NISSAN QUEST

1994 OWNER'S MANUAL

The inside pages of this manual contain a minimum of 50% recycled fibers, including 10% post-consumer fibers.

Foreword

Welcome to the growing family of new NISSAN owners. This vehicle is delivered to you with confidence. It was produced using the latest techniques and strict quality control.

This manual was prepared to help you understand the operation and maintenance of your vehicle so that you may enjoy many miles of driving pleasure. Please read through this manual before operating your vehicle.

A separate "Warranty Information Booklet" explains details about the warranties covering your vehicle.

Your NISSAN dealer knows your vehicle best. When you require any service or have any questions, he will be glad to assist you with the extensive resources available to him.

IMPORTANT SAFETY INFORMATION

REMINDERS FOR SAFETY!

Follow these four important driving rules to help ensure a safe and complete trip for you and your passengers

- **NEVER drive under the influence of alcohol or drugs.**
- **ALWAYS observe posted speed limits and never drive too fast for conditions.**
- **ALWAYS use your seat belts and appropriate child restraint systems.**
- **ALWAYS provide information about the proper use of vehicle safety features to all occupants of the vehicle.**

NOTES ON THE INFORMATION CONTAINED IN THIS OWNER'S MANUAL

This owner's manual contains descriptions and operating instructions for all systems, features and optional equipment that might appear in any model of this vehicle built for any destination in North America, including the continental United States, Canada and Hawaii. Therefore, you may very well find information in this manual that does not apply to your vehicle.

MODIFICATION OF YOUR VEHICLE

This vehicle should not be modified. Modification could affect its performance, safety or durability, and may even violate governmental regulations. In addition, damage or performance problems resulting from modifications may not be covered under NISSAN warranties.

All information, specifications and illustrations in this manual are those in effect at the time of printing. NISSAN reserves the right to change specifications or design at any time without notice and without obligation.

Welcome To The World Of NISSAN

NISSAN RESEARCH & DEVELOPMENT, INC.
in Farmington Hills, Michigan

NISSAN MOTOR MANUFACTURING CORPORATION
U.S.A. in Smyrna, Tennessee AFW0001

Your new Nissan is the result of our dedication to produce the finest in safe, reliable and economical transportation. Your vehicle is the product of a successful worldwide company that manufactures cars and trucks in over 20 countries and distributes them in 150 nations.

Nissan vehicles are designed and manufactured by Nissan Motor Co., Ltd. which was founded in Tokyo, Japan in 1933, and Nissan affiliates worldwide, collectively growing to become the fourth largest automaker in the world. In addition to cars and trucks, Nissan also makes textile machinery, forklift trucks, marine engines, boats and other products.

Nissan has made a substantial and growing investment in North America, starting with the opening of Nissan Motor Corporation U.S.A. in 1960, continuing with the production of some cars and trucks at one of the world's most modern manufacturing facilities in Smyrna, Tennessee, vehicle styling at Nissan Design International in San Diego, California, and engineering at Nissan Research and Development in Farmington Hills, Michigan.

Nissan Motor Corporation U.S.A. and its dealers employ about 50,000 Americans.

Nissan is also a substantial contributor to the Canadian economy. Nissan Canada Inc. and its 200 dealers and suppliers employ approximately 4,000 people. These include company employees and the staffs of Nissan dealers all across Canada. In addition, many Canadians work for companies that supply Nissan and Nissan dealers with materials and services ranging from the operation of port facilities and transportation services, to the supply of lubricants, parts and accessories.

Nissan pioneered the use of electronics and computers in automobiles, and has led the industry in improving both performance and fuel efficiency through new engine designs and the use of synthetic materials to reduce vehicle weight. The company has also developed ways to build quality into its vehicles at each stage of the production process, both through extensive use of automation and — most importantly — through an awareness that **people** are the central element in quality control.

From the time the parts arrived from our suppliers until you took delivery of your new Nissan, dozens of checks were made to ensure that only the best job was being done in producing and delivering your vehicle. Nissan also takes great care to ensure that when you take your Nissan to your dealer for maintenance, the service technician will perform his work according to the quality standards that have been established by the factory.

Safety has also been built into your Nissan. As you know, seat belts are an integral part of the safety systems that will help protect you and your passengers in the event of a sudden stop or an accident. We urge you to use the belts every time you drive the vehicle.

The Nissan story of growth and achievement reflects our major goal: to provide you, our customer, with a vehicle that is built with quality and craftsmanship — a product that we can be proud to build and you can be proud to own.

NISSAN CUSTOMER CARE PROGRAM

NISSAN CARES ...

Both NISSAN and your NISSAN dealer are dedicated to serving all your automotive needs. Your satisfaction with your vehicle and your NISSAN dealer are our primary concerns. Your NISSAN dealer is always available to assist you with all your automobile sales and service needs.

However, if there is something that your NISSAN dealer cannot assist you with or you would like to provide NISSAN directly with comments or questions, please contact our (NISSAN's) Consumer Affairs Department using our toll-free number:

For U.S. mainland customers
1-800-NISSAN-1 (1-800-647-7261)
For Hawaii customers
531-0231 (Oahu Number)
For Canada customers
1-800-387-0122

The Consumer Affairs Department will ask for the following information:
— Your name, address, and telephone number
— Vehicle identification number (on dashboard)
— Date of purchase
— Current odometer reading
— Your NISSAN dealer's name
— Your comments or questions

OR

you may write to NISSAN with the information on the left at:

For U.S. mainland customers
Nissan Motor Corporation in U.S.A.
Consumer Affairs Department
P.O. Box 191
Gardena, California 90247
For Hawaii customers
Nissan Motor Corporation in Hawaii
2880 Kilihau St.
Honolulu, Hawaii 96819
For Canada customers
Nissan Canada Inc.
P.O. Box 1709, Station "B"
Mississauga, Ontario L4Y 4H6

We appreciate your interest in NISSAN and thank you for buying a quality NISSAN vehicle.

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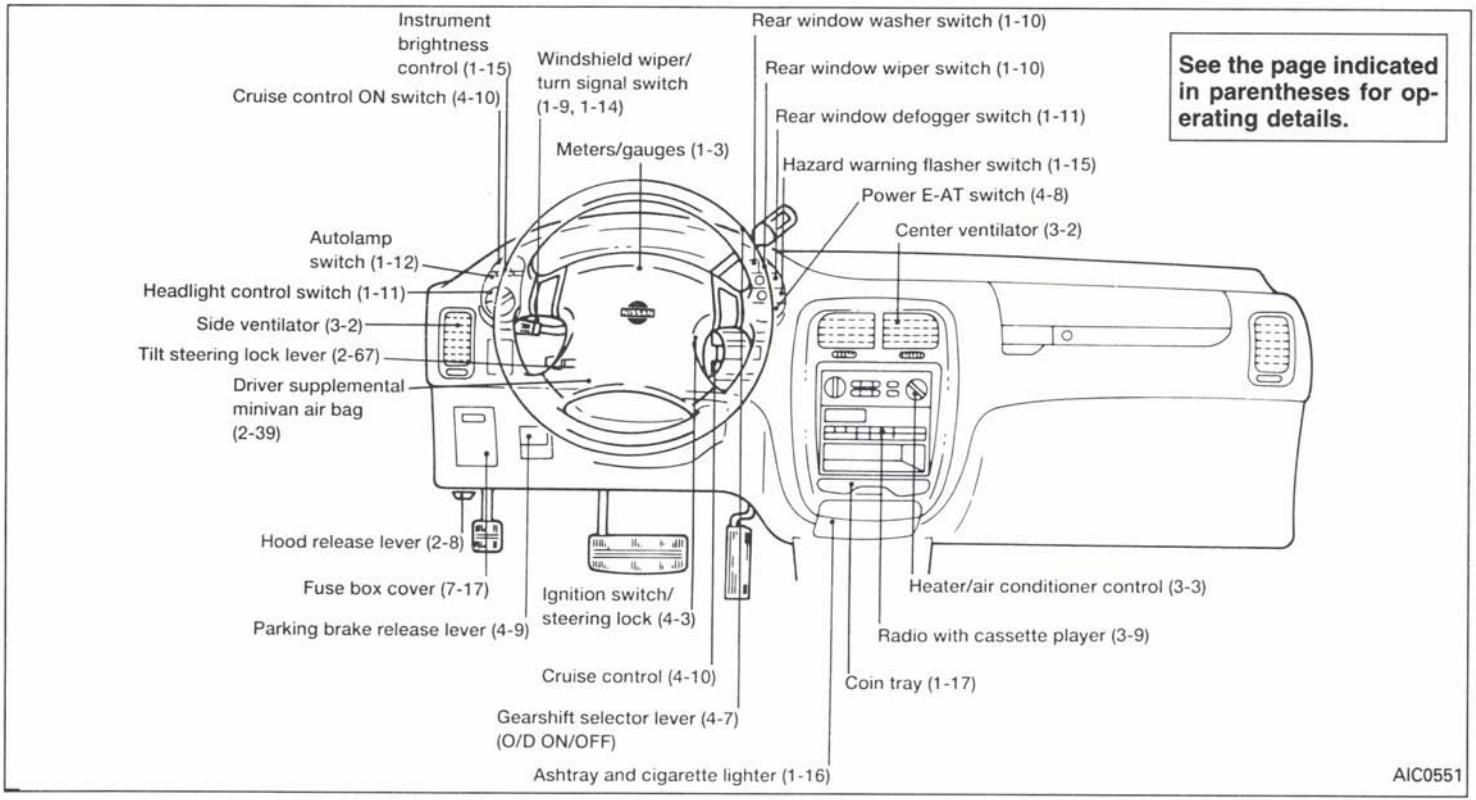
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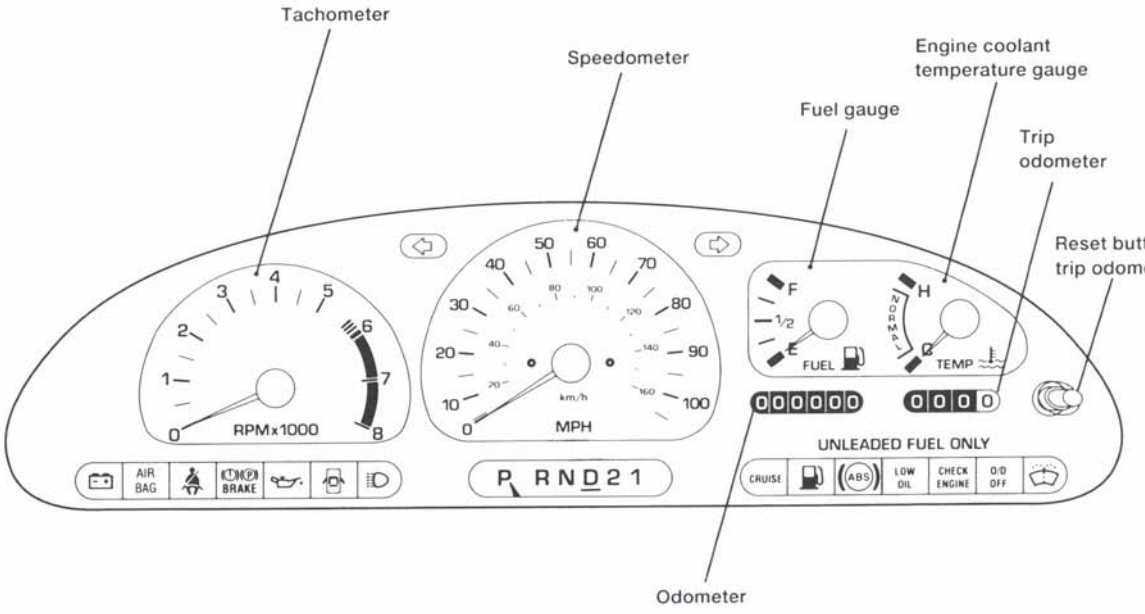
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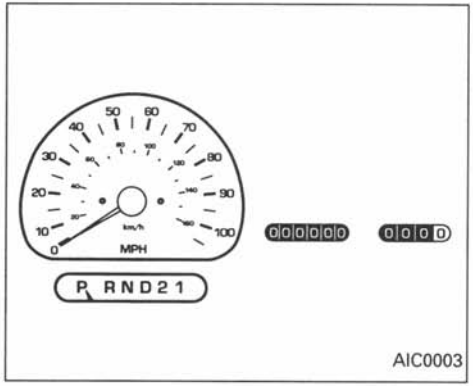


SPEEDOMETER

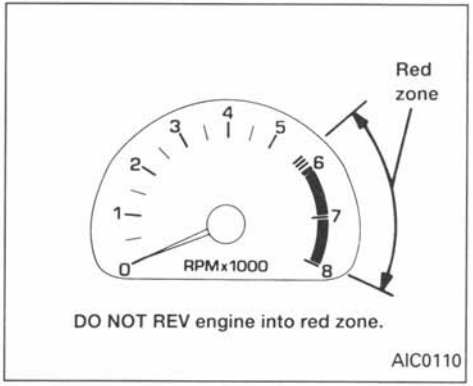
The speedometer indicates vehicle speed.

ODOMETER

The odometer records the total distance the vehicle has been driven.

TRIP ODOMETER

The trip odometer records the distance of individual trips. Before each trip, set the trip odometer to zero by pushing the RESET button.

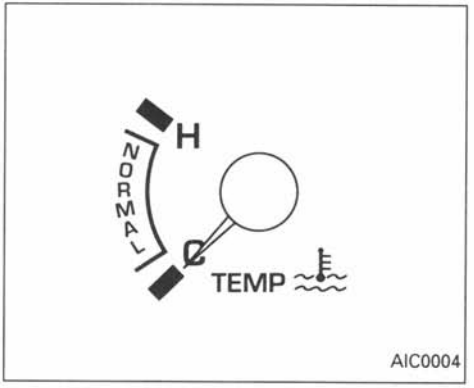


TACHOMETER

The tachometer indicates engine speed in revolutions per minute (rpm).

CAUTION:

When engine speed approaches the red zone, shift to a higher gear. Engine speed in the red zone may cause serious engine damage.

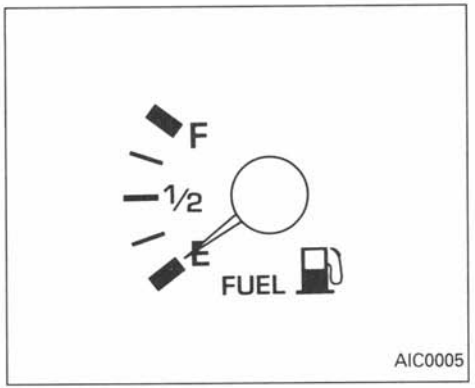


ENGINE COOLANT TEMPERATURE GAUGE

This gauge indicates the coolant temperature. The coolant temperature will vary with the outside air temperature and driving conditions.

CAUTION:

If the gauge indicates over the normal range, stop the vehicle as soon as safely possible. If the engine is overheated, continued operation of the vehicle may seriously damage the engine. See "In case of emergency" section for immediate action required.



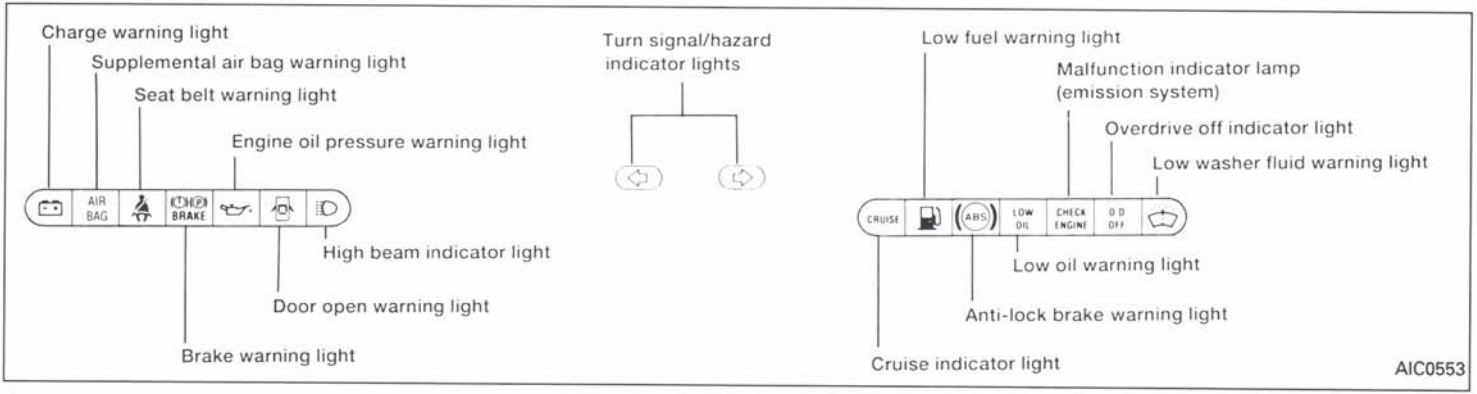
FUEL GAUGE

This gauge indicates the APPROXIMATE fuel level in the tank.

The gauge may move slightly during braking, turning, acceleration, or when going up or down hills.

The gauge needle is designed to remain in approximately the same position, even when the ignition key is turned "OFF".

Refill the fuel tank before the gauge registers at E (empty).



Checking bulbs

Apply the parking brake, fasten seat belts, and turn the ignition key to "ON" without starting the engine. The following lights will come on and stay on until the engine is started.

BRAKE CHECK ENGINE

The following lights come on briefly and then go off:

ABS AIR BAG O/D OFF

If any light fails to come on, it may indicate a burned-out bulb or an open circuit in the electrical system. Have the system repaired promptly.

Engine oil pressure warning light

This light warns of low engine oil **pressure.** If the light flickers or comes on during normal driving, pull off the road in a safe area, stop the engine **immediately** and call a NISSAN dealer or other authorized repair shop. **Running the engine with the oil pressure warning light on could cause serious damage to the engine.**

The oil pressure warning light is not designed to indicate a low oil level. Use the dipstick to check the oil level. See "Engine oil" in the "Do-it-yourself operations" section.

Low oil warning light

The low oil warning light comes on each time the ignition key is turned to the "START" position. The low oil light indicates low engine oil **level.** If the light stays on after the key is released and the engine is running, check the engine oil level. See "Engine oil" in the "Do-it-yourself operations" section and add oil if necessary.

When the vehicle is parked on a steep incline, the low oil light may not provide an accurate indication of oil level. If a steep incline causes the low oil light to come on, the light will stay on until the ignition key is turned to the "OFF" position. It may be necessary to park the vehicle on a level surface and allow the oil to drain back into the pan before restarting or the light may continue to illuminate.

If the oil level is correct when the engine is started, then the level drops while driving, the low oil light will not come on. This is because the check is only done with the key in the "START" position to obtain an accurate reading.

Charge warning light

If the light comes on while the engine is running, it may indicate that there is something wrong with the charging system. Turn the engine off and check the generator belt. If the belt is loose, broken, missing, or if the light remains on, see your NISSAN dealer immediately.

CAUTION:

Do not continue driving if the belt is loose, broken or missing.

Low fuel warning light

This light comes on when the fuel level in the fuel tank is getting low. Refuel as soon as it is convenient, preferably before the fuel gauge reaches "E". There should be a small reserve of fuel in the tank when the fuel gauge needle reaches "E".

Door open warning light

This light comes on when any of the doors is not closed securely while the ignition key is "ON".

Seat belt warning light and chime

The light and chime remind you to fasten your seat belts. If the seat belts are fastened, the light illuminates for about six seconds whenever the ignition key is turned to "ON". If the driver's lap belt and both front shoulder belts are NOT securely fastened, the chime will sound four times and the light will continue to illuminate.

Refer to "Seat belts" in the "Pre-driving checks and adjustments" section for precautions on seat belt usage.

Supplemental air bag warning light

When the ignition key is in the "ON" or "START" position, the supplemental air bag light will illuminate for about 7 seconds and then turn off. This means the Air Bag Supplemental Restraint System is operational.

If any of the following conditions occurs, the supplemental air bag system needs servicing and your vehicle should be taken to your nearest authorized NISSAN dealer as soon as practical.

1. The supplemental air bag light does not come on for 7 seconds and then go off as described above.
2. The supplemental air bag light flashes intermittently or remains on.
3. The supplemental air bag light does not come on at all.

Unless checked and repaired, the Supplemental Restraint System may not function properly. For additional details, see "Supplemental restraint system" in the "Pre-driving checks and adjustments" section.

Low washer fluid warning light

This light comes on when the washer reservoir fluid is at a low level. Add washer fluid as necessary. See the "Do-it-yourself operations" section.

Brake warning light

This light functions for both the parking brake and the foot brake systems.

The light comes on when the parking brake is applied, and also warns of a low brake fluid level. If the light comes on while the engine is running with the parking brake not applied, stop the vehicle and perform the following:

1. Check the brake fluid level. Add brake fluid as necessary. See "Brake fluid" in the "Do-it-yourself operations" section.
2. If the brake fluid level is correct, check the warning system.

WARNING:

- **If you judge it to be safe, drive carefully to the nearest service station for repairs. Otherwise, have your vehicle towed because driving it could be dangerous.**
- **Pressing the brake pedal with the engine stopped and/or low brake fluid level may increase your stopping distance and braking will require greater pedal effort as well as pedal travel.**

Anti-lock brake warning light

If the light comes on while the engine is running, it may indicate there is something wrong with the anti-lock portion of the brake system. Have the system checked by your NISSAN dealer.

If an abnormality occurs in the system, the anti-lock function will cease, but the brakes will continue to operate.

If the light comes on while you are driving, contact your NISSAN dealer for repair.

Overdrive off indicator light

This light comes on during driving when the overdrive switch is pressed to prevent overdrive operation.

The O/D OFF indicator light will come on for two seconds each time the ignition key is turned "ON". This shows that the light is functioning properly.

If the O/D OFF indicator light blinks for approximately 8 seconds after coming on for 2 seconds, have your NISSAN dealer check the transmission and repair it if necessary.

The automatic transmission is equipped with an electronic Fail-Safe mode. This system will allow the vehicle to be driven even in the event of damage to the electrical circuits. If this occurs, the gears will automatically be engaged and locked into 3rd gear.

NOTE: See the "Fail-safe" section in the "Starting and driving" section before visiting your NISSAN dealer.

Turn signal/hazard indicator lights

The appropriate light flashes when the turn signal lever is activated.

Both lights flash when the hazard switch is turned on.

High beam indicator light

This light comes on when the headlight high beam is on and goes out when the low beam is selected.

CRUISE Cruise indicator light

The light comes on while the vehicle speed is controlled by the cruise control system. If the CRUISE indicator blinks, have the system checked by your NISSAN dealer.

Key reminder chime

The chime will sound if the driver side door is opened while the key is left in the ignition switch. Remove the key and take it with you when leaving the vehicle.

Light reminder chime

A chime will sound when the driver side door is opened if the headlight control switch is turned on (ignition switch is turned off).

Turn the headlight control switch to off when you leave the vehicle.

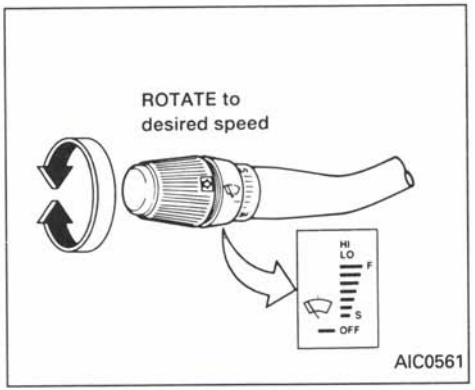
Brake pad wear warning

The disc brake pads have audible wear warnings. When a brake pad requires replacement, it will make a high pitched scraping sound when the vehicle is in motion whether or not the brake pedal is depressed. Have the brakes checked as soon as possible if the warning sound is heard.

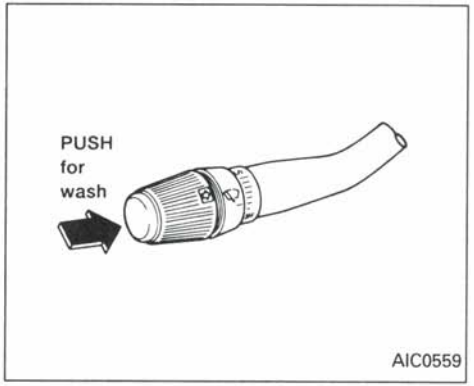
CHECK ENGINE Malfunction indicator lamp (emission system)

If this light comes on while the engine is running, it may indicate a potential emission control problem. Although the vehicle is still driveable, see your NISSAN dealer for service as soon as possible. Continued operation without having the emission control system checked and repaired as necessary could lead to poor driveability, reduced fuel economy, and possible damage to the emission control system which may affect your warranty coverage.

WINDSHIELD WIPER LEVER AND WASHER SWITCH



To operate the wipers intermittently, adjust the knob between the S and F positions. For continuous operation, select LO or HI.



To operate the washer, press on the end of the wiper knob. For more washer fluid, push and hold the end of the wiper knob. The wipers will cycle a few times when the washer is activated. The washer will operate in any of the wiper positions.

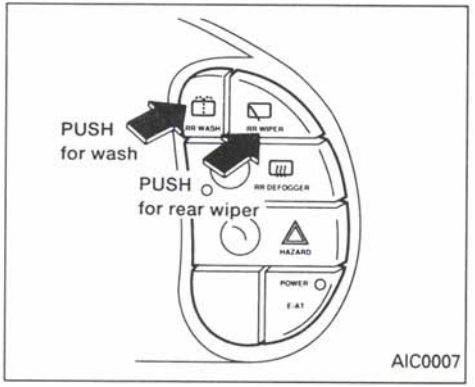
CAUTION:

- **Do not operate the washer continuously for more than 30 seconds.**
- **Do not operate the washer if the reservoir tank is empty.**

WARNING:

In freezing temperatures the washer solution may freeze on the windshield and obscure your vision. Warm the windshield with the defroster before you wash the windshield.

REAR WINDOW WIPER AND WASHER SWITCHES



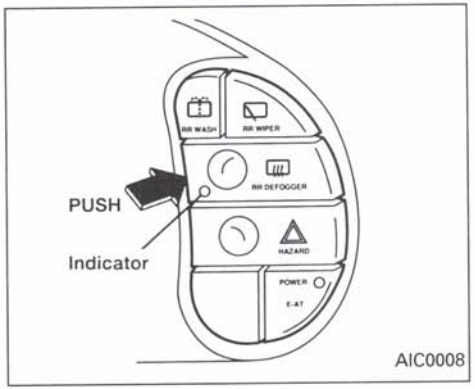
Push and hold the rear washer switch to operate the rear washer. The wiper will cycle continuously until the switch is released.

Push the rear wiper switch to operate the wiper. The wiper will cycle intermittently. Push again to cancel.

CAUTION:

- **Do not operate the washer continuously for more than 30 seconds.**
- **Do not operate the washer if the reservoir tank is empty.**

REAR WINDOW DEFOGGER SWITCH



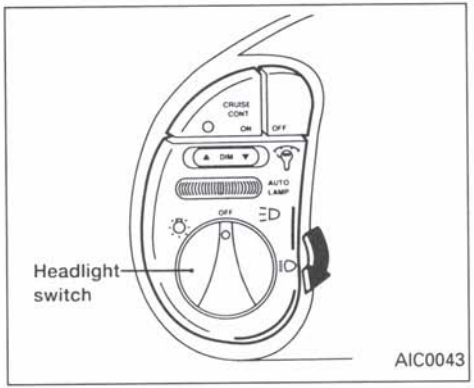
To defog the rear window glass, start the engine and push the switch on. (The indicator light will come on.) Push the switch again to turn the defogger off.

It will automatically turn off in approximately 15 minutes.

CAUTION:

When cleaning the inner side of the window, be careful not to scratch or damage the electrical conductors.

HEADLIGHT CONTROL SWITCH



Lighting

Turn the dial to the " ≡D " position:

The front clearance, side marker, tail, license plate and instrument lights will come on.

Turn the dial to the " ≡D " position:

Headlights will come on and all the previously listed lights will remain on.

To select the high beam, push the turn signal lever away from you. The lever will latch in place. Pull it back to select the low beam.

Daytime light system (for Canada)

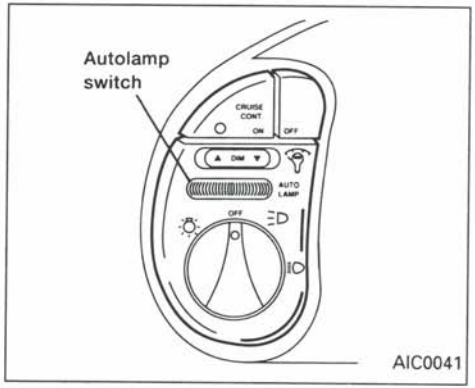
Even if the headlight control dial is off, the headlights' high beams will come on after starting the engine. The headlights will be a little dimmer than they are with the light switch in the " ≡D " position.

If the parking brake is applied before the engine is started, the daytime lights will not be illuminated. The daytime light system will illuminate once the parking brake is released. Thereafter, the daytime lights will not turn off when using the parking brake at stop signals, etc.

WARNING:

When the daytime light system is active, taillights on your vehicle will not be on. It is necessary at dusk to turn on your headlights. Failure to do so could cause an accident injuring yourself and others.

AUTOLAMP SWITCH



The autolamp system allows the headlights to be set so that they turn on and off automatically. The autolamp system can turn on the headlights automatically when it is dark, turn off the headlights when it is light, and keep the headlights on for up to three minutes after you turn the key to "OFF".

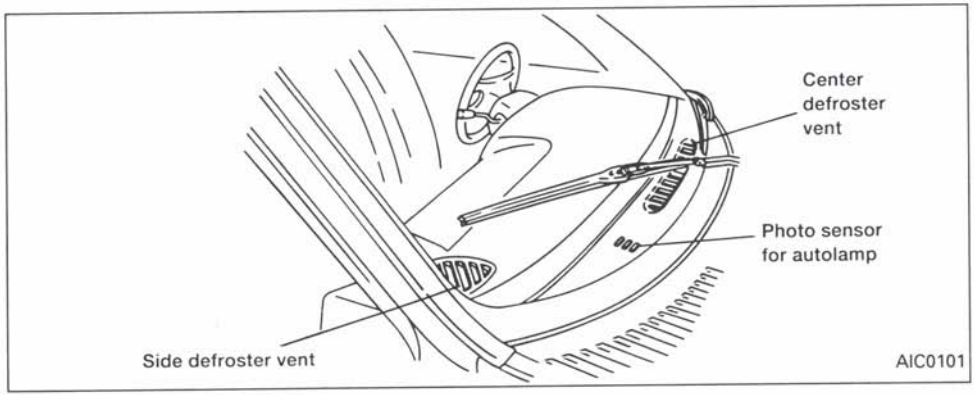
To set the autolamp system:

1. Make sure the headlight switch is in the "OFF" position. If the headlight switch is in the "ON" position, the autolamp system is canceled.
2. Turn the ignition key to "ON".
3. Use the autolamp switch to activate the autolamp feature. It is to the left of the steering wheel.
4. Turn the switch to the right. There is a slight detent in the switch that indicates that it has been turned past the "OFF" position. After the switch has been turned past the detent, the autolamp will automatically turn the lamps on and off.

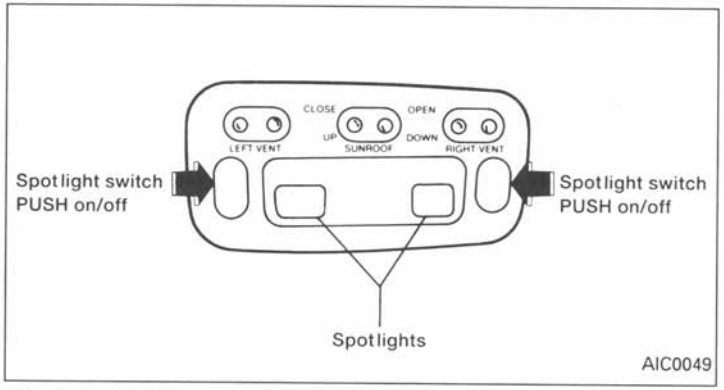
Shut-off delay

The length of time that the autolamps will stay on after the ignition has been turned to "OFF" depends on how far the switch is turned to the right. If the switch is turned all the way to the right, the headlights will stay on about three minutes after the ignition is turned to "OFF". If the switch is turned only a little way to the right, the headlights may stay on for less than a minute.

To turn the autolamp system "OFF", turn the switch all the way to the left until the detent is felt.



Be sure that you do not put anything on top of the photo sensor located in the top right side of the instrument panel. The photo sensor controls the autolamp; if it is covered, the photo sensor reacts as if it is dark out and the headlights will be illuminated.



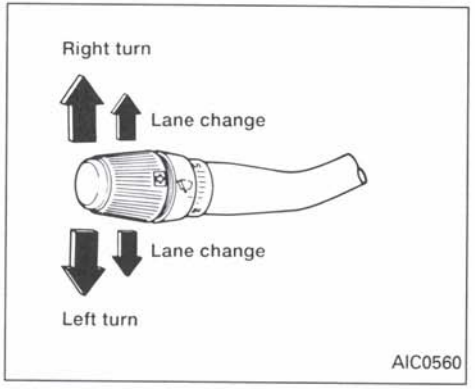
SPOTLIGHTS

To turn on the spotlights, press the switches next to the lights. To turn them off, press the switches again.

Illuminated entry

An illuminated entry system is provided on models with the digital touch entry system. This allows passengers to illuminate the interior of the vehicle before getting in. For more information, refer to "Digital touch entry" in the "Pre-driving checks and adjustments" section.

TURN SIGNAL SWITCH



Turn signal

Move the lever up or down to signal the turning direction. When the turn is completed, the turn signals cancel automatically.

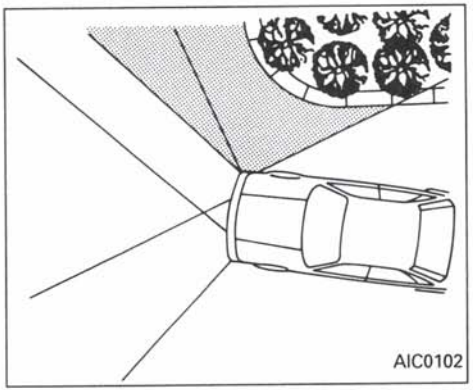
Lane change signal

To indicate a lane change, move the lever up or down to the point where lights begin flashing, but the lever does not latch.

Passing signal

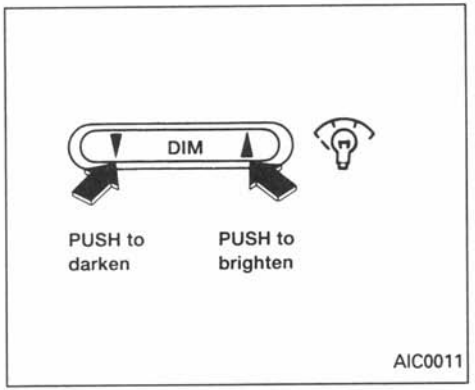
Pulling the lever toward you will turn on the headlight high beam. Release it and the headlight high beam will go off.

CORNERING LIGHT



The cornering light provides additional illumination toward the turning direction. The light on the turning direction side will come on when the turn signal lever is moved to the right or left with the headlights on.

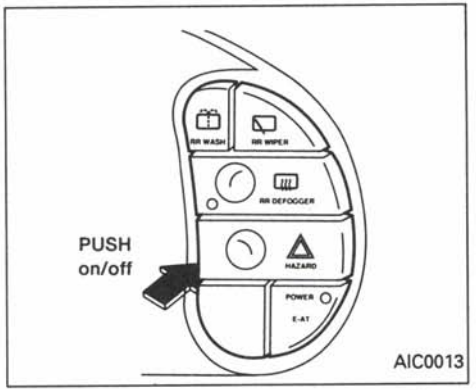
INSTRUMENT BRIGHTNESS CONTROL



The instrument brightness control operates when the light switch is in the " ≡D " or " ≡○ " position, or when the autolamp system is functioning.

Pressing the right side of the switch will brighten the instrument panel lights; pressing the left side of the switch will dim the instrument panel lights.

HAZARD WARNING FLASHER SWITCH



Push the switch on to warn other drivers when you must stop or park under emergency conditions. All turn signal lights will flash. Press the switch again to turn off the hazard warning flashers.

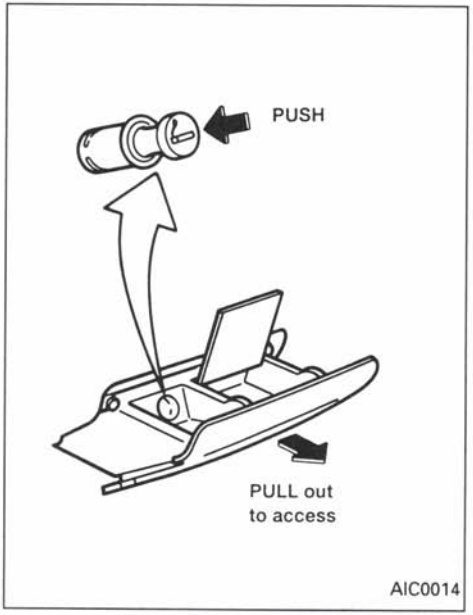
WARNING:

- **When stalled or stopped on the roadway under emergency conditions, move the vehicle well off the road.**
- **Do not use the switch while moving on the highway unless unusual circumstances force you to drive so slowly that your vehicle might be-**

come a hazard to other traffic.

- **Some state laws may prohibit the use of the hazard warning flasher switch while driving.**
- **Turn signals do not work when the switch is operating.**

The flasher can be actuated with the ignition switch either "OFF" or "ON".



The cigarette lighter operates when the ignition switch is in the "ACC" or "ON" position.

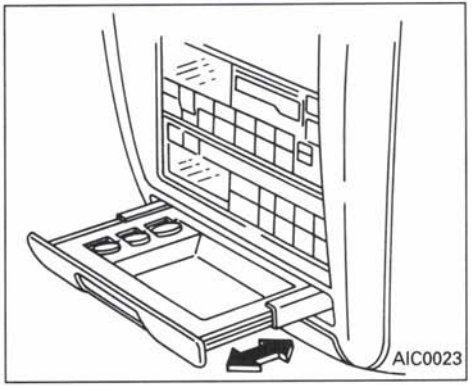
Push the lighter in all the way. When the lighter is heated, it will spring out.

Return the lighter to its original position after use.

CAUTION:

The cigarette lighter should not be used while driving in order that full attention may be given to the driving operation.

COIN TRAY

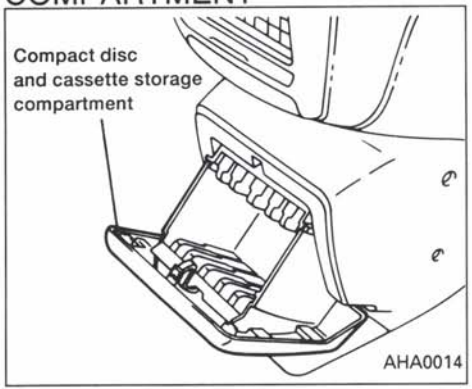


The slide-out coin tray is located in the instrument panel below the radio controls.

CAUTION:

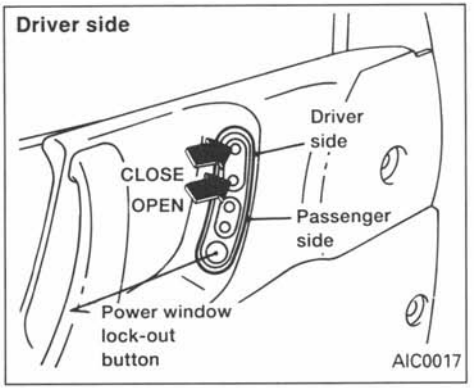
Do not place valuable items in the coin tray.

COMPACT DISC AND AUDIO CASSETTE STORAGE COMPARTMENT



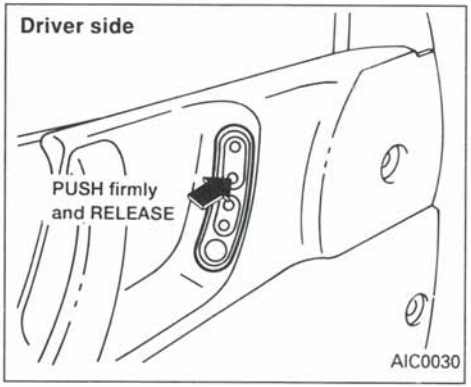
The audio cassette and compact disc storage compartment is located in the instrument panel below the ashtray and lighter. To open the storage compartment, pull out on the handle.

POWER WINDOW



The power window only operates when the ignition key is in the "ON" position.

To open or close the window, press the switch and hold it down. The main switch (on the driver side) will open or close the driver's or the passenger's window.



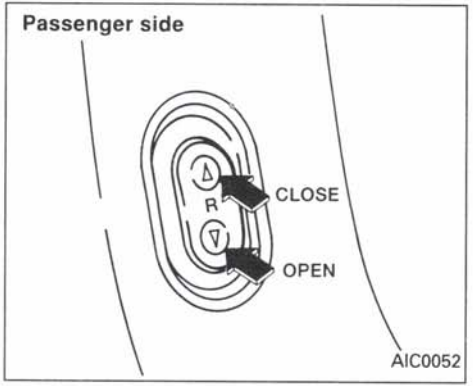
Automatic power window switch

To fully open the driver side window, press down firmly on the switch and release it; you do not need to hold the switch down. The window will automatically open all the way.

The automatic feature can be cancelled before the window is fully open by pressing the "close" side of the switch.

Locking passenger's window

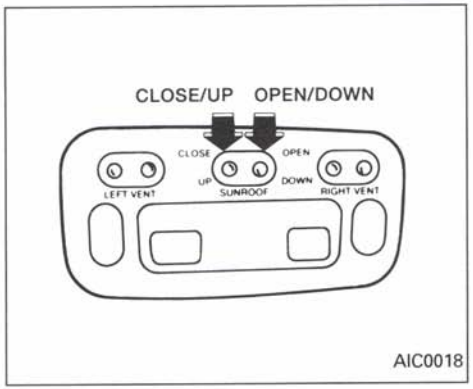
When the "P/W Lock" button is pushed in, the passenger side window cannot be opened or closed. Push the "P/W Lock" button again to cancel this feature.



The passenger side switch will open or close only the passenger window. To open or close the window, hold the switch down.

WARNING:

- **Make sure that all passengers have their hands, etc. inside the vehicle before closing the windows.**
- **Do not leave children unattended inside the vehicle. They could unknowingly activate switches.**



The sunroof will only operate when the ignition key is in the "ON" position.

Sliding the sunroof

To open the roof, push and hold the "OPEN" side of the switch.

To close the roof, push and hold the "CLOSE" side.

The sunroof has a two step closure feature. To close the sunroof half-way, press and hold the "CLOSE" side of the button. To close the sunroof fully release the button then, press the button again and hold it until closed.

Tilting the sunroof

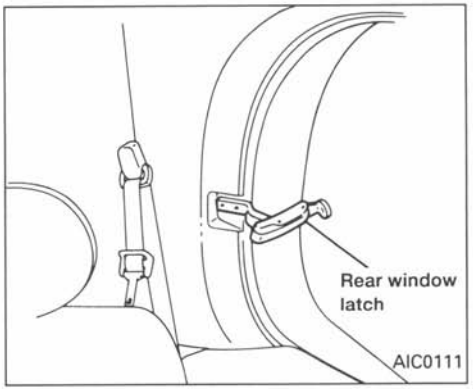
To tilt up, first close the sunroof, then keep pushing the "UP" side of the tilt switch. To close the sunroof, keep pushing the "DOWN" side.

Sun shade

Open and close the sun shade by sliding it forward or backward. The shade will open when the sunroof is opened, but it must be closed manually.

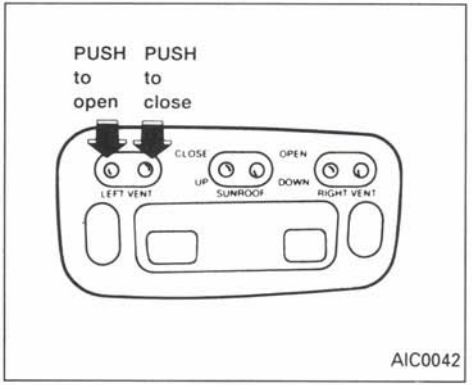
WARNING:

- **Be extremely careful not to have any part of your body in the sunroof opening while it is closing.**
- **Do not stand up or extend any portion of your body out of the opening while driving.**
- **Remove water drops, snow, ice or sand from the sunroof before opening.**
- **Do not place any heavy object on the sunroof or surrounding area.**



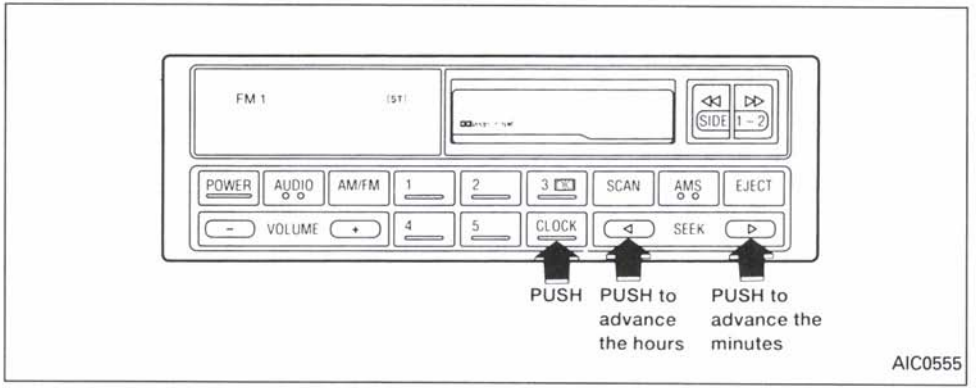
To open the manual rear windows, pull the rear portion of the latch toward you until it releases. To lock the window in the open position, push the latch rearward until you hear it latch. To close the windows, pull the latch toward you and push the rear portion of the latch toward the rear of the vehicle until you feel it latch.

POWER REAR WINDOWS



With the ignition in the "ON" position, use the vent buttons on the power sunroof controls to open and close the power rear windows. To open one of the rear power windows, press the indented side of switch. To close the window, press the raised side of the switch.

CLOCK



The digital clock displays time when the ignition key is in "ACC" or "ON".

If the power supply is disconnected, the clock will not indicate the correct time. Readjust the time.

