#### **FOREWORD**

#### READ FIRST—THEN DRIVE SAFELY

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

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

A separate Warranty Information Booklet explains details about the warranties covering your vehicle. The "NISSAN Service and Maintenance Guide" explains details about maintaining and servicing your vehicle. Additionally, a separate Customer Care/Lemon Law Booklet (U.S. only) will explain how to resolve any concerns you may have with your vehicle, as well as clarify your rights under your state's lemon law.

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

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

## **WARNING**

#### IMPORTANT SAFETY INFORMATION RE-MINDERS FOR SAFETY!

Follow these important driving rules to help ensure a safe and comfortable 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 give your full attention to driving and avoid using vehicle features or taking other actions that could distract you.
- ALWAYS use your seat belts and appropriate child restraint systems. Preteen children should be seated in the rear seat.
- ALWAYS provide information about the proper use of vehicle safety features to all occupants of the vehicle.
- ALWAYS review this Owner's Manual for important safety information.

#### MODIFICATION OF YOUR VEHICLE

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

#### 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.

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 without notice and without obligation.

# IMPORTANT INFORMATION ABOUT THIS MANUAL

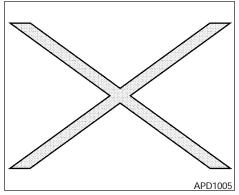
You will see various symbols in this manual. They are used in the following ways:

# **A** WARNING

This is used to indicate the presence of a hazard that could cause death or serious personal injury. To avoid or reduce the risk, the procedures must be followed precisely.

# **A** CAUTION

This is used to indicate the presence of a hazard that could cause minor or moderate personal injury or damage to your vehicle. To avoid or reduce the risk, the procedures must be followed carefully.



If you see this symbol, it means "Do not do this" or "Do not let this happen."





If you see a symbol similar to these in an illustration, it means the arrow points to the front of the vehicle.









Arrows in an illustration that are similar to these indicate movement or action.









Arrows in an illustration that are similar to these call attention to an item in the illustration.

# CALIFORNIA PROPOSITION 65 WARNING

#### **WARNING**

Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

# CALIFORNIA PERCHLORATE ADVISORY

Some vehicle parts, such as lithium batteries, may contain perchlorate material. The following advisory is provided: "Perchlorate Material – special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate."



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# NISSAN CUSTOMER CARE PROGRAM

#### NISSAN CARES ...

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

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

For U.S. customers 1-800-NISSAN-1 (1-800-647-7261)

For Canadian customers 1-800-387-0122

The Consumer Affairs Department will ask for the following information:

- Your name, address, and telephone number
- Vehicle identification number (attached to the top of the instrument panel on the driver's side)
- Date of purchase
- Current odometer reading
- Your NISSAN dealer's name
- Your comments or questions

OR

You can write to NISSAN with the information at:

For U.S. customers
Nissan North America, Inc.
Consumer Affairs Department
P.O. Box 685003
Franklin, TN 37068-5003

For Canadian customers Nissan Canada Inc. 5290 Orbitor Drive Mississauga, Ontario L4W 4Z5

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

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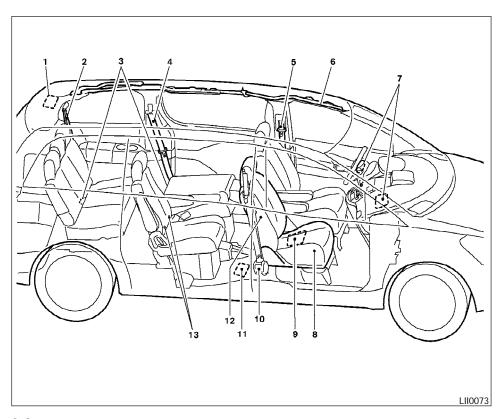
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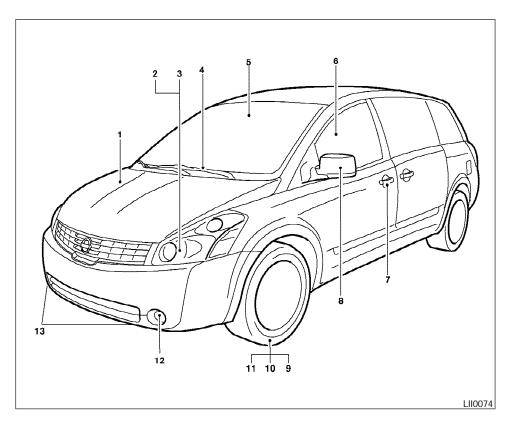
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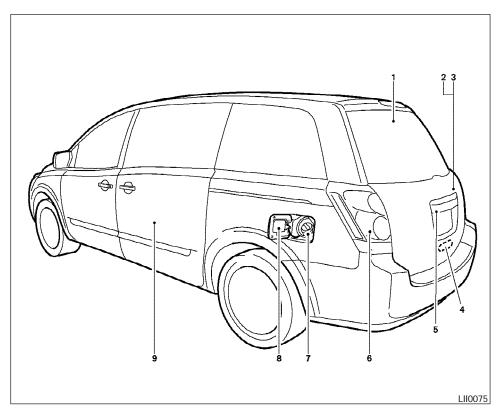
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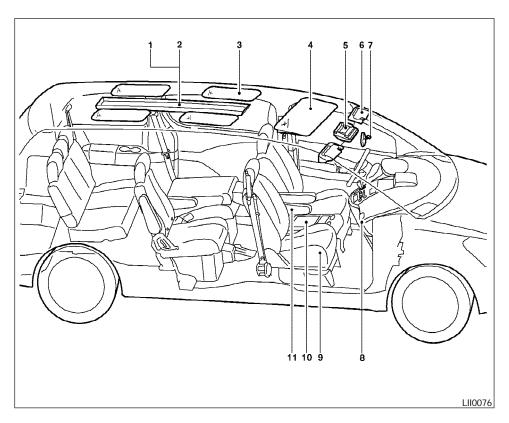
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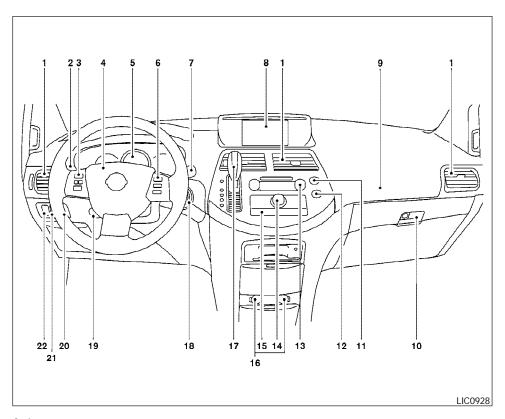
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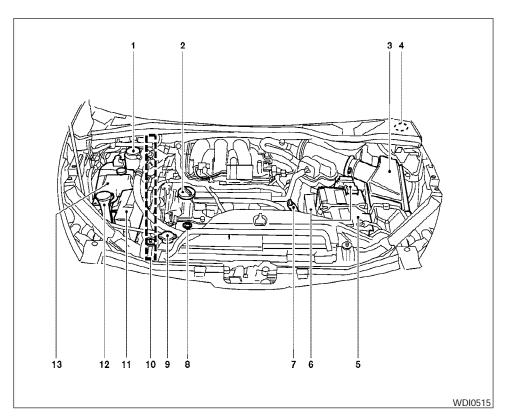


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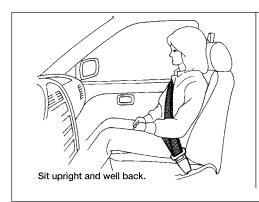
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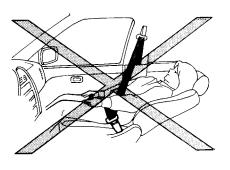
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#### **SEATS**





ARS1152

### **AWARNING**

- Do not ride in a moving vehicle when the seatback is reclined. This can be dangerous. The shoulder belt will not be against your body. In an accident, you could be thrown into it and receive neck or other serious injuries. You could also slide under the lap belt and receive serious internal injuries.
- For the most effective protection when the vehicle is in motion, the seat should be upright. Always sit well back in the seat with both feet on the floor and adjust the seat properly. See "Precautions on seat belt usage" later in this section.
- After adjustment, gently rock in the seat to make sure it is securely locked.
- Do not leave children unattended inside the vehicle. They could unknowingly activate switches or controls. Unattended children could become involved in serious accidents.

The seatback 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 seatback is reclined, the risk of sliding under the lap belt and being injured is increased.

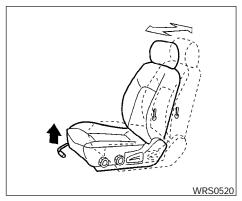
## **A** CAUTION

- When adjusting the seat positions, be sure not to contact any moving parts to avoid possible injuries and/or damage.
- There are sharp edges under the seat. To avoid injury, do not contact the bottom of the seat or the seat frame:
- if you need to retrieve an object from under the seat.
- while cleaning the carpet.

#### Seat Fold/Adjust Summary

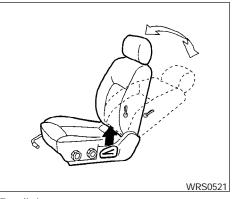
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3rd row	Recline (P. 1-8) Folding (P.1-12) Stow (P.1-12)

FRONT MANUAL SEAT ADJUSTMENT (if so equipped)



# Forward and backward

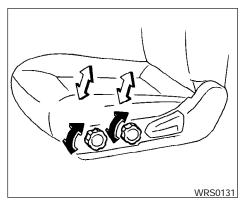
Pull the lever up and hold it while you slide the seat forward or backward to the desired position. Release the lever to lock the seat in position.



# Reclining

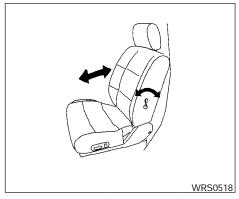
To recline the seatback, pull the lever up and lean back. To bring the seatback forward, pull the lever up and lean your body forward. Release the lever to lock the seatback in position.

