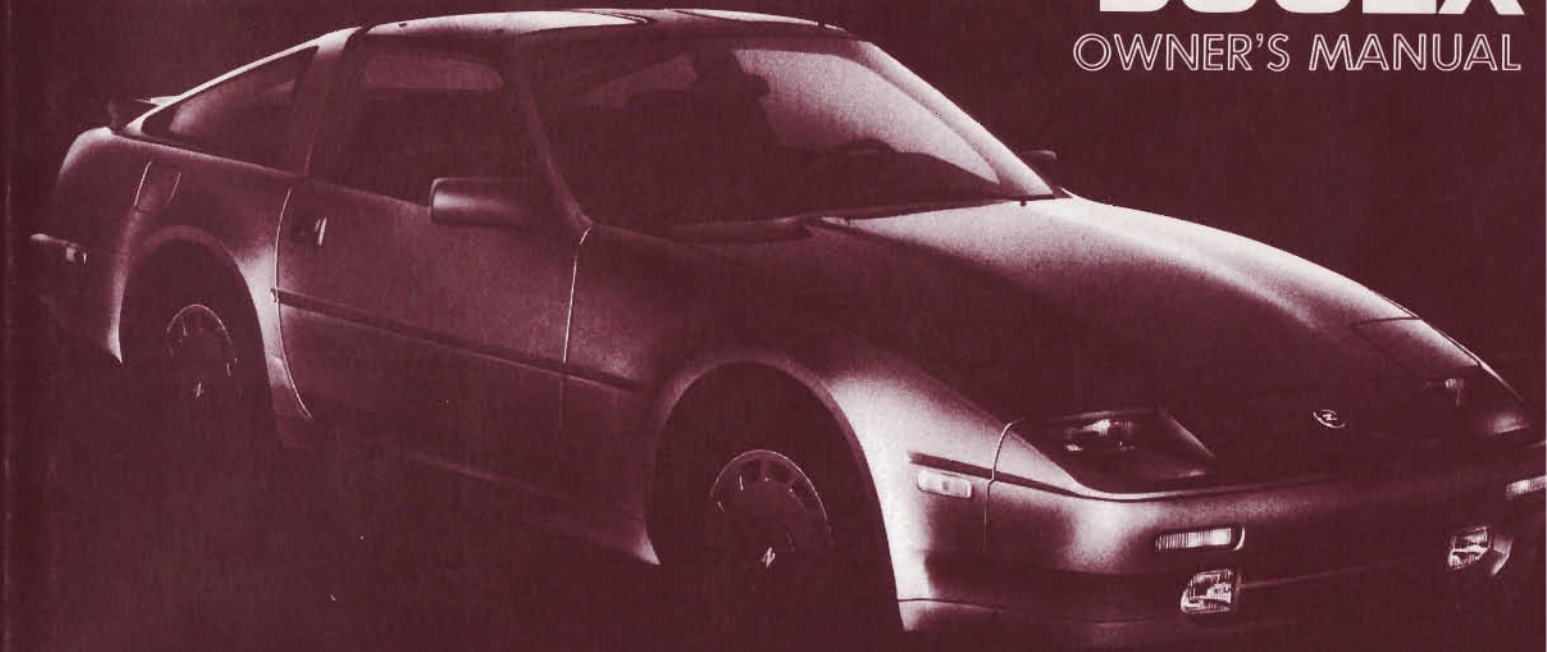
NISSAN

# 1988 NISSAN 300ZX

## OWNER'S MANUAL



# A Word To NISSAN Owners

Thank you for choosing a NISSAN. We are sure you will be happy you did. This manual has been prepared to help you understand the operation and maintenance of your vehicle so that you may enjoy many miles of driving pleasure.

A Warranty Booklet supplements this Owner's Manual. It provides valuable information concerning the warranty on your vehicle, etc. Read the Owner's Manual and Warranty Booklet carefully and keep them in your glove box at all times.

Your dealer has the equipment and experience to service your vehicle. He is kept advised of every new technical development and you are his customer. Your NISSAN dealer is the best place for you to take your vehicle for any kind of service.

To assist dealers in handling your needs, a number of Regional Offices are maintained throughout the United States and Canada. If you have a problem that has not been handled to your satisfaction, follow the procedures outlined in your Warranty Booklet under the heading "Consumer Assistance".

## OPERATION IN ANOTHER COUNTRY, STATE OR DISTRICT

When planning to travel in another country you should first find out if the octane rating of the gasoline available there is suitable for your vehicle's engine. Using gasoline with too low an octane rating may cause engine damage. Therefore, avoid taking your vehicle to areas where gasoline of the appropriate octane is not available.

All models can be operated only with unleaded gasoline.

The laws and regulations for motor vehicle emission control and safety standards vary according to the country; therefore, vehicle specifications may differ.

In addition, laws and regulations of the state or local governments differ; therefore, some vehicle specifications may also be different.

When transferring the registration of any vehicle to another country, state or district, it may be necessary to modify the vehicle to meet local laws and regulations. The vehicle must pass an inspection by the local authorities after it is modified. In addition, the vehicle may be required to complete other complicated procedures in order to transport and register the vehicle in another country, state or district.

When registered in another country, the following inconveniences may be encountered:

- Appropriate service may not be provided due to the non-availability of necessary parts, equipment or tools.
- A fuel that meets the appropriate specifications may not be available. The use of an inappropriate fuel could cause operational difficulties in the engine.
- Unleaded gasoline may be unavailable. The use of a leaded gasoline could cause deterioration in the catalyst performance.

**When any vehicle is to be taken into another country, state or district and registered, its modifications, transportation and registration are the responsibility of the user. Always be sure to check local regulations before taking your vehicle into another country. Nissan is not responsible for any inconvenience that may result.**

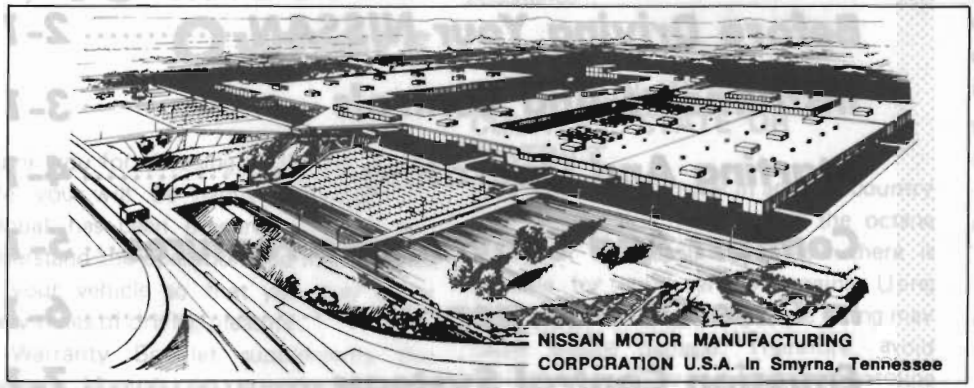
Because of the variety of options, components and features offered by NISSAN and your NISSAN dealer, the equipment described in this manual may or may not be identified as standard or optional and may or may not be applicable to your particular vehicle.

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.



# Contents

# Welcome To The World Of NISSAN



NISSAN MOTOR MANUFACTURING CORPORATION U.S.A. In Smyrna, Tennessee

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 spanning the globe.

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

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 automation and — most important — through an awareness that people are the central element in quality control.

Nissan has made a substantial investment in North America, starting with the opening of Nissan Motor Corporation in U.S.A. in 1960 and continuing with the production of cars and trucks at one of the world's most modern manufacturing facilities in Smyrna, Tennessee.

Nissan has invested more than $1.2 billion in its U.S. facilities and, together with Nissan dealers, spends more than $2.6 billion a year on payroll, goods and services.

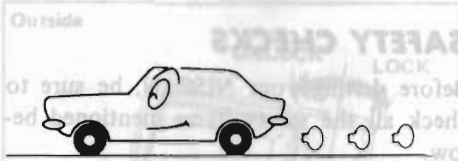
Nissan Motor Corporation in U.S.A. and dealers employ about 50,000 Americans. Nissan is also a substantial contributor the Canadian economy. Nissan Automob Company (Canada) Ltd. and its 200 deale and suppliers employ approximately 4,0 people. These include company employe and the staff of Nissan's 200 dealers acro Canada. In addition, many Canadians wo for companies that supply Nissan ar Nissan dealers with materials and servic ranging from operation of port facilities ar transportation services, to the supply lubricants, parts and accessories.

In building your vehicle, Nissan has worke to uphold the highest standards of quali and craftsmanship. Between the time th parts arrived from our suppliers until yo took delivery of your Nissan, dozens checks were made to insure that only th best job was being done in producing an delivering your vehicle. And when you tak your Nissan to your dealer for maintenanc in the future, the service technician w continue to monitor the quality standard that have been established.

Safety has also been built into your Nissa Seat belts are an integral part of the safet systems of your vehicle, and you and you passengers should always buckle-up.

The Nissan story of growth and achieve ment reflects one major purpose — t provide you, our customer, with a vehicl built with quality and craftsmanship, product that we can be proud to build an you can be proud to own.

# Economy Hints




EH001

Normal driving saves fuel and money.


EH002

Severe driving wastes fuel and money.

Operational economy is one of the outstanding features of your NISSAN. By developing the following good driving habits even greater economy may be attained.

1. Do not pump the accelerator. Gently depress until the desired speed has been attained and then try to maintain that speed.
2. Always drive your vehicle in the gear which properly suits driving conditions.
3. Maintain moderate speeds on the highway. Speeds above 50 MPH (80 km/h) will considerably increase fuel consumption.
4. Maintain a safe distance behind other vehicles. Avoid sudden stops. This will reduce wear on brake linings and pads and save fuel, as extra fuel is required to accelerate back to driving speed.
5. Excessive engine revving while the vehicle is stopped increases fuel consumption.
6. Keep the tires at the recommended inflation pressures for longer tire life and fuel economy.
7. Keep your engine tuned-up and follow the recommended periodic maintenance schedule. This will increase the life of all parts and lower operating costs.
8. Check your tires regularly for abnormal wear. Wheels that are out of alignment cause the tires to drag, resulting in premature tire wear and additional fuel consumption.
9. 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.

# Before Driving Your NISSAN

## REMINDERS FOR SAFETY!

Follow these three 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 use your safety belts and appropriate child restraint systems.**
- **ALWAYS observe posted speed limits and never drive too fast for conditions.**

Familiarize yourself with all the NISSAN features and safe-driving procedures.

## SAFETY CHECKS

Before driving your NISSAN, be sure to check all the safety items mentioned below.

### BEFORE ENTERING THE VEHICLE

- Check to be sure that all windows and light lenses are clean.
- Visually inspect tires for their appearance and condition. Also check tire pressure for proper inflation.
- Check to be sure that area around vehicle is clear.
- Make sure that the hood, doors and rear hatch are closed securely.
- To prevent the battery from running down, avoid continuous use of the power unit such as the power seat, power window, etc. which consume a large amount of electric power when the engine is stopped.

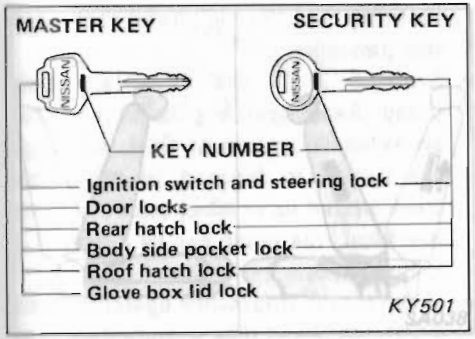
### AFTER ENTERING THE VEHICLE

- 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 lights, switches, horn and brakes.
- Check the operation of warning lights when key is turned to "ON" position.
- Adjust tilting steering wheel.
- Check to make sure all windows are clear from frost and fog.

### IMPORTANT OWNER INFORMATION

**Fluid levels such as engine oil, engine coolant, brake and clutch fluid, windshield washer, rear window washer fluid should be checked frequently, or at least whenever you refuel.** This is not only a good practice but is especially important to owners using "self-service" service stations. It is normal, especially in the case of engine oil and coolant, to have to add oil or coolant solution between recommended maintenance intervals. **Low or improper fluid levels can cause serious damage to your vehicle.** If frequent replenishment is required, take your vehicle to your NISSAN dealer or other competent service facility for necessary correction. Further details are described in "Do-It-Yourself".

# DOOR LOCKS

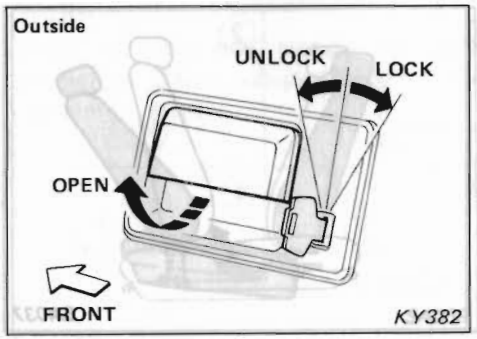



The key operates all the locks and the ignition switch on your NISSAN.

Record the key number so your NISSAN dealer will be able to replace a lost key.

It is also a good idea to keep your key number in your wallet together with your license.

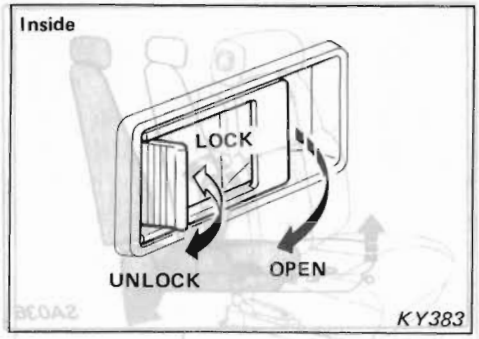
**If the driver's door is opened when the key is in the ignition switch, a chime will sound to remind you to remove the key. This will help prevent theft of your vehicle.**




## FROM OUTSIDE

The doors can be locked from the outside without a key. Move the inside lock knob to the "LOCK" position and then shut the door, pulling the outside door handle upward.

**When locking the door without a key, be sure that the key has not been left inside the vehicle.**




## FROM INSIDE

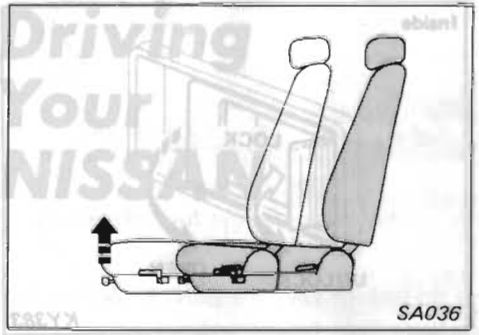
All doors can be locked from inside the vehicle. When the door is locked, it cannot be opened by the inside door handle.

- **Always lock doors from the inside while driving. This provides greater safety in accidents, helps keep children from opening doors, and helps keep out intruders when stopped.**
- **Before opening the door, always look to be sure it is safe to do so.**

## POWER DOOR LOCK

The passenger door can be locked (unlocked) by locking (unlocking) the door on the driver's side.

The passenger door can also be locked (unlocked) individually with the door lock knob.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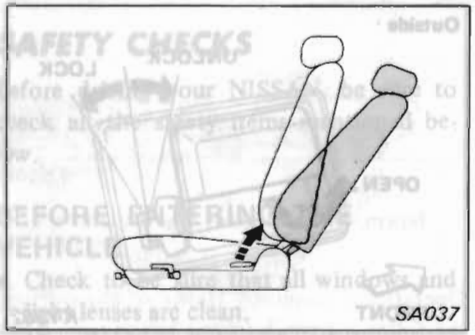

SA037

## FRONT SEAT ADJUSTMENT

The fore-and-aft control lever located at the lower front of the seat releases the seat latch. To adjust the seat position, move the lever as shown and hold it while you slide the seat forward or backward to the desired position. Release the lever to lock the seat in position.

**CAUTION:**

- **Do not adjust the driver's seat while driving. The seat may suddenly move forward or backward, which could result in loss of control.**
- **After adjustment, test to be sure seat is securely locked.**

## RECLINING SEATS

The reclining seat control levers are located at the outside of each front seat. To adjust the seatback, pull the lever upward, and lean back until the desired angle is obtained. To bring the seatback up again, pull the lever and it will move forward. When the desired angle is obtained, release the lever.

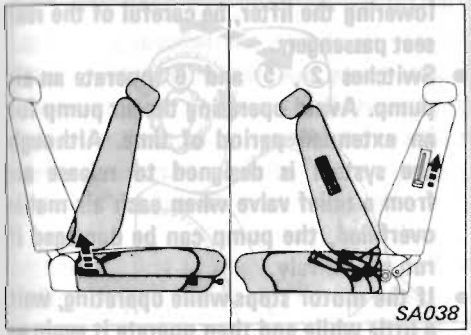
**After adjustment, test to be sure seat is securely locked.**

**WARNING:**

**Never ride in a moving vehicle with the seatback in the reclining position. Seat belts are effective only when the wearer is in a comfortable upright position.**

**CAUTION:**

**Do not adjust the drivers seat while dri**


SA038

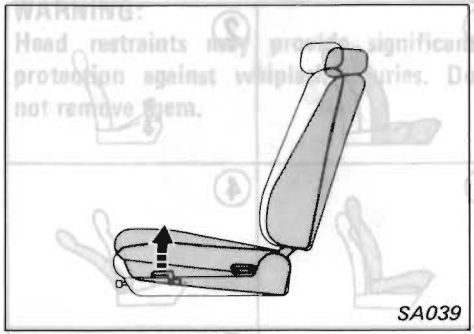
## TILTING FRONT SEATS

**2+2 model**

To facilitate entry to the rear seat, the front passenger's seatback tilts as illustrated.

When the latch is released, the seatback will tilt forward and the seat will automatically slide forward.

Rear seat occupant can tilt the front passenger seat by moving the lever located on the side of the seatback.

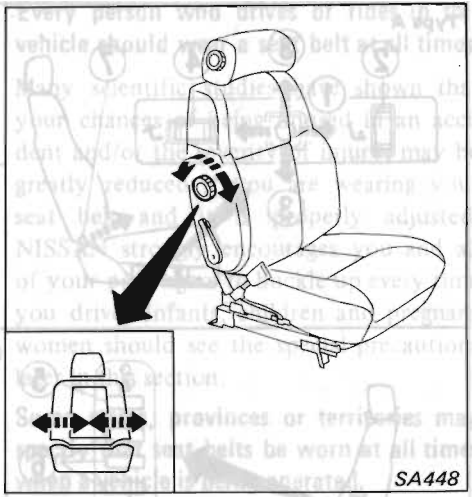

SA039

## SEAT LIFTER

Adjust the angle of the seat cushion to any desired position by pulling up the lever.

**CAUTION:**

**Do not adjust driver's seat while driving.**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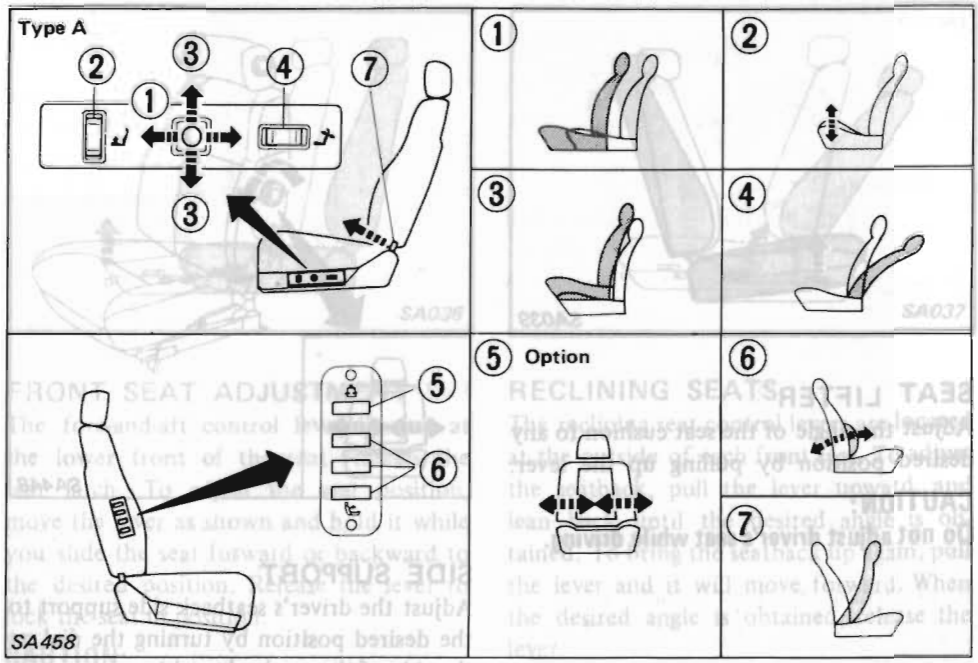
## SIDE SUPPORT

Adjust the driver's seatback side support to the desired position by turning the dial on the side of the seatback cushion.

**CAUTION:**

**Do not adjust the driver's seat while driving.**



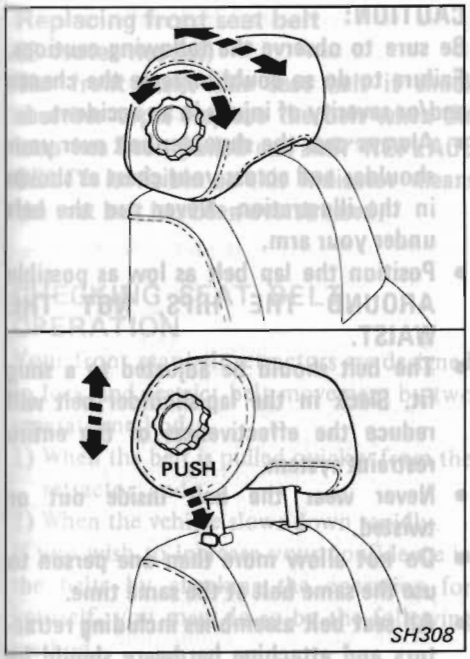

## POWER SUPPORT ADJUSTMENT SEAT (Driver's seat only)

The fore-and-aft slide, reclining seatback, seat lifter, side support, lumber support and thigh support can be adjusted by an electric system. Adjust them to the desired positions by pushing the switch on the seat's lower left side or seatback right side.

**CAUTION:**

- **Do not adjust the driver's seat while driving.**
- **Do not leave the vehicle unattended with only children inside.**
- **When moving the seat slide to the full rear position, reclining the seat back or lowering the lifter, be careful of the rear seat passengers.**
- **Switches ②, ⑤ and ⑥ operate an air pump. Avoid operating the air pump for an extended period of time. Although the system is designed to release air from a relief valve when each air mat is overfilled, the pump can be damaged if run excessively.**
- **If the motor stops while operating, wait a little while and then operate it again as it is designed so that electric current is cut off under overload conditions.**
- **Avoid using the power support adjustment seat continuously when the engine is stopped as it consumes a large amount of electric power. This is to prevent the battery from running down.**

## HEAD RESTRAINTS




Adjust the position which places the top of the head restraints closest to the top of your ears. To raise or lower, push the lock knob and slide the head restraint up or down. The fore-and-aft adjustment is made by moving the knob located on the side of the head restraint.

**WARNING:**
**Head restraints may provide significant protection against whiplash injuries. Do not remove them.**

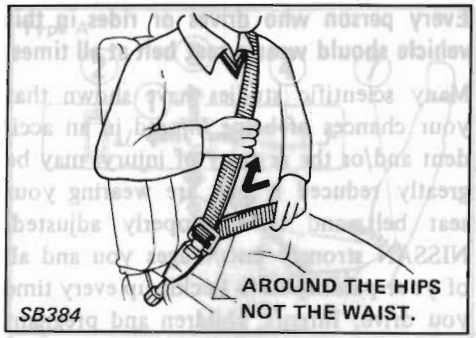
## SEAT BELTS

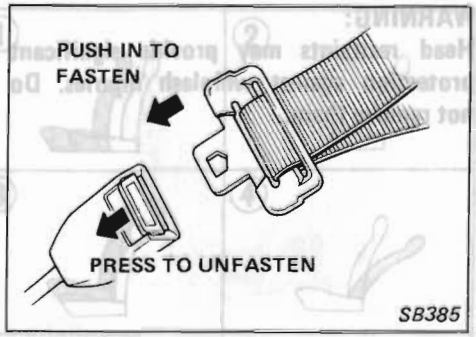
**Every person who drives or rides in this vehicle should wear a seat belt at all times.**

Many scientific studies have shown that your chances of being injured 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. Infants, children and pregnant women should see the special precautions later in this section.

**Some states, provinces or territories may specify that seat belts be worn at all times when a vehicle is being operated.**

Seat belts are provided for each seating position. Front seats are equipped with one-piece combination lap/shoulder belts and emergency locking retractors. Rear seats have lap belts with automatic locking retractors for the outboard positions (for models with rear seats). The system includes a reminder light and chime.




## FRONT SEAT BELTS

1. Adjust the seat forward or back to the preferred driving position. Adjust the seat back to a comfortable **upright** position, the seat belts will be less effective if the seat is reclined. Sit upright and well back in the seat; your seat belts are more effective when you sit up and face forward.
2. Take hold of the tongue and slowly pull out the lap-shoulder belt. Remove any twists in the belt and insert the tongue into the buckle until you hear a snapping sound.
3. Position the lap portion of the belt across the lap as low on the hips as possible.
4. If the lap-shoulder belt is slack after you have buckled it, pull the shoulder belt portion toward the retractor to take up the slack.

**The front seat belts have an emergency locking retractor which is designed to lock during a sudden stop or in certain kinds of accidents. Under normal circumstances the belt retractor permits the belt to move, allowing you some freedom of movement in the seat.**

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

**CAUTION:**

**Be sure to observe the following cautions. Failure to do so could increase the chance and/or severity of injury in an accident.**

- **Always pass the shoulder belt over your shoulder and across your chest as shown in the illustration. Never run the belt under your arm.**
- **Position the lap belt as low as possible AROUND THE HIPS, NOT THE WAIST.**
- **The belt should be adjusted to a snug fit. Slack in the lap-shoulder belt will reduce the effectiveness of the entire restraint system.**
- **Never wear the belt inside out or twisted.**
- **Do not allow more than one person to use the same belt at the same time.**
- **All seat belt assemblies including retractors and attaching hardware should be inspected after any collision at your NISSAN dealer. 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.**

### Replacing front seat belt (2-seater model)

**The front assist side seat belt is shock absorber type. Replace the belt when the loop has been pulled out and "REPLACE BELT" is visible as this indicator means the seat belt has been overstressed.**

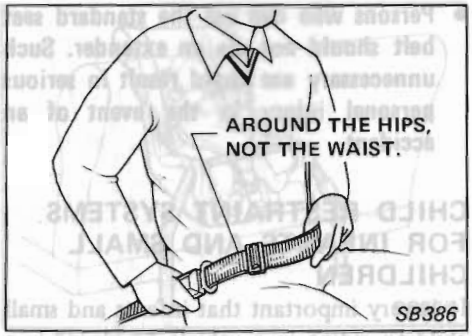
## CHECKING SEAT BELT OPERATION

Your front seat belt retractors are designed to lock and restrict belt movement by two separate methods:

1) When the belt is pulled quickly from the retractor; and
2) When the vehicle slows down rapidly.

If you wish to increase your confidence in the belts by checking the operation for yourself, you may do so by the following method.

- Grasp the shoulder belt and pull sharply forward. The retractor should lock and prevent additional belt movement.
- If the retractor does not lock during this check or if you have any other questions about the operation of your seat belt, please see your NISSAN dealer.

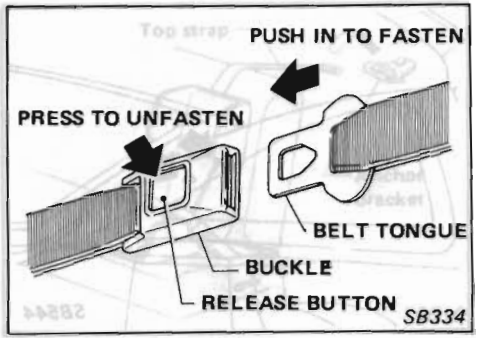



## REAR SEAT BELTS

1. Grasp the tongue. Slowly and in one motion, pull the tongue until the belt fits around your lap. Insert the tongue into the buckle until you hear a snapping sound.

**If pulling motion is interrupted, the retractor will lock and restrict further movement. If this happens, let the belt rewind into the retractor all the way and then the belt can be pulled out.**

2. Position the belt on the hips as low as possible and adjust for a snug fit by pulling the belt firmly toward the retractor.

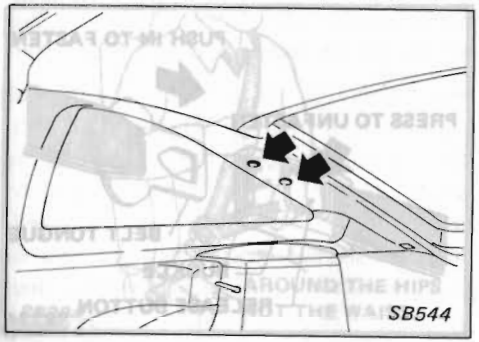



3. To unfasten the belt, press the button in the center of the buckle as illustrated. The seat belt will automatically retract.

**CAUTION:**

**Position the lap belt as low as possible AROUND THE HIPS, NOT THE WAIST.**

- **Never wear the belt inside out or twisted.**
- **Do not allow more than one person to use the same belt at the same time.**




## SHOULDER BELT ANCHORAGE

Shoulder belt anchorages for the rear outboard seat belt are located as shown in the illustration.

## SEAT BELT EXTENDERS

If, because of body size or driving position, it is not possible to properly fit the lap-shoulder belt and fasten it, an extender is available which is compatible with the installed seat belts. The extender adds approximately 8 inches (203 mm) of length and may be used for either front seating position. See your NISSAN dealer for assistance if the extender is required.

- **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.**

## CHILD RESTRAINT SYSTEMS FOR INFANTS AND SMALL CHILDREN

It is very important that infants and small children riding in a vehicle be placed in a restraint system.

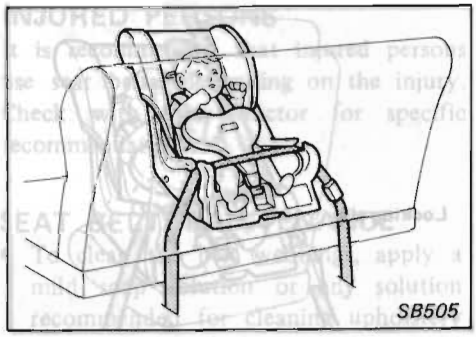
**Children and infants should never be carried on your lap; it is not possible for even the strongest adult to resist the forces of an accident. The child could be crushed between the adult and parts of the vehicle. Also, do not put the same seat belt around both your child and yourself. In general, child restraint systems are designed to be installed with a lap belt or the lap portion of a three-point type seat belt. According to traffic accident statistics, the rear seat is safer than the front seat for installation of a child restraint. An improperly installed child restraint could lead to serious injury in an accident.**

Child restraint systems specially designed for infants and small children are offered by several manufacturers. Some systems may be used for both infants and small children. When selecting any child restraint system, keep the following points in mind:

1) Choose only a system with a label certifying that it complies 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 and that you are willing to always follow all of the recommended procedures.
3) Check the child restraint in your vehicle to be sure it is compatible with the vehicle's seat belt system.

- **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 as it may not be possible to properly install some types of child restraints in your vehicle.**

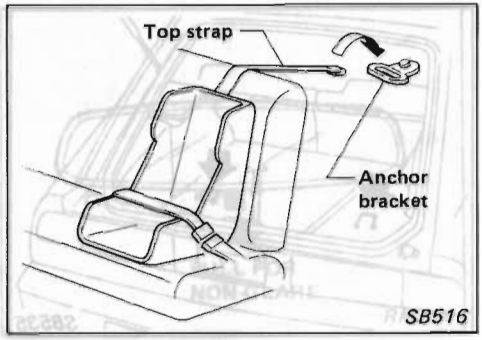
- When your child restraint system is not in use, store it in the luggage room or keep it secured with a seat belt to prevent it from being thrown forward in case of a sudden stop or accident.
- Remember that a child restraint left in a closed vehicle can become very hot. Check the seating surface and buckles before placing your child back in the child restraint.
- Some states, provinces, or territories require that infants and small children be restrained in approved child restraint systems at all times while the vehicle is being operated.




## Installation on rear seat

### Outboard lap belt

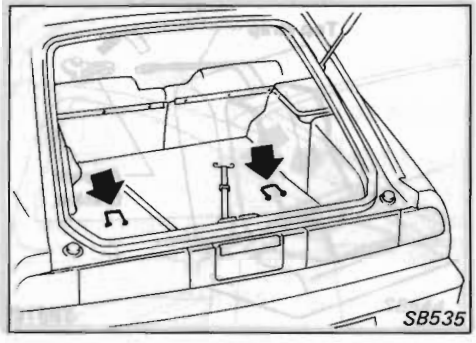
Secure the child restraint with the lap belt as illustrated. Adjust the belt for a snug fit by pulling it toward the retractor. The automatic locking retractor will hold it snug.




If your child restraint has a top strap, install the anchor bracket to the provided anchorage. Secure the child restraint with the lap belt and latch the top strap hook onto the anchor bracket. To install the anchor bracket, a metric bolt of the dimensions listed below must be used.

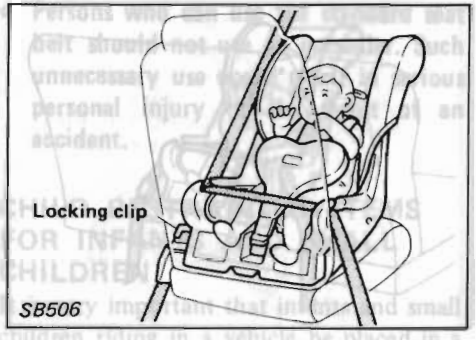
| | |
|---|---|
| **Bolt diameter:** | **8.0 mm** |
| **Bolt length:** | **more than 1.18 in (30 mm)** |
| **Thread pitch:** | **1.25 mm** |

**Child restraint anchorages are designed to withstand only these loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.**




## Anchorage location

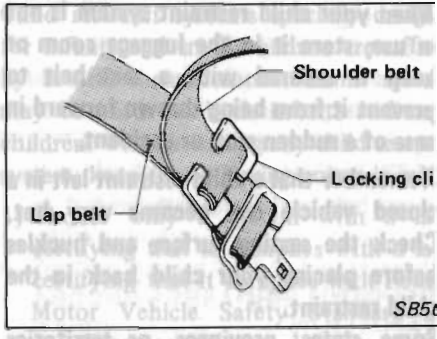
Anchorages are located under the carpet of the rear luggage floor.




## Installation on front seat

**Before using the locking clip, read the instructions attached to the clip.**

Secure the child restraint with the lap belt as illustrated. To prevent slack in the lap belt, it will be necessary to secure the lap/shoulder belt in place with a locking clip.




Use a NISSAN genuine locking clip (p number 999JW-A3000, available from y NISSAN dealer), or one which is equival in dimensions and strength.

**When your child restraint system is not use, keep the locking clip in the glove b to prevent it from being lost.**

## CHILDREN

Children who are too large for child restraint systems, or who do not have an appropriate child seat available should be seated and restrained by the seat belts which are provided. Children seated in the front seat should wear both the lap and shoulder belts. If the shoulder belt contacts the neck or face due to the child's size, the child should sit in the rear seat and wear a lap belt. Infants who cannot sit up by themselves and who do not have a child restraint available may be placed in a well-padded bassinet, crosswise on the rear seat, with a seat belt around the bassinet.

Never let a child stand or kneel on any seat or allow a child in the cargo areas while the vehicle is moving. A child who must stand while riding should stand on the floor, behind the driver's seat. This will provide some protection in case of a sudden stop.

