



Owner's Manual

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

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Foreword

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

This Owner's Manual explains the features of your new Toyota. Please read it and follow the instructions carefully so that you can enjoy many years of safe motoring.

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

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

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

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

TOYOTA MOTOR CORPORATION

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Accessories, spare parts and modification of your Toyota

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

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

Installation of a mobile two-way radio system

As the installation of a mobile two-way radio system in your vehicle could affect electronic systems such as multiport fuel injection system/sequential multiport fuel injection system and cruise control system, be sure to check with your Toyota dealer for precautionary measures or special instructions regarding installation.

Maintenance schedule

Please refer to the separate "Warranty and Service Booklet".

On-pavement and off-road driving tips

This vehicle will handle and maneuver differently from an ordinary passenger car because it is also designed for off-road use. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or an accident. Be sure to read "Off-road vehicle precautions" in Part 2 and "Off-road driving precautions" in Part 3.

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Safety and vehicle damage warnings

In this manual, you will see CAUTION and NOTICE warnings. These are used in the following ways:

CAUTION: ~~~~~

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

~~~~~

**NOTICE:**

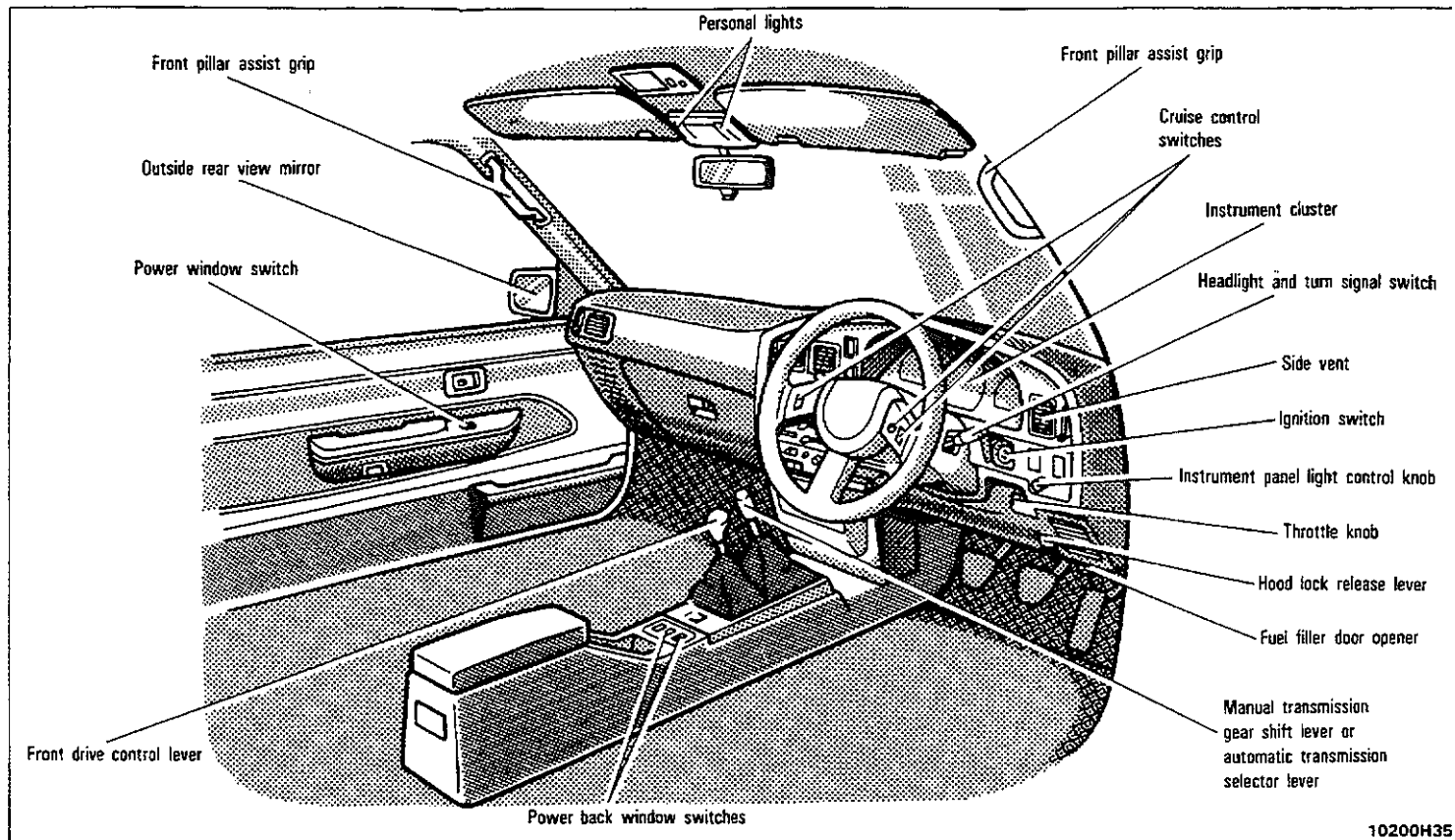
**This is a warning against something which may cause damage to the vehicle or its equipment. You are informed what you must or must not do in order to avoid or reduce the risk of damage to your vehicle and its equipment.**

**Part 1**  
**OPERATION OF**  
**INSTRUMENTS**  
**AND CONTROLS—**

**Chapter 1-1**  
**Overview of instruments**  
**and controls**

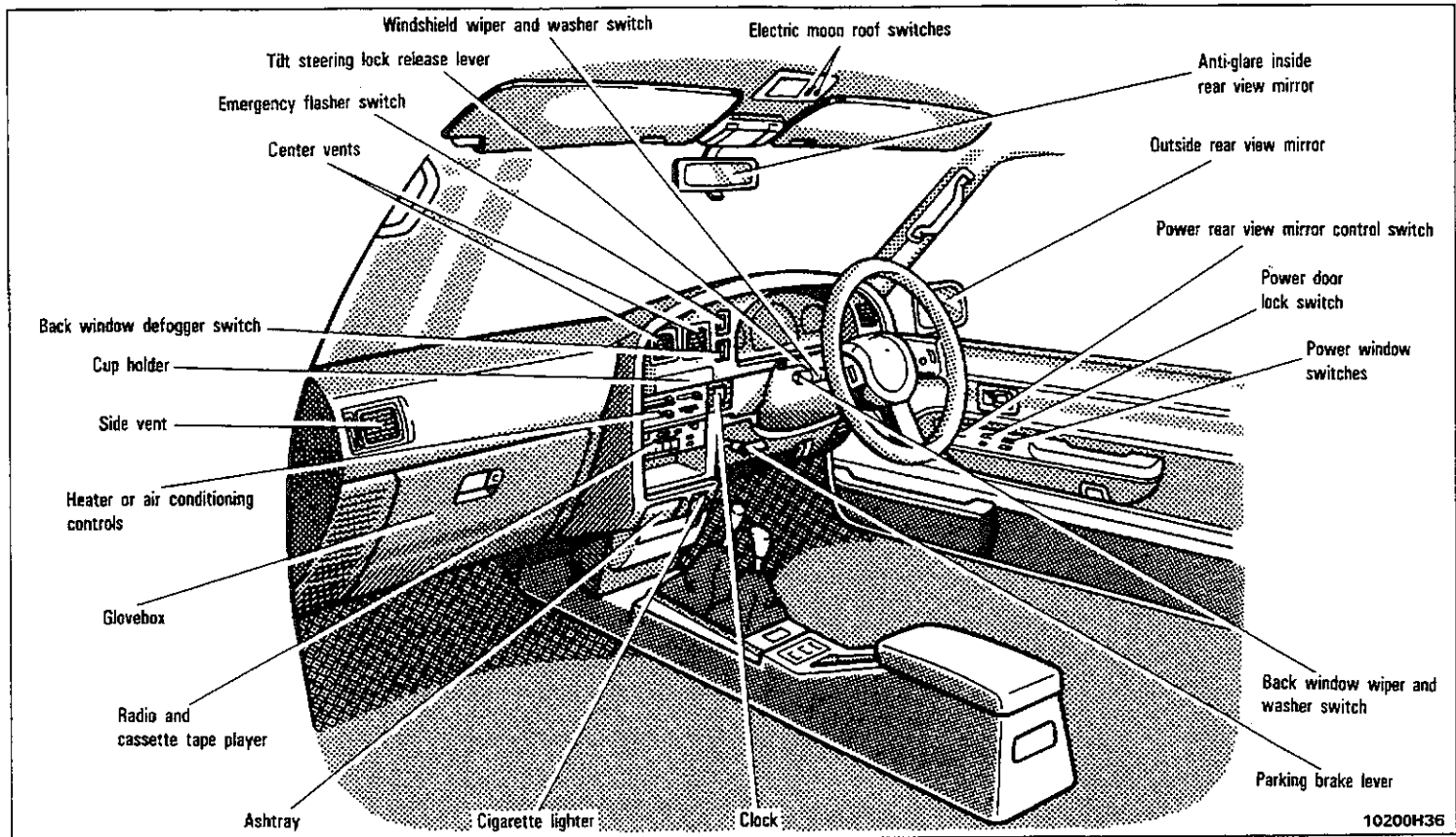
- Instrument panel overview
- Instrument cluster overview

## Instrument panel overview



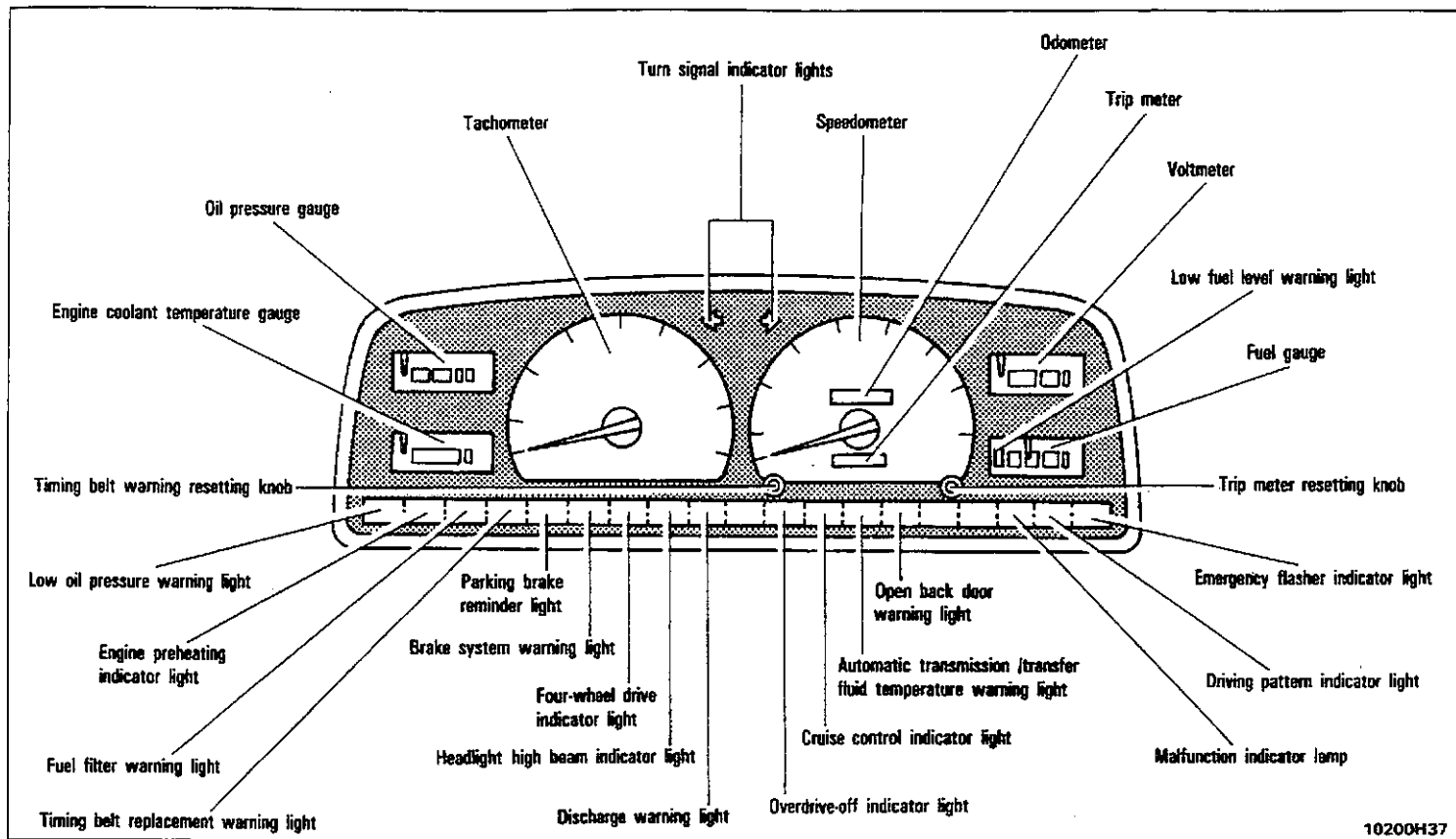
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## Instrument cluster overview



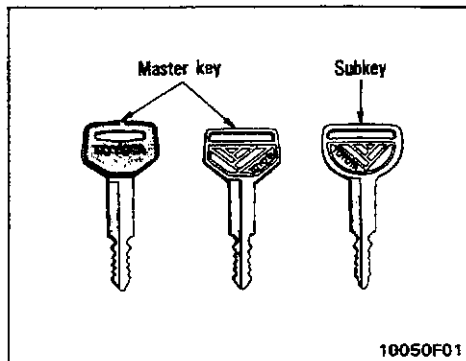
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# Part 1 OPERATION OF INSTRUMENTS AND CONTROLS—

## Chapter 1-2 Keys and Doors

- Keys
- Doors
- Power window switches
- Power back window switches
- Back door
- Hood
- Fuel tank cap
- Electric moon roof

### Keys

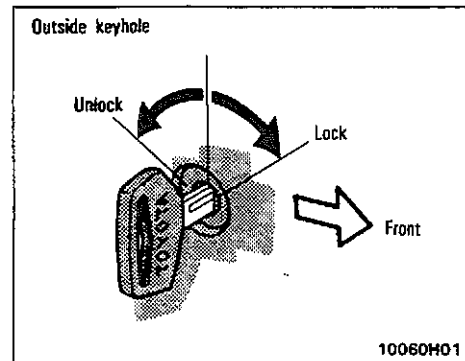


**The master key works in every lock. The subkey will not work in the glovebox.**

To protect things locked in the glovebox when you have your vehicle parked, leave the subkey with the attendant.

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

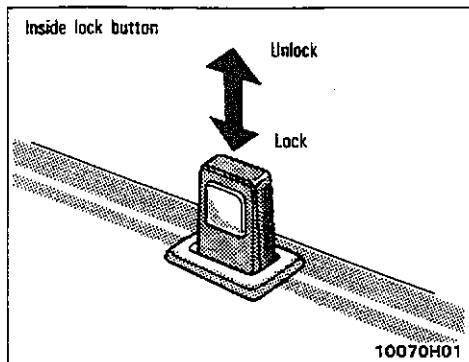
### Doors



#### LOCKING WITH KEY

**Turn the key towards the front of the vehicle to lock and towards the back to unlock.**

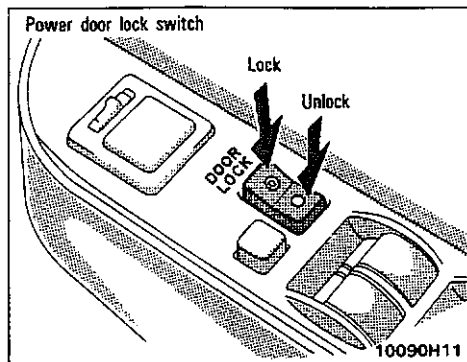
Vehicles with a power door lock switch—  
All the side doors lock and unlock simultaneously with the driver's door.



### LOCKING WITH INSIDE LOCK BUTTON

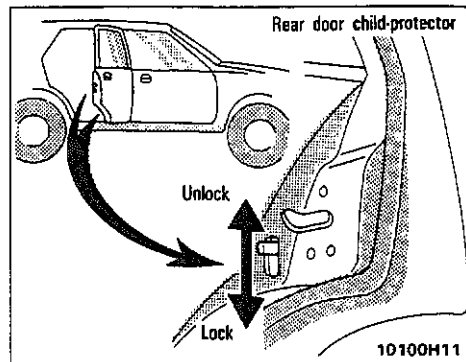
Push the lock button in to lock and pull it out to unlock.

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



### LOCKING WITH POWER DOOR LOCK SWITCH

To lock all the side doors simultaneously, push the switch on the "DOOR LOCK" side. Pushing on the opposite side will unlock them.

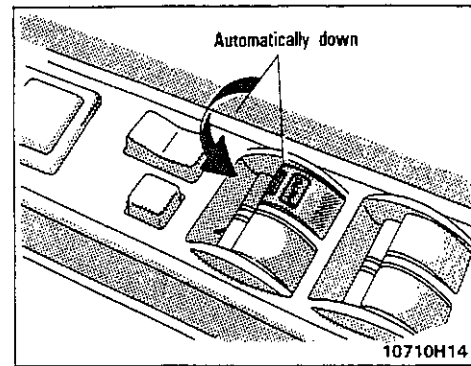
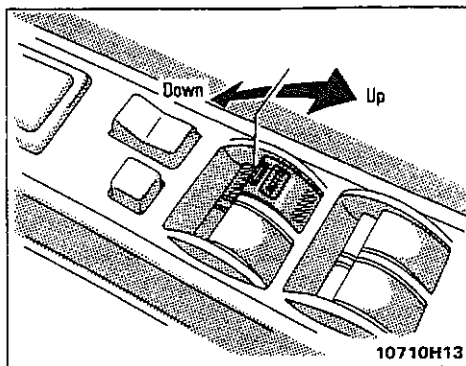


### LOCKING WITH REAR DOOR CHILD-PROTECTOR

To lock a rear door so that it does not open from the inside, push the lever down and then close the door.

We recommend using this feature whenever small children are in the vehicle.

## Power window switches



**CAUTION:**   
Before driving, be sure that the doors are closed and locked. 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.

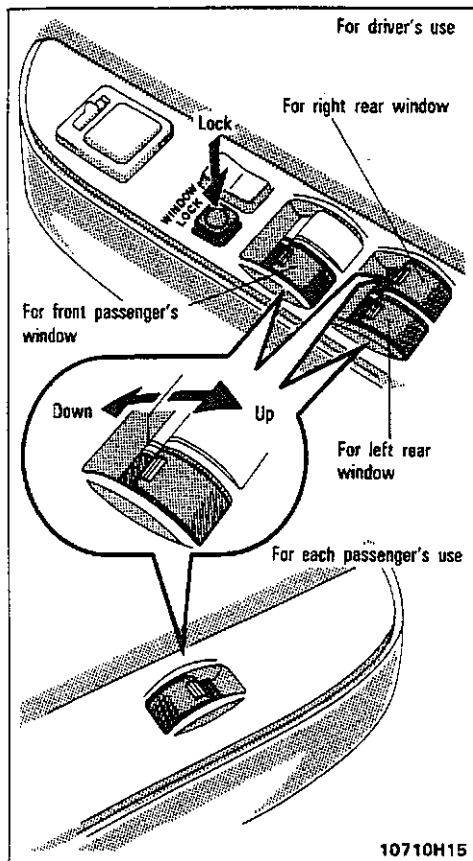
To raise or lower the windows, use the switch on each door. The passengers' windows can also be controlled by the switches on the driver's door.

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

### OPERATING THE DRIVER'S WINDOW

To lower the window, push the switch halfway down. Pull it up to raise the window back. The window moves as long as the switch is operated. For automatic operation, push the switch fully down.

In automatic operation, the window will fully open even if you let go of the switch. To stop the window partway, lightly pull the switch up and then release it.



## OPERATING THE PASSENGERS' WINDOWS

To lower the window, push the switch down. Pull it up to raise the window back. The window moves as long as the switch is operated. To lock the windows at that position, push the "WINDOW LOCK" switch.

With the "WINDOW LOCK" switch pressed in, the windows cannot be raised or lowered.

The back door window lock will also be controlled with the "WINDOW LOCK" switch. (For instructions, see "Power back window switches" in this Chapter.)

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

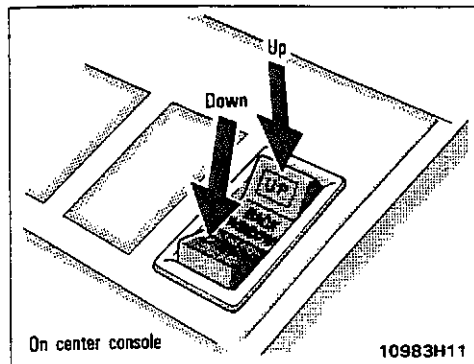
- Always make sure the head, hands and other parts of the body of you and your passengers are kept completely inside the vehicle before you close the power windows. If someone's neck, head or hands gets caught in a closing window, it could result in a serious injury. When your passengers close the power windows, be sure that they operate the windows safely.

- When small children are in the vehicle never let them use the power window switches without supervision. Use the "WINDOW LOCK" switch to prevent them from making unexpected use of the switches.

- Never leave small children alone in the vehicle, especially with the ignition key still inserted. They could use the power window switches and get trapped in a window. Unattended children can become involved in serious accidents.

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## Power back window switches



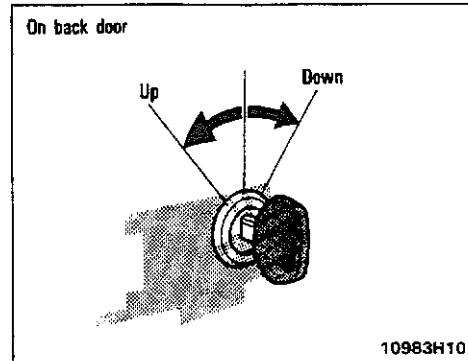
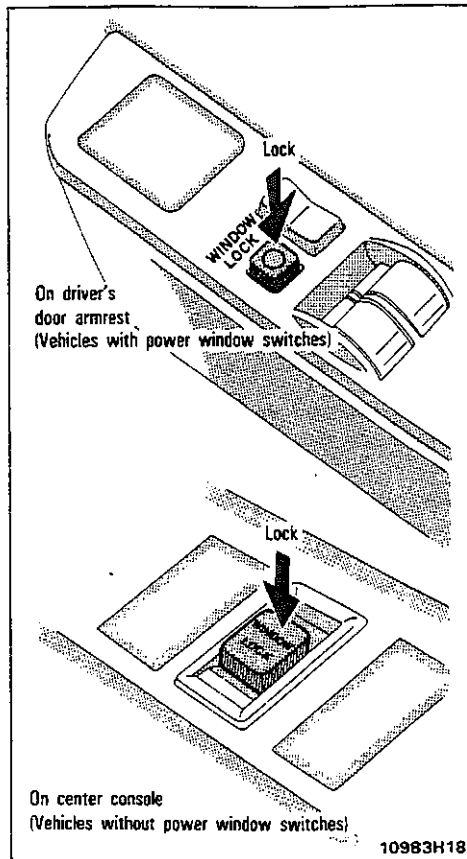
### FROM INSIDE

To raise or lower the back window from the inside, push the inner switch down on either side. The window moves as long as the switch is operated. To lock the window at that position, push the "WINDOW LOCK" switch.

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

If the back door is not completely closed or the back window wiper is operating, the switch will not operate.

When the "WINDOW LOCK" switch is pushed in, the back window cannot be raised or lowered.



### FROM OUTSIDE

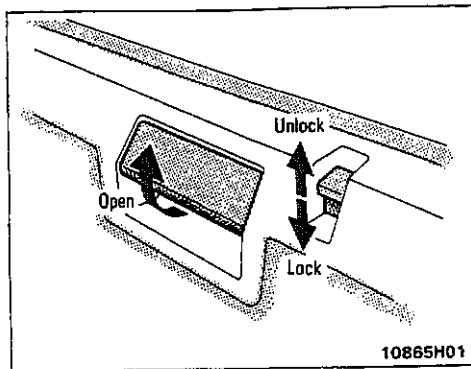
To raise or lower the back window from the outside, insert the key into the outer switch and turn it. The window moves as long as the switch is operated.

If the back door is not completely closed or the back window wiper is operating, the switch will not operate.

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

- Always make sure the head, hands and other parts of the body of you and your passengers are kept completely inside the vehicle before you close the power windows. If someone's neck, head or hands gets caught in a closing window, it could result in a serious injury. When your passengers close the power windows, be sure that they operate the windows safely.
- When small children are in the vehicle, never let them use the power window switches without supervision. Use the "WINDOW LOCK" switch to prevent them from making unexpected use of the switches.
- Never leave small children alone in the vehicle, especially with the ignition key still inserted. They could use the power window switches and get trapped in a window. Unattended children can become involved in serious accidents.
- Keep the back window closed while driving. This not only keeps the luggage from being thrown out but also prevents exhaust gases from entering the vehicle.

## Back door



To open the back door, lower the back window fully and pull up the lock button and lever.

When closing the back door, make sure that it is securely latched by pushing and pulling it. After closing it, push the button down to lock. If you close the back window, the back door will be locked automatically.

If the back door is not completely closed or locked, the open back door warning light and buzzer remain on.

See "Luggage stowage precautions" in Part 2 for precautions to observe in loading luggage.

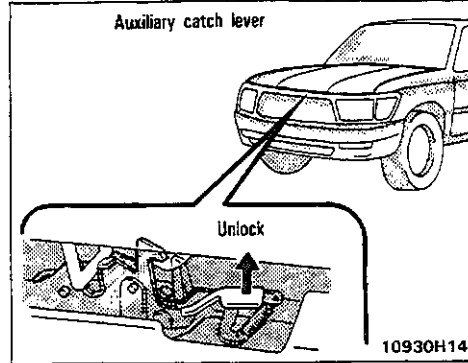
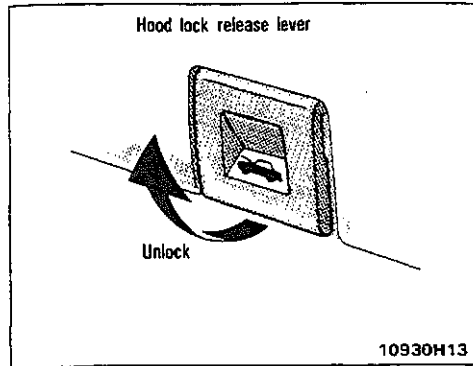
**CAUTION:**   
 Keep the back window and back door closed while driving. This not only keeps the luggage from being thrown out but also prevents exhaust gases from entering the vehicle.

**NOTICE:**

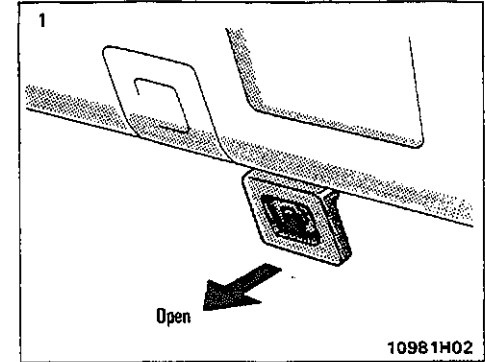
To prevent damage when opening the back door, brush off any snow etc. from the rear bumper.



## Hood



## Fuel tank cap

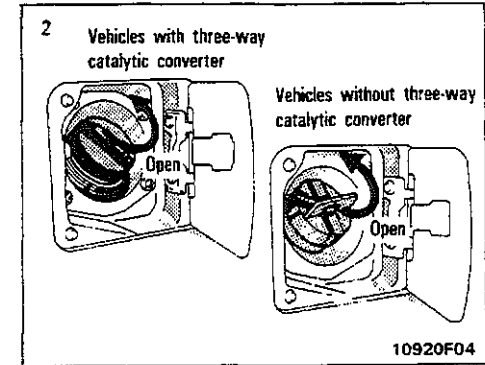
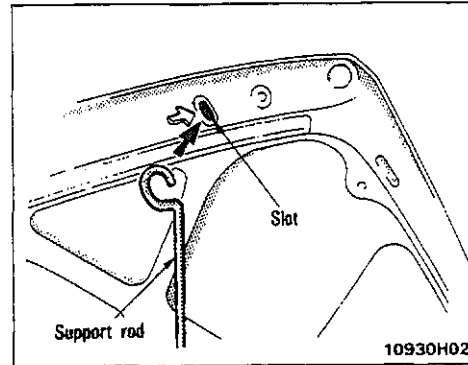


To open the hood, pull the hood lock release lever under the dash. The hood will spring up slightly. In front of the vehicle, press up on the auxiliary catch lever and lift the hood. Then hold the hood open by inserting the support rod into the slot.

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

**CAUTION:**

After inserting the rod, make sure it supports the hood securely.



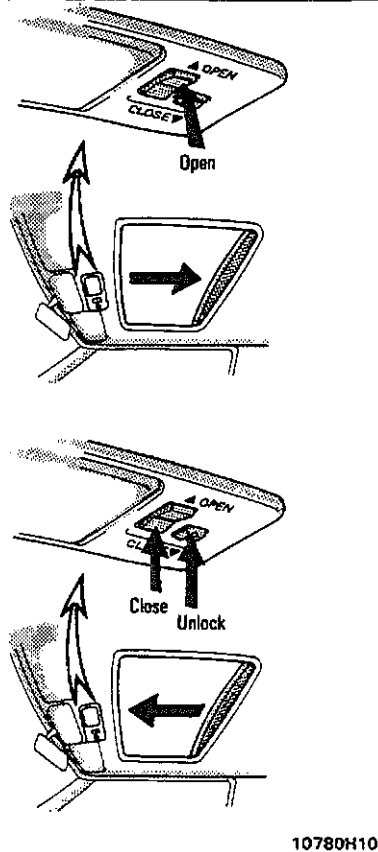
## Electric moon roof

1. To open the fuel filler door, pull the handle out.
2. To remove the fuel tank cap, turn the cap slowly counterclockwise, then pause slightly before removing it.

It is not unusual to hear a slight swoosh when the cap is opened. When installing, turn the cap clockwise till you hear a click on vehicles with a three way catalyst. On vehicles without a three way catalyst, make sure the tabs in the cap are properly aligned with the cutouts in the tank opening.

### CAUTION:

- Do not smoke, cause sparks or allow open flames when refuelling. The fumes are flammable.
- When opening the cap, do not remove the cap quickly. Fuel may be under pressure and spray out of the fuel filler neck under hot weather conditions, etc., which may cause injury.
- Make sure the cap is tightened securely to prevent fuel spillage in case of an accident.
- Use only a genuine Toyota fuel tank cap for replacement. It has a built-in check valve.



To open the moon roof, push the switch in on the "OPEN" side. To close it, push the switch in on the "CLOSE" side while pushing the lock button.

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

The moon roof will move while the switch is being pushed and stop when released.

You may open the moon roof to any desired position.

The sun shade can be opened or closed manually. However, if you open the moon roof the sun shade will be opened together with the moon roof.

### CAUTION:

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

- While the vehicle is moving, always keep the head, hands and other parts of the body of you and your passengers away from the roof opening.
- Always make sure the head, hands and other parts of the body of all passengers are completely inside the vehicle before you close the roof. If someone's neck, head or hands gets caught in the closing roof, it could result in a serious injury. When anyone closes the roof, first make sure it is safe to do so.

# Part 1 OPERATION OF INSTRUMENTS AND CONTROLS—

## Chapter 1-3 Seats, Seat belts, Steering wheel and Mirrors

- Front seats
- Fold-down rear seats
- Headrests
- Seat belts
- Child restraint anchorages
- Tilt steering wheel
- Power rear view mirror control
- Folding rear view mirrors
- Anti-glare inside rear view mirror

### Front seats—

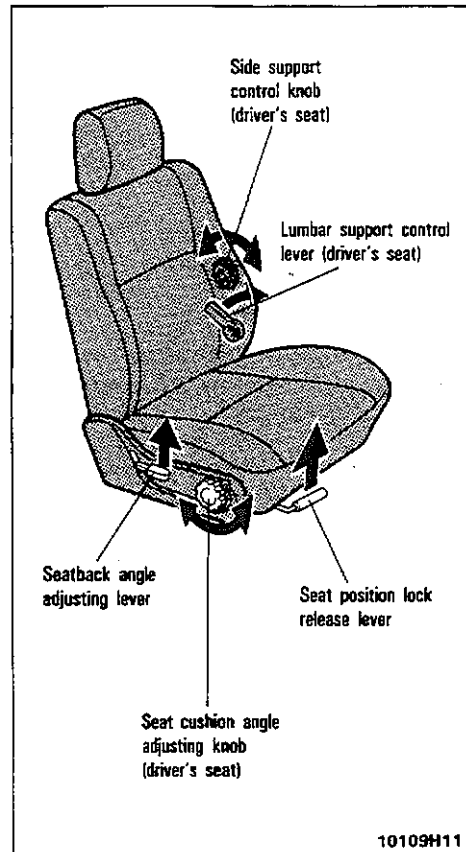
#### —Seat adjustment precautions

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

#### **CAUTION:**

- **Adjustments should not be made while the vehicle is moving, as the seat may unexpectedly move and cause the driver to lose control of the vehicle.**
- **When adjusting the seat, be careful not to hit the seat against a passenger or luggage.**
- **After adjusting the seat position, try sliding it forward and backward to make sure it is locked in position.**
- **After adjusting the seatback, exert body pressure to make sure it is locked in position.**

#### —Adjusting front seats



### ADJUSTING SEAT POSITION

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

Do not place anything under the front seats. It might interfere with the seat-lock mechanism.

### ADJUSTING SEATBACK ANGLE

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

### CAUTION: ::::::::::::::::::::::::::::::::::::::

To reduce the risk of sliding under the lap belt during a collision, avoid reclining the seatback any more than needed. The seat belts provide maximum protection when the driver and the passenger are sitting up straight and well back in the seats. If you are reclined, the lap belt may slide past your hips and apply restraint forces directly to the abdomen. Therefore, in the event of a frontal collision, the risk of personal injury may increase with increasing recline of the seatback.

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### ADJUSTING DRIVER'S SEAT CUSHION ANGLE

Turn the knob either way.

### ADJUSTING DRIVER'S SEAT LUMBAR SUPPORT

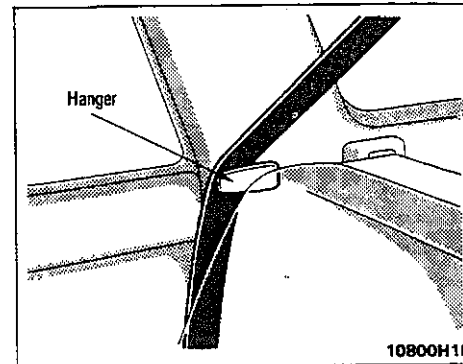
Pull the lever forward or backward.

Pulling the lever forward will increase the amount of your lower back.

### ADJUSTING DRIVER'S SEAT SIDE SUPPORTS

Turn the knob either way.

### Fold-down rear seats



### BEFORE FOLDING REAR SEAT

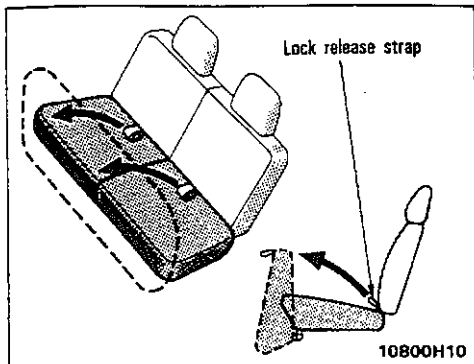
Make sure the shoulder belt passes through the hanger when folding the seatback down (or returning the seatback to the upright position).

This prevents the shoulder belt from being damaged.

### CAUTION: ::::::::::::::::::::::::::::::::::::::

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

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### FOLDING REAR SEAT

1. Swing the bottom cushion up by pulling the lock release strap.

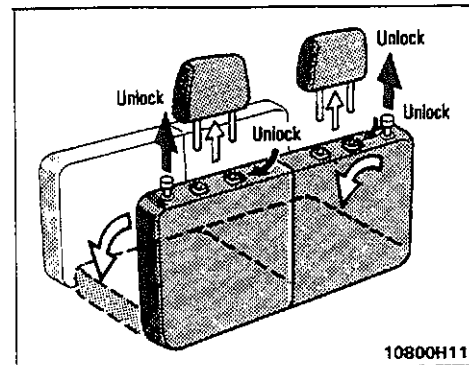
It is hinged at the front edge, so just lift it up.

If desired, each bottom cushion may be lifted separately.

#### CAUTION: .....

When returning the bottom cushion to its place:

- Do not forget to pull out the buckle of the side seatbelts and center seatbelt and arrange them in their proper position for ready use.

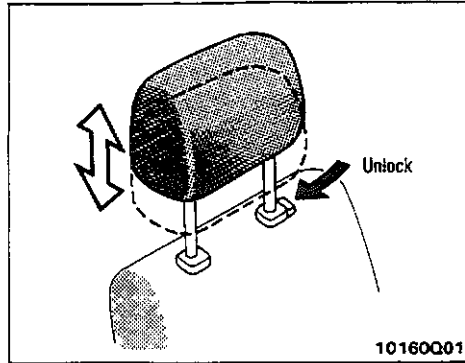


2. Remove the headrest, unlock the seatback and fold it down.

This will enlarge the luggage compartment as far as the raised seat cushion. See "Luggage stowage precautions" in Part 2 for precautions to observe in loading luggage.

If desired, each seatback may be folded separately.

### Headrests (vertically adjustable type)



**CAUTION:** .....

When returning the seatback to the upright position:

- Make sure the seat belts are not twisted or caught in the seatback and are arranged in their proper position for ready use.
- Make sure the seatback is securely locked by pushing forward and rearward on the top of the seatback.

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To raise the headrest, pull it up. To lower it, press the lock release button and push the headrest down.

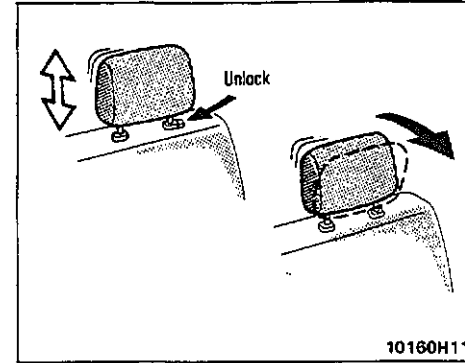
The headrest is most effective when it is close to your head. Therefore, using a cushion on the seatback is not recommended.

**CAUTION:** .....

- Adjust the top of the headrest so that it is closest to the top of your ears.
- After adjusting the headrest, make sure it is locked in position.
- Do not drive with the headrests removed.

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### Headrests (vertically and rotationally adjustable type)



To raise the headrest, pull it up. To lower it, press the lock release button and push the headrest down. To move the headrest forward, pull on the top.

Pulling the top of the headrest as far as it can go will return it to the upright position.

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

## Seat belts— —Seat belt precautions

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


**Child.** We recommend that the child sit in the rear seat and must be restrained using the vehicle's seat belt. If sitting in front, do not allow the child to stand up or kneel on the seat, and your child must be restrained using the vehicle's seat belt.

**Baby or small child.** Child restraint systems are available. We recommend the use of a type which fits your vehicle. Before installation, always read the manufacturer's instructions.

**Pregnant woman.** Toyota recommends the use of a seat belt. Ask your doctor for specific recommendations. The lap belt should be worn securely and as low as possible over the hips and not on the waist.

**Injured person.** Toyota recommends the use of a seat belt. Depending on the injury, however, first check with your doctor.

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

**CAUTION:**   
When using the seat belts, observe the following:

- Use the belt for only one person at a time. Do not use a single belt for two or more people—even children.
- Avoid reclining the seatbacks too much. The seat belts provide maximum protection when the seatbacks are in the upright position. (See the seat adjustment instructions.)
- Be careful not to damage the belt webbing or hardware. Take care that they do not get caught or pinched in the seat or doors.
- Inspect the belt system periodically. Check for cuts, fraying, and loose parts. Damaged parts should be replaced. Do not disassemble or modify the system.
- Keep the belts clean and dry. If they need cleaning, use a mild soap solution or lukewarm water. Never use bleach, dye, or abrasive cleaners—they may severely weaken the belts.
- Replace the belt assembly if it has been used in a severe impact. The entire assembly should be replaced even if damage is not obvious.

- **Australian owners:** Observe the following additional **WARNINGS**.

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

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

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

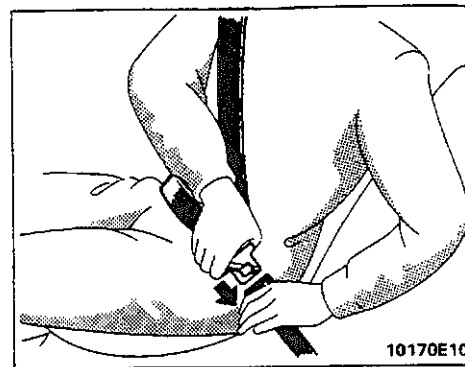
It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

Belts should not be worn with straps twisted.

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

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

### —3-point type



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

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

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

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



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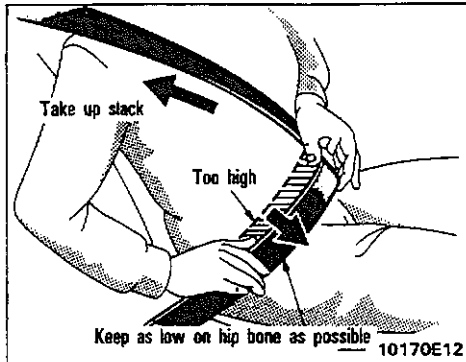
only If the seat belt cannot be pulled out of the retractor, firmly pull the belt and release it. You will then be able to smoothly pull the belt out of the retractor.

into **CAUTION:** .....

- After inserting the tab, make sure the connection is secure and that the belt is not twisted.

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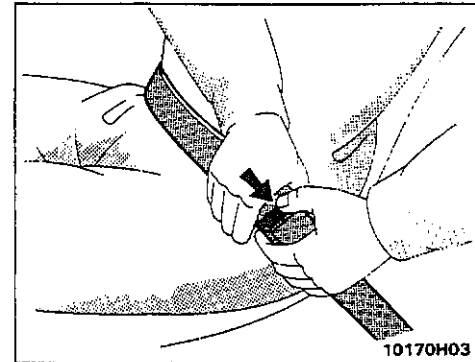
**Adjust the position of the lap and shoulder belts.**

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

**CAUTION:** .....

- High-positioned lap belts and loose-fitting shoulder belts both could increase the chance of injury due to sliding under the lap belt during an accident.
- For your safety, do not place the shoulder belt under your arm.

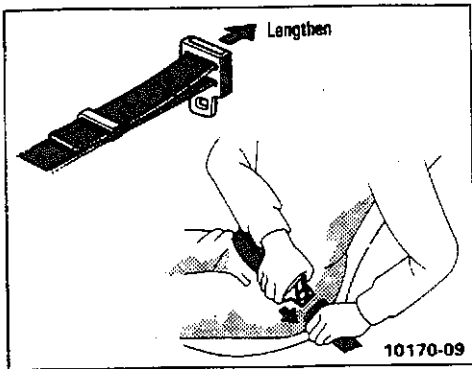
.....



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

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

## -2-point type

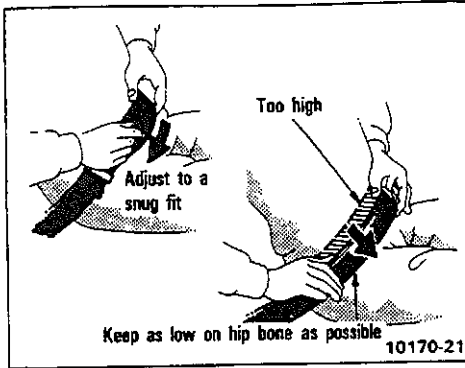


Sit up straight and well back in the seat. To fasten your belt, insert the tab into the buckle.

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

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

**CAUTION:** **After inserting the tab, make sure the connection is secure and that the belt is not twisted.**

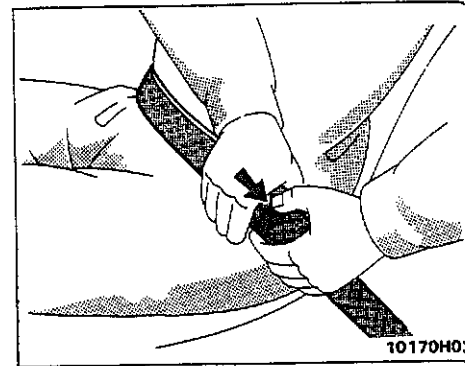


Remove excess length of the belt and adjust the belt position.

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

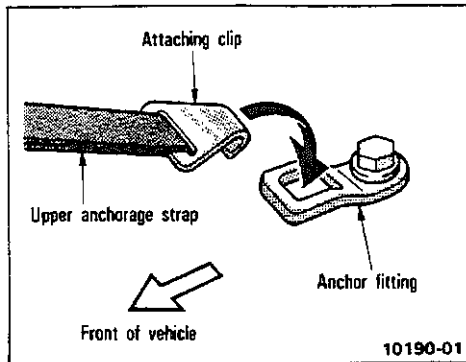
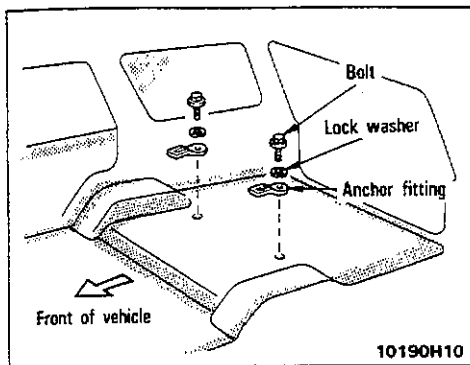
Position the lap belt as low as possible on your hips—not on your waist, then adjust it to a snug fit.

**CAUTION:** **High-positioned lap belts could increase the chance of injury due to sliding under the lap belt during an accident.**



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

## Child restraint anchorages



For easy installation of child restraints, your vehicle has two child restraint anchorage points concealed in the rear cargo floor. When installing a child restraint, follow both the instructions here and those provided by the manufacturer of your child restraint.

1. Cut out the part in the floor carpet, then remove the seal immediately behind where the child restraint will be positioned on the rear seat.

2. Install an M8 size bolt (supplied in vehicle) through the lock washer and anchor fitting. Tighten the bolt securely with the anchor fitting facing the front of the vehicle as shown.

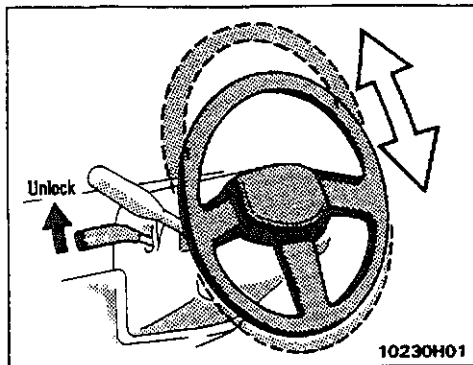
3. Attach the child restraint attaching clip to the child restraint anchor fitting. Make sure the clip is securely attached and tighten the upper anchorage strap.

**CAUTION:** This vehicle is fitted with two post-1993 type child restraint anchorage attachments located in the floor behind the rear seat. A suitable child restraint device can be readily attached without any further installation. If you are using a pre-1993 type child restraint device, please retain the M8 size screw fitted in this vehicle. The anchorage points in the floor are not suitable for 5/16" UNC screw that normally comes with any commercial child restraint attachment.

• **Make sure the seat belt is securely locked, and check that the child restraint system is secure by pushing and pulling it in different directions.**

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

## Tilt steering wheel



To change the steering wheel angle, hold the steering wheel, pull up the lock release lever, tilt the steering wheel to the desired angle and release the lever.

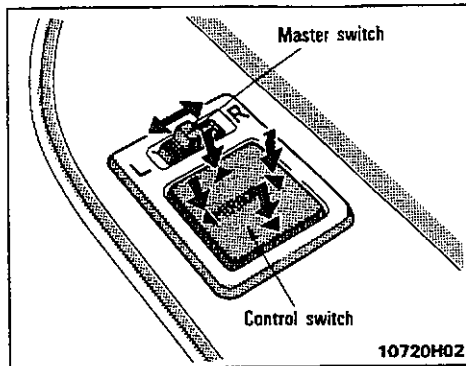
The steering wheel will spring up to the highest position when the lock release lever is pulled up.

### CAUTION: .....

- This adjustment should not be made while the vehicle is moving.
- After adjusting the steering wheel, try moving it up and down to make sure it is locked in position.

.....

## Power rear view mirror control



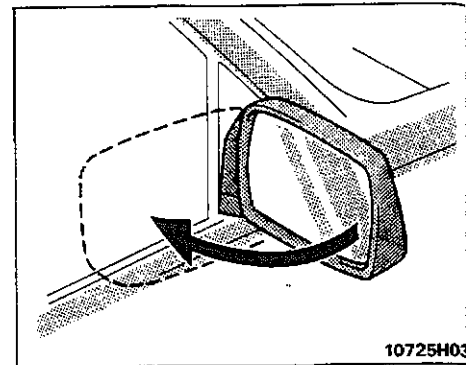
To adjust a power rear view mirror, first place the master switch at "R" (right) or "L" (left) depending on which mirror needs adjusting, then push the control switch in the desired direction.

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

### NOTICE:

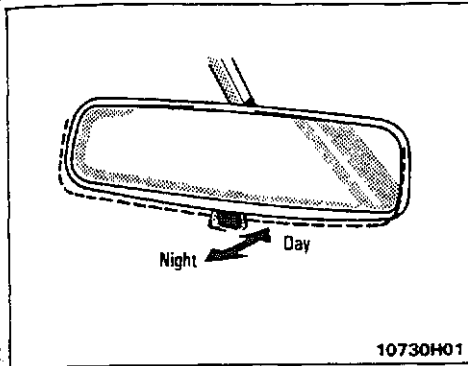
If ice should jam the mirror, do not operate the control or scrape the mirror face. Use a spray de-icer to free the mirror.

## Folding rear view mirrors



To fold the rear view mirror, push backward. The rear view mirrors can be folded backward for parking in restricted areas.

## Anti-glare inside rear view mirror



**Warn:** Pull the lever toward you to reduce glare  
**back** from the headlights of the vehicle behind you  
during night driving.

Before adjusting the mirror to the position with most clarity, push the day-night change lever away from you (daylight driving position).

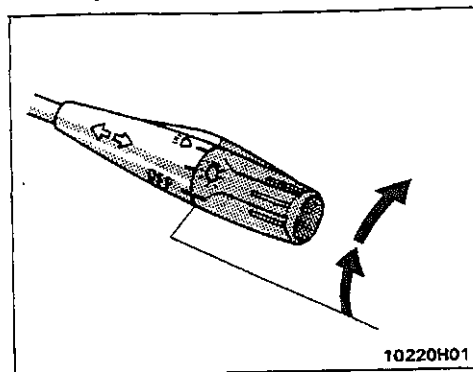
Remember that by reducing glare you also lose some rear view clarity.

# Part 1 OPERATION OF INSTRUMENTS AND CONTROLS—

## Chapter 1-4 Lights, Wipers and Defogger

- Headlight and turn signal switch
- Emergency flasher switch
- Instrument panel light control
- Interior light
- Ignition switch light
- Personal lights
- Luggage compartment light
- Windshield wiper and washer switch
- Back window wiper and washer switch
- Back window defogger switch

### Headlight and turn signal switch



To turn the lights on, twist the knob on the end of the lever.