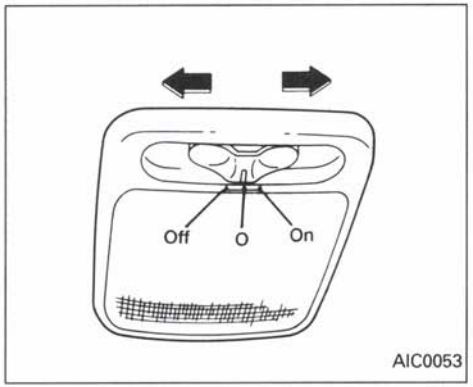
How to view the clock mode

Push the CLOCK button to alternate the radio frequency and the time in the display. In the clock mode, pressing any radio function will automatically display the radio frequency for approximately ten seconds before changing back to the clock mode.

How to set the clock

1. Turn the radio on. (Time is displayed while the radio is off).
2. Push and hold in the CLOCK button; then, press the left side of the SEEK button to advance the hours and the right side of the SEEK button to advance the minutes.

NOTE: The clock displays 12-hour time with no A.M./P.M. indications.



The interior lights have a three-position switch.

When the switch is in the center "O" position, the lights will illuminate when a door is opened.

One interior light is located overhead near the front seat and one is overhead near the rear seat.

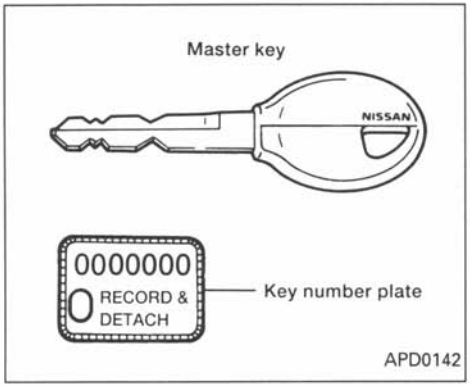
LUGGAGE COMPARTMENT LIGHTS

When the back door is opened, both of the luggage compartment lights, and the rear interior light illuminate.

When the back door is closed, all of the lights go off.

2 Pre-driving checks and adjustments

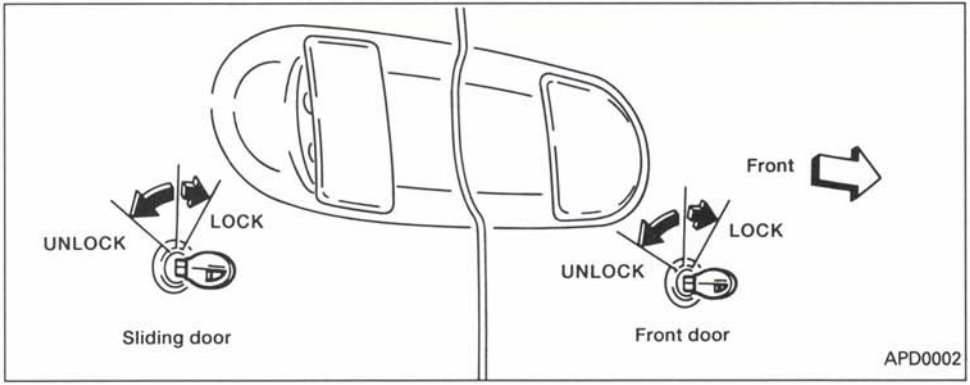
KEY



Record the key number on the key number plate and keep it in a safe place (such as your wallet), NOT IN THE CAR. A key number plate is supplied with your key. Keep the plate in a safe place. NISSAN does not record key numbers so it is very important to keep track of your key number plate.

Two keys are supplied with your vehicle — one has a plastic head and one is all metal. Both keys perform the same functions.

DOOR LOCKS

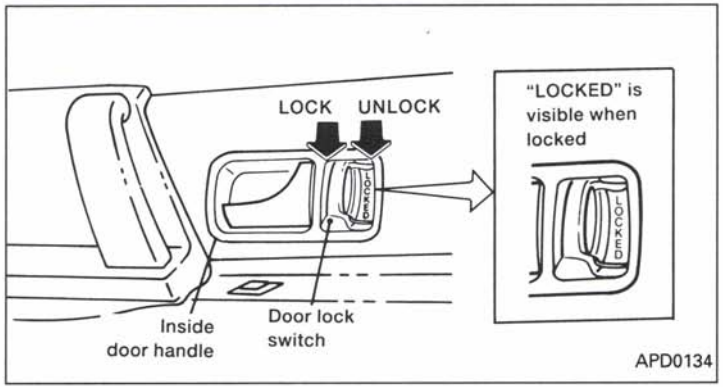


Locking front doors with the key

To lock the door, turn the key toward the front of the vehicle.

To unlock, turn it toward the rear.

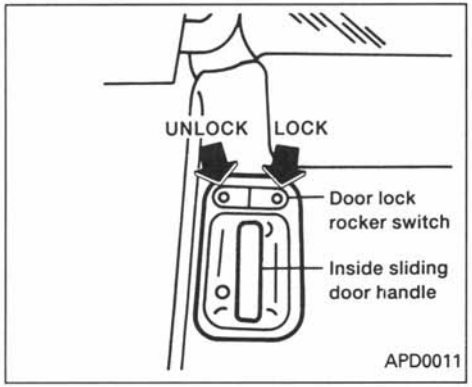
Locking the driver's door will simultaneously lock the other doors (power door lock equipped model).



Locking the doors without the key

To lock the doors from the outside without a key, move the inside lock switch to the "Lock" position, so that "LOCKED" is visible, then close the door.

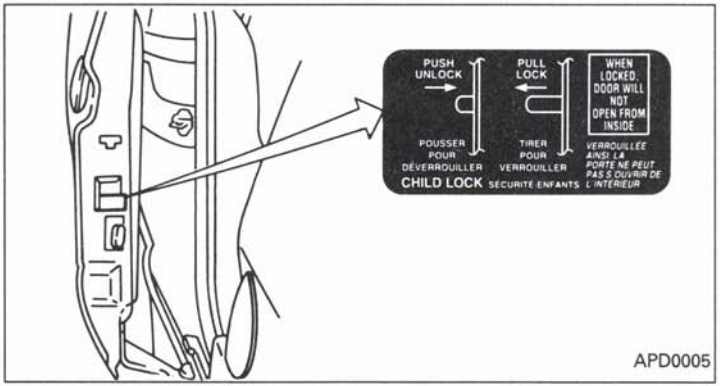
When locking the door this way, be certain not to leave the key inside the vehicle.



CAUTION:

- **Always have the doors locked while driving. Along with the use of seat belts, this provides greater safety in the event of an accident by helping to prevent persons from being thrown from the vehicle. This also helps keep children and others from unintentionally opening the doors, and will help keep out intruders.**
- **Before opening any door, always look for and avoid oncoming traffic.**

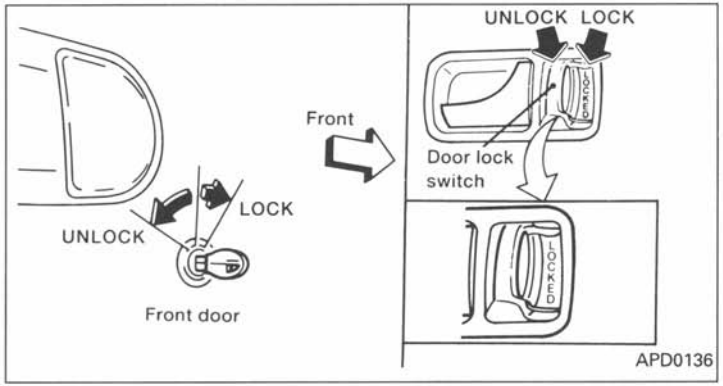
- **Always use the door handle to open or close the sliding door. Do not attempt to open or close the door by merely placing your hand on the door edge or door slide roller, as this may cause injury.**
- **When opening the sliding door on a slope, ensure that it is fully open and that it does not close by itself.**



CHILD SAFETY SLIDING DOOR LOCK

Child safety locking helps prevent doors from being opened accidentally, especially when small children are in the vehicle.

When the lever is in the lock position, the sliding door can be opened only from the outside.



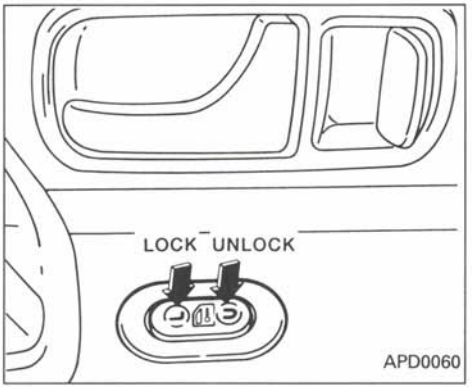
POWER DOOR LOCK

The power door lock system allows you to lock or unlock all doors simultaneously.

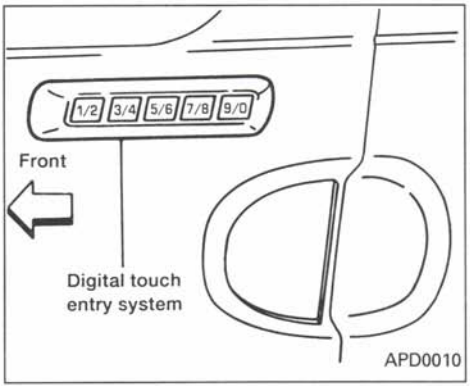
- Turning the driver side door key will lock all doors.
- Pushing the driver side lock knob in will lock all doors.

WARNING:

- **Before opening the door, always look for and avoid oncoming traffic.**
- **Do not leave children unattended in a locked vehicle. If an emergency occurs it may be more difficult to help them.**



- Operating the lock-unlock switch will lock or unlock all doors.
- If the power door lock switch is pressed and the sliding door is open, when the sliding door is closed it will be locked.



The digital touch entry system allows operation of all locks without using a key. The system is operated by the push buttons located near the driver side door handle.

The ignition key will operate any lock without using the digital touch entry system.

To use the optional digital touch entry system, you must use the 5-digit programming code number given to you by your NISSAN dealer to program your own personal code. It is a good idea to keep your code number in your wallet or purse with your license. If there is a problem with the digital touch entry system, or if the programming code number is lost, contact your NISSAN dealer.

The programming code number cannot be used to activate the digital touch entry system; it is only used to program your personal code.

Valid and invalid codes

To help protect your vehicle from theft, certain codes that are easily figured out cannot be registered for your personal code. Some of the codes that cannot be registered for your personal code include: the programming code, five numbers consisting of the same digit, five consecutive numbers and numbers that consist of a sequential combination of numbers. The digital touch entry system reads [1/2] and [9/0] as sequential numbers.

The following are examples of numbers that cannot be entered as a personal code:

- Any number containing digits that are all on the same button. Example: 2-1-2-1-2
- Any number requiring sequential operation of the buttons. Example: 1-3-5-7-0 or 7-5-3-1-9
- Any number with less than five digits or more than five digits.

Programming your personal code

To program your personal code, make sure the key is out of the ignition. Select five numbers that represent a valid code and follow these steps:

1. Enter the programming code.
2. The buzzer will sound for about six seconds or until your five digit personal code is entered.
3. If you have programmed a valid number within six seconds of entering the programming code, the buzzer will sound for about two seconds and the keypad light will shut off.
4. Next, you should test your personal code to see if it has properly registered. If it registered, any previously entered personal code has been erased from memory.
5. After you have entered your personal code, the driver's door will unlock.

If the personal code you entered did not work, it may be that you entered an invalid optional code. See "Valid and invalid codes" in this section to select a valid personal code.

Note: If the battery is ever disconnected, the programming code number and your personal code will be retained in memory.

Changing your personal code

To change your personal code, simply repeat the steps for entering your personal code using a new series of numbers; the previous personal code will be erased and replaced by the new code.

How to unlock the doors

To unlock the driver's door, simply enter your personal code. The programming code will not unlock the doors.

To unlock the passenger's door and the sliding door, enter your personal code and press the [3/4] button within five seconds of unlocking the driver's door or rear door.

To unlock the rear door, press the [5/6] button within five seconds of unlocking the driver's or passenger's doors.

It is possible to unlock the passenger's door, sliding door and back door as long as the driver's door has been unlocked first.

How to lock the doors

To lock all of the doors, press the [7/8] and [9/0] buttons at the same time. To prevent you from locking your keys in your vehicle, this feature will not operate if the key is in the ignition. It also will not operate if any of the doors are open.

Tamper disable

The digital touch entry system is equipped with a feature to temporarily disable the system if someone is tampering with it. If more than 15 buttons are pressed consecutively without entering either the programming code or the personal code the system will "lock-up" and will not operate for about 6 seconds. If more than 35 buttons are pressed consecutively without entering either the programming code or the personal code the system will "lock-up" and will not operate for about 30 seconds. The system will continue to "lock-up" for periods of 30 seconds until the programming code or the personal code is entered.

Illuminated entry system (for models with digital touch entry system)

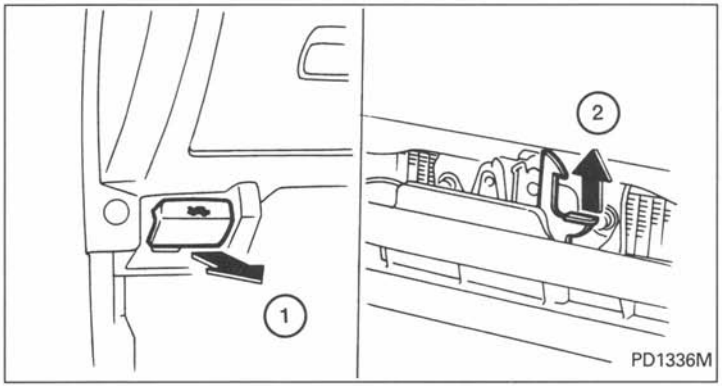
On models equipped with the digital touch entry system, the lights that make up the illuminated entry system will illuminate whenever any of the digital touch entry system buttons is pressed, or when either front door or the sliding door is opened. The interior light, the stepwell lights near the sliding door and on the front doors, and the footwell lights near the driver's and front passenger's feet will illuminate and then gradually dim to off within fifteen seconds or turn off immediately when the key is turned to ON.

The stepwell lights on the front doors and the rear interior light will illuminate until the doors are closed or until the key is placed in the ignition.

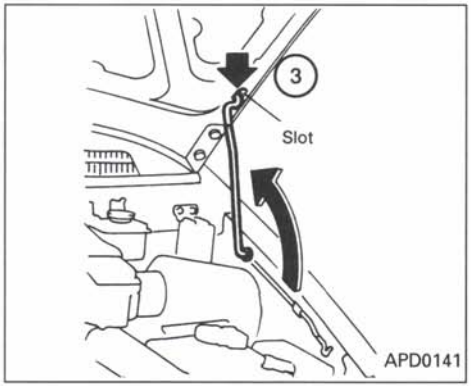
Battery saver

If the vehicle doors are not fully closed and the interior lights remain illuminated, they will eventually turn off automatically to prevent the battery from becoming discharged. Lights that illuminate when the front doors and the sliding door are open will turn off after approximately 30 minutes. Lights that are illuminated when the back door is open will turn off after approximately 60 minutes.

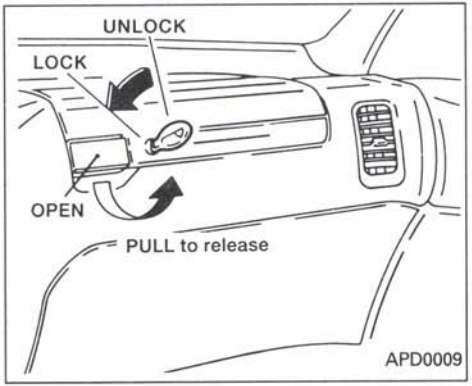
HOOD RELEASE



1. Pull the hood lock release handle ① located below the instrument panel; the hood will then spring up slightly.
2. Pull up on the lever ② at the front of the hood and raise the hood.
3. Insert the support rod ③ into the slot on the underside of the hood.
4. When closing the hood, reset the support rod to its original position, then slowly close the hood and make sure it locks into place.



GLOVE BOX LOCK



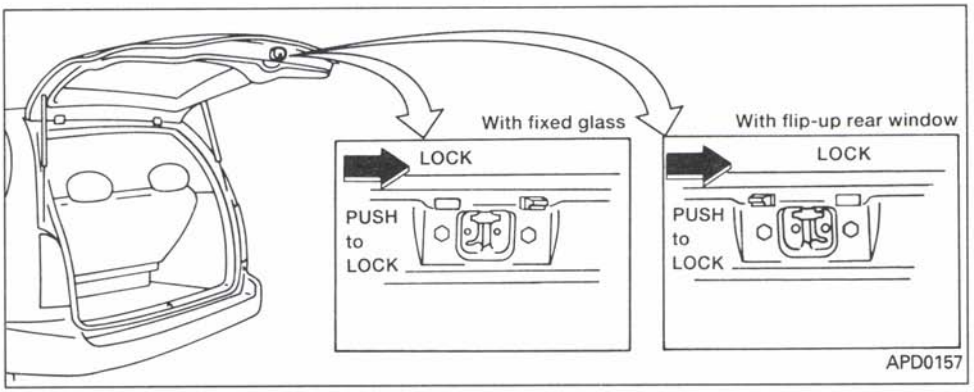
The glove box may be opened by turning the key as shown. The glove box lock cylinder will only allow the key to be partially inserted.

If it is unlocked, the glove box may be opened by pulling the handle.

WARNING:

Keep the glove box lid closed while driving to prevent injury in an accident or a sudden stop.

BACK DOOR LOCK



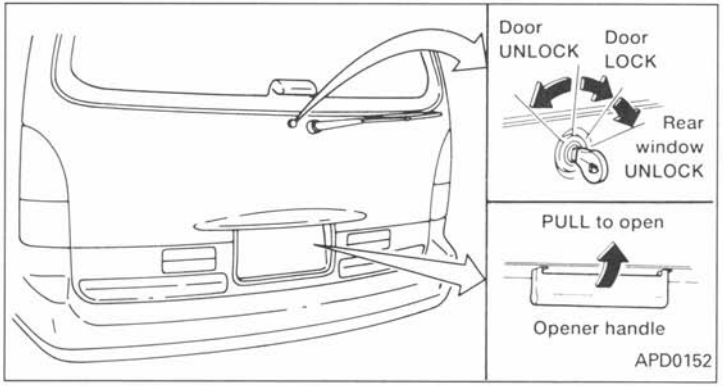
Key operation

To unlock the back door, turn the key counterclockwise. To open the back door, lift up on the opener handle near the license plate. To close, lower and push the back door down securely.

To lock the back door without the key, set the lock lever to the "LOCK" position following the "Push to Lock" instructions near the latch, then close the back door securely.

WARNING:

Do not drive with the back door or glass open. This could allow dangerous exhaust gases to be drawn into the vehicle.

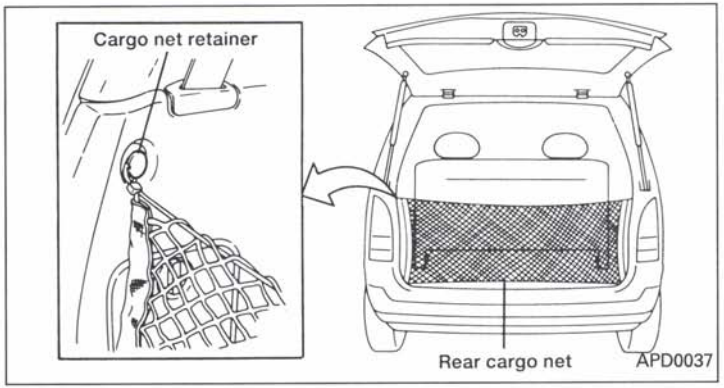


To lock the back door with the key, turn the key clockwise as shown in the illustration. Turning the key fully clockwise will unlock the rear window on models equipped with the flip-up rear window.

To close the rear window, firmly push on the window handle.

The back door cannot be opened if the flip-up rear window is raised.

CARGO NET



The cargo net keeps packages in the cargo area from moving around while your vehicle is driven.

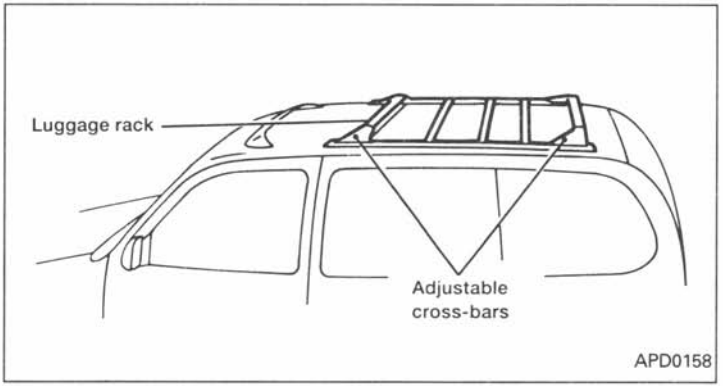
To install the cargo net, attach the four loops to the four retainers.

To remove the cargo net, detach the four loops from the cargo net retainers.

WARNING:

To prevent luggage or packages from sliding forward during braking, do not stack anything in the cargo area higher than the seatbacks.

Be sure to secure all four loops into the retainers. The cargo restrained in the net must not exceed 50 lbs. (22.7 kg) or the net may not stay secured.



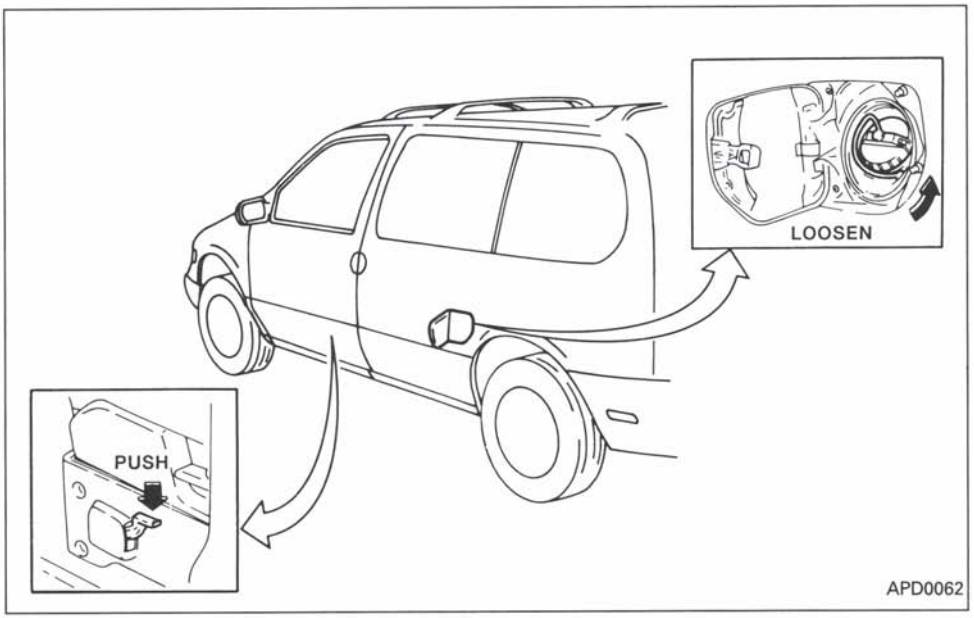
Always evenly distribute the luggage on the luggage rack. Do not load more than 100 pounds (45 kg). Be careful that your vehicle does not exceed the Gross Vehicle Weight Rating (GVWR) or its Gross Axle Weight Rating (GAWR front and rear). The GVWR and GAWR are located on the Safety Compliance Certification Label (located on the driver's door pillar).

The front and rear cross-bars can be adjusted forward and backward. Place your luggage between the bars, adjust the bars, and secure the luggage with rope to the bars. There are also adjustable loops on the side bars for the rope attachment.

WARNING:

- **Use care when placing or removing items from the luggage rack. If you cannot comfortably lift the items onto the luggage rack from the ground, use a ladder or stool.**

FUEL FILLER LID LOCK OPENER LEVER



Opener lever

To open the fuel filler lid, push down on the opener lever. To lock, close the fuel filler lid securely.

Fuel filler cap

The fuel filler cap is a screw-on ratcheting type. Tighten the cap clockwise until ratcheting clicks are heard.

CAUTION:

- **Fuel is extremely flammable and highly explosive under certain conditions. Always stop the engine and do not smoke or allow open flames or sparks near the vehicle when refueling.**
- **Fuel may be under pressure. Turn the cap one-half turn, and wait for any "hissing" sound to stop to prevent fuel from spraying out and possible personal injury. Then remove the cap.**
- **Use only a genuine NISSAN fuel filler cap as a replacement. It has a built-in safety valve needed for proper operation of the fuel system and emission control system. An incorrect cap may result in a serious malfunction and possible injury.**

SEATING ARRANGEMENTS

Many different arrangements for passenger seating or cargo hauling are available as you will see in the following illustrations. The second row seats may be removed and the third row seat may be moved forward to the second row seating position. The second and third row seats have an optional fold-down table-top feature. This allows for many different uses of the vehicle when moving or stopped.

The illustrations shown reflect the different seating positions available.

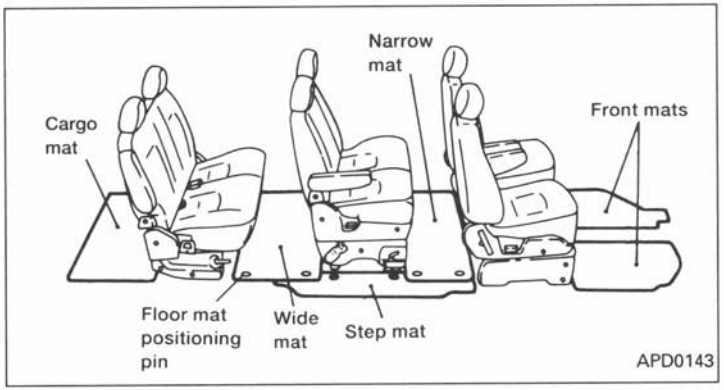
Before you begin to arrange the seats in your vehicle, read all of the cautions and warnings in this chapter, including the following section on the removable floor mats. Also observe any labels that are in the vehicle.

WARNING:

While the vehicle is in motion, passengers should always be seated in a forward facing direction in a seat which is properly secured and adjusted. Seat belts should always be used. Sitting without a seat belt in a seat that is not properly secured in one of the locations shown in this chapter, or in a place without a seat and seat belt can result in personal injury in a sudden stop or collision.

WARNING:

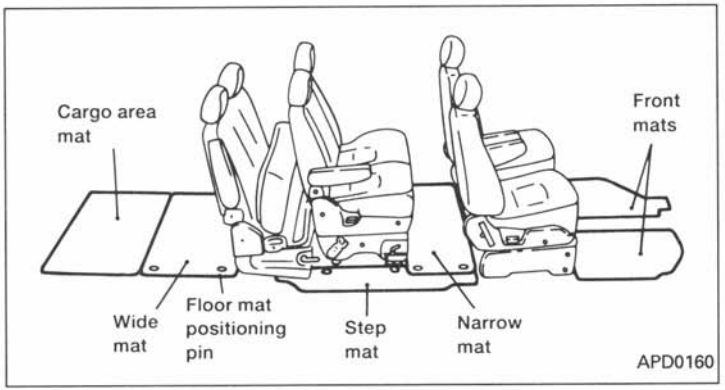
- **Do not place hard items such as coffee mugs or drinking glasses on the tabletop seats when the vehicle is moving. Any item can become a projectile inside a vehicle involved in a collision. To help prevent personal injury, never leave loose items on the fold-down tabletop seats when the vehicle is moving.**



SEVEN PASSENGER SEATING

Removable floor mats

Whenever you remove the mats for any reason, the mats must be reinstalled before passengers ride in your vehicle. The floor mats are specifically designed to keep objects out of the seat tracks.



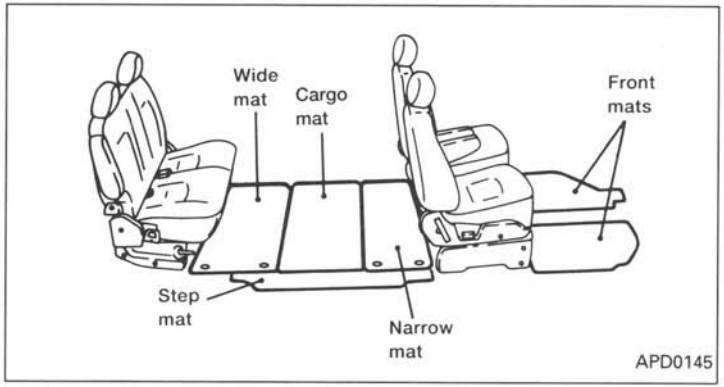
THREE-PASSENGER BENCH SEAT IN STORAGE POSITION

WARNING:

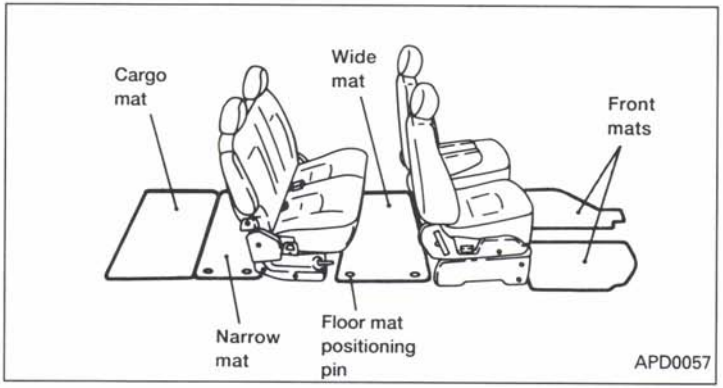
It is important to replace the floor mats whenever they are removed for any reason. The floor mats are intended to help prevent the possibility that high heeled shoes or similar objects might become stuck in the seat tracks. Failure to replace the floor mats might result in personal injury.

Be sure to keep the seat tracks clear of debris by cleaning them periodically.

Review the following illustrations so you will know the proper way to place the floor mats with the various seating arrangements available in your vehicle.

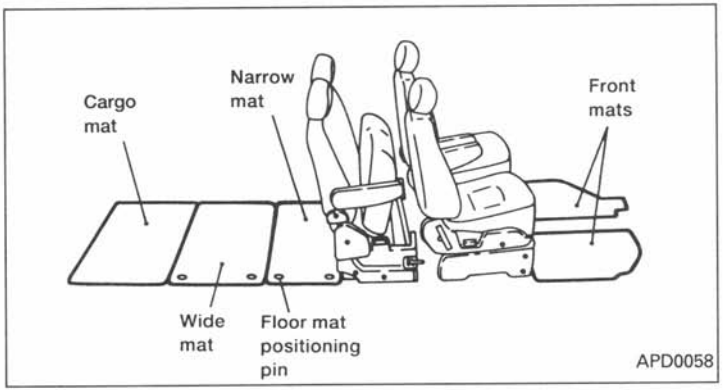


FIVE PASSENGER SEATING



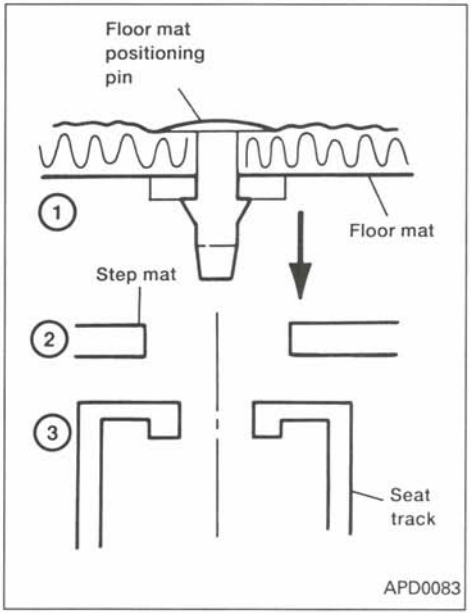
FIVE PASSENGER SEATING WITH CARGO ROOM

The step mat is not used in this seating configuration.



THREE-PASSENGER BENCH SEAT IN FULLY FORWARD POSITION

The step mat is not used in this seating configuration.



FLOOR MAT POSITIONING PINS

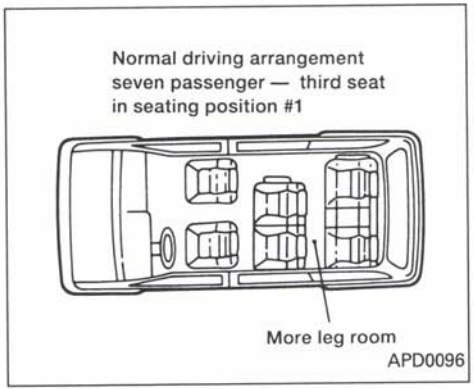
Positioning pins are attached to three of the floor mats. The cargo mat and front mats do not have pins. However, the front floor mats each have a grommet which is placed over the floor mat positioning brackets located at the base of the front seats.

Push the positioning pins into the seat tracks to ensure correct installation, then straighten the mats as necessary.

The step mat has holes in addition to pins. When the mats are arranged properly, the positioning pins of the two mats on either side of the step mat should fit through the holes in the step mat and into the seat track.

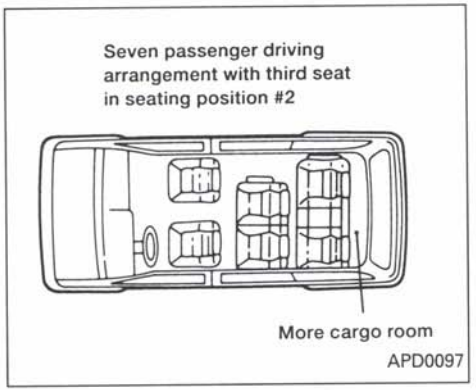
WARNING:

- **No occupant should ride in a vehicle seat unless it is in a normal riding arrangement and the seat belts are properly used.**
- **Never allow anyone to ride in the cargo area. It is not designed for passengers. They could be injured in sudden braking or collision.**
- **To prevent luggage or packages from sliding forward during braking, do not stack anything in the cargo area higher than the seatbacks.**
- **Failure to follow proper seating instructions in this section could result in serious personal injury in an accident or during a sudden stop.**

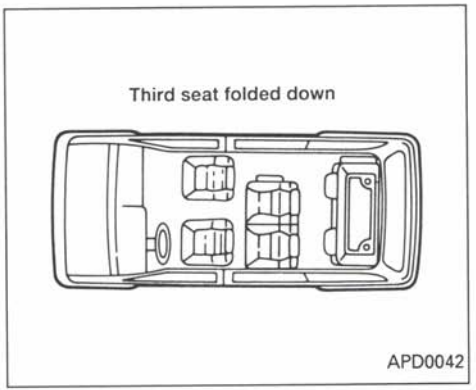


WITH SECOND ROW BENCH SEAT

The most common seating arrangement for seven passengers is with the three-passenger bench seat in seating position #1. This provides more leg room for the passengers sitting in the third row.

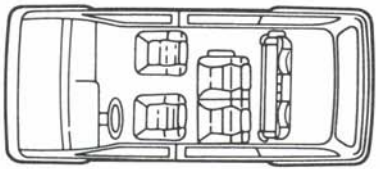


When more cargo area room is necessary, the three-passenger sliding bench seat can be moved to seating position #2. This seating arrangement provides less leg room for third row passengers, but more cargo area room.



The fold-down tabletop seats in the second and third rows can provide a surface for eating or playing games on long trips.

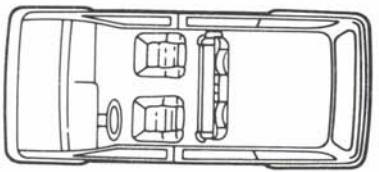
Third seat folded up in storage position #2



APD0043

If a considerable amount of cargo area room is needed, the seat cushion of the three-passenger sliding bench seat can be flipped up and the seat can be moved up to storage position #2, just behind the second row seat.

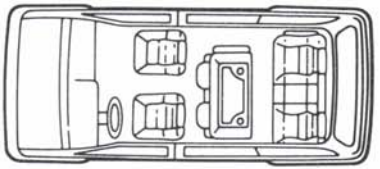
Third seat folded up in storage position #1, second seat removed



APD0049

When maximum cargo area is needed and there are no rear seat passengers, the second row seat can be removed and the three-passenger sliding bench seat can be moved up to storage position #1, just behind the front seats.

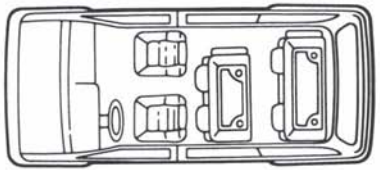
Second row seat folded down



APD0044

The second row bench seat can be folded down to serve as a tabletop for passengers sitting in the three-passenger bench seat.

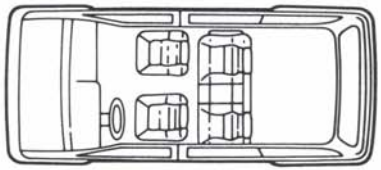
Second and third row seats folded down



APD0045

The second and third row bench seats can be folded down to tabletops.

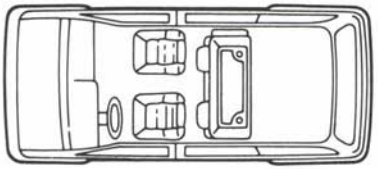
Third seat in second position with second row seat removed



APD0046

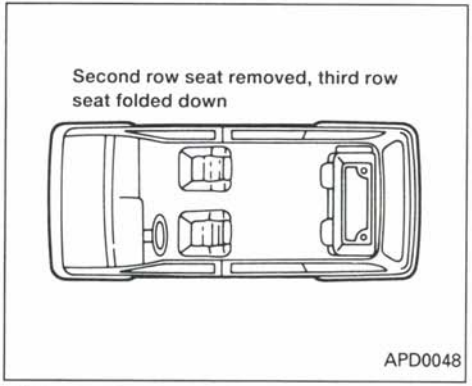
To increase cargo area space, the second row bench seat can be removed and the three-passenger sliding seat can be moved up to the second row position.

Third seat folded down in second seating position with second row seat removed

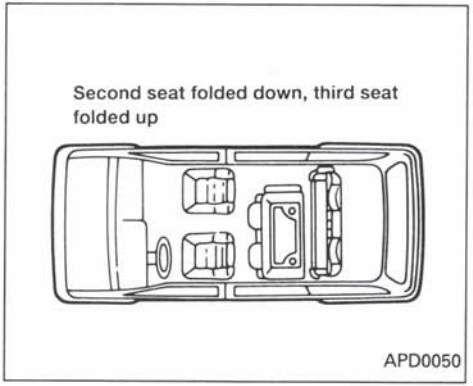


APD0047

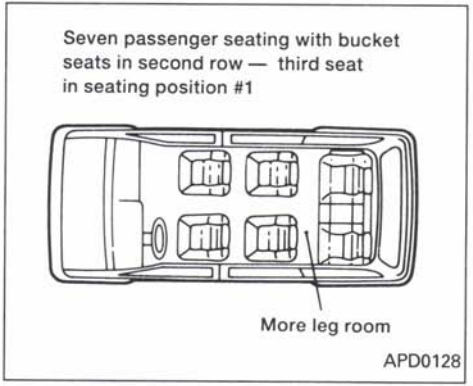
The third seat can be folded down into a tabletop.



With the third seat folded down and the second seat removed, cargo can be placed in between the front seats and the third row seat. **People should not be allowed to ride in areas meant for cargo. Passengers should always be properly restrained in seat belts.**

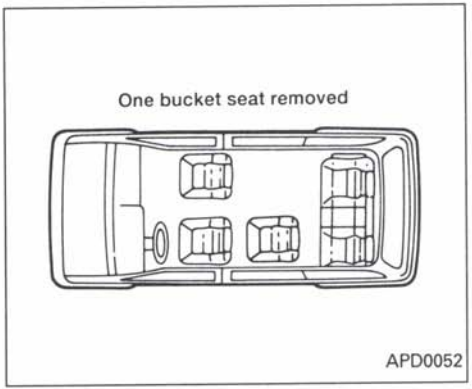


The second row seat can be folded down and the third row seat can be moved just behind it in a storage position.

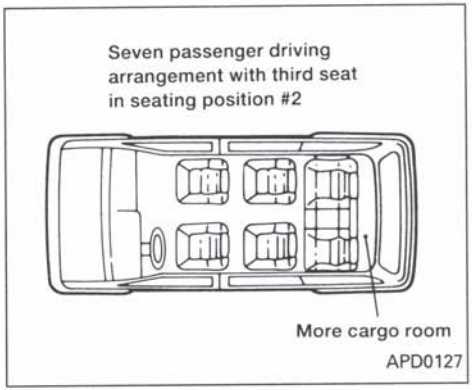


WITH SECOND ROW BUCKET SEATS

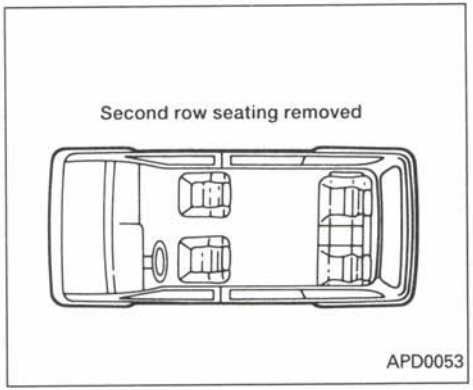
The normal seating arrangement for seven passengers is with the three-passenger bench seat in seating position #1. This provides more leg room for the passengers sitting in the third row.



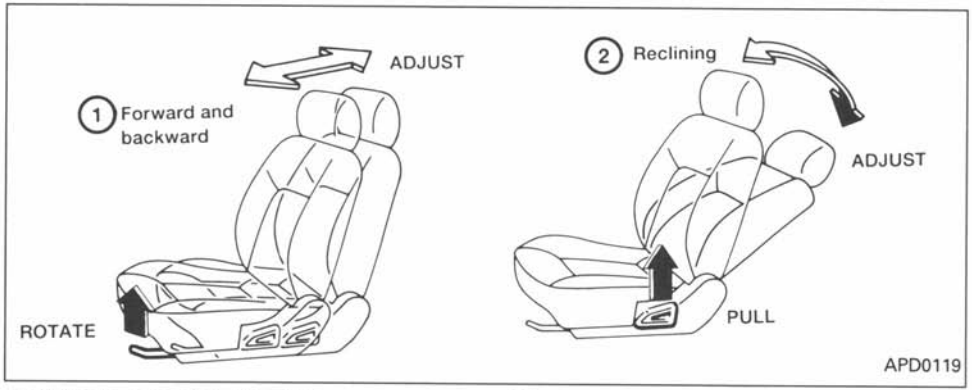
When one passenger in the three-passenger bench seat would like more leg room, one of the second row bucket seats can be removed.



When more cargo area room is necessary, the three-passenger sliding bench seat can be moved to seating position #2. This seating arrangement provides less leg room for third row passengers, but more cargo area room.



If passengers in the three-passenger bench seat would like more leg room, both second row bucket seats can be removed. **The floor area should never be used by passengers. Passengers should always be properly restrained by seat belts.**



MANUAL FRONT SEAT ADJUSTMENT

WARNING:

- **Do not adjust the driver's seat while driving. The seat may move suddenly and could cause loss of control of the vehicle.**
- **After adjustment, gently rock in the seat to make sure it is securely locked.**

① Forward and backward

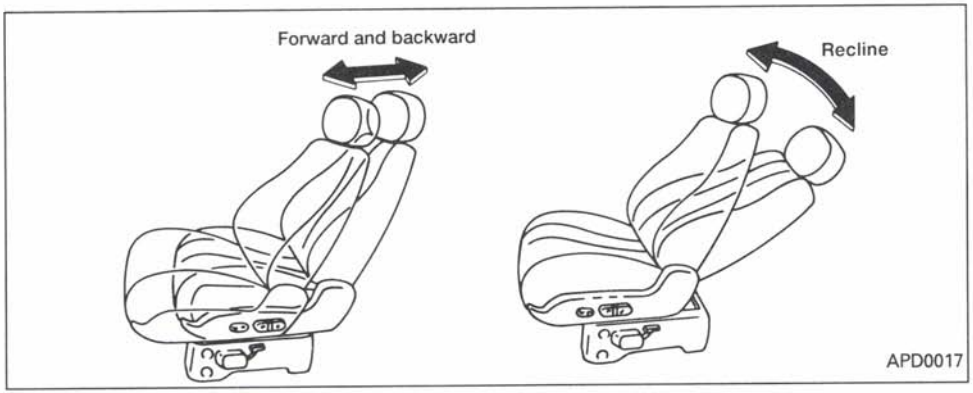
Rotate the lever up while you slide the seat forward or backward to the desired position. Release the lever to lock the seat in position.

② Reclining

Pull the lever up and lean back until the desired angle is obtained. To bring the seatback forward again, pull the lever and move your body forward. The seatback will move forward. Release the lever to lock the seatback in position.

WARNING:

The seatback should not be reclined any more than needed for comfort when the vehicle is moving. Seat belts are most effective when the passenger sits well back and straight up in the seat. If the seat is reclined, the risk of sliding under the lap belt and being injured is increased.



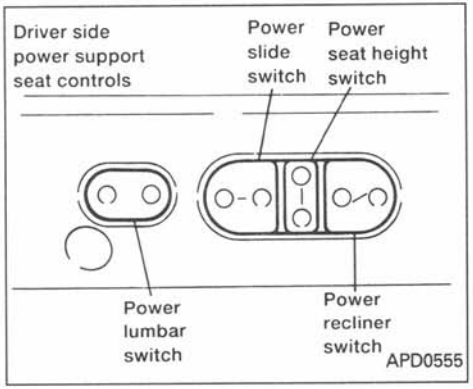
POWER SUPPORT FRONT SEAT

WARNING:

- **Do not adjust the driver's seat while driving.**
- **Never recline the seatback any more than needed for comfort when the vehicle is moving. The seat belts are most effective when the rider is sitting well back and straight up in the seat.**
- **Do not leave children unattended inside the vehicle. They may inadvertently activate switches.**

Operating tips

- The motor has an auto-reset overload protection circuit. If the motor stops during operation, wait 30 seconds, then reactivate the switch.
- Do not operate the power support seat for a long period of time when the engine is off. This will discharge the battery.



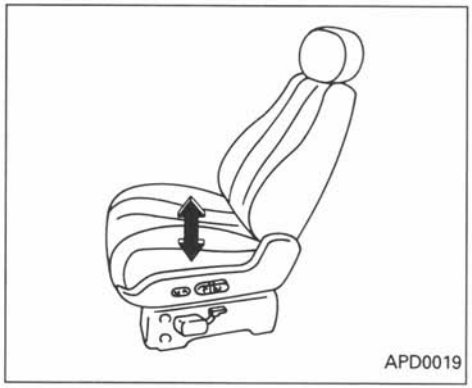
The passenger seat only has the power slide switch and the power recliner switch.

