

SECTION 1 - 1

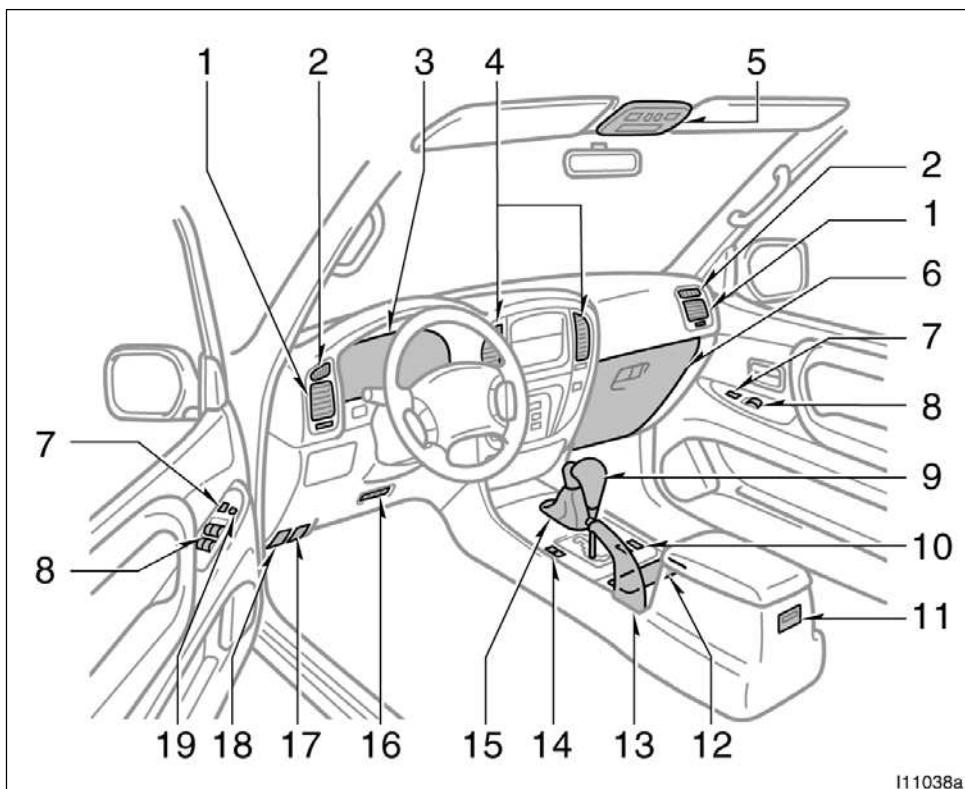
OPERATION OF INSTRUMENTS AND CONTROLS

Overview of instruments and controls

Instrument panel overview	2
Instrument cluster overview	6
Indicator symbols on the instrument panel	7

Instrument panel overview

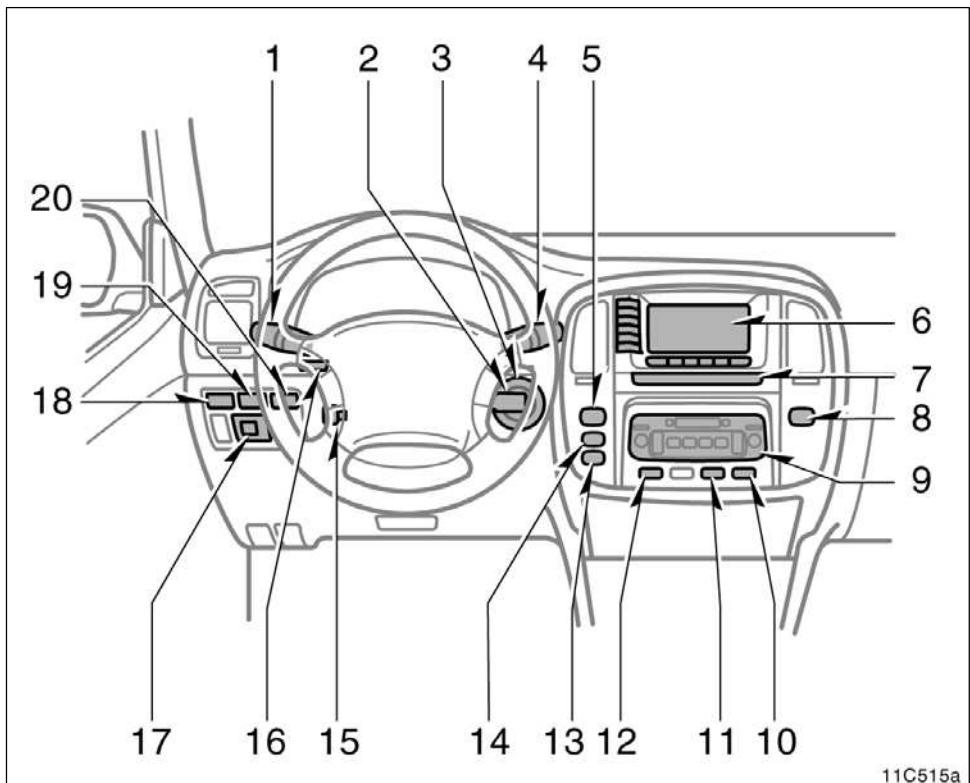
►View A



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

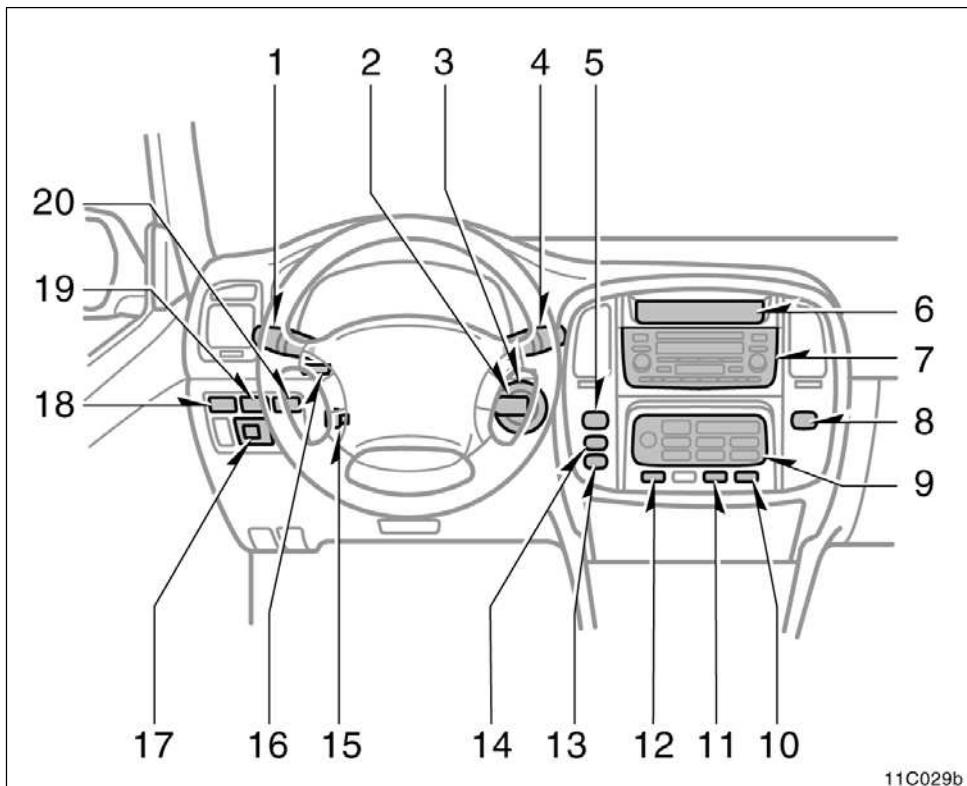
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►View B
(Vehicles with navigation system)



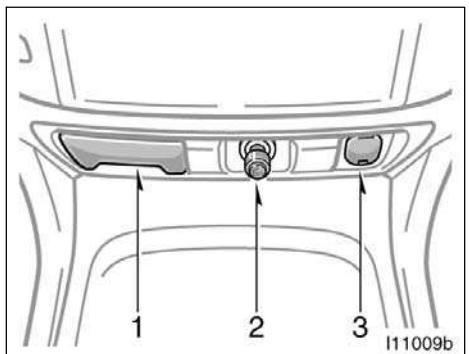
1. Headlight, turn signal and front fog light switches
2. Cruise control switch
3. Ignition switch
4. Wiper and washer switches
5. Emergency flasher switch
6. Navigation system including air conditioning controls (See the separate "Navigation System Owner's Manual".)
7. Clock, outside temperature and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

►View B
(Vehicles without navigation system)



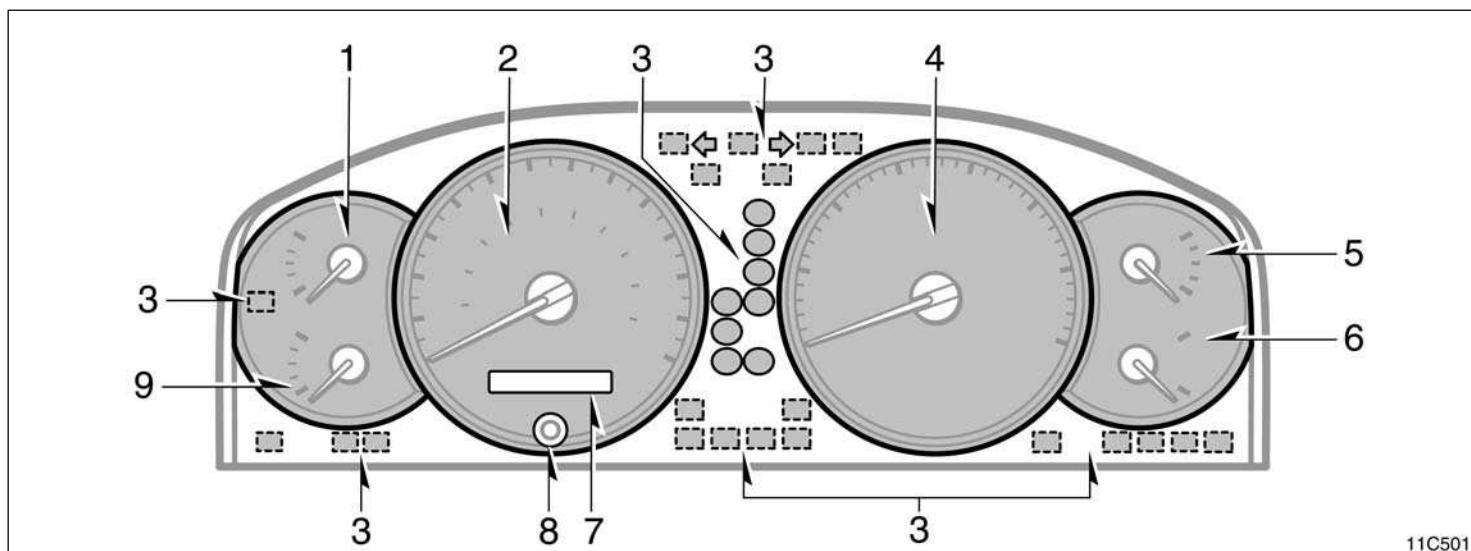
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►Lower part of center cluster panel



1. Ashtray
2. Cigarette lighter
3. Power outlet

Instrument cluster overview



11C501

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

Indicator symbols on the instrument panel

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

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

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

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

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

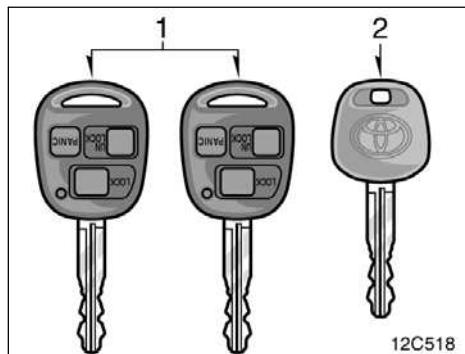
SECTION 1 - 2

OPERATION OF INSTRUMENTS AND CONTROLS

Keys and Doors

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Keys



Your vehicle is supplied with two kinds of keys.

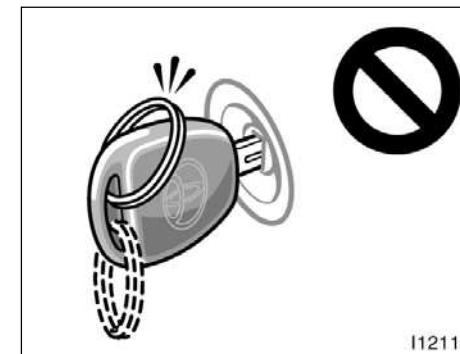
1. Master keys (black)—These keys work in every lock. Your Toyota dealer will need one of them to make a new key with a built-in transponder chip.
2. Sub key (gray)—This key does not work in the glove box.

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

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

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

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



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NOTICE

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

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



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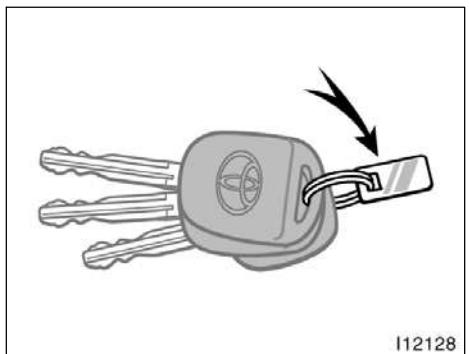


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◆ ***Do not use the key with electromagnetic materials.***

◆ ***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.***



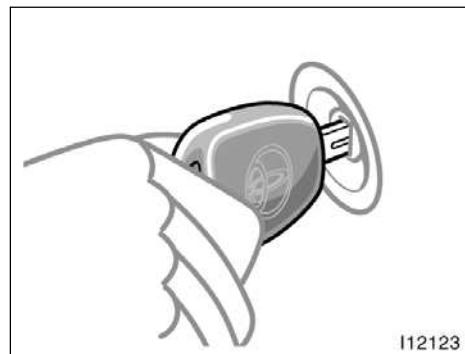
KEY NUMBER PLATE

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

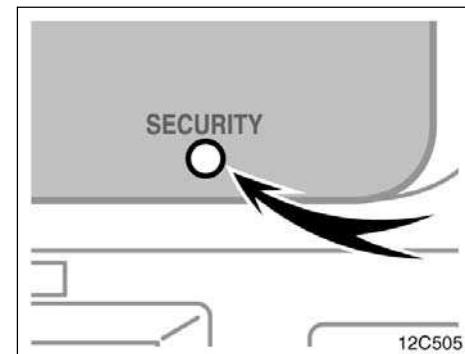
If you should lose your keys or if you need additional keys, duplicates can be made by a Toyota dealer using the key number.

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

Engine immobilizer system



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



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

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

- The indicator light stays on except when the theft deterrent system is setting or activating. (See "Theft deterrent system" on page 28.)
- The indicator light does not start flashing when the key is removed from the ignition switch.
- The indicator light flashes inconsistently.

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

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

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

**FCC ID: MOZRI-20BTY
MADE IN JAPAN**

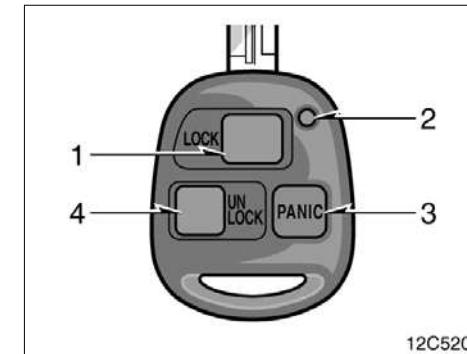
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

CAUTION

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

Wireless remote control*—



1. "LOCK" switch
2. Indicator light
3. "PANIC" switch
4. "UNLOCK" switch

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

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

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 and trouble to the key.

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

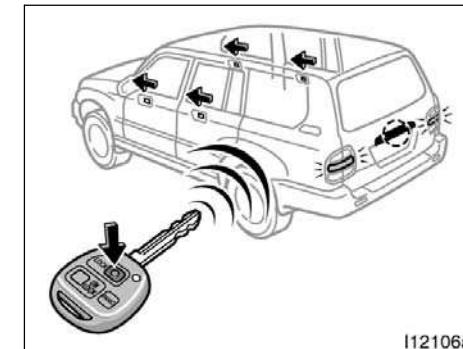
You can use up to 4 wireless remote control keys for the same vehicle. Contact your Toyota dealer for detailed information.

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

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

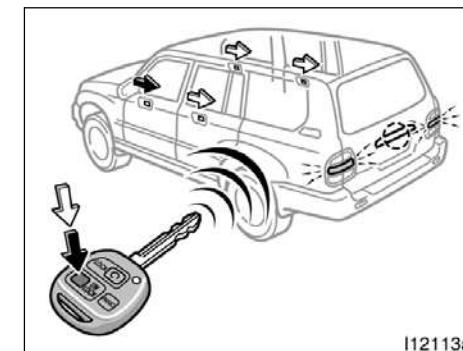
If you lose your wireless remote control key, contact your Toyota dealer as soon as possible to avoid the possibility of theft, or an accident. (For detailed information, see “If you lose your keys” on page 273.)

—Locking and unlocking doors



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Locking operation



I12113a

Unlocking operation

To lock and unlock all the side doors and back door, push the switches slowly and securely.

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

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

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

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

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

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

Together with the activation of unlocking, the interior light comes on for 15 seconds if the interior light switch is in "DOOR" position.* However, this function does not work when the ignition key is in the "ACC" or "ON" position. (For detailed information, see "Interior light" on page 111.)

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

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

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

—Activating panic mode



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

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

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

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

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

For vehicles sold in U.S.A.

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

NOTICE:

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING:

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

! CAUTION

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

—Replacing battery

For replacement, use a CR1616 lithium battery or equivalent and a special screwdriver.

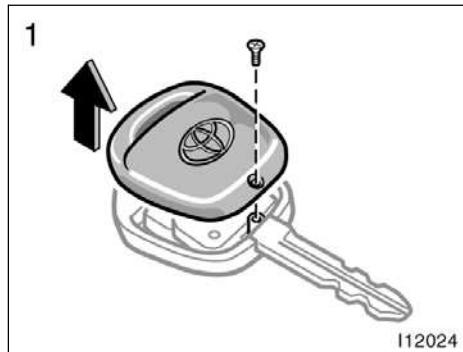
CAUTION

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

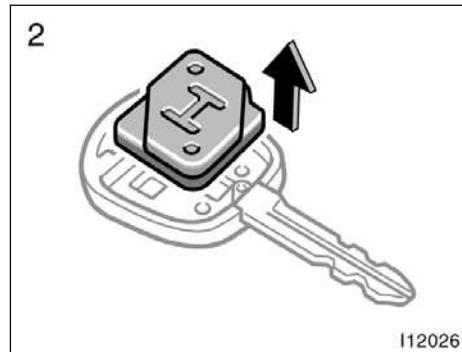
NOTICE

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

Replace the battery by following these procedures:



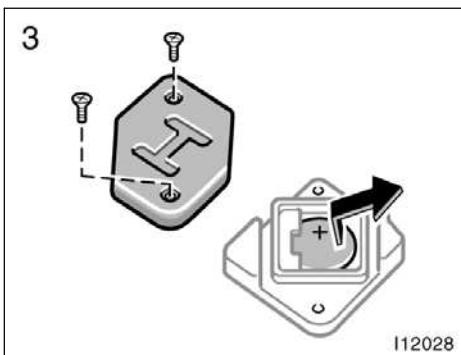
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1. Remove the screw, and then the cover.

2. Remove the module from the key frame.



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

NOTICE

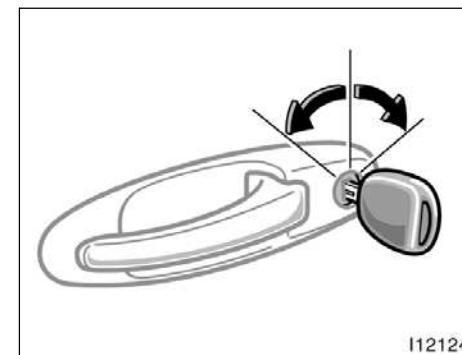
Do not bend the terminals.

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

NOTICE

- ◆ *Make sure the positive side and negative side of the battery are faced correctly.*
- ◆ *Do not replace the battery with wet hands. Water may cause unexpected rust.*
- ◆ *Do not touch or move any components inside 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.*
- ◆ *Take care not to lose the screws.*
- ◆ *Close the cover securely.*

Side doors—



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

To lock: Turn the key forward.

To unlock: Turn the key backward.

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

*NOTE: *The 2-step unlocking function can be changed. Ask your Toyota dealer for details.*



I12012

LOCKING AND UNLOCKING WITH INSIDE LOCK KNOB

Move the lock knob.

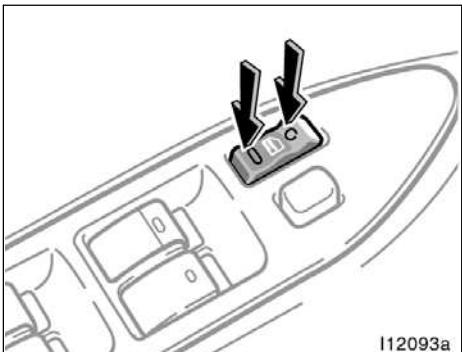
To lock: Push the knob forward.

To unlock: Pull the knob backward.

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

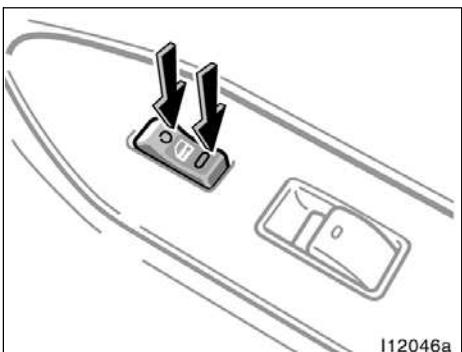
Closing the side door with the lock knob in the lock position will also lock the side door. Be careful not to lock your keys in the vehicle.

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



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Driver's side



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Passenger's side

LOCKING AND UNLOCKING WITH POWER DOOR LOCK SWITCH

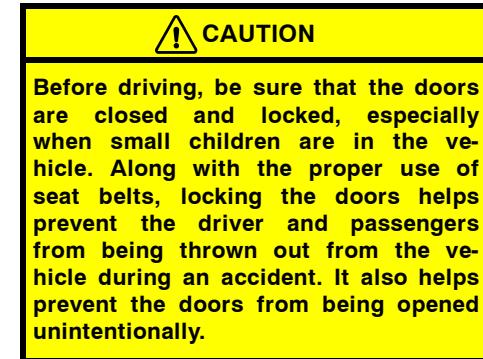
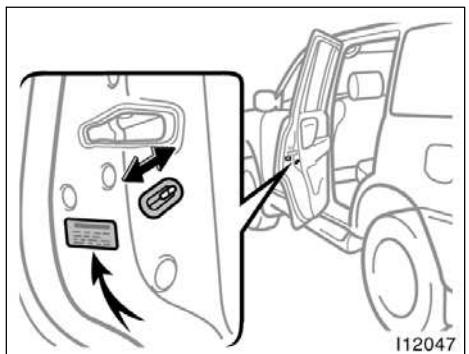
Push the switch.

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

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

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

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



REAR DOOR CHILD-PROTECTORS

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

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.

—Automatic door locking and unlocking functions

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

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

All doors are automatically locked when the shift lever is moved out of "P" position, the engine is running and all the doors are closed.

- Mode 2—Automatic locking operation linked to vehicle speed

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

- Mode 3—Automatic unlocking operation linked to the ignition switch

All doors are automatically unlocked when the driver's door is opened within 10 seconds after the ignition switch is turned to the "ACC" or "LOCK" position, or the key is removed.

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

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

SETTING FUNCTIONS

You can set the following functions by yourself.

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

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

To cancel the function, do the above operation again.

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

1. Set the parking brake, close all doors and turn the ignition switch to the "ON" position.
2. Shift the selector lever from the "P" into the "N" position.

3. Within 10 seconds of turning the ignition switch to the "ON" position, press and hold the front of the driver's side power door lock switch for 5 seconds and then release it.

4. The doors will be locked and unlocked to indicate that the function is set.

To cancel the function, do the above operation again.

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

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

To cancel the function, do the above operation again.

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

1. Set the parking brake, close all doors and turn the ignition switch to the "ON" position.

2. Shift the selector lever into the "P" position.

3. Within 10 seconds of turning the ignition switch to the "ON" position, press and hold the rear of the driver's side power door lock switch for 5 seconds and then release it.

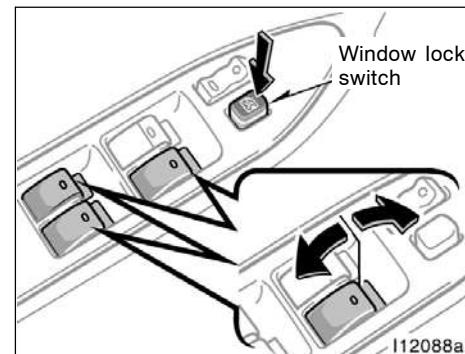
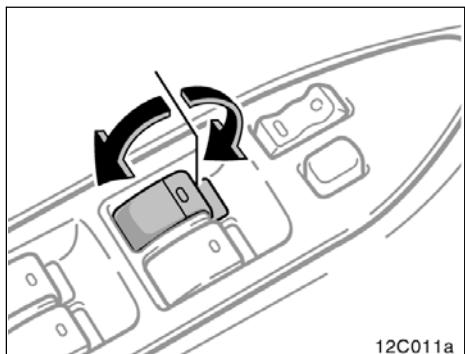
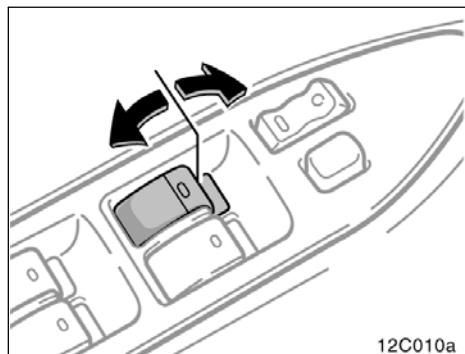
4. The doors will be locked and unlocked to indicate that the function is set.

To cancel the function, do the above operation again.

CAUTION

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

Power windows



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

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

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

OPERATING THE DRIVER'S WINDOW

Use the switch on the driver's door.

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

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

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

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

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

OPERATING THE PASSENGERS' WINDOWS

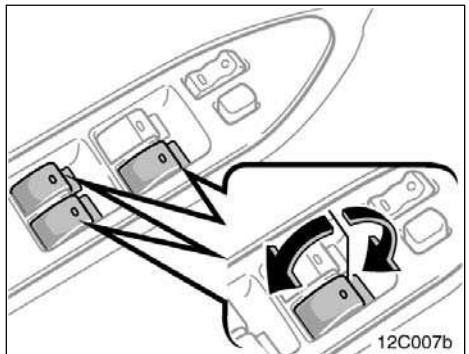
Use the switch on each passenger's door or the switches on the driver's door that control each passenger's window.

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

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

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

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

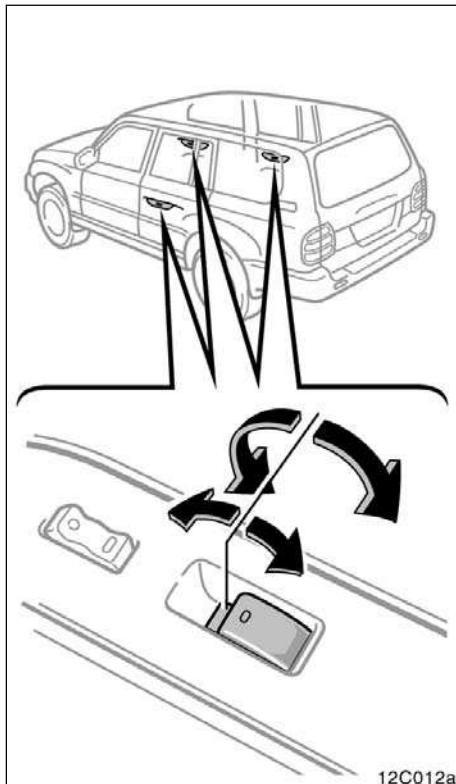


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Automatic operation: Push the switch completely down or pull it completely up, and then release it. The window will fully open or close. To stop the window part-way, lightly move the switch in the opposite direction and then release it.

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

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



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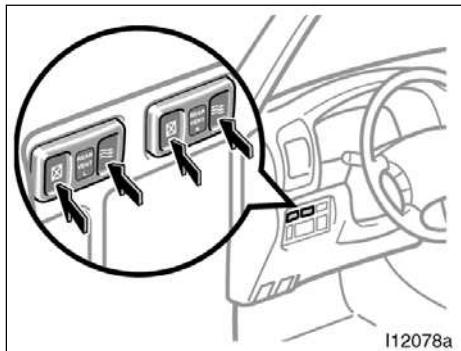
CAUTION

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

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

- Never leave anyone (particularly a small child) alone in your vehicle, especially with the ignition key still inserted. Otherwise, he or she could use the power window switches and get trapped in a window. Unattended person (particularly a small child) can be involved in a serious accident.
- Never try jamming any part of your body in a window to activate the jam protection function intentionally.
- The jam protection function may not work if something gets caught just before the window is fully closed.