The reclining feature allows adjustment of the seatback for occupants of different sizes for added comfort and to help obtain proper seat belt fit. See "Precautions on seat belt usage" later in this section. Also, the seatback can be reclined to allow occupants to rest when the vehicle is stopped and the transmission is in P (Park).



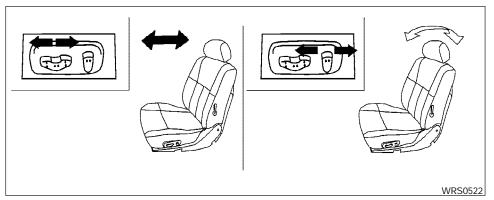
Seat lifter (if so equipped for driver's seat)

Turn either dial to adjust the angle and height of the seat cushion to the desired position.



Lumbar support (driver's seat)

The lumbar support feature provides lower back support to the driver. Move the lever up or down to adjust the seat lumbar area.



belt fit (see "Precautions on seat belt usage" later in this section). Also, the seatback can be reclined to allow occupants to rest when the vehicle is stopped and the transmission is in P (Park).

# FRONT POWER SEAT ADJUSTMENT (if so equipped)

# Operating tips

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

See "Automatic drive positioner (if so equipped)" in "Pre-driving checks and adjustments" for automatic drive positioner operation.

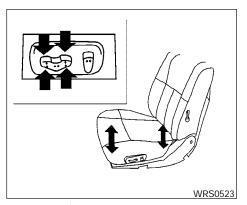
# Forward and backward

Moving the switch forward or backward will slide the seat forward or backward to the desired position.

# Reclining

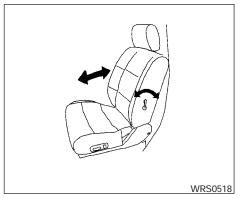
Move the recline switch backward until the desired angle is obtained. To bring the seatback forward again, move the switch forward and move your body forward. The seatback will move forward.

The reclining feature allows adjustment of the seatback for occupants of different sizes for added comfort and to help obtain proper seat



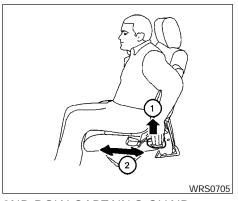
Seat lifter (if so equipped for driver's seat)

Push the front or rear end of the switch up or down to adjust the angle and height of the seat cushion.



Lumbar support (driver's seat)

The lumbar support feature provides lower back support to the driver. Move the lever up or down to adjust the seat lumbar area.



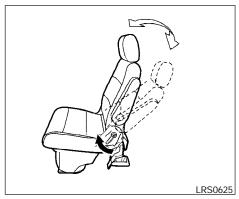
2ND ROW CAPTAIN'S CHAIR ADJUSTMENT

Forward and backward

# **WARNING**

- The 2nd row seats are heavy. Be careful when folding and unfolding.
- To avoid injury to yourself and others, keep hands and body clear when folding.

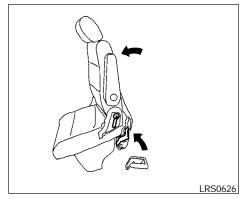
The adjustment lever can be found on the inboard side of the seat. While seated, pull the lever 1 and hold it while you slide 2 the seat forward or backward to the desired position. Release the lever to lock the seat in position.



# Reclining

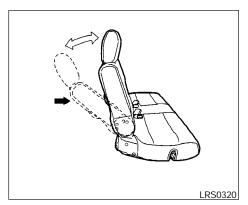
To recline the seatback, pull up on the lever and lean back.

The recline feature allows adjustment of the seat back for occupants of different sizes for added comfort and to help obtain proper seat belt fit (see "Precautions on seat belt usage" later in this section). Also, the seatback can be reclined to allow occupants to rest when the vehicle is stopped.



Tip up for easy entry to the 3rd row

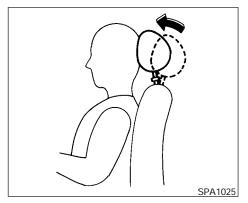
The 2nd row captain's chairs can be tipped forward for easy entry or exit from the 3rd row bench seat. To enter the 3rd row bench seat, lift up on the lever located on the lower base of the 2nd row captain's chair to tip the seat forward. To exit the 3rd row bench seat, pull back on the lever on the lower base of the 2nd row captain's chair and push the seat forward.



3RD ROW BENCH SEAT ADJUSTMENT

# Reclining

Lift up on the latch in the center of the seatback to adjust the back of the seat. Release the latch to lock the seatback into position.



FRONT-SEAT ACTIVE HEAD RESTRAINTS

# **AWARNING**

- Always adjust the head restraints properly as specified in this section. Failure to do so can reduce the effectiveness of the Active Head Restraint.
- Active Head Restraints are designed to supplement other safety systems. Always wear seat belts. No system can prevent all injuries in any accident.

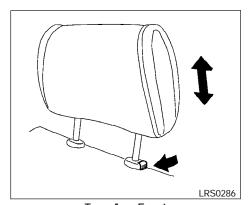
 Do not attach anything to the head restraint stalks. Doing so could impair Active Head Restraint function.

The Active Head Restraint moves forward utilizing the force that the seatback receives from the occupant in a rear-end collision. The movement of the head restraint helps support the occupant's head by reducing its backward movement and helping absorb some of the forces that may lead to whiplash-type injuries.

Active Head Restraints are effective for collisions at low to medium speeds in which it is said that whiplash injuries occur most.

Active Head Restraints operate only in certain rear-end collisions. After the collision, the head restraints return to their original positions.

Properly adjust the Active Head Restraints as described in this section.

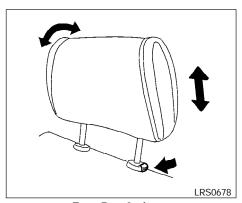


Type A — Front HEAD RESTRAINT ADJUSTMENT

To raise the head restraint, pull it up. To lower, push and hold the lock knob and push the head restraint down.

To adjust the head restraint forward or backward (Type B only), push it in the direction required.

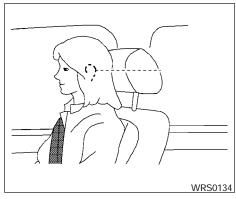
The front seats and 2nd row captain's chairs head restraints are removable. See "Head restraint storage" in the "Instrument and controls" section. The 3rd row bench seat head restraints are not removable.



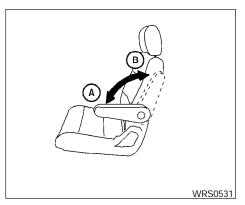
Type B — 2nd row

# **WARNING**

Head restraints should be adjusted properly as they may provide significant protection against injury in an accident. Do not remove them. Check the adjustment after someone else uses the seat.



Adjust the head restraint so the center is level with the center of your ears.



### **ARMRESTS**

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

- A Resting position
- B Stowed position

# Adjustable front seat armrest (if so equipped)

To use the adjustable seat armrest, pull it down to the resting position. Adjust the armrest to the desired position by raising the armrest to the desired height and releasing the armrest. To readjust the armrest to a lower position, raise the armrest to the stowed position, then pull it to the resting position and adjust to the desired height.

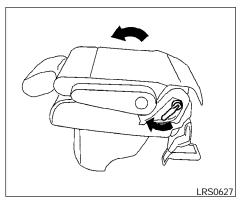
#### FLEXIBLE SEATING

# **AWARNING**

- Never allow anyone to ride in the cargo area or on the rear seats when they are in the fold-down position. In a collision, people riding in these areas without proper restraints are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts. Be sure everyone in your vehicle is in a seat and using a seat belt properly.
- Do not fold down the rear seats when occupants are in the rear seat area or any luggage is on the rear seats.
- Head restraints should be adjusted properly as they may provide significant protection against injury in an accident. Always replace and adjust them properly if they have been removed for any reason.

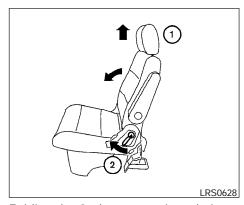
- If the head restraints are removed for any reason, they should be securely stored to prevent them from causing injury to passengers or damage to the vehicle in case of sudden braking or an accident.
- When returning the seatbacks to the upright position, be certain they are completely secured in the latched position. If they are not completely secured, passengers may be injured in an accident or sudden stop.
- Properly secure all cargo to help prevent it from sliding or shifting. Do not place cargo higher than the seatbacks.
   In a sudden stop or collision, unsecured cargo could cause personal injury.

# 1-10 Safety—Seats, seat belts and supplemental restraint system



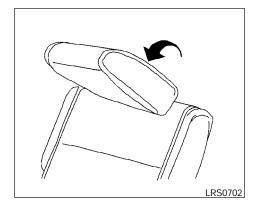
Folding

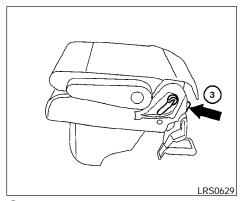
To fold the seatback forward for cargo hauling, lift up on the recline lever and fold the seatback over the seat base.



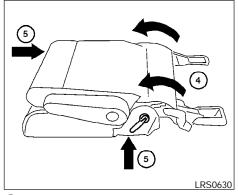
Folding the 2nd row captain's chair

- 1 For maximum cargo hauling, fold the 2nd row captain's chairs to the floor. Move the head restraints forward before folding.
- 2 Lift up on the recline lever to fold the seatback forward on the seat base.

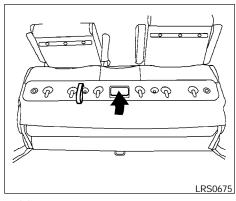




Push down on the small knob on the back of the seat to release the base of the seat.



