



Getting The Most From Your **NISSAN NP300 HARDBODY**



OWNER'S MANUAL



WELCOME TO YOUR NEW NISSAN NP300 HARDBODY

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Foreword

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

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

A separate "Warranty Information & Maintenance" booklet explains details about the warranties covering your vehicle.

Remember that your NISSAN Dealer knows your vehicle best. When you require any service or have any questions about your vehicle, they will be glad to assist you with the extensive resources available to you.

IMPORTANT SAFETY INFORMATION

REMINDERS FOR SAFETY

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

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


WHEN READING THE MANUAL

This manual includes information for all options available on this model. Therefore, you may find some information that does not apply to your vehicle.

- **For descriptions specified for 4-wheel drive models a  mark is placed at the beginning of the applicable sections/items.**

READ FIRST - THEN DRIVE SAFELY

Before driving your vehicle please read your Owner's Manual carefully. This will ensure familiarity with controls and maintenance requirements, assisting you in the safe operation of your vehicle.

Throughout this manual we have used the symbol  followed by the word **WARNING**. This is used to indicate the presence of a hazard which may cause the possibility of a personal injury or other damage and must be followed precisely.

CAUTION. This is also used throughout the manual to indicate the presence of a hazard that could cause possible minor injury to yourself or components and the procedures must be followed carefully.

ON-ROAD AND OFF-ROAD DRIVING

This vehicle will handle and manoeuvre differently from an ordinary passenger car, because it has a higher centre of gravity for off-road use. As with other vehicles with features of this type, failure to operate this vehicle correctly may result in loss of control or an accident.

Be sure to read the On-Road and Off-Road driving precautions in the "5. Starting and driving" section of this manual.

MODIFICATION OF YOUR VEHICLE

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

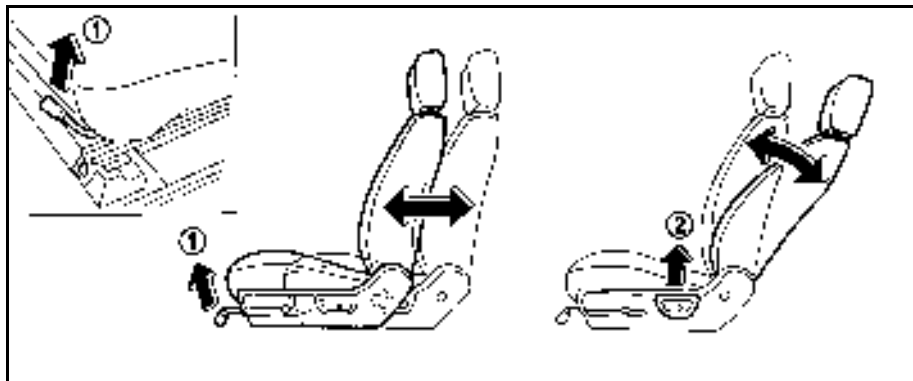
All information, specifications and illustrations in this manual are those in effect at the time of printing. NISSAN reserves the right to change specifications or design at any time without notice and without obligation.

1 Safety - seats, seat belts and supplemental restraint system

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SEATS



SEAT ADJUSTMENT (if so equipped)

WARNING

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

Forward and backward

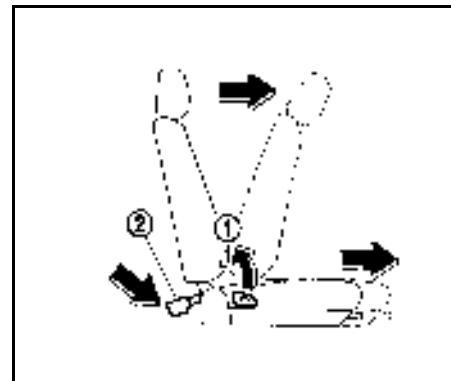
Pull the lever up (1) and hold it while you slide the seat forward or backward to the desired position. Release the lever to lock the seat in position.

Reclining (except bench seat)

Pull the lever up (2) and lean back until the desired angle is obtained. To bring the seat back forward again, pull the lever and move your body forward. The seat back will move forward.

WARNING

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



TILTING FRONT BUCKET SEAT (if so equipped)

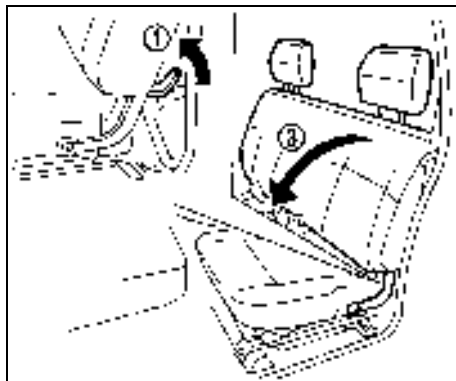
The front passenger's seat can be tilted to make it easier for passengers to get in and out.

To tilt the back rest, pull the reclining lever up (1) or push the tilt lever (2) down. The seat automatically moves forward.

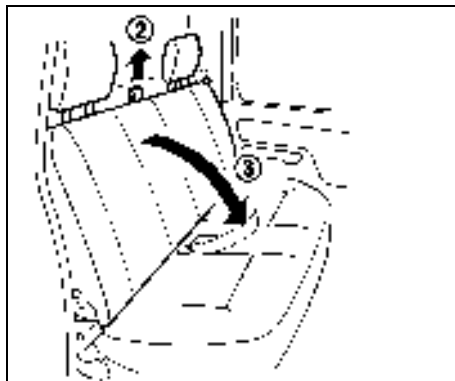
To return the seat, move the whole seat backward, then push the back rest up until it locks.

WARNING

After adjustment, gently rock in the seat to make sure it is securely locked.



Single cab model



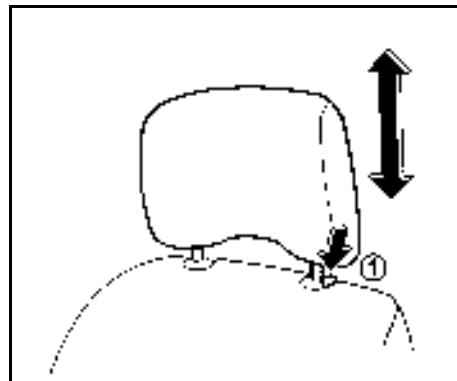
Double cab model (rear seat)

TILTING BENCH SEAT

The bench seat can be tilted to make it easier to remove the jacking tools from the storage area.

To tilt the seat back, pull the lever (1) or pull the strap up (2) and push the seat back forward (3).

For some single cab models, the lever (1) is located behind the driver seat.



ADJUSTABLE HEAD RESTRAINTS (If so equipped)

Adjust the centre of the head restraints to be level with the centre of your ears.

To raise the head restraint, just pull it up. To lower, push the lock knob (1) and push the head restraint down. After adjustment, make sure that it is securely locked.



WARNING

Head restraints should be adjusted properly as they may provide significant protection against whiplash injury.

SEAT BELTS

PRECAUTIONS ON SEAT BELT USAGE

NISSAN strongly encourages you and all of your passengers to buckle up every time you drive.

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.



WARNING

- **Seat belts are designed to bear upon the bony structure of the body and should be worn low across the front of the pelvis, or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided. Serious injury can occur if seat belt is not worn properly.**
- **No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.**
- **Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.**

- **Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.**
- **It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.**
- **Belts should not be worn with straps twisted.**
- **Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.**
- **It is compulsory by law that every person who drives or rides in this vehicle should wear a seat belt at all times. Children should be in appropriate child restraints.**
- **Do not allow more than one person at a time to use the same belt.**
- **Your NISSAN Dealer should inspect all seat belt assemblies including retractors and attaching hardware after any collision. NISSAN recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly.**

Seat belt assemblies not in use during a collision should also be inspected and replaced if either damage or improper operation is noted.

Infant or small child

NISSAN recommends that infants or small children be seated in a child restraint. You should choose a child restraint system that fits your vehicle and always follow the manufacturer's instructions for installation and use.

Children

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

NISSAN recommends that children sit in the rear seat if available. According to accident statistics, children are safer when properly restrained in the rear seat than in the front seat.

If the child's seating position has a shoulder belt that fits close to the face or neck, the use of a booster seat (commercially available) may help overcome this. The booster seat should raise the child so that the shoulder belt is properly positioned across the top middle portion of the shoulder and the lap belt is low on the hips. The booster seat should fit the vehicle seat. Once the child has grown so the shoulder belt is no longer on or near the face and neck, use the shoulder belt without the booster seat.

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

Pregnant women

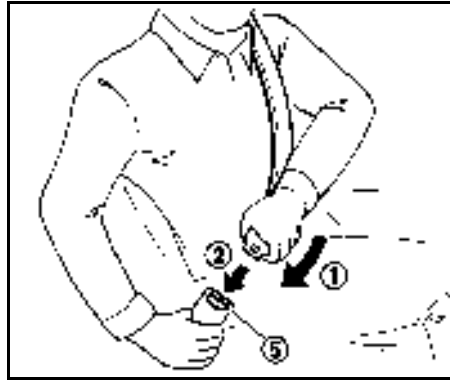
NISSAN recommends that pregnant women use seat belts. Contact your doctor for specific recommendations. The lap belt should be worn snug and positioned as low as possible around the hips, not the waist.

Injured persons

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

SEAT BELT MAINTENANCE

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



3-POINT TYPE WITH RETRACTOR

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

Fastening the belts

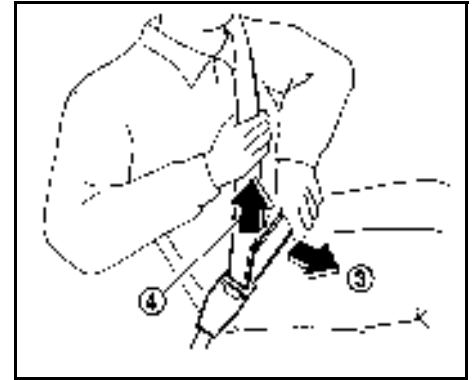
- 1 Adjust the seat.



WARNING

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

- 2 Slowly pull the seat belt (1) out of the retractor and insert the tongue (2) into the buckle until it snaps.



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

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



WARNING

- The seat belt should rest on the middle of the shoulder. It must not rest against the neck.
- Make sure that the seat belt is not twisted in any way.

To release the belts

To release the belt, press the button (5) on the buckle. The seat belt will automatically retract.

Checking seat belt operation

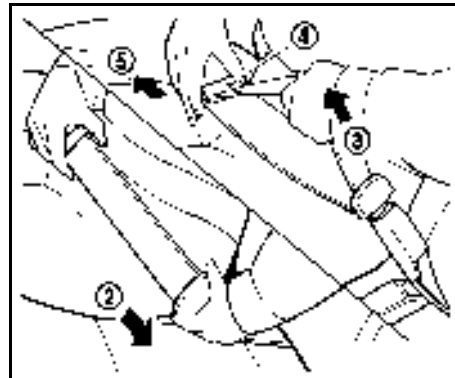
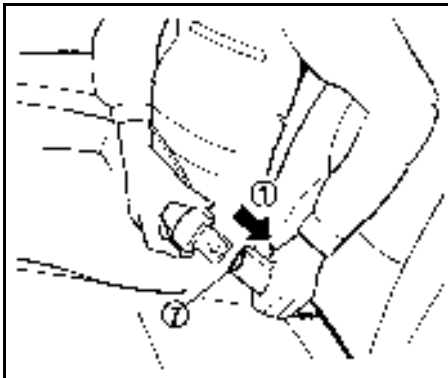
Your seat belt retractors are designed to lock belt movement by two separate methods:

- 1 When the belt is pulled quickly from the retractor.
- 2 When the vehicle slows down rapidly.

To increase your confidence in the belts, check the operation as follows:

- Grasp the shoulder belt and pull quickly forward. The retractor should lock and restrict further belt movement.

If the retractor does not lock during these checks or if you have any question about belt operation see your NISSAN Dealer.

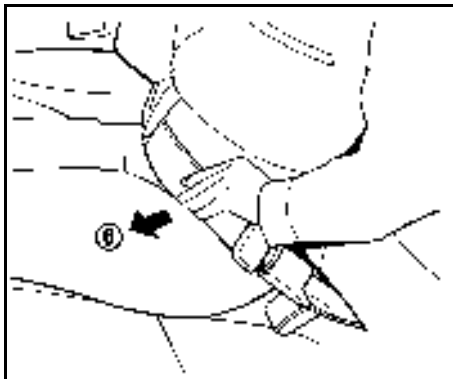


2-POINT TYPE SEAT BELTS

Fastening the seat belts

- 1 Insert the tongue into the buckle (1) until it snaps.

- 2 To lengthen, hold the tongue at a right angle to the belt (2) and pull on the belt. To shorten, pull the free end of the belt (3) away from the tongue then pull the belt clip (4) to take up the slack (5).

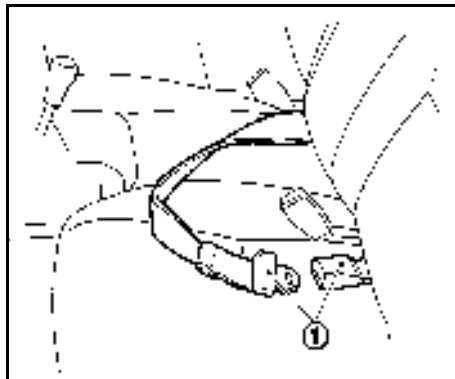


3 Position the lap belt low on the hips (6) as illustrated.

Unfastening the seat belts

To loosen the belt, press the button (7) on the buckle.

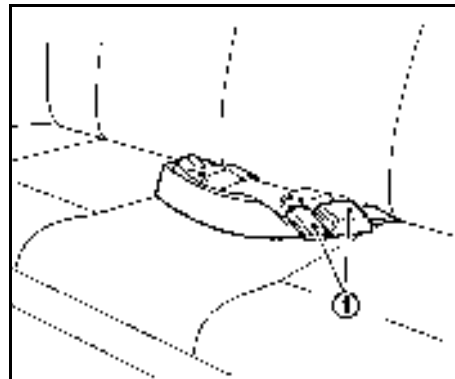
Fasten the seat belts when not in use to prevent them from being caught in the door.



Front center belt

Selecting correct set of belts

The centre seat belt buckle and tongue are identified by the "CENTRE" mark (1). The centre seat belt tongue can be fastened only into the centre seat belt buckle.



Rear center belt

CHILD RESTRAINTS

PRECAUTIONS ON CHILD RESTRAINTS USAGE

Infants and small children should always be placed in an infant or child restraint while riding in the vehicle.



WARNING

Infants and small children 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 restraints are designed to be installed with the lap portion of a three-point type seat belt.

NISSAN recommends that the child restraint system be installed in the rear seat. According to accident statistics, children are safer when properly restrained in the rear seat rather than in the front seat.

An improperly installed child restraint could lead to serious injury in an accident.

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

- Place your child in the child restraint system and check the various

adjustments to be sure that the child restraint system is compatible with your child. Always follow the manufacturer's instructions for installation and use.

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



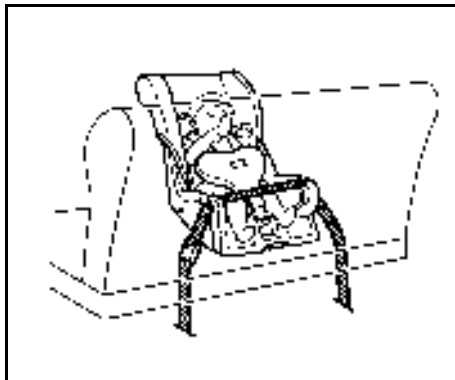
WARNING

- Never install a rear-facing child restraint system in the front seat. An inflating supplemental front-impact air bag could seriously injure or kill your child. A rear-facing child restraint system must only be used in the rear seat.
- Do not install a child restraint in the center position of the front bench seat. This portion is not suitable for child restraint installation.
- Follow all of the child restraint system manufacturer's instructions for installation and use. When purchasing a child restraint system, be sure to select one which will fit your child and vehicle. It may not be possible to properly install some types of child restraint systems in your vehicle.
- Improper use of a child restraint system can increase the risk or severity of injury for both the child and other occupants in the vehicle.

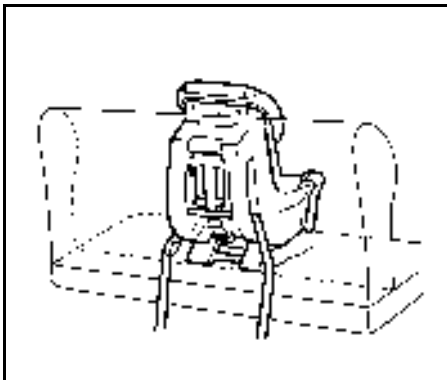
- When the child restraint system is not in use, keep it secured with a seat belt to prevent it from being thrown around in case of a sudden stop or accident.
- Remember that a child restraint system left in a closed vehicle can become very hot. Check the seating surface and buckles before placing your child in a child restraint system.
- After attaching a child restraint system, test it before you place the child in it. Tilt it from side to side. Try to tug it forward and check if it is held securely in place. If the restraint is not secure, tighten the belt as necessary, or install the restraint in another seat and test it again.
- If a child restraint system is not anchored properly, the risk of a child being injured in a collision or a collision or a sudden stop greatly increases.
- Adjustable seat backs should be positioned to fit a child restraint system, but as upright as possible.
- For a front-facing child restraint system, check to make sure the shoulder belt does not fit close to the child's face or neck. If it does, put the shoulder belt behind the child restraint system.
- If the seat belt in the position where a child restraint system is installed

requires a locking clip and if it is not used, injuries could result from a child restraint system tipping over during normal vehicle braking or cornering.

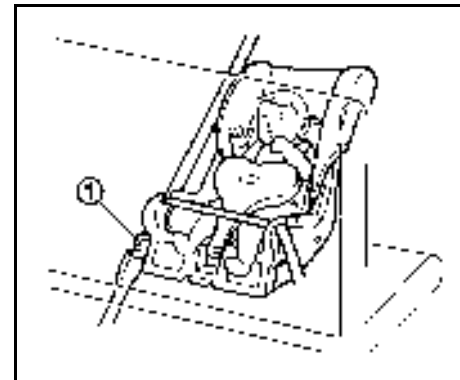
NISSAN recommends that infants and small children be seated in a child restraint system. You should choose a child restraint system that fits your vehicle and always follow the manufacturer's instructions for installation and use. In addition, there are many types of child restraint systems available for larger children that should be used for maximum protection.



Rear facing



Front facing



Rear facing

INSTALLATION OF CHILD RESTRAINT SYSTEM

Installation on bench seat

Center lap belt:

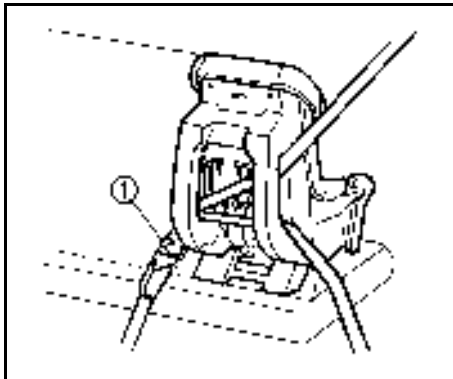
Secure the child restraint with the lap belt as illustrated. Remove all slack in the lap belt for a very tight fit by pulling forcefully on the lap belt adjustment.

After attaching the child restraint, test it before you place the child in it. Tilt the restraint from side to side. If it is not secure, repeat the above procedure.

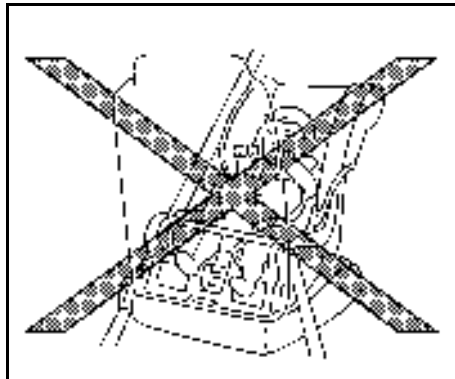
Outboard shoulder/lap belt:

Before using the locking clip, read the manufacturer's instructions attached to the child restraint.

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 (1).



Front facing



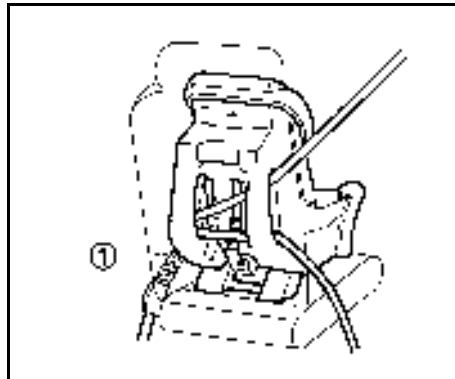
Rear facing

Installation on front passenger seat
(with front passenger air bag)



WARNING

- **Never install a rear-facing child restraint in the front passenger seat. Air bags inflate with great force. A rear-facing child restraint could be struck by the front air bag in a crash and could seriously injure or kill your child.**
- **If you install a forward-facing child restraint in the front passenger seat, place the passenger seat as far back as possible**



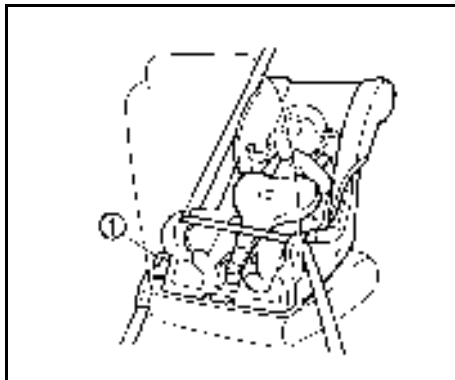
Front facing

Before using the locking clip, read the manufacturer's instructions attached to the child restraint.

Slide the seat to its rear most position.

Secure the child restraint with the lap/shoulder 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 (1).

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



Rear facing

Installation on front passenger seat
(without front passenger air bag)

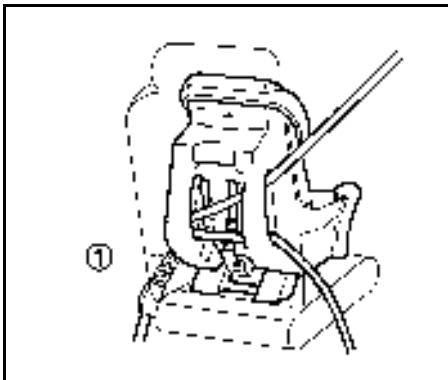
Before using the locking clip, read the manufacturer's instructions attached to the child restraint.

Slide the seat to its rear most position.

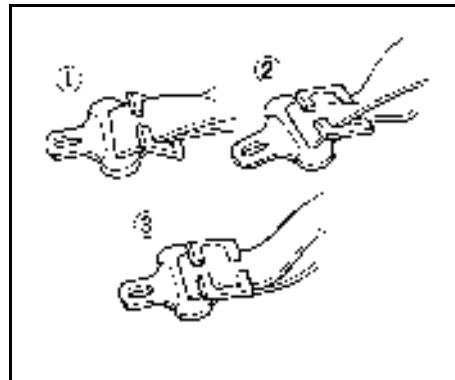
Secure the child restraint with the lap/shoulder belt as illustrated. To prevent slack in the lap belt, it will be necessary to secure the lap/shoulder belt in place with a locking clip (1).

Slide the seat forward so that the seat belt fully tightens the child restraint.

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



Front facing



Locking clip

Use a locking clip attached to the child restraint or one which is equivalent in dimensions and strength.

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

SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG SYSTEM)

DRIVER AND FRONT AIR BAGS (if so equipped)

This Supplemental Restraint System (SRS) section contains important information concerning the driver and passenger air bags.

The Supplemental Restraint System Air Bag can help reduce impact force to the driver and to the front passenger in certain frontal collisions. The Air bags are designed to supplement the crash protection provided by the driver and passenger seat belts and are not a substitute for them. The seat belts should always be correctly worn and the driver and front passenger seated a suitable distance away from the steering wheel and instrument panel. (See "SEAT BELTS" later in this section for instructions and precautions on seat belt usage.)

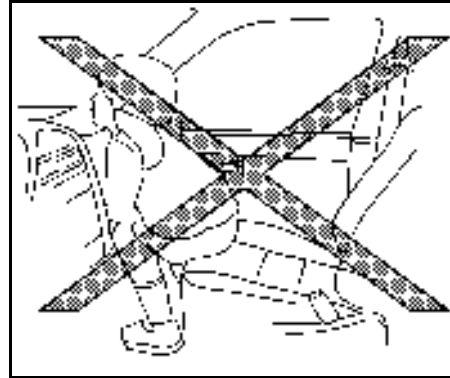
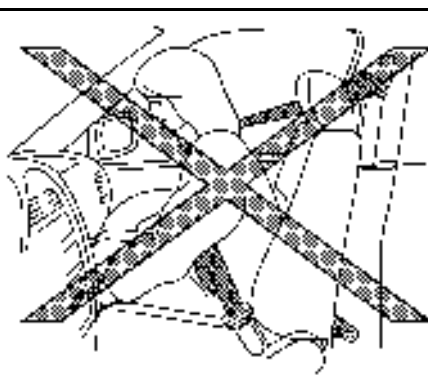
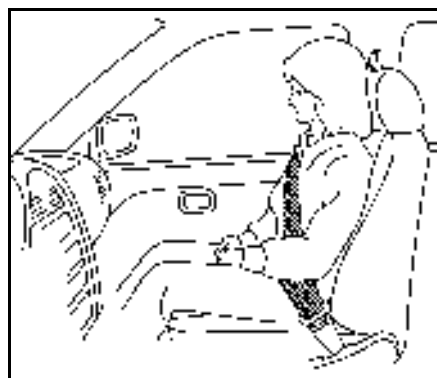
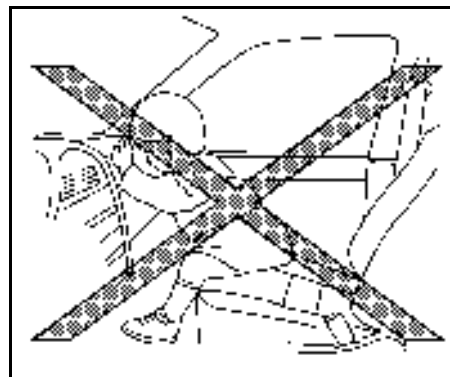
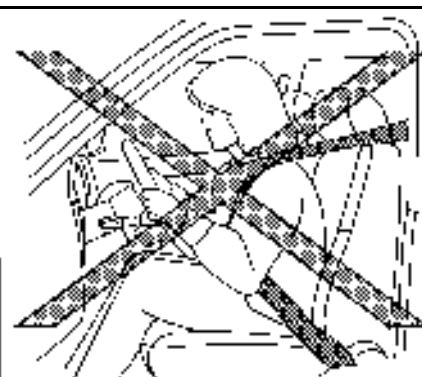
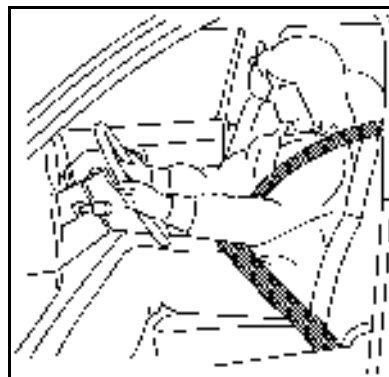
After turning the ignition key to the "ON" position, the supplemental air bag warning light illuminates. The supplemental air bag warning light will turn off after about 7 seconds if the system is operational.

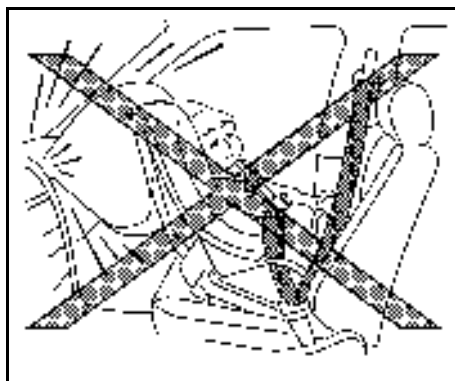
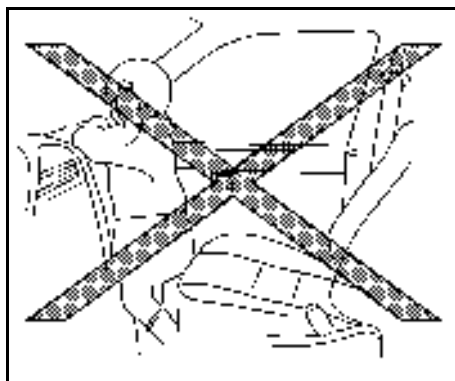
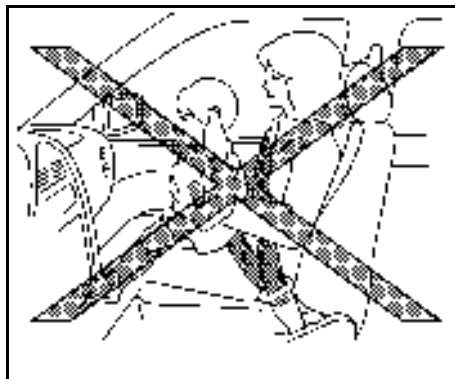
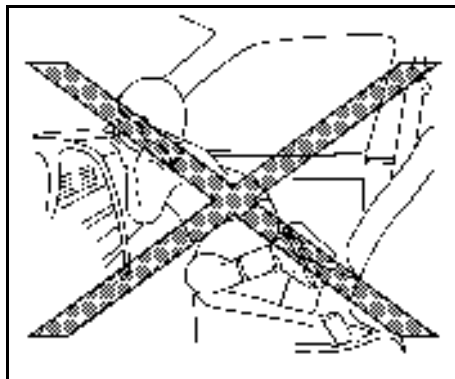


WARNING

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

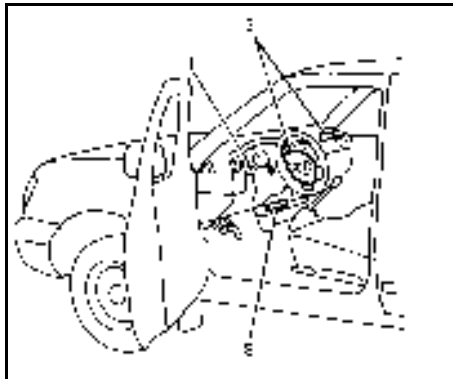
- The seat belts and the supplemental front air bags are most effective when you are sitting back and upright in the seat. Air bags inflate with great force. If you are unrestrained, leaning forward, sitting sideways or out of position in any way, you are at greater risk of injury or death in a crash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





⚠ WARNING

- Never let children ride unrestrained as shown in the illustrations.
- Children may be severely injured or killed when the air bag inflates if they are not properly restrained.
- Also, never install a rear facing child restraint in the front seat. For additional information, see "CHILD RESTRAINTS" earlier in this section.



- 1 Air bag warning lamp
- 2 Driver/Passenger air bag module
- 3 Diagnosis sensor unit

Air bag system

The driver air bag is located in the centre of the steering wheel; the front passenger supplemental air bag is mounted in the dashboard above the glove box. The air bags are designed to inflate in higher severity frontal collisions, although they may inflate if the forces in another type of collision are similar to those of a higher severity frontal impact. When the supplemental air bag inflates, a fairly loud noise may be heard, followed by release of smoke. This smoke is not harmful and does not indicate a fire, but care should be taken not to inhale it, as it may cause irritation and choking. Those with a history of breathing trouble should get fresh air promptly.

Supplemental front air bags, along with the use of seat belts, help to cushion the impact force on the face and chest of the front occupants.

They can help save lives and reduce serious injuries. However, an inflating air bag may cause facial abrasions or other injuries. Air bags do not provide restraint to the lower body.

The seat belts should be correctly worn and the driver and passenger seated upright as far as practical away from the steering wheel or dash board. Since the air bags inflate quickly in order to help protect the front occupants, the force of the air bag inflating can increase the risk of injury if the occupant is too close to, or is against the air bag module during inflation. The air bag will deflate quickly after the collision is over.

After turning the ignition key to the "ON" position, the supplemental air bag warning light illuminates. The supplemental air bag warning light will turn off after about 7 seconds if the system is operational.

WARNING

- **Right after inflation, several air bag system components will be hot. Do not touch them; you may severely burn yourself.**
- **No unauthorised changes should be made to any components or wiring of the supplemental front air bag system. This is to prevent accidental inflation of the air bag or damage to the air bag system.**

- **Tampering with these systems may result in serious personal injury. Tampering includes changes to the steering wheel and the instrument panel and the front seats assembly by placing material over the steering wheel pad and above the dashboard.**
- **Do not attach any objects to the steering wheel pad and to the instrument panel. Objects attached to the steering wheel pad and to the instrument panel may become dangerous projectiles and cause injury if the air bag inflates.**
- **An authorised NISSAN Dealer should do work around and on the supplemental front air bag systems. An authorised NISSAN Dealer should also do installation of electrical equipment. The SRS wiring harnesses* should not be modified or disconnected. Unauthorised electrical test equipment and probing devices should not be used on these systems.**

*** SRS wiring harnesses are covered with yellow insulation either just before the harness connectors or for the complete harness, for easy identification.**

DRIVER AIR BAG SYSTEM

This Supplemental Restraint System section contains important information concerning the driver air bag. The Supplemental Restraint System Air Bag can help reduce impact force to the driver in certain frontal collisions. The air

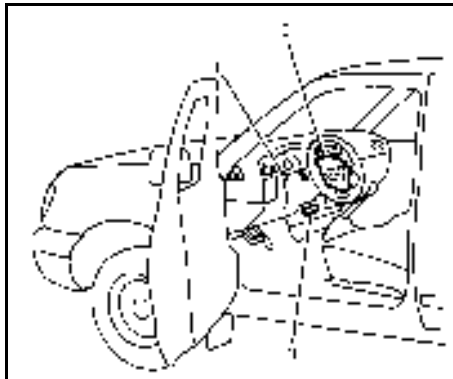
bag is designed to supplement the crash protection provided by the driver seat belt and is not a substitute for it. The seat belts should always be correctly worn and the driver seated a suitable distance from the steering wheel. (See "SEAT BELTS" later in this section for instructions and precautions on seat belt usage).

After turning the ignition key to the "ON" position, the air bag warning light illuminates. The air bag warning light will turn off after about 7 seconds if the system is operational.



WARNING

- **The air bag ordinarily will not inflate in the event of a side impact, rear impact, roll over, or lower severity frontal collision. Always wear your seat belts to help reduce the risk or severity of injury in various kinds of accidents.**
- **The seat belts and the air bag are most effective when you are sitting back and upright in the seat. Air bag inflates with great force. If you are unrestrained, leaning forward, sitting sideways or out of position in any way, you are at greater risk of injury or death in a crash and may also receive serious or fatal injuries from the air bag if you are up against it when it inflates.**



- 1 Air bag warning lamp
- 2 Driver air bag module
- 3 Diagnosis sensor unit

Air bag system

The driver air bag is located in the centre of the steering wheel. The air bag is designed to inflate in higher severity frontal collisions, although it may inflate if the forces in another type of collision are similar to those of a higher severity frontal impact. When the supplemental air bag inflates, a fairly loud noise may be heard, followed by release of smoke. This smoke is not harmful and does not indicate a fire, but care should be taken not to inhale it, as it may cause irritation and choking. Those with a history of breathing trouble should get fresh air promptly.

Supplemental front air bags, along with the use of seat belts, help to cushion the impact

force on the face and chest of the front occupants.

They can help save lives and reduce serious injuries. However, an inflating air bag may cause facial abrasions or other injuries. Air bags do not provide restraint to the lower body.

The seat belts should be correctly worn and the driver and passenger seated upright as far as practical away from the steering wheel or dash board. Since the air bags inflate quickly in order to help protect the front occupants, the force of the air bag inflating can increase the risk of injury if the occupant is too close to, or is against the air bag module during inflation. The air bag will deflate quickly after the collision is over.

After turning the ignition key to the “ON” position, the supplemental air bag warning light illuminates. The supplemental air bag warning light will turn off after about 7 seconds if the system is operational.

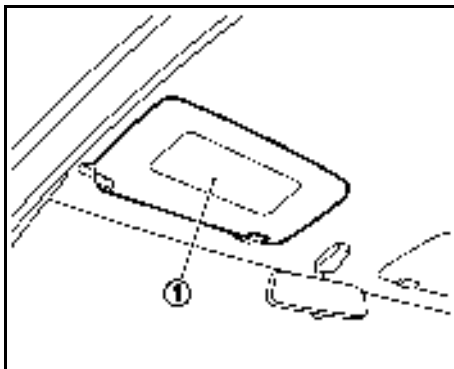
WARNING

- **Right after inflation, several air bag system components will be hot. Do not touch them; you may severely burn yourself.**
- **No unauthorised changes should be made to any components or wiring of the supplemental front air bag system. This is to prevent accidental inflation of the air bag or damage to the air bag system.**

- **Tampering with these systems may result in serious personal injury. Tampering includes changes to the steering wheel and the instrument panel and the front seats assembly by placing material over the steering wheel pad and above the dashboard.**
- **Do not attach any objects to the steering wheel pad and to the instrument panel. Objects attached to the steering wheel pad and to the instrument panel may become dangerous projectiles and cause injury if the air bag inflates.**
- **An authorised NISSAN Dealer should do work around and on the supplemental front air bag systems. An authorised NISSAN Dealer should also do installation of electrical equipment. The SRS wiring harnesses* should not be modified or disconnected. Unauthorised electrical test equipment and probing devices should not be used on these systems.**

* SRS wiring harnesses are covered with yellow insulation either just before the harness connectors or for the complete harness, for easy identification.

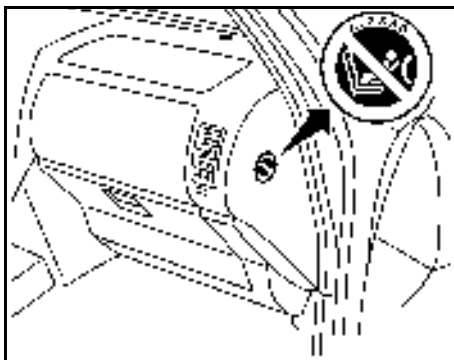
AIR BAG WARNING LABELS (if so equipped)



AIR BAG WARNING LIGHT (if so equipped)





Type A



Warning labels (1) about the air bag system are placed on the driver's and/or front passenger's side sun visors.



Type B

The air bag warning light, displaying  or  in the instrument panel, monitors the circuits of the front air bag system. The circuits monitored by the air bag warning light are the diagnosis sensor unit, front air bag modules and all related wiring.

After turning the ignition key to the "ON" position, the supplemental air bag warning light illuminates. The supplemental air bag warning light will turn off after about 7 seconds if the system is operational.

If any of the following conditions occurs, the front air bag system needs servicing and must be taken to your nearest authorised NISSAN Dealer:

- The air bag warning light remains on after approximately 7 seconds.
- The air bag warning light flashes intermittently.
- The air bag light does not come on at all

Under these conditions, the front air bags may not operate properly. It must be checked and repaired. Take your vehicle to the nearest authorised NISSAN Dealer.

Repair and replacement procedure

The front air bags are designed to inflate on a one-time-only basis. As a reminder, unless it is damaged, the air bag light will remain illuminated after inflation has occurred. Only authorised NISSAN Dealers should do repair and replacement of these systems.

To ensure long-term functioning, the system must be inspected 10 years after the date of manufacture and then every 2 years thereafter.