Forward and backward adjustment

To move the seat forward, push the raised side of the power slide switch. To move the seat backward, push the indented side of the switch. Release the switch to stop the movement of the seat.

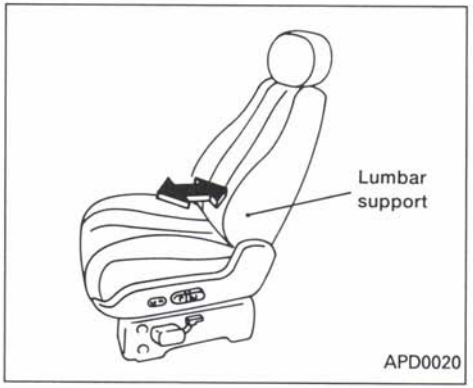
Reclining

To recline the seat, push the indented side of the power recliner switch. To return to a more upright position, push the raised side of the switch. Release the switch to stop the movement of the seatback.



Seat height adjustment

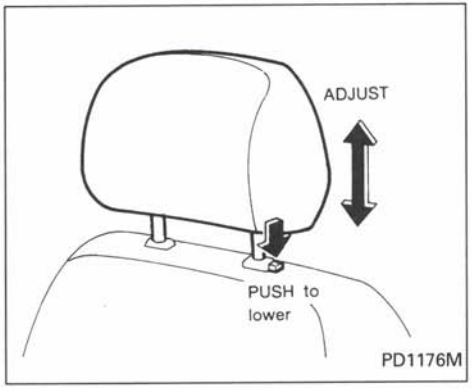
To raise the height of the seat, push the raised side of the power seat height switch and release it when the desired position has been reached. To lower the height of the seat, push the indented side of the switch and release it when the desired position has been reached.



Lumbar support

To inflate the lumbar support, push the raised side of the power lumbar switch and release it when the desired position has been reached. To deflate the lumbar support, push the indented side of the switch.

The power lumbar pump motor will continue to operate after the lumbar support is fully inflated. Release the switch when the lumbar stops inflating.



HEAD RESTRAINTS

Adjust the top of the head restraints level with the top of your ears.

To raise the head restraint, pull it up. To lower, push in the release button and push the head restraint down. To remove the head restraint, push in the button and pull the head restraint up.

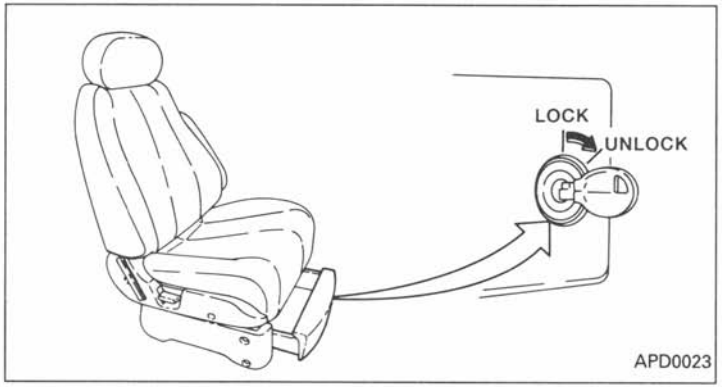
WARNING:

- **Head restraints should be adjusted properly as they may provide significant protection against whiplash injury. Always replace and adjust them properly if they have been removed for any reason.**
- **If the head restraints are removed for any reason, they should be securely stored to prevent them from causing damage to passengers or the vehicle in case of sudden braking or collision.**

Some seat arrangements may require removal of the head restraints when the seat is in a storage position and not to be used by passengers.

ARMRESTS

To use the armrests on any seat, pull them down to the resting position.

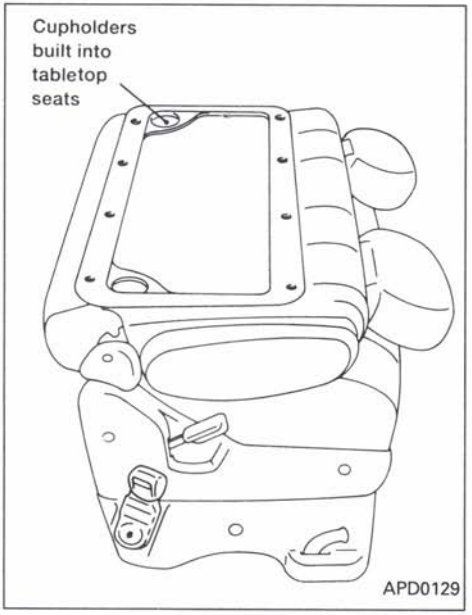


UNDERSEAT STORAGE TRAY

Some front passenger seats have an underseat storage tray.

To unlock the tray, turn the key clockwise.

To lock the tray, turn the key to the straight up position.



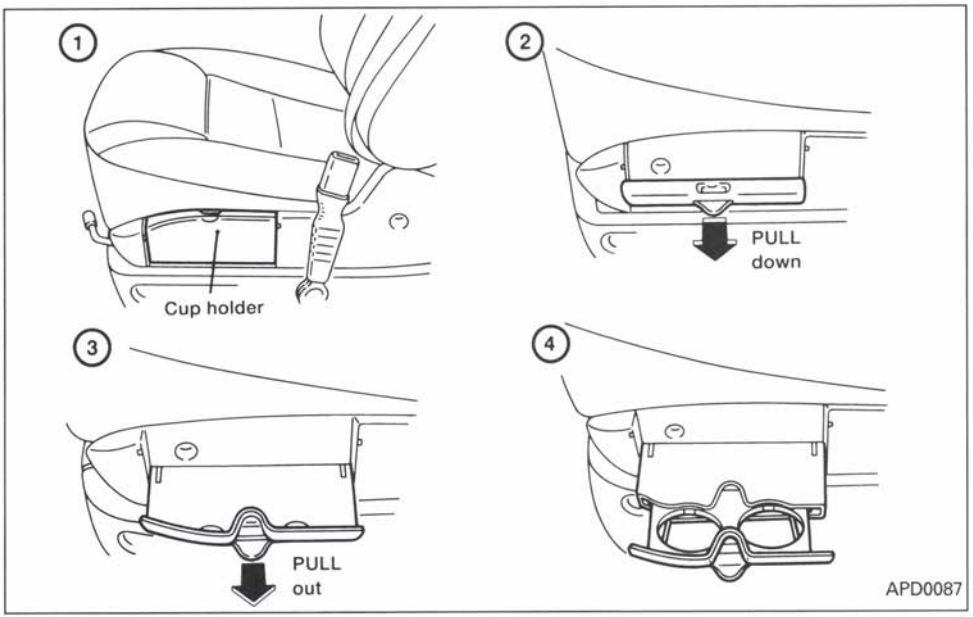
TABLETOP SEATS

The second and third row seats convert to tabletop with built-in cupholders. To use the tabletop seats, lift up on the seatback release lever and fold the seatback forward.

CUP HOLDER

WARNING:

- **Never place hard items such as coffee mugs or drinking glasses on the tabletop seats when the vehicle is moving. Any item can become a projectile inside a vehicle involved in a collision. To help prevent personal injury, never leave loose items on the folded-down tabletop seats when the vehicle is moving.**
- **Do not use the tabletop and cup holder feature while the vehicle is in motion unless you are properly seated with your seat belt on.**

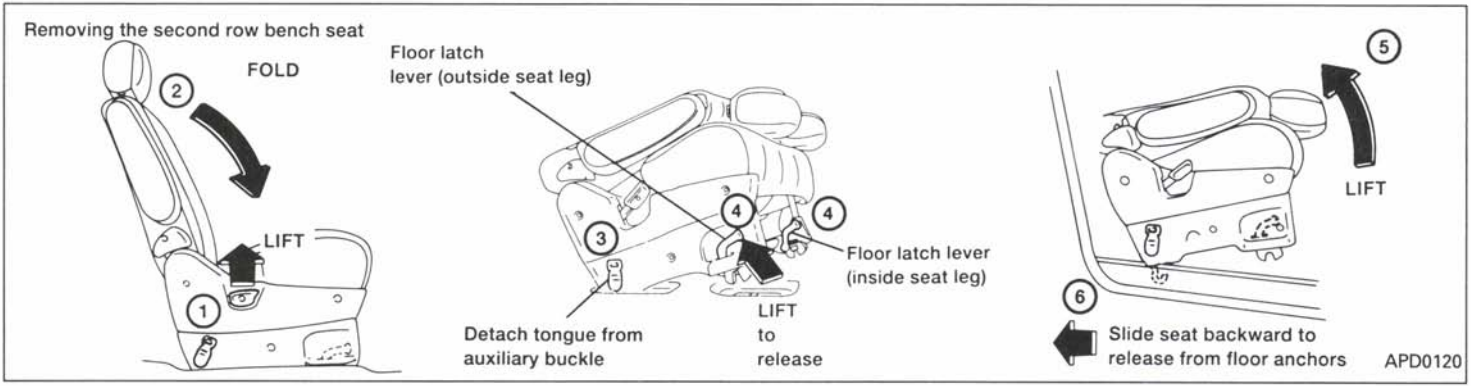


To use the cup holder, pull the cover away from the side of the front passenger seat. Pull the cup holder out of the cover.

To store the cup holder, push it back into the cover and lift the cover to its original position against the side of the seat.

WARNING:

The driver should not pull out the cup holder or remove or insert cups into the cup holder while driving in order that full attention may be given to the driving operation.

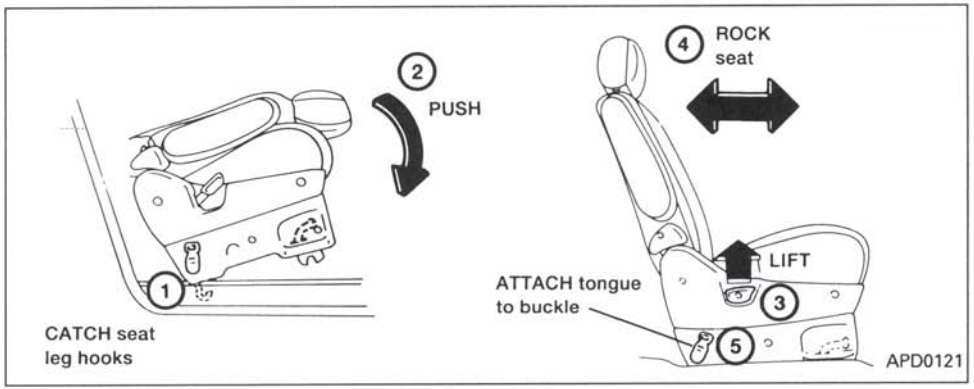


Removing and installing the second row bench seat

WARNING:

- **Do not remove or install seats while the vehicle is moving.**
- **The seats are heavy. Two people should remove or install them.**
- **After adjustment, check to be sure the seats are securely locked by rocking the seats back and forth.**
- **Never recline the seatback any more than needed for comfort. The seat belts are most effective when the rider is sitting well back and upright in the seat.**
- **When adjusting or moving any of the seats in your vehicle, do not use any of the seat belt buckles, tongues, or webbing to carry or move the seats. Lifting the seats by any of the seat belts could damage them. Damaged seat belts should be replaced at your NISSAN dealer. Failure to follow these instructions could increase the chance and/or severity of injury in an accident.**

1. Lift up the recliner lever.
2. Fold the seatback fully forward.
3. Detach the single window tongue from the auxiliary buckle mounted to the side of the seat and store the tongue out of the way. (For detailed information, see "The two buckle restraint system for the second row bench seat" later in this section.)
4. Unlock the seat legs at the two front floor latch levers.
5. Lift the front of the seat.
6. Slide it rearward off the rear anchor positions.



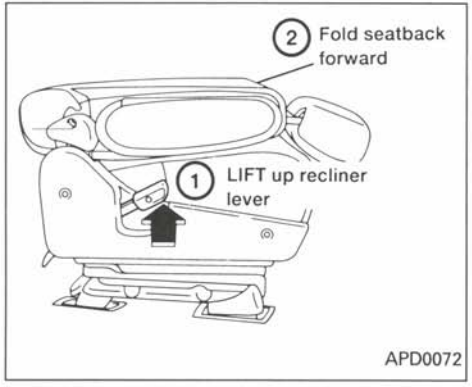
WARNING:

The seats are heavy. Two people should remove or install them.

Installing the second row bench seat

Clean the area around the seat leg floor anchors before installing seat.

1. With the seatback fully folded, place the seat behind the floor anchors and catch the seat leg hooks into each floor anchor.
2. Push down on the front of the seat cushion to secure the two front floor latches.
3. Lift up the recliner lever and raise the seatback.
4. Rock the seat back and forth to be sure that all four seat legs are securely latched.
5. Insert the (single window) tongue into the auxiliary buckle mounted to the side of the seat.

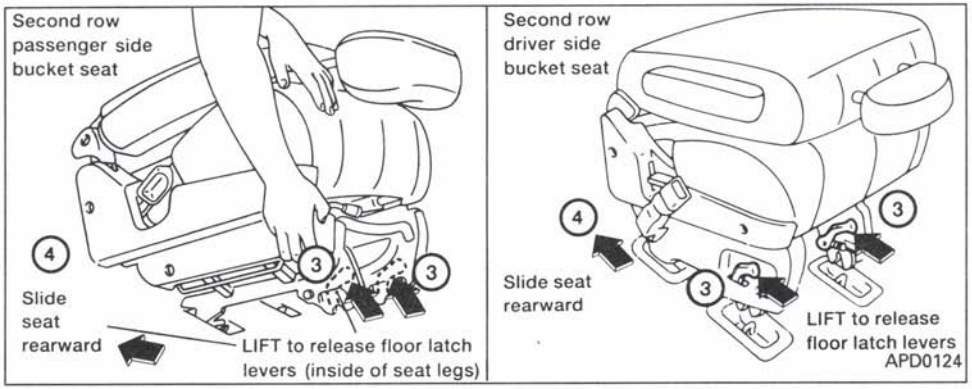


Removing second row bucket seats

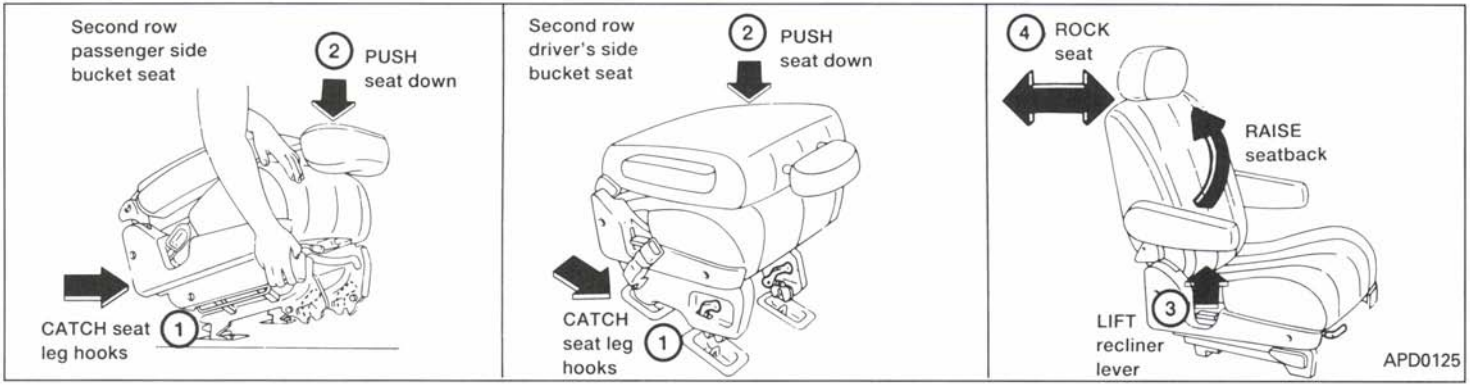
WARNING:

- **Do not remove or install seats while the vehicle is moving.**
- **The seats are heavy. Two people should remove or install them.**
- **After adjustment, check to be sure the seats are securely locked by rocking the seats back and forth.**
- **Never recline the seatback any more than needed for comfort. The seat belts are most effective when the rider is sitting well back and straight up in the seat.**
- **When adjusting or moving any of the seats in your vehicle, do not use any of the seat belt buckles, tongues, or webbing to carry or move the seats. Lifting the seats by any of the seat belts could damage them. Damaged seat belts should be replaced at your NISSAN dealer. Failure to follow these instructions could increase the chance and/or severity of injury in an accident.**

1. Lift the recliner lever.
2. Fold the seatback fully forward.



3. Unlock the seat legs at the two front floor latch levers.
4. Lift the front of the seat and slide it rearward off the rear anchor positions.



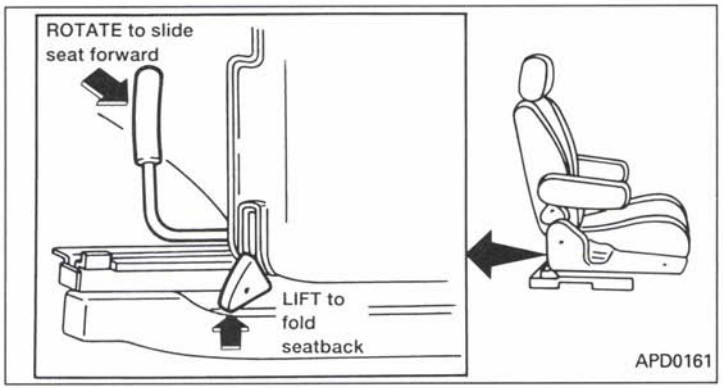
Installing the bucket seats

Clean the area around the seat floor attachment.

1. With the seatback fully folded, place the seat behind the floor anchors and slide seat leg hooks so they catch into each floor anchor.
2. Push down on the front of the seat to secure the two front floor latches.
3. Lift recliner lever and raise seatback.
4. Rock the seat to be sure that it is securely latched.
5. Lift up on seatback recliner lever to adjust seatback to the upright position.

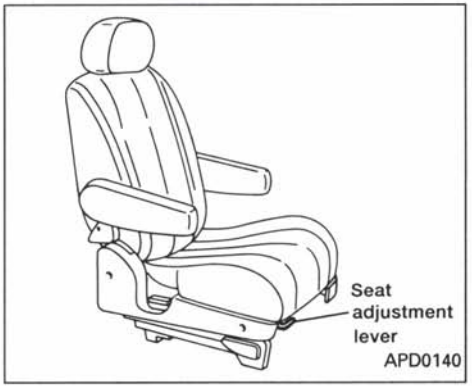
CAUTION:

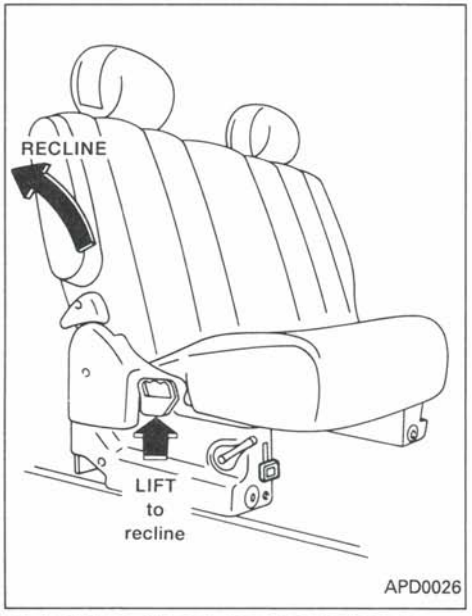
The second row bucket seats are not interchangeable. If you are having difficulty installing the seats, you may have them in the wrong location.



Second row passenger side bucket seat

The bucket seat near the sliding door can be moved forward to allow easier entry and exit for third seat passengers. There are also levers behind the bucket seat to allow third seat passengers to move the bucket seat forward without help from another passenger.





SLIDING THREE-PASSENGER SEAT

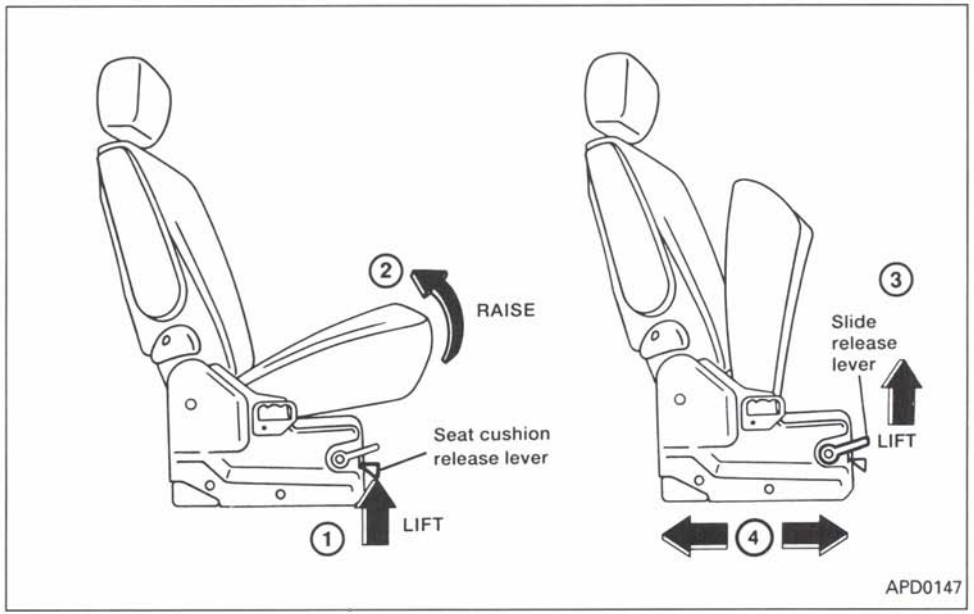
Reclining

To recline the three-passenger seat, lift up on the lever and lean back until you reach the desired angle. To bring the seatback forward, pull the lever up and lean your body forward.

Some three-passenger seats do not have the recline feature.

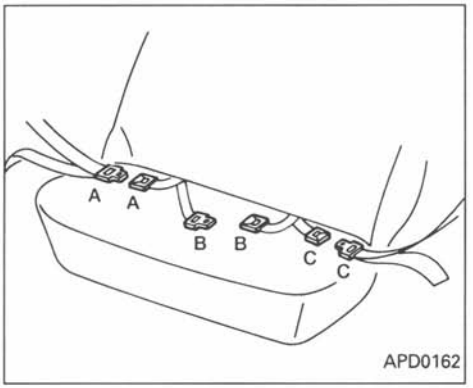
WARNING:

- **Do not recline the seatback while the vehicle is moving.**
- **Never recline the seatback any more than needed for comfort. The seat belts are most effective when the rider is sitting well back and straight up in the seat.**
- **After adjustment, gently rock in the seat to be sure both sides are securely locked.**



Sliding the three-passenger seat

Before sliding the seat, fasten the center belt tongue to the center buckle and remove the appropriate floor mats.

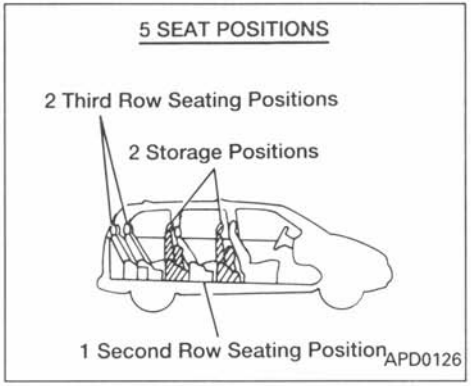


1. Lift the seat cushion release lever.
2. Lift the seat cushion up into the locked position.
3. Lift the slide release lever and grasp the bar under the seat in the center.
4. Slide the seat until locked at a passenger seating position or a storage position. After the seat starts moving, release the slide lever. The seat will latch at the next latching position. Continue to lift and release the slide lever until the desired position is obtained.

To lower the cushion, the seat must be

locked at a passenger seating position. Lift the seat cushion release lever and lower the cushion until locked.

The seat cushion cannot be lowered in a storage position. This prevents a passenger from using a seat or seat belt that is out of a seating position.



The seating system allows great flexibility. Proper usage is important to your safety.

WARNING:

- **Do not slide the seat while the vehicle is moving.**
- **After adjustment, gently rock in the seat to be sure it is securely locked.**
- **After sliding the seat, check that both sides of the seat are locked securely by attempting to move each side of the seat forward and backward. This must be done before the vehicle is put into motion in order to prevent unintended movement of the seat and potential passenger injuries.**
- **Do not attempt to use the seats placed into a storage position for passengers because in this position the seat belts will not protect the occupants. Be sure to use the proper seat belts for each seat location. Improper seat belt usage will increase the risk of severe injury in an accident.**
- **When the vehicle is being used to carry cargo, be sure contents are secure so that during a sudden stop or collision, they do not become projectiles.**
- **Be careful not to damage the seat belt. Never allow anyone to ride in the cargo area or on a seat that is in a storage position. It is not designed for passengers. They could be injured in sudden braking or a collision.**
- **To prevent luggage or packages from sliding forward during braking, do not stack anything in the cargo area higher than the seatbacks.**
- **Be sure to replace and reposition floor mats as discussed in "Floor mat positioning" in this section.**

WARNING:

The three-passenger sliding bench seat is not intended to be removed from the vehicle by consumers. However, if it must be removed, have a qualified person remove it. That person should refer to the instructions in the Service Manual. When seat is reinstalled, the attaching bolts must be tightened to the appropriate torque specifications. Failure to follow these instructions could increase the chance and/or severity of injury in an accident.

Cleaning the seat tracks

The seat tracks for the three-passenger sliding bench seat should be cleaned periodically with a high-powered vacuum cleaner. If the seat tracks become dirty it may reduce the ability to slide the seat. A wet cleansing agent may be used if necessary, but the seat tracks must be thoroughly dried.

Use a cloth wrapped around a screwdriver (or similar object) to clean the seat tracks. Do not use your fingers to clean debris from the tracks.

Do not apply any type of lubricant to the seat tracks.

WARNING:

- **Never insert fingers into the seat track rails. The rails may be sharp and could cause injury.**

SUPPLEMENTAL RESTRAINT SYSTEM (MINIVAN AIR BAG)

This Supplemental Restraint System description contains important information concerning the special driver supplemental minivan air bag. The Supplemental Restraint System Air Bag can help reduce impact force to the driver in certain frontal collisions. The driver's supplemental air bag is designed to **supplement** the crash protection provided by the seat belts and is **not a substitute** for the seat belts. The seat belts should always be correctly worn and the driver seated a suitable distance from the steering wheel. (See "Seat belts" for instructions and precautions on seat belt usage.)

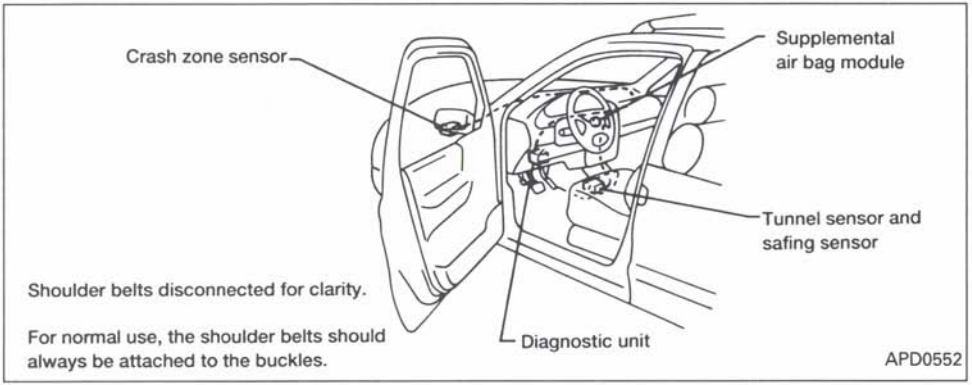
The supplemental air bag will operate only when the ignition switch is in the "ON" or "START" position.

WARNING:

The supplemental air bag ordinarily will not inflate in the event of a side impact, rear impact, roll over, or lower severity frontal collision; so always wear your seat belts to help reduce the risk or severity of injury in various kinds of accidents.

WARNING:

The seat belts and the supplemental air bag are most effective when you are sitting back and upright in the seat. Supplemental air bags inflate with great force. If you are unrestrained, leaning forward, sitting sideways or out of position in any way, you are at greater risk of injury or death in a crash and may also receive serious or fatal injuries from the supplemental air bag if you are up against it when it inflates.



Supplemental air bag system

The supplemental driver air bag is located in the center of the steering wheel. There is no air bag for the passenger seat. The supplemental air bag system is designed to inflate in higher severity frontal collisions, although it may inflate if the forces in another type of collision are similar to those of a higher severity frontal impact. When the supplemental air bag inflates, a fairly loud noise may be heard, followed by release of smoke. This smoke is not harmful and does not indicate a fire, but care should be taken not to intentionally inhale it, as it may cause irritation and choking. The supplemental air bag, along with the use of seat belts, helps to cushion the impact force on the face and chest of the occupant.

The seat belts should be correctly worn and the driver seated upright as far as practical away from the steering wheel. Since the supplemental air bag inflates quickly in order to help protect the occupant, the force of the supplemental air bag inflating can increase the risk of injury if the occupant is too close to or is against the supplemental air bag module during inflation. The supple-

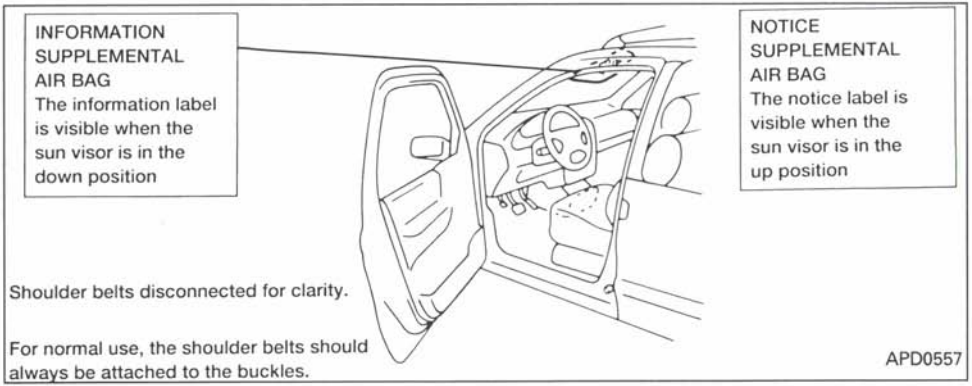
mental air bag will deflate quickly after the collision is over.

The supplemental air bag will operate only when the ignition switch is in the "ON" or "START" position.

WARNING:

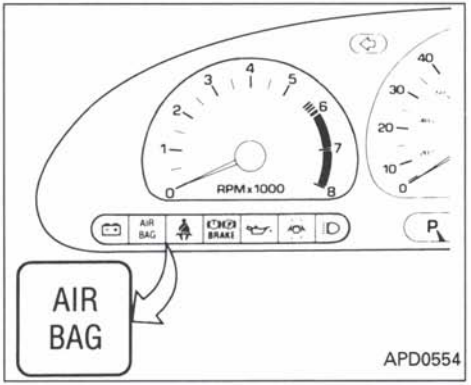
- **Right after inflation, several supplemental air bag system components will be hot. Do not touch them; you may severely burn yourself.**
- **No unauthorized changes should be made to any components or wiring of the supplemental air bag system. This is to prevent accidental inflation of the supplemental air bag or damage to the supplemental air bag system.**
- **Tampering with the supplemental air bag system may result in serious personal injury. Tampering includes changes to the steering wheel by placing material over the steering wheel pad or by installing additional trim material around the supplemental air bag system.**
- **Do not attach any objects to the steering wheel pad. Objects attached to the steering wheel pad may become dangerous projectiles and cause injury if the supplemental air bag inflates.**
- **Work around and on the supplemental air bag system should be done by an authorized NISSAN dealer. Installation of electrical equipment should also be done by an authorized NISSAN dealer. The yellow SRS wiring should not be modified or disconnected. Unauthorized electrical test equipment and probing devices should not be used on the supplemental air bag system.**

INFORMATION, WARNING AND NOTICE LABELS



Information, warning and notice labels about the supplemental air bag system are placed in the vehicle.

SUPPLEMENTAL AIR BAG WARNING LIGHT



The supplemental air bag light, displaying "AIR BAG" in the instrument panel, monitors the circuits of the supplemental air bag. The circuits monitored by the supplemental air bag light are the crash zone sensor, tunnel sensor, safing sensor and all related wiring.

When the ignition key is in the "ON" or "START" position, the supplemental air bag light will illuminate for about 7 seconds and then turn off. This means the system is operational.

If any of the following conditions occurs, the supplemental air bag needs servicing and should be taken to your nearest authorized NISSAN dealer:

1. The supplemental air bag light does not come on for 7 seconds and then go off as described above.
2. The supplemental air bag light flashes intermittently or remains on.
3. The supplemental air bag light does not come on at all.

Under these conditions, the Supplemental Restraint System Air Bag will not operate properly. It must be checked and repaired.

Repair and replacement procedure

The supplemental air bag system is designed to inflate on a one-time-only basis. As a reminder, unless it is damaged, the supplemental air bag light will remain illuminated after inflation has occurred. Repair and replacement of the supplemental air bag system should be done only by authorized NISSAN dealers. **To ensure long-term functioning, the system must be inspected 10 years after the date of manufacture as noted on the certification label located on the driver side front pillar.**

When maintenance work is required on the vehicle, the supplemental air bag system and related parts should be pointed out to the person conducting the maintenance. The ignition key should always be in the "LOCK" position when working under the hood or inside the vehicle.

WARNING:

- **Once the supplemental air bag inflates, the supplemental air bag module will not function again and must be replaced. The supplemental air bag module cannot be repaired.**
- **The supplemental air bag system should be inspected by an authorized NISSAN dealer if there is any damage to the front end portion of the vehicle or replaced if the supplemental air bag has inflated.**
- **When selling your vehicle, we request that you inform the buyer about the supplemental air bag system and guide the buyer to the appropriate sections in this Owner's Manual.**
- **If you need to dispose of a supplemental air bag or scrap the vehicle, contact an authorized NISSAN dealer. Correct supplemental air bag disposal procedures are set forth in the appropriate NISSAN Service Manual. Incorrect disposal procedures could cause personal injury.**

PRECAUTIONS ON SEAT BELT USAGE

Your chances of being injured or killed in an accident and/or the severity of injury may be greatly reduced if you are wearing your seat belt and it is properly adjusted. NISSAN strongly encourages you and all of your passengers to buckle up every time you drive, even if your seating position includes an air bag.

Some states, provinces or territories require that seat belts be worn at all times when a vehicle is being driven.

WARNING:

- **Every person who drives or rides in this vehicle should wear a seat belt at all times. Children should be in appropriate child restraints.**
- **The belts should be adjusted to a snug fit. Failure to do so will reduce the effectiveness of the entire restraint system.**
- **Do not wear the belts inside out or twisted.**
- **Do not allow more than one person to use the same seat belt.**
- **All seat belt assemblies, including retractors and attaching hardware, should be inspected at your NISSAN dealer after any collision. NISSAN recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Seat belt assemblies not in use during a collision should also be inspected and replaced if either damage or improper operation is noted.**

WARNING:

- **Never carry more people in the vehicle than there are seat belts.**
- **If the seat belt warning light glows continuously while the ignition is turned "ON" with all doors closed and all seat belts fastened, it may indicate a malfunction in the system. Have the system checked by your NISSAN dealer.**
- **Be sure to observe the following precautions when using seat belts. Failure to do so could increase the chance and/or severity of injury in an accident.**
- **Always route the shoulder belt over your shoulder and across your chest. Never run the belt under your arm. Serious injury can occur if a seat belt is not worn properly.**
- **Position the lap belt as low as possible AROUND THE HIPS, NOT THE WAIST.**

Infant or small child

NISSAN recommends that infants or small children be placed in child restraint systems that comply with Federal Motor Vehicle Safety Standards or Canadian Motor Vehicle Safety Standards. You should choose a child restraint system that fits your vehicle and always follow the manufacturer's instructions for installation and use.

Children

Children who are too large for child restraint systems should be seated and restrained by the seat belts which are provided.

NISSAN recommends that children sit in a rear seat if possible. According to accident statistics, children are safer when properly

restrained in a rear seat than in a front seat.

If the child's seating position has a shoulder belt that fits close to the face or neck, the use of a booster seat (commercially available) may help overcome this. The booster seat should raise the child so that the shoulder belt is centered across the top, middle portion of the shoulder and the lap belt is low on the hips. The booster seat should fit the vehicle seat and have a label certifying that it complies with Federal Motor Vehicle Safety Standards or Canadian Motor Vehicle Safety Standards. Once the child has grown enough so the shoulder belt is no longer on or near the face and neck, use the shoulder belt without the booster seat.

Never let a child stand or kneel on any seat and do not allow a child in the cargo areas while the vehicle is moving.

Pregnant women

NISSAN recommends that pregnant women use seat belts. Contact your doctor for specific recommendations. The lap belt should be worn snug and positioned as low as possible around the hips, not the waist.

Injured persons

NISSAN recommends that injured persons use seat belts, depending on the injury. Check with your doctor for specific recommendations.

2-POINT AUTOMATIC SEAT BELT SYSTEM

The Automatic Seat Belt system consists of a 2-point shoulder belt for the driver and front passenger seat positions. The shoulder belts automatically adjust to the body and seating positions when the door is closed and the ignition key is turned "ON". A manual lap belt for the driver and front passenger seat positions is also provided for increased protection in many types of accidents.

WARNING:

- **For most effective protection, always wear the manual lap belt in addition to the automatic shoulder belt.**
- **If you do not wear your lap belt, you may increase your chance of being injured or increase the severity of injury. The shoulder belt alone may not fully restrain you in some types of accidents.**
- **To properly operate the automatic seat belt system, the shoulder belt tongue should always remain inserted in the shoulder belt buckle, located in the rail of the door opening.**

NISSAN recommends that children be seated in the rear seats. See "Precautions on seat belt usage" earlier in this section.

System malfunction

If, while the ignition switch is turned "ON" with either front door open, the seat belt warning light illuminates and remains illuminated and the chime sounds faster than usual for about 6 seconds, it may indicate a malfunction in the system. Have the system checked by your NISSAN dealer.

Fastening the belts

1. Open the door and make sure that the shoulder buckle is in the forward position. Then, get into the vehicle and close the door.

When the ignition switch is in the "ON" position and the door is closed, the shoulder buckle will move to the rear position.

2. Adjust the seat.

WARNING:

The seatback should not be in a reclining position any more than needed for comfort. Seat belts are most effective when the passenger sits well back and straight up in the seat. If the seat is reclined, the risk of sliding under the lap belt and being injured is increased.

3. Turn the ignition switch to "ON". The shoulder buckle will move to the rear position and will fit across your chest. Pull the shoulder belt toward the retractor to take up extra slack.

- **Do not touch the door guide rail while the shoulder buckle is moving.**
- **Do not wear the shoulder belt across the neck or under your outer arm. The shoulder belt should be positioned midway over the shoulder for the most effective protection.**

4. Slowly pull the lap belt out of the retractor and insert the tongue into the lap buckle until it snaps. Position the lap belt **low on the hips** and pull the belt toward the retractor to take up extra slack.

- **Do not wear the lap belt across the shoulder belt.**
- **The retractors are designed to lock**

during a sudden stop or on impact. A slow pulling motion will permit the belt to move, and allow you some freedom of movement in the seat.

The front seat passenger side lap belt has a cinching mechanism for child seat installation. It is referred to as the automatic locking mode. When the cinching mechanism is activated the seat belt cannot be withdrawn again until the seat belt tongue is detached from the buckle and fully retracted. Refer to "Child restraints for infants and small children" later in this section for more information.

WARNING:

- **The automatic locking mode should be used only for child seat installation. During normal seat belt use by a passenger, the locking mode should not be activated. If it is activated it may cause uncomfortable seat belt tension.**

Unfastening the belts

1. To unfasten the lap belt, press the button on the lap buckle. The seat belt will automatically retract.
2. Open the door. The shoulder belt buckle will move to the forward position and the shoulder belt will move away from your chest.

- **Do not touch the door guide rail while the shoulder buckle is moving and do not place any body part or other objects in the path of the moving shoulder buckle.**
- **Do not unfasten the shoulder belt tongue from the buckle except in an emergency. See "Operation in an accident" later in this section.**

How the automatic shoulder belt works

While the ignition switch is "ON":

The shoulder buckle will move to the forward position when the door is opened, and it will move to the rear position when the door is closed.

While the ignition switch is "OFF":

The shoulder buckle will remain in or move to the front position when the door is opened, and it will remain in the front position when the door is closed until the ignition switch is turned "ON".

If the shoulder buckle operates abnormally, have the system checked by your NISSAN dealer.

Seat belt warning light " " and warning chime

When the ignition switch is turned "ON" with the door open (the shoulder buckle is at the front position):

The chime will sound for about 6 seconds, and the warning light will illuminate. The warning light will go off when the door is closed and the shoulder buckle reaches the rear position.

When the ignition switch is turned "ON" with the door closed:

The chime will sound and the warning light will illuminate until the shoulder buckle reaches the rear position.

If the shoulder belt tongue is disconnected from the buckle:

When the ignition switch is turned "ON" and the shoulder buckle reaches the rear position, the warning light will continue to illuminate and the chime will sound for about 6 seconds until the shoulder belt is connected to the shoulder buckle. Insert the shoulder

belt tongue into the shoulder buckle before driving.

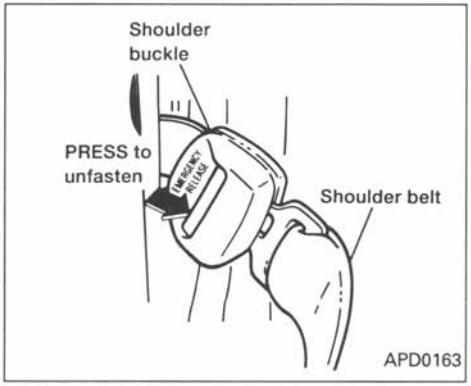
If the driver side lap belt is not fastened:

When the ignition switch is turned "ON" and the shoulder buckle reaches the rear position, the chime will sound for about 6 seconds and the warning light will continue to illuminate until the lap belt is fastened. Fasten the lap belt before driving.

WARNING:

If the seat belt warning light glows continuously while the ignition is turned "ON" with both doors closed and all seat belts fastened, it may indicate a malfunction in the system. Have the system checked by your NISSAN dealer.

If the vehicle is stopped quickly, the belt retractor may lock. Be sure to check if the shoulder belt is free before opening the door.



Operation in an accident

Emergency release

If you need to release the shoulder belt from the shoulder belt buckle in an emergency, press the red button marked with "EMERGENCY RELEASE". Use this feature only when the shoulder belt keeps you from leaving the vehicle in an accident.

For normal vehicle operation, the shoulder belt should always be connected to the buckle (see "Precautions on seat belt usage" in this section).

When the automatic shoulder belts do not move after an accident

This vehicle is equipped with an inertia fuel shut-off switch which also controls the automatic seat belt system circuit. The switch operates when the vehicle is involved in a collision and stops the automatic belts' motors from moving the belts and shuts off the fuel pump. Once the inertia fuel shut-off switch is activated, it must be reset before the vehicle will start and the automatic belts will operate.

For instructions on how to reset the inertia fuel shut-off switch, refer to "After an accident" in the "In case of emergency" section. Before resetting the switch, always check under the vehicle for fuel leaks.

WARNING:

If you see or smell fuel, do not reset the inertia fuel shut-off switch or try to start the vehicle. Have all the passengers get out of the vehicle and call the local fire department or a towing service. Failure to follow these instructions could result in injuries.

The belts may move suddenly when the inertia fuel shut-off switch reset button is

pressed. Stay clear of the shoulder belt assemblies to avoid contact when motors engage.

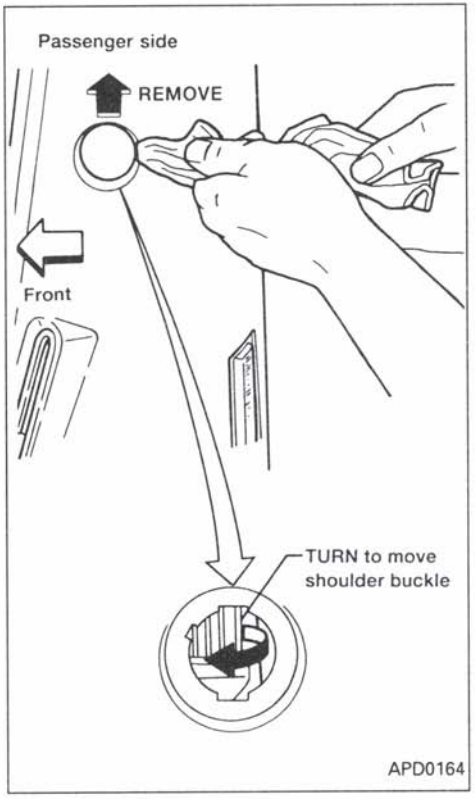
IF EITHER SHOULDER BELT BUCKLE DOES NOT OPERATE

1. Slide the seat forward as far as possible.
2. Remove the blind cap in the lower portion of the center pillar with a screwdriver.

   You will see the override thumbwheel.

   You can also use a key (wrapped in a cloth to protect the cap) to remove the blind cap.
3. Use your thumb to move the thumbwheel toward the front of the vehicle for the passenger shoulder belt and toward the rear of the vehicle for the driver shoulder belt. You will see the shoulder belt buckle move toward the back of the door guide rail. Keep turning the thumbwheel until the buckle reaches the back of the door guide rail.

Have the automatic seat belt system checked and repaired by your NISSAN dealer.



Checking seat belt retractor operation (automatic seat belt)

Your seat belt retractors are designed to lock belt movement **only** when the vehicle slows down rapidly. Pulling on the belt will not cause the retractor to lock, no matter how fast you pull.

If you wish to have the locking operation of your seat belts checked for you, or if you have any questions about belt operation, see your NISSAN dealer.

AUTOMATIC LOCKING MODE (FOR USE IN CHILD SEAT INSTALLATION)

The front seat passenger lap belt and rear 3-point seat belts have a cinching mechanism for child seat installation. It is referred to as the automatic locking mode.

When the cinching mechanism is activated the seat belt cannot be withdrawn again until the seat belt tongue is detached from the buckle and fully retracted. Refer to "Child restraints for infants and small children" later in this section for more information.

WARNING:

- **The automatic locking mode should be used only for child seat installation. During normal seat belt use by a passenger, the locking mode should not be activated. If it is activated it may cause uncomfortable seat belt tension.**

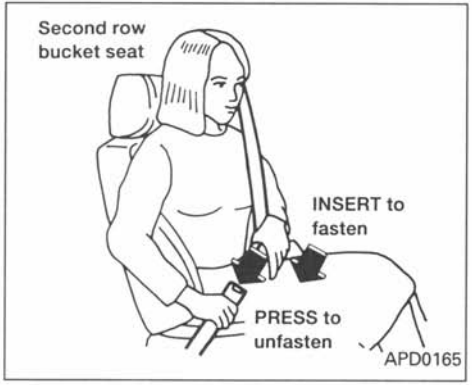
Unfastening the belts

To unfasten the belt, press the button on the buckle. The seat belt will automatically retract.