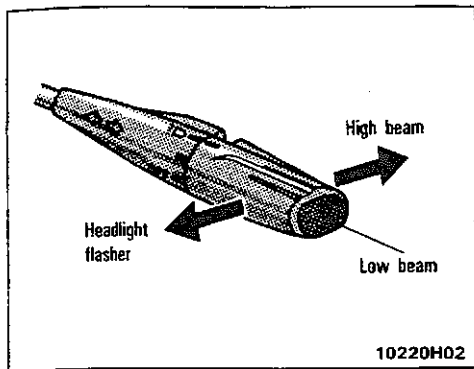
**FIRST CLICKSTOP:** Only the parking, tail, license plate and instrument panel lights turn on.

**SECOND CLICKSTOP:** The headlights also turn on.

On some models, the buzzer will remind you to turn the lights off when the driver's door is opened if the ignition switch is turned to the "LOCK" position with the headlight switch on.

#### **NOTICE:**

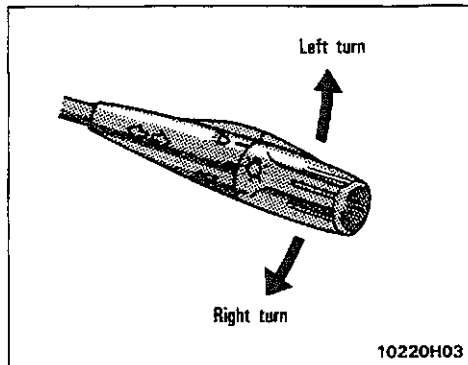
To prevent the battery from being discharged, do not leave the lights on for a long period when the engine is not running.



For high beam, push the lever away from you. Pull it toward you for low beam. For the headlight flasher, pull the lever all the way back and release.

A blue light in the instrument panel indicates high beam is on.

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

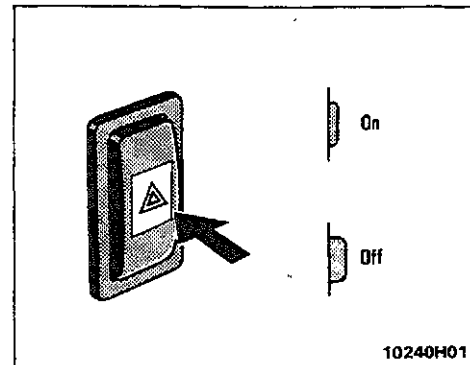


For signaling turns, move the lever up or down in the conventional manner.

The key must be in the "ON" position.

The turn signal is self-cancelling after a turn, but after a lane change, you may have to cancel it by hand. If the green light in the instrument panel flashes faster than normal, it indicates that the front or rear turn signal bulb has burned out.

## Emergency flasher switch



To turn on the emergency flashers, push the switch.

All the turn signal lights will flash.

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

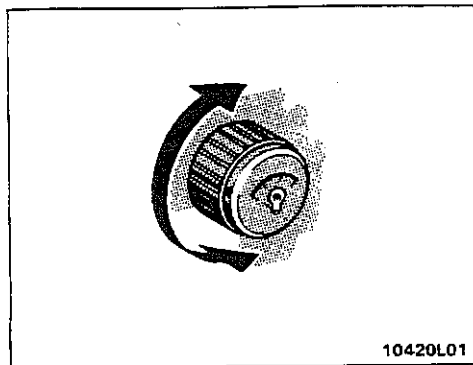
Always pull as far off the road as possible.

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

### NOTICE:

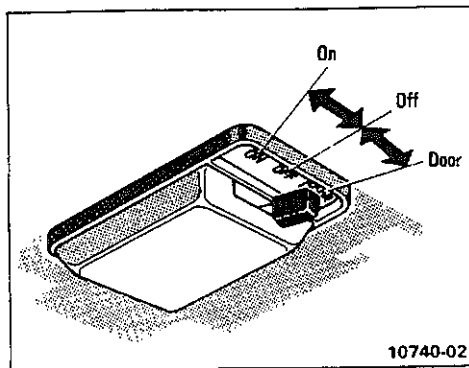
To prevent the battery from being discharged, do not leave the switch on longer than necessary when the engine is not running.

## Instrument panel light control



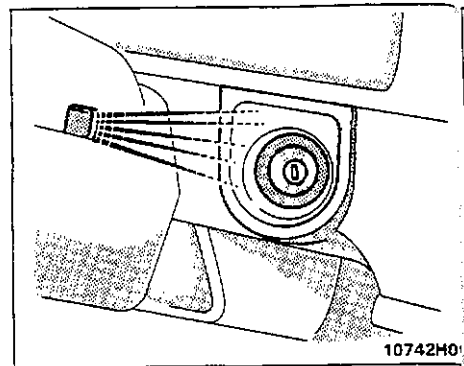
To adjust the brightness of the instrument panel lights, turn the knob.

## Interior light



To turn on the interior light, slide the switch. With the switch in the "DOOR" position, the light comes on when any of the side doors are opened.

## Ignition switch light

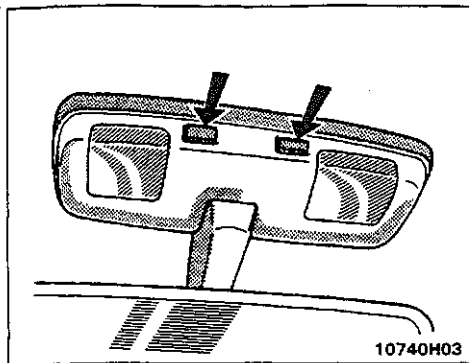


For easy access to the ignition switch, the ignition switch light is designed to come on when the driver's door is opened.

The light remains on for a certain time after the driver's door is closed.



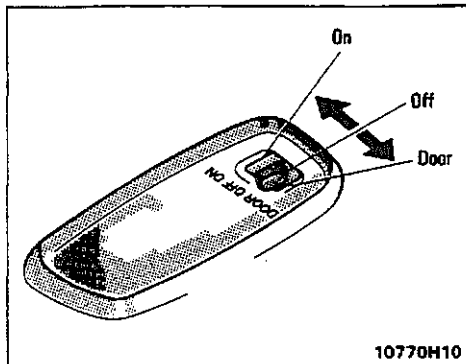
## Personal lights



To turn on the personal light, push the switch.

af.

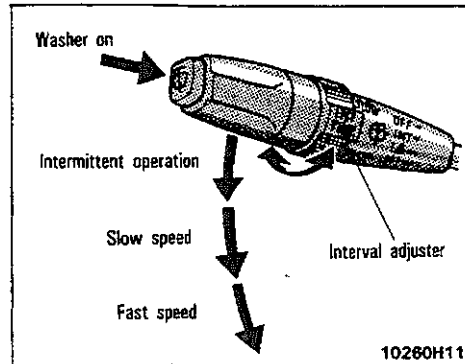
## Luggage compartment light



To turn on the luggage compartment light, slide the switch.

With the switch in the "DOOR" position, the light comes on when the back door is opened.

## Windshield wiper and washer switch



To turn the wipers on, move the lever. To make the washer squirt, push the button on the end of the lever.

The key must be in the "ON" position.

The wipers will operate at intervals when the lever is in the "INT" position. With the lever in this position, the wipers can be adjusted to operate at intervals of 2 to 11 seconds depending on the interval adjuster setting between "SLOW" and "FAST".

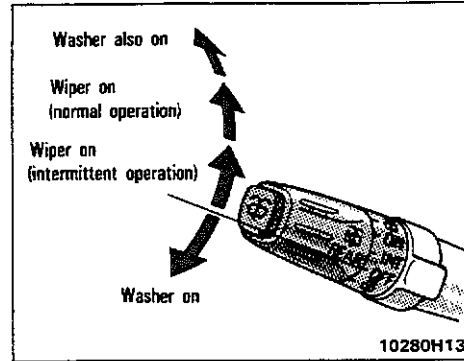
Also, the wipers will automatically operate a couple of times after the washer squirts even with the lever in the "OFF" position.

**NOTICE:**

To prevent the battery from being discharged, turn the switch on when the engine is running.

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

### Back window wiper and washer switch



If the washer does not work, check to see whether the washer tank is empty. For information on adding washer fluid, see "Adding washer fluid" in Chapter 7-3.

In cold weather, warm the windshield with the defroster before using the washer. This will help prevent icing, which could block your vision.

**NOTICE:**

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

To turn the wiper and washer on, twist the knob at the end of the lever.

The key must be in the "ON" position.

The wiper will operate three times when the knob is moved to the "INT" position. Then the wiper will operate at intervals.

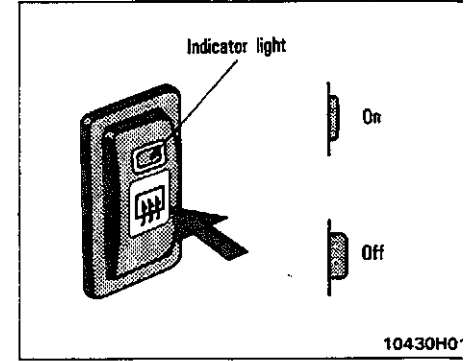
The washer squirts at the two marked knob positions. The knob will automatically return from these positions when it is released.

If the washer does not work, check to see whether the washer tank is empty. For information on adding washer fluid, see "Adding washer fluid" in Chapter 7-3.

**NOTICE:**

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

### Back window defogger switch



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

The key must be in the "ON" position.

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

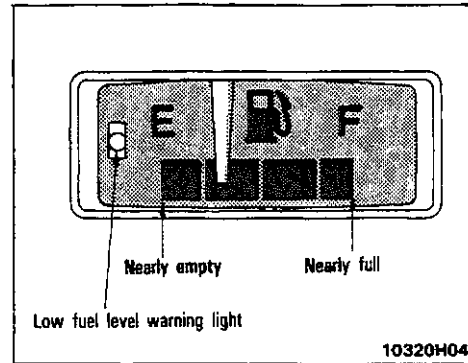
When the surface has cleared, push the switch once again to turn the defogger off. Continuous use may cause the battery to discharge, especially during stop-and-go driving. The defogger is not designed for dry rain water or for melting snow.

# Part 1 OPERATION OF INSTRUMENTS AND CONTROLS—

## Chapter 1-5 Gauges, Meters and Service reminder indicators

- Fuel gauge
- Engine coolant temperature gauge
- Oil pressure gauge
- Voltmeter
- Tachometer
- Odometer and trip meter
- Service reminder indicators and warning buzzers

Fuel gauge



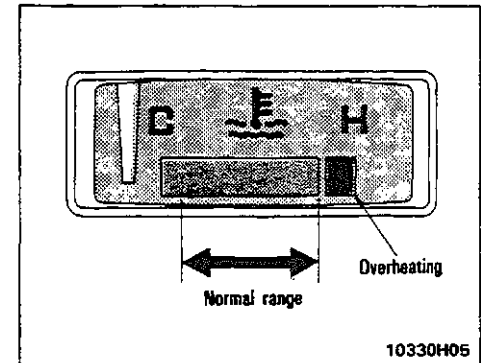
The gauge works when the ignition switch is on and indicates the approximate quantity of fuel remaining in the tank.

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

This fuel gauge has a non-return type needle which remains at the last indicated position when the ignition switch is turned off.

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

Engine coolant temperature gauge



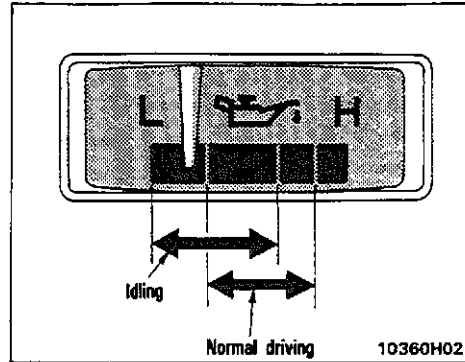
The gauge indicates the engine coolant temperature when the ignition switch is on. The engine operating temperature will vary with changes in weather and engine load.

If the needle 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.

### Oil pressure gauge



#### NOTICE:

Do not continue driving with an overheated engine. See "If your vehicle overheats" in Part 4.

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

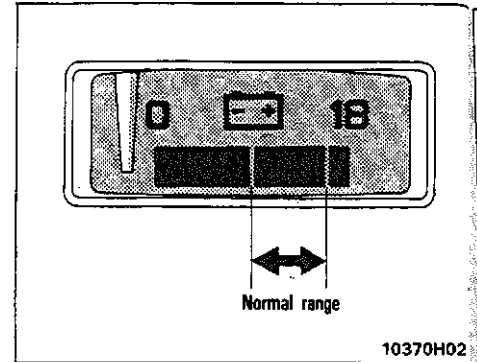
If the oil pressure should stay below the normal range, pull off the road to a safe place and stop the engine immediately. Call a Toyota dealer or qualified repair shop for assistance.

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

#### NOTICE:

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

### Voltmeter

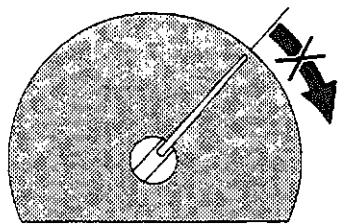


The voltmeter tells whether the battery is charged or discharged. Check it while the engine is running—the needle should always indicate as shown above.

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.

## Tachometer



Do not run into red zone

10350H11

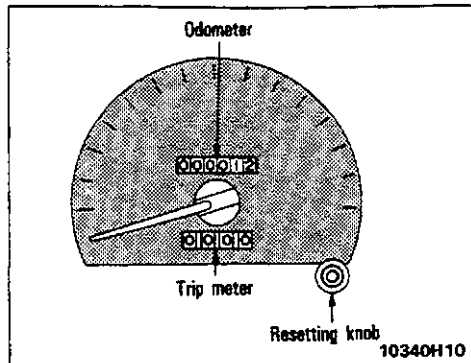
The tachometer indicates engine speed in thousands of rpm (revolutions per minute). Use it while driving to select correct shift points and to prevent engine lugging and overrevving.

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

### NOTICE:

Do not run the needle into the red zone. This may cause severe engine damage.

## Odometer and trip meter








10340H10

The odometer records the total distance the vehicle has been driven. The trip meter may be set to zero to record the distance on each trip. To set the trip meter, press the knob in and release it.

The black digits in white indicate tenths of kilometers or miles.

## Service reminder indicators and warning buzzers

| If the indicator or buzzer comes on...                                                             | Do this.                       |
|----------------------------------------------------------------------------------------------------|--------------------------------|
| (a)  PARK BRAKE | Release parking brake.         |
| (b)  BRAKE      | Stop and check.                |
| (c)             | Stop and check.                |
| (d)             | Stop and check.                |
| (e)  CHECK      | Take vehicle to Toyota dealer. |
| (f) Low fuel level warning light                                                                   | Fill up tank.                  |

10302

If the indicator or buzzer comes on...

Do this.

(g) **BACK DOOR**  
(Indicator and buzzer)

Close and lock back door.

(h) **T-BELT**

Take vehicle to Toyota dealer.

(i)   
(Indicator and buzzer)

Drain water.

(j) **A/T OIL TEMP**

Stop and check.

(k) Light reminder buzzer

Turn off lights.

10302

#### (a) Parking Brake Reminder Light

If this light is on, make sure the parking brake is fully released. The light should go off.

#### (b) Brake System Warning Light

This light has the following functions:

**Low brake fluid level warning and**


**Low vacuum warning (diesel-powered vehicles)**

If this light comes on and stays on while you are driving, slow down and pull off the road. Then stop the vehicle carefully. There may be a problem somewhere in the brake system. Check the fluid level of the see-through reservoir.

**If the brake fluid level is low...**

At a safe place, test your brakes by starting and stopping.

- If you judge that the brakes still work adequately, drive cautiously to your nearest dealer or shop for repairs.
- If the brakes are not working, have the vehicle towed in for repairs. (For towing information, see Part 4.)

**CAUTION:**   
**Continued normal driving with low brake fluid level is dangerous.**

  
If the brake fluid level is correct...


Gasoline-powered vehicles

Have the warning system checked by your Toyota dealer.

Diesel-powered vehicles (low vacuum warning)

Test your brake booster by following the instructions given in Chapter 7-2.

- If you judge that the brake booster still works adequately, have the warning system checked by your Toyota dealer.
- If the brake booster is not working, have the vehicle towed in for repairs. (For towing information, see Part 4.)

**CAUTION:**   
**Continued driving with an inoperative brake booster is dangerous.**

#### (c) 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.

#### **(d) Low Oil Pressure Warning Light**

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

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

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

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

#### **NOTICE:**

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

#### **(e) Malfunction Indicator Lamp (3VZ-E engine)**

This lamp warns that there is a problem somewhere in your engine electrical system.

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

#### **(f) 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.

#### **(g) Open Back Door Warning Light and Buzzer**

This light remains on until the back door is completely closed and locked. The buzzer will sound if the back door is not completely closed when the power back window switch is operated for raising.

#### **(h) Timing Belt Replacement Warning Light (diesel-powered vehicles)**

This light will come on every 100000 km or 60000 miles to indicate that the timing belt should be replaced. Therefore, when it comes on, have the belt replaced immediately and the warning light reset by your Toyota dealer.

#### **NOTICE:**

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

#### **(i) Fuel Filter Warning Light and Buzzer (diesel-powered vehicles)**

The light and buzzer warn you that the amount of accumulated water in the fuel filter has reached the specified level.

If they come on, drain the water immediately. (See Chapter 7-2 for instructions for how to drain the water.)

#### **NOTICE:**

**Never drive the vehicle with the warning light and buzzer on. Continued driving with water accumulated in the fuel filter will damage the fuel injection pump.**

#### **(j) Automatic Transmission/Transfer Fluid Temperature Warning Light**

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

If this light comes on while you are driving, slow down and pull off the road. Stop the vehicle at a safe place and put the selector lever in "P". With the engine idling, wait until the light goes off. If the light goes off, you 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 or transfer.**

**(k) Light Reminder Buzzer  
(some models)**

This buzzer will sound when the driver's door is opened if the ignition switch is turned to the "LOCK" position with the headlight switch on. Removing the key will not stop the buzzer as long as the headlight switch is on.

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

1. Apply the parking brake. Close and lock the back door.

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

All the service reminder indicators except the brake system warning light and open back door warning light should come on.

3. Open the back door.

The open back door warning light should come on.

4. Close and lock the back door.

The open back door warning light should go off.

5. Turn the key to "START". The brake system warning light should come on.

If any service reminder indicator or warning buzzer does not function as described above, either the bulb is burned out or the circuit is in need of repair. Have it checked by your Toyota dealer as soon as possible.

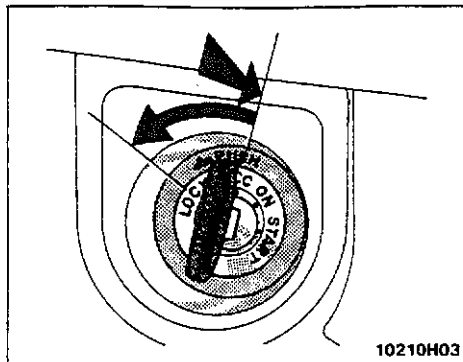


# Part 1 OPERATION OF INSTRUMENTS AND CONTROLS—

## Chapter 1-6 Ignition switch, Transmission and Parking brake

- Ignition switch with steering lock
- Throttle knob
- Automatic transmission
- Manual transmission
- Four-wheel drive system
- Parking brake
- Cruise control

### Ignition switch with steering lock (gasoline engine)



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

For starting tips, see Part 3.

**“ON”**—Engine on and all accessories on.

This is the normal driving position.

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

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

You must push in the key to turn it from **“ACC”** to the **“LOCK”** position.

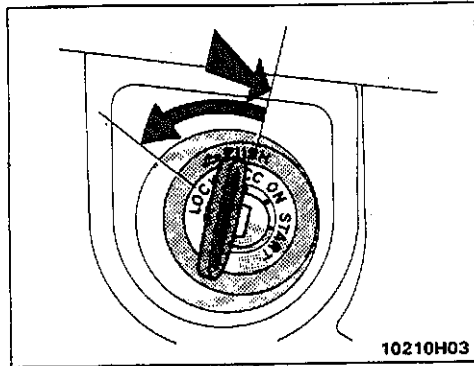
When starting the engine, the key may seem stuck at the **“LOCK”** position. To free it, first be sure the key is pushed all the way in, and then rock the steering wheel slightly while turning the key gently.

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

#### **NOTICE:**

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

## Ignition switch with steering lock (diesel engine)



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

For starting tips, see Part 3.

**“ON”**— Engine on and all accessories on. Before starting, glow plugs on and engine preheated.

This is the normal driving position.

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

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

You must push in the key to turn it from **“ACC”** to the **“LOCK”** position.

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.

**CAUTION:** .....

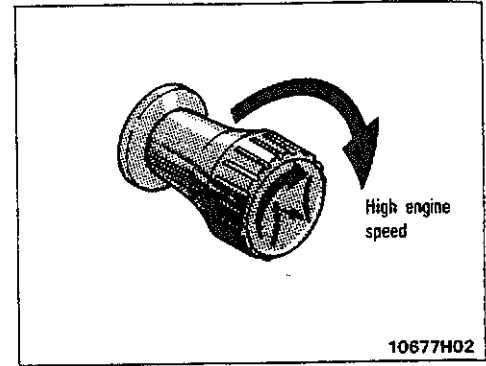
**Never remove the key when the vehicle is moving, as this will lock the steering wheel and result in loss of steering control.**

.....

**NOTICE:**

Do not leave the key in the **“ON”** position if the engine is not running. The battery will discharge.

## Throttle knob (diesel engine)



Turn the throttle knob clockwise to increase engine speed. To return the engine to the normal idle speed, turn the knob counter-clockwise.

Use the throttle knob in the following cases:

- The engine runs roughly when idling after starting from extreme cold (For details, see **“How to start the engine”** in Part 3.).
- The heating effect boosts in extremely cold conditions when the vehicle is not moving.

**CAUTION:** .....

**Do not use the throttle knob when the vehicle is moving. This could result in longer stopping distance.**

.....

## Automatic transmission

### Selector lever

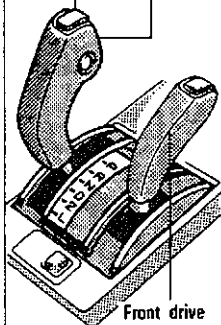


- Parking and engine starting position
- Reverse position
- Neutral position
- Normal driving position
- Position for engine braking
- Position for stronger engine braking than that in "2" position

### Lock release button To prevent misshifting



- Shift while holding the lock release button in



Front drive control lever

20040H16

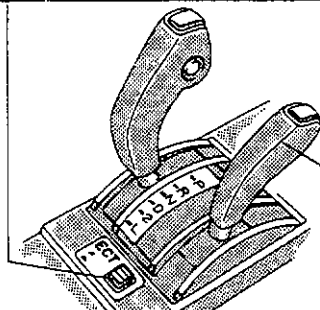
**Driving pattern selector button**  
For selecting a driving pattern suitable to existing driving conditions



"NORMAL" position  
for general driving conditions



"PWR" (Power) position  
for powerful acceleration



Front drive control lever

ECT  
PWR

"PWR" position indicator light on the instrument panel shows the driving pattern selector button is in the "PWR" position.

20040H17

### Overdrive switch

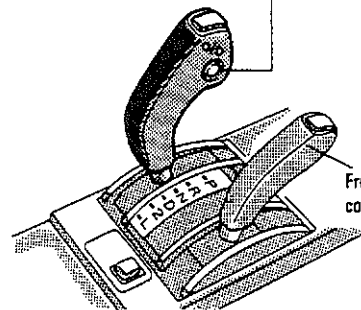
For selecting either a three-speed or four-speed transmission



"ON" position  
(Shifting into overdrive possible)



"OFF" position  
(Shifting into overdrive not possible)



Front drive control lever

O/D  
OFF

"O/D OFF" indicator light on the instrument panel shows the overdrive switch is off.

20040H18

### (a) Normal driving

1. Start the engine as instructed in "How to start the engine" in Part 3.

The transmission must be in "P" or "N". The engine will not start in "R", "2", "L" or "D" position even if the key is turned.

2. Set the driving pattern selector button to the "NORMAL" position.


Your transmission is fitted with a driving pattern selector button which allows you to select either "NORMAL" or "POWER" to suit your driving condition. For ordinary driving, Toyota recommends that you use the "NORMAL" position to improve fuel economy. For powerful acceleration, use the "POWER" position. In the "POWER" position, the "POWER" position indicator light is on and the transmission is shifted up and down at a higher vehicle speed than in the "NORMAL" position.


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

3. Push the overdrive switch to set it on.

Always turn the overdrive switch on for better fuel economy and quieter driving. (See "(b) Using engine braking" and "(f) Good driving practice" for exceptions.)

4. With your foot holding down the brake pedal, shift the selector lever to "D".

**CAUTION:**   
**Never put your foot on the accelerator pedal while shifting.**

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

The vehicle will start in the first gear and automatically shift to the second, third and overdrive gears according to the vehicle speed. However, while the engine coolant temperature is low and the vehicle is travelling at low speed or when the front drive control lever is in "L4" (four-wheel drive, low range), the transmission will not be shifted into the overdrive gear even with the overdrive switch on. (See "Four-wheel drive system" in this Chapter for information of the front control lever.)

In "D" position, the automatic transmission system will select the most suitable gear for the running conditions such as hill climbing, hard towing, etc.

If you need to accelerate rapidly while driving, push the accelerator pedal all the way to the floor. The transmission will automatically downshift to the third, second or first gear, according to the vehicle speed.

If engine braking is needed, such as in descending a long hill, see "(b) Using engine braking."

### (b) Using engine braking

To use the braking power of the engine, downshift the transmission in the way described below:

- Turn off the overdrive switch. (This is effective only when you are driving in the "D" position.) The "O/D OFF" indicator light will come on and the transmission will downshift to the third gear.
- Shift into the "2" position. The transmission will downshift to the second gear when the vehicle speed is or becomes lower than the speed listed below and more powerful engine braking will be obtained.

Front drive control lever in:

"H2" and "H4" 97 km/h (60 mph)

"L4" 36 km/h (22 mph)



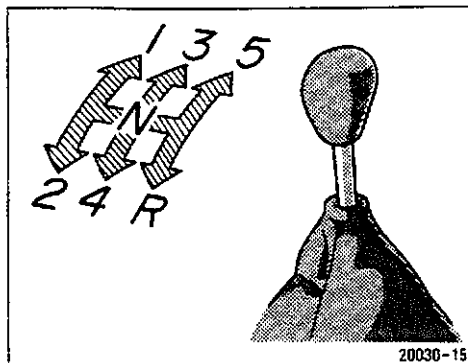
## Manual transmission

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

### NOTICE:

Do not hold the vehicle on an upgrade with the accelerator pedal. It can cause the transmission to overheat. Always use the brake pedal or parking brake.

(g) If the "O/D OFF" indicator light flashes Contact your Toyota dealer as soon as possible. There may be a trouble in the transmission system.



The shift pattern is conventional as shown above.

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

### Recommended shifting speeds

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

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

### Upshifting

| gear   | km/h (mph) |
|--------|------------|
| 1 to 2 | 24 (15)    |
| 2 to 3 | 40 (25)    |
| 3 to 4 | 65 (40)    |
| 4 to 5 | 72 (45)    |

### Downshifting

| gear   | km/h (mph) |
|--------|------------|
| 2 to 1 | 20 (12)    |
| 3 to 2 | 30 (19)    |
| 4 to 3 | 40 (25)    |
| 5 to 4 | 50 (31)    |

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

### Maximum allowable speeds

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

| 22R engine<br>gear | km/h (mph)                         |         |
|--------------------|------------------------------------|---------|
|                    | "H2" and "H4", or<br>"H" and "4WD" | "L4"    |
| 1                  | 33 (21)                            | 13 (8)  |
| 2                  | 56 (35)                            | 22 (14) |
| 3                  | 90 (56)                            | 35 (22) |
| 4                  | 130 (81)                           | 51 (32) |

| 3VZ-E engine<br>gear | km/h (mph)    |         |
|----------------------|---------------|---------|
|                      | "H2" and "H4" | "L4"    |
| 1                    | 39 (24)       | 15 (9)  |
| 2                    | 72 (45)       | 28 (17) |
| 3                    | 104 (65)      | 41 (25) |
| 4                    | 148 (92)      | 58 (36) |

| 3L engine<br>gear | km/h (mph)                         |         |
|-------------------|------------------------------------|---------|
|                   | "H2" and "H4", or<br>"H" and "4WD" | "L4"    |
| 1                 | 30 (19)                            | 12 (7)  |
| 2                 | 53 (33)                            | 21 (13) |
| 3                 | 85 (53)                            | 33 (21) |
| 4                 | 120 (75)                           | 47 (29) |

### NOTICE:

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

### Good driving practice

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

### CAUTION:

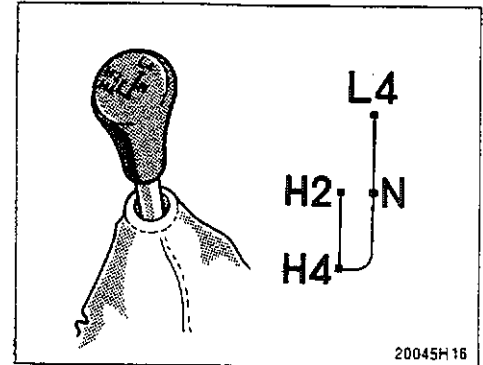
Be careful when downshifting on a slippery surface. Abrupt shifting could cause the vehicle to spin or skid.



### NOTICE:

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

### Four-wheel drive system— (a) Front drive control (lever type— vehicles with manual transmission)



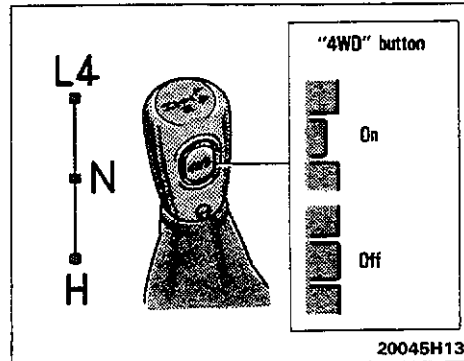
The front drive control lever selects one of the transfer modes below by the position.

The four-wheel drive indicator light shows when the front drive control lever is in the "H4", "N" or "L4" position.

**"H2": High range, two-wheel drive**  
Use this for normal driving on dry hard-surfaced roads. This position gives greater economy, quietest ride and least wear.

**"H4": High range, four-wheel drive**  
Use this for normal driving on wet, icy or snow-covered roads. This position provides greater traction than two-wheel drive.

**(a) Front drive control  
(lever/button type—vehicles with  
manual transmission)**



**"N": Neutral**

No power is delivered to the wheels. Use this position only for operating a winch or other equipment. The vehicle must be stopped.

**"L4": Low range, four-wheel drive**

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

See "(d) Shifting procedure (lever type—vehicles with manual transmission)" for further instructions.

The front drive control lever and "4WD" button select one of the transfer modes below by the positions.

The "H" position of the front drive control lever provides either "H" or "4WD" transfer mode depending on the "4WD" button position.

The four-wheel drive indicator light shows when the front drive control lever is in the "L4" position or when the "4WD" button is pushed in.

**"H": High range, two-wheel drive**

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

**"4WD": High range, four-wheel drive**

Use this for normal driving on wet, icy or snow-covered roads. This position provides greater traction than two-wheel drive.