## PREGNANT WOMEN

It is recommended that pregnant women use seat belts. Check with your doctor for specific recommendations. The lap belt should be worn snug and positioned as low as possible around the hips, not the waist.

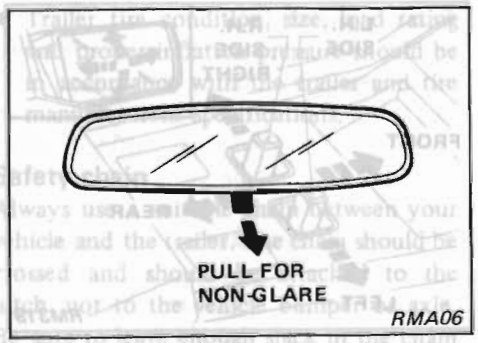
## INJURED PERSONS

It is recommended that injured persons use seat belts, depending on the injury. Check with your doctor for specific recommendations.

## SEAT BELT MAINTENANCE

- To clean the belt webbings, apply a mild soap solution or any solution recommended for cleaning upholstery or carpets, brush it, wipe with a cloth and allow it to dry in the shade.
- Do not allow the belts to retract until they are completely dry.
- Do not use any other chemicals or try bleaching or re-dyeing the belt. These operations weaken the webbing.
- Periodically check the belt and the metal components such as buckles, tongues, retractors, flexible wires and anchors for deterioration or damage.
- If any component is found deteriorated or damaged, **the entire belt assembly should be replaced.**

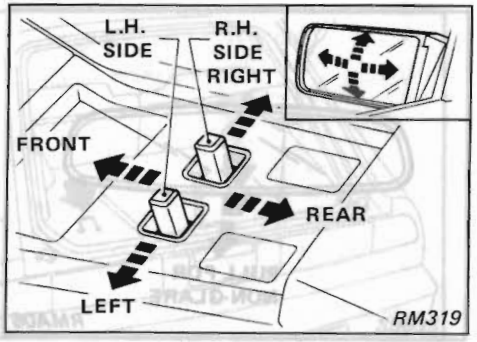





## INSIDE

The inside rearview mirror can be changed from clear daylight visibility to non-glare night visibility by pulling the knob under the mirror.

**The non-glare night position also reduces rear view clarity.**




## OUTSIDE

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

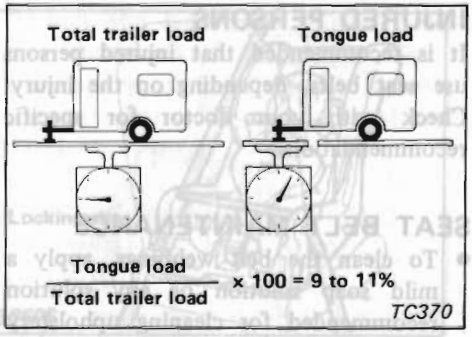
**To remove ice from the mirror surface, use a spray deicer; do not scrape ice from the mirror surface since damage to the mirror surface may occur.**

### Remote control mirror

This type of mirror is adjusted with the remote control switch located at the center console.

**If ice forms on the mirror surface, remove it with a spray deicer before using the mirror.**

**Objects in the door mirror on the assist side are closer than they appear.**




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 Trailer Towing Guide** for you.

## Maximum load limits

### Maximum trailer loads

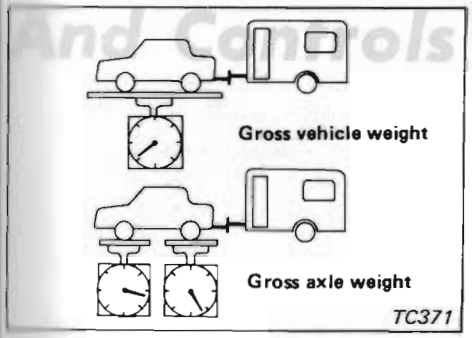
Never allow the total trailer load to exceed 1,000 lb (454 kg). The total trailer load equals trailer weight plus its cargo weight.

Towing loads greater than 1,000 lb kg) or using improper towing equipr could adversely affect vehicle hand braking and performance.

Vehicle damage and/or personal injur sulting from improper towing procedu not covered by NISSAN warranties. I mation on trailer towing and requ towing equipment should be obtained your NISSAN dealer.

### Maximum tongue load

Keep the tongue load between 9 to Tongue load can be adjusted by pr distribution of the load in the trailer.




**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. After the hitch is removed, seal the bolt holes to prevent exhaust fumes, water or dust from entering the passenger compartment.
- Check regularly to make sure that all trailer hitch mounting bolts are securely fastened.

## 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 center console box lid).
- Trailer tire condition, size, load rating and proper inflation pressure should be in accordance with the trailer and tire manufacturers' 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 vehicle for towing connection, connect stop and tail light pickup into the vehicle electrical circuit at a point between the sensor and stop light switch or light switch.**

## 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.

**Never connect a trailer brake system directly to the vehicle brake system.**

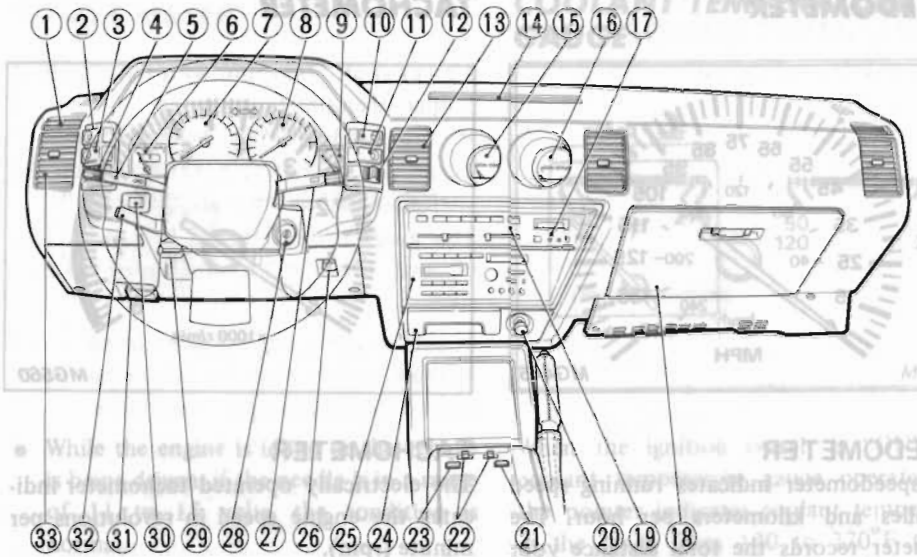
## Trailer towing tips

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.

- 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, and if your vehicle is equipped with automatic transmission, first block the wheels and apply the parking brake, and then move the transmission shift lever into the "P" position. If you move the shift lever to the "P" 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 to high and setting the temperature control to the "HOT" position.
- Trailer towing requires more fuel than normal circumstances.
- Avoid towing a trailer for the first 500 miles (800 km).
- Have your vehicle serviced more often than at intervals specified in the recommended Maintenance Schedule.

**When towing a trailer, change oil in the transmission more frequently.**
**See the Maintenance Schedule.**

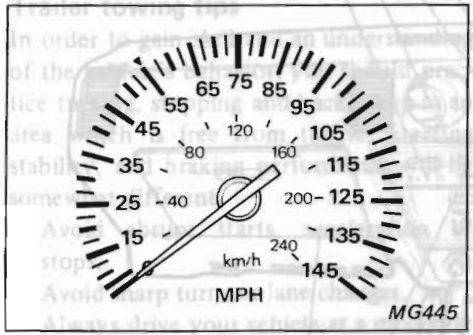
# Instruments And Controls



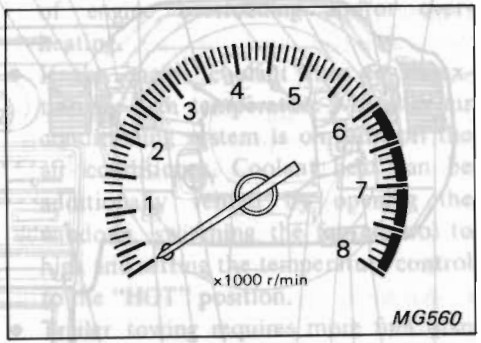

IC566

1. Side defroster
2. Retractable headlight switch
3. Hazard warning flasher switch
4. Cruise control main switch
   Illumination control rheostat
   (Non-cruise control device model)
5. Light and turn signal switch
6. Fuel gauge
7. Speedometer
8. Tachometer
9. Coolant temperature gauge
10. Rear defogger switch
11. Auxiliary driving light switch
12. Rear window wiper and washer switch
13. Center ventilator
14. Upper ventilator
15. Oil pressure gauge (Non-turbo model)
    Oil pressure and temperature gauge
    (Turbo model)
16. Voltmeter (Non-turbo model)
    Boost meter (Turbo model)
17. Clock
18. Glove box
19. Heater or air conditioner control
20. Cigarette lighter
21. Shock absorber adjusting switch
22. Door mirror remote control switch
23. Headlight cleaner switch
24. Ash tray
25. Radio and cassette stereo player
26. Floor ventilation control lever
27. Windshield wiper and washer switch
28. Ignition switch
29. Tilt steering wheel adjust lever
30. Illumination control rheostat
    (Cruise control device model)
31. Hood release handle
32. Cruise control lever
33. Side ventilator

## SPEEDOMETER




## TACHOMETER




### SPEEDOMETER

The speedometer indicates running speed in miles and kilometers per hour. The odometer records the total distance your vehicle has been driven and is useful for keeping a record of maintenance intervals. Two trip odometers are provided which individually record the distance your vehicle has traveled after they are reset. The last digit in orange indicates 1/10 of a mile (km for Canada). Reset the trip odometer to zero by pressing the reset knob.

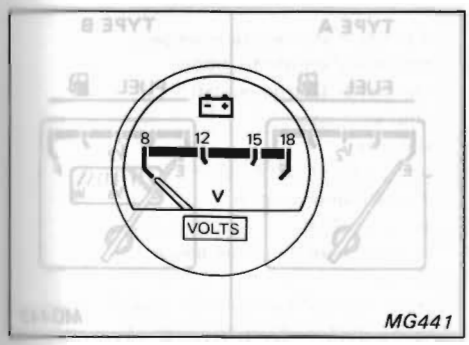
### TACHOMETER

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

There are two different colored zones on its face.

Operating the engine with the needle in the red zone can lead to serious engine damage.

## VOLTMETER




The voltmeter monitors the condition of the charging system and the state of the battery, as outlined below:

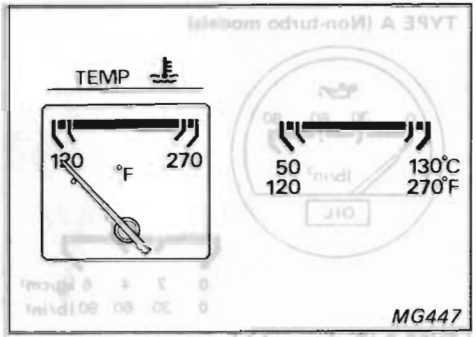
- Before starting the engine, check the position of the needle when the ignition switch is in the "ON" position.
  If the needle is not in a range of 11 to 12 volts . . . . . Check the condition of the battery.
- During starter operation
  If the needle is in a range of 6.0 to 10 volts . . . . . Normal condition.

**After starter operation, the needle may sometimes stay within a range of 6 to 8 volts, even though nothing is wrong with the battery or charging system.**
**The needle will fall back as the battery is discharged.**

- While the engine is idling or the vehicle is being driven, if the needle is in a range of 11 to 15 volts, the condition is normal.
  If the needle is in a range of 6 to 11 volts or 16 to 18 volts . . . . . The problem may be
  - Loose fan belt
  - Condition of battery or charging system
  - Electrical overload

Have the condition checked by your NISSAN dealer or other competent service facility.

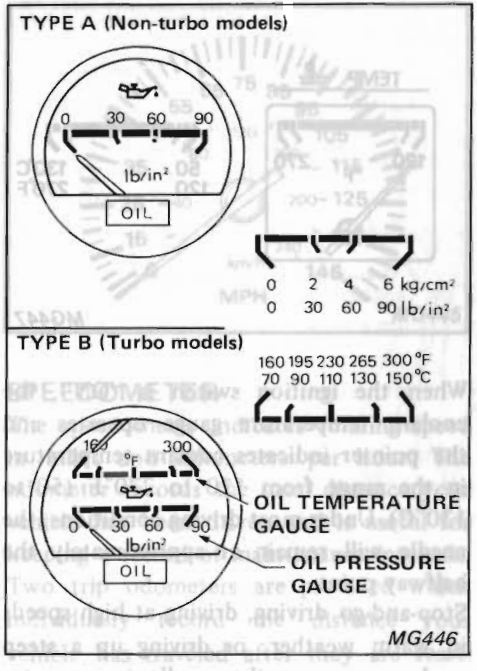
## COOLANT TEMPERATURE GAUGE




When the ignition switch is "ON", the coolant temperature gauge operates and the pointer indicates coolant temperature in the range from 120 to 270°F (50 to 130°C). Under most driving conditions, the needle will remain at approximately the halfway point.
Stop-and-go driving, driving at high speeds in warm weather, or driving up a steep grade may cause the needle to move toward the hot side.

**CAUTION:**
**Do not continue to drive your vehicle when the needle has swung fully to the hot side. This will cause overheating and damage the engine. If your vehicle overheats, refer to "In Case of Emergency".**

## OIL PRESSURE AND TEMPERATURE GAUGE




### OIL PRESSURE GAUGE

When the ignition switch is "ON", the oil pressure gauge indicates the oil pressure with the engine running.

During ordinary driving, the needle will remain 35 to 60 psi (2.5 to 4 kg/cm², 250 to 400 kPa) at 2,000 rpm with the engine at normal operating temperature.

If the needle moves below 30 psi (2 kg/cm², 200 kPa) at 2,000 rpm, stop the engine and check the engine oil level.

This gauge is not designed to indicate low oil level. Check the oil level using the dipstick.

**In cold weather, the engine oil pressure will increase slightly until the engine has reached its normal operating temperature.**

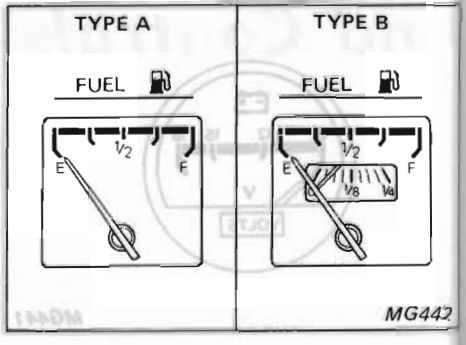
### OIL TEMPERATURE GAUGE

When the ignition switch is "ON", the engine oil temperature gauge operates and the pointer indicates oil temperature in the range from 160 to 300°F (70 to 150°C). During ordinary driving, the pointer will indicate 170 to 270°F (75 to 130°C).

**CAUTION:**

**Do not continue to drive your vehicle when the pointer has swung all the way to 280°F (140°C) as this will damage the engine. Have the condition checked by your NISSAN dealer or other competent service facility.**

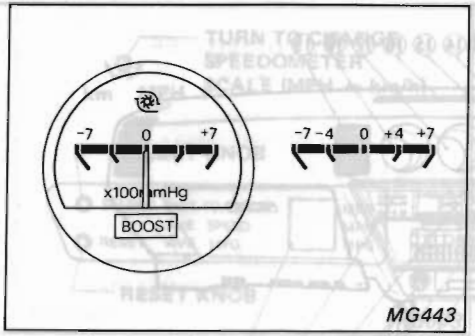
## FUEL GAUGE




When the ignition switch is "ON", the fuel gauge registers the APPROXIMATE fuel level in the tank. The position of the needle will vary slightly when accelerating, braking, or when the vehicle is going up or down hill. Check your fuel supply when the vehicle is on level ground, either parked or moving at a constant speed.

- When the ignition switch is turned "OFF", the fuel gauge needle will remain at almost the same position that it held before the switch was turned off. However, the indication may vary slightly when parking the vehicle for extended periods of time.
- **It is advisable to refill the fuel tank before the gauge registers Empty.**

## BOOST METER




When the engine is running, the boost meter indicates the pressure in the intake manifold. The boost meter indicates a negative pressure when the engine is idling or the vehicle is moving at extremely low speeds. A positive indication on the meter shows that the turbocharger is operating.

**CAUTION:**

**When the pressure exceeds the maximum positive or negative value shown on the meter, stop the vehicle as engine components could be damaged. Have the condition checked at your nearest NISSAN dealer or other competent service facility.**

- **When filling up with fuel, it will take a little time for the needle to stabilize.**
- **When the fuel tank is filled up, the needle on the fuel gauge may move beyond the "F" position or stay in that position for a while.**

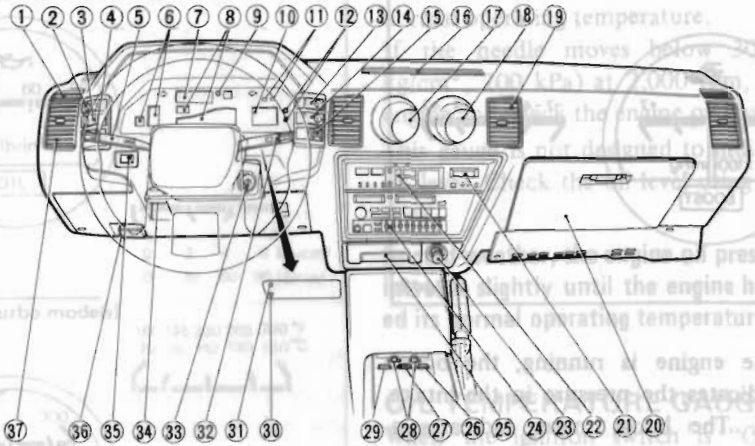
**Dual type**

A sub-gauge is provided on the dual type fuel gauge as well as the main gauge which indicates the fuel level between the Full and the Empty mark.

The sub-gauge registers the fuel level after the fuel has dropped to or below the one-quarter (1/4) mark on the main gauge dial.

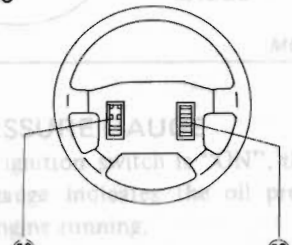
**There is no malfunction indicated if the needle should become visible when the fuel level is above the 1/4 mark.**

# DIGITAL AND GRAPHIC INSTRUMENT

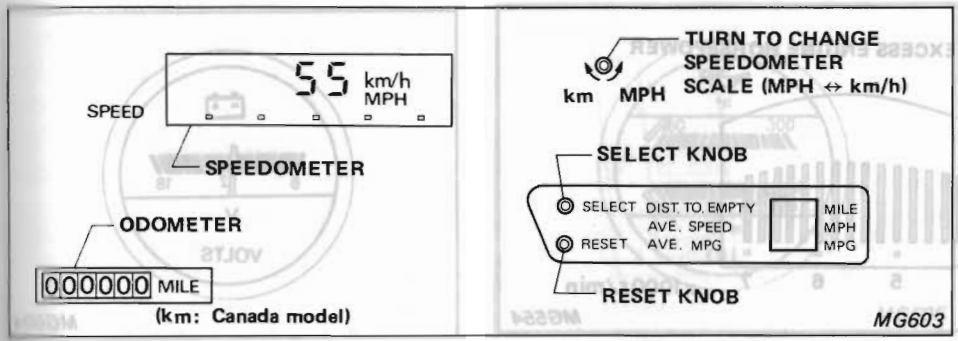



IC574

## STEERING SWITCHES




1. Side defroster
2. Retractable headlight switch
3. Hazard warning flasher switch
4. Cruise control main switch
5. Light and turn signal switch
6. Fuel gauge
7. Speedometer
8. Tachometer
9. MPH/km/h select and self-check knob
10. Coolant temperature gauge
11. Cruise control indicator
12. Tripmeter reset knob
13. Rear window defogger switch
14. Auxiliary driving light switch
15. Rear window wiper and washer switch
16. Upper ventilator
17. Oil pressure and temperature gauge
18. Voltmeter (Non-turbo model)
    Boost meter (Turbo model)
19. Center ventilator
20. Glove box
21. Clock
22. Air conditioner control
23. Cigarette lighter
24. Radio and cassette stereo player
25. Ash tray
26. Door mirror defogger switch (Non-turbo model)
    Shock absorber adjusting switch (Turbo model)
27. Door mirror defogger switch
    (Turbo model for Canada)
    Headlight cleaner switch (Turbo model except for Canada)
28. Door mirror remote control switch
29. Headlight cleaner switch
    Door mirror defogger switch
    (Turbo model except for Canada)
30. Reset knob
31. Distance to empty/Average speedometer/
    Average fuel consumption meter select knob
32. Windshield wiper and washer switch
33. Ignition switch
34. Tilt steering wheel adjust lever
35. Illumination control rheostat
36. Hood release handle
37. Side ventilator
38. Cruise contorl switches
39. Radio control switches




## DRIVE INFORMATION SYSTEM

Turn the ignition switch to "ON", then push the select button to change the display as follows:

"DISTANCE TO EMPTY"
↓
"AVERAGE SPEED"
↓
"AVERAGE MPG" (U.S.A.)/
"AVERAGE km/ℓ" (Canada)
↓
NO DISPLAY

### Distance to empty

From the average fuel consumption in the last 1-mile (1-km for Canada) driven and the remaining quantity of fuel, the meter computes the driveable distance before the fuel runs out and indicates it in "Miles (U.S.A.)" or "kms (Canada)."

**The driveable distance will not be displayed when the remaining fuel has decreased less than about 1-3/8 US gal (1-1/8 Imp gal, 5 liters).**

### Average speedometer

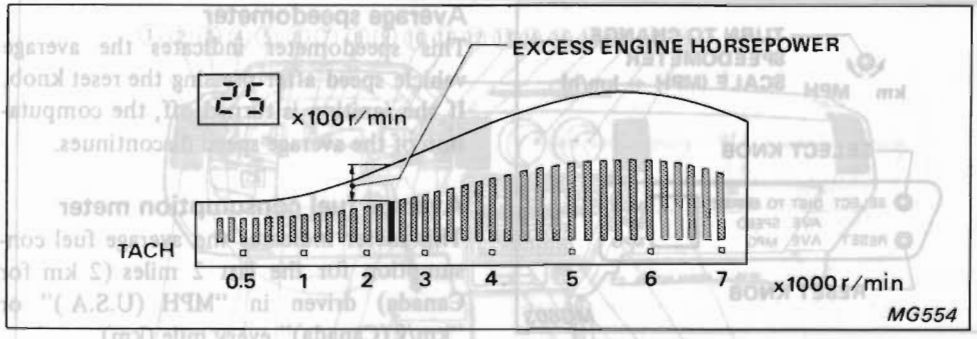
This speedometer indicates the average vehicle speed after pressing the reset knob. If the ignition is turned off, the computation of the average speed discontinues.

### Average fuel consumption meter

This meter indicates the average fuel consumption for the last 2 miles (2 km for Canada) driven in "MPH (U.S.A.)" or "km/ℓ (Canada)" every mile (km).

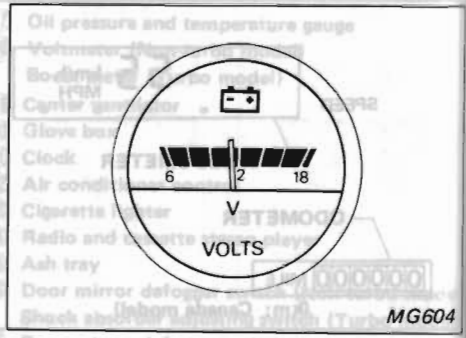
Even if the ignition is turned off, the computation of the average speed continues as long as the battery cables are not disconnected.

## TACHOMETER




The tachometer indicates the engine speed (rpm) in a digital and graphic-bar display. The digital indicates 1/100 of the actual rpm. For example, an indication of "25" means 2,500 rpm. In the graphic-bar display, the brightest vertical bar indicates the engine speed. The length of the brightest vertical bar indicates the boost pressure in the intake manifold, and the difference between the maximum curve and the indicated length of the brightest vertical bar shows the excess engine horsepower.

## VOLTMETER




The voltmeter monitors the condition of the charging system and the state of the battery, as outlined below:

- Before starting the engine, check the position of the indicator when the ignition switch is in the "ON" position.
  If it is not in a range of 11 to 14 volts . . . . . Check the condition of the battery.
- During starter operation
  The normal range is 6.0 to 10 volts.

**After starter operation, the meter may sometimes indicate within a range of 6 to 8 volts even though nothing is wrong with the battery or charging system.**

## OIL PRESSURE AND TEMPERATURE GAUGE

MG605

- While the engine is idling or the vehicle is being driven, the normal range is 11 to 15 volts.
  If it indicates a range of 6 to 11 volts or 16 to 18 volts . . . . . The problem may be
  - Loose fan belt
  - Condition of battery and alternator.
  - Electrical overload

  Have the condition checked by your NISSAN dealer or other competent service facility.

### OIL PRESSURE GAUGE

When the ignition switch is "ON", the oil pressure gauge indicates the oil pressure with the engine running.
During ordinary driving, the needle will remain 35 to 60 psi (2.5 to 4 kg/cm², 250 to 400 kPa) at 2,000 rpm with the engine at normal operating temperature.
If the needle moves below 30 psi (2 kg/cm², 200 kPa) at 2,000 rpm, stop the engine and check the engine oil level.
This gauge is not designed to indicate low oil level. Check the oil level using the dipstick.

**In cold weather, the engine oil pressure will increase slightly until the engine has reached its normal operating temperature.**

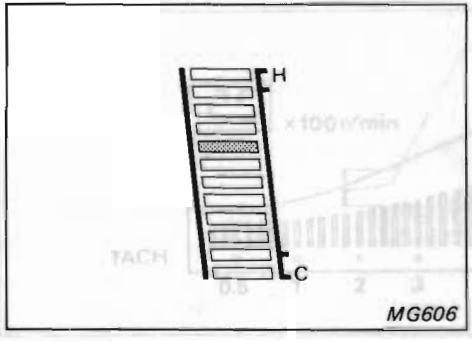
### OIL TEMPERATURE GAUGE

When the ignition switch is "ON", the engine oil temperature gauge operates and the pointer indicates oil temperature in the range from 160 to 300°F (70 to 150°C). During ordinary driving, the pointer will indicate 170 to 270°F (75 to 130°C).

**CAUTION:**

**Do not continue to drive your vehicle when the pointer has swung all the way to 280°F (140°C) as this will damage the engine. Have the condition checked by your NISSAN dealer or other competent service facility.**

## COOLANT TEMPERATURE GAUGE

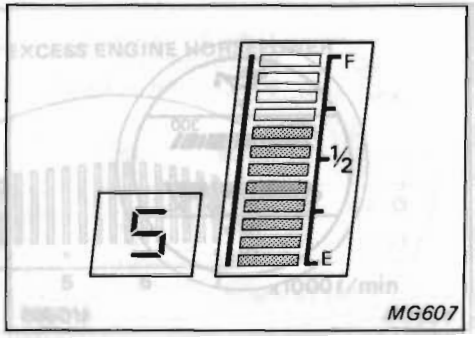



When the ignition switch is "ON", this gauge indicates the temperature of the coolant. Under most driving conditions, the indicator will remain at approximately the halfway point. Stop-and-go driving, driving at high speeds in warm weather, or driving up a steep grade may cause the indicator to move toward the upper side.

**CAUTION:**

**Do not continue to drive your vehicle when the temperature rises up to the top segment. This will cause overheating and damage the engine. If your vehicle overheats, refer to "In Case of Emergency".**

## FUEL GAUGE




The fuel gauge registers the APPROXIMATE fuel level in the tank.

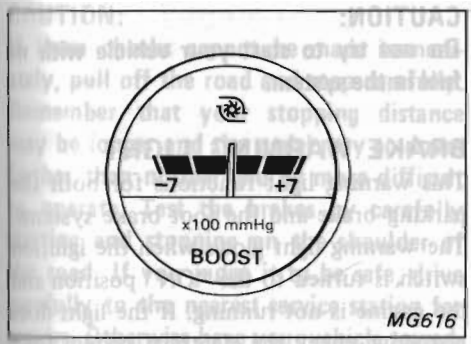
The position of the indicator will vary when turning, accelerating, braking, or when the vehicle is going up or down a hill. Check your fuel supply when the vehicle is level, whether stationary or moving.

The digital gauge begins to indicate the remaining amount of fuel in gallons (U.S.A.) or liters (Canada) when it is about 5 US gal (4-1/8 Imp gal) (U.S.A.) or 19 liters (Canada). The gauge will indicate until the remaining amount of fuel is 1 US gal (7/8 Imp gal) (U.S.A.) or 3 liters (Canada). If the amount falls below that, a letter "E" blinks.



**It is advisable to refill the fuel tank before the gauge registers Empty. When filling up with fuel, it will take a little time for the indicator to stabilize.**

## BOOST METER

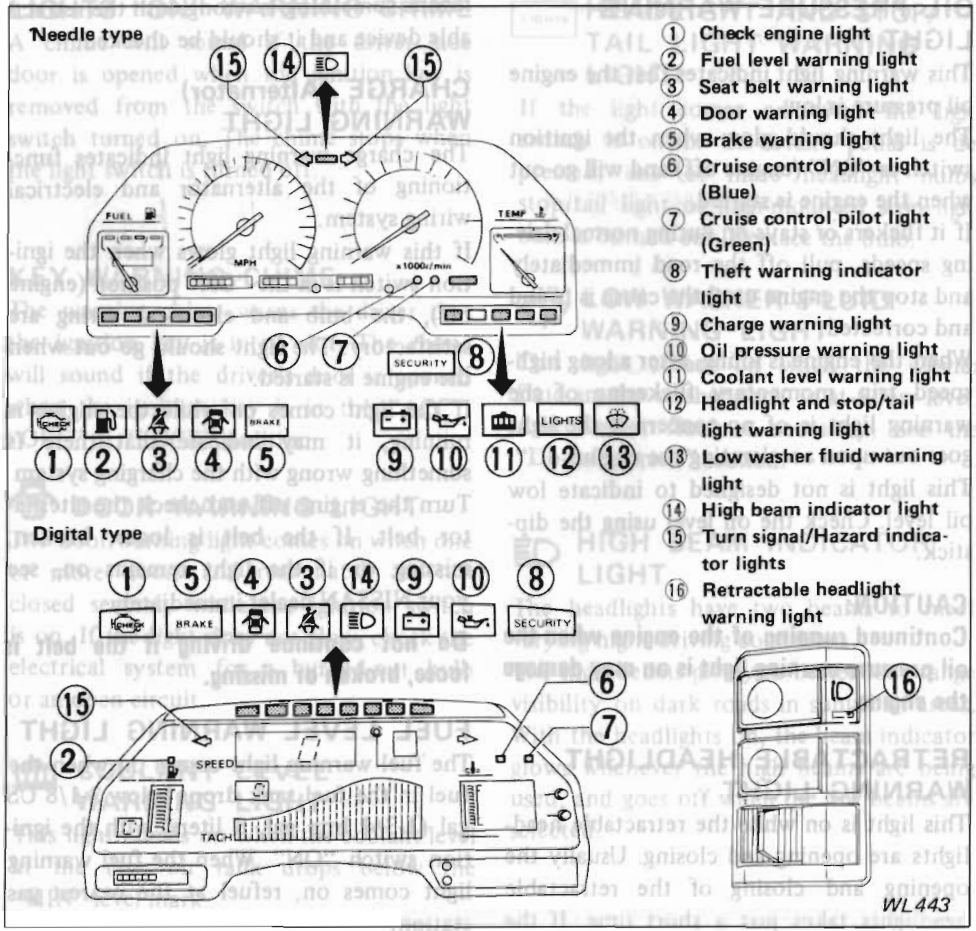



When the engine is running, the boost meter indicates the pressure in the intake manifold. The boost meter indicates a negative pressure when the engine is idling or the vehicle is moving at extremely low speeds. A positive indication on the meter shows that the turbocharger is operating.

**CAUTION:**

**When the pressure exceeds the maximum positive or negative value shown on the meter, stop the vehicle as engine components could be damaged. Have the condition checked at your nearest NISSAN dealer or other competent service facility.**

## WARNING/INDICATOR LIGHT AND CHIME




1. Check engine light
2. Fuel level warning light
3. Seat belt warning light
4. Door warning light
5. Brake warning light
6. Cruise control pilot light (Blue)
7. Cruise control pilot light (Green)
8. Theft warning indicator light
9. Charge warning light
10. Oil pressure warning light
11. Coolant level warning light
12. Headlight and stop/tail light warning light
13. Low washer fluid warning light
14. High beam indicator light
15. Turn signal/Hazard indicator lights
16. Retractable headlight warning light

## OIL PRESSURE WARNING LIGHT

This warning light indicates that the engine oil pressure is low.

The light should glow when the ignition switch is "ON" (engine off) and will go out when the engine is started.

If it flickers or stays on during normal driving speeds, pull off the road immediately and stop the engine until the cause is found and corrected.

When the engine is idling, after a long high-speed trip, momentary flickering of the warning light is of no concern if the light goes out upon accelerating the engine.

This light is not designed to indicate low oil level. Check the oil level using the dipstick.

**CAUTION:**

**Continued running of the engine when the oil pressure warning light is on may damage the engine.**

## RETRACTABLE HEADLIGHT WARNING LIGHT

This light is on while the retractable headlights are opening and closing. Usually the opening and closing of the retractable headlights takes just a short time. If the warning light remains on for a long time, it means something is wrong with the retractable device and it should be checked.

## CHARGE (Alternator) WARNING LIGHT

The charge warning light indicates functioning of the alternator and electrical wiring system.

If this warning light glows when the ignition switch is in the "ON" position (engine off), the bulb and electrical wiring are satisfactory. The light should go out when the engine is started.

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 alternator belt. If the belt is loose, broken, missing or if the light remains on, see your NISSAN dealer immediately.

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

## FUEL LEVEL WARNING LIGHT

The fuel warning light comes on when the fuel in the fuel tank drops below 2-1/8 US gal (1-3/4 Imp gal, 8 liters) with the ignition switch "ON". When the fuel warning light comes on, refuel at the nearest gas station.

**CAUTION:**

**Do not try to start your vehicle with n fuel in the system.**

## BRAKE WARNING LIGHT

This warning light functions for both th parking brake and the foot brake system The warning light glows when the ignitio switch is turned to the "ON" position an the engine is not running. If the light do not glow, check the electrical system for burned-out bulb or an open circuit.

### Parking brake system

The warning light will continue to glo when the parking brake is applied with th engine running.

### Brake fluid level indicator system

With the engine running and the parkin brake not applied, the warning light glow if the fluid level is lower than the pr scribed level.

If the warning light glows while you ar driving, brake fluid level should be checke immediately. All brake components shoul also be checked for leakage of brake fluid Add brake fluid or make other repair a necessary.

**CAUTION:**
**If these checks cannot be made immediately, pull off the road and stop carefully. Remember that your stopping distance may be longer and the pedal may go down farther than normal and be more difficult to operate. Test the brakes by carefully starting and stopping on the shoulder of the road. If you judge it to be safe, drive carefully to the nearest service station for repairs. Otherwise have your vehicle towed. Driving it could be dangerous.**

## SEAT BELT WARNING LIGHT AND CHIME

The driver's seat is equipped with a seat belt warning light and chime system.

The seat belt warning light comes on for about six seconds whenever the ignition switch is placed in the "ON" position.

The seat belt warning chime will sound for about six seconds when the ignition switch is placed in the "ON" position unless the driver's seat belt is securely fastened.