- Then fold the entire seat forward into the stowed position in the floor.
- (5) Reverse this process to return the 2nd row captain's chairs to a seating position.



# Folding

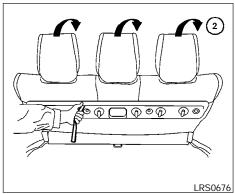
To fold the seatback forward for cargo hauling, lift up on the latch in the center of the seatback to fold the seatback over the seat base.

Folding the 3rd row bench seat

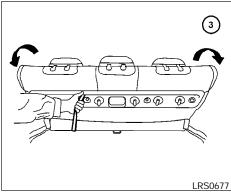
# **AWARNING**

- The 3rd row bench seat is heavy. Be careful when folding and unfolding.
- To avoid injury to yourself or others, keep hands and body clear of floor opening when folding.

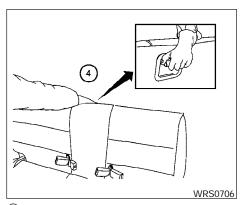
1. Disconnect and secure the center seat belt and tongues into the retractor base. See "Stowing the 3rd row center seat belt" later in this section.



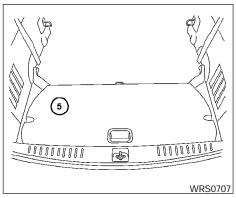
To fold the 3rd row bench seat flat into the floor for maximum cargo hauling, pull the strap on the seatback to allow all three head restraints to fold forward. If the head restraints are in the folded position, the seat may not be latched into the floor.



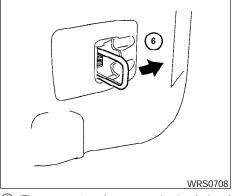
(3) Pull back on the pull strap to release the back of the seat. Rotate the seatback toward the back of the vehicle.



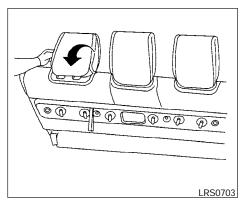
Pull up on the lever located on the back of the seat base. This will fold the seat base toward the back of the vehicle.



5) The entire seat will rotate toward you and stow in the floor.



The rear seat anchors are spring loaded and can be folded into the side panels to maximize cargo space. The anchors are held in the folded position by the items in the cargo area. When the load is removed from the cargo area, the rear seat anchors automatically return to the unfolded position.

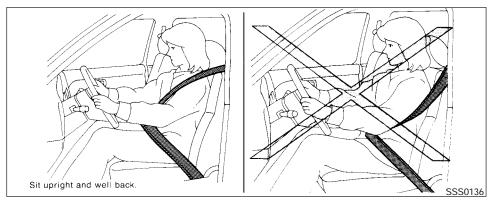


7. Reverse this process to return the bench seat to a seating position. Make sure to properly return the head restraints to the upright position, push the bench seat down into the floor, and pull back on the seatback until they latch into place.

## **WARNING**

- Do not unfasten the rear center seat belt connector except when folding down the rear seat.
- When attaching the rear center seat belt connector, be certain that the seatbacks are completely secured in the latched position and the rear center seat belt connector is completely secured.
- If the rear center seat belt connector. and the seatbacks are not secured in the correct position, serious personal injury may result in an accident or sudden stop.
- When returning the seatbacks, be sure to attach the rear center seat belt connector.

#### **SEAT BELTS**

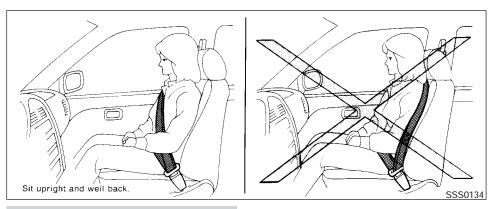


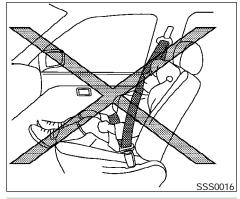
# PRECAUTIONS ON SEAT BELT USAGE

If you are wearing your seat belt properly adjusted and you are sitting upright and well back in your seat with both feet on the floor, your chances of being injured or killed in an accident and/or the severity of injury may be greatly reduced. NISSAN strongly encourages you and all of your passengers to buckle up every time you drive, even if your seating position includes a supplemental air bag.

Most U.S. states and Canadian provinces or territories specify that seat belts be worn at all times when a vehicle is being driven.

1-16 Safety—Seats, seat belts and supplemental restraint system



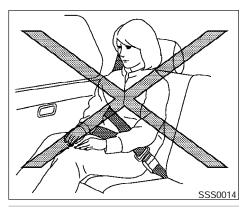


# **WARNING**

Every person who drives or rides in this vehicle should use a seat belt at all times. Children should be properly restrained in the rear seat and, if appropriate, in a child restraint.

# **AWARNING**

• The seat belt should be properly adjusted to a snug fit. Failure to do so may reduce the effectiveness of the entire restraint system and increase the chance or severity of injury in an accident. Serious injury or death can occur if the seat belt is not worn properly.



## **▲** WARNING

- Always route the shoulder belt over your shoulder and across your chest.
   Never put the belt behind your back, under your arm or across your neck. The belt should be away from your face and neck, but not falling off your shoulder.
- Position the lap belt as low and snug as possible AROUND THE HIPS, NOT THE WAIST. A lap belt worn too high could increase the risk of internal injuries in an accident.

- Be sure the seat belt tongue is securely fastened to the proper buckle.
- Do not wear the seat belt inside out or twisted. Doing so may reduce its effectiveness.
- Do not allow more than one person to use the same seat belt.
- Never carry more people in the vehicle than there are seat belts.
- If the seat belt warning light glows continuously while the ignition is turned ON with all doors closed and all seat belts fastened, it may indicate a malfunction in the system. Have the system checked by a NISSAN dealer.
- No changes should be made to the seat belt system. For example, do not modify the seat belt, add material, or install devices that may change the seat belt routing or tension. Doing so may affect the operation of the seat belt system. Modifying or tampering with the seat belt system may result in serious personal injury.

- Once a seat belt pretensioner has activated, it cannot be reused and must be replaced together with the retractor.
   See your NISSAN dealer.
- Removal and installation of pretensioner system components should be done by a NISSAN dealer.
- All seat belt assemblies, including retractors and attaching hardware, should be inspected after any collision by a NISSAN dealer. NISSAN recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Seat belt assemblies not in use during a collision should also be inspected and replaced if either damage or improper operation is noted.
- All child restraints and attaching hardware should be inspected after any collision. Always follow the restraint manufacturer's inspection instructions and replacement recommendations. The child restraints should be replaced if they are damaged.

#### **CHILD SAFETY**

Children need adults to help protect them. They need to be properly restrained.

In addition to the general information in this manual, child safety information is available from many other sources, including doctors, teachers, government traffic safety offices, and community organizations. Every child is different, so be sure to learn the best way to transport your child.

There are three basic types of child restraint systems:

- Rear-facing child restraint
- Front-facing child restraint
- Booster seat

The proper restraint depends on the child's size. Generally, infants up to about 1 year and less than 20 lbs (9 kg) should be placed in rear-facing child restraints. Front-facing child restraints are available for children who outgrow rear-facing child restraints and are at least 1 year old. Booster seats are used to help position a vehicle lap/shoulder belt on a child who can no longer use a front-facing child restraint.

# **WARNING**

Infants and children need special protection. The vehicle's seat belts may not fit them properly. The shoulder belt may come too close to the face or neck. The lap belt may not fit over their small hip bones. In an accident, an improperly fitting seat belt could cause serious or fatal injury. Always use appropriate child restraints.

All U.S. states and Canadian provinces or territories require the use of approved child restraints for infants and small children. See "Child Restraints" later in this section.

Also, there are other types of child restraints available for larger children for additional protection.

NISSAN recommends that all pre-teens and children be restrained in the rear seat. According to accident statistics, children are safer when properly restrained in the rear seat than in the front seat.

This is especially important because your vehicle has a supplemental restraint system (Air bag system) for the front passenger. See "Supplemental restraint system" later in this section.

#### Infants

Infants up to at least 1 year old should be placed in a rear-facing child restraint. NISSAN recommends that infants be placed in child restraints that comply with Federal Motor Vehicle Safety Standards or Canadian Motor Vehicle Safety Standards. You should choose a child restraint that fits your vehicle and always follow the manufacturer's instructions for installation and use.

#### Small children

Children that are over one year old and weigh at least 20 lbs (9 kg) can be placed in a forwardfacing child restraint. Refer to the manufacturer's instructions for minimum and maximum weight and height recommendations. NISSAN recommends that small children be placed in child restraints that comply with Federal Motor Vehicle Safety Standards or Canadian Motor Vehicle Safety Standards. You should choose a child restraint that fits your vehicle and always follow the manufacturer's instructions for installation and use.

# Larger children

Children who are too large for child restraints should be seated and restrained by the seat belts which are provided. The seat belt may not fit properly if the child is less than 4 ft 9 in (142.5 cm) tall and weighs between 40 lbs (18 kg) and 80 lbs (36 kg). A booster seat should be used to obtain proper seat belt fit.

NISSAN recommends that a child be placed in a commercially available booster seat if the shoulder belt in the child's seating position fits close to the face or neck or if the lap portion of the seat belt goes across the abdomen. 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. A booster seat can only be used in seating positions that have a three-point type seat belt. The booster seat should fit the vehicle seat and have a label certifying that it complies with Federal Motor Vehicle Safety Standards or Canadian Motor Vehicle Safety Standards. Once the child has grown so the shoulder belt is no longer on or near the face and neck, use the shoulder belt without the booster seat.

# **WARNING**

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. The child could be seriously injured or killed in an accident or sudden stop.

#### PREGNANT WOMEN

NISSAN recommends that pregnant women use seat belts. The seat belt should be worn snug and always position the lap belt as low as possible around the hips, not the waist. Place the shoulder belt over your shoulder and across your chest. Never run the lap/shoulder belt over your abdominal area. Contact your doctor for specific recommendations.