Checking seat belt operation (2-point type with retractor)

Your seat belt retractors are designed to lock belt movement when the vehicle slows down rapidly.

If the retractor does not lock during this check or if you have any questions about belt operation, see your NISSAN dealer.



3-POINT TYPE SEAT BELT WITH RETRACTOR FOR SECOND ROW BUCKET SEATS

Every person who drives or rides in this vehicle should wear a seat belt at all times.

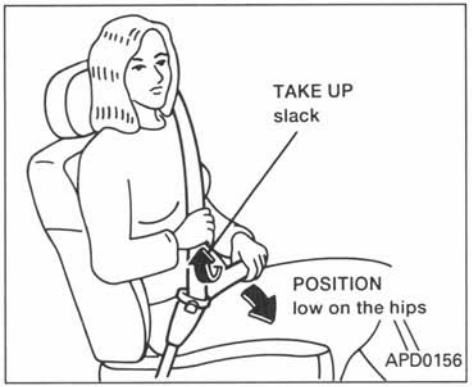
Fastening the belts

1. Adjust the seat.

The seatback should not be in a reclining position any more than needed for comfort. Seat belts are most effective when the passenger sits well back and straight up in the seat.

2. Slowly pull the seat belt out of the retractor and insert the tongue into the buckle until it snaps.

The retractor is designed to lock during a sudden stop or on impact. A slow pulling motion will permit the belt to move, and allow you some freedom of movement in the seat.



3. Position the lap belt portion **low on the hips** as shown.
4. Pull the shoulder belt portion toward the retractor to take up extra slack.

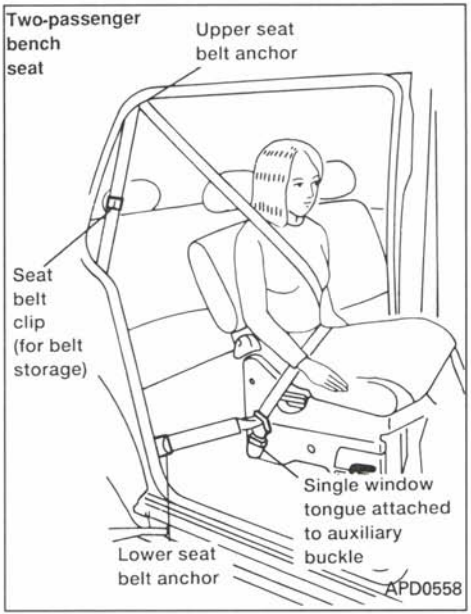
Two buckle seat belt system for the second row bench seat

There is a two buckle seat belt system for the seating position of the second row bench seat next to the sliding door.

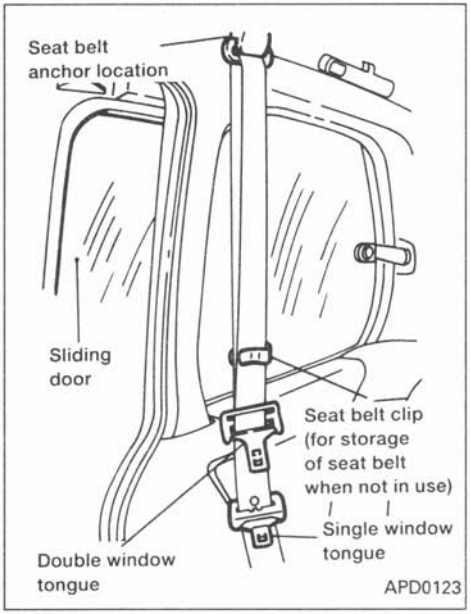
WARNING:

It is very important that you follow the instructions in this section before anyone rides in this seating position of the two-passenger bench seat.

Failure to do so may result in improper positioning of seat belt which could lead to increased likelihood or severity of injury in a sudden stop or collision.

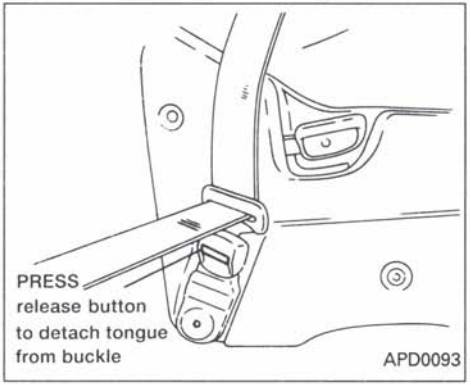


The two-passenger bench seat in the second row has a seat belt system made up of two buckles and two tongues. There are two body attaching points (one upper and one lower) that attach each end of the seat belt webbing.



One of the seat belt tongues has two "windows" (or holes) and the other has only one "window". The seat belt tongue with one window attaches to the buckle mounted to the side of the seat. The seat belt tongue with two windows should be positioned properly and fastened to the buckle mounted in the location in the middle of the seat.

When the two buckle seat belt system is not in use, the webbing can be secured with the seat belt clip. The seat belt clip should not be used with a child seat or during seat belt usage. The seat belt clip opening should face the front of the vehicle.



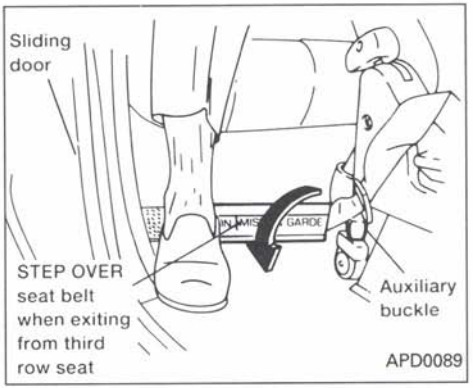
A twisted belt may prevent the retractor from working properly. If the two buckle seat belt system is twisted, disengage the single window tongue from the buckle on the side of the seat, remove the twist and reinstall the tongue into the buckle until you hear a snap and feel the latch engage.

Both tongues must be attached to their appropriate buckles whenever someone is riding in that seating position. If the tongue is released to allow a third row passenger to enter or exit, the tongue must be reattached.

When the two-passenger bench seat is re-

moved from the vehicle, you must detach the single window tongue from the auxiliary buckle.

If the three-passenger bench seat is moved up to the second row position, the outside passenger (near the sliding door) only needs to use the double window tongue and the standard buckle. Because the third row seat is so much wider and is closer to the sliding door, the single window tongue and the auxiliary buckle are not necessary.



WARNING:

Third row passengers must be very careful when exiting, because of the auxiliary seat belt. It is important to step over the seat belt guide and belt webbing to avoid tripping.

Unfastening the belts

To unfasten the belt, press the button on the buckle. The seat belt will automatically retract.

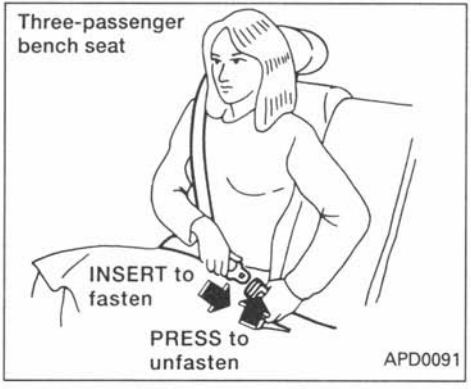
Checking seat belt operation (3-point type with retractor)

The second and third row seat belt retractors are designed to lock belt movement using two separate methods:

1) when the belt is pulled quickly from the retractor
2) when the vehicle slows down rapidly

To increase your confidence in the belts, check their operation. Grasp the shoulder belt and pull quickly forward. The retractor should lock and restrict further belt movement.

If the retractor does not lock during this check or if you have any questions about belt operation, see your NISSAN dealer.



THREE-PASSENGER BENCH SEAT

Fastening the seat belts

1. Adjust the seat.

The seatback should not be in a reclining position any more than needed for comfort. Seat belts are most effective when the passenger sits well back and straight up in the seat.

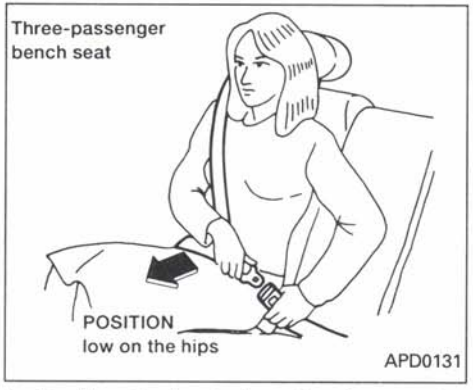
Third row passengers should be aware that their shoulder belt is located slightly behind the third row seating position. Never try to use the seat belts for the second row passengers which are in front of the three-passenger bench seat.

WARNING:

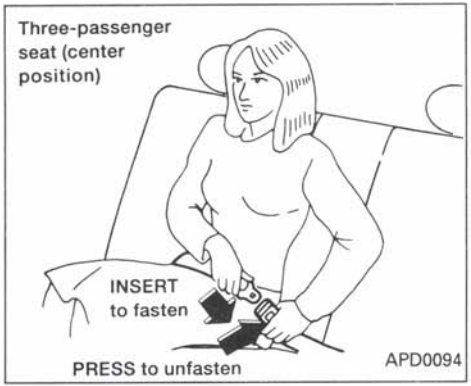
- **Use of the second row 3-point seat belts by third row passengers could increase injury in a sudden stop or an accident.**

2. Slowly pull the seat belt out of the retractor and insert the tongue into the buckle until it snaps.

The retractor is designed to lock during a sudden stop or on impact. A slow pulling motion will permit the belt to move, and allow you some freedom of movement in the seat.



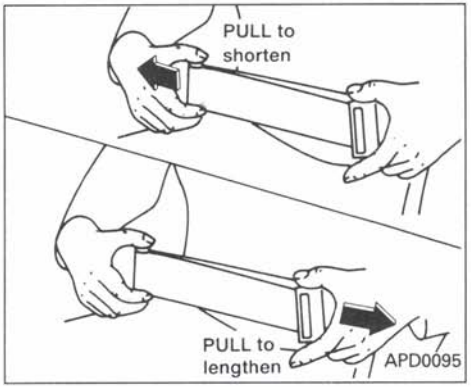
3. Position the lap belt portion **low on the hips as shown.**
4. Pull the shoulder belt portion toward the retractor to take up extra slack.



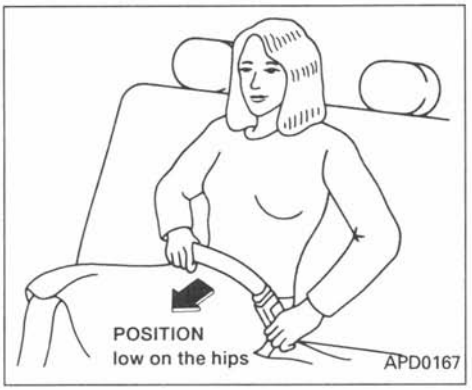
2-POINT TYPE WITHOUT RETRACTOR (Center of three-passenger bench seat)

Fastening the belts

1. Insert the tongue into the buckle until it snaps.



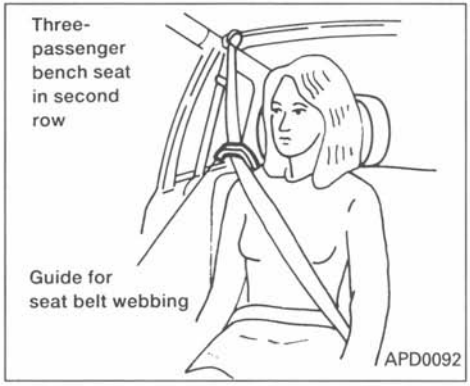
2. To lengthen, hold the tongue at a right angle to the belt and pull on the belt. To shorten, pull the free end of the belt away from the tongue.



3. Position the lap belt **low on the hips** as illustrated.

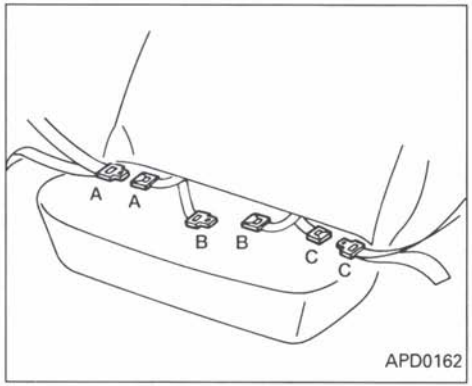
Unfastening the belts

To unfasten the belt, press the button on the buckle.



THREE-PASSENGER BENCH SEAT (IN SECOND ROW)

A seat belt guide is provided **only** on the head restraint of the passenger side of the three-passenger bench seat in vehicles equipped with the second row bench seat or in five passenger vehicles. **The guide is designed for the comfort of the passenger when the three-passenger bench seat is moved up to the second row position.** If the shoulder belt fits close to the passenger's face or neck, the belt webbing should be positioned under the seat belt guide. If the shoulder belt fits comfortably over the passenger's shoulder and across the chest, it is not necessary to use the guide.



Selecting correct set of belts

The seat belt tongues must be fastened into the seat belt buckles as illustrated above.

WARNING:

- **Any rear seat belt tongue will connect to any seat belt buckle, therefore it is important to follow the illustration above. Failure to do so could increase the chance and/or severity of injury in an accident.**

SEAT BELT EXTENDERS

If, because of body size or driving position, it is not possible to properly fit the front seat lap belts and fasten them, an extender is available which is compatible with the installed seat belts. The extender adds approximately 8 inches (200 mm) of length and may be used for either lap belt for the driver or front passenger seating position. See your NISSAN dealer for assistance if the extender is required.

WARNING:

- **Only NISSAN belt extenders, made by the same company which made the original equipment belts, should be used with NISSAN belts.**
- **Persons who can use the standard seat belt should not use an extender. Such unnecessary use could result in serious personal injury in the event of an accident.**

SEAT BELT MAINTENANCE

- **To clean the belt webbings,** apply a mild soap solution or any solution recommended for cleaning upholstery or carpets. Then brush the webbing, wipe it with a cloth and allow it to dry in the shade. Do not allow the belts to retract until they are completely dry.
- **Periodically check to see that the belt and the metal components** such as buckles, tongues, retractors, flexible wires and anchors work properly. If loose parts, deterioration, cuts or other damage on the webbing is found, the entire belt assembly should be replaced.

CHILD RESTRAINTS FOR INFANTS AND SMALL CHILDREN

Infants and small children should **always** be placed in an appropriate child restraint system while riding in the vehicle.

WARNING:

- **Children and infants should never be carried on your lap. It is not possible for even the strongest adult to resist the forces of a severe accident. The child could be crushed between the adult and parts of the vehicle. Also, do not put the same seat belt around both your child and yourself.**
- **In general, child restraint systems are designed to be installed with a lap belt or the lap portion of a three-point type seat belt.**

  A child restraint system should never be installed with a 2-point automatic shoulder belt since such a belt will not properly secure the child restraint.
- **Nissan recommends that the child restraint be installed in a rear seat. According to accident statistics, children are safer when properly restrained in a rear seat than in a front seat.**
- **An improperly installed child restraint could lead to serious injury in an accident.**

Child restraints specially designed for infants and small children are offered by several manufacturers. When selecting any child restraint, keep the following points in mind:

1) Choose only a restraint with a label certifying that it complies with Federal Motor Vehicle Safety Standard 213 or Canadian Motor Vehicle Safety Standard 213.
2) Place your child in the child restraint and

check the various adjustments to be sure the child restraint is compatible with your child. Always follow all recommended procedures.

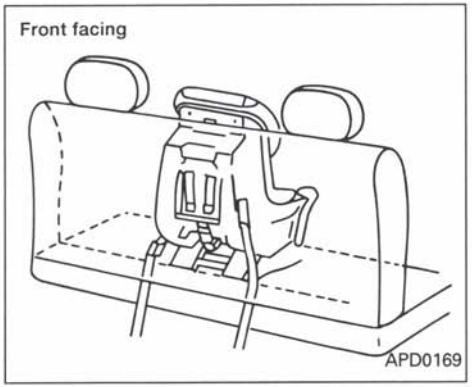
3) Check the child restraint in your vehicle to be sure it is compatible with the vehicle's seat belt system.

WARNING:

- **Follow all of the child restraint manufacturer's instructions for installation and use. When purchasing a child restraint, be sure to select one which will fit your child and vehicle. It may not be possible to properly install some types of child restraints in your vehicle.**
- **Improper use of a child restraint can result in increased injuries for both the infant or child and other occupants in the vehicle.**
- **When your child restraint is not in use, keep it secured with a seat belt to prevent it from being thrown forward in case of a sudden stop or accident.**
- **Remember that a child restraint left in a closed vehicle can become very hot. Check the seating surface and buckles before placing your child in the child restraint.**
- **All U.S. states and some provinces or territories require that infants and small children be restrained in approved child restraints at all times while the vehicle is being operated.**
- **After attaching the child restraint, test the restraint before you place the child in it. Tilt it from side to side. Try to tug it forward and check to see if the belt holds the restraint in place. If the restraint is not secure, tighten the belt as necessary, or put the restraint in another seat and test it again.**
- **If the child restraint is not anchored properly, the risk of a child being injured in a collision or a sudden stop greatly increases.**
- **Adjustable seatbacks should be positioned to fit the child restraint, but as upright as possible.**
- **For a front facing child restraint, if the seat position where it is installed has a 3-point type lap/shoulder belt, check to make sure the shoulder belt does not go in front of the child's face or neck. If it does, put the shoulder belt behind the child restraint.**

INSTALLATION AT THREE-PASSENGER BENCH SEAT CENTER POSITION

Secure the child seat with the lap belt as illustrated. Remove all slack in the lap belt for a very tight fit by pulling the free end of the belt away from the tongue.

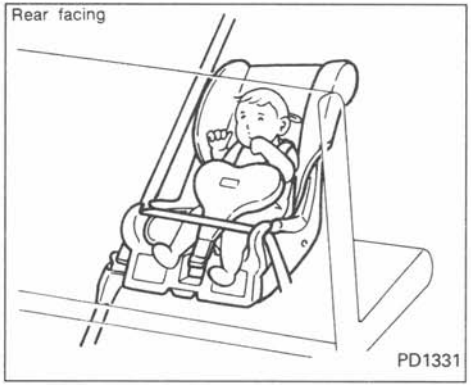


INSTALLATION AT SECOND AND THIRD ROW OUTBOARD POSITIONS

The following instructions apply to second row bucket seats, the second row bench seat and the outboard positions of the three-passenger bench seat.

WARNING:

- **When installing a child restraint in the two-passenger bench seat, if it is placed in the seating position next to the sliding door, be sure both the auxiliary buckle and main buckle are properly fastened. Failure to do so could increase the chance and/or severity of injury in an accident.**



WARNING:

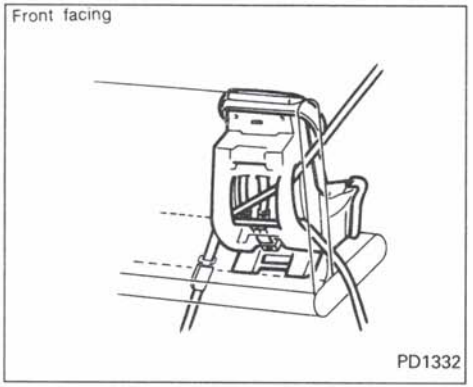
- **The 3-point belt on your vehicle is equipped with a locking mode retractor which must be used when installing a child restraint.**
- **Failure to do so will result in the child restraint not being properly secured. It could tip over or otherwise be unsecured and cause injury to the child in a sudden stop or collision.**

When you install a child restraint in a rear outboard seat, follow these steps:

1. Position the child restraint on the seat. It can be placed in a forward facing or rear facing direction, depending on the size of the child. Always follow the restraint manufacturer's instructions.
2. Route the seat belt tongue through the child restraint and insert it into the buckle until you hear and feel the latch engage.

Be sure to follow the child restraint manufacturer's instructions for belt routing.

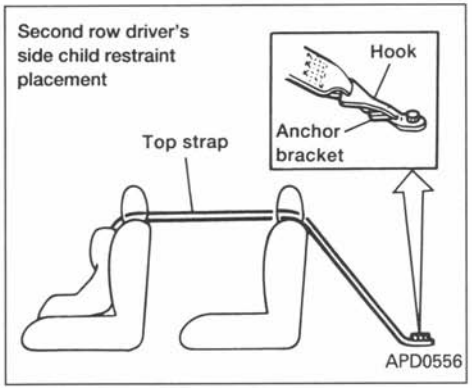
3. Pull on the shoulder belt until all of the belt is fully extended and a click is heard. At this time, the belt retractor is in the automatic locking mode (child restraint mode). (It will revert back to "emergency locking" when the belt is fully retracted.)
4. Allow the belt to retract. A clicking sound will be heard as the belt retracts. This indicates that the retractor is in the automatic locking mode. Pull up on the shoulder belt to remove any slack in the belt.



5. Before placing the child in the child restraint, use force to tilt the child restraint from side to side, and tug it forward to make sure that it is securely held in place.
6. Check that the retractor is in the automatic locking mode by trying to pull more belt out of the retractor. If you cannot pull any more belt webbing out of the retractor, the belt is in the automatic locking mode.
7. Check to make sure that the child restraint is properly secured prior to each

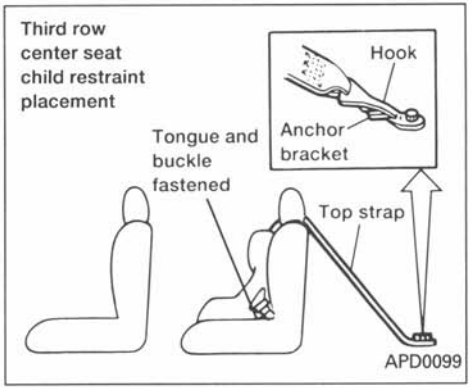
use. If the belt is not locked, repeat steps 3 through 6.

After the child restraint is removed and the seat belt is allowed to wind back into the retractor (for the passenger side of the two-passenger bench seat the auxilliary buckle must also be released), the automatic locking mode (child restraint mode) is canceled; the seat belt may be used as normal and will only lock during a sudden stop or impact.



If your child restraint has a top strap, install the anchor bracket to the provided anchor point. To gain access to an anchor point bolt, cut along the U-shaped anchor point indicators on the floor of the luggage area. Secure the child restraint with one of the seat belts and latch the top strap hook onto the appropriate anchor bracket. To install the anchor bracket, a metric bolt of the dimensions listed below must be used.

Bolt diameter: 8.0 mm
Bolt length: more than 1.18 in (30 mm)
Thread pitch: 1.25 mm



Child restraint anchor points 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 or harnesses.

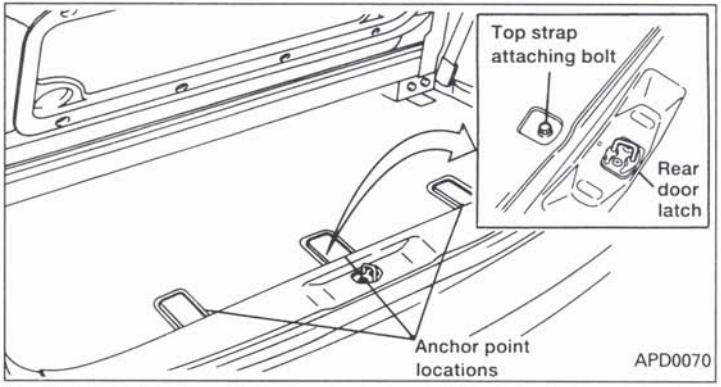
A child restraint anchored with a top strap can be installed in the driver's side second row bucket seat, driver's side of the second row bench seat, or three-passenger bench seat at all seating positions. If it is installed in a second row seating position, the top strap must go **over** the third seat and be secured to the anchor point attaching bolt.

A child restraint with a top strap should only be placed in a second row seat if there are no third seat occupants.

The top strap should be secured to the attaching bolt which provides the straightest installation of the top strap.

WARNING:

- **Do not install a child restraint with a top strap on the passenger side of the two (2) passenger bench seat or on the second row passenger side bucket seat because the top strap may not be in a straight enough line with the anchor point.**
- **Failure to follow this warning could result in the child restraint not being properly secured. The child restraint could tip over or otherwise be unsecured and cause injury to the child in a sudden stop or collision.**



Anchor point location

Anchor point attaching bolts are located under the carpet of the rear luggage area floor.

WARNING:

- **The anchor bolt should be installed at all times to prevent the possibility of exhaust fumes entering the passenger compartment through the holes.**

INSTALLATION ON THE FRONT PASSENGER SEAT

A child restraint with a top strap should not be used in the front row passenger seat.

WARNING:

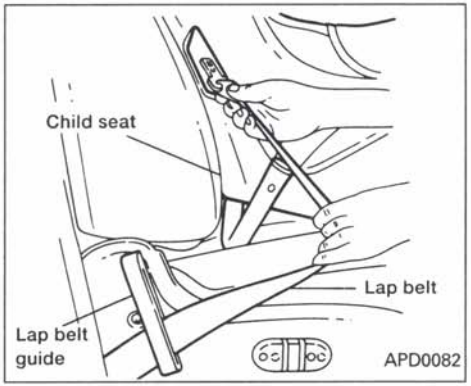
- **Your vehicle is equipped with a locking mode retractor on the lap belt for the front passenger seat. The automatic locking mode must be used when installing a child restraint in the front passenger seat.**

WARNING:

- **Failure to use the retractor's locking mode will result in the child restraint not being properly secured. The seat could tip over or otherwise be unsecured and cause injury to the child in a sudden stop or collision.**
- **Make sure the front motorized shoulder belt is disconnected so it does not cross or rest in front of the child's face or neck. Always reattach it when child restraint is removed from the seat.**

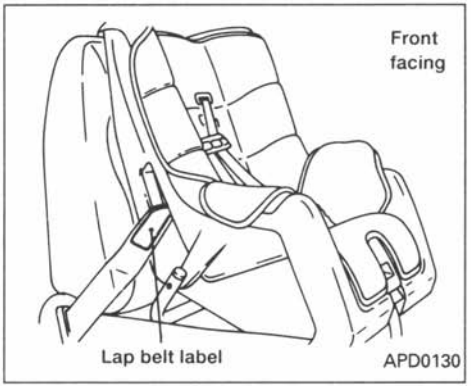
When you install a child restraint in the front seat follow these steps:

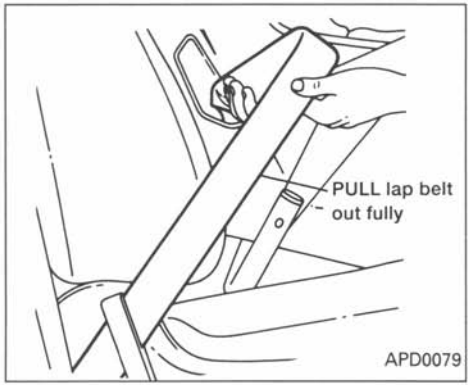
1. Position the child restraint in the front seat. It can be placed in a forward facing or rear facing direction, depending on the size of the child. Always follow the restraint manufacturer's instructions.



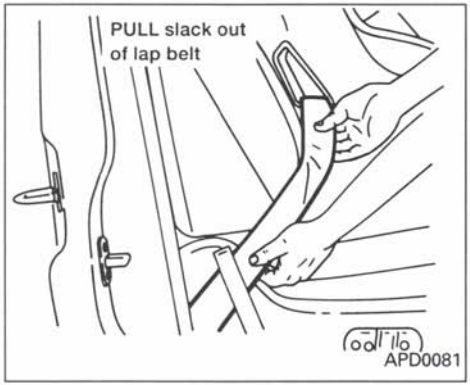
2. Route the lap belt through the child restraint and insert the belt tongue into the buckle until you hear and feel the latch engage.

Be sure to follow the child restraint manufacturer's instructions for belt routing.





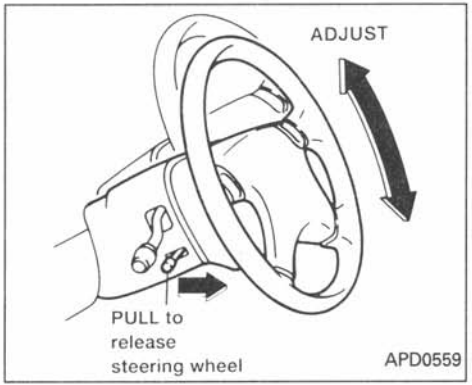
3. Grasp the lap belt below the child seat label which is on the belt. Pull upward until all of the belt is extracted and a click is heard. At this time, the lap belt retractor is in the automatic locking mode (child seat restraint mode). (It will revert back to "emergency locking" when the belt is fully retracted.)



4. Allow the belt to retract. A clicking sound will be heard as the belt retracts. This indicates that the retractor is in the automatic locking mode. Pull down on the belt to remove any slack in the belt.
5. Before placing the child in the child restraint, use force to tilt the seat from side to side, and tug it forward to make sure that the seat is securely held in place.
6. Check that the retractor is in the automatic locking mode. Try to pull more belt out of the retractor; if you cannot, the belt is in the automatic locking mode.
7. Check to make sure that the child restraint is properly secured prior to each use. If the lap belt is not locked, repeat steps 3 through 6.

After the child restraint is removed and the seat belt is allowed to wind back into the retractor, the automatic locking mode (child restraint mode) is canceled; the seat belt may be used as normal and will only lock during a sudden stop or impact.

TILTING STEERING WHEEL



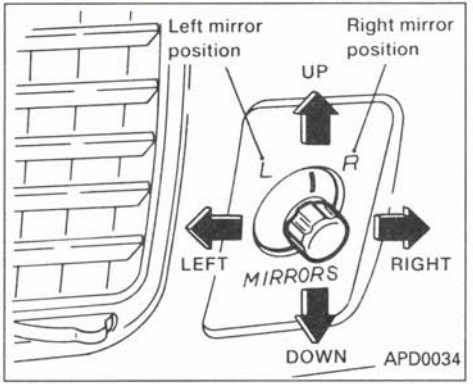
Pull the lock lever toward you and adjust the steering wheel up or down to the desired position. Release the lock lever to lock the steering wheel in place.

Gently pull down on the wheel to be sure it is engaged.

WARNING:

Do not adjust the steering wheel while driving.

OUTSIDE MIRROR CONTROL

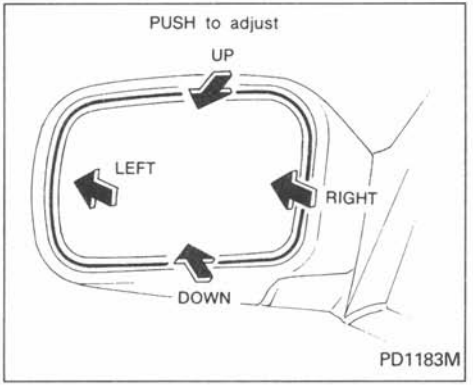


Electric control type

The outside mirrors will operate only when the ignition switch is in the "ACC" or "ON" position.

Turn the switch to select the right or left side mirror, then adjust using the control lever.

Objects viewed in the outside mirror on the passenger side are closer than they appear.

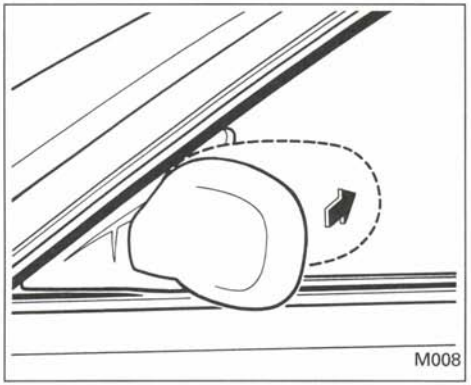


Manual control type

The outside mirror can be moved in any direction for a better rear view.

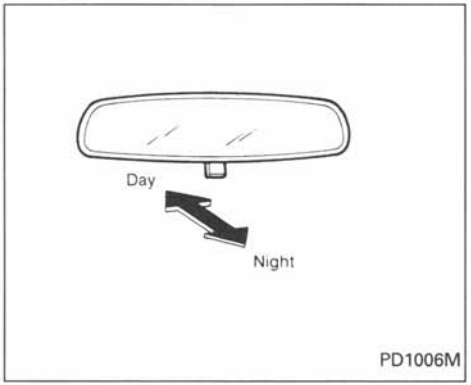
Objects viewed in the outside mirror on the passenger side are closer than they appear.

OUTSIDE MIRRORS



Push the outside mirrors backward to fold them.

INSIDE MIRROR



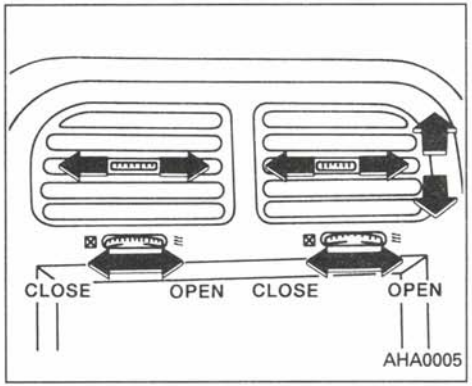
The night position will reduce glare from the headlights of vehicles behind you at night.

CAUTION:

Use the night position only when necessary, because it reduces rear view clarity.

3 Heater, air conditioner and audio system

VENTILATORS

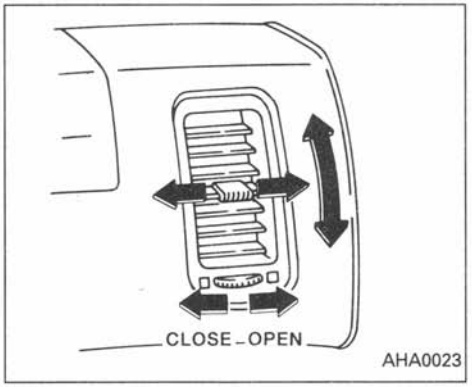


Center ventilators

Open or close, and adjust the air flow direction of ventilators.

⊠ : This symbol indicates that the vents are closed when the vent switch is moved to the left.

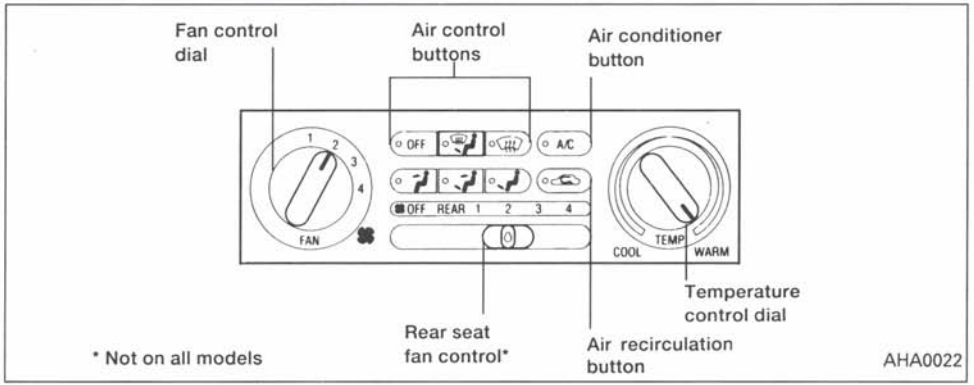
≋ : This symbol indicates that the vents are open when the vent switch is moved to the right.



Side ventilators

Adjust the air flow direction of ventilators.

HEATER AND AIR CONDITIONER



CONTROLS

Fan control dial

This dial controls fan speed.

Temperature control dial

This dial allows you to adjust the temperature of the outlet air.

Air control buttons

These buttons allow you to select the air flow outlets, or turn the system off.

"OFF" button

The "OFF" button shuts off the air supply to all outlets and stops all fan operations. Use the "OFF" button to prevent cold air from entering the passenger compartment under cold outside conditions before the engine is warmed up.

Air recirculation button

Fresh position (Indicator light OFF)

Outside air is drawn into the passenger compartment.

Use this position for normal heater or air conditioner operation.

Recirculate position (Indicator light ON)

Interior air is recirculated inside the vehicle.

Activate the air recirculation button (to the "ON" position) when driving on a dusty road or to help keep out traffic fumes.

Activate the air recirculation button for improved air conditioning performance under high temperature and high humidity conditions.

If the air recirculate mode has not been selected and the system is operating in the " " or " " mode, the system will not allow the air recirculate mode to be selected.

CAUTION:

Do not use the recirculation mode for long periods as it may cause the interior air to become stale and the windows to fog up.

Air conditioner button

This button is provided only for vehicles with an air conditioner.

Start the engine, move the fan control dial to

the desired (1 to 4) position, select an air control button and push the air conditioner button to turn on the air conditioner. The indicator light will come on when the air conditioner is on. To stop the air conditioner, push the button again; the indicator light should go off.

The air conditioner cooling function operates only when the engine is running.

WARNING:

Positioning of the heating or air conditioning controls should not be done while driving, in order that full attention may be given to the driving operation.

HEATER OPERATION

Heating

This mode is used to direct most of the hot air from the floor outlets.

The air recirculation button light should **not** be on for normal heating.

1. Push the " " button in.
2. Turn the fan control dial to select speed.
3. Move the temperature control dial to the desired position.

Ventilation

This mode directs air from the side and center vents.

1. Push the " " button in.
2. Turn the fan control dial to select speed.
3. Move the temperature control lever to the desired position.

NOTE: The recirculate position can be used.

Defrosting or defogging

This mode is used to defrost/defog the windows.

1. Push the " " button in.
2. Turn the fan control dial to select speed.
3. Move the temperature control dial to the desired position.

   When the " " button is pushed, the air conditioner will automatically be turned on to defog the windshield. The recirculated air mode will automatically be turned off to reduce window fogging.

   When " " is selected, the air conditioner indicator light will not illuminate unless illuminated in the previously selected mode. However, the air conditioner will operate to dehumidify if the outside temperature is more than 40°F (4°C), whether or not the A/C button has been pressed. Manual selection and illumination of the A/C button does not override the automatic dehumidifying which occurs when the defrost button is selected.

Bi-level heating/cooling

Bi-level is also a cooling mode when high sun load conditions are present with cool temperatures.

This mode can also be used as a cooling mode under high temperatures if the passenger(s) or driver feel their feet are too warm.

Under high temperature conditions, improved cooling can be obtained by pushing the recirculation button to the "ON" position.

The bi-level mode directs air from the side and center vents and from the floor outlets.

Push the air recirculation button to the "OFF" position when heating is required.

1. Push the " " button in.

2. Turn the fan control dial to the desired position.
3. Move the temperature control dial to the desired position.

Heating and demisting

This mode heats the interior and demists the windshield.

1. Push the " " button in.
2. Turn the fan control dial to the desired position.
3. Move the temperature control dial to the desired position.

   When the " " button is pushed, the air recirculate mode will automatically be turned off. Outside air is drawn into the passenger compartment to improve the defogging performance.

Operating tips

- **Clear snow and ice from the wiper blades and air inlet in front of the windshield. This will improve heater operation.**
- To defog the side windows more effectively when in bi-level or ventilation mode, close the center vent and direct the side vents toward the side windows.
- A slight delay may be experienced when changing air control buttons. This is not a problem, it is only the system motors and solenoids switching from one outlet to another.

AIR CONDITIONER OPERATION

Start the engine, move the fan control dial to the desired (1 to 4) position, and select an air control button before pushing in the air conditioner button to activate the air conditioner. When the air conditioner is "ON", cooling and dehumidifying functions will be added to the system operation.

The air conditioner cooling function operates only when the engine is running.

NOTE: When switching air flow outlets, the A/C system will remain activated unless the A/C button is pressed again to turn it off. The indicator light on the A/C button will remain illuminated unless the button is pressed to turn it off, or the "OFF" air control button is pressed.

Cooling

This mode is used to cool and dehumidify.

1. Push the " " button in.
2. Turn the fan control dial to select speed.
3. Push the air conditioner button. The indicator light will come on.
4. Move the temperature control dial to the desired position.

- For quick cooling when the outside temperature is high, move the air recirculation button to the "ON" position. Be sure to return the air recirculation button to the "OFF" position for normal cooling.
- Opening the windows will help vent heat buildup when parked in the sun.

Dehumidified heating

This mode is used to heat and dehumidify.

1. Push the air recirculation button to the "OFF" position.
2. Push the " " button in.
3. Turn the fan control dial to select speed.
4. Push on the air conditioner button. The indicator light will come on.

5. Move the temperature control dial to the desired position.

Dehumidified demisting

This mode is used to defog the windows and dehumidify.

1. Push the " " button in.
2. Turn the fan control dial to the desired speed.
3. Move the temperature control dial to the desired position.

   When the " " button is pushed, the air conditioner will automatically be turned on to defog the windshield, (however, the light will not illuminate unless illuminated in the previously selected mode) and the recirculated air mode will automatically be turned off.

Operating tips

- Keep windows and sun roof closed while the air conditioner is in operation.
- After parking in the sun, drive for two or three minutes with the windows open to vent hot air from the passenger compartment. Then, close the windows. This will allow the air conditioner to cool the interior more quickly.
- **The air conditioning system should be operated for about ten minutes at least once a month. This helps prevent damage to the system due to lack of lubrication.**
- If the coolant temperature gauge exceeds the HOT position, turn the air conditioner off. See "If your vehicle overheats" in the "In case of emergency" section for additional information.

Servicing air conditioning

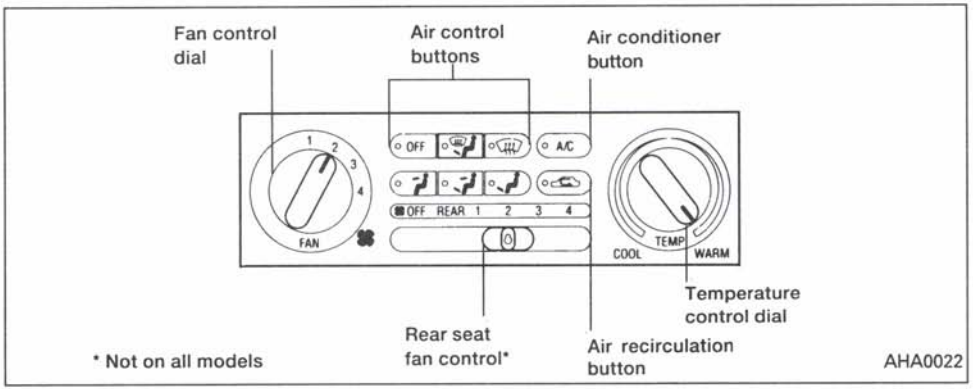
The air conditioning system in your NISSAN vehicle is charged with a new refrigerant designed with the environment in mind.

This new refrigerant will not harm the earth's ozone layer.

Special charging equipment and lubricant are required when servicing your NISSAN air conditioner. Using improper refrigerants or lubricants will cause severe damage to your air conditioning system. See "Air conditioning system refrigerant and lubricant recommendations" in the "Technical and consumer information" section of this manual.

Your NISSAN dealer will be able to service your environmentally "friendly" air conditioning system.

REAR SEAT HEATER AND AIR CONDITIONER



To operate the rear seat heater and air conditioner, the engine must be running.

The rear seat heater and air conditioner can be turned on and off from the front controls. If the rear seat fan control lever on the front panel is set to "OFF", the rear heater and air conditioner is turned off. If it is set to any of the fan speed positions, air will be discharged from the rear vents at the corresponding speed. When the rear seat fan control lever on the front panel is set to "REAR", the rear seat passengers can control their own fan speed.

The rear seat air conditioner only works when the front seat air conditioner is "ON".

The air conditioning cooling function operates only when the engine is running.

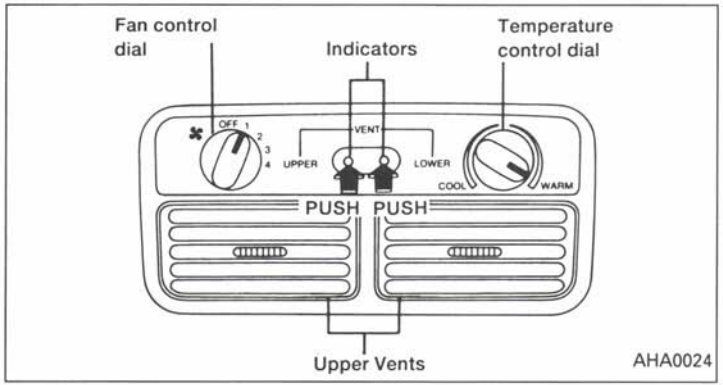
CONTROLS

Fan control dial

This dial turns the fan on and off, and controls fan speed.

Temperature control dial

This dial allows you to adjust the temperature of the outlet air.



Vent switch

The vent switch allows you to select air flow from the upper or lower vents.

- A slight delay may be experienced when changing the vent selection. This is not a problem; the delay is only the system motors and solenoids switching from one outlet to another.

RADIO

Your vehicle has either the Type 1 or the Type 2 radio. In many instances their operation is the same and their descriptions have been combined. In the cases in which their operations are different, the description will be identified as either Type 1 or Type 2.

To turn the radio on, turn the ignition key to "ACC" or "ON". If you listen to the radio with the engine not running, turn the key to the "ACC" position.

Radio reception is affected by station signal strength, distance from radio transmitter, buildings, bridges, mountains and other external influences. Intermittent changes in reception quality normally are caused by these external influences.

Clock

For information on setting the clock, refer to the section "Instruments and controls".