**"N": Neutral**

No power is delivered to the wheels. Use this position only for operating a winch or other equipment. The vehicle must be stopped.

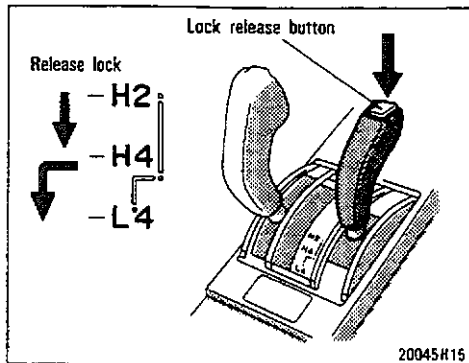
**"L4": Low range, four-wheel drive**

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

See "(d) Shifting procedure (lever/button type—vehicles with manual transmission)" for further instructions.



**(a) Front drive control  
(lever type—vehicles with  
automatic transmission)**



The front drive control lever selects one of the transfer modes below by the position.

The four-wheel drive indicator light shows when the front drive control lever is in the "H4" or "L4" position.

**"H2": High range, two-wheel drive**

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

**"H4": High range, four-wheel drive**

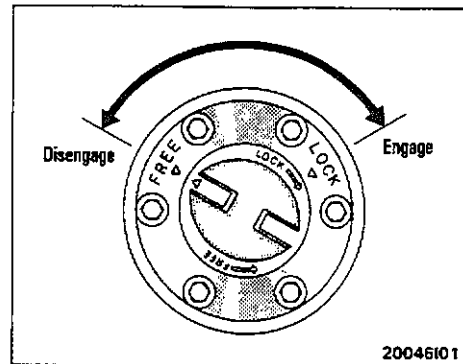
Use this for normal driving on wet, icy or snow-covered roads. This position provides greater traction than two-wheel drive.

**"L4": Low range, four-wheel drive**

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

See "(d) Shifting procedure (lever type—vehicles with automatic transmission)" for further instructions.

**(b) Free-wheeling hubs**



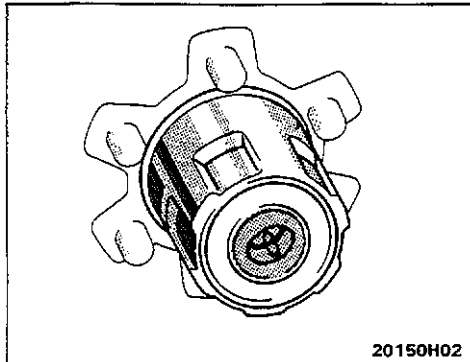
To engage the free-wheeling hubs, turn the hubs to "LOCK". To disengage, turn the hubs to "FREE".

Make sure that the triangle mark on the hub aligns with the other one at the side you wish to set.

Setting the free-wheeling hubs in "FREE" allows you to disengage the front axle and driveshaft so that they are not revolving. This reduces noise and wear when the vehicle is in two-wheel drive.

You should drive with the hubs in "LOCK" for at least 16 km (10 miles) each month. This will assure that the front drive components are lubricated.

**(c) A.D.D. (automatic disconnecting differential)**



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

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

**(d) Shifting procedure  
(lever type—vehicles with  
manual transmission)**

**SHIFTING BETWEEN "H2" AND "H4"**

**Vehicles without A.D.D.**

To shift from "H2" to "H4", move the front drive control lever. Also, engage both the free-wheeling hubs if so equipped.

This can be done when the vehicle is stopped, or moving straight ahead at speeds of 40 km/h (25 mph) or less. You need not even depress the clutch pedal. If you have trouble shifting, depress or release the accelerator pedal momentarily while pushing the front drive control lever.

**CAUTION:** ::::::::::::::::::::::::::::::::::

- **Never move the front drive control lever if wheels are slipping. Stop the slipping or spinning before shifting.**
- **Never drive with only one hub engaged.**

::::::::::::::::::::::::::::::::::::::::

To shift from "H4" to "H2", simply move the front drive control lever. Also, disengage both the free-wheeling hubs for continued "H2" use if so equipped.

The vehicle may be moving at any speed. You need not even depress the clutch pedal.

**Vehicles with A.D.D.**

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

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

The indicator light may not come on even if you shift into "H4". If the vehicle is stopped, starting out the vehicle will turn it on. If the vehicle is moving, depress or release the accelerator pedal slightly.

**CAUTION:** ::::::::::::::::::::::::::::::::::

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

::::::::::::::::::::::::::::::::::::::::

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

The vehicle may be moving at any speed. You need not even depress the clutch pedal.

**(d) Shifting procedure  
(lever/button type—vehicles with  
manual transmission)**

**SHIFTING BETWEEN "H4" AND "L4"**

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


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


The vehicle may be moving at any speed.

**SHIFTING BETWEEN "H" AND "4WD"**

To shift from "H" to "4WD", reduce your speed to less than 100 km/h (62 mph) and push the "4WD" button in to the ON position. You need not even depress the clutch pedal.

If the indicator light comes on and off, and the buzzer sound when you set into "4WD", reduce your speed or stop the vehicle and re-set.

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

  
To shift from "4WD" to "H", push the "4WD" button out to the OFF position. Also, disengage both the free-wheeling hubs for continued "H" use if so equipped.

The vehicle may be moving at any speed. You need not even depress the clutch pedal.

**SHIFTING INTO "L4"**

To shift from "H" or "4WD", stop the vehicle or reduce your speed to less than 8 km/h (5 mph). With your foot off the accelerator pedal, depress the clutch pedal and move the front drive control lever.

If you cannot shift, drive the vehicle slightly in either direction and try again.

To shift from "L4" to "H" or "4WD", depress the clutch pedal and move the front drive control lever.

The vehicle may be moving at any speed.

If you cannot shift, drive the vehicle slightly in either direction and try again.

**(d) Shifting procedure  
(lever type—vehicles with  
automatic transmission)**

**SHIFTING BETWEEN "H2" AND "H4"**

To shift from "H2" to "H4", move the front drive control lever with the lock release button depressed.

The indicator light may not come on even if you shift into "H4". If the vehicle is stopped, starting out the vehicle will turn it on. If the vehicle is moving, depress or release the accelerator pedal slightly.

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

To shift from "H4" to "H2", simply move the front drive control lever with the lock release button depressed.

The vehicle may be moving at any speed. If you shift while cornering, you may feel a slight shock. This is not abnormal.

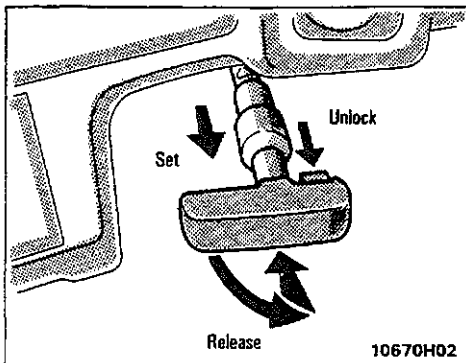
**SHIFTING BETWEEN "H4" AND "L4"**

To shift from "H4" to "L4", reduce your speed to less than 30 km/h (18 mph) and move the front drive control lever with the lock release button depressed.

To shift from "L4" to "H4", simply move the front drive control lever.

The vehicle may be moving at any speed.

**Parking brake**



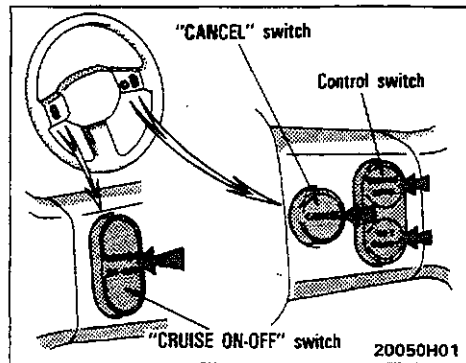
To set: Pull out on the lever.

To release: Press the lock release button, turn the lever, and push it in.

Before leaving your vehicle, firmly apply the parking brake. For better holding power, first depress the brake pedal and hold it while setting 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 40 km/h (25 mph) even with your foot off the accelerator pedal.

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

**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.

.....

**TURNING ON THE SYSTEM**

To operate the cruise control, push the "CRUISE 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 "CRUISE ON-OFF" switch off when not using the cruise control.

.....

**SETTING AT A DESIRED SPEED**

Bring your vehicle to the desired speed, push the control switch on the "SET (COAST)" side and release it. This sets the vehicle at that speed. Now you may 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.

**CAUTION (for manual transmission):**.....

While driving with the cruise control on, do not shift to neutral without depressing the clutch pedal, as this may cause engine racing or overrevving.

.....

**CANCELLING THE PRESET SPEED**

You can cancel the preset speed by:

- a. Depressing the brake pedal.
- b. Depressing the clutch pedal (manual transmission).
- c. Placing the selector lever in "N" (automatic transmission).
- d. Pushing the "CANCEL" switch.

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

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

If the preset speed automatically cancels out other than for the above cases or, if the main switch indicator light flashes several times, the cruise control may be malfunctioning. In such cases, have your vehicle checked by your Toyota dealer at the earliest opportunity.

**RESETTING AT A FASTER SPEED**

Push the control switch on the "ACCEL (RESUME)" side and hold it. Release the switch when the desired speed is attained. While the switch is held, the vehicle will gradually gain speed.

However, a faster way to reset is to accelerate the vehicle and then push the control switch on the "SET (COAST)" side.

**RESETTING AT A SLOWER SPEED**

Push the control switch on the "COAST (SET)" side and hold it. Release the switch when the desired speed is attained. While the switch is held, the vehicle speed will gradually decrease.

However, a faster way to reset is to depress the brake pedal and then push the control switch on the "SET (COAST)" side.

### **RESUMING THE PRESET SPEED**

Push the control switch on the "RESUME (ACCEL)" side. The vehicle will resume the speed set prior to cancellation unless the vehicle slow down to less than 40 km/h (25 mph) or to a speed 16 km/h (10 mph) below the preset speed.

# Part 1

## OPERATION OF INSTRUMENTS AND CONTROLS—

### Chapter 1-7

#### Car audio system and Air conditioning system

- Car audio system operating tips
- AM-FM radio with electronic tuner and cassette tape player
- Air conditioning controls
- Heater controls
- Side vents

#### Car audio system operating tips

You can listen to the car audio system when the ignition key is at "ON" or "ACC". However, if the engine is not running, the key must be in the "ACC" position.

#### ILLUMINATION CONTROL LOGIC

When the headlight switch is turned to the first or second clickstop, the letters light up on the mode buttons which can be operated.

When a cassette tape is not in the slot, the letters on the tape mode buttons do not light up, but the slot lights up for easy access.

Once a cassette tape is inserted, the letters on the tape mode buttons light up, and the slot stops illuminating.

#### RADIO

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

On some models, the antenna automatically extends to its full height when the radio and ignition are turned on, and retracts when either is turned off. Before extending the antenna, confirm that no one is close enough to get injured by it.

#### NOTICE:

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

#### CASSETTE TAPE PLAYER

Use only undamaged cassette tapes of good quality. Avoid using tapes with a total playing time longer than 90 minutes.

Using damaged tapes will cause trouble with the tape player. Longer tapes are not recommended because of their thinness.

Before inserting a cassette, make sure the tape is not slack and that the label is firmly stuck on the shell.

Wind the tape firmly by turning the hub with a pencil or the like.

Be careful not to touch the exposed tape surface.

**When not in use, take the cassette out of the player, put it back into its case and store it away from dust, magnets and direct sunlight.**

Leaving cassettes on the dashboard in the sun could damage your tapes.

**Keep the playback head, capstan and pinch roller clean.**

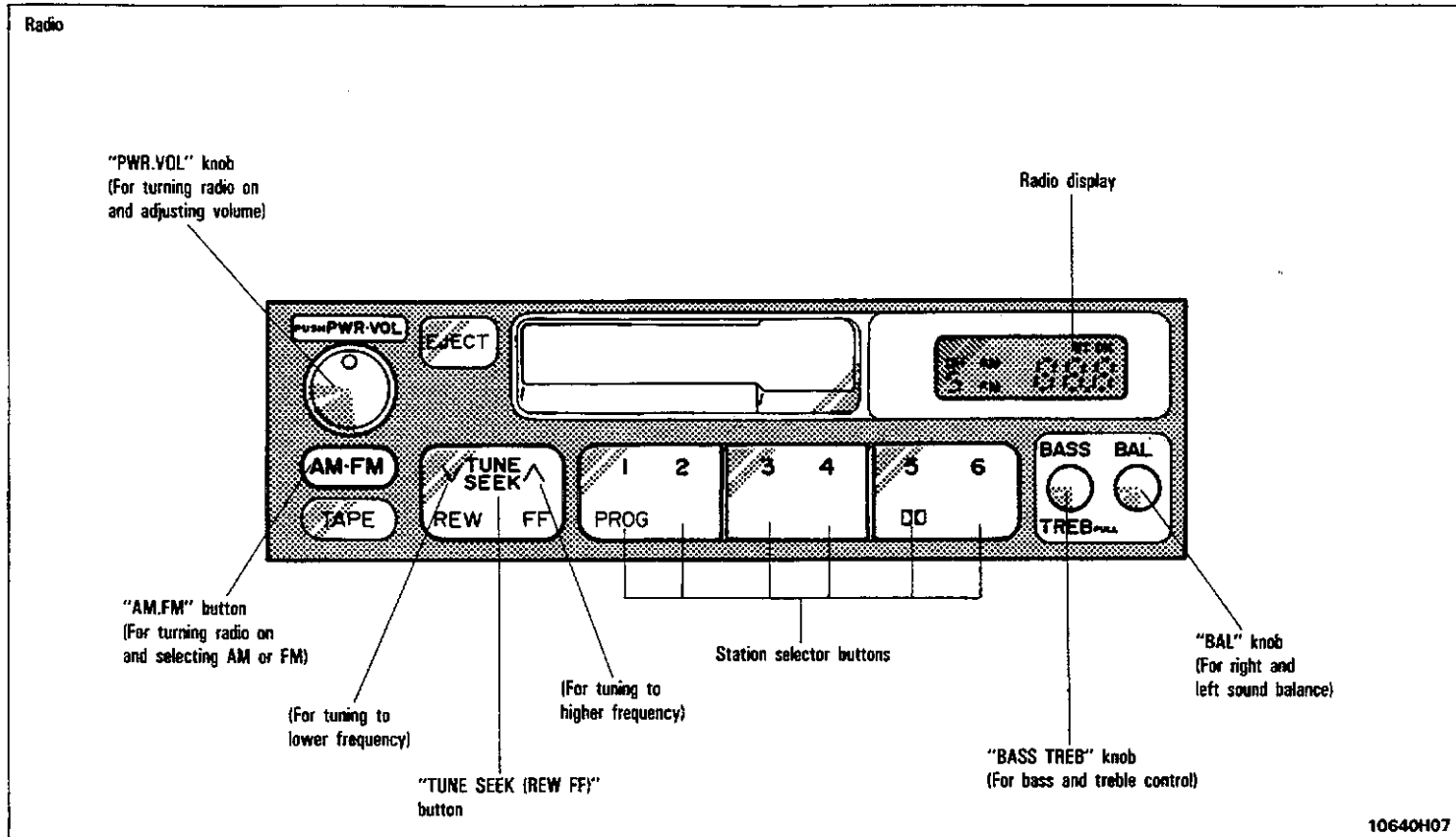
Remove tape coating residue accumulated on the head, capstan and pinch roller once or twice a month. A cleaning tape is available on the market.

**NOTICE:**

**Do not oil any part of the tape player and do not insert metal objects or a magnet into the slot, or you may damage the tape player.**



## AM-FM radio with electronic tuner and cassette tape player (type A)

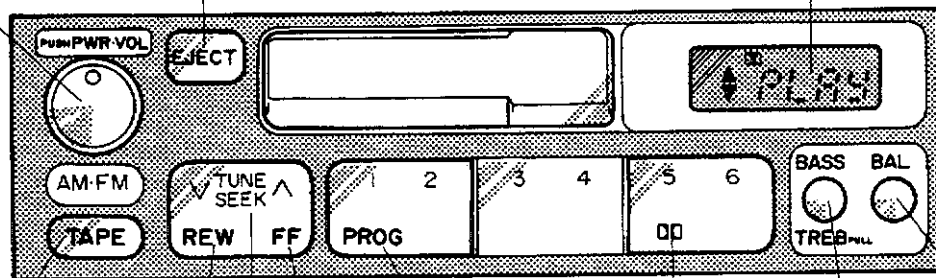


Cassette tape player

"PWR.VOL" knob  
(For turning player on  
and adjusting volume)

"EJECT" button  
(For stop and ejection)

Tape player  
display



"TAPE" button  
(For turning player on)

"PROG" button  
(For side change)

Dolby NR button

"BAL" knob  
(For right and left  
sound balance)

(For rewinding)

(For fast forwarding)

"BASS TREB" knob  
(For bass and treble control)

"REW FF (TUNE SEEK)"  
button

10640H14

### **(a) Listening to the radio**

1. Push the "AM.FM" button to turn the radio on and select either an AM or FM broadcast.

"AM" or "FM" will appear on the display.

The radio can also be turned on by pushing the "PWR.VOL" knob if the radio was on when the system was turned off.

2. Turn the "PWR.VOL" knob to adjust the volume.

3. Tune in the desired station. (See "(b) Selecting a station" and "(c) Presetting a station".)

The radio will change automatically to stereo reception when an FM stereo broadcast is being received. At the same time, "ST" will appear on the display. When the receiving signal gets weak, the channel separation will automatically be reduced for the lowest noise. If the signal becomes extremely weak, the radio will switch over to monaural reception.

4. Adjust the tone and sound balance. (See "(d) Adjusting the tone" and "(e) Adjusting the sound balance".)

5. To turn the radio off, push the "PWR.VOL" knob.

### **(b) Selecting a station**

Tune in the desired station using one of the following methods. The frequency will appear on the display.

**Preset tuning:** Use for tuning-in to a desired preset station. (See "(c) Presetting a station".)

Push the station selector button which has been preset to the desired station. The radio will tune in to the station and the button number will appear on the display.

**Seek tuning:** Use for automatic station search and stop.

Push the "TUNE SEEK (REW FF)" button on either side and hold it until a beep is heard. The radio will begin seeking up or down for a station of the nearest frequency and will stop on reception. Each time you push the button, stations will be sought out one after another.

If the radio cannot seek out any stations in one pass because of too weak signals, the radio will begin seeking again with sensitivity boosted for searching out weak stations. At this time, "DX" will appear on the display.

### **Manual tuning**

Push the "TUNE SEEK (REW FF)" button on either side for less than 0.5 second. Each time you push the button, the radio will step up or down to another frequency where stations could exist.

#### **(c) Presetting a station**

1. Tune in the desired station. (See "(b) Selecting a station".)

2. Push either side of the station selector buttons and hold it until a beep is heard. This sets the station to the button and the button number will appear on the display.

Each side of the buttons can store one AM station and one FM station. To change the preset station to a different one, follow the same procedure.

The preset station will be cancelled when the power source is severed (battery disconnected, burnt fuse, etc.).

#### **(d) Adjusting the tone**

To adjust a low-pitched tone, push the "BASS TREB" knob (if pushed in) and turn it.

To adjust a high-pitched tone, push the "BASS TREB" knob (if pushed in), pull it fully out and turn it.

#### **(e) Adjusting the sound balance**

Push the "BAL" knob (if pushed in) and turn it.

#### **(f) Listening to the cassette tape**

1. Put the cassette into the slot, with the tape side to the right and lightly push it in. The tape player will grab the cassette and slide it into place to play it. If the radio is on when inserting the cassette, the radio will automatically turn off.

If the cassette is already in the slot, push the "TAPE" button.


At this time, "PLAY" will appear on the display.

The tape player can also be turned on by pushing the "PWR.VOL" knob if the tape player was playing when the system was turned off by pushing the knob.

2. If using a tape recorded with Dolby NR\*, push the Dolby NR button. The display will indicate that the Dolby noise reduction system is on.

The Dolby NR mode reduces noise for high-pitched tones. For best sound reproduction, play your tapes with the Dolby NR\* on or off according to the mode used for recording the tape.

To play a tape recorded without Dolby NR\*, push the button again to turn off the Dolby NR\*.

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

3. Turn the "PWR.VOL" knob to adjust the volume.

4. Select your program. (See "(g) Selecting a program".)

5. Adjust the tone and sound balance. (See "(d) Adjusting the tone" and "(e) Adjusting the sound balance".)

6. To turn the player off, push the "PWR.VOL" knob.

7. To eject the cassette, push the "EJECT" button. As this is done, the player will turn off. If the radio was on when the cassette tape was inserted, it will automatically turn on again.

You can eject the cassette only once after the system is turned off.

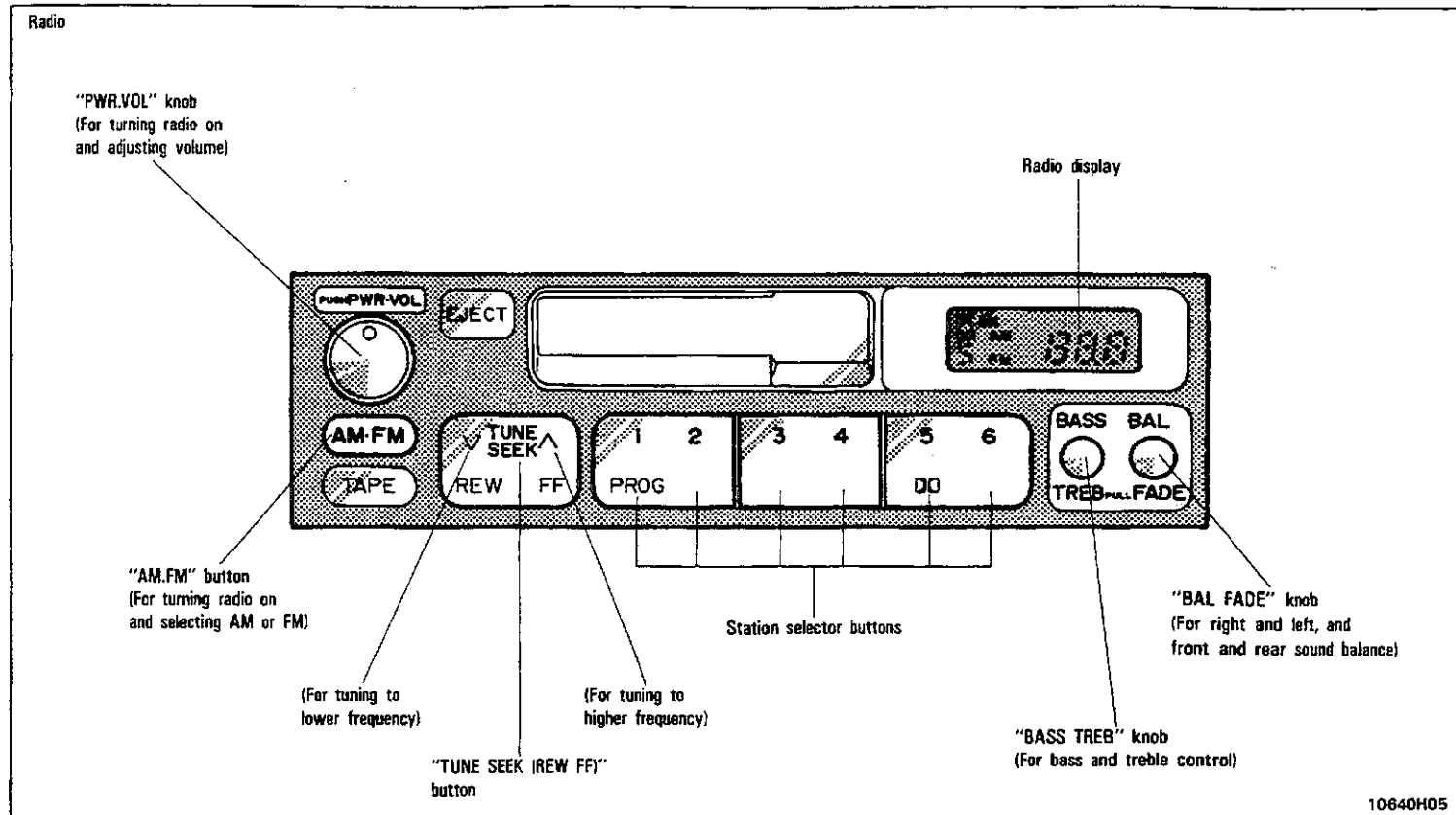
#### **(g) Selecting a program**

1. Push the "PROG" button to select a side to play. The tape operation indicator display shows you which side is being played.

The player will automatically reverse directions at the end of the tape to play the other side.

2. Push the "REW FF (TUNE SEEK)" button on either side to fast forward or rewind the tape. At this time, "FF" or "REW" will appear on the display. To stop either fast forwarding or rewinding, push the "TAPE" button. The tape will resume playing.

## AM-FM radio with electronic tuner and cassette tape player (type B)

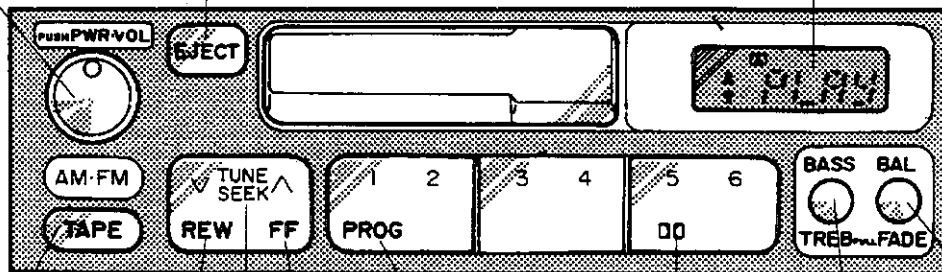


Cassette tape player

"PWR.VOL" knob  
(For turning player on  
and adjusting volume)

"EJECT" button  
(For stop and ejection)

Tape player  
display



"TAPE" button  
(For turning player on)

(For rewinding)

"REW FF (TUNE SEEK)"  
button

(For fast forwarding)

"PROG" button  
(For side change)

Dolby NR button

"BASS TREB" knob  
(For bass and treble control)

"BAL FADE" knob  
(For right and left, and  
front and rear sound balance)

### **(a) Listening to the radio**

1. Push the "AM.FM" button to turn the radio on and select either an AM or FM broadcast.

"AM" or "FM" will appear on the display.

The radio can also be turned on by pushing the "PWR.VOL" knob if the radio was on when the system was turned off.

2. Turn the "PWR.VOL" knob to adjust the volume.

3. Tune in the desired station. (See "(b) Selecting a station" and "(c) Presetting a station".)

The radio will change automatically to stereo reception when an FM stereo broadcast is being received. At the same time, "ST" will appear on the display. When the receiving signal gets weak, the channel separation will automatically be reduced for the lowest noise. If the signal becomes extremely weak, the radio will switch over to monaural reception.

4. Adjust the tone and sound balance. (See "(d) Adjusting the tone" and "(e) Adjusting the sound balance".)

5. To turn the radio off, push the "PWR.VOL" knob.

### **(b) Selecting a station**

Tune in the desired station using one of the following methods. The frequency will appear on the display.

**Preset tuning:** Use for tuning-in to a desired preset station. (See "(c) Presetting a station".)

Push the station selector button which has been preset to the desired station. The radio will tune in to the station and the button number will appear on the display.

**Seek tuning:** Use for automatic station search and stop.

Push the "TUNE SEEK (REW FF)" button on either side and hold it until a beep is heard. The radio will begin seeking up or down for a station of the nearest frequency and will stop on reception. Each time you push the button, stations will be sought out one after another. If the radio cannot seek out any stations in one pass because of too weak signals, the radio will begin seeking again with sensitivity boosted for searching out weak stations. At this time, "DX" will appear on the display.

### **Manual tuning**

Push the "TUNE SEEK (REW FF)" button on either side for less than 0.5 second. Each time you push the button, the radio will step up or down to another frequency where stations could exist.

### **(c) Presetting a station**

1. Tune in the desired station. (See "(b) Selecting a station".)

2. Push either side of the station selector buttons and hold it until a beep is heard. This sets the station to the button and the button number will appear on the display.

Each side of the buttons can store one AM station and one FM station. To change the preset station to a different one, follow the same procedure.

The preset station will be cancelled when the power source is severed (battery disconnected, burnt fuse, etc.).

### **(d) Adjusting the tone**

To adjust a low-pitched tone, push the "BASS TREB" knob (if pushed in) and turn it.

To adjust a high-pitched tone, push the "BASS TREB" knob (if pushed in), pull it fully out and turn it.

#### **(e) Adjusting the sound balance**

To balance the sound between the right and left speakers, push the "BAL FADE" knob (if pushed in) and turn it.

To balance the sound between the front and rear speakers, push the "BAL FADE" knob (if pushed in), pull it fully out and turn it.

#### **(f) Listening to the cassette tape**

1. Put the cassette into the slot, with the tape side to the right and lightly push it in. The tape player will grab the cassette and slide it into place to play it. If the radio is on when inserting the cassette, the radio will automatically turn off.

If the cassette is already in the slot, push the "TAPE" button.


At this time, "PLAY" will appear on the display.

The tape player can also be turned on by pushing the "PWR.VOL" knob if the tape player was playing when the system was turned off by pushing the knob.

2. If using a tape recorded with Dolby NR\*, push the Dolby NR button. The display will indicate that the Dolby noise reduction system is on.

The Dolby NR mode reduces noise for high-pitched tones. For best sound reproduction, play your tapes with the Dolby NR\* on or off according to the mode used for recording the tape.

To play a tape recorded without Dolby NR\*, push the button again to turn off the Dolby NR\*.

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

3. Turn the "PWR.VOL" knob to adjust the volume.

4. Select your program. (See "(g) Selecting a program".)

5. Adjust the tone and sound balance. (See "(d) Adjusting the tone" and "(e) Adjusting the sound balance".)

6. To turn the player off, push the "PWR.VOL" knob.

7. To eject the cassette, push the "EJECT" button. As this is done, the player will turn off. If the radio was on when the cassette tape was inserted, it will automatically turn on again.

You can eject the cassette only once after the system is turned off.

#### **(g) Selecting a program**

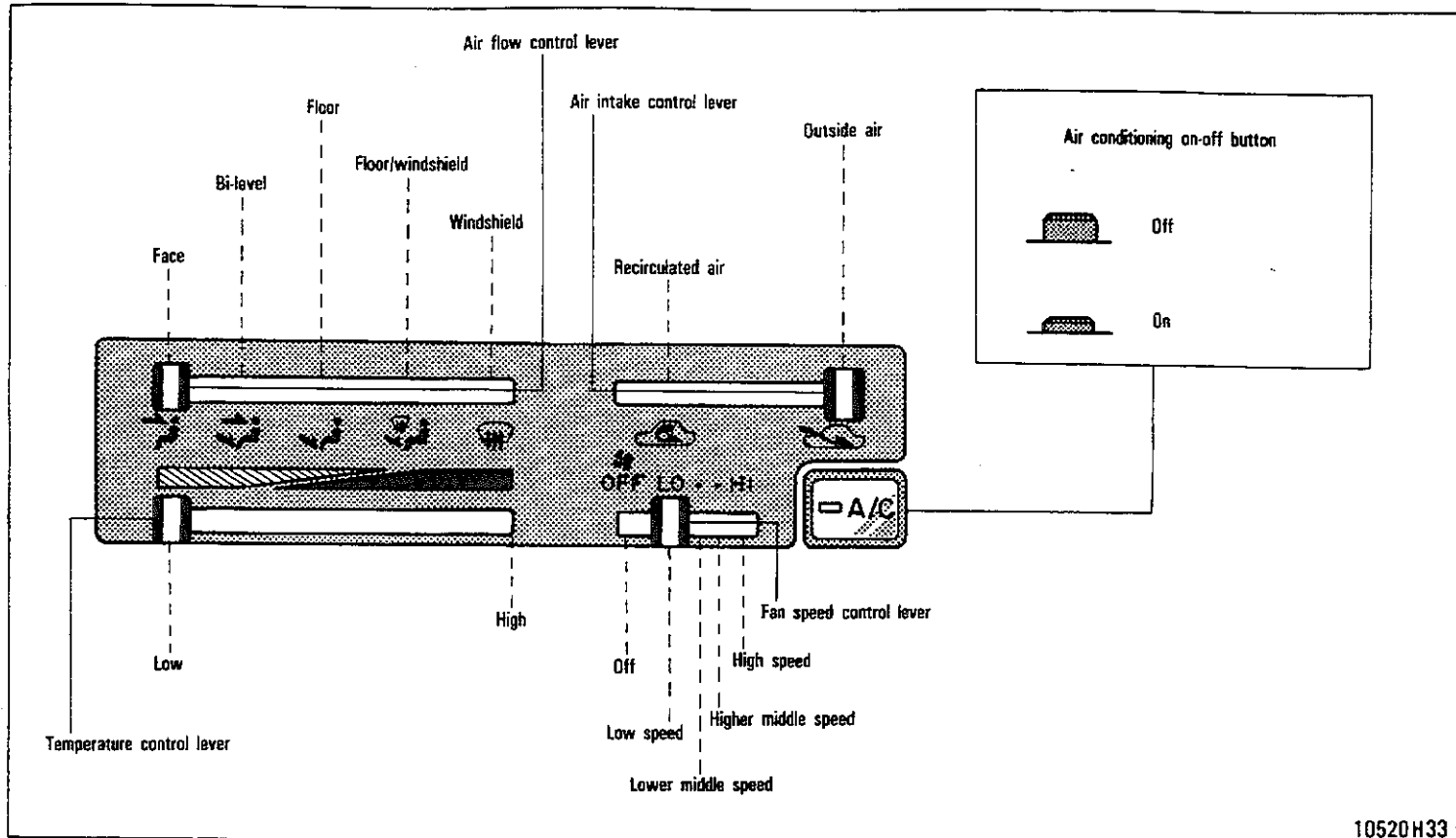
1. Push the "PROG" button to select a side to play. The tape operation indicator display shows you which side is being played.

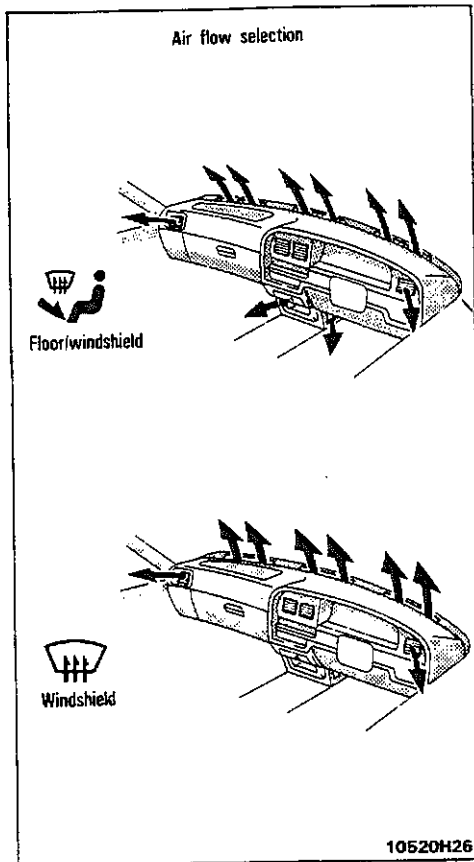
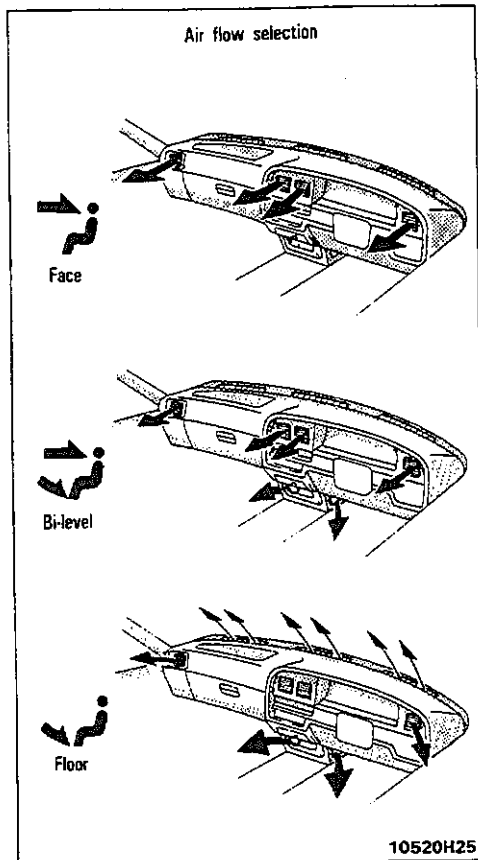
The player will automatically reverse directions at the end of the tape to play the other side.

2. Push the "REW FF (TUNE SEEK)" button on either side to fast forward or rewind the tape. At this time, "FF" or "REW" will appear on the display. To stop either fast forwarding or rewinding, push the "TAPE" button. The tape will resume playing.



## Air conditioning controls





#### (a) Controls and functions

The temperature control lever is used to adjust the temperature of the delivered air.

Move the lever toward the HIGH position for higher temperature and toward the LOW position for lower temperature.

The air intake control lever is used to select intake air, either outside air or recirculated air.

With the lever in the OUTSIDE AIR position, the system will take fresh outside air into the unit. For recirculated air, move the lever to the RECIRCULATED AIR position.

The air flow control lever is used to select the air flow outlets air is delivered from.

See "(f) Air flow selection" for detailed information.

The fan speed control lever is used to turn on and off the fan and select the fan speed.

The higher the fan speed setting is, the more air is delivered. Moving the lever to the "OFF" position turns off the fan.

The air conditioning on-off button is used to turn on and off the air conditioning.

With the button pressed in, the air conditioning turns on. Pressing the button once again will turn the air conditioning off.

### **(b) Heating**

1. Place the temperature control lever anywhere except the LOW position.

When dehumidified heating is desired, place the lever between the HIGH and middle positions.

If cooler air is desired at face level for bi-level operation, place the lever around the middle.

2. Move the air intake control lever to the OUTSIDE AIR position.

If quick circulation of heated air is desired, move the lever to the RECIRCULATED AIR position.

For normal use, it is best to keep the lever in the OUTSIDE AIR position. Otherwise the windows will fog up more easily.

3. Move the air flow control lever to the FLOOR position.