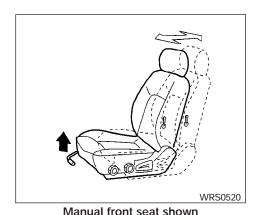
#### INJURED PERSONS

NISSAN recommends that injured persons use seat belts. Check with your doctor for specific recommendations.

# THREE-POINT TYPE SEAT BELT WITH RETRACTOR

# **WARNING**

- Every person who drives or rides in this vehicle should use a seat belt at all times.
- Do not ride in a moving vehicle when the seatback is reclined. This can be dangerous. The shoulder belt will not be against your body. In an accident, you could be thrown into it and receive neck or other serious injuries. You could also slide under the lap belt and receive serious internal injuries.
- For the most effective protection when the vehicle is in motion, the seat should be upright. Always sit well back in the seat with both feet on the floor and adjust the seat belt properly.

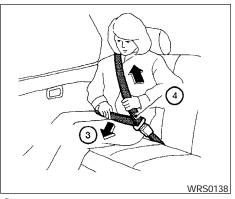


Fastening the seat belts

1. Adjust the seat. See "Seats" earlier in this section.



- Slowly pull the seat belt out of the retractor and insert the tongue into the buckle until you hear and feel the latch engage.
- The retractor is designed to lock during a sudden stop or on impact. A slow pulling motion permits the seat belt to move and allows you some freedom of movement in the seat.
- If the seat belt cannot be pulled from its fully retracted position, firmly pull the belt and release it. Then smoothly pull the belt out of the retractor.



- Position the lap belt portion low and snug on the hips as shown.
- Pull the shoulder belt portion toward the retractor to take up extra slack. Be sure the shoulder belt is routed over your shoulder and across your chest.

The front passenger seat, 2nd row captain's chairs and the rear bench seat three-point seat belts have two modes of operation:

- Emergency Locking Retractor (ELR)
- Automatic Locking Retractor (ALR)

The Emergency Locking Retractor (ELR) mode allows the seat belt to extend and retract to allow the driver and passengers some freedom of movement in the seat. The ELR locks the seat belt when the vehicle slows down rapidly or during certain impacts.

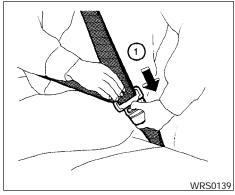
The Automatic Locking Retractor (ALR) mode (child restraint mode) locks the seat belt for child restraint installation.

When the ALR mode is activated, the seat belt cannot be extended again until the seat belt tongue is detached from the buckle and fully retracted. The seat belt returns to the ELR mode after the seat belt fully retracts. See "Child restraints" later in this section for more information.

The ALR mode should be used only for child restraint installation. During normal seat belt use by an occupant, the ALR mode should not be activated. If it is activated, it may cause uncomfortable seat belt tension. It can also change the operation of the front passenger air bag. See "Front passenger air bag and status light" later in this section.

#### **AWARNING**

When fastening the seat belts, be certain that the seatbacks are completely secured in the latched position. If they are not completely secured, passengers may be injured in an accident or sudden stop.



## Unfastening the seat belts

1) To unfasten the seat belt, press the button on the buckle. The seat belt automatically retracts.

## Checking seat belt operation

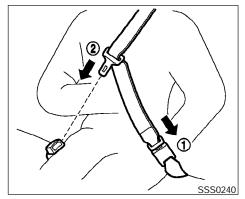
Seat belt retractors are designed to lock seat belt movement by two separate methods:

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

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

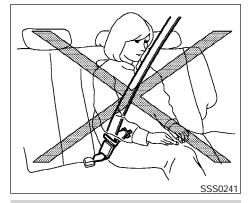
• Grasp the shoulder belt and pull forward quickly. The retractor should lock and restrict further belt movement.

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



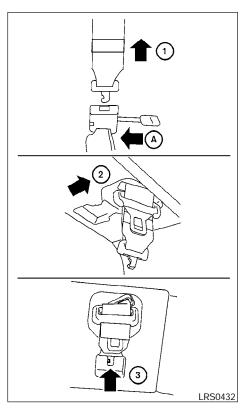
Center of the 3rd row bench seat

The 3rd row center seat belt has a connector tongue (1) and a seat belt tongue (2). Both the connector tongue and the seat belt tongue must be securely latched for proper seat belt operation.



### **WARNING**

- Always fasten the connector tongue and the seat belt in the order shown.
- Always make sure both the connector tongue and the seat belt tongue are secured when using the seat belt or installing a child restraint. Do not use the seat belt or child restraint with only the seat belt tongue attached. This could result in serious personal injury in case of an accident or a sudden stop.



#### Stowing the 3rd row center seat belt

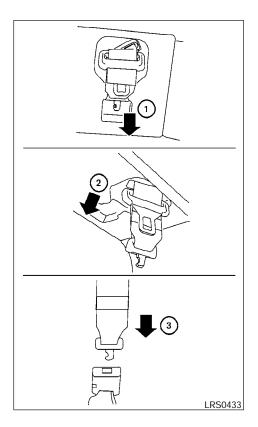
When folding down the 3rd row seat, the 3rd row center seat belt can be retracted into a stowed position as follows:

- ① Hold the connector tongue so that the seat belt does not retract suddenly when the tongue is released from the connector buckle. Release the connector tongue by inserting a suitable tool such as a key into the connector buckle (A).
- 2 Retract the seat belt up to the retractor base.
- (3) Insert the seat belt tongue into the fabric sleeve so it will lay flat. Then secure the connector tongue into the retractor base.

## **A** WARNING

- Do not unfasten the rear center seat belt connector except when folding down the rear seat.
- When attaching the rear center seat belt connector, be certain that the seatbacks are completely secured in the latched position and the rear center seat belt connector is completely secured.

 If the rear center seat belt connector and the seatbacks are not secured in the correct position, serious personal injury may result in an accident or sudden stop.



### Attaching the 3rd row center seat belt

Always be sure the 3rd row center seat belt connector tongue and connector buckle are attached. Disconnect only when folding down the rear seat.

To connect the buckle:

- 1) Pull out the connector tongue from the retractor base.
- 2 Pull out the seat belt tongue from the fabric sleeve.
- (3) Pull the seat belt and secure the receiver buckle until it clicks.

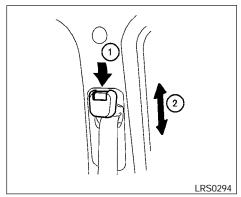
The center seat belt connector tongue and receiver buckle are indicated by the > and < mark.

The center seat belt connector tongue can be attached only into the rear center seat belt connector buckle.

To fasten the seat belt, see "Fastening the seat belts" earlier in this section.

## **WARNING**

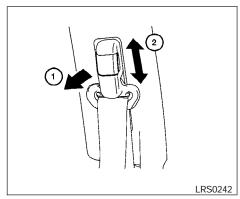
- Do not unfasten the rear center seat. belt connector except when folding down the rear seat.
- When attaching the rear center seat belt connector, be certain that the seatbacks are completely secured in the latched position and the rear center seat belt connector is completely secured.
- If the rear center seat belt connector. and the seatbacks are not secured in the correct position, serious personal injury may result in an accident or sudden stop.



Front seats

## Shoulder belt height adjustment (Front and 2nd row seats)

The shoulder belt anchor height should be adjusted to the position best for you. (See "Precautions on seat belt usage" earlier in this section.) To adjust, push or pull out the adjustment button (1) and move the shoulder belt anchor (2) to the desired position so the belt passes over the center of the shoulder. The belt should be away from your face and neck but not falling off your shoulder. Release the adjustment button to lock the shoulder belt anchor into position.



2nd row seats

#### **AWARNING**

- After adjustment, release the adjustment button and try to move the shoulder belt anchor up and down to make sure it is securely fixed in position.
- The shoulder belt anchor height should be adjusted to the position best for you. Failure to do so may reduce the effectiveness of the entire restraint system and increase the chance or severity of injury in an accident.

#### SEAT BELT EXTENDERS

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

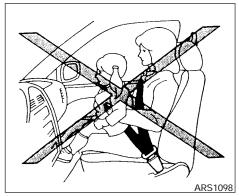
#### **AWARNING**

- Only NISSAN seat belt extenders, made by the same company which made the original equipment seat belts, should be used with NISSAN seat belts.
- Adults and children who can use the standard seat belt should not use an extender. Such unnecessary use could result in serious personal injury in the event of an accident.
- Never use seat belt extenders to install child restraints. If the child restraint is not secured properly, the child could be seriously injured in a collision or a sudden stop.

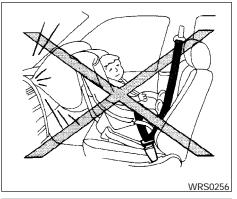
#### CHILD RESTRAINTS

#### SEAT BELT MAINTENANCE

- To clean the seat belt webbing, apply a mild soap solution or any solution recommended for cleaning upholstery or carpet. Then wipe with a cloth and allow the seat belts 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 quide 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 seat belt assembly should be replaced.



PRECAUTIONS ON CHILD **RESTRAINTS** 



## **WARNING**

- Infants and small children should always be placed in an appropriate child restraint while riding in the vehicle. Failure to use a child restraint can result in serious injury or death.
- 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 a severe accident. The child could be crushed between the adult and parts of the vehicle. Also, do not put the same seat belt around both your child and yourself.

- Even with the NISSAN Advanced Air Bag System, never install a rear-facing child restraint in the front seat. An inflating front air bag could seriously injure or kill your child. A rear-facing child restraint must only be used in the rear seat.
- NISSAN recommends that the child restraint be installed in the rear seat. According to accident statistics, children are safer when properly restrained in the rear seat than in the front seat. If you must install a front-facing child restraint in the front seat, see "Child restraint installation using the seat belts" later in this section.
- Improper use or improper installation of a child restraint can increase the risk or severity of injury for both the child and other occupants of the vehicle and can lead to serious injury or death in an accident.
- Follow all of the child restraint manufacturer's instructions for installation and use. When purchasing a child restraint, be sure to select one which will fit your child and vehicle. It may not be possible to properly install some types of child restraints in your vehicle.