Power quarter windows



I12078a

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

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

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

To open: Push the right one of the switches.

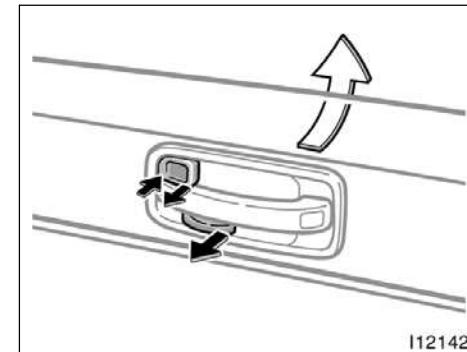
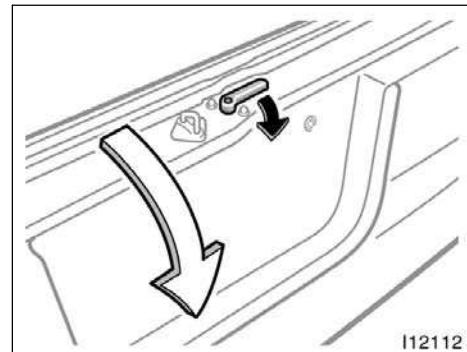
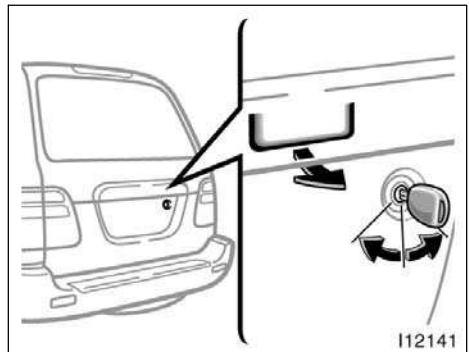
To close: Push the left one of the switches.

CAUTION

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

- Before you close the power quarter windows, always make sure there is nobody around the power quarter windows. You must also make sure the hands and other parts of the bodies of all occupants are kept completely inside the vehicle. If someone's hands get caught in a closing window, it could result in a serious injury. When anyone closes the power quarter windows, make sure he or she operates the windows safely.
- Be sure to remove the ignition key when you leave your vehicle.
- Never leave anyone (particularly a small child) alone in your vehicle, especially with the ignition key still inserted. Otherwise, he or she could use the power quarter window switches and get trapped in a window. Unattended person (particularly a small child) can be involved in a serious accident.

Back door



LOCKING AND UNLOCKING WITH KEY

Insert the key into the key hole and turn it.

To lock: Turn the key clockwise.

To unlock: Turn the key counterclockwise.

All the doors lock and unlock simultaneously with back door.

Operating the power door lock switch simultaneously locks or unlocks all the side doors and the back door. (See "—Locking and unlocking doors" on page 14 and "Side doors" on page 18.)

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

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

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

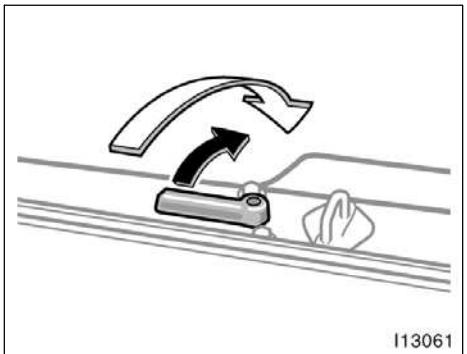
See "Cargo and luggage" on page 230 for precautions when loading luggage.

LOCKING AND UNLOCKING FROM INSIDE

To lock: Push the knob.

To unlock: Pull the knob.

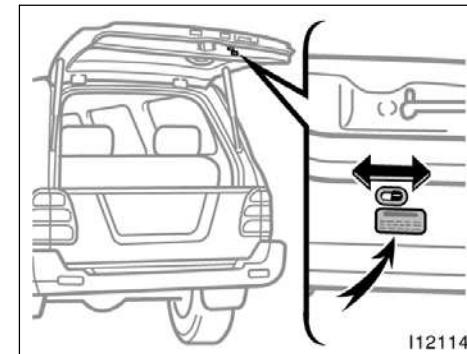
Operating the power door lock switch simultaneously locks or unlocks all the side doors and the back door. (See "Side doors" on page 18.)



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

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

See "Cargo and luggage" on page 230 for precautions when loading luggage.



BACK DOOR CHILD-PROTECTOR

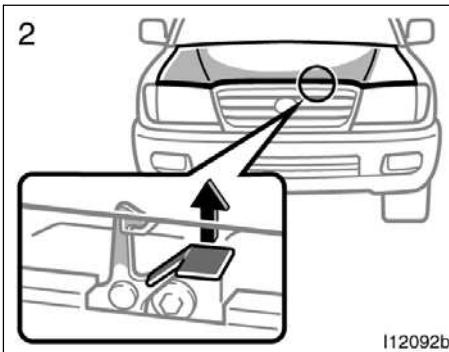
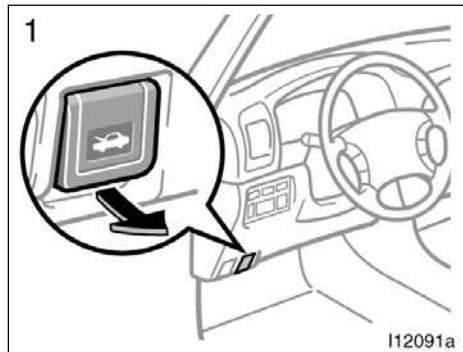
Move the lock lever to the "LOCK" position as shown on the label.

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

! CAUTION

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

Hood



To open the hood:

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

! CAUTION

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

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

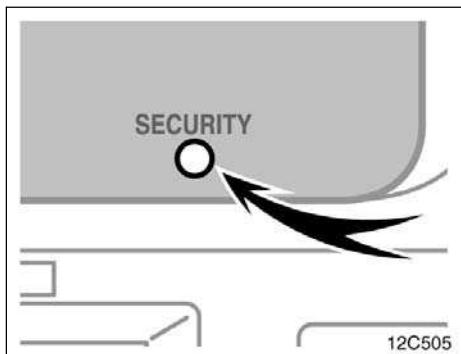
Before closing the hood, check to see that you have not forgotten any tools, rags, etc. Then lower the hood and make sure it locks into place. If necessary, press down gently on the front edge to lock it.

Theft deterrent system



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

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



SETTING THE SYSTEM

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

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

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

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

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

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

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

WHEN THE SYSTEM IS SET

Activating the system

The system will sound the alarm under the following conditions:

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

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

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

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

Reactivating the alarm

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

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

Stopping the alarm

The alarm will be stopped by the following two ways:

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

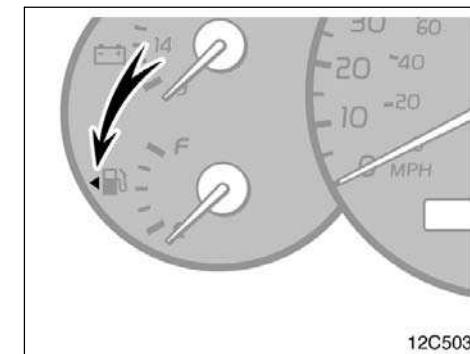
These ways cancel the system at the same time.

TESTING THE SYSTEM

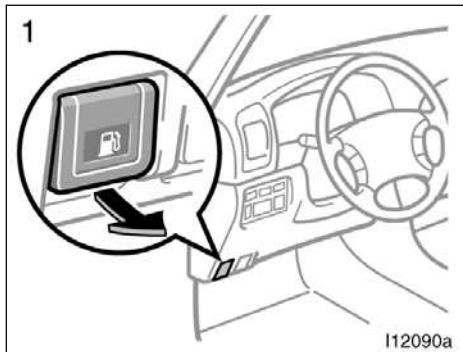
1. Open all the windows.
2. Set the system as described above. The side doors and back door should be locked with the key or wireless remote control key. Be sure to wait until the indicator light goes off or starts flashing.
3. Unlock any side door or back door from the inside. The system should activate the alarm.
4. Stop the alarm as described above.
5. Repeat this operation for the other doors, back door and hood. When testing the hood, also check that the system is activated when the battery terminal is disconnected and then reconnected.

If the system does not work properly, have it checked by your Toyota dealer.

Fuel tank cap

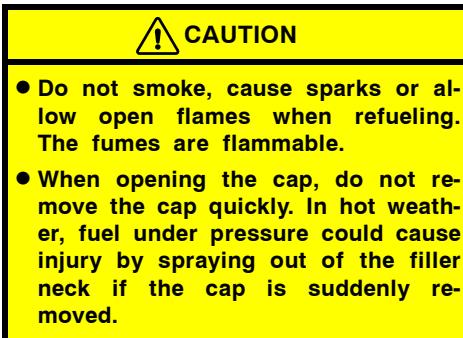


This indicates that the fuel filler door is on the left side of your vehicle.



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

When refueling, turn off the engine.



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

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

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



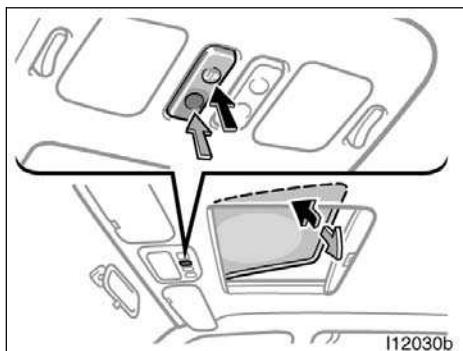
CAUTION

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

Electric moon roof



Sliding operation



Tilting operation

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

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

Sun shade operation—

The sun shade can be opened or closed by hand.

Sliding operation—

To open: Push the switch on the rear side.

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

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

The sun shade will be opened together with the roof.

To close: Push the switch on the front side.

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

Tilting operation—

To tilt up: Push the switch on the "UP" side.

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

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

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

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

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

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

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

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

CAUTION

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

- While the vehicle is moving, always keep the heads, hands and other parts of the bodies of all occupants away from the roof opening. Otherwise, they could be seriously injured if the vehicle stops suddenly or if the vehicle is involved in an accident.
- Before you close the moon roof, always make sure there is nobody around the moon roof. You must also make sure nobody places his or her head, hands and other parts of the body in the roof opening. If someone's neck, head or hands get caught in the closing roof, it could result in death or serious injury. When anyone closes the moon roof, first make sure it is safe to do so.
- Be sure to remove the ignition key when you leave your vehicle.

- Never leave anyone (particularly a small child) alone in your vehicle, especially with the ignition key still inserted. Otherwise, he or she could use the moon roof switches and get trapped in the roof opening. Unattended person (particularly a small child) can be involved in a serious accident.
- Never sit on top of the vehicle around the roof opening.
- Never try jamming any part of your body to activate the jam protection function intentionally.
- The jam protection function may not work when something gets caught just before the moon roof is fully closed.

SECTION 1 - 4

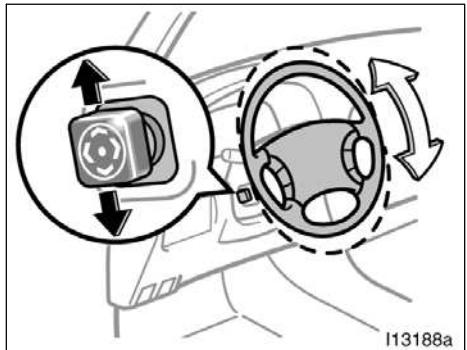
OPERATION OF INSTRUMENTS AND CONTROLS

Steering wheel and Mirrors

Power tilt and telescopic steering wheel	98
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Power tilt and telescopic steering wheel

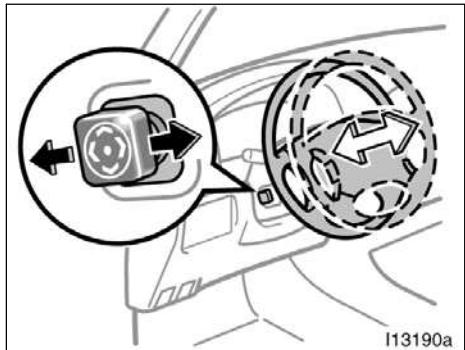


ADJUSTMENT OF STEERING WHEEL TILT

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

CAUTION

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



ADJUSTMENT OF TELESCOPIC STEERING COLUMN

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

CAUTION

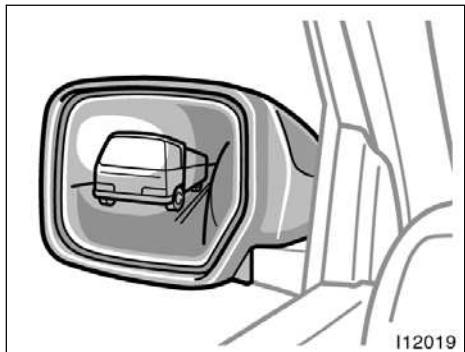
Do not adjust the steering column while the vehicle is moving. Doing so may cause the driver to mishandle the vehicle and an accident may occur resulting in death or serious injuries.

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

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

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

Outside rear view mirrors—



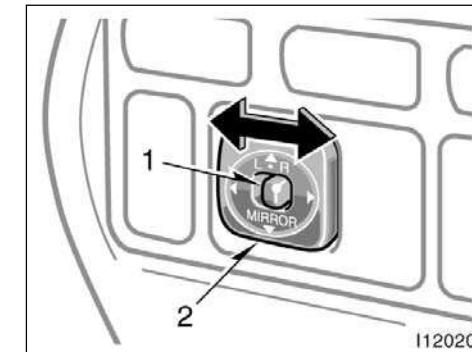
Adjust the mirror so that you can just see the side of your vehicle in the mirror.

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

When you push the outside rear view mirror heater switch, the heater panels in the outside rear view mirrors will quickly clear the mirror surface. (See "Outside rear view mirror heaters" on page 115.)



—Power rear view mirror control



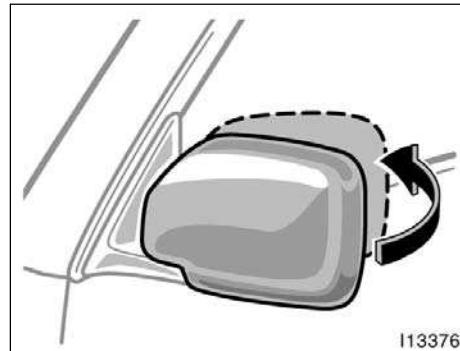
To adjust a mirror, use the switches.

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

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

NOTICE

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

—Folding rear view mirrors

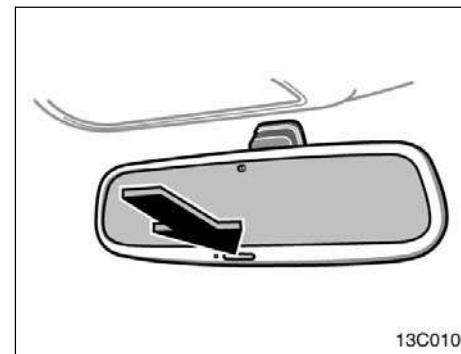
I13376

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

To fold the rear view mirror, push backward.

! CAUTION

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

Anti-glare inside rear view mirror—

13C010

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

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

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

"DAY" mode: The mirror surface is normal.

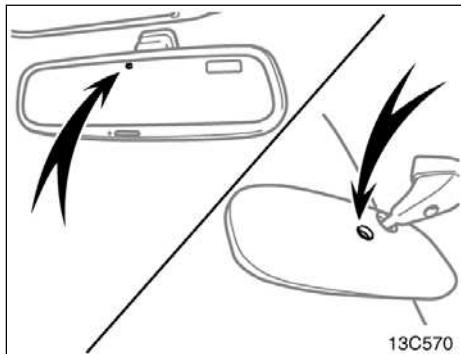
"AUTO" mode: If the mirror detects light from the headlights of the vehicle behind you, the mirror surface darkens slightly to reduce the reflected light.

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

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

CAUTION

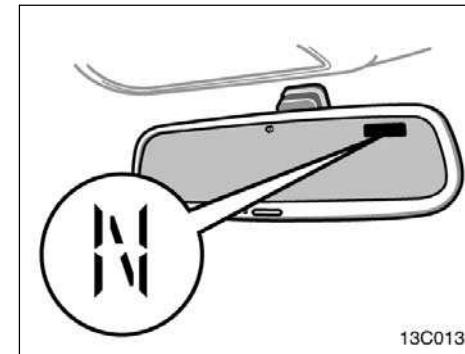
Do not adjust the mirror while the vehicle is moving. Doing so may cause the driver to mishandle the vehicle and an accident may occur resulting in death or serious injuries.



13C570

To ensure correct functioning of anti-glare mirror sensors located on both sides of the mirror, do not touch or cover the sensors with your finger or a piece of cloth, etc.

—Compass



13C013

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

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

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

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

- The vehicle is stopped immediately after turning. The compass does not adjust while the vehicle is stopped.
- The ignition switch is turned off immediately after turning.
- The vehicle is on an inclined surface.
- The vehicle is in a place where the earth's magnetic field is subject to interference by artificial magnetic fields (underground parking, under a steel tower, between buildings, roof parking, near a crossing, near a large vehicle, etc.).
- The vehicle is magnetized. (There is a magnet or a metal object on or near the inside rear view mirror.)
- The battery has been disconnected.
- Any door is open.

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.

102

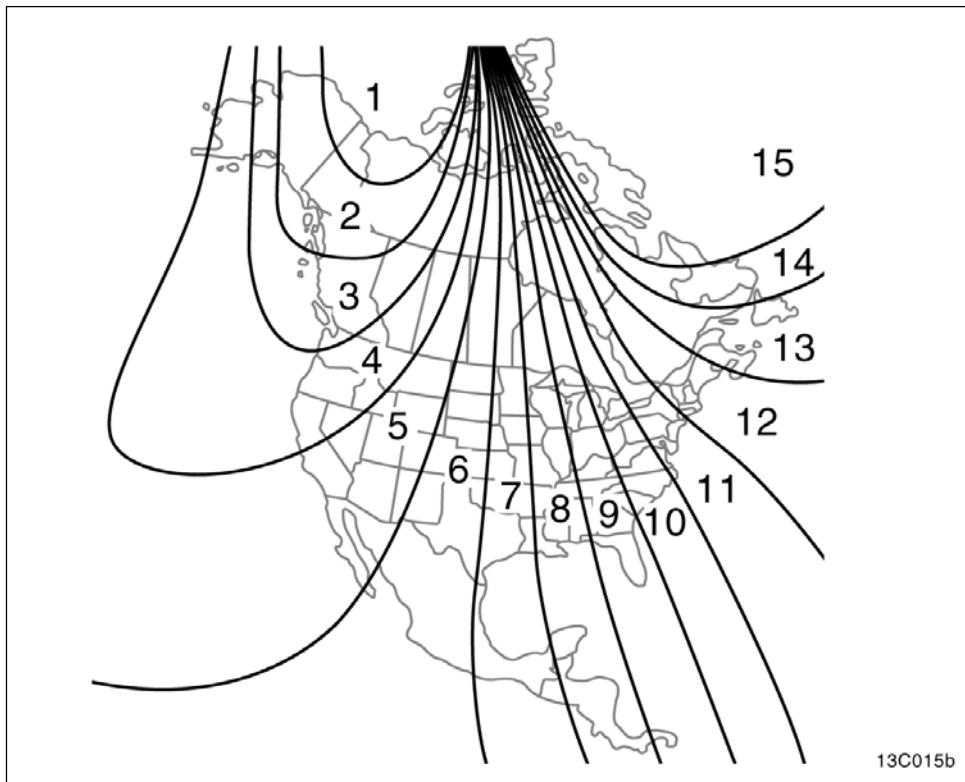
NOTICE

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

CALIBRATING THE COMPASS (deviation calibration)

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

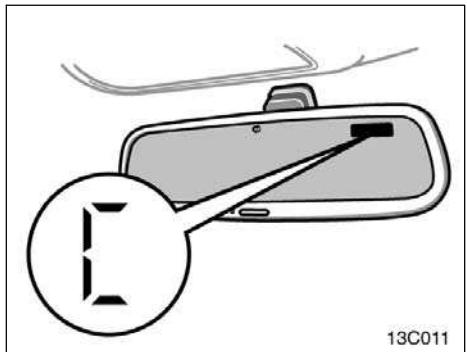
To adjust for this deviation, stop the vehicle and push the button for longer than about 6 seconds until the number (1-15) appears on the display. Then push the button again, referring to the following map to select the number of the zone where the vehicle is.



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

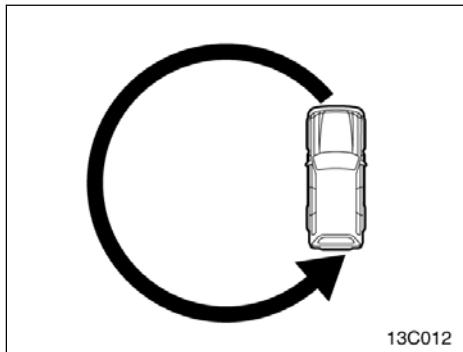
CAUTION

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



CALIBRATING THE COMPASS (circling calibration)

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



Drive the vehicle slowly (at 8km/h (5mph) or lower) in a circle until the direction is displayed. If there is not enough space to drive in a circle, drive around the block until the direction is displayed.

After driving in 1 to 3 circles in the above method, calibration is complete with the direction shown on the display.

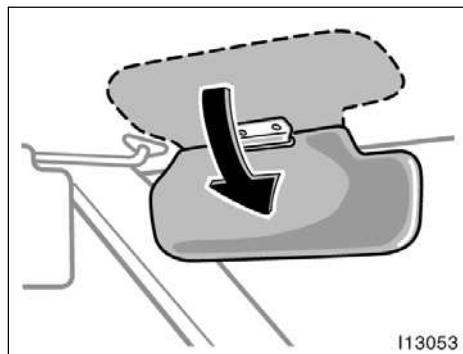
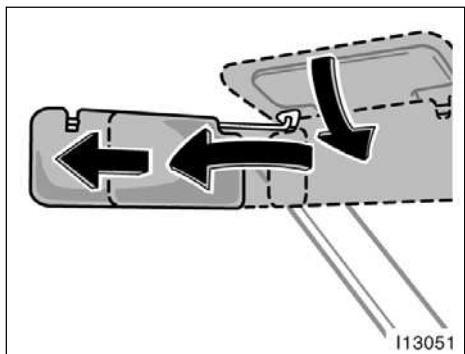
If calibration cannot be performed because of the magnetized vehicle, etc., take your vehicle to Toyota dealer.

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

CAUTION

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

Sun visors—



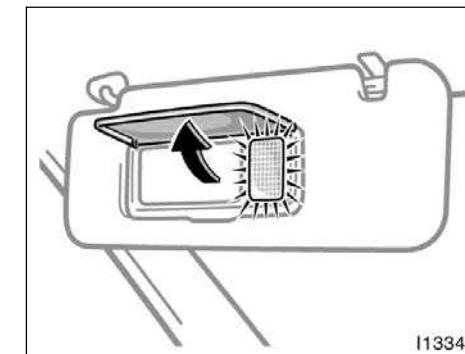
To block out glare, move the sun visor.

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

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

You can adjust its position as shown.

—Vanity mirror



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

The vanity light comes on when you open the cover.

CAUTION

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

SECTION 1 - 6

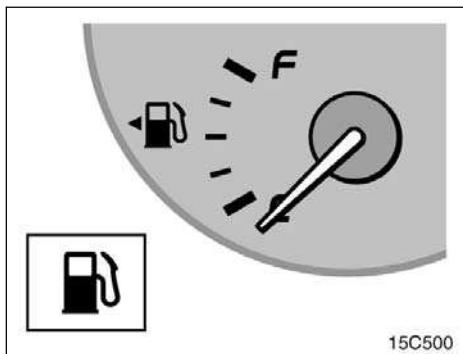
OPERATION OF INSTRUMENTS AND CONTROLS

Gauges, Meters and Service reminder indicators

Fuel gauge	118
Engine coolant temperature gauge	118
Engine oil pressure gauge	119
Voltmeter	120
Tachometer	120
Odometer and two trip meters	121
Service reminder indicators and warning buzzers	122
Trip information display	129

[REDACTED]

Fuel gauge



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

Nearly full—Needle at "F"

Nearly empty—Needle at "E"

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

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

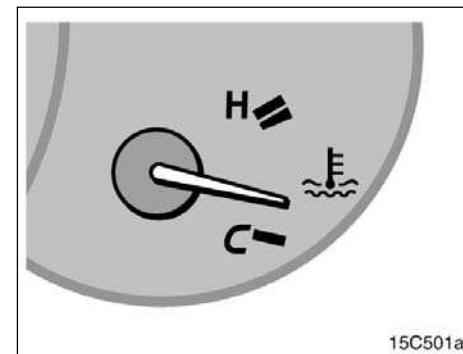
On inclines or curves, due to the movement of fuel in the tank, the fuel gauge needle may fluctuate or the low fuel level warning light may come on earlier than usual.

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

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

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

Engine coolant temperature gauge



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

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

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

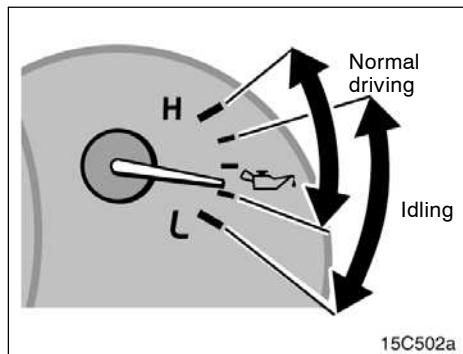
- Driving up a long hill on a hot day.
- Reducing speed or stopping after high speed driving.
- Idling for a long period with the air conditioning on in stop-and-go traffic.
- Towing a trailer.

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

NOTICE

- ◆ *Do not remove the thermostat in the engine cooling system as this may cause the engine to overheat. The thermostat is designed to control the flow of coolant to keep the temperature of the engine within the specified operating range.*
- ◆ *Do not continue driving with an overheated engine. See "If your vehicle overheats" on page 256.*

Engine oil pressure gauge



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

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

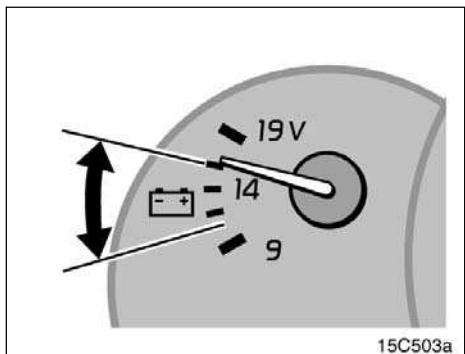
Engine oil pressure may not build up when the engine oil level is too low. The engine oil pressure gauge is not designed to indicate oil level, and the engine oil level must be checked using the level dipstick.

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

NOTICE

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

Voltmeter



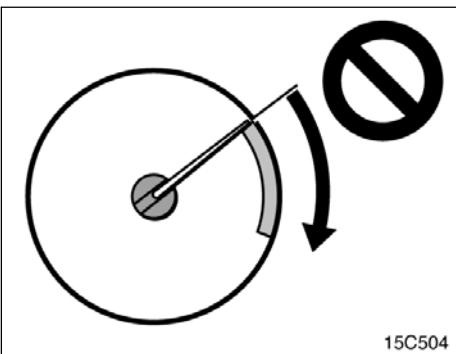
The voltmeter tells whether the battery is charged or discharged. Check it while the engine is running—the needle should always indicate as shown above.

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

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

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

Tachometer



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

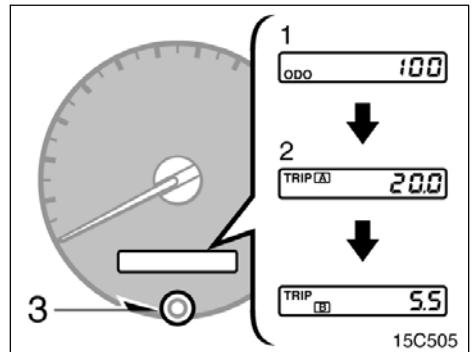
Driving with the engine running too fast causes excessive engine wear and poor fuel economy. Remember, in most cases the slower the engine speed, the greater the fuel economy.

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

NOTICE

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

Odometer and two trip meters



This meter displays the odometer and two trip meters.

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

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

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

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

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

Service reminder indicators and warning buzzers

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

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

(a) Brake System Warning Light and Buzzer

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

● When the parking brake is applied...

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

● When the brake fluid level is low...

⚠ CAUTION

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

● When the hydraulic brake booster fails...

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

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

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

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

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

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

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

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

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

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

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

(c) Front Passenger's Seat Belt Reminder Light

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

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

This light warns that the battery is being discharged.

If it comes on while you are driving, there is a problem somewhere in the charging system.

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

NOTICE

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

(e) Engine Oil Replacement Reminder Light

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

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

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

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

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

1. Turn the ignition key to the "OFF" position with the odometer reading shown. (For details, see "Odometer and trip meter" on page 121).
2. Turn the ignition key to the "ON" position while holding down the "ODO/TRIP" knob.