If cooler air is desired at face level for bi-level operation, move the lever to the BI-LEVEL position.

If the windshield fogs up easily, move the lever to the FLOOR/WINDSHIELD position.

For detailed information on air flow control including other settings, see "(f) Air flow selection".

4. Move the fan speed control lever anywhere except the "OFF" position.

5. Leave the air conditioning on-off button in the OFF position.

If dehumidified heating is desired, press in the button.

### **(c) Cooling**

1. Place the temperature control lever anywhere between the middle and LOW positions.

If warmer air is desired at floor level for bi-level operation, place the lever around the middle.

2. Move the air intake control lever to the OUTSIDE AIR position.

If quick circulation of cooled air is desired, move the lever to the BLEND or RECIRCULATED AIR position.

For normal use, it is best to keep the lever in the OUTSIDE AIR position.

3. Move the air flow control lever to the FACE position.

If warmer air is desired at floor level for bi-level operation, move the lever to the BI-LEVEL position.

For detailed information on air flow control including other settings, see "(f) Air flow selection".

4. Move the fan speed control lever anywhere except the "OFF" position.

5. Press in the air conditioning on-off button.

### **(d) Ventilation**

1. Place the temperature control lever at the LOW position.

2. Move the air intake control lever to the OUTSIDE AIR position.

3. Move the air flow control lever to the FACE position.

For detailed information on air flow control including other settings, see "(f) Air flow selection".

4. Move the fan speed control lever anywhere except the "OFF" position.

5. Leave the air conditioning on-off button in the OFF position.

### **(e) Windshield defogging and defrosting**

To remove interior fog on the windshield;

1. Place the temperature control lever at any position.

2. Move the air intake control lever to the OUTSIDE AIR position.

3. Move the air flow control lever to the WINDSHIELD position.

For detailed information on air flow control, see "(f) Air flow selection".

4. Move the fan speed control lever anywhere except the "OFF" position.
5. Press in the air conditioning on-off button. To remove frost or exterior fog on the windshield;

1. Place the temperature control lever at the HIGH position.
2. Move the air intake control lever to the OUTSIDE AIR position.
3. Move the air flow control lever to the WINDSHIELD position.

For detailed information on air flow control, see "(f) Air flow selection".

4. Move the fan speed control lever to the "HI" position.
5. Leave the air conditioning on-off button in the OFF position.

#### **(f) Air flow selection**

**FACE position**—This position directs the air flow to face level.

**BI-LEVEL position**—This position directs the air flow to face level and the floor. Except in ventilation, the air to the floor is slightly warmer than that to face level.

**FLOOR position**—This position directs the air flow mostly to the floor.

**FLOOR/WINDSHIELD position**—This position directs the air flow to the windshield and front side windows as well as the floor.

**WINDSHIELD position**—This position directs the air flow mostly to the windshield and front side windows.

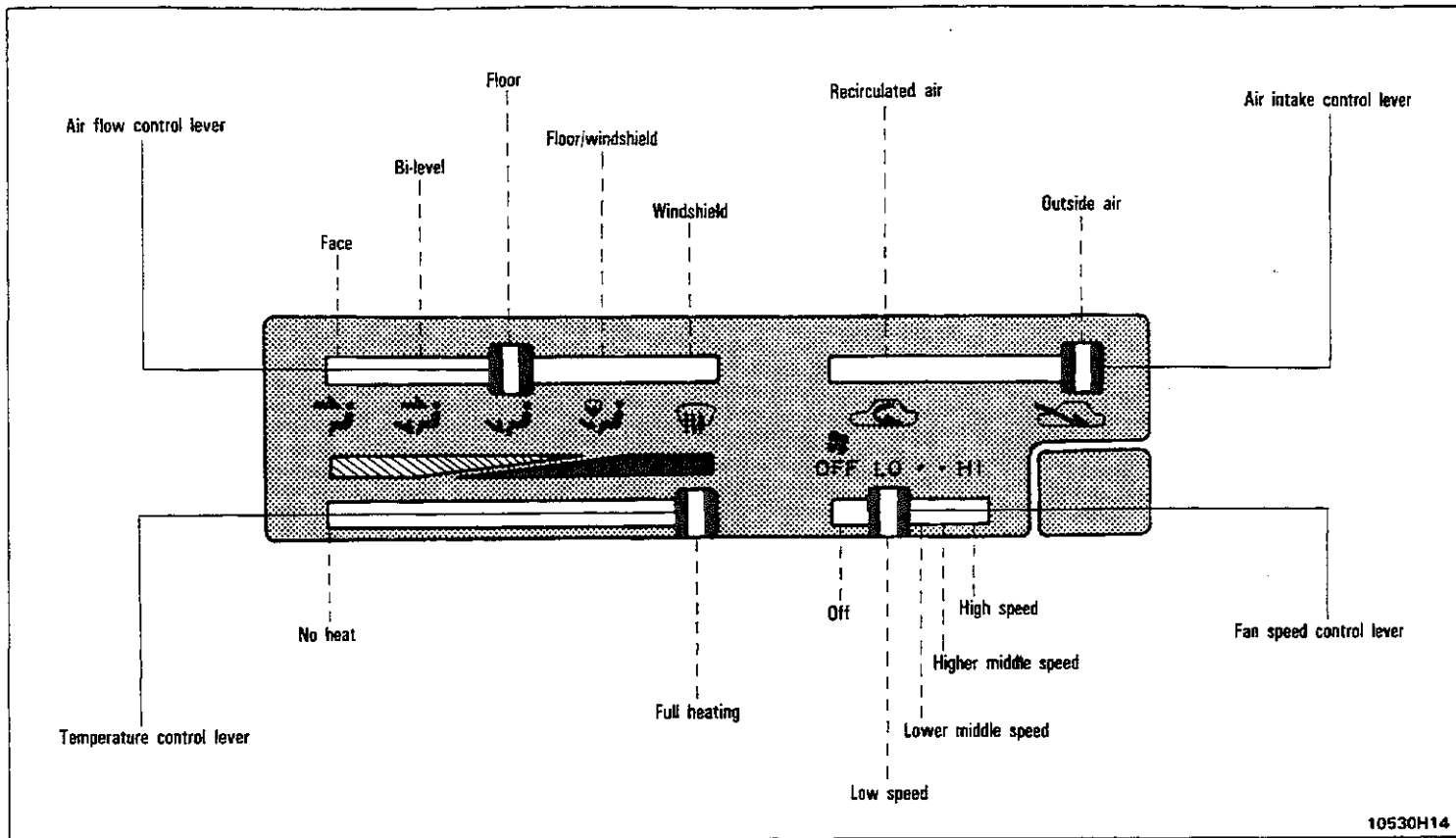
Do not use the WINDSHIELD position during cooling operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up blocking your vision.

#### **(g) Operating tips**

- Be sure the air inlet grilles in front of the windshield are not blocked by leaves or other obstructions.
- If air flow control is not satisfactory, check the side vents. (See "Side vents" after "Heater controls".)
- To help cool down the interior after parking in the hot sun, drive for the first few minutes with the windows open. After the excess heat has blown away, close the windows.

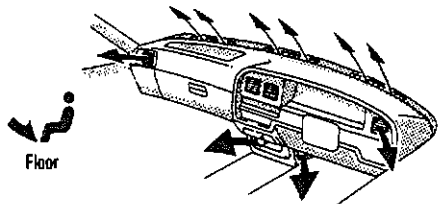
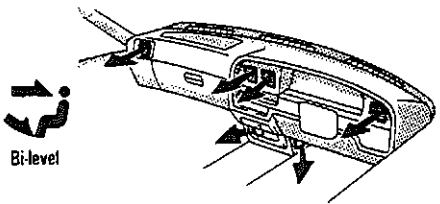
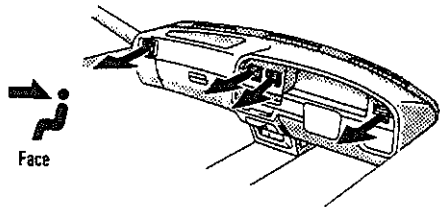
- When driving on dusty roads, close all windows. If dust thrown up by the vehicle is still drawn into the vehicle after closing the windows, it is recommended that the air intake control lever be set to the OUTSIDE AIR position and the fan speed control lever anywhere except the "OFF" position.
- If following another vehicle on a dusty road, or driving in windy and dusty conditions, it is recommended that the air intake control lever be temporarily set to the RECIRCULATED AIR position, which will close off the outside passage and prevent outside air and dust from entering the vehicle interior.

## Heater controls



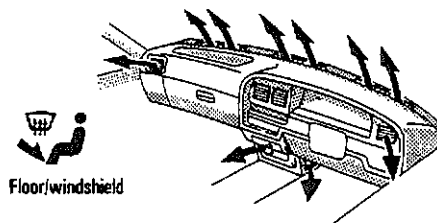
10530H14

Air flow selection



10520H25

Air flow selection



10520H26

### (a) Controls and functions

The temperature control lever is used to turn on and off the heater and adjust the temperature of the heated air.

Move the lever toward the FULL HEATING position for higher temperature. Moving the lever to the NO HEAT position turns off the heater.

The air intake control lever is used to select intake air, either outside air or recirculated air.

With the lever in the OUTSIDE AIR position, the system will take fresh outside air into the unit. For recirculated air, move the lever to the RECIRCULATED AIR position.

The air flow control lever is used to select the air flow outlets air is delivered from.

See "(e) Air flow selection" for detailed information.

The fan speed control lever is used to turn on and off the fan and select the fan speed.

The higher the fan speed setting, the more air is delivered. Moving the lever to the "OFF" position turns off the fan.

### (b) Heating

1. Place the temperature control lever anywhere except the NO HEAT position.

If cooler air is desired at face level for bi-level operation, place the lever around the middle.

2. Move the air intake control lever to the OUTSIDE AIR position.

If quick circulation of heated air is desired, move the lever to the RECIRCULATED AIR position.

For normal use, it is best to keep the lever in the OUTSIDE AIR position. Otherwise the windows will fog up more easily.

3. Move the air flow control lever to the FLOOR position.

If cooler air is desired at face level for bi-level operation, move the lever to the BI-LEVEL position.

If the windshield fogs up easily, move the lever to the FLOOR/WINDSHIELD position.

For detailed information on air flow control including other settings, see "(e) Air flow selection".

4. Move the fan speed control lever anywhere except the "OFF" position.

#### (c) Ventilation

1. Place the temperature control lever at the NO HEAT position.

2. Move the air intake control lever to the OUTSIDE AIR position.

3. Move the air flow control lever to the FACE position.

For detailed information on air flow control including other settings, see "(e) Air flow selection".

4. Move the fan speed control lever anywhere except the "OFF" position.

#### (d) Windshield defogging and defrosting

1. Place the temperature control lever at the FULL HEATING position.

2. Move the air intake control lever to the OUTSIDE AIR position.

3. Move the air flow control lever to the WINDSHIELD position.

For detailed information on air flow control, see "(e) Air flow selection".

4. Move the fan speed control lever to the "HI" position.

#### (e) Air flow selection

FACE position—This position directs the air flow to face level.

BI-LEVEL position—This position directs the air flow to face level and the floor. Except in ventilation, the air to the floor is slightly warmer than that to face level.

FLOOR position—This position directs the air flow mostly to the floor.

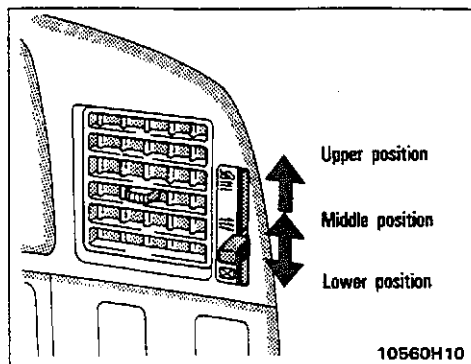
FLOOR/WINDSHIELD position—This position directs the air flow to the windshield and front side windows as well as the floor.

WINDSHIELD position—This position directs the air flow mostly to the windshield and front side windows.

#### (f) Operating tips

- Be sure the air inlet grilles in front of the windshield are not blocked by leaves or other obstructions.
- If air flow control is not satisfactory, check the side vents. (See "Side vents")
- When driving on dusty roads, close all windows. If dust thrown up by the vehicle is still drawn into the vehicle after closing the windows, it is recommended that the air intake control lever be set to the OUTSIDE AIR position and the fan speed control lever anywhere except the "OFF" position.
- If following another vehicle on a dusty road, or driving in windy and dusty conditions, it is recommended that the air intake control lever be temporarily set to the RECIRCULATED AIR position, which will close off the outside passage and prevent outside air and dust from entering the vehicle interior.

## Side vents



The side vents may be opened or closed as shown.

**Upper position**—The side vents also allow fresh outside air to flow directly into the vehicle. You can have heated or cooled air mixed up with fresh outside air. The amount of air entering depends on vehicle speed.

**Middle position**—The side vents allow air to enter into the vehicle through the heater/air conditioner unit. You can have heated or cooled air through these vents.

**Lower position**—The side vents do not allow air entering.

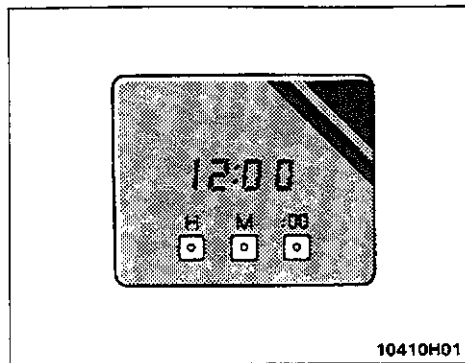


# Part 1 OPERATION OF INSTRUMENTS AND CONTROLS—

## Chapter 1-8 Other equipments

- Clock
- Cigarette lighter and ashtray
- Glovebox
- Cup holder
- Tie-down hooks
- Luggage cover

### Clock



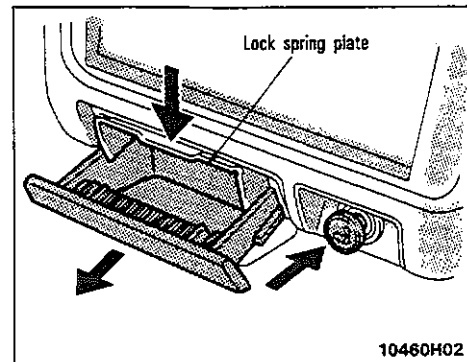
The digital clock indicates the time with the ignition key at the "ACC" or "ON" position. To reset the hour, depress the "H" button. To reset the minutes, depress the "M" button. To adjust the time to a full hour, depress the ":00" button.

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.

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

Once the electrical power source has been disconnected from the clock, the time is automatically set to 1:00 (one o'clock).

### Cigarette lighter and ashtray



To operate the cigarette lighter, press it in. When it becomes heated, it automatically pops out ready for use.

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

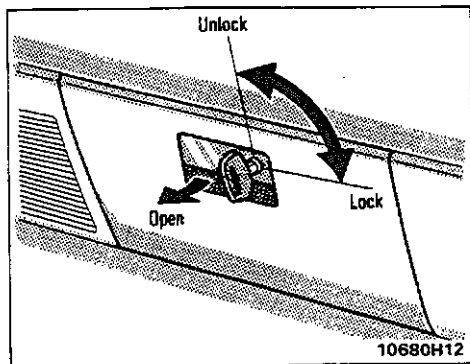
Do not hold the cigarette lighter pressed in.

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.

Use a Toyota genuine cigarette lighter or equivalent for replacement.

## Glovebox



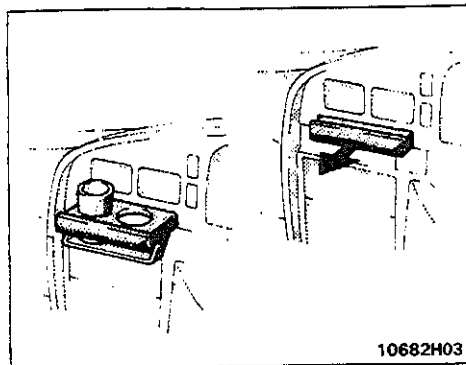
To open the glovebox door, pull the lever. To lock the glovebox door, insert the master key and turn it clockwise.

### CAUTION: .....

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

.....

## Cup holder



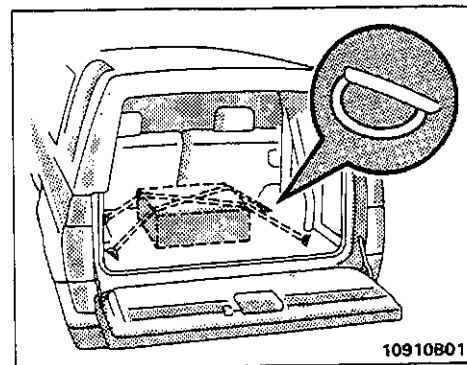
To use the cup holder, pull it out completely. The cup holder is designed for holding cups or drink-cans fit snugly in its holes.

### CAUTION: .....

- Do not place anything else on the cup holder, as such items may be thrown about and possibly injure people in the vehicle during sudden braking or an accident.
- Keep the cup holder shut when not in use.

.....

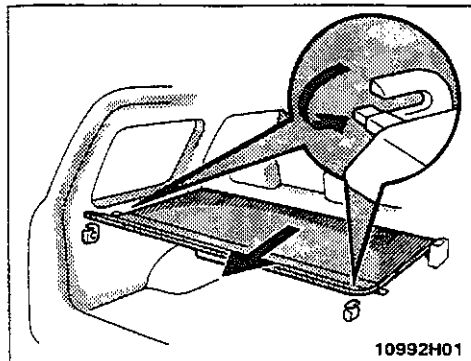
## Tie-down hooks



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

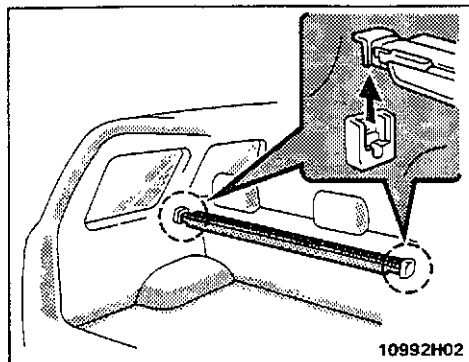
See "Luggage stowage precautions" in Part 2 for precautions to observe in loading luggage.

## Luggage cover



To use the luggage cover, pull it out of the retractor and hook it to the anchors.

When opening the back door, turn back the dropleaf of the luggage cover to gain access to the back door lever inside the vehicle.



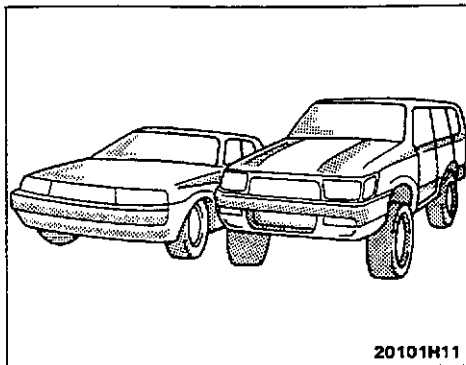
To remove the luggage cover, lift it up.

## Part 2

# INFORMATION BEFORE DRIVING YOUR TOYOTA

- Off-road vehicle precautions
- Break-in period
- Fuel
- Operation in foreign countries
- Three-way catalytic converter
- Engine exhaust cautions
- Facts about engine oil consumption
- Brake system
- Brake pad wear indicators
- Luggage stowage precautions
- Limited-slip differential
- Your Toyota's identification

### Off-road vehicle precautions



This vehicle is one of the class of vehicles which have higher ground clearance and narrower tread in relation to the height of their center of gravity to make them capable of performing in a wide variety of off-road applications. Specific design characteristics give it a higher center of gravity than ordinary cars. An advantage of the higher ground clearance is a better view of the road allowing you to anticipate problems. It is not designed for cornering at the same speeds as conventional two-wheel drive vehicles any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions.

### CAUTION:

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

- Avoid sharp turns or abrupt maneuvers, if at all possible. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or vehicle rollover.
- Avoid loading any items on the roof that will make the center of gravity even higher.
- Always slow down in gusty crosswinds. Because of its high center of gravity, your vehicle is more sensitive to side winds than an ordinary passenger car. Slowing down will allow you to have much better control.
- Do not drive horizontally across steep slopes. Driving straight up or straight down is preferred. Your vehicle (or any similar off-road vehicle) can tip over sideways much more easily than forward or backward.

- **When driving off-road or in rugged terrain, do not drive at excessive speeds, jump, strike objects, etc. This may cause loss of control or vehicle roll-over. You are also risking expensive damage to your vehicle's suspension and chassis.**

### **Break-in period**

**Drive gently and avoid high speeds.**

Your vehicle does not need an elaborate break-in. But following a few simple tips for the first 1000 km (600 miles) can add to the future economy and long life of your vehicle:

- Do not drive over 100 km/h (62 mph).
- Run the engine at moderate speed between 2000 and 4000 rpm.
- Avoid full-throttle starts.
- Try to avoid hard stops during the first 300 km (200 miles).
- Do not drive slowly with the transmission in a high gear.
- Do not drive for a long time at any single speed, either fast or slow.
- Do not tow a trailer during the first 800 km (500 miles).

**Vehicles with the free-wheeling hubs only—**

**For the first 500 km (300 miles):**

We recommend that you use high range, two-wheel drive, with both free-wheeling hubs engaged. For information on the four-wheel drive system and the front hubs, see "Four-wheel drive system" in Chapter 1-6.

### **Fuel**

**Selecting the proper fuel is essential to satisfactory performance of the engine.**

Engine damage caused by use of improper fuels is not covered under Toyota's new vehicle warranty.

#### **FUEL TYPE**

**Gasoline engine—Use only unleaded gasoline.**

**Diesel engine—Use only diesel fuel.**

To help prevent gas station mixups, vehicles designed for use with unleaded gasoline have a new smaller fuel tank opening. The special nozzle on pumps with unleaded fuel will fit it, but the larger standard nozzle on pumps with leaded gas will not.

#### **NOTICE:**

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

## OCTANE/CETANE NUMBER

### Gasoline engine –

Select Research Octane Number 91 or higher.

### Diesel engine –

Select cetane number 50 (cetane index 45) or higher.

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

### If your engine knocks...

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

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

## FUEL TANK CAPACITY

Vehicles with 205R16 tires  
65 (17.2, 14.3)

Vehicles with 265/75R15 112S tires  
71 (18.8, 15.6)

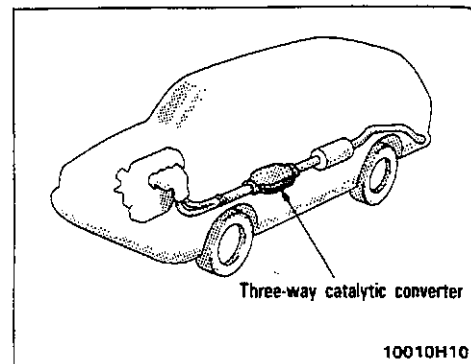
## Operation in foreign countries

If you plan to drive your Toyota in another country ...

**First**, comply with the vehicle registration laws.

**Second**, confirm the availability of the correct fuel.

## Three-way catalytic converter (gasoline engine)



The three-way catalytic converter is an emission control device installed in the exhaust system.

It looks somewhat like a muffler, but its purpose is to reduce pollutants in the exhaust gas.

### CAUTION: .....

- Keep people and combustible materials away from the exhaust pipe while the engine is running. The exhaust gas is very hot.
- Do not idle or park your vehicle over anything that might burn easily such as grass, leaves, paper or rags.

.....



- **Keep the back window closed while driving. An open or unsealed back window may cause exhaust gases to be drawn into the vehicle. If you must drive with the back window open to accommodate a large object, close the side windows, open all the dashboard vents and have the heating or cooling system deliver fresh air into the vehicle by turning the fan to high speed with the air intake control set at the OUTSIDE AIR position.**
- **To allow proper operation of your vehicle's ventilation system, keep the inlet grilles in front of the windshield clear of snow, leaves, or other obstructions.**
- **If you smell exhaust fumes in the vehicle, drive with the side windows open and the back window closed. Have the cause immediately located and corrected.**

## **Facts about engine oil consumption**

### **FUNCTIONS OF ENGINE OIL**

Engine oil has the primary functions of lubricating and cooling the inside of the engine, and plays a major role in maintaining the engine in proper working order.

### **ENGINE OIL CONSUMPTION**

It is normal that an engine should consume some engine oil during normal engine operation. The causes of oil consumption in a normal engine are as follows.

- Oil is used to lubricate pistons, piston rings and cylinders. A thin film of oil is left on the cylinder wall when a piston moves downwards in the cylinder. High negative pressure generated when the vehicle is decelerating sucks some of this oil into the combustion chamber. This oil as well as some part of the oil film left on the cylinder wall is burned by the high temperature combustion gases during the combustion process.
- Oil is also used to lubricate the stems of the intake valves. Some of this oil is sucked into the combustion chamber together with the intake air and is burned along with the fuel. High temperature exhaust gases also burn the oil used to lubricate the exhaust valve stems.

The amount of engine oil consumed depends on the viscosity of the oil, the quality of the oil and the conditions the vehicle is driven under.

More oil is consumed under such driven conditions as high speeds and frequent acceleration and deceleration.

A new engine consumes more oil, since its pistons, piston rings and cylinder walls have not become conditioned.

**When judging the amount of oil consumption, note the oil may become diluted and make it difficult to judge the true level accurately.**

As an example, if a vehicle is used for repeated short trips, and consumes a normal amount of oil, the dipstick may not show any drop in the oil level at all, even after 1000 km (600 miles) or more. This is because the oil is gradually becoming diluted with fuel or moisture, making it appear that the oil level has not changed.

The diluting ingredients evaporate out when the vehicle is then driven at high speeds, as on an expressway, making it appear that oil is excessively consumed after driving at high speeds.



**IMPORTANCE OF ENGINE OIL LEVEL CHECK**

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

**NOTICE:**

Failure to check the oil level regularly could lead to serious engine troubles due to insufficient oil.

For detailed information on oil level check, see "Checking the engine oil level" in Chapter 7-2.

**Brake system**

**Tandem master cylinder brake system**

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

**CAUTION:**

**Do not rely on a single brake system. Have your brakes fixed immediately.**

**Brake booster**

The brake booster uses engine vacuum to power-assist the brakes. If the engine should quit while you are driving or if the engine drive belt is broken (diesel engine only), you can bring the vehicle to a stop with normal pedal pressure. There is enough reserve vacuum for one or two stops—but no more!

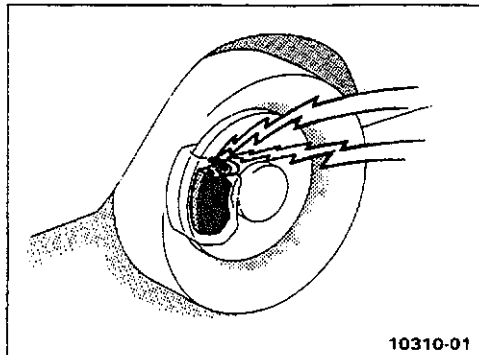
**CAUTION:**

**Do not pump the brake pedal if the engine stalls. Each push on the pedal uses up your vacuum reserve.**

**● Even if the power assist is completely lost, the brakes will still work. But you will have to push the pedal hard—much harder than normal. And your braking distance will be longer.**



## Brake pad wear indicators



The brake pad wear indicators on your disc brakes give a warning noise when the brake pads are worn to where replacement is required.

If you hear a squealing or scraping noise while driving, have the brake pads checked and replaced by your nearest Toyota dealer immediately.

Avoid continuous driving with the warning noise.

Continuous driving without replacing the brake pads will cause expensive rotor damage and increasing brake pedal effort to get the same stopping distance.

## Luggage stowage precautions

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

- Put luggage or cargo in the luggage compartment when at all possible. Be sure all items are secured in place.
- Be careful to keep the vehicle balanced. Locating the weight as far forward as possible helps maintain this.
- For better fuel economy, do not carry unneeded weight.

### **CAUTION:**

- **To prevent luggage or packages from sliding forward during braking, do not stack anything in the luggage compartment higher than the seatbacks.**
- **Never allow anyone to ride in the luggage compartment area other than on the seats. It is not designed for passengers. They could be injured in sudden braking.**
- **Do not place anything on the filler panel or luggage cover. Such items may be thrown about and possibly injure people in the vehicle during sudden braking or an accident (secure all items in a safe place).**

## Limited-slip differential

Your vehicle is equipped with a limited-slip differential. If one rear wheel begins to spin on a slippery surface, the limited-slip differential is designed to aid traction by automatically transmitting driving force to the other wheel.

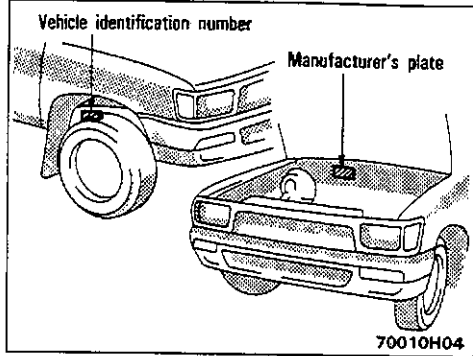
**CAUTION:**

**Do not start or run the engine while your vehicle is supported by a jack. The vehicle could be driven off the jack and could pose a danger or result in serious injury.**

### **NOTICE:**

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

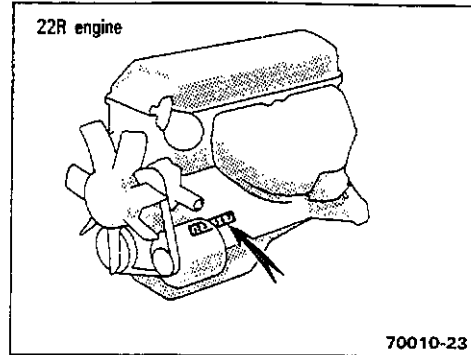
## Your Toyota's identification



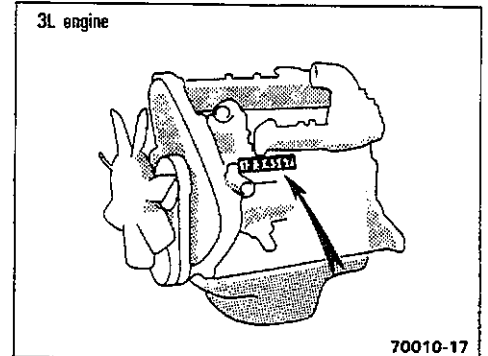
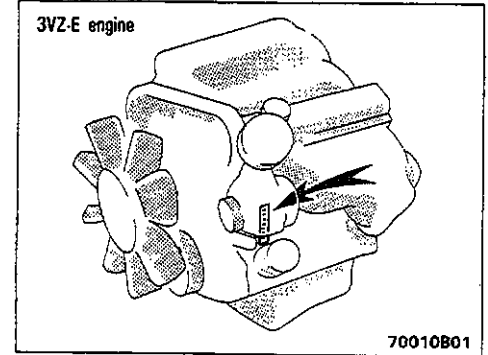
The vehicle identification number (VIN) is the legal identifier for your vehicle.

The vehicle identification number (VIN) is also on the manufacturer's plate.

This is the primary identification number for your Toyota. It is used in registering the ownership of your vehicle.



The engine number is stamped on the engine block as shown.



## Part 3

# STARTING AND DRIVING

- Before starting the engine
- How to start the engine
- Pretrip safety check
- Tips for driving in various conditions
- Off-road driving precautions
- Winter driving tips
- Trailer towing
- How to save fuel and make your vehicle last longer, too

### Before starting the engine

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

### How to start the engine — (a) Before cranking

1. Apply the parking brake firmly.
2. Turn off unnecessary lights and accessories.
3. **Manual transmission:** Press the clutch pedal to the floor and shift the transmission into neutral. Hold the clutch pedal to the floor until the engine is started.

**Automatic transmission:** Put the selector lever in "P". If you need to restart the engine while the vehicle is moving, put the selector lever in "N". A starter safety device will prevent the starter from operating if the selector lever is in any drive position.

4. **Automatic transmission only:** Depress the brake pedal and hold it to the floor until driving off.

## **(b) Starting the engine (22R engine)**

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

### **Normal starting procedure (engine cold)**

1. Press the accelerator pedal twice to the floor and release it. This engages the automatic choke and fast idle.
2. With your foot off the accelerator pedal, crank the engine by turning the key to "START". Release it when the engine starts.
3. After the engine runs for about 10 seconds, you are ready to drive.