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



WARNING

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

PRE-TENSIONER SEAT BELT SYSTEM (if so equipped)



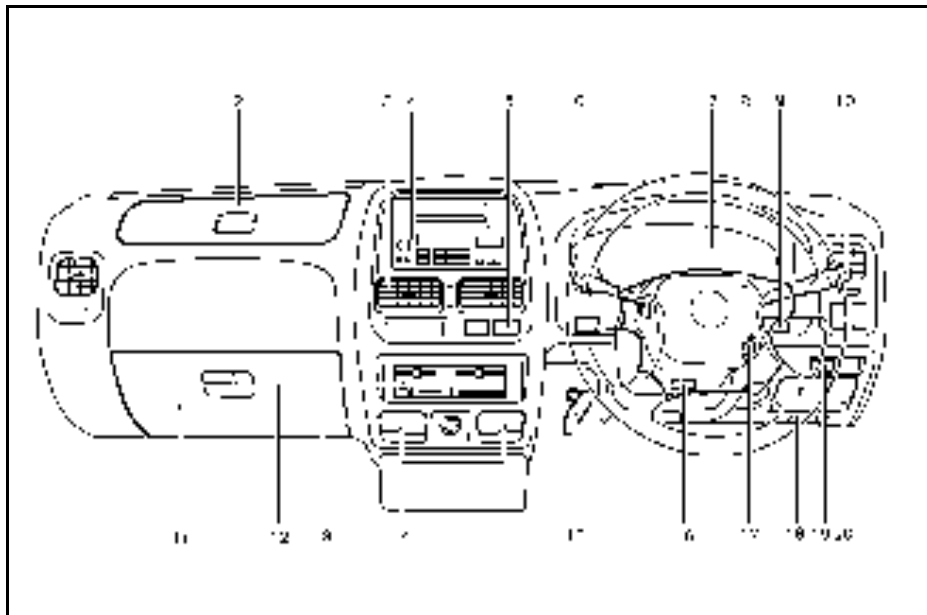
WARNING

- **The pre-tensioner seat belt cannot be reused after activation. It must be replaced together with the retractor as an unit.**
- **If the vehicle becomes involved in certain types of frontal collision but the pre-tensioner is not activated, be sure to have the pre-tensioner system checked and if necessary, replaced by your NISSAN dealer.**
- **No unauthorized changes should be made to any components of wiring of the pre-tensioner seat belt system. This is to prevent accidental retraction or extension of the pre-tensioner seat belt or damage to the pre-tensioner seat belt operation. Tampering with the pre-tensioner seat belt system may result in serious personal injury.**

2 Instruments and controls

Instrument panel	2-1	Headlight and turn signal switch.....	2-14
Right-hand drive model.....	2-1	Headlight switch	2-14
Left hand drive model.....	2-2	Turn signal switch.....	2-14
Meters and gauges	2-3	Fog light switch (if equipped)	2-15
Speedometer and odometer	2-6	Hazard indicator flasher switch	2-15
Tachometer (if so equipped)	2-6	Windows.....	2-16
Engine coolant temperature gauge.....	2-7	Manual windows	2-16
Fuel gauge	2-7	Power windows (if so equipped)	2-16
Clock	2-8	Automatic operation.....	2-18
Warning/indicator lights and audible reminders	2-9	Rear sliding window (if so equipped)	2-18
Checking bulbs.....	2-9	Power Point and ashtrays (if so equipped).....	2-18
Warning lights.....	2-9	Power Point	2-18
Indicator lights.....	2-11	Ashtrays	2-18
Security system (if so equipped)	2-12	Interior lights	2-19
NATS (NISSAN Anti-Theft System)	2-12	Storages	2-19
Security indicator light	2-12	Glove box	2-19
Wiper and washer switch.....	2-13	Cup holder (if so equipped).....	2-19
Windshield wiper and washer switch.....	2-13	Console box (if so equipped)	2-20

INSTRUMENT PANEL



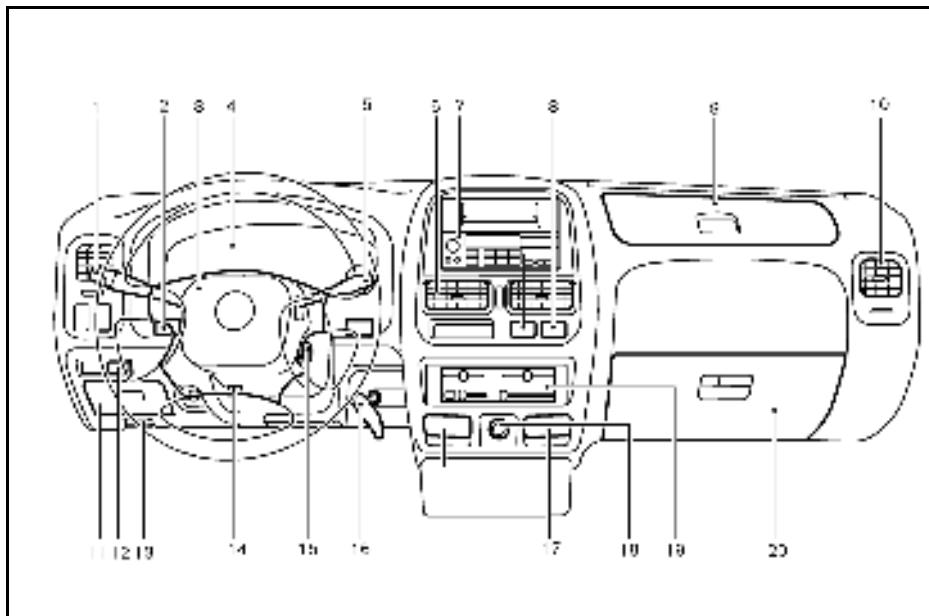
- 16 Tilting steering wheel lock lever*
- 17 Ignition switch/steering lock
- 18 Hood release lever
- 19 Heat switch*
- 20 Fuse box cover

*: if so equipped

Note: Diff Lock switch (Type A) is situated on the centre console, between the two separate front seats.

RIGHT-HAND DRIVE MODEL

- 1 Side ventilator
- 2 Passenger's air bag*/instrument panel pocket*
- 3 Center ventilator
- 4 Radio/CD*
- 5 Hazard warning flasher switch
- 6 Windshield wiper/washer switch
- 7 Meters/gauges and clock
- 8 Driver's air bag*
- 9 Diff lock switch (Type B)*
- 10 Headlight, turn signal switch & Fog light switch*
- 11 Glove box
- 12 Heater/Air conditioner* control
- 13 Cigarette lighter
- 14 Ashtrays
- 15 Parking brake lever (stick type)*



- 15 Ignition switch/steering lock
- 16 Parking brake lever (stick type)*
- 17 Ashtrays
- 18 Cigarette lighter
- 19 Heater/Air conditioner* control
- 20 Glove box

*: if so equipped

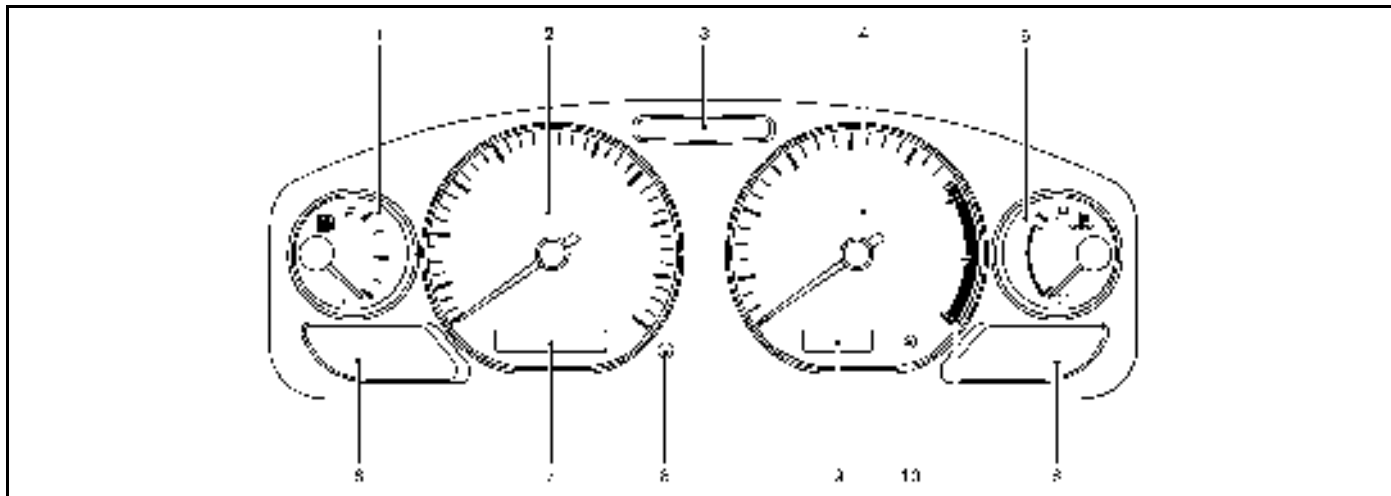
Note: Diff Lock switch (Type A) is situated on the centre console, between the two separate front seats.

LEFT-HAND DRIVE MODEL

- | | |
|---|---|
| 1 Headlight, Turn signal switch & Fog light switch* | 7 Radio/CD* |
| 2 Diff lock switch (Type B)* | 8 Hazard warning flasher switch |
| 3 Driver's air bag* | 9 Passenger's air bag*/instrument panel pocket* |
| 4 Meters/gauges and clock | 10 Side ventilator |
| 5 Windshield wiper/washer switch | 11 Fuse box cover |
| 6 Center ventilator | 12 Heat switch* |
| | 13 Hood release lever |
| | 14 Tilting steering wheel lock lever* |

2-2 Instruments and controls

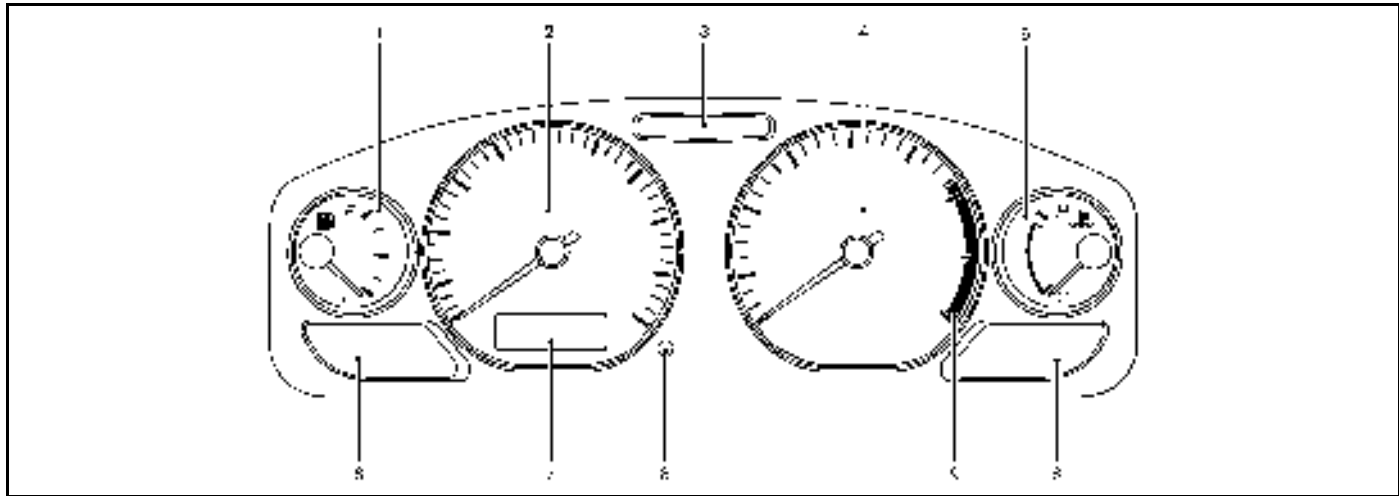
METERS AND GAUGES



Type A

- | | | |
|--|------------------------------------|--------------------------|
| 1 Fuel gauge | 5 Engine coolant temperature gauge | 9 Clock |
| 2 Speedometer | 6 Warning / indicator light | 10 Clock adjustment knob |
| 3 Turn signal lights / hazard indicator lights
/ airbag warning light | 7 Odometer / trip odometer | 11 Red zone indication |
| 4 Tachometer | 8 Trip Odometer Reset knob | |

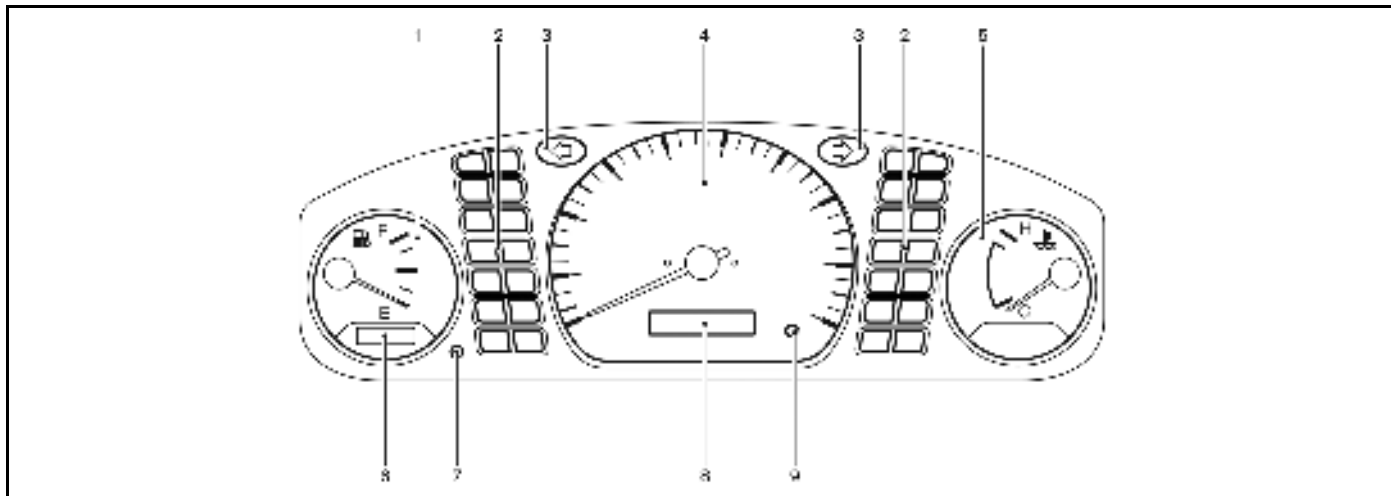
METERS AND GAUGES



Type B

- | | | |
|---|------------------------------------|--|
| 1 Fuel gauge | 4 Tachometer | 7 Odometer / trip meter and clock |
| 2 Speedometer | 5 Engine coolant temperature gauge | 8 Trip meter Reset and Clock adjustment knob |
| 3 Turn signal lights / hazard indicator lights / airbag warning light | 6 Warning / indicator lights | 9 Red zone indication |

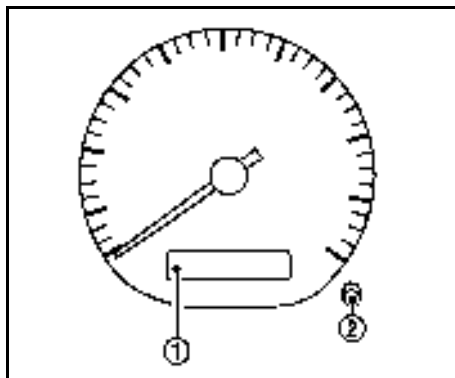
METERS AND GAUGES



Type C

- | | | |
|--|------------------------------------|-------------------------------|
| 1 Fuel gauge | 4 Speedometer | 7 Clock Adjustment knob |
| 2 Warning / indicator lights | 5 Engine coolant temperature gauge | 8 Odometer/twin trip odometer |
| 3 Turn signal lights / hazard indicator lights | 6 Clock | 9 Trip odometer reset knob |

SPEEDOMETER AND ODOMETER



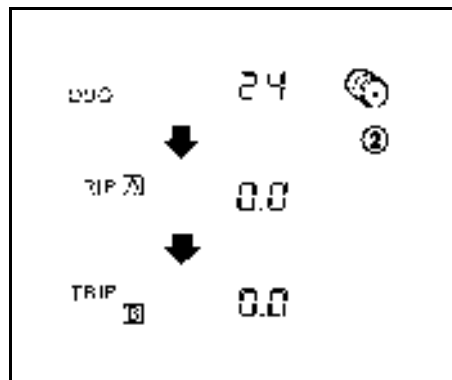
Speedometer

The speedometer indicates vehicle speed.

Odometer/Twin trip odometer

The odometer (1) records the total distance the vehicle has been driven.

The trip odometer (2) records the distance of individual trips.



Changing the trip odometer display

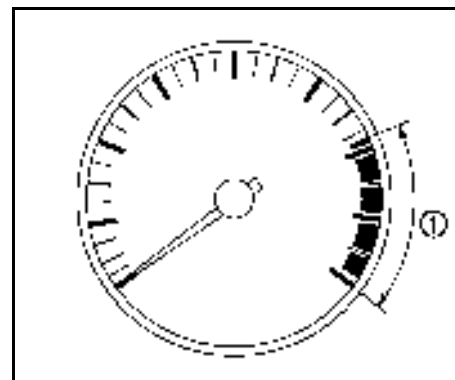
Push the reset knob (2) to change the display as follows:

ODO → TRIP A → TRIP B → ODO

Resetting the trip odometer

Push the reset knob (2) for more than 1 second to reset the displayed trip odometer to zero.

TACHOMETER (if so equipped)

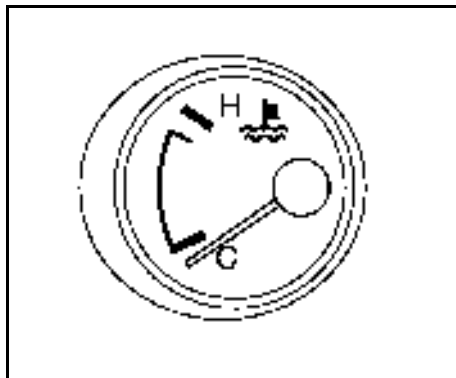


The tachometer indicates engine speed in revolutions per minute (r/min). Do not rev the engine into the red zone. (1)

CAUTION:

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

ENGINE COOLANT TEMPERATURE GAUGE



The gauge indicates the engine coolant temperature.

The engine coolant temperature will vary with the outside air temperature and driving conditions.

CAUTION:

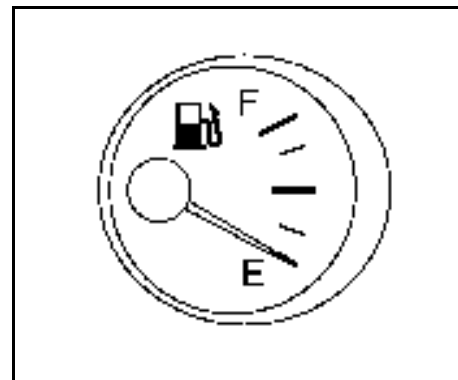
- When towing a trailer or driving uphill, if the needle nears the hot end of the normal range, reduce the vehicle speed as soon as safely possible to decrease the engine coolant temperature. It is recommended to use 2nd and 3rd gears under speeds of 30 km/h (20 MPH) and 60 km/h (37 MPH) respectively.
- If the gauge indicates above the normal range, stop the vehicle as soon as safely possible.

- If the engine is overheated, continued operation of the vehicle may seriously damage the engine. See "IF YOUR VEHICLE OVERHEATS" in the "6. In case of emergency" section for immediate action required.

WARNING

Allow the engine to cool before removing the radiator cap to avoid the danger of being scalded.

FUEL GAUGE



The gauge indicates the APPROXIMATE fuel level in the tank.

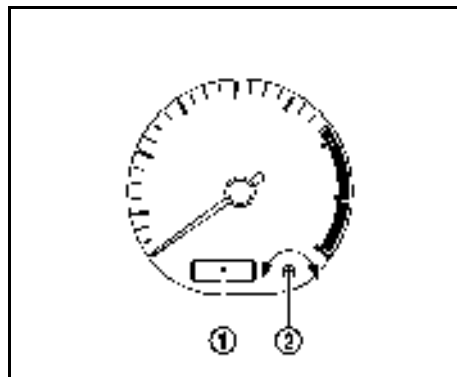
The gauge may move slightly during braking, turning, acceleration, or going up or down hill.

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

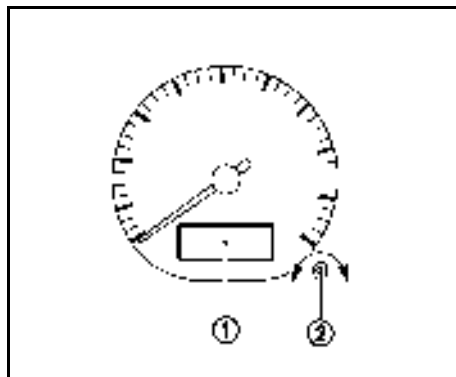
CAUTION:

Refill before the gauge registers Empty (E).

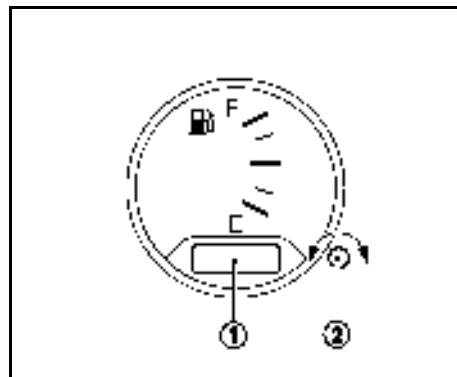
CLOCK



Type A



Type B



Type C

The digital clock (1) displays on the meter or gauge all the time. When the ignition key is in "ON", an illumination light will come on.


















Adjusting the time

Turn the adjusting knob (2) anti-clockwise to advance the hour.

Turn the adjusting knob (2) clockwise to advance the minute.

Once the power supply is disconnected, the clock will start to operate from the time 1:00. Adjust the time display.

WARNING / INDICATOR LIGHTS AND CHIMES

	or	Air bag warning light*		Low fuel warning light*		High beam indicator light (blue)
				Seat belt warning light*		Malfunction indicator light (MI or MIL)
		Anti-lock brake system warning light*		Speed [120 km/h (75 MPH)] warning light*		Turn signal/hazard indicator light
		Brake warning light		Water in fuel filter warning light (Diesel engine - YD25DDTi diesel engines only)		Security indicator light*
		Charge warning light		4-wheel drive indicator light (TX model)*		Diff Lock indicator light*
		Engine oil pressure warning light		Glow plug indicator light (Diesel engine)		* if so equipped

Checking bulbs

With all doors closed, apply the parking brake, fasten the seat belts and turn the ignition key to "ON" without starting the engine. The following lights will come on:





The following lights come on briefly and then go off:



If any light fails to come on, it may indicate a burned-out bulb or an open circuit in the

electrical system. Have the system repaired promptly.

WARNING LIGHTS

 or  Air bag warning light (if so equipped)

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

If any of the following conditions occur, the air bag and pre-tensioned seat belt need servicing and your vehicle must be taken to your nearest Authorized NISSAN Dealer.

- The air bag warning light remains on after approximately 7 seconds.
- The air bag warning light flashes intermittently.
- The air bag warning light does not come on at all.

Unless checked and repaired, the Supplemental Restraint System and/or pre-tensioned seat belt may not function properly.

For additional details on the Air Bag System, see "1. Safety - seats, seat belts and supplemental restraint system"



Anti-lock brake system warning light (if so equipped)

After turning the ignition key to the "ON" position, the light will illuminate. The anti-lock brake warning light will turn off after about 1 second if the system is operational.

If the light comes on while the engine is running, it may indicate the anti-lock brake system is not functioning properly. Have the system checked by your NISSAN Dealer.

However if the light illuminates while starting the engine, it does not indicate a system malfunction.

If a malfunction occurs in the system, the anti-lock function of the brake will cease but the ordinary brakes will continue to operate normally.

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



Brake warning light

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

Parking brake indicator:

The light comes on when the parking brake is applied.

Low brake fluid warning light: (if so equipped)

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

- 1 Check the brake fluid level. Add brake fluid as necessary. See "BRAKE AND CLUTCH FLUID" in the "8. Maintenance and do-it-yourself" section.



WARNING

If the brake fluid level is below the MINIMUM mark on the brake fluid reservoir, do not drive until the brake system has been checked at a NISSAN Dealer.

- 2 If the brake fluid level is correct, have the warning system checked by a NISSAN Dealer.



WARNING

- **Even if you judge that to continue driving is safe, have your vehicle towed because driving it could be dangerous.**
- **Pressing the brake pedal when the engine stops and / or low brake fluid level may increase your stopping distance and require greater pedal effort as well as pedal travel.**



Charge warning light

If the light comes on while the engine is running, it may indicate the charging system is not functioning properly. 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.

CAUTION:

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



Engine oil pressure warning light

This light warns of low engine oil pressure. If the light flickers or comes on during normal driving, pull off the road in a safe area, stop the engine immediately and call a NISSAN Dealership.

CAUTION:

- **Running the engine with the oil pressure warning light on could cause serious damage to the engine.**
- **The engine oil pressure warning light is not designed to indicate a low oil level. Use the dipstick to check the oil level. See "ENGINE OIL" in the "8. Maintenance and do-it-yourself" section.**




Low fuel warning light (if so equipped)

This light comes on when the fuel tank is almost empty. Refuel at the nearest filling station.



Seat belt warning light (if so equipped)

When the ignition switch is in the "ON" position, the seat belt warning light illuminates. The light will continue to illuminate until the driver's seat belt is fastened.

For models equipped with pre-tensioner seat belt (if the air bag warning light is ):

When the ignition key is turned to the ON position, the seat belt warning light illuminates for about 7 seconds. If the light starts blinking after about 7 seconds, there may be something wrong with the pre-tensioner seat belt. In this case, the pre-tensioner will not

operate properly. Have it checked by your NISSAN dealer.

For additional information, see "PRE-TENSIONER SEAT BELT SYSTEM" in the "1. Safety - seats, seat belts and supplemental restraint system" section.



Speed [120 km/h (75 MPH)] warning light (if equipped)

This light blinks when the vehicle speed goes over approximately 120 km/h (75 MPH). Be sure to observe the speed limit in the area where you are driving.



Water in fuel filter warning light (YD25DDTi diesel engines only)

If the light comes on (and a chime sounds if so equipped) while the engine is running, it warns that you need to immediately drain the water from the fuel filter. See "FUEL FILTER" in the "8. Maintenance and do-it-yourself" section.

CAUTION:

Failure to drain water can cause serious damage to the engine.

INDICATOR LIGHTS



4-Wheel drive indicator light (4X4 model)

This light comes on when the transfer shift control lever is in the "4H" or "4L" position.

If the light remains on when shifting from "4H" to "2H", the 2-wheel drive is not selected. Ensure safety and either accelerate, decelerate or reverse the vehicle to change to 2-wheel drive.



Glow plug indicator light (Diesel engines)

This light comes on when the ignition key is in "ON", and goes out when the glow plugs have been preheated. When the engine temperature is colder, the glow plug warm-up time will be longer.



High beam indicator light (Blue)

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



Malfunction indicator (light) (MI or MIL) (YD25DDTi diesel engine)

This light functions as an indicator for the "Water in fuel filter warning (YD25DDTi diesel engine) and engine control malfunction indicator.

Water in fuel filter warning (YD25DDTi diesel engine)

If the light comes on while the engine is running, it may warn that you need to drain water from the fuel filter. This should be checked immediately. See "FUEL FILTER" in the "8. Maintenance and do-it-yourself" section.

CAUTION:

Failure to drain water can cause serious damage to the engine.

Malfunction indicator light function for engine control (Gasoline and diesel engines):

If this light comes on while the engine is running, it may indicate a potential engine control malfunction. Although the vehicle is still driveable, see your NISSAN dealer for service as soon as possible. You do not need to have your vehicle towed to the dealer. Continued operation without having the engine control system checked and repaired as necessary could lead to poor driveability, reduced fuel economy and possible damage to the engine control system.

Incorrect setting of the engine control system may lead to non-compliance of local and national emission laws and regulations.



Security indicator light (if so equipped)

The security indicator light blinks whenever the ignition is in the "ACC", "OFF" or "LOCK" position. This function indicates that the theft warning system equipped on the vehicle is operational.

If the theft warning system is malfunctioning, this light will remain on while the ignition switch is in the "ON" position. (See "SECURITY SYSTEM" later in this section for additional information.)



Turn signal/hazard indicator lights

The light flashes when the turn signal switch lever or hazard switch is turned on.



Diff Lock indicator light (if so equipped)

This light comes on when the diff lock switch is turned to the on position.

SECURITY SYSTEM (if so equipped)

NATS (NISSAN ANTI-THEFT SYSTEM)

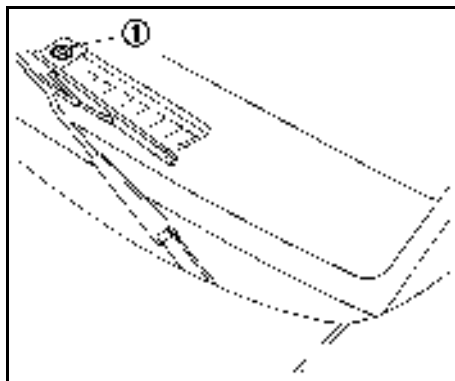
The NATS (NISSAN Anti-theft System)* will not allow the engine to start without the use of the registered NATS key.

* Immobiliser

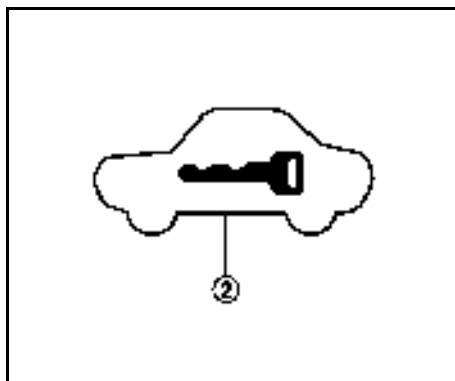
If the engine fails to start using the registered NATS key, it may be due to interference caused by another NATS key, an automated toll road device or automated payment device on the key ring. Restart the engine using the following procedures:

- 1 Leave the ignition switch in the "ON" position for approximately 5 seconds.
- 2 Turn the ignition switch to the "OFF" or "LOCK" position and wait approximately 5 seconds.
- 3 Repeat step 1 and 2 again
- 4 Restart the engine while keeping the device (which may have caused the interference) separate from the registered NATS key.

If this procedure allows the engine to start, NISSAN recommends placing the registered NATS key on a separate key ring to avoid interference from other devices.



Type A



Type B

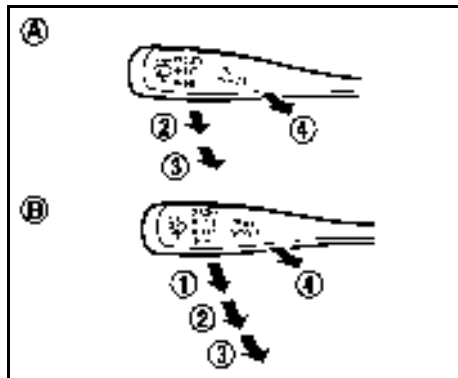
Security indicator light

If NATS (Nissan Anti-theft System) is malfunctioning, the security indicator light (1) or (2) will remain on while the ignition key is in the ON position.

If NATS (Nissan Anti-Theft System) is malfunctioning, the security indicator light (1) or (2) will turn on after flashing six times while the ignition key is in the ON position. However, if the security indicator light turns off after the light has remained on for 15 minutes, you can start the engine only once. See your NISSAN dealer for NATS service as soon as possible.

If the light still remains ON and/or the engine will not start, see your NISSAN Dealer for NATS service as soon as possible. Please bring all NATS keys that you have when visiting your NISSAN Dealer for service.

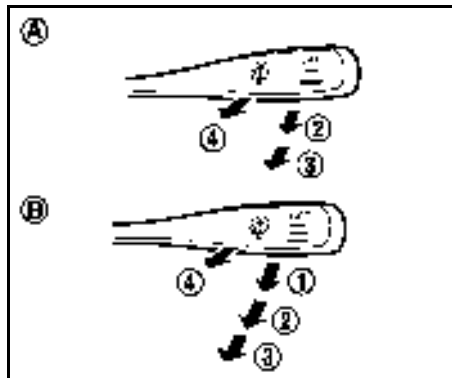
WINDSHIELD WIPER AND WASHER SWITCH



Right-hand drive models

Turn the ignition switch to "ACC" or "ON" and push the lever down for intermittent (1) (if so equipped), low speed (2) or high speed (3) wiper operation.

To operate the washer, pull the lever towards you to (4) until the desired amount of washer fluid is spread on the windshield. The wiper will automatically operate several times.



Left-hand drive models

CAUTION:

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




WARNING

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


HEADLIGHT, DIMMER AND TURN SIGNAL SWITCH

NISSAN recommends you should consult the local regulations on the use of lights.

Lighting

Turn the switch to the  position (1).

The front park lights, tail, license plate and instrument lights will come ON.

Turn the switch to the  position (2).

Headlights will come on and all the other lights remain ON.

To select the high beam, push the lever forward (3). Pull it back (4) to select the low beam.

Flashing headlight

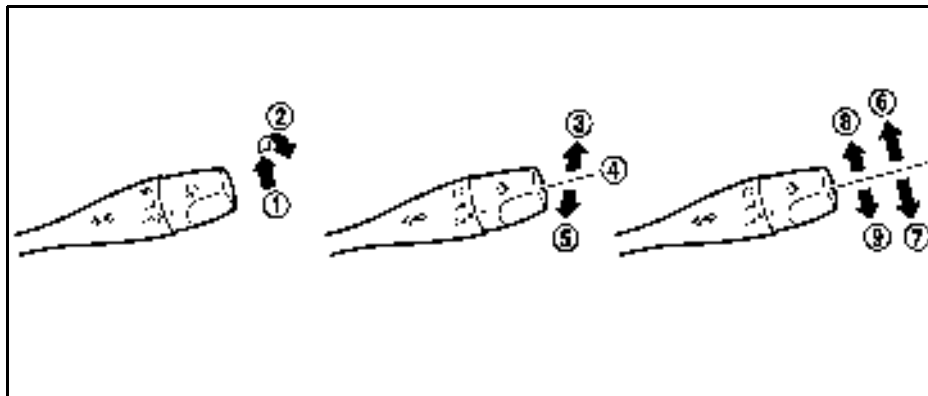
Pulling the lever toward you (5) will turn ON headlight high beam even when the headlight switch is OFF.

Turn signal

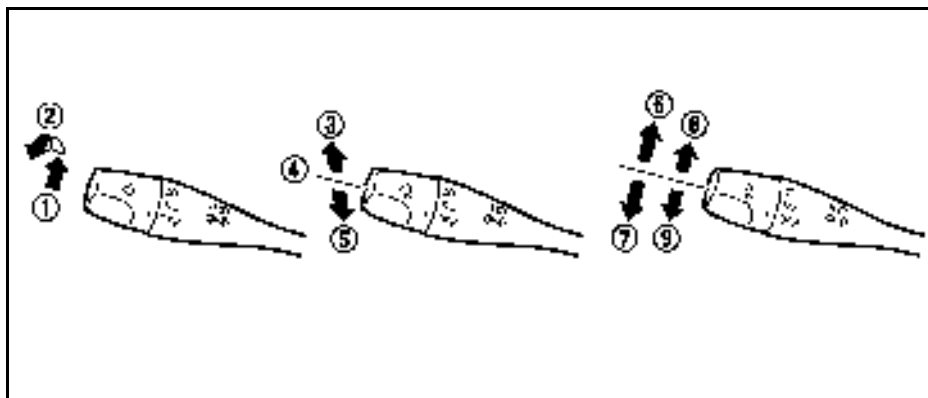
Move the lever up (6) or down (7) to signal the turning direction. When the turn is completed, the turn signals cancel automatically.

Lane change signal

To indicate a lane change, move the lever up (8) or down (9) to the point where lights begin flashing.

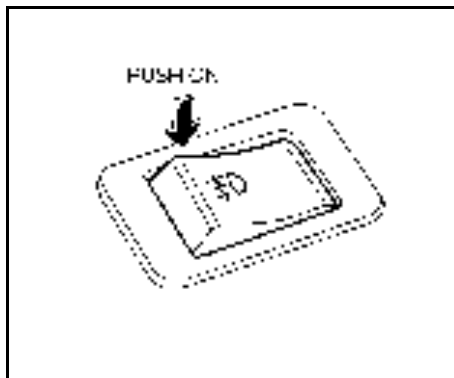


Right-hand drive models



Left-hand drive models

FOG LIGHT SWITCH (if equipped)



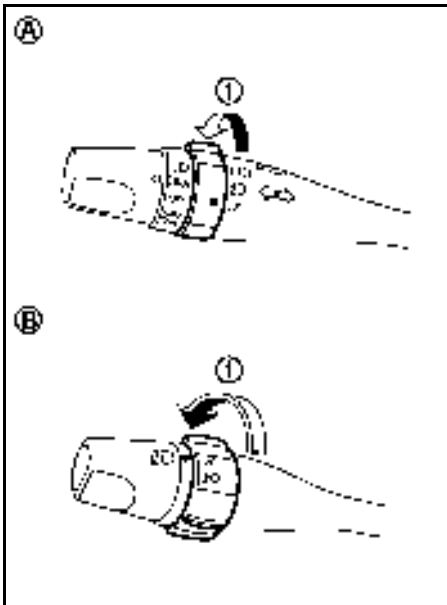
Type A

FRONT FOG LIGHTS

Type A:

The fog light switch operates when the headlight switch is in the **ON** or **OFF** position.

Push the switch on to turn on the fog lights.



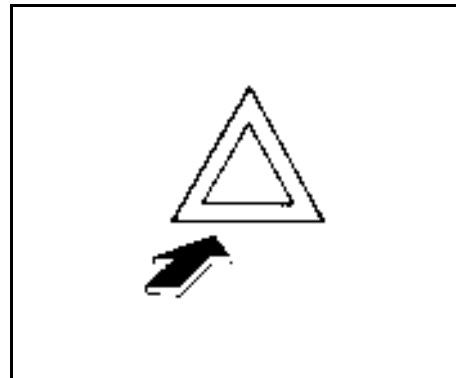
Type B

Type B:

To turn the fog lights on, turn the headlight switch to the **ON** or **OFF** position, then turn the fog light switch to the **ON** position (1). To turn them off, turn the switch to the **OFF** position.

The headlight switch must be in the **ON** or **OFF** position for the fog lights to operate.

HAZARD INDICATOR FLASHER SWITCH



Push the switch ON to warn other drivers when you must stop or park under emergency conditions. All turn signal lights will flash.

The flasher can be activated with the ignition switch either off or on.

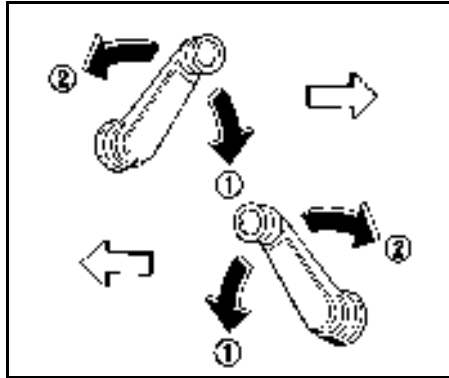


WARNING

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

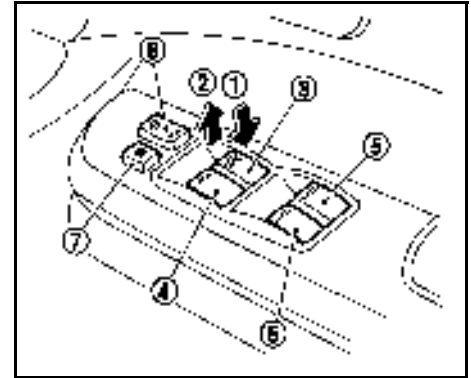
MANUAL WINDOWS

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

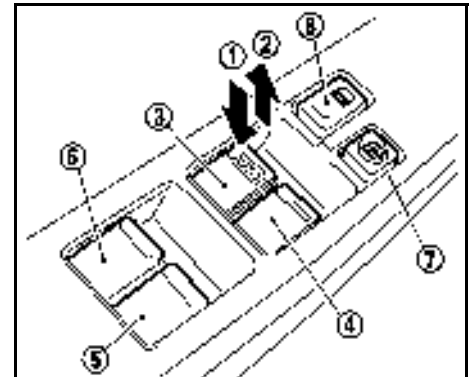


The side windows can be opened (1) or closed (2) by turning the hand crank on each door.

POWER WINDOWS (if so equipped)



Right-hand drive models



Left-hand drive models

Driver's side window switch

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

To open or close the window, push down (1) or pull up (2) the switch and hold it.

The main switch to the driver's side door will open or close each window by operating the driver side switch (3), front passenger side switch (4), rear right side switch (Double cab models) (5) and rear left side switch (Double cab models) (6).

Locking passenger's window (if so equipped)

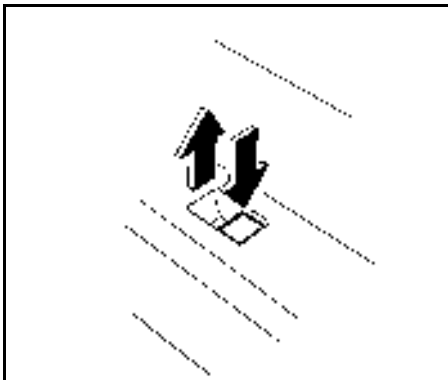
When the lock button (7) is pushed in, only the driver side window can be opened or closed. Push it in again to cancel.