AM-FM RADIO WITH CASSETTE PLAYER

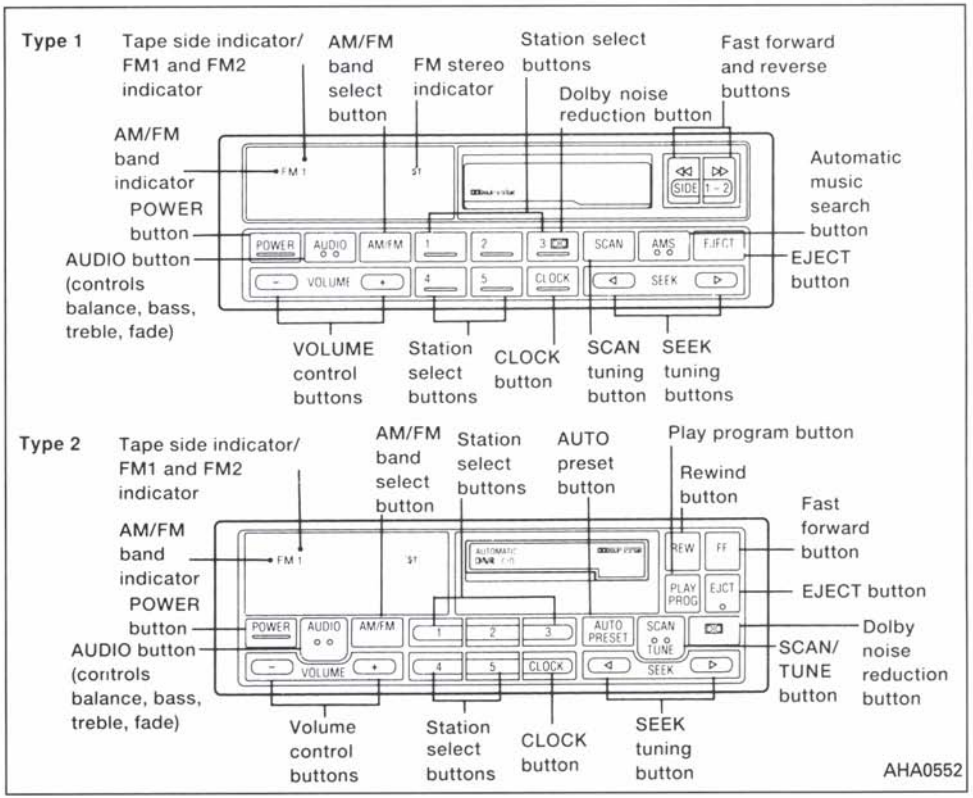
Radio operation

Push the "POWER" button to turn on the radio and tune in the desired station.

Inserting a cassette tape into the cassette player while the radio is on will turn off the radio and turn on the cassette player.

Volume

The volume can be adjusted using the "VOLUME" button. Press the left (–) side of the button to decrease the "VOLUME". Press the right (+) side of the button to increase the "VOLUME".



TUNING

Auto preset button (Type 2)

Pressing the AUTO PRESET button for three seconds allows you to automatically set all memory buttons in AM, FM1 and FM2 to the first five strong stations in each band. This is the auto memory load feature.

Once these memory buttons are set, the auto memory store feature allows you to temporarily store the auto preset stations without erasing any stations that might have been previously stored on the preset memory buttons. To use this feature, after the AUTO PRESET button has been held for three seconds, press the AUTO PRESET button once. This will store the five strong stations in each band into the memory buttons. The display will show "AUTO" and run through the frequency band, stopping briefly at each station set into memory. The radio is now in auto mode and the display will show "AUTO" each time a memory preset is pressed. To deactivate this feature, press the AUTO/ PRESET button again. The display will show "AUTO" then "OFF". The originally stored stations will now be recalled with the memory buttons.

If there are less than five strong stations in the frequency band, the remaining unfilled buttons will store the last strong station detected on the band.

After all stations have been filled, the radio will begin playing the station stored on memory button 1.

SEEK tuning function

This feature on your radio allows you to automatically select strong frequency stations up or down the frequency band. Press the right side of the "SEEK" button to select the next strong frequency station up the frequency band. Press the left side of the button to select the next strong frequency station down the frequency band. To change frequencies quickly, press and hold down either the right or left side of the "SEEK" button.

Using the SCAN button (Type 1)

If your radio has the "SCAN" button, press it to enter the scan mode. The radio will scan up the frequency band, stopping on each strong frequency station for five seconds. This continues until the SCAN button is pressed a second time.

Tuning the radio with AMS (Automatic Music Search) (Type 1)

Pushing AMS when playing the radio, will cause "TUNE" to light up in the display. Pressing the ► side of the "SEEK" button will advance the radio frequency one channel. Pressing the ◄ side of the "SEEK" button will change the radio frequency down one channel. Five seconds after the last button is pressed the system will return to the "SEEK" mode and the display will continue to show the radio system frequency.

Using the SCAN/TUNE button (Type 2)

If your radio has the SCAN/TUNE button, it is used to manually tune the radio, and to activate the scan function for selecting radio stations or selecting tape tracks.

To manually tune the radio, press the SCAN/TUNE button twice (the display shows "TUNE"). Within five seconds, press the right side of the SEEK button to tune up, or press the left side to tune down to the next frequency channel.

To enter the scan mode, press the SCAN/ TUNE button once (the display shows

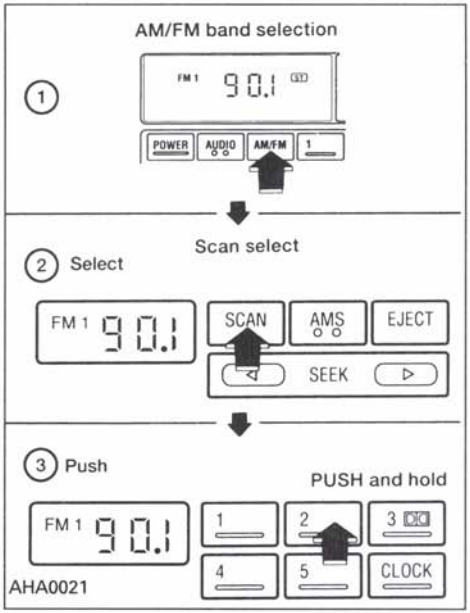
"SCN"). Pressing the right side of the SEEK button will begin to scan up the frequency band, stopping on each strong frequency station for five seconds. Pressing the left side of the SEEK button will begin the scan mode down the frequency band. To stop the scan mode, press the SCAN button again, or press the side of the SEEK button that matches the direction the radio is currently scanning.

To scan cassette tape selections, press the SCAN/TUNE button (the display shows "SCN"). Pressing either the right or left side of the SEEK button begins the forward or reverse scan mode on the tape currently being played, stopping on each track for eight seconds. While scanning, the display will show whirling sprockets plus an "S". To stop the scan mode, press the side of the SEEK button which matches the current scan direction, or press the SCAN/TUNE button.

Selecting the desired band

Push the band select button "AM/FM" to change from AM to FM reception.

The stereo indicator will glow during FM stereo reception. When the stereo broadcast signal is weak, the radio will automatically change from stereo to monaural reception.



Station memory operations

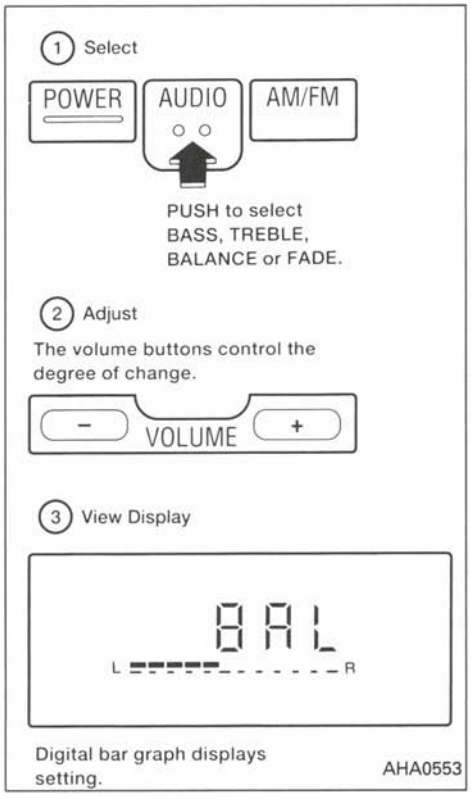
Your radio is equipped with five station select buttons. These buttons can be used to select up to five preset AM stations and ten preset FM stations.

NOTE: If the vehicle's battery is disconnected, the Station memory preset buttons will need to be reset.

Follow the easy steps below to set these buttons to the desired frequencies:

1. First, select either the AM or FM band by pushing the "AM/FM" button. (Push the button once for access to the five AM presets, again for access to the first five FM1 presets and a third time for access to the second set of five FM2 presets.)
2. Tune to the desired frequency.
3. Press one of the station memory buttons and hold the button in for about two seconds until the sound returns. That station is now held in memory on that button.

Repeat the three steps above for each station memory preset button you want to set.



The station memory buttons also control the rear seat audio system. Push the Memory 1 and Memory 3 buttons simultaneously to turn the rear controls on. Push them again to turn off the rear audio controls. A headphone symbol will appear in the display when the rear controls are activated.

Adjusting tone quality with the AUDIO button

Adjusting the BASS

Bass control allows you to adjust the lower, bass frequencies to your preference. Push the "AUDIO" button repeatedly until the display reads "BASS". Push the right side (+) of the "VOLUME" button to increase the bass (more "lows"), and push the left side (–) to decrease bass (less "lows").

Adjusting the TREBLE

Treble control allows you to adjust the higher, treble frequencies of your radio to your preference. Push the "AUDIO" button repeatedly until the display reads "TREB". Push the right side (+) of the "VOLUME" button to increase the treble (more "highs"), and push the left side (–) to decrease treble (less "highs").

Adjusting speaker sound balance

Balance control allows you to adjust the sound distribution between the right and left speakers. Push the "AUDIO" button repeatedly until the display reads "BAL". Push the right side (+) of the "VOLUME" button to shift the sound to the right speakers, and push the left side (–) of the button to shift the sound to the left speakers.

FADER volume control

The fader control allows you to adjust the sound distribution between the front and rear speakers. Push the "AUDIO" button repeatedly until the display reads "FADE". Push the right side (+) of the "VOLUME" button to shift the sound to the front speakers, and push the left side (–) to shift the sound to the rear speakers.

NOTE: Illuminated bars in the display show relative levels of bass, treble, speaker balance and fader functions.

Cassette tape operation

Turn the ignition key to "ACC" or "ON", then insert the cassette tape into the tape door by lightly pushing it.

Because of the power loading feature, the cassette tape will automatically be pulled into the player and begin to play.

A cassette tape can be loaded with the ignition ON whether or not the radio power is on. Inserting a cassette tape with the radio power off will cause the audio system to turn on. After the cassette is ejected, the audio system will be off. Also, the antenna will be in the up position whenever the radio is playing, but will go down any time the radio is not playing (i.e., when a cassette or compact disc is playing or when the radio power is off.)

Do not force the cassette tape into the tape door.

Forcing a tape in, or pushing too hard could cause player damage.

The cassette tape will automatically change directions to play the other side when the first side is completed.

- **To maintain good quality sound, NISSAN recommends that you use cassette tapes of 60 minutes or shorter in length.**
- **Cassette tapes should be removed from the player when not in use. Store cassettes in their protective cases and away from direct sunlight, heat, moisture and magnetic sources.**

  Direct sunlight can cause the cassette to become deformed. The use of deformed cassettes may cause the cassette to jam in the player.
- **Do not use cassettes that have labels which are peeling and loose. If used, the label could jam in the player.**
- **If a cassette has loose tape, insert a pencil through one of the cassette hubs and rewind the tape firmly around the hubs. Loose tape may cause tape jamming and wavering sound quality.**
- **Over a period of time, the playback head, capstan and pinch roller may collect a tape coating residue as the tape passes over the head. This residue accumulation can cause weak or wavering sound, and should be removed periodically with a head cleaning tape.**

  If the residue is not removed periodically, the player may need to be disassembled for cleaning.

Using a Nissan Cassette Deck Cleaning System or equivalent to clean the tape player head after 10-12 hours of play will help maintain the best playback sound and proper tape operation.

Fast forwarding or rewinding the tape

Type 1

Push the ▶▶ (fast forward) or ◀◀ (reverse) button for the desired direction.

If the tape is in the fast forward mode ▶▶, pushing the rewind button ◀◀ will stop the tape and it will resume playing. If the tape is in the rewind mode ◀◀, pushing the fast forward ▶▶ button again will stop the tape and it will resume playing.

Type 2

Push the FF (fast forward) button or the REW (rewind) button for the desired direction.

If the tape is in the fast forward mode, pushing the FF button again will stop the tape and it will resume playing. If the tape is in the rewind mode, pushing the REW button again will stop the tape and it will resume playing.

AMS (automatic music search) fast forwarding or AMS rewinding the tape (Type 1)

Push the AMS button while the cassette tape is playing. The tape will run quickly, then stop and play the next program. When in the AMS mode, pushing ◀◀ will fast rewind to the beginning of the song being played. Pushing ▶▶ will fast forward to the end of the current song.

This system searches for the blank intervals between selections. If there is a blank interval within a selection or there is no interval between selections, the system may not search correctly.

Changing the direction of tape play

Type 1

If your audio system has Rewind/Fast Forward buttons that are labeled "SIDE 1-2", pressing both buttons together will also allow you to switch to the opposite track (side) of the tape.

Type 2

The PLAY PROGRAM button will stop fast forward or rewind and will also resume tape play. It can also be used to reverse the tape to the opposite track.

Stopping and ejecting the cassette tape

Push the "EJECT" button.

The cassette tape will automatically come out.

When you eject a tape the radio is turned off automatically. You have to push the "POWER" switch again to turn on the radio.

Dolby NR (noise reduction)

Push the DD "DOLBY NR" button for Dolby NR encoded tapes to reduce high frequency tape noise. The indicator will come on.

Dolby NR is manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY NR" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Metal or chrome tape usage (Type 2)

The cassette player will be automatically set to high bias play when playing a metal or chrome cassette tape. The indicator "M" will come on when playing a metal or chrome cassette tape.

POWER ANTENNA

The antenna will automatically extend when the radio is turned on, and retract when switched off. If the radio is left on, the antenna will retract and extend with the ignition key "OFF-ON" operation.

CAUTION:

Before turning the radio on, make sure that there is no one near the antenna outlet and there is enough space for it to extend.

To prevent damage, be sure that the power antenna is fully retracted before the vehicle enters an automated car wash.

Dirt and other foreign matter on the power antenna rod may interrupt its operation. Clean the rod periodically with a damp cloth. This type of cleaning is especially important during the winter seasons in areas where road salt and other chemicals may be spread on the road surfaces and splashed onto the antenna rod.

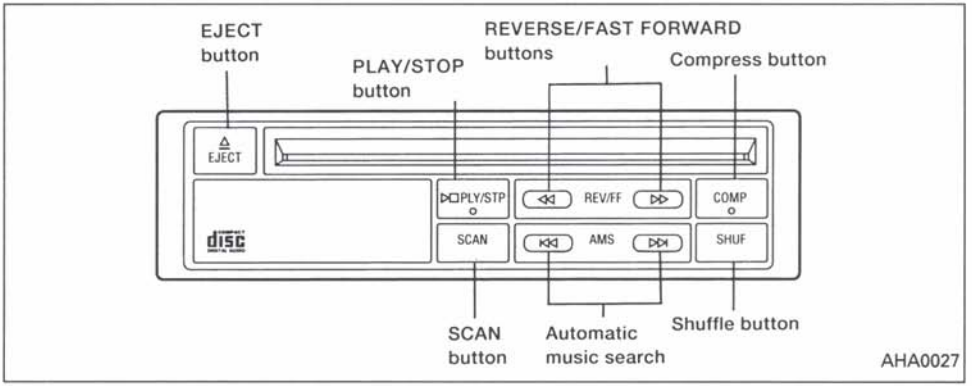
Tape error messages

Your cassette tape player is equipped to diagnose certain problems you may experience. Error codes are as follows:

Error 0 - Communication error between the radio controller and the tape controller. The cassette player will eject the tape. Insert the tape again. If the same error code appears in the display, try a different cartridge.

Error 1 - Possible problem cartridge. The cassette tape player will eject the tape. Insert the tape again. If the same error code appears in the display, try a different cartridge.

Error 2 - Tape eject or load failure. Your cassette tape player will go into the pause mode. Push "EJECT" to eject the tape. If the tape doesn't eject, refer the problem to qualified personnel for service.



COMPACT DISC PLAYER

Using the controls on your new compact disc player

The compact disc player operates when a disc is inserted (label side up). Handle the disc by its edge only.

The digital display on your CD player shows the track (selection) number and the elapsed time. Indicators for play (▷), stop (□), compression on (COMP) and shuffle on (SHUF) are also in the display. (These features are described later.)

Once a disc is inserted, operation of the CD player will override that of the cassette player or radio.

NOTE: The volume, bass, treble, balance and fader controls on the radio are also used with the CD player. Refer to the previous pages for operating instructions on these controls.

NOTE: The three-inch compact disc singles can be used.

How to insert a disc and begin play

Insert one disc, label side up, into the disc opening. When inserted, the disc automati-

cally loads into the unit and play starts at the beginning of the first selection. The play indicator (▷) lights up and the number "1" (track) and "0.00" (elapsed time) are shown in the digital display.

When the disc reaches the end, the disc player automatically returns to the beginning of the disc and resumes playing.

If a compact disc is inserted when the audio system is off, it will turn the audio system on and begin the play mode.

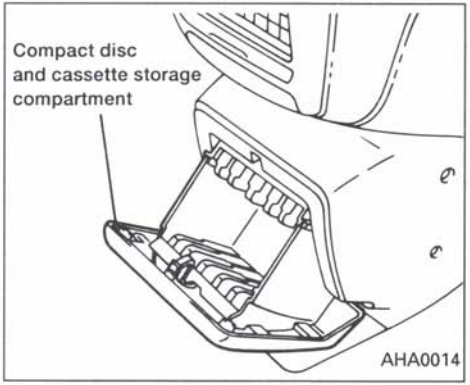
Once a disc is inserted, the disc opening is secured to prevent the accidental insertion of a second disc.

The CD player has heat protection circuitry to protect the laser diode. If the temperature of the player reaches 167°F (75°C), the heat detection circuit will shut off the player and "HOT" will appear in the display. When the temperature is within normal operating range, the "HOT" indicator will turn off and the CD player will again be operational.

How to stop and restart the CD player

When a disc is loaded, the unit automatically enters the play mode and the play indicator (▷) illuminates. To stop temporarily, press the PLY/STP button. The stop indicator (□) in the display illuminates and operation returns to the radio or tape mode. To resume CD play, press this button again.

If the CD player is playing when the ignition key is turned off, when the ignition switch is turned on again, the CD player will resume playing.



Some models have a compact disc/cassette holder located under the audio system in the instrument panel.

How to use the AMS (automatic music selection) button on your CD player

The AMS feature on your CD player allows you to quickly find a particular selection on the disc. Press the forward side of the AMS button to advance to the next selection. Press the reverse side of the AMS button to reverse to a previous selection.

Using the SCAN feature

Press the "SCAN" button to enter the scan mode. The CD player will begin scanning the disc, stopping on each listenable track for an eight second sampling. This continues until you press the "SCAN" button a second time or eject the disc. While in the scan mode, the track number flashes in the display.

How to fast forward or reverse your CD player

Press the fast forward (FF) side or reverse (REV) side of the button to quickly search for a particular point in a selection. While either side of the button is pressed, the disc goes forward or backward at two different speeds depending on how long the button is held down. (Pressing the button for more than a couple of seconds will speed up the process.) Release the button at the desired point (watch the elapsed playing time in the display or listen to the sound during fast forward or reverse to judge when to release the button).

When the end time of the last track appears in the display, you have reached the end of the disc by keeping the fast forward (FF) side of the button pressed. The indicator returns to normal display when the reverse (REV) side of the button is pressed. A "1" and "0.00" will appear when the beginning of the disc is reached by pressing the reverse (REV) side of the button.

Compression

Because of the wide dynamic range of the compact disc player, soft passages may be difficult to hear under certain driving conditions while maintaining a reasonable volume level in the louder passages. The compression feature will bring these soft and loud passages closer together for a more consistent listening level.

To turn the compression on, press the "COMP" button. When on, the compression indicator ("COMP") will appear in the display. Press the button again to turn it off.

Shuffle

The shuffle feature on your CD player allows you to listen to your disc selections in a different order. When this feature is activated, your CD player will randomly select and play tracks on the disc.

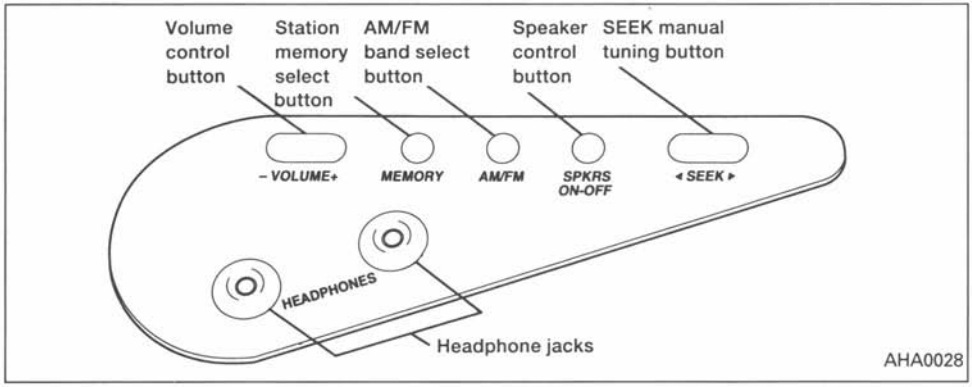
Press the shuffle ("SHUF") button to turn on. Press it again to turn off. When on, the shuffle indicator ("SHUF") will appear in the display.

Shuffle and Scan

Both the shuffle and scan features can be activated simultaneously. In this mode, the player will randomly pick a selection and play the first eight seconds. This process is continued until either the "SCAN" button or shuffle "SHUF" button is pressed a second time.

How to eject the disc

Push the "EJECT" button to stop play, eject the disc and resume radio or tape operation of your audio system. If the disc is not removed within 15 seconds, the mechanism will reload the disc for storage.



Rear audio controls

Radio features that can be controlled by the rear seat remote control are listed below:

- Volume: –/+
- Memory: front preset stations
- Band select — AM, FM1, FM2
- Speakers ON/OFF
- Seek: ◄ ►

Push the Memory 1 and Memory 3 buttons on the front radio controls simultaneously to turn the rear controls on. Push them again to turn off the rear audio controls.

The headphones symbol will illuminate in the front display when the rear audio controls are on.

Push the Memory 1 and Memory 3 buttons simultaneously to override turning the speakers off by rear control.

If your radio has a cassette player, a rear seat passenger listening to the headphones can reverse and fast forward a cassette tape using the "SEEK" button.

The rear controls can only increase the volume to the level which the front radio is set.

Headphones are not included with the vehicle. Most portable radio headphones will work with the rear audio controls.

When the rear seat controls are on, push the "SPKRS ON-OFF" button to turn all speakers off. Push again to turn all speakers on.

If the rear audio system was "ON" when the ignition was turned "OFF" the audio system will "remember" and the rear system will still be "ON" when the engine is started again. The system also "remembers" if the speakers were "ON" or "OFF". Therefore, the speakers may have to be turned on again with the Memory 1 and Memory 3 buttons.

CB RADIO OR CAR PHONE

When installing a CB ham radio, a car phone or other transmitters in your NISSAN, be sure to observe the following cautions, otherwise the new equipment may adversely affect the MFI system and other electronic parts.

CAUTION:

- **Keep the antenna as far away as possible from the Engine Control Module.**
- **Also keep the antenna wire more than 8 inches (20 cm) away from the Multiport Electronic Fuel Injection (MFI) harness. Do not route the antenna wire next to any harness.**
- **Adjust the antenna standing-wave ratio as recommended by the manufacturer.**
- **Connect the ground wire from the CB radio chassis to the body.**
- **For details, consult a NISSAN dealer.**

4 Starting and driving

PRECAUTIONS WHEN STARTING AND DRIVING

WARNING:

Do not leave children, unreliable adults, or pets alone in your vehicle. They could accidently injure themselves or others through inadvertent operation of the vehicle. Also, on hot, sunny days, temperatures in a closed vehicle could quickly become high enough to cause severe or possibly fatal injuries to people or animals.

EXHAUST GAS (Carbon Monoxide)

WARNING:

Do not breathe exhaust gases; they contain colorless and odorless carbon monoxide. Carbon monoxide is dangerous. It can cause unconsciousness or death.

- **If you suspect that exhaust fumes are entering the vehicle, drive with all windows fully open, and have the vehicle inspected immediately.**
- **Do not run the engine in closed spaces such as a garage for any longer than is absolutely necessary.**
- **Do not park the vehicle with the engine running for any extended length of time.**
- **Keep the back door closed while driving, otherwise exhaust gases could be drawn into the passenger compartment. If you must drive in this manner for some reason, take the following steps.**
  1. **Open all the windows.**
  2. **Set the air recirculate switch to "OFF" and the fan control dial at 4 (high) to circulate the air.**
- **If electrical wiring or other cable connections must pass to a trailer through a seal on the body, follow the manufacturer's recommendation to prevent carbon monoxide entry into the vehicle.**
- **The exhaust system and body should be inspected by a qualified mechanic whenever:**
  a. **The vehicle is raised for service.**
  b. **You suspect that exhaust fumes are entering into the passenger compartment.**
  c. **You notice a change in the sound of the exhaust system.**
  d. **You have had an accident involving damage to the exhaust system, underbody, or rear of the vehicle.**

THREE WAY CATALYST

The three way catalyst is an emission control device installed in the exhaust system. Exhaust gases in the three way catalyst are burned at high temperatures to help reduce pollutants.

WARNING:

- **The exhaust gas and the exhaust system are very hot. While the engine is running, keep people or flammable materials away from the exhaust pipe.**
- **Do not stop or park the vehicle over flammable materials such as dry grass, waste paper or rags, as they may burn easily.**

To help prevent damage

- **Do not use leaded gasoline.**
  Deposits from leaded gasoline will seriously reduce the three way catalyst's ability to help reduce exhaust pollutants.
- **Keep your engine tuned up. Malfunc-**

tions in the ignition, fuel injection, or electrical systems can cause overrich fuel flow into the catalyst, causing it to overheat. Do not keep driving if the engine misfires, or if noticeable loss of performance or other unusual operating conditions are detected. Have the vehicle inspected promptly by an authorized NISSAN dealer.

- **Avoid driving with an extremely low fuel level. Running out of fuel could cause the engine to misfire, damaging the three way catalyst.**
- **Do not race the engine while warming it up.**
- **Do not push or tow your vehicle to start the engine.**

Drinking Alcohol/Drugs and Driving

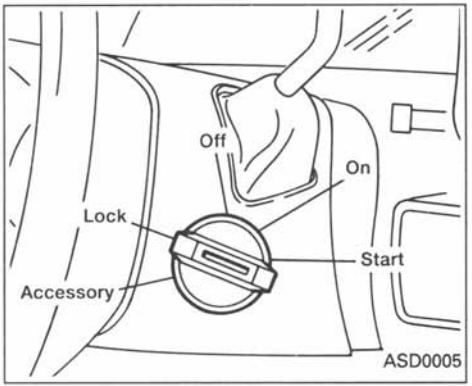
WARNING:

Alcohol in the blood stream reduces coordination, delays reaction time and impairs judgement. Driving after drinking alcohol increases the likelihood of being involved in an accident injuring yourself and others. Additionally, if you are injured in an accident alcohol can increase the severity of the injury.

Nissan is committed to safe driving. But, you must choose not to drive under the influence of alcohol. Every year thousands of people are injured or killed in alcohol related accidents. Although the local laws vary on what is considered to be legally intoxicated, the fact is that alcohol affects all people differently and most people underestimate the effects of alcohol.

Remember, drinking and driving don't mix!

And that's true for drugs, too (over the counter, prescription, and illegal drugs). Don't drive if your ability to operate your vehicle is impaired by alcohol, drugs, or some other physical condition.



The switch includes an anti-theft steering lock device.

"LOCK" (Normal parking position)

The ignition key can only be removed at this position.

The ignition lock is designed so that the key cannot be turned to "LOCK" and removed until the shift lever is moved to the "P" position.

The shift lever is designed so that it cannot be moved out of "P" and into any of the other gear positions if the ignition key is turned to either "ACC", or "LOCK", or if the

key is removed from the switch.

The shift lever can be moved out of "P" (Park) after the ignition switch is in the "ON" position, and the foot brake pedal is depressed.

WARNING:

- **To lock the steering wheel, remove the key. To unlock the steering wheel, insert the key and turn it gently while rotating the steering wheel slightly right and left.**
- **Never remove the key while driving. If the key is removed, the steering wheel will lock. This may cause the driver to lose control of the vehicle and could result in serious vehicle damage or personal injury.**

"OFF"

The engine can be turned off without locking the steering wheel.

"ACC" (Accessories)

This position activates electrical accessories such as the radio when the engine is not running.

"ON" (Normal operating position)

This position turns on the ignition system and the electrical accessories.

"START"

This position activates the starter motor, starting the engine.

BEFORE STARTING THE ENGINE

- Make sure the area around the vehicle is clear.
- Maintenance items listed here should be checked periodically, for example, each time you check engine oil.
- Check that all windows and lights are clean.
- Visually inspect tires for their appearance and condition. Also check tires for proper inflation.
- Lock all doors.
- Position seat and adjust head restraints.
- Adjust inside and outside mirrors.
- Fasten seat belts and ask all passengers to do likewise.
- Check the operation of warning lights when key is turned to the "ON" position.

DRIVING WITH AN AUTOMATIC TRANSMISSION

The automatic transmission in your vehicle is electronically controlled by a microcomputer to produce maximum power and smooth operation.

Shown on the following pages are the recommended operating procedures for this transmission. Follow these procedures for maximum vehicle performance and driving enjoyment.

Starting the vehicle

- After starting the engine, fully depress the foot brake pedal before shifting the selector lever to the "R", "N", "D", "2" or "1" position. Be sure the vehicle is fully stopped before attempting to shift the selector lever.

This automatic transmission is designed so that the foot brake pedal MUST be depressed before shifting from "P" to any drive position while the ignition switch is "ON".

The shift lever cannot be moved out of "P" and into any of the other gear positions if the ignition key is turned to "ACC", "LOCK", or if the key is removed from the switch.

When the battery charge is low, the shift lever can be moved if the ignition switch is in the "ACC" position.

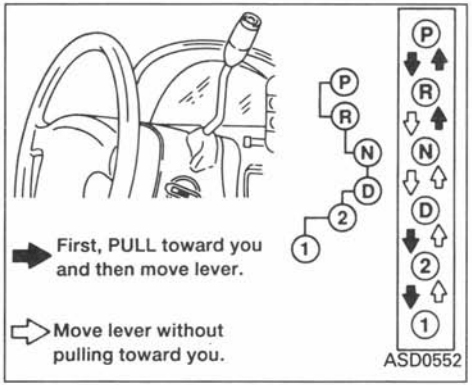
1. Keep the foot brake pedal depressed and shift into a driving gear.
2. Release the parking brake and foot brake, then gradually start the vehicle in motion.

- **Cold engine idle speed is high, so use caution when shifting into a forward or reverse gear before the engine has warmed up.**
- **Avoid revving up the engine while the vehicle is stopped. This could cause unexpected vehicle movement.**

Driving precautions

To help prevent transmission damage:

- **Do not depress the accelerator pedal while shifting from "P" or "N" to: "R", "D", "2" or "1". Always depress the brake pedal until shifting is completed.**
- **Never shift to "P" or "R" while the vehicle is moving.**
- **When stopping the vehicle on an uphill grade, do not hold the vehicle by depressing the accelerator pedal. The foot brakes should be used for this purpose.**



"P" (Park):

Use this selector position when the vehicle is parked or when starting the engine. Always be sure the vehicle is at a complete stop. For maximum safety, depress the brake pedal, then pull the lever toward you and move the lever to the "P" position. Apply the parking brake. When parking on a hill, apply the parking brake first, then shift the lever into the "P" position.

Shifting from "P" (Park)

If the ignition switch is in the "ON" position and the foot brake pedal is depressed, but the shift lever still cannot be moved out of "P" (Park), follow these instructions:

1. Shut the engine off and remove the key.
2. Apply the parking brake.
3. Reinsert the ignition key and turn it clockwise to the first position (OFF).
4. Depress the brake pedal, move the gearshift lever to "N" (Neutral) and start the engine.
5. Check stoplight operation.

WARNING:

If the shift lever cannot be moved from the "P" position while the engine is running and the brake pedal depressed, the stoplights may not work. Malfunctioning stoplights could cause an accident injuring yourself and others.

These instructions for starting the vehicle in "N" (Neutral) should only be used until service can be obtained. Never drive the vehicle if the stoplights are not operating properly.

"R" (Reverse):

Use this position to back up. Always be sure the vehicle is completely stopped. Depress the brake pedal then pull the shift lever toward you and move it to the "R" position.

"N" (Neutral):

Neither forward nor reverse gear is engaged. The engine can be started in this position. You may shift to "N" and restart a stalled engine while the vehicle is moving.

"D" (Drive):

Use this position for all normal forward driving.

"2" (Second gear):

Use for hill climbing or engine braking on downhill grades.

Do not downshift into the "2" position at speeds over 68 MPH (110 km/h). Do not exceed 68 MPH (110 km/h) in the "2" position.

"1" (Low gear):

Use this position when climbing steep hills slowly or driving slowly through deep snow, sand or mud, or for maximum engine brak-

ing on steep downhill grades.

Do not exceed 35 MPH (56 km/h) in the "1" position.

Do not shift into the "1" position at speeds over 68 MPH (110 km/h).

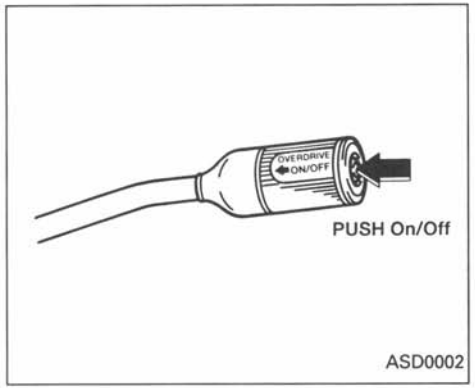
Accelerator downshift — In "D" position —

For rapid passing or hill climbing, fully depress the accelerator pedal to the floor. This shifts the transmission down into third gear, second gear or first gear, depending on the vehicle speed.

Fail-safe

When the Fail-safe operation occurs, the next time the key is turned to the "ON" position, the O/D OFF light will blink for approximately 8 seconds after coming on for 2 seconds. While the vehicle can be driven under these circumstances please note that the gears in the automatic transmission will be locked in 3rd gear.

NOTE: If the vehicle is driven under extreme conditions, such as excessive wheel spinning and subsequent hard braking, the Fail-safe system may be activated. This will occur even if all electrical circuits are functioning properly. In this case, turn the ignition key "OFF" and wait for 3 seconds. Then turn the key back to the "ON" position. The vehicle should return to its normal operating condition. If it does not return to its normal operating condition have your NISSAN dealer check the transmission and repair if necessary.



Overdrive switch

Each time your vehicle is started, the transmission is automatically "reset" to overdrive "ON".

ON: **For normal driving the Overdrive switch is engaged. The transmission is upshifted into Overdrive as the vehicle speed increases.**

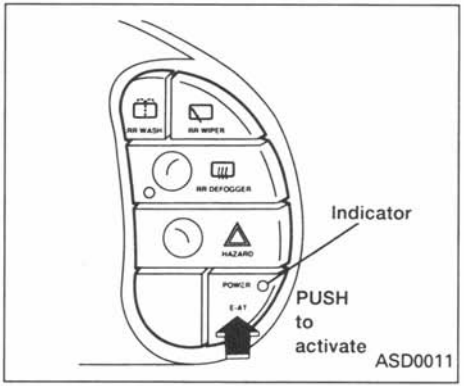
The overdrive will not engage until the engine has warmed up.

OFF: **For driving up and down long slopes** where engine "braking" would be advantageous, push the

overdrive switch. The O/D OFF light will illuminate. When cruising at a low speed or climbing a gentle slope, you may feel uncomfortable shift shocks as the transmission shifts between 3rd and overdrive repeatedly. In this case, press the overdrive switch. The O/D OFF indicator light will come on at this time.

When driving conditions change, press the overdrive switch again. The "O/D OFF" indicator light will go out.

Remember not to drive at high speeds for extended periods of time with the "O/D OFF" light illuminated. This reduces the fuel economy.



Power E-AT switch

The Power E-AT (Electronic Automatic Transmission) activates a power mode for powerful acceleration. When selected, the indicator light on the switch will illuminate. This mode allows the transmission to shift at higher engine revolutions (higher vehicle speed) for increased acceleration when passing or driving up long slopes.

1. Apply the parking brake.
2. Move the selector lever to "P" (Park) or "N" (Neutral). ("P" preferred.)

   The shift lever cannot be moved out of "P" and into any of the other gear positions if the ignition key is turned to "ACC" or "OFF" or if the key is removed from the switch.

   The starter is designed not to operate if the selector lever is in one of the driving positions.

3. Crank the engine **with your foot off the accelerator pedal** by turning the ignition key to "START". Release the key when the engine starts. If the engine starts, but fails to run, repeat the above procedure.

   — If the engine is very hard to start in extremely cold or hot weather, depress the accelerator pedal and hold it to help start the engine.

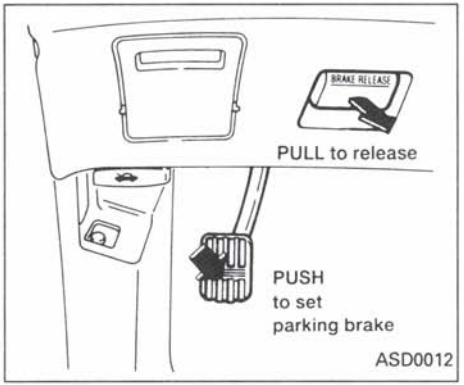
   — In the summer, when restarting the engine within 30 minutes after it has been stopped, keep the accelerator pedal slightly depressed while starting.

CAUTION:

Do not operate the starter for more than 15 seconds at a time. If the engine does not start, wait 10 seconds before cranking again, otherwise the starter could be damaged.

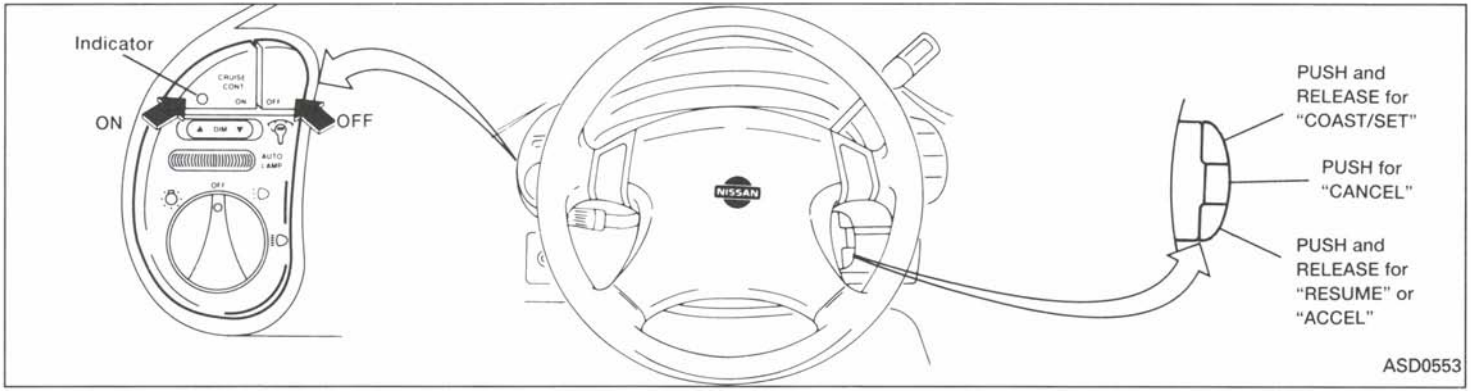
4. Warm-up

   Allow the engine to idle for at least 30 seconds after starting. Drive at moderate speed for a short distance first, especially in cold weather.



To apply: Firmly depress the parking brake.

To release: Pull the release lever. Before driving, be sure the parking brake warning light goes out.



The cruise control allows driving at a speed between 30 to 90 MPH (48 to 144 km/h) without keeping your foot on the accelerator pedal.

To turn on the cruise control, push the "CRUISE CONT ON" switch. The indicator light on the switch will come on.

To set at cruising speed, accelerate your vehicle to the desired speed, push the "COAST/SET" switch and release it. (The "CRUISE" light in the instrument cluster will come on.) Take your foot off the accelerator pedal. Your vehicle will maintain the set speed.

- **To pass another vehicle,** depress the accelerator pedal. When you release the pedal, the vehicle will return to the previously set speed.
- The vehicle may not maintain the set speed when going up or down steep hills. If this happens, drive without the cruise control.

To cancel the preset speed, follow any of these three methods:

a) Push the "CANCEL" button; the "CRUISE" light will go out.

b) Tap the brake pedal; the "CRUISE" light will go out.

c) Push the cruise control OFF switch. Both the "ON" indicator and "CRUISE" lights will go out.

- If you depress the brake pedal while pushing the "RES/ACCEL" switch, the "RES/ ACCEL" function is cancelled.

  In order for the "RES/ACCEL" switch to operate, the "COAST/SET" must be used to re-engage the system.
- The cruise control will automatically be cancelled if the vehicle slows down more

than 8 MPH (13 km/h) below the set speed.

- Move the selector lever to "N" (Neutral). The "CRUISE" light will go out.

To reset at a faster cruising speed, use one of the following three methods:

a) Depress the accelerator pedal. When the vehicle attains the desired speed, push and release the "COAST/SET" switch.

b) Push and hold the "RES/ACCEL" switch. When the vehicle attains the speed you desire, release the switch.

c) Push, then quickly release the "RES/ACCEL" switch. Each time you do this, the set speed will increase by about 1 MPH (1.6 km/h).

To reset at a slower cruising speed, use one of the following three methods:

a) Lightly tap the brake pedal. When the vehicle attains the desired speed, push the "COAST/SET" switch and release it.

b) Push and hold the "COAST/SET" switch. Release the switch when the vehicle slows down to the desired speed.

c) Push, then quickly release the "COAST/SET" switch. Each time you do this, the set speed will decrease by about 1 MPH (1.6 km/h).

To resume the preset speed, push and release the "RES/ACCEL" switch. The vehicle will resume the last set cruising speed when the vehicle speed is over 30 MPH (48 km/h).

Precautions

- If the cruise control system malfunctions, it will cancel automatically. The "CRUISE" indicator in the instrument cluster will then blink to warn the driver.
- When the cruise indicator blinks, turn the cruise control switch (Main switch) "OFF" and have the system checked by your NISSAN dealer.
- The cruise indicator may sometimes blink when the cruise control switch (Main switch) is turned "ON" while pushing the "RES/ACCEL" switch, the "COAST/SET" switch or the "CANCEL" switch (located on the steering wheel). To properly set the cruise control system perform the steps above in the order indicated.

Avoid using the cruise control when driving under the following conditions:

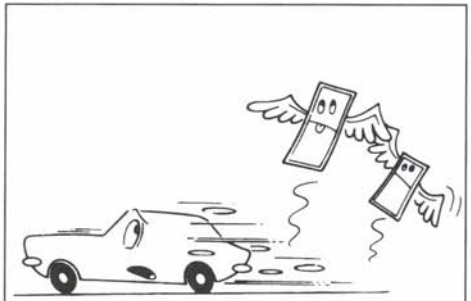
- when it is not possible to keep the vehicle at set speed.
- in heavy traffic or in traffic that varies in speed.
- on winding roads, or hilly roads.
- on slippery roads (rain, snow, ice, etc.)
- in very windy areas.

BREAK-IN SCHEDULE

During the first 1,000 miles (1600 km), follow these recommendations for the future reliability and fuel economy of your new vehicle. Failure to follow these recommendations may result in vehicle damage or shortened engine life.

- Do not drive over 55 MPH (90 km/h) and do not run the engine over 4,000 rpm. Avoid driving for long periods at constant speed, either fast or slow.
- Do not accelerate at full throttle in any gear.
- Avoid quick starts.
- Avoid hard braking as much as possible.
- Do not tow a trailer for the first 500 miles (800 km).

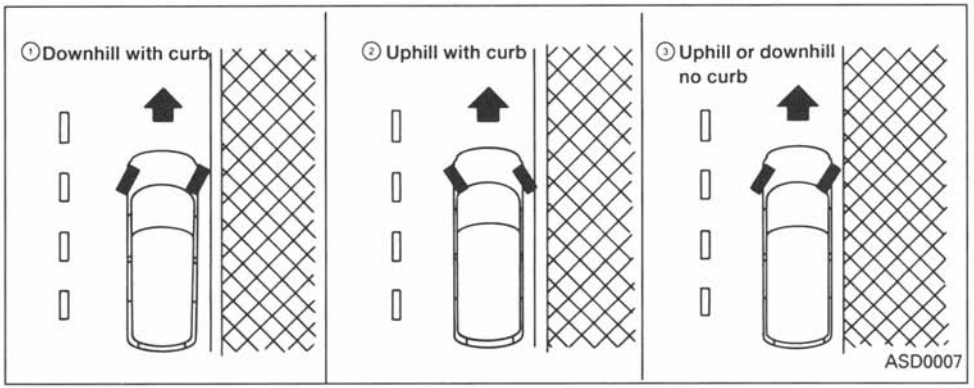
ECONOMY HINTS



Abrupt starts and stops waste fuel and money.

SD1001M

- Accelerate slowly and smoothly. Maintain cruising speeds with a constant accelerator position.
- Drive at moderate speeds on the highway. Driving at high speed will lower fuel economy.
- Avoid unnecessary stopping and braking. Maintain a safe distance behind other vehicles.
- Use a proper gear range which suits road conditions. On level roads, shift into high gear as soon as possible.
- Avoid unnecessary engine idling.
- Keep your engine tuned up.
- Follow the recommended periodic maintenance schedule.
- Keep the tires inflated at the correct pressure. Low pressure will increase tire wear and waste fuel.
- Keep the front wheels in correct alignment. Improper alignment will cause not only tire wear but also lower fuel economy.
- Air conditioner operation lowers fuel economy. Use the air conditioner only when necessary.
- When cruising at highway speeds, it is more economical to use the air conditioner and leave the windows closed to reduce drag.



CAUTION:

Do not park the vehicle over flammable materials such as dry grass, waste paper or rags, as they may burn easily.

1. Firmly apply the parking brake.
2. Move the gearshift lever to the "P" (Park) position.

CAUTION:

Safe parking procedures require that both the parking brake be set and the transmission placed into "P" (Park) position.

3. To help prevent the vehicle from rolling into the street when parked on a sloping driveway, it is a good practice to turn the wheels as illustrated.

- HEADED DOWNHILL WITH CURB: ①

  Turn the wheels into the curb and move the vehicle forward until the curb side wheel gently touches the curb.

- HEADED UPHILL WITH CURB: ②

  Turn the wheels away from the curb and move the vehicle back until the curb side wheel gently touches the curb.

- HEADED UPHILL OR DOWNHILL, NO CURB: ③

  Turn the wheels toward the side of the road so the vehicle will move away from the center of the road if it moves.