**If the weather is below freezing or if the vehicle has not been driven for several days...**

1. Before cranking the engine, fully depress and release the accelerator pedal three or four times. This gives a richer mixture for cold starting.
2. With your foot off the accelerator pedal, crank the engine by turning the key to "START". Release it when the engine starts.
3. After the engine runs for about 30 seconds, tap the accelerator pedal once to reduce the idle speed (rpm).
4. Let the engine warm up for a few minutes before driving.

**If the engine is warm...**

With the accelerator pedal about halfway down, crank the engine by turning the key to "START". Release the key and accelerator pedal when the engine starts. Do not pump the pedal.

**If the engine is hot...**

With the accelerator pedal fully down to the floor, crank the engine by turning the key to "START". Release the key and accelerator pedal when the engine starts. Do not pump the pedal.

**If the engine stalls...**

Simply restart it, using the correct procedure given above, depending on the engine temperature.

**If the engine will not start—**

See "If your vehicle will not start" in Part 4.

### **NOTICE:**

**Do not crank for more than 15 seconds at a time. This may overheat the starter and wiring systems.**

**Do not race a cold engine.**

**If the engine becomes difficult to start or stalls frequently, have the engine checked immediately.**

## **(b) Starting the engine (3VZ-E engine)**

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

### **Normal starting procedure**

The multiport fuel injection system/sequential multiport fuel injection system in your engine automatically controls the proper air-fuel mixture for starting. You can start a cold or hot engine as follows:

1. With your foot off the accelerator pedal, crank the engine by turning the key to "START". Release it when the engine starts.
2. After the engine runs for about 10 seconds, you are ready to drive.

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

**If the engine stalls...**

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

**If the engine will not start—**

See "If your vehicle will not start" in Part 4.

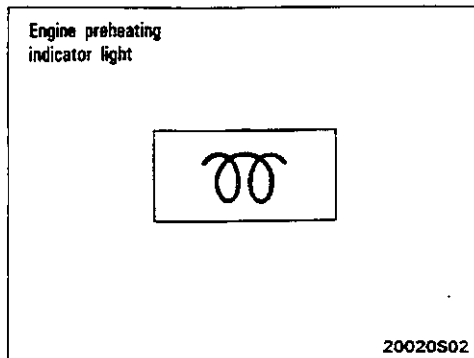
### **NOTICE:**

**Do not crank for more than 15 seconds at a time. This may overheat the starter and wiring systems.**

**Do not race a cold engine.**

If the engine becomes difficult to start or stalls frequently, have the engine checked immediately.

### (b) Starting the engine (3L engine)



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

#### Normal starting procedure (engine cold)

1. Turn the key to "ON" and verify that the engine preheating indicator light has come on. Keep the key in the position until the light goes off.
2. With the accelerator pedal about halfway down, crank the engine by turning the key to "START". Release the key and accelerator pedal when the engine starts.
3. After the engine runs for about 10 seconds, you are ready to drive.

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

#### If the weather is extremely cold...

1. Turn the key to "ON" and verify that the engine preheating indicator light has come on. Keep the key in the "ON" position until the light goes off.
2. With the accelerator pedal fully down to the floor, crank the engine by turning the key to "START". Release the key and accelerator pedal when the engine starts.
3. After the engine warms up for a few minutes, you are ready to drive.

If the engine runs rough while warming up, adjust the throttle knob to increase engine speed to where the engine runs smoothly. After the engine is fully warmed up, be sure to return the throttle knob to its original position before driving off.

#### If the engine is warm...

Follow the above "Normal starting procedure".

#### If the engine stalls...

Simply restart it, using the correct procedure given above, depending on the engine temperature.

If the engine will not start—

See "If your vehicle will not start" in Part 4.

**NOTICE:**


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

Do not race a cold engine.

If the engine becomes difficult to start or stalls frequently, have the engine checked immediately.

### Pretrip safety check

It is a good idea to review the safety check before starting out on a trip. A few minutes of checking can help ensure safe and pleasant driving. Just a basic familiarity with your vehicle is required and a careful eye! Or, if you would like, your Toyota dealer will be pleased to make this check for you at a nominal cost.

**CAUTION:**   
If you make this check in an enclosed garage, make sure there is adequate ventilation. Engine exhaust is poisonous.

  
**BEFORE STARTING THE ENGINE**

#### Outside the vehicle

**Tires (spare included).** Check the pressure with a gauge and look carefully for cuts, damage, or excessive wear.

**Wheel nuts.** Make sure no nuts are missing or loose.

**Fluid leaks.** After the vehicle has been parked for a while, check underneath for leaking fuel, oil, water, or fluid. (Water dripping from the air conditioner after use is normal.)

**Wiper blades.** Look for wear or cracks.

**Lights.** Make sure the headlights, stop lights, tail lights, turn signals and other lights are all working. Check the headlight aim.

#### Inside the vehicle

**Jack and wheel nut wrench.** Make sure you have your jack and wheel nut wrench.

**Seat belts.** Check that the buckles lock securely. Make sure the belts are not worn or frayed.

**Horn.** Does it work?

**Instruments and controls.** Especially make sure the service reminder indicators, instrument lights, and defroster are working.

**Wipers and washer.** Make sure they both work and that the wipers do not streak.

**Brakes.** Make sure the pedal has enough clearance. (See Chapter 7-2 for instructions.)

**Spare fuses.** Make sure you have spare fuses. They should cover all the amperage ratings designated on the fuse box lid.

### In the engine compartment

**Coolant level.** Make sure the coolant level is correct. (See Chapter 7-2 for instructions.)

**Radiator and hoses.** Make sure the front of the radiator is clean—not blocked with leaves, dirt, or bugs. Check the hoses for cracks, kinks, rot, and loose connections.

**Battery and cables.** All the battery cells should be filled to the proper level with distilled water. Look for corroded or loose terminals and a cracked case. Check the cables for good condition and connections.

**Wiring.** Look for damaged, loose, or disconnected wires.

**Brake and clutch fluid levels.** Make sure the brake and clutch fluid levels are correct. (See Chapter 7-2 for instructions.)

**Engine drive belts.** Check all belts for fraying, cracks, wear or oiliness. Apply thumb pressure between the pulleys. The deflection of each belt should be within the specified limits. (See Chapter 7-2 for instructions.)

**Fuel lines.** Check the lines for leaks or loose connections.

### AFTER STARTING THE ENGINE

**Exhaust system.** Look for cracks, holes and loose supports. Listen for any leakage. Have any leaks fixed immediately. (See carbon monoxide warning in Part 2.)

**Automatic transmission fluid.** Check the dipstick with the engine idling and the selector lever in "P". (See Chapter 7-2 for instructions.)

**Power steering fluid.** With the engine idling, give the steering wheel several end-to-end turns and check the fluid level. (See Chapter 7-2 for instructions.)

**Engine oil level.** Stop the engine and check the dipstick with the vehicle parked on a level spot. (See Chapter 7-2 for instructions.)

### WHILE DRIVING

**Instruments.** Make sure the speedometer and gauges are working.

**Brakes.** At a safe place make sure the brakes do not pull.

**Anything unusual?** Look for loose parts and leaks. Listen for abnormal noises.

If everything looks O.K., set your mind at ease and enjoy your trip!

### Tips for driving in various conditions

- Always slow down in gusty crosswinds. This will allow you much better control.
- Drive slowly onto curbs and, if possible, at a right angle. Avoid driving onto high, sharp-edged objects and other road hazards. Failure to do so can lead to severe tire damage resulting in tire bursts.
- When parking on a hill, turn the front wheels until they touch the curb so that the vehicle will not roll. Apply the parking brake, and place the transmission in "P" (automatic) or in first or reverse (manual). If necessary, block the wheels.
- Washing your vehicle or driving through deep water may get the brakes wet. To see whether they are wet, check that there is no traffic near you, and then press the pedal lightly. If you do not feel a normal braking force, the brakes are probably wet. To dry them, drive the vehicle cautiously while lightly pressing the brake pedal with the parking brake pulled. If they still do not work safely, pull to the side of the road and call a Toyota dealer for assistance.
- Toyota recommends not using four-wheel drive on dry hard-surfaced roads, because four-wheel driving will cause unnecessary noise and wear, and poor fuel economy.





- The driver and all passengers should fasten their seat belts whenever the vehicle is moving.

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**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 damage to the engine or other components does not occur. Water entering the engine air intake will cause severe engine damage.

Always perform a maintenance inspection after each day of off-road driving that has taken you through sand, mud, or water.

### Winter driving tips

Make sure you have ethylene-glycol antifreeze in the radiator.

**NOTICE:**

Do not use alcohol type antifreeze.

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. Chapter 7-3 tells you how to visually inspect the battery. Your Toyota dealer and most service stations will be pleased to check the level of charge.

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

See Chapter 7-2 for recommended viscosity. Leaving a heavy summer oil in your vehicle during winter months may cause harder starting. If you are not sure about which oil to use, call your Toyota dealer—he will be pleased to help.

Keep the door locks from freezing.

Squirt lock de-icer or glycerine into the locks to keep them from freezing. To open a frozen lock, try heating the key before inserting it.

Use a washer fluid containing an antifreeze solution.

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

**NOTICE:**

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

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

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

Keep ice and snow from accumulating under the fenders.

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

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

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

## Trailer towing

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

### WEIGHT LIMITS

Before towing, confirm the towing capacity with your local Toyota dealer or the vehicle documents and make sure your trailer is within the towing capacity.

Towing capacity has been tested at sea-level. If you have to go to a high mountain area, keep in mind that the engine power and towing capacity will decrease.

### TOWING BRACKETS

Toyota recommends using only a bracket which has been designed and type-approved for your vehicle.

### NOTICE:

**Do not use an axle-mounting bracket as it may cause damage to the axle housing, wheel bearings, wheels and/or tires.**

### TIRES

- Ensure that your vehicle's tires are properly inflated. See Chapter 7-2 for instructions.
- The trailer tires should be inflated to the pressure recommended by the trailer manufacturer in respect to the total trailer weight.

### TRAILER LIGHTS

- 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.

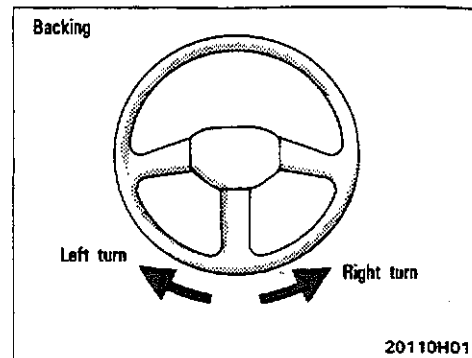
## PRE-TOWING SAFETY CHECK

- Be sure not to exceed designated maximum load for the ball coupling of the towing bracket. Please remember that the ball coupling load will increase the load on the vehicle. Maximum permissible rear axle capacity must not be exceeded.
- Be sure the trailer cargo is securely loaded so that it may not shift.
- If the traffic behind the trailer cannot be seen properly with the standard rear view mirrors, additional outside mirrors will be necessary. Both outside mirrors must be fitted on folding arms and adjusted to give a good rear view at all times.

## 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 10 km/h (6 mph) of speed, allow at least one vehicle and trailer length between you and the vehicle ahead. Avoid sudden braking as you may skid, resulting in jackknifing and loss of control. This is especially true on wet or slippery surfaces.
- Avoid jerky starts or sudden acceleration. If your vehicle has a manual transmission, prevent excessive clutch slippage by keeping engine rpm low and not racing the engine. Always start out in first gear.
- Avoid jerky steering and sharp turns. The trailer could hit your vehicle in a tight turn. Slow down before making a turn to avoid the necessity of sudden braking.



- Backing with a trailer is difficult and requires practice. Have someone guide you when backing to reduce the risk of an accident.
- 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.



- **Avoid continuous speeding up and slowing down.** Stop-and-go driving wastes fuel.
- **Avoid unnecessary stopping and braking.** Maintain a steady pace. Try to time the traffic signals so you only need to stop as little as possible or take advantage of through streets to avoid traffic lights. Keep a proper distance from other vehicles to avoid sudden braking. This will also reduce wear on your brakes.
- **Avoid heavy traffic or traffic jams whenever possible.**
- **Do not rest your foot on the clutch or brake pedal.** This causes needless wear, overheating and poor fuel economy.
- **Maintain a moderate speed on highways.** The faster you drive, the greater the fuel consumption. By reducing your speed, you will cut down on fuel consumption.
- **Keep the front wheels in proper alignment.** Avoid hitting the curb and slow down on rough roads. Improper alignment not only causes faster tire wear but also puts an extra load on the engine, which, in turn, wastes fuel.
- **Keep the bottom of your vehicle free from mud, etc.** This not only lessens weight but also helps prevent corrosion.

- **Keep your vehicle tuned-up and in top shape.** A dirty air cleaner, carburetor out of adjustment, improper valve clearance, dirty plugs, dirty oil and grease, brakes not adjusted, etc. all lower engine performance and contribute to poor fuel economy. For longer life of all parts and lower operating costs, keep all maintenance work on schedule, and if you often drive under severe conditions, see that your vehicle receives more frequent maintenance.

**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.**

::::::::::::::::::::::::::::::::::::::::

## Part 4 IN CASE OF AN EMERGENCY

- If your vehicle will not start
- If your engine stalls while driving
- If your vehicle overheats
- If you have a flat tire
- If your vehicle needs to be towed

### If your vehicle will not start— (a) Simple checks

Before making these checks, make sure you have followed the correct starting procedure given in "How to start the engine" in Part 3 and that you have sufficient fuel.

**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 or, if your vehicle has a manual transmission and is not equipped with a three-way catalytic converter, push starting. A vehicle with an automatic transmission and/or three-way catalytic converter cannot be push started. Diesel-powered vehicles may not be push-started if the battery is discharged too much. See "(d) Jump starting" for further instructions.

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

### NOTICE:

**Do not pull-start the vehicle. It may damage the vehicle or cause a collision when the engine starts. On vehicles with a three-way catalytic converter, do not try push-starting either. 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—**

#### Gasoline-powered vehicles

1. Check that all the push-on connectors are tight at the ignition coil, distributor and spark plugs.

See Chapter 7-1 for locations of these parts.

2. If the connectors are O.K., the engine may be flooded because of repeated cranking. See "(b) Starting a flooded engine (gasoline engine)" for further instructions.

#### Diesel-powered vehicles

1. If you are starting the engine that has died from an empty tank, you may have needed to bleed the fuel system before cranking the engine. See "(c) Bleeding the fuel system (diesel engine)" for further instructions.
2. If the fuel system is O.K., but the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop for assistance.

## (b) Starting a flooded engine (gasoline engine)

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

If this happens:

- 22R engine—Depress the accelerator pedal and hold it to the floor for 15 or 20 seconds. Then try starting the engine without releasing the accelerator pedal. Do not pump the pedal—just keep it held to the floor.
- 3VZ-E engine—Turn the key to "START" with the accelerator pedal held down. Keep the key and accelerator pedal for 15 seconds and release them. Then try starting the engine with your foot off the accelerator pedal.

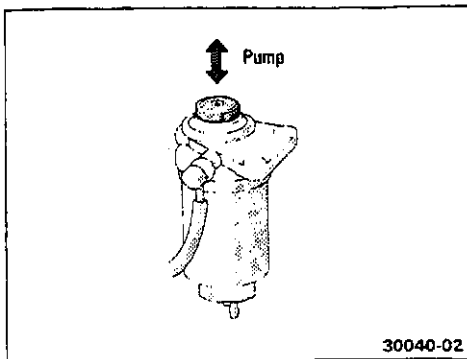
If the engine does not start after 15 seconds of cranking, release the key, wait a few minutes and try again.

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

### NOTICE:

Do not crank for more than 15 seconds at a time. This may overheat the starter and wiring systems.

## (c) Bleeding the fuel system (diesel engine)



If you run out of fuel and the engine dies, the engine may not restart after refueling. In such case, operate the priming pump until you feel more resistance.

## (d) Jump starting

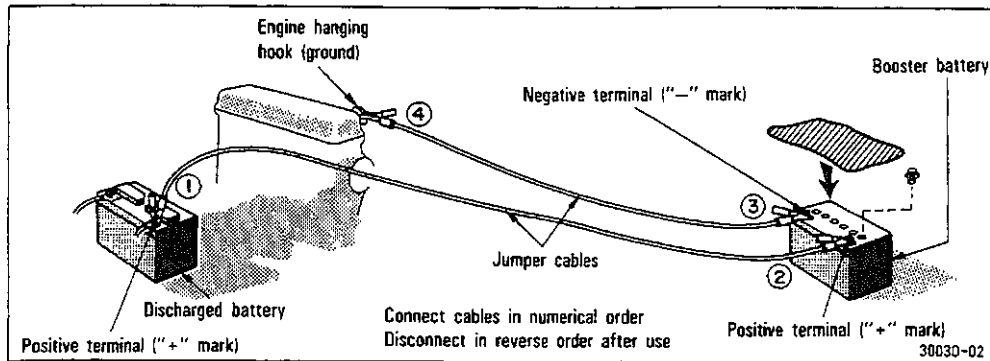
To avoid serious personal injury and damage to your vehicle which might result from battery explosion, acid burns, electrical burns, or damaged electronic components, these instructions must be followed precisely.

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 for at least 15 minutes. 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 standardised jumper cables and do not smoke or light a match while jump starting.**

**NOTICE:**

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

**JUMP STARTING PROCEDURE**

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

2. If required, remove all the vent plugs from the booster battery. Lay a cloth over the open vents on the battery. (This helps reduce the explosion hazard.)

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 jumping run the engine at about 2000 rpm with the accelerator pedal lightly depressed.

4. Connect the jumper cables in the exact order shown in the illustration: positive terminal ("+" mark)-to-positive terminal ("+" mark), and negative terminal ("- mark)-to-engine or body ground. Note that you first connect the positive cable to the discharged battery and then to the booster battery. Next, connect the negative cable to the booster battery and then to a solid, stationary, metallic point (e.g. engine hanging hook) away from the battery. Do not connect it to or near any part that moves when the engine is cranked.

**NOTICE:**

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

5. Start your engine in the normal way. After starting, run it at about 2000 rpm for several minutes with the accelerator pedal lightly depressed.

6. Carefully disconnect the cables in the exact reverse order: the negative cable and then the positive cable.

7. Carefully dispose of the battery cover cloths—they may now contain sulfuric acid.

8. If removed, replace all the battery vent plugs.

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

### 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".

**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 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 ping 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" (automatic) or neutral (manual) and apply the parking brake. Turn off the air conditioning if it is being used.
2. If coolant or steam is boiling out of the radiator or reservoir, stop the engine. Wait until the steam subsides before opening the hood. If there is no coolant boiling over or steam, leave the engine running.

**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 water to the reservoir while the engine is running. Fill it about half full.

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

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

### **If you have a flat tire—**

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place well away from the traffic. Avoid stopping on the center divider of a highway. Park on a level spot with firm ground.

2. Stop the engine and turn on your emergency flashers.

3. Firmly set the parking brake and put the transmission in "P" (automatic) or reverse (manual).

4. Have everyone get out of the vehicle on the side away from traffic.

5. Read the following instructions thoroughly.

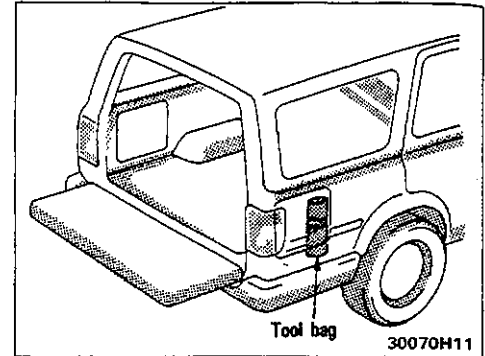
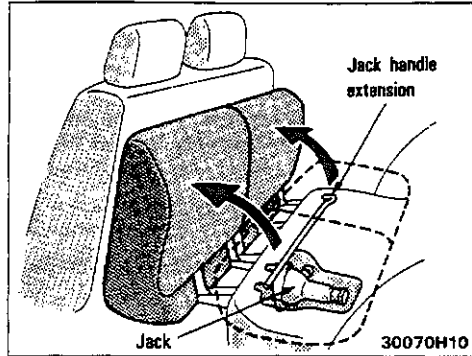
**CAUTION:** **When jacking, be sure to observe the following to reduce the possibility of personal injury:**

- Follow jacking instructions.
- Use a jack only for lifting your vehicle during wheel changing.
- Never get beneath the vehicle when supported by a jack.
- Do not start or run the engine while your vehicle is supported by a jack.

## —Required tools and spare tire

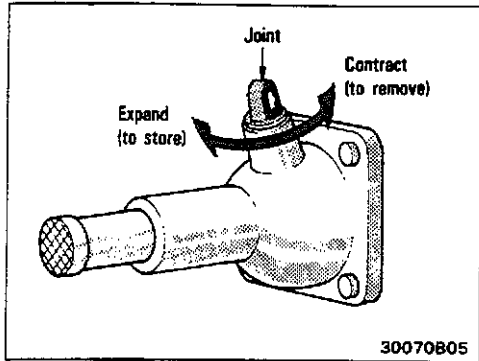
### NOTICE:

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

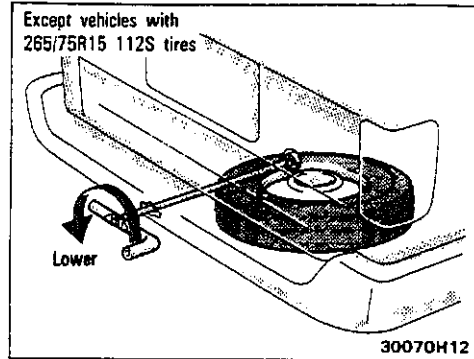


1. Get the tool bag, jack, jack handle extension and spare tire.

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 removing the jack, turn the joint by hand towards the CONTRACT direction until the jack is free. When storing, turn the joint by hand towards the EXPAND direction until the jack is firmly secured to prevent it from flying forward during a collision or sudden braking.

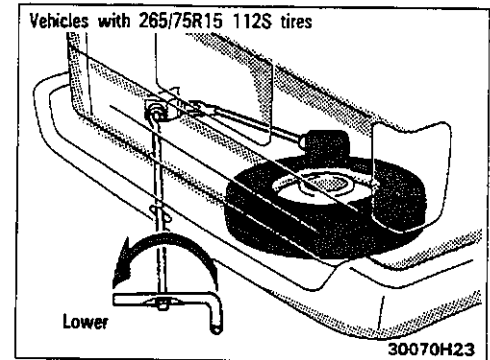


To remove the spare tire:

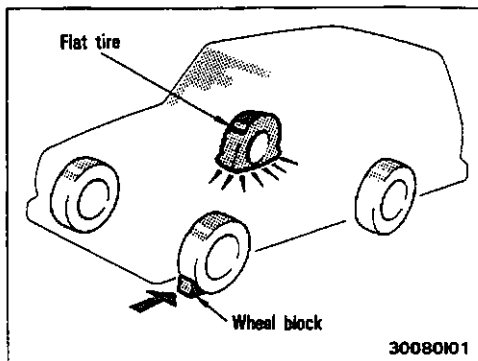
1. Insert the end of the jack handle extension into the lowering screw and turn it counter-clockwise with the handle, making sure the handle remains firmly fitted onto the jack handle extension.
2. After the tire is lowered completely to the ground, remove the holding bracket.

When storing the spare tire, put it into place with the outer side of the wheel facing up. Then secure the tire, being careful that the tire rises straight up without catching on any other part, to prevent it from flying forward during a collision or sudden braking.

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



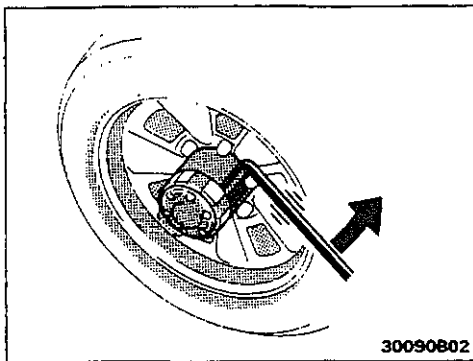
## —Blocking the wheel



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

When blocking the wheel, place a wheel block from the front for the front wheels or from the rear for the rear wheels.

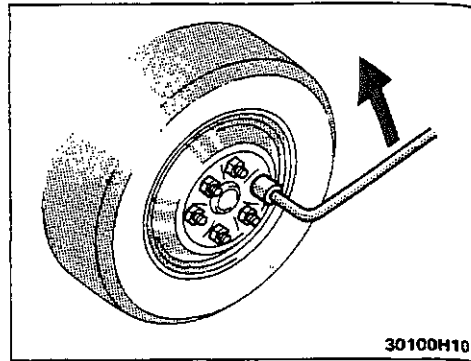
## —Removing wheel ornament



**3. Remove the wheel ornament.**

Pry off the wheel ornament, using the beveled end of the wheel ornament remover as shown. To avoid personal injury, do not attempt to pull off the ornament by hand.

## —Loosening wheel nuts



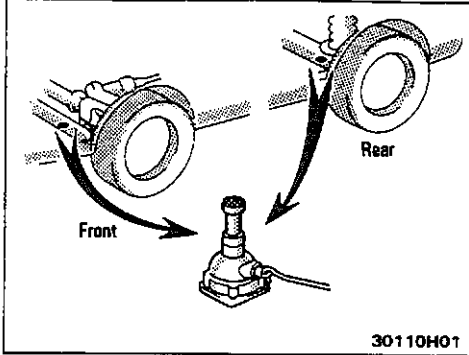
**4. Loosen all the wheel nuts.**

Always loosen the wheel nuts before raising the vehicle.

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

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

## —Positioning the jack



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

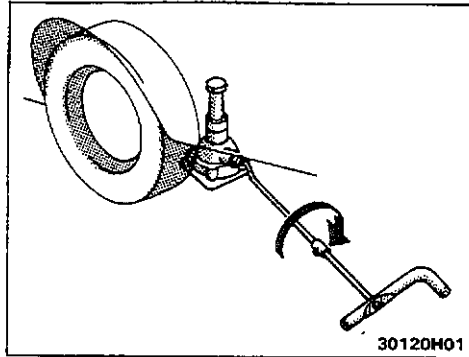
Make sure the jack is positioned on a level and solid place.

### JACK POINTS:

Front —Under the front suspension cross-member

Rear —Under the rear axle housing

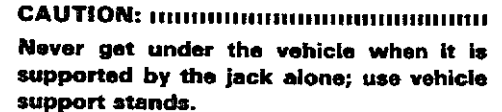
## —Raising your vehicle



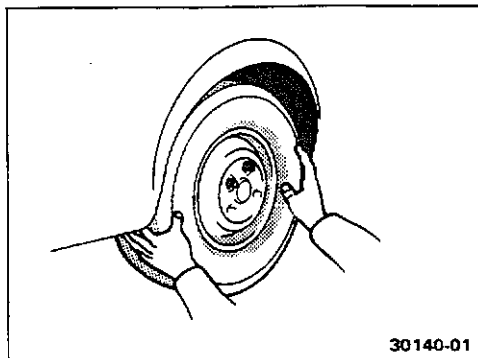
6. After making sure that no one is in the vehicle, raise it high enough so that the spare tire can be installed.

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

To raise the vehicle, insert the jack handle extension into 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 extension. As the jack touches the vehicle and begins to lift, double-check that it is properly positioned.

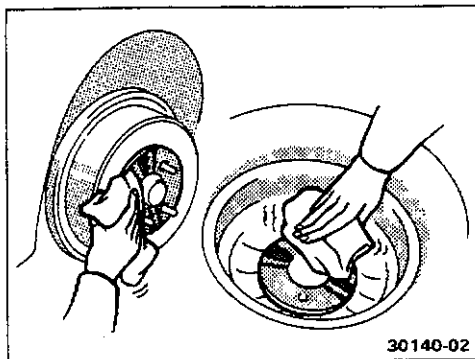