For the power door lock switch (8) descriptions, refer to "LOCKING WITH POWER DOOR LOCK SWITCH" in the "3. Pre-driving checks and adjustments" section.

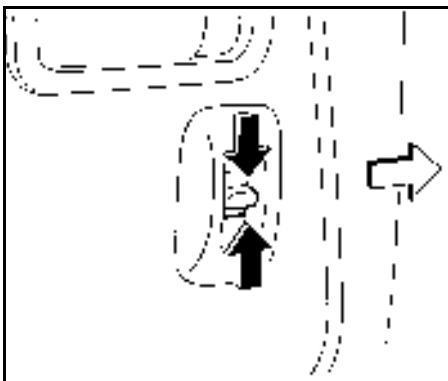


WARNING

- **Make sure that the passenger has his/her hands etc. inside the vehicle before closing the windows.**
- **Do not leave children and pets unattended inside the vehicle. They could unknowingly activate switches.**



Type A

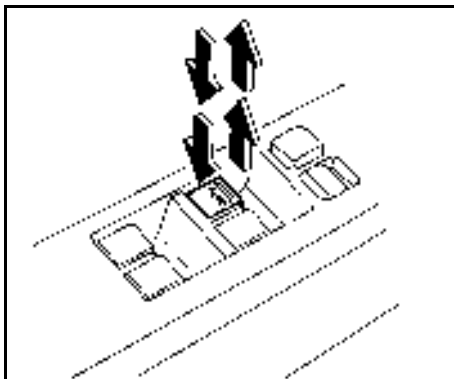


Type B

Passenger's side window switch

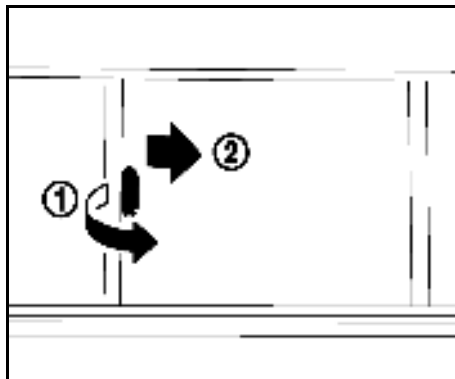
Front passenger's switch (Type A) or rear passenger's switch (Type B) (Double cab models) will open or close only the corresponding window. To open or close the window, push down or pull up the switch and hold it.

If the passenger's window lock button on the driver's side switch is pushed in, the passenger's side switch cannot be operated.



Automatic operation (if so equipped)

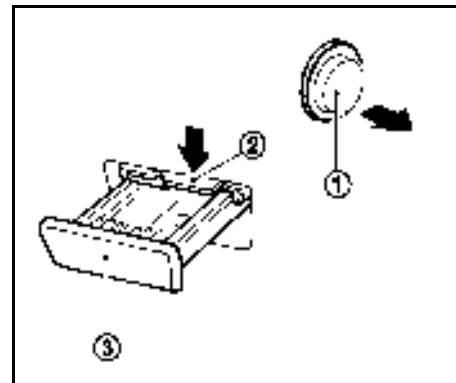
To fully open or close (if so equipped) the driver's side window, completely push down or pull up the switch and release it; it need not be held. The window will automatically open or close all the way. To stop the window, just press the switch in the opposite direction.



Rear sliding window (if so equipped)

Pull the lever toward (1) and then slide the window (2).

POWER POINT AND ASHTRAYS (if so equipped)



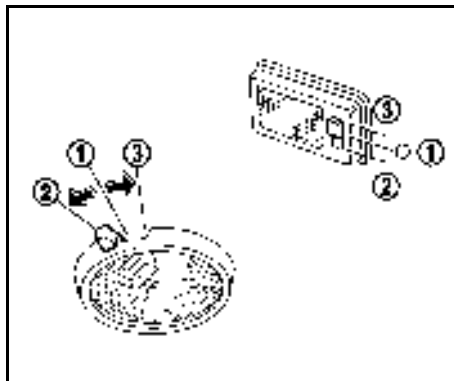
The power socket (1) operates when the ignition switch is in the "ACC" or "ON" position.

Remove the power outlet cap to access the socket for personal accessories.

Return the power outlet cap to its original position after use.

To take out the ashtray, push down the holding part (2) as illustrated. Front ashtrays (3) are located on the console panel.

INTERIOR LIGHTS



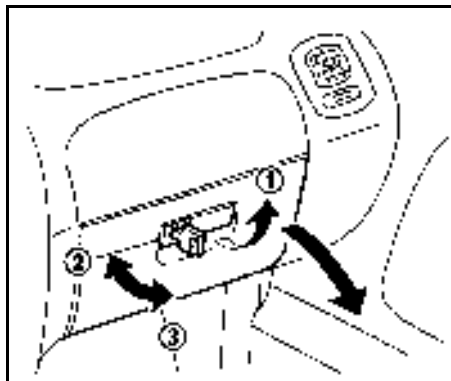
The interior light has a three-position switch.

- When the switch is in the centre "O" or "DOOR" position (1), the light will illuminate by opening the doors.
- When the switch is in the "OFF" position, (2) the interior light will not illuminate, regardless of door position.
- When the switch is in the "ON" position (3), the interior light will illuminate, whether any door is opened or closed.

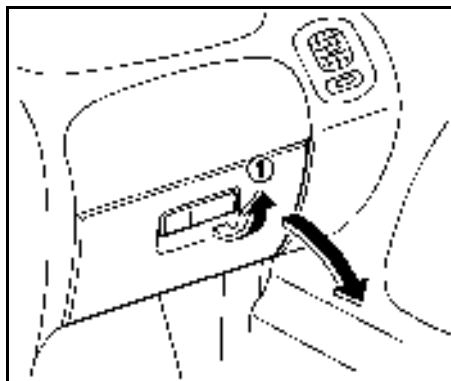
CAUTION:

Do not use for extended periods of time with the engine stopped.

GLOVE BOX



Type A



Type B

To open the glove box lid, pull the lever up (1). The glove box can be locked (2) or unlocked (3) with the ignition key if the lid is equipped with a key cylinder.

WARNING

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

CUP HOLDERS (If so equipped)

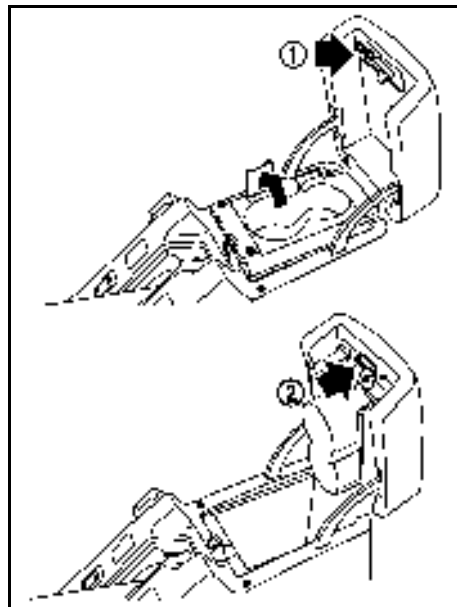
WARNING

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

CAUTION:

- Avoid abrupt starting and braking when the cup holder is being used to prevent spillage. If the liquid is hot, it can scald you or your passenger.

CONSOLE BOX (If so equipped)

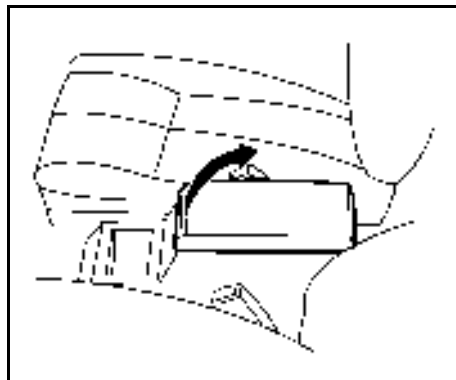


Type A

Pull the right side lever (1) on the console box lid to open the lid only.

Pull the left side lever (2) on the console box lid to open the lid with the cup holder.

Do not place valuable items in the storage.



Type B



WARNING

- The centre console box should not be used while driving in order that full attention may be given to the driving operation.
- Keep the console box and glove box lid closed while driving to prevent injury in an accident or a sudden stop.

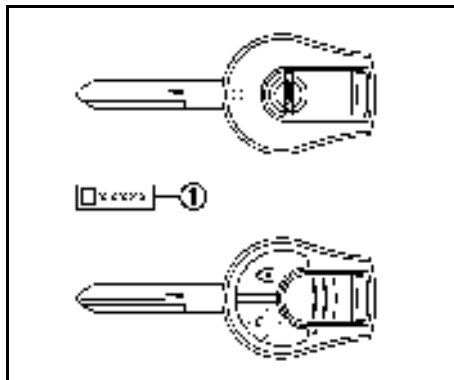
CAUTION:

Do not place valuable items in the centre console box.

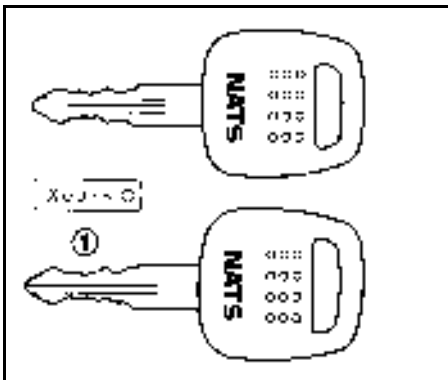
3 Pre-driving checks and adjustments

Keys	3-1	Fuel filler lid	3-7
NATS (NISSAN Anti-Theft System)		Tailgate latch.....	3-8
(if so equipped).....	3-2	Tailgate	3-9
Door locks	3-2	Tie down hooks (if so equipped)	3-9
Locking with key	3-2	Roof luggage rack	3-10
Locking with inside lock knob	3-2	Steering wheel	3-10
Locking with power door lock switch		Tilting steering wheel (if so equipped)	3-10
(if so equipped).....	3-3	Mirrors	3-10
Child safety rear door lock (Double cab models).....	3-3	Outside rearview mirrors.....	3-10
Remote control door lock system		Inside rearview mirror	3-11
(if so equipped).....	3-4	Vanity mirror (if so equipped)	3-12
Locking doors	3-5	Parking brake.....	3-12
Unlocking doors.....	3-5	Stick Type	3-12
Battery replacement	3-5	Center lever type	3-12
Hood.....	3-6		
Opening the hood.....	3-6		
Closing the hood.....	3-6		

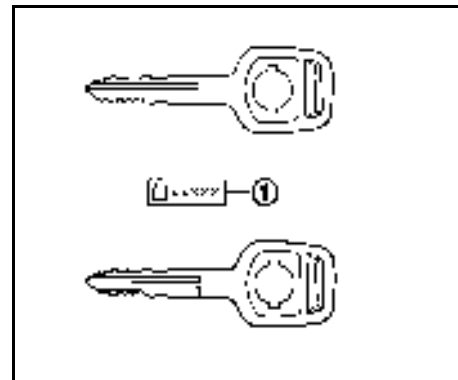
KEYS



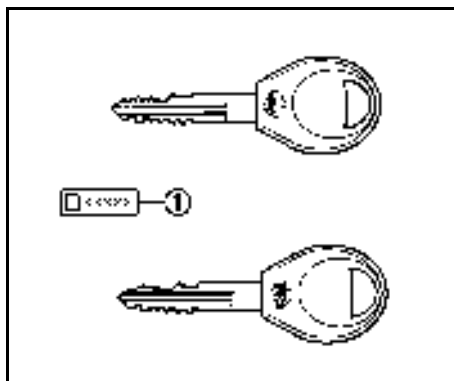
Type A



Type B



Type C



Type D

The key can only be inserted fully in the ignition key cylinder. For the door, glove box and fuel filler lid key cylinders, it is normal for the key not to go into the key cylinder all the way.

A key number plate (1) is supplied with your key. Record the key number and keep the plate in a safe place (such as your wallet), NOT IN THE CAR. NISSAN does not record key numbers so it is very important to keep track of your key number plate.

A key number is only necessary when you have lost all keys and do not have one to duplicate from. If you still have a key, this key can be duplicated by your NISSAN dealer.

CAUTION:

Do not leave the ignition key inside the vehicle if you leave the vehicle.

DOOR LOCKS

NATS (Nissan Anti-theft System)* if so equipped

Only a key with NATS can start your vehicle. A key number and NATS PIN code are necessary when you need an extra key made.

Type A:

As many as 5 keys with NATS can be used with one vehicle. (4 door lock remote controllers can be registered for the NATS keys.)

Type B:

As many as 4 keys for RHD models or 5 keys for LHD models of NATS can be used with one vehicle.

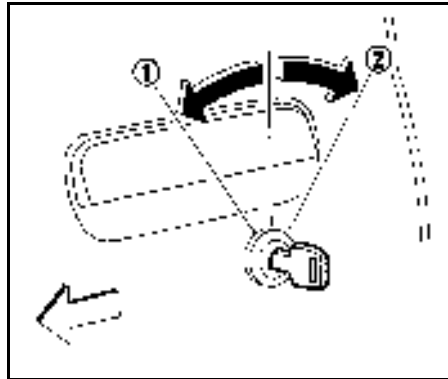
The new key must be registered to the NATS components of your vehicle by your NISSAN Dealer. At this time, you are requested to bring all NATS keys that you have to your NISSAN dealer.

Also bring your NATS PIN code that was originally supplied with your vehicle (if so equipped). This is because the registration process will erase all memory of the NATS components.

CAUTION:

Do not allow the NATS key, which contains an electrical transponder to come into contact with salt water. This could affect system function.

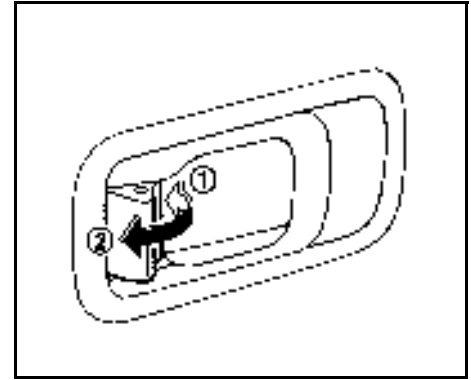
*Immobilizer



LOCKING FRONT DOORS WITH KEY

To lock the doors, turn key towards the front of the vehicle (1). To unlock, turn it towards the rear (2).

Locking or unlocking the driver's door will simultaneously lock or unlock the other doors. (With power door lock models).



LOCKING WITH INSIDE LOCK KNOB

- (1) LOCK
- (2) UNLOCK

Driver's door

The driver's door cannot be locked from the outside without a key .

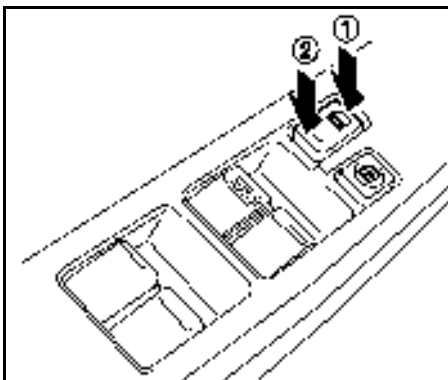
This is to prevent the door lock from accidentally being locked with the key inside the vehicle.

Other doors

To lock the door from the outside without a key, move the inside lock knob to the "LOCK" position (1), then close the door.

WARNING

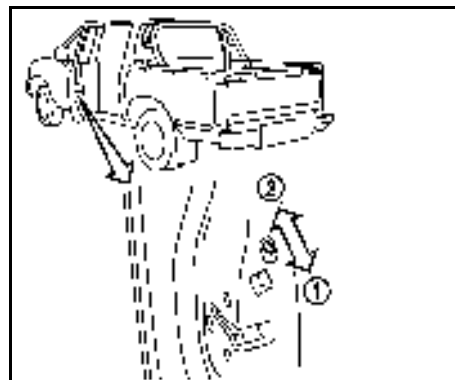
- When locking the door without a key, be sure not to leave the key inside the vehicle.
- Before opening the door, always check for and avoid oncoming traffic.
- Never leave children unattended in a vehicle, and always be sure you have your keys with you when leaving your vehicle unattended. If an emergency occurs it will be difficult to help them.



LOCKING WITH POWER DOOR LOCK SWITCH (if so equipped)

The power door lock system allows you to lock (1) or unlock (2) all doors simultaneously.

- Turning the driver side door key will lock or unlock all doors.
- Pushing the driver's inside lock knob will lock all doors. Pulling the lock knob will unlock all doors.
- Operating the power door lock switch will lock or unlock all doors except the driver side door.



CHILD SAFETY REAR DOOR LOCK (Double cab models)

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

When the lever is in the LOCK position (1), the rear door can be opened only from the outside. For normal operation, set the lever to the FREE position (2).

REMOTE CONTROL DOOR LOCK SYSTEM (if so equipped)

The remote keyless entry system can operate all door locks using the remote controller. The remote controller can operate at a distance of approximately 1 m (3.3 ft) from the vehicle. (The effective distance depends upon the conditions around the vehicle.)

As many as four remote controllers can be used with one vehicle. For information concerning the purchase and use of additional remote controllers, contact your NISSAN Dealer.

The remote controller will not function under the following conditions:

- When the distance between the remote controller and vehicle is more than approximately 1 m (3.3 ft).
- When the remote controller battery is discharged.
- When the key is in the ignition switch.

CAUTION:

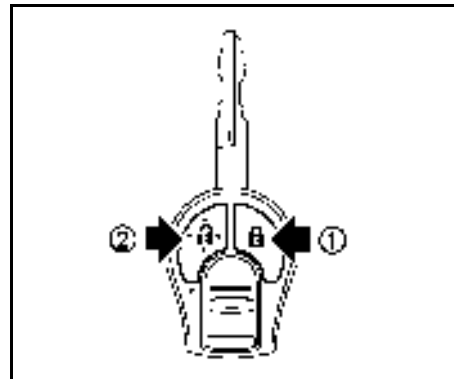
- **When locking the doors using the remote controller, be sure not to leave the key in the vehicle.**
- **Do not allow the remote controller, which contains electrical components, to come in contact with water or salt water. This could affect the system function.**
- **Do not drop the remote controller.**
- **Do not strike the remote controller sharply against another object.**

3-4 Pre-driving checks and adjustments

- **Do not place the remote controller for an extended period in an area where temperature exceeds 60°C (140°F).**

If a remote controller is lost or stolen, NISSAN recommends erasing the ID code of that controller. This will prevent the controller from unauthorised use to unlock the vehicle. For information regarding the erasing procedure, contact a NISSAN dealer.

If your vehicle is equipped with a genuine NISSAN Anti-Theft System, operating the remote control door lock system will simultaneously operate the anti-theft system.



Type A

- (1) LOCK button
- (2) UNLOCK button

LOCKING DOORS

- 1 Remove the ignition key.
 - 2 Close all the doors.
 - 3 Push the LOCK button (1) on the remote controller.
 - 4 Operate the door handles to confirm that the doors have been securely locked.
- All the doors will lock.
 - The hazard indicator flashes once.

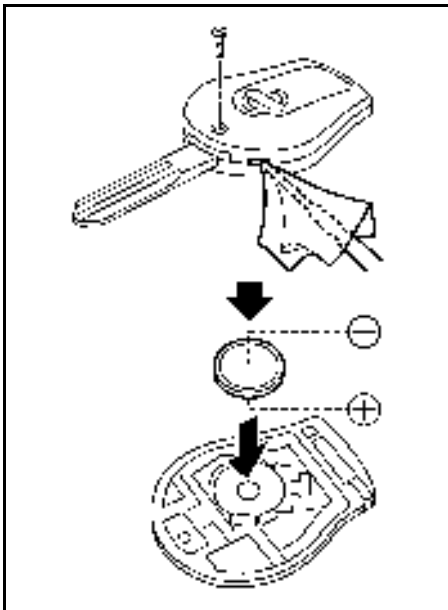
When the LOCK button is pushed with all doors locked, the hazard indicator flashes once as a reminder that the doors are already locked.

CAUTION:

After locking the doors using the remote controller, be sure that the doors have been securely locked by operating the door handles.

UNLOCKING DOORS

- 1 Push the UNLOCK button (2) on the remote controller once.
- All doors will unlock.
 - The hazard indicator flashes twice.



Type A

BATTERY REPLACEMENT (Type A)

CAUTION:

- **Be careful not to allow children to swallow the battery and removed parts.**
- **An improperly disposed battery can harm the environment. Always confirm local regulations for battery disposal.**
- **When changing batteries, do not let dust or oil get on the components**

- **There is danger of explosion if lithium battery is incorrectly replaced. Replace only with the same or equivalent type.**

To replace the battery:

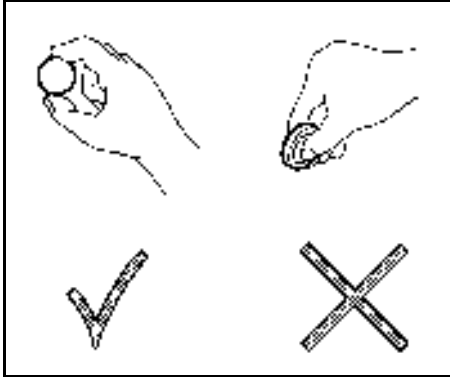
- 1 Remove the screw.
- 2 Insert a small screw driver into the slit of the corner and twist it to separate the upper part from the lower part. Use a cloth to protect the casing.
- 3 Replace the battery with a new one.

Recommended battery:

CR1620 or equivalent.

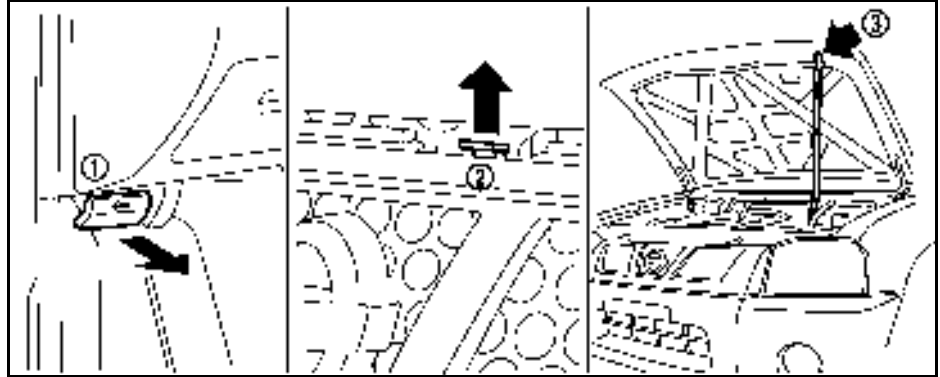
- Do not touch the internal circuit and electric terminals as doing so could cause a malfunction.
 - Hold the battery by the edges. Holding the battery across the contact points will seriously deplete the storage capacity.
 - Make sure that the + side faces the bottom case.
- 4 Close the lid securely and install the screw.
 - 5 Operate the buttons to check its operation.
- See a NISSAN dealer if you need any assistance for replacement.

HOOD



CAUTION:

Always hold the battery by the edges, as shown. Holding the battery across the contact points will seriously deplete the storage capacity.



OPENING THE HOOD

- 1 Pull the hood lock release handle (1) located below the instrument panel; the hood will then lift up slightly.
- 2 Pull the lever (2) upward at the front of the hood with your fingertips and raise the hood.
- 3 Insert the support rod (3) into the slot on the under-side of the hood.

CLOSING THE HOOD

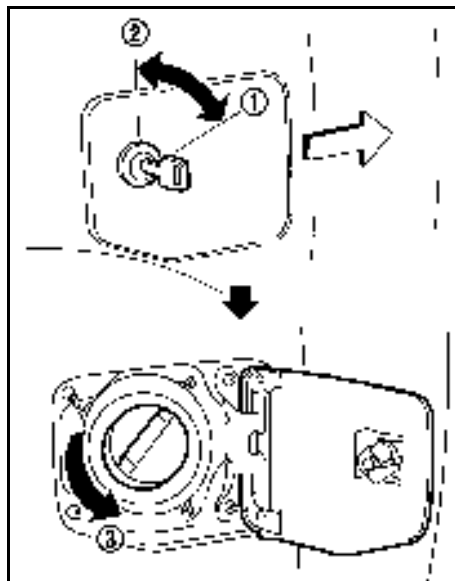
When closing the hood, reset the support rod to its original position, then slowly close the hood and make sure it locks into place.



WARNING

Always check that the hood is closed and locked securely to prevent it from opening while driving. The vehicle should only ever be operated with the hood securely closed.

FUEL FILLER LID AND CAP

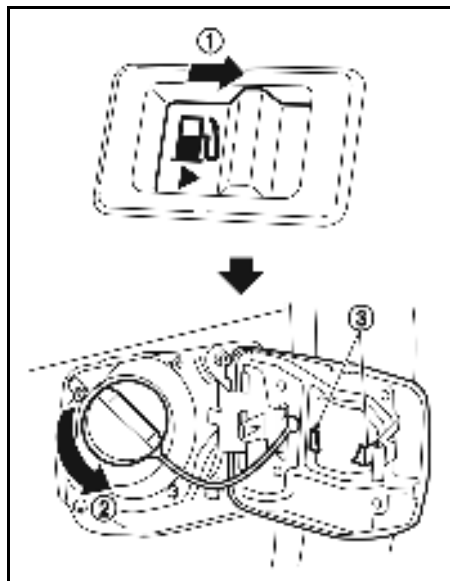


Type A

To open the fuel filler lid, turn the key clockwise (1). To close it and turn the key anti-clockwise (2).

To fill with fuel, turn the fuel filler cap anti-clockwise (2).

The fuel filler cap is a screw-on ratcheting type. Tighten the cap clockwise (3) until more than 2 ratcheting clicks are heard. The cap will lock automatically.

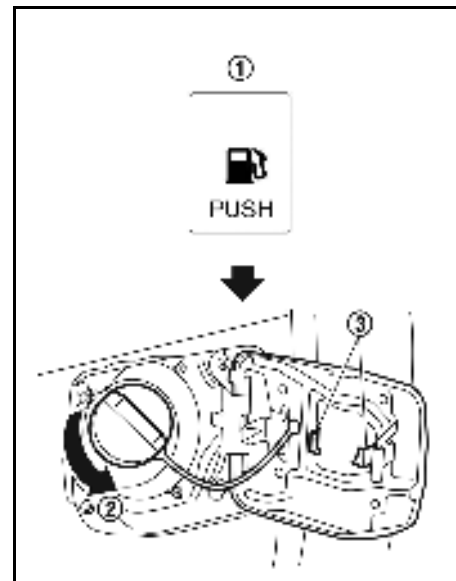


Type B

To open the fuel filler lid, slide the opener switch (1). To lock, close the fuel filler lid securely.

Turn the fuel filler cap counterclockwise (2) and place the cap on the cap holder (3) while filling the fuel.

The fuel filler cap is a screw-on ratcheting type. After refueling, tighten the cap clockwise until more than 2 ratcheting clicks are heard.



Type C

To open the fuel filler lid, push the opener (1), located on the right hand side of the driver seat, downwards. To lock, close the fuel filler lid securely.

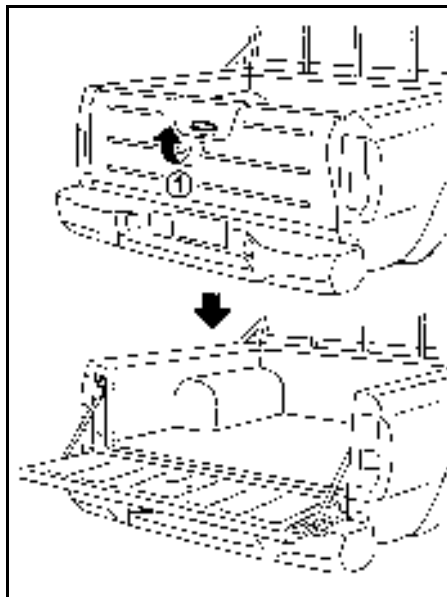
Turn the fuel filler cap counterclockwise (2) and place the cap on the cap holder (3) while filling the fuel.

The fuel filler cap is a screw-on ratcheting type. After refueling, tighten the cap clockwise until more than 2 ratcheting clicks are heard.

WARNING

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

TAILGATE LATCH

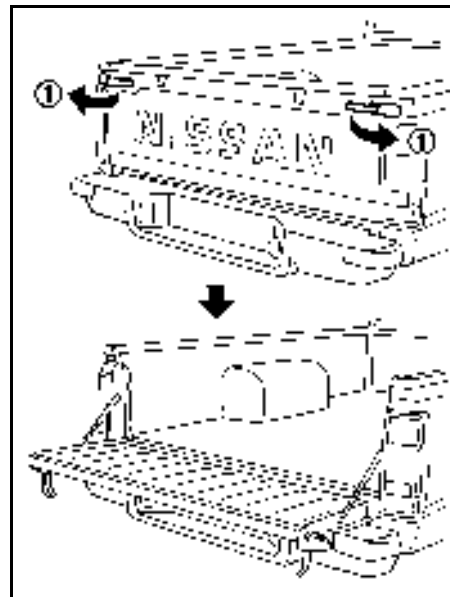


Type A

To open the tailgate, pull the tailgate handle (1) and lower the tailgate.

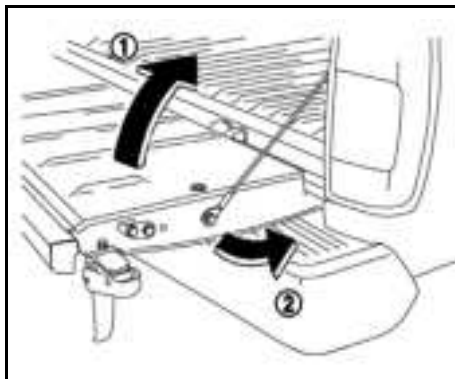
The support stays/cables will hold the gate open.

- The weight of the cargo loads must be evenly distributed over both the front and the rear axles.

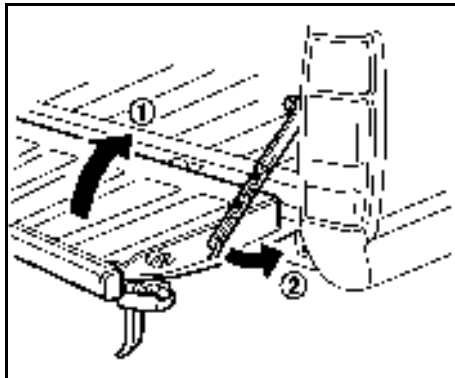


Type B

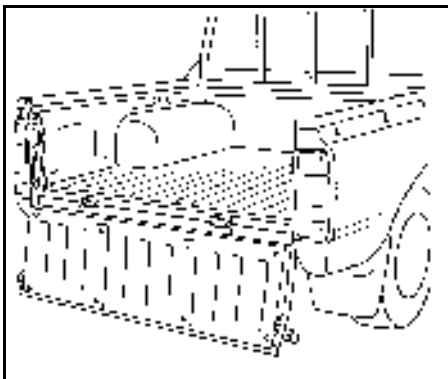
- All cargo should be securely fastened with ropes or straps to prevent it from shifting or sliding within the vehicle.
- Do not unhook cables as the tail gate will be damaged by the bumper
- When closing the tailgate, make sure that the latches are securely locked (Type A) or the handles are firmly fastened (Type B).



Type A



Type B



Releasing the tailgate stays/cables (Models without rear step bumper)

To fold the tailgate down to the lowest position, lift the tailgate slightly (1), then release the stays/cables (2).

CAUTION:

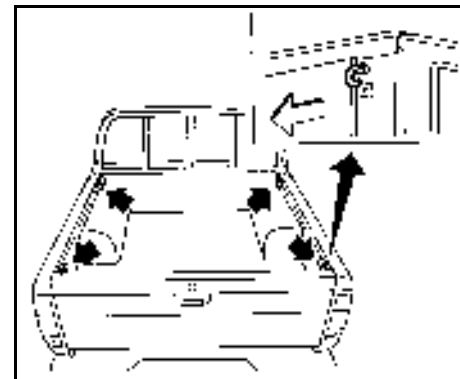
Do not drive the vehicle with the tailgate down.

Do not drop the tailgate down when a bumper or towbar is fitted. The tailgate will be damaged.

⚠ WARNING

While driving, never allow anyone to ride in the cargo area. Abrupt braking or stopping could lead to personal injury.

TIE DOWN HOOKS (If so equipped)



For your convenience, tie down hooks are placed at each corner of the load box. These may be used to help secure cargo loaded into the load box.

- The weight of the cargo load must be evenly distributed over both the front and rear axles.
- All cargo should be securely fastened with ropes or straps to prevent it from shifting or sliding within the vehicle.

ROOF LUGGAGE RACK (If so equipped)

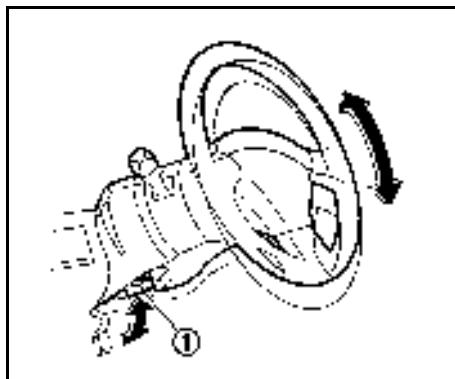
The roof rack may be used to load additional luggage on the vehicle.

CAUTION

- **Overloading of the roof rack can cause serious damage to the vehicle. The maximum load that can be placed on the roof rack is 50 kg.**
- **A maximum recommended speed of 120 km/h should not be exceeded when objects are loaded on the roof rack.**
- **Always ensure that the load is properly secured to the roof rack.**
- **Keep the height of the load as small as possible, as the increased centre of gravity can have an adverse effect on the stability of the vehicle.**
- **If at all possible, only use the roof rack when there is no space left in the loadbox.**

NISSAN is not responsible for any damage to the vehicle or loss of property that may result from not adhering to these warnings.

TILTING STEERING WHEEL (if so equipped)



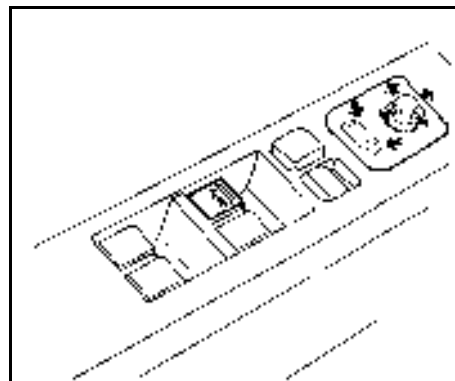
Push the lock lever (1) down and adjust the steering wheel up or down to the desired position. Push the lock lever (1) up firmly to lock the steering wheel in place.



WARNING

Do not adjust the steering wheel while driving.

OUTSIDE MIRROR CONTROL



Remote control type (if so equipped)

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

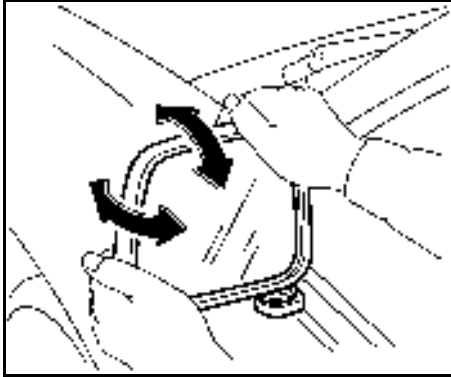
Push the right or left end of the switch to select the right or left side mirror, then adjust using the control knob.



WARNING

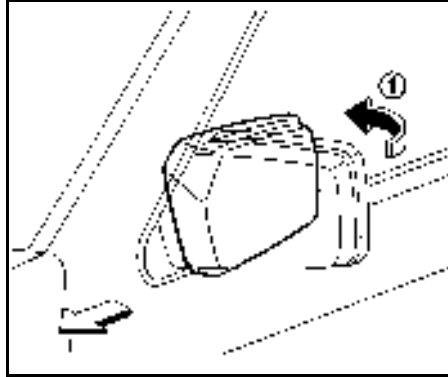
- **Check the position of all mirrors before driving. Altering their position while driving could distract your attention from the driving operation.**

INSIDE REARVIEW MIRROR



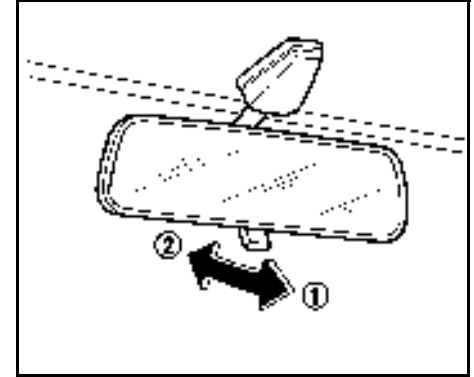
Manually adjusting type

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



Folding

Push the door mirror backward (1) to fold.



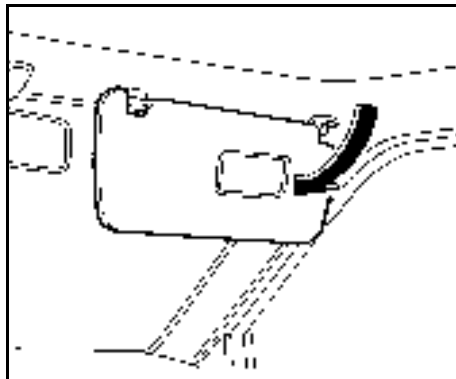
Manual anti-glare type (if so equipped)

The night position (1) will reduce glare from the headlights of vehicles behind you at night. Select the day position (2) when you drive in the daytime.

CAUTION

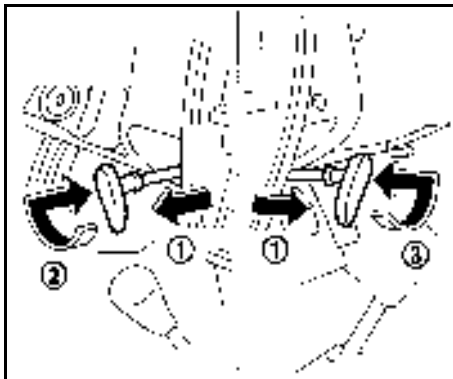
Use the night position only when necessary, because it reduces rear view clarity.

VANITY MIRROR (if so equipped)



To use the front vanity mirror, pull down the passenger's sunvisor.

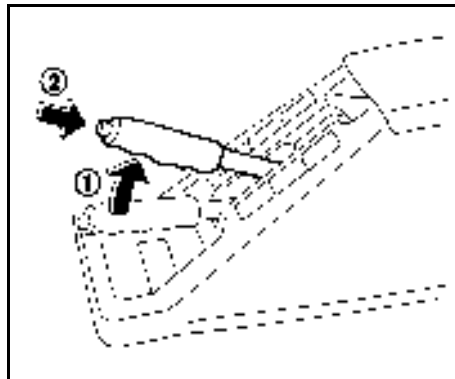
PARKING BRAKE LEVER



Stick Type

To apply: pull the lever out (1).

To release: pull out slightly and turn the lever (2) (Left-hand drive models) or (3) (Right-hand drive models), then push it in completely. Before driving, be sure the parking brake warning light goes out.



Center Lever Type

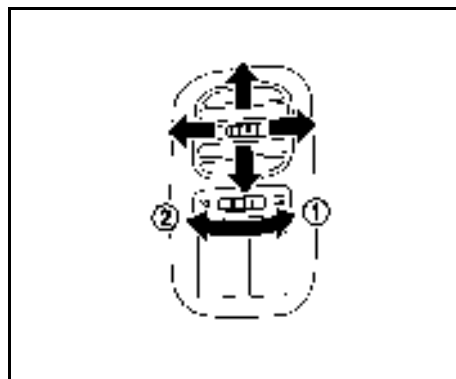
To apply: pull the lever up (1).

To release: pull the lever up slightly, push the button (2) and lower completely. Before driving, be sure the parking brake warning light goes out.