4. Turn the ignition key to the "LOCK" position and remove the key.

CAUTION:

- **Never leave the engine running while the vehicle is unattended.**
- **Never leave children unattended in the vehicle.**

- **Driving with vacuum assisted brake:**

  The brake booster aids braking by using engine vacuum. If the engine stops, you can stop the vehicle by depressing the brake pedal. However, greater foot pressure on the brake pedal will be required to stop the vehicle and the stopping distance will be longer.

- **Driving with the power assisted steering:**

  The power assisted steering is designed to use a hydraulic pump, driven by the engine, to assist steering.

  If the engine stops or the drive belt breaks, you will still have control of the vehicle. However, much greater steering effort is needed, especially in sharp turns or at low speeds.

- **Wet brakes:**

  When the vehicle is washed or driven through water, the brakes may get wet. As a result, your braking distance will be longer and the vehicle may pull to one side during braking.

  To dry brakes, drive the vehicle at a safe speed while lightly pressing the brake pedal to heat up the brakes. Do this until the brakes return to normal. Avoid driving the vehicle at high speeds until the brakes function correctly.

- Avoid resting your foot on the brake pedal while driving. This will overheat the brakes, wear out the brake linings and pads faster and reduce gas mileage.

- To help save the brakes and to prevent the brakes from overheating, reduce speed and downshift to a lower gear before going down a slope or long grade. Overheated brakes may reduce braking performance and could result in loss of vehicle control.

- While driving on a slippery surface, be careful when braking, accelerating or downshifting. Abrupt braking actions or sudden acceleration could cause the wheels to skid.

The anti-lock brake system controls the brakes at each wheel so the wheels will not lock when braking abruptly or when braking on slippery surfaces. The system detects the rotation speed at each wheel and varies the brake fluid pressure to prevent each wheel from locking and sliding. By preventing wheel lockup, the system helps the driver maintain steering control and helps to minimize swerving and spinning on slippery surfaces.

Self-test feature

The anti-lock brake system consists of electronic sensors, electric pumps, and hydraulic solenoids controlled by a computer. The computer has a built-in diagnostic feature that tests the system each time you start the engine and move the vehicle at a low speed in forward or reverse. When the "self-test" occurs, you may hear a "clunk" noise and/or feel a "pulsation" in the brake pedal. This is normal and is not an indication of any malfunction. If the computer senses any malfunction, it switches the anti-lock brake system OFF and turns on the "ANTI-LOCK" brake warning light in the dashboard. The brake system will then behave normally, but without anti-lock assistance.

Normal operation

The vehicle must be traveling at least 6 MPH (10 km/h) for the anti-lock system to work. When the anti-lock system senses that one or more wheels are close to locking up, the actuator (under the hood) rapidly applies and releases hydraulic pressure (like pumping the brakes very quickly). While the actuator is working, you may feel a pulsation in the brake pedal and hear a noise or vibration from the actuator under the hood. This is normal and indicates that the anti-lock system is working properly. However, the pulsation may indicate that road conditions are hazardous and extra care is required while driving.

WARNING:

The anti-lock brake system is a sophisticated device, but it cannot prevent accidents resulting from careless or dangerous driving techniques. It can help maintain vehicle control during braking on slippery surfaces, but remember that the stopping distance on slippery surfaces will be longer than on normal surfaces, even with the anti-lock system. Ultimately, the responsibility for safety of self and others rests in the hands of the driver.

Tire type and condition of tires may also affect braking effectiveness. Refer to "Wheels and tires" in the "Do-it-yourself operations" section of this manual.

COLD WEATHER DRIVING CAUTIONS

Freeing a frozen door lock

To prevent a door lock from freezing, apply de-icer or glycerin to it through the key hole. If the lock becomes frozen, heat the key before inserting it into the key hole.

Anti-freeze

In the winter when it is anticipated that the temperature will drop below 32°F (0°C), check anti-freeze (ethylene glycol base) to assure proper winter protection. For details, see "Engine cooling system" in the "Do-it-yourself operations" section.

Battery

If the battery is not fully charged during extremely cold weather conditions, the battery fluid may freeze and damage the battery. To maintain maximum efficiency, the battery should be checked regularly. For details, see "Battery" in the "Do-it-yourself operations" section.

Draining of coolant water

If the vehicle is to be left outside without anti-freeze, drain the cooling system by opening the drain valves located under the radiator and on the engine block. Refill

before operating the vehicle. See "Changing engine coolant" in the "Do-it-yourself operations" section.

Tire equipment

1. The SUMMER tires are of a tread design to provide superior performance on dry pavement. However, the performance of these tires will be substantially reduced in snowy and icy conditions. If you operate your vehicle on snowy or icy roads, NISSAN recommends using MUD & SNOW or ALL SEASON tires on all four wheels. Please consult your NISSAN dealer for the tire type, size, speed rating and availability information.
2. For additional traction on icy roads, studded tires may be used. However, some provinces and states prohibit their use. Check local, state and provincial laws before installing studded tires.

Skid and traction capabilities of studded snow tires, on wet or dry surfaces, may be poorer than that of non-studded snow tires.

3. Snow chains may be used if desired. Make sure they are of proper size for the tires on your vehicle and are installed according to the chain manufacturer's suggestions. In addition, drive at a reduced speed, otherwise, your vehicle may be damaged and/or vehicle handling and performance may be adversely affected.

Tire chains

Use of tire chains may be prohibited according to location. Check the local laws before installing tire chains. When installing tire chains, make sure they are of proper size for the tires on your vehicle and are installed according to the chain manufacturer's suggestions. **Use only SAE Class "S" chains.** Other types may damage your vehicle. Use chain tensioners when recommended by the tire chain manufacturer to ensure a tight fit. Loose end links of the tire chain must be secured or removed to prevent the possibility of whipping action damage to the fenders or undercarriage. If possible, avoid fully loading your vehicle when using tire chains. In addition, drive at a reduced speed. Do not exceed maximum speed suggested by chain manufacturer. Otherwise, your vehicle may be damaged and/or vehicle handling and performance may be adversely affected.

Never install tire chains on T-type and small size spare tires. Do not use the chains on dry roads.

Special winter equipment

It is recommended that the following items be carried in the vehicle during winter:

1. A scraper and stiff-bristled brush to remove ice and snow from the windows and wiper blades.
2. A sturdy, flat board to be placed under the jack to give it firm support.
3. A shovel to dig the vehicle out of snowdrifts.
4. Extra window washer fluid to refill the reservoir tank.

Driving on snow or ice

- Wet ice (32°F, 0°C and freezing rain), very cold snow or ice can be slick and very hard to drive on. The vehicle will have a lot less traction or "grip" under these conditions. Try to avoid driving on wet ice until the road is salted or sanded.
- Whatever the condition, drive with caution and accelerate gently. If accelerated too fast, the drive wheels will spin and will

lose even more traction.

- Allow more stopping distance under these conditions. Braking should be started sooner than on dry pavement.
- Allow greater following distances on slippery roads.
- Watch for slippery spots (glare ice). These may appear on an otherwise clear road in shaded areas. If a patch of ice is seen ahead, brake before reaching it. Try not to brake while actually on the ice, and avoid any sudden steering maneuvers.

Engine block heater

WARNING:

Do not use your heater (if so equipped) with an ungrounded electrical system or two-pronged (cheater) adapters. You can be injured by an electrical shock if you use an ungrounded connection.

5 In case of emergency

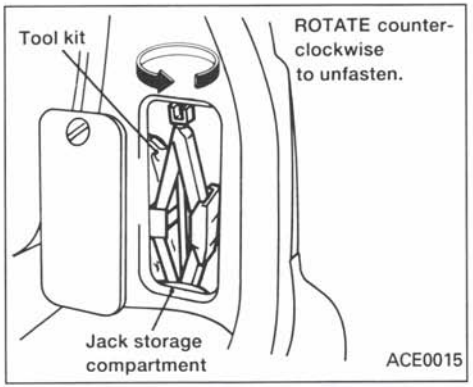
If you have a flat tire, follow the instructions below.

Stopping the vehicle

1. Safely move the vehicle off the road away from traffic.
2. Turn on the hazard warning flashers.
3. Park on a level surface and apply the parking brake. Move the gearshift lever to the "P" (Park) position.
4. Turn off the engine.

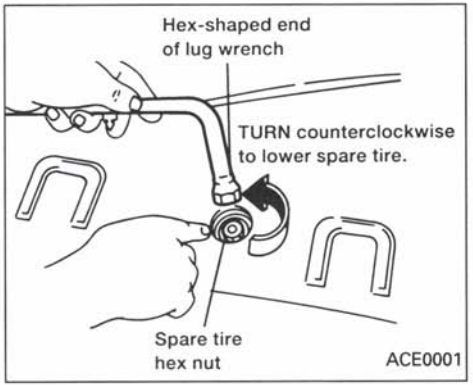
WARNING:

- **Never change tires when the vehicle is on a slope, ice or slippery areas. This is dangerous.**
- **Never change tires if oncoming traffic is close to your vehicle. Wait for professional road assistance.**
- **Raise the hood to warn other traffic, and to signal professional road assistance personnel that you need assistance.**
- **Have all passengers get out of the vehicle and stand in a safe place, away from traffic and clear of the vehicle.**

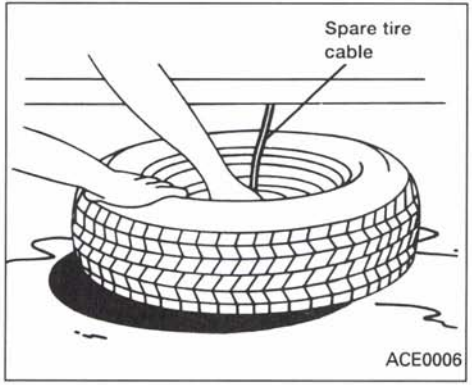


Getting the tools and spare tire

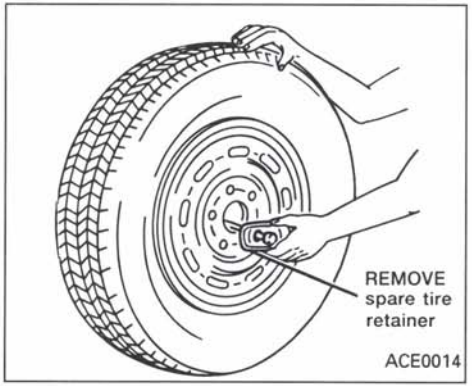
Remove the jack and the tool kit from the jack storage compartment in the luggage area. Remove the lug wrench from the tool kit.



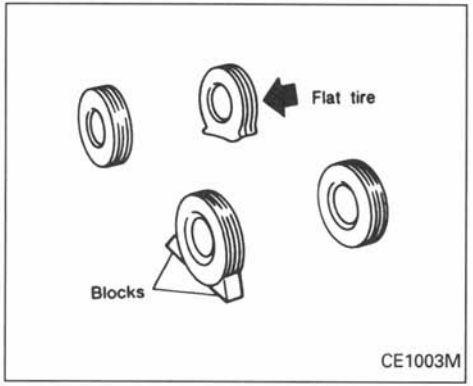
1. Remove the plastic hex nut cover in the carpeting of the cargo area. The hex nut is used to lower and raise the spare tire which is located underneath the vehicle.
2. Place the lug wrench over the hex nut and turn counterclockwise until the cable extends completely. The spare tire hex nut rachets when the cable is fully extended.



3. Carefully slide the tire from under the rear of the vehicle.

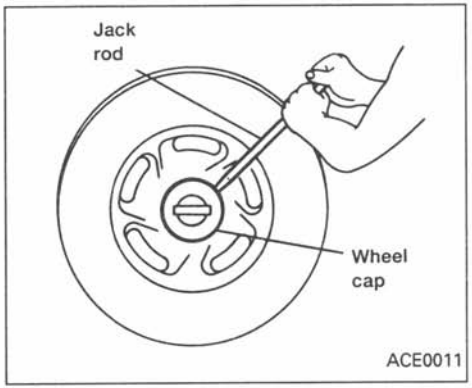


4. Stand the tire up to easily remove the retainer.



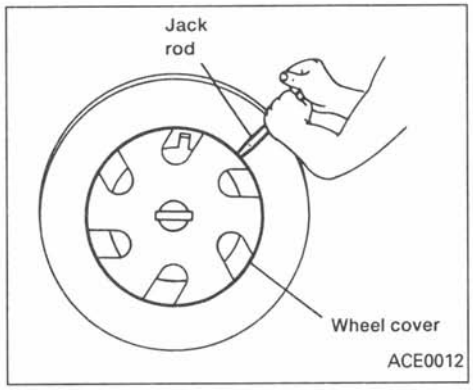
Blocking wheels

Place suitable blocks at both the front and back of the wheel diagonally opposite the flat tire. This will prevent the vehicle from rolling when it is jacked up.



Removing wheel cap

For cap removal, place the screwdriver tip of the jack rod into the indentation between the cap and the wheel. Push and twist gently.

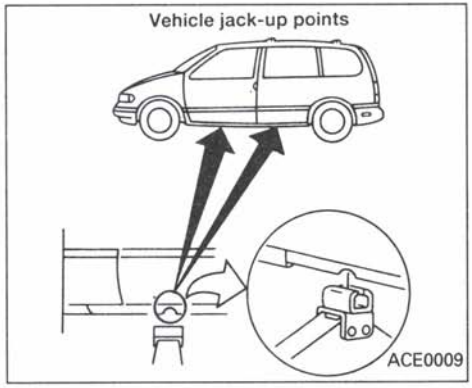


Removing wheel cover

Remove the jack rod from the tool kit. For wheel cover removal, place the screwdriver tip of the jack rod between the wheel cover and the edge of the rim. Push and twist gently.

WARNING:

Do not use your hands to pry off wheel caps or wheel covers. Doing so could result in personal injury.

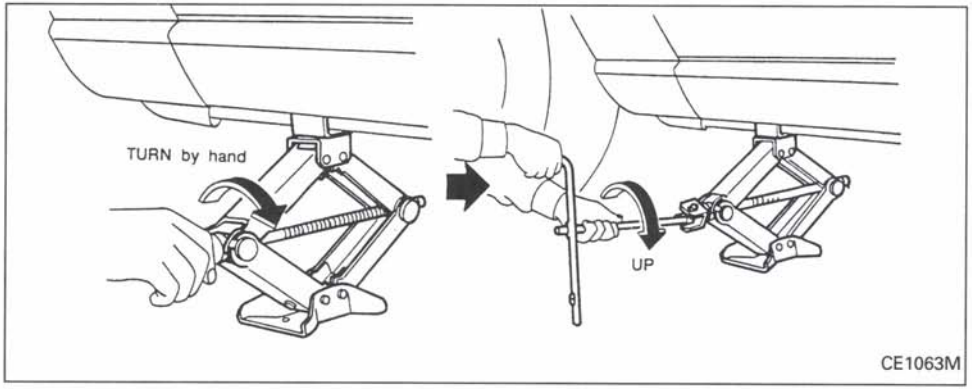


Jacking up and removing wheel

To help avoid personal injury, carefully read the caution label attached to the jack body and the following instructions.

1. Place the jack directly under the jack-up point as illustrated above so that the top of the jack contacts the vehicle at the jack-up point. Align the center of both the jack head and the notch at the jack-up point as shown. Also fit the notched portion of the vehicle in the groove of the jack head as shown.

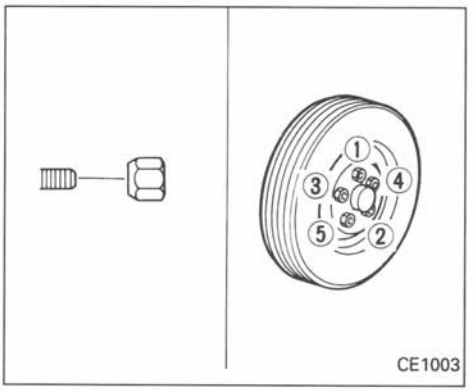
The jack should be used on level firm ground.



2. Loosen each wheel nut one or two turns by turning counterclockwise with the lug wrench. **Do not remove the wheel nuts until the tire is off the ground.**
3. Carefully raise the vehicle until the tire clears the ground. Remove the wheel nuts, and then remove the wheel.

WARNING:

- **Never get under the vehicle while it is supported only by the jack.**
- **Use the jack provided with your vehicle. The jack is designed only for lifting your vehicle during a tire change.**
- **Use the correct jack-up points; never use any other part of the vehicle for jack support.**
- **Never jack up the vehicle more than necessary.**
- **Never use blocks on or under the jack.**
- **Do not start or run engine while vehicle is on the jack.**
- **Do not allow passengers to stay in the vehicle while it is on the jack.**
- **Do not raise the vehicle using a bumper jack.**



Installing wheel

The T-type spare tire is designed for emergency use. See specific instructions under the heading "Wheels and tires" in the "Do-it-yourself operations" section.

1. Clean any mud or dirt from the surface between the wheel and hub.
2. Carefully put the wheel on and tighten the lug nuts finger tight.
3. With the lug wrench, tighten lug nuts alternately and evenly until they are tight.

4. Lower the vehicle slowly until the tire touches the ground. Then, with the lug wrench, tighten the lug nuts securely in the sequence as illustrated.

CAUTION:

- **As soon as possible tighten the lug nuts to the specified torque with a torque wrench.**

  Lug nut tightening torque:
  72 to 87 ft-lb (98 to 118 N·m)

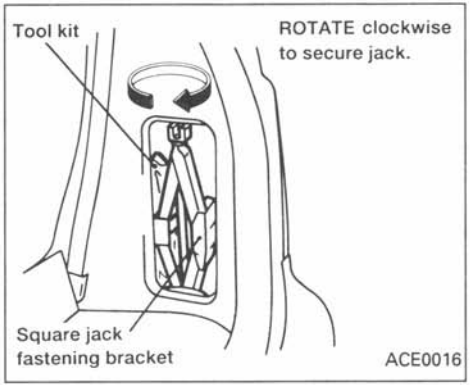
- **Adjust tire pressure to the COLD pressure.**

COLD pressure:

After vehicle has been parked for three hours or more or driven less than 1 mile (1.6 km).

COLD tire pressures are shown on the tire placard affixed to the driver side center pillar.

- **Retighten the lug nuts when the vehicle has been run for 600 miles (1,000 km) after installing the aluminum wheel.**



5. Securely store the jacking equipment in the vehicle. The tool kit is stored behind the jack.

Stowing the spare tire or flat tire

1. To raise the tire to the stowed position, install the retainer through the wheel center and turn the wheel lug wrench clockwise until the tire is raised to its original position underneath the vehicle.

   The spare tire hex nut ratchets when the tire is raised. It won't allow you to over-tighten.

2. Check for proper seating against underbody supports. If necessary, loosen tire, reposition and retighten.

- **Always make sure that the spare tire and jacking equipment are properly secured after use. Such items can become dangerous projectiles in an accident or sudden stop.**

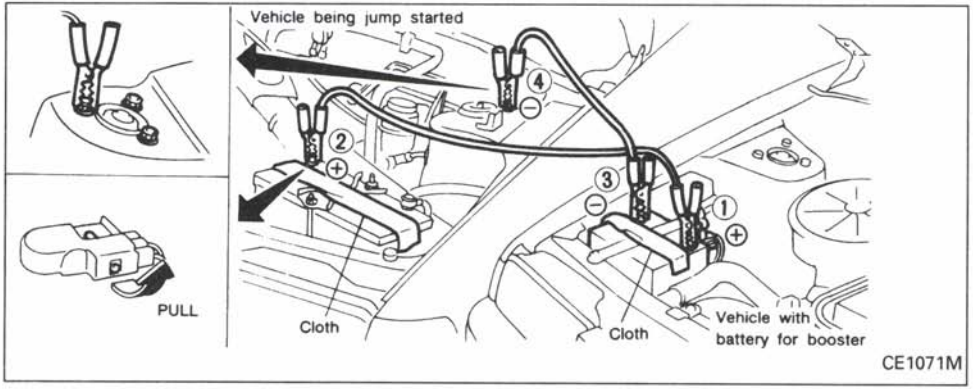
  The T-type spare tire is designed for emergency use. See specific instructions under the heading "Wheels and tires" in the "Do-it-yourself operations" section.

JUMP STARTING

To start your engine with a booster battery, the instructions and precautions below must be followed.

CAUTION:

- **If done incorrectly, jump starting can be hazardous.**
- **Explosive hydrogen gas is always present in the vicinity of the battery. Keep all sparks and flames away from the battery.**
- **Do not allow battery fluid to come into contact with eyes, skin, cloth or painted surfaces. Battery fluid is a corrosive sulfuric acid solution which can cause severe burns. If the fluid should come into contact with anything, immediately flush the contacted area with water.**
- **A battery rated higher than 12 volts should not be used for a booster.**
- **Whenever working on or near a battery, always wear suitable eye protectors (for example, goggles or industrial safety spectacles) and remove rings, metal bands, or any other metal jewelry.**
- **Keep battery out of the reach of children.**



Always follow the instructions below. Failure to do so could result in damage to the charging system and cause personal injury.

1. If the booster battery is in another vehicle, position the two vehicles to bring their batteries close to each other.

   Do not allow the two vehicles to touch.

2. Apply the parking brake. Move the gearshift lever to the "P" (Park) position. Switch off all unnecessary electrical systems (lights, heater, air conditioner, etc.).
3. Remove vent caps on the battery (if so equipped). Cover the battery with an old cloth to reduce explosion hazard.
4. Connect jumper cables in the sequence as illustrated.

CAUTION:

- **Always connect positive (+) to positive (+) and negative (–) to body ground (for example, the strut mounting bolt, etc. — not to the battery).**
- **Make sure that cables do not touch moving parts in the engine compart-**

ment and that clamps do not contact any other metal.

5. Start the engine of the other vehicle and let it run for a few minutes.
6. Keep the engine speed of the other vehicle at about 2,000 rpm, and start your engine in the normal manner.

CAUTION:

Do not keep the starter motor engaged for more than 10 seconds. If the engine does not start right away, turn the key off and wait 3 to 4 seconds before trying again.

7. After starting your engine, carefully disconnect the negative cable and then the positive cable.
8. Replace the vent caps (if so equipped). Be sure to dispose of the cloth used to cover the vent holes as it may be contaminated with corrosive acid.

CAUTION:

Automatic transmission models cannot be push started. This may cause transmission damage.

IF YOUR VEHICLE OVERHEATS

If your vehicle is overheating (indicated by an extremely high temperature gauge reading), or if you feel a lack of engine power, detect abnormal noise, etc., take the following steps:

WARNING:

To avoid the danger of being scalded, never remove the radiator cap while the engine is still hot. When the radiator cap is removed, pressurized hot water will spurt out, possibly causing serious injury.

1. Move the vehicle safely off the road, apply the parking brake and move the gearshift lever to the "P" (Park) position.

   Do not stop the engine.

2. Turn off the air conditioner switch. Open all the windows, move the temperature control dial to "warm" and fan control knob to "4".
3. Get out of the vehicle. Look and listen for steam or coolant escaping from the radiator before opening the hood. Wait until no steam or coolant can be seen before proceeding.
4. Open the hood.

WARNING:

If steam or water is coming from the engine, stand clear to prevent getting burned.

5. If engine overheating is caused by climbing a long hill on a hot day, run the engine at a fast idle (approximately 1,500 rpm) until the temperature gauge indication returns to normal.
6. Visually check drive belts for damage or looseness. Also check to make sure the cooling fan is running. The radiator hoses and radiator should not leak water.

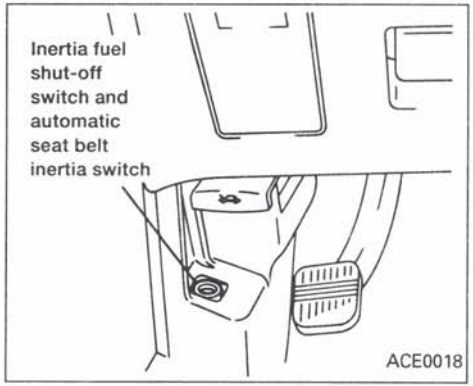
WARNING:

Be careful not to allow your hands, hair or clothing to come into contact with, or to get caught in, the running fan, belts, or motor fan.

The fan motor may start at any time when the coolant temperature is high.

If coolant is leaking, the water pump belt is missing or loose, or the cooling fan does not run, stop the engine.

7. After the engine cools down completely, check the coolant level in the reservoir tank with the engine running. Add coolant to the reservoir tank if necessary. Have your vehicle repaired at the nearest NISSAN dealer.



Inertia fuel shut-off switch

If your engine cranks but does not start after a collision:

1. Turn the key in the ignition to "OFF".
2. Check under the vehicle for leaking fuel.
3. If you do not see or smell fuel, push down the red reset button on the fuel pump shut-off switch.
4. Turn the ignition key "ON" for a few seconds, then turn it "OFF".
5. Check under the vehicle again for leaking fuel. If you see or smell fuel, do not start your vehicle again. If no fuel is detected, try to start your vehicle again.

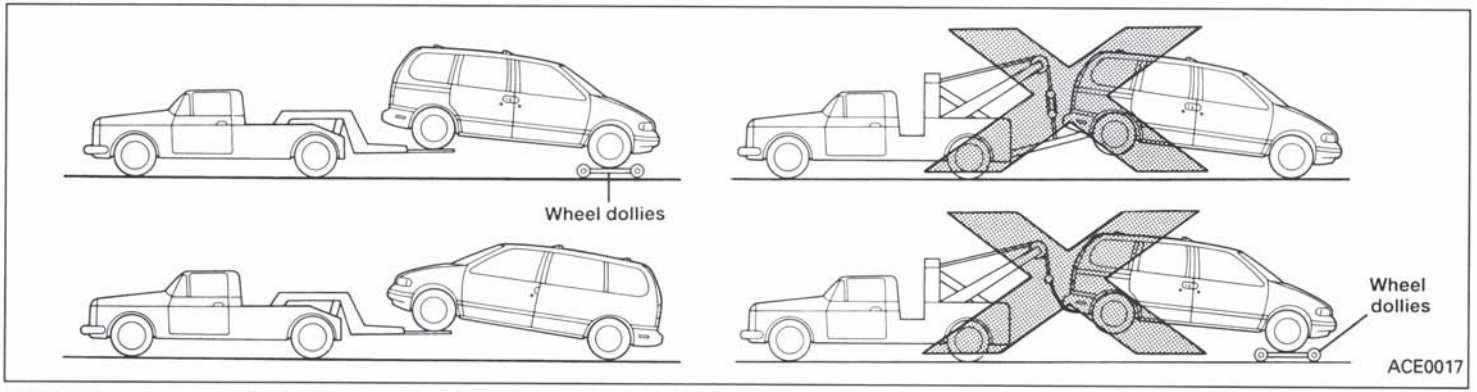
WARNING:

- **If you see or smell fuel, do not reset the switch or try to start your vehicle. You could injure yourself or others. Have all the passengers get out of the vehicle and call the local fire department or a towing service.**
- **If the inertia fuel shut-off switch has been triggered, the automatic shoulder belts will not move forward.**
- **For more information about what to do when the automatic shoulder belts won't move, refer to "Operation in an accident" in the "Pre-driving checks and adjustments" section.**

When towing your vehicle, all state (provincial in Canada) and local regulations for towing must be followed. Incorrect towing equipment could damage your vehicle. Towing instructions are available from your NISSAN dealer. Local service operators will generally be familiar with the applicable laws and procedures for towing. To assure proper towing and to prevent accidental damage to your vehicle, NISSAN recommends that you have a service operator tow your vehicle. It is advisable to have the service operator carefully read the following precautions.

CAUTION:

- **When towing, make sure that the transmission, axles, steering system and powertrain are in working condition. If any unit is damaged, dollies must be used.**
- **Never use a tow bar that attaches to the bumper when you tow your vehicle. It may damage the bumper and cause damage to the transmission.**
- **When towing with the front wheels on dollies:**
  Turn the ignition key to the "OFF" position and secure the steering wheel in a straight-ahead position with a rope or similar device. Never place the ignition key in the "LOCK" position. This will result in damage to the steering lock mechanism.
  Move the gearshift lever to the "N" (Neutral) position.
- **When towing with the rear wheels on the ground, release the parking brake.**
- **Attach safety chains for all towing.**



NISSAN recommends that your vehicle be towed with the driving (front) wheels off the ground as illustrated.

- **Speed: Below 60 MPH (97 km/h)**
- **Distance: Less than 500 miles (800 km)**

Towing the vehicle with rear wheels raised (with front wheels on the ground)

CAUTION:

Never tow the vehicle with the rear wheels raised (with the front wheels on the ground) as this may cause serious and expensive damage to the transmission. If it is necessary to tow the vehicle with the rear wheels raised, always use towing dollies under the front wheels.

If you have to tow the vehicle with four wheels on ground

Observe the following restricted towing speeds and distances.

- **Speed: Below 30 MPH (50 km/h)**
- **Distance: Less than 40 miles (65 km)**

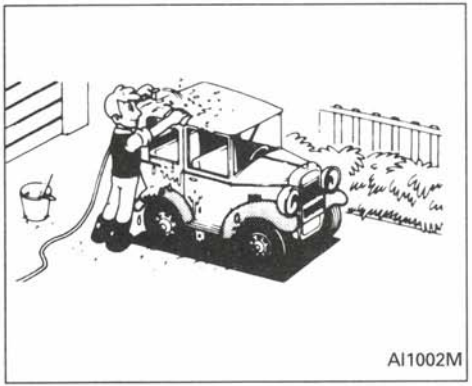
CAUTION:

Never tow the vehicle from the rear (i.e., backward) with four wheels on the ground as this may cause serious and expensive damage to the transmission.

- **Do not use a "sling" tow device on the rear of the vehicle. It may damage the bumper's energy absorbing mechanism.**

6 Appearance and interior care

CLEANING EXTERIOR AND INTERIOR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In order to maintain the appearance of your vehicle, it is important to take proper care of it.

In the following cases, please wash your vehicle as soon as possible to protect the paint surface.

- After a rainfall
- After driving on coastal roads
- When things such as soot, bird droppings, tree sap, metal particles or bugs get on the paint surface
- When dust or mud builds up on the surface

Whenever possible, store or park your vehicle inside a garage or in a covered area.

When it is necessary to park outside, park in a shady area or protect the vehicle with a body cover.

Be careful not to scratch the paint surface when putting on or removing the body cover.

Washing

Wash dirt off with a wet sponge and plenty of water. Clean the vehicle thoroughly using a mild soap or detergent (a special vehicle soap or general purpose dish-washing liquid) mixed with clean, lukewarm (never hot) water.

CAUTION:

Do not use strong household soap, strong chemical detergents, gasoline or solvents.

Rinse the vehicle thoroughly with plenty of clean water.

Inside flanges, seams and folds on the doors, hatches and hood are particularly vulnerable to the effects of road salt. Therefore, these areas must be regularly cleaned. Take care that the drain holes in the lower edge of the door are open. Spray water under the body and in the wheel wells to loosen the dirt and wash away road salt.

A damp chamois can be used to dry the vehicle to avoid water spots.

Waxing

Regular waxing protects the paint surface and helps retain new vehicle appearance. After waxing, polishing is recommended to remove built-up residue and to avoid a "weathered" appearance.

Removing spots

Remove tar and oil spots, industrial dust, insects, and tree sap as quickly as possible from the surface of the paint to avoid lasting damage or staining. Special cleaning products are available at your NISSAN dealer or any automotive accessory store.

Underbody

In areas where road salt is used in winter, the underbody must be cleaned regularly. This will prevent dirt and salt from building up and causing underbody and suspension corrosion. Before the winter period and

again in the spring, the underseal must be checked and, if necessary, re-treated.

Cleaning glass

Use glass cleaner to remove smoke and dust film from the glass surfaces. It is normal for glass to become coated with a film after the vehicle is parked in the hot sun. Glass cleaner and a soft cloth will easily remove this film.

CAUTION:

When cleaning the inside of the window, do not use sharp-edged tools, abrasive cleaners or chlorine-based disinfectant cleaners. They could damage electrical conductors or rear window defogger elements.

Cleaning alloy wheels

Wash regularly, especially during winter months in areas where road salt is used. Salt could discolor the wheel if not removed.

Chrome parts

Clean all chrome parts regularly with a non-abrasive chrome polish to maintain the finish.

Plastic parts

Plastic parts can be cleaned with a mild soap solution. If the dirt cannot be easily removed, use a plastic cleaner. Do not use solvents.

Cleaning interior

Occasionally remove loose dust from the interior trim and seats using a vacuum cleaner or soft brush. Wipe the vinyl and leather surfaces with a clean, soft cloth dampened in mild soap solution, then wipe clean with a dry, soft cloth. Before using any fabric protector, read the manufacturer's recommendations. Some fabric protectors contain chemicals that may stain or bleach the seat material.

CAUTION:

- **Never use benzine, thinner, or any similar material.**
- **Leather seats should be regularly coated with a leather wax like saddle soap. Never use car wax.**
- **Never use fabric protectors unless recommended by the manufacturer.**

Front floor mat positioning aid

This model includes a front floor mat bracket to act as a floor mat positioning aid. NISSAN floor mats, specially designed for your vehicle, incorporate grommets. To install, simply position the mat using the floor mat bracket hook through the floor mat grommet hole while centering the mat in the floor pan contour.

Periodically check to make certain that the mat is properly positioned.

Floor mats

The use of genuine NISSAN floor mats can extend the life of your vehicle carpet and make it easier to clean the interior. No matter what mats are used, be sure they are fitted for your vehicle and are properly positioned in the footwell to prevent interference with pedal operation. Mats should be maintained with regular cleaning and replaced if they become excessively worn.

Seat belts

The seat belts can be cleaned by wiping them with a sponge dampened in a mild

soap solution. Allow the belts to dry completely before using them. Do not allow wet belts to roll up in the retractor. NEVER use bleach, dye, or chemical solvents since these may severely weaken the seat belt webbing.

Most common factors contributing to vehicle corrosion:

1. The accumulation of moisture-retaining dirt and debris in body panel sections, cavities, and other areas.
2. Damage to paint and other protective coatings caused by gravel and stone chips or minor traffic accidents.

Environmental factors influence the rate of corrosion:

Moisture

Accumulation of sand, dirt and water on the vehicle body underside can accelerate corrosion. Wet floor coverings will not dry completely inside the vehicle, and should be removed for drying to avoid floor panel corrosion.

Relative humidity

Corrosion will be accelerated in areas of high relative humidity, especially those areas where the temperatures stay above freezing and where atmospheric pollution exists and road salt is used.

Temperature

A temperature increase will accelerate the rate of corrosion to those parts which are not well ventilated.

Air pollution

Industrial pollution, the presence of salt in the air in coastal areas, or heavy road salt use will accelerate the corrosion process. Road salt will also accelerate the disintegration of paint surfaces.

To protect your vehicle from corrosion:

- Wash and wax your vehicle often to keep the vehicle clean.
- Always check for minor damage to the paint and repair it as soon as possible.
- Keep drain holes at the bottom of the doors open to avoid water accumulation.
- Check the underbody for accumulation of sand, dirt or salt. If present, wash with water as soon as possible.
- **NEVER remove dirt, sand or other debris from the passenger compartment by washing it out with a hose.**

Remove dirt with a vacuum cleaner or broom.

- **Never allow water or other liquids to come in contact with electronic components inside the vehicle.**

7 Do-it-yourself operations

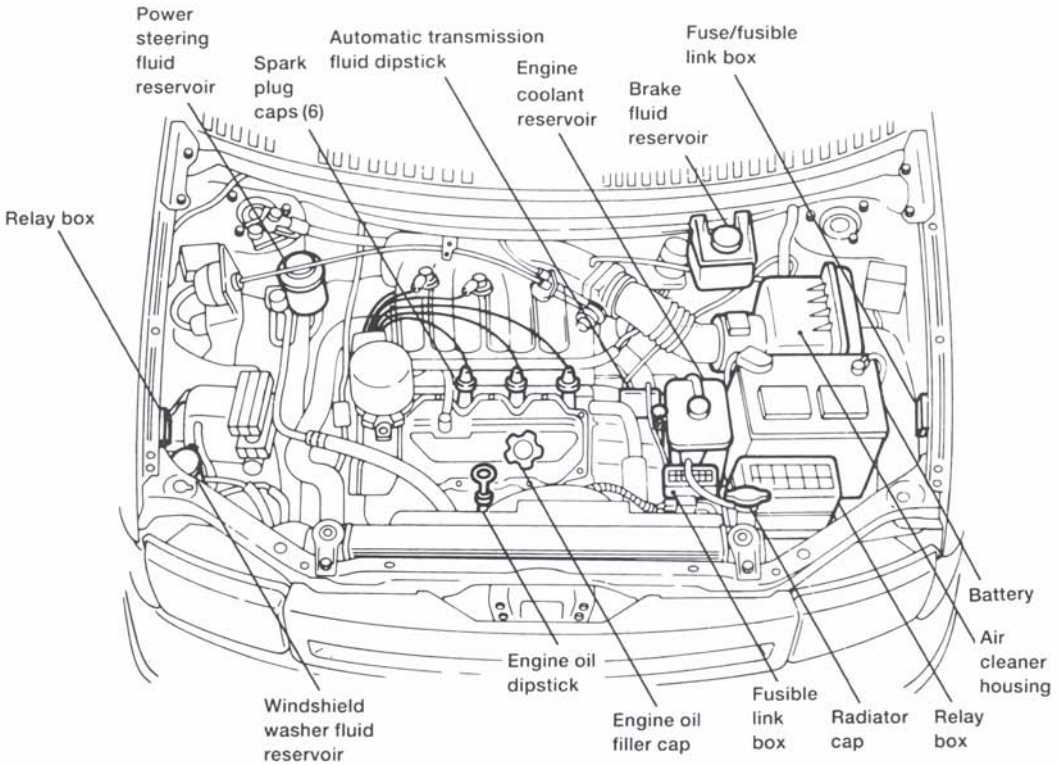
When performing any inspection or maintenance work on your vehicle, always take care to prevent serious accidental injury to yourself or damage to the vehicle. The following are general precautions which should be closely observed.

- **Park the vehicle on a level surface, apply the parking brake securely and block the wheels to prevent the vehicle from moving. Move the gearshift lever to neutral ("N").**
- **Be sure the ignition key is "OFF" when performing any replacement or repair.**
- **Do not work under the hood while the engine is hot. Turn off the engine and wait until it cools down.**
- **Be sure to turn the ignition key to the "OFF" or "LOCK" position. When the ignition key is in the "ON" or "ACC" position, the cooling fan may start to operate suddenly even when the engine is not running.**
- **If you must work with the engine running, keep your hands, clothing, hair and tools away from moving fans, belts and any other moving parts.**
- **It is advisable to remove ties and any jewelry, such as rings, watches, etc. before working on your vehicle.**
- **If you must run the engine in an enclosed space such as a garage, be sure there is proper ventilation for exhaust gases.**
- **Never get under the vehicle while it is supported only by a jack. If it is necessary to work under the vehicle, support it with safety stands.**
- **Keep smoking materials, flame and sparks away from fuel and the battery.**
- **Never connect or disconnect either the battery or any transistorized component connector while the ignition is on.**
- **On gasoline engine models with the multiport fuel injection (MFI) system, the fuel filter or fuel lines should be serviced by a NISSAN dealer because the fuel lines are under high pressure even when the engine is off.**
- **Failure to follow these or other common sense guidelines may lead to serious injury or vehicle damage.**
- **Improperly disposed motor oil and/or other vehicle fluids can hurt the environment. Always conform to local regulations for disposal of vehicle fluid.**

This "Do-it-yourself operations" section gives instructions regarding only those items which are relatively easy for an owner to perform.

You should be aware that incomplete or improper servicing may result in operating difficulties or excessive emissions, and could affect your warranty coverage. **If in doubt about any servicing, have it done by your NISSAN dealer.**

CHECK LOCATIONS IN THE ENGINE COMPARTMENT



The engine cooling system is filled at the factory with a high-quality, year-round, anti-freeze coolant solution. The anti-freeze solution contains rust and corrosion inhibitors, therefore additional cooling system additives are not necessary.

CAUTION:

When adding or replacing coolant, be sure to use only an ethylene glycol anti-freeze with the proper mixture ratio. Examples are shown below:

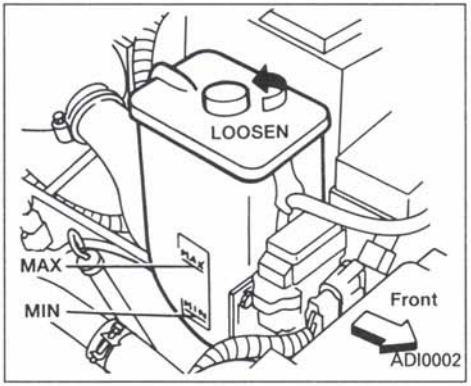
Outside temperature down to		Anti-freeze	Soft water
°C	°F		
−15	5	30%	70%
−35	−30	50%	50%

The use of other types of coolant solutions may damage your cooling system.

The radiator is equipped with a pressure cap. Use an appropriate NISSAN genuine cap or its equivalent when replacement is required.

Never remove the radiator cap when the engine is hot. Serious burns could be caused by high pressure fluid escaping from the radiator.

Wait until the engine and radiator cool down. See precautions in "If your vehicle overheats" found in the "In case of emergency" section.



CHECKING ENGINE COOLANT LEVEL

With coolant reservoir

Check the coolant level in the reservoir tank when the engine is cold. If the coolant level is below "MIN", add coolant up to the "MAX" level. If the reservoir tank is empty, check the coolant level in the radiator **when the engine is cold.** If there is insufficient coolant in the radiator, fill the radiator with coolant up to the filler opening and also add it to the reservoir tank up to the "MAX" level.

If the cooling system frequently requires coolant, have it checked by your NISSAN dealer.

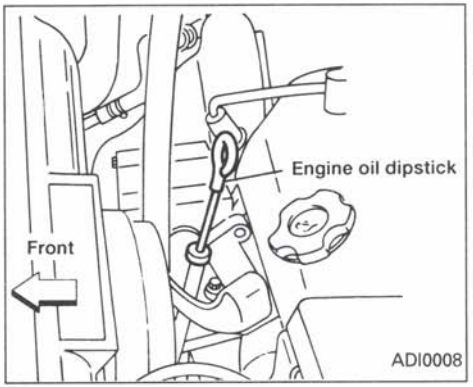
CHANGING ENGINE COOLANT

Your NISSAN dealer can change the engine coolant. The service procedure can be found in NISSAN's service manual.

Improper servicing can result in reduced heater performance and engine overheating.

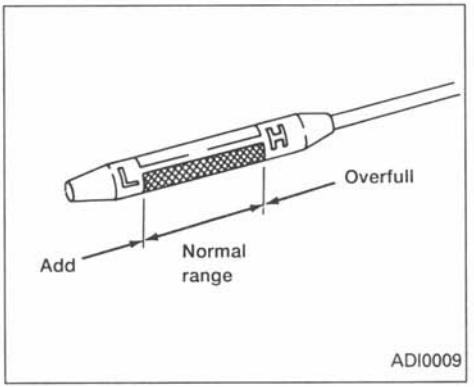
WARNING:

To avoid danger of being scalded, never change the coolant when the engine is hot.



CHECKING ENGINE OIL LEVEL

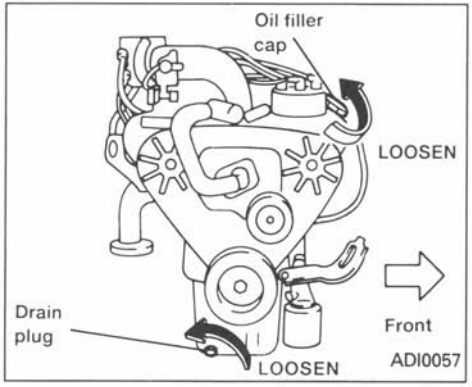
1. Park the vehicle on a level surface and apply the parking brake.
2. Run the engine until it reaches operating temperature.
3. Turn off the engine. **Wait a few minutes for the oil to drain back into the oil pan.**
4. Remove the dipstick and wipe it clean. Reinsert it all the way.



5. Remove the dipstick again and check the oil level. It should be between the "H" and "L" marks. If the oil level is below the "L" mark, remove the oil filler cap and pour recommended oil through the opening. **Do not overfill.**
6. Recheck oil level with dipstick.

CAUTION:

- **Oil level should be checked regularly. Operating with an insufficient amount of oil can damage the engine, and such damage is not covered by warranty.**
- **It is normal to add some oil between oil maintenance intervals or during the break-in period, depending on the severity of operating conditions.**



CHANGING ENGINE OIL

1. Park the vehicle on a level surface and apply the parking brake.
2. Run the engine until it reaches operating temperature, and then turn it off.
3. Place a large drain pan under the drain plug.
4. Remove the oil filler cap.
5. Remove the drain plug with a wrench and completely drain the oil.

If oil filter is to be changed, remove and replace it at this time. See "Changing the oil filter" later in this section.

WARNING:

- **Prolonged and repeated contact with used engine oil may cause skin cancer.**
- **Try to avoid direct skin contact with used oil. If skin contact is made, wash thoroughly with soap or hand cleaner as soon as possible.**
- **Keep used engine oil out of reach of children.**
- **Be careful not to burn yourself, as the engine oil is hot.**

CAUTION:

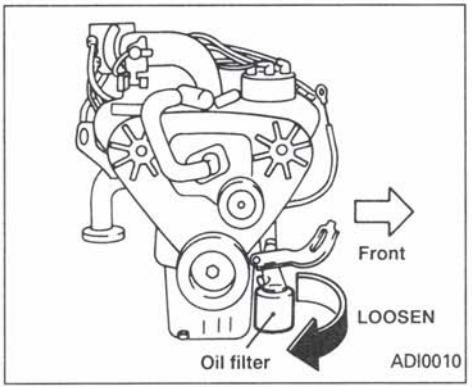
Waste oil must be disposed of properly. Check your local regulations.

6. Clean and re-install the drain plug with a new washer. Securely tighten the drain plug with a wrench.

   Drain plug tightening torque:
   22 to 29 ft-lb
   (29 to 39 N·m)

   Do not use excessive force.

7. Refill engine with recommended oil and install the cap securely. See the "Technical and consumer information" section for refill capacity.
8. Start the engine. Check for leakage around the drain plug. Correct as required.
9. Turn the engine off and wait several minutes. Check the oil level with the dipstick. Add engine oil if necessary.