## LIGHTS "ON" WARNING CHIME

A chime will sound if the driver side door is opened when the ignition key is removed from the switch with the light switch turned on. The chime stops when the light switch is turned off.

## KEY WARNING CHIME

The warning chime warns the driver that the ignition key is in its slot. The chime will sound if the driver's door is opened when the ignition key is in the "ACC", "OFF" or "LOCK" position.

## DOOR WARNING LIGHT

The door warning light comes on when one or more doors and rear hatch are not closed securely while the ignition switch is on. If the light does not glow, check the electrical system for a burned-out bulb or an open circuit.

## COOLANT LEVEL WARNING LIGHT

This light comes on when the coolant level in the reservoir tank drops below the "MIN" level mark.

## HEADLIGHT AND STOP/TAIL LIGHT WARNING LIGHT

If the light comes on when the light switch is on or the brake pedal is depressed, one or more headlight bulbs, stop/tail light or high-mounted stop light bulb is burned out. Replace the bulb.

## LOW WASHER FLUID WARNING LIGHT

This light comes on when the washer fluid in the washer tank is at a low level. Add washer fluid as necessary. See the "Do-It-Yourself" section.

## HIGH BEAM INDICATOR LIGHT

The headlights have two beams to meet varying night driving conditions.

The high beams give you better long range visibility on dark roads in suburban areas. With the headlights on, the beam indicator glows whenever the high beams are being used, and goes off when the low beams are selected.

## ⇦⇨ TURN SIGNAL/HAZARD INDICATOR LIGHTS

The green indicator light on the instrument panel flashers simultaneously with the exterior turn signal lights.

## THEFT WARNING INDICATOR LIGHT

Refer to the section titled "THEFT WARNING SYSTEM".

## CRUISE CONTROL PILOT LIGHT

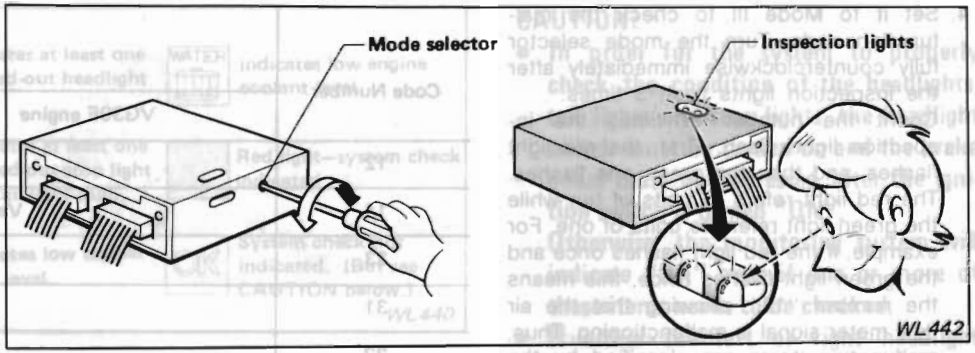
Refer to the section titled "CRUISE CONTROL" in the "Starting And Operating" instructions.

## CHECK ENGINE LIGHT (California models)

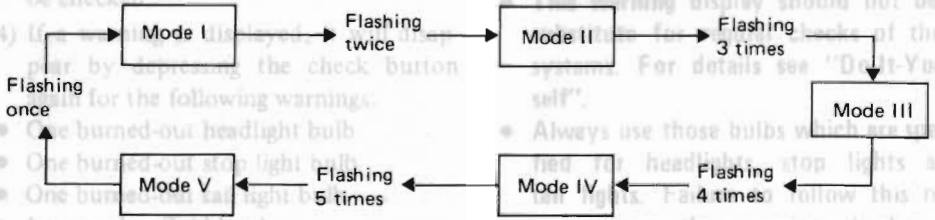
If the light comes on while the engine is running, it may indicate that something is wrong with the engine components. In this case, see your NISSAN dealer or other competent facilities and have it checked.

### Checking procedure

Check the Engine Control Unit to find malfunction items in the following manner. For detailed procedures on how to check and repair, see a NISSAN dealer or refer to a NISSAN Service Manual.




1. Take out the Engine Control Unit (E.C.U.) from the passenger's dash side. Do not disconnect the harness connector from the E.C.U.
2. Turn the ignition switch ON. Red and green inspection lights on the E.C.U. will come on.
3. Turn the mode selector fully clockwise with a screwdriver. Red and green inspection lights will repeatedly flash in the following sequence:

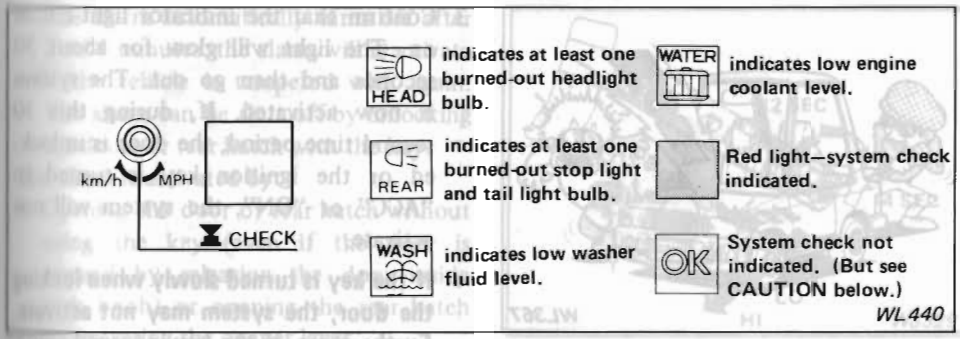


4. Set it to Mode III to check the malfunction code. Turn the mode selector fully counterclockwise immediately after the inspection lights flash 3 times.
Count the number of times the inspection lights flash. First, the red light flashes, and then the green one flashes. The red light refers to units of ten while the green light refers to units of one. For example, if the red light flashes once and the green light flashes twice, this means the number "12", showing that the air flow meter signal is malfunctioning. Thus, malfunction items are classified by the code numbers, as shown in the following:

| Code Number | Malfunction Item | |
|---|---|---|
| | VG30E engine | VG30ET engine |
| 12 | Air flow meter signal | |
| 14 | Vehicle speed sensor signal | |
| 23 | Idle switch signal | |
| 31 | Control unit signal | |
| 32 | E.G.R. signal | |
| 33 | Oxygen sensor signal | |
| 45 | Injector leak signal | |

If there are two or more malfunction items, the smallest code number will appear fir

## WARNING DISPLAY




The warning display monitors the following systems:

- Headlight bulbs
- Tail light and stop light bulbs
- Washer fluid level
- Engine coolant level

1) Each time the ignition switch is turned "ON", "WASH" light, "WATER" light, and "OK" light will illuminate in that order if there is no need to check any of these items.
2) When the check button is depressed with the ignition switch "ON", "HEAD" light, "REAR" light, "WASH" light, "WATER" light, and "OK" light will illuminate in that order if there is no need to check any of these items.

If the red light remains on in the case of 1) and 2), depressing the check button will indicate the item which needs to be checked.

3) When the red light comes on while driving, depressing the check button will indicate the item which needs to be checked.
4) If a warning is displayed, it will disappear by depressing the check button again for the following warnings:

- One burned-out headlight bulb
- One burned-out stop light bulb
- One burned-out tail light bulb
- Low washer fluid level
- Low engine coolant level with water temperatures below 246°F (119°C)

**CAUTION:**

- **In order for the system to properly check the condition of the headlights, tail lights and stop lights, the headlight switch must be turned on and the brake pedal must be depressed after the ignition switch is turned "ON". Otherwise, the monitoring system will indicate "OK" even if one or more of these items needs to be checked.**
- **If either the left or right headlight circuit fuse has burned out, the "HEAD" light will illuminate. However, this light will not illuminate if both headlight circuit fuses have burned out. This condition is the same as with the lighting switch "OFF".**
- **When repairing the malfunctioning portion, turn the ignition "OFF".**
- **This warning display should not be a substitute for regular checks of these systems. For details see "Do-It-Yourself".**
- **Always use those bulbs which are specified for headlights, stop lights and tail lights. Failure to follow this rule may cause the warning display to operate incorrectly or cause damage to the lamp sensors.**

## DISC BRAKE WEAR INDICATOR

The front and rear disc brake pads have audible wear indicators. When the brake pad wears to such an extent that it needs to be replaced, the audible wear indicator will make a high-pitched sound similar to that of a wire brush striking a cymbal (or a maraca being shaken). This sound will be heard continuously or discontinuously when the car is in motion, no matter when foot brakes are applied. If this warning sound is heard, have the brakes checked as soon as possible to prevent the pad from being worn out completely and the rotor from being damaged subsequently. This sound may not be heard when driving in noisy areas, when the car radio is operating or when windows are closed. Check the disc brake pads for wear in accordance with the Maintenance Schedule even if the wear indicator does not make a sound.

## THEFT WARNING

WL367

The theft warning system is designed to protect your vehicle from intruders when the windows are closed and all doors, hood and rear hatch are locked.

### How to activate theft warning system

1. Remove the key from the ignition switch.
2. Close all windows. Close and lock all doors, hood and rear hatch. The door can be locked either with or without the key.

**The system is activated even if the windows are open.**

3. Confirm that the indicator light comes on. The light will glow for about 30 seconds and then go out. The system is now activated. If, during this 30 second time period, the door is unlocked or the ignition key is turned to "ACC" or "ON", the system will not activate.

- **If the key is turned slowly when locking the door, the system may not activate. Furthermore, if the key is turned excessively to the unlock side, when removing the key, the system may not be activated. If the indicator light fails to glow for 30 seconds, unlock the door once and lock it again.**
- **Even when the driver and/or passenger are in the vehicle, the system will activate with all doors, hood and rear hatch locked and ignition key off. Turn the ignition key to "ACC" or "ON" to turn the system off.**

### Theft warning system operation

The warning system will give the following alarm:

- The headlights blink and the horn sounds intermittently. In addition, the starter motor will not operate.

- The alarm automatically turns off after 2 to 4 minutes; the alarm will reactivate if the vehicle is tampered with again. The alarm can be shut off by unlocking the doors or rear hatch with the key.

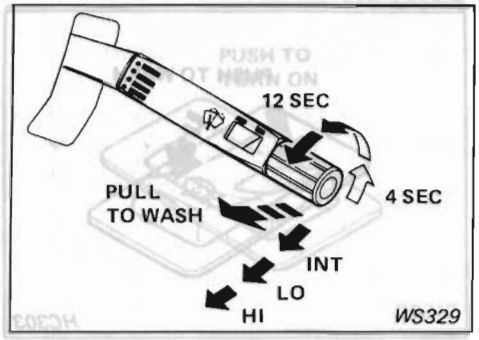
The alarm is activated by:

- Opening the door or rear hatch without using the key (even if the door is opened by releasing the door inside lock knob) or opening the rear hatch by operating the opener lever.
- Opening the hood.
- Pushing in or pulling out of the key cylinder on the door or rear hatch.

### How to stop alarms

The alarm will stop only by unlocking the door or rear hatch with the key. The alarm will not stop even if the ignition switch is turned to "ACC" or "ON".

## WINDSHIELD WIPER AND WASHER SWITCH




The switch controls the speed of the windshield wiper and also controls the windshield washer while the ignition switch is in "ACC" or "ON".

To operate the washer, pull the lever toward you and hold it until there is enough fluid on the windshield to wash off dirt.

### Intermittent time control knob

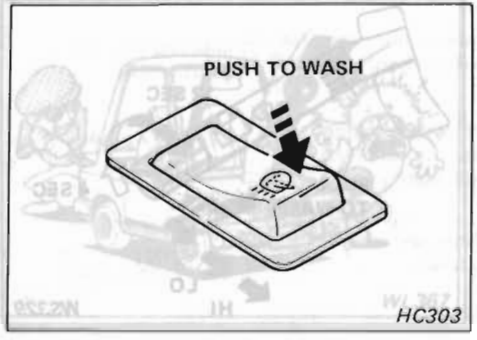
The intermittent time control knob is attached to the switch lever. When this knob is turned with the switch lever in the intermittent (first) position, wiper blade operation can be adjusted to an intermittent duration of from 4 to 12 seconds.

- **Check washer fluid level regularly.**
- **Do not operate the washer continuously for more than thirty seconds.**
- **In cold weather, defrost the windshield glass before operating the washer.**
- **Do not substitute radiator anti-freeze for windshield washer solutions.**
- **Do not wipe the glass with a dry cloth. It may scratch the glass.**
- **Do not operate the washer if the reservoir is dry.**

## REAR WINDOW WIPER AND WASHER SWITCH


The rear window wiper switch has one-speed. To operate the wiper, turn the ignition switch to "ACC" or "ON" and push the switch to right. To operate the washer, push the knob to the left when the wiper is stopped and to the right when it is operating and hold it until there is enough fluid on the glass to wash off the dirt. For general precautions, refer to descriptions under the heading "Windshield Wiper and Washer Switch".

## HEADLIGHT CLEANER SWITCH



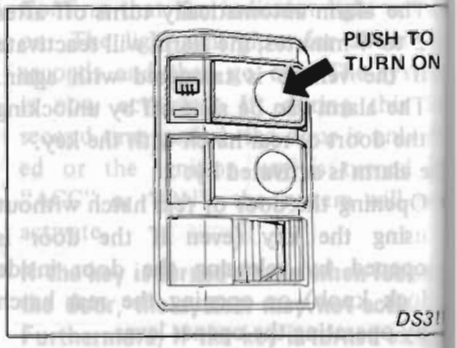

Open the headlights by turning on the retractable headlight switch or the headlight switch with the ignition switch in the "ACC" or "ON" position.

Washer fluid is sprayed on the headlight lens by pushing the rear end of the switch button.

**This switch does not operate when the headlights are closed.**

For general precautions, refer to the "Windshield Wiper and Washer Switch".

## REAR WINDOW DEFOGGER SWITCH




An electric defogger is built into the re window.

To heat the rear window glass, push t switch to the "ON" position.

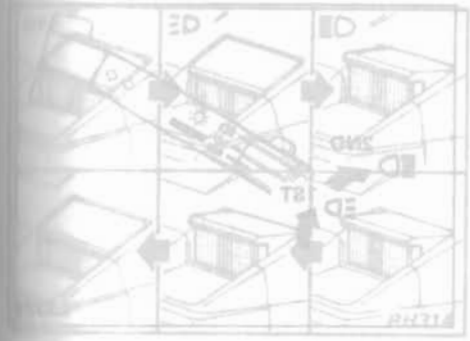
A rear window defogger monitoring li installed in the switch will glow to indica the system is on.

The switch operates only when the ignitio switch is in the "ON" position.

The rear window defogger will automa cally turn off approximately 15 minut after the switch is turned "ON".

If you need it further, push the swit again.

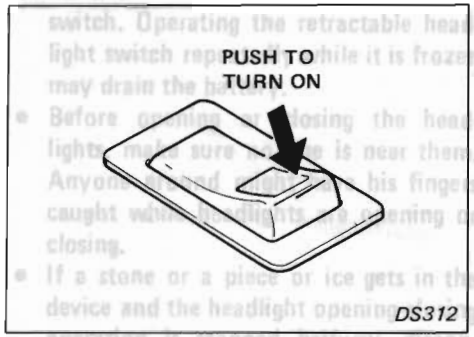
When the window is clear within 15 m utes, push the switch to the "OFF" po tion.



**CAUTION:**

**When you clean the vehicle, do not clean the inner side of the window with abrasive-type cleaners, and do not use any type of scraper to remove foreign deposits from the inner glass surface as this may damage the electrical conductors.**

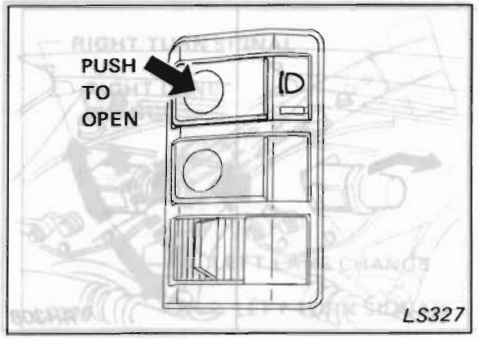
## DOOR MIRROR DEFOGGER SWITCH

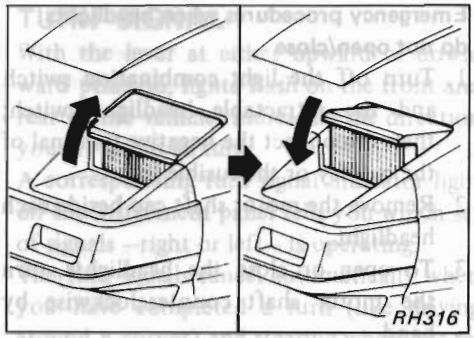



An electric defogger is built into the door mirrors. To heat the door mirror glass, push the rear end of the switch. A defogger monitoring light on the switch will glow to indicate the system is on.
The switch operates only when the ignition switch is in the "ON" position.

**When the defogger is not in use, turn off the switch.**

## RETRACTABLE HEADLIGHT SWITCH

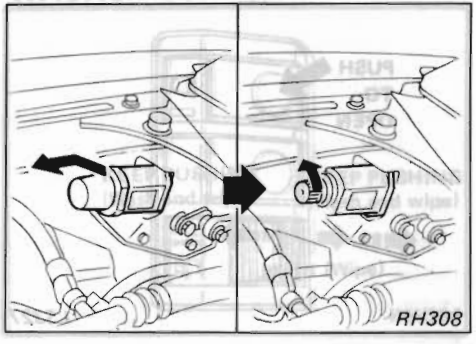



When the switch is set to "ON", the retractable headlights will open. This switch does not turn on the headlights.

**CAUTION:**

**Before operating the switch, make sure that no one is near the headlights.**




**Emergency procedures when headlights do not open/close**

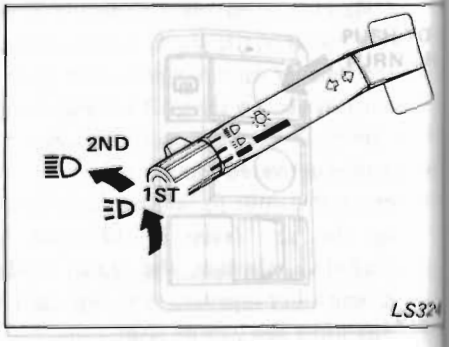
1. Turn off the light combination switch and the retractable headlight switch; then disconnect the negative terminal of the battery or the fusible link.
2. Remove the motor shaft cap beside each headlight.
3. To open or close the headlights, turn the motor shaft counterclockwise by hand.
4. Reinstall the motor shaft cap.

**Be sure to have the headlights checked and repaired by your NISSAN dealer or other competent service facility.**

**CAUTIONS:**

- **Remove the negative terminal of the battery or the fusible link.**
- **If work is started without disconnecting the negative terminal of the battery or the fusible link, the headlights and motor shaft may suddenly begin moving and catch your fingers.**

## LIGHT SWITCH



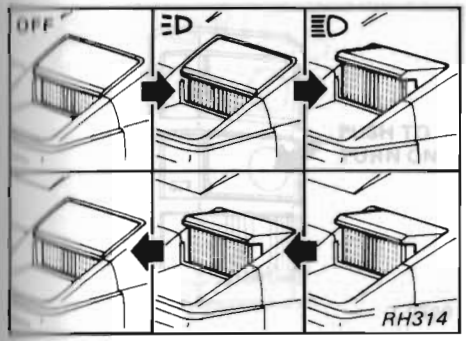

When the light switch knob is turned o the following lights will come on.

### ≡D POSITION

Parking (or clearance), tail, license pla side marker, key illumination, automa transmission selector lever indicator, hea (air conditioner) control panel, rear wi dow defroster illumination and instrume panel lights.

### ≡D POSITION

Headlights and all the above lights. (T headlight high/low beams are controlled b the light/turn select lever.)



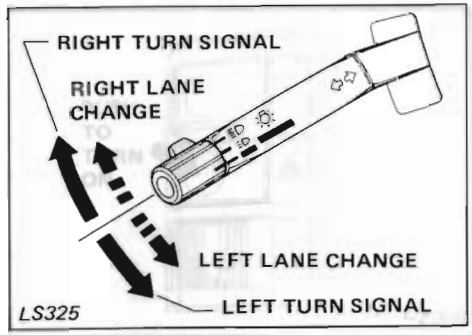

**Retractable headlights**

The retractable headlights will open and come on when the light combination switch is set in the ≡D position, and will close when the switch is set in the "OFF" position.

**CAUTION:**

- **When driving in cold weather or on a snowcovered road and there is a possibility the headlight mechanism will become frozen, drive or park your vehicle with the headlights opened. (Operate the retractable headlight switch, not the light combination switch.) If the mechanism is frozen and will not operate, be sure to carefully melt or break the ice before operating the switch. Operating the retractable headlight switch repeatedly while it is frozen may drain the battery.**
- **Before opening or closing the headlights, make sure no one is near them. Anyone around might have his fingers caught while headlights are opening or closing.**
- **If a stone or a piece or ice gets in the device and the headlight opening-closing operation is stopped halfway, disconnect the battery or the fusible link and remove the obstacle; then operate the switch again.**

## TURN SIGNAL SWITCH AND HEADLIGHT BEAM SELECTOR




### TURN SIGNAL

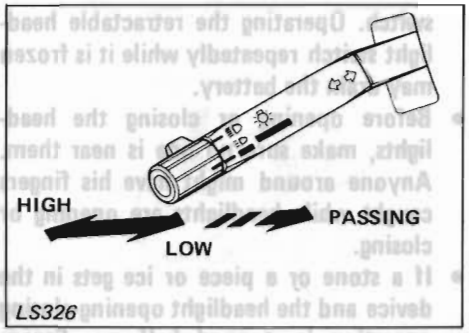
With the lever at either upward or downward position, lights flash on the front and rear of the vehicle, indicating the direction you are about to turn.

A corresponding turn signal indicator light on the instrument panel tells you which set of signals –right or left– is operating.

The turn signals cancel automatically when you have completed a turn (like driving around a corner) and steering wheel has returned to the straight ahead position.

## LANE CHANGE SIGNAL

To indicate a lane change, move the lever up or down to a point where it begins flashing. The lever will return to the neutral position when released.




## HEADLIGHT BEAM SELECTOR

The headlight/turn select lever also controls headlight high-low beam when the headlight switch is turned to the ≡D position.

If the high beam is on, the high beam indicator light on the instrument panel glows.

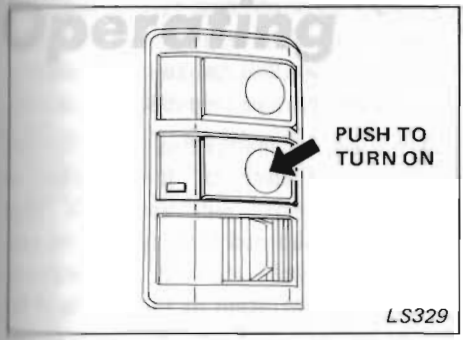
## PASSING SIGNAL

The high beam lights will come on when the turn signal lever is moved fully toward the driver, irrespective of the light switch position. Release the lever to turn lights off.



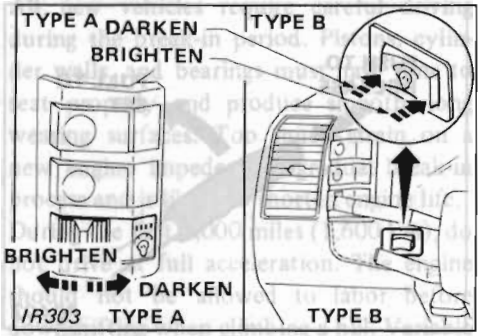
If the turn signal lever is pulled when the headlights are opened, the high beam lights will come on. If the signal lever is pulled when the headlights are closed, the headlights will open and come on. Release the lever and the headlights will go out and close. If the lever is released before the headlights have completely opened, the headlights will continue to the full-open position and then will go out and close.

## AUXILIARY DRIVING LIGHT SWITCH




The light comes on when the switch is pressed and goes out when pressed again.
The monitoring light in the switch glows when the light comes on.
The switch operates only when the headlights come on.

## ILLUMINATION CONTROL RHEOSTAT




The illumination control rheostat is located on the instrument panel. The brightness of all instrument illumination lights can be adjusted by pushing the control switch.

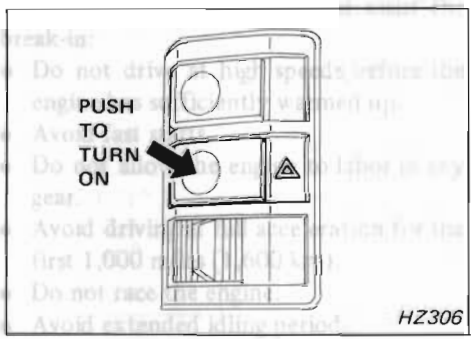
### TYPE A

When the switch is pushed to the left, the illumination lights brighten. Pushing to the right will reduce their brightness.

### TYPE B

Pushing the right side of the switch will brighten the illumination lights. They will darken when pressed to the left side.

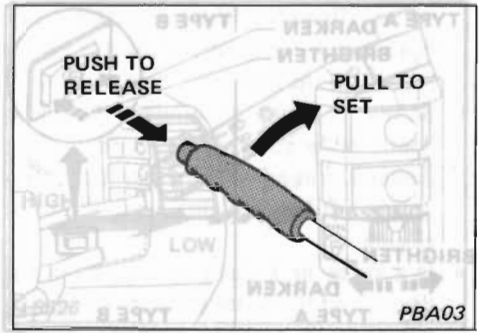
## HAZARD WARNING FLASHER SWITCH




All directional signals flash when the flasher switch is on to warn other drivers and pedestrians that your vehicle is disabled or parked under emergency conditions.
The flasher can be actuated with the ignition switch either off or on.

- **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 become a hazard to other traffic.**
- **Some state laws may prohibit the use of the hazard warning flasher switch under any circumstances.**

## PARKING BRAKE LEVER




- **Turn signals do not work when the switch is operating.**

To set the parking brake, pull the lever upwards. It is a good practice to depress the foot brake pedal at the same time.

To release, pull upward. Then depress the push button and push down all the way.

If the ignition switch is "ON", the brake warning light will continue to glow as long as the parking brake is engaged.

For proper parking procedures see "Parking" under the heading "Starting and Operating".

**CAUTION:**

**Make sure that the parking brake is completely released before driving.**

**If you drive a vehicle with the parking brake partially engaged, the rear brake shoes may be damaged.**

# Starting And Operating

## BREAK-IN SCHEDULE

All new vehicles require careful driving during the break-in period. Pistons, cylinder walls, and bearings must have time to seat properly and produce smooth, long wearing surfaces. Too much strain on a new engine impedes this gradual break-in process and is likely to shorten engine life.

During the first 1,000 miles (1,600 km), do not drive at full acceleration. The engine should not be allowed to labor before downshifting when climbing a hill. Variable speeds are best during the break-in period. Always drive so that the engine runs fast enough to prevent strain.

Fuel economy will vary in the first few thousand miles (kilometers) of operation due to engine break-in. And it is also dependent upon driving habits and proper maintenance.

Therefore to conserve fuel and assist the break-in:

- Do not drive at high speeds before the engine has sufficiently warmed up.
- Avoid fast starts.
- Do not allow the engine to labor in any gear.
- Avoid driving at full acceleration for the first 1,000 miles (1,600 km).
- Do not race the engine.
- Avoid extended idling periods.
- Except in an emergency, avoid heavy braking or rough usage of the brakes.

Break-in speed limit MPH (km/h)

| | 1st | 2nd | 3rd | 4th | 5th |
|---|---|---|---|---|---|
| Manual transmission | 0 to 22 (0 to 35) | 15 to 37 (25 to 60) | 22 to 60 (35 to 95) | 30 to 80 (50 to 130) | 40 to 80 (65 to 130) |

| | "1" Low | "2" Second | "D" Drive |
|---|---|---|---|
| Automatic transmission | 0 to 30 (0 to 50) | 22 to 50 (35 to 80) | 0 to 75 (0 to 120) |

**The figures listed in the chart refer to potential speed ranges for each gear. The speed at which you drive, however, should conform to all federal, state, province and territory laws, and to the condition which will permit safe operation.**

## CATALYTIC CONVERTER

A catalytic converter for emission cont is installed in the exhaust system. Insi this converter, exhaust gases are burned high temperature to help reduce pollutan

**Certain engine malfunctions, particular involving the electrical, fuel injection ignition systems, will result in lar amount of unburned fuel, causing the co verter to reach elevated temperatur Discontinue operation of the vehicle if t engine misfires, or if noticeable loss of p formance or other unusual operating cond tions are detected.**

**Instead, have the vehicle inspected by a authorized NISSAN dealer or other co petent service facility.**

**CAUTION:**

a) **Use UNLEADED GASOLINE ONLY the type recommended in "Oil and fu recommendation" under the headi "Do-It-Yourself". Leaded gasoline w seriously damage catalytic converter.**
b) **Keep an eye on your fuel gauge; runni out of gas could possibly cause dama to the catalytic converter.**
c) **Refrain from racing the engine.**

## TURBOCHARGER SYSTEM

**d) Do not stop or park the vehicle over inflammable materials, such as dry grass, waste paper, or rags that may come into contact with the exhaust system.**

**e) When parking, ensure that people or inflammable materials are kept away from the exhaust pipe.**

The turbocharger system uses engine oil for lubrication and cooling of its rotating components. The turbocharger turbine turns at extremely high speeds and its temperature can reach extremely high levels. It is essential to maintain a clean supply of oil flowing through the turbocharger ystem. Therfore, a sudden interruption of oil supply may cause a malfunction in the turbocharger.

To ensure prolonged life and performance of the turbocharger, it is essential to comply with the following maintenance procedure:

1. **Change your engine oil every 5,000 miles (8,000 km) or 6 months, whichever comes first. More frequent maintenance may be required under severe driving conditions. Use only the recommended oil.**
2. **If the engine had been operating at high rpm for an extended period of time, let it idle for a few minutes prior to shutdown.**
3. **Do not accelerate your engine to high rpm immediately after start.**

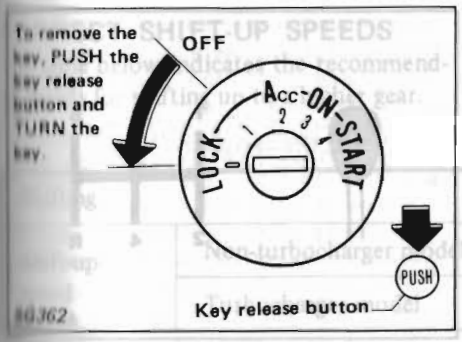
## EXHAUST GAS WARNING (Carbon Monoxide)

**Never inhale exhaust gases; they contain carbon monoxide, a colorless, odorless extremely dangerous gas which can cause unconciousness or death. If you should suspect that exhaust fumes are getting into the passenger compartment, have the vehicle examined and the leakage corrected immediately. If you must drive under these conditions, drive only with ALL windows FULLY OPEN and ventilator fan operating.**

1. It is not advisable to sit for any length of time in a parked vehicle with the engine running.
2. Do not run the engine in closed spaces such as a garage for any longer than is absolutely necessary.
3. When a vehicle has been stopped in an open area with its engine running for any significant length of time, turn the ventilator on to force outside air into the vehicle.
4. If the rear hatch is not closed while driving, exhaust gases could be drawn into the vehicle. Avoid driving for any length of time with the rear hatch open. If it is necessary to drive in this manner, open windows and operate ventilation fan.
5. Always assure that the front ventilator inlet grille is free from snow, leaves or any other kind of obstruction so that vehicle's ventilation system will be able to function properly at all times.
6. 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 getting 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.

## IGNITION SWITCH




The switch includes the anti-theft steering lock device and also controls the ignition system and most of the electrical equipment.

**"LOCK (0)" Normal parking position**

The ignition key can only be removed at this position.

To turn the ignition key to "LOCK" from "ACC" or "ON", turn the key to "OFF" and press in the key release button, then turn the key to "LOCK".

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.

**WARNING:**

**Never press the key release button and remove the key while driving. If the key is removed, the steering wheel will lock. This will cause the driver to lose control of the vehicle and result in serious vehicle damage or personal injury.**

**"OFF"**

The position permits turning the engine off without locking the steering wheel.

**"ACC" (Accessories)**

This position allows you to use all the electrical accessories controlled by the switch.

**"ON" Normal operating position**

This position turns on the ignition system and electrical circuits.

**"START"**

This position starts the engine. After the engine has started, release the key. It will automatically return to the "ON" position.

## BEFORE STARTING THE ENGINE

**The seat belt warning light flashes on for about six seconds when the ignition switch is placed in the "ON" position.**

**The warning chime will sound for about six seconds when placing the ignition switch in the "ON" position if you do not fasten the driver's seat belt securely.**

1. Make sure the parking brake is applied.
2. Place the gearshift lever into "Neutral" (in "N" or "P" position for the automatic transmission).

**With manual transmission model, depress the clutch pedal to the floor while cranking the engine.**

**The starter is designed not to operate unless the clutch pedal is depressed to the floor.**

## TIPS ON STARTING

1. To start the engine, turn on the ignition switch without depressing the accelerator pedal.

- **If the engine is very hard to start in extremely cold or hot weather, use the accelerator pedal to help start the engine.**
- **In the summer, when restarting the engine within 30 minutes after it has been stopped, crank the engine keeping the pedal fully depressed.**

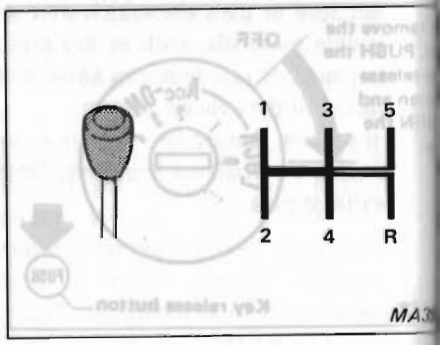
2. As soon as the engine starts running under its own power, release the ignition key and accelerator pedal.
3. If the engine stops or falters in starting, wait 3 or 4 seconds before restarting. This will prevent possible damage to the starting motor or engine.

**If it becomes necessary to start the engine with a booster battery and jumper cables, the instructions and cautions contained in the "In Case of Emergency" should be carefully followed.**

### Warm-up

Always allow the engine to idle for at least 30 seconds after starting and drive at moderate speed for a short distance, especially in cold weather.

## DRIVING WITH MANUAL TRANSMISSION




To shift gears, fully depress the clu pedal and then operate the gearshift lev

When shifting the lever from a Forw gear to Reverse, or from Reverse to a F ward gear, be sure to first bring y vehicle to a complete stop.

**On the non-turbo model, you cannot sh directly from 5th gear into Reverse, b must first shift into Neutral, then i Reverse.**

**Apply the parking brake when at a sta still. When starting to move the vehicle, lease the parking brake and drive away.**

## CORRECT SHIFT-UP SPEEDS

The table below indicates the recommended speeds for shifting up to a higher gear.

Unit: MPH (km/h)

| Shifting | | 1 → 2 | 2 → 3 | 3 → 4 | 4 → 5 |
|---|---|---|---|---|---|
| Shift-up speed | Non-turbocharger model | 15 (25) | 30 (50) | 40 (65) | 45 (75) |
| | Turbocharger model | 15 (25) | 25 (40) | 40 (65) | 45 (75) |

## SPEED RANGES IN EACH GEAR

The following table indicates the speed ranges in which the vehicle may be driven or downshifted in each gear without overrevving. Never run the engine in a higher gear than is required for the speed you are traveling as this will place a great strain on the components and may damage the engine or drive train. Always downshift when slowing to negotiate a sharp turn, when proceeding up a steep hill, or when slowing down appreciably for any reason.