**CAUTION:**  Never get under the vehicle when it is supported by the jack alone; use vehicle support stands.

## —Changing wheels



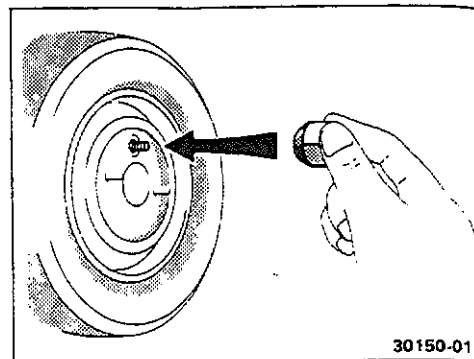
**7. Remove the wheel nuts and change tires.**  
Lift the flat tire straight off and put it aside.

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



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

## —Reinstalling wheel nuts

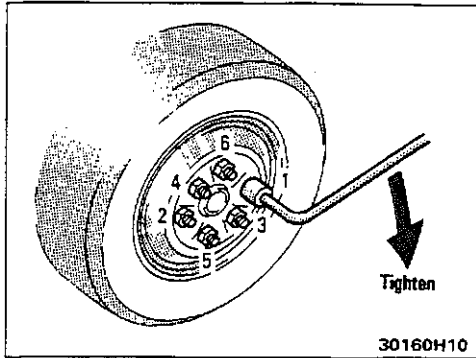


**8. Reinstall all the wheel nuts finger tight.**

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.



## —Lowering your vehicle



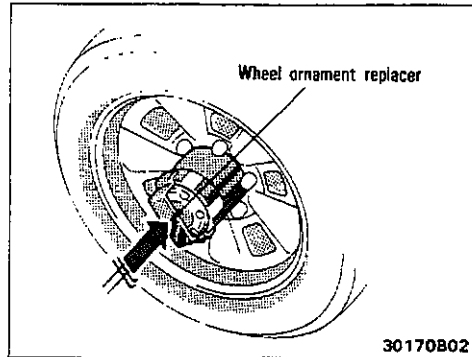
### 9. Lower the vehicle completely and tighten the wheel nuts.

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

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

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

## —Reinstalling wheel ornament



### 10. Reinstall the wheel ornament.

Put the wheel ornament into position and then tap it firmly with the side or heel of your hand to snap it into place.

On ornaments for free-wheeling hubs, place the wheel ornament replacer over the opening and tap on the replacer to snap the ornament into place. Be careful not to slip off the replacer.

## —After changing wheels



### 11. Check the air pressure of the replaced tire.

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

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

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

As soon as possible after changing wheels, tighten the wheel nuts to the torque specified in Part 8 with a torque wrench and have a technician repair the flat tire. If, in an emergency, you have to temporarily replace a flat front tire with a spare of a different size or ply rating, replace the spare tire with the repaired tire.

**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 needs to be towed—

(a) Using flat bed truck



(b) Towing with wheel lift type truck—  
—From front



—From rear



(c) Towing with sling type truck



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

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

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

### TOWING PRECAUTIONS:

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

#### (a) Using flat bed truck

Toyota recommends this as the best method for your vehicle.

#### (b) Towing with wheel lift type truck

##### From front—

##### ● Manual transmission:

We recommend using a towing dolly under the rear wheels. If you do not use a towing dolly, release the parking brake, put the transmission in neutral and the transfer in "H2" (lever type) or "H" (lever/button type). (If your vehicle has a lever/button type front drive control, the "4WD" button must be left out.)

##### ● Automatic transmission:

Use a towing dolly under the rear wheels.

##### **NOTICE:**

**Never tow a vehicle with an automatic transmission from the front with the rear wheels on the ground, as this may cause serious damage to the transmission.**

## –Emergency towing

**From rear**—We recommend using a towing dolly under the front wheels. If you do not use a towing dolly, place the ignition key in the "ACC" position, put the transmission in neutral and the transfer in "H2" (lever type) or "H" (lever/button type). (If your vehicle has a lever/button type front drive control, the "4WD" button must be left out.) Disengage both free-wheeling hubs if so equipped.

### NOTICE:

Do not tow with the key removed or in the "LOCK" position when towing from the rear without a towing dolly. The steering lock mechanism is not strong enough to hold the front wheels straight.

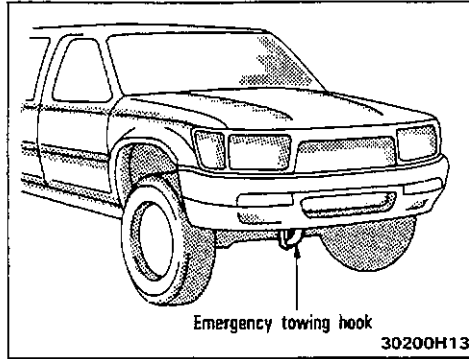
### (c) Towing with sling type truck

**From front**—Follow the instructions for towing from front in "(b) Towing with wheel lift type truck".

**From rear**—

### NOTICE:

Do not tow with sling type truck. This may cause body damage.



If towing service is not available in an emergency, your vehicle may be temporarily trailed by a cable secured to the emergency towing hook under the front of 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.

Before towing, release the parking brake, put the transmission in neutral (manual) or "N" (automatic) and the transfer in "H" (lever/button type) or "H2" (lever type). (If your vehicle has a lever/button type front drive control, the "4WD" button must be left out.) 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 installation bolts are not loose.
- Fasten the towing rope or cable securely to the hook.
- Do not jerk the hook.
- To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.

## Part 5

# CORROSION PREVENTION AND APPEARANCE CARE

- Protecting your Toyota from corrosion
- Washing and waxing your Toyota
- Cleaning the interior

### Protecting your Toyota from corrosion

Toyota, through its diligent research, design and utilizing the most advanced technology available, has done its part to help prevent corrosion and has provided you with the finest quality vehicle construction. Now, it is up to you. Proper care of your Toyota can help ensure 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 temperatures will cause corrosion to those components of the vehicle which are prevented from quick-drying due to lack of proper ventilation.

The above signifies the necessity to keep your vehicle, particularly the underside, as clean as possible and to repair any damage to paint or protective coatings as soon as possible.

**To help prevent corrosion on your Toyota, follow these guidelines:**

**Wash your vehicle frequently.** It is, of course, necessary to keep your vehicle clean by regular washing, but to prevent corrosion, the following points should be observed:

- If you drive on salted roads in the winter or if you live near the ocean, you should hose off the undercarriage at least once a month to minimize corrosion.
- High pressure water or steam is effective for cleaning the vehicle's underside and wheel housings. Pay particular attention to these areas as it is difficult to see all the mud and dirt. It will do more harm than good to simply wet the mud and debris without removing them. The lower edge of doors, rocker panels and frame members have drain holes which should not be allowed to clog with dirt as trapped water in these areas can cause corrosion.

- Wash the underside of the vehicle thoroughly when winter is over.

See "Washing and waxing your Toyota" 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., and 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.

**Do not park your vehicle in a damp, poorly ventilated garage.** If you wash your vehicle in the garage, or if you drive it in covered with water or snow, your garage may be so damp it will cause corrosion. Even if your garage is heated, a wet vehicle can corrode if the ventilation is poor.

## Washing and waxing your Toyota

**Wash your vehicle in the shade when the body is not hot to the touch. Use a mild car-wash soap and rinse it well.**

Dirt can cause small scratches in the paint and the chemicals in some dirt and air pollutants can cause deterioration of the paint and trim. Therefore, frequent washing is recommended. If you park or drive your Toyota near the ocean or on salted roads, it is especially important to prevent corrosion.

Automatic car washes use a wide variety of equipment for both cleaning your car and applying waxes and sealants. Certain types of brushes used, as well as the overall washing procedure itself, can scratch the paint's surface. Damage will be more apparent on darker colors. Before using an automatic car wash, be sure to review with the car wash management the type of equipment and washing process used to ensure that they will not adversely affect your vehicle's paint finish.

The following is the proper procedure for car washing by hand.

1. Begin by rinsing all loose dirt off the vehicle with a hose. If the underside has picked up mud or road salt, use a hard, direct stream from a hose to remove it.

2. Wash with a commercial car-wash product available at your Toyota dealer or auto parts store. Follow the manufacturer's mixing instructions carefully. Dip your sponge or cloth into the wash bucket frequently and do not rub too hard—let the soap and water remove the dirt.

To clean aluminum wheels, use only a mild soap or neutral detergent.

Road tar may be removed with turpentine. Use warm water and car-wash soap for insects and tree sap. Commercial products are also available.

**NOTICE:**

**Do not use gasoline or strong solvents, which may be toxic or cause damage.**

**If wax remover or concentrated alkaline cleaner is left on the side step, bleaching of the aluminum surface may occur, so thorough rinsing with water should be performed.**

3. Rinse the vehicle thoroughly. If any soap dries on the vehicle, it may cause streaking. In hot weather, you may have to rinse each section of the vehicle right after you wash it.

4. Dry the vehicle with a moist chamois or soft towel. The main purpose of drying is to remove excess water so that the vehicle will air dry without water spots. So do not rub or press hard, which might scratch the paint.

If you detect any stone chips or scratches in the paint, touch them up immediately to protect the bare metal from corrosion.

After washing your vehicle, make sure the brakes are fully dry before driving.

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

1. Always wash and dry the vehicle before you begin waxing, even if you are using a combined cleaner and wax.

2. Use a good quality polish and wax. If the finish has become extremely weathered, use a car-cleaning polish, followed by a separate wax. Carefully follow the manufacturer's instructions and precautions. Be sure to polish and wax the chrome trim as well as the paint.

3. Wax the vehicle again when water does not bead but remains on the surface in large patches.

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

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

## **Cleaning the interior**

### **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 does 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.**

### **Windows**

**The windows may be cleaned with any household window cleaner.**

#### **NOTICE:**

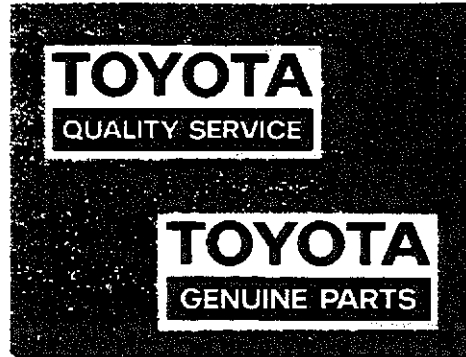
**When cleaning the inside of the windows, be careful not to scratch or damage the heater wires on the back window.**

**If you have any questions about the cleaning of your Toyota, your local Toyota dealer will be pleased to answer them.**

## Part 6 MAINTENANCE REQUIREMENTS

- Maintenance facts
- Does your vehicle need repairing?

### Maintenance facts



#### **Regular maintenance is essential.**

We urge you to protect your new vehicle by having your Toyota serviced according to the maintenance schedule given in the separate booklet. Regular maintenance will aid:

- Good fuel economy
- Long vehicle life
- Driving enjoyment
- Safety
- Reliability
- Warranty coverage
- Compliance with government regulations

Your Toyota has been designed for economical driving and economical maintenance. Many formerly required maintenance items are no longer required or are not required as often. To make sure your vehicle runs at peak efficiency, follow the maintenance schedule.

For full details of your maintenance schedule, read the separate "Warranty and Service Booklet".

#### **Where to go for service?**

It makes good sense to take your vehicle to your local Toyota dealer for service.

Toyota technicians are well-trained specialists. And they are receiving the latest service information through technical bulletins, service tips, and in-dealership training programs. They learn to work on Toyotas before they work on your vehicle, rather than while they are working on it. Doesn't that seem like the best way?

Your Toyota dealer has invested a lot of money in special Toyota tools and service equipment. It helps do the job better and at less cost.

Your Toyota dealer's service department will perform all of the scheduled maintenance on your vehicle—reliably and economically.



### What about do-it-yourself maintenance?

Many of the maintenance items are easy to do yourself if you have a little mechanical ability and a few basic automotive tools. Simple instructions for how to perform them are presented in Part 7.

Note, however, that some maintenance tasks require special tools and skills. These are best performed by qualified technicians. Even if you are an experienced do-it-yourself mechanic, we recommend that repairs and maintenance be conducted by your Toyota dealer who will keep a record of maintenance on your Toyota. This record could be helpful should you ever require Warranty Service.

The service interval for scheduled maintenance is determined by the odometer reading or time interval, whichever comes first, shown in the schedule.

Rubber hoses (for cooling and heater system, brake system and fuel system) should be inspected by a qualified technician in accordance with the Toyota maintenance schedule.

They are particularly important maintenance items. Have any deteriorated or damaged hoses replaced immediately. Note that rubber hoses will deteriorate with age, resulting in swelled, chafed or cracked condition.

### Does your vehicle need repairing?

Be on the alert for changes in performance, sounds, and visual tip-offs that indicate service is needed. Some important clues are as follows:

- Engine missing, stumbling, or pinging
- Appreciable loss of power
- Strange engine noises
- A leak under the vehicle (however, water dripping from the air conditioning after use is normal.)
- Change in exhaust sound (This may indicate a dangerous carbon monoxide leak. Drive with the windows open and have the exhaust system checked immediately.)
- Flat-looking tire; excessive tire squeal when cornering; uneven tire wear
- Vehicle pulls to one side when driving straight on a level road
- Strange noises related to suspension movement
- Loss of brake effectiveness; spongy feeling brake or clutch pedal; pedal almost touches floor; vehicle pulls to one side when braking
- Engine coolant temperature continually higher than normal

- Engine continually runs hot; oil pressure gauge stays low

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

### **CAUTION:** .....

**Do not continue driving with the vehicle unchecked. It could result in serious vehicle damage and possibly personal injury.**

.....

# **Part 7**

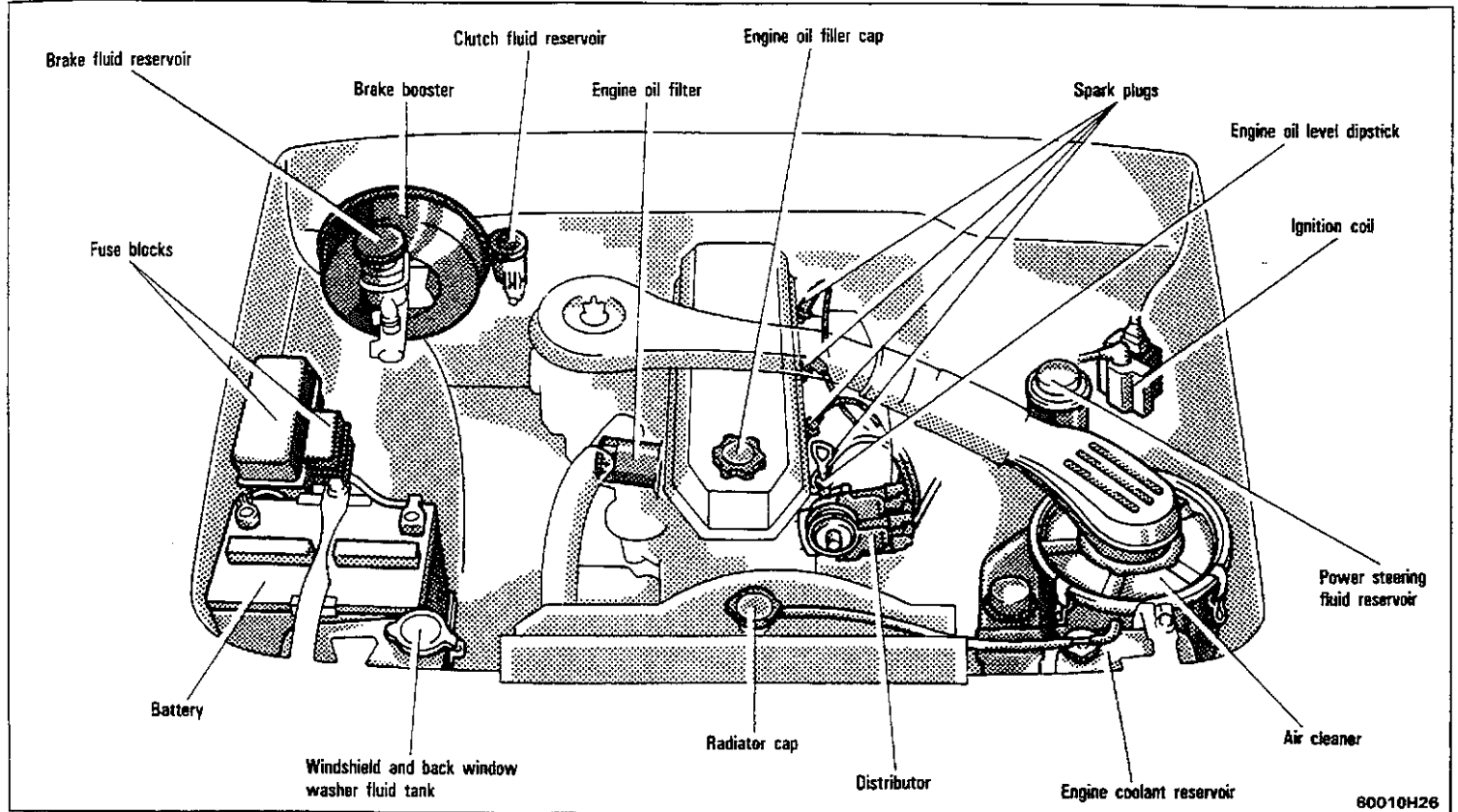
## **DO-IT-YOURSELF MAINTENANCE—**

### **Chapter 7-1**

#### **Introduction**

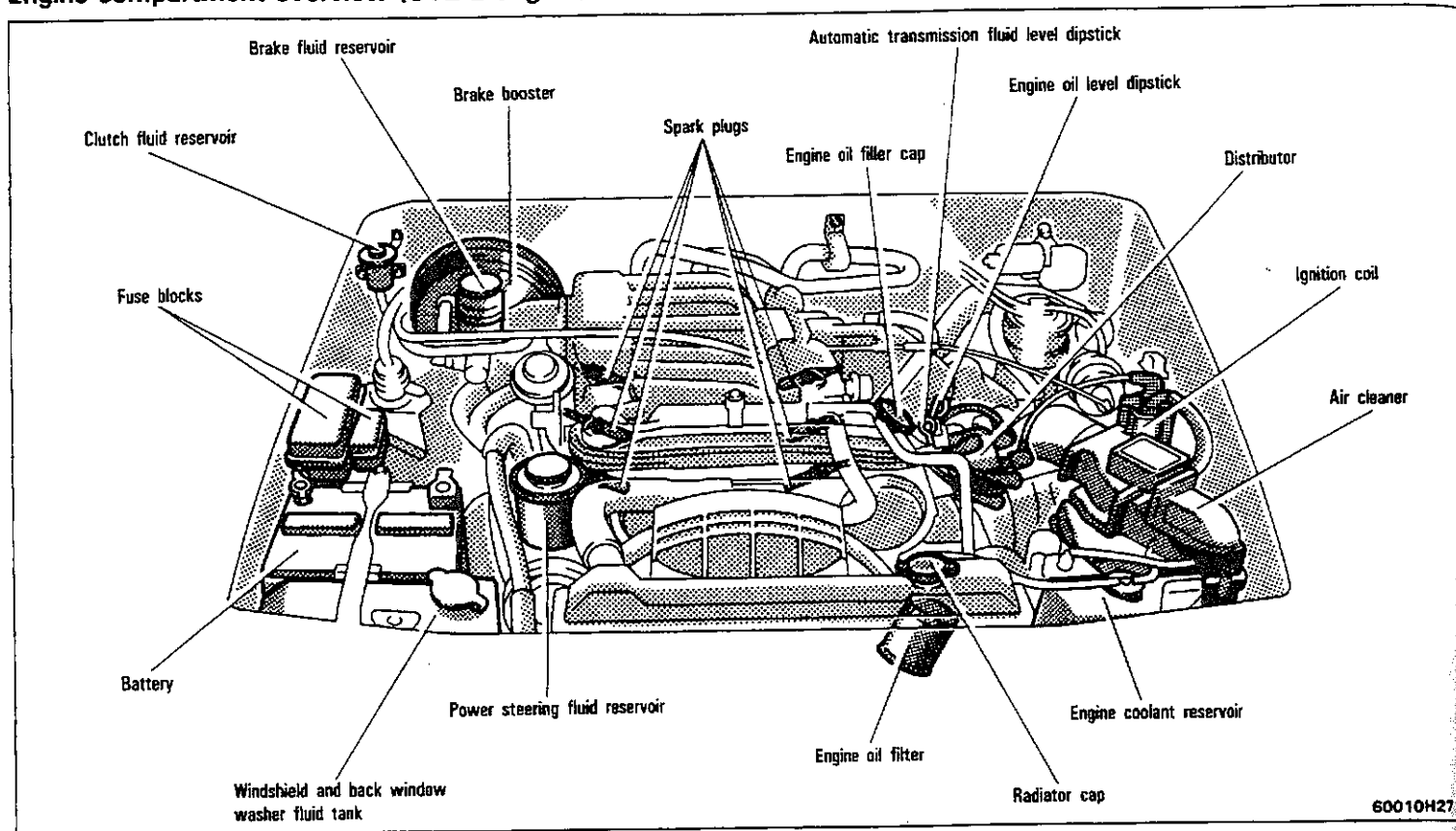
- Engine compartment overview
- Fuse locations
- Do-it-yourself service precautions

## Engine compartment overview (22R engine)

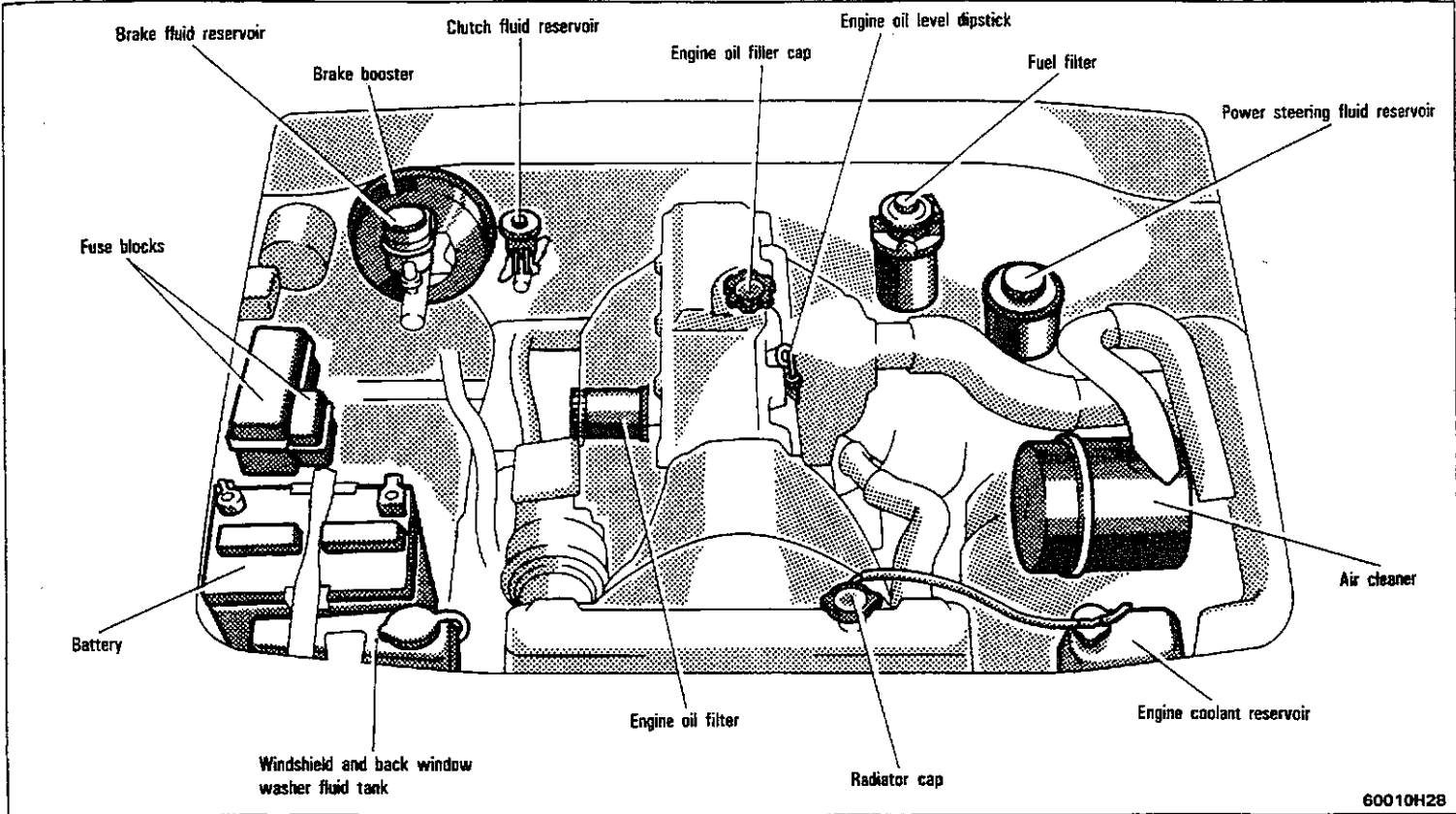


80010H26

## Engine compartment overview (3VZ-E engine)

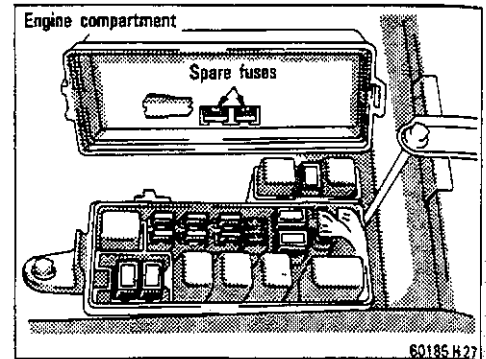
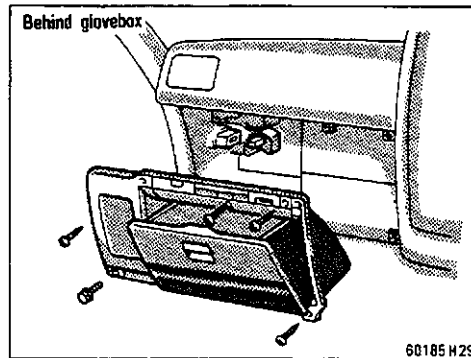
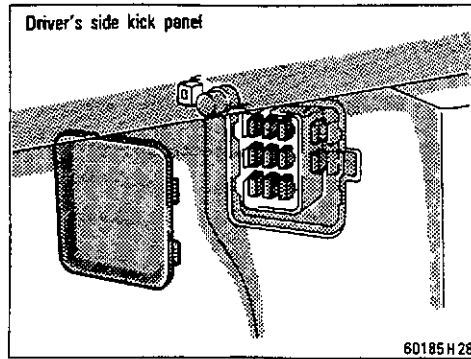
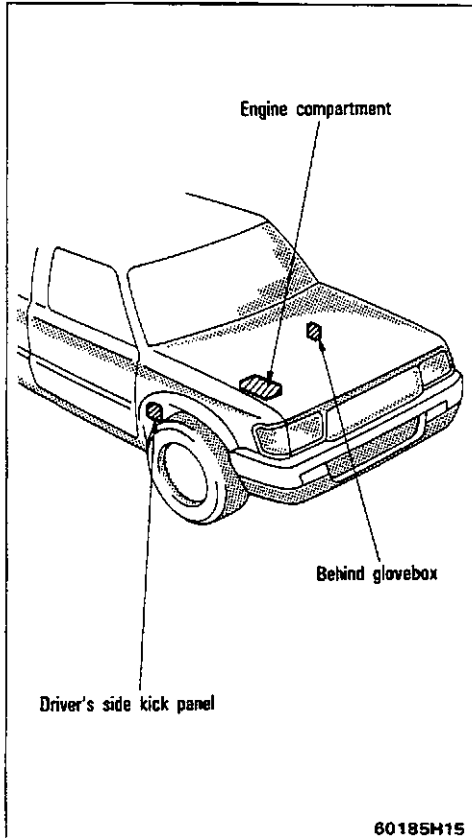


# Engine compartment overview (3L engine)



60010H28

## Fuse locations



## Do-it-yourself service precautions

If you perform maintenance by yourself, be sure to follow the correct procedure given in this part.

You should be aware that improper or incomplete servicing may result in operating problems.

This part gives instructions only for those items that are relatively easy for an owner to perform. As explained in Part 6, there are still a number of items that must be done by a qualified technician with special tools.

Utmost care should be taken when working on your vehicle to prevent accidental injury. Here are a few precautions that you should be especially careful to observe:

### CAUTION:

- **When the engine is running, keep hands, clothing, and tools away from the moving fan and engine drive belts. (Removing rings, watches, and ties is advisable.)**
- **Right after driving, the engine, radiator and exhaust manifold will be hot, so be careful not to touch them. Oil and fluid may also be hot.**
- **Do not smoke, cause sparks or allow open flames around fuel or battery. The fumes are flammable.**

- **Be extremely cautious when working on the battery. It contains poisonous and corrosive sulfuric acid.**
- **Do not get under your vehicle with just the body jack supporting it. Always use automotive jack stands or other solid supports.**
- **Use eye protection whenever you work on or under your vehicle where you may be exposed to flying or falling material, fluid spray, etc.**



### NOTICE:

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

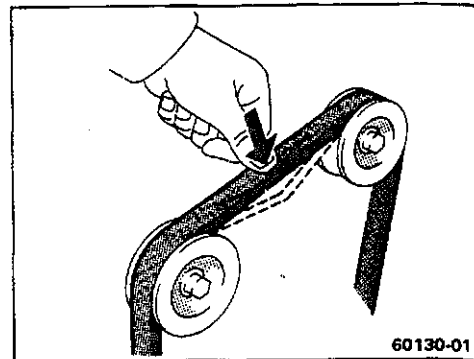
When closing the engine hood, check to see that you have not forgotten any tools, rags, etc.

## Part 7 DO-IT-YOURSELF MAINTENANCE—

### Chapter 7-2 Engine and Chassis

- Checking the engine drive belts
- Checking the engine oil level
- Changing the engine oil and filter
- Checking the engine coolant level
- Changing the engine coolant
- Draining fuel filter water
- Checking and replacing the air cleaner filter
- Replacing spark plugs
- Checking clutch pedal freeplay
- Checking brake and clutch fluid
- Checking brake pedal freeplay
- Checking brake pedal clearance
- Checking parking brake adjustment
- Checking the brake booster
- Checking power steering fluid
- Checking steering wheel freeplay
- Lubrication the propeller shafts
- Lubrication the ball joints
- Checking manual transmission oil
- Checking transfer oil
- Checking transfer fluid
- Checking automatic transmission fluid
- Checking front differential oil
- Checking rear differential oil
- Checking tire pressure
- Checking and replacing tires
- Rotating tires
- Installing snow tires and chains
- Replacing wheels
- Aluminum wheel precautions

### Checking the engine drive belts



**Visually inspect the condition of the belts. Check their tension by applying thumb pressure midway between the pulleys.**

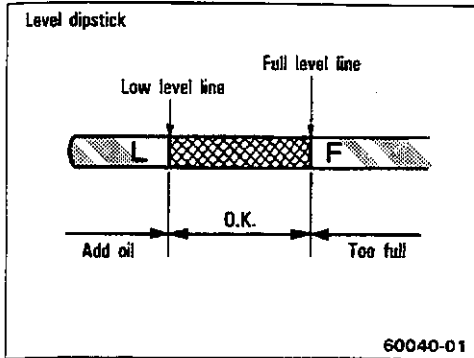
a. With the engine turned off, check the belts for cracks, fraying, excessive wear or oil stains. Have belts in poor condition immediately replaced by your Toyota dealer.

b. With your thumb, press hard on each belt midway between the pulleys. Each belt should deflect no more than the amount specified in Part 8. If a belt is loose, have it adjusted by your Toyota dealer.

**CAUTION:** When the engine is hot, be careful not to touch the radiator or engine.




## Checking the engine oil level



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

1. To get a true reading, the vehicle should be on a level spot. After turning off the engine, wait a few minutes for the oil to drain back into the bottom of the engine.
2. Pull out the dipstick, and wipe it clean with a rag.
3. Reinsert the dipstick—push it in as far as it will go, or the reading will not be correct.
4. Pull the dipstick out and look at the oil level on the end.

**CAUTION:**  Be careful not to touch the hot exhaust manifold.

 If the oil level is below or only slightly above the low level line, add engine oil of the same type as already in the engine.

Remove the oil filler cap and add engine oil in small quantities at a time, checking the dipstick.

The approximate quantity of oil needed to fill between the low level line and the full level line 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.):

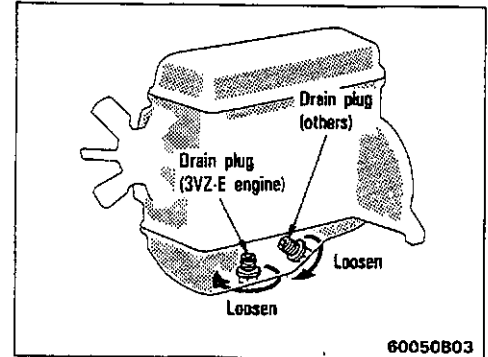
|                 |                |
|-----------------|----------------|
| Gasoline engine | 1.0 (1.1, 0.9) |
| Diesel engine   | 1.6 (1.7, 1.4) |

**NOTICE:**

**Avoid overfilling, or the engine could be damaged.**

**Check the oil level on the dipstick once again after adding the oil.**

## Changing the engine oil and filter



**1. Warm up the engine for a few minutes and then turn it off. Remove the oil filler cap.**

a. Park the vehicle on a level spot. Warm up the engine until the engine coolant temperature gauge shows a rise. (Warm oil will drain faster and more thoroughly.) Turn the engine off.

b. Remove the oil filler cap. This allows air to enter the engine as the oil drains.

**2. Remove the drain plug and allow the oil to drain fully.**

a. Place a drain pan under the drain plug.

b. Using a wrench, remove the drain plug. Allow the oil to drain fully.

**CAUTION:** .....

The oil may be hot—be careful not to burn yourself.

.....

3. Remove the old oil filter and install a new one. Reinstall the drain plug.

a. Using an oil filter wrench (any of several common types will work), loosen the oil filter. It turns counterclockwise. Once loose, you may unscrew it the rest of the way by hand. When removing it, hold up the end so that oil does not spill out.

b. With a clean rag, wipe off the mounting surface on the engine so that the new filter will seat well. Make sure the old gasket has not stuck to the mounting surface. If it has, remove it before installing the new filter.

c. Smear a little engine oil on the rubber gasket of the new oil filter.

d. Screw the new filter into place and tighten it until the gasket contacts the seat. Then give it an additional 3/4 turn to seat the filter with the oil filter wrench.

e. Reinstall the drain plug and a new gasket. Tighten the plug with your wrench, but do not force it and strip the threads.

**CAUTION:** .....

Be careful not to touch the hot exhaust manifold.

.....

4. Add oil and install the filler cap. Start the engine and check for leaks at the filter or drain plug.

a. See the following "Engine oil selection" for proper engine oil selection. Engine oil additives are neither needed nor recommended.

b. After adding the oil, make sure the filler cap is installed hand-tight. You should double-check the oil level on the dipstick.

c. With the engine running, look carefully for any small leaks from around the oil filter or drain plug. Any leak indicates a faulty installation.

d. Turn the engine off and wait a few minutes. Check the oil level again and add oil if necessary.

**CAUTION:** .....

● 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 house, hold trash, in sewers or onto the ground. Call your dealer or a service station for information concerning recycling or disposal.

.....

**Engine oil selection**

**Gasoline engine**

Use API SG or SH multigrade engine oil or ILSAC multigrade engine oil.

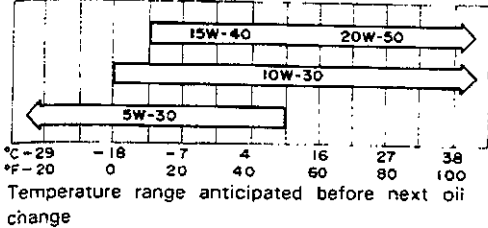
**Diesel engine**

Use API CC, CD or better.

Recommended viscosity is given in the following chart.

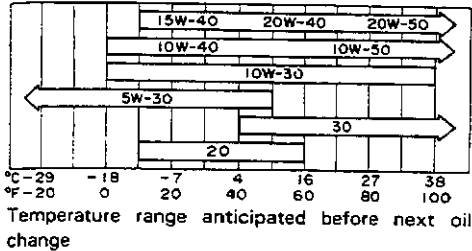
**Recommended viscosity (SAE):**

**GASOLINE ENGINE**



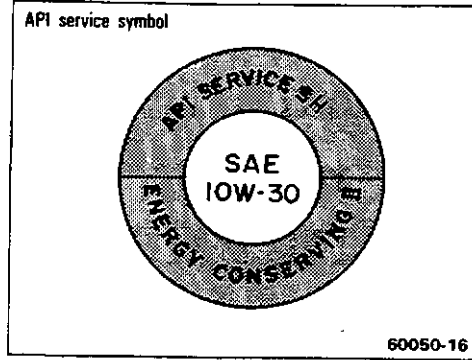
60040-12E

**DIESEL ENGINE**



60040-08E

**API service symbol**



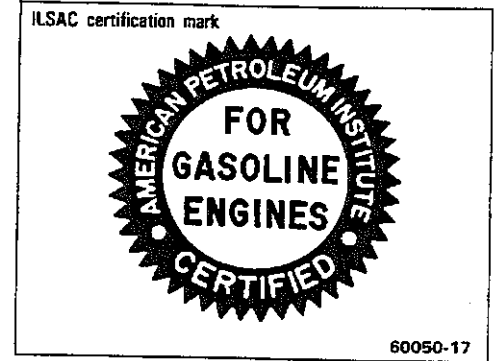
**Oil identification marks**

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 SH. The center portion of the label shows the SAE viscosity grade such as SAE 10W-30. "Energy-Conserving II" shown in the lower portion, indicates that the oil has fuel-saving capabilities. Oils marked "Energy-Conserving II" will have higher fuel-saving capabilities that oils marked "Energy-Conserving".

**ILSAC certification mark**



The ILSAC (International Lubricant Standardization and Approval Committee) Certification Mark is displayed on the front of the container.

## Checking the engine coolant level

Look at the see-through coolant reservoir tank. The coolant level is satisfactory if it is between the "FULL" and "LOW" lines on the tank. If the level is low, add coolant of the same type as already in the system.

The coolant level in the reservoir tank will vary with engine temperature. However, if the level is on or below the "LOW" line, add coolant. Bring the level up to the "FULL" line.

Always use the same type of coolant as already in the cooling system. For information on coolant, see also "Changing the engine coolant".

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.

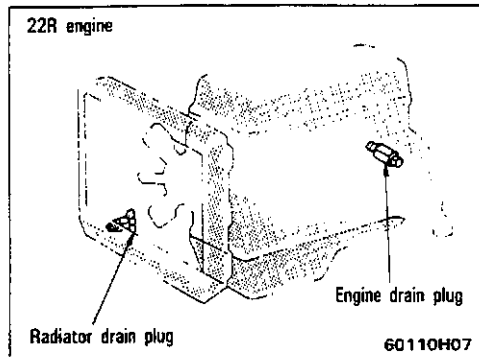
If no leak can be found, have the cap pressure tested at your Toyota dealer.

**CAUTION:** .....

**To prevent burning yourself, do not remove the radiator cap when the engine is hot.**

.....

## Changing the engine coolant



### 1. Drain the cooling system and flush it out with water.

a. Park the vehicle on a level spot, where the coolant can drain into a suitable disposal container.

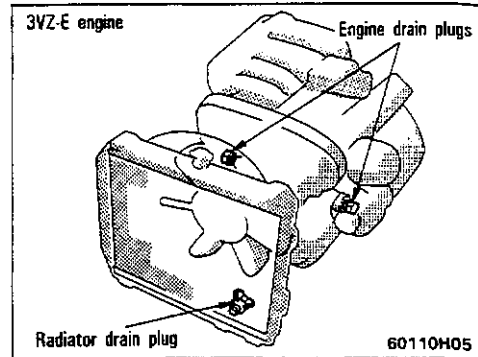
b. Remove the radiator cap and loosen (turn counterclockwise) the drain plugs.

**CAUTION:** .....

**To prevent burning yourself, do not remove the radiator cap or loosen the drain plugs if the engine is hot.**

.....

2. Close the drain plugs and fill the system with coolant. Install the radiator cap.