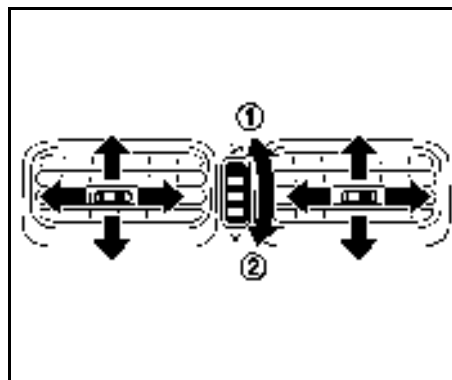
4 Heater and air conditioner and audio system

Ventilators.....	4-1	Audio system (if so equipped).....	4-6
Heater and air conditioner.....	4-2	Audio operation precautions	4-6
Heater and manual air conditioner	4-2	Antenna.....	4-6
Servicing air conditioner.....	4-5	CD Player/LW-MW-FM Radio Type.....	4-7
Heat switch (for YD25DDTi engine models only)....	4-5	FM-AM Radio with Compact Disc (CD) Player.....	4-14
Driving in dusty conditions.....	4-5	Car phone and CB radio.....	4-18

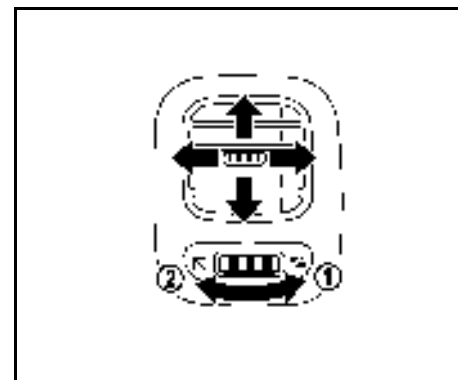
CENTRE AND SIDE VENTILATORS



Driver's side



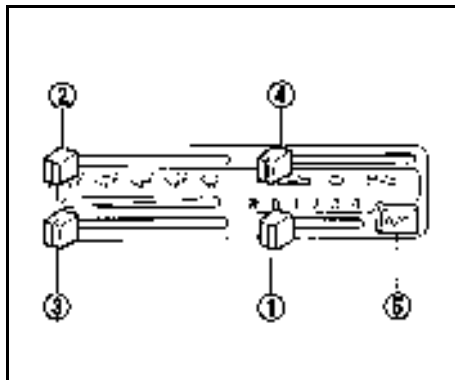
Center



Passenger's side

Open (1) or close (2) (if so equipped), and adjust the air flow direction of the ventilators.

HEATER AND AIR CONDITIONER

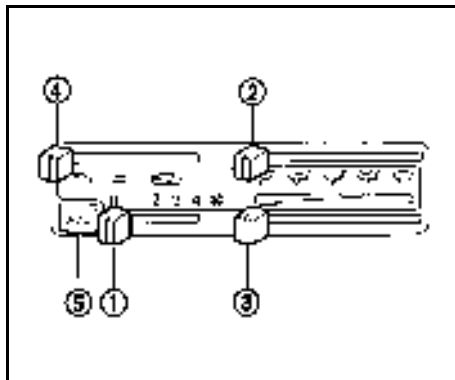


Right hand drive



WARNING

- The air conditioner cooling function operates only when the engine is running.
- Do not leave children or adults who would normally require the support of others alone in your vehicle. Pets should not be left alone either. On hot, sunny days, temperatures in a closed vehicle could quickly become high enough to cause severe or possibly fatal injuries to people or animals.
- Do not use the re-circulation mode for long periods as it may cause the interior air to become stale and the windows to fog up.



Left hand drive

- Position of the heating or air conditioning controls should not be done while driving, so full attention may be given to vehicle operation.

CONTROLS

Fan control lever

Fan control lever (1), turns the fan on and off and controls fan speed.

Air flow control lever

Air flow control lever (2), allows you to select the air flow outlets.



- Air flows from centre and side ventilators.



- Air flows from centre and side ventilators and foot outlets.



- Air flows mainly from foot outlets.



- Air flows from defroster outlets and foot outlets.




- Air flows mainly from defroster outlets.

Temperature control lever

Temperature control lever (3) allows you to adjust the temperature of the outlet air.

Air intake lever


Air intake lever (4) allows you to select the outside air circulation or the air recirculation.

-  position

Outside air is drawn into the passenger compartment.

Use this position for normal heater, or air conditioner operation.

If dust is not raised in front of the vehicle, this position is effective to prevent dust entry.



-  position

Interior air is re-circulated inside the vehicle.

Move the air intake lever (4) to this position when driving on a dusty road or to avoid traffic fumes.

Air conditioner button (If so equipped)







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

Start the engine, move the fan control lever  to the desired (1 to 4) position and push the air conditioner button  to turn on the air conditioner. The indicator light will come on when the air conditioner button is on. To stop the air conditioner, push the switch again to return it to the original position.

HEATER OPERATION





Heating

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

- 1 Move the air intake lever  to the "A/C" position for normal heating.
 - 2 Move the air control lever  to the "A/C" position.
 - 3 Turn on the fan control lever .
 - 4 Move the temperature control lever  to the desired position between the middle and the "HOT" position.
- For quick heating, move the air intake lever  to the "A/C" position. Be sure to turn the air intake lever  to the "A/C" position for normal heating.









Ventilation

This mode directs outside air from the side and centre vents.

- 1 Move the air intake lever  to the "A/C" position.
- 2 Move the air control lever  to the "A/C" position.
- 3 Turn on the fan control lever .
- 4 Move the temperature control lever  to the desired position.

Defrosting or defogging





This mode is used to defrost/defog the windows.

- 1 Move the air intake lever  to the "A/C" position.
 - 2 Move the air control lever  to the "A/C" position.
 - 3 Turn on the fan control lever .
 - 4 Move the temperature control lever  to the desired position between the middle and the "HOT" position.
- To quickly remove ice from the windows, move the air intake lever  to the "A/C" position, the fan control lever  to "4" and the temperature control lever  to the full "HOT". As soon as possible after the window is clear, move the air intake  lever to the "A/C" position.

- If it is difficult to defrost the windscreen while the air conditioner is turned off, turn it on (if so equipped).





Bi-level heating

This mode directs outside air from the side and centre vents and hot air from the floor outlets.

- 1 Move the air intake lever  to the "A/C" position.
- 2 Move the air control lever  to the "A/C" position.
- 3 Turn on the fan control lever .
- 4 Normally move the temperature control lever  to the midpoint between "HOT" and "COLD".

Heating and defogging

This mode heats the interior and defogs the windscreen.

- 1 Move the air intake lever  to the "A/C" position.
- 2 Move the air control lever  to the "A/C" position.
- 3 Turn on the fan control lever .
- 4 Move the temperature control lever  to the desired position between the middle and the "HOT" position.

Operating tips

Clear snow and ice from the wiper blade and air inlet in front of the windshield. This will improve heater operation and defroster operation.

AIR CONDITIONER OPERATION (If so equipped)

Start the engine, move the fan control lever (1) to the desired (1 to 4) position and push in the air conditioner button (6). To activate the air conditioner. When the air conditioner is on, cooling and dehumidifying functions will be added to the heater operation.

A visible mist may be seen coming from the ventilators in hot, humid conditions as the air is cooled rapidly. This does not indicate a malfunction.

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

Cooling

This mode is used to cool and dehumidify.

- 1 Move the air intake lever (4) to the "A/C" position.
- 2 Move the air control lever (2) to the "A/C" position.
- 3 Turn on the fan control lever (1).
- 4 Push in the air conditioner button (6). The indicator light will come on.

- 5 Move the temperature control lever (3) to the desired position.

- For quick cooling when the outside temperature is high, move the air intake lever (4) to the "A/C" position. Be sure to return the air intake lever (4) to the "A/C" position for normal cooling.

Dehumidified heating

This mode is used to heat and dehumidify.

- 1 Move the air intake lever (4) to the "A/C" position.
- 2 Move the air control lever (2) to the "A/C" position.
- 3 Turn on the fan control lever (1).
- 4 Push in the air conditioner lever (6). The indicator light will come on.
- 5 Move the temperature control lever (3) to the desired position.

Dehumidified defogging

This mode is used to defog the windows and dehumidify.

- 1 Move the air intake lever (4) to the "A/C" position.
- 2 Turn the air control lever (2) to the "A/C" position.
- 3 Turn on the fan control lever (1).

- 4 Push in the air conditioner button (6). The indicator light will come on.

- 5 Move the temperature control lever (3) to the desired position.

Operating tips

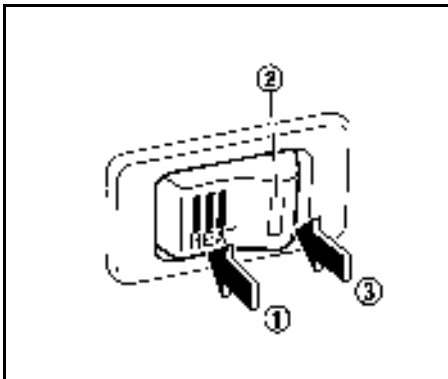
- Keep windows closed while the air conditioner is in operation.
- After parking in the sun, drive for two or three minutes with the windows open to vent hot air from the passenger compartment. Then close the windows. This will allow the air conditioner to cool the interior more quickly.
- The air conditioning system should be operated for about ten minutes at least once a month, especially in winter. This helps prevent damage to the system due to lack of lubrication.
- If the coolant temperature gauge exceeds the "HOT" position, turn the air conditioner off. Have your vehicle inspected by a NISSAN Dealer. See "IF YOUR VEHICLE OVERHEATS" in the "6. In case of emergency" section for additional information.

SERVICING AIR CONDITIONER

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

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

However, special charging equipment and lubricant are required when servicing your NISSAN air conditioner. Using improper refrigerants or lubricants will cause severe damage to your air conditioning system. See "RECOMMENDED AIR CONDITIONER SYSTEM REFRIGERANT AND LUBRICANT" in the "9. Technical information" section.



HEAT SWITCH (YD25DDTi engine models only)

The heat switch is found on the driver side on the lower side of the instrument panel.

The heat switch is used when the engine is cold to speed up the heater's operation. If the switch is turned to the ON position (1) and the indicator (2) illuminates, the engine electronic control unit will automatically increase the cold engine idle speed.

The system works with the transmission in the N (neutral) position (manual transmission) and the accelerator off. Turn the switch off (3) when the engine coolant temperature gauge moves. When the vehicle is being driven, the system is automatically deactivated.

DRIVING IN DUSTY CONDITIONS

When driving in dusty conditions:

- Close all the windows.
- Move the air intake lever (4) to the "OFF" position.
- Turn on the fan control lever (1).

This will prevent dust from entering the vehicle.

When approaching a dust cloud:

- Move the air intake lever (4) to the "OFF" position.

Once clear of the dust cloud, move the air intake lever (4) to the "ON" position.

AUDIO SYSTEM (if so equipped)

AUDIO OPERATION PRECAUTIONS



WARNING

Do not adjust the audio system while driving so that full attention may be given to vehicle operation.

The audio system operates when the ignition switch is in the "ACC" or "ON" position.

Radio

- 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.
- Using a cellular phone in or near the vehicle may influence radio reception quality.

Compact Disc (CD player)

- During cold weather or rainy days, the player may malfunction due to the humidity. If this occurs, remove the CD and dehumidify or ventilate the player completely.
- The player may skip while driving on rough roads.
- The CD player sometimes may not function when the compartment temperature is extremely high. Decrease the temperature before use.

- Do not expose the CD to direct sunlight.
- CD's that are of poor quality, dirty, scratched or covered with finger prints, or that have pin holes may not work properly
- The following CD's may not work properly.
 - Copy control compact discs (CCCD)
 - Recordable compact discs (CD-R)
 - Rewritable compact discs (CD-RW)
- Do not use the following CD's as they may cause the CD player to malfunction.
 - 8 cm (3.1 in) discs with an adapter
 - Discs with/without an adapter
 - CD's that are not round
 - CD's with a paper label
 - CD's that are wrapped, scratched or have unusual edges.

ANTENNA

Manual antenna

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

CAUTION:

Be sure to retract the antenna before washing the car in an automatic car wash or the antenna may be damaged.

CD PLAYER/LW-MW-FM RADIO TYPE

Anti-theft system (without personal code)

This unit can only be activated when the ignition key for NATS is in the ACC or ON position.

Anti-theft system (With personal code)

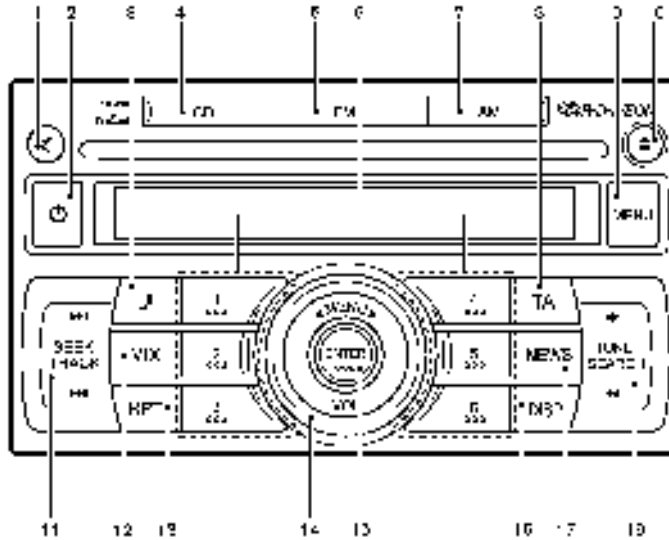
By using a personal 4-digit code known only to the vehicle owner, the possibility of the audio unit being stolen is effectively reduced, because without the code, the unit can not be activated. When used normally, the unit is unlocked and accessible in the usual way.

If however, force is used to try and remove the unit, the anti-theft system activates and the unit locks. The only way it can be unlocked is by entering the personal code number known only by the owner. This code number cannot be altered and applies only to your vehicle. This code number is shown on a radio pass card. The radio pass card is installed in the glove box at the vehicle productions site. Ask your NISSAN dealer for the location of your radio pass card.



WARNING

Keep the radio pass card in a safe place and refrain from keeping it in the vehicle. Contact your NISSAN dealer if you lose the radio pass card or forget the code number of your radio.



- | | |
|------------------------------------|------------------------------------|
| 1 MUTE button | 11 SEEK/TRACK button |
| 2 POWER ON/OFF button | 12 MIX (Mix play) button |
| 3 Sound preference button | 13 RPT button |
| 4 CD button | 14 VOLUME control/MENU select dial |
| 5 FM band select button | 15 ENTER button |
| 6 Radio memory buttons | 16 DISP (Display) button |
| 7 AM band select button | 17 NEWS button |
| 8 TA (Traffic Announcement) button | 18 TUNE/SEARCH button |
| 9 MENU button | |
| 10 CD EJECT button | |

Unlocking the unit:



CAUTION:

Read this section very carefully. It is important that the instructions are followed precisely.

If the battery supply to the vehicle is interrupted by accident for some reason, the unit will lock.

To unlock the unit, proceed as follows:

- 1 Press the power ON/OFF button to turn the unit on.
- 2 CODE IN is displayed.
- 3 Press the TUNE/SEARCH or SEEK/TRACK button.
- 4 Input your personal code by pressing the radio memory buttons 1 to 4 (thousands digit to ones digit).
- 5 Press the TUNE/SEARCH or SEEK/TRACK button.
- 6 If the entered code number is correct, the radio turns on. A radio frequency appears on the display.
- 7 If the entered code is incorrect, the unit becomes inoperable for 10 seconds for the first three attempts, then the code input mode is automatically set (CODE IN is displayed).
- 8 If the code is incorrect the fourth time, the unit becomes inoperable for 60 minutes and (- - -) is displayed. After 60 minutes, the code input mode is automatically set

(CODE IN is displayed). If the above is repeated 17 times, the unit will lock permanently and you will need to contact your NISSAN dealer.

Audio main operation

The audio system operates when the ignition switch is in the "ACC" or "ON" position.

POWER ON/OFF button:

To turn on the audio system push the POWER ON/OFF button.

- The system will turn on in the mode, (radio or CD) which was used immediately before the system was turned off.
- If there is no CD loaded, the radio will be turned on.

To turn off the audio system, push the POWER ON/OFF button.

Volume control:


To control the volume, turn the VOLUME control dial.


Turn the VOLUME control dial to make the sound louder.






Turn the VOLUME control dial counterclockwise to make the sound quieter.



Sound preference button:

To enter the audio mode (radio or CD), push the  button. When no CD is loaded, the audio system will automatically switch to the radio mode.

To change the audio settings (BASS, TREBLE, FADER, BALANCE, EQ), push the  button or ENTER button to select the mode.

BASS  TREBLE  BALANCE  FADER
 EQ  BASS

To adjust each audio setting, turn the MENU/VOL control dial clockwise or counterclockwise.

BASS:

(-) to decrease / (+) to increase

TREBLE:

(-) to decrease / (+) to increase

BALANCE:

(R) to right balance / (L) to left balance





FADE(R):

(F) to front fade / (R) to rear fade

EQ (Equalizer):

Use this control to change the preset sound mode for CD play.

Turn the MENU/VOL dial clockwise or counterclockwise. The mode will change as follows:

OFF  ENHANCE  ACOUSTIC 
LIVE  OFF

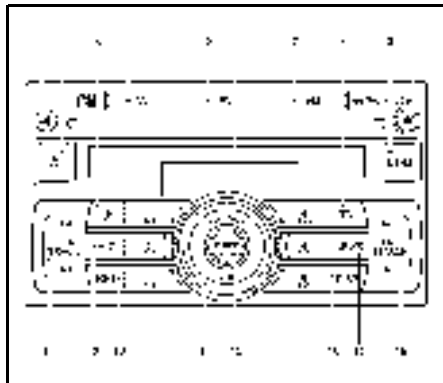
If the audio settings mode is unchanged for approximately 8 seconds, the audio settings mode will automatically return to the normal mode.

4-8 Heater and air conditioner and audio system

**Mute button:**

Push the MUTE button to mute the audio system and MUTE appears on the display. To unmute, use any one of the following options:

- Push the MUTE button again.
- Turn the MENU/VOL dial.
- Push the CD, FM or AM button.

**CD player operation**

The audio system operates when the ignition switch is in the "ACC" or "ON" position.

Loading:

Insert a CD into the slot with the label side facing up. The CD will be guided automatically into the slot and will start playing. If the radio is already playing, it will automatically turn off and the CD will start playing.


**CAUTION:**

Do not force the CD into the slot. This could damage the player.



After loading the CD, the number of tracks and the playtime will appear on the display.



8 cm (3.1 in) diameter CDs can be played without using an adapter.

**CD button:**


When the  button is pushed while the audio system is off and a CD is loaded, the audio system will turn on and a CD will start playing automatically. If the radio is already playing, it will automatically turn off and the CD will start playing.

**TRACK UP/****DOWN button:**

When the  button is pushed while a CD is being played, the present track will be advanced and move to the next track. Push the  button several times to skip forward tracks. The CD will advance the number of times the button is pushed. When the last track of the CD is forwarded, the first track will be played.

When the  button is pushed while a CD is being played, the present track will start over from the beginning. Push the  button several times to skip back tracks. The CD will rewind the number of times the button is pushed. When the first track of the CD is rewound, the last track will be played.

**Repeat/MIX button (Type A):**

Push the  button repeatedly to change the play mode as follows:

RPT (REPEAT) TRACK → MIX DISC → RPT (REPEAT) ALL

RPT TRACK:

The CD player plays the current track continuously.


RPT ALL:

All the tracks on the CD will be played in sequential order.

MIX DISC:

All the tracks on the CD will be played in a random order.

Repeat button:

Push the  button repeatedly to change the play mode as follows:

RPT (REPEAT) TRACK → RPT (REPEAT) ALL → RPT (REPEAT) TRACK


RPT TRACK:

The CD player plays the current track continuously

RPT ALL:

All the tracks on the CD will be played in sequential order.

MIX button:

Push the  button repeatedly to change the play mode as follows:

MIX DISC → RPT ALL → MIX DISC


MIX DISC:


All the tracks on the CD will be played in a random order


RPT ALL:

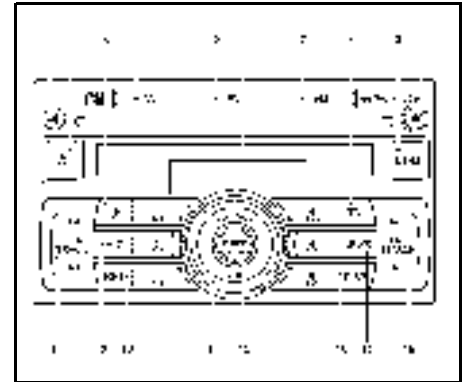
All the tracks on the CD will be played in sequential order.

CD EJECT button:

When the  button is pushed while a CD is loaded, the CD will be ejected.

When the  button is pushed twice, the CD will be ejected further and the CD can be removed with ease.





If a CD is ejected by pushing the  button and it is not taken out from the loading slot, the CD will automatically be reloaded to the slot to protect the CD.





LW-MW-FM radio operation


The audio system operates when the ignition switch is in the "ACC" or "ON" position.

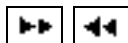
FM-AM button:

When the  or  button is pushed while the audio system is off, the audio system will turn on and the radio will turn on. when the  or  button is pushed while CD is already operating, it will automatically turn off and the radio will turn on.


To change the radio bands, push the  or  button until the desired band appears.

- For FM
FM 1 → FM 2 → FM T
- For AM
MW → LW → MW

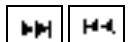
During FM reception, when the  button is pushed for longer than 1.5 seconds, stations are searched for and the 6 stations of the FM T band. The sound is muted until the auto store operation is completed, upon which preset channel 1 is automatically tuned in.




TUNE button:

When adjusting the broadcasting station frequency manually, push the  button. until the desired frequency is achieved.

The frequency changes in steps of 100 kHz on the FM band, 9 kHz on the MW band and 3 kHz on the LW band.





SEEK button:



When adjusting the broadcasting station frequency automatically, push the  button. When the system detects a broadcasting station, it will stop at the station.

Radio memory buttons:

The audio system can store up to 18 FM station frequencies (six in each of FM 1, FM 2 and FM T), 6 MW and 6 LW station frequencies.

To store the station frequency manually:

- 1 Tune to the desired broadcasting station frequency by using the  or  button.

- 2 Push and hold a radio memory button  -  until a beep sounds. (The radio mutes when the memory button is pushed.)


- 3 The channel indicator will display and the radio mute disengages, indicating that the memory is stored properly.

- 4 Perform steps 1 - 3 for all other memory buttons.

If the battery cable is disconnected, or if the audio fuse blows, the radio memory will be erased. In such a case, reset the desired stations.



DISP:

When the  button is pushed, the display switches between FM station frequencies and PS name.

Radio data system (RDS)

Alternative Frequency (AF):

- The AF function operates in the FM (radio and CD models).
- When the AF mode is set to "ON" in the user setup menu mode, the AF indicator illuminates.

For activation or deactivation details, see "MENU button" later in this section.

Automatic switching function

This function compares the strengths of the signals of all the stations on the AF list and selects the station with the optimum reception conditions.

Program Information (PI) search

Program Information (PI) search begins automatically if no suitable station is found with the above automatic switching function. The PI search function checks each RDS station with the same PI code. During this time the sound is muted and "PI SEARCH" is displayed. The PI search operation stops when a suitable station is found. If no station is found once all the frequencies have been searched, the radio returns to the previous frequency.

Enhanced Other Network (EON) data update (This function also operates when the AF mode is off)

When EON data is being received, this enables automatic retuning of other preset stations on the same network. Also, network linked services can be used. The EON indicator turns on during the reception of RDS EON stations in the FM mode.

RDS functions:

Programme Service (PS) function (station name display function)

When an RDS station is tuned in with seek or manual tuning, the RDS data is received and the Program Service (PS) name is displayed.

Emergency broadcast interrupt function (ALARM INTERRUPTION - EBU SPEC FOR INFO)

When the radio receives PTY code 31 (an emergency broadcast code), the sound is interrupted, the emergency broadcast is heard and "PTY31 ALARM" is displayed. The volume level at this time is the same as that for traffic announcements. Once the emergency broadcast is finished, the unit immediately returns to the previous source.

▪ **REG (Regional) mode**

Some local radio stations are linked together according to their region because they only offer limited coverage due to their limited number of transmitters. If the signal from one station becomes weak while you are driving around, RDS mode will switch to another local station in the region with a stronger signal.

When the REG mode is activated in the FM band and the radio receiver is turned to a local radio station, it will keep receiving this radio station without switching to another local station. For activation or deactivation details, see "MENU button" later in this section

Traffic Announcement (TA):

- The TA function operates in the FM and CD modes.
- The TA mode is turned on or off when the TA button is pushed or the TA/NEWS button is pushed for less than 2 seconds.
- The TA mode operates regardless of whether the AF mode is on or off.

- "TA ON" is displayed when the TA mode is turned on and the TA indicator turns on. "TA OFF" is displayed when the TA mode is turned off and the TA indicator turns off.

The following functions operate when the TA mode is on:

▪ **Traffic announcement interrupt function**

When a traffic announcement is received, the announcement is tuned in and the volume increases to the set level.

Once the traffic announcement is finished, the unit returns to the source which was set before the traffic announcement started and the volume returns to the previous level. For EON stations, the radio is interrupted by another EON station with traffic announcements.

The traffic announcement interrupt mode is cancelled if the TA or TA/NEWS button is pushed during a traffic announcement. The TA mode returns to the standby mode and the audio unit returns to the previous source.

News mode

When the NEWS button is pushed or the TA/NEWS button is pushed for longer than 2 seconds in the FM mode, the news function is activated. "NEWS" is displayed for 3 seconds and the NEWS indicator appears on the display.


When the news function is activated, the radio receives a news code from the FM broadcasting news station and the actual playing mode will be interrupted. Once the news broadcast is finished, the unit returns to the previous mode.

In some countries or regions, this service is not available or this signal is too weak to be received.

1 News standby mode

- The news standby mode can be activated in the FM or CD mode.
- A news interruption will be announced and "NEWS" will be displayed when the radio detects the news code from the tuned station or EON stations. The display will then change to the PS name of the interrupting station.
- When pushing the NEWS button or pushing the TA/NEWS button for longer than 2 seconds, the news standby mode is turned off and the indicator disappears from the display.

2 News interruption mode

- When the NEWS button or the TA/NEWS button is pushed during the news interruption mode, the radio returns to the previous source. However, the news standby mode is kept.
- When the  button is pushed during the news interruption mode, the radio changes to the CD mode. However, the news standby mode is kept.

If the radio band is changed to the MW or LW, the news standby mode will be turned off.

MENU buttons:

To configure Alternative Frequency, Regional and Language settings, perform the following procedure:

- 1 Push and hold the MENU button for at least 1.5 seconds.
- 2 Turn the MENU/VOL dial clockwise or counter clockwise. The display message will change as follows:

AF ↔ REG ↔ LANGUAGE ↔ AF

- To activate or deactivate the AF and REG mode, briefly push on the ENTER button when AF or REG appears on the display and turn the MENU/VOL dial clockwise or counterclockwise to switch between the off or on position. After selection, push the ENTER button to confirm the settings.
 - When the AF mode is enabled, the audio unit will automatically re-tune to a stronger frequency if the radio signal becomes weak.
 - When the REG mode is enabled, the audio unit will maintain and hold the station which is broadcasting local (regional) programmes.
- To change the display language, briefly push the ENTER button when LANGUAGE appears on the display the turn the MENU/VOL dial clockwise or counterclockwise to select the appropriate language setting.

ENGLISH ↔ DUTCH ↔ FRENCH ↔
SPANISH ↔ GERMAN ↔ ITALIAN ↔
PORTUGUESE ↔ ENGLISH

After selecting the desired language, push the ENTER button to exit the menu.

To configure the SPEED volume and BEEP settings, perform the following procedure:

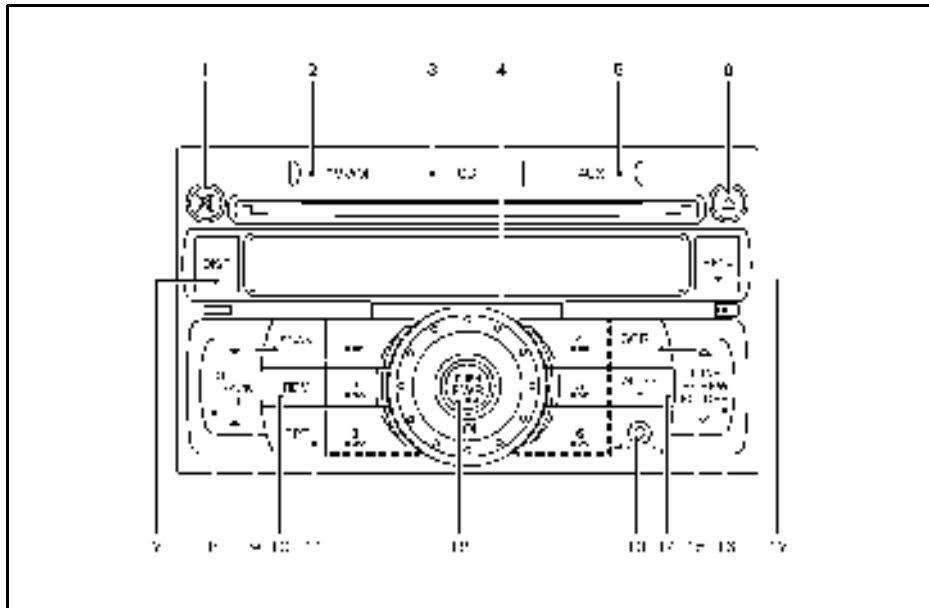
- 1 Push the MENU button.
- 2 Turn the MENU/VOL dial clockwise or counterclockwise. The display message will change as follows:

SPEED VOL ↔ BEEP

- When SPEED VOL appears on the display, briefly push on the ENTER button then turn the MENU/VOL dial clockwise or counterclockwise to adjust the level of the volume.

Adjusting the setting to 0 (zero) turns off the speed volume feature. Increasing the speed volume setting results in the audio volume increasing more rapidly with vehicle speed. Push the ENTER button again to save the setting.
- When BEEP appears on the display, briefly push the ENTER button and then turn the MENU/VOL dial clockwise or counterclockwise to switch the beep sound on or off. Push the ENTER button again to save the setting.

After the desired levels have been set, push the MENU button to exit the menu or wait at least for 10 seconds without pressing any buttons.



- | | |
|---|-------------------------------------|
| 1 MUTE button | 9 SCAN button |
| 2 FM-AM radio band select button | 10 RDM (Random) button |
| 3 CD button | 11 RPT (Repeat) button |
| 4 Radio memory buttons | 12 Power button/Volume control knob |
| 5 AUX button | 13 AUX In jack |
| 6 CD EJECT button | 14 AUTO.P (Automatic Preset) button |
| 7 DISP (Display) button | 15 SCRL (Scroll) button |
| 8 SEEK/TRACK/FILE button/APS REW button/APS FF button | 16 TUNE/FF-REW/FOLDER button |
| | 17 MENU button |

FM-AM RADIO WITH COMPACT DISC (CD) PLAYER

Audio main operation

The audio system operates when the ignition switch is in the "ACC" or "ON" position.

POWER ON/OFF button:

To turn on the audio system push the POWER ON/OFF button.

- The system will turn on in the mode, (radio or CD) which was used immediately before the system was turned off.
- If there is no CD loaded, the radio will be turned on.

To turn off the audio system, push the POWER ON/OFF button.

Volume control:


To control the volume, turn the VOLUME control dial.


Turn the VOLUME control dial to make the sound louder.

Turn the VOLUME control dial counterclockwise to make the sound quieter.







MENU button:

To change the audio settings (BASS, TREBLE, FADE, BALANCE, BEEP AND CLOCK), push the  button or select the mode while the CD or radio is on.

Push the  button until the desired mode appears on the display

BASS → TREBLE → FADE → BALANCE
→ BEEP → CLOCK


Push the SEEK/TRACK/FILE button ( or ) or TUNE/FF-REW/FOLDER button ( or ) to adjust the audio settings.

BASS: (-) to decrease / (+) to increase.





TREBLE: (-) to decrease / (+) to increase.

FADE: (F) to front fade / (R) to rear fade.

BALANCE: (R) to right balance / (L) to left balance.

Once the audio settings are set to the desired level, push the  button until the radio or CD display appears.

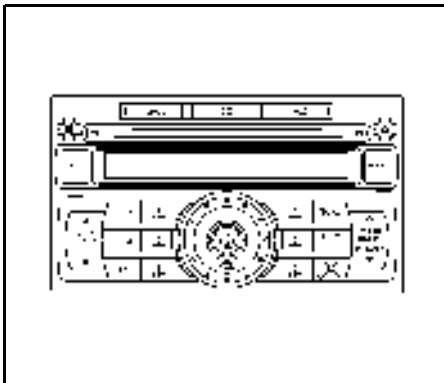
If not action is performed for approximately 5 seconds, the audio settings mode will automatically return to the normal mode.

To turn the beep sound off or on, push the SEEK/TRACK button  or  or TUNE/FF-REW/FOLDER button  or  until the desired mode is displayed. This turns on or off the beep sound when audio buttons are pushed.



Mute button:

Press the MUTE button to mute the sound. Press again to restore the sound.






FM/AM radio operation

The audio system operates when the ignition switch is in the "ACC" or "ON" position.



FM-AM button:

When the  button is pushed while the audio system is off, the audio system will turn on and the radio will turn on. When the  button is pushed while another audio source is playing, the other audio source will turn off and the radio will turn on.

To change the radio bands, push the  button.



AM → FM 1 → FM 2

The FM stereo indicator, "ST" will display during FM stereo reception. When the stereo broadcast signal is weak, the radio will

automatically change from stereo to monaural reception.





TUNE/FF-REW/FOLDER button:

When adjusting the broadcasting station frequency manually, push the  or  button (located on the right side) until the desired frequency is achieved.

The frequency changes in steps of 100 kHz on the FM band, 9 kHz on the MW band and 3 kHz on the LW band.





TUNE/FF-REW/FOLDER button:

When adjusting the broadcasting station frequency automatically, push the  or  button. When the system detects a broadcasting station, it will stop at the station.



SCAN button:



When the  button is pushed, the system will seek and stop at the detected broadcasting station for 5 seconds, and then it will start to seek for the next broadcasting station

Push the  button in this 5-second period to stop seeking.

Radio memory button:

The audio system can store up to 12 FM station frequencies (for FM1 and FM2) and 6 AM station frequencies.

To store the station frequency:

- 1 Tune to the desired broadcasting station frequency by using the  or  button (located on the right side).
- 2 Push and hold a memory button (1-6) until a beep sounds.
- 3 The switch number and frequency will appear on the display when the memory is stored properly.
- 4 Perform steps 1-3 for all other memory buttons.


Push a memory button (1-6) to select a desired memory.


If the battery cable is disconnected, or if the audio fuse blows, the radio memory will be erased. In such a case, reset the desired stations.

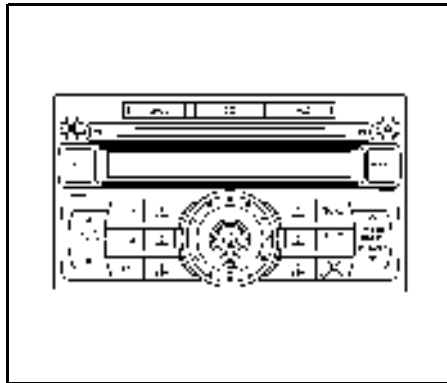


(Automatic Preset) button:

The audio system can store up to 6 FM station frequencies and 6 AM station frequencies.

To store the station frequency automatically, push and hold the  button until a beep sounds. The station will be automatically stored in the "AUTO.P" memory. The display indicates "AP-**".

Push the  button to select a desired memory.



CD player operation

The audio system operates when the ignition switch is in the "ACC" or "ON" position.

Loading:

Insert a CD into the slot with the label side facing up. The CD will be guided automatically into the slot and will start playing. To stop playing, push the Power button.

After loading the CD, the number of tracks and the playtime will appear on the display.




CAUTION:

Do not force the CD into the slot. This could damage the player.




CD button:

When the  button is pushed while the audio system is off and a CD is loaded, the audio system will turn on and a CD will start

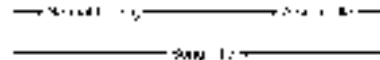
playing automatically. If the radio is already playing, it will automatically turn off and the CD will start playing.



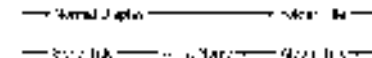
Display button:

When the  button is pushed while a CD with a title is being played, the display will change as follows:



CD:





CD with MP3 or WMA:



SEEK/TRACK/FILE button:



When the  button (located on the left side) is pushed while a CD is being played, the present track will be advanced and move to the next track. Push the  button several times to skip forward tracks. The CD will advance the number of times the button is pushed. When the last track of the CD is forwarded, the first track will be played.



When the  button is pushed while a CD is being played, the present track will start over from the beginning of the current track. Push the  button several times to skip back tracks. The CD will rewind the number of times

the button is pushed. When the first track of the CD is rewound, the last track will be played.




TUNE/FF-REW/FOLDER button:


When the  or  button is pushed and held while a CD is being played, the CD will be played while forwarding or rewinding. When the button is released, the CD will return to the normal play speed.

When the  or  button (located on the right side) is pushed while a CD with MP3 or WMA is being played, the first track in the next or the previous folder will be played.




SCAN button:

When the  button is pushed while a CD is being played, the first 10 seconds of all the tracks will be played.

When the  button is pushed again, the CD will return to normal play from the track which is playing



REPEAT button:

To change the play settings, push the  button to select the mode.


CD:

RPT DISC ➞ RPT TRACK


CD with MP3 or WMA:

RPT DISC ➞ RPT FOLDER ➞ RPT TRACK


RPT DISC:

All the tracks of the CD will be played continuously in sequential order. The display indicates no symbol mark. While the  button is pushed, the display indicates “RPT DISC”.

RPT TRACK:


The selected track of the CD will be played continuously. While the  button is pushed, the display indicates “RPT TRACK”.

RPT FOLDER:

All the tracks of the selected folder will be played continuously in sequential order (CD with MP3 or WMA only). While the  button is pushed, the display indicates “RPT FOLDER”.



RANDOM button:

To change the play sequence, push the  button to select the mode.


CD:

RDM DISC ➞ RPT DISC


CD with MP3 or WM:

RDM DISC ➞ RDM FOLDER ➞ RPT


RPT DISC:

All the tracks of the CD will be played continuously in sequential order. The display indicates no symbol mark. While the  button is pushed, the display indicates “RPT DISC”.

RDM DISC:


All the tracks or folders (CD with MP3 or WMA only) of the CD will be played continuously in random order. While the  button is pushed, the display indicates “RDM DISC”.

RDM FOLDER:

All the tracks of the selected folder will be played continuously in random order (CD with MP3 or WMA only). While the  button is pushed, the display indicates “RDM FOLDER”.






SCROLL button:

When the title is displayed but it is a long one, the whole title is not shown in the display. In this case, push the  button to scroll the title. When the title is scrolled to the end of it, the display will stop moving and return to the first condition.



CD EJECT button:

To eject a CD, push the CD EJECT  button. When the  button is pushed twice, the CD will be ejected further and the CD can be removed with ease.

If a CD is ejected by pushing the  button and it is not taken out from the loading slot, the CD will automatically be reloaded to the slot to protect the CD (12 cm discs only).

AUX AUX button:

The AUX In jack is located on the audio unit. The AUX IN audio input jack accepts any standard analog audio input such as from a portable cassette tape, CD player, MP3 player or laptop computer.

Push the AUX button to play a compatible device when it is plugged into the AUX IN jack. NISSAN strongly recommend using a stereo mini plug cable when connecting your music device to the audio system. Music may not be played properly when monaural cable is used.

CLOCK setting:

The digital clock (in the audio unit) displays the time when the ignition switch is in the "ON" position.

If the battery cable is disconnected, the clock will reset its time and the display mode.

ADJUSTING TIME:



Audio display model

You can select clock display ON and OFF mode.

When clock is not displayed:

If the clock is not displayed with the ignition switch in the "ACC" or "ON" position, you need to select the clock ON mode as follows:

- 1 Turn the audio unit on by pushing the ON-OFF/VOLUME control knob.

- 2 Push the "MENU" button until the display indicates the clock adjustment mode.
- 3 Push the "SEEK" button or "TUNE" button to turn this mode on. Then the clock can be adjusted in the following steps:
 - 4 Push the "MENU" button.
 - 5 The time indicator will flash.
Push the "SEEK" button to adjust the hour. Then adjust the minute by pushing the "TUNE" button.
Pushing  or button will advance the time and  button will turn back the time.
- 6 Push the "MENU" button to finish the clock adjustment.

When clock is displayed:

- 1 Turn the audio unit on by pushing the ON-OFF/VOLUME control knob.
- 2 Push the "MENU" button until the display indicates the clock adjustment mode.
- 3 Perform steps 4 to 6 above to adjust the time.