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

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

(f) Malfunction Indicator Lamp

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

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

- Empty fuel tank

If the fuel tank is empty, refuel immediately.

- Loose fuel tank cap

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

These cases are temporary malfunctions. The malfunction indicator lamp will go off after taking several driving trips.

If the lamp will not go off even after several trips, contact your Toyota dealer as soon as possible.

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

or

If the fuel tank is not empty or the fuel tank cap is not loose...

- There is a problem somewhere in the engine, emission control system, electronic throttle control system, automatic transmission electrical system or warning light system itself.

Contact your Toyota dealer as soon as possible to service the vehicle.

If engine speed does not increase when the accelerator pedal is depressed, there may be a problem somewhere in the electronic throttle control system.

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

Even if the abnormality of the electronic throttle control system is corrected during low speed driving, the system may not be recovered until the engine is stopped and the ignition key is turned to "ACC" or "LOCK" position.

CAUTION

Be especially careful to prevent erroneous pedal operation.

Emissions Inspection and Maintenance (I/M) programs

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

For details, see "Emissions Inspection and Maintenance (I/M) programs" on page 288.

(g) Low Fuel Level Warning Light

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

(h) SRS Warning Light

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

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

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

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

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

(i) “ABS” Warning Light

The light comes on when the ignition key is turned to the “ON” position. If the anti-lock brake system and the brake assist system work properly, the light turns off after a few seconds. Thereafter, if either of the systems malfunctions, the light comes on again.

When the “ABS” warning light is on (and the brake system warning light is off), the anti-lock brake system, the brake assist system, the vehicle stability control system and/or active traction control system do/does not operate, but the brake system still operates conventionally.

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

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

- The light does not come on when the ignition key is turned to the “ON” position, or remains on.
- The light comes on while you are driving.

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

! CAUTION

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

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

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

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

(j) Open Door Warning Light

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

(k) Unengaged "Park" Warning Light

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



CAUTION

To restore the park function, shift the four-wheel drive control out of "N", or the vehicle can move.

(l) Automatic Transmission Fluid Temperature Warning Light

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

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

NOTICE

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

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

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

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

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

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

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

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

(n) Key Reminder Buzzer

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

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

1. Apply the parking brake.
2. Open one of the side doors or back door.
The open door warning light should come on.
3. Close the door.
The open door warning light should go off.

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

The "A/T P" should come on. It goes off when you place the four-wheel drive control lever in "H" or "L" position.

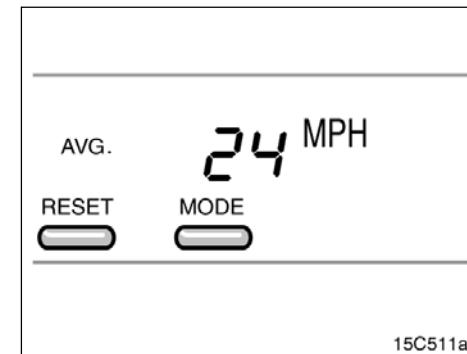
5. Turn the ignition key to "ON", but do not start the engine.

All the service reminder indicators except the open door warning light should come on. The "ABS", "VSC/TRAC", "VSC OFF", "TRAC", and slip indicator light go off after a few seconds. The SRS warning light goes off after about 6 seconds.

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

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

Trip information display

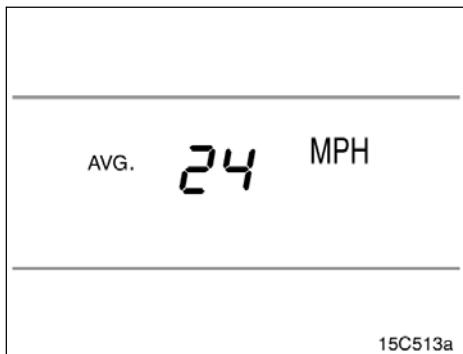


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The following information is shown with the ignition key turned on. Each time you push the "MODE" button, the displayed information is changed.

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

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

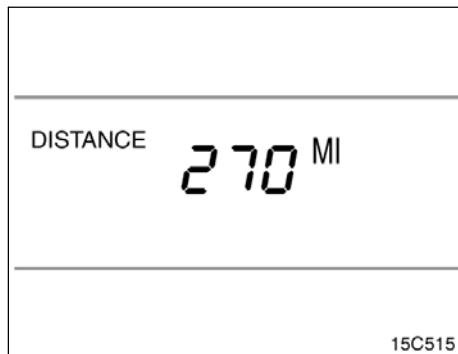


- **Average vehicle speed**

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

The displayed value is updated every 10 seconds.

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



- **Driving distance after engine starting**

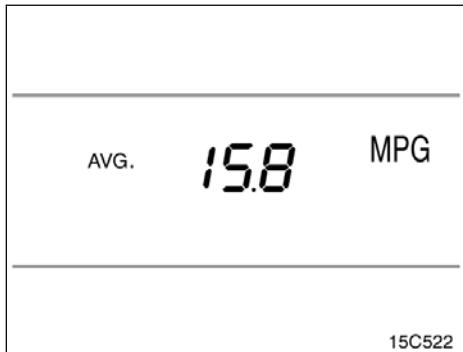
The driving distance after engine starting is displayed.

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



- **Available driving range**

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



- **Average fuel consumption after refueling**

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

The value is updated every 10 seconds. When refueling, be sure to stop your vehicle and turn the ignition key off.



- **Current fuel consumption**

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

The value is updated every 2 seconds. If you are driving at low speeds just before stopping, the accurate figure may not be shown.

SECTION 1 - 7

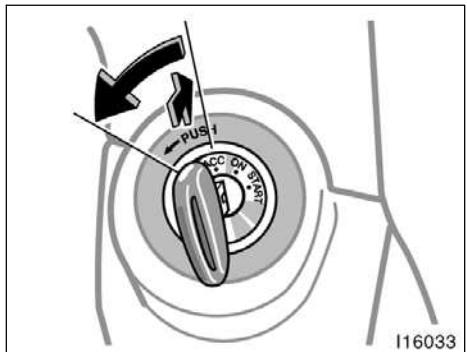
OPERATION OF INSTRUMENTS AND CONTROLS

Ignition switch, Transmission and Parking brake

Ignition switch with steering lock	134
Automatic transmission	135
Four-wheel drive system	139
Parking brake	142
Cruise control	142
Active traction control system	145
Vehicle stability control system	147



Ignition switch with steering lock



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

For starting tips, see page 236.

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

“ON”—Engine on and all accessories on.

This is the normal driving position.

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

If you leave the key in the “ACC” or “LOCK” position and open the driver's door, a buzzer will remind you to remove the key.

“LOCK”—Engine is off and the steering wheel is locked. The key can be removed only at this position.

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

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

When starting the engine, the key may seem stuck at the “LOCK” position. To free it, first be sure the key is pushed all the way in, and then rock the steering wheel slightly while turning the key gently.

NOTICE

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

Automatic transmission

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

Selector lever position

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

► The shift position is displayed on the instrument cluster

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

PWR	ECT PWR	"PWR" (power) mode for powerful acceleration This indicator lights on the instrument panel
2nd		Normal mode for general driving condition

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

PWR	2nd STRT	Second start mode This indicator lights on the instrument panel in the second start mode
2nd		

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- ◆ When the cruise control is being used, even if you downshift from "D" to "4", engine braking will not be enabled because the cruise control is not cancelled. For ways to decrease the vehicle speed, see "Cruise control" on page 142.

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

(a) Normal driving

1. Start the engine as instructed in "How to start the engine" on page 236. The transmission must be in "P" or "N".
2. With your foot holding down the brake pedal, shift the selector lever to "D".

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

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



CAUTION

Never put your foot on the accelerator pedal while shifting.

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

(b) Using engine braking

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

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

Four-wheel drive control lever
in "H" 43 km/h (27 mph)

Four-wheel drive control lever
in "L" 17 km/h (11 mph)

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

Four-wheel drive control lever
in "H" 83 km/h (52 mph)

Four-wheel drive control lever
in "L" 33 km/h (21 mph)

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

Four-wheel drive control lever
in "H" 43 km/h (27 mph)

Four-wheel drive control lever
in "L" 17 km/h (11 mph)

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

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



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

(c) Using "3", "2" and "L" positions

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

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

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

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

NOTICE

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

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

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

(d) Backing up

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

NOTICE

Never shift into reverse while the vehicle is moving.

(e) Parking

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

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

CAUTION

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

(f) Good driving practice

- If the transmission repeatedly shifts up and down between fourth gear and overdrive gears when climbing a gentle slope, shift the selector lever to the "4" position. Be sure to shift the selector lever to the "D" position immediately afterward.
- When towing a trailer, in order to maintain engine braking efficiency, do not use overdrive.

CAUTION

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

NOTICE

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

(g) Driving in "PWR" (Power) mode

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

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

(h) Driving in "2nd STRT" (second start) mode

In the "2nd STRT" (Second start) mode, the transmission system shifts up from second gear. Use this mode when starting your vehicle in sand, mud, ice or snow.

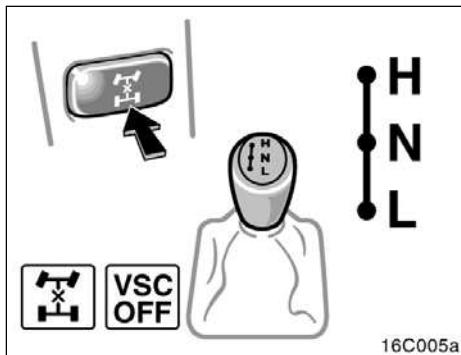
To set the "2nd STRT" mode, push the "2nd" button. In the "2nd STRT" mode, the "2nd STRT" indicator light comes on.

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

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

If you cannot shift the selector lever from the “P” position even though the brake pedal is depressed, use the shift lock override button. For instructions, see “If you cannot shift automatic transmission selector lever” on page 272.

**Four-wheel drive system—
(a) Four-wheel drive control**



Use the four-wheel drive control lever and center differential lock button to select the transfer and center differential modes.

The “H” and “L” position of the four-wheel drive control lever provides either lock or unlock mode of the center differential depending on the center differential lock button position.

Use the center differential lock system if your wheels get stuck in a ditch, or when you are driving on a slippery or bumpy surface. When the center differential is locked, the vehicle stability control system is automatically turned off and the center differential lock and “VSC OFF” indicator lights come on because the function that controls engine performance interferes with the process of freeing your wheels.

NOTICE

As soon as the center differential lock switch is turned on, the “VSC OFF” indicator light comes on. After the wheels are out of the ditch or off the slippery or bumpy surface, turn the center differential lock switch off. Make sure the center differential lock indicator light and vehicle stability control system off indicator light turn off.

"H" (high speed position, center differential unlocked): Lever at "H", center differential lock button left out

Use this for normal driving on all types of roads, from dry hard-surfaced roads to wet, icy or snow-covered roads. This position gives greater economy, quietest ride, least wear and better vehicle control.

"H" (high speed position, center differential locked): Lever at "H", center differential lock button pushed in

Use this for greater traction when you experience a loss of power, such as wheel slipping, in the center differential unlock mode.

"N" (neutral position): Lever at "N"

No power is delivered to the wheels. The vehicle must be stopped.

"L" (low speed position, center differential unlocked): Lever at "L", center differential lock button left out

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

In this mode, the braking feeling that occurs when the wheels are negotiating a sharp corner is further reduced than in the "L" (low position, center differential locked) mode.

"L" (low speed position, center differential locked): Lever at "L", center differential lock button pushed in.

Use this for maximum power and traction. Use this for hard pulling in situations the vehicle cannot negotiate even in the "L" (low speed position, center differential unlocked) mode. Also, using this mode when driving down steep off-road inclines will help contribute to increased vehicle stability.

The indicator light tells when the differential lock is engaged. Note that the differential is not still locked as long as the indicator light remains off.

When the operation is not completed, the indicator blinks. If the indicator light does not go off when you push out the center differential lock switch, drive straight ahead while accelerating or decelerating, or drive in reverse.

The center differential lock system operation is not completed within 5 seconds while the cruise control system is set, cancel the cruise control system. To cancel the cruise control system, see "Cruise control" on page 142.

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

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

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

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

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

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

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

(b) Shifting procedure

SHIFTING BETWEEN "H" (UNLOCKED) AND "H" (LOCKED)

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

SHIFTING BETWEEN "L" (UNLOCKED) AND "L" (LOCKED)

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

SHIFTING BETWEEN "H" AND "L"

Stop the vehicle, put the transmission into "N" and move the four-wheel drive control lever.



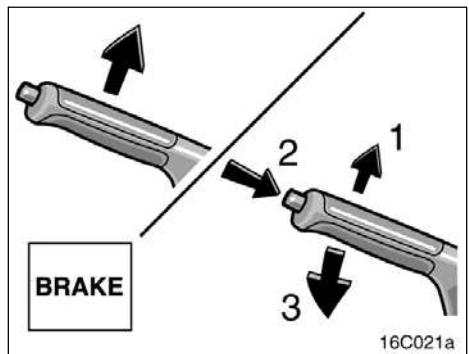
CAUTION

Never move the four-wheel drive control lever if wheels are slipping. Wait until the wheels have stopped slipping or spinning before shifting.

NOTICE

For normal driving on dry and hard surface roads, unlock the center differential. To prevent damage to the center differential lock system, do not push the center differential lock button when the vehicle is cornering or when its wheels are spinning freely off the ground. If the indicator light does not go off when unlocking the center differential, drive straight ahead while accelerating or decelerating, or drive in reverse.

Parking brake



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

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

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

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

CAUTION

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

Cruise control

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

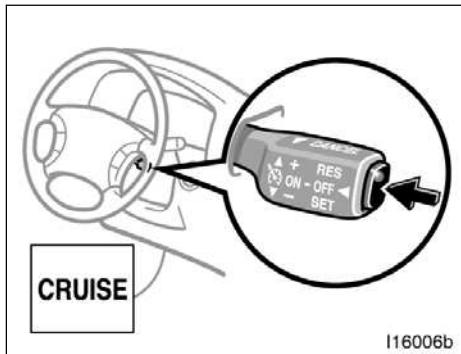
Your cruising speed can be maintained within the limits of engine performance, although a slight speed change may occur when driving up or down the grades. On steeper hills, a greater speed change will occur so it is better to drive without the cruise control.

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

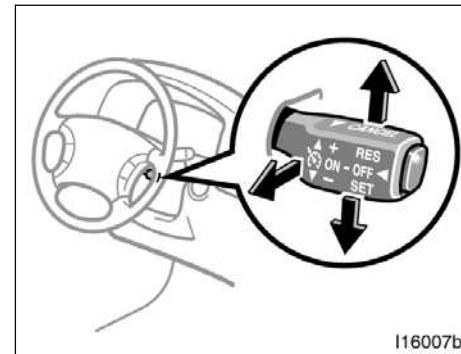


CAUTION

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



I16006b



I16007b

TURNING THE SYSTEM ON

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



CAUTION

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

SETTING AT A DESIRED SPEED

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

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

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

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

CANCELLING THE PRESET SPEED

You can cancel the preset speed by:

- a. Pulling the control lever in the “CANCEL” direction and releasing it.
- b. Depressing the brake pedal.
- c. Pushing the “CRUISE ON-OFF” switch.

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

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

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

RESETTING TO A FASTER SPEED

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

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

RESETTING TO A SLOWER SPEED

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

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

Even if you downshift the transmission from the “D” position to “4” with the cruise control on, engine braking will not be applied because the cruise control is not cancelled. To decrease the vehicle speed, reset to a slower speed with the cruise control lever or depress the brake pedal. If you use the brake pedal, cruise control is cancelled.

RESUMING THE PRESET SPEED

If the preset speed is cancelled by pulling the control lever or by depressing the brake pedal, pushing the lever up in the “+ RES” direction will restore the speed set prior to cancellation.

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

CRUISE CONTROL FAILURE WARNING

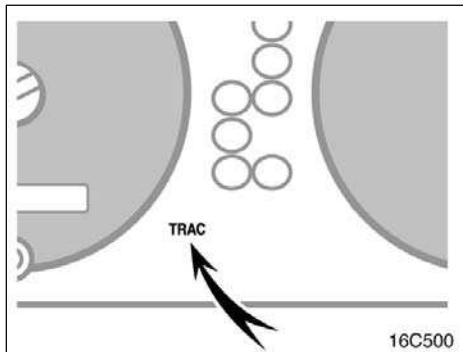
If the “CRUISE” indicator light in the instrument cluster flashes when using the cruise control, press the “ON-OFF” button to turn the system off and then press it again to turn it on.

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

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

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

Active traction control system



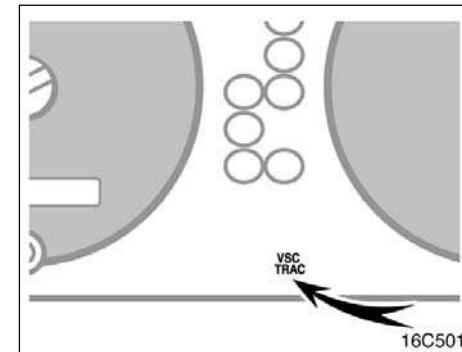
Active traction control system indicator light

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

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

You may hear a sound in the engine compartment for a few seconds when the engine is started or just after the vehicle begins to move. This means that the active traction control system is in the self-check mode, and does not indicate malfunction. When the active traction control system is operating, you may feel vibration or hear noise of your vehicle, caused by operation of the brakes. This indicates the system is functioning properly.

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



Active traction control system failure warning

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

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

The brake actuator temperature increases during the active traction control system or vehicle stability control system operating. If the brake actuator temperature becomes too high while the active traction control system or vehicle stability control system is operating, a buzzer will start to sound intermittently to indicate that the active traction control system can no longer operate. In this case, immediately stop your vehicle at a safe place. If the system continues to operate, the buzzer sound changes from intermittent to continuous. (The continuous buzzer sounds for about 3 seconds.) At the time, the "VSC/TRAC" warning light will come on and the active traction control system temporarily stops operating in order to protect the brake actuator. (Although the active traction control system does not operate, there is no problem to continue your driving.) The system will be automatically restored after a short time and "VSC/TRAC" warning light goes off if the accelerator pedal is released.

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

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

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

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

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

In the following cases, contact your Toyota dealer:

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

CAUTION

Under certain slippery road conditions, full traction of the vehicles and power to 4 wheels may not be maintained, even though the active traction control system is in operation. Do not drive the vehicle under any speed or maneuvering conditions which will cause the vehicle to lose traction. In situations where the road surface is covered with ice or snow, your vehicle should be fitted with snow tires or tire chains. Always drive at an appropriate and cautious speed for the road conditions present.

Vehicle stability control system

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

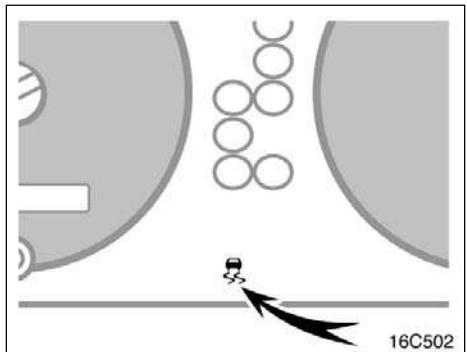
The system activates when the vehicle speed is about more than 15 km/h (9 mph).

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

CAUTION

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

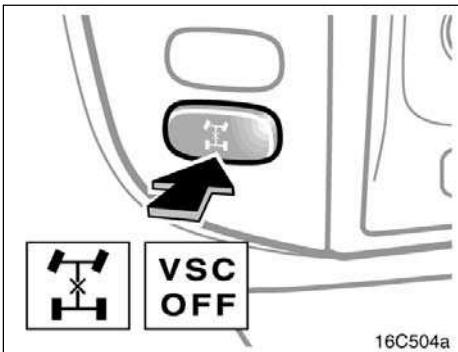
- Only use tires of specified size. The size, manufacturer, brand and tread pattern for all 4 tires should be the same. If you use the tires other than specified, or different type or size, the vehicle stability control system may not function correctly. When replacing the tires or wheels, contact your Toyota dealer. (See "Checking and replacing tires" on page 304.)



16C502

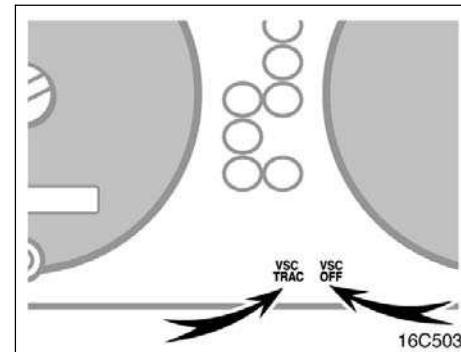
If the vehicle is going to skid during driving, the slip indicator light flashes and an alarm sounds intermittently.

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



16C504a

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



16C503

Vehicle stability control system failure warning

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

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

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

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

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

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

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

In the following cases, contact your Toyota dealer:

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

SECTION 1 - 10

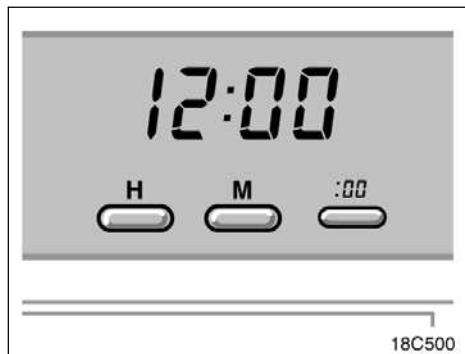
OPERATION OF INSTRUMENTS AND CONTROLS

Other equipment

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Clock



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

To reset the hour: Push the "H" button.
To reset the minutes: Push the "M" button.

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

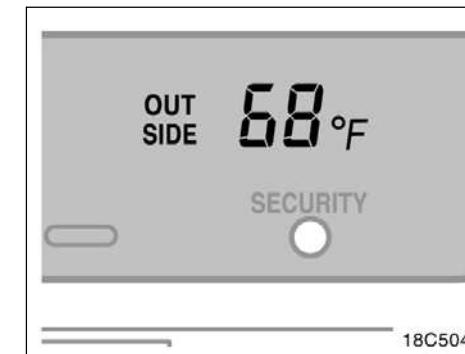
If quick adjustment to a full hour is desired, push the ":00" button.

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 (one o'clock).

Outside temperature display



The display indicates between the range of -22°F and 122°F.

The key must be in the "ON" position.

Rear view monitor system

The rear view monitor system assists the driver by displaying an image of the rear of the vehicle while backing up. The displayed image on the screen is a horizontally reversed mirror image of the inside rear view mirror.

To display the rear view image on the screen, place the selector lever in the "R" position when the ignition switch in the "ON" position.

If you move the selector lever out of the "R" position, the screen returns to the previous screen. Operating another function of the navigation system will display another screen.

The rear view monitor system is a supplement device intended to assist back up. When backing up, be sure to check behind and all around the vehicle visually.

CAUTION

- Never depend on the rear view monitor system entirely when backing up. Always make sure your intended path is clear.
Use caution just as you would when backing up any vehicle.
- Never back up while looking only at the screen. The image on the screen is different from actual conditions. Depicted distances between objects and flat surfaces will differ from actual distances. If you back up while looking only at the screen, you may hit a vehicle, a person or an object. When backing up, be sure to check behind and all around the vehicle visually and with mirrors before proceeding.
- Do not use the system when the back door is not completely closed.

- If the back of the vehicle is hit, the position and mounting angle of the camera may change. Be sure to have the camera's position and mounting angle checked at your Toyota dealer.

- If the temperature changes rapidly, such as when hot water is poured on the vehicle in cold weather, the system may not operate normally.

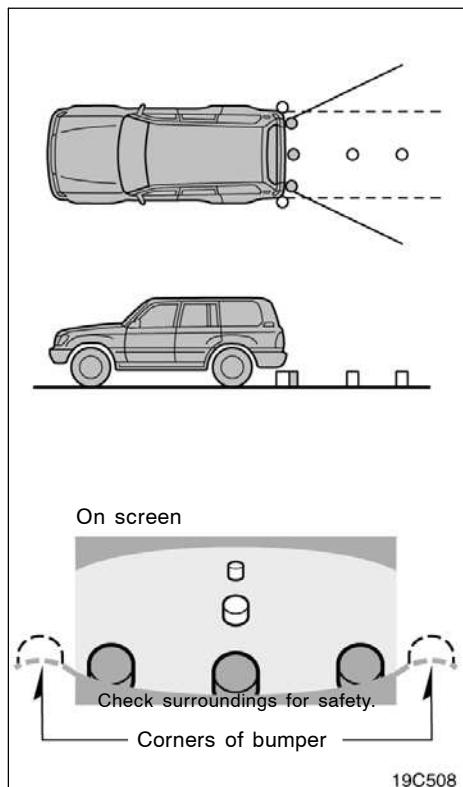
- If the camera lens becomes dirty, it cannot transmit a clear image. If water droplets, snow, or mud adhere to the lens, rinse with water and wipe with a soft cloth. If the lens is extremely dirty, wash it with a mild cleanser and rinse.

- The displayed image may become darker and moving images may be slightly distorted when the system is cold. When backing up, be sure to check behind and all around the vehicle visually and with mirror before proceeding.

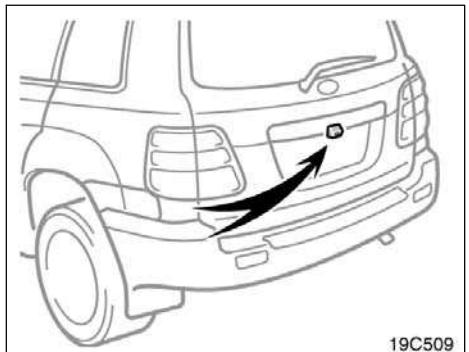
When replacing the tires, please consult your Toyota dealer. If you replace the tires, the area displayed on the screen may change.

AREA DISPLAYED ON SCREEN

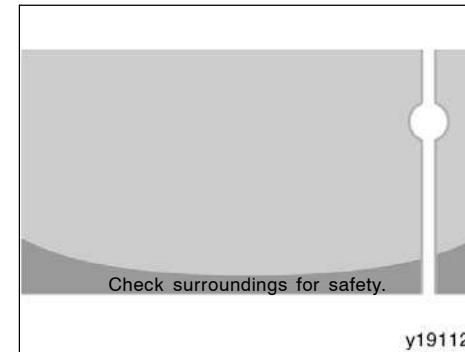
Image is displayed approximately level on screen.



- The area detected by the camera is limited. Objects which are close to either corner of the bumper or under the bumper cannot be seen on the screen.
- The area displayed on the screen may vary according to vehicle orientation or road conditions.



- When water droplets are adhering to the camera, or when humidity is high (for example, when it rains)
- When foreign matter (for example, snow or mud) adheres to the camera lens
- When the sun or the beam of headlights is shining directly into the camera lens



THE REAR VIEW MONITOR SYSTEM CAMERA

The rear view monitor system camera is located on the back door as shown in the illustration. The camera uses a special lens. The distance of the image that appears on the screen differs from the actual distance.

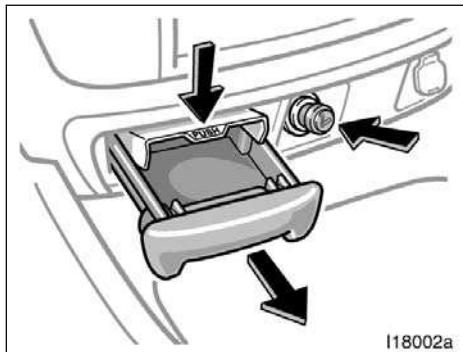
In the following cases, it may become difficult to see the images on the screen, even when the system is functioning.

- In the dark (for example, at night)
- When the temperature near the lens is extremely high or low

If a bright light (for example, sunlight reflected off the vehicle body) is picked up by the camera, the smear effect* peculiar to the camera may occur.

*: Smear effect—A phenomenon that occurs when a bright light (for example, sunlight reflected off the vehicle body) is picked up by the camera; when transmitted by the camera, the light source appears to have a vertical streak above and below it.

Cigarette lighter and ashtray



CIGARETTE LIGHTER

To use the cigarette lighter, press it in. After it finishes heating up, it automatically pops out ready for use.

If the engine is not running, the key must be in the "ACC" position to use the lighter.

Do not hold the cigarette lighter pressed in.

Use a Toyota genuine cigarette lighter or equivalent for replacement.

ASHTRAY

To use the ashtray, pull it out.

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

To remove the ashtray, press down on the lock spring plate and pull out.

CAUTION

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

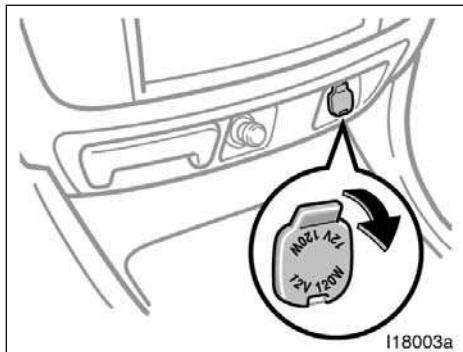
Power outlets

The power outlets are designed for power supply for car accessories. To use them, open the lids as shown in the following illustrations.