a. Make sure the drain plugs are securely tightened.

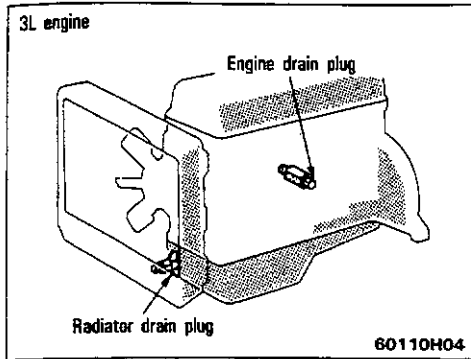
b. Pour the proper amount of antifreeze or anticorrosive into the radiator. Then fill with clean demineralized or distilled water until the radiator is full.

### NOTICE:

**Add only demineralized or distilled water to fill the radiator.**

c. Wait for a few minutes and add water again in small quantities until the water level does not drop.

d. Start the engine, and top up the radiator with water. Fill the reservoir half full.



e. Install the radiator and reservoir caps and double-check that the drain plugs are not leaking.

**NOTICE:**

**If you spill some of the coolant, be sure to wash it off with water to prevent it from damaging the parts or painting.**

**Coolant type selection**

Your coolant must contain either ethylene-glycol antifreeze or anticorrosive.

Ethylene-glycol antifreeze is the antifreeze contained in the coolant your new Toyota is delivered with. In addition to preventing freezing and subsequent damage to the engine, this will prevent corrosion.

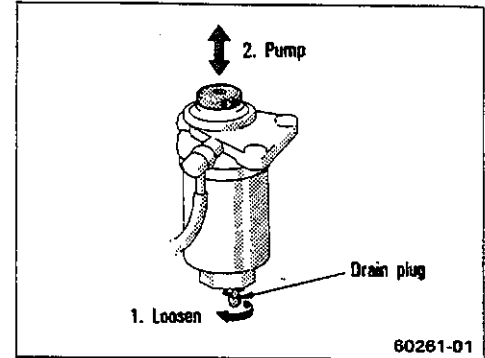
Anticorrosive may be used only in regions where there is no possibility of the coolant freezing. Use Toyota "RADIATOR CONDITIONER" anticorrosive or equivalent.

Read the antifreeze or anticorrosive container for information on freeze and corrosion protection. Follow the manufacturer's directions for how much to mix with water. The total capacity of the cooling system is given in Part 8. As for antifreeze, we recommend 50 % solution be used for your Toyota, or a sufficient quantity to provide protection to about  $-35^{\circ}\text{C}$  ( $-31^{\circ}\text{F}$ ).

**NOTICE:**

**Do not use alcohol type antifreeze or plain water alone.**

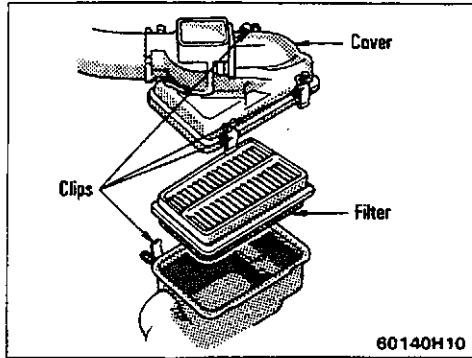
**Draining fuel filter water (diesel engine)**



**When the fuel filter warning light and buzzer come on, the water in the fuel filter must be drained immediately.**

- Place a small tray under the drain plug to catch the water.
- Turn the drain plug counterclockwise about 2–2-1/2 turns. (Loosening more than this will cause water oozing from around the drain plug.)
- Operate the priming pump until fuel begins to run out.
- Retighten the drain plug. Do not use a tool.

## Checking and replacing the air cleaner filter (3VZ-E engine)



To inspect the filter, release the clips, remove the cover and take out the filter.

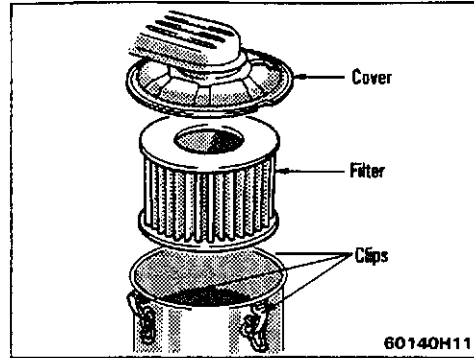
Inspect the lower surface of the filter. If it is dirty, it should be replaced. If it is just moderately dusty, it may be cleaned by blowing compressed air from the upper surface. Do not wash or oil the filter.

When installing a filter, be sure to remove any dust from where the filter seats and put the filter properly in place.

### NOTICE:

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.

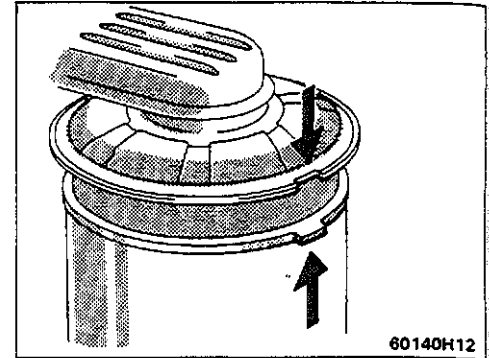
## Checking and replacing the air cleaner filter (22R engine)



### CHECKING AND REPLACING

1. To inspect the filter, release the clips, remove the cover and take out the filter.

Inspect the outer surface of the filter. If it is dirty, it should be replaced. If it is just moderately dusty, it may be cleaned as described in "CLEANING".

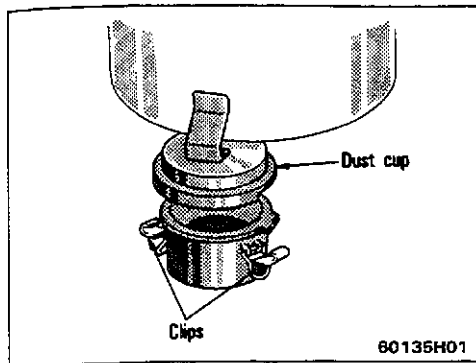


2. To install a filter, put it properly in place and reinstall the cover with the cutout fitted in the tab provided.

Before installing, remove any dust from the case and cover.

### NOTICE:

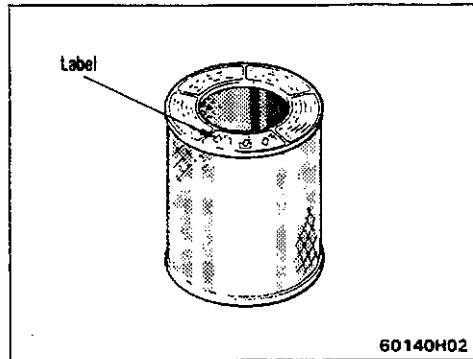
Do not drive with the air cleaner filter removed, or excessive engine wear could result. Also backfiring could cause a fire in the engine compartment.



### 3. To check the dust cup, release the clips.

Check the dust cup for any dirt. Empty the cup as required.

To reinstall the dust cup, align the tab on the dust cup with the cutout of the dust cup seat and fasten the clips.



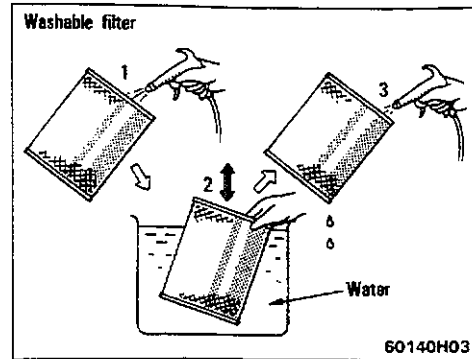
### CLEANING

**If the filter is just moderately dusty, clean it as follows.**

Washable filters have a label at the top as shown in the illustration. Non-washable filters have no label.

#### Non-washable filter—

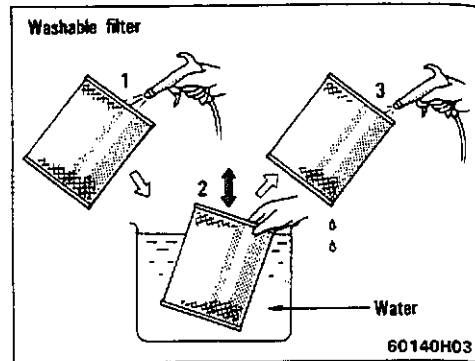
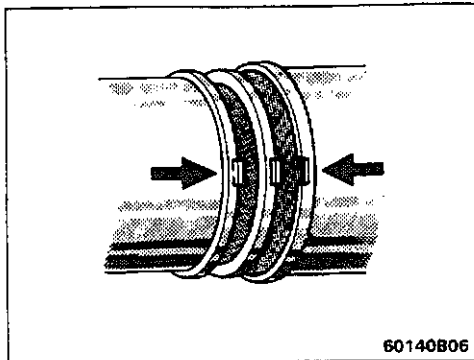
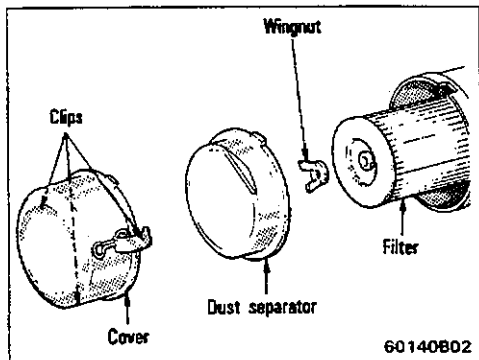
Clean the filter by blowing compressed air from the inside. Do not wash or oil the filter.



#### Washable filter—

- Prepare a suitable container and fill it with water.
- Blow dust out of the filter with compressed air from the inside.
- Submerge the filter in the water and move it up and down ten or more times.
- Empty the container and refill it with clean water.
- Repeat steps c. and d. until water is clear.
- Remove excess water by shaking the filter or blowing it with compressed air. Do not beat or drop the filter.

## Checking and replacing the air cleaner filter (3L engine)



### CHECKING AND REPLACING

1. To inspect the filter, release the clips, and remove the cover and dust separator. Then unscrew the wingnut and take out the filter.

The wingnut can be unscrewed by hand.

Inspect the outer surface of the filter. If it is dirty, it should be replaced. If it is just moderately dusty, it may be cleaned as described in "CLEANING".

2. To install a filter, put it properly in place and tighten the wingnut. Then reinstall the cover with the tabs on the dust separator and cover fitted in the cutout on the case.

### NOTICE:

Do not drive with the air cleaner filter removed, or excessive engine wear could result.

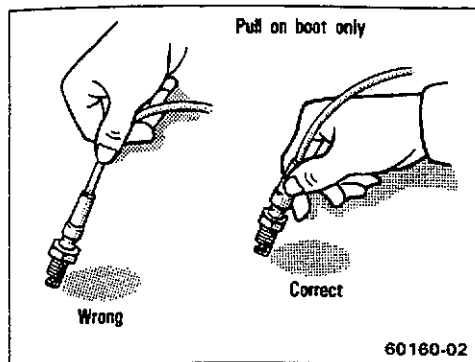
### CLEANING

If the filter is just moderately dusty, clean it as follows.

- Prepare a suitable container and fill it with water.
- Blow dust out of the filter with compressed air from the inside.
- Submerge the filter in the water and move it up and down ten or more times.
- Empty the container and refill it with clean water.
- Repeat steps c. and d. until water is clear.
- Remove excess water by shaking the filter or blowing it with compressed air. Do not beat or drop the filter.



## Replacing spark plugs

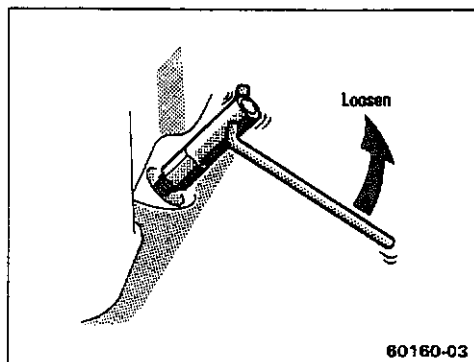


1. Unfasten the spark plug cables by pulling on the boot, not on the cable itself.

a. Note the order of the spark plug cables. If you are not positive that you can reconnect them correctly, mark each cable with a number on a piece of tape before disconnecting it.

b. Unfasten the connector by pulling straight up. Pulling on the cables may break the conductor inside.

**CAUTION:**   
**The boots may be hot, so be careful.**

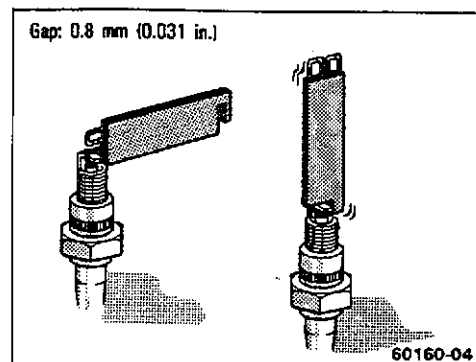


2. Unscrew the old spark plugs with a spark plug wrench and remove them.

**CAUTION:**   
**The spark plugs may be hot, so be careful.**

**NOTICE:**

**Do not allow dirt or anything else to fall through the spark plug holes.**



3. Set the gap on the new plugs to the correct clearance, and install them. Reconnect the spark plug cables in the correct order.

a. Check the gap by passing the feeler gauge between the electrodes on the spark plug. If the gap is correct, you will feel a slight drag. If necessary, bend the outer electrode to obtain the right clearance.

b. Screw in the plugs by hand as far as they will go. If necessary, a spark plug wrench may be used for an extension. If a plug does not screw in smoothly, remove it and try again to ensure the threads on the spark plug correctly engage the threads in the hole. This prevents the threads from stripping in the next step.

c. Tighten the plugs with a spark plug wrench. Do not overtighten.

d. Make sure the cables are installed in the correct order. Fasten the connector by pushing it squarely over the end of the plug.

**NOTICE:**

**When adjusting the gap, do not pry the outer electrode against the center electrode.**

**Spark plug selection**

Always use the spark plugs recommended below or equivalent.

22R engine

NIPPONDENSO  
NGK

W16EXR-U  
BPR5EY

3VZ-E engine

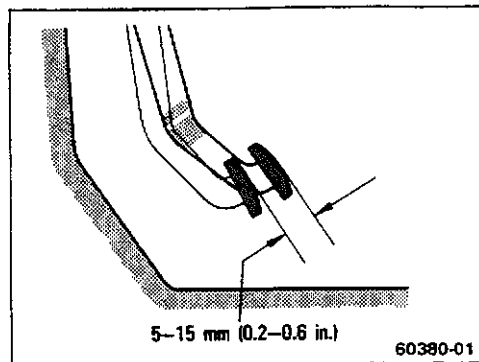
NIPPONDENSO  
NGK

K16R-U  
BKR5EYA

**NOTICE:**

**Use only spark plugs of the type specified above. Using other types will cause engine damage, loss of performance or radio noise.**

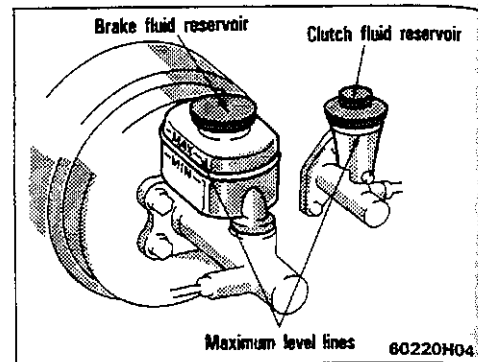
### Checking clutch pedal freeplay



Press down lightly on the clutch pedal and measure the distance it moves freely before the clutch resistance is felt. The freeplay should be within the above limits.

If the freeplay is more or less, have your Toyota dealer inspect the clutch.

### Checking brake and clutch fluid



To check the fluid levels, simply look at the see-through reservoirs. The brake and clutch fluid levels should be within 10 mm (0.4 in.) below each maximum level line.

It is a good habit to check these fluid reservoirs every time you check the engine oil level.

It is normal for the brake fluid level to go down slightly as the brake pads wear. So be sure to keep the reservoirs filled.

If any reservoir needs frequent refilling, it may indicate a serious mechanical problem.

If the level is low, add SAE J1703 or FMVSS No. 116 DOT 3 brake fluid to the brake or clutch reservoir.

Remove and replace the reservoir covers by hand. Fill the brake fluid to the dotted line. This brings the fluid to the correct level when you put the cover back on.

Use only newly opened brake fluid. Once opened, brake fluid absorbs moisture from the air, and excess moisture can cause a dangerous loss of braking. Also, for this reason you should have the brake fluid drained and replaced periodically.

**CAUTION:** .....

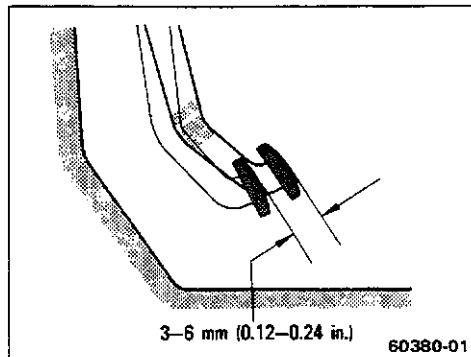
Use caution in filling the reservoirs because brake fluid can harm your eyes and damage painted surfaces. If fluid gets in your eyes, flush your eyes with clean water.

.....

**NOTICE:**

If you spill some of the fluid, be sure to wash it off with water to prevent it from damaging the parts or painting.

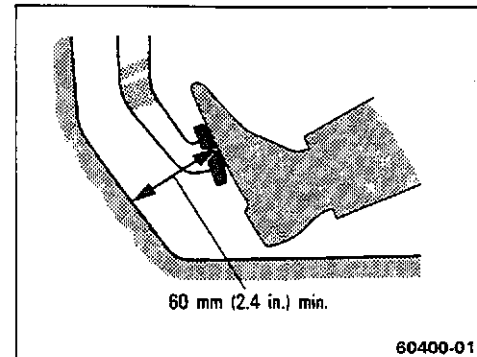
### Checking brake pedal freeplay



With the engine stopped, first reduce the vacuum in the booster by depressing the brake pedal several times. Then lightly and slowly press down on the pedal with your fingers and measure the distance it moves before slight resistance is felt.

If the freeplay is more or less than specification, have your Toyota dealer adjust the brakes.

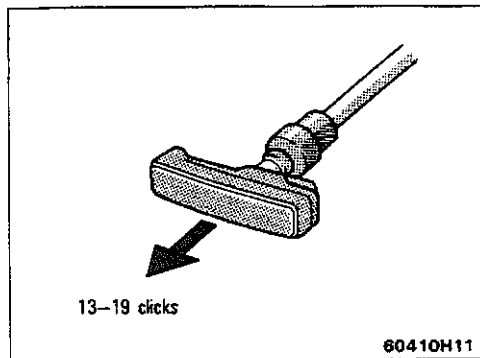
### Checking brake pedal clearance



With the engine running, have someone press the brake pedal several times and then press hard (approximately 490 N [50 kgf, 110 lb.]) on it. The distance from the asphalt sheet to the top surface of the pedal should not be less than specified.

If the clearance is less, have your Toyota dealer adjust the brakes.

## Checking parking brake adjustment



Count the number of clicks as you slowly pull on the parking brake as far as it will go (approximately 196 N [20 kgf, 44 lb.]). The adjustment is correct if you hear the number of clicks specified above.

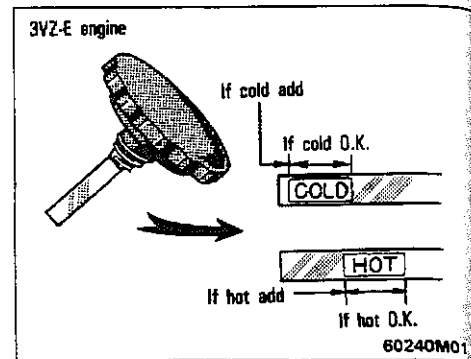
If you count more or less clicks, have the parking brake adjusted by your Toyota dealer.

## Checking the brake booster

Sit in the driver's seat and follow the instructions given below. If your brakes do not operate as described, have them checked at your Toyota dealer.

1. With the engine stopped, depress the brake pedal several times: the travel distance should not change.
2. With the brake fully depressed, start the engine: the pedal should move down a little when the engine starts.
3. Depress the brake, stop the engine, and hold the pedal in for about 30 seconds: the pedal should neither sink nor rise.
4. Restart the engine, run it for about a minute and turn it off. Then firmly depress the brake several times: the pedal travel should decrease with each application.

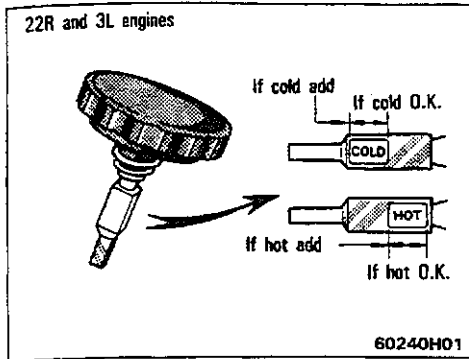
## Checking power steering fluid



Check the fluid level on the dipstick. If necessary, add automatic transmission fluid DEXRON®-II.

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.

- a. Clean all dirt from outside of the reservoir tank.
- b. Remove the filler cap by turning it counter-clockwise and wipe the dipstick clean.



c. Reinstall the filler cap.

d. Remove the filler cap again and look at the fluid level. If the fluid is cold, the level should be in the "COLD" range on the dipstick. 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 to bring the level within the range.

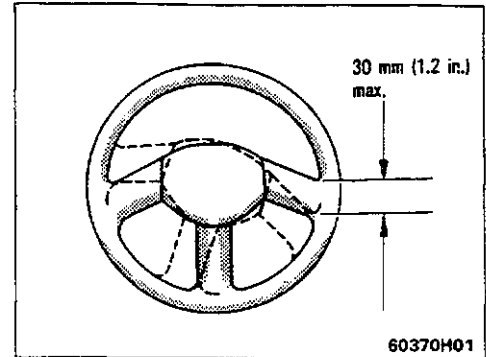
e. After replacing the filler cap, visually check the steering box case, vane pump and hose connections for leaks or damage.

**CAUTION:** **The reservoir tank may be hot so be careful not to burn yourself.**

**NOTICE:**

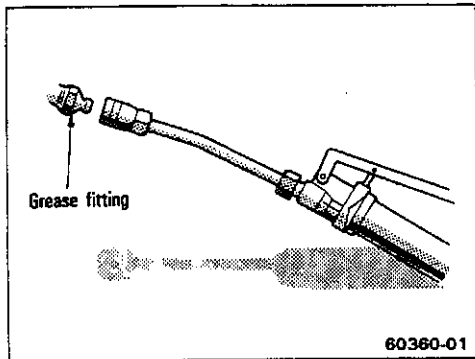
**Avoid overfilling, or the power steering could be damaged.**

### Checking steering wheel freeplay



With the vehicle stopped and the front wheels pointed straight ahead, turn the steering wheel tightly to both sides. If the freeplay is more than specified, have it inspected by your Toyota dealer.

## Lubricating the propeller shafts



Wipe off each grease fitting. With a grease gun, pump chassis grease into each fitting until it begins to flow from the grease outlet or from around the oil seal. Remove the grease gun.

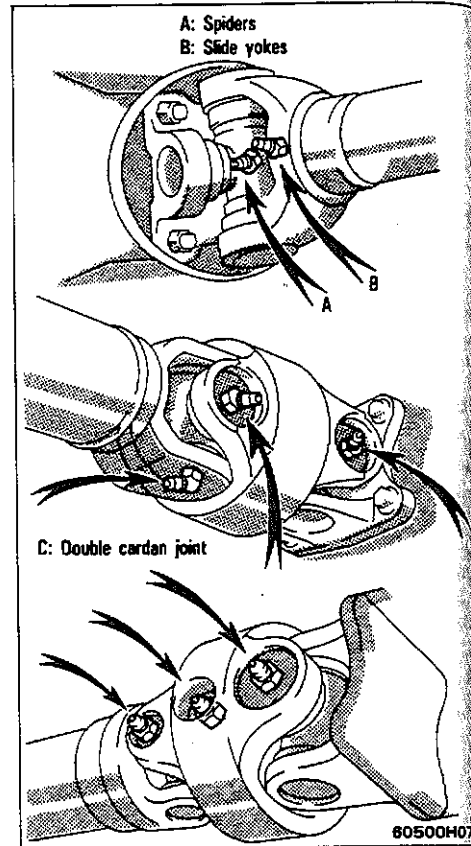
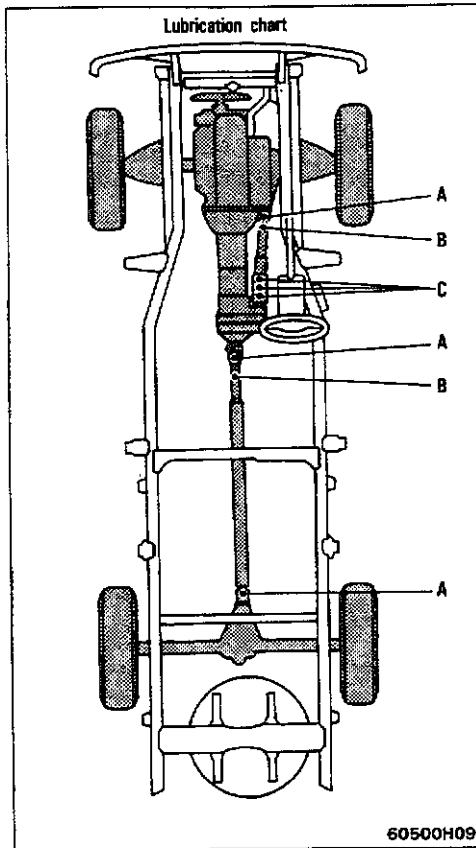
### Recommended grease:

#### Spiders and slide yokes

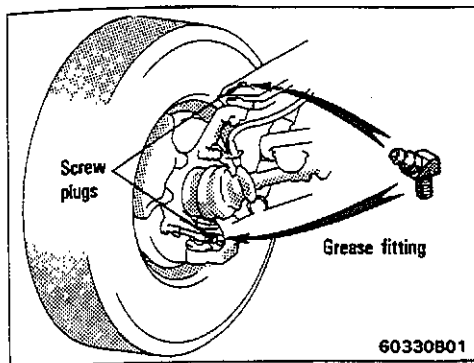
Lithium base chassis grease, NLGI No. 2

#### Double cardan joint

Molybdenum-disulfide lithium base chassis grease, NLGI No. 2

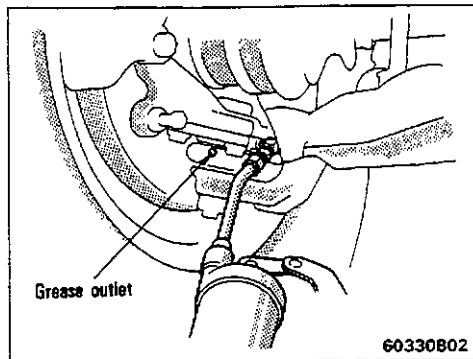


## Lubricating the ball joints



1. Remove the screw plug and temporarily screw on a standard grease fitting.

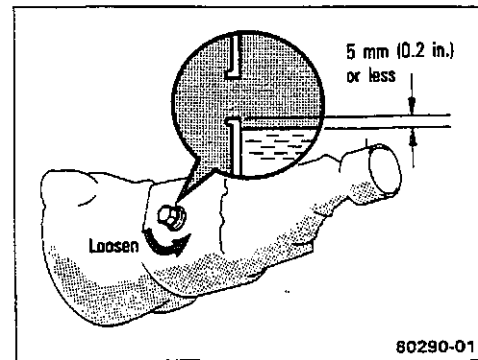
Be sure to save the screw plugs for reinstallation.



2. With a grease gun, pump molybdenum-disulfide lithium base chassis grease (NLGI No. 1 or 2) into the fitting until it begins to flow from the grease outlet in the rubber dust boot. Remove the grease fitting and reinstall the screw plug.

If the dust boots should be broken, have them replaced by your Toyota dealer.

## Checking manual transmission oil



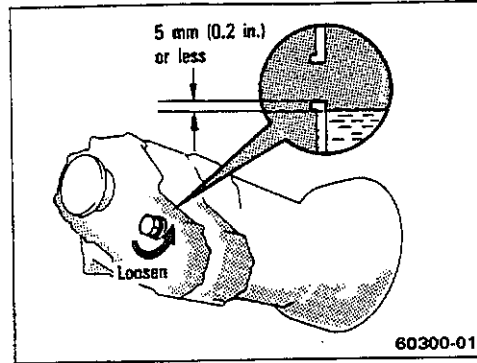
Remove the filler plug and feel inside the hole with your finger. The oil level should be no more than 5 mm (0.2 in.) below the bottom edge of the hole. If the level is O.K., reinstall the plug and tighten it.

a. Make sure the vehicle is level while making this check.

b. After installing the plug, visually check the transmission case for leaks or damage.

**CAUTION:** .....  
Right after driving the oil may be hot, so be careful.  
.....

## Checking transfer oil (vehicles with manual transmission)



If the level is low, add multipurpose gear oil (API GL-4 or GL-5) until it begins to run out of the filler hole. Reinstall the plug securely.

Recommended viscosity: SAE 75W-90

- Fill the lubricant filler with gear oil.
- Put the end of the tube into the filler hole and add oil until it begins to run out.
- Install and retighten the filler plug.

Remove the filler plug and feel inside the hole with your finger. The oil level should be no more than 5 mm (0.2 in.) below the bottom edge of the hole. If the level is O.K., reinstall the plug and tighten it.

- Make sure the vehicle is level while making this check.
- After installing the plug, visually check the transfer case for leaks or damage.

**CAUTION:** .....

Right after driving the oil may be hot, so be careful.

.....

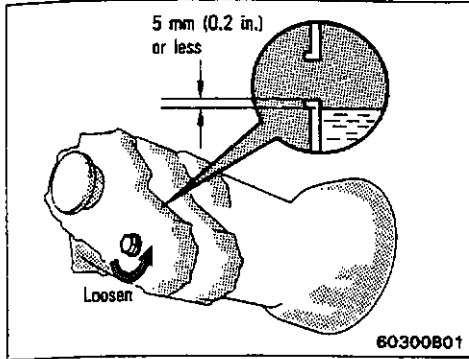
If the level is low, add multipurpose gear oil (API GL-4 or GL-5) until it begins to run out of the filler hole. Reinstall the plug securely.

Recommended viscosity: SAE 75W-90

- Fill the lubricant filler with gear oil.
- Put the end of the tube into the filler hole and add oil until it begins to run out.
- Install and retighten the filler plug.



## Checking transfer fluid (vehicles with automatic transmission)



Remove the filler plug and feel inside the hole with your finger. The fluid level should be no more than 5 mm (0.2 in.) below the bottom edge of the hole. If the level is O.K., reinstall the plug and tighten it.

- Make sure the vehicle is level while making this check.
- After installing the plug, visually check the transfer case for leaks or damage.

**CAUTION:** .....

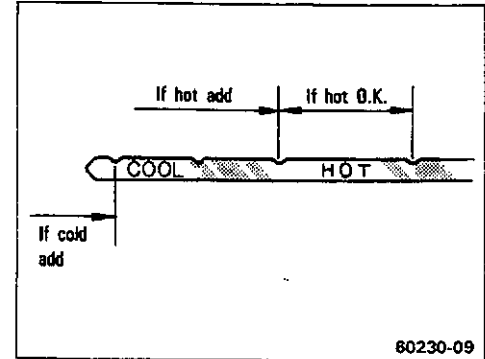
**Right after driving the fluid may be hot, so be careful.**

.....

If the level is low, add automatic transmission fluid DEXRON®-II until it begins to run out of the filler hole. Reinstall the plug securely.

- Fill the lubricant filler with fluid.
- Put the end of the tube into the filler hole and add fluid until it begins to run out.
- Install and retighten the filler plug.

## Checking automatic transmission fluid



1. Check the fluid level when the transmission is hot (normal operating temperature).

If the vehicle has been driven over 16 km or 10 miles (24 km or 15 miles in frigid temperatures) and the fluid temperature is 70°C – 80°C (160°F – 175°F), the transmission is hot.

If the vehicle has just been driven for a long time at high speed or in city traffic in hot weather, or if the vehicle has been pulling a trailer, an accurate fluid level cannot be obtained. Check the level after the fluid has cooled down (about 30 minutes).

You may check the level when the transmission is cold. If the vehicle has not been driven for over five hours and the fluid is about room temperature 20°C–30°C (70°F–85°F), the transmission is cold. However, checking a cold transmission is to be used for your reference only and the transmission must be checked again for correct level at normal operating temperature.

2. With the vehicle level, first set the parking brake and then start the engine. While the engine is idling, depress the brake pedal and shift the selector lever into each position from "P" to "L" and return to "P". With the engine still idling, check the fluid level and condition on the dipstick.

a. Pull out the dipstick and wipe it clean.

b. Reinsert the dipstick—push it in as far as it will go.

c. Pull the dipstick out and look at the fluid level. If the transmission is hot, the fluid level should be in the "HOT" range on the dipstick. Similarly, if it is cold, the level should be in the "COOL" range.

d. While checking the fluid level, also check the condition. If the fluid is black or if it smells burnt, have it changed.

**CAUTION:** .....

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

• Be careful not to touch the hot exhaust manifold.

.....

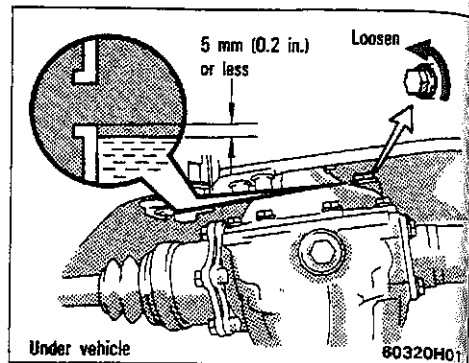
3. If the level is low, add automatic transmission fluid DEXRON®-II.

If the level is at the low side of either range, add automatic transmission fluid DEXRON®-II to bring the level within the range. (Fluid is added through the dipstick tube, using a funnel.)

**NOTICE:**

Avoid overfilling, or the transmission could be damaged.

## Checking front differential oil



Remove the filler plug and feel inside the hole with your finger. The oil level should be no more than 5 mm (0.2 in.) below the bottom edge of the hole. If the level is O.K., reinstall the plug and tighten it.

a. Make sure the vehicle is parked on a level spot.

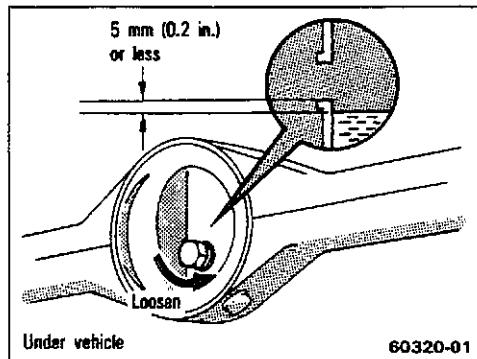
b. After installing the plug, visually check the differential and axle for leaks or damage.

**CAUTION:** .....

Right after driving the oil may be hot, so be careful.

.....

## Checking rear differential oil



If the level is low, add the oil specified below until it begins to run out of the filler hole. Reinstall the plug.

Oil type:

Standard differential

Hypoid gear oil API GL-5

A.D.D.

Toyota "GEAR OIL SUPER" oil or hypoid gear oil API GL-5

Recommended oil viscosity:

Standard differential

Above  $-18^{\circ}\text{C}$  ( $0^{\circ}\text{F}$ )

SAE 90

Below  $-18^{\circ}\text{C}$  ( $0^{\circ}\text{F}$ )

SAE 80W or 80W-90

A.D.D.

SAE 75W-90

- Fill the lubricant filler with gear oil.
- Put the end of the tube into the filler hole and add oil until it begins to run out.
- Install and retighten the filler plug.

Remove the filler plug and feel inside the hole with your finger. The oil level should be no more than 5 mm (0.2 in.) below the bottom edge of the hole. If the level is O.K., reinstall the plug and tighten it.

- Make sure the vehicle is parked on a level spot.
- After installing the plug, visually check the differential and axle for leaks or damage.

**CAUTION:** .....  
Right after driving the oil may be hot, so be careful.  
.....

If the level is low, add the oil specified below until it begins to run out of the filler hole. Reinstall the plug.

Oil type:

Hypoid gear oil for limited-slip differential  
API GL-5

Recommended oil viscosity:

Above  $-18^{\circ}\text{C}$  ( $0^{\circ}\text{F}$ )

SAE 90

Below  $-18^{\circ}\text{C}$  ( $0^{\circ}\text{F}$ )

SAE 80W or 80W-90

- Fill the lubricant filler with gear oil.
- Put the end of the tube into the filler hole and add oil until it begins to run out.
- Install and retighten the filler plug.

## Checking tire pressure

**Keep your tire pressures at the proper level.**

The recommended cold tire pressures and tire sizes are given in Part 8.

You should check the tire pressures every two weeks, or at least once a month. And don't forget the spare!

**Incorrect tire pressure can reduce tire life and make your vehicle less safe to drive.**

Low tire pressure results in excessive wear, poor handling, reduced fuel economy, and the possibility of blowouts from overheated tires. Also, low tire pressure can cause poor sealing of the tire bead. If the tire pressure is excessively low, there is the possibility of wheel deformation and/or tire separation.

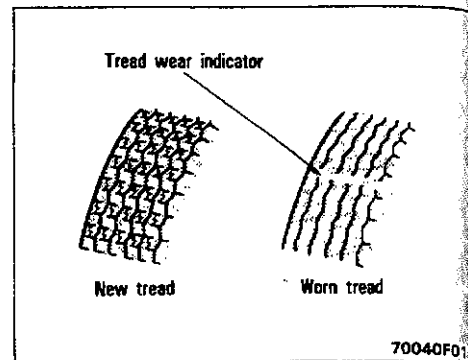
High tire pressure produces a harsh ride, handling problems, excessive wear at the center of the tire tread, and a greater possibility of tire damage from road hazards.

If a tire frequently needs refilling, have it checked by your Toyota dealer.

The following instructions for checking tire pressure should be observed:

- **The pressure should be checked only when the tires are cold.** If your vehicle has been parked for at least 3 hours and has not been driven for more than 1.5 km or 1 mile since, you will get an accurate cold tire pressure reading.
- **Always use a tire pressure gauge.** The appearance of a tire can be misleading. Besides, tire pressures that are even just a few pounds off can degrade handling and ride.
- **Do not bleed or reduce tire pressure after driving.** It is normal for the tire pressure to be higher after driving.
- **Be sure to reinstall the tire inflation valve caps.** Without the valve caps, dirt or moisture could get into the valve core and cause air leakage. If the caps have been lost, have new ones put on as soon as possible.

## Checking and replacing tires



### CHECKING YOUR TIRES

Check the tire tread for the tread wear indicators. If the indicators show, replace the tires.

The tires on your Toyota have built-in tread wear indicators to help you know when the tires need replacement. When the tread depth wears to 1.6 mm (0.06 in.) or less, the indicators will appear. If you can see the indicators in two or more adjacent grooves, the tire should be replaced. The lower the tread, the higher the risk of skidding.

The effectiveness of snow tires is lost if the tread wears down below 4 mm (0.16 in.).

Check the tires regularly for damage such as cuts, splits and cracks. If any damage is found, consult with a technician and have the tire repaired or replaced.

Even if the damage does not appear serious, a qualified technician should examine the damage. Objects which have penetrated the tire may have caused internal damage.

Any tires which are over six years old must be checked by a qualified technician even if damage is not obvious.

Tires deteriorate with age even if they have never or seldom been used.

This also applies to the spare tire and tires stored for future use.

### REPLACING YOUR TIRES

When replacing a tire, use only the same size and construction as originally installed and with the same or greater load capacity.

Using any other size or type of tire may seriously affect handling, ride, speedometer/odometer calibration, ground clearance, and clearance between the body and tires or snow chains.

**CAUTION:** Do not mix radial, bias belted, or bias-ply tires on your vehicle. It can cause dangerous handling characteristics, resulting in loss of control.

Never use second-hand tires on your Toyota.