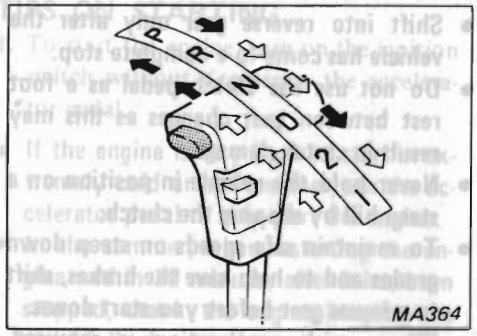
When braking, disengage the clutch when your speed has fallen to 10 to 15 MPH (15 to 25 km/h) and continue braking to a stop.

Unit: MPH (km/h)

| Gear position | 1st | 2nd | 3rd | 4th | 5th |
|---|---|---|---|---|---|
| Speed range | 0 to 30 (0 to 50) | 15 to 55 (25 to 90) | 22 to 80 (35 to 130) | Over 30 (Over 50) | Over 40 (Over 65) |

- **When you are shifting from one gear to another, be certain to press the clutch pedal all the way to the floor to avoid clashing or chipping the gears.**
- **Shift into reverse gear only after the vehicle has come to a complete stop.**
- **Do not use the clutch pedal as a foot rest between gear changes as this may result in clutch damage.**
- **Never hold the vehicle in position on a steep hill by slipping the clutch.**
- **To maintain safe speeds on steep down grades and to help save the brakes, shift to a lower gear before you start down.**
- **When quick acceleration is required, shift to a lower gear and accelerate until the vehicle reaches the maximum speed in each gear. Do not exceed the speed limit of any gear.**

  **Use caution when accelerating or when shifting into a lower gear on slippery surfaces. Sudden acceleration or downshifting could cause the wheels to skid and result in loss of control.**
- **The figures listed in the chart refer to potential speed ranges for each gear. The speed at which you drive, however, should conform to all federal, state, province and territory laws, and to the condition which will permit safe operation.**




## HOW TO OPERATE SELECTOR LEVER

Push the button located on the end of the selector lever when engaging "R" and "P" and when shifting from "D" to "2", as indicated by the arrow " ➡ ".

The lever can be shifted freely into any of the positions indicated by the arrow " ⇨ ".

When shifting the lever from a Forward gear to Reverse, or from Reverse to a Forward gear or "Park", be sure to first bring the vehicle to a complete stop.

### Starting

- Start the engine with the selector lever in the "P" position whenever possible. The engine will also start with the selector lever in the "N" position, but will not start in any other selector lever position. If it does, have your vehicle checked by your NISSAN dealer, or other competent service facility.

### Selecting desired lever position

- After starting the engine, fully depress the foot brake pedal before shifting the selector lever to the "D", "R", "2" or "1" positions. 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".**

- Make sure the selector lever is in the desired position. "D", "1", and "2" are used to move forward and "R" to back up. Then release the parking brake lever.

### Depressing the accelerator pedal

Release the parking brake lever and foot brake pedal. Slowly depress the accelerator pedal to start the vehicle in motion and merge with traffic. Avoid abrupt starting and spinning the tires. Avoid revving up the engine while the vehicle is stopped. This could cause unexpected vehicle movement if the selector lever were in "D", "R", "2", "1" positions, or damage the engine if in "R" or "P" positions.

### Warming the engine

- Due to the higher idle speeds when the engine is cold, extra caution must be exercised when shifting the selector lever into the driving position immediately after starting the engine.
- Keep the engine at idling speed when shifting from "N" to any driving position.

### Parking the vehicle

- Depress the foot brake pedal and, once the vehicle stops, move the selector lever into the "P" position, pull the parking brake lever and release the foot brake pedal.
- When at a standstill for longer than a short waiting period, shift the lever into the "P" position, turn off the engine and apply the parking brake if the engine is not turned OFF, shift into the "N" position and apply the parking brake.
- When stopped on an upgrade, always use your brakes to hold the vehicle in place to prevent overheating the transmission.

**"P" (Park):**

Use this position when the vehicle is parked or when starting the engine. Use this position together with the parking brake. When parking on a hill, first apply the parking brake and then shift into the "P" position.

**"R" (Reverse):**

Use this position to back up. Shift into this position only after the vehicle has completely stopped.

**"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, effective engine braking on downhill grades, or starting on slippery roads.

Do not downshift into the "2" position at speeds over 62 MPH (100 km/h) for the non-turbocharger model and 60 MPH (95 km/h) for the turbocharger model. Do not exceed 62 MPH (100 km/h) for the non-turbocharger model and 60 MPH (95 km/h) for the turbocharger model in the "2" position.

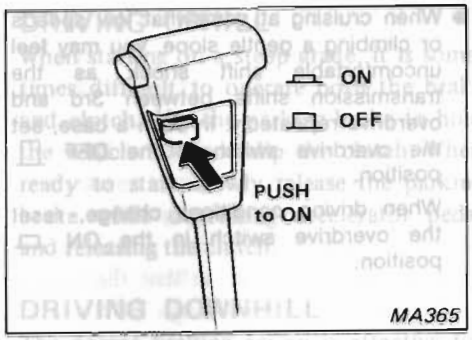
**"1" (Low gear):**

Use this position when climbing steep hills slowly or driving slowly through deep snow, sand or mud, or for maximum engine braking on steep downhill grades.

Do not shift into the "1" position at speeds over 62 MPH (100 km/h) for the non-turbocharger model and 60 MPH (95 km/h) for the turbocharger model. Do not exceed 37 MPH (60 km/h) in the "1" position.

### 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 second gear or first gear, depending on the vehicle speed.




### Overdrive switch

**For normal driving,** move the selector lever to "D" and set the overdrive switch in the ON, ⏍ position. The transmission is upshifted into OVERDRIVE as the vehicle speed increases.

**When driving on a long slope such as on mountain roads,** set the overdrive switch in the OFF ⏍ position so that the engine braking can help slow down the vehicle. The indicator light comes on when the overdrive switch is set in the OFF ⏍ position.

- Remember not to drive at high speeds for extended periods of time with the overdrive switch set in the OFF ⏍ position. This lowers the fuel economy.

- When cruising at somewhat low speeds or climbing a gentle slope, you may feel uncomfortable shift shock as the transmission shifts between 3rd and overdrive repeatedly. In such a case, set the overdrive switch in the OFF position.

  When driving conditions change, reset the overdrive switch in the ON position.



## BEFORE LEAVING YOUR VEHICLE

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

1. Set the parking brake.
2. **Manual transmission models:**
   Place the gearshift lever in the "Reverse" position.

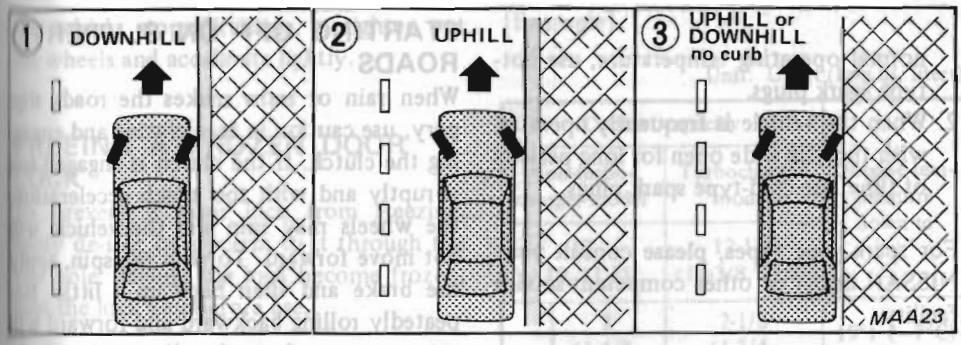
**When parking on an uphill grade, place the gearshift lever in the "1st" position.**

   **Automatic transmission models:**
   Place the gearshift lever in the "P" position.

**CAUTION:**

**Safe parking procedures require that both the parking brake be set and the transmission placed in the "P" (park) position. Make sure the shift lever has been pushed as far forward as it can go and cannot be moved without depressing the button at the end of the lever.**

3. Turn the ignition key to the "LOCK" position. Never leave an unattended vehicle with its engine running.
4. Remove the ignition key.
5. Lock all doors.
6. Never leave children unattended in the vehicle.




When parked on a sloping driveway, turn the wheels so the vehicle will not roll into the street in case it moves.

- **HEADED DOWNHILL: ①**
  **Turn the wheels into the curb, allow the vehicle to move forward until the curb. Then set the parking brake.**
- **HEADED UPHILL: ②**
  **Turn the wheels away from the curb and allow the vehicle to move back until the curb side wheel gently touches the curb. Then set the parking brake.**
- **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. Then set the parking brake.**

## DRIVING UPHILL

When starting on a steep grade, it is sometimes difficult to operate both the brake and clutch. Use the parking brake to hold the vehicle. Do not slip the clutch. When ready to start, slowly release the parking brake while depressing accelerator pedal and releasing the clutch.

## DRIVING DOWNHILL

The engine braking action is effective for controlling the vehicle while descending hills. The gearshift lever should be placed in the lower speed position prior to descending. With the automatic transmission vehicle, the "2" or "1" position should be selected.

## WET BRAKES

When the vehicle is washed or driven under extremely wet or muddy conditions, the brake linings sometimes get wet. In a safe manner and as traffic conditions permit, gently apply the brakes several times as the vehicle is moving slowly to dry the linings. Do not drive the vehicle at high speeds until the brakes are functioning correctly.

## SPARK PLUGS

The factory-installed spark plugs on your vehicle are designed to meet normal driving conditions. If your vehicle is operated under either of the following conditions, it is recommended that optional spark plugs of the proper heat range be installed.

1. When the vehicle is used primarily for short distance travel, so that the engine does not run long enough to reach its normal operating temperature, use hot-type spark plugs.
2. When the vehicle is frequently operated with throttle wide open for long periods of time, use cold-type spark plugs.

For spark plug types, please consult your NISSAN dealer or other competent service facility.

**Recommended spark plugs**

| Engine | Hot type | Standard type | Cold type |
|---|---|---|---|
| Non-turbocharger model | BCPR5ES-11* | BCPR6ES-11* | BCPR7ES-11* |
| Turbocharger model | BCPR5E-11* | BCPR6E-11* | BCPR7E-11* |

Always use the spark plug, or its equivalent, indicated in the above chart.
Resistor built-in type spark plug

*: NGK make

## STARTING OFF ON SLIPPERY ROADS

When rain or snow makes the roads slippery, use caution in accelerating and engaging the clutch. If the clutch is engaged too abruptly and with too much acceleration, the wheels may spin and the vehicle will not move forward. To stop the spin, apply the brake and then back up a little. Repeatedly rolling backward and forward will get you away from the slippery patch. In an emergency situation, the vehicle carpet can be used as skidmatting.

## DRIVING ON SLIPPERY ROADS

Hard driving, braking, or cornering on wet or slippery roads should be avoided. When braking under these conditions, shift to a lower gear and use the braking effect of the engine to assist the foot brakes.

When driving on icy roads, always proceed slowly and cautiously, turn the steering wheel gently, and use the brakes only very lightly. Moreover, always change gears smoothly, and never drive with the clutch pedal depressed.

If you should go into a skid, do not apply the brakes. Release the accelerator slowly and turn into the direction of the skid. As

the vehicle stops skidding, straighten out the wheels and accelerate lightly.

## FREEING A FROZEN DOOR LOCK

To prevent a door lock from freezing, apply de-icer or glycerin to it through the key hole. Should the lock become frozen, heat the lock key before use.

## 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, refer to "Engine Cooling System" under the heading "Do-It-Yourself".

[Example]

Unit: US qt (Imp qt, liters)

| Coolant capacity | | | |
|---|---|---|---|
| | Non-turbo-charger model | Turbocharger model | Outside temperature down to |
| | 12 (10, 11.3) | 12-1/2 (10-3/8, 11.8) | |
| Anti-freeze | 2 (1-5/8, 1.9) | 2-1/8 (1-3/4, 2.0) | 19°F (−7°C) |
| | 4 (3-3/8, 3.8) | 4-1/8 (3-3/8, 3.9) | 0°F (−18°C) |
| | 6 (5, 5.7) | 6-1/4 (5-1/4, 5.9) | −31°F (−35°C) |

## 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.

## DRAINING OF COOLANT WATER

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

For details, refer to "Changing Engine Coolant" under the heading "Do-It-Yourself".

## TIRE EQUIPMENT

1. If you have snow tires installed on the rear wheels of your vehicle, they should be of the same size, load range, construction and type (bias, bias-belted or radial) as the front tires.
2. If the vehicle is to be operated in severe winter conditions, snow tires may be installed on all four wheels.
3. For additional traction on icy roads, studded tires may be used. However, some Provinces and States prohibit their use, so, before installing studded tires, check local, state and provincial laws.

**CAUTION:**

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

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

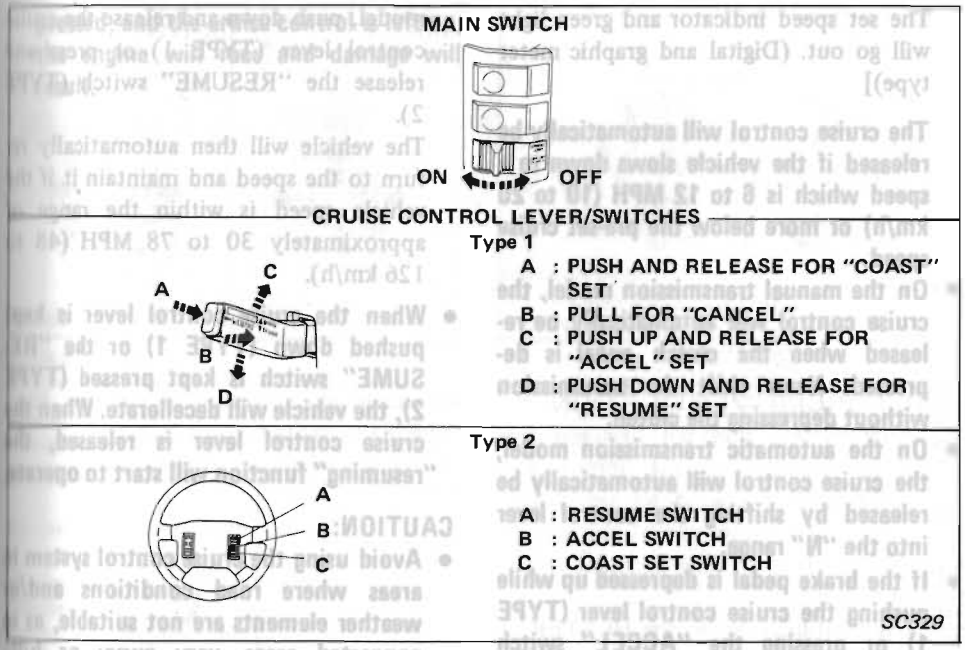
## CORROSION PROTECTION

Chemicals used for road surface de-icing are extremely corrosive and will accelerate corrosion and the deterioration of underbody components such as the exhaust system, fuel and brake lines, brake cables, floor pan and fenders.

Flushing all components at frequent intervals with plain water will greatly reduce the harmful effects of these chemicals.

In areas where heavy concentrations of these corrosive chemicals are used, the vehicle should, in addition to frequent washing, be thoroughly washed, flushed and carefully inspected for signs of deterioration or corrosive action, at least several times per year. Repairs should be performed accordingly.

For additional protection against rust and corrosion, which may be required in some areas, consult your local NISSAN dealer or other competent service facility.



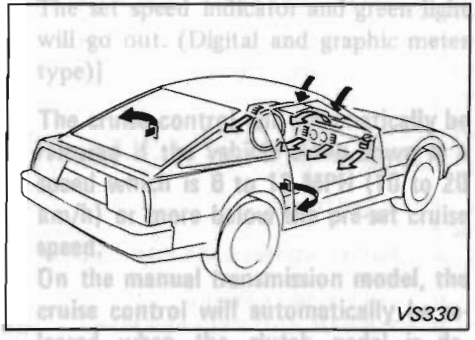

The cruise control system automatically maintains a desired vehicle speed within a range of approximately 30 to 78 MPH (48 to 126 km/h) without the necessity of operating the accelerator pedal.

1. To operate the cruise control, push the main switch to the "ON" position.
[The pilot light (green) on the combination meter panel will illuminate.]
And depress the accelerator pedal and, when the vehicle attains the desired speed, momentarily press the "COAST" set switch.
The vehicle will then automatically maintain the desired cruising speed.
[The pilot light (blue) on the combination meter panel will illuminate (Needle type meter). The set speed will illuminate in the graphic display on the speedometer (Digital and graphic type meter).]
2. To increase the vehicle speed, briefly depress the accelerator pedal. When the pedal is released, the vehicle will return to the cruising speed selected prior to acceleration.
3. To reset at a faster cruising speed, proceed with either of the following two methods. The vehicle will then automatically maintain the newly selected speed.

a) Depress the accelerator pedal and, as the vehicle attains the desired speed, momentarily press the "COAST" set switch.
b) Keep pushing the cruise control lever up (TYPE 1) or pressing the "ACCEL" switch (TYPE 2), allowing the vehicle to accelerate without depressing the accelerator pedal. When the vehicle attains the desired speed, release the cruise control lever or "ACCEL" switch.
c) Push, then quickly release the "ACCEL" set switch. Each time you do this, the set speed will increase by about 1 MPH (1.6 km/h).

# Comfort And Convenience Features

## VENTILATION SYSTEM

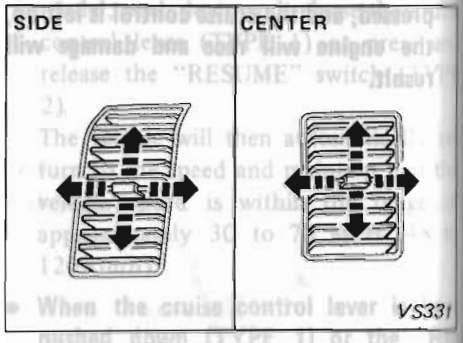



### FOR FORCED VENTILATION

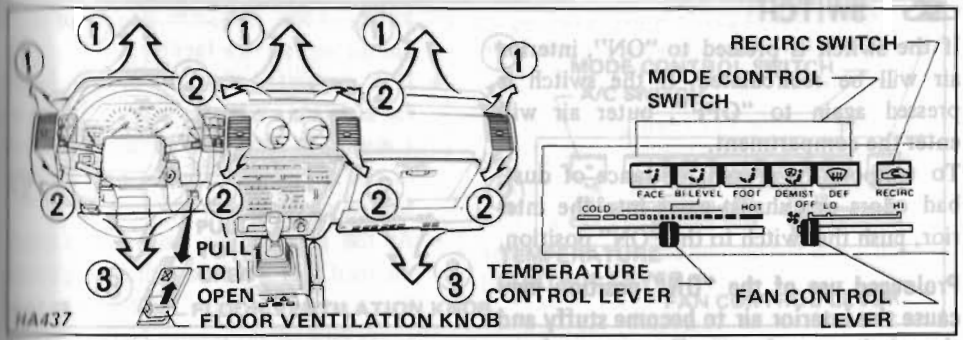
Air flow outlets that act like one-way valves are provided in the door locker pillar. When all the windows are closed, they allow air to flow out of the vehicle but not into it, providing constant, draft-free circulation.

When ventilating, refer to the HEATER or AIR CONDITIONER section for operation instructions.

## VENTILATORS




To change the direction of air flow, tur the grille as desired.




## OPERATION

| Preferred climate setting | Control position | | | | Air source | Air outlet |
|---|---|---|---|---|---|---|
| | Mode control switch | Temperature control lever | Fan control lever | RECIRC switch | | |
| No heating | Any position | COLD" | "OFF" | ON | – | No air flow |
| | | COLD" to "HOT" | | OFF | Outside | ① |
| Ventilation | | "COLD" to "HOT" | "LO" to "HI" | ON or OFF | Inside or Outside | ② |
| Bi-level | | | | | | ②, ③ |
| Heating | | | | | | ③ |
| Defrosting and Heating | | | | | | ①, ③ |
| Defrosting | | | | OFF | Outside | ① |
| Fast heating | | "HOT" | "HI" | ON | Inside | ③ |

### FLOOR VENTILATOR KNOB

When the floor ventilator is pulled up with the MODE control switch at the " FACE " position, the air will be directed toward the floor area as well as the face area.

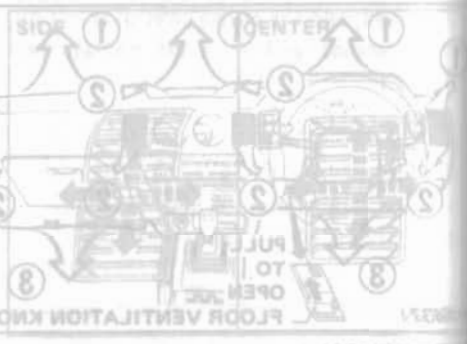
## OPERATING TIPS

- Clear any snow and ice from the air inlet in front of the windshield to improve heater and defroster efficiency.
- **To quickly remove ice or fog on the outside of the windows, set the mode control switch at " ", the recirc switch at "ON", the fan control lever at "HI" and the temperature control lever at full "HOT". However, prolonged use of the recirc switch at "ON" will cause the inside of the windows to fog up.**
- Always remove snow and ice from the front, side and rear windows to improve defogging efficiency and ensure proper visibility.
  Remove snow and ice from the outside mirrors and lights at the same time.
- For adequate rear seat heating, keep the floor areas beneath the front seats clear, and operate the fan as required.

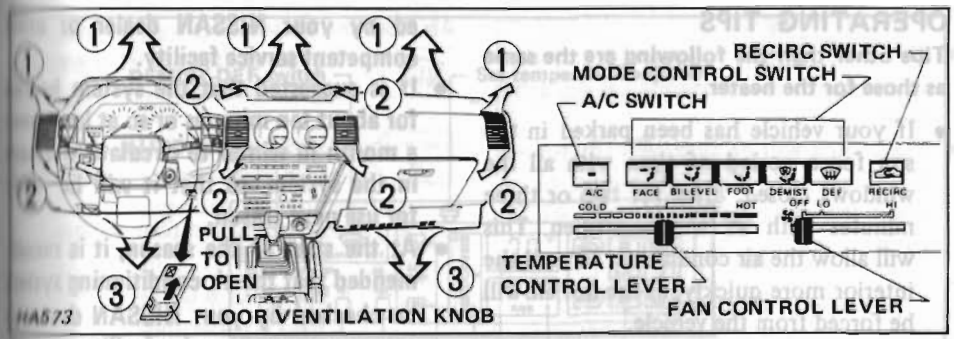
### SWITCH

If the switch is pressed to "ON", interior air will be recirculated. If the switch is pressed again to "OFF", outer air will enter the compartment.
To temporarily prevent entrance of dust, bad odors or exhaust gases into the interior, push the switch to the "ON" position.

**Prolonged use of the "ON" position may cause the interior air to become stuffy and the windows to fog up. To prevent these, usually, the "OFF" position should be used.**



# AIR CONDITIONER (Manual control)




## OPERATION

| Preferred climate setting | Control position | | | | | |
|---|---|---|---|---|---|---|
| | Mode control switch | Temperature control lever | Fan control lever | RECIRC switch | Air source | Air outlet |
| Cooling and Dehumidified heating | | "COLD" to "HOT" | "LO" to "HI" | "ON" or "OFF" | Inside or Outside | ② |
| | | | | | | ②, ③ |
| | | | | | | ③ |
| | | | | | | ①, ③ |
| Dehumidified defogging | | | | OFF | Outside | ① |
| Ventilation Heating Defrosting* | Utilize the same procedure as for the HEATER. | | | | | |

1. If it is difficult to defrost the windshield glass while the A/C switch is turned off, turn it on.

### A/C SWITCH

To operate the air conditioner system, start the engine and push the A/C switch to "ON", then move the FAN CONTROL LEVER from "LO" to "HI". The air conditioner indicator light on the A/C switch will come on.

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

## RECIRC SWITCH

If the switch is pressed to "ON", interior air will be recirculated. If the switch is pressed again to "OFF", outer air will enter the compartment.

To temporarily prevent entrance of dust, bad odors or exhaust gases into the interior, push the switch to the "ON" position.

**Prolonged use of the "ON" position may cause the interior air to become stuffy and the windows to fog up. To prevent these, usually, the "OFF" position should be used.**

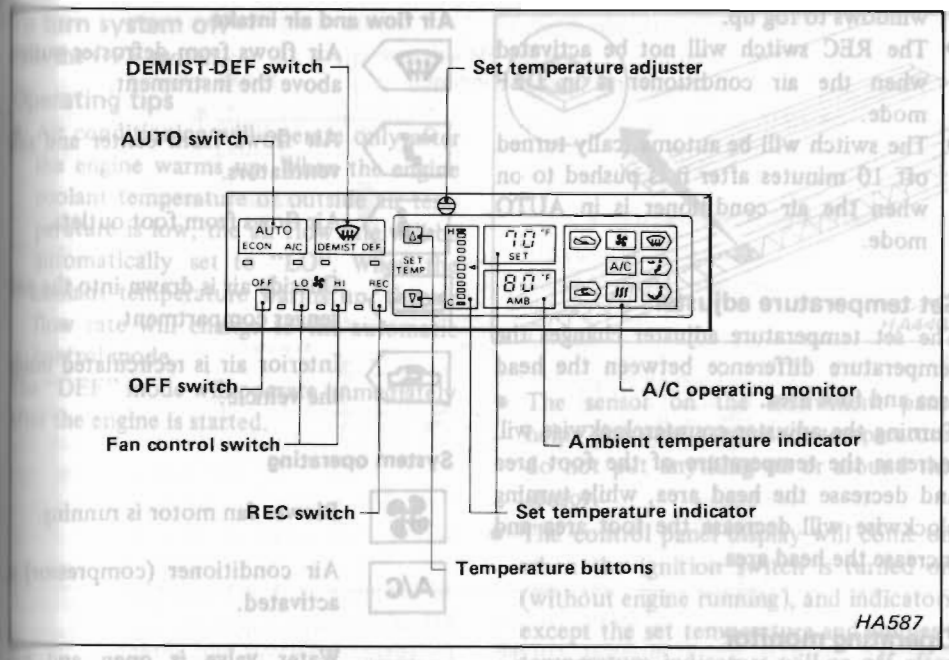
## FLOOR VENTILATOR KNOB

When the floor ventilator is pulled up with the MODE control switch at the "FACE" position, the air will be directed toward the floor area as well as the face area.

## OPERATING TIPS

**Tips other than the following are the same as those for the heater.**

- If your vehicle has been parked in the sun for a period of time with all the windows closed, drive for two or three minutes with all windows open. This will allow the air conditioner to cool the interior more quickly, as the hot air will be forced from the vehicle.
- If stopped in traffic during hot weather, place the automatic transmission lever in PARK "P" position to increase the engine idle speed. This helps cool the engine and assists air conditioning efficiency.
- Keep windows closed while the air conditioner is in operation.
- **If the cooling system has not been used for a week or more, or if the ambient temperature range is below 60°F (15°C), the system should be run in by turning the switch on and off several times at three second intervals, with the engine running at low speed. This will add to the service life of the system.**
- **If anything unusual is noted, shut off the system immediately. Have it checked by your NISSAN dealer or other competent service facility.**
- **It is suggested that the system be run for about ten minutes or so at least once a month in winter to circulate lubricant in the system, so that it will be ready for use next season.**
- **At the start of the season, it is recommended that the air conditioning system be checked by your NISSAN dealer or other competent service facility.**




Start the engine and operate the controls to activate the air conditioner.

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

## Cooling and/or dehumidified heating (Auto mode)

This mode may be normally used all year round as the system automatically works to keep a constant temperature. Air flow distribution and fan speed are also controlled automatically.

1. Push the AUTO switch in the A/C position.
2. Push the TEMPERATURE buttons to set at the desired temperature.

- A beep will sound when the switch is pushed to A/C, or when the set tempetature is changed if the outside temperature is lower than 60°F (15°C). Set the switch in the ECON mode for fuel economy.

## Economy heating (ECON mode)

The air conditioning does not activate. When you need to heat only, use this mode.

1. Push the AUTO switch in the ECON mode. The indicator light will come on.
2. Push the TEMPERATURE buttons to set to the desired temperature.

- The temperature of the passenger compartment will be maintained automatically. Air flow distribution and fan speed are also controlled automatically.
- Do not set the temperature at lower than the outside air temperature. Otherwise the system may not work properly.
- Not recommended if windows fog up.
- Push the AUTO switch again to return to the auto mode.

### Dehumidified defrosting and defogging

1. Push the DEMIST-DEF switch to the DEF or DEMIST mode.
2. Push the TEMPERATURE buttons to set the desired temperature.

- To quickly remove ice or fog from the outside of the windows, push the DEMIST-DEF switch to the DEF mode, set the temperature at full hot, and push the "HI" fan control switch.
- As soon as possible after the windshield is clean, push the AUTO switch to return to the auto mode.

### Manual fan speed control

Push either the "HI" or "LO" fan control switch to manually control the fan speed.
Push the "HI" or "LO" again to return to the automatically control of the fan speed.

### REC switch

Push the switch to on (The indicator will come on) to recirculate the interior air inside the vehicle.
Push it again to draw outside air into the passenger compartment. The indicator will go out.

- Do not leave the switch on for long periods of time because it may cause the interior air to become stuffy and the windows to fog up.
- The REC switch will not be activated when the air conditioner is in DEF mode.
- The switch will be automatically turned off 10 minutes after it is pushed to on when the air conditioner is in AUTO mode.

### Set temperature adjuster

The set temperature adjuster changes the temperature difference between the head area and foot area.
Turning the adjuster counterclockwise will increase the temperature of the foot area and decrease the head area, while turning clockwise will decrease the foot area and increase the head area.

### Operating monitor

Each indicator shows the following when it glows.

**Air flow and air intake**


Air flows from defroster outlet above the instrument.


Air flows from center and side ventilators.


Air flows from foot outlets.


Outside air is drawn into the passenger compartment.


Interior air is recirculated inside the vehicle.

**System operating**


Blower fan motor is running.

Air conditioner (compressor) activated.


Water valve is open and hot water flows into the heater core from the engine block.

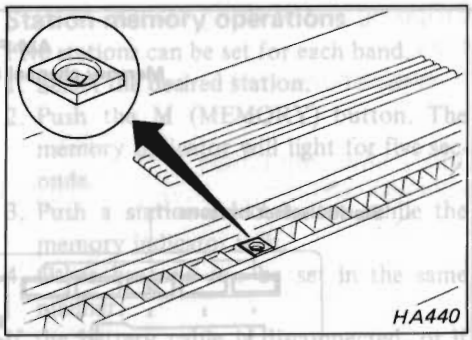
### To turn system off

Push the OFF switch.

### Operating tips

- Air conditioning will operate only after the engine warms up. When the engine coolant temperature or outside air temperature is low, the air flow rate will be automatically set to "LO". When the coolant temperature warms up, the air flow rate will change to the automatic control mode.

The "DEF" mode will operate immediately after the engine is started.




- The sensor on the instrument panel helps maintain a constant temperature; do not put anything on or around this sensor.
- The control panel display will come on when the ignition switch is turned on (without engine running), and indicators except the set temperature and ambient temperature indicators will go off after the engine starts.
  The set temperature and ambient temperature indicators are displayed while the engine is running even when the air conditioner is turned off.
- Keep windows and T-bar 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, especially in winter. This could 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.

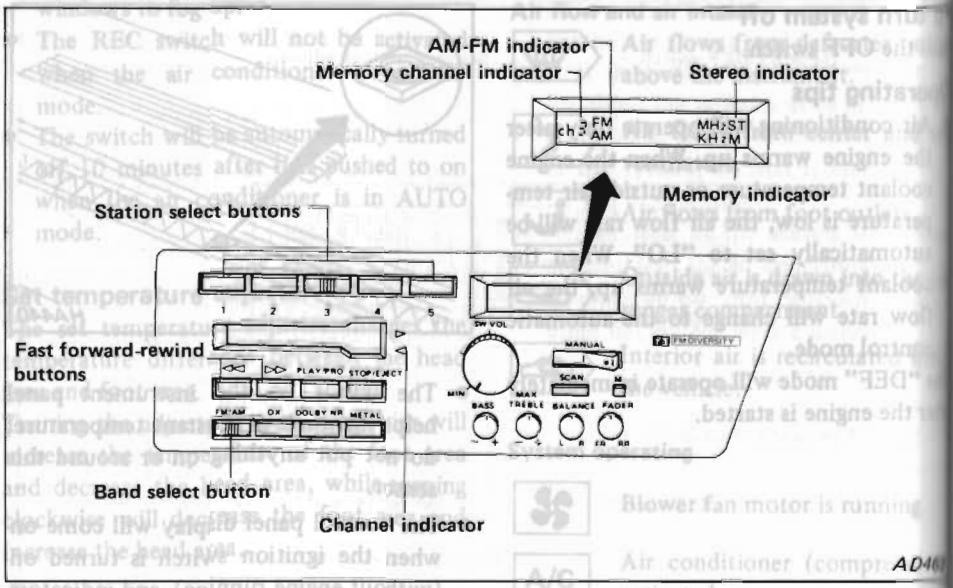
## RADIO

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.

Adjust the antenna length for the best reception. A fully extended antenna is usually best for distant reception.

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.

## AM-FM ELECTRONIC TUNING RADIO WITH CASSETTE TAPE PLAYER (Type A)




Push the SW.VOL knob to listen to the radio and tune in the desired station.

Turn the SW.VOL knob to adjust the volume.

Pushing SW.VOL knob will turn the radio on while the cassette tape is playing.

The electronic tuning radio has a DIVERSITY reception system. The FM signal can reflect off of buildings or mountains. This causes offensive noises. The DIVERSITY system employs two antennas; one is a rod type antenna and the other is a wire antenna built in the rear window. The system automatically switches to the antenna which receives less noise. Thus the radio provides high quality reception.

### Selecting the desired band

Push the band select button 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.

## Tuning

### Manual tuning

Push down the manual tuning button.

### SCAN tuning

Push the SCAN tuning button. SCAN tuning begins from low to high frequencies and stops at each broadcasting station for five seconds. Pushing the button again during this five second period will stop SCAN tuning and the radio will remain tuned to that station.

Scan tuning will not stop at an exceptionally weak station. In such a case, set the DX button to the "DX" ( ⊏ ) position to increase reception sensitivity. For normal use, set the button in the off ( ⊓ ) position.

## Station memory operations

Five stations can be set for each band.

1. Select the desired station.
2. Push the M (MEMORY) button. The memory indicator will light for five seconds.
3. Push a station select button while the memory indicator is lit.
4. Other buttons can be set in the same manner.

If the battery cable is disconnected, or if the fuse blows, the radio memory will be cancelled. In that case, reset the desired stations.

## Adjusting speaker sound balance

Turn the BALANCE control knob to adjust the volume between the right and left speakers.

Turn the FADER control knob to adjust the volume between the front and rear speakers.

## Adjusting tone quality

Turn the BASS and TREBLE control knob to obtain the most pleasant sound.

## Cassette tape operation

Turn the ignition key to "ACC" or "ON", then lightly insert the cassette tape into the tape door. The cassette tape will be automatically pulled into the player. The radio will turn off and the cassette tape will begin to play.

**Do not force the cassette tape into the tape door. Pressing strongly could cause damage to the player.**

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

## PLAY button

Push the PLAY button to play the cassette tape when the tape play stops, the tape is fast forwarded or rewound, or the radio is on.

- **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 gather 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 overhauled for cleaning.**

### Fast forwarding or rewinding the tape

Push either the forward or rewind button.

### Changing the direction of tape play

Push the PRO (program) select button.

### Stopping and ejecting the cassette tape

Push the STOP/EJECT button.