CAR PHONE AND CB RADIO

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

CAUTION:

- **Keep the antenna as far as possible away from the Electric Control Unit (including radio).**
- **Keep the antenna wire more than 20 cm (8 in) away from the Multiport Fuel Injection 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 your NISSAN dealer.**

5 Starting and driving

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RUNNING-IN SCHEDULE

During the first 1 600 km (1,000 miles), follow these recommendations for the future reliability and economy of your new vehicle. Failure to follow these recommendations may result in vehicle damage or shortened engine life.

- Avoid driving for long periods at constant speed, either fast or slow.
- Do not accelerate at full throttle in any gear.
- Avoid quick starts and full acceleration.
- Avoid hard braking as much as possible.
- Do not tow a trailer for the first 800 km (500 miles).

BEFORE STARTING THE ENGINE



WARNING

The driving characteristics of your vehicle can be changed remarkably by any additional load and its distribution, as well as by adding optional equipment (trailer couplings, roof racks, etc.). Your driving style and speed have to be adjusted accordingly. ESPECIALLY WHEN CARRYING HEAVY LOADS, YOUR SPEED MUST BE REDUCED ADEQUATELY.

- Make sure the area around the vehicle is clear.
- Check fluid levels such as engine oil, coolant, brake and clutch fluid, window washer fluid as frequently as possible, at least whenever you refuel.
- Check, to be sure that all windows and light lenses are clean.
- Visually inspect tyres for their appearance and condition. Also check tyre pressure for proper inflation.
- Lock all doors.
- Position seats and adjust head restraints.
- Adjust inside and outside mirrors.
- Fasten seat belts and ask all passengers to do likewise.

- **Do not place hard or heavy objects on either the front or rear parcel shelf to prevent injury in the event of a sudden stop.**
- Check the operation of warning lights when key is turned to the "ON" (3) position.
- Tune the radio to the desired broadcasting station before driving.

PRECAUTIONS WHEN STARTING AND DRIVING



WARNING

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

EXHAUST GAS (Carbon Monoxide)



WARNING

- Do not breathe exhaust gases; they contain colourless and odourless carbon monoxide. Carbon monoxide is dangerous. It can cause unconsciousness or death.
- If you suspect that exhaust fumes are entering the vehicle, drive with all windows fully open, and have the vehicle inspected immediately.
- Do not run the engine in closed spaces such as a garage.
- Do not park the vehicle with the engine running for any extended length of time.
- It is not advisable to sit for any length of time in a parked vehicle with the engine running.

- 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.

THREE-WAY CATALYST (if so equipped)

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

CAUTION:

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

To help prevent damage

CAUTION:

- Use **UNLEADED GASOLINE ONLY**. See “RECOMMENDED FUEL/LUBRICANTS AND CAPACITIES” in the “9. Technical information” section for fuel recommendation. **Leaded gasoline will seriously damage three-way catalyst.**
- **Do not use leaded gasoline.**
Deposits from leaded gasoline will seriously reduce the three-way catalyst's ability to help reduce exhaust pollutants.
- Keep your engine tuned up. Malfunctions in the ignition, carburetion/fuel injection, or electrical systems can cause overrich fuel flow into the three-way catalyst, causing it to overheat. Do not keep driving if the engine misfires, or if noticeable loss of performance or other unusual operating conditions are detected. Have the vehicle inspected promptly by a NISSAN dealer.
- Avoid driving with an extremely low fuel level. Running out of fuel could cause the engine to misfire, damaging the three-way catalyst.
- Do not race the engine while warming it up.
- Do not push or tow your vehicle to start the engine.

FITMENT OF CANOPY

CAUTION:

Certain canopy designs may allow the ingress of exhaust gases to the interior, consequently NISSAN recommends the following:

Regardless of the type of canopy to be fitted to your Nissan vehicle, please insist on the fitment of a SIDE EXIT extension to the Exhaust Tail Pipe. Side exit extensions are readily available from your local Exhaust fitment centre.

For longevity and compatibility with your Nissan Exhaust system, we recommend Stainless Steel tubing for this application.

TURBOCHARGER SYSTEM (if so equipped)

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 degrees. It is essential to maintain a clean supply of oil flowing through the turbocharger system. Therefore, 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:

CAUTION:

- **Change your engine oil according to the recommended intervals shown in a separate maintenance booklet. Use only the recommended engine oil.**
- **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.**
- **Do not accelerate your engine to high rpm immediately after start.**

ON-ROAD AND OFF-ROAD DRIVING PRECAUTIONS



Vehicles have higher ground clearance and a wider track to make them capable of performing in a wide variety of off-road applications. Specific design characteristics give them a higher centre of gravity than ordinary cars. An advantage of higher ground clearance is a better view of the road, allowing you to anticipate problems. They are not designed for cornering at the same speeds as conventional 2-wheel drive vehicles any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions. If at all possible, avoid sharp turns or abrupt manoeuvres. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or vehicle roll-over.

CARE WHEN DRIVING

Driving your vehicle to fit the circumstances is essential for your safety and comfort. As a DRIVER, you should be the one who knows best how to drive in the given circumstances.

ENGINE COLD START PERIOD

Due to the higher engine speeds when the engine is cold, extra caution must be exercised when selecting gear positions during the engine warm-up period after starting the engine.

LOADING THE LUGGAGE

Loads and their distribution and the attachment of equipment (coupling devices, roof baggage carriers, etc.) will change the driving characteristics of the vehicle considerably. Driving style and speed must be changed according to the circumstances.

DRIVING IN WET CONDITIONS

- Avoid starting off, accelerating and stopping suddenly.
- Avoid sharp turns or lane changes.
- Extra distance should be kept from the vehicle in front.
- When water covers the road surface in puddles, small streams, etc., **REDUCE SPEED** to prevent aquaplaning which will cause skidding and loss of control. Worn tyres increase this risk.

UNDER ICY CONDITIONS

- Drive sensitively.
- Avoid sudden steering actions.
- Extra distance should be kept from the vehicle in front.

DRIVING AT THE UPLAND (Diesel engine models)

YD25DDTI engine except for high altitude specification model:

Avoid driving at an altitude higher than 3,000 m (9,843 ft).

It may cause loss of emission control effect and driveability, or it may be hard to start the engine.

TRAILER TOWING

Your new vehicle was designed to be used primarily for carrying passengers and luggage.

Towing a trailer will place additional loads on your vehicle's engine, drivetrain, steering, braking and other systems. The towing of a trailer will exaggerate other conditions such as sway caused by crosswinds, rough road surfaces or passing trucks.

Your driving style and speed must be changed according to the circumstances. Before towing a trailer, see a NISSAN dealer for an explanation about the proper use of towing equipment

OPERATING PRECAUTIONS

- Avoid towing a trailer during the running-in period.
- Before driving, make sure that the lighting system of the trailer works properly.
- Observe the legal maximum speeds for trailer operation.
- Avoid sharp turns or lane changes.
- Always drive your vehicle at a moderate speed.
- Take note of trailer manufacturer's instructions.
- Choose proper coupling devices (trailer hitch, safety chain, etc.) for your vehicle and trailer. These devices are of course available at your NISSAN Dealer where you

can obtain more detailed information on trailer towing.

- Never allow the total trailer load (trailer weight plus its cargo weight) to exceed the maximum set for the coupling device.
- The trailer must be loaded so that heavy goods are placed over the axle. The maximum allowable vertical load on the trailer hitch must not be exceeded.
- Have your vehicle serviced more often than at the intervals specified in a separate maintenance booklet.
- Trailer towing requires more fuel than under normal circumstances because of a considerable increase in traction power and resistance.
- Use the 4L (4WD models) when starting out or driving up a steep slope.
- Always block the wheels on both vehicle and trailer when parking. Apply parking brake on trailer where fitted.
- Take care that the tyre pressures are at the pressure for full loading shown on the tyre placard.
- Avoid abrupt starts, acceleration or stops.
- Parking on a steep slope is not recommended.

TOWING – LEGAL AND SAFETY ASPECTS

The following information may be seen as the basic set of rules with which to comply, firstly to satisfy safety and legal requirements, and secondly to ensure comfortable driving. Confirm Towing Regulations with your local authorities.

BRAKES AND TOWED MASS

If the towed gross vehicle mass is 750 kg (1,643 lb) or less and does not exceed half of the tare of the towing vehicle, the towed vehicle **MUST** be equipped with either a parking device or a parking brake.

If the towed gross vehicle mass is 750 kg (1,643 lb) or less and exceeds half of the tare of the towing vehicle, the towed vehicle **MUST** be equipped with a parking brake, as well as either an overrun brake or service brake.

If the towed gross vehicle mass is between 750 kg (1,643 lb) and 3 000 kg (6,614 lb) and does not exceed the tare of the towing vehicle, the towed vehicle **MUST** be equipped with a parking brake, as well as either an overrun brake or a service brake.

If the towed gross vehicle mass exceeds the towing vehicle tare, or 3 500 kg (7,716 lb), it **MUST** be equipped with a parking brake **AS WELL AS** a service brake.

CAUTION:

The tare mass is supplied on the licence disk as well as the Registration Certificate of your vehicle. NISSAN recommends that the mass of the trailer or caravan (Towed gross vehicle mass) must NOT exceed the difference between the GCM (Gross Combined Mass) and GVM (Gross Vehicle Mass). See Section “9. Technical Information” for the Vehicle Identification plate position on which the GVM and GCM are displayed.

Thus the towed gross vehicle mass must not exceed the following:

Engine type:

2.0 Gasoline	1 250 kg (2,756 lb)
2.4 Gasoline	1 400 kg (3,087 lb)
2.5 Turbo Diesel	1 400 kg (3,087 lb)

It is dangerous to overload a towbar and failure to adhere to this load limit will void the warranty on the towbar.

All the models/variants are fitted with a rear bumper/towbar combination, but not with the tow-ball, drop-plate, fasteners, socket and wiring harness. These mentioned parts are available as an appropriate P&A item/kit available from NISSAN Parts and Accessories Division. This kit has been designed specifically to suit the original equipment towbar and also contains a data plate indicating the maximum loads for the towbar.

It is strongly recommended that this P&A kit be used, instead of any other “aftermarket” tow-ball kits. NISSAN is not responsible for

any damage to the vehicle or loss of property that may result from fitting any kit other than the approved P&A kit.

NOSE MASS

The nose mass, that is the total mass on the ball coupling, shall not be less than 25 kg (55 lb) and not more than 90 kg (199 lb).

The correct nose mass is achieved by proper storage and/or loading of the caravan or trailer.

TOWING HEIGHT

The minimum towing height is 350 mm (14 in), and the maximum 420 mm (17 in) from the road surface to the centre of the towing ball. The towing vehicle must not sag, and the towed vehicle should be horizontal or slightly nose-down.

LIGHTS

Ensure that the tail lights, brake lights, reverse light (if fitted) and indicator lights on the towed vehicle work.

CAUTION:

Have your NISSAN Hardbody headlight beam settings checked by an authorised NISSAN dealer with the loaded caravan or trailer coupled to your vehicle, as the settings may need adjustment to compensate for the added weights pressing down on the towing hitch of the vehicle.

MIRRORS

Extended rear-view mirrors must be fitted to both sides (left and right) of the towing vehicle.

SPEED LIMITS

The maximum speed limits in force when towing a caravan or trailer, are those posted on the highways, main roads, roads or in urban areas.

CAUTION:

NISSAN recommends that a maximum towing speed of 90 km/h (56 mph) should not be exceeded under the most favourable conditions. Reduce speed at the first sign of adverse conditions ahead.

LOADING THE CARAVAN OR TRAILER

The payload or contents of the caravan or trailer should be stored as low and as close to the middle as possible, to ensure a low centre of gravity. This will result in greater stability when travelling.

Light items should be loaded in the front and rear. All items must be secured properly to prevent sideways or fore/aft movement.



WARNING

Do not exceed the individual Gross Vehicle Mass or the Gross Combined Mass of your NISSAN Hardbody and caravan / trailer.

TYRE PRESSURES

Inflate the tyres of the caravan or trailer when cold to the pressures recommended by the manufacturer.

Inflate the rear tyres of your NISSAN Hardbody to the maximum load pressures indicated in the TECHNICAL SPECIFICATIONS.



WARNING

Uneven tyre pressures can cause the caravan or trailer to sway.

DRIVING RECOMMENDATIONS WHEN TOWING

Pull-away should be gentle and smooth.
Smooth, steady braking will yield the shortest
stopping distances.

WARNING

Hard braking can cause jack-knifing or set up a whiplash effect. DO NOT push engine speed into the red zone of the tachometer. When going uphill, change down early, to ascend without strain. When going downhill, DO NOT accelerate, but let the engine run against compression.

WARNING

DO NOT overtake on a downhill – this is extremely dangerous.

Overtaking should **ONLY** be undertaken on level, straight stretches of road, or on gentle, long uphill gradients.

NO passengers are allowed in the caravan or trailer whilst travelling.

SWAY PREVENTION AND CONTROL

Swaying should not occur when your NISSAN Hardbody and caravan or trailer is properly matched.

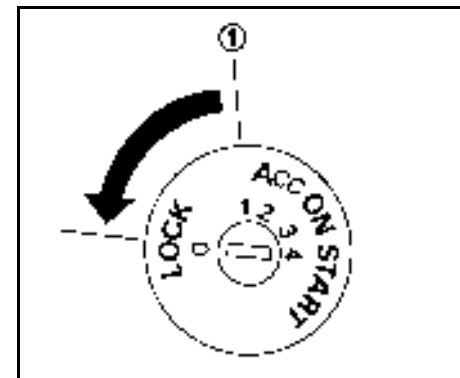
Should the combination tend to sway, however, an anti-sway device can be fitted.

Sway can also be caused by excessive downhill speed, uneven braking, uneven tyre pressures, or a badly loaded or nose heavy caravan or trailer.

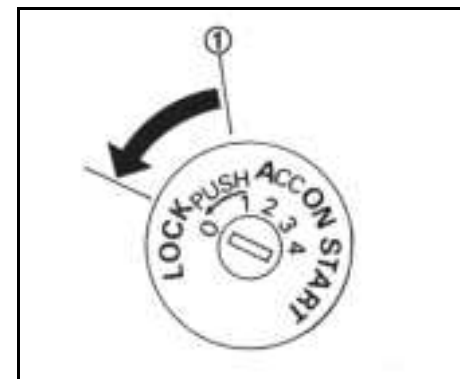
Should the combination start to sway:

- **STAY CALM.**
- **Hold the steering wheel firmly.**
- **Steer a STRAIGHT line.**
- **DO NOT brake hard.**
- **DO NOT steer into the sway movement.**
- **DO NOT attempt acceleration to pull the combination straight.**

IGNITION SWITCH



Type A



Type B

The switch includes an anti-theft steering lock device.

The ignition key can only be removed when the switch is in the "LOCK" normal parking position (0).

Type A: To turn the ignition switch to the "LOCK" position from the "ACC" or "ON" position, turn the key to the "OFF" position, then turn the key to the "LOCK" position.

Type B: To turn the ignition switch to the "LOCK" position from the "ACC" or "ON" position, turn the key to the "OFF" position, push the key in, then turn the key to the "LOCK" position.

There is an "OFF" position (I) in between LOCK and ACC, although it does not show on the lock cylinder. When the ignition is in "OFF" the steering wheel is not locked.

In order for the steering wheel to be locked, it must be turned about 1/6 of a turn clockwise from the straight up position.

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 remove the key while driving. If the key is removed, the steering wheel will lock. This may cause the driver to lose control of the vehicle and could result in serious vehicle damage or personal injury.

5-8 Starting and driving

KEY POSITIONS

LOCK (Normal parking position) (0):

The ignition key can only be removed at this position.

OFF (1)

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

ACC (Accessories) (2)

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

ON (Normal operating position) (3)

This position turns on the glow plug system and electrical accessories.

START (4)

This position starts the engine. As soon as the engine has started, release the key immediately. It will automatically return to the "ON" position.

STARTING THE ENGINE

GASOLINE ENGINE

- 1 Apply the parking brake.
- 2 Move the shift lever to "N" (Neutral). Depress the clutch pedal to the floor while cranking the engine.
- 3 Crank the engine **with your foot off the accelerator pedal** by turning the ignition key to "START". Release the key when the

engine starts. If the engine starts, but fails to run, repeat the above procedure.


- If the engine is very hard to start in extremely cold or hot weather or when restarting, depress the accelerator pedal a little (approximately 1/3 to the floor) and hold it and then crank the engine. Release the key and the accelerator pedal when the engine starts.

- If the engine is very hard to start because it is flooded, depress the accelerator pedal all the way to the floor and hold it. Crank the engine for 5-6 seconds. After cranking the engine, release the accelerator pedal. Crank the engine **with your foot off the accelerator pedal** by turning the ignition key to START. Release the key when the engine starts. If the engine starts, but fails to run, repeat the above procedure.

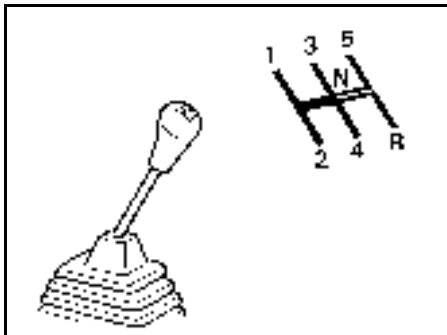
Do not operate the starter for more than 15 seconds at a time. If the engine does not start, turn the key off and wait 10 seconds before cranking again, otherwise the starter could be damaged.

- 4 Allow the engine to idle for at least 30 seconds after starting. Do not race the engine while warming it up. Drive at a moderate speed for a short distance first, especially in cold weather.

DIESEL ENGINE WITHOUT THROTTLE CONTROL KNOB

- 1 Apply the parking brake.
 - 2 Move the gearshift lever to "N" (Neutral), and depress the clutch pedal to the floor while cranking the engine.
 - 3 Turn the ignition key to "ON" and wait until the glow plug indicator light  goes out.
 - 4 After the glow plug indicator light goes out, crank the engine with your foot off the accelerator pedal by turning the ignition key to "START". Release the key when the engine starts.
- **Do not crank the engine for more than 20 seconds at a time. If the engine does not start, turn the key off and wait 20 seconds before cranking again, otherwise the starter could be damaged.**
 - **If the engine is very hard to start in extremely cold weather, use the accelerator pedal to help start the engine**
- 5 Allow the engine to idle for about 30 seconds.

DRIVING WITH MANUAL TRANSMISSION



Starting the vehicle

- 1 Depress the clutch pedal to the floor and move the shift lever to the "1" or "R" position.
- 2 Slowly depress the accelerator pedal, releasing the clutch pedal and parking brake lever at the same time.

Shifting the gear

To change gears, fully depress the clutch pedal, then move the gearshift lever. After shifting, release the clutch slowly and smoothly.

To ensure smooth gear changes, fully depress the clutch pedal before operating the shift lever. If the clutch pedal is not fully depressed before the transmission is shifted, a gear noise

may be heard. Transmission damage could occur.

If it is difficult to move the shift lever into Reverse or 1st, shift into Neutral, then release the clutch pedal. Fully depress the clutch pedal again and shift into Reverse or 1st again.

On the 5-speed transmission model, you cannot shift directly from 5th gear into Reverse. First shift into Neutral, then into Reverse after stopping the vehicle completely.

CAUTION:

- **Do not rest your foot on the clutch pedal while driving. This may cause clutch damage.**
- **Fully depress the clutch pedal before shifting to help prevent transmission damage.**
- **Stop your vehicle completely before shifting into reverse.**
- **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.**
- **Avoid abrupt starts and acceleration for your safety.**

When quick acceleration is required for some reason, 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. Pay special attention when accelerating or

when shifting into a lower gear on slippery surfaces. Sudden acceleration or down shifting could cause the wheels to skid and result in loss of control.

SUGGESTED SHIFT-UP SPEEDS

The following provides suggested speed ranges for shifting into a higher gear. These suggestions relate to fuel economy and vehicle performance. Actual shift ranges should be adjusted for specific road conditions, the weather and individual driving habits.

2-WHEEL/4-WHEEL DRIVE MODELS (2H and 4H POSITION)

GEAR	Km/h (MPH)
1st to 2nd	24 (15)
2nd to 3rd	40 (25)
3rd to 4th	64 (40)
4th to 5th	72 (45)

4-WHEEL DRIVE MODELS (4L POSITION)

GEAR	Km/h (MPH)
1st to 2nd	13 (8)
2nd to 3rd	20 (12)

4-WHEEL DRIVE MODELS (4L POSITION)

3rd to 4th	32 (20)
4th to 5th	36 (22)

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, government, province and territory laws, and to the condition which will permit safe operation.

SUGGESTED MAXIMUM SPEED IN EACH GEAR

Downshift to a lower gear if the engine is not running smoothly, or if you need to accelerate.

Do not exceed the maximum suggested speed (shown below) in any gear. For level road driving, use the highest gear suggested for that speed. Always observe posted speed limits, and drive according to the road conditions which will ensure safe operation. Do not over-rev the engine when shifting to a lower gear as it may cause engine damage or loss of vehicle control.

ALLOWABLE MAXIMUM SPEED IN EACH GEAR

2-WHEEL/4-WHEEL DRIVE MODELS (2H POSITION)

GEAR	Km/h (MPH)
1st	45 (28)
2nd	70 (44)
3rd	115 (71)
4th	160 (99)

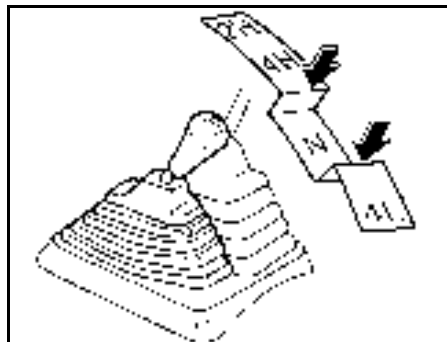
4-WHEEL DRIVE MODELS (4H POSITION)

GEAR	Km/h (MPH)
1st	35 (22)
2nd	60 (38)
3rd	80 (50)
4th & 5th	80 (50)

4-WHEEL DRIVE MODELS (4L POSITION)

GEAR	Km/h (MPH)
1st	15 (9)
2nd	30 (19)
3rd	45 (28)
4th & 5th	50 (30)

4WD TRANSFER CASE SHIFTING PROCEDURES FOR 4-WHEEL DRIVE VEHICLES



2H- (2WD, high range)

Only the rear wheels are driven. Use when driving under the same conditions as standard 2WD vehicle.

4H- (4WD, high range)

Four wheels are driven. Use when driving on roads where it is difficult to drive in the 2H position (i.e. driving at normal speeds on snow covered, icy, wet, muddy or sandy roads).

The "4H" position provides maximum power and traction.

Avoid excessive speed, as it will cause loss of traction. Speed over 80 km/h (50 MPH) in 4H is not recommended.

- **1 – Shifting between 2H and 4H can be done whilst moving [Max speed = 40 km/h (25 MPH)]**

- **2 – Shifting between 4H and 4L must always be done whilst stationary. (Standing still)**

4L – (4WD, low range)

Four wheels are driven. Use when climbing or descending steep hills, or during hard driving in sand, mud or deep snow. The "4L" position provides maximum power and traction. Avoid raising vehicle speed excessively, as the maximum speed in 5th gear is approximately 50 km/h (30 MPH).

N-

No wheels are driven. Always leave the transfer lever out of the "N" position. Shift the lever quickly and smoothly when moving across the "N" position with the vehicle stopped.

If the lever is stopped during shifting, gears may grind.

Note: You must push down (depress) on the shift (transfer) lever and shift quickly and smoothly (one continuous movement) back & forth between 4H, N & 4L.

CAUTION:

- **Do not drive on dry hard surface roads in 4-wheel drive.**

Driving on dry hard surfaces in "4H" or "4L" may cause unnecessary noise and tyre wear as well as increased fuel consumption. NISSAN

recommends driving in the “2H” position under these conditions.

- **To lubricate the front wheel drive system, drive the vehicle in 4-wheel drive at least once a month.**



WARNING

- **When parking the vehicle, apply the parking brake and shift the transfer control lever in the “2H”, “4H” or “4L” position,**
- **Do not leave the transfer control lever in the “N” position. Otherwise, the vehicle could roll unexpectedly even if the transmission is in a gear.**
- **Failure to engage the transfer control lever in “2H”, “4H” or “4L” could result in the vehicle moving unexpectedly, which could cause serious personal injury or property damage.**

Do not move the transfer lever from “4H” or “4L” to “4L” or “4H”, from “2H” to “4L” and from “4L” to “2H” with the engine turned off. Otherwise, you may have difficulty in moving the transfer lever to the desired position.

Do not leave the transfer lever in the N position with the engine running. Stopping with the transfer case in the N position may cause gear grinding when selecting another gear. Changing the transfer case gear quickly and smoothly will eliminate this.

DIFF LOCK (If so equipped)

To prevent the rear wheel from spinning in poor traction conditions (e.g. Mud, sand or grass)

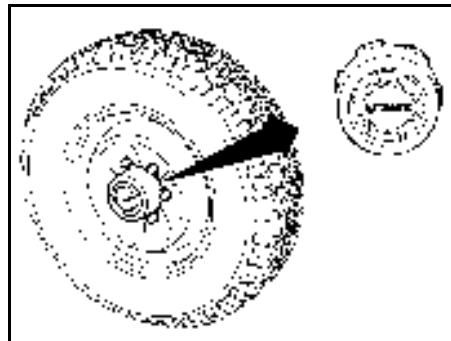
Only "Engage" or "Disengage" DIFF LOCK at low speed [Max. 30 km/h (19 MPH)] or when stopped.

CAUTION:

Do not engage DIFF LOCK when:

- **One wheel is jacked up,**
- **On firm surfaces with good traction,**
- **While rear wheel is spinning**

Also see DIFF LOCK warning label on inside of windscreen.



AUTO-LOCK FREE-RUNNING HUBS (If so equipped)

The auto-lock free-running hub is designed to allow for automatic 4-wheel drive engagement when the shift lever is moved to the "4H" or "4L" position. If your vehicle is equipped with this system, follow these operational cautions:

CAUTION:

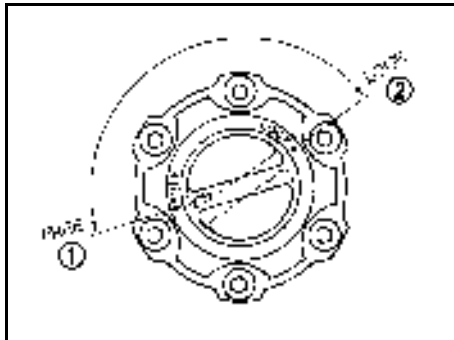
- **When engaging and disengaging, the auto-lock hubs will make a clicking noise. This is normal.**
- **Accelerating the vehicle suddenly from a stop with the transfer lever in the "4H" or "4L" position may not engage the auto-lock free-running hub and may cause a clattering noise. Continued use of the vehicle with this noise may damage the hub lock. In such case, release the accelerator pedal to reduce the engine speed.**

- If the auto-lock hubs make a clattering noise while driving in the "2H" position, stop and move the vehicle about 2 to 3 metres (7 to 10 ft) in the opposite direction of travel.
- Under extremely cold conditions [below -15°C (5°F)], when the vehicle is driven in 2-wheel drive at high speeds without first warming up the vehicle and gear oil, the axle shafts may rotate, causing the hubs to make a clattering noise. To avoid this, first drive in 4-wheel drive, then shift to 2-wheel drive.
- When shifting from the "2H" to "4H" position while driving, do not stop shift lever movement midway. An incomplete shift from the "2H" to "4H" position or disengagement of only one hub lock may cause a clattering noise from the auto-lock hubs. Continued use of the vehicle with this noise may damage the hub lock. Shift to 4-wheel drive to stop the noise; unlock hubs as described.

Also in cold weather, if difficulty is encountered in shifting from "2H" to "4H", it may be necessary to reduce speed or stop the vehicle.

TO SHIFT TRANSFER:	SHIFT PROCEDURE FOR AUTO-LOCK FREE-RUNNING HUBS
From "2H" to "4H"	Move the transfer case shift lever to "4H" at speeds below 40 km/h (25 MPH). It is not necessary to depress the clutch pedal or to move the selector lever to the N position. Perform this operation when driving straight.
From "4H" to "2H"	<p>Move the transfer case shift lever to "2H". This can be done at any speed up to 80 km/h (50 MPH) and it is not necessary to depress the clutch pedal or move the selector lever to the N position. Perform this operation when driving straight.</p> <p>NOTE:</p> <ul style="list-style-type: none"> ▪ For 2-wheel drive operation, set the free-running hubs in the disengaged position. AUTO-LOCK hubs will not disengage until the vehicle is moved about 1 m (3 feet) in the opposite direction of travel: <ul style="list-style-type: none"> - When driving forward, stop and move 1 m (3 feet) in reverse. - When backing up, stop and move 1 m (3 feet) forward, then move the vehicle about 1 m (3 feet) in reverse. ▪ If the 4-wheel drive indicator light remains on when shifting from 4H, the 2-wheel drive is not selected. Ensure safety and either accelerate, decelerate or back up the vehicle to change to 2-wheel drive.
From "4H" or "4L" to "4L" or "4H"	<ol style="list-style-type: none"> 1 Stop the vehicle. Keep the engine running. 2 Depress the clutch pedal, or move the transmission selector lever in the N (Neutral) position. 3 Depress the transfer case shift lever and move it to the desired "4L" or "4H" position. Change gears quickly and smoothly.
From "2H" to "4L"	<ol style="list-style-type: none"> 1 Stop the vehicle. Keep the engine running. 2 Depress the clutch pedal, or move the transmission selector lever in the N (Neutral) position. 3 Depress the transfer case shift lever and move it to "4L" position. Change gears quickly and smoothly.
From "4L" to "2H"	<ol style="list-style-type: none"> 1 Stop the vehicle. Keep the engine running. 2 Depress the clutch pedal, or move the transmission selector lever in the N (Neutral) position. 3 Depress the transfer case shift lever and move it to "2H" position. Change gears quickly and smoothly. <p>NOTE:</p> <ul style="list-style-type: none"> ▪ Follow the "NOTE" shown in shifting from 4H to 2H. ▪ If the 4-wheel drive indicator light remains on when shifting from 4H to 2H, the 2-wheel drive is not selected. Ensure safety and either accelerate, decelerate or back up the vehicle to change to 2-wheel drive.

5-14 Starting and driving



MANUAL-LOCK FREE-RUNNING HUBS (if so equipped)

The manual-lock free-running hubs are designed to allow you to engage or disengage the front drive shaft to the front wheels. Before driving, set the free-running hub to the desired position:

- 2-wheel operation - Turn the knob to the FREE position. (1)
- 4-wheel operation - Turn the knob to the LOCK position. (2)

Be certain to align the "←" mark on the knob with the "●" mark on the wheel hub.

CAUTION:

- **Never drive in 4-wheel drive ("4H" or "4L") with the free-running hubs in the FREE position.**
- **Do not drive your vehicle with the left and right free-running hub set to different positions.**
- **For the first 500 km (300 miles) it is recommended that you drive in the "2H" position, with the free-running hubs set in the LOCK position.**
- **To ensure proper lubrication of front drive components, drive in the LOCK position for at least 16 km (10 miles) each month.**

NOTE: If knob is difficult to turn when dis-engaging (unlock), move the vehicle forward for ½ to ¾ of a wheel turn until knob turns easily (i.e. until 4 wheel drive light is switch off).

TO SHIFT TRANSFER:	SHIFT PROCEDURE FOR MANUAL-LOCK FREE-RUNNING HUBS
From "2H" to "4H"	<ol style="list-style-type: none"> 1 Stop the vehicle. 2 Set free-running hubs in the LOCK position. 3 Move the transfer lever to "4H". This can be done at any speed up to 80 km/h (50 MPH) and it is not necessary to depress the clutch pedal or move the selector lever to the N position. Perform this operation when driving straight.
From "4H" to "2H"	<p>Move the transfer lever to "2H". This can be done at any speed up to 80 km/h (50 MPH) and it is not necessary to depress the clutch pedal or move the selector lever to the N position. Perform this operation when driving straight.</p> <p>NOTE:</p> <ul style="list-style-type: none"> ▪ For 2-wheel drive operation, set the free-running hubs in the FREE position. This will allow for better fuel economy, quieter ride and less component wear. ▪ If the 4-wheel drive indicator light remains on when shifting from "4H" to "2H", the 2-wheel drive is not selected. Ensure safety and either accelerate, decelerate or reverse the vehicle to change to 2-wheel drive.
From "4H" or "4L" to "4L" or "4H"	<ol style="list-style-type: none"> 1 Stop the vehicle. Keep the engine running. 2 Depress the clutch pedal, or move the transmission selector lever in the N (Neutral) position. 3 Depress the transfer lever and move it to the desired "4L" or "4H" position. Change gears quickly and smoothly.
From "2H" to "4L"	<ol style="list-style-type: none"> 1 Stop the vehicle. Keep the engine running. 2 Depress the clutch pedal, or move the transmission selector lever in the N (Neutral) position. 3 Depress the transfer lever and move it to "4L". Change gears quickly and smoothly.
From "4L" to "2H"	<ol style="list-style-type: none"> 1 Stop the vehicle. Keep the engine running 2 Depress the clutch pedal, or move the transmission selector lever in the N (Neutral) position. 3 Depress the transfer lever and move it to "2H". Change gears quickly and smoothly. <p>NOTE:</p> <ul style="list-style-type: none"> ▪ Follow the "NOTE" shown in shifting from "4H" to "2H". ▪ If the 4-wheel drive indicator light remains on when shifting from "4H" to "2H", then 2-wheel drive is not selected. Ensure safety and either accelerate, decelerate or reverse the vehicle to change to 2-wheel drive.

DRIVING SAFETY PRECAUTIONS



Your NISSAN is designed for both normal and off-road use. However, avoid driving in deep water or mud as your NISSAN is mainly designed for leisure use, unlike a conventional off-road vehicle.

Remember that two-wheel drive models are less capable than four-wheel drive models for rough road driving and extrication when stuck in deep snow or mud, or the like.

Please observe the following precautions:

CAUTION:

- **Drive carefully when off the road and avoid dangerous areas. Always wear your seat belts to help keep you and your passengers in position when driving over rough terrain.**
- **Do not drive across steep slopes. Instead, drive either straight up or straight down the slopes. Off-road vehicles can tip over sideways much more easily than they can forward or backward.**
- **Many hills are too steep for any vehicle. If you drive up them, the engine may stall. If you drive down them, you may not be able to control your speed. If you drive across them, the vehicle may roll over.**
- **Stay alert when driving to the top of a hill. At the top there could be a drop-off or other hazard that could cause an accident.**

- **If your engine stalls or you cannot make it to the top of a steep hill, never attempt to turn around. Your vehicle could tip or roll over. Always back straight down in reverse gear. Never back down in neutral (N) or with the clutch depressed, using only the brake, as this could cause loss of control.**
- **Heavy braking going down a hill could cause the brakes to overheat and fade, resulting in loss of control and an accident. Apply brakes lightly and use a low gear to control your speed.**
- Unsecured cargo can be thrown around when driving over rough terrain. Properly secure it so that it will not be thrown forward and cause injury to you or your passengers.
- Avoid raising the centre of gravity by loading things on the roof or equipping the vehicle with tyres larger than specified in this manual. This could cause your vehicle to roll over. Put heavy loads in the cargo area as far forward and as low as possible,
- Do not grip the inside or spokes of the steering wheel when driving off-road. The steering wheel could jerk and injure your hands. Instead drive with your fingers and thumbs on the outside of the rim.
- Before operating the vehicle, ensure that the driver and all passengers have their seat belts fastened.
- Always drive with the floor mats in place as the floor may become very hot. Particular care should be taken if you are barefoot.
- Lower your speed when encountering strong crosswinds. With its higher centre of gravity, your Nissan is more affected by gusty side winds. Slower speeds ensure better vehicle control.
- **Do not drive beyond the performance of the tyres even with 4WD.**
Sudden acceleration, sharp steering manoeuvres or sudden braking may cause loss of control.
- Be sure to check the brakes immediately after driving in mud or water as specified in "WET BRAKES" later in this section.
- Whenever you drive off-road through sand, mud or water as deep as the wheel hub, more frequent maintenance may be required. For details, refer to "Maintenance under severe driving conditions" in a separate maintenance booklet.
- Avoid parking your vehicle on steep hills. If you get out of the vehicle and it rolls forward, backward or sideways, you could be injured.

TYRES OF 4-WHEEL DRIVE VEHICLES

CAUTION:

Always use tyres of the same size, brand, construction (bias, bias-belted or radial) and tread pattern on all four wheels. Failure to do so may result in a circumference difference between tyres on the front and rear axles which will cause excessive tyre wear and may damage the transmission, transfer case and differential gears.

If excessive tyre wear is found, it is recommended that all four tyres be replaced with tyres of the same size, brand, construction and tread pattern. The tyre pressure and wheel alignment should also be checked and corrected as necessary. Contact your NISSAN Dealer.

Tyre inflation pressure

Check the pressure in all tyres, including the spare, with a gauge periodically when at a service station. Adjust to the specified pressure if necessary. Tyre pressures are shown on the tyre placard affixed. For tyre placard location information, refer to "TYRE PLACARD" in the "9. Technical information" section.

Tyre rotation

NISSAN recommends that tyres be rotated periodically. Do not include the temporary spare tyre in the tyre rotation.

POWER STEERING SYSTEM

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

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

BRAKE SYSTEM

PRECAUTIONS WHEN DRIVING

Vacuum assisted brakes

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



WARNING

Do not coast with the engine stopped.

Wet brakes

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

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

CAUTION:

- **Avoid resting your foot on the brake pedal while driving. This will overheat the brakes, wear out the brake linings and pads faster and increase fuel consumption.**
- **To help save the brakes and to prevent the brakes from overheating, reduce speed and downshift to a**

lower gear before going down a slope or long grade. Overheated brakes may reduce braking performance and could result in loss of vehicle control.

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

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 the 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.

ANTI-LOCK BRAKE SYSTEM (ABS) (if so equipped)

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

control and helps to minimize swerving and spinning on slippery surfaces.

If a tyre slips on rough roads for more than approximately 40 seconds, the ABS warning light may come on. Turn OFF the ignition key, restart the engine and drive the vehicle at speeds above 30 km/h (20 MPH). If the warning light does not go out, have the vehicle checked at a NISSAN dealer.

Self-test function

The anti-lock brake system consists of electronic sensors, electric pumps, and hydraulic solenoids controlled by a computer.

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

If the light comes on during the self check, or while you are driving, you should take your vehicle to your NISSAN Dealer for repair at your earliest convenience.

Normal operation

The anti-lock brake system will not operate at speeds below 5 to 10 km/h (3 to 6 MPH) to completely stop the vehicle. (The speeds will vary according to road conditions.) When the anti-lock system senses that one or more wheels are close to locking up, the actuator (under the hood) rapidly applies and releases hydraulic pressure (like pumping the brakes very quickly). While the actuator is working, you may feel a pulsation in the brake pedal and hear a noise or vibration from the actuator under the hood.

This is normal and indicates that the anti-lock system is working properly. However, the pulsation may indicate that road conditions are hazardous and extra care is required while driving.



WARNING

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

Tyre type and condition may also affect braking effectiveness.

- When replacing tyres, install the specified size of tyres on all the 4 wheels.
- When installing a spare tyre, make sure it is the proper size and type as specified on the tyre placard. For tyre placard location information, refer to "TYRE PLACARD" in the "9. Technical information" section.

PARKING



WARNING


- Do not park the vehicle over flammable materials such as dry grass, waste paper or rags, as they may burn easily.
- Never leave the engine running while the vehicle is unattended.
- Never leave children unattended in the vehicle.

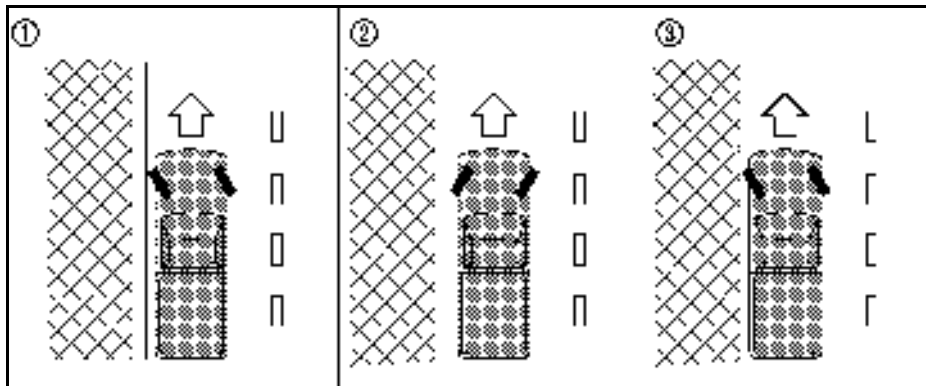
Safe parking procedures require that the parking brake be set and the gear shift lever placed in the proper position.