CHANGING ENGINE OIL FILTER

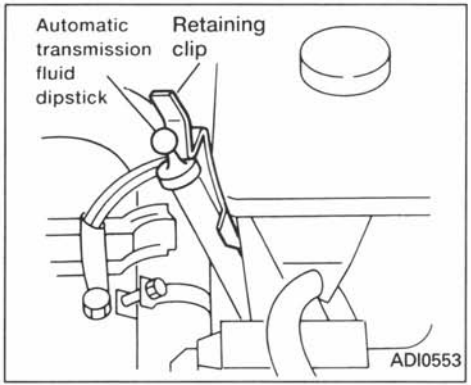
1. Park the vehicle on a level surface and apply the parking brake.
2. Turn the engine off.
3. Loosen the oil filter with an oil filter wrench. Remove the oil filter by turning it by hand.

WARNING:

Be careful not to burn yourself, as the engine oil may be hot.

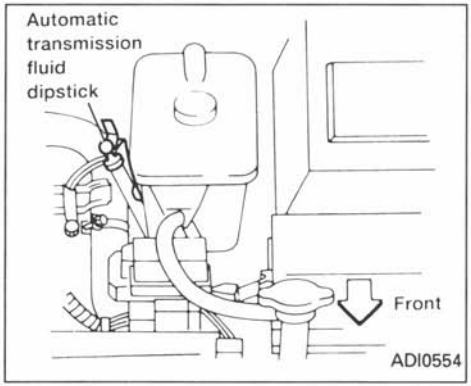
4. Wipe the engine oil filter mounting surface with a clean rag. Be sure to remove any old rubber gasket remaining on the mounting surface of the engine.
5. Coat the rubber gasket on the new filter with clean engine oil.
6. Screw in the oil filter until a slight resistance is felt, then tighten additionally more than 2/3 turn.
7. Start the engine and check for leakage around the oil filter. Correct as required.
8. Turn the engine off and wait several minutes. Check the oil level. Add engine oil if necessary.

AUTOMATIC TRANSMISSION FLUID



WARNING:

- **When engine is running, keep hands and clothing away from any moving parts such as cooling fan and drive belt.**
- **Automatic transmission fluid is poisonous and should be stored carefully in marked containers out of the reach of children.**



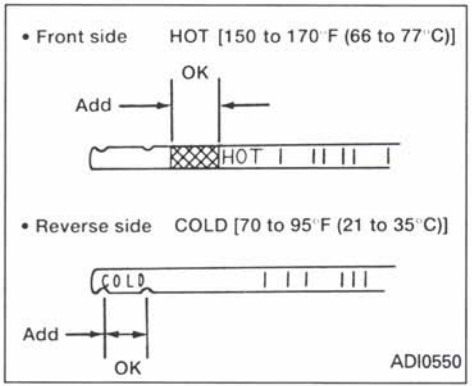
TEMPERATURE CONDITIONS FOR CHECKING

- The fluid level should be checked using the "HOT" range on the dipstick after the following conditions have been met:

— The engine should be warmed up to operating temperature.

— The vehicle should be driven at least 15 minutes.

— The automatic transmission fluid should be warmed to between 150 and 170°F (66 to 77°C).



- The fluid can be checked at fluid temperatures of 70 to 95°F (21 to 35°C) using the "COLD" range on the dipstick after the engine is warmed up and before driving. However, the fluid should be re-checked using the "HOT" range.

1. Park the vehicle on a level surface and set the parking brake.
2. Start the engine and then move the gearshift lever through each gear range, ending in "P" (Park) after you have moved it through all ranges.

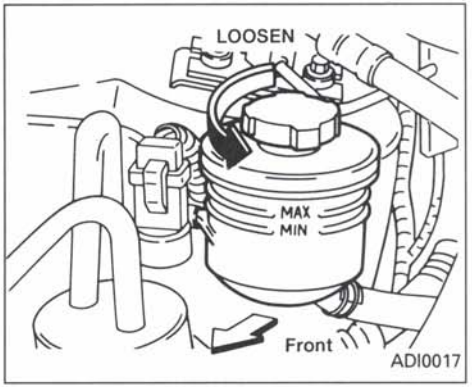
POWER STEERING FLUID

3. Check the fluid level with the engine idling.
4. Remove the dipstick and wipe it clean with lint-free paper.
5. Reinsert the dipstick into the charging pipe as far as it will go.
6. Remove the dipstick and note the reading. If the level is at the low side of either range, add fluid to the charging pipe.

DO NOT OVERFILL.
USE ONLY Genuine NISSAN ATF or an equivalent DEXRON™ II E type fluid.

NOTE:

If the vehicle has been driven for a long time at high speeds, or in city traffic in hot weather, or if it is being used to pull a trailer, the accurate fluid level cannot be read. You should wait until the fluid has cooled down (about 30 minutes).



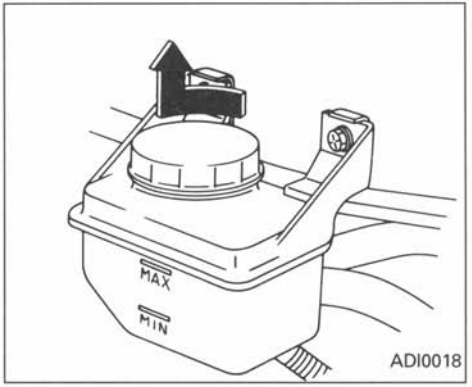
Check the fluid level.

The fluid level should be checked by looking at the MAX and MIN lines at fluid temperatures of 32 to 86°F (0 to 30°C).

CAUTION:

- **Do not overfill.**
- **The recommended fluid is Type F Automatic Transaxle Fluid.**

BRAKE FLUID



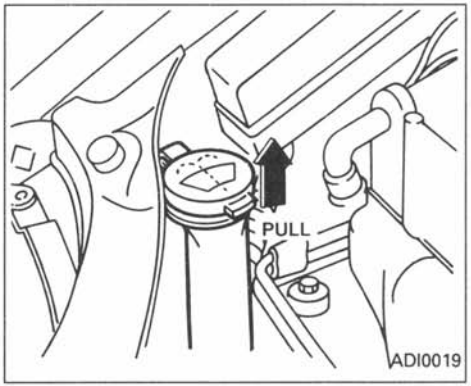
Check the fluid level in the reservoir. If the fluid is below the "MIN" line or the brake warning light comes on, add **DOT 3** fluid up to the "MAX" line. If fluid must be added frequently, the system should be thoroughly checked by your NISSAN dealer.

CAUTION:

- **Use only new fluid. Old, inferior, or contaminated fluid may damage the brake system. The use of improper fluids can damage the brake system and affect the vehicle's stopping ability.**

WINDOW WASHER FLUID

- **Do not spill the fluid on painted surfaces. This will damage the paint. If fluid is spilled, wash with water.**



Add fluid when the low washer fluid warning light comes on. To check the fluid level, look down the fill tube of the washer fluid reservoir in the engine compartment.

To add fluid, remove the reservoir cap and refill reservoir.

This reservoir serves both front and rear washer systems.

CAUTION:

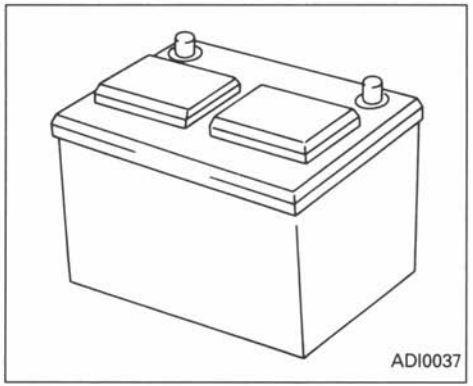
Do not substitute engine anti-freeze coolant for window washer solution. This may result in damage to the paint.

BATTERY

- Keep the battery surface clean and dry. Any corrosion should be washed off with a solution of baking soda and water.
- Make certain the terminal connections are clean and securely tightened.
- If the vehicle is not to be used for 30 days or longer, disconnect the negative (–) battery terminal cable to prevent discharge.

WARNING:

Do not expose the battery to flames or electrical sparks. Hydrogen gas generated by battery action is explosive. Do not allow battery fluid to contact your skin, eyes, fabrics, or painted surfaces. After touching a battery or battery cap, do not touch or rub your eyes. Thoroughly wash your hands. If the acid contacts your eyes, skin or clothing, immediately flush with water for at least 15 minutes and seek medical attention.



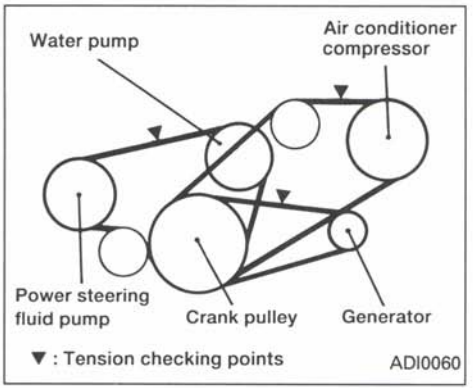
Check the fluid level in each cell. It should be between the "MAX" and "MIN" lines.

If it is necessary to add fluid, add only distilled water to bring the level to the indicator in each filler opening. **Do not overfill.**

1. Remove the cell plugs using a suitable tool.
2. Add distilled water up to the "MAX" level.
3. Tighten cell plugs.

JUMP STARTING

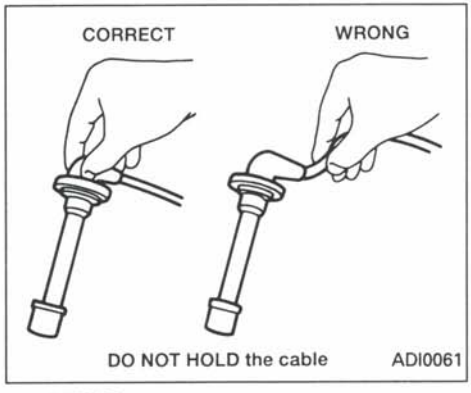
If jump starting is necessary, see the "In case of emergency" section. If the engine does not start by jump starting, the battery may have to be replaced. Contact your NISSAN dealer.



WARNING:

Be sure the ignition key is "OFF".

1. Visually inspect each belt for signs of unusual wear, cuts, fraying or looseness. If the belt is in poor condition or loose, have it replaced or adjusted by your NISSAN dealer.
2. Have the belts checked regularly for condition and tension in accordance with the maintenance schedule in this manual.



WARNING:

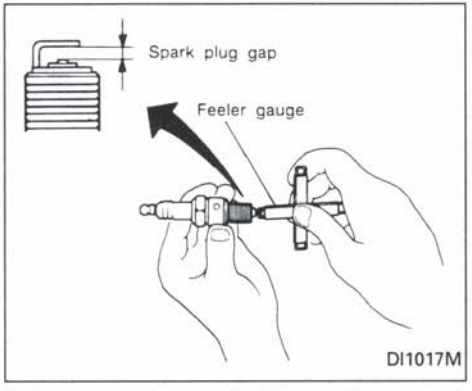
Be sure the engine and ignition switch are off and that the parking brake is engaged securely.

CAUTION:

Be sure to use the correct wrench to remove the plugs. An incorrect wrench can cause damage.

1. Disconnect the spark plug cables from the spark plugs.

When disconnecting, always hold the boots, not the cables.



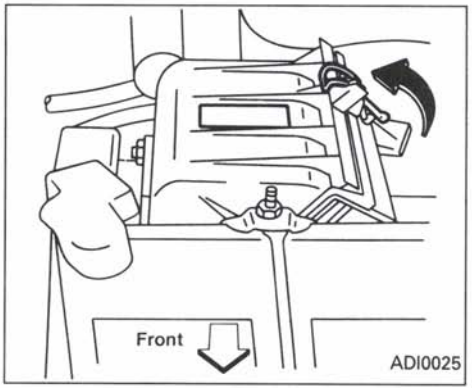
2. Remove the spark plugs with a spark plug wrench. The plug wrench has a rubber seal that holds the spark plug so that it will not fall when it is pulled out. Make sure that each spark plug is snugly fitted into the plug wrench.
3. Check the gap on each new spark plug with a feeler gauge. (The spark plug gap is shown in the "Technical and consumer information" section.) Adjust it as required.

4. Fit the new plugs, one at a time, into the spark plug wrench and install them. Turn each plug in several full turns by hand, then tighten with a spark plug wrench to the correct torque. Do not overtighten.

   Spark plug tightening torque:
   14 to 22 ft-lb (20 to 29 N·m)

5. Holding the boot, re-connect each high tension cable to its proper spark plug by pushing it on until you feel a snap.

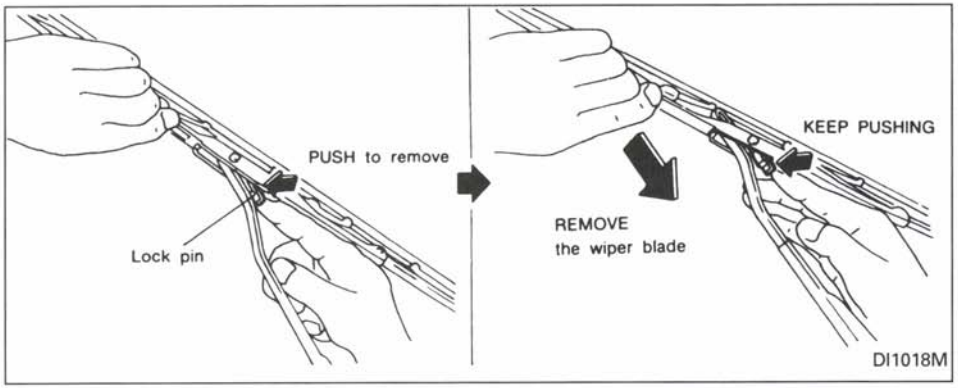
AIR CLEANER HOUSING FILTER



The filter should not be cleaned and reused. Replace it according to the maintenance intervals shown in the "Maintenance schedule" section. When replacing the filter, unclip the four clamps and remove the filter. Wipe the inside of the air cleaner housing and the cover with a damp cloth when replacing filter.

WARNING:

Operating the engine with the air cleaner off can cause you or others to be burned. The air cleaner not only cleans the air, it stops flame if the engine backfires. If it isn't there, and the engine backfires, you could be burned. Don't drive with it off, and be careful working on the engine with the air cleaner off.



1) CLEANING

If your windshield is not clear after using the windshield washer or if the wiper blade chatters when running, wax or other material may be on the blade or windshield.

Clean the outside of the windshield with a washer solution or a mild detergent. Your windshield is clean if beads do not form when rinsing with clear water.

Clean the blade by wiping it with a cloth soaked in a washer solution or a mild detergent. Then, rinse the blade with clear water. If your windshield is still not clear after cleaning the blades and using the wipers, replace the blades.

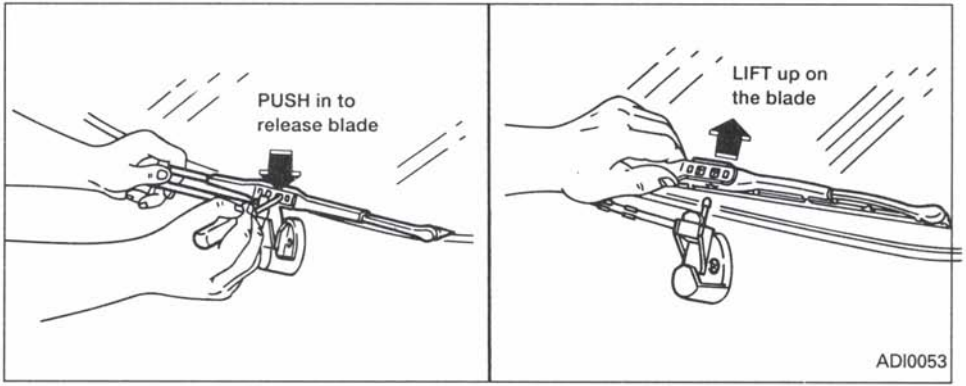
2) REPLACEMENT

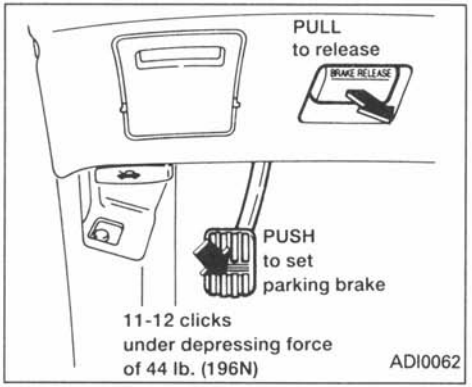
1. Lift the wiper arm away from the windshield.
2. Push the lock pin, then remove the wiper blade.
3. Insert the new wiper blade to the wiper arm until it clicks into place.

CAUTION:

After wiper blade replacement, return the wiper arm to its original position. Otherwise it may be damaged when the engine hood is opened.

Make sure the wiper blade contacts the glass, otherwise the arm may be damaged from wind pressure.

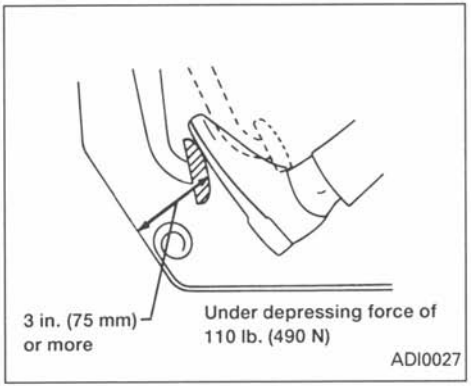




Rear wiper blade replacement

1. Lift wiper arm away from the windshield.
2. Push in the lock pin with a suitable tool, then pull up on the blade.
3. Insert a new wiper blade onto the wiper arm and press down until the blade clicks into place.

BRAKE PEDAL



With the engine running, check the distance between the upper surface of the pedal and the floor. If it is out of the range shown above, see your NISSAN dealer.

WARNING:

See your NISSAN dealer and have it checked if the brake pedal height does not return to normal.

SELF-ADJUSTING BRAKES

Your vehicle is equipped with self-adjusting brakes.

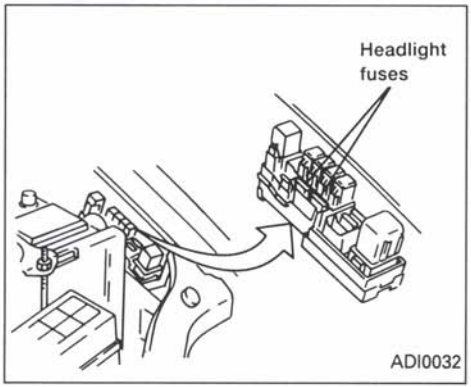
The front disc-type brakes self-adjust every time the brake pedal is applied. The rear drum-type brakes self-adjust every time the brake pedal is applied. If the brake pedal goes down farther than normal, see your NISSAN dealer.

BRAKE BOOSTER

Check the brake booster function as follows:

1. With the engine off, depress the brake pedal several times to make sure that the pedal travel distance does not change.
2. While depressing the brake pedal, start the engine. The pedal height should drop a little.
3. With the brake pedal depressed, turn the engine off. Keep the pedal depressed for about 30 seconds; the pedal height should not change.
4. Run the engine for one minute without depressing the brake pedal, then turn it off. Depress the brake pedal several times. The pedal travel distance will decrease gradually with each depression as the vacuum is released from the booster.

If the brakes do not operate properly, see your NISSAN dealer.



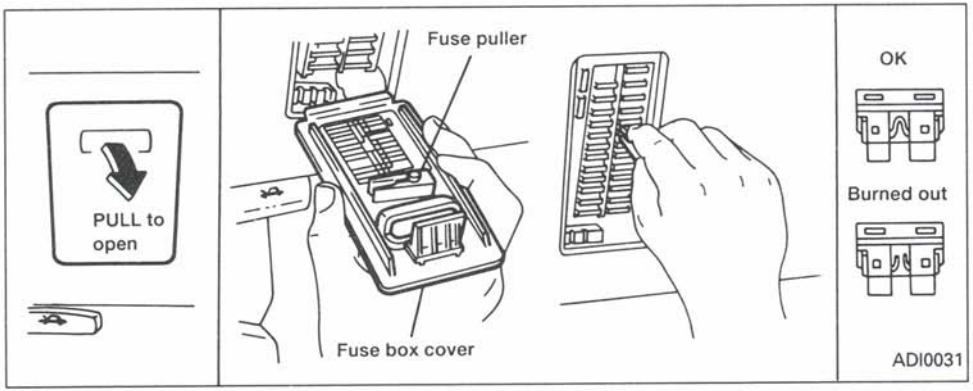
Engine compartment (headlight fuses)

If the headlight does not come on, check for a burned-out fuse.

1. Turn the headlight switch to the "OFF" position.
2. Open the engine hood.
3. Remove the fusible link cover.
4. Remove the fuse with the fuse puller attached to the passenger compartment fuse box cover.
5. If the fuse is burned out, replace it with a new fuse.

Never use a fuse of a higher amperage rating than that specified on the fuse box cover.

6. If a new fuse burns out again, have the electrical system checked and repaired by your NISSAN dealer.



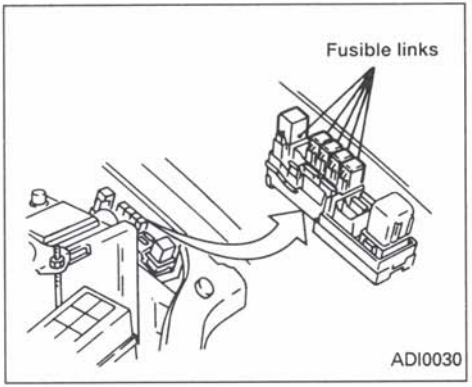
Passenger compartment

If the electrical equipment does not operate, check for a burned-out fuse.

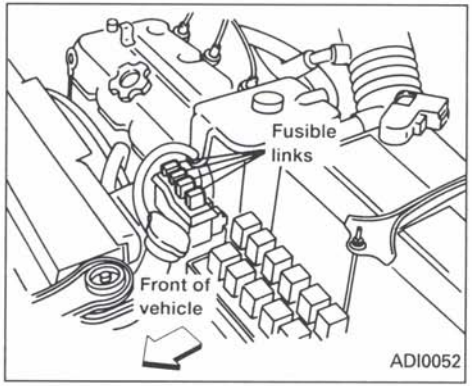
1. Remove the key from the ignition.
2. Open the fuse box cover. Refer to the fuse label on the fuse box cover to locate the fuse in question.
3. Remove the fuse with the fuse puller.
4. If the fuse is burned, replace it with a new fuse.

Never use a fuse of a higher amperage rating than that specified on the fuse box cover.

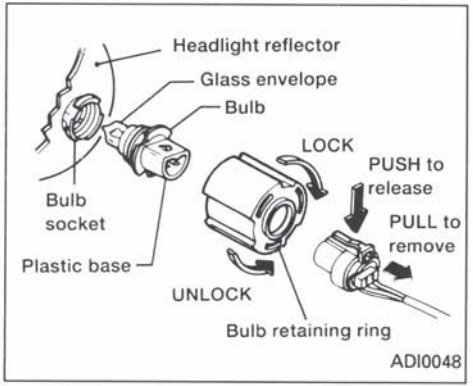
5. If a new fuse burns again, have the electrical system checked and repaired by your NISSAN dealer.



If the electrical equipment does not operate and fuses are in good condition, check the fusible links. If any of these fusible links are melted, replace only with genuine NISSAN parts.



If the new fusible link burns again, have the system checked and repaired by your NISSAN dealer.



HEADLIGHTS

The headlight is a semi-sealed beam type which uses a replaceable headlight (halogen) bulb. A bulb can be replaced from inside the engine compartment without removing the headlight assembly.

CAUTION:

High pressure halogen gas is sealed inside the halogen bulb. The bulb may break if the glass envelope is scratched or the bulb is dropped.

Hold the plastic base when handling the bulb. Never touch the glass envelope.

Removing the headlight bulb

1. Disconnect the negative battery cable.
2. Disconnect the electrical connector from the rear end of the bulb.
3. Turn the bulb retaining ring counterclockwise until it is free from the headlight reflector, then remove it.
4. Remove the headlight bulb by pulling straight rearward. Do not shake or rotate the bulb when removing it.

Replacing the headlight bulb

1. Insert the bulb into the headlight reflector with the flat side of the plastic base facing upward.
2. Install the bulb retaining ring and turn it clockwise until it stops.
3. Push the electrical connector into the bulb plastic base until it snaps and stops.

CAUTION:

DO NOT TOUCH THE BULB.

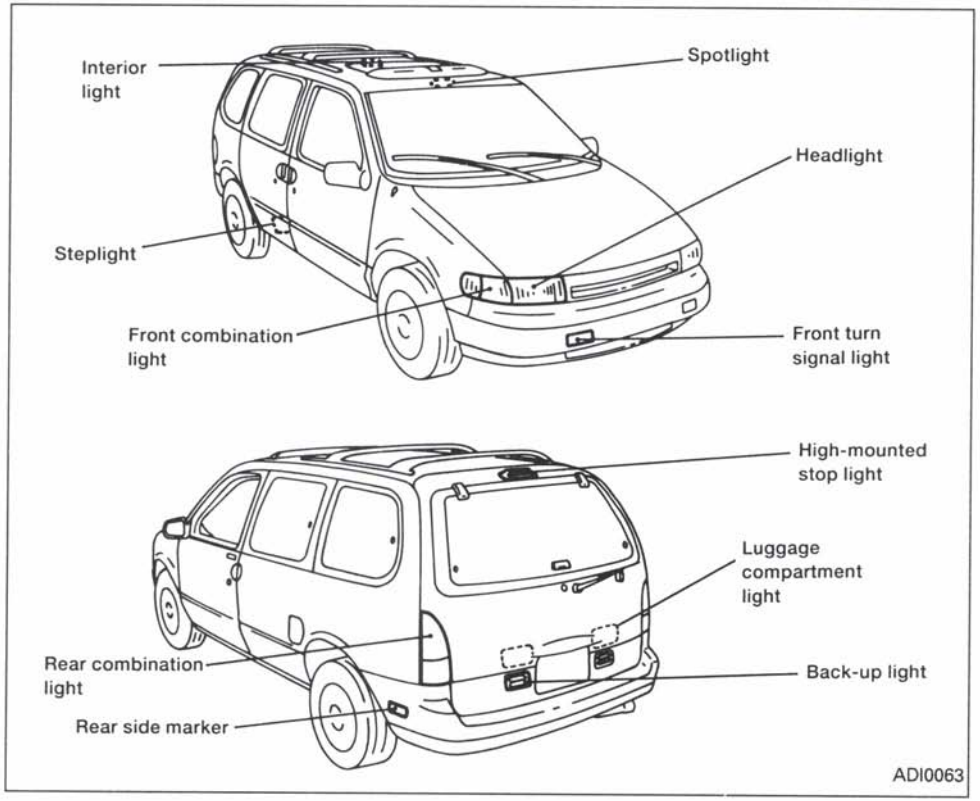
- **Use the same number and wattage as originally installed:**

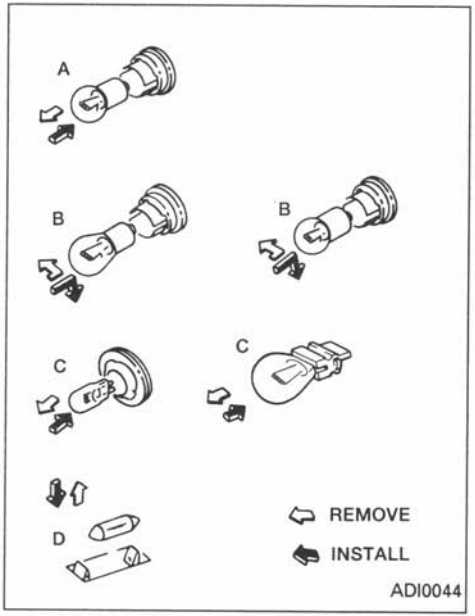
  Wattage 65/45

  Bulb no. 9004
- **Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, contact your NISSAN dealer.**
- **Do not leave the bulb out of the headlight reflector for a long period of time as dust, moisture, and smoke may enter the headlight body and affect the performance of the headlight.**

OTHER LIGHTS

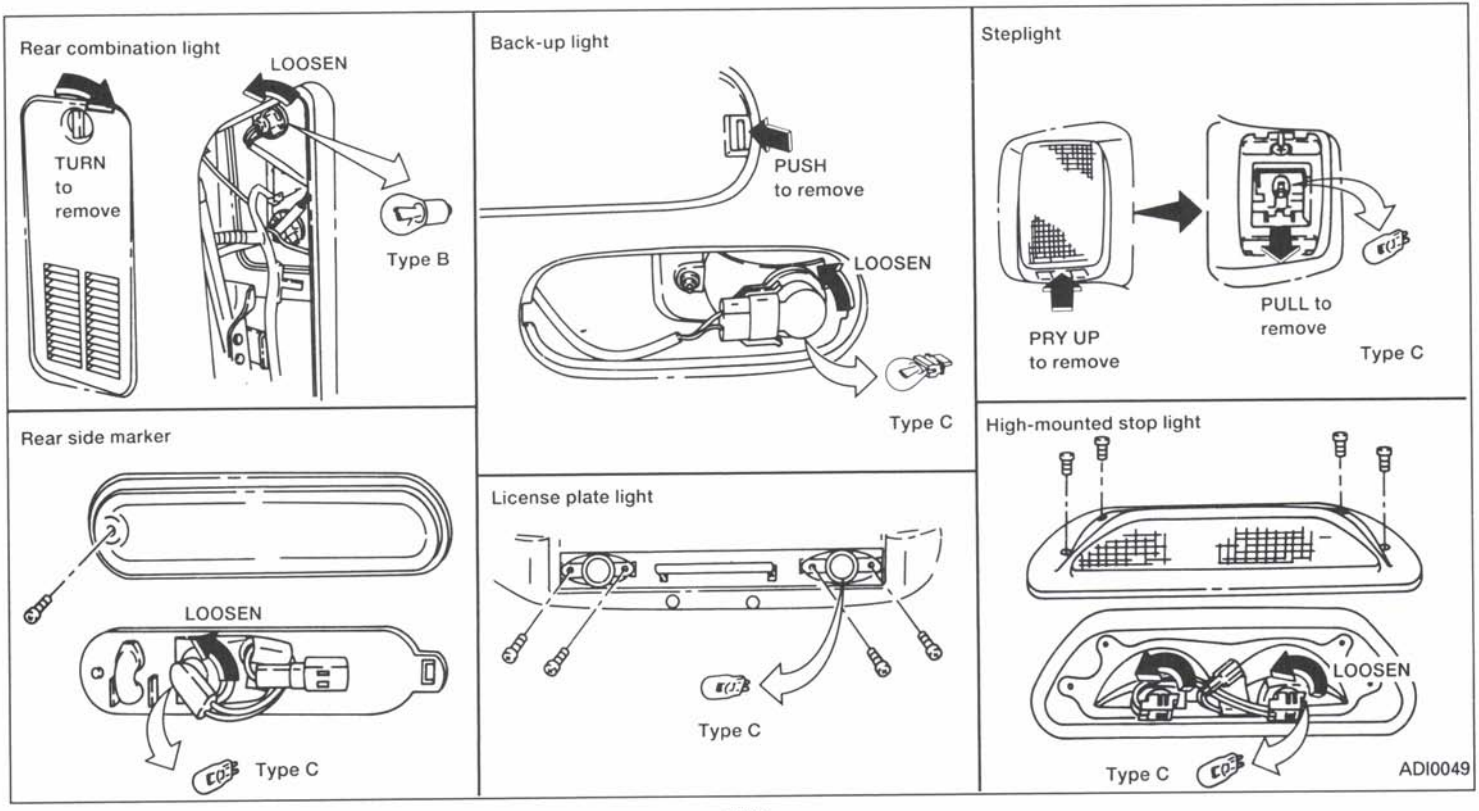
Item	Wattage (W)	Bulb No.
Front combination light		
Front side marker light	3.8	194
Clearance/Cornering	8.25/27	3157
Front turn signal light	27	3156
Rear combination light		
Turn signal	27	2057
Stop/Tail	27	2057
Back-up light	27	3156
Rear side marker light	3.8	194
License plate light	3.8	194
High-mounted stop light	12.8	912
Interior light	12	211-2
Luggage compartment light	12	211-2
Steplight	3.8	194
Spotlight	10	—



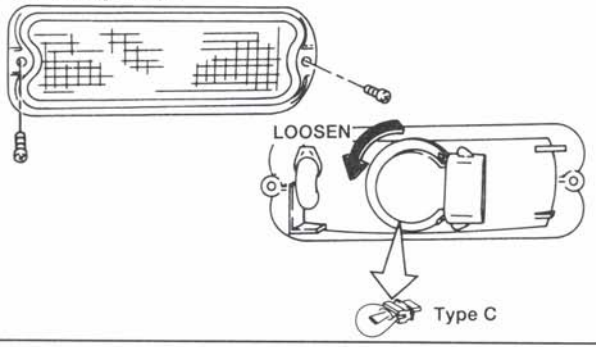


Replacement procedures

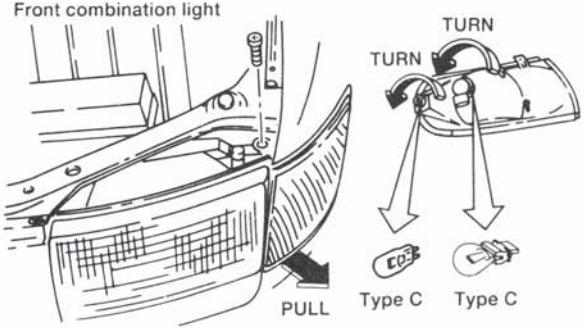
All lights (except for headlights) are either type A, B, C or D. When replacing a bulb, first remove the lens and/or cover.


Rear combination light
LOOSEN
TURN
to
remove
Type B
Back-up light
PUSH
to remove
LOOSEN
Type C
Steplight
PRY UP
to remove
PULL to
remove
Type C
Rear side marker
LOOSEN
Type C
License plate light
Type C
High-mounted stop light
LOOSEN
Type C
ADI0049

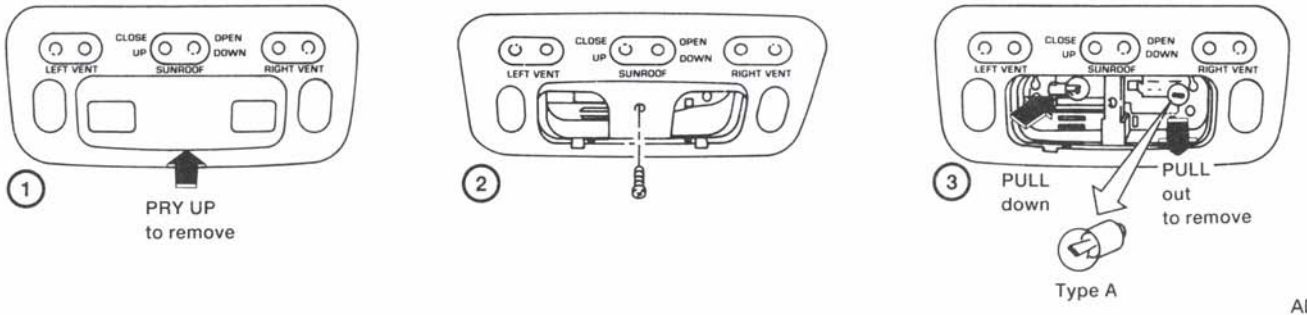
Front turn signal light



Front combination light



Spotlight



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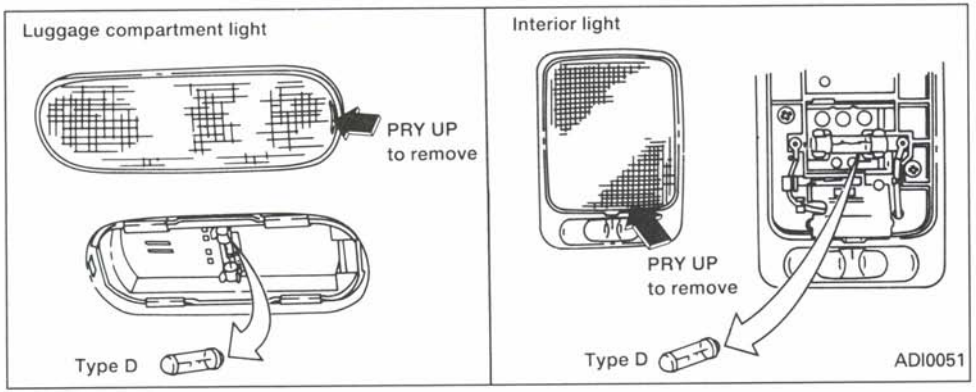
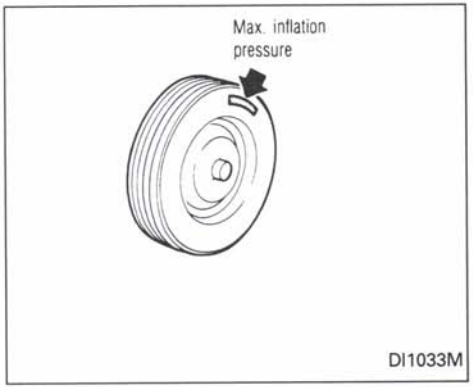




If you have a flat tire, see "In case of emergency" section.

Maximum inflation pressure

Do not exceed the maximum inflation pressures shown on the side wall of the tire.

Tire inflation pressure

Periodically check the tire pressure (including spare). Incorrect tire pressure may adversely affect tire life and vehicle handling. Tire pressure should be checked when tires are COLD. Tires are considered COLD after the vehicle has been parked for three or

more hours, or driven less than 1 mile (1.6 km). COLD tire pressures are shown on the tire placard affixed to the glove box door.

CAUTION:

The vehicle capacity weight is indicated on the tire placard. Do not load your vehicle beyond this capacity. Overloading your vehicle may result in reduced tire life, unsafe operating conditions due to premature tire failure, or unfavorable handling characteristics and could also lead to a serious accident. Loading beyond the specified capacity may also result in failure of other vehicle components.

Before taking a long trip, or whenever you have loaded your vehicle heavily, use a tire pressure gauge to ensure that the tire pressure is at the specified level.

CAUTION:

Do not drive your vehicle over 85 MPH (140 km/h) unless it is equipped with high speed capability tires. Driving faster than 85 MPH (140 km/h) may result in tire failure, loss of control and possible injury.

Types of tires

CAUTION:

When changing or replacing tires, be sure all four tires are of the same type (i.e., Summer, All Season or Snow) and construction. Your NISSAN dealer may be able to help you with information about tire type, size, speed rating and availability. Replacement tires may have a lower speed rating than the factory equipped tires, and may not match the potential maximum vehicle speed. Never exceed the maximum speed rating of the tire.

All season tires

NISSAN specifies All Season tires to provide good performance for use all year, including snowy and icy road conditions. All Season Tires are identified by "ALL SEASON" and/or "M&S" on the tire sidewall. Snow tires have better snow traction than All Season tires and may be more appropriate in some areas.

Snow tires

If snow tires are needed, it is necessary to select tires equivalent in size and load rating to the original equipment tires. If you do not, it can adversely affect the safety and handling of your vehicle.

Generally, snow tires will have lower speed ratings than factory equipped tires and may not match the potential maximum vehicle speed. Never exceed the maximum speed rating of the tire.

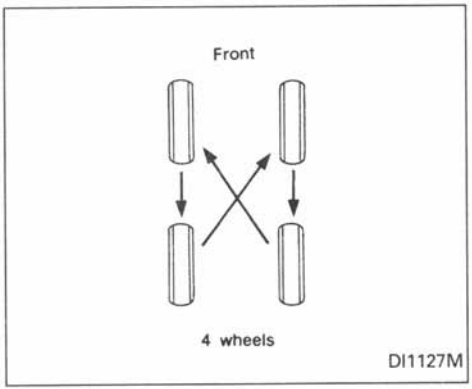
For additional traction on icy roads, studded tires may be used. However, some states and provinces prohibit their use. Check local, state and provincial laws before installing studded tires. Skid and traction capabilities of studded snow tires, on wet or dry surfaces, may be poorer than that of non-studded snow tires.

Tire chains

Use of tire chains may be prohibited according to location. Check the local laws before installing tire chains. When installing tire chains, make sure they are of proper size for the tires on your vehicle and are installed according to the chain manufacturer's suggestions. **Use only SAE Class "S" chains.** Other types may damage your vehicle. Use chain tensioners when recommended by the tire chain manufacturer to ensure a tight

fit. Loose end links of the tire chain must be secured or removed to prevent the possibility of whipping action damage to the fenders or undercarriage. If possible, avoid fully loading your vehicle when using tire chains. In addition, drive at a reduced speed. Do not exceed maximum speed suggested by chain manufacturer. Otherwise, your vehicle may be damaged and/or vehicle handling and performance may be adversely affected.

Never install tire chains on T-type and small size spare tires. Do not use the chains on dry roads.



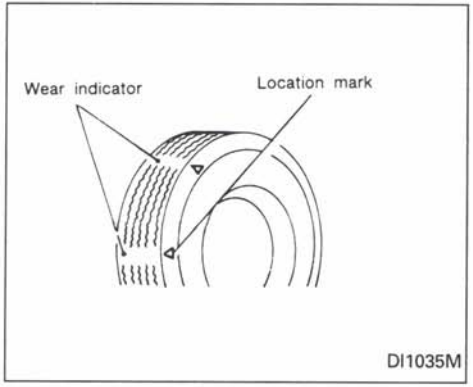
Tire rotation

NISSAN recommends that tires be rotated every 7,500 miles (12,000 km).

See "Flat tire" in the "In case of emergency" section for tire replacing procedures.

CAUTION:

- **After rotating the tires, adjust the tire pressure.**
- **Retighten the lug nuts after the wheels have been run for the first 600 miles (1,000 km) (also in cases of a flat tire, etc.).**
- **Do not include the T-type spare tire or any other small size spare tire in the tire rotation.**



Tire wear and damage

CAUTION:

Tires should be periodically inspected for wear, cracking, bulging, or objects caught in the tread. If excessive wear, cracks, bulging, or deep cuts are found, the tire should be replaced.

The original tires have a built-in tread wear indicator. When the wear indicator is visible, the tire should be replaced.

Improper service for a T-type spare tire may result in serious personal injury. If it is necessary to repair the T-type spare tire, contact your NISSAN dealer.

Changing tires and wheels

When replacing a tire, use the same size, speed rating and load carrying capacity as originally equipped. Recommended types and sizes are shown in "Wheels and tires" in the "Technical and consumer information" section. The use of tires other than those recommended or the mixed use of tires of different brands, construction (bias, bias-belted or radial), or tread patterns can adversely affect the ride, braking, handling, ground clearance, body-to-tire clearance, snow chain clearance, speedometer calibration, headlight aim and bumper height. **Some of these effects may lead to accidents and could result in serious personal injury.**

If the wheels are changed for any reason, always replace with wheels which have the same offset dimension. Wheels of a different offset could cause early tire wear, possibly degraded vehicle handling characteristics and/or interference with the brake discs/drums. Such interference can lead to decreased braking efficiency and/or early brake pad/shoe wear.

WARNING:

Do not install a deformed wheel or tire even if it has been repaired. Such wheels or tires could have structural damage and could fail without warning.

Wheel balance

Unbalanced wheels may affect vehicle handling and tire life. Even with regular use, wheels can get out of balance. Therefore, they should be balanced as required.

Wheel balance service should be performed with the wheels off the vehicle. Spin balancing the front wheels on the vehicle could lead to transmission damage.

Care of wheels

- Wash the wheels when washing the vehicle to maintain their appearance.
- Clean the inner side of the wheels when the wheel is changed or the underside of the vehicle is washed.
- Do not use abrasive cleaners when washing the wheels.
- Inspect wheel rims regularly for dents or corrosion. Such damage may cause loss of pressure or poor seal at the tire bead.

- NISSAN recommends that the road wheels be waxed to protect against road salt in areas where it is used during winter.

Spare tire (T-type spare tire)

Observe the following precautions if the T-type spare tire must be used, otherwise your vehicle could be damaged or involved in an accident.

CAUTION:

- **The T-type spare tire should be used only for emergency. It should be replaced by the standard tire at the first opportunity.**
- **Drive carefully while the T-type spare tire is installed. Avoid sharp turns and abrupt braking while driving.**
- **Periodically check tire inflation pressure, and always keep it at 60 psi (420 kP, 4.2 bar).**
- **Do not drive your vehicle at speeds faster than 50 MPH (80 km/h).**
- **Do not use tire chains on a T-type spare tire. Tire chains will not fit properly on the T-type spare tire and may cause damage to the vehicle.**
- **When driving on roads covered with snow or ice, the T-type spare tire should be used on the rear wheel and the original tire used on the front wheels (drive wheels). Use tire chains only on the front two original tires.**
- **Tire tread of the T-type spare tire will wear at a faster rate than the original tire. Replace the T-type spare tire as soon as the tread wear indicators appear.**
- **Because the T-type spare tire is smaller than the original tire, ground clearance is reduced. To avoid damage to the vehicle do not drive over obstacles. Also do not drive the vehicle through an automatic car wash since it may get caught.**
- **Do not use the T-type spare tire on other vehicles.**
- **Do not use more than one T-type spare tire at the same time.**

8 Maintenance schedule

Your new NISSAN has been designed to have minimum maintenance requirements with longer service intervals to save you both time and money. However, some day-to-day and regular maintenance is essential to maintain your NISSAN's good mechanical condition, as well as its emission and engine performance.

It is the owner's responsibility to make sure that the specified maintenance, as well as general maintenance, is performed.

As the vehicle owner, you are the only one who can ensure that your vehicle receives the proper maintenance care. You are a vital link in the maintenance chain.

General maintenance

General maintenance includes those items which should be checked during normal day-to-day operation of the vehicle. They are essential if your vehicle is to continue to operate properly. It is your responsibility to perform these procedures regularly as prescribed.

These checks or inspections can be done by yourself, a qualified technician or, if you prefer, your NISSAN dealer.

Periodic maintenance

The maintenance items listed in this section must be serviced at regular intervals.

However, under severe driving conditions, additional or more frequent maintenance will be required.

Where to go for service

If maintenance service is required or your vehicle appears to malfunction, have the systems checked and tuned by an authorized NISSAN dealer.

NISSAN technicians are well-trained specialists and are kept up to date with the latest service information through technical bulletins, service tips, and in-dealership training programs. They are completely qualified to work on NISSAN's vehicles **before** they work on your vehicle, rather than after they have worked on it.

You can be confident that your NISSAN dealer's service department performs the best job to meet the maintenance requirements on your vehicle — in a reliable and economic way.

During the normal day-to-day operation of the vehicle, general maintenance should be performed regularly as prescribed in this section. If you detect any unusual sounds, vibrations or smells, be sure to check for the cause or have your NISSAN dealer do it promptly. In addition, you should notify your NISSAN dealer if you think that repairs are required.

When performing any checks or maintenance work, closely observe the precautions in the "Do-it-yourself operations" section.