### Dolby noise reduction

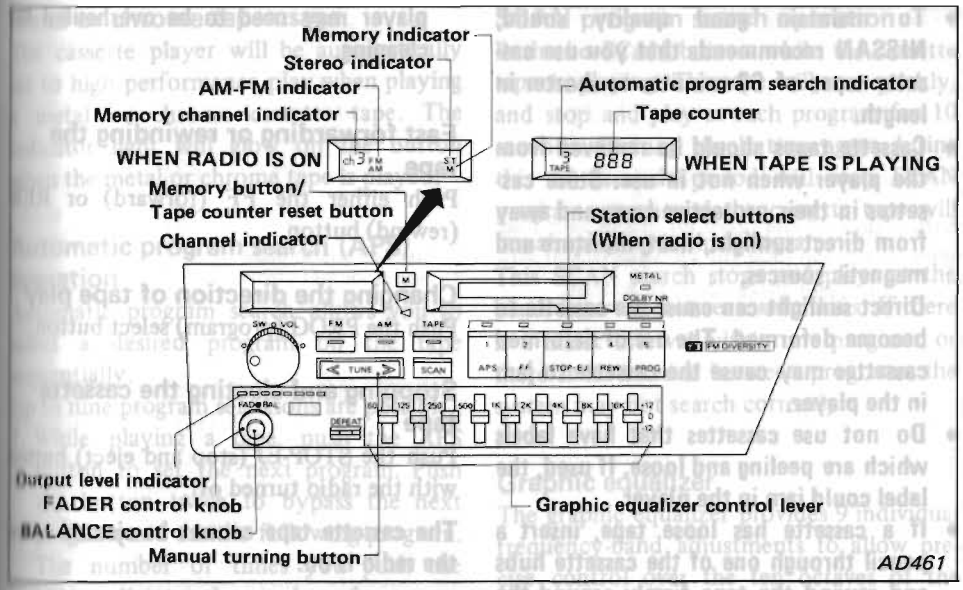
Push the "Dolby NR" button to reduce high frequency tape noise.

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

### Metal or chrome tape usage

Push the METAL button.

## AM-FM ELECTRONIC TUNING RADIO WITH CASSETTE TAPE PLAYER (Type B)




Push the SW.VOL knob to listen to the radio and tune in the desired station.

Turn the SW.VOL knob to adjust the volume.

Pushing the AM or FM button will turn the radio on while the cassette tape is playing.

The electronic tuning radio has a DIVERSITY reception system. The FM signal can reflect off of buildings or mountains. This causes offensive noises. The DIVERSITY system employs two antennas; one is a rod type antenna and the other is a wire antenna built in the rear window. This system automatically switches to the antenna which receives less noise. Thus the radio provides high quality reception.

### Selecting the desired band

Push the AM or FM button 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.

### Tuning

#### Manual tuning

Push down the manual tuning button.

#### SCAN tuning

Push the SCAN tuning button. SCAN tuning begins from low to high frequencies and stops at each broadcasting station for five seconds. Pushing the button again during this five second period will stop SCAN tuning and the radio will remain tuned in that station.

### Station memory operations

Five stations can be set for each band.

1. Select the desired station.
2. Push the M (MEMORY) button. The memory indicator will light for five seconds.
3. Push a station select button while the memory indicator is lit.
4. Other buttons can be set in the same manner.

If the battery cable is disconnected, or if the fuse blows, the radio memory will be cancelled. In that case, reset the desired stations.

### Adjusting speaker sound balance

Turn the BALANCE control knob to adjust the volume between the right and left speakers.

Turn the FADER control knob to adjust the volume between the front and rear speakers.

### Cassette tape operation

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

**Do not force the cassette tape into the tape door. Pressing strongly could cause damage to the player.**

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

### TAPE button

Push the TAPE button to play the cassette tape when the tape play stops, the tape is fast forwarded or rewound, or the radio is on.

- **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 gather 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 overhauled for cleaning.**

### Fast forwarding or rewinding the tape

Push either the FF (forward) or REW (rewind) button.

### Changing the direction of tape play

Push the PROG (program) select button.

### Stopping and ejecting the cassette tape

Push the STOP-EJ (stop and eject) button with the radio turned off.

**The cassette tape cannot be ejected when the radio is on.**

### Dolby noise reduction

Push the "Dolby NR" button to reduce high frequency tape noise. The indicator will glow on the button.

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

### Metal or chrome tape usage

The cassette player will be automatically set to high performance play when playing a metal or chrome cassette tape. The indicator light will glow on the button when the metal or chrome tape is played.

### Automatic program search (APS) operation

Automatic program search allows you to select a desired program on the tape sequentially.

Up to nine program selections are possible.

1. While playing a tape, push the APS button to set the next program. Push the button twice to bypass the next program and set the following program. The number of times you push the button dictates the number of programs bypassed.
2. Push either the fast forward or rewind button for the direction desired. The tape will run quickly and stop just prior to the program and then play.

This system searches by counting the blank intervals between selections. If there is a blank interval within one program or there is no interval between programs, the system may not search correctly.

### SCAN program search operation

Push the SCAN button while the cassette tape is playing. The tape will run quickly, and stop and play at each program for 10 seconds. Pushing the button again during this 10 seconds period will stop SCAN program search and the cassette tape will remain playing at that program.

This SCAN search stops and plays at the blank intervals between selections. If there is a blank interval within one program, or there is no interval between programs, the system may not search correctly.

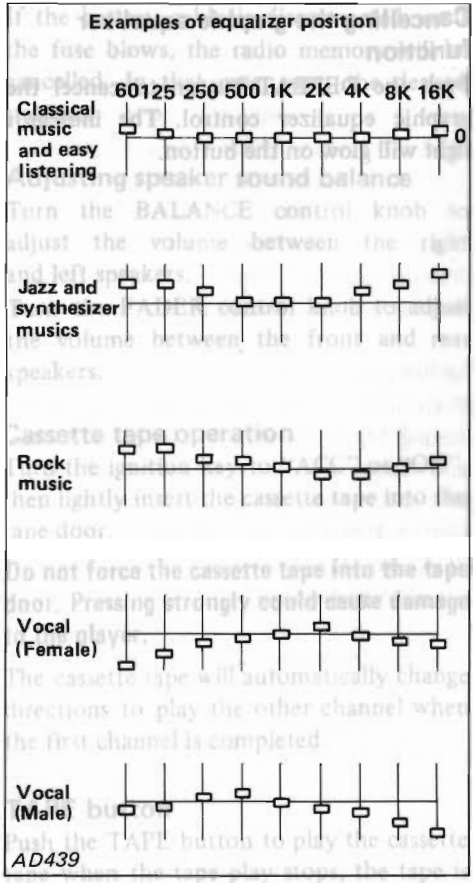
### Graphic equalizer

The graphic equalizer provides 9 individual frequency-band adjustments to allow precise control over the ten octaves of the audio spectrum.

Center frequencies of 60 Hz, 125 Hz, and 250 Hz have been carefully selected to adjust for both deep and mid-bass response. 500 Hz, 1 kHz, 2 kHz and 4 kHz adjust for critical mid-range sounds; and 8 kHz and 16 Hz adjusts for reduction of "hiss" and "high" frequency "noise".

### Cancelling the graphic equalizer function

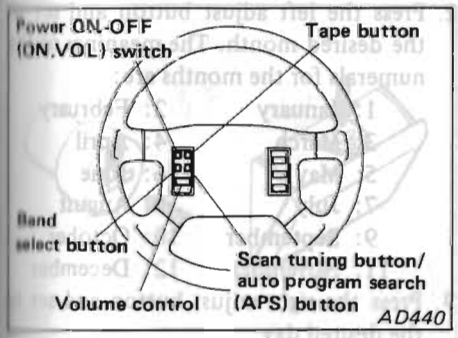
Push the DEFEAT button to cancel the graphic equalizer control. The indicator light will glow on the button.




## 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.

**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.**




## CONTROL SWITCHES ON THE STEERING WHEEL (Option for Type B)

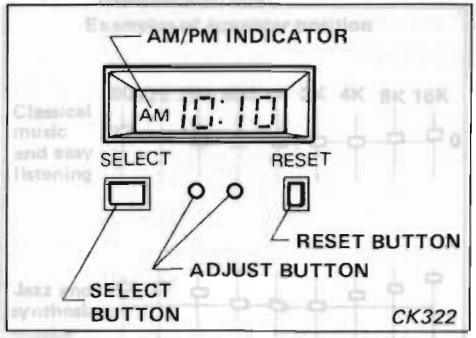
Some functions can be operated by the switches on the steering wheel as well as on the radio. For operation of the switch, refer to the descriptions explained previously as well as the following.

**When the volume control on the radio is set at minimum, the sound will not come out even though you turn the volume control on the steering wheel. The volume control on the radio should be set in an appropriate position.**

## CB RADIO OR CAR PHONE

When installing a CB ham radio or a car phone in your NISSAN, be sure to observe the following as it may adversely affect the E.F.I. system and other electronic parts depending on its installation location.

- Keep the antenna as far as possible away from the Electronic Control Unit.
- Also keep the antenna wire more than 8 inches (20 cm) away from the E.F.I. 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 radio chassis to the body.
- For details, consult a NISSAN dealer.




The time is displayed when the ignition switch is in the "ACC" or "ON" position. The clock continues operation even when the ignition switch is in the "OFF" or "LOCK" position, though the time is not displayed. The digital clock display will change as follows when the "SELECT" button is pressed.

**"Hours and minutes" → "Month and day" → "Minutes and seconds" → Hours and minutes" → ...**

However, the display of "month and day" will automatically return to "hours and minutes" within several seconds.

**Once the power supply is disconnected the clock will continue to flash 12:00 in hours and minutes or the date 1 1 (Jan. 1). In this case, pressing the adjust button will start the clock running again.**

**The adjust button is designed so that it cannot be pressed with a finger. When adjustment is necessary, press the adjust button with a pointed article such as a pencil. This is designed to prevent an accidental adjustment.**

To adjust the clock, proceed in the following manner.

### Hour and minute display

1. Press the "SELECT" button and set the digital display to "hours and minutes". For example, 10:45. In this case, the colon located in the middle of the digits flashers.
2. Press the left adjust button and adjust to the desired hour with the AM/PM indicator lighted.
3. Keep pressing the right adjust button and adjust to the desired minute.

### Calendar (Month and day) display

1. Press the "SELECT" button and set the digital display to "month and day". For example 2 1 (Feb. 1). In this case, the colon located in the middle of the digits disappears.
2. Press the left adjust button and set to the desired month. The meanings of the numerals for the months are:

| | |
|---|---|
| 1: January | 2: February |
| 3: March | 4: April |
| 5: May | 6: June |
| 7: July | 8: August |
| 9: September | 10: October |
| 11: November | 12: December |

3. Press the right adjust button and set to the desired day.

### Minute and second display

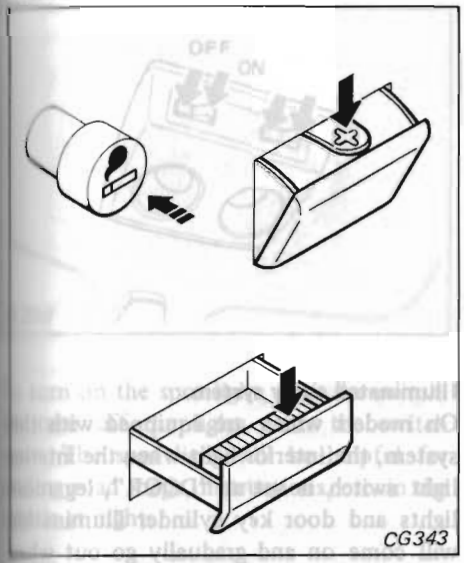
Press the "SELECT" button and set the digital display to "minutes and seconds". For example 10:10 (10 minutes 10 seconds).

### Time adjustment

When the clock displays either "hours and minutes" or "minutes and seconds", the clock can be set to the time signal.

For example, if the "RESET" button is depressed while the time is between 8:01 and 8:29, the display will be reset to 8:00. If depressed while it is between 8:30 and 8:59, the display will be reset to 9:00.

## CIGARETTE LIGHTER AND ASH TRAYS




### CIGARETTE LIGHTER

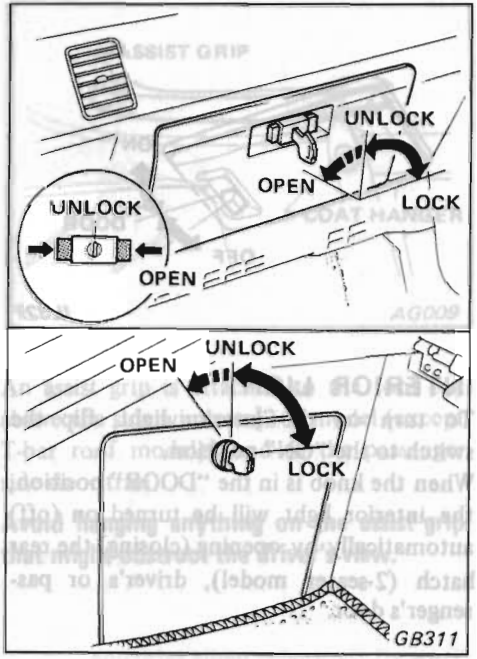
Push the knob in all the way and release it. When the lighter springs back to its original position, it is ready for use.

**Replace the lighter in its original position after use.**

### ASH TRAYS

**Do not use the ash tray as a waste receptacle.**

## GLOVE BOX AND BODY SIDE POCKET

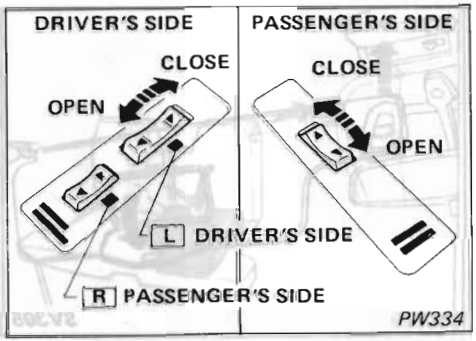



The glove box and body side pocket provide handy storage space.

**When locking or unlocking the glove box, use the master key. The security key cannot be used.**

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

## POWER WINDOW



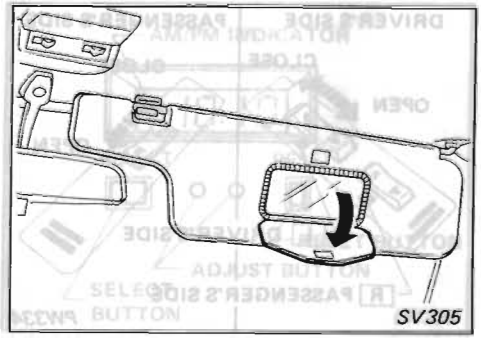

When the ignition switch is in the "ON" position, the door windows can be opened or closed using the switches set in the door arm restraint.

The driver's switches will open or close all the windows. The passenger's switch will open or close only the corresponding window. Releasing the switch when the window reaches the desired position will cause the window to stop.

### WARNING:

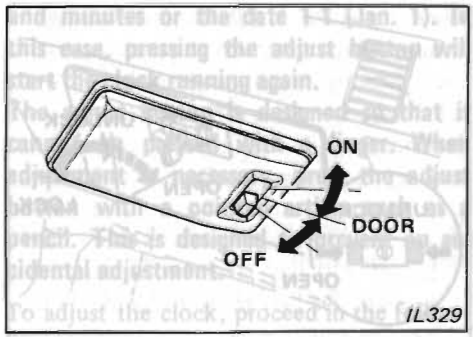
**To assure the safety of children and others, make sure that all passengers have their hands, etc. inside the vehicle before closing the windows. Also, be sure to remove the ignition key and keep it with you when you leave the vehicle.**

## SUN VISORS AND VANITY MIRROR




You can lift the sun visors from their center mounting and turn them toward the windows to block glare from the sides.
The vanity mirror is located behind the passenger sun visor.

## INTERIOR LIGHT




To turn on the interior light, flip the switch to the "ON" position.
When the knob is in the "DOOR" position, the interior light will be turned on (off) automatically by opening (closing) the rear hatch (2-seater model), driver's or passenger's door.

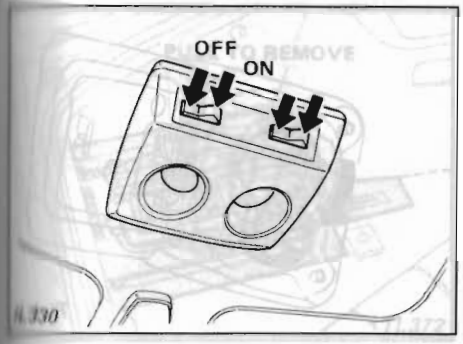
### Interior light delay system

On models which are equipped with this system, when doors are closed and the interior light switch is set at "DOOR", the interior light will gradually fade to "OFF".

### Illuminated entry system

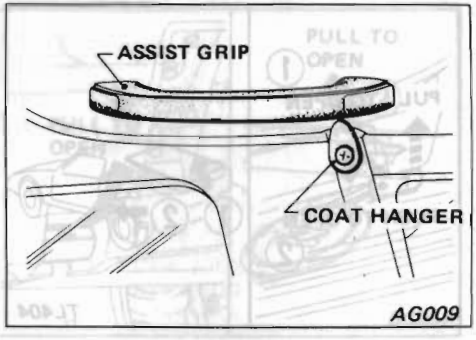
On models which are equipped with this system, the interior light when the interior light switch is set at "DOOR", leg room lights and door key cylinder illumination will come on and gradually go out when the outer handle of the driver's door is pulled and released once. This operation will allow you to check the interior of the vehicle and to aid for inserting the key into the door key hole from the outside before unlatching the door lock when entering the vehicle at night.

## SPOT LIGHT




To turn on the spot light, push the switch. To turn off the light, push the switch again. The spot light will be helpful for reading road maps, instructions, etc. in the vehicle at night.

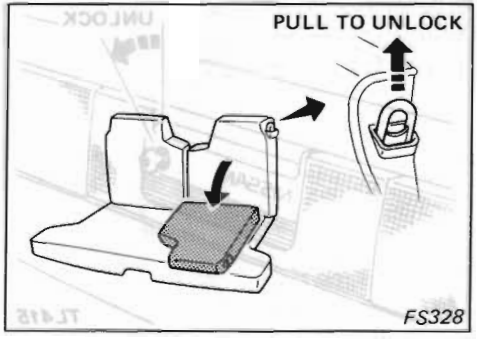
## ASSIST GRIPS AND COAT HANGERS




An assist grip is attached to the roof rail above the side window [2+2 model (except T-bar roof model)] and to the passenger side door trim.

**Avoid hanging anything on the assist grip that might obstruct the driver's view.**

## FOLDING REAR SEAT

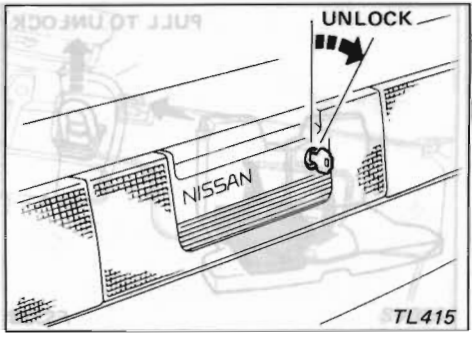



### 2+2 MODEL

The rear seat may be quickly and easily converted into luggage space when needed. The right and left rear seat backs can be folded down separately. Release the lock at the outer side of each seat back, and then pull the seat back forward and down to expand the luggage space.

- **When the seat back is in its normal upright position, make sure it is locked securely.**
- **Never allow anyone to ride in the luggage area or on the rear seat in the fold-down position. Use of these areas by passengers without proper restraint can be extremely hazardous in case of accidents or during sudden stops.**

## REAR HATCH LOCK



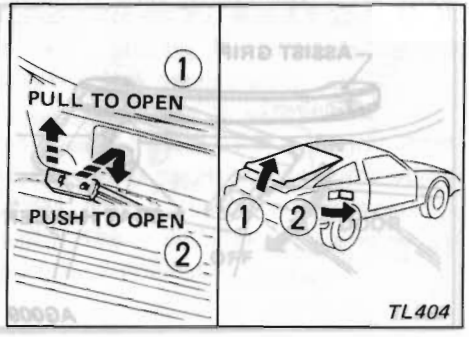

To open the rear hatch, insert the key and turn it clockwise. To lock the rear hatch, push it down securely. No further key operation is required.

**CAUTION:**

**Do not drive with the rear hatch open. This will prevent dangerous exhaust gases from being drawn into the vehicle.**

**If the vehicle is driven with an open or unsecured rear hatch, it could become damaged through uncontrolled movement.**

## REAR HATCH AND FUEL FILLER LID OPENER



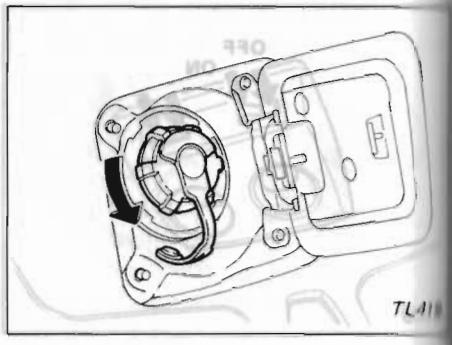

The rear hatch or fuel filler lid can be opened from the driver's seat without a key. To open the rear hatch, pull up the opener lever located in the left of the driver's seat to release the lock. To open the fuel filler lid, push the opener lever down. To lock, push the rear hatch or fuel filler lid down securely.

**Turn off the engine while refueling.**

**CAUTION:**

**Do not drive with the rear hatch open. This will prevent dangerous exhaust gases from being drawn into the vehicle.**

**If the vehicle is driven with an open or unsecured rear hatch, it could become damaged through uncontrolled movement.**



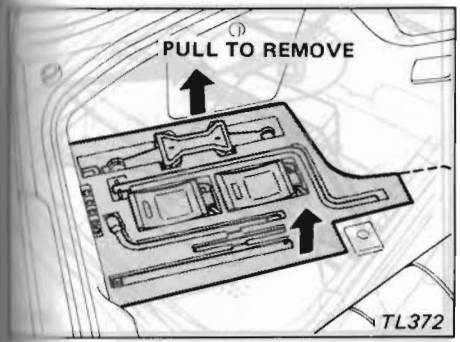

## FUEL FILLER CAP

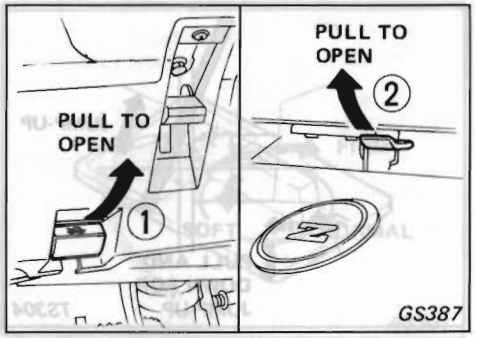
The fuel filler cap is a screw-on ratcheting type.

To remove the fuel filler cap, rotate it counterclockwise. To install the fuel filler cap, tighten it clockwise securely until a ratcheting clicking sound is heard indicating the cap is completely on.

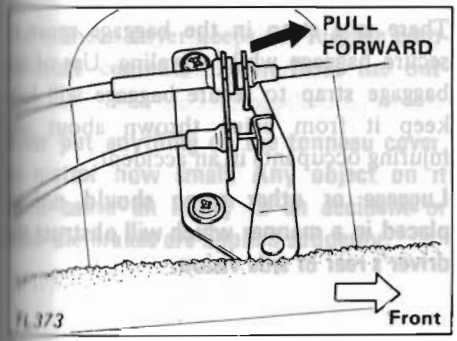
- **Turn off the engine while removing the fuel filler cap.**
- **Use only a genuine NISSAN fuel filler cap specified for your model. It has a built-in safety valve to prevent a serious malfunction of the fuel system and emission control system.**

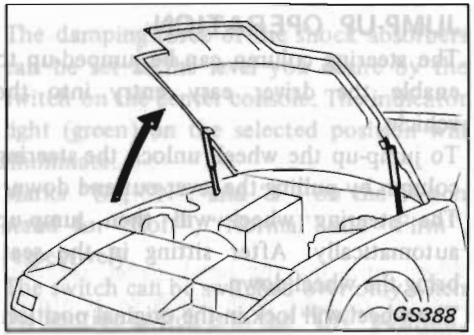
## HOOD RELEASE





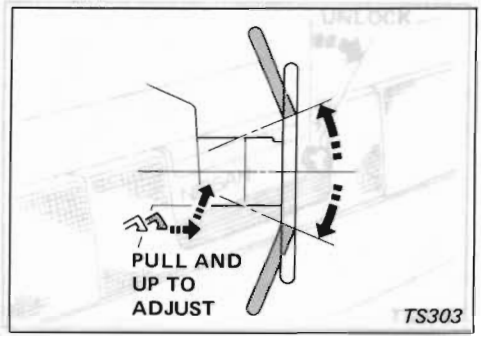

### Emergency procedures

When the fuel filler lid opener is inoperative, proceed as follows:

1. Remove the rear floor pad where the tool is located.
2. Move the lever, which is connected to the cable, forward as shown in the figure.

1. Pull the hood lock release handle (1) located below the instrument panel; the hood will then spring up slightly.
2. Push the lever (2) at the front of the hood with your fingertips and raise the hood.
3. When closing the hood, slowly close the hood and make sure it locks into place.

## TILTING STEERING WHEEL



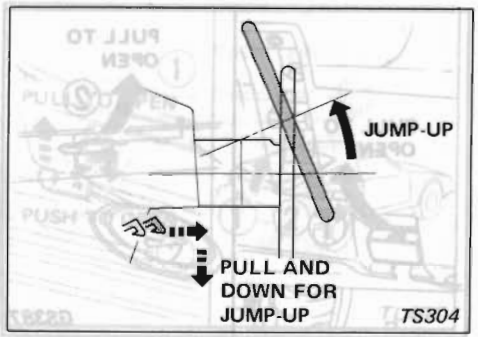

### TILT OPERATION

The steering wheel can be tilted to obtain the best driving position.

To tilt the wheel, first unlock the steering column by pulling the lock lever out and up.

Then, while keeping the lever up, move the steering wheel up or down to the desired position.

To lock the wheel, release the lever and the lever will return to the original position.




### JUMP-UP OPERATION

The steering column can be jumped-up to enable the driver easy entry into the vehicle.

To jump-up the wheel, unlock the steering column by pulling the lever out and down.

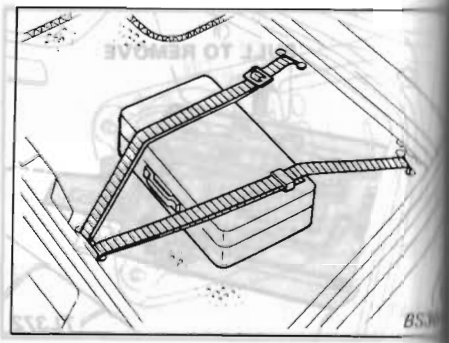
The steering wheel will then jump-up automatically. After sitting in the seat, bring the wheel down.

The wheel will lock in the original position.

**CAUTION:**

**Do not adjust the steering wheel while driving.**

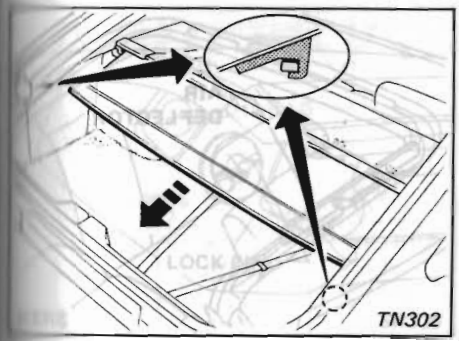
## BAGGAGE STRAP



There is a strap in the baggage space to secure baggage while traveling. Use of the baggage strap to secure baggage will help keep it from being thrown about and injuring occupants in an accident.

**Luggage or other cargo should not be placed in a manner which will obstruct the driver's rear or side vision.**

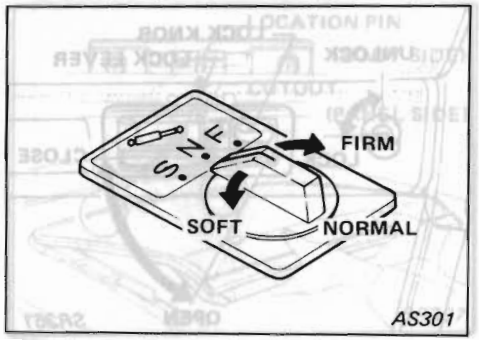
## TONNEAU COVER




The tonneau cover keeps the luggage compartment contents hidden from the outside.

**Never put anything on the tonneau cover, no matter how small. Any object on it could cause an injury in an accident or when the brakes are applied suddenly.**

## ADJUSTABLE SHOCK ABSORBER SWITCH




The damping force of the shock absorbers can be set at the level you desire by the switch on the center console. The indicator light (green) on the selected position will illuminate.

Marks "S", "N", and "F" on the switch stand for "Soft", "Normal" and "Firm", respectively.

The switch can be switched over only when the ignition switch is in the "ON" position.

**When the system is normal, only the indicator light for the selected position will come on. If any other condition exists, (for example, all the three indicator lights come on or go off, or any of the lights flickers), it shows that there is an abnormality.**

**Should this occur, contact your NISSAN dealer or other competent service facility and have it checked.**

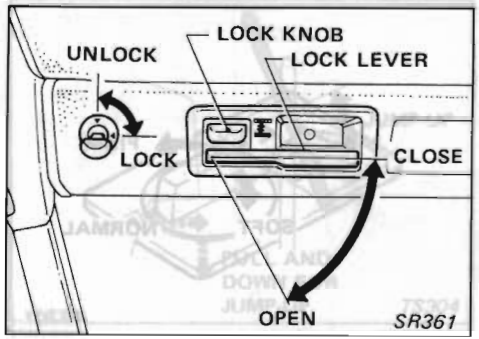
## T-BAR ROOF

**WARNING:**

- **Do not attempt to remove or install the hatch panel while driving the vehicle.**
- **Do not touch the lock knob or lock lever while driving the vehicle with the hatch panel in place.**
- **Do not stand up or extend any portions of your body out of the opening, while driving the vehicle with the hatch panel removed.**

**CAUTION:**

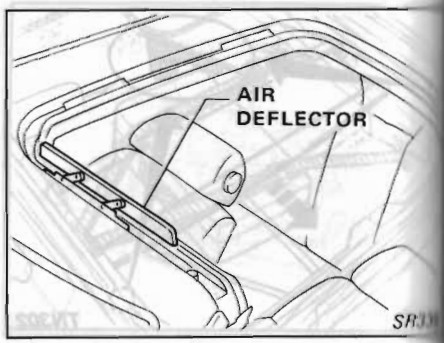
**When leaving the vehicle, be sure to lock the T-bar roof with the key to prevent theft.**




### REMOVING THE HATCH PANEL

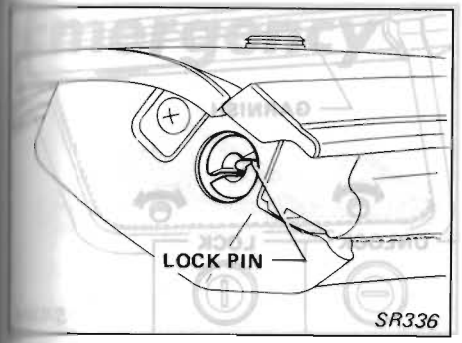
1. Insert the key and turn it counter-clockwise to unlock.
2. While pushing up the lock knob, pull the lock lever to its fully open position.
3. Lift the hatch panel and remove it from the vehicle.

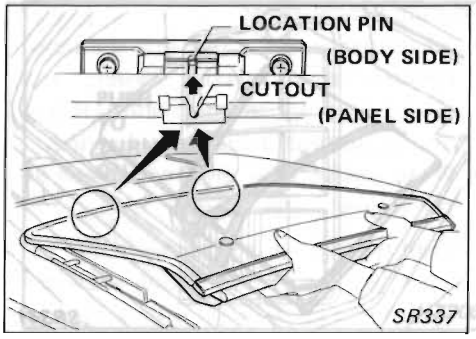
**When removing the hatch panel, securely support it using both hands so as not to drop it.**

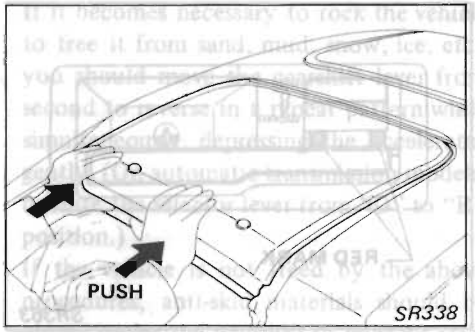



**CAUTION:**

**Do not attempt to put hot water on frozen air deflector in cold weather.**



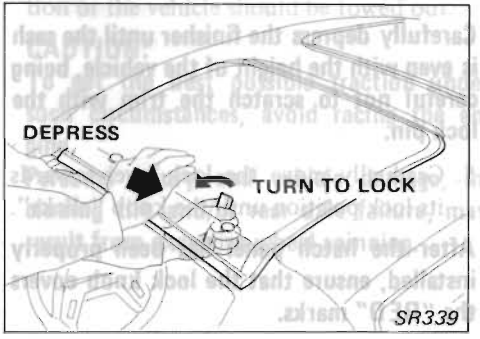




## INSTALLING THE HATCH PANEL

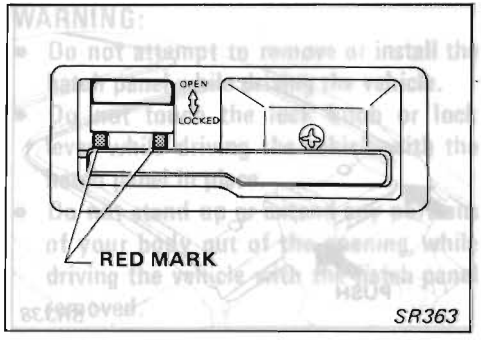
1. Move the lock lever to its fully open position.

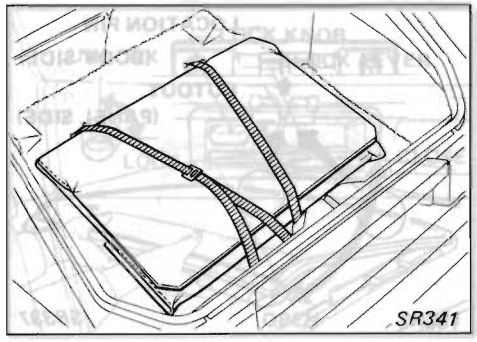
**Ensure that the end of the lock pin does not protrude from the roof garnish.**

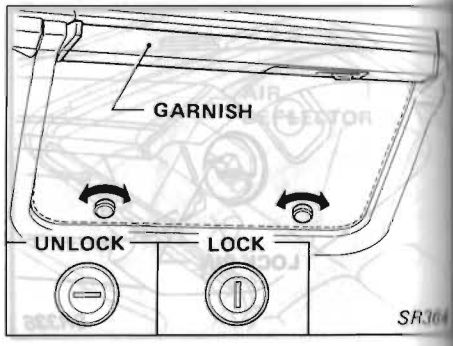
2. Properly align the cutout portion of the sash on the hatch panel with the locating pin of the hook on the vehicle body, and insert the hatch panel into the hook.




3. To firmly place the hatch panel in position, push the hatch panel towards the middle of the vehicle.
4. Lower the entire hatch panel. While depressing the hatch panel finisher, gradually move the lock lever in the direction that tightens the hatch panel.