Using tires whose previous history is unknown is a risk.

Toyota recommends all four tires, or at least both of the front or rear tires be replaced at a time as a set.

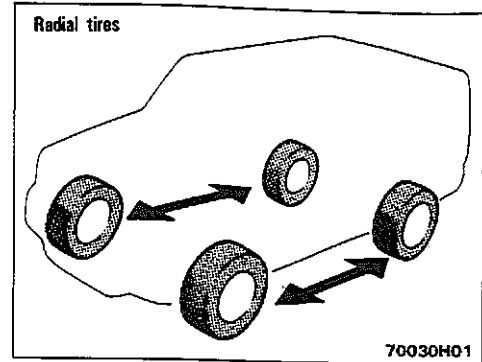
See "If you have a flat tire" in Part 4 for tire change procedure.

When a tire is replaced, the wheel should always be balanced.

An unbalanced wheel may affect vehicle handling and tire life. Wheels can get out of balance with regular use and should therefore be balanced occasionally.

When replacing a tubeless tire, the air valve should also be replaced with a new one.

### Rotating tires



To equalize tire wear and help extend tire life, Toyota recommends that you rotate your tires approximately every 12000 km (7500 miles). However, the most appropriate timing for tire rotation may vary according to your driving habits and road surface conditions.

See "If you have a flat tire" in Part 4 for tire change procedure.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, out-of-balance wheels, or severe braking.



## Replacing wheels

### WHEN TO REPLACE YOUR WHEELS

If you have wheel damage such as bends, cracks or heavy corrosion, the wheel should be replaced.

If you fail to replace damaged wheels, the tire may slip off the wheel or they may cause loss of handling control.

### WHEEL SELECTION

When replacing wheels, care should be taken to ensure that the wheels are replaced by ones with the same load capacity, diameter, rim width, and offset.

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

- After driving your vehicle the first 1600 km (1000 miles), check that the wheel nuts are tight.
- If you have rotated, repaired, or changed your tires, check that the wheel nuts are still tight after driving 1600 km (1000 miles).
- When using tire chains, be careful not to damage the aluminum wheels.
- Use only the Toyota wheel nuts and wrench designed for your aluminum wheels.
- When balancing your wheels, use only Toyota balance weights or equivalent and a plastic or rubber hammer.
- As with any wheel, periodically check your aluminum wheels for damage. If damaged, replace immediately.

## Part 7 DO-IT-YOURSELF MAINTENANCE—

### Chapter 7-3 Electrical component

- Checking battery condition
- Battery recharging precautions
- Checking and replacing fuses
- Replacing the windshield wiper blades
- Replacing the back window wiper blade
- Adding washer fluid
- Replacing light bulbs

#### Checking battery condition— —Precautions

#### CAUTION: .....

#### BATTERY PRECAUTIONS

The battery produces a 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.

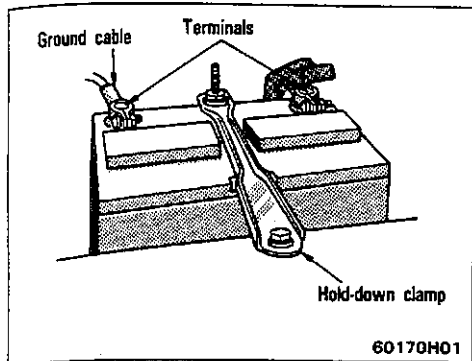
#### EMERGENCY MEASURES

- If electrolyte gets in your eyes, flush your eyes with clean water for at least 15 minutes 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 happen to 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 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 connections are loose, tighten the clamp bolts—but do not overtighten.

c. Tighten the hold-down clamp only enough to keep the battery firmly in place. Overtightening may damage the battery case.

### NOTICE:

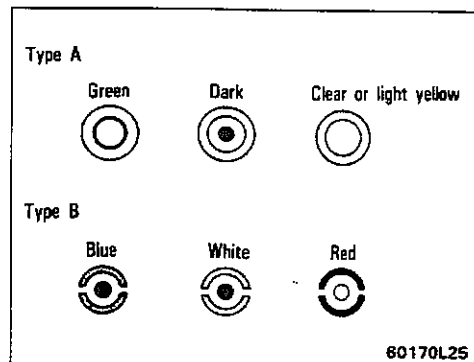
Be sure the engine and all accessories are off before performing maintenance.

When checking the battery, remove the ground cable from the negative terminal ("—" mark) first and reinstall it last.

Be careful not to cause a short circuit with tools.

Take care no solution gets into the battery when washing it.

## —Checking battery fluid



**NON-MAINTENANCE BATTERY** (identified by "MAINTENANCE FREE BATTERY" on its top)

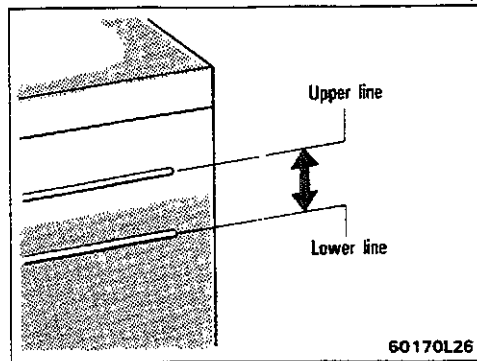
The battery never needs refilling with water.

Check the fluid condition by the hydrometer on the top of the battery.

| Hydrometer 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.                     |

### NOTICE:

Do not refill the battery with water.

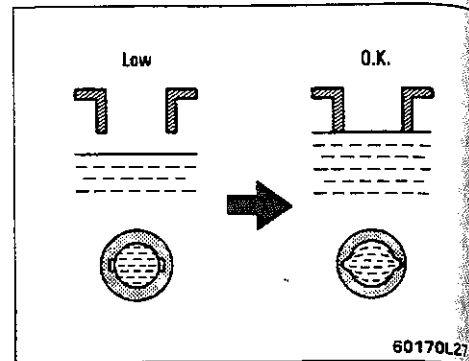


#### Checking with lines—

Check the electrolyte level by the lines on the side of the battery. The level must be between the upper and lower lines.

When checking the electrolyte level, look at all six cells, not just one or two.

If the level is lower than the lower line, add distilled water.



#### When adding distilled water:

1. Remove the vent plugs.
2. Add distilled water to cells needing fluid. If the side of your battery is covered, the water level can be checked by looking down directly above the cell as illustrated above.
3. Retighten the vent plugs securely.

#### NOTICE:

Do not overfill the cells. Excess electrolyte could squirt out of the battery during heavy charging, causing corrosion or damage.

#### MAINTENANCE TYPE BATTERY

##### Checking with hydrometer—

Check the fluid condition by the hydrometer on the top of the battery.

| Hydrometer 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    | Add distilled water                                             |

## Battery recharging precautions

During recharging, the battery is producing hydrogen gas.

Therefore, before recharging:

1. Maintenance type batteries—Remove the vent plugs.
2. If recharging with the battery installed on the vehicle, be sure to disconnect the ground cable.
3. 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.
- Non-maintenance batteries: Only do a slow charge (5A or less). Charging at a quicker rate is dangerous.

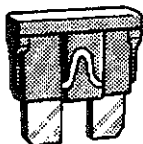
Maintenance type batteries: Be sure to remove the vent plugs before recharging.

### NOTICE: .....

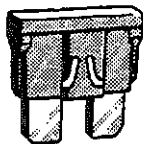
Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

## Checking and replacing fuses

Type A

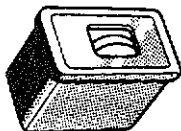


Good



Blown

Type B

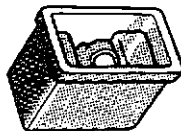


Good

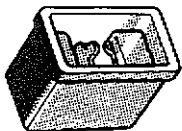


Blown

Type C



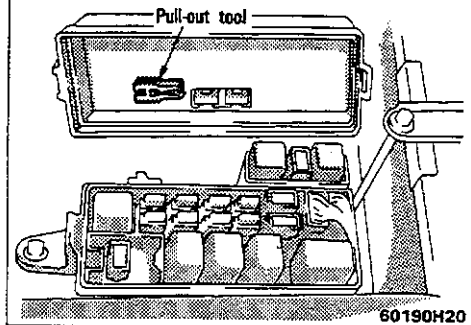
Good



Blown

60190I01

Engine compartment



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" in Chapter 7-1 for locations of the fuses.

Turn the ignition switch and inoperative component off. Pull a suspected fuse straight out and check it.

Determine which fuse may be causing the problem. The lid of the fuse box shows the name of the circuit for each fuse. See Part 8 of this manual for the functions controlled by each circuit.

Type A fuses pull out by using the pull-out tool.

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.

Install only a fuse with an amperage rating designated on the fuse box lid.

If you do not have a spare fuse, in an emergency you can pull out the "CIG", "RADIO", "DOME" or "A/C" fuse, which may be dispensable for normal driving, and use it if its amperage rating is the same.

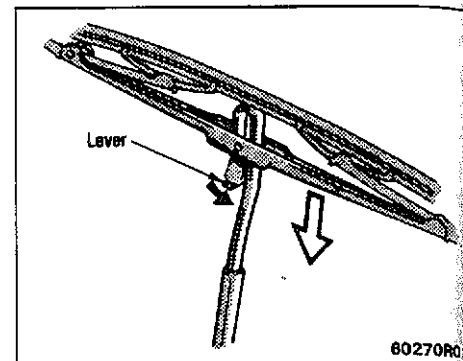
If you cannot use one of the same amperage, use one that is lower, but as close as possible to, the rating. If the amperage is lower than that specified, the fuse might blow out again but this does not indicate anything wrong. Be sure to get a correct fuse as soon as possible and return the substitute 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.

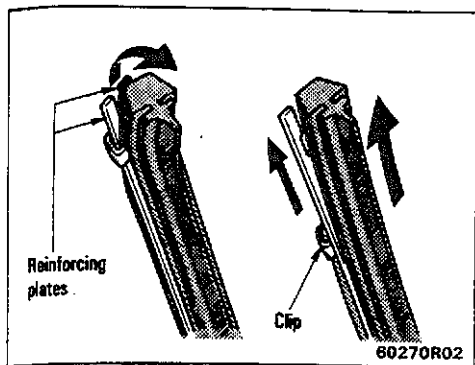
**CAUTION:** **Never use a fuse with a higher amperage rating or any other object in place of a fuse. This may cause extensive damage and possibly a fire.**

## Replacing the windshield wiper blades



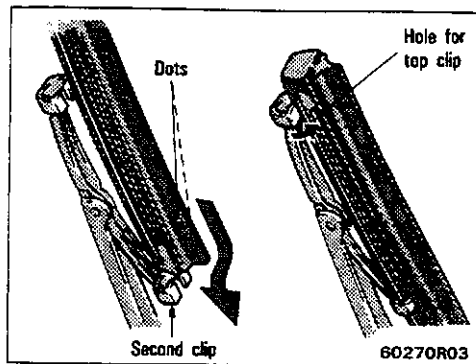
When the wipers no longer clean adequately, the wiper blades may be worn or cracked, requiring replacement.

a. To remove the wiper blade from the arm, pull the blade toward you while pushing the lever.



b. Pull up the top end of the rubber blade to unclip the blade and expose the reinforcing plates.

c. Squeeze the reinforcing plates together and pull them out of the clip. Then pull the blade out together with the plates.



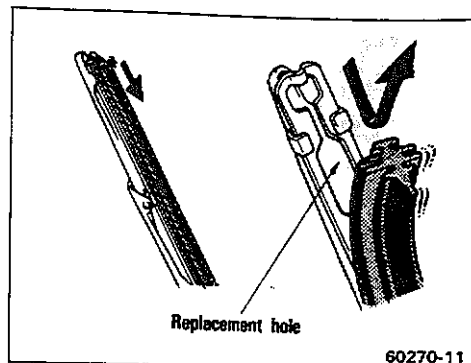
d. To install a new rubber blade, insert the end marked by the small dots into the second clip from the top of the blade frame and slide the blade forward through the other clips.

e. Once all of the blade is inserted through the clips, hook the top clip into the hole on each side at the top of the rubber blade.

**NOTICE:**

Be careful not to scratch the glass surface with the wiper frame.

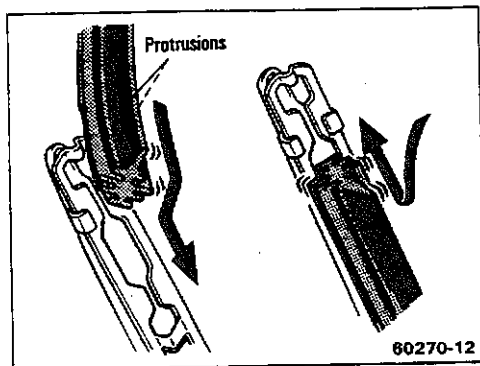
**Replacing the back window wiper blade**



When the wiper no longer cleans adequately, the wiper blade may be worn or cracked requiring replacement.

a. Pull the top end of the rubber inward until the rubber blade is free of the end slot, and you can see the replacement hole.

b. Pull the rubber blade out the replacement hole.



c. To install a new rubber, insert the end with small protrusions into the replacement hole, and work the rubber along the slot in the blade frame.

d. Once all of the rubber is in the frame slot, allow it to expand and fill in the end.

**NOTICE:**

Be careful not to scratch the glass surface with the wiper frame.

### 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.

### 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:**

Halogen bulbs have pressurized gas inside and require special handling. They can burst or scatter 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:**

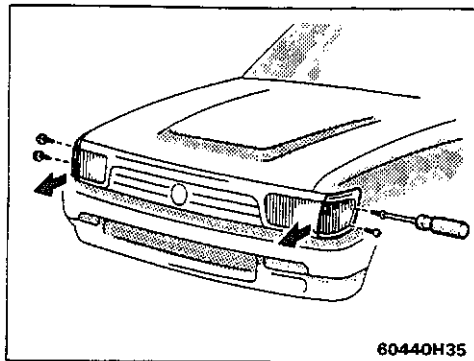
Only use a bulb of the listed type.

| Light Bulbs              | W     | Type |
|--------------------------|-------|------|
| Headlights               | 60/55 | A    |
| Parking lights           | 5     | C    |
| Front turn signal lights | 21    | B    |
| Side turn signal lights  | 5     | C    |
| Rear turn signal lights  | 21    | B    |
| Stop and tail lights     | 21/5  | B    |
| Back-up lights           | 21    | B    |
| High mounted stoplight   | 5     | C    |
| License plate lights     | 5     | C    |
| Interior light           | 10    | D    |

| Light Bulbs               | W   | Type |
|---------------------------|-----|------|
| Personal lights           | 5   | D    |
| Glovebox light            | 1.4 | C    |
| Luggage compartment light | 10  | D    |
| Door courtesy lights      | 3   | D    |

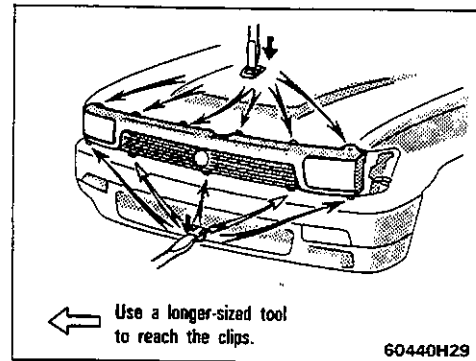
- A: H4 halogen bulbs
- B: Single end bulbs
- C: Wedge base bulbs
- D: Double end bulbs

## — Headlights



60440H35

1. Loosen the parking light unit retaining screws, and remove the units unplugging the connectors.

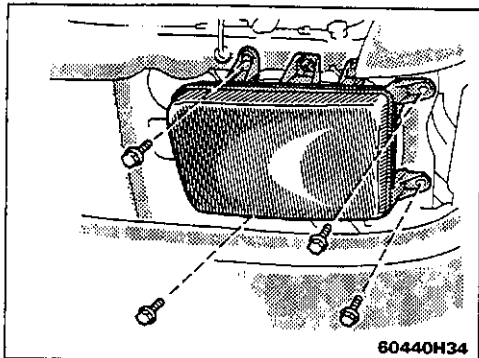


← Use a longer-sized tool to reach the clips.

60440H29

2. Open the hood. Release the clips and remove the radiator grille.

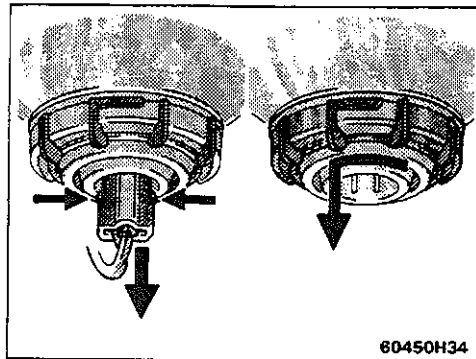
The clips can be released with a flat-blade screwdriver as shown.



3. Loosen the screws and take out the beam unit.

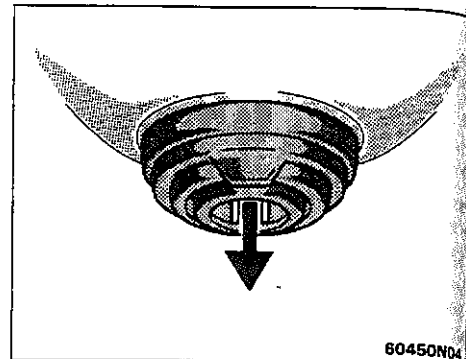
**NOTICE:**

Never attempt to loosen the headlight aim adjusting screws.



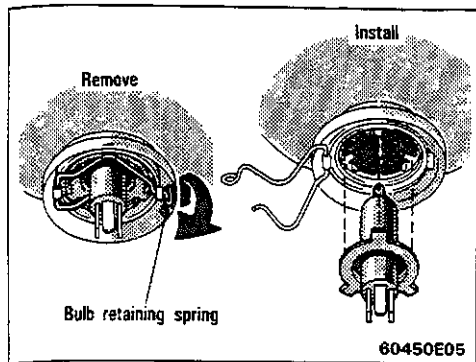
4. Press both sides of the connector and pull the connector out. Turn the plastic cover counterclockwise and remove it.

If the connector is tight, wiggle it.



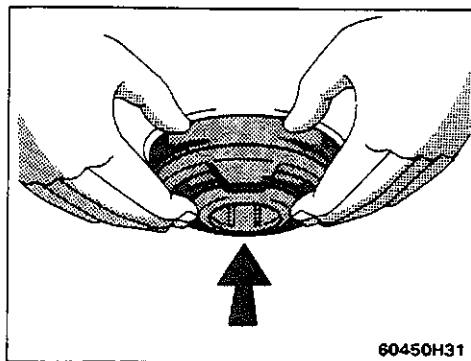
5. Remove the rubber cover.





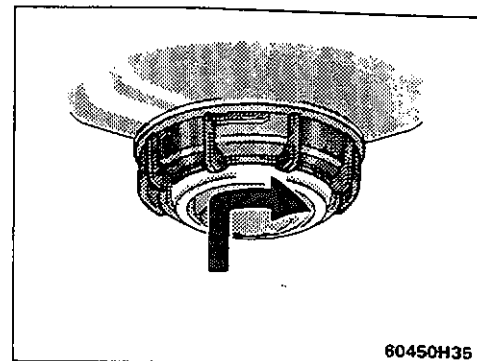
**6. Release the bulb retaining spring and remove the bulb. Install a new bulb and the bulb retaining spring.**

To install a bulb, align the tabs of the bulb with the cutouts of the mounting hole.



**7. Install the rubber cover and snuggle on the boss.**

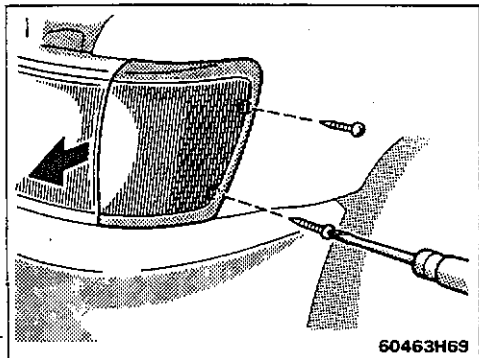
Make sure the rubber cover fits snugly on the connector and the headlight body.



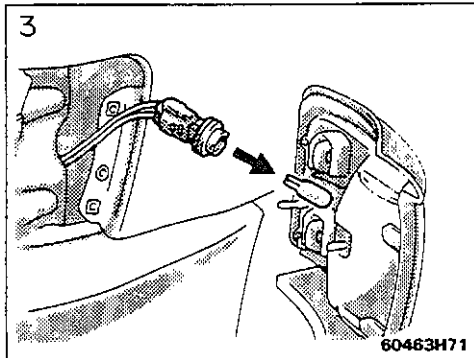
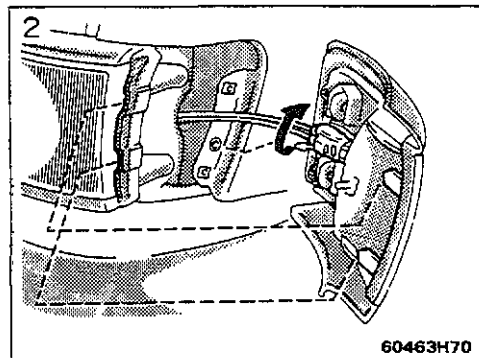
**8. Install the plastic cover. Then install the unit, plugging the connector. Put the unit and tighten the screws. Install the radiator grille and parking and side turn signal light units.**

When aiming adjustment is necessary, contact your Toyota dealer.

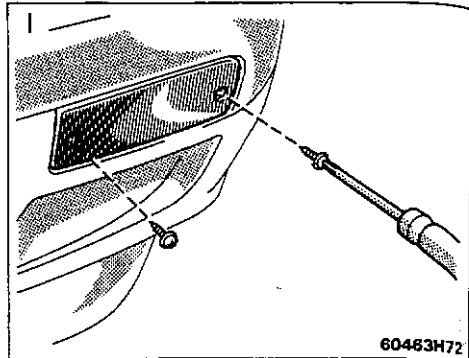
## —Parking lights



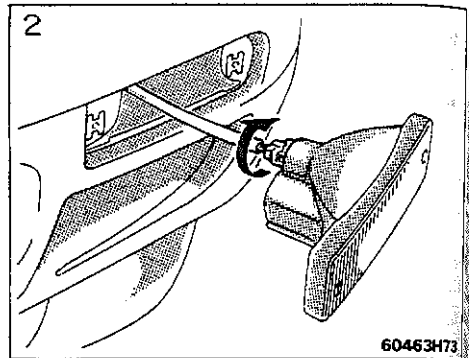
Use a phillips-head screwdriver



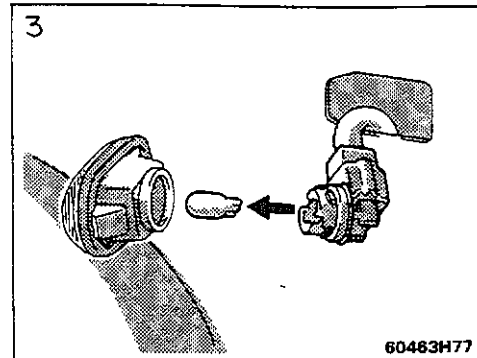
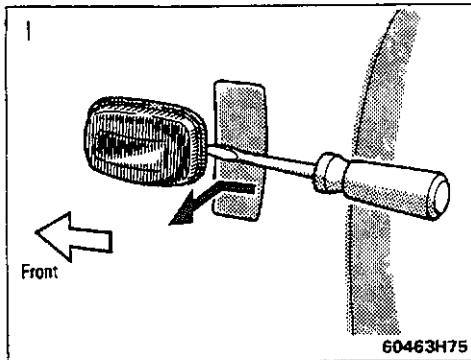
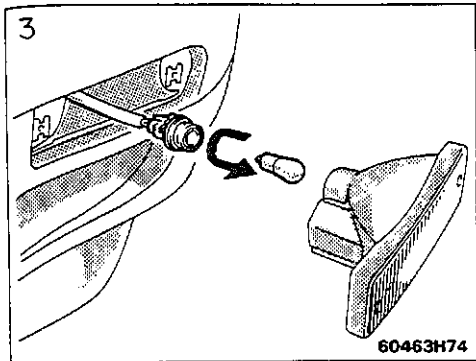
## —Front turn signal lights



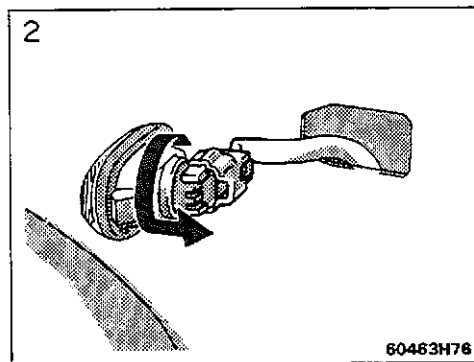
Use a Phillips-head screwdriver.



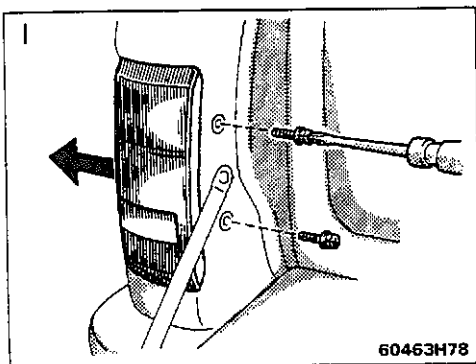
—Side turn signal lights



Use a flat-bladed screwdriver. To protect the paint, place several sheets of paper over the paintwork.

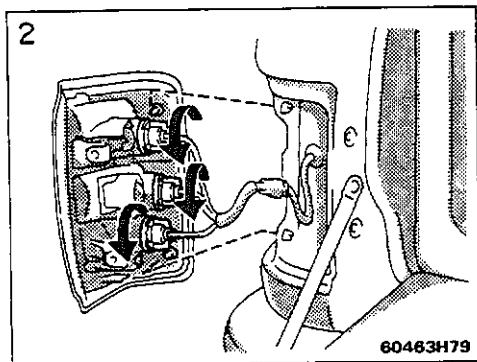


— Rear turn signal,  
stop and tail and back-up lights

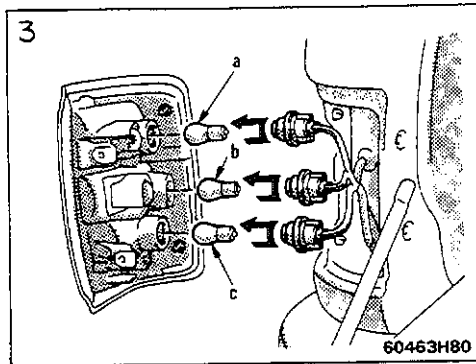


60463H78

Use a Phillips-head screwdriver.



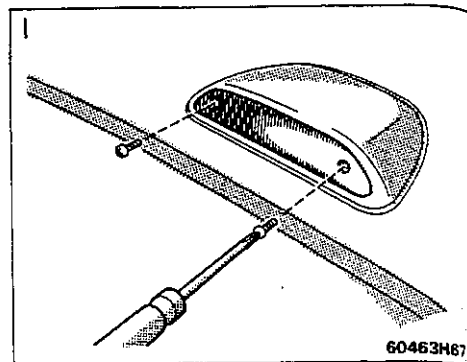
60463H79



60463H80

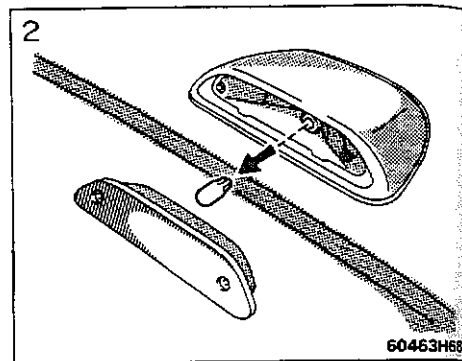
a: Rear turn signal light  
b: Stop and tail light  
c: Back-up light

— High mounted stoplight



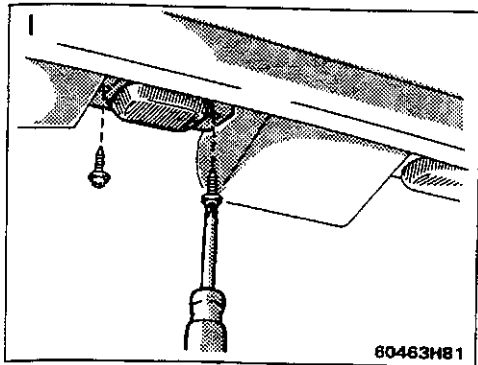
60463H87

Use a Phillips-head screwdriver.

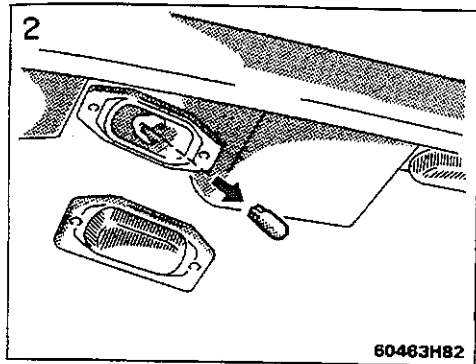


60463H88

## -License plate lights



Use a Phillips-head screwdriver.



## Part 8 SPECIFICATIONS

- Dimensions
- Engine
- Fuel
- Service specifications
- Tires
- Fuses

### Dimensions

|                |       |                      |
|----------------|-------|----------------------|
| Overall length | mm    | 4490                 |
|                | (in.) | (176.8)              |
| Overall width  | mm    | 1690* <sup>1</sup>   |
|                | (in.) | (66.5)* <sup>1</sup> |
|                |       | 1700* <sup>2</sup>   |
|                |       | (66.9)* <sup>2</sup> |
| Overall height | mm    | 1790* <sup>3</sup>   |
|                | (in.) | (70.5)* <sup>3</sup> |
|                |       | 1755                 |
|                |       | (69.1)               |
| Wheelbase      | mm    | 1775* <sup>3</sup>   |
|                | (in.) | (69.9)* <sup>3</sup> |
|                |       | 2625                 |
| Front tread    | mm    | (103.3)              |
|                | (in.) | 1430                 |
| Rear tread     | mm    | (56.3)               |
|                | (in.) | 1475* <sup>3</sup>   |
|                |       | (58.1)* <sup>3</sup> |
|                |       | 1425                 |
| Rear tread     | mm    | (56.1)               |
|                | (in.) | 1470* <sup>3</sup>   |
|                |       | (57.9)* <sup>3</sup> |

\*<sup>1</sup>: Without arch moulding

\*<sup>2</sup>: With small arch moulding

\*<sup>3</sup>: With 265/75R15 112S tires

### Engine

Model:

22R, 3VZ-E and 3L

Type:

22R engine

4 cylinder in line, 4 cycle, gasoline

3VZ-E engine

6 cylinder V type, 4 cycle, gasoline

3L engine

4 cylinder in line, 4 cycle, diesel

Bore and stroke, mm (in.):

22R engine 92.0x 89.0 (3.62 x 3.50)

3VZ-E engine 87.5x 82.0 (3.44 x 3.23)

3L engine 96.0x 96.0 (3.78 x 3.78)

Displacement, cm<sup>3</sup> (cu. in.):

22R engine 2367 (144.4)

3VZ-E engine 2959 (180.5)

3L engine 2779 (169.6)

## Fuel

### Fuel type:

Gasoline engine—

Unleaded gasoline, Research Octane Number 91 or higher

Diesel engine—

Diesel fuel, cetane number 50 (cetane index 45) or higher

### Fuel tank capacity, L (gal., Imp. gal.):

Vehicles with 205R16 tires

65 (17.2, 14.3)

Vehicles with 265/75R15 112S tires

71 (18.8, 15.6)

## Service specifications

### ENGINE

Valve clearance, mm (in.):

22R engine (engine hot)

Intake 0.20 (0.008)

Exhaust 0.30 (0.012)

3VZ-E engine (engine cold)

Intake 0.18–0.28 (0.007–0.011)

Exhaust 0.22–0.32 (0.009–0.013)

3L engine (engine cold)

Intake 0.20–0.30 (0.008–0.012)

Exhaust 0.40–0.50 (0.016–0.019)

Spark plug type:

22R engine

NIPPONDENSO W16EXR-U

NGK BPR5EY

3VZ-E engine

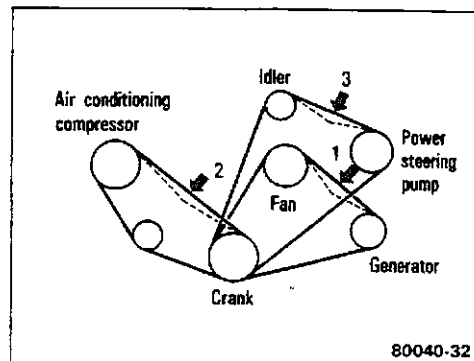
NIPPONDENSO K16R-U

NGK BKR5EYA

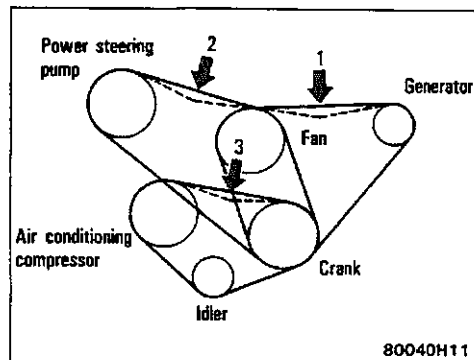
Spark plug gap, mm (in.): 0.8 (0.031)

Drive belt deflection with 98 N (10 kgf, 22 lb.) thumb pressure (used belt), mm (in.):

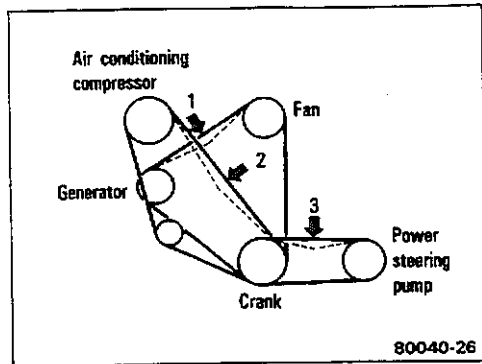
### 22R engine



### 3VZ-E engine



### 3L engine



#### 22R engine

1. 7-10 (0.28-0.39)
2. 9.5-13 (0.37-0.51)
3. 7-10 (0.28-0.39)

#### 3VZ-E engine

1. 14-16 (0.55-0.63)
2. 9-12 (0.35-0.47)
3. 9-12 (0.35-0.47)

#### 3L engine

1. 10-14 (0.39-0.55)
2. 17-21 (0.67-0.82)
3. 9-12 (0.35-0.47)

## ENGINE LUBRICATION

Oil capacity (drain and refill), L (qt., Imp. qt.):

### Gasoline engine

#### 22R engine

- With filter 4.3 (4.5, 3.8)
- Without filter 3.8 (4.0, 3.3)

#### 3VZ-E engine

- With filter 4.5 (4.8, 4.0)
- Without filter 4.2 (4.4, 3.7)

### Diesel engine

- With filter 5.3 (5.6, 4.7)
- Without filter 4.3 (4.5, 3.8)

### Oil grade:

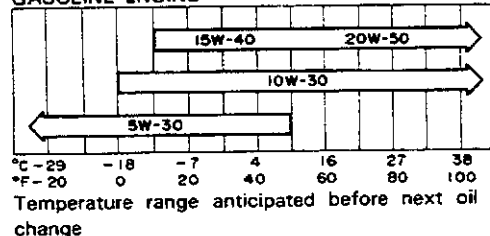
#### Gasoline engine

API SG or SH multigrade engine oil or  
ILSAC multigrade engine oil

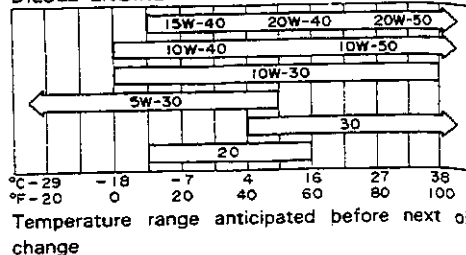
Diesel engine API CC, CD or better

### Recommended oil viscosity (SAE):

#### GASOLINE ENGINE



#### DIESEL ENGINE



80040-08e

## COOLING SYSTEM

Total capacity, L (qt., Imp. qt.):

- 22R engine 8.4 (8.9, 7.4)
- 3VZ-E engine
  - With manual transmission 10.0 (10.6, 8.8)
  - With automatic transmission 9.8 (10.4, 8.6)
- 3L engine 9.0 (9.5, 7.9)

### Coolant type:

With ethylene-glycol antifreeze or anticorrosive (Toyota "RADIATOR CONDITIONER" anticorrosive or equivalent) (Do not use alcohol type antifreeze.)

80040-12E



## BATTERY

Specific gravity reading at 20°C (68°F):

|        |               |
|--------|---------------|
| 55D23R |               |
| 1.260  | Fully charged |
| 1.160  | Half charged  |
| 1.060  | Discharged    |
| 80D26R |               |
| 1.280  | Fully charged |
| 1.180  | Half charged  |
| 1.080  | Discharged    |

Charging rates:

|              |           |
|--------------|-----------|
| Quick charge | 15 A max. |
| Slow charge  | 5 A max.  |

## CLUTCH

Pedal freeplay, mm (in.):

5—15 (0.2—0.6)

Fluid type:

SAE J1703 or FMVSS No. 116 DOT 3

## MANUAL TRANSMISSION

Oil capacity, L (qt., Imp. qt.):

|                    |                |
|--------------------|----------------|
| 3VZ-E engine       | 2.2 (2.3, 1.9) |
| 22R and 3L engines | 3.9 (4.1, 3.4) |

Oil type:

Multipurpose gear oil API GL-4 or GL-5

Recommended oil viscosity:

SAE 75W-90

## AUTOMATIC TRANSMISSION

Fluid capacity (drain and refill),

|                      |  |
|----------------------|--|
| L (qt., Imp. qt.):   |  |
| Up to 4.5 (4.8, 4.0) |  |

Fluid type:

Automatic transmission fluid DEXRON®-II

## TRANSFER

(vehicles with manual transmission)

Oil capacity, L (qt., Imp. qt.):

1.1 (1.2, 1.0)

Oil type:

Multipurpose gear oil API GL-4 or GL-5

Recommended oil viscosity:

SAE 75W-90

## TRANSFER

(vehicles with automatic transmission)

Fluid capacity (drain and refill),

|                    |  |
|--------------------|--|
| L (qt., Imp. qt.): |  |
| 0.8 (0.8, 0.7)     |  |

Fluid type:

Automatic transmission fluid DEXRON®-II

## DIFFERENTIAL

Oil capacity, L (qt., Imp. qt.):

|                        |                |
|------------------------|----------------|
| Front                  |                |
| Standard differential. | 1.6 (1.7, 1.4) |
| A.D.D.                 | 1.9 (2.0, 1.7) |
| Rear                   | 2.2 (2.3, 1.9) |

Oil type:

|                                |  |
|--------------------------------|--|
| Front                          |  |
| Standard differential          |  |
| Hypoid gear oil API GL-5       |  |
| A.D.D.                         |  |
| Toyota "GEAR OIL SUPER" oil or |  |
| Hypoid gear oil API GL-5       |  |

Rear

Hypoid gear oil for limited-slip differential API GL-5

**Recommended oil viscosity:****Front****Standard differential**

Above -18°C (0°F)

SAE 90

Below -18°C (0°F)

SAE 80W or 80W-90

**A.D.D.**

SAE 75W-90

**Rear**

Above -18°C (0°F)

SAE 90

Below -18°C (0°F)

SAE 80 W or 80 W -90

**CHASSIS LUBRICATION****Wheel bearings:**

Lithium base wheel bearing grease, NLGI No. 2

**Ball joints:**

Molybdenum-disulfide lithium base chassis grease, NLGI No. 1 or No. 2

**Front drive shaft thrust bushings:**

Molybdenum-disulfide lithium base chassis grease, NLGI No. 2

**Propeller shafts:****Spiders and slide yokes**

Lithium base chassis grease, NLGI No. 2

**Double cardan joint**

Molybdenum-disulfide lithium base chassis grease, NLGI No. 2

**BRAKES**

Minimum pedal clearance when depressed, mm (in.):

60 (2.4)

Pedal freeplay, mm (in.):

3-6 (0.12-0.24)

Parking brake adjustment:

13-19 clicks

Fluid type:

SAE J1703 or FMVSS No. 116 DOT 3

**STEERING**

Wheel freeplay:

Less than 30 mm (1.2 in.)

Power steering fluid type:

Automatic transmission fluid DEXRON®-II

**Tires****Tire size and pressure:****Conventional tire****Tire size**kPa (kg/cm<sup>2</sup> or bar, psi)**205 R16\*****Loaded****Front**

170 (1.7, 25)

**Rear**

240 (2.4, 35)

**Unloaded****Front**

170 (1.7, 25)

**Rear**

240 (2.4, 35)

**265/75 R15 112S****Loaded****Front**

190 (1.9, 28)

**Rear**

190 (1.9, 28)

**Unloaded****Front**

190 (1.9, 28)

**Rear**

190 (1.9, 28)

\*: Reinforced radial tire

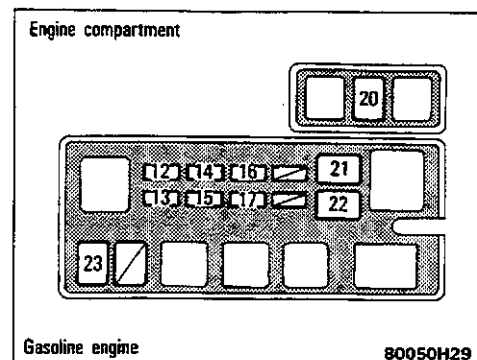
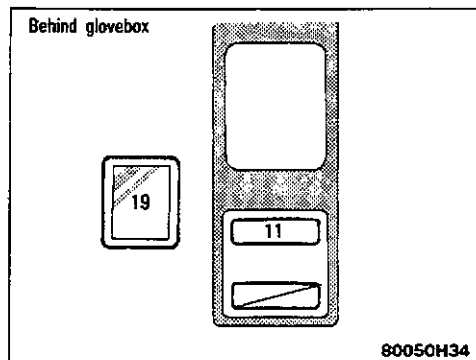
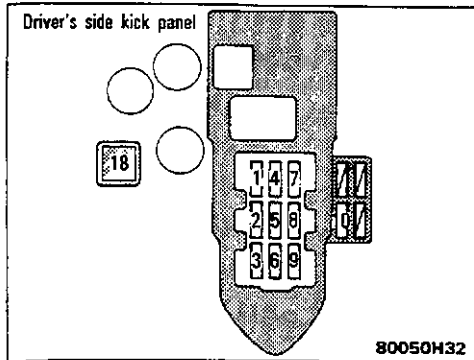
**Snow tire**

Same as conventional tire

**Wheel nut torque, N·m (kgf·m, ft·lb.):**

103 (10.5, 76)

## Fuses



### Fuses (type A)

- 1. ENG 20 A:** Charging system, automatic transmission overdrive system, cruise control system, four-wheel drive control system
- 2. WIPER 20 A:** Windshield wipers and washer, back window wiper and washer
- 3. RADIO 7.5 A:** Radio, cassette tape player, power rear view mirrors, warning lights and buzzers (except discharge)
- 4. IGN 7.5 A:** Discharge warning light, emission control system, automatic choke

- 5. GAUGES 10 A:** Gauges and meters, service reminder indicators and warning buzzers (except discharge), back-up lights, air conditioning system, electronically controlled automatic transmission system, back window defogger, power door lock system, A.D.D. control system

- 6. CIG 15 A:** Cigarette lighter, digital clock display

- 7. TAIL 10 A:** Tail lights, parking lights, license plate lights, instrument panel lights

- 8. STOP 10 A:** Stop lights, cruise control system cancel device, High mounted stop-light

- 9. TURN 10 A:** Turn signal lights

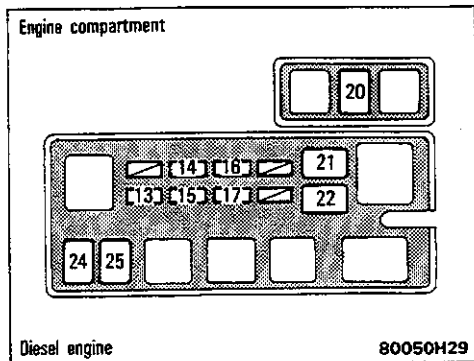
- 10. DEFOG 20 A:** Back window defogger
- 11. A/C 10 A:** Air conditioning cooling system

- 12. EFI 15 A:** Multiport fuel injection system/sequential multiport fuel injection system

- 13. CHARGE 7.5 A (vehicles with 22R engine):** Discharge warning light, automatic choke

- 14. DOME 15 A:** Interior light, personal lights, door courtesy lights, luggage compartment light, ignition switch light, clock, radio, service reminder indicators and warning buzzers (except discharge)

- 15. HAZ-HORN 15 A:** Emergency flashers, horns



**16. HEAD (LH) 10 A:** Left-hand headlight

**17. HEAD (RH) 10 A:** Right-hand headlight

**Fuses (type B)**

**18. 30 A:** Power windows, power door lock system, electric moon roof

**19. 40 A:** Air conditioning heating system

**20. 30 A:** Air conditioning fan system

**Fuses (type C)**

**21. AM2 30 A:** Engine glow system, electronically controlled automatic transmission system, all components in "IGN" and "EFI" fuses

**22. AM1 40 A:** Starting system, multiport fuel injection system/sequential multiport fuel injection system, fuel heater, all components in "ENG", "WIPER", "RADIO", "GAUGES", "CIG", "TURN", "DEFOG", fuses and No. 18 fuse

**23. ALT 100 A (gasoline-powered vehicles):** Starting system, multiport fuel injection system/sequential multiport fuel injection system, all components in "ENG", "WIPER", "RADIO", "GAUGES", "CIG", "TAIL", "STOP", "TURN", "DEFOG", fuses and No. 18 fuse

**24. GLOW 80 A:** Engine glow system

**25. ALT 100 A (diesel-powered vehicles):** Starting system, all components in "ENG", "WIPER", "RADIO", "GAUGES", "CIG", "TAIL", "STOP", "TURN", "DEFOG", fuses and No. 18 fuse

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## Gas station information

### Fuel type:

Gasoline engine—

UNLEADED gasoline, Research Octane Number 91 or higher.

Diesel engine—Diesel fuel, cetane number 50 (cetane index 45) or higher

See page 77 for detailed information.

### Fuel tank capacity:

Vehicles with 205R16 tires                      65 (17.2, 14.3)

Vehicles with 265/75R15 112S tires        71 (18.8, 15.6)

### Recommended engine oil:

Gasoline engine—API SG or SH multigrade engine oil or ILSAC multigrade engine oil

Diesel engine—API CC, CD or better

Use SAE 10W-30 if normal temperatures are above -18°C (0°F).

See page 123 for detailed information.

**Tire information:** See pages 141 through 144.

**Tire pressure:** See page 163.