Additional information on the following items with "*" can be found in the "Do-it-yourself operations" section.

OUTSIDE THE VEHICLE

The maintenance items listed here should be performed from time to time, unless otherwise specified.

Tires* — Check the pressure with a gauge periodically when at a service station, including the spare, and adjust to the specified pressure if necessary. Check carefully for damage, cuts or excessive wear.

Wheel nuts* — When checking the tires,

make sure no nuts are missing, and check for any loose nuts. Tighten if necessary.

Tire rotation* — Tires should be rotated every 7,500 miles (12,000 km).

Wheel alignment and balance — If the vehicle should pull to either side while driving on a straight and level road, or if you detect uneven or abnormal tire wear, there may be a need for wheel alignment.

If the steering wheel or seat vibrates at normal highway speeds, wheel balancing may be needed.

Windshield wiper blades* — Check for cracks or wear if they do not wipe properly.

Doors and engine hood — Check that all doors and the engine hood operate properly. Also ensure that all latches lock securely. Lubricate hinges, latches, rollers and links if necessary. Make sure that the secondary latch keeps the hood from opening when the primary latch is released.

When driving in areas using road salt or other corrosive materials, check lubrication frequently.

INSIDE THE VEHICLE

The maintenance items listed here should be checked on a regular basis, such as when performing periodic maintenance, cleaning the vehicle, etc.

Lights* — Make sure that the headlights, stop lights, tail lights, turn signal lights, and other lights are all operating properly and installed securely. Also check headlight aim.

Warning lights and buzzers/chimes — Make sure that all warning lights and buzzers/chimes are operating properly.

Windshield wiper and washer* — Check that the wipers and washer operate properly and that the wipers do not streak.

Windshield defroster — Check that the air comes out of the defroster outlets properly and in sufficient quantity when operating the heater or air conditioner.

Steering wheel — Check for changes in the steering conditions, such as excessive freeplay, hard steering or strange noises.

Seats — Check seat position controls such as seat adjusters, seatback recliner, etc. to ensure they operate smoothly and that all latches lock securely in every position. Check that the head restraints move up and down smoothly and that the locks hold securely in all latched positions. Check that the seat leg latches lock securely in every anchor position for the folding down rear seat and detachable rear seat (if equipped).

Seat belts — Check that all parts of the seat belt system (e.g. buckles, anchors, adjusters and retractors) operate properly and smoothly, and are installed securely. Check the belt webbing for cuts, fraying, wear or damage.

Accelerator pedal — Check the pedal for smooth operation and make sure the pedal does not catch or require uneven effort. Keep the floor mats away from the pedal.

Brakes — Check that the brakes do not pull the vehicle to one side when applied.

Brake pedal* — Check the pedal for smooth operation and make sure it has the proper distance under it when depressed fully. Check the brake booster function. Be certain to keep floor mats away from the pedal.

Parking brake* — Check that pedal is adjusted to specification and confirm that

your vehicle is held securely on a fairly steep hill with only the parking brake applied.

Automatic transmission "Park" mechanism — On a fairly steep hill check that your vehicle is held securely with the selector lever in the "P" (Park) position without applying any brakes.

UNDER THE HOOD AND VEHICLE

The maintenance items listed here should be checked periodically, for example, each time you check the engine oil or refuel.

Windshield washer fluid* — Check that there is adequate fluid in the tank.

Engine coolant level* — Check the coolant level when the engine is cold.

Radiator and hoses — Check the front of the radiator and clean off any dirt, insects, leaves, etc., that may have accumulated. Make sure the hoses have no cracks, deformation, rot or loose connections.

Brake fluid level* — Make sure that the brake fluid level is between the "MAX" and "MIN" lines on the reservoir.

Battery* — Check the fluid level in each cell. It should be between the "MAX" and "MIN" lines.

Engine drive belts* — Make sure that no belt is frayed, worn, cracked or oily.

Engine oil level* — Check the level after parking the vehicle on a level surface and turning off the engine.

Power steering fluid level* and lines — Check the level when the fluid is cold and the engine is turned off. Check the lines for proper attachment, leaks, cracks, etc.

Automatic transmission fluid level* — Check the level after putting the selector lever in "P" (Park) with the engine idling.

Exhaust system — Make sure there are no cracks, holes, loose joints or supports. If the sound of the exhaust seems unusual or there is a smell of exhaust fumes, immediately have the exhaust system inspected by a qualified individual. (See the carbon monoxide warning in the "Starting and driving" section.)

Underbody — The underbody is frequently exposed to corrosive substances such as those used on icy roads or to control dust. It is very important to remove these substances, otherwise rust will form on the floor pan, frame, fuel lines and around the exhaust system. At the end of winter, the underbody should be thoroughly flushed with plain water, being careful to clean those areas where mud and dirt may accumulate. See the "Appearance and interior care" section for additional information.

Fluid leaks — Check under the vehicle for fuel, oil, water or other fluid leaks after the vehicle has been parked for a while. Water dripping from the air conditioner after use is normal. If you should notice any leaks or if gasoline fumes are evident, check for the cause and have it corrected immediately.

To ensure smooth, trouble-free, safe and economical driving, NISSAN provides two different maintenance schedules that may be used, depending upon the conditions in which you usually drive. These schedules contain both distance and time intervals, up to 60,000 miles (96,000 km)/48 months. For most people, the odometer reading will indicate when service is needed. However, if you drive very little, your vehicle should be serviced at the regular time intervals shown in the schedule. **After 60,000 miles (96,000 km) or 48 months, continue periodic maintenance at the same mileage/time intervals.**

SCHEDULE 1

Follow Periodic Maintenance Schedule 1 if your driving habits frequently include one or more of the following driving conditions:

- **Repeated short trips of less than 5 miles (8 km).**
- **Repeated short trips of less than 10 miles (16 km) with outside temperatures remaining below freezing.**
- **Operating in hot weather in stop-and-go "rush hour" traffic.**
- **Extensive idling and/or low speed driving for long distances, such as police, taxi or door-to-door delivery use.**
- **Driving in dusty conditions.**
- **Driving on rough, muddy, or salt spread roads.**
- **Towing a trailer, using a camper or a car-top carrier.**

SCHEDULE 2

Follow Periodic Maintenance Schedule 2 if none of the driving conditions shown in Schedule 1 apply to your driving habits.

SCHEDULE 1

Abbreviations: R = Replace I = Inspect. Correct or replace if necessary. [ ]: At the mileage intervals only

MAINTENANCE OPERATION		MAINTENANCE INTERVAL															
Perform at number of miles, kilometers or months, whichever comes first.	Miles × 1,000	3.75	7.5	11.25	15	18.75	22.5	26.25	30	33.75	37.5	41.25	45	48.75	52.5	56.25	60
	(km × 1,000)	(6)	(12)	(18)	(24)	(30)	(36)	(42)	(48)	(54)	(60)	(66)	(72)	(78)	(84)	(90)	(96)
	Months	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48
Emission control system maintenance																	
Drive belts	See NOTE (1).																I*
Air cleaner filter	See NOTE (2).								[R]								[R]
Vapor lines									I*								I*
Fuel lines									I*								I*
Fuel filter	See NOTE (3)*.																
Engine coolant		Replace every 30,000 miles (48,000 km) or 36 months.*															
Engine oil		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Engine oil filter (See page 9-4 for oil filter selection.) (Use Nissan Premium type, or equivalent.)		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Spark plugs									[R]								[R]
Timing belt		Replace every 105,000 miles (168,000 km).															

NOTE: (1) After 60,000 miles (96,000 km) or 48 months, inspect every 15,000 miles (24,000 km) or 12 months.

(2) If operating mainly in dusty conditions, more frequent maintenance may be required.

(3) If vehicle is operated under extremely adverse weather conditions or in areas where ambient temperature are either extremely low or extremely high, the filters might become clogged. In such an event, replace them immediately.

*** Maintenance items and intervals with "*" are recommended by NISSAN for reliable vehicle operation. The owner need not perform such maintenance in order to maintain the emission warranty or manufacturer recall liability. Other maintenance items and intervals are required.**

Abbreviations: I = Inspect. Correct or replace if necessary.

MAINTENANCE OPERATION		MAINTENANCE INTERVAL							
Perform at number of miles, kilometers or months, whichever comes first.	Miles x 1,000	7.5	15	22.5	30	37.5	45	52.5	60
	(km x 1,000)	(12)	(24)	(36)	(48)	(60)	(72)	(84)	(96)
	Months	6	12	18	24	30	36	42	48
Chassis and body maintenance									
Brake lines & cables			I		I		I		I
Brake pads, discs, drums & linings		I	I	I	I	I	I	I	I
Automatic transmission fluid	See NOTE (1).		I		I		I		I
Steering gear & linkage, axle & suspension parts		I	I	I	I	I	I	I	I
Steering linkage ball joints & front suspension ball joints		I	I	I	I	I	I	I	I
Exhaust system		I	I	I	I	I	I	I	I
Front drive shaft boots		I	I	I	I	I	I	I	I
Supplemental air bag system	See NOTE (2).								

NOTE: (1) If towing a trailer, using a camper or a car-top carrier, or driving on rough or muddy roads, change (not just inspect) fluid at every 30,000 miles (48,000 km) or 24 months.

(2) Inspect the supplemental air bag system 10 years after the date of manufacture as noted on the certification label located on the left center pillar.

SCHEDULE 2

Abbreviations: R = Replace I = Inspect. Correct or replace if necessary. [ ]: At the mileage intervals only

MAINTENANCE OPERATION		MAINTENANCE INTERVAL							
Perform at number of miles, kilometers or months, whichever comes first.	Miles x 1,000	7.5	15	22.5	30	37.5	45	52.5	60
	(km x 1,000)	(12)	(24)	(36)	(48)	(60)	(72)	(84)	(96)
	Months	6	12	18	24	30	36	42	48
Emission control system maintenance									
Drive belts	See NOTE (1).								I*
Air cleaner housing filter					[R]				[R]
Vapor lines					I*				I*
Fuel lines					I*				I*
Fuel filter	See NOTE (2)*.								
Engine coolant		Replace every 30,000 miles (48,000 km) or 36 months.*							
Engine oil		R	R	R	R	R	R	R	R
Engine oil filter (Use Nissan Premium type, or equivalent.)	See NOTE (1).		R		R		R		R
Spark plugs					[R]				[R]
Timing belt		Replace every 105,000 miles (168,000 km).							

NOTE: (1) After 60,000 miles (96,000 km) or 48 months, inspect every 15,000 miles (24,000 km) or 12 months.

(2) If vehicle is operated under extremely adverse weather conditions or in areas where ambient temperature are either extremely low or extremely high, the filters might become clogged. In such an event, replace them immediately.

*** Maintenance items and intervals with "*" are recommended by NISSAN for reliable vehicle operation. The owner need not perform such maintenance in order to maintain the emission warranty or manufacturer recall liability. Other maintenance items and intervals are required.**

Abbreviations: I = Inspect. Correct or replace if necessary.

MAINTENANCE OPERATION		MAINTENANCE INTERVAL							
Perform at number of miles, kilometers or months, whichever comes first.	Miles x 1,000 (km x 1,000) Months	7.5 (12) 6	15 (24) 12	22.5 (36) 18	30 (48) 24	37.5 (60) 30	45 (72) 36	52.5 (84) 42	60 (96) 48
Chassis and body maintenance									
Brake lines & cables			I		I		I		I
Brake pads, discs, drums & linings			I		I		I		I
Automatic transmission oil			I		I		I		I
Steering gear linkage, axle & suspension parts					I				I
Exhaust system	See NOTE (1).				I				I
Front drive shaft boots			I		I		I		I
Supplemental air bag system	See NOTE (2).								

NOTE: (1) After 60,000 miles (96,000 km) or 48 months, inspect every 15,000 miles (24,000 km) or 12 months.
(2) Inspect the supplemental air bag system 10 years after the date of manufacture as noted on the certification label located on the left center pillar.

EXPLANATION OF MAINTENANCE ITEMS

Additional information on the following items with "*" is found in the "Do-it-yourself operations" section.

Emission control system maintenance

Drive belts* — Check drive belts for wear, fraying or cracking and also for proper tension. Replace the drive belts if found damaged.

Air cleaner filter — Under normal driving conditions, the air cleaner filter should be replaced in accordance with the maintenance schedule. However, driving the vehicle in dusty areas may cause more rapid clogging of the element. Consequently, the element may have to be replaced more frequently.

Vapor lines — Check vapor lines and connections for failure or looseness. If leaks are found, replace them.

Fuel lines — Check the fuel hoses, piping and connections for leaks, looseness or deterioration. Replace any parts if they are damaged.

Fuel filter — If the vehicle is operated under extremely adverse weather conditions or in areas where ambient temperatures are either extremely low or extremely high, the filter might become clogged. In such an event, replace the filter immediately.

Engine coolant* — Changing engine coolant can be performed by your NISSAN dealer or procedures can be found in the Service Manual. Improper air relief after changing coolant can result in reduced heater performance and overheating.

Engine oil & oil filter * — Under normal driving conditions, the engine oil and oil filter should be replaced in accordance with the maintenance schedule. However, under severe driving conditions, they may have to be replaced more frequently.

Spark plugs* — Replace with new plugs having the correct heat range.

Timing belt — Replace the timing belt for driving the camshaft.

Chassis and body maintenance

Brake lines & cables — Check the brake lines and hoses (including brake booster vacuum hoses, connections & check valve) and parking brake cables for proper attachment, leaks, cracks, chafing, abrasion, deterioration, etc.

Brake pads, discs, drums & linings — Check these and the other neighboring brake components for wear, deterioration and leaks. Under severe driving conditions, they may have to be inspected more frequently.

Automatic transmission fluid* — Check the fluid level and visually inspect for signs of leakage.

Under severe driving conditions, the fluid should be replaced at the specified interval.

Steering gear & linkage, axle & suspension parts, and drive shaft boots — Check for damage, looseness and leakage of oil or grease. Under severe driving conditions, more frequent inspection should be performed.

Steering linkage ball joints & front suspension ball joints — Check the ball joints for damage, looseness and grease leakage.

Exhaust system — Visually check the exhaust pipes, muffler, and hangers for proper attachment, leaks, cracks, chafing, abrasion, deterioration, etc. Under severe driving conditions, inspection should be performed more frequently.

Air bag system — Check the air bag system components for proper attachment, damage, deformities, cracks, rust, etc. Work around and on the air bag system should be done by an authorized NISSAN dealer.

9 Technical and consumer information

CAPACITIES AND RECOMMENDED FUEL/ LUBRICANTS

The following are approximate capacities. The actual refill capacities may be a little different. When refilling, follow the procedure instructed in the "Do-it-yourself operations" section to determine the proper refill capacity.

	Capacity (Approximate)			Recommended Fuel/Lubricants
	US measure	Imp measure	Liter	
Fuel	20 gal	16-5/8 gal	75.7	Unleaded gasoline with an octane rating of at least 87 AKI (RON 91)(1)
Engine oil (Refill)				
With oil filter	4-1/4 qt	3-1/2 qt	4.0	Energy Conserving Oils of API SG(2), (3)
Without oil filter	3-7/8 qt	3-1/8 qt	3.6	
Cooling system				
With reservoir tank				
With rear heater	12-3/4 qt	10-5/8 qt	12.1	Anti-freeze coolant (Ethylene glycol base)
Without rear heater	11-3/8 qt	9-3/8 qt	10.7	
Reservoir	3/4 qt	5/8 qt	0.7	
Automatic transaxle fluid	Refill to the proper oil level according to the instructions in the "Do-it-yourself operations" section.			Genuine NISSAN ATF(4) or equivalent DEXRON™ II E type fluid
Power steering fluid				Type F Automatic Transaxle Fluid or equivalent
Brake fluid				Genuine NISSAN Brake Fluid(4) or equivalent DOT 3 (US FMVSS No. 116)
Multi-purpose grease	—	—	—	NLGI No. 2 (Lithium soap base)
Air conditioning system refrigerant	—	—	—	R-134a

(1): For further details, see "Fuel recommendation".
(2): For further details, see "Engine oil and oil filter recommendation".
(3): For further details, see "Recommended SAE viscosity number".
(4): Available in mainland U.S.A. through your NISSAN dealer.

FUEL RECOMMENDATION

Gasoline engine models

All models are designed to operate on unleaded gasoline with an octane rating of at least 87 AKI (Anti-Knock Index) number (Research octane number 91).

CAUTION:

Using a fuel other than that specified could adversely affect the emission control devices and systems, and could also affect warranty coverage.

Under no circumstances should a leaded gasoline be used, since this will damage the three way catalyst.

Gasoline containing oxygenates

Some fuel suppliers sell gasoline containing oxygenates such as ethanol, MTBE and methanol with or without advertising their presence. NISSAN does not recommend the use of fuels of which the oxygenate content and the fuel compatibility for your NISSAN cannot be readily determined. If in doubt, ask your service station manager.

If you use oxygenate-blend gasoline, please take the following precautions as the usage

of such fuels may cause vehicle performance problems and/or fuel system damage.

- **The fuel should be unleaded and have an octane rating no lower than that recommended for unleaded gasoline.**
- **If an oxygenate-blend, excepting a methanol blend, is used, it should contain no more than 10% oxygenate. (MTBE may, however, be added up to 15%.)**
- **If a methanol blend is used, it should contain no more than 5% methanol (methyl alcohol, wood alcohol). It should also contain a suitable amount of appropriate cosolvents and corrosion inhibitors. If not properly formulated with appropriate cosolvents and corrosion inhibitors, such methanol blends may cause fuel system damage and/or vehicle performance problems. At this time, sufficient data is not available to ensure that all methanol blends are suitable for use in NISSAN vehicles.**

If any undesirable driveability problems such as engine stalling and difficult hot-starting are experienced after using oxygenate-blend fuels, immediately change to a non-oxygenate fuel or a fuel with a low blend of MTBE.

Take care not to spill gasoline during refueling. Gasoline containing oxygenates can cause paint damage.

Octane rating tips

In most parts of North America, you should use unleaded gasoline with an octane rating of at least 87 AKI (Anti-Knock Index) number. However, you may use unleaded gasoline with an octane rating as low as 85 AKI (Anti-Knock Index) number in these high altitude areas [over 4,000 ft (1,219 m)] such as: Colorado, Montana, New Mexico, Utah, Wyoming, northeastern Nevada, southern Idaho, western South Dakota, western Nebraska, and that part of Texas which is directly south of New Mexico.

Using unleaded gasoline with an octane rating lower than stated above can cause persistent, heavy "spark knock." ("Spark knock" is a metallic rapping noise.) If severe, this can lead to engine damage. If you detect a persistent heavy spark knock even when using gasoline of the stated octane rating, or if you hear steady spark knock while holding a steady speed on level roads, have your dealer correct the condition. Failure to correct the condition is misuse of the vehicle, for which NISSAN is not responsible.

Incorrect ignition timing will result in knocking, after-run or overheating. This in turn may cause excessive fuel consumption or damage to the engine. If any of the above symptoms are encountered, have your vehicle checked at a NISSAN dealer or other competent service facility.

However, now and then you may notice light spark knock for a short time while accelerating or driving up hills. This is no cause for concern, because you get the greatest fuel benefit when there is light spark knock for a short time under heavy engine load.

ENGINE OIL AND OIL FILTER RECOMMENDATION

Selecting the correct oil

An API SG quality, SAE 5W-30 and energy conserving oil is the preferred engine oil for your vehicle.

There are three oil characteristics which must be considered when selecting the correct engine oil. They are quality, viscosity and frictional characteristics. It is essential that the correct quality and viscosity oil is chosen to ensure satisfactory life and performance of the engine. It is further recommended on the gasoline engine that a low friction oil (energy conserving oil) be selected in order to improve fuel economy and conserve energy. **Oil which may contain foreign matter or has been previously used should not be used.**

Oil quality

The quality of the engine oil is shown on the container in accordance with API (American Petroleum Institute) designations of quality.

Oils which do not have the specified quality label should not be used as they could cause engine damage.

Only energy conserving oils of API SG should be used. These oils may have single or combined designators (i.e., "SG", "SG/CC" or "SG/CD").

Oil viscosity

The engine oil viscosity or thickness changes with temperature. Because of this, it is important that the engine oil viscosity be selected based on the temperatures at which the vehicle will be operated before the next oil change. The chart "Recommended SAE viscosity number" shows the recommended oil viscosities for the expected ambient temperatures. Choosing an oil viscosity other than that recommended could cause serious engine damage.

Energy conserving oils

In order to improve fuel economy and conserve energy, new lower friction engine oils have been developed. These oils are readily available and can be identified by such labels as EC-I, EC-II, energy conserving, energy saving, improved fuel economy, etc.

Oil identification

A standard symbol may be used to help you select the correct oil. A typical symbol is shown above. The upper portion designates the quality, the center designates the viscosity and the lower section indicates that the oil has fuel saving capabilities.

Selecting the correct oil filter

Your new vehicle is equipped with a high-quality genuine NISSAN oil filter. When replacing, use the premium type oil filter or its equivalent for the reason described in "change intervals".

Change intervals

The oil and oil filter change intervals for your engine are based on the use of the specified quality oils and filters. Oil and filters other

than the specified quality, or oil and filter change intervals longer than recommended could reduce engine life. Damage to engines caused by improper maintenance or use of incorrect oil and filter quality and/or viscosity is not covered by the new NISSAN vehicle warranties.

Your engine was filled with a high quality engine oil when it was built. You do not have to change the oil before the first recommended change interval. Oil and filter change intervals depend upon how you use your vehicle. Operation under the following conditions may require more frequent oil and filter changes:

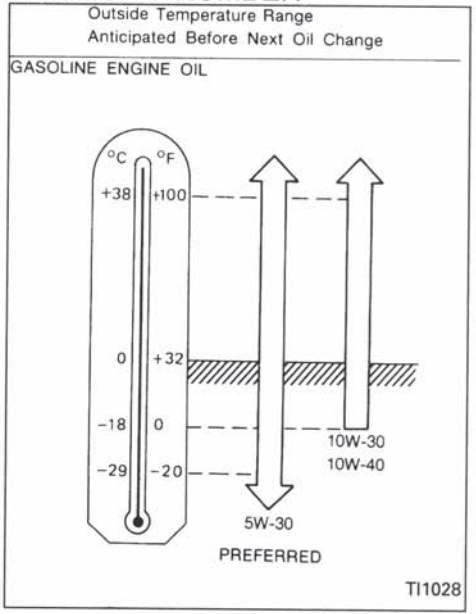
— repeated short distance driving at cold outside temperatures,

— driving in dusty conditions,

— extensive idling,

— towing a trailer.

RECOMMENDED SAE VISCOSITY NUMBER



- **5W-30 is preferable for all ambient temperatures. 10W-30 and 10W-40 are usable for ambient temperatures above 50°F (10°C) for all seasons.**

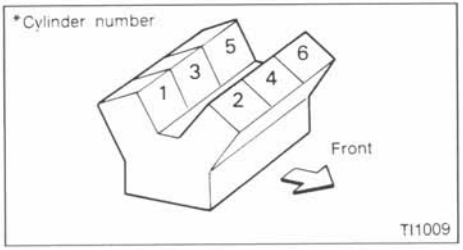
AIR CONDITIONING SYSTEM REFRIGERANT AND LUBRICANT RECOMMENDATIONS

The air conditioning system in this NISSAN vehicle must be charged with the refrigerant R-134a and the lubricant, NISSAN type "PAG F" or the exact equivalents. Use of any other refrigerant or lubricant will cause severe damage and you will need to replace your vehicle's entire air conditioning system.

The release of refrigerant into the atmosphere is not recommended. The new refrigerant R-134a in your NISSAN vehicle will not harm the earth's ozone layer. However, it may contribute in a small part to ground level smog. NISSAN recommends that the refrigerant be recovered and recycled.

Contact your NISSAN dealer when servicing your air conditioning system.

Model		VG30E
Type		Gasoline, 4-cycle
Cylinder arrangement		6-cylinder, V slanted at 60°
Bore × Stroke	in (mm)	3.425 × 3.268 (87.0 × 83.0)
Displacement	cu in (cm^3)	180.62 (2,960)
Firing order		1,2,3,4,5,6* (See illustration below)
Idle speed	rpm	See the "Important Vehicle Information" label on the underside of the hood.
Ignition timing (B.T.D.C.)	degree/rpm	
CO percentage at idle speed [No air]	%	
Spark plug		
Standard		BKR5EY
Cold		BKR6EY
Spark plug gap	in (mm)	0.031 to 0.035 (0.8 to 0.9)
Drive belts [Width × Length]	in (mm)	
Generator belt		0.7008 × 33.66 (17.80 × 855)
Air conditioner compressor		0.5606 × 46.65 (14.24 × 1,185)
Power steering pump		0.5606 × 40.74 (14.24 × 1,035)



WHEELS & TIRES

Road wheel	Steel	5-1/2 - JJ × 15	
	Aluminum	6-1/2 - JJ × 15	
	Offset in (mm)	1.77 (45)	
Tire size	Conventional	P205/75R15	97 S
	Cast aluminum*	P205/75R15	97 S
		P215/70R15	97 H
	Spare	T125/90D16	
		P205/75R15	97 S*
		P215/70R15	97 H*

*: Option

DIMENSIONS AND WEIGHTS

Overall length	in (mm)	189.9 (4,824)
Overall width	in (mm)	73.7 (1,871)
Overall height	in (mm)	67.6 (1,716)
Front tread	in (mm)	63.4 (1,610)
Rear tread	in (mm)	63.4 (1,610)
Wheelbase	in (mm)	112.2 (2,850)
Gross vehicle weight rating	lb (kg)	See the "F.M.V.S.S. certification label" on the driver's side lock pillar.
Gross axle weight rating		
Front	lb (kg)	
Rear	lb (kg)	

WHEN TRAVELING OR REGISTERING YOUR VEHICLE IN ANOTHER COUNTRY

When planning to travel in another country, you should first find out if the fuel available is suitable for your vehicle's engine.

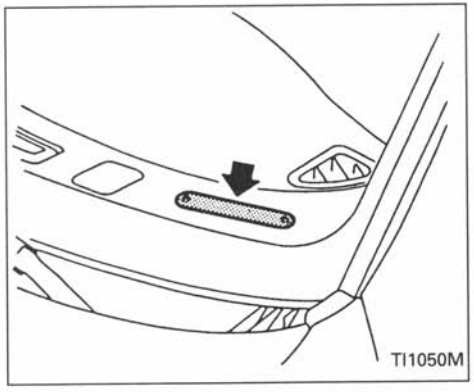
Using fuel with an octane/cetane rating that is too low may cause engine damage. All gasoline vehicles must be operated with unleaded engine gasoline. Therefore, avoid taking your vehicle to areas where appropriate fuel is not available.

When transferring the registration of your vehicle to another country, state, province or district, it may be necessary to modify the vehicle to meet local laws and regulations.

The laws and regulations for motor vehicle emission control and safety standards vary according to the country, state, province or district; therefore, vehicle specifications may differ.

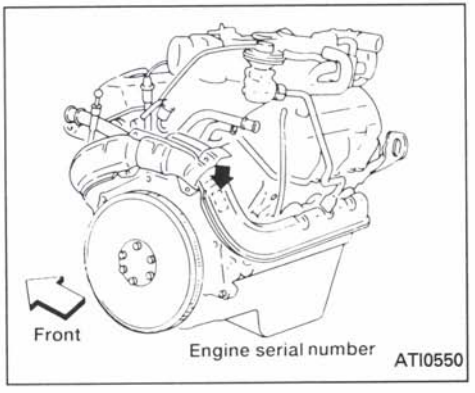
When any vehicle is to be taken into another country, state, province or district and registered, its modifications, transportation, and registration are the responsibility of the user. NISSAN is not responsible for any inconvenience that may result.

VEHICLE IDENTIFICATION



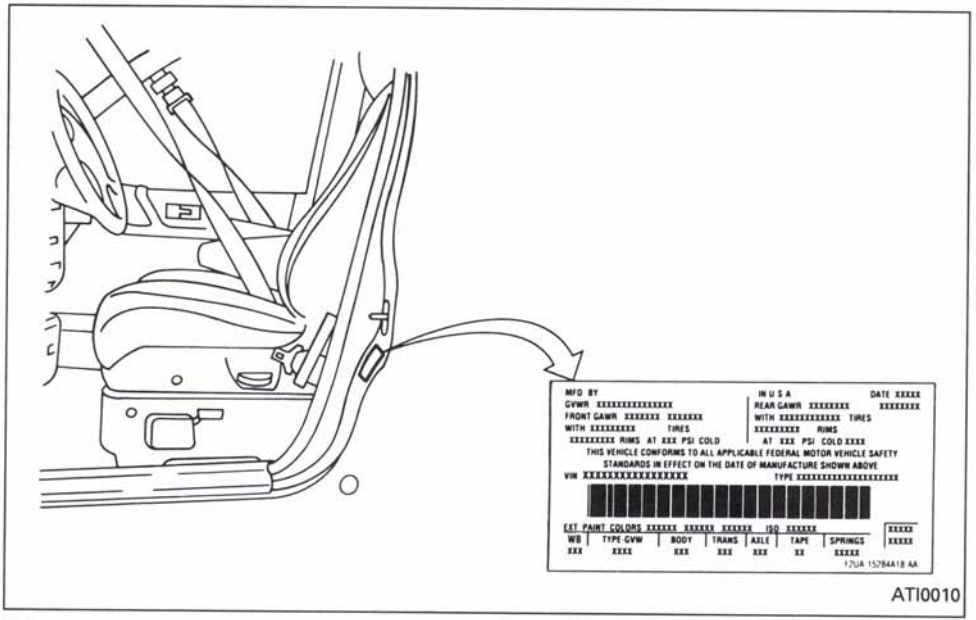
VEHICLE IDENTIFICATION NUMBER PLATE

The vehicle identification number plate is attached as shown. This number is the identification for your vehicle and is used in the vehicle registration.



ENGINE SERIAL NUMBER

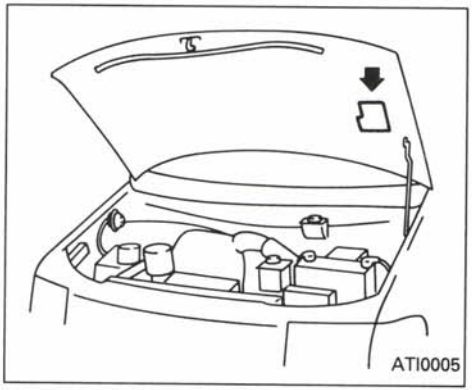
The number is stamped on the engine as shown.



ATI0010

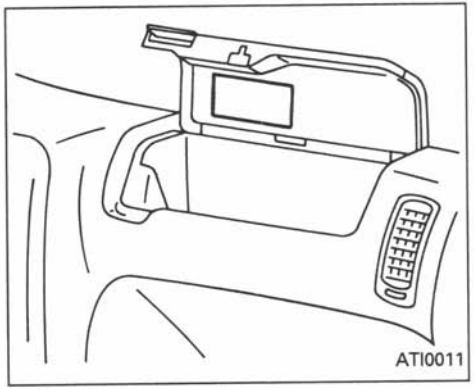
F.M.V.S.S. CERTIFICATION LABEL

The F.M.V.S.S. certification label is affixed as shown.


ATI0005

IMPORTANT VEHICLE INFORMATION LABEL

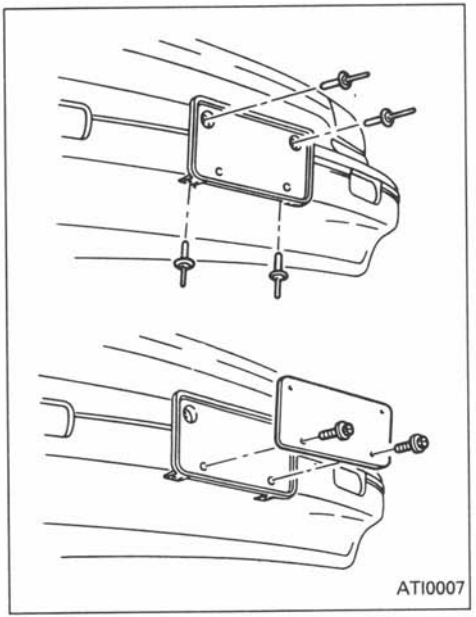
The emission control information label is attached as shown.



TIRE PLACARD

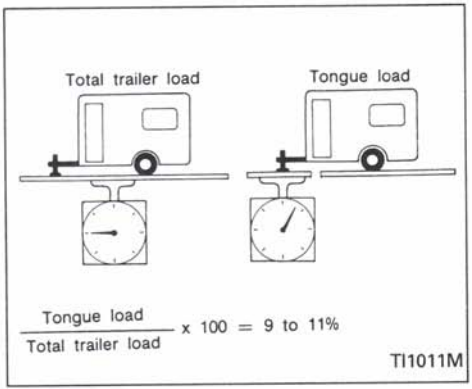
The cold tire pressure is shown on the tire placard affixed to the inside of the glove box.

INSTALLING THE LICENSE PLATE



Have your front license plate installed by your NISSAN dealer.

TRAILER TOWING



Your new vehicle was designed to be used primarily to carry passengers and cargo. Remember that towing a trailer will place additional loads on your vehicle's engine, drive train, steering, braking and other systems.

Information on trailer towing ability and the special equipment required should be obtained from your NISSAN dealer. He can obtain a **NISSAN Towing Guide** for you.

Do not tow a trailer if your vehicle is a cargo van model.

Maximum load limits

Maximum trailer loads

Never allow the total trailer load to exceed 3,500 lbs (1,588 kg). The total trailer load equals trailer weight plus its cargo weight. Towing loads greater than 3,500 lbs (1,588 kg) or using improper towing equipment could adversely affect vehicle handling, braking and performance. The Gross Combined Weight is the total weight of the tow vehicle with all occupants, cargo and fuel tanks, PLUS the total weight of the trailer and all its cargo.

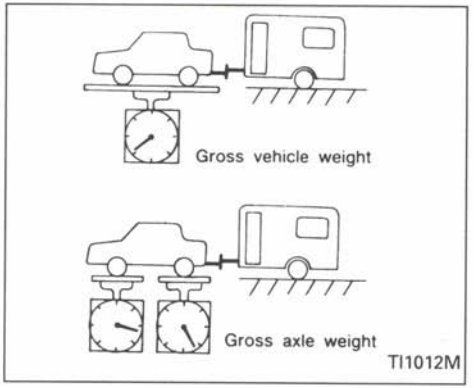
The Gross Combined Weight should not exceed 8,000 lbs (3,628 kg). This weight should be properly distributed. For more information regarding vehicle and trailer loading, refer to The NISSAN Towing Guide, available from you Nissan dealer.

WARNING:

Vehicle damage and/or personal injury resulting from improper towing procedures is not covered by NISSAN warranties. Information on trailer towing and required towing equipment should be obtained from dealers who specialize in providing trailers or other towing equipment.

Tongue load

Keep the tongue load between 9 and 11% of the total trailer load. If the tongue load becomes excessive, rearrange cargo to allow for proper tongue load.



Maximum gross vehicle weight/maximum gross axle weight

The gross vehicle weight of the towing vehicle must not exceed the gross vehicle weight rating (GVWR) shown on the F.M.V.S.S. certification label. The gross vehicle weight equals the combined weight of the unloaded vehicle, passengers, luggage, hitch, trailer tongue load and any other optional equipment. In addition, front or rear gross axle weight must not exceed the gross axle weight rating (GAWR) shown on the F.M.V.S.S. certification label.

Trailer hitch

Choose a proper hitch for your vehicle and trailer. Make sure the trailer hitch is securely attached to the vehicle to help avoid personal injury or property damage due to sway caused by crosswinds, rough road surfaces or passing trucks.

- Axle-mounted hitches should not be used.
- The hitch should not be attached to or affect the operation of the impact-absorbing bumper.
- Do not modify the vehicle exhaust system, brake system, etc. when the hitch is installed.
- To reduce the possibility of additional damage if your vehicle is struck from the rear, remove the hitch when not in use. After the hitch is removed, seal the bolt holes to prevent exhaust fumes, water or dust from entering the passenger compartment.
- Regularly check that all hitch mounting bolts are securely mounted.

Tire pressures

- When towing a trailer, inflate the vehicle tires to the recommended cold tire pressure indicated on the tire placard (located on the inside of the glove box lid).
- Trailer tire condition, size, load rating and proper inflation pressure should be in accordance with the trailer and tire manufacturer's specifications.

Safety chain

Always use a suitable chain between your vehicle and the trailer. The chain should be crossed and should be attached to the hitch, not to the vehicle bumper or axle. Be sure to leave enough slack in the chain to permit turning corners.

Trailer lights

Trailer lights should comply with Federal and/or local regulations. When wiring the vehicle for towing, connect the stop and tail light pickup into the vehicle electrical circuit.

Class I Trailer Tow electrical wiring provides two circuits (right and left hand) to operate trailer stop/turn tail lamps. Each individual stop/turn circuit will operate only one combination stop/turn light bulb (#1157, 3157, 2357, or 3357) on the trailer. Never add more than one trailer light bulb to one circuit.

Always confirm proper vehicle and trailer stop/turn lamp operation every time the trailer light circuits are connected for use.

Trailer brakes

If your trailer is equipped with a braking system, make sure it conforms to Federal and/or local regulations and that it is properly installed.

CAUTION:

Never connect a trailer brake system directly to the vehicle brake system.

Pre-towing tips

- Be certain your vehicle maintains a level position when a loaded and/or unloaded trailer is hitched. Do not drive the vehicle if it has an abnormal nose-up or nose-down condition; check for improper tongue load, overload, worn suspension or other possible causes of either condition.

- Always secure items in the trailer to prevent load shifts while driving.
- Be certain your rear view mirrors conform to all federal, state or local regulations. If not, install any mirrors required for towing before driving the vehicle.

Trailer towing tips

In order to gain skill and an understanding of the vehicle's behavior, you should practice turning, stopping and backing up in an area which is free from traffic. Steering stability, and braking performance will be somewhat different than under normal driving conditions.

- Always secure items in the trailer to prevent load shift while driving.
- Avoid abrupt starts, acceleration or stops.
- Avoid sharp turns or lane changes.
- Always drive your vehicle at a moderate speed.
- Always block the wheels on both vehicle and trailer when parking. Parking on a slope is not recommended; however, if you must do so, first block the wheels and apply the parking brake, and then move the transmission gearshift lever into the "P" (Park) position. If you move the shift lever to the "P" (Park) position before blocking the wheels and applying the parking brake, transmission damage could occur.
- When going down a hill, shift into a lower gear and use the engine braking effect. When ascending a long grade, downshift the transmission to a lower gear and reduce speed to reduce chances of engine overloading and/or overheating.
- If the engine coolant rises to an extremely high temperature when the air conditioning system is on, turn off the air conditioner. Coolant heat can be additionally vented by opening the windows, switching the fan control dial to high and setting the temperature control dial to the "WARM" position.
- Trailer towing requires more fuel than normal circumstances.
- Avoid towing a trailer for the first 500 miles (800 km) of the vehicle's life.
- Have your vehicle serviced more often than at intervals specified in the recommended Maintenance Schedule.
- When making a turn, your trailer wheels will be closer to the inside of the turn than your vehicle wheels. To compensate for this, make a larger than normal turning radius during the turn.
- Crosswinds and rough roads will adversely affect vehicle/trailer handling, possibly causing vehicle sway. When being passed by larger vehicles, be prepared for possible changes in crosswinds that could affect vehicle handling. If swaying does occur, firmly grip the steering wheel, steer straight ahead, and immediately (but gradually) reduce vehicle speed. This combination will help stabilize the vehicle. Never increase speed.
- Be careful when passing other vehicles. Passing while towing a trailer requires considerably more distance than normal passing. Remember the length of the trailer must also pass the other vehicle before you can safely change lanes.
- To maintain engine braking efficiency and electrical charging performance, do not use overdrive.
- Avoid holding the brake pedal down too

long or too frequently. This could cause the brakes to overheat, resulting in reduced braking efficiency.

When towing a trailer, change fluid in the transmission more frequently.

See the Maintenance schedule.

UNIFORM TIRE QUALITY GRADING

Department of Transportation (DOT) Quality Grades: All passenger car tires must conform to Federal Safety Requirements in addition to these grades.

Treadwear

Treadwear grade is a comparative rating based on tire wear rate when tested under controlled conditions on specified government test courses. For example, a tire graded 150 would wear one and a half (1-1/2) times as well on the government course as a tire graded 100. However, relative tire performance depends on actual driving conditions, and may vary significantly from the norm, due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction A, B and C

Traction grades are A (the highest), B and C. They represent a tire's ability to stop on wet pavement as measured under controlled conditions, on specified government test surfaces of asphalt and concrete. A tire marked with a C may have poor traction performance.

WARNING:

The traction grade assigned to your vehicle tires is based on straight line braking traction tests and does not include cornering (turning) traction.

Temperature A, B and C

Temperature grades are A (the highest), B, and C. They represent a tire's resistance to heat build-up, and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause tire material to degenerate, reducing tire life. Excessive temperatures can lead to sudden tire failure. Grade C corresponds to a performance level which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades A and B represent higher levels of performance on laboratory test wheels than the minimum required by law.

WARNING:

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under inflation, or excessive loading, either separately or in combina-

tion, can cause heat build-up and possible tire failure problems.

EMISSION CONTROL SYSTEM WARRANTY

Your NISSAN is covered by the following emission warranties.

For U.S.A.

1) Emission Defects Warranty

2) Emissions Performance Warranty

For Canada

Emission Control System Warranty

Details of these warranties may be found with other vehicle warranties in your warranty folder that comes with your NISSAN. If you did not receive a warranty folder, or it has become lost, you may obtain a replacement by writing to:

- Nissan Motor Corporation, in U.S.A.
  Consumer Affairs Department
  P.O. Box 191
  Gardena, CA 90247
- Nissan Canada Inc.
  P.O. Box 1709
  Station "B"
  Mississauga, Ontario,
  L4Y 4H6

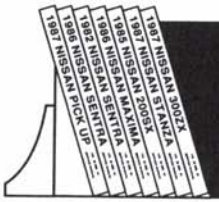
REPORTING SAFETY DEFECTS (U.S.A.)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying NISSAN.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or NISSAN.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

You may notify NISSAN by contacting our Consumer Affairs Department, toll-free, at 1-800-NISSAN-1
In Hawaii call 531-0231.



Genuine NISSAN Service Manuals
GET THE INSIDE STORY

A Genuine NISSAN Service Manual is the best source of service and repair information for your vehicle. Filled with wiring diagrams, illustrations and step-by-step diagnostic and adjustment procedures, this manual is the same one used by the factory trained technicians working at your NISSAN dealership.

For a copy, see your NISSAN dealer or send a check or money order to:

In U.S.A.: Dyment Distribution Services
20770 Westwood Drive
Strongsville, Ohio, 44136

In Canada: NISSAN Canada Inc.
P.O. Box 1709
Station "B"
Mississauga, Ontario
L4Y 4H6

MODEL	SERVICE MANUAL			OWNER'S MANUAL		
	PART NUMBER	U.S.A.	CANADA	PART NUMBER	U.S.A.	CANADA
1994 Quest (U.S.A.)	2V4094	$50.00	—	3V4094	$8.00	—
1994 Quest (Canada)	2V4094	—	$45.95	3V4094 3V4094C	English French	$6.50 $6.50

California and Ohio residents add 6.5% tax.

Yes, we also have service manuals for older models. Write for a free catalog.

In a hurry? Call 1-800-247-5321 and charge your purchase to Visa/Master Card.

Prices listed are for Dyment Distribution Services and NISSAN Canada Inc., and are suggested retail prices. Dealer prices may vary. Prices are subject to change without notice.

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MEMO

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MEMO

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MEMO

Recommended fuel:

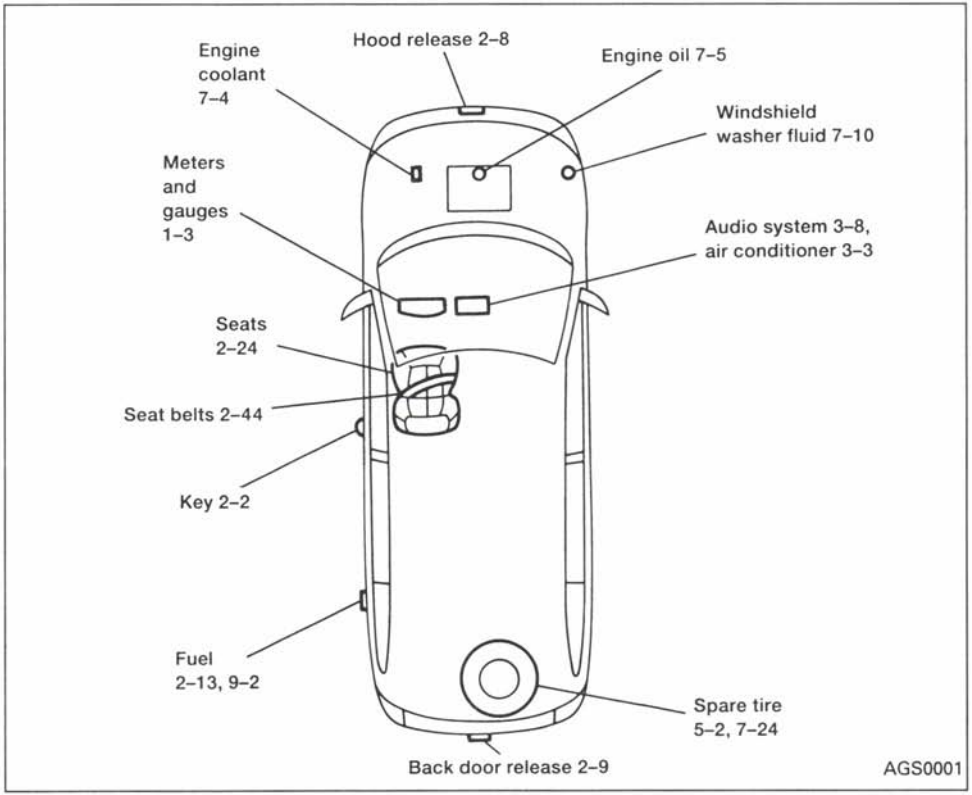
Unleaded gasoline, at least 87 AKI number (RON 91).
For further details such as gasohol, see "Fuel recommendation" in the "Technical and consumer information" section.

Recommended engine oil:

Energy Conserving Oils of API SG, SAE 5W-30 is preferable for all ambient temperatures. See "Engine oil and oil filter recommendation" in the "Technical and consumer information" section.

Cold tire pressure:

See tire placard affixed to the glove compartment lid.



NISSAN

'94 V40-D

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