- If the child restraint is not anchored properly, the risk of a child being injured in a collision or a sudden stop greatly increases.
- Child restraint anchor points are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.
- Adjustable seatbacks should be positioned to fit the child restraint, but as upright as possible.
- After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the seat near the LATCH attachment or by the seat belt path. The child restraint should not move more than 1 inch (25 mm), from side to side. Try to tug it forward and check to see if the belt holds the restraint in place. If the restraint is not secure, tighten the belt as necessary, or put the restraint in another seat and test it again. You may need to try a different child restraint. Not all child restraints fit in all types of vehicles.

When your child restraint is not in use, keep it secured with the LATCH system or a seat belt to prevent it from being thrown around in case of a sudden stop or accident.

## **A**CAUTION

Remember that a child restraint left in a closed vehicle can become very hot. Check the seating surface and buckles before placing your child in the child restraint.

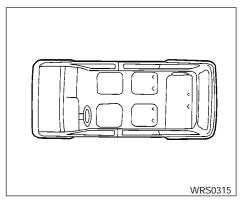
This vehicle is equipped with a universal child restraint lower anchor system, referred to as the LATCH (Lower Anchors and Tethers for CHildren) system. Some child restraints include two rigid or webbing-mounted attachments that can be connected to these lower anchors. For details, see "LATCH (Lower Anchors and Tethers for CHildren) system" later in this section.

If you do not have a LATCH compatible child restraint, the vehicle seat belts can be used. See "Child restraint installation using the seat belts" later in this section. In general, child restraints are also designed to be installed with a lap/shoulder seat belt.

Several manufacturers offer child restraints for infants and small children of various sizes. When selecting any child restraint, keep the following points in mind:

- Choose only a restraint with a label certifying that it complies with Federal Motor Vehicle Safety Standard 213 or Canadian Motor Vehicle Safety Standard 213.
- Check the child restraint in your vehicle to be sure it is compatible with the vehicle's seat and seat belt system.
- If the child restraint is compatible with your vehicle, place your child in the child restraint and check the various adjustments to be sure the child restraint is compatible with vour child. Choose a child restraint that is designed for your child's height and weight. Always follow all recommended procedures.

All U.S. states and Canadian provinces or territories require that infants and small children be restrained in an approved child restraint at all times while the vehicle is being operated. Canadian law requires the top tether strap on front-facing child restraints be secured to the designated anchor point on the vehicle.

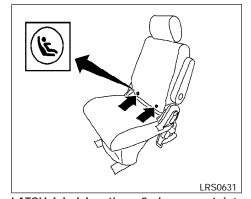


LATCH system anchor locations LATCH (Lower Anchors and Tethers for CHildren) SYSTEM

Your vehicle is equipped with special anchor points that are used with LATCH (Lower Anchors and Tethers for CHildren) system compatible child restraints.

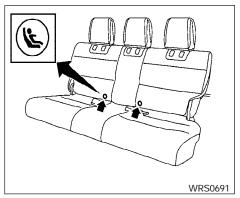
The LATCH anchor points are provided to install child restraints in the following positions only:

- 2nd row captain's chairs (if so equipped).
- 3rd row bench seat center position only (if so equipped).

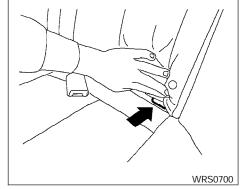


LATCH label locations 2nd row captain's chairs (if so equipped) LATCH lower anchor point locations

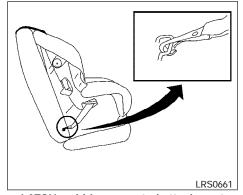
The LATCH anchors are located at the rear of the seat cushion near the seatback. A label is attached to the seatback to help you locate the LATCH anchors.



LATCH label locations 3rd row bench (if so equipped)



**LATCH lower anchor location** 

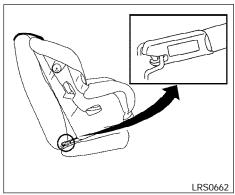


LATCH webbing-mounted attachment Installing child restraint LATCH anchor attachments

LATCH compatible child restraints include two rigid or webbing-mounted attachments that can be connected to two anchors located at certain seating positions in your vehicle. This system is known as the LATCH system. This system may also be referred to as the ISOFIX or ISOFIX compatible system. With this system, you do not have to use a vehicle seat belt to secure the child restraint. Check your child restraint for a label stating that it is compatible with the LATCH system. This information may also be in the instructions provided by the child restraint manufac-

## **A** WARNING

- Attach LATCH system compatible child restraints only at the locations shown. If a child restraint is not secured properly, your child could be seriously injured or killed in an accident.
- Child restraint anchor points are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.



#### LATCH rigid-mounted attachment

turer. If you have such a child restraint, refer to the illustration for the seating positions equipped with LATCH system anchors which can be used to secure the child restraint.

LATCH child restraints generally require the use of a top tether strap. See "Top tether strap child restraint" later in this section for installation instructions.

When installing a child restraint, carefully read and follow the instructions in this manual and those supplied with the child restraint. See "Child restraint installation using LATCH on 2nd row captain's chairs (if so equipped)" or "Child restraint installation using LATCH on 3rd row bench seat (if so equipped)" in this section.

## TOP TETHER STRAP CHILD **RFSTRAINT**

If the manufacturer of your child restraint requires the use of a top tether strap, it must be secured to the anchor point.

## **AWARNING**

- Child restraint anchor points are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.
- Do not allow cargo to contact the top tether strap when it is attached to the top tether anchor. Properly secure the cargo so it does not contact the top tether strap. Cargo that is not properly secured or cargo that contacts the top tether strap may damage it during a collision. Your child could be seriously injured or killed in a collision if the top tether strap is damaged.

# Top tether anchor point locations

Anchor points are located in the following locations:

- On the floor behind the front passenger seat (2-passenger cargo van only) as shown.
- On the back of the 2nd row captain's chairs (if so equipped) as shown.
- On the back of the 3rd row center seating position (if so equipped) as shown.

If you have any questions when installing a top tether strap child restraint on the rear seat, consult your NISSAN dealer for details.

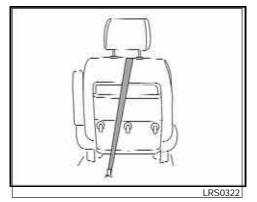


#### Label

The front passenger seat and 2nd row captain's chair anchor point locations are marked with the label shown.

## Installing top tether strap

First, secure the child restraint with the LATCH system (2nd row captain's seating positions and center seating position only of the 3rd row bench seat) or the seat belt, as applicable.



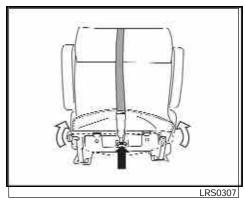
Front passenger seat (2 passenger cargo van only)

For the front passenger seat in the 2 passenger cargo van only, install the top tether strap as follows:

- 1. Adjust the head restraint to its highest position.
- 2. Route the top tether strap between the head restraint and the top of the seatback.
- 3. Secure the tether strap to the tether anchor point on the floor directly behind the seat.

4. Tighten the tether strap according to the manufacturer's instructions to remove any slack

For best child restraint fit, see the child restraint installation instructions in this section and the child restraint manufacturer's instructions.



2nd row captain's chairs (if so equipped)

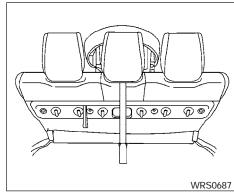
- 1. Top tether strap
- 2. Anchor point

For the 2nd row captain's chairs (if so equipped), install the top tether strap as follows:

- 1. Remove the head restraint. Store it in a secure location.
- 2. Position the top tether strap over the top of the seatback.
- 3. Secure the tether strap to the tether anchor point on the seat directly behind the child restraint.

4. Tighten the tether strap according to the manufacturer's instructions to remove any slack.

For best child restraint fit, see the child restraint installation instructions in this section and the child restraint manufacturer's instructions.

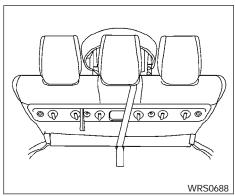


Type A 3rd row bench seat (if so equipped)

- 1. Top tether strap
- 2. Anchor point

## **WARNING**

In the 3rd row bench seat, a child restraint with a top tether strap can only be used in the center position. Do not place in an outboard seating position and attempt to angle the tether strap to the center position.



Type B

The center position of the 3rd row bench seat is the seating position that can use a top tether strap.

For the 3rd row bench seat (if so equipped), install the top tether strap as follows:

- Position the top tether strap under the head restraint (Type A) or position the top tether strap around the side of the head restraint (Type B).
- Secure the tether strap to the tether anchor point on the seat directly behind the child restraint

Tighten the tether strap according to the manufacturer's instructions to remove any slack.

For best child restraint fit, see the child restraint installation instructions in this section and the child restraint manufacturer's instructions.

CHILD RESTRAINT INSTALLATION USING LATCH-2ND ROW CAPTAIN'S CHAIRS (if so equipped)

## **AWARNING**

- Attach LATCH system compatible child restraints only at the locations shown.
   For the LATCH lower anchor locations see "LATCH (Latch Anchors and Tethers for CHildren) system". If a child restraint is not secured properly, your child could be seriously injured or killed in an accident.
- The LATCH anchors are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.