- 1 Firmly apply the parking brake.
- 2 Place the transmission shift lever in the "REVERSE" position when parking on a down hill grade.
- 3 When parking on an uphill grade, place the shift lever in the "1st" (Low gear) position.
- 4 Turn the ignition key to the "LOCK" position and remove the key.

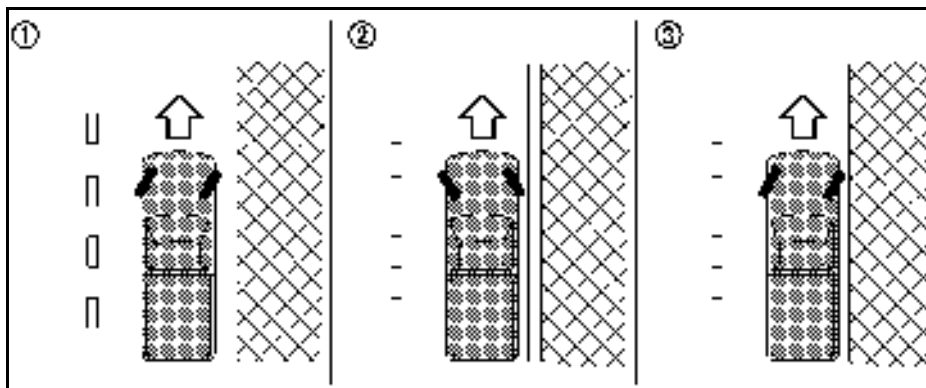


WARNING

-  The transfer control lever must be in the "2H", "4H" or "4L" position to prevent the vehicle from moving. .
- Never place it in the "N" neutral position.



Right-hand drive models



Left-hand drive models

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

HEADED DOWNHILL:

Turn the wheels into the curb (1), allow the vehicle to move forward until the curb side wheel gently touches the curb. Then set the parking brake.

HEADED UPHILL:

Turn the wheels away from the curb (2) 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:

Turn the wheels toward the side of the road (3) so the vehicle will move away from the centre of the road if it moves. Then set the parking brake.

VEHICLE SECURITY

When leaving your vehicle unoccupied:

- Always remove the ignition key - even in your own garage.
- Close all windows completely and lock all doors.
- Always park your vehicle where it can be seen. At night, park in a well lit area.
- If you have an alarm or immobilization device, use it - even for short periods.
- Do not leave children and pets in the vehicle unattended.
- Do not leave valuables on view to tempt a thief. Always take your valuables with you. If you must leave something in your vehicle, hide it out of sight.
- Do not leave the vehicle documents in your vehicle. In the unfortunate event of your vehicle being stolen the documents will only help a thief to sell the vehicle.
- Do not leave articles on a roof rack as they are particularly vulnerable. If possible, remove them from the rack and lock them inside the vehicle.
- Do not leave the spare key in the vehicle - keep it in a safe place in your home.
- Do not leave a note of your vehicle key number in the vehicle. A thief may break into the vehicle, note the key number and return with a key to enter and drive the vehicle.

5-22 Starting and driving

COLD WEATHER DRIVING

Anti-freeze

In the winter when it is anticipated that the temperature will drop below 0°C (32°F), check anti-freeze to ensure proper winter protection. For details, see "ENGINE COOLING SYSTEM" in the "8. Maintenance and do-it-yourself" section.

Battery

If the battery is not fully charged during extremely cold weather conditions, the battery fluid may freeze and damage the battery. To maintain maximum efficiency, the battery should be checked regularly. For details, see "BATTERY" in the "8. Maintenance and do-it-yourself" section.

Engine coolant

If the vehicle is to be left outside without anti-freeze, drain the cooling system by opening the drain valves located under the radiator and on the engine block. Refill before operating the vehicle. See "CHANGING ENGINE COOLANT" in the "8. Maintenance and do-it-yourself" section.

CORROSION PROTECTION

For additional protection against rust and corrosion, which may be required in some areas, consult your local NISSAN Dealer.

6 In case of emergency

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FLAT TYRE


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

Stopping the vehicle

- 1 Safely move the vehicle off the road away from traffic.
- 2 Turn on the hazard warning flasher.
- 3 Park on a level surface and apply the parking brake. Shift the gearshift lever into the "R" (Reverse) position.



WARNING

 **The transfer control lever must be in the "2H", "4H" or "4L" position to prevent the vehicle from rolling.**

Never place it in the "N" position.

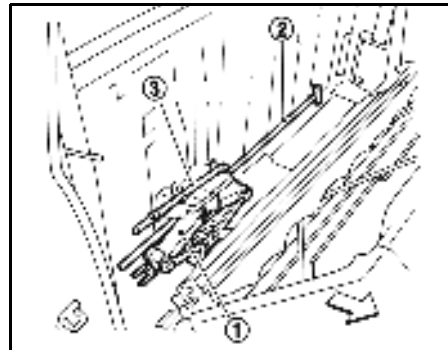
- 4 Turn off the engine.
- 5 Have all passengers get out of the vehicle and stand in a safe place, away from traffic and clear of the vehicle.



WARNING

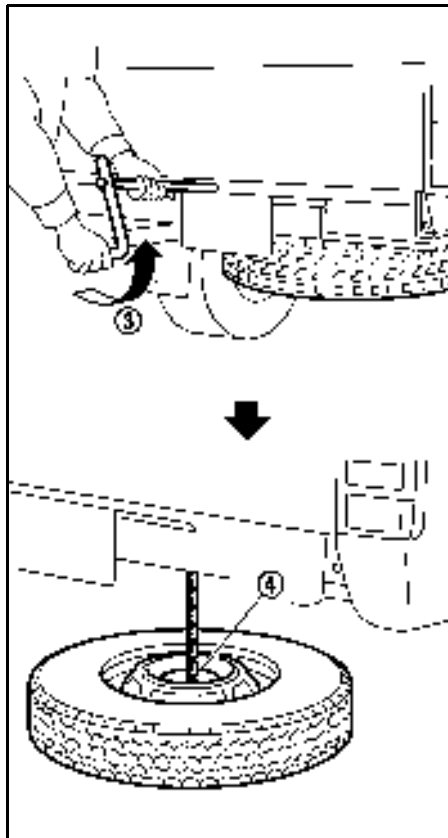
- **Make sure that the parking brake is securely applied.**
- **Be sure to shift the gearshift lever to the "R" (Reverse) position.**
- **Never change tyres when the vehicle is on a slope, icy or a slippery area. This is dangerous.**

- **Never change tyres if oncoming traffic is close to your vehicle. Wait for professional road assistance.**
- **Raise the hood to warn other traffic and to signal professional road assistance personnel that you require assistance.**
- **Place emergency Triangles**



The storage area for the Jack, Jack rod and Wheel nut wrench is located behind the driver's seat. For seat tilting procedures, refer to "SEATS" in the "1. Safety - seats, seat belts and supplemental restraint system" section.

- 1 Jack
- 2 Jack rod
- 3 Wheel nut wrench



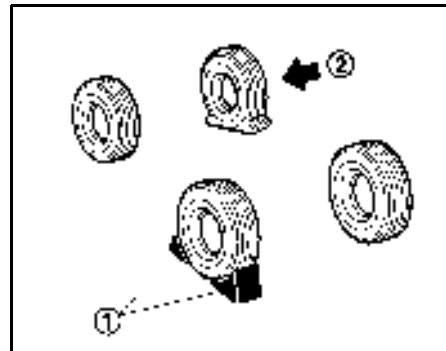
PREPARING THE TOOLS AND SPARE TYRE

- 1 Remove jacking tools from storage area.
- 2 Remove the spare wheel lock if fitted.
- 3 Remove the wheel nut wrench from the tool bag. Fit the square end of the jack rod into the square hole of the wheel spanner to form a handle.
- 4 Find the oval shaped opening under the middle of the tailgate. Pass the T-shaped end of the jack rod through the opening, and direct it towards the spare tyre winch, located directly above the spare tyre.
- 5 Seat the T-shaped end of the jack rod into the T-shaped opening of the spare tyre winch, and turn the jack rod anti-clockwise (3) to lower the spare tyre.
- 6 Once the spare tyre is completely lowered, (4) reach under the vehicle, remove the retainer chain and carefully slide the tyre from under the rear of the vehicle.

Tightening torque of wheel nuts:

132 Nm (13.5 kg-m, 98 ft-lb)

When installing the tyre, tighten securely.



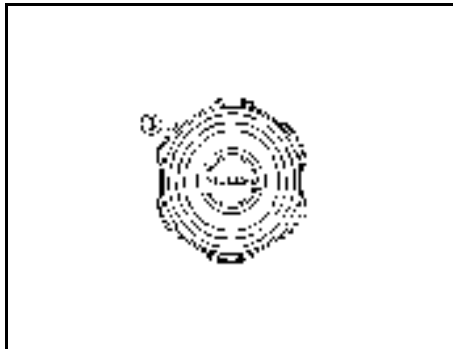
BLOCKING THE WHEELS



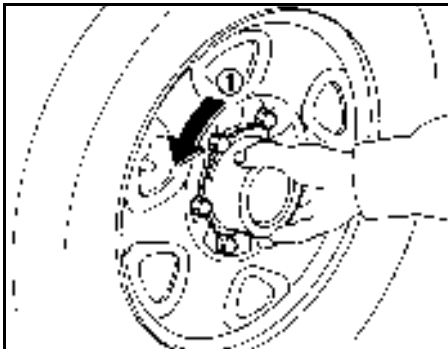
WARNING

Be sure to block the appropriate wheel as the vehicle may move and could cause personal injury.

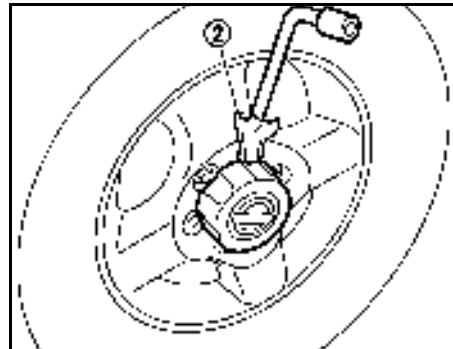
Place suitable blocks (1) at both the front and back of the wheel diagonally opposite the flat tyre (2) to prevent the vehicle from moving when it is jacked up.



Type A



Type A



Type B

REMOVING TYRE

Removing the wheel cap (if so equipped).

Type A:

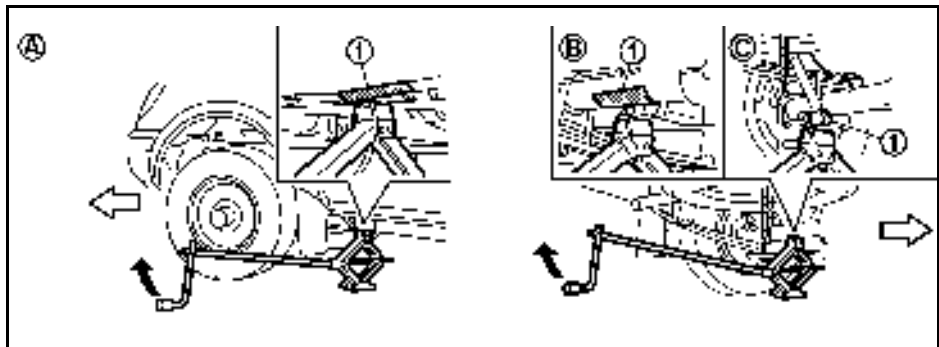
- 1 Loosen one wheel nut at the "U" shape (3) shown above.
- 2 Turn the cap anti-clockwise and remove.

Replacing the wheel cap.

- 1 Loosen the wheel nut (1) as illustrated.
- 2 Turn the wheel cap clockwise so that the "U" shape (3) is opposite the loosened nut.
- 3 Tighten nut.

Type B:

Use a waste cloth (2) to prevent scratches.



(A) Front wheel of 2WD models and 4WD models

(B) Rear wheel of 2WD models

(C) Rear wheel of 4WD models

(1) Jack-up point

Jacking up and removing tyre



WARNING

- **Never get under the vehicle while it is supported only by the jack; use a vehicle support stand.**
- **Use the jack provided with your vehicle. Do not use the jack provided with your vehicle on other vehicles. The jack is designed only for lifting your vehicle during a tyre change.**
- **Use the correct jack up points; never use any other part of the vehicle for jack support.**

- **Never jack up the vehicle more than necessary.**

- **Never use blocks on or under the jack.**

- **Do not start or run engine while vehicle is on the jack, as it may cause the vehicle to move. This is especially true for vehicles with limited slip differential carriers.**

- **Do not allow passengers to stay in the vehicle while it is on the jack.**

- **Remove all loads.**

- **Never run the engine with the wheels off the ground. It may cause the vehicle to move.**

- **Carefully read the caution label attached to the jack body and the following instructions.**

- 1 Place the jack directly under the jack-up point as illustrated above so that top of the

jack contacts the vehicle at the jack up point. Align the centre of both the jack head and the jack up point as shown.

The jack should be used on level firm ground.

- 2 Remove the centre cap.

- 3 Loosen each wheel nut one or two turns by turning anti-clockwise with the wheel nut wrench (jack handle).

Do not remove the wheel nuts until the tyre is off the ground.

- 4 Carefully raise the vehicle until the tyre clears the ground. Remove the wheel nuts, and then remove the wheel. Do not remove the brake drum with the wheel.

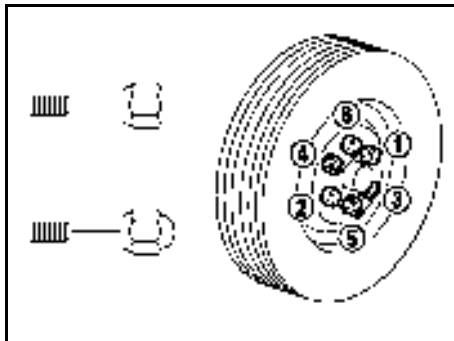
Removing the damaged tyre

- 1 Remove the wheel nuts.

- 2 Remove the damaged tyre.

CAUTION:

The tyre is heavy. Be sure that your feet are clear from the tyre and use gloves as necessary to avoid injury.



INSTALLING THE SPARE TYRE

- 1 Clean any mud or dirt from the surface between the wheel and hub.
- 2 Carefully put the wheel on and tighten the wheel nuts finger tight.
- 3 With the wheel nut wrench, tighten wheel nuts alternately and evenly until they are tight.
- 4 Lower the vehicle slowly until the tyre touches the ground. Then, with the wheel nut wrench, tighten the wheel nuts securely in the sequence as illustrated.

CAUTION:

- **As soon as possible tighten the wheel nuts to the specified torque with a torque wrench.**
- **Wheel nut tightening torque:**
132 Nm (13.5 kg-m, 98 ft-lb)

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

COLD pressure:

After vehicle has been parked for 3 hours or more or driven less than 1,6 km (1 mile).

COLD tyre pressures are shown on the tyre placard. (See "9. Technical Information" Section for location of placard)

WARNING

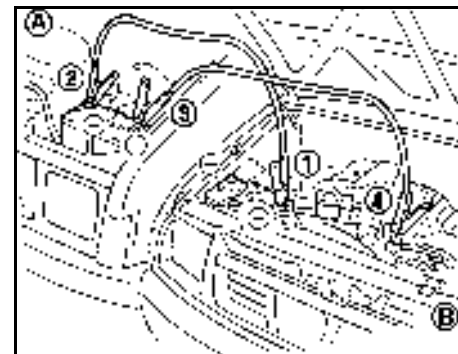
Retighten the wheel nuts when the vehicle has been driven for 1,000 km (600 miles).

- 5 Install the centre wheel cap securely.
- 6 Securely store the spare tyre and jacking equipment in the vehicle.

WARNING



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

JUMP STARTING



CAUTION:

Use a battery rated at 12 volts for a booster.

- 1 Prepare a vehicle  with the battery as booster for the vehicle  being jump started. Do not allow the vehicles to touch each other.
- 2 Remove vent caps on the battery (if so equipped). Cover the battery with a moist cloth that has been wrung out.
- 3 Connect jumper cables in the sequence (1) → (2) → (3) → (4) as illustrated.

CAUTION:

An incorrect connection could result in damage to the charging system.

- 4 Start the engine of the other vehicle and let it run for a few minutes. Keep the

engine speed at about 2 000 rpm, and start your engine in the normal manner.

- 5 After starting your engine, carefully disconnect the negative lead and then the positive lead.
- 6 Replace the vent caps (if so equipped).

CAUTION:


Be careful not to allow contact of the positive jump lead connector with the vehicle or the negative lead during connection and disconnection.

PUSH STARTING

CAUTION:

- **Catalytic converter equipped models should not be started by pushing since the catalytic converter may be damaged.**
- **Never try to start the vehicle by towing it; when the engine starts, the forward surge could cause the vehicle to collide with the tow vehicle.**

Gasoline engine with Manual transmission (Except catalytic converter equipped models)

- 1 Turn the ignition key to "ON".
- 2 Hold the clutch fully depressed and shift into second or third.
 Place the transfer in "2H" and free-running hubs in the "FREE" position (models with manual-lock free-running hub)
- 3 Hold the accelerator pedal about halfway.
- 4 Start pushing and when the vehicle reaches a speed of about 16 km/h (10 MPH), turn the ignition key to "ON" and slowly release the clutch pedal to start the engine.

IF YOUR VEHICLE OVERHEATS



WARNING

To avoid the danger of being burned, never remove the radiator cap while the engine is still hot.

- 1 Move the vehicle safely off the road, apply the parking brake and move the shift lever to the "N" (neutral) position.

Do not stop the engine.

- 2 Turn off the air conditioner switch. Open all the windows, move the heater or air conditioner temperature control to "maximum hot" and fan control to "high speed".
- 3 Open the hood. If steam or water is coming from the engine, stand clear to prevent getting burned.
- 4 If engine overheating is caused by climbing a long hill on a hot day, run the engine at a fast idle (approximately 1 500 rpm) until the temperature gauge indicator returns to normal.
- 5 Visually check drive belts for damage or looseness. Also, check if the cooling fan is running. The radiator hoses and radiator should not leak water.



WARNING

- **Be careful not to allow your hands, hair or clothing to come into contact with the fan, belts, or other moving parts.**

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

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

TOW TRUCK TOWING

When towing your vehicle, local regulations for towing must be followed. Incorrect towing equipment could damage your vehicle. To assure proper towing and to prevent accidental damage to your vehicle, NISSAN recommends that you have a service operator tow your vehicle. It is advisable to have the service operator carefully read the following precautions.

Towing precautions

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

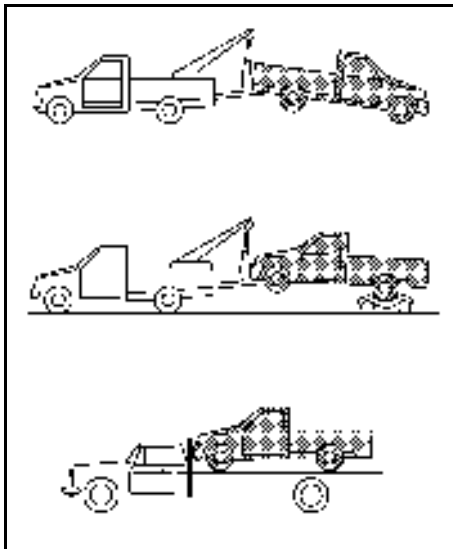
Turn the ignition key to the "OFF" position and secure the steering wheel in a straight-ahead position with a rope or similar device. Never place the ignition key in the "LOCK" position. This will result in damage to the steering lock mechanism. Move the shift lever to neutral ("N" position).

- **For 4-wheel drive model:**

Set the free-running hubs to the free position. Move the transfer case shift lever into the "2H" position and the transmission shift lever into the "N" neutral position.

CAUTION:

- **Do not shift the transfer lever to the "4L" position. This will cause damage to the transmission.**
- **Attach safety chains for all towing.**



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

- 1 Release the parking brake and move the gearshift lever to the "N" (neutral) position.
- 2 Observe the following restricted towing speeds and distances:

- **Speed: Below 95 km/h (60 MPH)**
- **Distance: Less than 800 km (500 miles)**

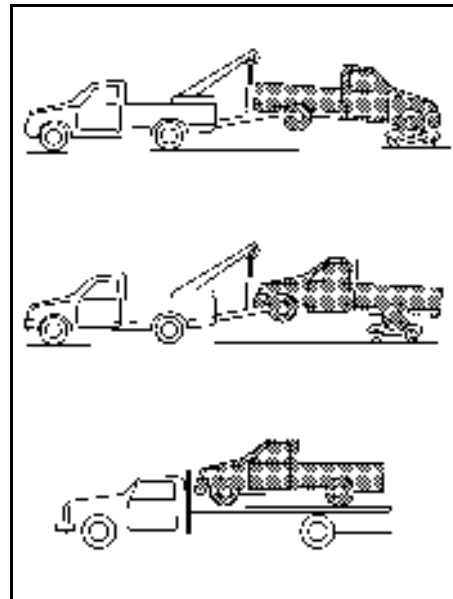
If the speed or distance must necessarily be greater, remove the propeller shaft beforehand to prevent damage to the transmission.

WARNING

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

RECOMMENDED TOWING FOR 2-WHEEL DRIVE MODELS

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



RECOMMENDED TOWING FOR 4-WHEEL DRIVE MODELS

NISSAN recommends that a dolly be used as illustrated when towing your vehicle.

If you have to tow your vehicle with four wheels on the ground or front or rear wheels on the ground

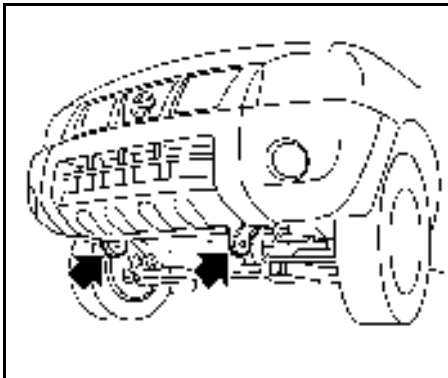
- 1 Release the parking brake and move the gearshift lever to the "N" (neutral) position.
- 2 Observe the following restricted towing speeds and distances.

- **Speed: Below 95 km/h (60 MPH)**
- **Distance: Less than 800 km (500 miles)**

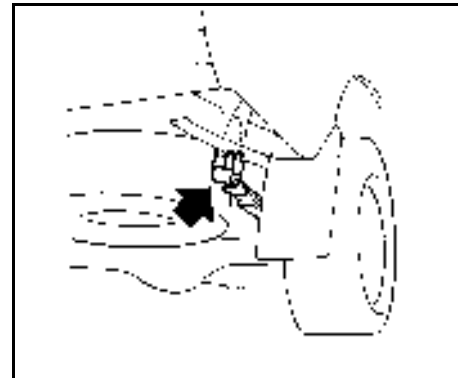
If the speed or distance must necessarily be greater, remove the propeller shaft beforehand to prevent damage to the transmission.

WARNING

- **Never tow your vehicle from the rear (i.e. backward) with four wheels on the ground as this may cause serious and expensive damage to the transmission.**
- **Be sure to place the transfer case shift lever into the "2H" position and the transmission shift lever into the "N" neutral position if the vehicle is to be towed.**



Front



Rear

FREEING TRAPPED VEHICLE

- 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 a long distance 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.

WARNING

Do not allow anyone to stand near the towing line during this operation.

7 Appearance and care

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CLEANING EXTERIOR

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

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

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

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

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

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

WASHING

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

CAUTION:

- **Do not use strong household soap, strong chemical detergents, gasoline or solvents.**
- **Do not wash your vehicle in the direct sunlight or while the vehicle body is hot, as the surface may become water-spotted.**
- **Avoid using tigh-napped or rough cloths, such as washing mitts. Care must be taken when removing caked-on dirt or other foreign substances so that the paint surface is not scratched or damaged.**

Rinse the vehicle thoroughly with plenty of clean water.

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

REMOVING SPOTS

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

WAXING

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

Your NISSAN Dealer can assist you in choosing the proper product.

- Wax your vehicle only after a thorough washing. Follow the instructions supplied with the wax.
- Do not use a wax containing any abrasives, cutting compounds or cleaners that may damage the vehicle finish.
- If the surface does not polish easily, use a "road tar" remover and wax again.

Machine compounding or aggressive polishing on a base coat/clear coat paint finish may dull the finish or leave swirl marks.

Only use black wax or black shoe polish on black urethane or polypropylene bumpers.

GLASS

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

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 contain chemicals that may stain or bleach the seat material.

- **Never use benzine, thinners, or any similar fluids.**
- **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.**

GLASS

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

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

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.

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.

CORROSION PROTECTION

MOST COMMON FACTORS CONTRIBUTING TO VEHICLE CORROSION

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

ENVIRONMENTAL FACTORS INFLUENCE THE RATE OF CORROSION

Moisture

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

Relative humidity

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

Temperature

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

Air pollution

Industrial pollution and the presence of salt in the air in coastal areas will accelerate the corrosion process.

For additional protection against rust and corrosion, which may be required in some areas, consult your local NISSAN Dealer.

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 for accumulation of sand, dirt or salt. If present, wash with water as soon as possible.
- NEVER remove dirt, sand or other debris from the passenger compartment by washing it out with a hose. Remove dirt with a vacuum cleaner or broom.
- Never allow water or other liquids to come in contact with electronic components inside the vehicle.

In winter, the underbody must be cleaned periodically.

8 Maintenance and do-it-yourself

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MAINTENANCE REQUIREMENTS

Your new NISSAN has been designed to have minimum maintenance requirements with longer service intervals to save you both time and money. However, some day-to-day and regular maintenance is essential to maintain your NISSAN's good mechanical condition, as well as its emission and engine performance.

It is the owner's responsibility to make sure that scheduled maintenance, as well as general maintenance, is performed.

As a vehicle owner, you are the only one who can ensure that your vehicle receives the proper maintenance care. You are a vital link in the maintenance chain.

SCHEDULED MAINTENANCE

For your convenience, the required schedule maintenance items are described and listed in a separate maintenance booklet. You must refer to that booklet to ensure that necessary maintenance is performed on your NISSAN at regular intervals.

GENERAL MAINTENANCE

General maintenance includes those items that should be checked during normal day-to-day operation of the vehicle. They are essential if your vehicle is to continue to operate properly. It is your responsibility to perform these procedures regularly as prescribed.

Performing general maintenance checks require minimal mechanical skill and only a few general automotive tools.

These checks or inspections can be done by yourself, a qualified technician, or if you prefer, your NISSAN Dealer.

WHERE TO GO FOR SERVICE

If maintenance service is required or your vehicle appears to malfunction, have the systems checked and tuned by an authorised NISSAN Dealer.

NISSAN technicians are well-trained specialists and are kept up to date with the latest service information through technical bulletins, service tips, and training programs. They are completely qualified to work on NISSAN vehicles before they work on your vehicle, rather than after they have worked on it.

You can be confident that your NISSAN Dealer's service department performs the best job to meet the maintenance requirement on your vehicle - in a reliable and economic way.

GENERAL MAINTENANCE

During the normal day-to-day operation of the vehicle, general maintenance should be performed regularly as prescribed in this section. If you detect any unusual sounds, vibration or smell, be sure to check for the cause or have your NISSAN Dealer do it promptly. In addition, you should notify your NISSAN Dealer if you think that repairs are required.

When performing any checks or maintenance work, closely observe "MAINTENANCE PRECAUTIONS" later in this section.

EXPLANATION OF GENERAL MAINTENANCE ITEMS

Additional information on the following items with "*" is found later in this section.

Outside the vehicle

The maintenance items listed here should be performed from time to time, unless otherwise specified.

Doors and engine hood:

Check that all doors and the engine hood operate properly. Also ensure that all latches lock securely. Lubricate hinges and latches if necessary. Make sure that the secondary latch keeps the hood from opening when the primary latch is released.

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.

Tyres*:

Check the pressure with a gauge periodically when at a service station (including the spare) and adjust to the specified pressure if necessary. Check carefully for damage, cuts or excessive wear.

Tyre rotation*:

Tyres should be rotated frequently. The timing for tyre rotation may vary according to your driving habits and road surface conditions.

Windshield wiper blades*:

The life of windscreen wiper blades is dependent on the amount of use and climatic conditions. For safety reasons these items should be replaced when wear impairs their function to clear the windscreen effectively.

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.

Seat belts:

Check that all parts of the seat belts system, (e.g. buckles, anchors, adjusters and retractors) operate properly and smoothly and are installed securely. Check the belt webbing for cuts, fraying, wear or damage.

Steering wheel:

Check for change in the steering conditions, such as excessive free play, hard steering or strange noises.

Warning/indicator lights and buzzers/chimes:

Make sure that all warning/indicator lights and buzzers/chimes are operating properly.

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.

Battery*:

Check the fluid level in each cell. It should be between the MAX and MIN lines.

Brake and clutch fluid level*:

Make sure that the brake and clutch fluid level is between the MAX and MIN lines on the reservoir.

Engine coolant level*:

Check the coolant level when the engine is cold.

Engine oil level*:

Check the level after parking the vehicle on a level spot and turning off the engine.

Windshield washer fluid*:

Check that there is adequate fluid in the tank.

MAINTENANCE PRECAUTIONS

When performing any inspection or maintenance work on your vehicle, always take care to prevent serious accidental injury to yourself or damage to the vehicle. The following are general precautions which should be closely observed.

- **Park the vehicle on a level surface, apply the parking brake securely and block the wheels to prevent the vehicle from moving. For a manual transmission, move the shift lever to neutral.**
- **Do not work under the hood while the engine is hot. Turn off the engine and wait until it cools down.**
- **Be sure to turn the ignition key to the "OFF" or "LOCK" position.**
- **When the ignition key is in the "ON" or "ACC" position, the cooling fan may start to operate suddenly even when the engine is not running.**
- **If you must work with the engine running, keep your hands, clothing, hair and tools away from moving fans, belts and any other moving parts.**
- **It is advisable to remove ties and any jewelry, such as rings, watches, etc. before working on your vehicle.**
- **If you must run the engine in an enclosed space such as a garage, be sure there is proper ventilation for exhaust gases.**

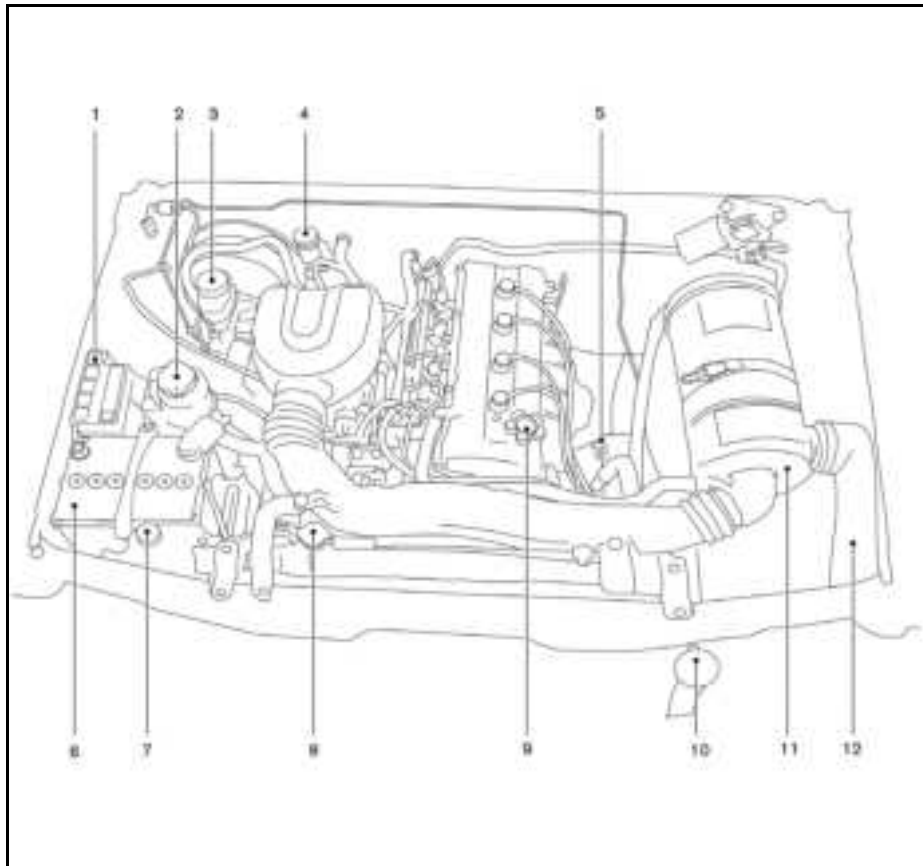
- **Never get under the vehicle while it is supported only by a jack. If it is necessary to work under the vehicle, support it with safety stands.**
- **Keep smoking materials, flame and sparks away from fuel and battery.**
- **Never connect or disconnect either the battery or any transistorized component connector while the ignition is on.**
- **Always apply the parking brake and block the wheels to prevent the vehicle from moving.**
- **On gasoline engine models with the multiport fuel injection (MFI) system, the fuel filter or fuel lines should be serviced by a NISSAN dealer because the fuel lines are under high pressure even when the engine is off.**
- **Failure to follow these or other common sense guidelines may lead to serious injury or vehicle damage.**
- **Improperly disposed motor oil and/or other vehicle fluids can hurt the environment. Always conform to local regulations for disposal of vehicle fluid.**
- **Avoid direct contact with used engine oil.**

This "8. Maintenance and do-it-yourself" section gives instructions regarding only those items which are relatively easy for an owner to perform.

You should be aware that incomplete or improper servicing may result in operating difficulties or excessive emissions and could affect your warranty coverage.

If in doubt about any servicing, have it done by your NISSAN Dealer.

ENGINE COMPARTMENT CHECK LOCATIONS



KA20 GASOLINE ENGINE

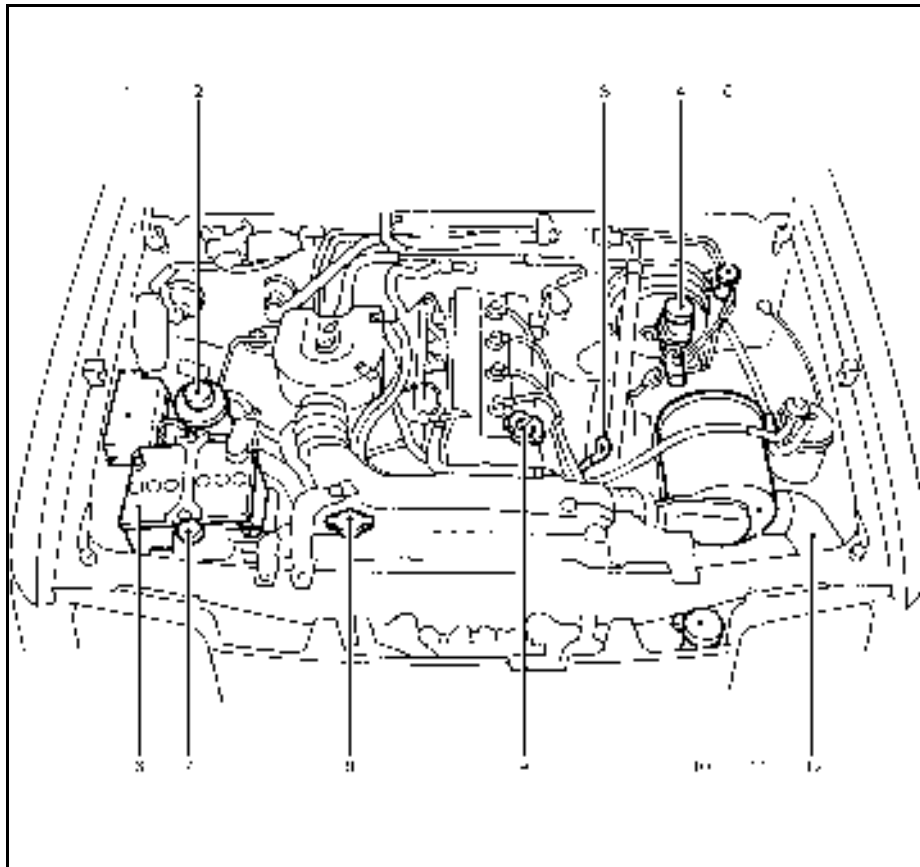
1. Fuse box
2. Power steering fluid reservoir
3. Brake fluid reservoir*
4. Clutch fluid reservoir*
5. Engine oil dipstick
6. Battery
7. Engine coolant reservoir
8. Radiator cap
9. Engine oil filler cap
10. Windshield washer reservoir
11. Air cleaner
12. Air intake duct

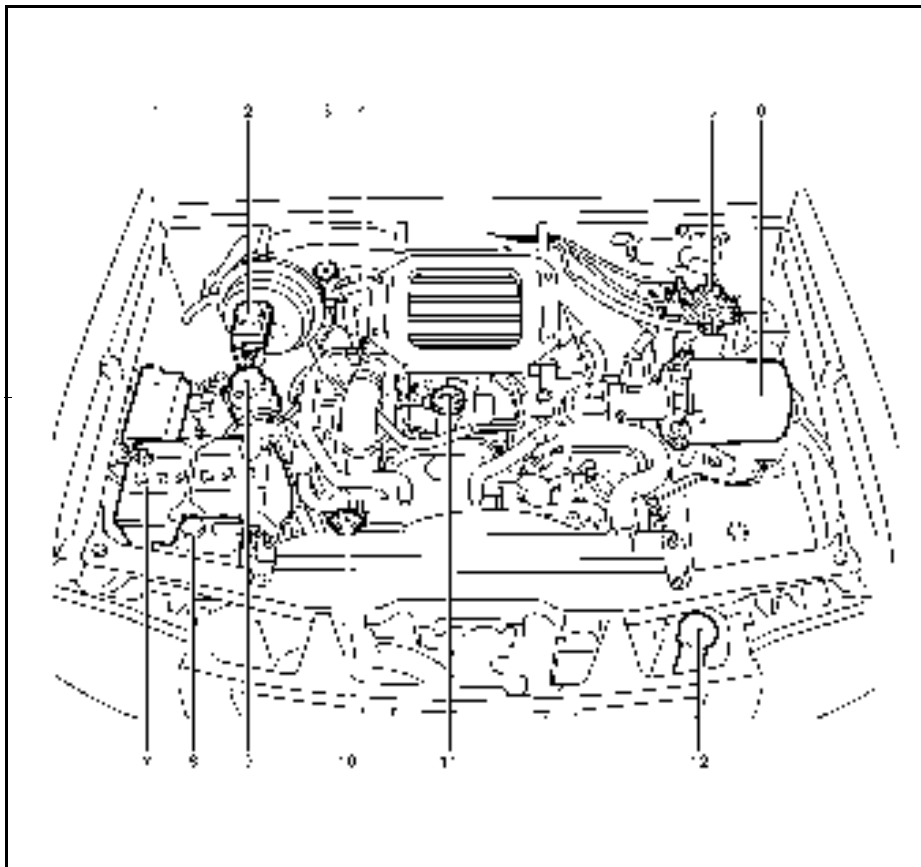
*:This layout is for RHD models.

KA24 GASOLINE ENGINE

1. Fuse box
2. Power steering fluid reservoir
3. Brake fluid reservoir*
4. Clutch fluid reservoir*
5. Engine oil dipstick
6. Battery
7. Engine coolant reservoir
8. Radiator cap
9. Engine oil filler cap
10. Windshield washer reservoir
11. Air cleaner
12. Air intake duct

*:This layout is for LHD models. For KA24 RHD models, these components are located on the opposite side.





YD25DDTi DIESEL ENGINE

1. Fuse box
2. Brake fluid reservoir*
3. Clutch fluid reservoir*
4. Engine oil dipstick
5. Fuel filter*/**
6. Air cleaner
7. Battery
8. Engine coolant reservoir
9. Power steering fluid reservoir
10. Radiator cap
11. Engine oil filler cap
12. Windshield washer reservoir

*: This layout is for RHD models. For LHD models, these components are located on the opposite side.

- **:
1. RHD models with ABS: Single combined fuel filter.
 2. RHD models without ABS: Single combined fuel filter.
 3. LHD all models: Single combined fuel filter.

ENGINE COOLING SYSTEM

WARNING

- **Never remove the radiator cap when the engine is hot. Serious burns could be caused by high-pressure fluid escaping from the radiator. Wait until the engine and radiator cool down. See precautions in "IF YOUR VEHICLE OVERHEATS" found in the "6. In case of emergency" section.**
- **Engine coolant is poisonous and should be stored carefully in marked containers out of the reach of children.**

The engine cooling system is filled at the factory with a high-quality, year-round and extended life engine coolant. The high quality engine coolant contains the specific solutions effective for the anti-corrosion and the anti-freeze function. Therefore, additional cooling system additives are not necessary.