**Carefully depress the finisher until the sash is even with the height of the vehicle, being careful not to scratch the trim with the lock pin.**

5. Gradually move the lock lever towards its lock position until the knob "clicks".

**After the hatch panel has been properly installed, ensure that the lock knob covers the "RED" marks.**

6. Lock the hatch panel by turning the key clockwise to prevent theft.

## STORING OF PANELS

After removing the hatch panel, store it in the luggage compartment according to the following procedures:

1. Insert the hatch panel into its protective bag.
2. Securely fasten the hatch bag using the baggage straps.

- **To correctly store the left and right hatch panels, place one hatch panel over the other with their locks positioned symmetrically to prevent scratching the panels.**
- **Do not place any heavy objects or items which have pointed corners or sharp edges on the stored panels.**

## SUN SHADE PLATE

### Removal

1. Loosen the bolts while holding on to the sun shade plate.
2. Unfasten the hooks on the sun shade plate from the holders.

### Installation

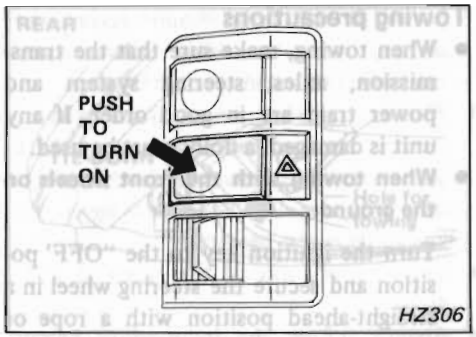
1. Insert the outside edge of sun shade plate into the garnish.
2. Align two bolts on inside of sun shade plate with locknuts and then securely tighten the bolts.

**CAUTION:**

**Do not attempt to remove the sun shade while the vehicle is in motion.**

# In Case Of Emergency

## HAZARD WARNING




Use the hazard warning flasher to warn other drivers that your vehicle is disabled or parked under emergency conditions.
Avoid stopping the vehicle on the roadway if possible. For further instructions, refer to "Hazard Warning Flasher Switch" under the heading "Instruments and Controls".

## FREEING IMMOBILIZED VEHICLE

If it becomes necessary to rock the vehicle to free it from sand, mud, snow, ice, etc., you should move the gearshift lever from second to reverse in a repeat pattern while simultaneously depressing the accelerator gently. (On automatic transmission models, operate the selector lever from "D" to "R" position.)
If the vehicle is not freed by the above procedures, anti-skid materials should be placed under the wheel(s) to improve traction or the vehicle should be towed out.

**CAUTION:**

**To get the best possible traction under such circumstances, avoid racing the engine.**

**Personal injury and vehicle damage, including tire and/or rear axle failure, may result from excessive wheel spinning.**

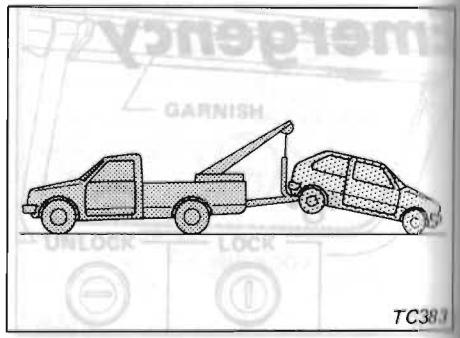
# TOW TRUCK TOWING

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 you have a service operator tow your vehicle. It is advisable to have the service operator carefully read the following precautions.

## Towing precautions

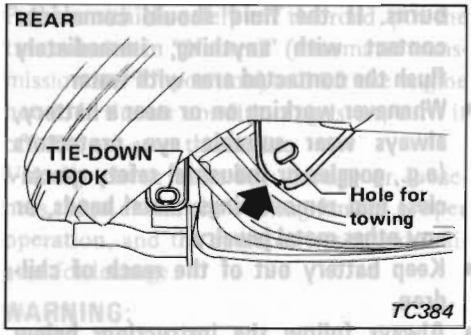
- When towing, make sure that the transmission, axles, steering system and power train are in good order. If any unit is damaged, a dolly must be used.
- **When towing with the front wheels on the ground:**

  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.
- **When towing with the rear wheels on the ground,** release the parking brake and move the gearshift lever to neutral ("N" position).
- Attach safety chains for all towing.
- **Do not tow your vehicle by the front end.**




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

## FREEING VEHICLE FROM SAND, SNOW OR MUD




- Use the towing hooks **only**, not other parts of the vehicle. Otherwise, the vehicle body will be damaged.
- Use the towing hooks **only** to free a vehicle stuck in sand, snow, mud, etc. **Never** tow the vehicle using only the towing hooks.
- The towing hook is under tremendous force when used to free a stuck vehicle. Always pull the cable straight out from the front or rear of the vehicle. **Never** pull on the hook at a sideways angle.

**If you have to tow an automatic transmission with four wheels on ground or Towing with front wheels raised (with rear wheels on ground)**

Observe the following restricted towing speeds and distances.

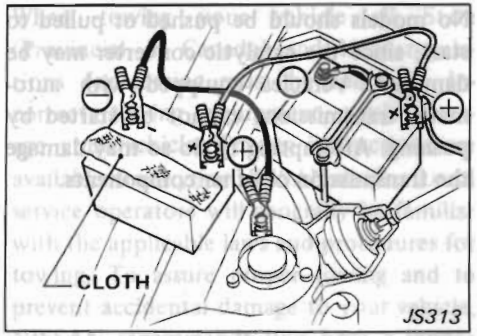
- **Speed: Below 30 MPH (50 km/h)**
- **Distance: Less than 40 miles (65 km)**

If the speed of distance must necessarily be greater, remove the propeller shaft beforehand to prevent damage to the transmission.

## *PUSH STARTING*

No models should be pushed or pulled to start, since the catalytic converter may be damaged. Vehicles equipped with automatic transmissions cannot be started by pushing. Attempting to do so may damage the transmission or other components.

## JUMP STARTING WITH BOOSTER BATTERY




- If done incorrectly, jump starting can be hazardous.
- Because explosive hydrogen gas is always present in the vicinity of the battery, keep all sparks and flames away from it. Whenever charging or using a battery in a closed environment always be sure that there is suitable ventilation.
- The final booster cable connection must be to ground on the part shown in the illustration away from the battery to reduce the chance of an explosion set off by sparks.
- Do not, under any circumstances, allow battery fluid to come into contact with eyes, skin, cloth or painted surfaces. Battery fluid is a corrosive sulphuric acid solution which can cause severe burns. If the fluid should come into contact with anything, immediately flush the contacted area with water.
- Whenever working on or near a battery, always wear suitable eye protectors (e.g., 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 exactly.

1. Position the two vehicles to bring their batteries into close proximity to each other. Set parking brakes. Set the shift lever in "Neutral" (On automatic transmission models set the lever in "P" position). Switch off all unnecessary electrical systems (light, heater, fan, etc.).

**CAUTION:**

- The booster battery voltage must not exceed 12 volts, or electric components and the control unit of the fuel injection system will be damaged.
- If the battery cables have been disconnected they should be tightly clamped to the battery terminals to secure a good contact.
- Do not allow the two vehicles to touch.

2. To reduce the explosion hazard inherent in connecting a live booster battery to a discharged battery, remove the vent caps (if so equipped) from both batteries and place a cloth over their open vent wells or open vent holes.
3. Run one jumper cable from the positive terminal (identified by "+" on the battery case, post, or clamp) of the booster battery to the positive terminal of the discharged battery.
4. Connect the other cable to the booster battery's negative terminal and to the engine lift bracket of the vehicle with the discharged battery **[not to negative (–) terminal of battery]**.

**CAUTION:**

- Do not connect the positive lead to the negative terminal or vice versa. Doing so could cause damage to both charging systems or could even result in serious personal injury.
- Make sure cables are clear of moving parts and that neither clamp contacts 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.

7. Once you have your engine running carefully disconnect the jumper cables, exactly reversing the connection procedure.

8. Replace the vent caps if so equipped. Because the cloths used to cover the vent wells or holes may have been contaminated with corrosive acid, be sure to dispose of them in a safe manner.

## IF YOUR VEHICLE OVERHEATS

Pull the vehicle safely off the road, put the transmission in "Neutral" (automatic transmission in "P" position) and lift the engine hood. If the air conditioning is on, turn it off. Do not stop the engine.

Visually check belts for damage or looseness. Also check the cooling fan for proper operation, and the radiator hoses and radiator for leakage.

**WARNING:**

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

**b) The turbocharged engine model is equipped with an auxiliary fan in the engine compartment. The fan may come on as the ignition key is turned off when the coolant temperature is high. The fan may stay on for about 15 minutes after the ignition key is turned off.**

If engine overheating is not caused by a faulty cooling system but by something else, such as climbing a long hill on a hot day, abrupt reduction of vehicle speed after high-speed driving or repeated stop-and-go driving in congested areas, the engine coolant temperature will start to drop after the engine has run at idle for one or two minutes.

If coolant is leaking or the fan belt damaged or loose, stop the engine and have your vehicle brought to the nearest NISSAN dealer or other competent service facility for repair.

To reduce the coolant temperature, run the engine for several minutes at a speed twice as high as the normal idle speed.

- After the engine cools down to normal operating temperature, again check for leakage and, with the engine running, add coolant as necessary. After starting the vehicle again, drive slowly for the first ten minutes, checking for any sign of abnormality. If no abnormality is noted during that time, resume normal driving.

**WARNING:**

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

**MEMO**

# Emission Control Systems

Your new NISSAN is equipped with an emission control system which satisfies either Federal, California or Canadian emission regulations as applied where your NISSAN was first legally registered.

The emission control system consists of (1) a crankcase emission control system, (2) an exhaust emission control system, and (3) an evaporative emission control system.

**Under the laws of some jurisdictions, the owner may be subject to penalties for modification of the emission control system after delivery.**

## CRANKCASE EMISSION CONTROL SYSTEM

This system serves to prevent the emission of blow-by gases into the atmosphere.

## EXHAUST EMISSION CONTROL SYSTEM

**Models not equipped with turbocharger;**

| | |
|---|---|
| Electronic Fuel Injection | (E.F.I.) |
| Exhaust Gas Recirculation | (E.G.R.) |
| Air Induction Valve | (A.I.V.) |
| Three-way Catalyst | (T.W.C.) |
| Closed Loop | (C.L.) |
| Electronic Concentrated engine Control System | (E.C.C.S.) |

**Models equipped with turbocharger;**

| | |
|---|---|
| Electronic Fuel Injection | (E.F.I.) |
| Exhaust Gas Recirculation | (E.G.R.) |
| Air Induction Valve | (A.I.V.) |
| Three-way Catalyst | (T.W.C.) |
| Closed Loop | (C.L.) |
| Electronic Concentrated engine Control System | (E.C.C.S.) |
| Turbocharger | (T.C.) |

### ELECTRONIC FUEL INJECTION (E.F.I.) SYSTEM

The electronic fuel injection system monitors the operating conditions of the engine through various types of sensors.

### THREE-WAY CATALYTIC CONVERTER (T.W.C.)

The three-way catalytic converter is located midway along the exhaust tube.
This converter oxidizes hydrocarbons (HC) and carbon monoxide (CO) and at the same time reduces nitrogen oxides (NOx), thus minimizing these emissions.

### EXHAUST GAS RECIRCULATION (E.G.R.) SYSTEM

This system controls the engine combustion temperature, thus reducing NOx emission.

## AIR INDUCTION VALVE (A.I.V.) SYSTEM

The A.I.V. system injects air into the exhaust manifold/tube to burn the unburned gas and reduce the content of hydrocarbons (HC) and carbon monoxide (CO).

## CLOSED LOOP (C.L.) SYSTEM

The closed-loop system is designed to maintain the air/fuel ratio at a point that allows the three-way catalyst to simultaneously minimize CO, HC, and NOx emissions.

## ELECTRONIC CONCENTRATED ENGINE CONTROL SYSTEM (E.C.C.S.)

This system monitors the operating conditions of the engine and vehicle through various types of sensors, and controls Fuel Injection, Idle Speed, Ignition Timing, E.G.R. and Fuel Pump operation to obtain better driveability, fuel economy, etc.

## TURBOCHARGER (T.C.)

This unit is installed as a part of the Air Flow System and sends the air which is pressurized by the turbine to the engine in order to increase power.

## EVAPORATIVE EMISSION CONTROL SYSTEM

The evaporative emission control system prevents evaporative gases in the fuel tank from entering the atmosphere.

## EMISSION CONTROL SYSTEM WARRANTY

Your NISSAN is covered by the following emission warranties.

**For U.S.A.**

1) Emissions 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 booklet which comes with your NISSAN. If you did not receive a warranty booklet or it becomes lost, you may obtain a replacement by writing.

- Nissan Motor Corporation in U.S.A.
  Consumer Relations Department
  P.O. Box 191
  Gardena, CA 90247
- Nissan Automobile Company
  (Canada) Ltd.,
  P.O. Box 2600,
  Streetsville Postal Station,
  Mississauga, Ontario,
  L5M 2L5

# Maintenance Schedule

In order to maintain your new NISSAN's good mechanical condition as well as its emission and engine performance, it is essential to have it (checked and) serviced by your NISSAN dealer or other competent service facility in accordance with the following Maintenance Schedule.

If maintenance service is required, or if your vehicle exhibits malfunctions, have the systems checked and tuned by an authorized NISSAN dealer or any other qualified service outlet.

## PERIODIC MAINTENANCE

The following charts show the normal maintenance schedule. **Under severe driving conditions,** additional or more frequent maintenance will be required. Refer to "Maintenance under severe driving conditions".

**The periodic maintenance schedule is repeated beyond the last mileage and period shown by returning to the first 15,000 miles (24,000 km) or 12 months.**

## Emission control system maintenance

| MAINTENANCE OPERATION | | MAINTENANCE INTERVAL | | | | | |
|---|---|---|---|---|---|---|---|
| Periodic maintenance should be performed at number of miles, kilometers of months, whichever comes first. | Miles x 1,000 | 5 | 7.5 | 15 | 30 | 45 | 60 |
| | (Kilometers x 1,000) | (8) | (12) | (24) | (48) | (72) | (96) |
| | Months | 6 | 6 | 12 | 24 | 36 | 48 |
| Drive belts | | | | | I* | | I* |
| Air cleaner filter | | | | Replace every 30,000 miles (48,000 km). | | | |
| Vapor lines | | | | | I* | | I* |
| Fuel lines (hoses, piping, connections, etc.) | | | | | I* | | I* |
| Fuel filter | | | | | See NOTE (1)*. | | |
| Engine coolant | | | | | R | | R |
| Engine oil | Except turbocharged engine | | R | Then replace every 7,500 miles (12,000 km) or 6 months. | | | |
| | Turbocharged engine | R | | Then replace every 5,000 miles (8,000 km) or 6 months. | | | |
| Engine oil filter (Use Nissan PREMIUM type or equivalent.) | Except turbocharged engine | | R | Then replace every second oil change | | | |
| | Turbocharged engine | R | | | | | |
| Spark plugs | | | | Replace every 30,000 miles (48,000 km). | | | |
| Ignition wires | | | | Inspect every 2 years* | | | |
| Idle rpm (Except turbocharged engine) | | | | I* | I* | I* | I* |
| Timing belt | | | | Replace every 60,000 miles (96,000 km). | | | |

**NOTE:**

**(1) If vehicle is operated under extremely adverse weather conditions or in areas where ambient temperatures are either extremely low or extremely high, the filters might become clogged. In such an event, replace them immediately.**

**(2) 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: A = Adjust
R = Replace
I = Inspect. Correct or replace if necessary.

| MAINTENANCE OPERATION | | MAINTENANCE INTERVAL | | | |
|---|---|---|---|---|---|
| Periodic maintenance should be performed at number of miles, kilometers or months, whichever comes first. | Miles x 1,000 | 15 | 30 | 45 | 60 |
| | (Kilometers x 1,000) | (24) | (48) | (72) | (96) |
| | Months | 12 | 24 | 36 | 48 |
| Brake lines & hoses | | I | I | I | I |
| Brake pads & discs | | Inspect every 15,000 miles (24,000 km). | | | |
| Manual and automatic transmission & differential (exc. LSD) gear oil | | Inspect every 15,000 miles (24,000 km) | | | |
| Limited-slip differential (LSD) gear oil | | I | R | I | R |
| Power steering lines & hoses | | I | I | I | I |
| Steering gear & linkage, & axle & suspension parts | | I | I | I | I |
| Steering linkage ball joints & front suspension ball joints | | | | | I |
| Locks, hinges & hood latch | | L | L | L | L |
| Front wheel bearing grease | | | I | | I |
| Exhaust system | | I | I | I | I |
| Seat belts, buckles, retractors, anchors & adjuster | | I | I | I | I |

Abbreviations: L = Lubricate
I = Inspect. Correct or replace if necessary.

## MAINTENANCE UNDER SEVERE DRIVING CONDITIONS

The maintenance intervals shown on the preceding pages are for normal operating conditions. If the vehicle is mainly operated under severe driving conditions as shown below, more frequent maintenance is required to be performed on the following items as shown in the table.

**Severe driving conditions**

A – Repeated short distance driving
B – Extensive idling
C – Driving in dusty conditions
D – Driving in extremely low or high ambient temperatures
E – Towing a trailer
F – Driving in areas using road salt or other corrosive materials
G – Driving on rough and/or muddy roads

| Driving condition | | | | | | | | Maintenance item | Maintenance operation | Maintenance interval |
|---|---|---|---|---|---|---|---|---|---|---|
| . | . | C | . | . | . | . | . | Air cleaner filter | R | More frequently |
| A | B | C | . | E | . | . | . | Engine oil & oil filter | R | Every 3,000 miles (5,000 km) or 3 months |
| A | . | C | . | E | F | G | . | Brake pads & discs | I | Every 7,500 miles (12,000 km) |
| . | . | . | . | E | . | G | . | Manual and automatic transmission & differential (exc. LSD) gear oil | R | Every 30,000 miles (48,000 km) or 24 months |
| | | | | | | | | Limited-slip differential (LSD) gear oil | R | Every 15,000 miles (24,000 km) or 12 months |
| . | . | . | . | . | . | G | . | Steering gear & linkage, and axle & suspension parts | I | Every 7,500 miles (12,000 km) or 6 months |
| . | . | C | D | . | F | G | . | Steering linkage ball joints & front suspension ball joints | I | Every 7,500 miles (12,000 km) or 6 months |
| . | . | . | . | . | F | . | . | Locks, hinges & hood latch | L | Every 7,500 miles (12,000 km) or 6 months |
| A | . | . | . | E | F | G | . | Exhaust system | I | Every 7,500 miles (12,000 km) or 6 months |

Maintenance operations: I = Inspect. Correct or replace if necessary. R = Replace
L = Lubricate

## EXPLANATION OF MAINTENANCE ITEMS

**Additional information on the following items with "*" is found in the "Do-It-Yourself" 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 (hoses, piping, connections, etc.)** 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*** Drain and flush the cooling system.

**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.

**Ignition wires** Check the ignition wires for cracking of exterior insulation and for proper fit on the distributor cap and spark plugs.

**Idle rpm (Except turbocharged engine)** Inspection and adjustment should be made with a tachometer to ensure accuracy.

**Timing belt** Replace the timing belt for driving the camshaft.

### Chassis and body maintenance

**Brake lines & hoses** Check the brake lines and hoses (including brake booster vacuum hoses, connections & check valve) for proper attachment, leaks, cracks, chafing, abrasion, deterioration, etc.

**Brake pads & discs** 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.

**Manual and automatic transmission* & differential (exc. LSD) gear oil** Visually inspect for signs of leakage. Under severe driving conditions, the oil should be replaced at the specified interval.

**Limited-slip differential (LSD) gear oil** Visually inspect for signs of leakage and replace at the specified interval. Under severe driving conditions, the oil should be replaced more frequently.

**Power steering lines & hoses** Check the lines & hoses for proper attachment, leaks, cracks, chafing, abrasion, deterioration, etc.

**Steering gear & linkage, and axle & suspension parts** 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. Under severe driving conditions, more frequent inspection should be performed.

**Locks, hinges & hood latch*** Lubricate all locks and hinges on all doors including trunk lid, back hatch and hood latch. When driving in areas using road salt or other corrosive materials, lubrication should be performed more frequently.

**Front wheel bearing grease** Check for grease leakage around grease seals, axial end play and smooth turning.

**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.

**Seat belts, buckles, retractors, anchors & adjuster** Check for damage, deterioration, proper functioning, smooth operation and loose mounting.

## GENERAL MAINTENANCE

General maintenance includes those items which should be checked during the normal day-to-day operation of the vehicle. They are essential if your vehicle is to continue operating properly. It is your responsibility to perform these procedures regularly as prescribed. As the driver, you are the only one who can ensure that your vehicle receives the proper maintenance care. Remember, you are a vital link in the maintenance chain. You can perform the checks and inspections yourself or you can have your NISSAN dealer do them for a nominal charge. If you detect any unusual sounds, vibrations or smell, be sure to check for the cause or have your NISSAN dealer or other competent service facility do it promptly. In addition, you should notify your NISSAN dealer or other competent service facility if you think that repairs are required.

When performing any checks or maintenance work, closely observe the precautions in the "Do-It-Yourself" section.

**Additional information on the following items with "*" is found in the "Do-It-Yourself" section.**

## OUTSIDE THE VEHICLE

**Tires*** Check the pressure with a gauge periodically when at a service station, 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 glass** Check for abrasions or scratches.

**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 smoothly as well as the trunk lid and back hatch. Also ensure that all latches lock securely. Lubricate if necessary. Make sure that the secondary latch keeps the hood from opening when the primary latch is released.

## 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 chimes** Make sure that all warning lights and chimes are operating properly.

**Horn** Make sure it operates 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.

**Rear view mirror** Make sure that it is secure.

**Sun visors** Make sure that they can be moved freely and are secure.

**Steering wheel*** Check that it has the specified freeplay. Be sure to check for changes in the steering condition, 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 (if so equipped) hold securely in all latched positions. Check that the latches lock securely for folding-down rear seatbacks.

**Seat belts** Check that all parts of the seat belt system e.g. buckles, anchors and retractors operate properly and smoothly 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.

**Clutch pedal*** Make sure the pedal operates smoothly and check that it has the proper free travel.

**Brakes** Check that the brake does 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.

**Parking brake*** Check that the lever has the proper travel and confirm that your vehicle is held securely on a fairly steep hill with only the parking brake applied.

**Automatic transmission "Park" mechanism** Check that the lock release button on the selector lever operates properly and smoothly. On a fairly steep hill check that your vehicle is held securely with the selector lever in the "P" position without applying any brakes.

## UNDER THE HOOD AND VEHICLE

The maintenance items listed here should be checked periodically e.g. 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 and clutch fluid levels*** Make sure that the brake and clutch fluid levels are between the "MAX" and "MIN" lines on the reservoir.

**Engine drive belts*** Make sure that no belt is frayed, worn, cracked or oily.

**Engine oil level*** Check the level on the dipstick after parking the vehicle on a level spot and turning off the engine.

**Power steering fluid level*** Check the level when the fluid is cold and the engine is turned off.

**Automatic transmission fluid level*** Check the level on the dipstick after putting the selector lever in "P" with the engine idling.

**Exhaust system** Make sure there are no loose supports, cracks or holes. If the sound of the exhaust seems unusual or there is a smell of exhaust fumes, immediately locate the trouble and correct it. (Refer to the carbon monoxide warning in the "Starting and Operation" 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 can easily accumulate. Refer to 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 gasoline fumes are evident, check for the cause and correct it immediately.

# Do-It-Yourself

## PRECAUTIONS

When performing any inspection or maintenance work on your vehicle, always exercise care to prevent accidental personal injury to yourself or damage to the vehicle. The following are general precautions which should be closely observed in carrying out any servicing operation.

- **Set the parking brake securely.**
- **Do not work on the engine while it is hot. Always turn it off and allow it to cool down.**
- **If you must work with the engine running, remove necktie and any jewelry, such as rings, watch, etc. Keep your hand, clothing, hair and tools away from moving fans and fan belts.**
- **The non-turbocharged engine model is equipped with an auxiliary fan in the engine compartment. The fan may come on as the ignition key is turned off when the coolant temperature is high. The fan may stay on for about 15 minutes after the ignition key is turned off.**
- **Never get under the vehicle while it is supported only by a jack. If it is necessary to work under the vehicle, use safety stands.**
- **Keep smoking materials, flame or sparks away from gasoline or battery.**
- **Never connect or disconnect either the battery or any transistorized component while the ignition key is on.**
- **When connecting the battery cables, pay particular attention to their polarities. Never confuse the positive cable with the negative cable.**
- **When performing any checks with the engine running in an enclosed space such as a garage, be sure there is proper ventilation.**
- **On models with the electronic fuel injection (E.F.I.) 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.**

This "Do-It-Yourself" section gives instructions regarding only those items which are relatively easy for an owner to perform.

The "Periodic Maintenance and Lubrication Schedule" is included in this booklet. However, sustained heavy duty or high speed operations or operation under adverse conditions may necessitate more frequent servicing. 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 an authorized NISSAN dealer or other competent service facility.**

Before changing oil, check for a suitable way to dispose of the old oil. Do not pour it down sewage drains, onto garden soil, or into open streams. Your zoning or environmental regulations will give you more detailed instructions on such disposal. We suggest that you have your oil changed at your authorized NISSAN dealer or other competent service facility.

## OIL AND FUEL RECOMMENDATION

### FUEL RECOMMENDATION

**All models are designed to operate on unleaded gasoline with an octane rating of at least 87 AKI (Anti-Knock Index) number (91 Research octane number).**

**Using a fuel other than that specified could adversely affect the emission control devices and systems, and could also affect the warranty coverage validity.**

**Under no circumstances should a leaded gasoline be used since this will damage the catalytic converter.**

#### Gasolines containing alcohol

Some fuel suppliers sell gasoline containing alcohol (gasohol) or other additives with or without advertising their presence. Nissan does not recommend the use of fuels where the alcohol content and the fuel compatibility for your Nissan cannot be readily determined. If in doubt, ask your service station manager.

If you use gasohol, 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 of at least 87 AKI (Anti-Knock Index) number (Research octane number 91).**
- **If an ethanol blend is used, it should contain no more than 10% ethanol (ethyl alcohol, grain alcohol).**
- **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 hard hot starting are experienced after using alcohol blend fuels, immediately change to a non-alcohol fuel.

**CAUTION:**

**Take care not to spill gasoline during refueling. Gasolines containing alcohol 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-Konck 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 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 problem. Failure to take steps to stop such knocking is misuse of the car, for which NISSAN is not responsible.**

Incorrect ignition timing, or the use of a fuel whose octane rating is too low, 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 economy benefit from the gasoline's octane rating when there is occasional light spark knock. Using gasoline with a higher octane rating than that which allows occasional spark knock is an unnecessary expense.**

## ENGINE OIL AND OIL FILTER RECOMMENDATION

**Selecting the correct oil**

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 non-turbo 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.

**Non-turbo engine oil:** Only energy conserving oils with the designation "SF" should be used. The oil may be labeled with a single designation "SF", or "SF" in combination with other categories, for example, "SF/CC".

**Turbo engine oil:** Use oils with the designation "SF/CC" or "SF/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 following 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 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 below, 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 genuine 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 filter 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.

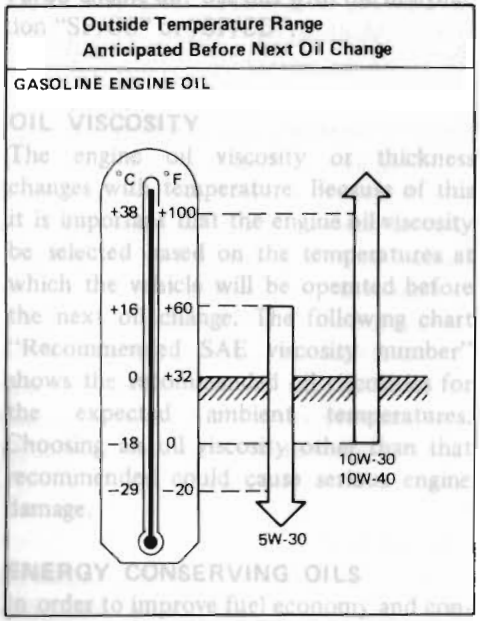
- repeated short distance driving at cold outside temperatures,
- driving in dusty conditions,
- extensive idling,
- towing a trailer.

## RECOMMENDED LUBRICANT SPECIFICATIONS

| Lubricant | | Specifications | Remarks |
|---|---|---|---|
| Engine oil | Non-Turbo engine | Genuine Nissan Motor Oil*1 or equivalent API SF (Energy Conserving Oils) | For further details, refer to "Engine oil and oil filter recommendation". |
| | Turbo engine | Genuine Nissan Motor Oil*1 or equivalent API SF/CC or SF/CD | |
| Gear oil | Manual transmission | API GL-4 | For further details, refer to the recommended SAE viscosity chart. |
| | Differential (exc. LSD) | API GL-5 | |
| | Limited-slip differential (LSD) | Only LSD gear oil: API GL-5 and SAE 80W-90*2 that approved for Nissan LSD | Contact your Nissan dealer for a list of approved oils. |
| Automatic transmission fluid | | Genuine Nissan ATF*1 or equivalent Type DEXRON® | – |
| Power steering fluid | | Type DEXRON® | |
| Multi-purpose grease | | NLGI No. 2 | Lithium soap base |
| Brake and clutch fluid | | Genuine Nissan Brake Fluid*1 or equivalent DOT 3 | US FMVSS No. 116 |
| Anti-freeze | | – | Ethylene glycol base |

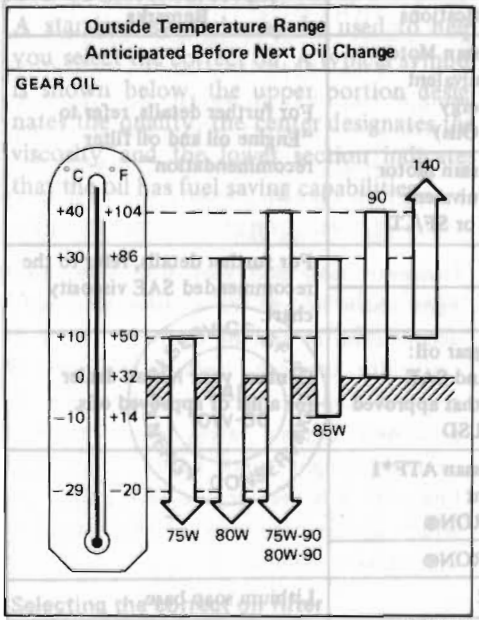
*1: Available in mainland U.S.A. through your Nissan dealer.
*2: SAE 90 is acceptable in ambient temperatures above 0°F (–18°C)

## RECOMMENDED SAE VISCOSITY NUMBER



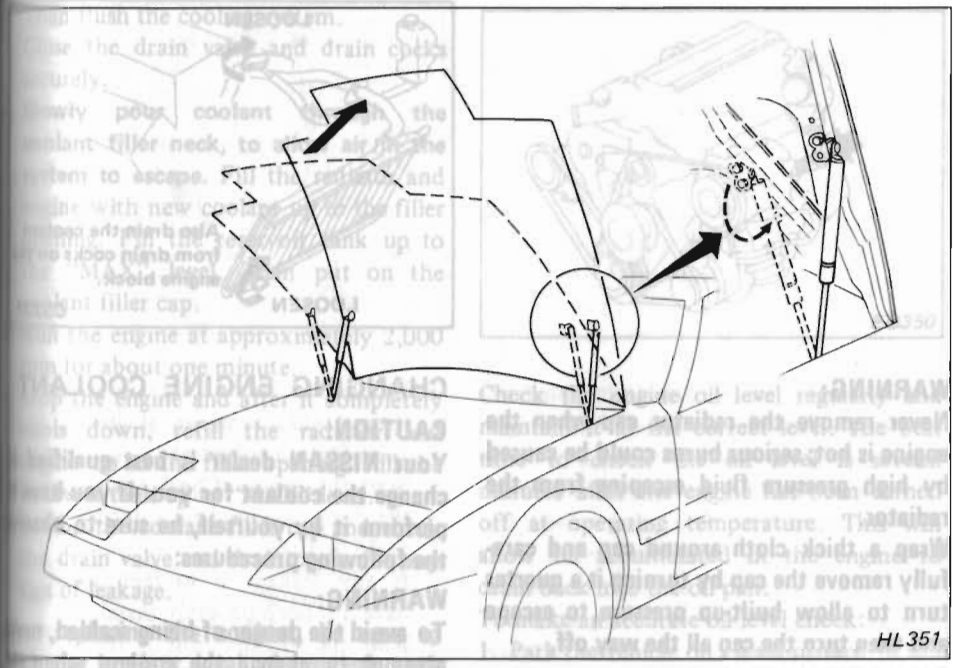

TI0002

**10W-30 is preferable if the ambient temperature is above 0°F (−18°C). 20W-40 and 20W-50 are usable if the ambient temperature is above 50°F (10°C) for all seasons.**




TI0003

**If the ambient temperature is below 104°F (40°C), the following is preferable.**
**75W-90: For transmission.**
**80W-90: For differential gear.**




The hood can be opened further than normal in order to better facilitate the maintenance of the engine. Open the hood, remove the bolts securing the stay to the hood, and install the stay in the lower hole provided.

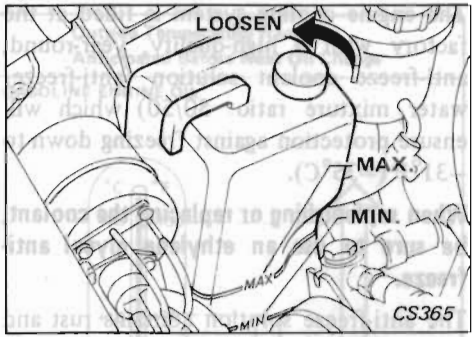
- **For safety's sake, it is recommmended that this operation be performed by two persons.**
- **Before closing the hood, be sure to reinstall the stay in the regular mounting hole. Failure to do so can damage the stay or hood.**

## ENGINE COOLING SYSTEM

The engine cooling system is filled at the factory with a high-quality, year-round, anti-freeze coolant solution (anti-freeze/water mixture ratio: 50/50) which will ensure protection against freezing down to −31°F (−35°C).

**When replenishing or replacing the coolant, be sure to use an ethylene glycol anti-freeze.**

The anti-freeze solution contains rust and corrosion inhibitors, therefore additional cooling system additives are not necessary. To ensure the proper anti-freeze/water mixture ratio, carefully read the instructions on the container label. For optimum engine operation, it is advisable to use an anti-freeze/water mixture ratio of 50/50 in your cooling system. The radiator is equipped with a 13 psi (0.9 kg/cm$^2$, 88 kPa) pressure cap. If replacement becomes necessary, be sure the new cap meets this specification.



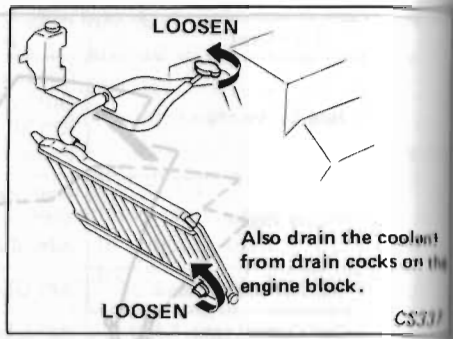

## CHECKING COOLANT LEVEL

Visually check the amount of coolant in the reservoir tank when the engine is cold. If the coolant level is below the "MIN" level, remove the reservoir tank filler cap and add coolant until the "MAX" level is reached. If the reservoir tank is empty, check the coolant level in the radiator. If there is insufficient coolant in the radiator, pour coolant into the radiator up to the cap and also pour it into the reservoir tank up to the "MAX" level. If it becomes necessary to repeatedly add coolant, your cooling system should be inspected by your NISSAN dealer or other competent service facility.