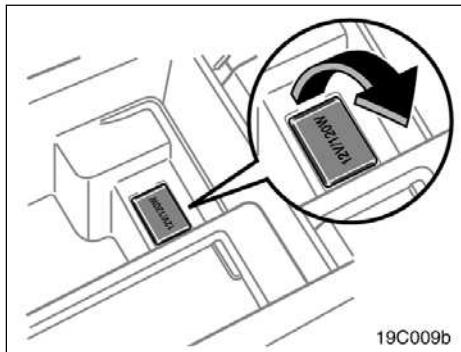
The key must be in the "ACC" or "ON" position to be used.

NOTICE

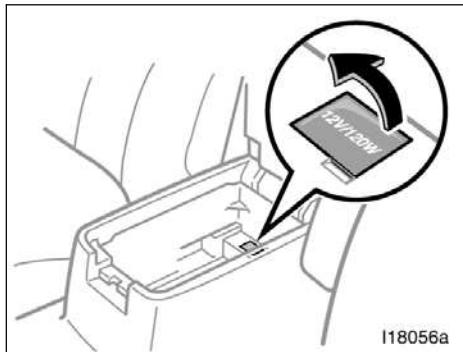
- ◆ To prevent the fuse from being blown, do not use the electricity over the total vehicle capacity of 12V/120W (all the outlets together).
- ◆ To prevent the battery from being discharged, do not use the power outlets longer than necessary when the engine is not running.
- ◆ Close the power outlet lids when the power outlets are not in use. Inserting 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.



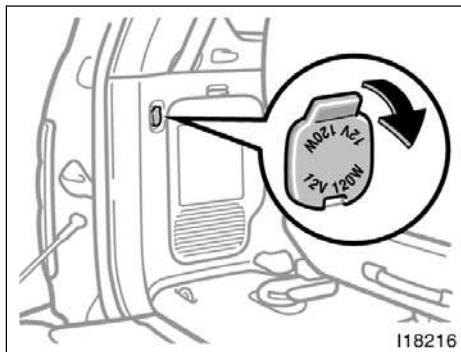
Instrument panel



Rear console box
(Vehicles with navigation system)

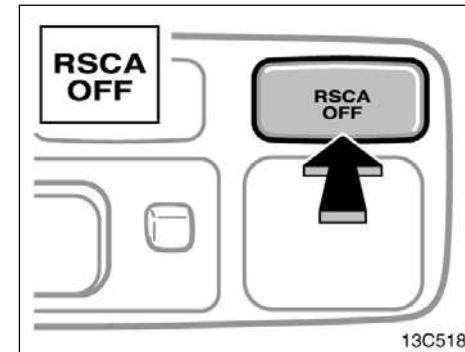


Rear console box
(Vehicles without navigation system)



Luggage compartment

Roll sensing of curtain shield airbags off switch



13C518

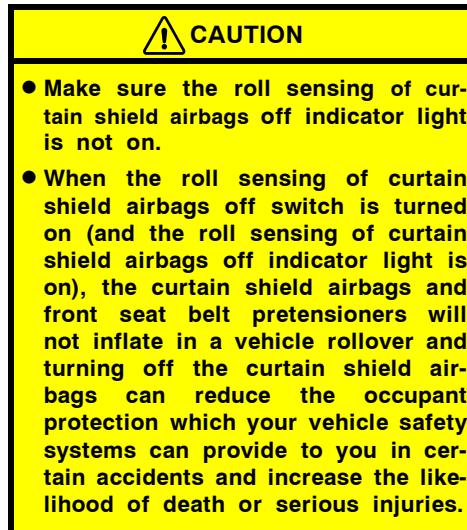
The roll sensing of curtain shield airbags off switch can turn off the curtain shield airbags and front seat belt pretensioners in a vehicle rollover. This switch should only be used in a situation where the inflation is not desired (such as extreme off-road driving).

When you push the roll sensing of curtain shield airbags off switch for a few seconds with the ignition switch on, the roll sensing of curtain shield airbags off indicator light comes on and the roll sensing function is turned off. When you push the switch again, the indicator light goes off and the roll sensing function is turned on.

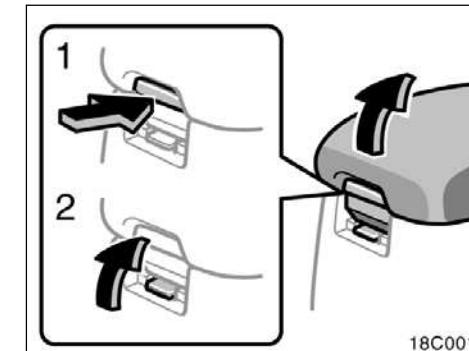
In a severe side impact, the curtain shield airbags on impacted side will inflate even if the roll sensing function is turned off.

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

For details, "Front seat belt pretensioners" on page 55 or "SRS side airbags and curtain shield airbags with roll sensing function" on page 65.



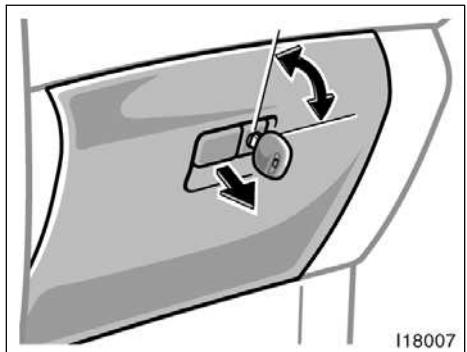
Rear console box



To use the rear console box, open as shown in the illustration.

1. For upper box
2. For lower box

Glove box



To use the glove box, do this.

To open: Pull the lever.

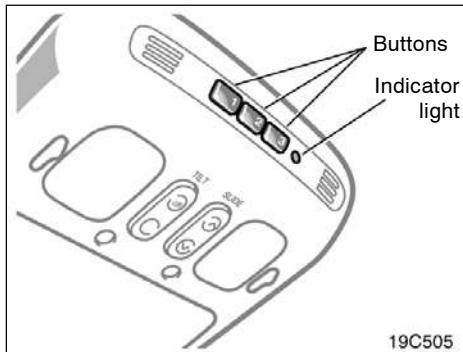
With the instrument panel lights on, the glove box light will come on when the glove box is open.

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

! CAUTION

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

Garage door opener



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

(a) Programming the HomeLink®

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

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

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

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

1. Decide which of 3 HomeLink® buttons you want to program. Push and hold down one of the buttons until the indicator corresponding to the selected channel begins to flash.
2. Place your hand-held garage transmitter 25 to 75 mm (1 to 3 in.) away from the surface of the HomeLink®. Keep the indicator light on the HomeLink® in view while programming.
3. Simultaneously press and hold the hand-held garage transmitter button along with the selected HomeLink® button.
4. When the indicator light on the HomeLink® changes from a slow to a rapid flash after 20 seconds, you can release both buttons.

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

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

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

Programming a rolling code system

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

1. Locate the "training" button on the ceiling mounted garage door opener motor. The exact location and color of the button may vary by brand of garage door opener. Refer to the owner's guide supplied by the garage door opener manufacturer for the location of this "training" button.
2. Press the "training" button on the ceiling mounted garage door opener motor. Following this step, you have 30 seconds in which to initiate step 3 below.
3. Press and release the vehicle's programmed HomeLink® button twice. The garage door may open. If the door does open, the programming process is complete. If the door does not open, press and release the button a third time. This third press and release will complete the programming process by opening the garage door.
4. Repeat steps 1 through 3 for each remaining HomeLink® button to program another rolling code system.

Programming an entrance gate/Programming all devices in the Canadian market

1. Decide which of the 3 HomeLink® buttons you want to program.
2. Place your hand-held gate/device transmitter 25 to 75 mm (1 to 3 in.) away from the surface of the HomeLink®. Keep the indicator light on the HomeLink® in view while programming.
3. Press and hold the selected HomeLink® button.
4. Continuously press and release (cycle) the hand-held gate/device transmitter button every two seconds until step 5 is complete.
5. When the indicator light on the HomeLink® changes from a slow to a rapid flash after 20 seconds, you can release both buttons.
6. Test the operation of the HomeLink® by pressing the newly programmed button. Check to see if the gate/device operates correctly.
7. Repeat steps 1 through 6 for each remaining HomeLink® button to program another device.

Programming other devices

To program other devices such as home security systems, home door locks or lighting, contact your authorized Toyota dealer for assistance.

Reprogramming a button

Individual HomeLink® buttons cannot be erased, however, to reprogram a single button, follow the procedure "Programming the HomeLink®".

(b) Operating the HomeLink®

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

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

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

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

CAUTION

- When programming the HomeLink® Universal Transceiver, you may be operating a garage door or other device. Make sure people and objects are out of the way of the garage door or other device to prevent potential harm or damage.
- Do not use this HomeLink® Universal Transceiver with any garage door opener that lacks the safety stop and reverse feature as required by federal safety standards. (This includes any garage door opener model manufactured before April 1, 1982.) A garage door opener which cannot detect an object (signaling the door to stop and reverse), does not meet current federal safety standards. Using a garage door opener without these features increases risk of serious injury or death.

This device complies with Part 15 of the FCC Rules and with RSS-210 of the IC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: This transmitter has been tested and complies with FCC and IC Rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

Auxiliary boxes—

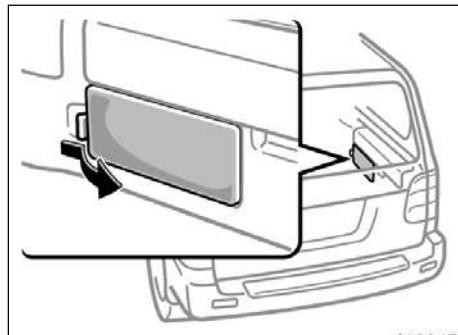
To use the auxiliary boxes, open the lids as shown in the following illustrations.

CAUTION

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

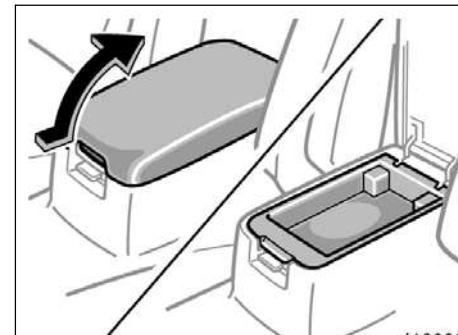
NOTICE

Auxiliary boxes on the ceiling—In hot weather, inside of the vehicle ceiling becomes very hot. Do not leave anything flammable or deformable such as a lighter, the glasses, etc. inside.



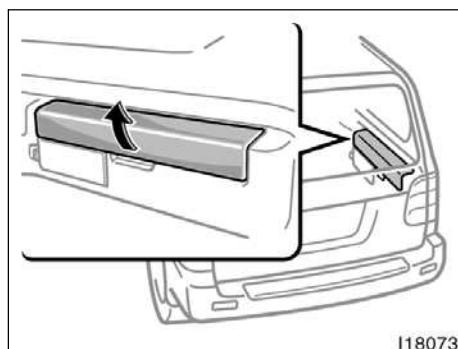
I18047

Type A (luggage compartment)



I18099

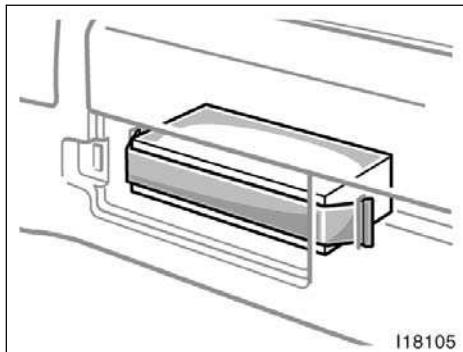
Type C (rear console)



I18073

Type B (luggage compartment)

—First-aid kit holder



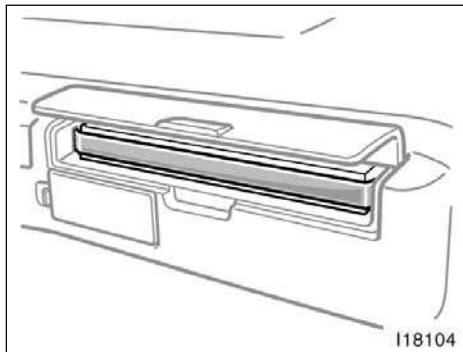
An auxiliary box is equipped with a band to hold the first-aid kit.

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

Hold the first-aid kit with a band.

Make sure the first-aid kit is securely held.

—Warning reflector holder



An auxiliary box is equipped with a band to hold the warning reflector.

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

Hold the warning reflector kit with a band.

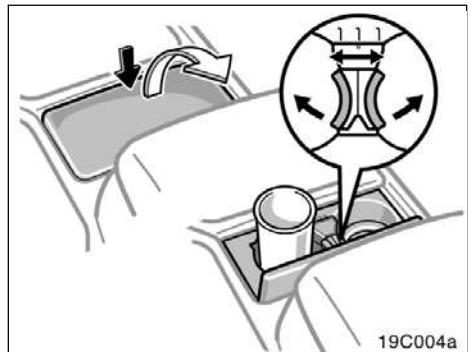
Make sure the warning reflector is securely held.

Cup holders

The cup holder is designed for holding cups or drink-cans securely. To use them, observe the following illustrations.

CAUTION

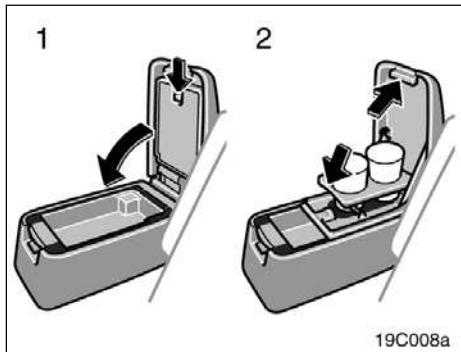
- Do not place anything else other than cups or drink-cans in the cup holder, as such items may be thrown about in the compartment and possibly injure people in the vehicle during a sudden braking or an accident.
- To reduce the chance of injury in case of an accident or a sudden stop while driving,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



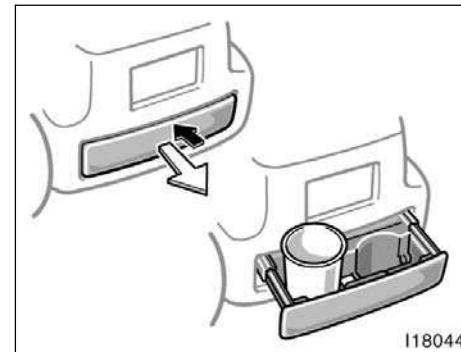
For front seats

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

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



For front seat



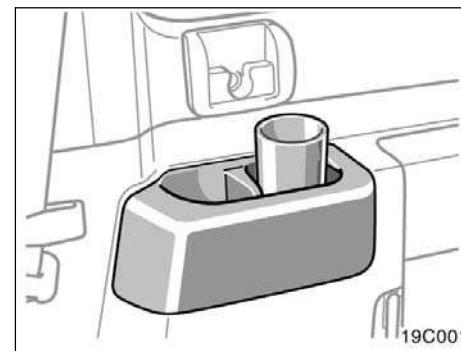
For second seats

To use a cup holder in the console box.

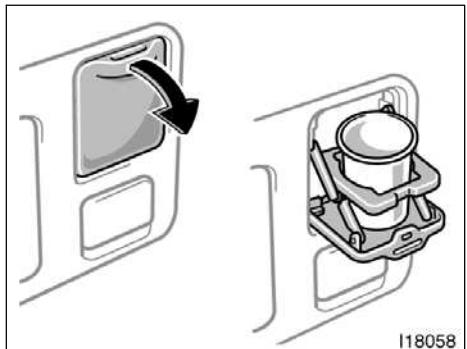
1. Open the console box lid. Pull down the knob so that the cup holder swings down.
2. While holding the console box lid with your hand, push down the cup holder to be secured.

NOTICE

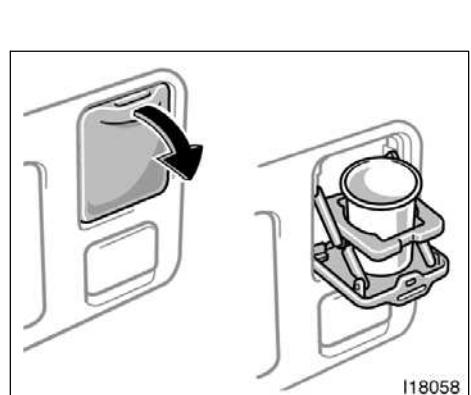
- ◆ *When you use the cup holder in the console box, make sure it is securely locked.*
- ◆ *Do not rest your arm on the cup holder in the console box.*
- ◆ *Wipe up spilt drink at once.*



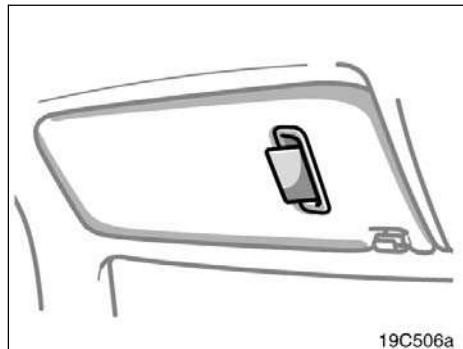
For third seats (right-hand side)



For third seats (left-hand side)

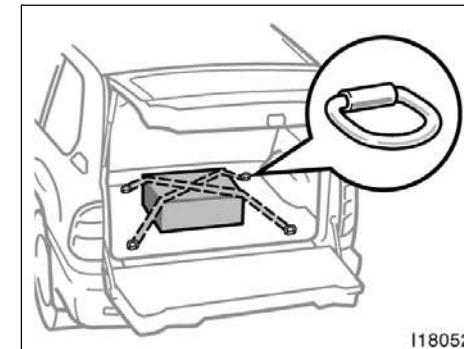


Card holder



19C506a

Tie-down hooks



19C5052

You can store a card in the slot as shown in the illustration.

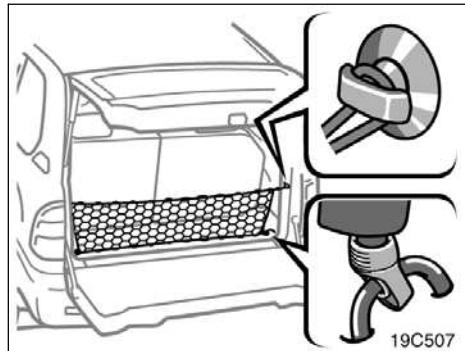
To secure your luggage, use the tie-down hooks as shown above.

See "Cargo and luggage" on page 230 for precautions when loading luggage.

NOTICE

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

Cargo net hooks



These hooks are designed to hang cargo net.

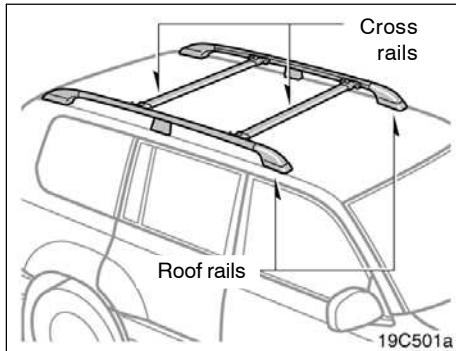
To hang the cargo net, use the cargo net hooks and rear tie-down hooks.

Although the cargo net itself is not included as an original equipment, these hooks can be used to hang the cargo net.

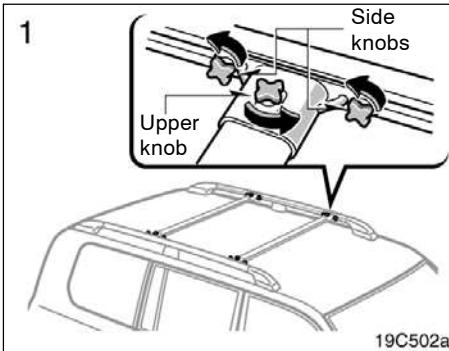
NOTICE

To prevent damage to the hook, avoid hanging things other than a cargo net on it.

Roof luggage carrier

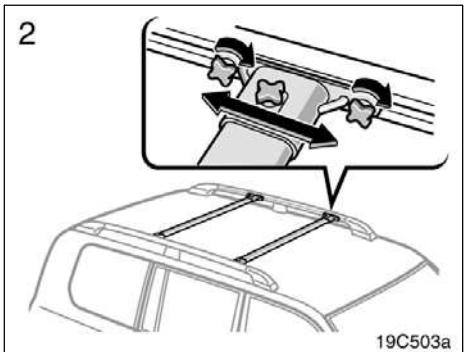


The roof luggage carrier consists of roof rails and sliding cross rails.



ADJUSTING THE POSITION OF CROSS RAILS:

1. Turn the upper and side knobs counterclockwise to loosen the cross rails.

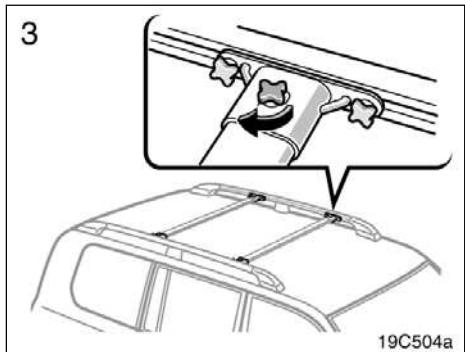


2. Slide the cross rails to the appropriate position for loading the luggages and turn the side knobs clockwise to tighten the cross rails securely.

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

NOTICE

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



3. In order to fix the cross rails to the appropriate length, turn the upper knobs clockwise after tightening all of the side knobs.

CAUTION

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

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

CAUTION

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

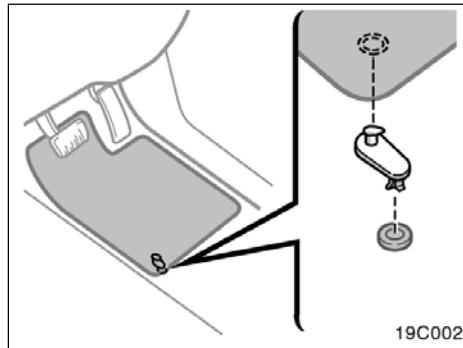
- Place the cargo so that its weight is distributed evenly between the front and rear axles.
- If loading long or wide cargo, never exceed the vehicle overall length or width. (See "Dimensions and weights" on page 324 for information on your vehicle overall length and width.)
- Before driving, make sure the cargo is securely fastened on the roof luggage carrier.
- Loading cargo on the roof luggage carrier will make the center of the vehicle gravity higher. Avoid high speeds, sudden starts, sharp turns, sudden braking or abrupt maneuvers, otherwise it may result in loss of control or vehicle rollover due to failure to operate this vehicle correctly.

- If driving for a long distance, on rough roads, or at high speeds, stop the vehicle now and then during the trip to make sure the cargo remains in its place.
- Do not exceed 70 kg (154 lb.) cargo weight on the roof luggage carrier.

NOTICE

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

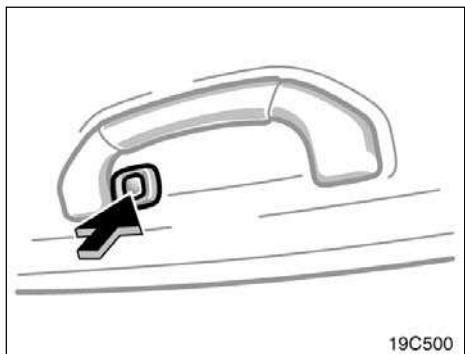
Floor mat



CAUTION

Make sure the floor mat is properly placed on the floor carpet. If the floor mat slips and interferes with the movement of the pedals during driving, it may cause an accident.

Coat hooks



To use the coat hook, push the hook.

CAUTION

Do not hook a hanger, heavy or sharp pointed object on the coat hook. If the curtain shield airbags inflate, those items will be hurled away with great force or the curtain shield airbags may not activate correctly. When you hang clothes, hang them on the coat hook directly.

SECTION 3

STARTING AND DRIVING

Before starting the engine	236
How to start the engine	236
Tips for driving in various conditions	237
Off-road driving precautions	238
Winter driving tips	240
Dinghy towing	241
Trailer towing	241
How to save fuel and make your vehicle last longer, too	249

Before starting the engine

1. Check the area around the vehicle before entering it.
2. Adjust seat position, seatback angle, head restraint height and steering wheel angle.
3. Adjust the inside and outside rear view mirrors.
4. Lock all doors.
5. Fasten seat belts.

How to start the engine—

(a) Cranking hold function

Once you turn the ignition key to "START" position and release it, the cranking hold function continues to crank the engine in "ON" position until it starts.

The function stops cranking the engine after about 25 seconds maximum if the engine has not started yet. When you crank the engine again, wait a few seconds and restart it.

If you hold the key in "START" position, the function will keep cranking for about 30 seconds maximum.

(b) Before cranking

1. Apply the parking brake firmly.
2. Turn off unnecessary lights and accessories.
3. Put the selector lever in "P". If you need to restart the engine while the vehicle is moving, put the selector lever in "N". A starter safety device will prevent the starter from operating if the selector lever is in any drive position.
4. Depress the brake pedal and hold it to the floor until driving off.

(c) Starting the engine

Before starting the engine, be sure to follow the instructions in "(b) Before cranking".

Normal starting procedure

The multiport fuel injection system/sequential multiport fuel injection system in your engine automatically controls the proper air-fuel mixture for starting.

You can start a cold or hot engine as follows:

With your foot off the accelerator pedal, turning the ignition key to "START" position, then release it.

Engine should be warmed up by driving, not in idle. For warming up, drive with smoothly turning engine until engine coolant temperature is within normal range.

If the engine stalls...

Simply restart it, using the correct procedure given in normal starting.

If the engine will not start...

See "If your vehicle will not start" on page 252.

NOTICE

- ◆ *Do not race a cold engine.*
- ◆ *If the engine becomes difficult to start or stalls frequently, have the engine checked immediately.*

Tips for driving in various conditions

- Always slow down in gusty crosswinds. This will allow you much better control.
- Drive slowly onto curbs and, if possible, at a right angle. Avoid driving onto high, sharp-edged objects and other road hazards. Failure to do so can lead to severe tire damage such as a tire burst.
Drive slowly when passing over bumps or travelling on a bumpy road. Otherwise, the impact could cause severe damage to the tires and/or wheels.
- When parking on a hill, turn the front wheels until they touch the curb so that the vehicle will not roll. Apply the parking brake, and place the transmission in "P". If necessary, block the wheels.
- Washing your vehicle or driving through deep water may get the brakes wet. To see whether they are wet, check that there is no traffic near you, and then press the pedal lightly. If you do not feel a normal braking force, the brakes are probably wet. To dry them, drive the vehicle cautiously while lightly pressing the brake pedal with the parking brake applied. If they still do not work safely, pull to the side of the road and call a Toyota dealer for assistance.



CAUTION

- Before driving off, make sure the parking brake is fully released and that the parking brake reminder light is off.
- Do not leave your vehicle unattended while the engine is running.
- Do not rest your foot on the brake pedal while driving. It can cause dangerous overheating, needless wear, and poor fuel economy.
- To drive down a long or steep hill, reduce your speed and downshift. Remember, if you ride the brakes excessively, they may overheat and not work properly.
- Be careful when accelerating, upshifting, downshifting or braking on a slippery surface. Sudden acceleration or engine braking could cause the vehicle to spin or skid.

- Do not drive in excess of the speed limit. Even if the legal speed limit permits it, do not drive over 140 km/h (85 mph) unless your vehicle has high-speed capability tires. Driving over 140 km/h (85 mph) may result in tire failure, loss of control and possible injury. Be sure to consult a tire dealer to determine whether the tires on your vehicle are high-speed capability tires or not before driving at such speeds.
- Do not continue normal driving when the brakes are wet. If they are wet, your vehicle will require a longer stopping distance, and it may pull to one side when the brakes are applied. Also, the parking brake will not hold the vehicle securely.

Off-road driving precautions

When driving your vehicle off-road, please observe the following precautions to ensure your driving enjoyment and to help prevent the closure of areas to off-road vehicles.

- a. Drive your vehicle only in areas where off-road vehicles are permitted to travel.
- b. Respect private property. Get owner's permission before entering private property.
- c. Do not enter areas that are closed. Honor gates, barriers and signs that restrict travel.
- d. Stay on established roads. When conditions are wet, driving techniques should be changed or travel delayed to prevent damage to roads.

For owners in U.S. mainland, Hawaii and Puerto Rico:

To obtain additional information pertaining to driving your vehicle off-road, consult the following organizations.

- State and Local Parks and Recreation Departments
- State Motor Vehicle Bureau
- Recreational Vehicle Clubs

- U.S. Forest Service and Bureau of Land Management

! CAUTION

Always observe the following precautions to minimize the risk of serious personal injury or damage to your vehicle:

- Drive carefully when off the road. Do not take unnecessary risks by driving in dangerous places.
- Do not grip the steering wheel spokes when driving off-road. A bad bump could jerk the wheel and injure your hands. Keep both hands and especially your thumbs on the outside of the rim.
- Always check your brakes for effectiveness immediately after driving in sand, mud, water or snow.