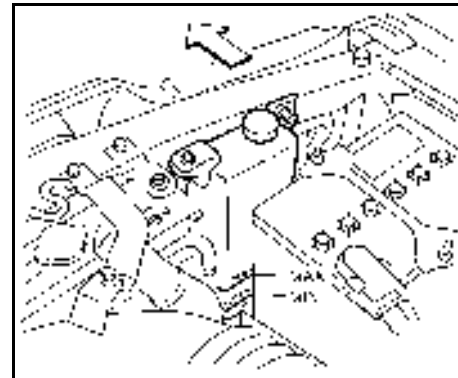
CAUTION:

When adding or replacing coolant, be sure to use only a NISSAN Genuine Engine Coolant or equivalent in its quality with the proper mixture ratio. Examples are shown below:

Outside temperature down to	Composition	
°C (°F)	Engine coolant (concentrated)	Demineralized water or distilled Water
-15 (5)	30%	70%
-35 (-30)	50%	50%

The use of other types of engine coolant may damage your cooling system.

The radiator is equipped with a pressure cap. Use a NISSAN genuine cap when replacement is required.



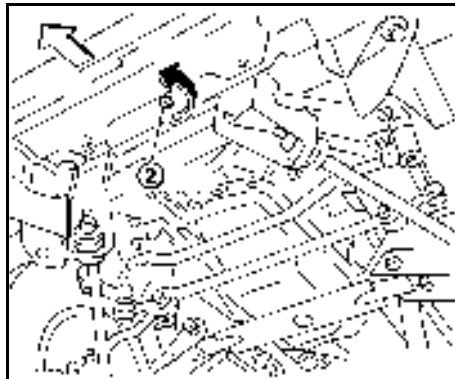
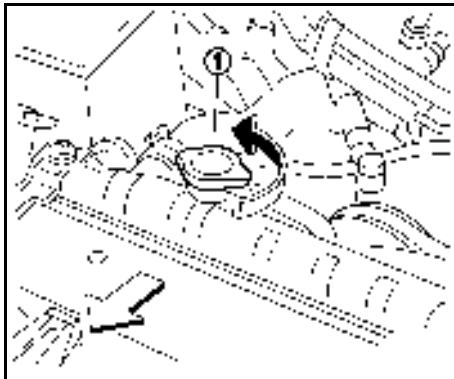
CHECKING ENGINE COOLANT LEVEL

Coolant reservoir

Check the coolant level in the reservoir tank when the engine is cold. If the coolant level is below "MIN", add coolant up to the "MAX" level. If the reservoir tank is empty, check the coolant level in the radiator when the engine is cold. If there is insufficient coolant in the radiator, fill the radiator with coolant up to the filler opening and also add it to the reservoir tank up to the "MAX" level.

CAUTION:

If the cooling system frequently requires coolant, have it checked by your NISSAN Dealer.



CHANGING ENGINE COOLANT

Your NISSAN Dealer should perform major cooling system repairs. The service procedures can be found in the appropriate NISSAN Service Manual.

Improper servicing can result in reduced heater performance and engine overheating.

WARNING

- **To avoid the danger of being scalded, never change the coolant when the engine is hot.**
- **Never remove the radiator cap when the engine is hot. Serious burns could be caused by high-pressure fluid escaping from the radiator.**

1 Open the drain plug (2) at the bottom of the radiator and the radiator cap (1).

▪ **Be careful not to allow coolant to contact drive belts.**

▪ **Waste coolant must be disposed of properly. Check your local regulations.**

2 Close the radiator drain plug (2) securely.

3 See the "Technical information" section for cooling system capacity. Fill the radiator slowly with the proper mixture of coolant and water. Fill the reservoir tank up to the "MAX" level. Then install the radiator cap (1).

4 Start the engine, and warm it up until it reaches normal operating temperature. Then race the engine 2 or 3 times under no load.

Watch the coolant temperature gauge for signs of overheating.

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

6 Check the drain plug (2) for any sign of leakage.

7 Recheck the coolant level after the vehicle has been driving for a day.

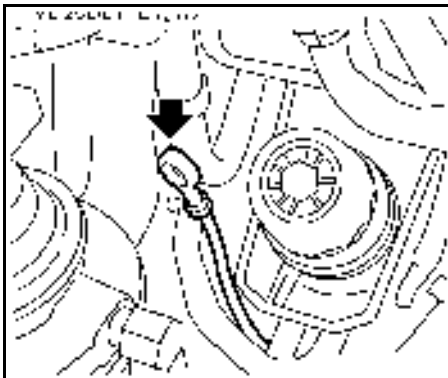
ENGINE OIL

CHECKING ENGINE OIL LEVEL

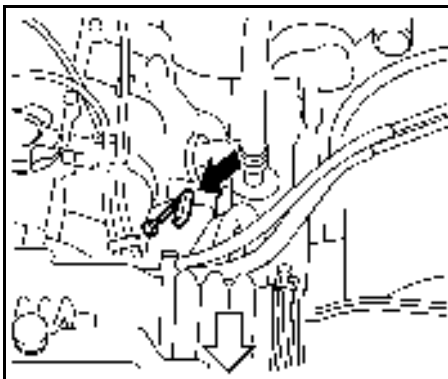
- 1 Park the vehicle on a level surface and apply parking brake.
- 2 Run the engine until it reaches operating temperature.
- 3 Turn off the engine. Wait at least 10 minutes for the oil to drain back into the oil pan.
- 4 Remove the dipstick and wipe it clean. Reinsert it all the way.
- 5 Remove the dipstick again and check the oil level. It should be between the "H" and "L" marks. If the oil level is below the "L" mark, remove the oil filler cap and pour recommended oil through the opening. Do not overfill.
- 6 Recheck oil level with dipstick.

CAUTION:

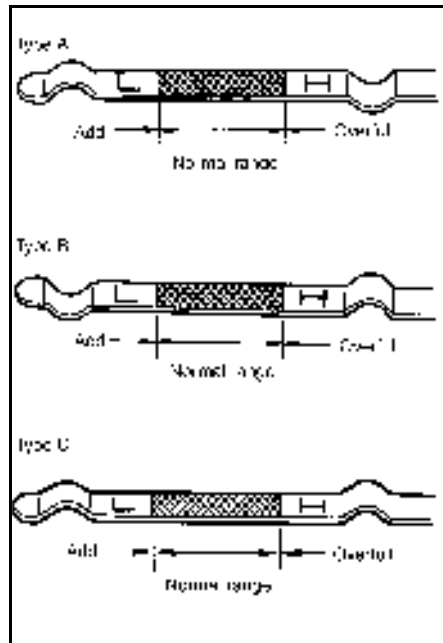
- **Oil level should be checked regularly. Operating with insufficient amount of oil can damage the engine, and such damage is not covered by warranty.**
- **It is normal to add some oil between oil maintenance intervals or during the run-in period, depending on the severity of operating conditions.**



YD25DDTi engine



KA20/KA24 engine



FACTS ABOUT OIL AND OIL CONSUMPTION

Diesel combustion engines depend upon oil to lubricate cylinder walls, pistons and rings. With each stroke of the piston, a thin film of oil is left on the cylinder walls and on the firing stroke the combustion flame burns it. If an engine burned just one drop of oil on every firing stroke, it would need approximately 400 ml per kilometre/mile.

Consumption of this amount is unheard of in the internal combustion engine, but all efficient engines do, however, use some oil to prevent rapid engine wear.

The rate of consumption depends upon the quality and viscosity of the oil, engine rpm, the temperature and the amount of dilution and oxidation in the crankcase.

If the engine oil is checked it may indicate full on the dipstick, but this could be misleading due to the vehicle being operated for 2,000 km (1,243 miles) or more in city or congested road conditions, which causes a build up of condensation and unburned fuel in the combustion chamber, which passes into the crankcase, and thus gives a false dipstick reading.

If the vehicle should then be driven at high engine rpm for a fairly long journey the unburned fuel will boil off rapidly and the vehicle then appears to consume oil.

High speed operating conditions will greatly accelerate oil consumption due to the inability

of the piston rings to scavenge the oil completely at higher rpm and high engine temperature. Automobile manufacturers have proved in tests that an internal combustion engine uses seven times the quantity of oil at 100 km/h (62 MPH) than it does at 60 km/h (37 MPH).

No standard rate of consumption can be established because of the varying combinations and conditions and as a guide we consider the following as normal oil consumption on gasoline engines.

Oil consumption of up to 1,5 litres per 1,000 km (621 miles) during the first 10,000 km (6,214 miles) of vehicle life is considered normal, as it takes approximately 10 000 km (6,214 miles) for the piston rings to bed in to the cylinder walls, and the normal consumption should then drop to approximately 1 litre per 1 000 km (621 miles).

CHANGING ENGINE OIL



WARNING

Used oil must not be poured into the ground, canals, rivers, etc. It should be disposed of at a rubbish tip having proper facilities. We recommend having your oil changed by a NISSAN Dealer.

- 1 Park the vehicle on a level surface and apply the parking brake.
- 2 Run the engine until it reaches operating temperature and then turn it off. Wait for more than 10 minutes.
- 3 Place a large drain pan under the drain plug.
- 4 Remove the oil filler cap (T).
- 5 Remove the drain plug with a wrench and completely drain the oil.

If oil filter is to be changed, remove and replace it at this time. See "CHANGING OIL FILTER" in the "8. Maintenance and do-it-yourself" section.



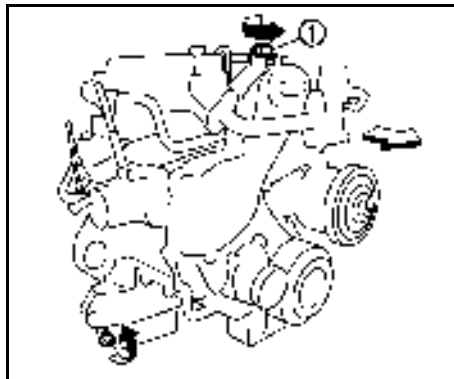
WARNING

Be careful not to burn yourself, as the engine oil is hot.

CAUTION:

Waste oil must be disposed of properly. Check your local regulations.

- 6 Clean and re-install the drain plug with a new washer. Securely tighten the drain plug with a wrench. Do not use excessive force.

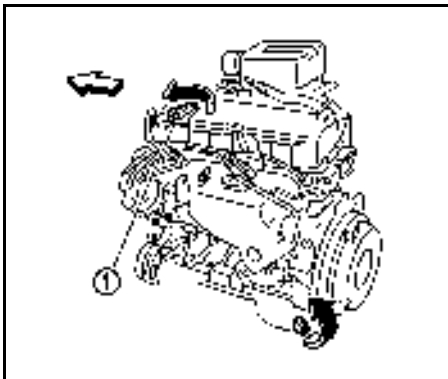


YD25DDTi engine

Drain plug tightening torque:

Gasoline engines and YD25DDTi engine
29 to 39 Nm
(3.0 to 4.0 kg-m, 22 to 29 ft-lb)

- 7 Refill engine with recommended oil and install the cap (T) securely.
 See the "9. Technical Information" section for refill capacity.
- 8 Start the engine.
 Check for leakage around the drain plug.
 Correct as required.
- 9 Turn the engine off and wait several minutes.
 Check the oil level with the dipstick. Add engine oil if necessary.

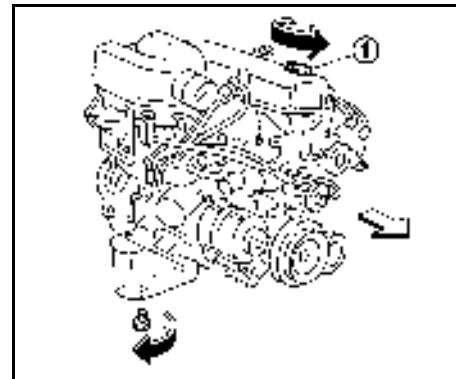


KA20/KA24 (2WD) engine

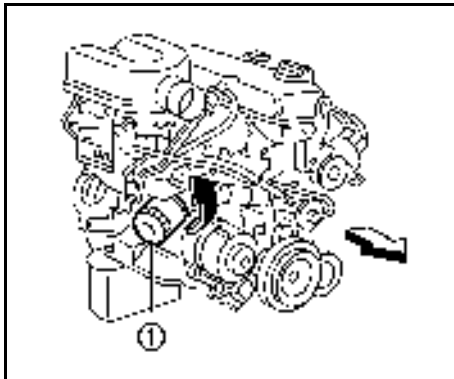
⚠ WARNING

- Prolonged and repeated contact with used engine oil may cause skin cancer.
- Try to avoid direct skin contact with used oil. If skin contact is made, wash thoroughly with soap or hand cleaner as soon as possible.

Keep used engine oil out of reach of children.



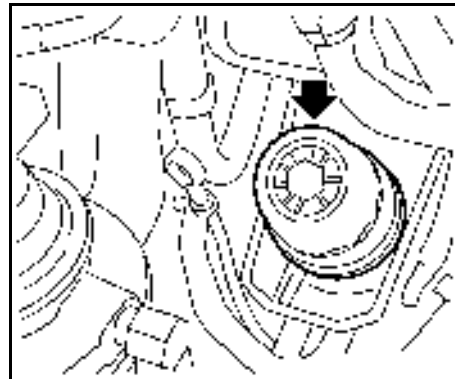
KA24 (4WD) engine



KA20/KA24 engine

Be sure to remove any old rubber gasket remaining on the mounting surface of the engine.

- 5 Coat the rubber gasket on the new filter with clean engine oil.
- 6 Screw in the oil filter until a slight resistance is felt, then tighten additionally more than 2/3 turn.
- 7 Start the engine and check for leakage around the oil filter. Correct as required.
- 8 Turn the engine off and wait several minutes. Check the oil level. Add engine oil if necessary.



YD25DDTi engine

CHANGING ENGINE OIL FILTER

A used oil filter should be disposed of at a rubbish tip having proper facilities. We recommend having your oil filter changed by a NISSAN Dealer.

Except YD25DDTi engine

- 1 Park the vehicle on a level surface and apply the parking brake.
- 2 Turn the engine off.
- 3 Loosen the oil filter (1) with an oil filter wrench. Remove the oil filter (1) by turning it by hand.

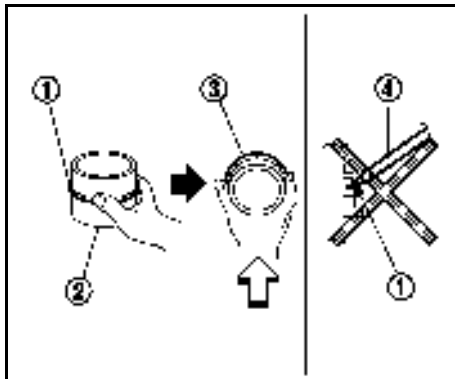
Be careful not to burn yourself, as the engine oil may be hot.

- 4 Wipe the engine oil filter mounting surface with a clean rag.

YD25DDTi type engines

Removal:

- 1 Turn the engine off.
- 2 Using a socket wrench, loosen the filter body.
- 3 Catch the oil in a container or with waste rags.
- 4 Remove the filter body and remove the oil filter element.
- 5 Remove the O-ring from the filter body.



Push the O-ring (1), with your hand to separate it from the filter body (2). Then grab and hold of it with your fingertips (3) and remove it.

Do not use a wire or screwdriver (4) as it will damage the filter body.

If engine oil gets on the engine or vehicle body, wipe it completely clean.

Installation:

- 1 Remove foreign materials thoroughly from inside the filter body and O-ring mounting portions (on the body and bracket sides).
- 2 Install a new oil filter element and a new O-ring to the filter body.

Securely push the oil filter element into the filter body.

- 3 Install the filter body to the oil filter bracket.

Tightening torque for YD25DDTi type:
15 to 21 N.m
(1.6 to 2.1 kg-m, 11 to 15 ft-lb))

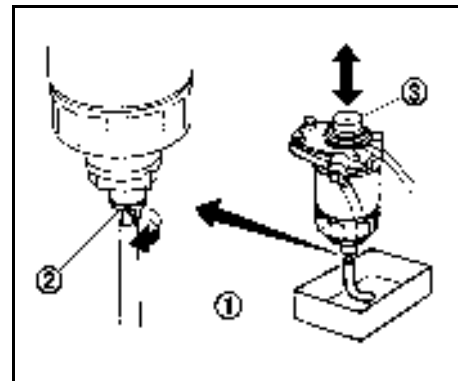
After the engine has been warmed up, make sure there are no oil leaks.

PROTECT THE ENVIRONMENT

It is illegal to pollute drains, water courses and soil. Use authorized waste collection facilities, including civic amenity sites and garages providing facilities for disposal of used oil and used oil filters. If in doubt, contact your local authority for advice on disposal.

The regulations concerning the pollution of the environment will vary from country to country.

FUEL FILTER (Diesel engine)



Type A
Combined type for RHD ABS models

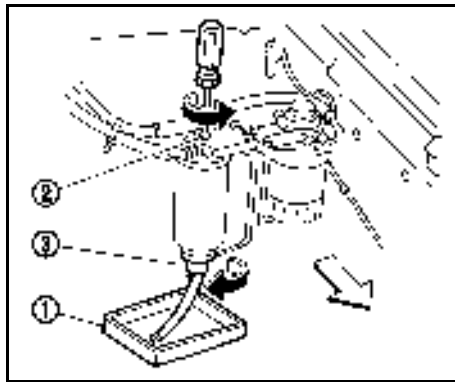
DRAINING WATER

If the water-in-fuel warning light (YD25DDTi engines) or the malfunction indicator light (YD25DDTi engine) comes on (and a chime sound, if so equipped) while the engine is running, drain the water in the fuel filter as follows:

Type A

- 1 Place a container (1) under the fuel filter.
- 2 Loosen the drain valve (2) 4 to 5 turns to drain the water. To avoid dropping it, do not loosen the drain valve too much. If water does not drain properly, move the priming pump (3) up and down.
- 3 After the water has been completely drained, close the drain valve (2).

- 4 Bleed any air from the fuel system. (See "BLEEDING THE FUEL SYSTEM" later in this section).

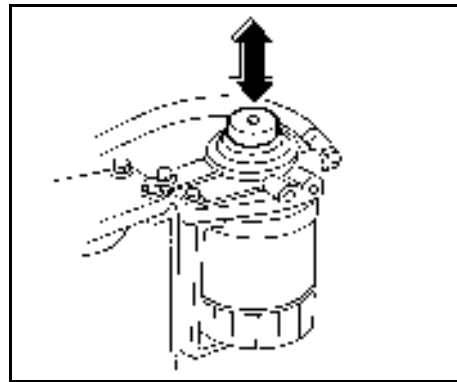


Type B
Seperate type

Type B

- 1 Place a container (1) under the drain valve.
- 2 Loosen the drain support screw (2) and drain valve (3) 4 to 5 turns to drain the water. To avoid dropping it, do not loosen the drain valve too much.
- 3 After the water has been completely drained, close the drain valve (3) and drain support screw (2).
- 4 Bleed any air from the fuel system. (Refer to "BLEEDING THE FUEL SYSTEM" later in this section.)

NISSAN recommends draining water in the fuel filter according to the maintenance intervals shown in a separate maintenance booklet.



BLEEDING THE FUEL SYSTEM

Bleed air out of the fuel system after refilling an empty fuel tank by the following action:

- 1 Move the priming pump up and down until a resistance occurs, then stop the pumping.
- 2 Crank the engine until the engine starts. Do not crank the engine for more than 30 seconds.
- 3 If the engine does not start, stop cranking and repeat step 1 above.
- 4 If the engine does not operate smoothly after it has started, race it two or three times.

DRIVE BELTS

Be sure the ignition key is "OFF".

- 1 Visually inspect each belt for signs of unusual wear, cuts, fraying or looseness. If the belt is in poor condition or loose, have it replaced or adjusted by your NISSAN Dealer.
- 2 Have the belts checked regularly for condition and tension in accordance with the maintenance intervals shown in a separate maintenance booklet.

SPARK PLUGS

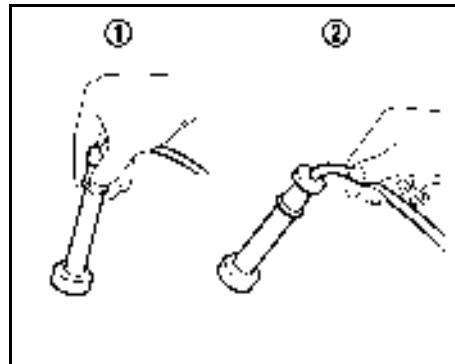


WARNING

Be sure the engine and ignition switch are off and that the parking brake is engaged securely.

CAUTION:

- **Be sure to use the correct socket to remove the spark plugs. An incorrect socket can cause damage to the spark plugs.**
- **Always replace spark plugs with recommended or equivalent ones.**



SPARK PLUG REPLACEMENT

Replace the spark plugs according to the maintenance log shown in a separate maintenance booklet.

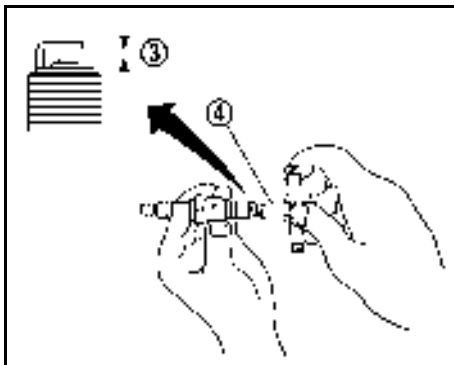
CAUTION:

Be sure the ignition key is "OFF".

- 1 Disconnect spark plug cables. Keep track of the original cable location.

When disconnecting, always hold the boots (1) - not the cables (2). Mark all cables to identify.

- 2 Remove spark plugs with a spark plug wrench.



RECOMMENDED HEAT RANGE

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.

- 3 Check each new spark plug gap (3) with a feeler gauge (4). (The spark plug gap is shown in the "Technical Information" section.) Adjust it as required.

- 4 Install spark plugs.

CAUTION:

When installing a plug, turn it in two or three turns by hand and then tighten with a spark plug wrench. Be careful not to over-tighten it.

Spark plug tightening torque:
20 to 29 Nm
(2.0 to 3.0 kg-m, 14 to 22 ft-lb)

- 5 Reconnect the spark plug cables to their original positions.

BRAKE

CHECKING PARKING BRAKE

Periodically check the holding ability of the parking brake by parking on a steep hill and holding the vehicle by using only the parking brake. If it does not hold satisfactorily, see your NISSAN Dealer.

CHECKING BRAKE PEDAL

If the brake pedal suddenly goes down further than normal, the pedal feels "spongy" or the vehicle seems to take longer to stop, see your NISSAN Dealer immediately.

BRAKE BOOSTER

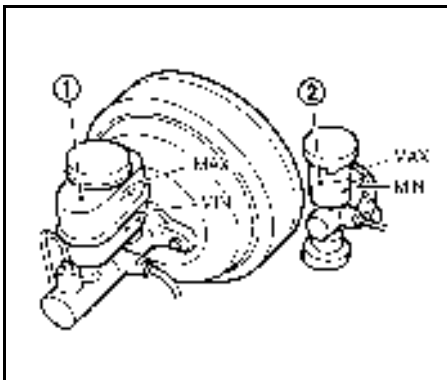
Check the brake booster function with the following steps:

- 1 With the engine off, depress the brake pedal several times to make sure that the pedal travel distance does not change.
- 2 While depressing the brake pedal, start the engine. The pedal height should drop a little.
- 3 With the brake pedal depressed, stop the engine. Keeping the pedal depressed for about 30 seconds, the pedal height should not change.

- 4 Run the engine for one minute without depressing the brake pedal, then turn it off. Depress the brake pedal several times. The pedal travel distance will decrease gradually with each depression as the vacuum is released from the booster.

If the brakes do not operate properly, see your NISSAN dealer.

BRAKE AND CLUTCH FLUID



Check the fluid levels in the brake fluid reservoir (1) and clutch fluid reservoir (2). If the fluid is below the MIN line or the warning light comes on, add fluid up to the MAX line.

If fluid must be added frequently, the system should be thoroughly checked by your NISSAN Dealer.

DOT 3 OR DOT 4 (DO NOT MIX BRAKE FLUIDS)

CAUTION:

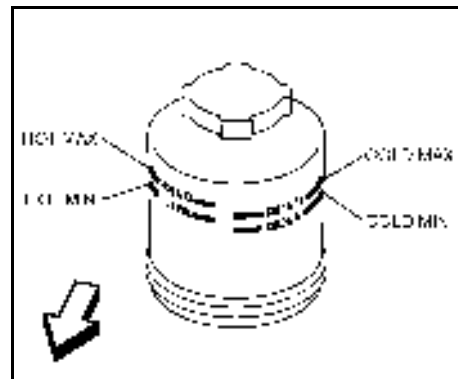
- **NISSAN recommends that refilling and checking the brake and clutch systems be left to a NISSAN Dealer who will have the necessary brake and clutch fluids and technical knowledge.**

- **Do not spill the fluid on painted surfaces. This will damage the paint. If fluid is spilled, wash with water.**

WARNING

- **Use only new fluid. Old, inferior, or contaminated fluid may damage the brake and clutch systems. The use of improper fluids can damage the clutch and brake systems and affect the vehicle's stopping ability.**
- **Brake and clutch fluids are poisonous and should be stored carefully in marked containers out of the reach of children.**

POWER STEERING FLUID



Check the fluid level in the reservoir.

The fluid level should be checked using the "HOT" range on the fluid reservoir at fluid temperatures of 50°C to 80°C (122 to 176 °F) or using the "COLD" range on the fluid reservoir at fluid temperatures of 0°C to 30°C (32 to 86°F).

CAUTION:

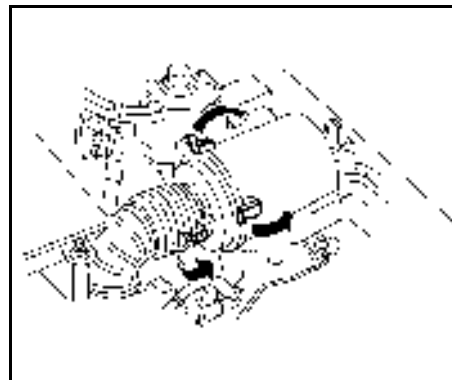
- Do not overfill.
- Use only "Type DEXRON TMII^E", or DEXRON TMIII equivalent.



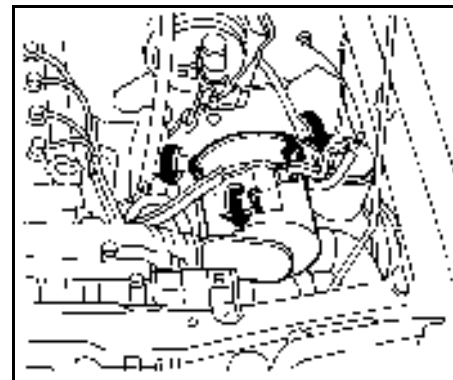
WARNING

Power steering fluid is poisonous and should be stored carefully in marked containers out of the reach of children.

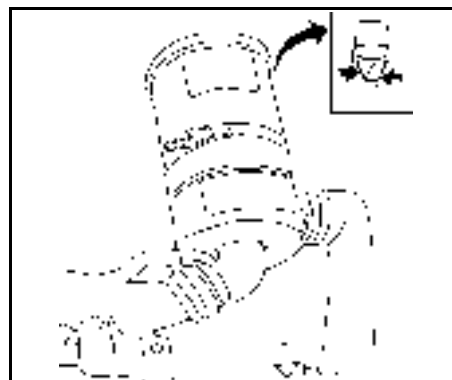
AIR CLEANER



YD25 Diesel engines



KA24 Gasoline engines



KA20 Gasoline engines

VISCOUS PAPER TYPE

The filter element should not be cleaned and reused as it is given a special treatment. We recommend it be replaced according to the maintenance intervals shown in a separate maintenance booklet. When replacing the filter, wipe the inside of the air cleaner housing and the cover with a damp cloth.

DRY PAPER TYPE

Check the filter element to see if it is dirty. If it is dirty, shake the element to remove dust. We recommend it be cleaned or replaced according to the maintenance intervals shown in a separate maintenance booklet. When cleaning or replacing the filter, wipe the inside of the air cleaner housing and the cover with a damp cloth.



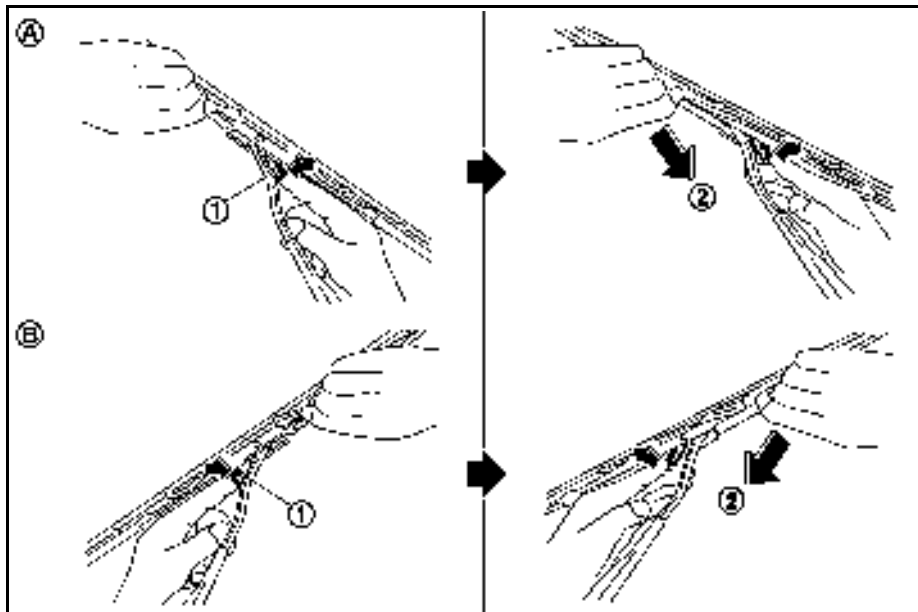
WARNING

Operating the engine with the air cleaner filter off can cause you or others to be burned. The air cleaner not only cleans the intake air, it also stops flame if the engine backfires. If it is not here and the engine backfires, you could be burned. Don't drive with it off and be careful working on the engine with the air cleaner off.

CYCLONE AIR CLEANER (if so equipped)

Periodically pinch the rubber cap located under the cyclone to remove dust from the cyclone.

WIPER BLADES



A Left-hand drive models

B Right-hand drive models

CLEANING

If your windshield is not clear after using the windshield washer or if the wiper blade chatters when running, wax or other material may be on the blade or windshield.

Clean the outside of the windshield with a washer solution or a mild detergent. Your

windshield is clean if beads do not form when rinsing with clear water.

Clean the blade by wiping it with a cloth soaked in a washer solution or a mild detergent. Then rinse the blade with clear water. If your windshield is still not clear after cleaning the blades and using the wiper, replace the blades.

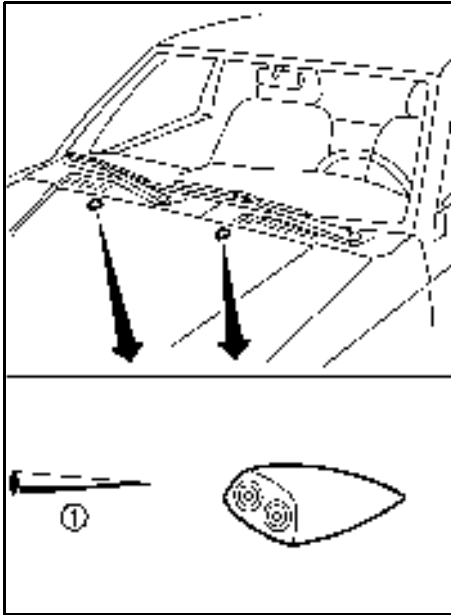
REPLACEMENT

- 1 Pull the wiper arm up.
- 2 Push the lock pin (1), then remove the wiper blade (2).
- 3 Insert the new wiper blade to the wiper arm until a click sounds.

CAUTION:

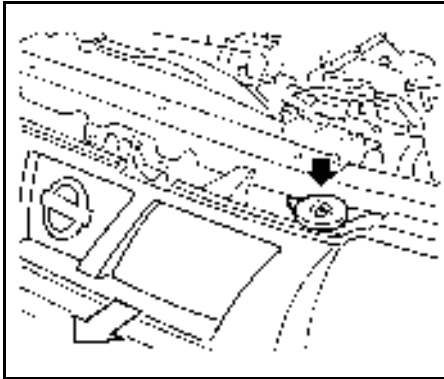
- After wiper blade replacement, return the wiper arm to its original position. Otherwise it may be damaged when the engine hood (bonnet) is opened.
- Make sure the wiper blade contacts the glass, otherwise the arm may be damaged from wind pressure.

WINDOW WASHER FLUID



WINDSHIELD WASHER NOZZLE

If you wax the surface of the hood, be careful not to let wax get into the washer nozzle. This may cause clogging or improper windshield washer operation. If wax gets into the nozzle, remove it with a needle or small pin (1).



Check the fluid level in the reservoir tank and add fluid if necessary. Add a washer solvent to the water for better cleaning. In the winter season, add a window washer anti-freeze. Follow the manufacturer's instructions for the mixture ratio.







CAUTION:

Do not substitute engine anti-freeze coolant for window washer solution. This may result in damage to the paint.

WARNING

Anti-freeze is poisonous and should be stored carefully in marked containers out of the reach of children.

BATTERY

Caution symbols for battery		⚠ WARNING
①		No smoking, No exposed flames, No sparks. Never smoke around battery. Never expose battery to open flames or electrical sparks.
②		Shield eyes. Handle the battery cautiously. Always wear eye protection glasses to protect against explosion or battery acid.
③		Keep away from children. Never allow children to handle battery. Keep the battery out of the reach of children.
④		Battery acid. Do not allow battery fluid to contact your skin, eyes, fabrics, or painted surfaces. After handling the battery or battery acid, immediately wash your hands thoroughly. If the battery fluid gets into your eyes, or onto your skin or clothing, flush with water immediately for at least 15 minutes and seek medical attention. Battery fluid is acid. If the battery fluid gets into your eyes or onto your skin, it could cause loss of your eyesight or burns.
⑤		Note operating instructions. Before handling the battery, read this instruction carefully to ensure correct and safe handling.
⑥		Explosive gas. Hydrogen gas, generated by battery fluid, is explosive.

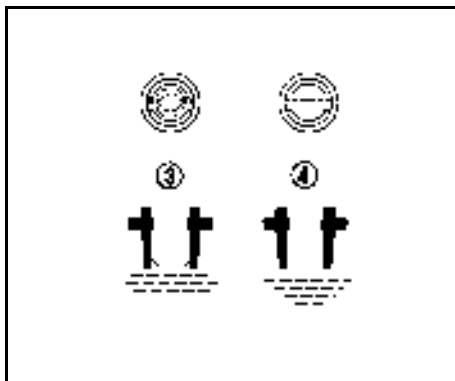
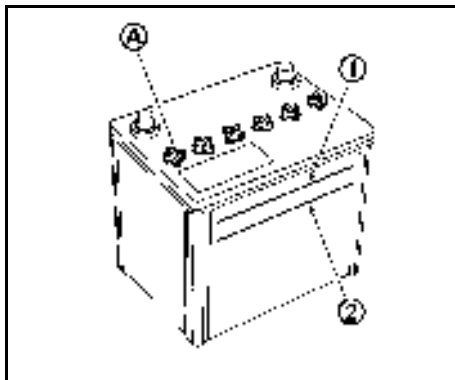
VEHICLE BATTERY



Do not operate the vehicle if the fluid in the battery is low. Low battery fluid can cause a higher load on the battery which can generate heat, reduce battery life and in some cases lead to an explosion.

- Keep the battery surface clean and dry. Any corrosion should be washed off with a solution of baking soda and water.

- Make certain the terminal connections are clean and securely tightened.
- If the vehicle is not to be used for 30 days or longer, disconnect the "-" negative battery terminal cable to prevent discharge.



Check the fluid level in each cell. It should be between the UPPER LEVEL (1) and LOWER LEVEL (2) lines.

It is necessary to add fluid, add only distilled water to bring the level to the indicator in each filler opening. Don not overfill.

Vehicles operated in high temperatures or under severe conditions require frequent checks of the battery fluid level.

- 1 Remove the cell plugs (A).
- 2 Add distilled water up to the UPPER LEVEL (1).

If the side of the battery is not visible, the electrolyte level can be checked through each filler opening as illustrated. The indicator (3) shows that the electrolyte level reaches to the upper level. Otherwise, the indicator (4) means the electrolyte needs to be added.

- 3 Tighten cell plugs (A).

CAUTION:

Do not overfill battery cells. Excessive electrolyte may leak out of the battery during charging and cause paint damage.

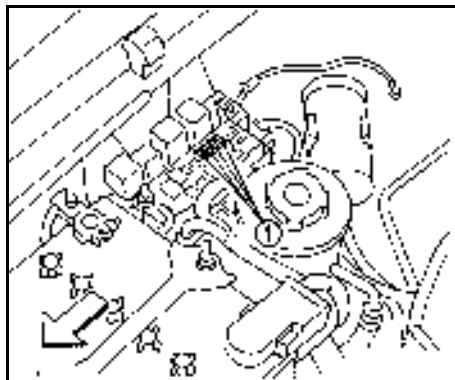
WARNING

- **Do not expose the battery to flames or electrical sparks. Hydrogen gas generated by battery action is explosive. Do not allow battery fluid to contact your skin, eyes, fabrics, or painted surfaces. After touching a battery or battery cap, do not touch or rub your eyes. Thoroughly wash your hands. If the acid contacts your eyes, skin or clothing, immediately flush with water for at least 15 minutes and seek medical attention.**
- **Keep the battery out of reach of children.**

Jump starting

If jump starting is necessary, see the "6. In case of emergency" section. If the engine does not start by jump starting, the battery may have to be replaced. Contact your NISSAN dealer.

FUSES



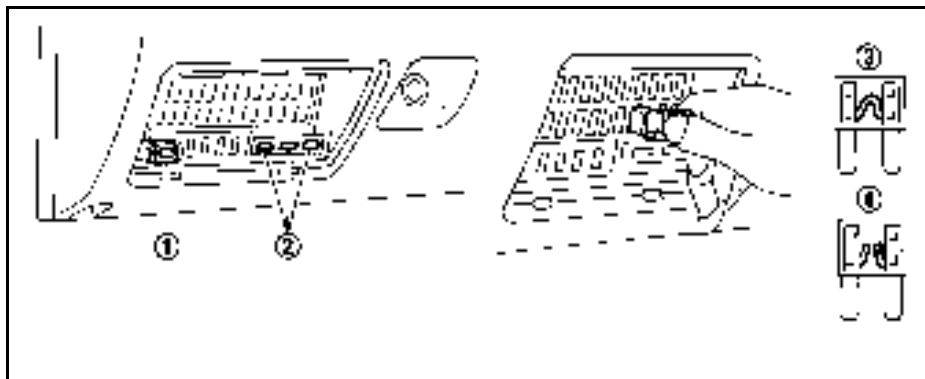
WARNING

Never use a fuse of higher amperage rating than that specified on the fuse box cover.

ENGINE COMPARTMENT

If the electrical equipment does not operate, check for a burnt fuse.

- 1 Be sure the ignition key and the headlight switch are "OFF".
- 2 Open the engine hood.
- 3 Remove the fusible link cover.
- 4 Remove the fuse (1) with the fuse puller.
- 5 If the fuse is burnt, replace it with a new fuse.



- 6 If a new fuse burns again, have the electrical system checked and repaired by your NISSAN Dealer.

PASSENGER COMPARTMENT

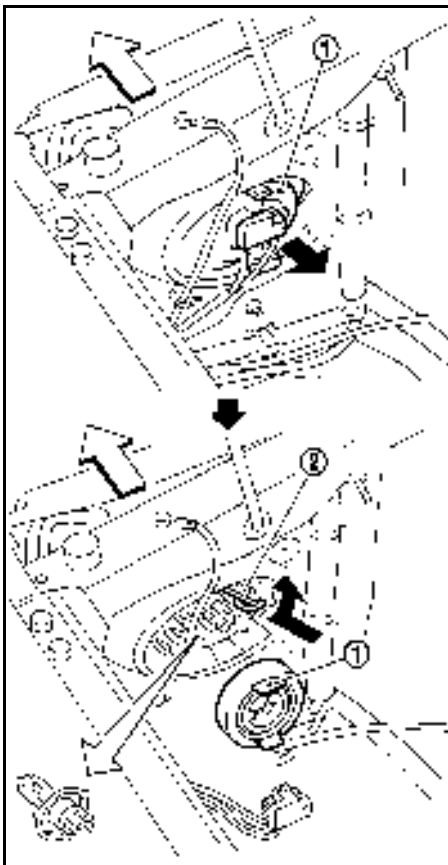
If any electrical equipment does not operate, check for a burnt fuse.