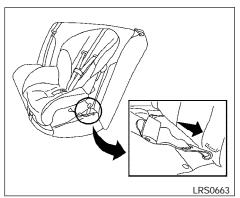
Inspect the lower anchors by inserting your fingers into the lower anchor area and feeling to make sure there are no obstructions over the LATCH anchors, such as seat belt webbing or seat cushion material. The child restraint will not be secured properly if the LATCH anchors are obstructed.

## Front-facing

Follow these steps to install a front-facing child restraint in the 2nd row captain's chairs using LATCH:

- Recline the seatback if the seatback is adjustable to assist in attaching the child restraint to the lower anchors.
- Position the child restraint on the seat. Always follow the child restraint manufacturer's instructions.

#### 1-34 Safety—Seats, seat belts and supplemental restraint system

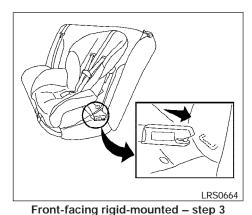


Front-facing web-mounted - step 3

- 3. Secure the child restraint anchor attachments to the LATCH lower anchors. Check to make sure the LATCH attachment is properly attached to the lower anchors.
- 4. Return the seatback to its normal upright and locked position.

The back of the child restraint should be secured against the vehicle seatback.

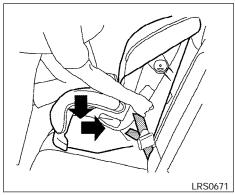
If necessary, adjust or remove the head restraint to obtain the correct child restraint fit. See "Head restraint adjustment" in this section.



If the head restraint is removed, store it in a

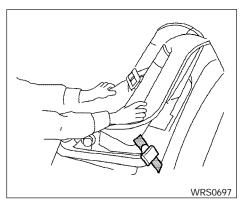
secure place. Be sure to reinstall the head restraint when the child restraint is removed.

If the seating position does not have an adjustable head restraint and it is interfering with the proper child restraint fit, try another seating position or a different child restraint.



Front-facing - step 5

- 5. For child restraints that are equipped with webbing mounted attachments, remove any additional slack from the anchor attachments. Press downward and rearward firmly in the center of the child restraint with your knee to compress the vehicle seat cushion and seatback while tightening the webbing of the anchor attachments.
- 6. If the child restraint is equipped with a top tether strap, route the top tether strap and secure the tether strap to the tether anchor point. See "Top tether strap child restraint" in this section.



Front-facing - step 7

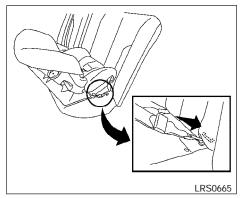
7. After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the seat near the LATCH attachment path. The child restraint should not move more than 1 inch (25 mm), from side to side. Try to tug it forward and check to see if the LATCH attachment holds the restraint in place. If the restraint is not secure, tighten the LATCH attachment as necessary, or put the restraint in another seat and test it again. You may need to try a different child restraint. Not all child restraints fit in all types of vehicles.

 Check to make sure the child restraint is properly secured prior to each use. If the child restraint is loose, repeat steps 4 through 7.

## Rear-facing

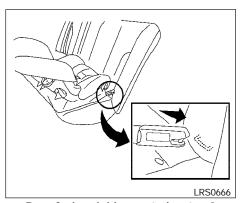
Follow these steps to install a rear-facing child restraint in the 2nd row captain's chairs using LATCH system:

- Recline the seatback if the seatback is adjustable to assist in attaching the child restraint to the lower anchors.
- Position the child restraint on the seat. Always follow the child restraint manufacturer's instructions.

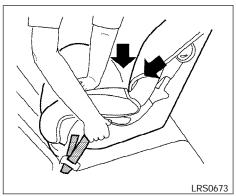


Rear-facing web-mounted - step 3

- Secure the child restraint anchor attachments to the LATCH lower anchors. Check to make sure the LATCH attachment is properly attached to the lower anchors.
- 4. Return the seatback to its normal upright and locked position.

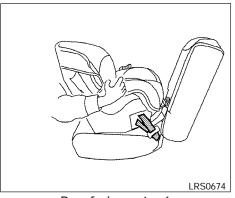


Rear-facing rigid-mounted - step 3



Rear-facing - step 5

5. For child restraints that are equipped with webbing mounted attachments, remove any additional slack from the anchor attachments. Press downward and rearward firmly in the center of the child restraint with your knee to compress the vehicle seat cushion and seatback while tightening the webbing of the anchor attachments.



Rear-facing - step 6

6. After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the seat near the LATCH attachment path. The child restraint should not move more than 1 inch (25 mm), from side to side. Try to tug it forward and check to see if the belt holds the restraint in place. If the restraint is not secure, tighten the belt as necessary, or put the restraint in another seat and test it again. You may need to try a different child restraint. Not all child restraints fit in all types of vehicles.

7. Check to make sure the child restraint is properly secured prior to each use. If the child restraint is loose, repeat steps 3 through 6.

CHILD RESTRAINT INSTALLATION USING LATCH-3RD ROW BENCH SEAT (if so equipped)

### **WARNING**

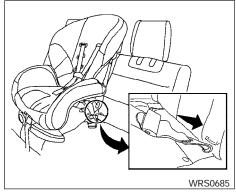
- Attach LATCH system compatible child restraints only at the locations shown. For the LATCH lower anchor locations see "LATCH (Latch Anchors and Tethers for CHildren) system". If a child restraint is not secured properly, your child could be seriously injured or killed in an accident.
- The LATCH anchors are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.

 Inspect the lower anchors by inserting your fingers into the lower anchor area and feeling to make sure there are no obstructions over the LATCH anchors, such as seat belt webbing or seat cushion material. The child restraint will not be secured properly if the LATCH anchors are obstructed.

## Front-facing

Follow these steps to install a front-facing child restraint in the 3rd row bench seats using LATCH:

- 1. Recline the seatback if the seatback is adjustable to assist in attaching the child restraint to the lower anchors.
- 2. Position the child restraint on the seat. Always follow the child restraint manufacturer's instructions.

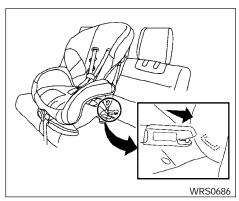


## Front-facing web-mounted - step 3

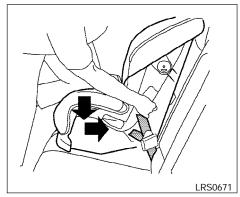
- 3. Secure the child restraint anchor attachments to the LATCH lower anchors. Check to make sure the LATCH attachment is properly attached to the lower anchors.
- 4. Return the seatback to its normal upright and locked position.

The back of the child restraint should be secured against the vehicle seatback.

If the seating position does not have an adjustable head restraint and it is interfering with the proper child restraint fit, try another seating position or a different child restraint.



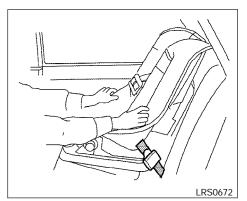
Front-facing rigid-mounted - step 3



Front-facing - step 5

5. For child restraints that are equipped with webbing mounted attachments, remove any additional slack from the anchor attachments. Press downward and rearward firmly in the center of the child restraint with your knee to compress the vehicle seat cushion and seatback while tightening the webbing of the anchor attachments

6. If the child restraint is equipped with a top tether strap, route the top tether strap and secure the tether strap to the tether anchor point. See "Top tether strap child restraint" in this section. Do not install child restraints that require the use of the top tether strap to seating positions that do not have a top tether anchor.



Front-facing - step 7

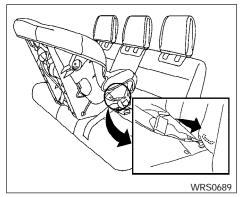
7. After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the seat near the LATCH attachment path. The child restraint should not move more than 1 inch (25 mm), from side to side. Try to tug it forward and check to see if the LATCH attachment holds the restraint in place. If the restraint is not secure, tighten the LATCH attachment as necessary, or put the restraint in another seat and test it again. You may need to try a different child restraint. Not all child restraints fit in all types of vehicles.

8. Check to make sure the child restraint is properly secured prior to each use. If the child restraint is loose, repeat steps 3 through 8.

## Rear-facing

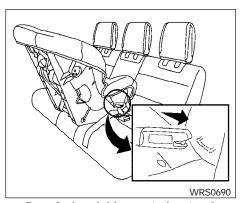
Follow these steps to install a rear-facing child restraint in the 3rd row bench seats using LATCH system:

- Recline the seatback in vehicles with adjustable seatbacks to assist in attaching the child restraint to the lower anchors.
- Position the child restraint on the seat. Always follow the child restraint manufacturer's instructions.

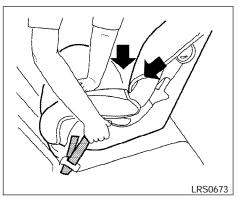


Rear-facing web-mounted - step 3

- Secure the child restraint anchor attachments to the LATCH lower anchors. Check to make sure that the LATCH attachment is properly attached to the lower anchors.
- 4. Return the seatback to its normal upright and locked position.

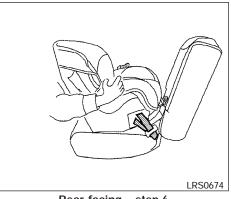


Rear-facing rigid-mounted - step 3



Rear-facing - step 5

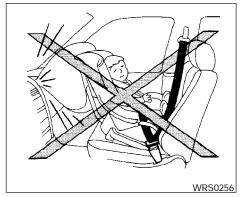
5. For child restraints that are equipped with webbing mounted attachments, remove any additional slack from the anchor attachments. Press downward and rearward firmly in the center of the child restraint with your hand to compress the vehicle seat cushion and seatback while tightening the webbing of the anchor attachments.



Rear-facing - step 6

6. After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the seat near the LATCH attachment path. The child restraint should not move more than 1 inch (25 mm), from side to side. Try to tug it forward and check to see if the belt holds the restraint in place. If the restraint is not secure, tighten the belt as necessary, or put the restraint in another seat and test it again. You may need to try a different child restraint. Not all child restraints fit in all types of vehicles.