- After driving through tall grass, mud, rock, sand, rivers, etc., check that there is no grass, bush, paper, rags, stone, sand, etc. adhering or trapped on the underbody. Clear off any such matter from the underbody. If the vehicle is used with these materials trapped or adhering to the underbody, a breakdown or fire could occur.
- In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Therefore, the driver and all passengers should fasten their seat belts whenever the vehicle is moving.
- When driving off-road or in rugged terrain, do not drive at excessive speeds, jump, make sharp turns, strike objects, etc. This may cause loss of control or vehicle rollover causing death or serious injury. You are also risking expensive damage to your vehicle's suspension and chassis.

NOTICE

- ◆ If driving through water, such as when crossing shallow streams, first check the depth of the water and the bottom of the river bed for firmness. Drive slowly and avoid deep water.
- ◆ Take all necessary safety measures to ensure that water damage to the engine or other components does not occur.
- ◆ Water entering the engine air intake will cause severe engine damage.
- ◆ Water can wash the grease from wheel bearings, causing rusting and premature failure, and may also enter the differentials, transmission and transfer case, reducing the gear oil's lubricating qualities.
- ◆ Sand and mud that has accumulated in brake drums and around brake discs may affect braking efficiency and may damage brake system components.

◆ **Always perform a maintenance inspection after each day of off-road driving that has taken you through rough terrain, sand, mud, or water. For scheduled maintenance information, refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".**

Winter driving tips

Make sure your coolant is properly protected against freezing.

Only use "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology. (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 298 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. It tells you how to visually inspect the battery on page 312. Your Toyota dealer and most service stations will be pleased to check the level of charge.

Make sure the engine oil viscosity is suitable for the cold weather.

See page 297 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 anti-freeze solution.

This product is available at your Toyota dealer and most auto parts stores. Follow the manufacturer's directions for how much to mix with water.

NOTICE

Do not use engine antifreeze or any other substitute as washer fluid because it may damage your vehicle's paint.

Do not use your parking brake when there is a possibility it could freeze.

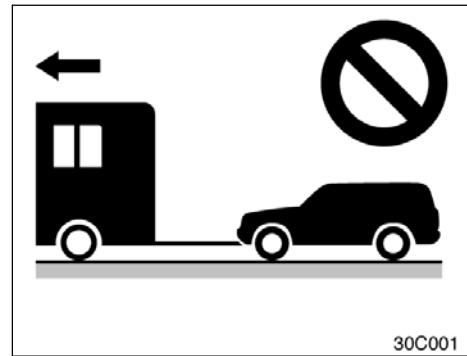
When parking, put the transmission into "P" and block the front wheels. Do not use the parking brake, or snow or water accumulated in and around the parking brake mechanism may freeze, making it hard to release.

Keep ice and snow from accumulating under the fenders.

Ice and snow built up under your fenders can make steering difficult. During bad winter driving, stop and check under the fenders occasionally.

Depending on where you are driving, we recommend you carry some emergency equipment.

Some of the things you might put in the vehicle are tire chains, window scraper, bag of sand or salt, flares, small shovel, jumper cables, etc.

Dinghy towing

Your vehicle is not designed to be dinghy towed (with four wheels on the ground) behind a motorhome.

NOTICE

Do not tow your vehicle with four wheels on the ground. This may cause serious damage to your vehicle.

Trailer towing

Your vehicle is designed primarily as a passenger-and-load-carrying vehicle. Towing a trailer will have an adverse effect on handling, performance, braking, durability and driving economy (fuel consumption, etc.). Your safety and satisfaction depend on the proper use of correct equipment and cautious driving habits. For your safety and the safety of others, you must not overload your vehicle or trailer. Ask your local Toyota dealer for further details before towing.

WEIGHT LIMITS

Before towing, make sure the total trailer weight, gross combination weight, gross vehicle weight, gross axle weight and trailer tongue load are all within the limits.

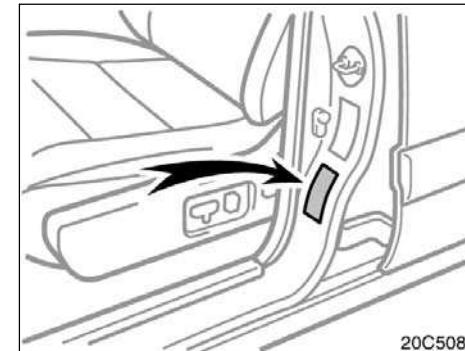
The total trailer weight and tongue load can be measured with platform scales found at a highway weighing station, building supply company, trucking company, junk yard, etc.



CAUTION

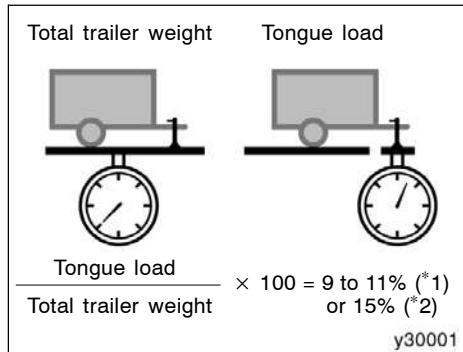
- The maximum gross trailer weight (trailer weight plus cargo weight) must never exceed 2948 kg (6500 lb.). If towing a trailer and cargo weighing over 907 kg (2000 lb.), it is necessary to use a sway control device with sufficient capacity. The combination of the gross trailer weight added to the total weight of the vehicle, occupants and vehicle cargo must never exceed a total of 5625 kg (12400 lb.). Exceeding the maximum weight of the trailer, the vehicle, or the vehicle and trailer combination, can cause an accident resulting in serious personal injuries.

- Trailer hitch assemblies have different weight capacities established by the hitch manufacturer. Even though the vehicle may be physically capable of towing a higher weight, the operator must determine the maximum weight rating of the particular hitch assembly and never exceed the maximum weight rating specified for the trailer-hitch. Exceeding the maximum weight rating set by the trailer hitch manufacturer can cause an accident resulting in serious personal injuries.



- The gross vehicle weight must not exceed the Gross Vehicle Weight Rating (GVWR) indicated on the Certification Label. The gross vehicle weight is the sum of weights of the unloaded vehicle, driver, passengers, luggage, hitch and trailer tongue load. It also includes the weight of any special equipment installed on your vehicle.

- The load on either the front or rear axle resulting from distribution of the gross vehicle weight on both axles must not exceed the Gross Axle Weight Rating (GAWR) listed on the Certification Label.



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.

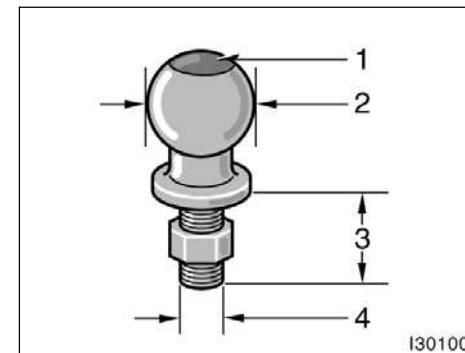
- The trailer cargo load should be distributed so that the tongue load is 9 to 11% for weight carrying hitch (*1) or 15% for weight distributing hitch (*2) of the total trailer weight, not exceeding the maximum load of the following
 - Weight carrying hitch
295 kg (650 lb.)
 - Weight distributing hitch
442 kg (975 lb.)

HITCHES

- If you wish to install a trailer hitch, you should consult with your Toyota dealer.
- Use only a hitch recommended by the hitch manufacturer and the one which conforms to the total trailer weight requirement.
- The hitch must be bolted securely to the vehicle frame and installed according to the hitch manufacturer's instructions.
- The hitch ball and king pin should have a light coat of grease.
- Toyota recommends removing the trailer hitch whenever you are not towing a trailer to reduce the possibility of additional damage caused by the hitch if your vehicle is struck from behind. After removing the hitch, seal any mounting holes in the vehicle body to prevent entry of pollutants such as exhaust fumes, dirt, water, etc.

NOTICE

Do not use axle-mounted hitches as they can cause damage to the axle housing, wheel bearings, wheels or tires. Also, never install a hitch which may interfere with the normal function of an Energy Absorbing Bumper, if so equipped.



- 1 Trailer ball load rating
- 2 Ball diameter
- 3 Shank length
- 4 Shank diameter

TRAILER BALL

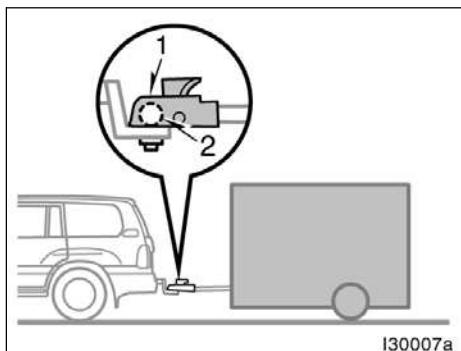
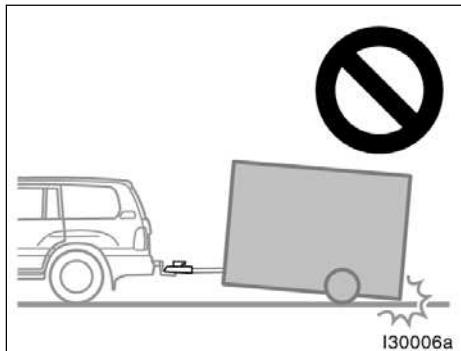
Follow these easy steps to properly determine the correct trailer ball for your application:

1. Determine the correct trailer ball size for the trailer coupler. Most couplers are stamped with the required trailer ball size. The sizes you will most likely find stamped on the coupler are:

Trailer Class Typical Trailer Ball Size

III	2 in.
II	2 in.
I	1 7/8 in.

2. Select the appropriate trailer ball to match or exceed the gross trailer weight rating of the trailer. The trailer ball load rating should be printed on the top of the ball.
3. When mounted in the ball mount, the threaded ball shank must protrude beyond the bottom of the lock washer and nut at least 2 threads. The trailer ball shank must be matched to the ball mount hole diameter size.



1 Coupler
2 Trailer ball

MATCHING TRAILER BALL HEIGHT TO TRAILER COUPLER HEIGHT

No matter which class of tow hitch applies, for a safe trailer hookup, the trailer ball setup on must be the proper height for the coupler on the trailer.

BRAKES AND SAFETY CHAINS

- Toyota recommends trailers with brakes that conform to any applicable federal and state/provincial regulations.
- A safety chain must always be used between the towing vehicle and the trailer. Leave sufficient slack in the chain for turns. The chain should cross under the trailer tongue to prevent the tongue from dropping to the ground in case it becomes damaged or separated. For correct safety chain procedures, follow the hitch or trailer manufacturer's recommendations.

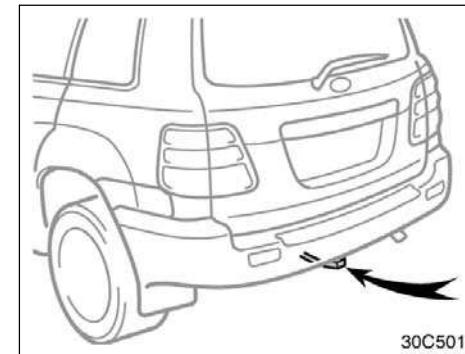


CAUTION

- If the total trailer weight exceeds 453 kg (1000 lb.), trailer brakes are required.
- Never tap into your vehicle's hydraulic system as it would lower its braking effectiveness.
- Never tow a trailer without using a safety chain securely attached to both the trailer and the vehicle. If damage occurs to the coupling unit or hitch ball, there is danger of the trailer wandering over into another lane.

TIRES

- Ensure that your vehicle's tires are properly inflated. Adjust the tire inflation pressure indicated below:
tire inflation pressure, kPa (psi)
Front 220 (32)
Rear 240 (35)
See Section 7-2 and Section 8 for instructions.
- The trailer tires should be inflated to the pressure recommended by the trailer manufacturer in respect to the total trailer weight.



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TRAILER LIGHTS

- Your vehicle is equipped with a wire harness stored in the rear end under body. Your vehicle is fitted with a socket for trailer lights under the rear bumper. Use either of them to connect and operate the trailer lights. However, the trailer lights must comply with federal, state/provincial and local regulations. See your local recreational vehicle dealer or rental agency for the correct type of wiring and relays for your trailer. Check for correct operation of the turn signals and stop lights each time you hitch up. Direct splicing may damage your vehicle's electrical system and cause a malfunction of your lights.

BREAK-IN SCHEDULE

- Toyota recommends that you do not tow a trailer with a new vehicle or a vehicle with any new power train component (engine, transmission, differential, wheel bearing, etc.) for the first 800 km (500 miles) of driving.

MAINTENANCE

- If you tow a trailer, your vehicle will require more frequent maintenance due to the additional load. For this information, please refer to the scheduled maintenance information in the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".
- Retighten all fixing bolts of the towing ball and bracket after approximately 1000 km (600 miles) of trailer driving.

PRE-TOWING SAFETY CHECK

- Check that your vehicle remains level when a loaded or unloaded trailer is hitched. Do not drive if the vehicle has an abnormal nose-up or nose-down condition, and check for improper tongue load, overload, worn suspension or other possible causes.
- Make sure the trailer cargo is securely loaded so that it cannot shift.

- Check that your rear view mirrors conform to any applicable federal, state/provincial or local regulations. If not, install the rear view mirrors required for towing purpose.

TRAILER TOWING TIPS

When towing a trailer, your vehicle will handle differently than when not towing. The three main causes of vehicle-trailer accidents are driver error, excessive speed and improper trailer loading. Keep these in mind when towing:

- Before starting out, check operation of the lights and all vehicle-trailer connections. After driving a short distance, stop and recheck the lights and connections. Before actually towing a trailer, practice turning, stopping and backing with a trailer in an area away from traffic until you learn the feel.
- Because stopping distance may be increased, vehicle-to-vehicle distance should be increased when towing a trailer. For each 16 km/h (10 mph) of speed, allow at least one vehicle and trailer length between you and the vehicle ahead. Avoid sudden braking as you may skid, resulting in jackknifing and loss of control. This is especially true on wet or slippery surfaces.
- Avoid jerky starts or sudden acceleration.
- Avoid jerky steering and sharp turns. The trailer could hit your vehicle in a tight turn. Slow down before making a turn to avoid the necessity of sudden braking.
- Remember that when making a turn, the trailer wheels will be closer than the vehicle wheels to the inside of the turn. Therefore, compensate for this by making a larger than normal turning radius with your vehicle.
- Backing with a trailer is difficult and requires practice. Grip the bottom of the steering wheel and move your hand to the left to move the trailer to the left. Move your hand to the right to move the trailer to the right. (This procedure is generally opposite to that when backing without a trailer). Also, just turn the steering wheel a little at a time, avoiding sharp or prolonged turning. Have someone guide you when backing to reduce the risk of an accident.

- Crosswinds and rough roads will adversely affect handling of your vehicle and trailer, causing sway. Pay attention to the rear from time to time to prepare yourself for being passed by large trucks or buses, which may cause your vehicle and trailer to sway. If swaying happens, firmly grip the steering wheel and reduce speed immediately but gradually. Never increase speed. Steer straight ahead. If you make no extreme correction with the steering or brakes, the vehicle and trailer will stabilize itself.
- Be careful when passing other vehicles. Passing requires considerable distance. After passing a vehicle, do not forget the length of your trailer and be sure you have plenty of room before changing lanes.
- In order to maintain engine braking and electrical charging performance, do not use the overdrive. Transmission must be in the "4" position.
- Because of the added load of the trailer, your vehicle's engine may overheat on hot days (at temperatures over 30°C [85°F]) when going up a long or steep grade with a trailer. If the engine coolant temperature gauge indicates overheating, immediately turn off the air conditioning (if in use), pull off the road and stop in a safe spot. Refer to "If your vehicle overheats" on page 256.
- Always place wheel blocks under both the vehicle and trailer wheels when parking. Apply the parking brake firmly. Put the transmission in "P". Avoid parking on a slope with a trailer, but if it cannot be avoided, do so only after performing the following:
 1. Apply the brakes and keep them applied.
 2. Have someone place wheel blocks under both the vehicle and trailer wheels.
 3. When the wheel blocks are in place, release your brakes slowly until the blocks absorb the load.
 4. Apply the parking brake firmly.
 5. Shift into "P" and turn off the engine.

When restarting out after parking on a slope:

1. With the transmission in "P" position, start the engine. Be sure to keep the brake pedal depressed.
2. Shift into the "3", "2", "L" or "R" position.
3. Release the parking brake and brake pedal and slowly pull or back away from the wheel blocks. Stop and apply your brakes.
4. Have someone retrieve the blocks.



CAUTION

- Do not exceed 72 km/h (45 mph) or the posted towing speed limit, whichever is lower. Because instability (swaying) of a towing vehicle-trailer combination usually increases as the speed increases, exceeding 72 km/h (45 mph) may cause loss of control.
- Slow down and downshift before descending steep or long downhill grades. Do not make sudden downshifts.
- Avoid holding the brake pedal down too long or too frequently. This could cause the brakes to overheat and result in reduced braking efficiency.

How to save fuel and make your vehicle last longer, too

Improving fuel economy is easy—just take it easy. It will help make your vehicle last longer, too. Here are some specific tips on how to save money on both fuel and repairs:

- **Keep your tires inflated at the correct pressure.** Underinflation causes tire wear and wastes fuel. See page on 301.
- **Do not carry unneeded weight in your vehicle.** Excess weight puts a heavier load on the engine, causing greater fuel consumption.
- **Avoid lengthy warm-up idling.** Once the engine is running smoothly, begin driving—but gently. Remember, however, that on cold winter days this may take a little longer.
- **Accelerate slowly and smoothly.** Avoid jackrabbit starts.
- **Avoid long engine idling.** If you have a long wait and you are not in traffic, it is better to turn off the engine and start again later.
- **Avoid engine over-revving.** Use a gear position suitable for the road on which you are travelling.
- **Avoid continuous speeding up and slowing down.** Stop-and-go driving wastes fuel.
- **Avoid unnecessary stopping and braking.** Maintain a steady pace. Try to time the traffic signals so you only need to stop as little as possible or take advantage of through streets to avoid traffic lights. Keep a proper distance from other vehicles to avoid sudden braking. This will also reduce wear on your brakes.
- **Avoid heavy traffic or traffic jams whenever possible.**
- **Do not rest your foot on the brake pedal.** This causes premature wear, overheating and poor fuel economy.
- **Maintain a moderate speed on highways.** The faster you drive, the greater the fuel consumption. By reducing your speed, you will cut down on fuel consumption.

- **Keep the front wheels in proper alignment.** Avoid hitting the curb and slow down on rough roads. Improper alignment not only causes faster tire wear but also puts an extra load on the engine, which, in turn, wastes fuel.
- **Keep the bottom of your vehicle free from mud, etc.** This not only lessens weight but also helps prevent corrosion.
- **Keep your vehicle tuned-up and in top shape.** A dirty air cleaner, improper valve clearance, dirty plugs, dirty oil and grease, brakes not adjusted, etc. all lower engine performance and contribute to poor fuel economy. For longer life of all parts and lower operating costs, keep all maintenance work on schedule, and if you often drive under severe conditions, see that your vehicle receives more frequent maintenance. (For scheduled maintenance information, please refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".)

 **CAUTION**

Never turn off the engine to coast down hills. Your power steering and brake booster will not function without the engine running. Also, the emission control system operates properly only when the engine is running.

SECTION 4

IN CASE OF AN EMERGENCY

If your vehicle will not start	252
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If your vehicle will not start—

(a) Simple checks

Before making these checks, make sure you have followed the correct starting procedure given in "How to start the engine" on page 236 and that you have sufficient fuel. Also check whether the other keys will start the engine. If they work, your key may be broken. Have the key checked at your Toyota dealer. If none of your keys work, there may be a malfunction in the immobilizer system. Call your Toyota dealer. (See "Keys" on page 10.)

If the engine is not turning over or is turning over too slowly—

1. Check that the battery terminals are tight and clean.
2. If the battery terminals are O.K., switch on the interior light.
3. If the light is out, dim or goes out when the starter is cranked, the battery is discharged. You may try jump starting. See "(c) Jump starting" for further instructions.

If the light is O.K., but the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop.

NOTICE

Do not pull- or push-start the vehicle. It may damage the vehicle or cause a collision when the engine starts. Also the three-way catalytic converter may overheat and become a fire hazard.

If the engine turns over at its normal speed but will not start—

1. The engine may be flooded because of repeated cranking. See "(b) Starting a flooded engine" for further instructions.
2. If the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop.

(b) Starting a flooded engine

If the engine will not start, your engine may be flooded because of repeated cranking.

If this happens, turn the ignition key to "START" with the accelerator pedal fully depressed, and hold the key at this position for about 30 seconds. Then the cranking hold function stops cranking automatically, and you can try starting the engine with your foot off the accelerator pedal.

If the engine does not start, wait a few minutes and try again.

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

(c) Jump starting

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

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

CAUTION

- Batteries contain sulfuric acid which is poisonous and corrosive. Wear protective safety glasses when jump starting, and avoid spilling acid on your skin, clothing, or vehicle.
- If you should accidentally get acid on yourself or in your eyes, remove any contaminated clothing and flush the affected area with water immediately. Then get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.

- The gas normally produced by a battery will explode if a flame or spark is brought near. Use only standardized jumper cables and do not smoke or light a match while jump starting.

NOTICE

The battery used for boosting must be 12 V. Do not jump start unless you are sure that the booster battery is correct.

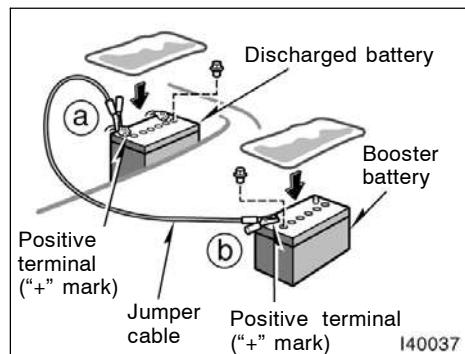
JUMP STARTING PROCEDURE

1. If the booster battery is installed in another vehicle, make sure the vehicles are not touching. Turn off all unnecessary lights and accessories.

When boosting, use the battery of matching or higher quality. Any other battery may be difficult to jump start with.

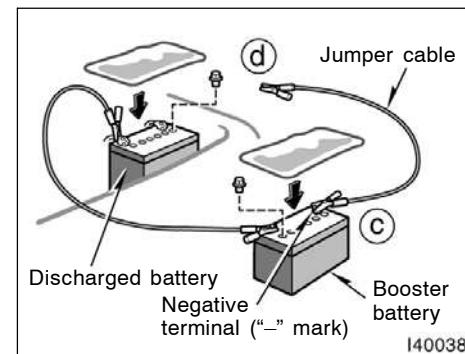
If jump starting is difficult, charge the battery for several times.

2. If required, remove all the vent plugs from the booster and discharged batteries. Lay a cloth over the open vents on the batteries. (This helps reduce the explosion hazard, personal injuries and burns.)
3. If the engine in the vehicle with the booster battery is not running, start it and let it run for a few minutes. During jump starting, run the engine at about 2000 rpm with the accelerator pedal lightly depressed.



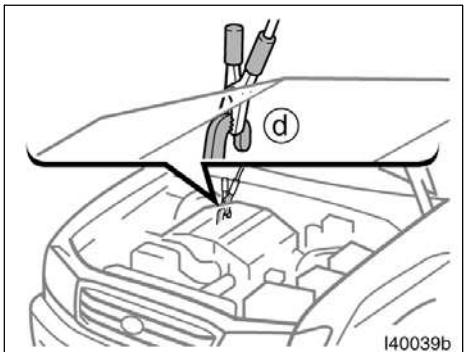
4. Make the cable connections in the order a, b, c, d.

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



- c. Connect the clamp of the negative (black) jumper cable to the negative (-) terminal on the booster battery.
- d. Connect the clamp at the other end of the negative (black) jumper cable to a solid, stationary, unpainted, metallic point of the vehicle with the discharged battery.

The recommended connecting point is shown in the following illustration:



Connecting point

Do not connect the cable to or near any part that moves when the engine is cranked.

CAUTION

When making the connections, to avoid serious injury, do not lean over the battery or accidentally let the jumper cables or clamps touch anything except the correct battery terminals or the ground.

5. Charge the discharged battery with the jumper cables connected for approximately 5 minutes. At this time, run the engine in the vehicle with the booster battery at about 2000 rpm with the accelerator pedal lightly depressed.
6. Start your engine in the normal way. After starting, run it at about 2000 rpm for several minutes with the accelerator pedal lightly depressed.
7. Carefully disconnect the cables in the exact reverse order: the negative cable and then the positive cable.
8. Carefully dispose of the battery cover cloths—they may now contain sulfuric acid.
9. If removed, replace all the battery vent plugs.

If the cause of your battery discharging is not apparent (for example, lights left on), you should have it checked at your Toyota dealer.

If the first start attempt is not successful...

Check that the clamp on the jumper cables are tight. Recharge the discharged battery with the jumper cables connected for several minutes and restart your hybrid system in the normal way.

If the 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 252.

! CAUTION

If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.

If you cannot increase engine speed

If engine speed does not increase when the accelerator pedal is depressed, the electronic throttle control system may be faulty. Move the vehicle to a safe place by means of creeping and call a Toyota dealer for assistance:

1. Depress the brake pedal and shift to the "D" position.
2. Gradually release the brake pedal, and the vehicle starts to move by creeping. After arriving at a safe place, stop the vehicle and call a Toyota dealer for assistance.

! CAUTION

- The above method of moving the vehicle is for emergency. Use it only for moving minimum distances to a safe place.
- Be especially careful to prevent erroneous pedal operation.

If your vehicle overheats

If your engine coolant temperature gauge indicates overheating, if you experience a loss of power, or if you hear a loud knocking or pinging noise, the engine has probably overheated. You should follow this procedure...

1. Pull safely off the road, stop the vehicle and turn on your emergency flashers. Put the transmission in "P" and apply the parking brake. Turn off the air conditioning if it is being used.
2. If coolant or steam is boiling out of the radiator or reservoir, stop the engine. Wait until the steam subsides before opening the hood. If there is no coolant boiling over or steam, leave the engine running.

! CAUTION

To help avoid personal injury, keep the hood closed until there is no steam. Escaping steam or coolant is a sign of very high pressure.

3. Visually check to see if the engine drive belt (fan belt) is broken or loose. Look for obvious coolant leaks from the radiator, hoses, and under the vehicle. However, note that water draining from the air conditioning is normal if it has been used.

CAUTION

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

4. If the engine drive belt is broken or the coolant is leaking, stop the engine immediately. Call a Toyota dealer for assistance.
5. If the engine drive belt is O.K. and there are no obvious leaks, you may help the engine cool down more quickly by running it at about 1500 rpm for a few minutes with the accelerator pedal lightly depressed.
6. Check the coolant reservoir. If it is dry, add coolant to the reservoir while the engine is running. Fill it about half full. For the coolant type, see "Coolant type selection" on page 299.

CAUTION

Do not attempt to remove the radiator cap when the engine and radiator are hot. Serious injury could result from scalding hot fluid and steam blown out under pressure.

7. After the engine coolant temperature has cooled to normal, again check the coolant level in the reservoir. If necessary, bring it up to half full again. Serious coolant loss indicates a leak in the system. You should have it checked as soon as possible at your Toyota dealer.

If you have a flat tire—

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place well away from the traffic. Avoid stopping on the center divider of a highway. Park on a level spot with firm ground.
2. Stop the engine and turn on your emergency flashers.
3. Firmly set the parking brake and put the transmission in "P".
4. Have everyone get out of the vehicle on the side away from traffic.
5. Read the following instructions thoroughly.

 **CAUTION**

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

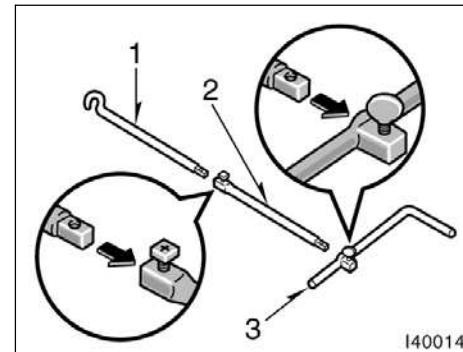
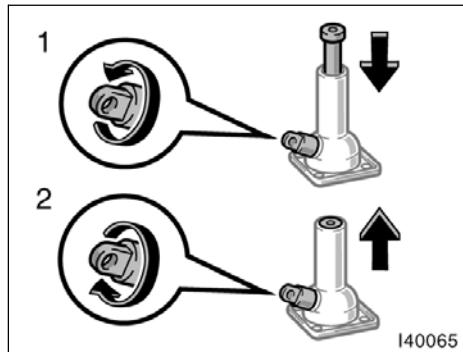
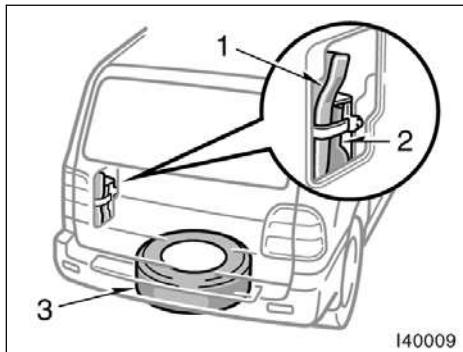
- Follow jacking instructions.
- Do not put any part of your body under the vehicle supported by the jack. Otherwise, personal injury may occur.
- Do not start or run the engine while your vehicle is supported by the jack.
- Stop the vehicle on a level firm ground, firmly set the parking brake and put the transmission in reverse. Block the wheel diagonally opposite to the one being changed if necessary.