- 1 Be sure the ignition key and the headlight switch are "OFF".
- 2 Open the fuse box lid.
- 3 Remove the fuse with the fuse puller (1).
- 4 If the fuse is burnt, replace it with a new fuse (2).
- 5 If a new fuse (3) burns again (4), have the electrical system checked and repaired by your NISSAN Dealer.

LIGHTS

CAUTION:

Use only genuine NISSAN or equivalent bulb as a replacement. Using an incorrect bulb can result in damage to the light.



HEADLIGHTS

Replace the halogen headlight bulb

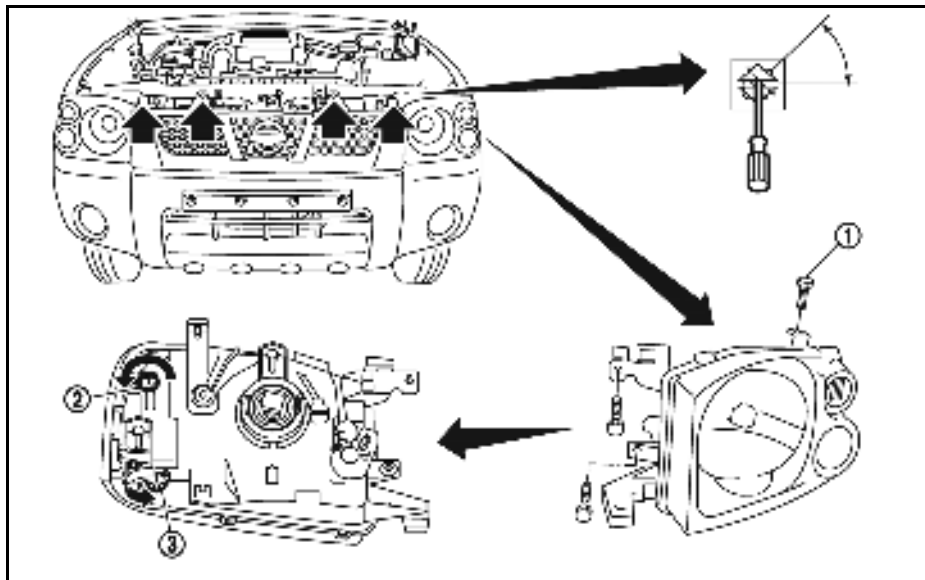
The halogen headlight is a semi-sealed beam type that uses a replaceable headlight bulb. A bulb can be replaced from inside the engine compartment without removing the headlight assembly.

CAUTION:

- **High-pressure halogen gas is sealed inside the halogen bulb. The bulb may break if the glass envelope is scratched or the bulb is dropped.**
- **DO NOT TOUCH THE BULB.**
- **Use the same number and wattage as originally installed:**
Wattage 60/55
- **Aiming is usually not necessary after replacing the bulb. When aiming adjustment is necessary, contact your NISSAN Dealer.**
- **Do not leave the bulb out of the headlight reflector for a long period of time as dust, moisture, and smoke may enter the headlight body and affect the performance of the headlight.**

- 1 Disconnect the battery negative (-) cable.
- 2 Disconnect the electrical connector from the rear end of the bulb and remove the rubber cap (1).
- 3 Push and turn the retaining pin (2) to loosen it.
- 4 Remove the headlight bulb. Do not shake or rotate the bulb when removing it.
- 5 Install the new bulb in the reverse order of removal.

Press the rubber cap (1) firmly so the lip comes into contact with the headlight body.



FRONT CLEARANCE LIGHTS AND FRONT TURN SIGNAL LIGHTS (if so equipped)

Replacing the front clearance light bulb and front turn signal light bulb

- 1 Disconnect the battery negative cable.
- 2 Remove the clips attaching the radiator grille, then remove the radiator grille.
- 3 Remove the screws (1) on the headlight unit.
- 4 Turn and remove the bulb socket.

5 Remove the front clearance light bulb (2) or front turn signal light bulb (3).

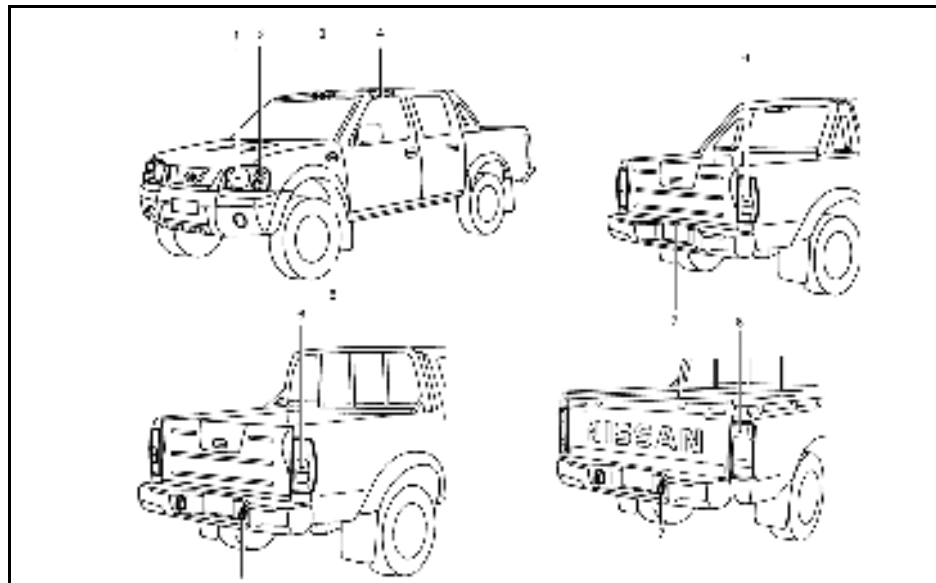
6 Install the new bulb in the reverse order of removal.

OTHER LIGHTS

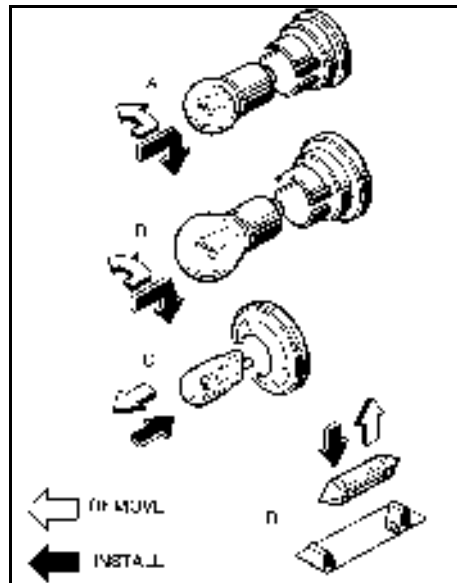
Item	Wattage (W)
Front turn signal light	21
Front clearance light	5
Side turn signal light	5
Front fog light*	55
Rear combination light	
Turn signal	21
Stop / tail	21 / 5
Reverse	18
Number plate light	5
Interior light	10
Personal light	8

*: if so equipped

LIGHT LOCATION

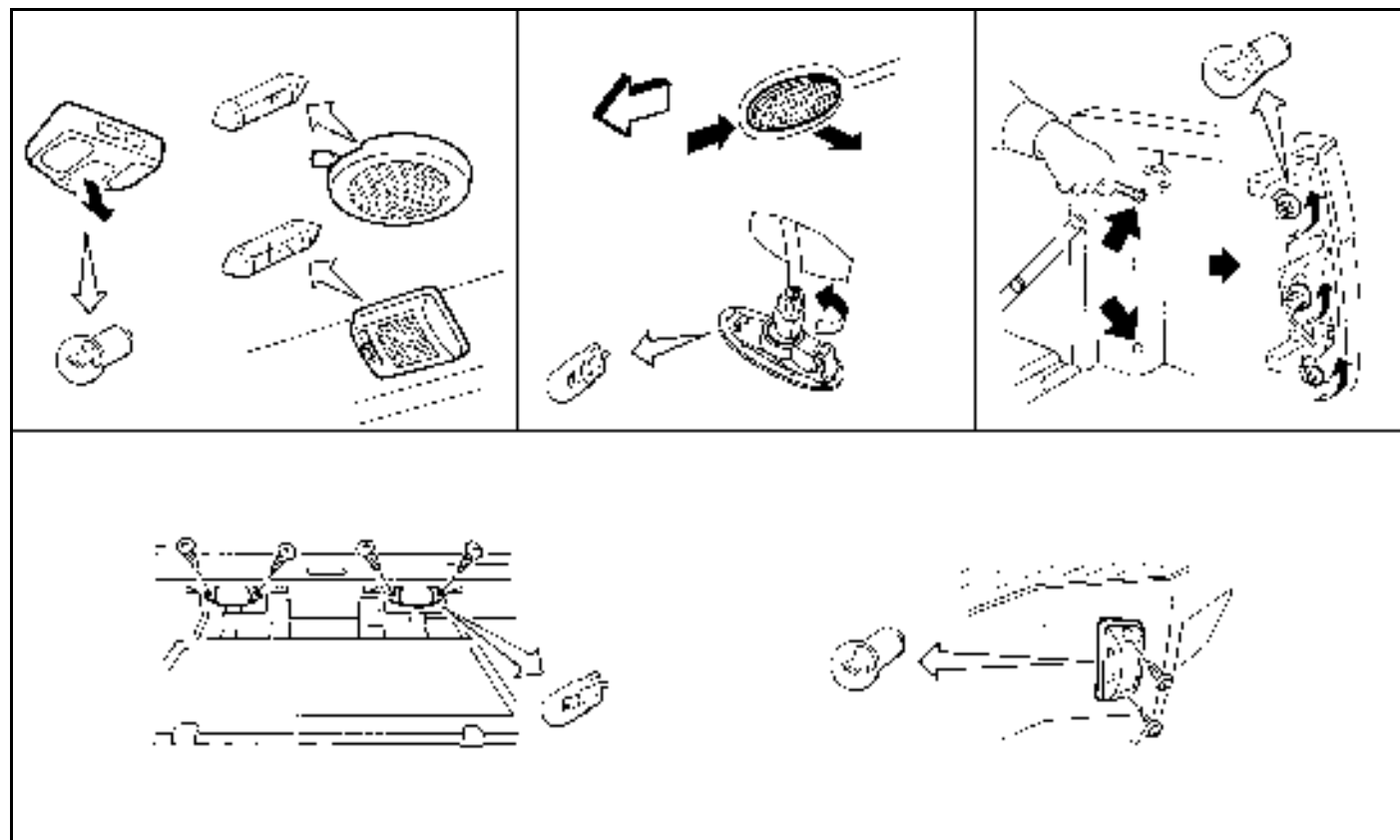


- 1 Headlight
- 2 Clearance/turn signal light
- 3 Personal light
- 4 Interior light
- 5 Side turn signal light (if so equipped)
- 6 Rear combination light
- 7 License plate light



Replacement procedures

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



WHEELS AND TYRES

If you have a flat tyre, see "6. In case of emergency" section.

TYRE INFLATION PRESSURE

Periodically check the tyre pressure (including spare). Tyre pressure should be checked when tyres are COLD. Tyres are considered COLD after the vehicle has been parked for three or more hours, or driven less than 1,6 km. COLD tyre pressures are shown on the tyre placard.

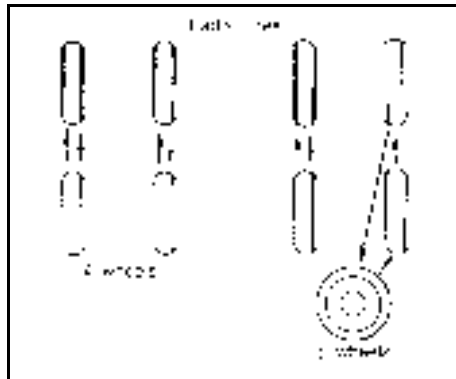
CAUTION:

Incorrect tyre pressure may adversely affect tyre life and vehicle handling.

Insufficient pressure can lead to an overheating of the tyre and subsequent internal damage. At high speeds, this could result in tread separation and even bursting of the tyre.

CAUTION:

When changing or replacing tyres, be sure all four tyres are of the same type and construction. Your NISSAN Dealer may be able to help you with information about tyre type, size, speed rating and availability. Replacement tyres may have a lower speed rating than the factory equipped tyres, and may not match the potential maximum vehicle speed. Never exceed the maximum speed rating of the tyre.



TYRE ROTATION

NISSAN recommends that tyres be rotated:

Except South Africa:

2WD - every 10 000 km.

4WD - every 5 000 km.

For South Africa:

2WD - every 15 000 km.

4WD - every 7 500 km.

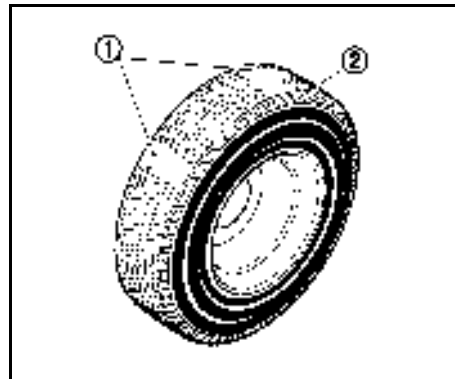
See "Flat tyre" in the "In case of emergency" section for tyre replacing procedures.

- **After rotating the tyres, adjust the tyre pressure.**
- **Retighten the wheel nuts after the vehicle has been driven for 1 000 km (600 miles) (also in cases of a flat tyre, etc.).**



WARNING

Incorrect tyre selection, fitting, care or maintenance can affect vehicle safety with risk of accident and injury. If in doubt, consult your NISSAN Dealer or the tyre manufacturer.



TYRE WEAR AND DAMAGE

Tyres should be periodically inspected for wear, cracking, bulging, or objects caught in the tread. If excessive wear, cracks, bulging, or deep cuts are found, the tyre should be replaced.

The original tyres have a built-in tread wear indicator (1). When the wear indicator is visible, the tyre should be replaced. The wear indicator locator locations are shown by the location marks (2).

TYRE AGE

Remember tyre age. Never use a tyre over six years old, regardless of whether it has been used or not.

Tyres degrade with age as well as the use they are subjected to. Have your tyres checked and balanced frequently by a recognized tyre agent. Report all accidents where the tyre is knocked however minor.

CHANGING TYRES AND WHEELS

When replacing a tyre, use the same size, speed rating and load carrying capacity as originally equipped. Recommended types and sizes are shown in "TYRES AND WHEELS" in the "9. Technical Information" section. The use of tyres other than those recommended or the mixed use of tyres of different brands, construction (bias, bias-belted or radial), or tread patterns can adversely affect the ride, braking, handling, ground clearance, body-to-tyre clearance, speedometer calibration, headlight aim and bumper height. Some of these effects may lead to accidents and could result in serious personal injury.

If the wheels are changed for any reason, always replace with wheels that have the same offset dimension. Wheels of a different offset could cause early tyre wear, possibly degraded vehicle handling characteristics and/or interference with the brake discs/drums. Such interference can lead to decreased braking efficiency and/or early brake pad/shoe wear.



WARNING

Do not install a deformed wheel or tyre even if it has been repaired. Such wheels or tyres could have structural damage and could fail without warning.

4-WHEEL DRIVE MODEL

CAUTION:

Always use tyres of the same size, brand, construction (bias, bias-belted or radial), and tread pattern on all four wheels. Failure to do so may result in a circumference difference between tyres on the front and rear axles that will cause excessive tyre wear and may damage the transmission, transfer case and differential gears.

ONLY use spare tyres specified for each 4-wheel drive model.

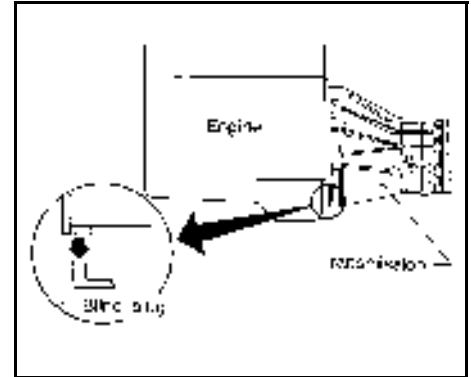
WHEEL BALANCE

Unbalanced wheels may affect vehicle handling and tyre life. Even with regular use, wheels can get out of balance. Therefore, they should be balanced as required.

CARE OF WHEELS

- Wash the wheels when washing the vehicle to maintain their appearance.
- Clean the inner side of the wheels when the wheel is changed or the underside of the vehicle is washed.
- Do not use abrasive cleaners when washing the wheels.
- Inspect wheel rims regularly for dents or corrosion. This may cause loss of pressure or damage the tyre bead.

CLUTCH HOUSING



Checking water entry

Whenever you drive in deep water or mud, check water entry in the clutch housing by removing the blind plug at the bottom of the transmission case. After checking, be sure to reinstall the plug.

9 Technical information

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CAPACITIES AND RECOMMENDED FUEL/LUBRICANTS

The following are approximate capacities. The "actual" refill capacities may be a little different. When refilling, follow the procedure instructed in the "Do-it-yourself operations" section to determine the proper refill capacity.

	Model		Capacity (Approximate) in liters	Nissan recommended Spec
Fuel			60 - Short Wheel Base 75 - Long Wheel Base 75 - Double Cab	See "Fuel recommendations"
Diesel engine oil	YD25	2wd	5.6 (with oil filter) 5.3 (without oil filter)	YD type engine: Genuine NISSAN engine oil*1
		4wd	4.3 (with oil filter) 4.0 (without oil filter)	API CF-4*1,*3 JASO DH-1*1 ACEA B1, B3, B4 or B5*1
Gasoline engine oil	KA20 & KA24	2wd	3.6 (with oil filter) 3.3 (without oil filter)	Genuine NISSAN engine oil*1 API SE; SF; SG; SH; SJ; SL or SM*1
	KA24	4wd	4.2 (with oil filter) 3.9 (without oil filter)	ILSAC grade GF-1; GF-2; GF-3; GF-4 or SG+*1
Manual transmission gear oil	KA24	2wd	2.0	Genuine NISSAN Manual Transmission Fluid (MTF) HQ Multi 75W-85.
Differential carrier gear oil (Without limited slip differential)			1.3 (Front) 1.3 (Rear)	Front: Except 4WD models for Middle East: Genuine NISSAN Differential Oil Hypoid Super GL-5 80W-90 or API GL-5, Viscosity SAE 80W-90. 4WD models for Middle East: API GL-5, Viscosity SAE 140 Rear: API GL-5*1
Differential carrier gear oil (With limited slip differential)			Except for Middle East	Genuine NISSAN Differential Oil Hypoid LSD GL-5 80W-90 or equivalent
			For Middle East	API GL-5 LSD oil, Viscosity SAE 140 or equivalent*1
Transfer fluid			-	Genuine NISSAN Matic D ATF (Part no KLE22-00004, 4Lt can; KLE22-00002; 20Lt can) or equivalent*2 or API GL-4*1 Viscosity SAE 75W-90
Rear Diff gear oil	KA20, KA24 & YD25	2wd	1.5	Castrol Multigrax GM™; Caltex EP Plus 460™
Rear Diff gear oil	KA24 & YD25	4wd	1.45	Castrol Multigrax GM; Caltex EP Plus 460
Front Diff gear oil	KA24 & YD25	4wd	1.3	API GL-5*1
Power steering fluid	Models with Power Steering		Refill to the proper oil level according to "Do it yourself" Owners manual section	Type DEXTRON™III or equivalent*2

*1: For further detail, see SAE viscosity number charts in the Owners manual.

*2: Contact a Nissan dealership for more information regarding suitable fluid, including recommended brands of DEXTRON™III.

*3: Never use CG-4 grade oil.

CG-4 or higher spec oil can be used on condition that the container has the notation "JASO DH-1"

*4: Use Nissan Genuine Long Life Coolant, Part no KQ10020001, in order to avoid possible aluminium corrosion within the engine cooling system caused by the use of non genuine engine coolant. Note that any repairs for the incidents within the cooling system while using non genuine engine coolant may not be covered by the warranty, even if such incidents occurred during the warranty period.

Table continue on next page.

	Model		Capacity (Approximate) in liters	Nissan recommended Spec
Cooling System	KA20	2wd	6.9	Use Nissan LLC (Part no KQ10020001)*4 30%-LLC; 70%-water
	KA24	2wd & 4wd	6.9	
	YD25	2wd & 4wd	8.6	
Brake and clutch fluid	-	-	Refill to the proper oil level according to "Do it yourself" Owners manual section	DOT 3 nqCNS3 'Cn mmsl hwaq j d d t r (
Propeller shaft grease	-	-	-	NLGI No 2 (Lithium soap base)
Multi purpose grease	-	-	-	NLGI No 2 (Lithium soap base)
Air conditioning system refrigerant	-	-	-	HFC-134a (R-134a)
Air conditioning system lubricants	-	-	-	NISSAN A/C System Oil Type S or exact equivalent

9-2 Technical information

FUEL RECOMMENDATION

Gasoline engine:

Model with three-way catalyst:

Unleaded gasoline of above 91 octane (RON).

CAUTION:

Do not use a leaded gasoline. Using a leaded gasoline will damage the three-way catalyst.

Model without three-way catalyst:

Use unleaded or leaded gasoline of above 88 octane (RON).

Use unleaded fuel if instructed on the Fuel filler lid.

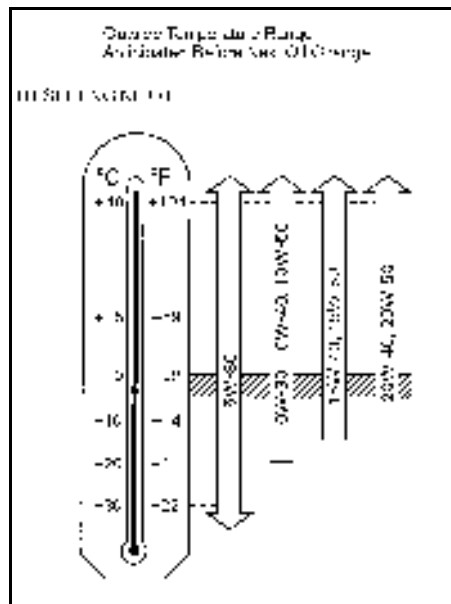
Diesel engine:

▪ YD25DDTi engine models

Diesel fuel of above 50 cetane must be used.

If fuel other than the specified fuel is used, white smoke could be emitted.

RECOMMENDED SAE VISCOSITY NUMBER



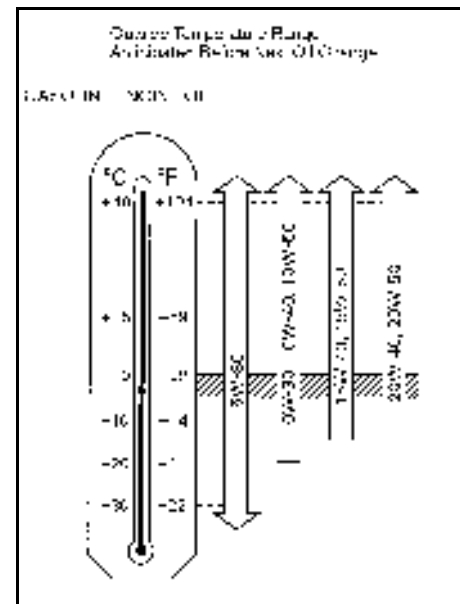
For cold areas:

5W-30 is preferable.

5W-20 is not recommended.

For hot and warm areas:

20W-40 and 20W-50 are suitable.



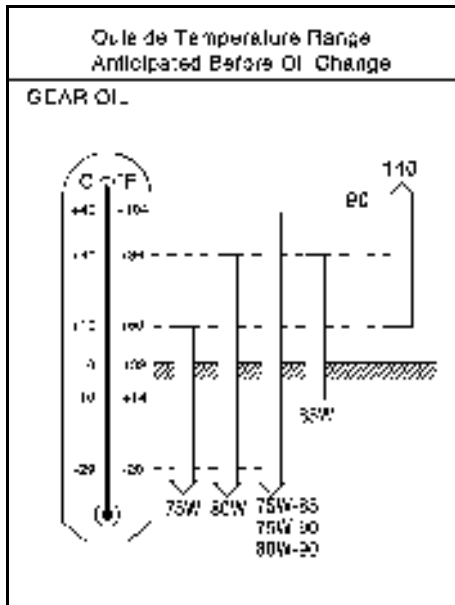
For cold and warm areas:

10W-30 is preferable for ambient temperatures above -20°C (-4°F).

5W-30 will positively improve fuel economy.

For hot areas:

20W-40 and 20W-50 are suitable.



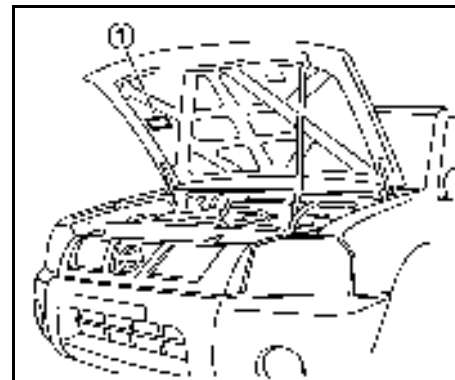
RECOMMENDED AIR CONDITIONING SYSTEM REFRIGERANT AND LUBRICANT (If so equipped)

The air conditioning system in this NISSAN vehicle must be charged with the refrigerant HFC-134a (R-134a) and the lubricant, NISSAN A/C System Oil Type S or the exact equivalents. Use of any other refrigerants or lubricants will cause severe damage and you will need to replace your vehicle's entire air conditioning system.

The release of refrigerant into the atmosphere is not recommended. The new refrigerant HFC-134a (R-134a) in your NISSAN vehicle will not harm the earth's ozone layer. However, it may contribute in a small part to global warming. NISSAN recommends that the refrigerant be recovered and recycled.

Contact your NISSAN Dealer when servicing your air conditioning system.

VEHICLE IDENTIFICATION



AIR CONDITIONER SPECIFICATION LABEL

The air conditioner specification label (1) is affixed as shown.

Rear differential

For cold and warm areas:

90 or 80W-90 is preferable.

For hot areas:

90 is suitable for ambient temperatures below 40°C (104°F).

For extremely hot areas and the Middle East:

140 is preferable.

ENGINE

MODEL		YD25DDTi	KA20DE	KA24DE
Type		Diesel, 4-cycle	Gasoline, 4-cycle	Gasoline, 4-cycle
Cylinder arrangement		4-cylinder, in-line	4-cylinder, in-line	4-cylinder, in-line
Bore X stroke	mm (in)	89 X 100 (3.504 x 3.94)	86 X 86 (3.39 x 3.39)	89 X 96 (3.50 x 3.78)
Displacement	cm ³ (cu in)	2,488 (151.82)	1,998 (121.88)	2,389 (145.78)
Firing order		1-3-4-2	1-3-4-2	1-3-4-2
Idling speed	rpm	750	700	650
Ignition timing (BTDC)	° at idle	-	20°	15°
Spark plug gap	mm	-	1.0 to 1.1 (0.039 to 0.043)	1.0 to 1.1 (0.039 to 0.043)
Spark plugs	Standard	-	BKR5E-II	BKR5E-II
Camshaft operation		Chain drive	Timing chain	Timing chain

WHEELS AND TYRES

Except for South Africa:

		2wd				4wd				
MODEL		S/Cab	S/Cab	D/Cab	D/Cab	S/Cab	D/Cab	D/Cab	D/Cab	D/Cab
		STD	STD	STD	GL	STD	STD	STD	GL	GL
		KA24	YD25	YD25	YD25	YD25	KA24	YD25	KA24	YD25
Tyre	Wheel									
195R 14-8/8	14 inch Steel	X								
195 R15	5.5JJ-15 Steel	X								
215 R15	6JJ-15 Steel	X	X	X			X		X	
245/70 R16	7JJ-16 Alu				X	X		X	(*)	X
245/70 R16	7JJ-16 Steel					(**)	(**)	(**)		

Opt - (*) = With ABS
Opt - (**) = With Steel wheel

For South Africa:

		2wd										4wd		
MODEL		S/Cab	S/Cab	S/Cab	S/Cab	S/Cab	S/Cab	S/Cab	S/Cab	D/Cab	D/Cab	S/Cab	S/Cab	D/Cab
		STD	STD	OPT	SE	STD	STD	OPT	SE	STD	STD	STD	STD	STD
		SWB	LWB	LWB	LWB	LWB	LWB	LWB	LWB	LWB	LWB	LWB	LWB	LWB
		KA20	KA20	KA20	KA20	KA24	YD25	YD25	YD25	KA24	YD25	KA24	YD25	KA24
Tyre	Wheel													
195R15	5.5JJ-15	X	X		(*)		X		(*)					
245/70R16	7JJ-16					X				X	X			(**)
215R15	6JJ-15			X				X				X	X	X

Opt - (*) = With ABS
Opt - (**) = With Alloy wheel
● Opt - 3 spoke steering wheel; 15" wheels, Diff lock and Tubular RR Bumper

9-6 Technical information

DIMENSIONS

Unit: mm (in)

Vehicle type	2-wheel drive model				4-wheel drive model	
Wheelbase	Short	Long	Long		Long	
Item Cab or bed type	Single cab	Single cab	Double cab	Single or Double cab Hi-Rider	Single Cab	Double Cab
Overall length mm (in)	4600 (181.1) 4660 (183.5)*1	4900 (181.1) 4960 (183.5)*1	4960 (195.3)	5175 (203.7)*2 5085 (200.1)*1	4900 (192.9)	5085 (200.1)*1
Overall width mm (in)	1690 (66.5)	1690 (66.5)	1690 (66.5)	1825 (71.9)	1825 (71.9)	1825 (71.9)
Overall height mm (in)	1620 (63.8)	1615 (63.6)	1645 (64.8)	1700 (66.9)*2 1790 (70.5)*4	1670 (65.7)*3	1790 (70.5) Overall height of vehicle can change due to local size tyres
Wheelbase mm (in)	2650 (104.3)	2950 (104.3)	2950 (104.3)	2950 (104.3)	2950 (104.3)	2950 (104.3)
Track	Front: mm (in)	1395 (54.9) 1415 (55.7)*4	1395 (54.9)	1415 (55.7)	1530 (60.2)	1530 (60.2)
	Rear: mm (in)	1390 (54.7) 1410 (55.5)*4	1390 (54.7)	1410 (55.5)	1505 (59.3)	1505 (59.3)
Ground clearance mm (in)	185 (7.3) 210 (8.3)*4	185 (7.3) 210 (8.3)*3	210 (8.3)	220 (8.7)	205 (8.1) 220 (8.7)	220 (8.7)

*1 RR bumper equipped models

*2 Single cab Hi Rider models

*3 15" wheel models

*4 Double cab Hi Rider models

WHEN TRAVELLING OR REGISTERED IN ANOTHER COUNTRY

When planning to travel in another country, you should first find out if the fuel available is suitable for your vehicle's engine.

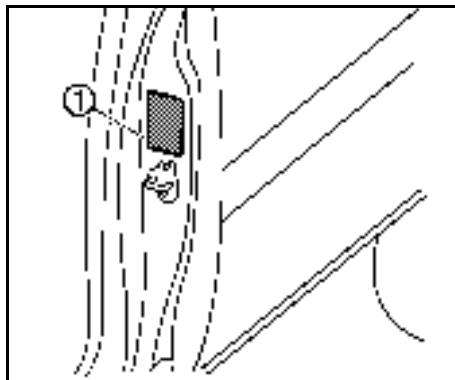
Using fuel with too low an octane/cetane rating may cause engine damage. Therefore, avoid taking your vehicle to areas where appropriate fuel is not available.

When transferring the registration of your vehicle to another country, state, province or district, check with the appropriate authorities that the vehicle complies with the requirements and it may not be possible to adapt the vehicle. In some cases, a vehicle cannot meet the legal requirements and in others it may be necessary to modify the vehicle to meet local laws and regulations.

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

When any vehicle is to be taken into another country, state, province or district and registered, its modifications, transportation, and registration are the responsibility of the user. NISSAN is not responsible for any inconvenience that may result.

VEHICLE IDENTIFICATION

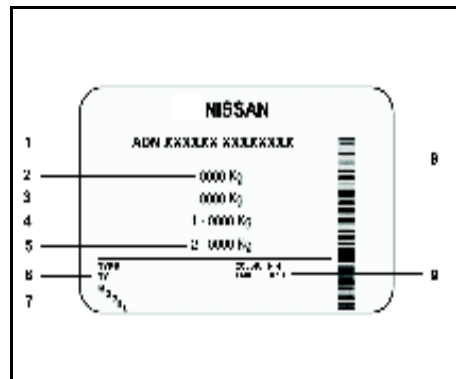


VEHICLE IDENTIFICATION PLATE

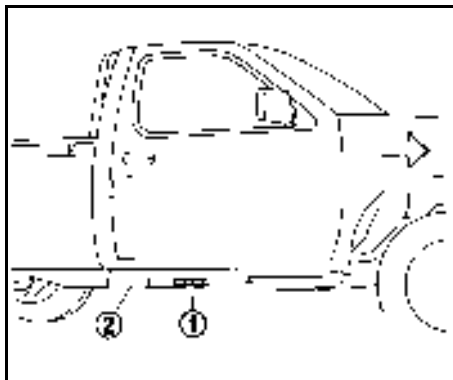
The vehicle identification plate (1) is affixed as shown.

For South Africa only:

The vehicle identification number (VIN number) is also displayed on the inside of the front- and rear windows of the vehicle. This is a Legal Requirement. Please do not tamper with the stickers.

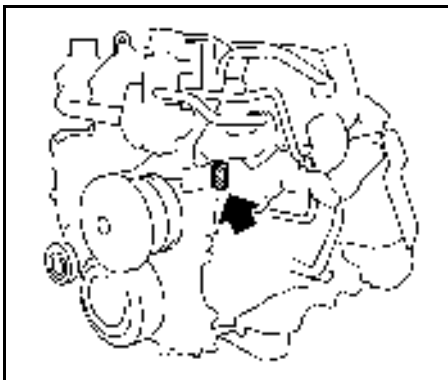


- 1 Vehicle type and chassis number (VIN number)
- 2 Gross vehicle mass
- 3 Gross combination mass (vehicle full loaded, with trailer)
- 4 Maximum permissible weight on front axle.
- 5 Maximum permissible weight on rear axle.
- 6 Vehicle type
- 7 Model variation code
- 8 Bar code
- 9 Body & Trim colour codes



VEHICLE IDENTIFICATION NUMBER (VIN)

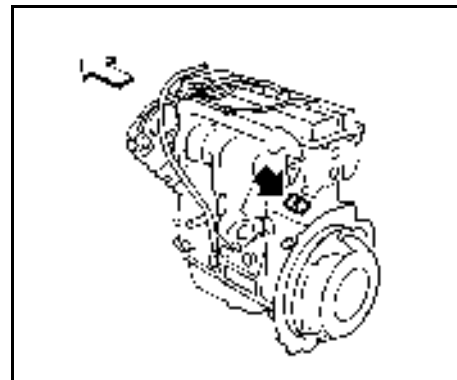
The vehicle identification number (Chassis number/VIN number) (1) is stamped on the frame (2) as shown.



YD25DDTi engine

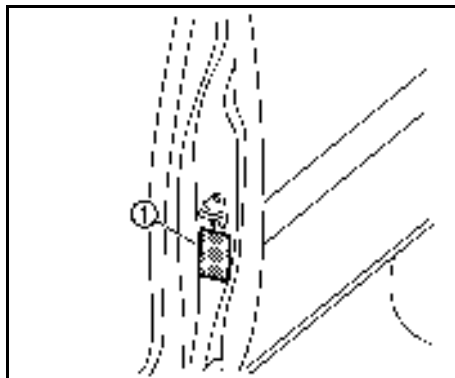
ENGINE SERIAL NUMBER

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



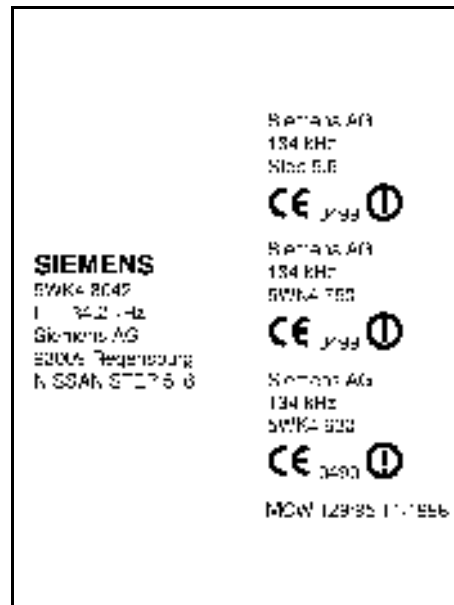
KA20DE/KA24DE engine

TYRE PLACARD



The cold tyre pressure is shown on the tyre placard (1).

NATS IMMOBILIZER RADIO APPROVAL NUMBER



Your vehicle is equipped with one of the immobilizer systems shown above.

See also NATS control unit additional approval numbers

REMOTE CONTROL RADIO APPROVAL NUMBER (for South Africa)



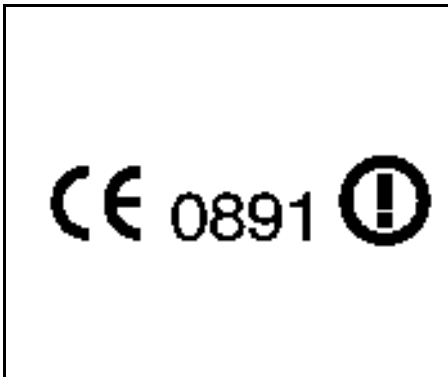
Remote keyless entry system.

**REMOTE CONTROL RADIO
APPROVAL NUMBER (for
Nigeria)**

KEYLESS ENTRY SYSTEM MODEL No.
TWB1U761, TWD1G703

Connection and use of this communications
Equipment is permitted by the Nigerian
Communications Commission

**REMOTE CONTROL RADIO
APPROVAL NUMBER**



Remote keyless entry system.

SECURITY INFORMATION

As the Owner of this vehicle, a number of important codes have been supplied to you that you may require in case your radio needs to be repaired OR in case you need to duplicate a NATS key.

Please fill in the allocated areas for radio security code, key code and NATS PIN code* or attach the sticker(s) if available. For key code and NATS PIN code, see "Keys" in the "2. Pre-driving checks and adjustments" section. Remove the page from this manual and keep it in a safe place, **not in the vehicle**.

When selling your vehicle, we kindly request you to hand over this page to the buyer.

* If so equipped for models with NATS

NATS - Nissan Anti Theft System

SECURITY INFORMATION

Radio security code
(if so equipped)

--	--	--	--

Key Code

--	--	--	--	--

Remove the page from the manual and keep it in a safe place, **not in the vehicle**.

When selling your vehicle, we kindly request you to hand over this page to the buyer.

* If so equipped for models with NATS



GAS STATION INFORMATION

RECOMMENDED FUEL

Gasoline engine:

Model with three-way catalyst:

Unleaded gasoline of above 91 octane (RON).

CAUTION:

Do not use a leaded gasoline. Using a leaded gasoline will damage the three-way catalyst.

Model without three-way catalyst:

Use unleaded or leaded gasoline of above 88 octane (RON).

Use unleaded fuel if instructed on the Fuel filler lid.

Diesel engine:

▪ **YD25DDTi engine models**

Diesel fuel of above 50 cetane must be used.

If fuel other than the specified fuel is used, white smoke could be emitted.

RECOMMENDED ENGINE OIL

Gasoline engine

Genuine NISSAN engine oil

API grade SE, SF, SG, SH, SJ, SL or SM

ILSAC grade GF-1, GF-2, GF-3, GF-4 or SG+

Diesel engine

YD with common rail:

Genuine NISSAN engine oil

API CF-4

JASO DH-1

ACEA B1, B3, B4 or B5

For further details, see "RECOMMENDED SAE VISCOSITY NUMBER" in the "9. Technical information" section.

TYRE COLD PRESSURE

See the tyre placard affixed to the driver's side center pillar.

QUICK REFERENCE

- In case of emergency.... 6-1
(Flat tyre, engine will not start, overheating, towing)
- How to start the engine.... 5-1
- How to read the meters and gauges.... 2-1
- Technical information.... 9-1

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