**WARNING:**

**Never remove the radiator cap when the engine is hot; serious burns could be caused by high pressure fluid escaping from the radiator.**

**Wrap a thick cloth around cap and carefully remove the cap by turning it a quarter turn to allow built-up pressure to escape and then turn the cap all the way off.**




## CHANGING ENGINE COOLANT

**CAUTION:**

**Your NISSAN dealer is best qualified to change the coolant for you. If you have to perform it by yourself, be sure to observe the following procedures:**

**WARNING:**

**To avoid the danger of being scalded, never attempt to change the coolant when the engine is hot.**

1. Move the temperature control lever to the heater or air conditioner control to the "HOT" position.
2. Open the coolant filler cap and drain valve of the radiator to drain the coolant. Open the drain cocks on the left and right sides of the engine block.

Then flush the cooling system.

Close the drain valve and drain cocks securely.

**Slowly pour coolant through the coolant filler neck, to allow air in the system to escape.** Fill the radiator and engine with new coolant up to the filler opening. Fill the reservoir tank up to the "MAX" level. Then put on the coolant filler cap.

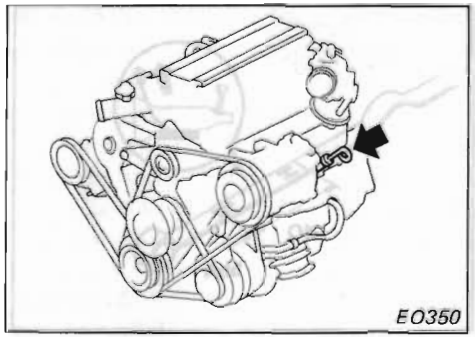
Run the engine at approximately 2,000 rpm for about one minute.

Stop the engine and after it completely cools down, refill the radiator and engine up to the filler opening. Fill the reservoir tank up to "MAX" level.

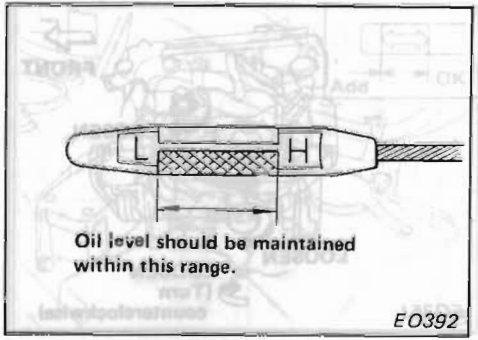
Put on the coolant filler cap and check the drain valve and drain cocks for any sign of leakage.

**After replacing the coolant, be sure to check the coolant level of reservoir tank some time after the engine has cooled. Add coolant if necessary.**

## CHECKING ENGINE OIL LEVEL



EO350




Oil level should be maintained within this range.

EO392

Check the engine oil level regularly and maintain it at the correct level. The best time to check the oil level is several minutes after the engine has been turned off at operating temperature. This will allow oil accumulated in the engine to drain back into the oil pan.

To make an accurate oil level check:

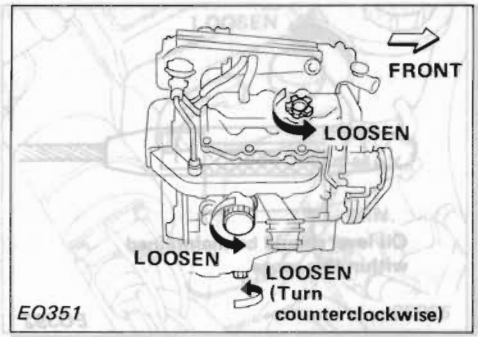
1. Park the vehicle on a level surface.
2. Turn off engine.
3. Remove the dipstick and wipe it clean.
4. Reinsert it all the way into the tube for an accurate reading.
5. Remove the dipstick and check the oil level. It should be between the "H" and "L" marks.
6. After taking the reading, reinsert the dipstick securely.

If the oil level is at or below the "L" mark, add sufficient oil into the oil filler, located on the right side rocker cover, to raise the level to the "H" mark. Do not overfill.

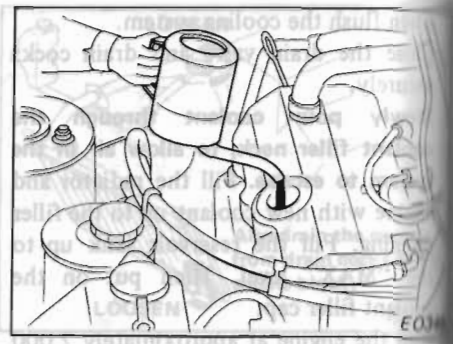
It is normal to add some oil between oil changes or during the break-in period, depending on the severity of operating conditions.

**Oil level should be checked regularly. Operating with insufficient amount of oil can damage the engine, and such demage is not covered by warranty.**

## CHANGING ENGINE OIL AND OIL FILTER





**For the engine oil and oil filter, refer to the information described under the heading "Engine oil and oil filter recommendation".**

The engine oil and oil filter should be replaced periodically.

1. Park the vehicle on a level surface and set the parking brake.
2. Warm up the engine until it reaches operating temperature, and then turn it off.
3. Place a drain pan under the drain plug of the oil pan.
4. Remove the oil filler cap.
5. Remove the drain plug with a wrench and completely drain the oil.

**Be careful not to burn yourself, as the engine oil may be hot.**

6. Clean and re-install the drain plug with washer. Tighten the plug with a wrench, but do not use excessive force.

It is recommended that the oil filter be replaced at the same time.

a. Loosen the oil filter with an oil filter wrench. (A special cap-type wrench will assist with oil filter removal. This tool can be purchased from your NISSAN dealer.) Then remove the oil filter by turning it by hand.
b. Wipe the engine oil filter mounting surface with a clean rag.
c. Smear a little engine oil on the rubber gasket of the new filter.
d. Screw in the oil filter until a slight resistance is felt, then tighten an additional 2/3 turn.

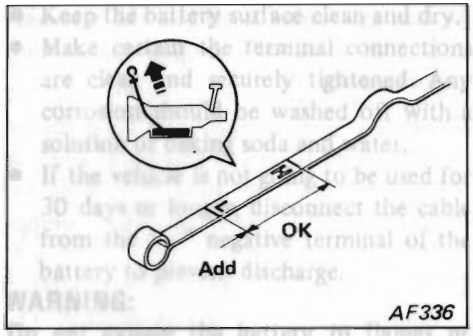
7. Refill oil and install the cap securely. Refer to "Capacity at oil change" in the "Gas Station Information".
8. Start the engine. Check the area around the drain plug and oil filter for any signs of oil leakage.
   If any leakage is evident, these parts have not been properly installed.
9. Run the engine until it reaches operating temperature. Then turn it off and wait several minutes. Check the oil level. If necessary, add engine oil.

## CHECKING AUTOMATIC TRANSMISSION FLUID LEVEL


**WARNING:**

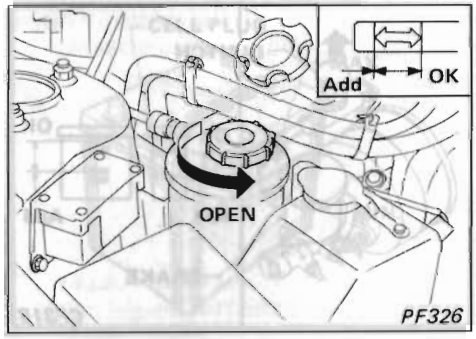
**When engine is running, keep hands and clothing away from any moving parts such as fan and drive belt.**

1. Drive the vehicle several miles (kilometers) to bring the transmission up to normal operating temperature. [Approximately 158°F (70°C)]
2. Park the vehicle on a level surface.
3. Set the parking brake.
4. Place the selector lever in the park "P" position and leave the engine running.
5. Remove the dipstick and wipe it clean.
6. Reinsert the dipstick all the way into the dipstick pipe.
7. Remove the dipstick and note reading.



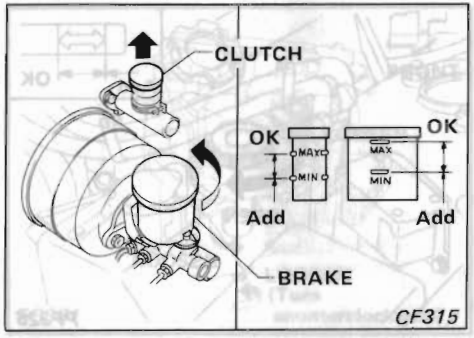

If the fluid level is at or below the "L" mark, add sufficient fluid through the dipstick pipe to raise the level to the "H" mark. Do not overfill above "H" mark. See the "Recommended Lubricants" for fluid.

## CHECKING ZF POWER STEERING FLUID LEVEL




With engine off, check the fluid level in reservoir by observing the dipstick when the fluid is cold. Add fluid as necessary to bring the level into proper range on dipstick.

## CHECKING BRAKE AND CLUTCH FLUID LEVELS




Check the fluid level in each reservoir. It should be between the Max. and Min. lines on the reservoir. If it is below the Min. line or the brake warning light comes on, add brake fluid DOT 3 up to the Max. line.

**Use only new brake fluid. Use of an old or inferior brake fluid may endanger the functioning of the brake and clutch systems.**

- **Do not allow the brake fluid to come into contact with painted surfaces. This may damage the paint.**
- **Before opening the reservoir cap, wipe it clean with a rag.**

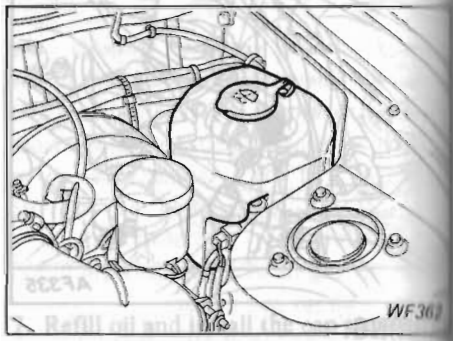
If brake fluid must be added frequently, the system should be thoroughly checked by your NISSAN dealer or other competent service facility.

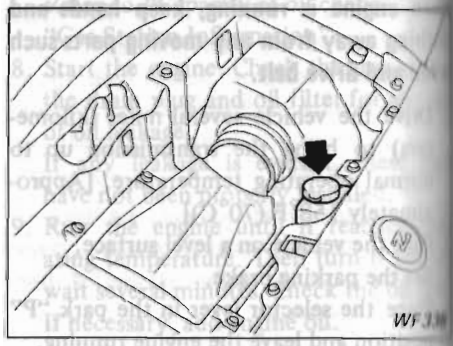


**WARNING:**

**With service stations continuing to convert to self-service operations, many motorists check fluid levels in their vehicles themselves and add fluids when necessary. Adding the wrong type brake fluid or allowing the braking system to become contaminated can damage the system and affect the vehicle's stopping ability.**

## CHECKING WINDSHIELD/REAR WINDOW/HEADLIGHT CLEANER WASHER FLUID LEVEL



Check fluid level in the washer reservoir and add fluid if necessary.

Add a washer solvent to the water as clear water is usually not adequate for cleaning. In the winter season, add a windshield washer anti-freeze and follow the manufacturer's instructions for the correct amount to be used.

On models equipped with a rear window washer, the washer fluid reservoir is designed for use with both the windshield washer and rear window washer.

**CAUTION:**

**Do not substitute radiator anti-freeze for windshield washer solution. This may result in damage to the paint.**

## CHECKING BATTERY FLUID LEVEL AND CONDITION

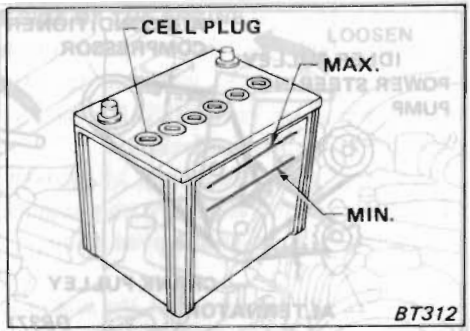
- Keep the battery surface clean and dry.
- Make certain the terminal connections are clean and securely tightened. Any corrosion should be washed off with a solution of baking soda and water.
- If the vehicle is not going to be used for 30 days or longer, disconnect the cable from the "–" negative terminal of the battery 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 come in contact with skin, eyes, fabrics, or painted surfaces. After touching a battery or battery cap, do not touch or rub your eyes until you have thoroughly washed your hands. If the acid contacts the eyes, skin or clothing, immediately flush with water for 15 minutes and seek medical attention.**

### JUMP STARTING

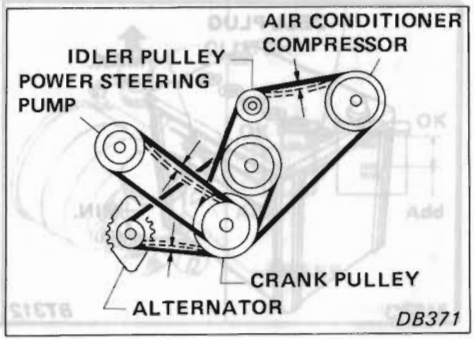
If jump starting is necessary, follow the procedure and precautions under the heading "Jump Starting with Booster Battery". If the engine still does not start, the battery may have reached the end of its useful life. Contact an authorized NISSAN dealer or other competent service facility.




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.

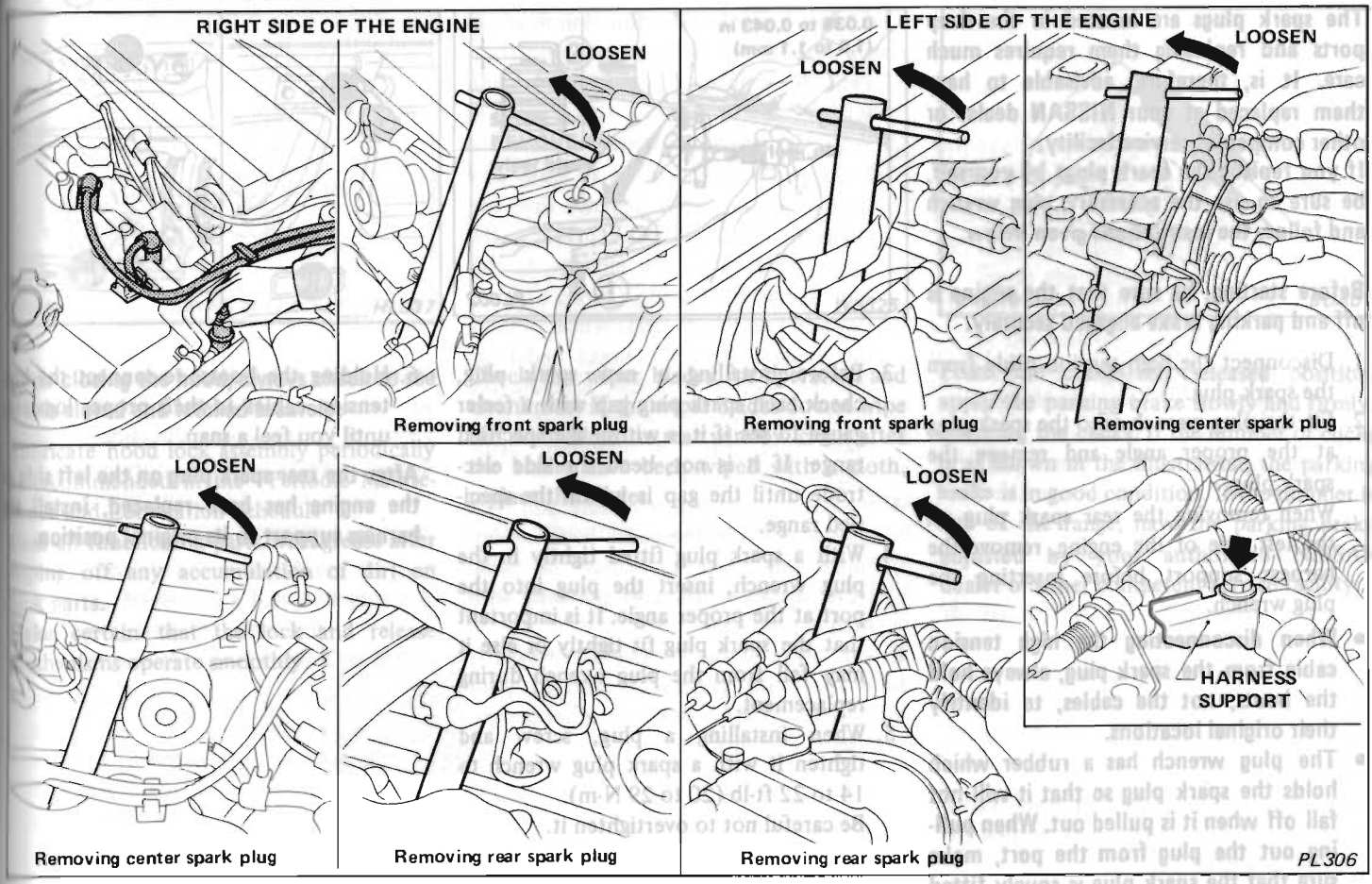
## CHECKING DRIVE BELTS




**Be sure the engine is off and the transmission is in "Neutral". Engage the parking brake securely.**

1. Visually inspect each belt for signs of unusual wear, cuts or fraying. If a belt is in poor condition, have it replaced by your NISSAN dealer or other competent service facility.
2. Check the belt tension by applying moderate thumb pressure midway between the pulleys. The belt should deflect within the specified amount as shown in the "SPECIFICATIONS" section. If the belt tension is not proper, have it adjusted at your NISSAN dealer or other competent service facility.

# REPLACING SPARK PLUG

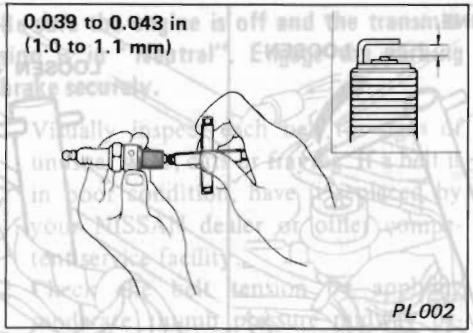


**The spark plugs are located in the deep ports and replacing them requires much care. It is, therefore, advisable to have them replaced at your NISSAN dealer or other competent service facility.**
**If you replace the spark plugs by yourself, be sure to use the accessory plug wrench and follow the instructions given below.**

**Before starting, be sure that the engine is off and parking brake engaged securely.**

1. Disconnect the high tension cable from the spark plug.
2. Fit the plug wrench onto the spark plug at the proper angle and remove the spark plug.
   When removing the rear spark plug on the left side of the engine, remove the harness support before inserting the plug wrench.

- **When disconnecting the high tension cable from the spark plug, always hold the boots, not the cables, to identify their original locations.**
- **The plug wrench has a rubber which holds the spark plug so that it will not fall off when it is pulled out. When pulling out the plug from the port, make sure that the spark plug is snugly fitted in the plug wrench.**

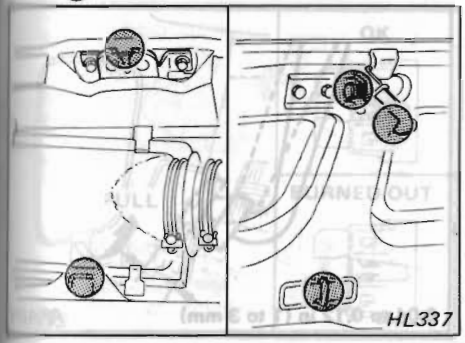



3. Before installing a new spark plug, check each spark plug gap with a feeler gauge to see if it is within the specified range. If it is not, bend the side electrode until the gap is within the specified range.
4. With a spark plug fitted tightly in the plug wrench, insert the plug into the port at the proper angle. It is important that the spark plug fit tightly or else it may fall from the plug wrench during replacement.
5. When installing a plug, screw and tighten it with a spark plug wrench to 14 to 22 ft-lb (20 to 29 N·m).
   Be careful not to overtighten it.
6. Holding the boots, re-connect the high tension cables to their proper locations until you feel a snap.

**After the rear spark plug on the left side of the engine has been replaced, install the harness support to its original position.**

## CHECKING HOOD LOCK

LUBRICATION POINT



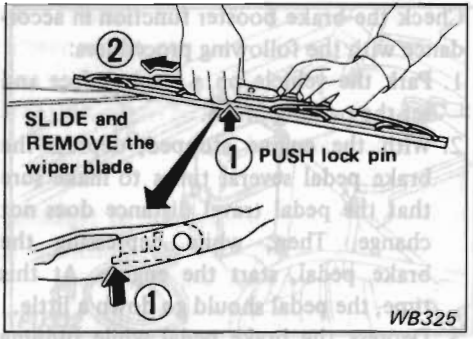

**After closing the hood, always check to see if it is closed and latched securely.**

Lubricate hood lock assembly periodically as recommended in the "Periodic Maintenance and Lubrication Schedule".

Coat all functioning parts with grease after wiping off any accumulation of dirt on lock parts.

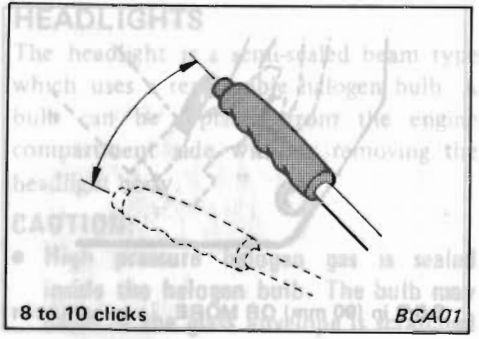
Make certain that the lock and release mechanisms operate smoothly.

## CHECKING WIPER BLADES



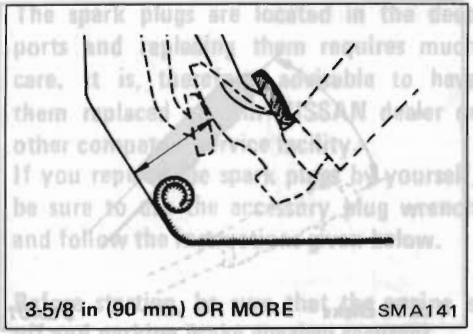

Check the wiper blades for operation and cleanliness. If the wiper blades do not wipe the windshield or rear window clean after the blades have been wiped with a cloth, replace the blades.

## CHECKING PARKING BRAKE CONDITION




From the completely released position, apply the parking brake slowly and firmly, counting the clicks. If the number of clicks is as shown in the illustration, the parking brake is in good condition. If the number is out of the range, have the parking brake adjusted by your authorized NISSAN dealer or other competent service facility.

## CHECKING BRAKE PEDAL DISTANCE




When the brake pedal is fully depressed [depressing force of 110 lb (490 N)] with the engine running, the distance between the upper surface of the pedal and the melt sheet should be as shown in the illustration.

When this distance approaches the prescribed limit value, have the brake checked by your authorized NISSAN dealer or other competent service facility.

If the distance should abruptly be shortened, there is something wrong with the brake system. Stop driving your vehicle immediately.

**Your vehicle is equipped with power assisted brakes. Braking effort with engine off will require greater pedal force.**

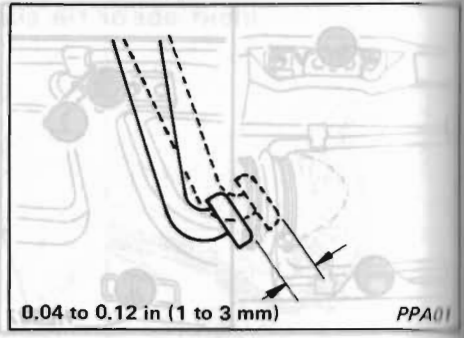
## CHECKING BRAKE BOOSTER FUNCTION

Check the brake booster function in accordance with the following procedures:

1. Park the vehicle on a level surface and set the parking brake.
2. With the engine stopped, depress the brake pedal several times to make sure that the pedal travel distance does not change. Then, while depressing the brake pedal, start the engine. At this time, the pedal should go down a little.
3. Depress the brake pedal while running the engine. With the brake pedal depressed, stop the engine. Keeping the pedal depressed for about 30 seconds, make sure that the depressed pedal height does not change.
4. Run the engine for a minute and then stop it. Depress the brake pedal several times and make sure that the pedal travel distance decreases gradually with each depression.

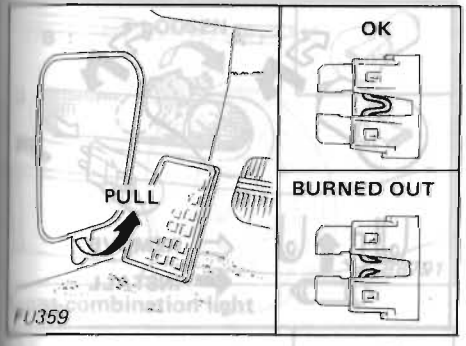
If the brake does not operate properly, have the brake system checked by your authorized NISSAN dealer or other competent service facility.

## CHECKING CLUTCH PEDAL FREE TRAVEL




The clutch pedal should have the amount of free travel shown in the illustration. Check it by depressing the pedal by hand. If free travel is too little or too much, have the clutch checked by your NISSAN dealer or other competent service facility.

## CHECKING FUSES



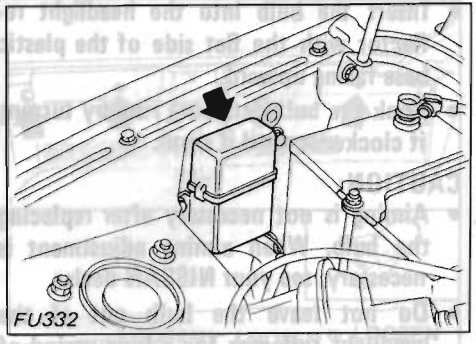

Should an electrical failure occur, check for a burned-out fuse. Fuses are located as shown in the illustration.

1. Remove the fuse and check. If it is burned out, replace it.

**Before replacing any fuse, be sure to check the fuse specifications listed on the fuse box cover. Never use a fuse of higher amperage rating than that specified.**
**Snap fuses into their fuse holders securely.**

2. Should a replacement fuse burn out again, have the electrical system checked and repaired by your authorized NISSAN dealer or other competent service facility.

## CHECKING FUSIBLE LINKS




When electrical failure has occurred and fuses are in good order, check the condition of the fusible links. Fusible links are located as shown in the illustration. Should an overload occur, these fusible links melt, preventing damage to the wiring harness, electronic fuel injection system and electrical equipment. Replace a fusible link only with a genuine NISSAN part or one of an equal rating.

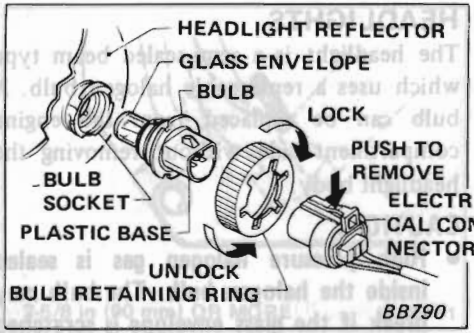
## BULB REPLACEMENT

### HEADLIGHTS

The headlight is a semi-sealed beam type which uses a replaceable halogen bulb. A bulb can be replaced from the engine compartment side without removing the headlight body.

**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 battery cable.
2. Turn the bulb retaining ring counterclockwise until it is free from the headlight reflector, and then remove it.
3. Disconnect the electrical connector from the rear end of the bulb.
4. Remove the headlight bulb carefully. Do not shake or rotate the bulb when removing it.

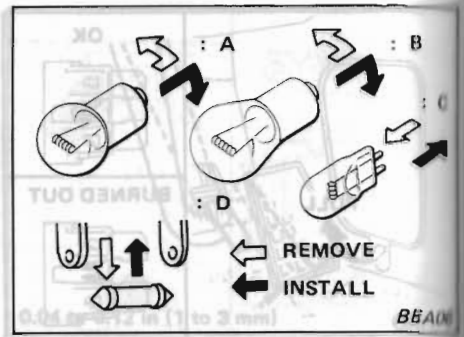
### Installing the headlight bulb

Install the new bulb in the reverse order of removal.

- **Push the electrical connector into the plastic base of the bulb securely until it snaps and locks. Do not touch the bulb.**
- **Insert the bulb into the headlight reflector with the flat side of the plastic base facing upward.**
- **Lock the bulb retaining ring by turning it clockwise until it stops.**

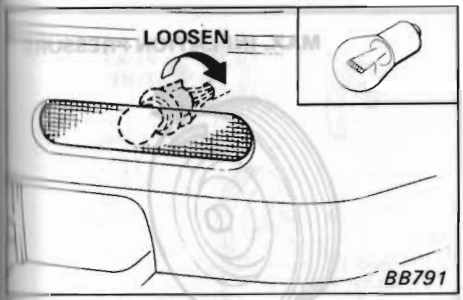
**CAUTION:**

- **Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, see your NISSAN dealer.**
- **Do not leave the bulb out of the headlight reflector for a long period of time as dust, moisture, smoke, etc. may enter the headlight body and affect the performance of the headlight. Thus, the headlight bulb should not be removed from the headlight reflector until just before a replacement bulb is to be installed.**

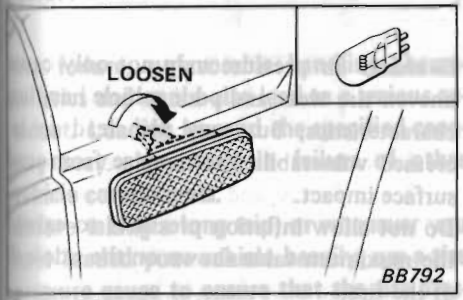



## OTHER LIGHTS

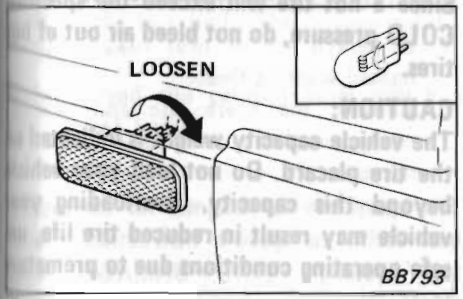
All other lights are either type A, B, C or D. When replacing a bulb, first remove the lens and/or cover.



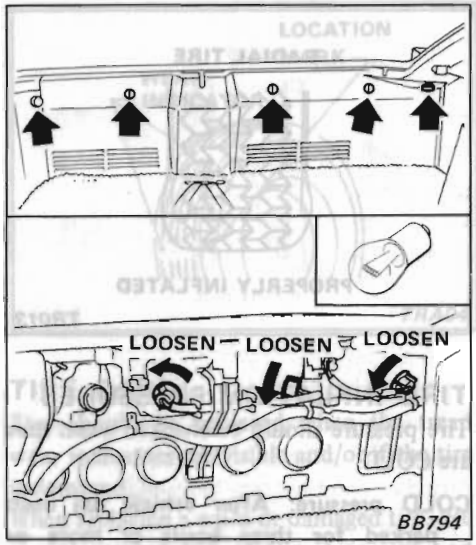

Front combination light



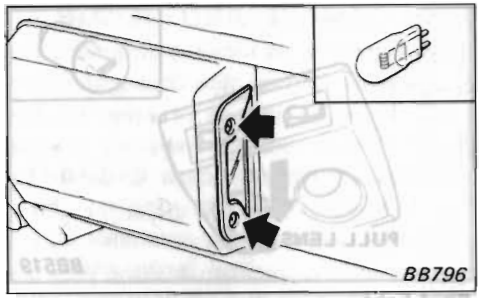

Front side marker light



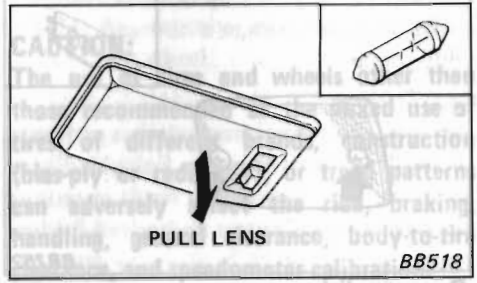

Rear side marker light



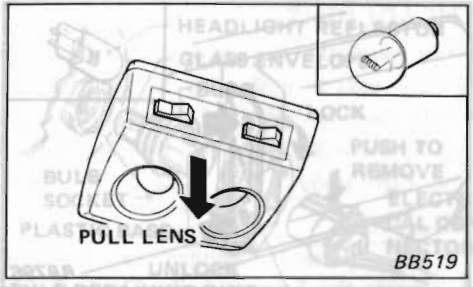

Rear combination light



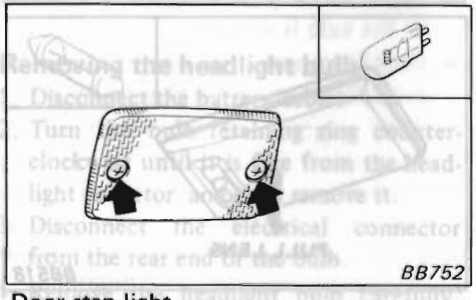

License plate light



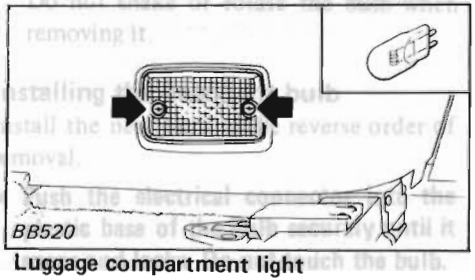

Interior light



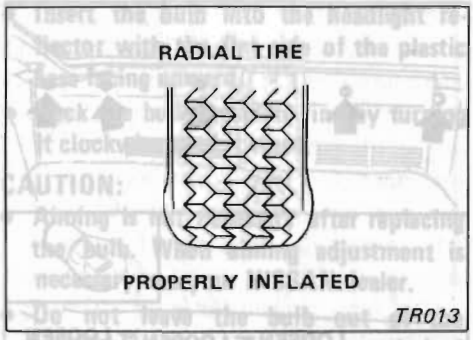

Spot light




Door step light




Luggage compartment light



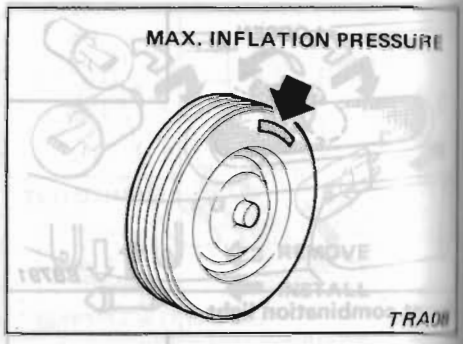

## TIRE INFLATION PRESSURES

Tire pressure should be checked when tires are COLD.

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

Proper tire pressures are shown on the tire placard affixed to the center console box lid.

If tires are not properly inflated, tire life and vehicle performance may be adversely affected. Insufficient air pressure may cause tires to become overheated, and may result in uneven wear, poor vehicle handling characteristics and excessive fuel consumption.



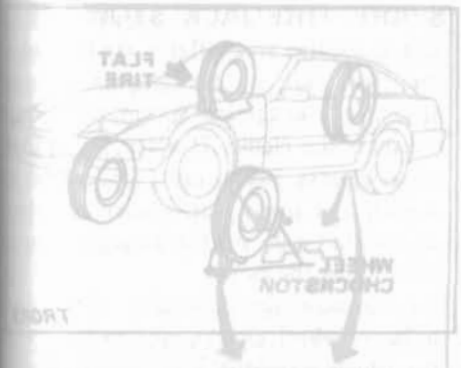

Excessive air pressure may not only cause uneven tire wear and poor vehicle handling characteristics, but may also lead to increased vulnerability to damage from road surface impact.

Do not allow inflation pressures to exceed the maximum value shown on the side wall of the tire.