7. Check to make sure the child restraint is properly secured prior to each use. If the child restraint is loose, repeat steps 3 through 6.



CHILD RESTRAINT INSTALLATION USING THE SEAT BELTS

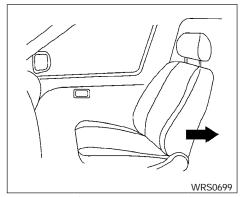
## **WARNING**

Even with the NISSAN Advanced Air Bag System, never install a rear-facing child restraint in the front passenger seat. Front 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.

- NISSAN recommends that child restraints be installed in the rear seat. However, if you must install a frontfacing child restraint in the front center bench seat, follow these instructions carefully.
- The three-point seat belt in your vehicle is equipped with an Automatic Locking Retractor (ALR) which must be used when installing a child restraint.
- Failure to use the ALR mode will result in the child restraint not being properly secured. The restraint could tip over or otherwise be unsecured and cause injury to the child in a sudden stop or collision. Also, it can change the operation of the front passenger air bag. See "Front passenger air bag and status light" later in this section.
- When installing a child restraint system in the rear center position, both the center seat belt connector tongue and buckle tongue must be secured. See "Attaching the 3rd row center seat belt" earlier in this section.

- When using the rear center seat belt to install a child restraint, make sure the connector tongue and the seat belt tongue are secured. Do not use the seat belt with only the seat belt tongue attached. This could result in serious personal injury in case of an accident or sudden stop.
- A child restraint with a top tether strap should not be used in the front passenger seat except for the 2-passenger cargo van.
- Front-facing child restraints can be installed in all 3rd row bench seat positions. However, front-facing child restraints that require the use of a top tether strap can be installed in the center 3rd row position only. Do not install a child restraint requiring a top tether strap in an outboard position and attempt to angle the tether to the 3rd row center anchor.

The instructions in this section apply to child restraint installation using the vehicle seat belts in the rear seats or the front passenger seat.



Front-facing (front passenger seat) - step 1 Front-facing

Follow these steps to install a front-facing child restraint using the vehicle seat belt in the rear seats or in the front passenger seat:

1. If you must install a child restraint in the front seat, it should be placed in a front-facing direction only. Move the seat to the rearmost position. Child restraints for infants must be used in the rear-facing direction and therefore must not be used in the front seat.

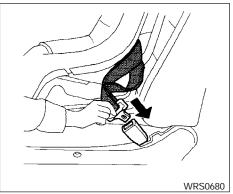
2. Position the child restraint on the seat. Always follow the child restraint manufacturer's instructions.

The back of the child restraint should be secured against the vehicle seatback.

If necessary, adjust or remove the head restraint to obtain the correct child restraint fit. See "Head restraint adjustment" earlier in this section.

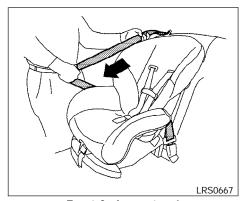
If the head restraint is removed, store it in a secure place. Be sure to reinstall the head restraint when the child restraint is removed.

If the seating position does not have an adjustable head restraint and it is interfering with the proper child restraint fit, try another seating position or a different child restraint.



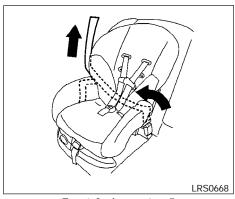
Front-facing - step 3

Route the seat belt tongue through the child restraint and insert it into the buckle until you hear and feel the latch engage. Be sure to follow the child restraint manufacturer's instructions for belt routing.



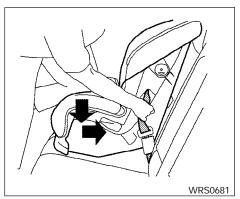
Front-facing - step 4

4. Pull the shoulder belt until the belt is fully extended. At this time, the seat belt retractor is in the Automatic Locking Retractor (ALR) mode (child restraint mode). It reverts to the Emergency Locking Retractor (ELR) mode when the seat belt is fully retracted.



Front-facing – step 5

Allow the seat belt to retract. Pull up on the shoulder belt to remove any slack in the belt.



Front-facing - step 6

6. Remove any additional slack from the seat belt; press downward and rearward firmly in the center of the child restraint with your knee to compress the vehicle seat cushion and seatback while pulling up on the seat belt.



Front-facing - step 7

7. If the child restraint is equipped with a top tether strap, route the top tether strap and secure the tether strap to the tether anchor point. See "Top tether strap child restraint" earlier in this section. Do not install child restraints that require the use of a top tether strap to seating positions that do not have a top tether anchor.

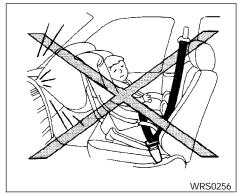
- 8. After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the seat near the seat belt path. The child restraint should not move more than 1 inch (25 mm), from side to side. Try to tug it forward and check to see if the belt holds the restraint in place. If the restraint is not secure, tighten the belt as necessary, or put the restraint in another seat and test it again. You may need to try a different child restraint. Not all child restraints fit in all types of vehicles.
- 9. Check that the retractor is in the ALR mode by trying to pull more seat belt out of the retractor. If you cannot pull any more belt webbing out of the retractor, the retractor is in the ALR mode.
- 10. Check to make sure the child restraint is properly secured prior to each use. If the seat belt is not locked, repeat steps 3 through 8.



Front-facing - step 11

11. If the child restraint is installed in the front passenger seat, turn the ignition switch to the ON position. The front passenger air bag status light 🌋 should illuminate. If this light is not illuminated see "Front passenger air bag and status light" later in this section. Move the child restraint to another seating position. Have the system checked by a NISSAN dealer.

After the child restraint is removed and the seat belt is fully retracted, the ALR mode (child restraint mode) is canceled.

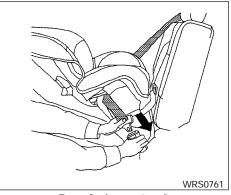


Rear-facing - step 1

## Rear-facing

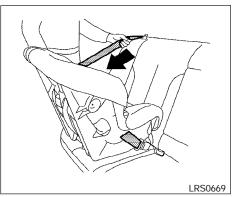
Follow these steps to install a rear-facing child restraint using the vehicle seat belt in the rear seats:

1. Child restraints for infants must be used in the rear-facing direction and therefore must not be used in the front seat. Position the child restraint on the seat. Always follow the restraint manufacturer's instructions.



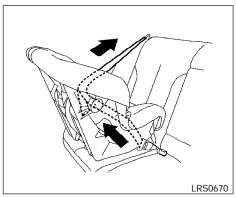
Rear-facing - step 2

2. Route the seat belt tongue through the child restraint and insert it into the buckle until you hear and feel the latch engage. Be sure to follow the child restraint manufacturer's instructions for belt routing.



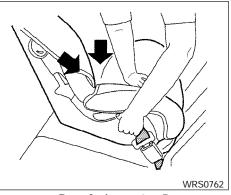
Rear-facing - step 3

3. Pull the shoulder belt until the belt is fully extended. At this time, the seat belt retractor is in the Automatic Locking Retractor (ALR) mode (child restraint mode). It reverts to the Emergency Locking Retractor (ELR) mode when the seat belt is fully retracted.



Rear-facing - step 4

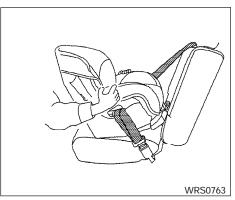
4. Allow the seat belt to retract. Pull up on the shoulder belt to remove any slack in the belt.



Rear-facing - step 5

5. Remove any additional slack from the child restraint; press downward and rearward firmly in the center of the child restraint to compress the vehicle seat cushion and seatback while pulling up on the seat belt.

#### **BOOSTER SEATS**

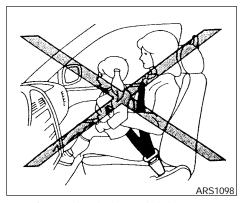


Rear-facing - step 6

6. After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the seat near the seat belt path. The child restraint should not move more than 1 inch (25 mm), from side to side. Try to tug it forward and check to see if the belt holds the restraint in place. If the restraint is not secure, tighten the belt as necessary, or put the restraint in another seat and test it again. You may need to try a different child restraint. Not all child restraints fit in all types of vehicles.

- 7. Check that the retractor is in the ALR mode by trying to pull more seat belt out of the retractor. If you cannot pull any more seat belt webbing out of the retractor, the retractor is in the ALR mode.
- 8. Check to make sure that the child restraint is properly secured prior to each use. If the seat belt is not locked, repeat steps 3 through 7.

After the child restraint is removed and the seat belt fully retracted, the ALR mode (child restraint mode) is canceled.



PRECAUTIONS ON BOOSTER **SFATS** 

#### **WARNING**

 Infants and small children should always be placed in an appropriate child restraint while riding in the vehicle. Failure to use a child restraint or booster seat can result in serious injury or death.

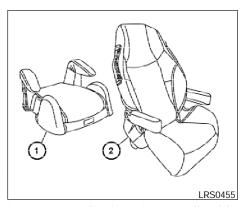
- Infants and small children should never be carried on your lap. It is not possible for even the strongest adult to resist the forces of a severe accident. The child could be crushed between the adult and parts of the vehicle. Also, do not put the same seat belt around both your child and yourself.
- NISSAN recommends that the booster seat be installed in the rear seat. According to accident statistics, children are safer when properly restrained in the rear seat than in the front seat. If you must install a booster seat in the front seat, see "Booster seat installation" in this section.
- A booster seat must only be installed in a seating position that has a lap/shoulder belt. Failure to use a three-point type seat belt with a booster seat can result in a serious injury in sudden stop or collision.
- Improper use or improper installation of a booster seat can increase the risk or severity of injury for both the child and other occupants of the vehicle and can lead to serious injury or death in an accident.