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

NOTICE

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

—Required tools and spare tire



1. Get the required tools and spare tire.

- 1 Tool bag
- 2 Jack
- 3 Spare tire

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

When storing the jack, put it in place and secure to prevent it from flying forward during a collision or sudden braking.

Turn the jack joint by hand.

To remove: Turn the joint in direction 1 until the jack is free.

To store: Turn the joint in direction 2 until the jack is firmly secured to prevent it flying forward during a collision or sudden braking.

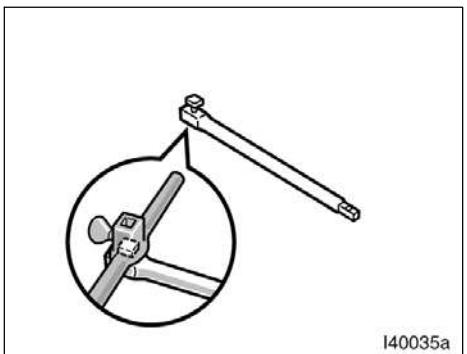
To remove the spare tire under the luggage compartment:

1. Put a jack handle, jack handle extensions and jack handle end together as shown in the illustration.

- 1 Jack handle end
- 2 Jack handle extension
- 3 Jack handle

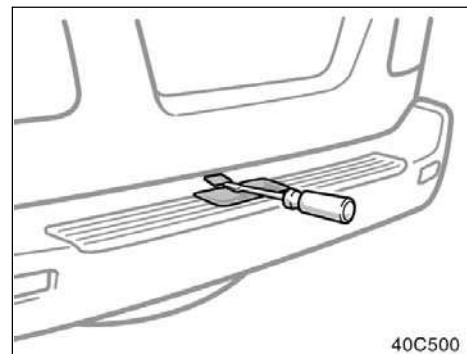
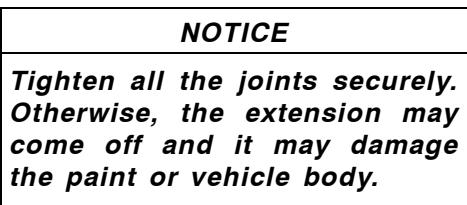
CAUTION

Make sure they are each securely fixed with screws.



I40035a

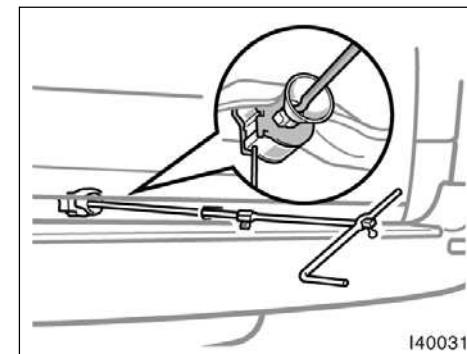
When connecting a jack handle extension with a jack handle end, use a jack handle to tighten the bolts on the joints as shown in the illustration. When connecting the jack handle with extension, tighten the wing bolt on the joint securely. Make sure the hollow meets the bolt on every joint when you tighten the bolts.



40C500

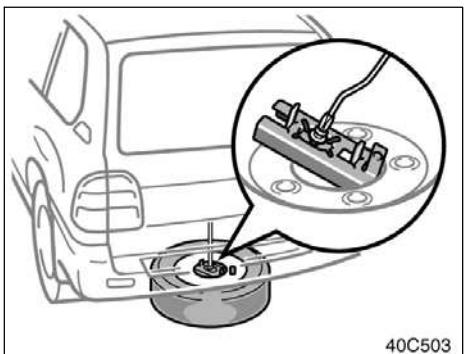
2. Remove the access hole cover on the rear bumper with a flat-bladed screwdriver.

To protect the paint, place several sheets of paper over the paintwork.

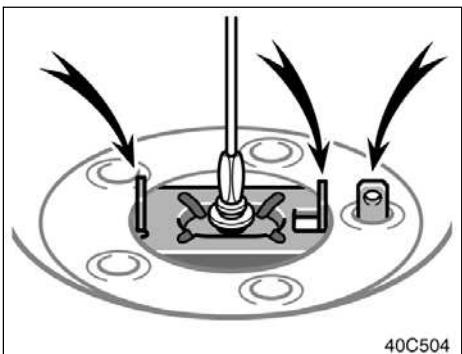


I40031

3. Insert the jack handle end into the lowering screw through the access hole and turn it counterclockwise with pushing it to the front lightly.



40C503



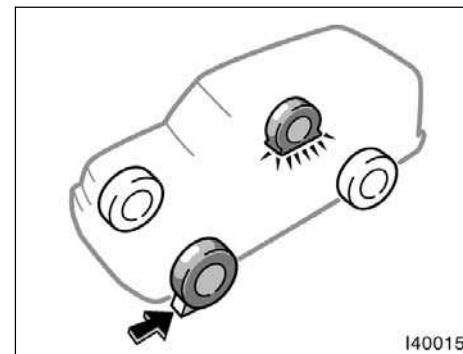
40C504

4. After the tire is lowered completely to the ground, remove the holding bracket as shown in the illustration.

When storing the spare tire, put it in place with the outer side of the wheel facing up and hook the holding bracket as shown in the illustration. Then secure the tire, taking care that the tire goes straight up without catching on any other part, to prevent it from moving during a collision or sudden braking.

Check the tire from the side to see that the tire is stored horizontally.

—Blocking the wheel

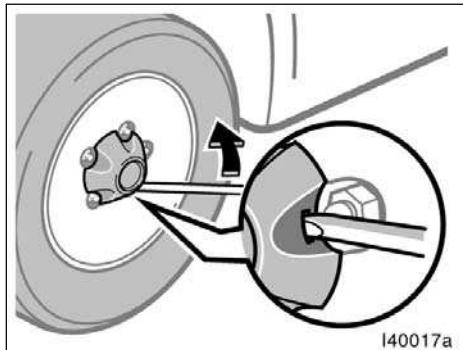


I40015

2. **Block the wheel diagonally opposite the flat tire to keep the vehicle from rolling when it is jacked up.**

When blocking the wheel, place a wheel block in front of one of the front wheels or behind one of the rear wheels.

—Removing wheel ornament



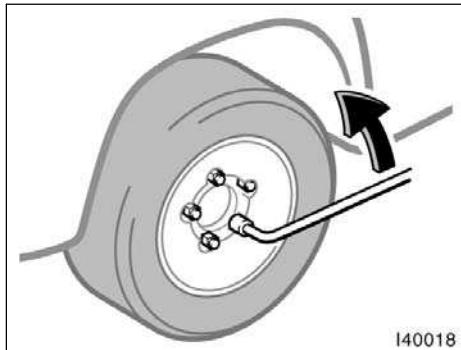
3. Remove the wheel ornament.

Pry off the wheel ornament, using the beveled end of the wheel ornament remover as shown.

CAUTION

Do not try to pull off the ornament by hand. Take due care in handling the ornament to avoid unexpected personal injury.

—Loosening wheel nuts



4. Loosen all the wheel nuts.

Always loosen the wheel nuts before raising the vehicle.

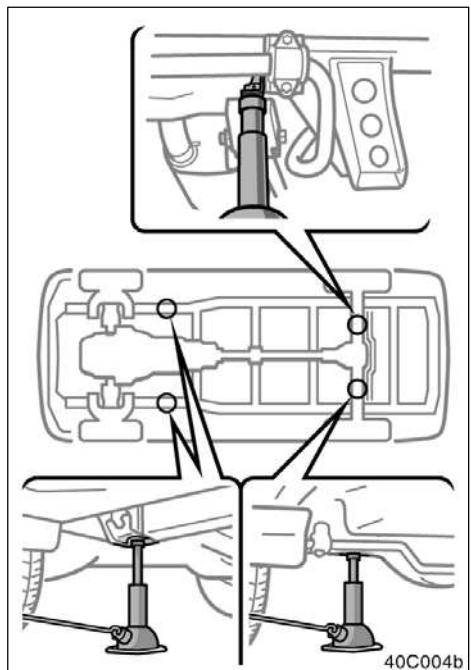
Turn the wheel nuts counterclockwise to loosen. To get maximum leverage, fit the wrench to the nut so that the handle is on the right side, as shown above. Grab the wrench near the end of the handle and pull up on the handle. Be careful that the wrench does not slip off the nut.

Do not remove the nuts yet—just unscrew them about one-half turn.

CAUTION

Never use oil or grease on the bolts or nuts. The nuts may loosen and the wheels may fall off, which could cause a serious accident.

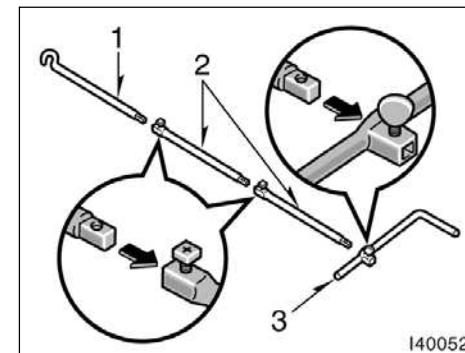
—Positioning the jack



JACK POINTS:

Front—Under the frame side rail
Left rear—Under the rear axle housing
Right rear—Under the bracket on the rear axle housing

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



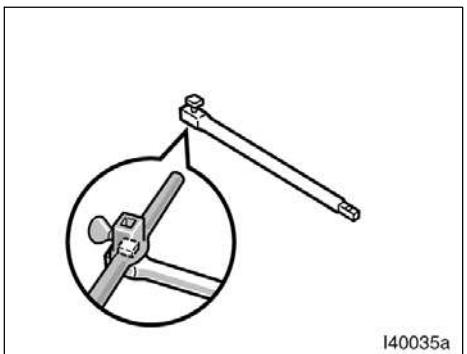
Put a jack handle, jack handle extensions, and jack handle end together as shown in the illustration.

- 1 Jack handle end
- 2 Jack handle extensions
- 3 Jack handle

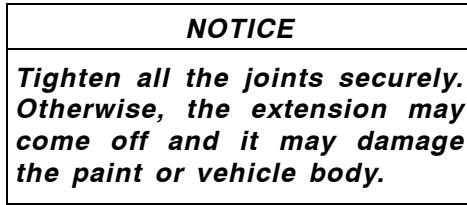
! CAUTION

Make sure they are each securely fixed with screws.

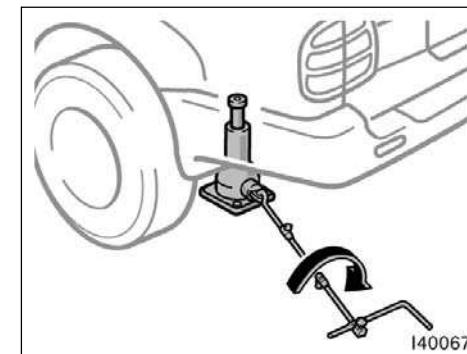
5. Position the jack at the correct jack point as shown.



When connecting a jack handle extension with another extension and a jack handle end, use a jack handle to tighten the bolts on the joints as shown in the illustration. When connecting the jack handle with extension, tighten the wing bolt on the jack handle securely. Make sure the hollow meets the bolt on any joint when you tighten the bolts.



—Raising your vehicle



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

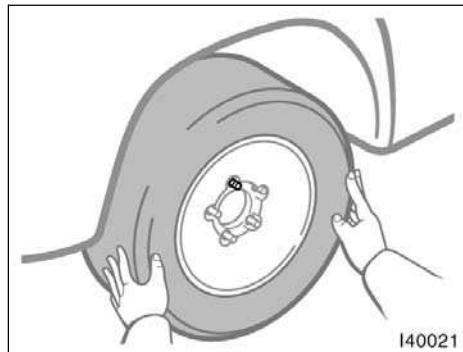
Remember you will need more ground clearance when putting on the spare tire than when removing the flat tire.

To raise the vehicle, insert the jack handle end into the joint of the jack (it is a loose fit) and turn it clockwise with the handle, making sure the handle remains firmly fitted onto the jack handle end. As the jack touches the vehicle and begins to lift, double-check that it is properly positioned.

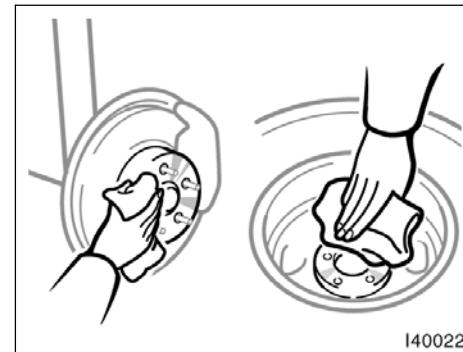
CAUTION

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

—Changing wheels



I40021



I40022

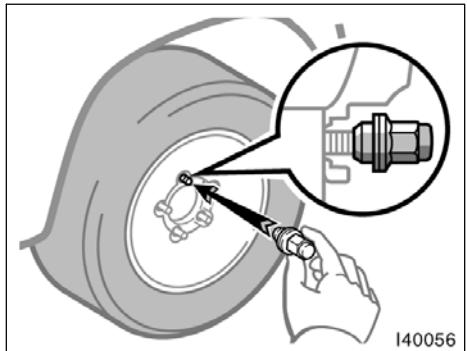
7. Remove the wheel nuts and change tires.

Lift the flat tire straight off and put it aside.

Roll the spare wheel into position and align the holes in the wheel with the bolts. Then lift up the wheel and get at least the top bolt started through its hole. Wiggle the tire and press it back over the other bolts.

Before putting on wheels, remove any corrosion on the mounting surfaces with a wire brush or such. Installation of wheels without good metal-to-metal contact at the mounting surface can cause wheel nuts to loosen and eventually cause a wheel to come off while driving.

—Reinstalling wheel nuts



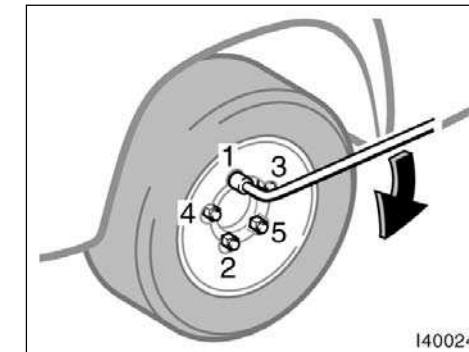
8. Reinstall all the wheel nuts finger tight.

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

CAUTION

Never use oil or grease on the bolts or nuts. Doing so may lead to overtightening the nuts and damaging the bolts. The nuts may loosen and the wheels may fall off, which could cause a serious accident. If there is oil or grease on any bolt or nut, clean it.

—Lowering your vehicle



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

Turn the jack handle extension counterclockwise with handle to lower the vehicle, making sure the handle remains firmly fitted onto the jack handle extension.

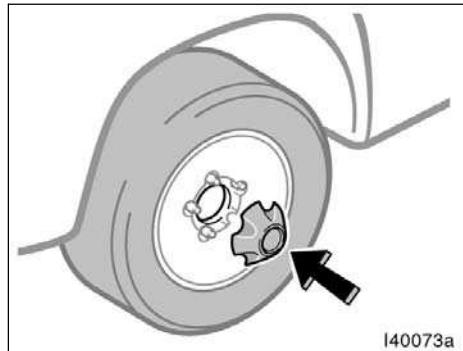
Use only the wheel nut wrench and turn it clockwise to tighten the nuts. Do not use other tools or any additional leverage other than your hands, such as a hammer, pipe or your foot. Make sure the wrench is securely engaged over the nut.

Tighten each nut a little at a time in the order shown. Repeat the process until all the nuts are tight.

CAUTION

- When lowering the vehicle, make sure all portions of your body and all other persons around will not be injured as the vehicle is lowered to the ground.
- Have the wheel nuts tightened with a torque wrench to 131 N·m (13.4 kgf·m, 96.6 ft·lbf), as soon as possible after changing wheels. Otherwise, the nuts may loosen and the wheels may fall off, which could cause a serious accident.

—Reinstalling wheel ornament



I40073a

10. Reinstall the wheel ornament.

Put the wheel ornament into position. And press hand firmly on one side of wheel ornament and then firmly tap the other side around the edge of wheel ornament with the heel of your hand to snap into place.

CAUTION

Take due care in handling the ornament to avoid unexpected personal injury.

—After changing wheels

11. Check the air pressure of the replaced tire.

Adjust the air pressure to the specification designated on page 328. If the pressure is lower, drive slowly to the nearest service station and fill to the correct pressure.

Do not forget to reinstall the tire inflation valve cap as dirt and moisture could get into the valve core and possibly cause air leakage. If the cap is missing, have a new one put on as soon as possible.

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

As soon after changing wheels as possible, tighten the wheel nuts to the torque specified on page 328 with a torque wrench. Have a technician repair the flat tire.

This is the same procedure for changing or rotating your tires.

CAUTION

Before driving, make sure all the tools, jack and flat tire are securely in place in their storage location to reduce the possibility of personal injury during a collision or sudden braking.

If your vehicle becomes stuck

If your vehicle becomes stuck in snow, mud, sand, etc., then you may attempt to rock the vehicle free by moving it forward and backward.

If your vehicle is equipped with the traction control system, turn off the system to become unstuck to allow the tires to spin enough to remove the vehicle from the obstruction. (For details, see "Vehicle stability control system" on page 147.)

CAUTION

Do not attempt to rock the vehicle free by moving it forward and backward if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects.

NOTICE

If you rock your vehicle, observe the following precautions to prevent damage to the transmission and other parts.

- ◆ *Do not depress the accelerator pedal while shifting the selector lever or before the transmission is completely shifted to forward or reverse gear.*
- ◆ *Do not race the engine and avoid spinning the wheels.*
- ◆ *If your vehicle remains stuck after rocking the vehicle several times, consider other ways such as towing.*

If your vehicle needs to be towed—

(a) Towing with wheel lift type truck—

—From front



—From rear



(b) Using flat bed truck



If towing is necessary, we recommend you have it done by your Toyota dealer or a commercial tow truck service. In consultation with them, have your vehicle towed using either (a) or (b).

Only when you cannot receive a towing service from a Toyota dealer or commercial tow truck service, tow your vehicle carefully in accordance with the instructions given in “—Emergency towing” in this section.

Proper equipment will help ensure that your vehicle is not damaged while being towed. Commercial operators are generally aware of the state/provincial and local laws pertaining to towing.

Your vehicle can be damaged if it is towed incorrectly. Although most operators know the correct procedure, it is possible to make a mistake. To avoid damage to your vehicle, make sure the following precautions are observed. If necessary, show this page to the tow truck driver.

TOWING PRECAUTIONS:

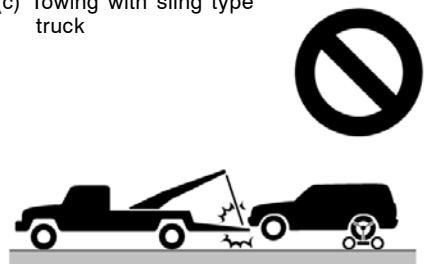
Use a safety chain system for all towing, and abide by the state/provincial and local laws. The wheels and axle on the ground must be in good condition. If they are damaged, use a towing dolly.

(a) Towing with wheel lift type truck

Use a towing dolly under the wheels not lifted by the truck.

(b) Using flat bed truck

(c) Towing with sling type truck



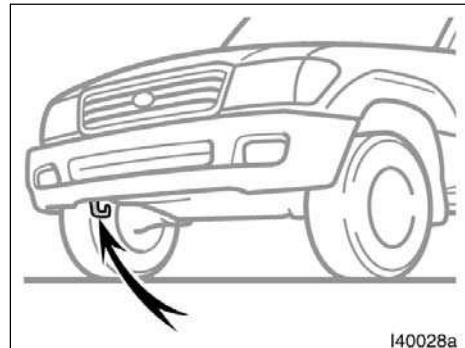
40C007

(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



I40028a

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

If towing service is not available in an emergency, your vehicle may be temporarily towed by a cable or chain secured to front emergency towing hook.

Use extreme caution when towing the vehicle.

A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speeds. Also, the wheels, axles, drive train, steering and brakes must all be in good condition.

CAUTION

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

NOTICE

◆ *Do not use front and rear eyelets. It is not designed for towing.*

◆ *Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.*

◆ *Never tow a vehicle from the rear with four wheels on the ground. This may cause serious damage to the transmission.*

Before towing, release the parking brake and put the transmission in "N". Unlock the center differential. The key must be in "ACC" (engine off) or "ON" (engine running).

 **CAUTION**

If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.

—Emergency towing hook precautions

- Before emergency towing, check that the hook is not broken or damage and that the installation bolts are not loose.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply steady and even force.
- To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.

 **CAUTION**

If the emergency towing hook is used to get out when your vehicle becomes 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 hook and the towing cable or chain may break, causing serious injury or damage.

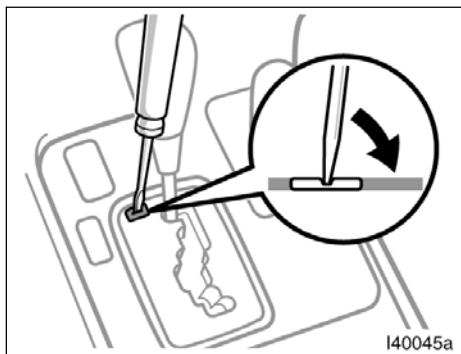
- If the towing vehicle can hardly move, do not forcibly continue the towing. Contact your Toyota dealer or a commercial tow truck service for assistance.
- Tow the vehicle as straight ahead as possible.
- Keep away from the vehicle during towing.

—Tips for towing a stuck vehicle

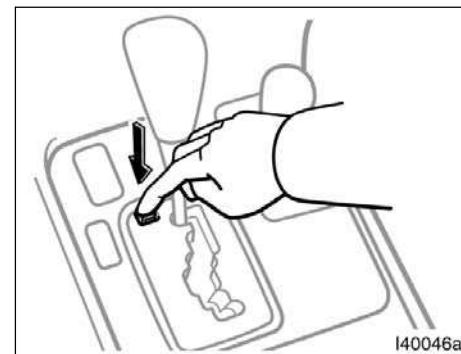
The following methods are effective to use when your vehicle is stuck in the mud, sand or other condition from which the vehicle cannot be driven out under its own power. Use extreme caution when towing the vehicles. In addition, keep away from the vehicles and towing cable or chain when towing.

- Remove the sand soil in the front and the back of the tires.
- Place stones or wood under the tires.

If you cannot shift automatic transmission selector lever



I40045a



I40046a

If you cannot shift the selector lever out of "P" position to other positions even though the brake pedal is depressed, use the shift lock override button as follows:

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

3. Insert your finger into the hole to push down the shift lock override button. You can shift out of "P" position only while pushing the button.
4. Shift into "N" position.
5. Reinstall the cover.
6. Start the engine. For your safety, keep the brake pedal depressed.

Be sure to have the system checked by your Toyota dealer as soon as possible.

If you lose your keys

You can purchase a new key at your Toyota dealer if you can give them the key number and master key.

Even if you lose only one key, contact your Toyota dealer to make a new key. If you lose all your master keys, you cannot make new keys; the whole engine immobilizer system must be replaced.

See the suggestion given in "Keys" on page 10.

You can use the wireless remote control system with the new key. Contact your Toyota dealer for detailed information.

If your keys are locked in the vehicle and you cannot get a duplicate, many Toyota dealers can still open the door for you, using their special tools. If you must break a window to get in, we suggest breaking the smallest side window because it is the least expensive to replace. Be extremely cautious to avoid cuts from the glass.

SECTION 5

CORROSION PREVENTION AND APPEARANCE CARE

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Protecting your Toyota from corrosion

Toyota, through its diligent research, design and use of the most advanced technology available, helps prevent corrosion and provides you with the finest quality vehicle construction. Now, it is up to you. Proper care of your Toyota can help ensure long-term corrosion prevention.

The most common causes of corrosion to your vehicle are:

- The accumulation of road salt, dirt and moisture in hard-to-reach areas under the vehicle.
- Chipping of paint, or undercoating caused by minor accidents or by stones and gravel.

Care is especially important if you live in particular areas or operate your vehicle under certain environmental conditions:

- Road salt or dust control chemicals will accelerate corrosion, as will the presence of salt in the air near the sea-coast or in areas of industrial pollution.
- High humidity accelerates corrosion especially when temperatures range just above the freezing point.

- Wetness or dampness to certain parts of your vehicle for an extended period of time, may cause corrosion even though other parts of the vehicle may be dry.
- High ambient temperatures can cause corrosion to those components of the vehicle which do not dry quickly due to lack of proper ventilation.

The above signifies the necessity to keep your vehicle, particularly the underside, as clean as possible and to repair any damage to paint or protective coatings as soon as possible.

To help prevent corrosion on your Toyota, follow these guidelines:

Wash your vehicle frequently. It is, of course, necessary to keep your vehicle clean by regular washing, but to prevent corrosion, the following points should be observed:

- If you drive on salted roads in the winter or if you live near the ocean, you should hose off the undercarriage at least once a month to minimize corrosion.

● High pressure water or steam is effective for cleaning the vehicle's underside and wheel housings. Pay particular attention to these areas as it is difficult to see all the mud and dirt. It will do more harm than good to simply wet the mud and debris without removing. The lower edge of doors, rocker panels and frame members have drain holes which should not be allowed to clog with dirt as trapped water in these areas can cause corrosion.

- Wash the underside of the vehicle thoroughly when winter is over.

See "Washing and waxing your Toyota" on page 277 for more tips.

Check the condition of your vehicle's paint and trim. If you find any chips or scratches in the paint, touch them up immediately to prevent corrosion from starting. If the chips or scratches have gone through the bare metal, have a qualified body shop make the repair.

Check the interior of your vehicle. Water and dirt can accumulate under the floor mats and could cause corrosion. Occasionally check under the mats to make sure the area is dry. Be particularly careful when transporting chemicals, cleansers, fertilizers, salt, etc.; these should be transported in proper containers. If a spill or leak should occur, immediately clean and dry the area.

Use mud shields on your wheels. If you drive on salted or gravel roads, mud shields help protect your vehicle. Full-size shields, which come as near to the ground as possible, are the best. We recommend that the fittings and the area where the shields are installed be treated to resist corrosion. Your Toyota dealer will be happy to assist in supplying and installing the shields if they are recommended for your area.

Keep your vehicle in a well ventilated garage or a roofed place. Do not park your vehicle in a damp, poorly ventilated garage. If you wash your vehicle in the garage, or if you drive it covered with water or snow, your garage may be so damp as to cause corrosion. Even if your garage is heated, a wet vehicle can corrode if the ventilation is poor.

Washing and waxing your Toyota

Washing your Toyota

Keep your vehicle clean by regular washing.

The following cases may cause weakness to the paint or corrosion to the body and parts. Wash your vehicle as soon as possible.

- When driving in a coastal area
- When driving on a road sprinkled with antifreeze
- When exposed to coal tar, tree sap, bird droppings and carcass of an insect
- When driving in areas where there is a lot of smoke, soot, dust, iron dust or chemical substances
- When the vehicle becomes remarkably dirty with dust and mud

Hand-washing your Toyota

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

CAUTION

When cleaning under floor or chassis, be careful not to injure your hands.

1. Rinse off loose dirt with a hose. Remove any mud or road salt from the underside of the vehicle or in the wheel wells.

2. Wash with a mild car-wash soap, mixed according to the manufacturer's instructions. Use a soft cotton mitt and keep it wet by dipping it frequently into the wash water. Do not rub hard—let the soap and water remove the dirt.

Plastic wheel ornaments: The plastic wheel ornaments are damaged easily by organic substances. If any organic substances splashes an ornament, be sure to wash it off with water and check if the ornament is damaged.

CAUTION

Do not attach the heavily damaged plastic wheel ornament. It may fly off the wheel and cause accidents while the vehicle is moving.

Aluminum wheels: Use only a mild soap or neutral detergent.

Plastic bumpers: Wash carefully. Do not scrub with abrasive cleaners. The bumper faces are soft.

Road tar: Remove with turpentine or cleaners that are marked safe for painted surfaces.

NOTICE

Do not use organic substances (gasoline, kerosene, benzine or strong solvents) which may be toxic or cause damage.

3. Rinse thoroughly—dried soap can cause streaking. In hot weather you may need to rinse each section right after you wash it.
4. To prevent water spots, dry the vehicle using a clean soft cotton towel. Do not rub or press hard—you might scratch the paint.

Automatic car wash

Your vehicle may be washed in an automatic car wash, but remember that the paint can be scratched by some types of brushes, unfiltered washing water, or the washing process itself. Scratching reduces paint durability and gloss, especially on darker colors. The manager of the car wash should be able to advise you whether the process is safe for the paint on your vehicle.

NOTICE

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

Waxing your Toyota

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

Apply wax once a month or if the vehicle surface does not repel water well.

1. Always wash and dry the vehicle before you begin waxing, even if you are using a combined cleaner and wax.
2. Use a good quality polish and wax. If the finish has become extremely weathered, use a car-cleaning polish, followed by a separate wax. Carefully follow the manufacturer's instructions and precautions. Be sure to polish and wax the chrome trim as well as the paint.