**Since a hot tire will exceed the specified COLD pressure, do not bleed air out of hot tires.**

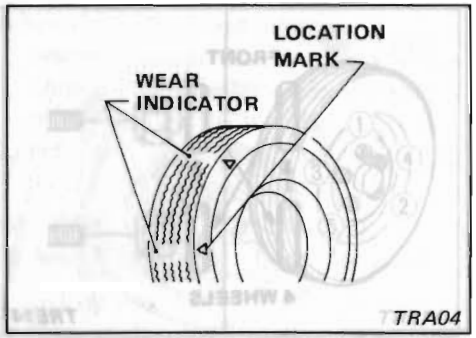
**CAUTION:**

**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, 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.




## TIRE CARE

Tire should be replaced when the tread wear indicators are visible and/or if the tire is damaged.

When replacing a worn or damaged tire, use a replacement tire of the same size and load carrying capacity as that with which the vehicle was equipped when manufactured. The use of different size and/or load capacity tires will not only shorten tire service life but may also result in a serious accident.

**CAUTION:**

**The use of tires and wheels other than those recommended or the mixed use of tires of different brands, construction (bias-ply or radial-ply), or tread patterns can adversely affect the ride, braking, handling, ground clearance, body-to-tire clearance, and speedometer calibration.**

**Some of these effects may lead to accidents and result in serious personal injury.**

## TIRE DAMAGE AND REPAIR

Tires should be periodically inspected for cracking, bulging or objects caught in the tread. If cracks, bulging or deep cuts are found, the tire should be replaced. If a tire is suspected of being unsafe, it should be taken to your NISSAN dealer or other competent service facility.

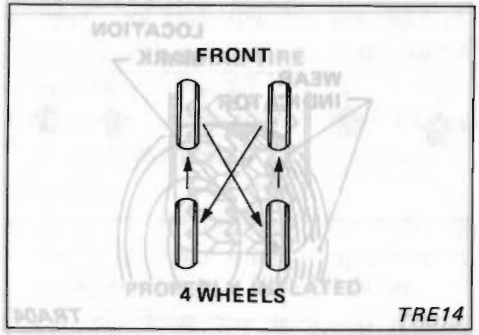
If a blowout or sudden loss of pressure occurs while driving, do not travel further than is necessary to stop safely. Driving on a flat tire can damage a tire and rim beyond repair.

**CAUTION:**

**Do not, under any circumstances, attempt to repair a Space Saver or Foldable Spare Tire. Improper service can result in serious personal injury. Contact authorized Bridgestone, authorized Yokohama or NISSAN dealers if service is required.**




Luggage compartment light



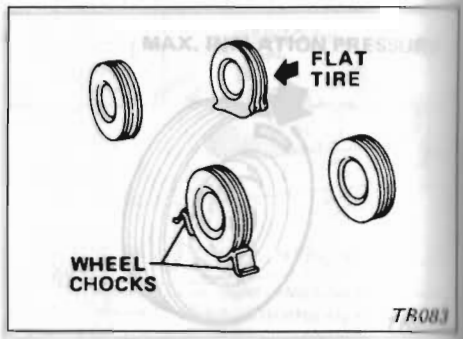

## TIRE ROTATION

NISSAN recommends that tires be rotated every 7,500 miles (12,000 km).

Periodic rotation of tires will result in longer tire life. Tires should be rotated as recommended in the illustrated rotation system.

**CAUTION:**

- **All the tires should be of the same type.**
- **Bias, bias belted and radial-ply tires must not be mixed under any circumstances.**
- **Do not include the Space Saver Spare tire when rotating tires.**




## CHANGING TIRES

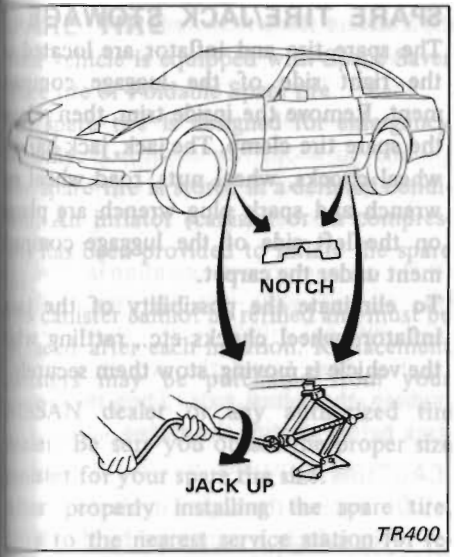
When changing tires, carefully take the following steps.

1. Park on a level surface, set parking brake firmly and turn off engine. Set manual transmission in reverse (automatic transmission in "P").

**Never change tires when the vehicle is on a slope as this is dangerous.**

2. If parked on or near road, activate hazard warning flasher.
3. Remove the spare tire and jacking equipment from the stowage compartment.

**The spare tire is designed for emergency use. Refer to specific instructions under the heading "TIRE DAMAGE AND REPAIR".**

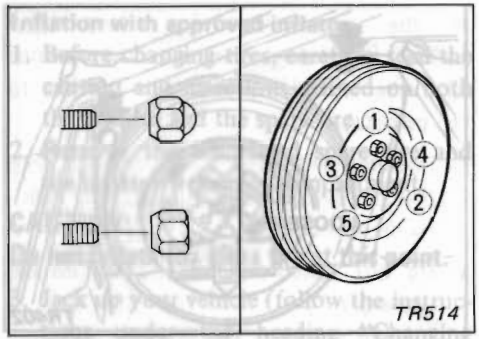



Place wheel chocks at both the front and back of the wheel diagonally opposite the jack position.

Place the jack under the jack-up point indicated.

**...fully read the caution label attached to the jack body.**

Using the flat end of the wheel nut wrench, remove the wheel cover and loosen the wheel nuts one or two turns each by turning them counterclockwise.




- **Do not remove wheel cover with bare hands.**
- **Do not remove the wheel nut until the wheel is raised off the ground.**

7. Raise the vehicle slowly until the wheel clears the ground. Remove the wheel nuts and replace the wheel.

**WARNING:**

**Never get under the vehicle while it is supported only by the jack.**

**Do not start or run engine while vehicle is on the jack.**

- **On models equipped with the limited slip differential carrier, never run the engine with one rear wheel off the ground. It may cause the vehicle to move.**

8. Reinstall the wheel nuts as shown in the illustration and tighten them in the sequence indicated as much as you can by hand.

- **If NISSAN aluminum wheels are installed, use only wheel nuts designed for your aluminum wheels.**
- **Pull the wheel back to properly align the nuts with the bolt holes, then hand-tighten the aluminum wheel nuts until they fit securely into holes on the aluminum wheel.**

9. Then slightly tighten the wheel nuts alternately and evenly until there is no wheel play.
10. Lower the vehicle slowly until the wheel touches the ground, and then tighten the wheel nuts to the specified torque in a criss-cross fashion.

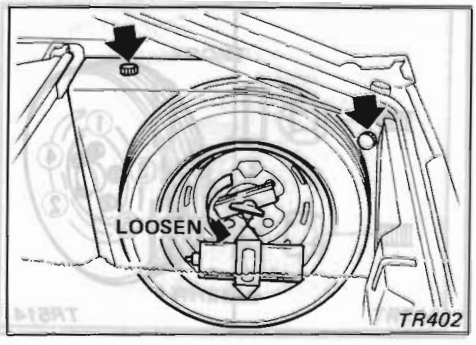
- **Use the NISSAN wheel nut wrench to tighten the nuts.**
- **As soon as possible after changing wheels, have a technician tighten the wheel nuts to the specified torque shown in the Service Data with a torque wrench.**

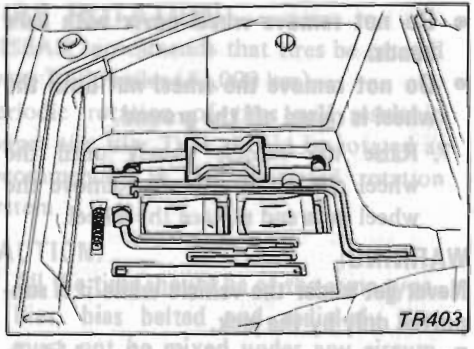
- **Be sure to check the wheel nuts for tightness, after the aluminum wheel has been run for the first 600 miles (1,000 km) (also in cases of repairing flat tires, tire rotation, etc.). Retighten if necessary.**

11. Adjust the tire pressure to the specified value indicated on the tire placard. Remove the wheel chocks, and replace the tools and spare tire.

**CAUTION:**

**Always make sure that the spare tire and jacking equipment are properly secured after use. Such items can become dangerous projectiles in a serious accident.**




## SPARE TIRE/JACK STOWAGE

The spare tire and inflator are located on the right side of the luggage compartment. Remove the inside trim, then release the spare tire clamp. The jack, jack handle, wheel chocks, wheel nuts, road wheel and wrench and spark plug wrench are placed on the left side of the luggage compartment under the carpet.

To eliminate the possibility of the jack, inflator, wheel chocks etc., rattling while the vehicle is moving, stow them securely.

## SPARE TIRE

Your vehicle is equipped with Space Saver spare tire or Foldable Spare tire.

The spare tire is designed for emergency use only.

The spare tire is stored in a deflated condition. An inflator (canister or air compressor) has been provided to inflate the spare tire.

The canister cannot be refilled and must be replaced after each inflation. Replacement canisters may be purchased from your NISSAN dealer or any authorized tire dealer. Be sure you obtain the proper size canister for your spare tire size.

After properly installing the spare tire, drive to the nearest service station for repair or replacement of the conventional tire. When the conventional tire has been reinstalled, the spare tire should be deflated and stowed for future use.

**CAUTION:**

**The spare tire is designed for emergency use and short distance driving only. Do not exceed 50 MPH (80 km/h) with the spare tire installed.**

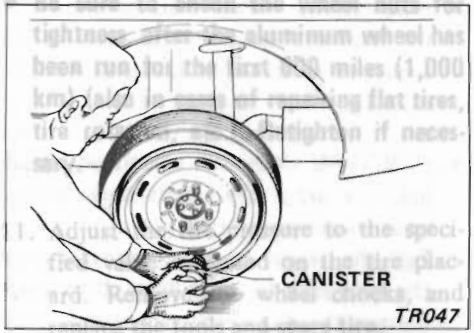
**Inflation with approved inflator**

1. Before changing tires, carefully read the caution and directions affixed on both the inflator and the spare tire.
2. Remove the uninflated spare tire and the inflator from rear compartment.

**CAUTION:**

**Do not inflate the spare tire at this point.**

3. Jack up your vehicle (follow the instructions under the heading "Changing Tires") and remove the damaged tire. Then mount the uninflated spare tire to the axle. (Tighten wheel nuts slightly.)




### USING CANISTER

1) With tire valve at 6 o'clock position, inflate the spare tire with the canister. Place tire inflator on the tire inflation valve and push squarely until gas can be heard entering the tire. The spare tire may be inflated in about 3 minutes.

**CAUTION:**

**The metal parts of the canister become extremely cold during inflation and can cause frost bite. Avoid contact with the metal, and use a glove or other means of protection.**

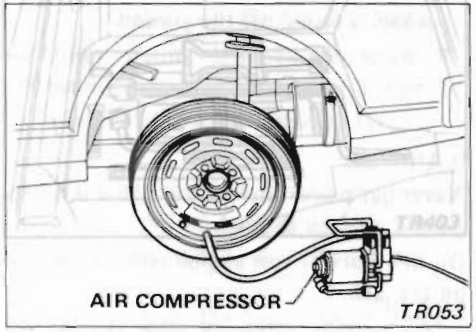
2) To ensure complete emptying of the canister, hold the canister on tire valve for one minute after sound of gas stops.

**If the temperature is below 10°F (–12.2°C), the canister must be warmed with the windshield defroster for five to ten minutes.**

3) Lower the vehicle in accordance with the jacking instructions and fully tighten the wheel nuts.

**a) Do not install the wheel cover on the spare tire.**

**b) In cold weather, the tire may not look fully inflated. Therefore, drive slowly for the first mile; as the tire temperature rises the pressure will increase.**




### USING AIR COMPRESSOR

1) Remove the valve cap from the spare tire and securely connect the air compressor hose in its place.

2) Connect the power cord plug of the air compressor to the cigarette lighter socket. The spare tire may be inflated to the recommended pressure 28 psi (200 kPa) in about 5 minutes. Adjust the tire pressure per the tire placard with tire pressure gauge.

**If the air compressor operation is slow, run the engine while the air compressor is operating.**

**In this case, lower the vehicle and fully tighten the wheel nuts. Then remove the jack before starting the engine.**

**CAUTION:**

**a) Do not run the engine in closed space or if the vehicle is supported by the jack.**

**b) Do not touch the air compressor with the bare hands while it is operating for it may become quite hot.**

3) Disconnect the power cord plug from socket.

Check the tire for air leakage, and then securely install and tighten the valve cap.

4) Lower the vehicle in accordance with the jacking instructions and fully tighten the wheel nuts.

**Do not install the wheel cover on the spare tire.**

**Deflation**

1. Deflate the tire by depressing the button on the tire inflation valve or by removing the valve core.

**CAUTION:**

**To avoid personal injury, do not inhale the gas which is vented while the tire is deflating.**

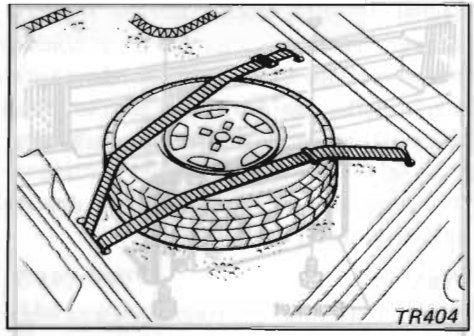
2. Flatten tire. The spare tire folds gradually while deflating.
3. Store tire in rear compartment.

**Repair**

Repairing, mounting, or dismounting of the spare tire on the wheel is not recommended under any circumstance.

Improper service can result in serious personal injury.

Contact agents of tire manufacturer, their dealers or NISSAN dealers if service is required.




**CAUTION:**

**When stowing a tire replaced by a spare, the tire should be placed in the baggage area and secured with baggage straps, as illustrated. This will reduce the likelihood of the tire being thrown about and injuring occupants in an accident.**

## CHANGING WHEELS

When selecting new tires or wheels, pick only those types and sizes recommended in "Wheels and Tires" under the heading "Specifications". The wheels should be equal in load limit, diameter, width, offset, and mounting configuration to those recommended. A wheel of the wrong size may adversely affect wheel and bearing life, braking and stopping ability, handling characteristics, ground clearance, body-to-tire clearance, snow chain clearance, speedometer calibration, headlight aim and bumper height.

- **Do not install a deformed wheel even if it has been repaired. Such wheels could have structural damage and could fail without warning.**
- **Do not use an inner tube on a tubeless tire wheel.**
- **Avoid installing a used wheel. If the wheel has been used under severe operating conditions, its life may have been significantly shortened and could fail without warning.**

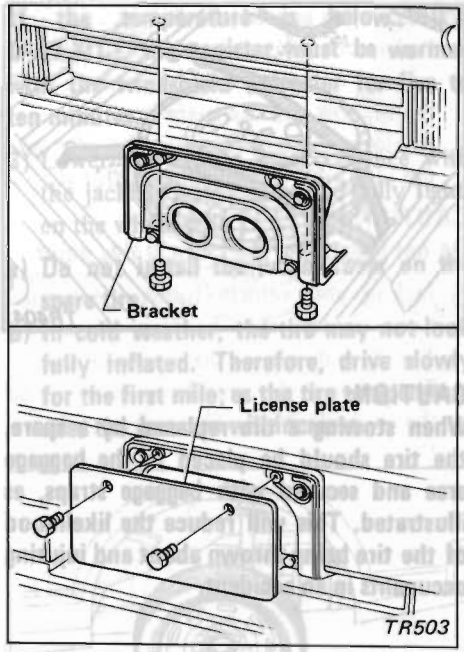
## CARE OF ALUMINUM WHEELS

Wash the wheels while washing the rest of the vehicle to maintain their appearance. Clean the inner side of the wheels each time one is changed or the underside of the vehicle is washed.

**CAUTION:**

- **Do not use abrasive cleaners when washing the wheels.**
- **Inspect wheel rims regularly for dents or corrosion, which may cause loss of pressure, damage the tire bead, or sudden wheel failure.**
- **Consider the application of vehicle wax to protect against the road salt used during winter.**
- **The wheel nut tightening torque is 72 to 87 ft-lb (98 to 118 N·m).**

## INSTALLING FRONT LICENSE PLATE




Use the following steps to mount the license plate:

1. Mount the bracket using two screws. The bracket and screws are stored in the vehicle.
2. Mount the license plate using proper screws which are 0.24 in (6 mm) in diameter, 0.039 in (1.0 mm) in pitch and 0.79 in (20 mm) or more in length.

MEMO

## Appearance And Interior Care

### Environmental factors affecting the rate of corrosion:



### Washing

# Appearance And Interior Care

## CLEANING EXTERIOR AND INTERIOR


### 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.

**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 endangered by 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 paintwork and keeps the finish. After waxing, polishing is recommended to remove built-up residual and avoid a "Weathered" appearance.

Only apply black wax or black shoe polish to the black urethane or polypropylene bumper.

### 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 accessories store.

### Underbody

In areas where road salt is used in winter, it is necessary to clean the underbody regularly in order to prevent dirt and salt from building up and causing corrosion on the underbody and suspension. 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 be coated with a film after the vehicle is parked in the hot sun. Glass cleaner and a soft cloth will easily remove this film.

When cleaning the inside of the window, **do not use any sharp-edged tools or abrasive cleaners or chlorine-based disinfectant cleaners.** These may damage the 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 any 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 contains chemicals that stain or bleach the seat material.

- **Never use benzine, thinner or any similar material.**
- The 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.

### 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.

## PROTECTING AGAINST CORROSION

### 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

The accumulation of sand, dirt and water on the underside of the body will accelerate corrosion. Floor sections which have snow and ice trapped under the floor matting will not dry.

#### 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.

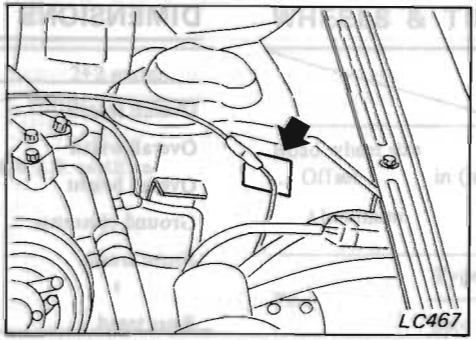
# Appearance

**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 and tailgate open to avoid water accumulation.
- Check the underbody. If any sand, dirt or salt has accumulated, wash it off with water as soon as possible.
- NEVER remove dirt, sand or other debris from the passenger compartment by washing 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.

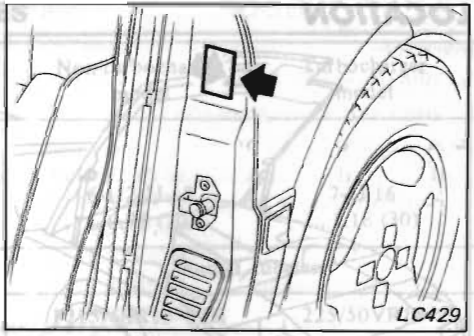
# Specifications

## VEHICLE IDENTIFICATION PLATE LOCATION



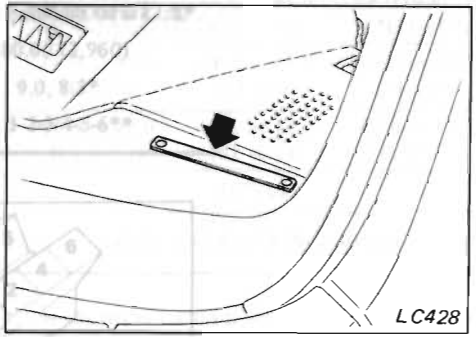

The vehicle identification plate is located as shown in the illustration.

## F.M.V.S.S. CERTIFICATION LABEL LOCATION



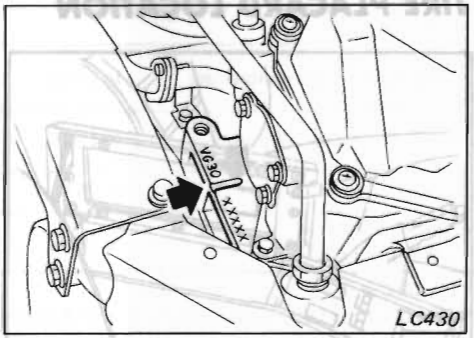

The F.M.V.S.S. certification label is affixed as shown in the illustration.

## VEHICLE IDENTIFICATION NUMBER PLATE LOCATION



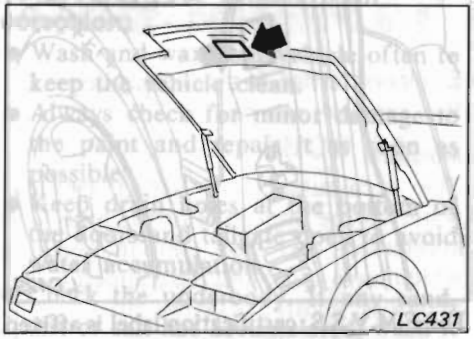

The vehicle identification number plate is attached as shown in the illustration.

## ENGINE SERIAL NUMBER LOCATION



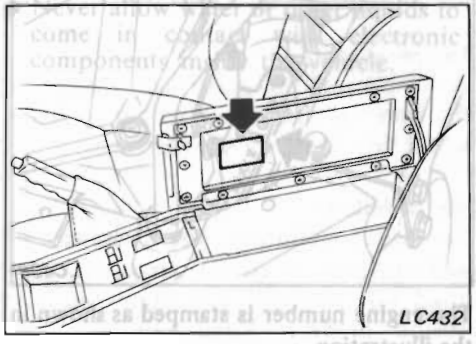

The engine number is stamped as shown in the illustration.

## EMISSION CONTROL INFORMATION LABEL LOCATION




The emission control information label is attached as shown in the illustration.

## TIRE PLACARD LOCATION




The tire placard label is attached to the inside of the center console box lid.

## SPECIFICATIONS

### DIMENSIONS

| | | 2 seater | 2+2 seater |
|---|---|---|---|
| Overall length | in (mm) | 173.4 (4,405) | 181.3 (4,605) |
| Overall width | in (mm) | 67.9 (1,725) | 67.9 (1,725) |
| Overall height | in (mm) | 51.0 (1,295) | 51.6 (1,310) |
| Ground clearance | in (mm) | 5.9 (150) | 5.9 (150) |
| Front tread | in (mm) | 57.3 (1,455)*1<br>56.5 (1,435)*2 | 57.3 (1,455)*1<br>56.5 (1,435)*2 |
| Rear tread | in (mm) | 58.1 (1,475)*1<br>57.3 (1,455)*2 | 58.1 (1,475)*1<br>57.3 (1,455)*2 |
| Wheelbase | in (mm) | 91.3 (2,320) | 99.2 (2,520) |
| Turning circle [wall to wall] | ft (m) | 34.8 (10.6) | 37.4 (11.4) |

*1: Non-turbo models
*2: Turbo models

## WEIGHTS

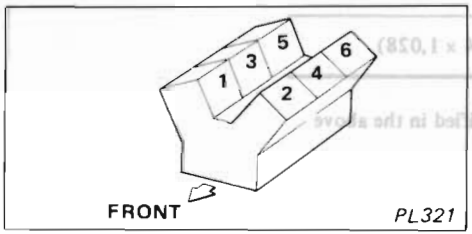
| | | 2 seater | 2+2 seater |
|---|---|---|---|
| Gross Vehicle Weight Rating | lb (kg) | See the "F.M.V.S.S. certification label". | |
| Gross Axle Weight Rating | | | |
| Front | lb (kg) | | |
| Rear | lb (kg) | | |
| Seating capacity | persons | 2 | 4 |

## ENGINE

| Model | | VG30E |
|---|---|---|
| Cylinder arrangement | | 6-cylinder, V-slanted at 60° |
| Type | | 4-cycle OHC |
| Bore x Stroke | in (mm) | 3.425 x 3.268 (87.0 x 83.0) |
| Displacement | cu in ($cm^3$) | 180.62 (2,960) |
| Compression ratio | | 9.0, 8.3* |
| Firing order | | 1-2-3-4-5-6** |

*: Models equipped with turbocharger

**CYLINDER NUMBERING




## WHEELS & TIRES

| | | Non-turbocharger model | Turbocharger model |
|---|---|---|---|
| Road wheel size ... Offset | in (mm) | | |
| Aluminum | | 6-1/2-JJ-15 ... 0.79 (20) | 7-JJ-16 ... 1.18 (30) |
| Tire | Type | Radial, tubeless | |
| | Size | P215/60R15 90H | 225/50VR16 |
| Spare tire | | | |
| Road wheel size ... Offset | in (mm) | 5-J x 15 (Steel) ... 1.18 (30) | 5-J x 15 (Steel) ... 1.18 (30) |
| Tire size | | 155/90D15 | 155/90D15 |

## ENGINE TUNE-UP

| | | |
|---|---|---|
| Idle speed | rpm | See the "Emission Control Label" on the underside of the hood. |
| Ignition timing (B.T.D.C.) | degree/rpm | |
| CO percentage at idle speed [No air] | % | |
| Spark plug gap | in (mm) | |
| Non-turbocharger model | BCPR5ES-11*1<br>BCPR6ES-11*1<br>BCPR7ES-11*1 | 0.039 to 0.043 (1.0 to 1.1) |
| Turbocharger model | BCPR5E-11*1<br>BCPR6E-11*1<br>BCPR7E-11*1 | |

| Drive belt deflection | | Used belt deflection | | Set deflection of new belt |
|---|---|---|---|---|
| | | Checking deflection*2 | Adjust deflection | |
| Alternator | in (mm) | 0.24 to 0.47 (6 to 12),<br>0.24 to 0.43 (6 to 11)*3 | 0.24 to 0.31 (6 to 8),<br>0.24 to 0.35 (6 to 9)*3 | 0.20 to 0.28 (5 to 7),<br>0.20 to 0.31 (5 to 8)*3 |
| Air conditioner compressor | in (mm) | 0.35 to 0.63 (9 to 16) | 0.35 to 0.43 (9 to 11) | 0.28 to 0.35 (7 to 9) |
| Power steering oil pump | in (mm) | 0.51 to 0.83 (13 to 21) | 0.51 to 0.63 (13 to 16) | 0.39 to 0.51 (10 to 13) |
| Applied pushing force | lb (N) | | 22 (98) | |
| Alternator belt size Width x Length | in (mm) | 0.5606 x 40.47 (14.24 x 1,028) | | |

*1: NGK make

*2: Adjust the belt tension when the belt deflection is not within the amount specified in the above "checking deflection".

## CAPACITIES

| | US measure | Imp measure | Liter |
|---|---|---|---|
| Fuel tank | 19 gal | 15-7/8 gal | 72 |
| Coolant | | | |
| Non-turbo model | 11-1/8 qt | 9-1/4 qt | 10.5 |
| Turbo model | 11-5/8 qt | 9-5/8 qt | 11.0 |
| Reservoir tank | 7/8 qt | 3/4 qt | 0.8 |
| Engine (Refill capacity) | | | |
| With oil filter | 4-1/4 qt | 3-1/2 qt | 4.0 |
| Without oil filter | 3-7/8 qt | 3-1/8 qt | 3.6 |

## TIGHTENING TORQUE

Unit: ft-lb (N·m)

| | |
|---|---|
| Spark plug | 14 to 22 (20 to 29) |
| Oil pan drain plug | 22 to 29 (29 to 39) |
| Wheel nut | 72 to 87 (98 to 118) |

## BULBS

| Item | Wattage (W) | Bulb No. |
|---|---|---|
| Headlight high/low | 65/45 | 9,004 |
| Auxiliary driving light | 55 | – |
| Front combination light | 27/8 | 1,157 |
| Front side marker light | 3.4 | 158 |
| Rear side marker light | 3.4 | 158 |
| Rear combination light | | |
| Turn signal | 27 | 1,156 |
| Stop/Tail | 27/8 | 1,157 |
| Back-up | 27 | 1,156 |
| License plate light | 3.8 | – |
| Interior light | 10 | – |
| Spot light | 8 | – |
| High-mounted stop light | 7.3 | – |

## FUSIBLE LINKS

| Color | Usage |
|---|---|
| Gray | Power supply to battery, accessory, E.F.I. circuit and ignition switch |
| Brown | Ignition switch |
| Brown | Headlight circuit |
| Green | Power window |
| Brown | E.F.I. injector |

# Consumer Information

This information has been provided for you on the basis of extensive tests in compliance with regulations issued by the National Highway Traffic Safety Administration of the United States Department of Transportation. We believe it is essential that you carefully study this data before driving your new vehicle.

These results were obtained by skilled drivers under controlled road and vehicle conditions, and may not be representative of results obtainable under other conditions.

This information may not apply to some Canadian model vehicles.

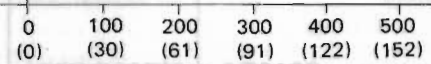
**Vehicle stopping distance**

This figure indicates braking performance that can be met or exceeded by the vehicles to which it applies, without locking the wheels, under different conditions of loading and with partial failures of the braking system.

The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

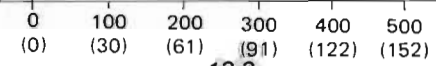
## NISSAN 300ZX NON-TURBO MODELS

| Condition of braking | Stopping distance in feet (meter) from 60 MPH (97 km/h) |
|---|---|
| Fully operational service brake Light load | 157 ft (47.9 m) |
| Fully operational service brake Maximum load | 164 ft (50.0 m) |
| Emergency service brakes (with partial service brake system failure) | 309 ft (94.2 m) |
| Brake power unit failure Maximum load | 229 ft (69.8 m) |




## NISSAN 300ZX TURBO MODELS

| Condition of braking | Stopping distance in feet (meter) from 60 MPH (97 km/h) |
|---|---|
| Fully operational service brake Light load | 155 ft (47.2 m) |
| Fully operational service brake Maximum load | 157 ft (47.9 m) |
| Emergency service brakes (with partial service brake system failure) | 311 ft (94.8 m) |
| Brake power unit failure Maximum load | 224 ft (68.3 m) |



## Uniform tire quality grading

DOT Quality Grades: All passenger car tires must conform to Federal Safety Requirements in addition to these grades.

### Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and a half (1-1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

### Traction A, B and C

The traction grades, from highest to lowest, are A, B and C, and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

**WARNING:**

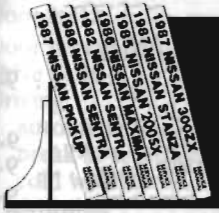
**The traction grade assigned to your vehicle tires is based on straight line braking traction tests and does not include cornering (turning) traction.**

### Temperature A, B and C

The temperature grades are A (the highest), B, and C, representing the 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 the material of the tire to degenerate and reduce tire life. Excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

**WARNING:**

**The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure problems.**

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| MODEL | SERVICE MANUAL | | | OWNER'S MANUAL | | |
|---|---|---|---|---|---|---|
| | PART NUMBER | U.S.A. | CANADA | PART NUMBER | U.S.A. | CANADA |
| 1988 300ZX | 2Z3188 | $32.00 | — | 3Z3188 | $3.75 | — |
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# Index

## GAS STATION INFORMATION

### Hood release:

Pull the handle under the instrument panel.

See "Hood release" in the "Comfort and convenience features" section.

### Recommended fuel:

**Gasoline engine:** Unleaded gasoline, at least 87 AKI number (RON 91)

For further details such as gasohol, see "Oil and fuel recommendation" in the "Do-It-Yourself" section.

### Recommended engine oil:

Non-turbo engine ... Genuine Nissan Motor Oil* or equivalent API SF (Energy Conserving Oils)

Turbo engine ... Genuine Nissan Motor Oil* or equivalent API SF/CC or SF/CD

SAE 10W-30 is preferable for temperatures above 0°F (–18°C). See "Oil and fuel recommendation" in the "Do-it-Yourself" section.

### Brake and clutch fluid:

Genuine Nissan Brake Fluid* or equivalent

DOT 3

### Automatic transmission fluid:

Genuine Nissan ATF* or equivalent

Type DEXRON®

### Power steering fluid:

Type DEXRON®

### Tire cold pressure:

See tire placard affixed to the center console box lid.

*: Available in mainland U.S.A. through your Nissan dealer.

## QUICK REFERENCE



Printing: July 1987 (24)
Publication No. OM8E-0Z31U0

Printed in Japan


IN
CASE
OF AN
ACCIDENT...

# You Have A Right To Know...

## There Is No Substitute For Quality.

Quality...You Demand It! You Deserve It. Nissan has been committed to providing you with the highest quality products for over 50 years. That commitment to quality is probably one of the primary reasons why you chose to buy your new Nissan.

This commitment to quality is evident in every new Nissan car and truck we manufacture. You can see it in the precise fit of the body panels...the smooth finish of the painted surfaces...the craftsmanship that's evident in the interior...and the superior performance of your Nissan on the road. At Nissan, there is no substitute for quality.

You should be aware, however, that should you ever be in an accident and your Nissan requires the replacement of body parts, not all body replacement parts are genuine. In fact, imitation body parts currently proliferate the marketplace and their use is stipulated by many insurance companies in the repair of vehicles.

**Quality**
Because many insurance companies are requiring the use of imitation body parts, your vehicle may not be repaired with Genuine Nissan Body Parts which incorporate the same high-quality standards as the body parts that were originally installed on your vehicle at the factory. Rather, the repair may be performed with imitation body parts which are stamped from dies that are made from impressions of Genuine Nissan Body Parts. These "fourth generation" parts are not produced in accordance with Nissan's exacting original equipment specifications and often contribute to problems of fit, corrosion resistance and appearance. The result is that your vehicle's physical appearance may be compromised.

**Safety**
More importantly, however, is the fact that all Nissan vehicles sold in the United States comply with Federal Motor Vehicle Safety Standards and incorporate important and often complex safety features. Nissan is unaware of any comprehensive testing or certification programs being conducted by either imitation body parts manufacturers or the insurance industry to determine whether or not imitation body parts would render a vehicle incapable of complying with the safety standards established by the United States Government.

# DEMAND THE BEST...

## Ask For Genuine Nissan Body Parts.

The availability and usage of imitation body parts is overshadowed by the numerous questions regarding their quality and safety. If your Nissan vehicle requires body repairs and your insurance company prescribes the use of imitation body replacement parts on your vehicle, you have the right to contact your insurance agent and/or adjustor and request that Genuine Nissan Body Replacement Parts be used in the repair of your vehicle.

**Tested and Proven**
In July, 1983 and again in March, 1986, Nissan contracted with major independent testing laboratories to conduct comparative evaluations of Genuine Nissan and imitation body replacement parts. The results of these tests conclusively prove that Genuine Nissan Body Parts are superior to imitation parts in the areas of fit, finish, corrosion resistance and overall workmanship.

GENUINE NISSAN

IMITATION

**Corrosion Resistance** Scribed to bare metal and exposed to vigorous salt spray for 240 hours, Genuine Nissan Fenders and imitation fenders were tested. The results show genuine fenders were virtually rust-free (except at the scribe marks), while the imitation fenders showed excessive amounts of corrosion.

GENUINE NISSAN

IMITATION

**Fit and Appearance** An imitation grille was tested and found difficult to install. In fact, it required some force and manipulation to achieve a satisfactory fit. The genuine grille installed easily with excellent fit and appearance.

GENUINE NISSAN

IMITATION

**Bumper Workmanship** Appearance and workmanship is an integral part of original equipment quality. Quality workmanship is evidenced in the smooth surface appearance and detail of this Genuine Nissan Bumper. The poor manufacturing quality and substandard workmanship of the imitation bumper is apparent from its rippled surface and rough, unfinished edges.


Printed in Japan