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

NOTICE

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

3. Wax the vehicle again when water does not bead but remains on the surface in large patches.

NOTICE

Always remove the plastic bumpers if your vehicle is re-painted and placed in a high heat paint waxing booth. High temperatures could damage the bumpers.

Cleaning the interior

 **CAUTION**

- Vehicles with side airbags and curtain shield airbags:
Be careful not to splash water or spill liquid on the floor. This may prevent the side and curtain shield airbags from activating correctly, resulting in serious injury.
- Do not wash the vehicle floor with water, or allow water to get onto the floor when cleaning the vehicle interior or exterior. Water may get into audio components or other electrical components above or under the floor carpet (or mat) and cause a malfunction; and it may cause body corrosion.

Vinyl interior

The vinyl upholstery may be easily cleaned with a mild soap or detergent and water.

First vacuum over the upholstery to remove loose dirt. Then, using a sponge or soft cloth, apply the soap solution to the vinyl. After allowing it to soak in for a few minutes to loosen the dirt, remove the dirt and wipe off the soap with a clean damp cloth. If all the dirt do not come off, repeat the procedure. Commercial foaming-type vinyl cleaners are also available which work well. Follow the manufacturer's instructions.

NOTICE

Do not use solvent, thinner, gasoline or window cleaner on the interior.

Carpets

Use a good foam-type shampoo to clean the carpets.

Begin by vacuuming thoroughly to remove as much dirt as possible. Several types of foam cleaners are available; some are in aerosol cans and others are powders or liquids which you mix with water to produce a foam. To shampoo the carpets, use a sponge or brush to apply the foam. Rub in overlapping circles.

Do not apply water—the best results are obtained by keeping the carpet as dry as possible. Read the shampoo instructions and follow them closely.

Seat belts

The seat belts may be cleaned with mild soap and water or with lukewarm water.

Use a cloth or sponge. As you are cleaning, check the belts for excessive wear, fraying, or cuts.

NOTICE

- ◆ *Do not use dye or bleach on the belts—it may weaken them.*
- ◆ *Do not use the belts until they become dry.*

Windows

The windows may be cleaned with any household window cleaner.

NOTICE

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

Air conditioning control panel, car audio, instrument panel, console panel, and switches

Use a soft damp cloth for cleaning.

Soak a clean soft cloth in water or lukewarm water then lightly wipe off dirt.

NOTICE

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

Leather Interior

The leather upholstery may be cleaned with neutral detergent for wool.

Remove dirt using a soft cloth dampened with 5% solution of neutral detergent for wool. Then thoroughly wipe off all traces of detergent with a clean damp cloth.

After cleaning or whenever any part of the leather gets wet, dry with a soft clean cloth. Allow the leather to dry in a ventilated shaded area.

NOTICE

- ◆ If a stain should fail to come out with a neutral detergent, apply a cleaner that does not contain an organic solvent.
- ◆ Never use organic substances such as benzine, alcohol or gasoline, or alkaline or acid solutions for cleaning the leather as these could cause discoloring.
- ◆ Use of a nylon brush or synthetic fiber cloth, etc. may scratch the fine grained surface of the leather.

◆ Mildew may develop on soiled leather upholstery. Be especially careful to avoid oil spots. Try to keep your upholstery always clean.

◆ Long exposure to direct sunlight may cause the leather surface to harden and shrink. Keep your vehicle in a shaded area, especially in the summer.

◆ The interior of your vehicle is apt to heat up on hot summer days, so avoid placing on the upholstery items made of vinyl or plastic or containing wax as these tend to stick to leather when warm.

◆ Improper cleaning of the leather upholstery could result in discoloration or staining.

If you have any questions about the cleaning of your Toyota, your local Toyota dealer will be pleased to answer them.

SECTION 7-1

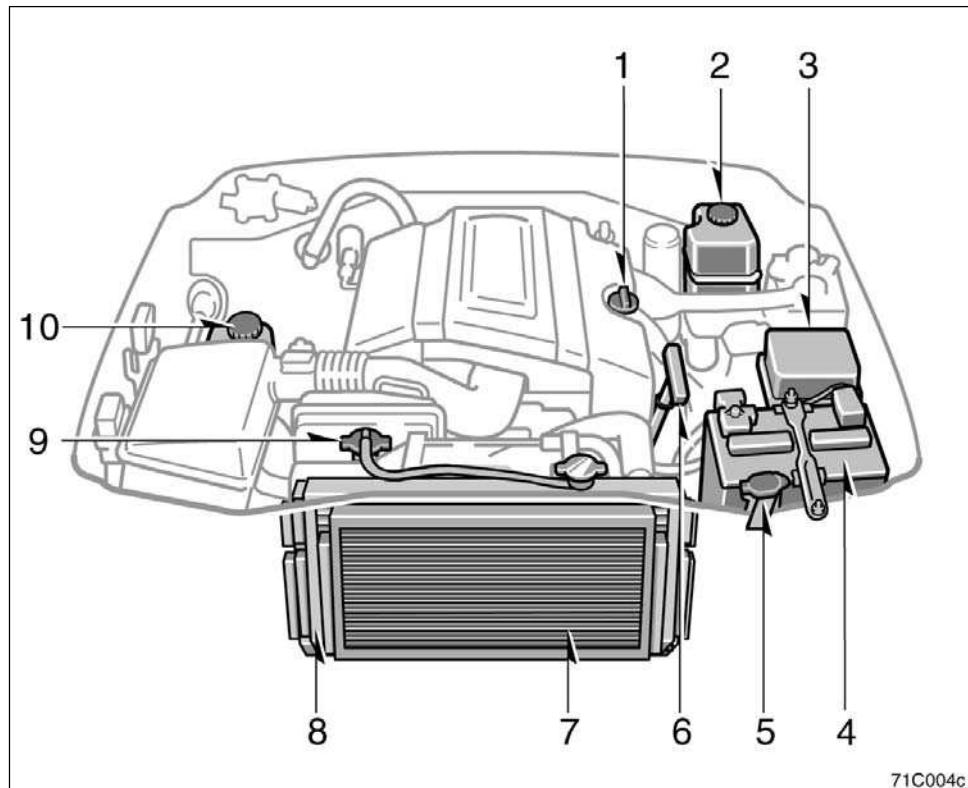
DO-IT-YOURSELF MAINTENANCE

Introduction

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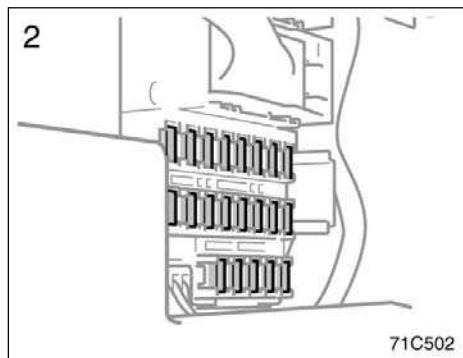
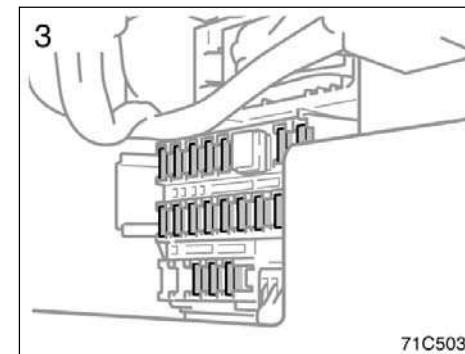
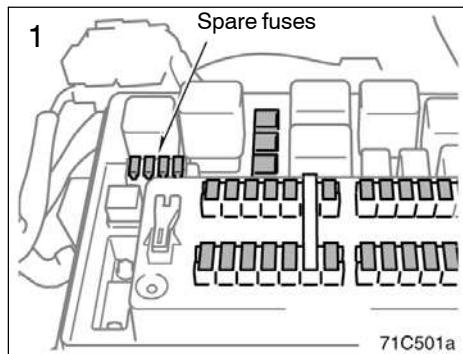
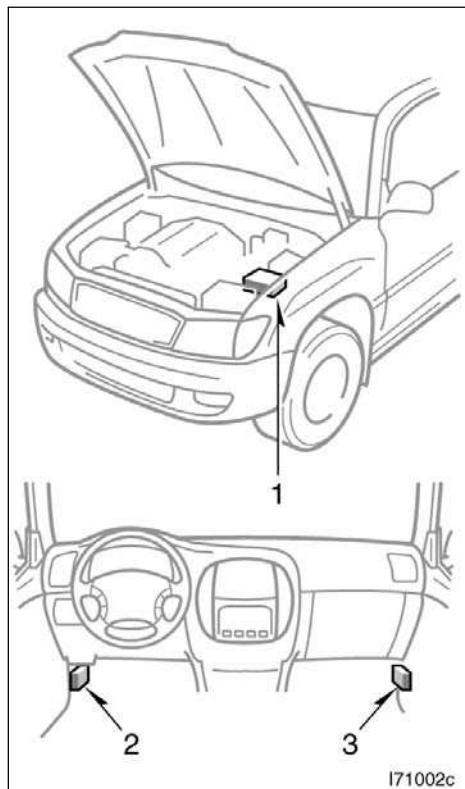


Engine compartment overview



1. Engine oil filler cap
2. Brake fluid reservoir
3. Fuse block
4. Battery
5. Windshield and rear window washer fluid tank
6. Engine oil level dipstick
7. Condenser
8. Radiator
9. Engine coolant reservoir
10. Power steering fluid reservoir

Fuse locations



Do-it-yourself service precautions

If you perform maintenance by yourself, be sure to follow the correct procedure given in this section.

You should be aware that improper or incomplete servicing may result in operating problems.

Performing do-it-yourself maintenance during the warranty period may affect your warranty coverage. Read the separate Toyota Warranty statement for details and suggestions.

This part gives instructions only for those items that are relatively easy for an owner to perform. As explained in Section 6, there are still a number of items that must be done by a qualified technician with special tools.

For information on tools and parts for do-it-yourself maintenance, see "Parts and tools" on page 293.

Utmost care should be taken when working on your vehicle to prevent accidental injury. Here are a few precautions that you should be especially careful to observe:

CAUTION

- When the engine is running, keep hands, clothing, and tools away from the moving fan and engine drive belts. (Removing rings, watches, and ties is advisable.)
- Right after driving, the engine compartment—the engine, radiator, exhaust manifold, power steering fluid reservoir and spark plug boots, etc.—will be hot. So be careful not to touch them. Oil, fluids and spark plugs may also be hot.
- If the engine is hot, do not remove the radiator cap or loosen the drain plugs to prevent burning yourself.
- Do not leave anything that may burn easily, such as paper or rags, in the engine compartment.
- Do not smoke, cause sparks or allow open flames around fuel or the battery. Their fumes are flammable.
- Be extremely cautious when working on the battery. It contains poisonous and corrosive sulfuric acid.

- Do not get under your vehicle with just the body jack supporting it. Always use automotive jack stands or other solid supports.
- Be sure that the ignition is off if you work near the electric cooling fan or radiator grille. With the ignition on, the electric cooling fan will automatically start to run if the air conditioning is on.
- Use eye protection whenever you work on or under your vehicle where you may be exposed to flying or falling material, fluid spray, etc.
- Used engine oil contains potentially harmful contaminants which may cause skin disorders such as inflammation or skin cancer, so care should be taken to avoid prolonged and repeated contact with it. To remove used engine oil from your skin, wash thoroughly with soap and water.
- Do not leave used oil within the reach of children.

- Dispose of used oil and filter only in a safe and acceptable manner. Do not dispose of used oil and filter in household trash, in sewers or onto the ground. Call your dealer or a service station for information concerning recycling or disposal.

NOTICE

- ◆ Remember that battery and ignition cables carry high currents or voltages. Be careful of accidentally causing a short circuit.
- ◆ Add only "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite and non-borate coolant with long-life hybrid organic acid technology to fill the radiator. "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 plug holes.

- ◆ Do not pry the outer electrode of a spark plug against the center electrode.
- ◆ Use only spark plugs of the specified type. Using other types will cause engine damage, loss of performance or radio noise.
- ◆ Do not reuse iridium-tipped spark plugs by cleaning or regapping.
- ◆ Do not overfill automatic transmission fluid, transfer oil and power steering fluid, or the transmission, transfer and power steering could be damaged.
- ◆ Do not drive with the air cleaner filter removed, or excessive engine wear could result. Also backfiring could cause a fire in the engine compartment.
- ◆ Be careful not to scratch the glass surface with the wiper frame.
- ◆ When closing the engine hood, check to see that you have not forgotten any tools, rags, etc.

Parts and tools

Here is a list of parts and tools you will need to perform do-it-yourself maintenance. Remember all Toyota parts are designed in metric sizes, so your tools must be metric.

CHECKING THE ENGINE OIL LEVEL

Parts (if level is low):

- "Toyota Genuine Motor Oil" or equivalent. See "Checking the engine oil level" on page 296 for instructions.

Tools:

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

CHECKING THE ENGINE COOLANT LEVEL

Parts (if level is low):

- "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology.

"Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water.

Tools:

- Funnel (only for adding coolant)

CHECKING BRAKE FLUID**Parts (if level is low):**

- SAE J1703 or FMVSS No.116 DOT 3
brake fluid

Tools:

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

CHECKING POWER STEERING FLUID**Parts (if level is low):**

Automatic transmission fluid DEXRON® II
or III

Tools:

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

CHECKING BATTERY CONDITION**Tools:**

- Warm water
- Baking soda
- Grease
- Conventional wrench (for terminal
clamp bolts)

CHECKING AND REPLACING FUSES**Parts (if replacement is necessary):**

- Fuse with same amperage rating as
original

ADDING WASHER FLUID**Parts:**

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

Tools:

- Funnel

REPLACING LIGHT BULBS**Parts:**

- Bulb with same number and wattage
rating as original (See charts in "Re-
placing light bulbs" on page 315.)

Tools:

- Screwdriver

SECTION 7-2

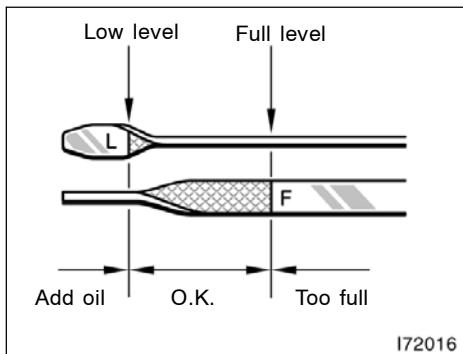
DO-IT-YOURSELF MAINTENANCE

Engine and Chassis

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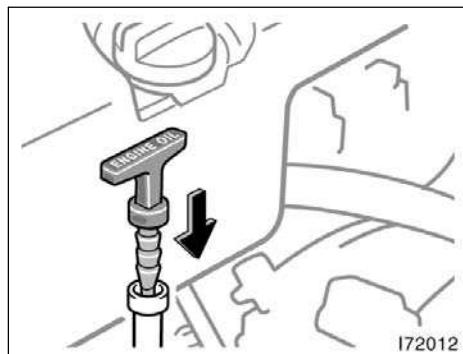


Checking the engine oil level



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

1. To get a correct reading, the vehicle should be on level ground. After turning off the engine, wait a few minutes for the oil to drain back into the bottom of the engine.
2. Pull the dipstick out, hold a rag under the end and wipe it clean.



3. Standing up on the left side of the vehicle, reinsert the dipstick in the direction so that the "ENGINE OIL" on top should be read correctly and push it in as far as it will go, or the reading will not be correct.
4. Pull the dipstick out and look at the oil level while holding a rag under the end.

CAUTION

Be careful not to touch the hot exhaust manifold.

NOTICE

Be careful not to drop engine oil on the vehicle components.

If the oil level is below or only slightly above the low level, add engine oil of the same type as already in the engine.

Remove the oil filler cap and add engine oil in small quantities at a time, checking the dipstick. We recommend that you use a funnel when adding the oil.

The approximate quantity of oil needed to raise the level between low and full on the dipstick is indicated below for reference.

When the level reaches within the correct range, install the filler cap hand-tight.

Oil quantity, L (qt., Imp.qt.):
1.5 (1.6, 1.3)

NOTICE

◆ *Be careful not to spill engine oil on the vehicle components.*

◆ *Avoid overfilling, or the engine could be damaged.*

◆ *Check the oil level on the dipstick once again after adding the oil.*

ENGINE OIL SELECTION

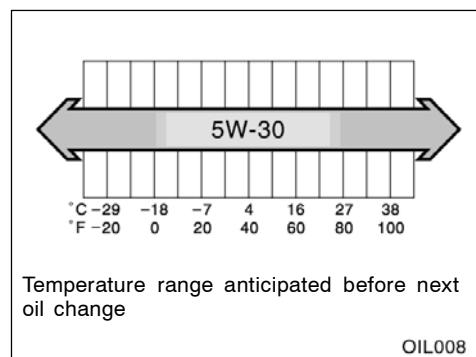
"Toyota Genuine Motor Oil" is used in your Toyota vehicle. Use Toyota approved "Toyota Genuine Motor Oil" or equivalent to satisfy the following grade and viscosity.

Oil grade:

API grade, SL "Energy-Conserving" or ILSAC multigrade engine oil

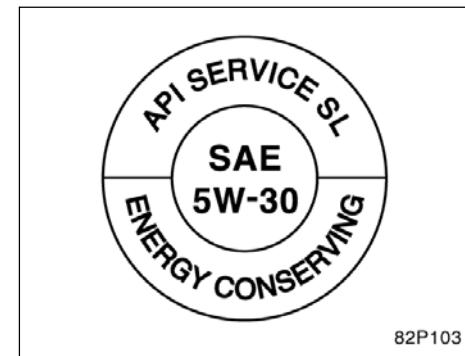
Recommended viscosity:

SAE 5W-30



SAE 5W-30 is the best choice for good fuel economy, and good starting in cold weather.

If SAE 5W-30 oil is not available, SAE 10W-30 oil may be used. However, it should be replaced with SAE 5W-30 at the next oil change.



API service symbol



ILSAC certification mark

Oil identification marks

Either or both API registered marks are added to some oil containers to help you select the oil you should use.

The API Service Symbol is located anywhere on the outside of the container.

The top portion of the label shows the oil quality by API (American Petroleum Institute) designations such as SL. The center portion of the label shows the SAE viscosity grade such as SAE 5W-30. "Energy-Conserving" shown in the lower portion, indicates that the oil has fuel-saving capabilities.

The ILSAC (International Lubricant Standardization and Approval Committee) Certification Mark is displayed on the front of the container.



To ensure excellent lubrication performance for your engine, "Toyota Genuine Motor Oil" is available, which has been specifically tested and approved for all Toyota engines.

Please contact your Toyota dealer for further details about "Toyota Genuine Motor Oil".

Checking the engine coolant level

Look at the see-through coolant reservoir when the engine is cold. The coolant level is satisfactory if it is between the "FULL" and "LOW" lines on the reservoir. If the level is low, add the coolant. (For the coolant type, see "Coolant type selection" described below.)

The coolant level in the reservoir will vary with engine temperature. However, if the level is on or below the "LOW" line, add coolant. Bring the level up to the "FULL" line.

If the coolant level drops within a short time after replenishing, there may be a leak in the system. Visually check the radiator, hoses, radiator cap and drain cock and water pump.

If you can find no leak, have your Toyota dealer test the cap pressure and check for leaks in the cooling system.

CAUTION

To prevent burning yourself, do not remove the radiator cap when the engine is hot.

Coolant type selection

Use of improper coolants may damage your engine cooling system.

Only use "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology. (Coolant with long-life hybrid organic acid technology 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 and condenser

If any of the above parts are extremely dirty or you are not sure of their condition, take your vehicle to a Toyota dealer.

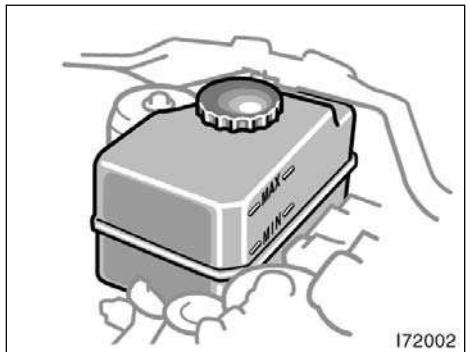
CAUTION

To prevent burning yourself, be careful not to touch the radiator or condenser when the engine is hot.

NOTICE

To prevent damage to the radiator and condenser, do not perform the work by yourself.

Checking brake fluid



To check the fluid level, simply look at the see-through reservoir. The level should be between the "MAX" and "MIN" lines on the reservoir.

It is normal for the brake fluid level to go down slightly as the brake pads wear or when the fluid level in the accumulator is high.

If the reservoir needs frequent refueling, it may indicate a serious mechanical problem.

If the level is low, add SAE J1703 or FMVSS No. 116 DOT 3 brake fluid to the brake reservoir.

Refilling brake fluid:

1. Turn the ignition switch off.
2. Depress the brake pedal more than 40 times.
3. Remove the reservoir cap by hand. Add brake fluid up to the "MAX" line.

If you do not follow the procedure above, the reservoir may overflow.

Use only newly opened brake fluid. Once opened, brake fluid absorbs moisture from the air, and excess moisture can cause a dangerous loss of braking.

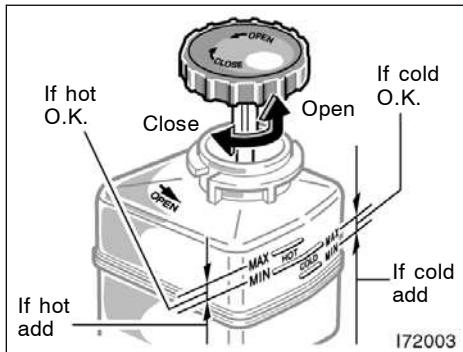
NOTICE

If you spill the fluid, be sure to wipe it off to prevent it from damaging the parts or painting.

CAUTION

Take care when filling the brake fluid reservoir because brake fluid can harm your hands or eyes. If fluid gets on your hands or in your eyes, flush the affected area with clean water immediately. If you still feel uncomfortable with your hands or eyes, go to the doctor.

Checking power steering fluid



Check the fluid level on the dipstick. If necessary, add automatic transmission fluid DEXRON®II or III.

If the vehicle has been driven around 80 km/h (50 mph) for 20 minutes (a little more in frigid temperatures), the fluid is hot (60°C–80°C or 140°F–175°F). You may also check the level when the fluid is cold (about room temperature, 10°C–30°C or 50°F–85°F) if the engine has not been run for about five hours.

Clean all dirt from outside of the reservoir tank and look at the fluid level. If the fluid is cold, the level should be in the "COLD" range. Similarly, if it is hot, the fluid level should be in the "HOT" range. If the level is at the low side of either range, add automatic transmission fluid DEXRON®II or III to bring the level within the range.

To remove the reservoir cap, turn it counterclockwise and lift up. To reinstall it, turn it clockwise. After replacing the filler cap, visually check the steering box case, vane pump and hose connections for leaks or damage.

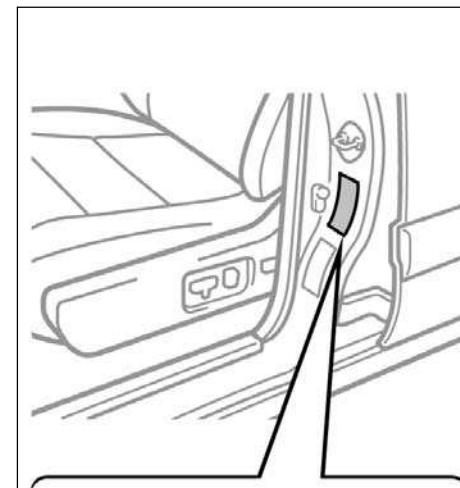
CAUTION

The reservoir tank may be hot so be careful not to burn yourself.

NOTICE

Avoid overfilling, or the power steering could be damaged.

Checking tire inflation pressure



72C502

Keep your tire inflation pressures at the proper level.

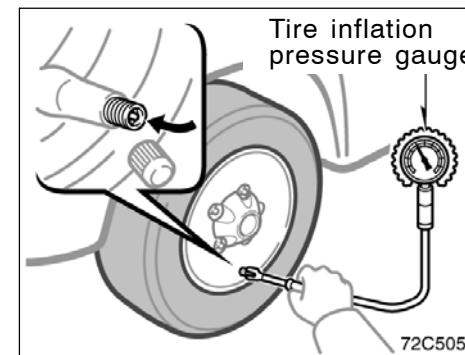
The recommended cold tire inflation pressures, tire sizes and the combined weight of occupants and cargo (vehicle capacity weight) are described on page 328 and 324. They are also described on the tire and loading information label as shown.

You should check the tire inflation pressures every two weeks, or at least once a month. And do not forget the spare!

The following instructions for checking tire inflation pressure should be observed:

- The pressure should be checked only when the tires are cold. If your vehicle has been parked for at least 3 hours and has not been driven for more than 1.5 km or 1 mile since, you will get an accurate cold tire inflation pressure reading.

- Always use a tire inflation pressure gauge. The appearance of a tire can be misleading. Besides, tire inflation pressures that are even just a few pounds off can degrade ride and handling.
- Do not bleed or reduce tire inflation pressure after driving. It is normal for the tire inflation pressure to be higher after driving.
- Never exceed the vehicle capacity weight. The passenger and luggage weight should be located so that the vehicle is balanced.



INSPECTION AND ADJUSTMENT PROCEDURE

1. Remove the tire valve cap.
2. Press the tip of the tire inflation pressure gauge to the tire valve.
3. Read the pressure using a graduation of the gauge.
4. In case that the tire inflation pressure is not within the prescribed range, insert the compressed air from the valve. In case of applying too much air, press the center of the valve and release the air to adjust.

5. After completing the tire inflation pressure measurement and adjustment, apply soap water to the valve and check the leakage.

6. Install the tire valve cap.

If the gauge and the air pump are not available, have your vehicle checked by your Toyota dealer.

 **CAUTION**

Be sure to reinstall the tire valve caps. Without the valve caps, dirt or moisture could get into the valve core and cause air leakage. If the caps have been lost, have new ones put on as soon as possible.

Incorrect tire inflation pressure may waste fuel, reduce the comfort of driving, reduce tire life and make your vehicle less safe to drive.

If a tire frequently needs refilling, have it checked by your Toyota dealer.

 **CAUTION**

Keep your tires properly inflated. Otherwise, the following conditions may occur and cause an accident resulting in death or serious injuries.

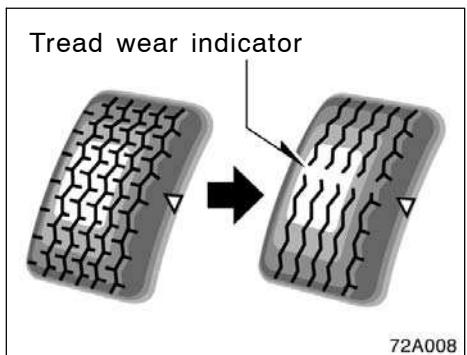
Low tire pressure (underinflation)—

- Excessive wear
- Uneven wear
- Poor handling
- Possibility of blowouts from an overheated tire
- Poor sealing of the tire bead
- Wheel deformation and/or tire separation
- A greater possibility of tire damage from road hazards

High tire pressure (overinflation)—

- Poor handling
- Excessive wear
- Uneven wear
- A greater possibility of tire damage from road hazards

Checking and replacing tires



CHECKING YOUR TIRES

Check the tire's tread for tread wear indicators. If the indicators show, replace the tires. The location of the tread wear indicators is shown by the "TWI" or "Δ" marks, etc., molded on the sidewall of each tire.

The tires on your Toyota have built-in tread wear indicators to help you know when the tires need replacement. When the tread depth wears to 1.6 mm (0.06 in.) or less, the indicators will appear. If you can see the indicators in two or more adjacent grooves, the tire should be replaced. The lower the tread, the higher the risk of skidding.

The effectiveness of snow tires is lost if the tread wears down below 4 mm (0.16 in.).

If you have tire damage such as cuts, splits, cracks deep enough to expose the fabric, or bulges indicating internal damage, the tire should be replaced.

If a tire often goes flat or cannot be properly repaired due to the size or location of a cut or other damage, it should be replaced. If you are not sure, consult with your Toyota dealer.

If 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 also applies to the spare tire and tires stored for future use.

REPLACING YOUR TIRES

When replacing a tire, use a tire of the same size and construction, and the same or greater maximum load as the originally installed tires. Also, all the tires must be the same brand and have the same tread patterns.

Using any other size or type of tire may seriously affect handling, ride, speedometer/odometer calibration, ground clearance, and clearance between the body and tires or snow chains.

Check that the maximum load of the replaced tire is greater than 1/2 of the Gross Axle Weight Ratings (GAWR) of either the front axle or the rear axle, whichever is greater. As for the maximum load of the tire, see the load limit at maximum cold tire inflation pressure mentioned on the sidewall of the tire, and as for the Gross Axle Weight Ratings (GAWR), see the Certification Label. For details about the sidewall of the tire and the Certification Label, see pages 222 and 220.

 **CAUTION**

Observe the following instructions. Otherwise, an accident may occur resulting in death or serious injuries.

- **Do not mix radial, bias belted, or bias-ply tires on your vehicle, as this may cause dangerous handling characteristics resulting in loss of control.**
- **Do not use tires other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.**
- **Do not use tires of different brands, sizes, construction or tread patterns, as this may cause dangerous handling characteristics resulting in loss of control.**

Toyota recommends all four tires, or at least both front or rear tires be replaced as a set.

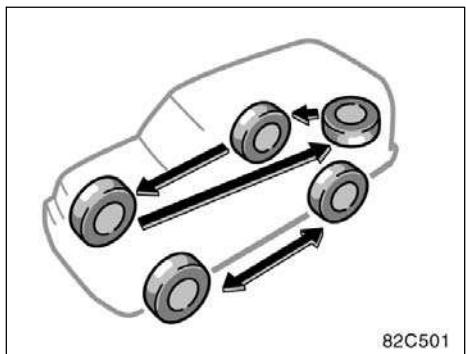
See "If you have a flat tire" on page 257 for tire change procedure.

When a tire is replaced, the wheel should always be balanced.

An unbalanced wheel may affect vehicle handling and tire life. Wheels can get out of balance with regular use and should therefore be balanced occasionally.

When replacing a tubeless tire, the air valve should also be replaced with a new one.

Rotating tires



To equalize tire wear and help extend tire life, Toyota recommends that you rotate your tires according to the maintenance schedule. (For scheduled maintenance information, please refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".) However, the most appropriate timing for tire rotation may vary according to your driving habits and road surface conditions.

See "If you have a flat tire" on page 257 for tire change procedure.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire inflation pressure, improper wheel alignment, out-of-balance wheels, or severe braking.

Installing snow tires and chains

WHEN TO USE SNOW TIRES OR CHAINS

Snow tires or chains are recommended when driving on snow or ice.

On wet or dry roads, conventional tires provide better traction than snow tires.

SNOW TIRE SELECTION

If you need snow tires, select tires of the same size, construction and load capacity as the originally installed tires. Also, all the tires must be the same brand and have the same tread patterns.

Do not use tires other than those mentioned above. Do not install studded tires without first checking local regulations for possible restrictions.

! CAUTION

Observe the following instructions. Otherwise, an accident may occur resulting in death or serious injuries.

- Do not use snow tires other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.
- Do not use snow tires of different brands, sizes, construction or tread patterns, as this may cause dangerous handling characteristics resulting in loss of control.

SNOW TIRE INSTALLATION

Snow tires should be installed on all wheels.

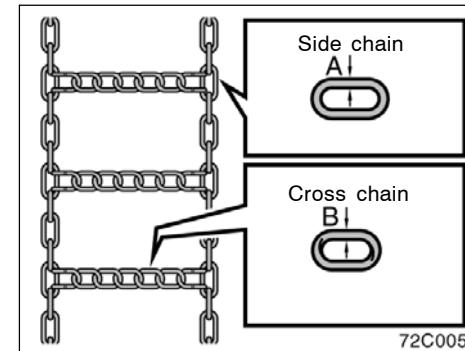
Installing snow tires on the rear wheels only can lead to an excessive difference in road grip capability between the front and rear tires which could cause loss of vehicle control.

When storing removed tires, you should store them in a cool dry space.

Mark the direction of rotation and be sure to install them in the same direction when replacing.

! CAUTION

- Do not drive with the snow tires incorrectly inflated.
- Never drive over 105 km/h (65 mph) with any type of snow tires.



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TIRE CHAIN SELECTION

Use the tire chains of correct size.

Use the following type chains.

For P275/65R17 113S and P275/60R18 111H tires

mm (in.)

A Diameter of side chain: 3.5 (0.14)

B Diameter of cross chain: 4.0 (0.16)

Regulations regarding the use of tire chains vary according to location or type of road, so always check local regulations before installing chains.

NOTICE

If the wrong combination of tire and chain is used, the chains could damage the vehicle body.

CHAIN INSTALLATION

Install the chains on the rear tires as tightly as possible. Do not use tire chains on the front tires. Retighten chains after driving 0.5 – 1.0 km (1/4 – 1/2 mile).

When installing chains on your tires, carefully follow the instructions of the chain manufacturer.

If wheel covers are used, they will be scratched by the chain band, so remove the covers before putting on the chains.

CAUTION

- Do not exceed 50 km/h (30 mph) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully avoiding bumps, holes, and sharp turns, which may cause the vehicle to bounce.
- Avoid sharp turns or locked-wheel braking, as use of chains may adversely affect vehicle handling.
- When driving with chains installed, be sure to drive carefully. Slow down before entering curves to avoid losing control of the vehicle. Otherwise an accident may occur.

Replacing wheels**WHEN TO REPLACE YOUR WHEELS**

If you have wheel damage such as bending, cracks or heavy corrosion, the wheel should be replaced.

If you fail to replace a damaged wheel, the tire may slip off the wheel or cause loss of handling control.

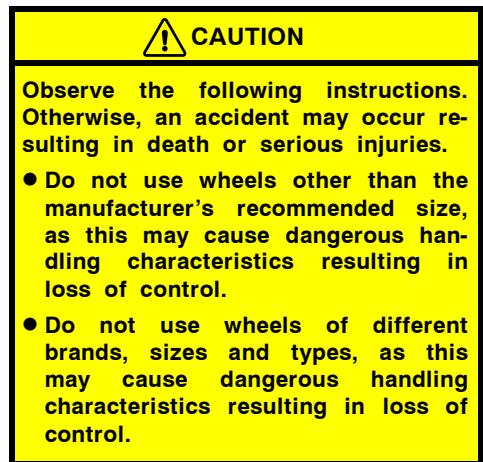
WHEEL SELECTION

When replacing wheels, care should be taken to ensure that the wheels are replaced by ones with the same load capacity, diameter, rim width, and offset.

Correct replacement wheels are available at your Toyota dealer.

A wheel of a different size or type may adversely affect handling, wheel and bearing life, brake cooling, speedometer/odometer calibration, stopping ability, headlight aim, bumper height, vehicle ground clearance, and tire or snow chain clearance to the body and chassis.

Replacement with used wheels is not recommended as they may have been subjected to rough treatment or high mileage and could fail without warning. Also, bent wheels which have been straightened may have structural damage and therefore should not be used. Never use an inner tube in a leaking wheel which is designed for a tubeless tire.



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.

SECTION 7-3

DO-IT-YOURSELF MAINTENANCE

Electrical components

Checking battery condition	312
Battery recharging precautions	313
Checking and replacing fuses	314
Adding washer fluid	315
Replacing light bulbs	315



Checking battery condition— —Precautions

! CAUTION

BATTERY PRECAUTIONS

The battery produces flammable and explosive hydrogen gas.

- Do not cause a spark from the battery with tools.
- Do not smoke or light a match near the battery.

The electrolyte contains poisonous and corrosive sulfuric acid.

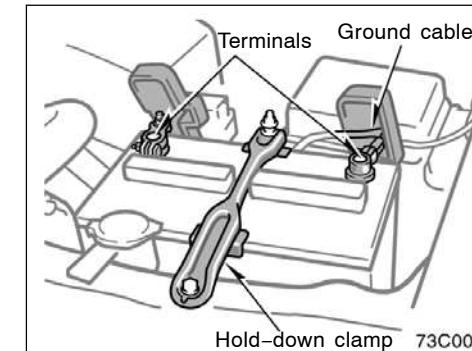
- Avoid contact with eyes, skin or clothes.
- Never ingest electrolyte.
- Wear protective safety glasses when working near the battery.
- Keep children away from the battery.

EMERGENCY MEASURES

- If electrolyte gets in your eyes, flush your eyes with clean water immediately and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.

- If electrolyte gets on your skin, thoroughly wash the contact area. If you feel pain or burning, get medical attention immediately.
- If electrolyte gets on your clothes, there is a possibility of its soaking through to your skin, so immediately take off the exposed clothing and follow the procedure above, if necessary.
- If you accidentally swallow electrolyte, drink a large quantity of water or milk. Follow with milk of magnesia, beaten raw egg or vegetable oil. Then go immediately for emergency help.

—Checking battery exterior



Check the battery for corroded or loose terminal connections, cracks, or loose hold-down clamp.

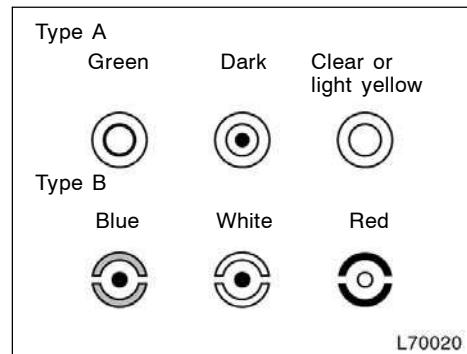
- a. If the battery is corroded, wash it off with a solution of warm water and baking soda. Coat the outside of the terminals with grease to prevent further corrosion.
- b. If the terminal connections are loose, tighten their clamp nuts—but do not overtighten.
- c. Tighten the hold-down clamp only enough to keep the battery firmly in place. Overtightening may damage the battery case.

NOTICE

- ◆ **Be sure the engine and all accessories are off before performing maintenance.**
- ◆ **When checking the battery, remove the ground cable from the negative terminal ("—" mark) first and reinstall it last.**
- ◆ **Be careful not to cause a short circuit with tools.**
- ◆ **Take care no solution gets into the battery when washing it.**

If the battery terminal is disconnected or the battery is run down, the moon roof may not operate automatically and the jam protection function will not operate correctly after you reconnect, replace or recharge the battery with the moon roof slide-opened or tilted up. In any of these cases, you should return the moon roof to normal. To return the moon roof to normal, see "Electric moon roof" on page 31.

—Checking battery condition



CHECKING BY INDICATOR

Check the battery condition by the indicator color.

Indicator color		Condition
Type A	Type B	
Green	Blue	Good
Dark	White	Charging necessary. Have battery checked by your Toyota dealer.
Clear or light yellow	Red	Have battery checked by your Toyota dealer.

Battery recharging precautions

During recharging, the battery is producing hydrogen gas.

Therefore, before recharging:

1. If recharging with the battery installed on the vehicle, be sure to disconnect the ground cable.
2. Be sure the power switch on the recharger is off when connecting the charger cables to the battery and when disconnecting them.

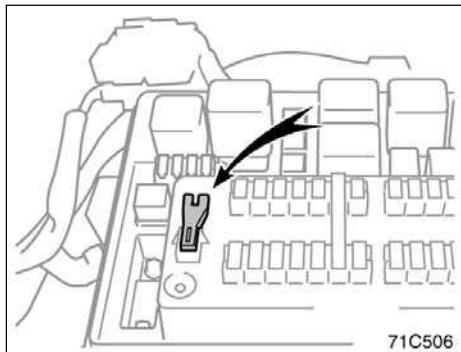
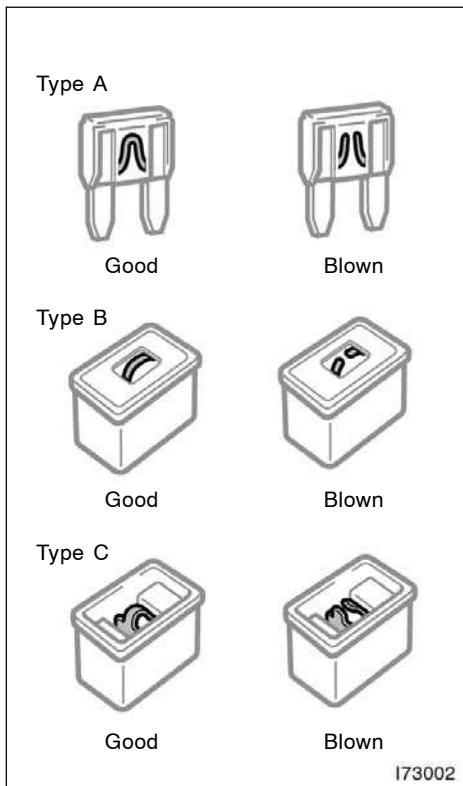
CAUTION

- Always charge the battery in an unconfined area. Do not charge the battery in a garage or closed room where there is not sufficient ventilation.
- Only do a slow charge (5 A or less). Charging at a quicker rate is dangerous. The battery may explode, causing personal injuries.

NOTICE

Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

Checking and replacing fuses



If the headlights or other electrical components do not work, check the fuses. If any of the fuses are blown, they must be replaced.

See "Fuse locations" on page 291 for locations of the fuses.

Turn the ignition switch and inoperative component off. Pull the suspected fuse straight out and check it.

Determine which fuse may be causing the problem. The lid of the fuse box shows the name of the circuit for each fuse. See page on 329 for the functions controlled by each circuit.

Type A fuses can be pulled out by the pull-out tool. The location of the pull-out tool is shown in the illustration.

If you are not sure whether the fuse has blown, try replacing the suspected fuse with one that you know is good.

If the fuse has blown, push a new fuse into the clip.

Only install a fuse with the amperage rating designated on the fuse box lid.

If you do not have a spare fuse, in an emergency you can pull out the "RADIO", "DOME" or "RR A.C" fuse, which may be dispensable for normal driving, and use it if its amperage rating is the same.

If you cannot use one of the same amperage, use one that is lower, 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.

You may use plain water as washer fluid. However, in cold areas where temperatures range below freezing point, use washer fluid containing antifreeze. This product is available at your Toyota dealer and most auto parts stores. Follow the manufacturer's directions for how much to mix with water.

NOTICE

- ◆ *Do not use engine antifreeze or any other substitute because it may damage your vehicle's paint.*
- ◆ *Do not fill washer fluid over the "NORMAL" level.*

Replacing light bulbs—

The following illustrations show how to gain access to the bulbs. When replacing a bulb, make sure the ignition switch and light switch are off. Use bulbs with the wattage ratings given in the table.

CAUTION

- To prevent burning yourself, do not replace the light bulbs while they are hot.
- Halogen bulbs have pressurized gas inside and require special handling. They can burst or shatter if scratched or dropped. Hold a bulb only by its plastic or metal case. Do not touch the glass part of a bulb with bare hands.

NOTICE

Only use a bulb of the listed type.

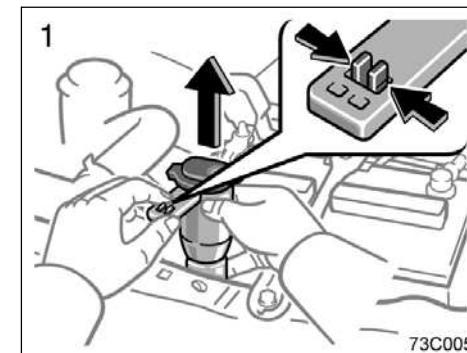
The inside of the lens of exterior lights such as headlights may temporarily fog up when the lens becomes wet in the rain or in a car wash. This is not a problem because the fogging is caused by the temperature difference between the outside and inside of the lens, just like the windshield fogs up in 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	Bulb No.	W	Type
Headlights (high)	9005	60	A
Headlights (low)	9006	51	B
Front turn signal and front side marker lights	1157NA	27/8	C
Front fog lights	9006	51	B
Parking lights	—	5	D
Rear turn signal lights	7440	21	G
Stop/tail lights	7443	21/5	D

Light bulbs	Bulb No.	W	Type
Back-up lights	7440	21	D
License plate lights	—	5	D
Interior lights	—	8	E
Personal lights	—	5	F
Type A	—	8	E
Type B	—	—	—
Glove box light	—	1.4	D
Door courtesy lights	—	3	D
Vanity lights	—	1.5	E

A : HB3 halogen bulbs
 B : HB4 halogen bulbs
 C : Single end bulbs (amber)
 D : Wedge base bulbs
 E : Double end bulbs
 F : Single end bulbs
 G : Wedge base bulbs (amber)

—Headlights

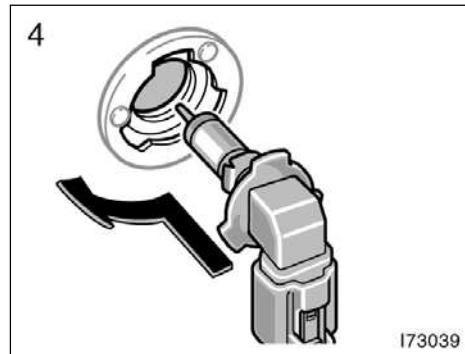
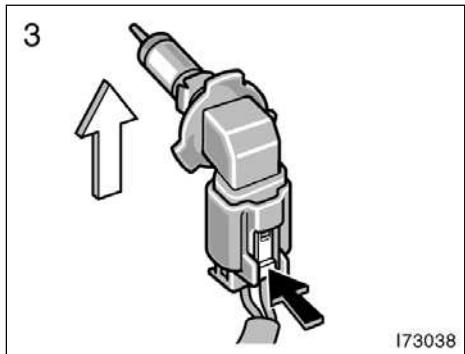
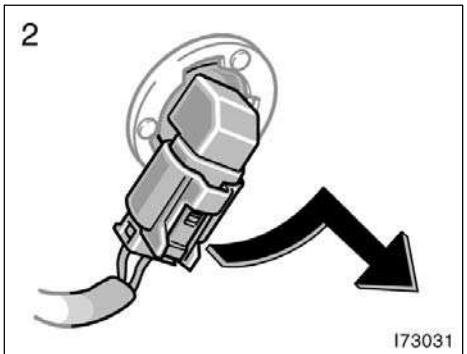


1. Open the hood.

LEFT-HAND HEADLIGHT: Remove the washer inlet.

Be careful not to spill the washer fluid over the "NORMAL" level.

Do not place the washer inlet on the engine or battery.



2. Turn the bulb base counterclockwise to the front of the vehicle as shown.

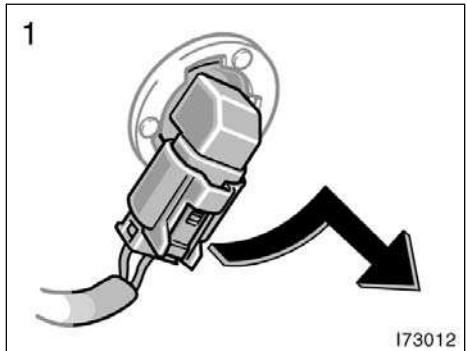
3. Pull the bulb out of the bulb base.
If the connector is tight, wiggle it.

4. Install a new bulb base by turning it clockwise to the front of the vehicle.

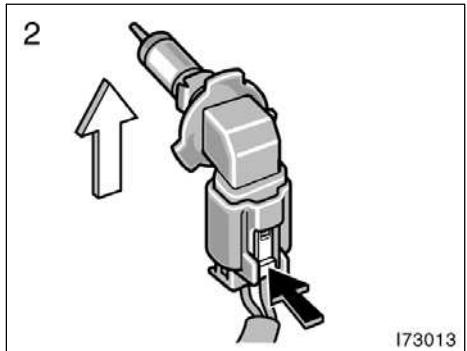
LEFT-HAND HEADLIGHT: Install the washer inlet securely.

Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, contact your Toyota dealer.

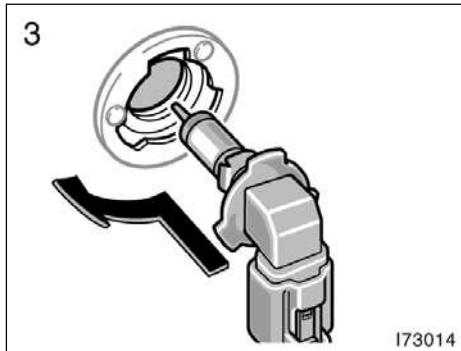
—Front fog lights



1. Turn the bulb base counterclockwise to the front of the vehicle as shown.



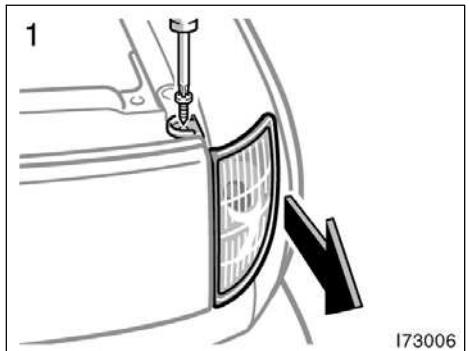
2. Pull the bulb out of the bulb base.
If the connector is tight, wiggle it.



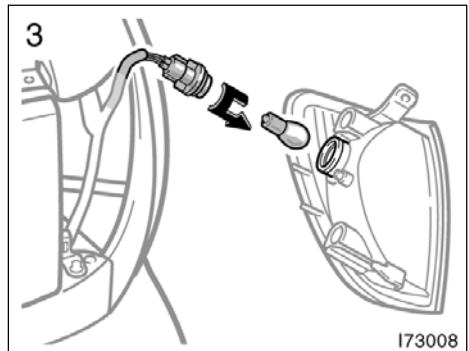
3. Install a new bulb base by turning it clockwise to the front of the vehicle.

Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, contact your Toyota dealer.

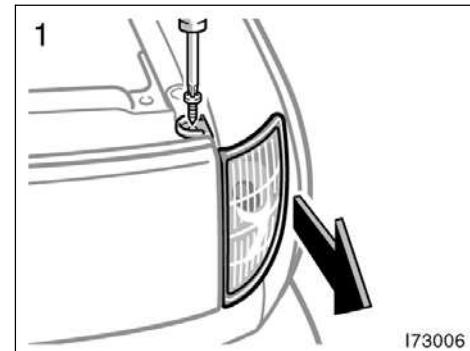
—Front turn signal and front side marker lights



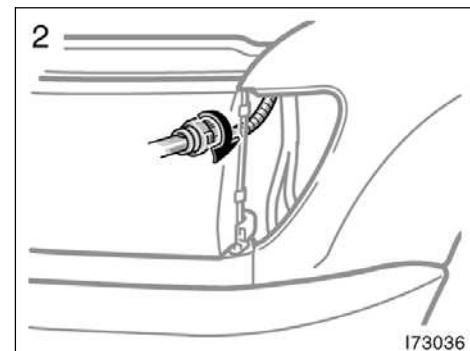
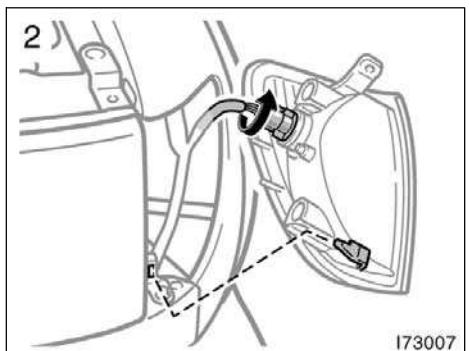
Use a Phillips-head screwdriver.



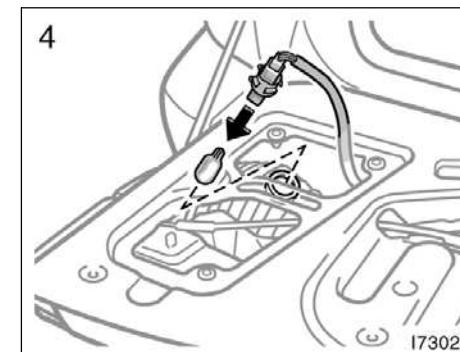
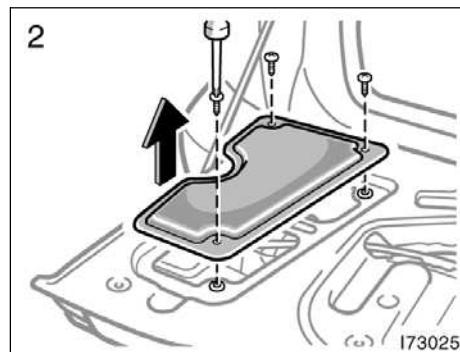
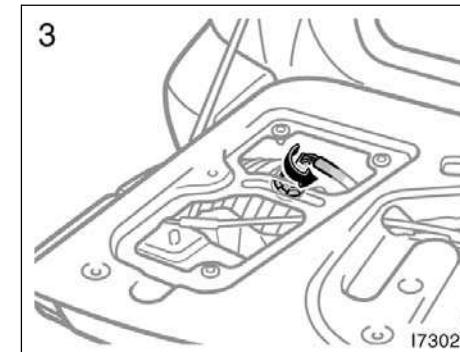
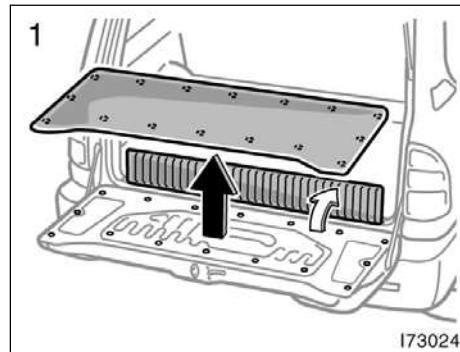
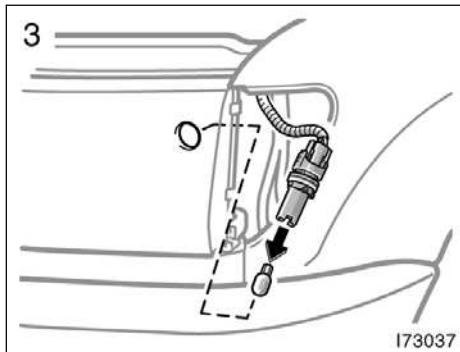
—Parking lights



Use a Phillips-head screwdriver.

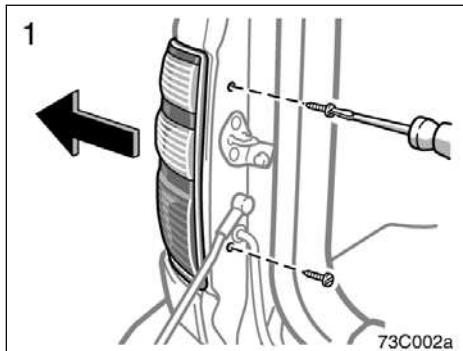


—Stop and tail lights

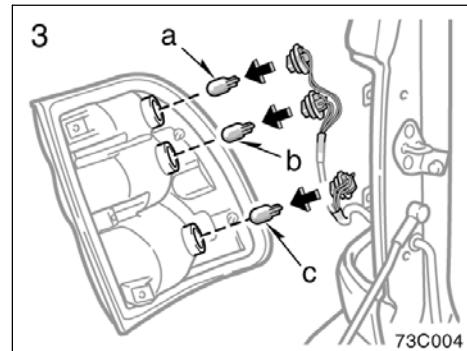
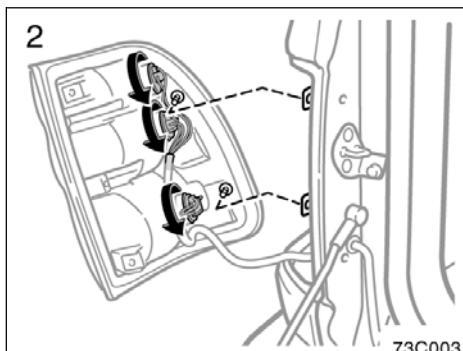


Use a Phillips-head screwdriver.

—Rear turn signal, stop/tail,
and back-up lights

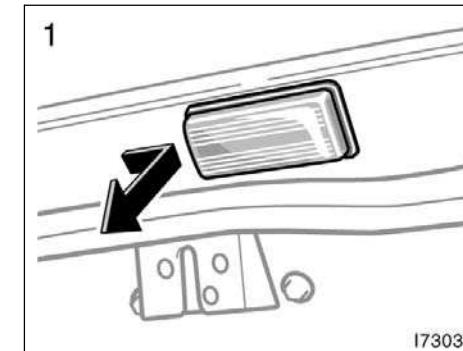


Use a flat-bladed screwdriver.

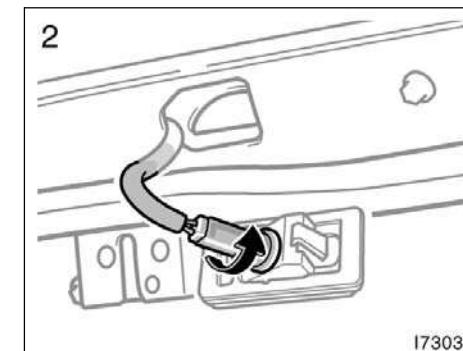


a: Back-up light
b: Rear turn signal light
c: Stop/tail light

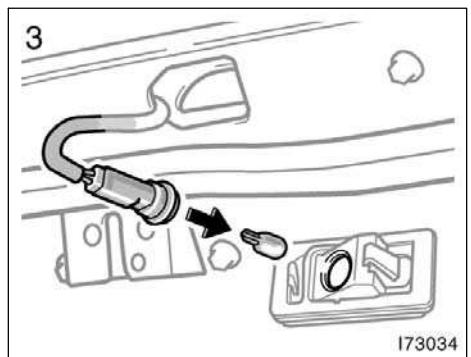
—License plate lights



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SECTION 9

REPORTING SAFETY DEFECTS FOR U.S. OWNERS AND UNIFORM TIRE QUALITY GRADING

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Reporting safety defects for U.S. owners

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Toyota Motor Sales, U.S.A., Inc. (Toll-free: 1-800-331-4331).

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Toyota Motor Sales, U.S.A., Inc.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.