- Do not use towels, books, pillows or other items in place of a booster seat. Items such as these may move during normal driving or a collision and result in serious injury or death. Booster seats are designed to be used with a lap/shoulder belt. Booster seats are designed to properly route the lap and shoulder portions of the seat belt over the strongest portions of a child's body to provide the maximum protection during a collision.
- Follow all of the booster seat manufacturer's instructions for installation and use. When purchasing a booster seat, be sure to select one which will fit your child and vehicle. It may not be possible to properly install some types of booster seats in your vehicle.
- If the booster seat and seat belt is not used properly, the risk of a child being injured in a collision or a sudden stop greatly increases.
- Adjustable seatbacks should be positioned to fit the booster seat, but as upright as possible.

- After placing the child in the booster seat and fastening the seat belt, make sure the shoulder portion of the belt is away from the child's face and neck and the lap portion of the belt does not cross the abdomen.
- Do not put the shoulder belt behind the child or under the child's arm. If you must install a booster seat in the front seat, see "Booster seat installation" later in this section.
- When your booster seat 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.

## **A**CAUTION

Remember that a booster seat left in a closed vehicle can become very hot. Check the seating surface and buckles before placing your child in the booster seat.



Booster seats of various sizes are offered by several manufacturers. When selecting any booster seat, keep the following points in mind:

- Choose only a booster seat with a label certifying that it complies with Federal Motor Vehicle Safety Standard 213 or Canadian Motor Vehicle Safety Standard 213.
- Check the booster seat in your vehicle to be sure it is compatible with the vehicle's seat and seat belt system.



- Make sure the child's head will be properly supported by the booster seat or vehicle seat. The seatback must be at or above the center of the child's ears. For example, if a low back booster seat ① is chosen, the vehicle seatback must be at or above the center of the child's ears. If the seatback is lower than the center of the child's ears, a high back booster seat ② should be used.
- If the booster seat is compatible with your vehicle, place your child in the booster seat and check the various adjustments to be sure the booster seat is compatible with your child. Always follow all recommended procedures.



All U.S. states and Canadian provinces or territories require that infants and small children be restrained in an approved child restraint at all times while the vehicle is being operated.

The instructions in this section apply to booster seat installation in the rear seats or the front passenger seat.

#### **BOOSTER SEAT INSTALLATION**

## **A** WARNING

NISSAN recommends that booster seats be installed in the rear seat. However, if you must install a booster seat in the front passenger seat, move the passenger's seat to the rearmost position.

#### **A**CAUTION

Do not use the lap/shoulder belt Automatic Locking Retractor mode when using a booster seat with the seat belts.

Follow these steps to install a booster seat in the rear seat or in the front passenger seat:



- 1. If you must install a booster seat in the front seat, move the seat to the rearmost position.
- 2. Position the booster seat on the seat. Only place it in a front-facing direction. Always follow the booster seat manufacturer's instructions.



Rear center position



Rear outboard position

- The booster seat should be positioned on the vehicle seat so that it is stable. If necessary, adjust or remove the head restraint to obtain the correct booster seat fit. See "Head restraint adjustment" earlier in this section.
  - If the head restraint is removed, store it in a secure place. Be sure to reinstall the head restraint when the booster seat is removed.
  - If the seating position does not have an adjustable head restraint and it is interfering with the proper booster seat fit, try another seating position or a different booster seat.

- Position the lap portion of the seat belt low and snug on the child's hips. Be sure to follow the booster seat manufacturer's instructions for adjusting the seat belt routing.
- 5. Pull the shoulder belt portion of the seat belt toward the retractor to take up extra slack. Be sure the shoulder belt is positioned across the top, middle portion of the child's shoulder. Be sure to follow the booster seat manufacturer's instructions for adjusting the seat belt routing.



#### Front passenger position

Follow the warnings, cautions and instructions for properly fastening a seat belt shown in "Three-point type seat belt with retractor" earlier in this section.



WRS0475

7. If the booster seat is installed in the front passenger seat, place the ignition switch in the ON position. The front passenger air bag status light 🌋 may or may not illuminate, depending on the size of the child and the type of booster seat being used. See "Front passenger air bag and status light" later in this section.

#### SUPPLEMENTAL RESTRAINT **SYSTEM**

# PRECAUTIONS ON SUPPLEMENTAL RESTRAINT **SYSTEM**

This Supplemental Restraint System (SRS) section contains important information concerning the following systems:

- Driver and passenger supplemental frontimpact air bag (NISSAN Advanced Air Bag System)
- Front seat-mounted side-impact supplemental air bag
- Roof-mounted curtain side-impact supplemental air bag
- Seat belt with pretensioner

Supplemental front-impact air bag system: The NISSAN Advanced Air Bag System can help cushion the impact force to the head and chest of the driver and front passenger in certain frontal collisions.

Front seat-mounted side-impact supplemental air bag system: This system can help cushion the impact force to the chest area of the driver and front passenger in certain side impact collisions. The side air bags are designed to inflate on the side where the vehicle is impacted.

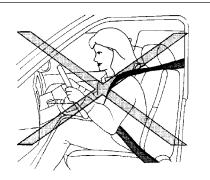
Roof-mounted curtain side-impact supplemental air bag system: This system can help cushion the impact force to the head of occupants in front and rear outboard seating positions in certain side impact collisions. The curtain air bags are designed to inflate on the side where the vehicle is impacted.

These supplemental restraint systems are designed to supplement the crash protection provided by the seat belts and are not a substitute for them. Seat belts should always be correctly worn and the occupant seated a suitable distance away from the steering wheel, instrument panel and door finishers. See "Seat belts" earlier in this section for instructions and precautions on seat belt usage.

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

After placing the ignition switch in 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.



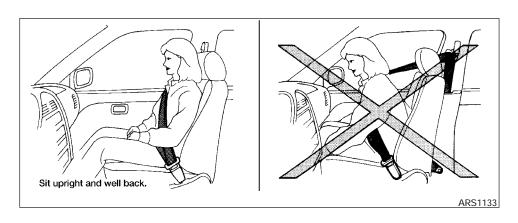


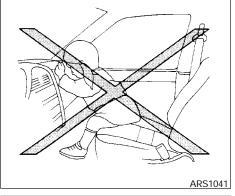
WRS0031

### **AWARNING**

- The front air bags ordinarily will not inflate in the event of a side impact, rear impact, rollover, 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 front passenger air bag will not inflate if the passenger air bag status light is lit or if the front passenger seat is unoccupied. See "Front passenger air bag and status light" later in this section.
- The seat belts and the front air bags are most effective when you are sitting well back and upright in the seat. The front air bags inflate with great force. Even with the NISSAN Advanced Air Bag System, 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. You may also receive serious or fatal injuries from the front air bag if you are up against it when it inflates. Always sit back against the seatback and as far away as practical from the steering wheel or instrument panel. Always use the seat belts.

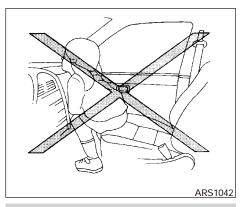
- The driver and front passenger seat belt buckles are equipped with sensors that detect if the seat belts are fastened. The Advanced Air Bag System monitors the severity of a collision and seat belt usage then inflates the air bags. Failure to properly wear seat belts can increase the risk or severity of injury in an accident.
- The front passenger seat is equipped with an occupant classification sensor (pressure sensor) that turns the front passenger air bag OFF under some conditions. This sensor is only used in this seat. Failure to be properly seated and wearing the seat belt can increase the risk or severity of injury in an accident. See "Front passenger air bag and status light" later in this section.
- Keep hands on the outside of the steering wheel. Placing them inside the steering wheel rim could increase the risk that they are injured when the front air bag inflates.

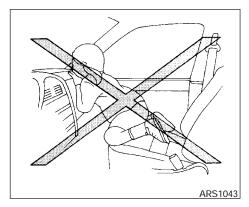


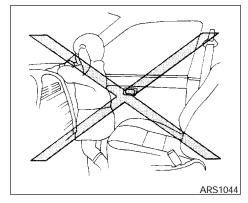


## **WARNING**

 Never let children ride unrestrained or extend their hands or face out of the window. Do not attempt to hold them in your lap or arms. Some examples of dangerous riding positions are shown in the illustrations.

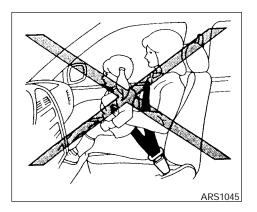


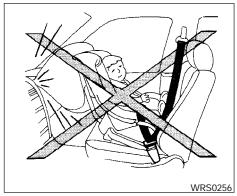




# **WARNING**

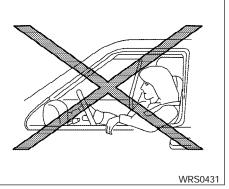
Children may be severely injured or killed when the front air bags, side air bags or curtain and rollover air bags inflate if they are not properly restrained. Pre-teens and children should be properly restrained in the rear seat, if possible.





# **WARNING**

Even with the NISSAN Advanced Air Bag System, never install a rear-facing child restraint in the front seat. An inflating front air bag could seriously injure or kill your child. See "Child restraints" earlier in this section for details.



Do not lean against the door.

# **AWARNING**

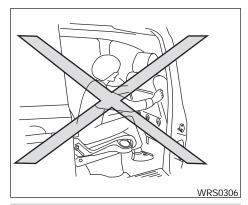
Front seat-mounted side-impact supplemental air bags and roof-mounted curtain side-impact supplemental air bags:

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



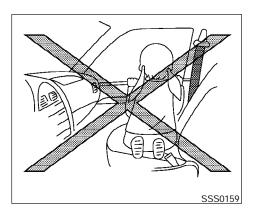
## **AWARNING**

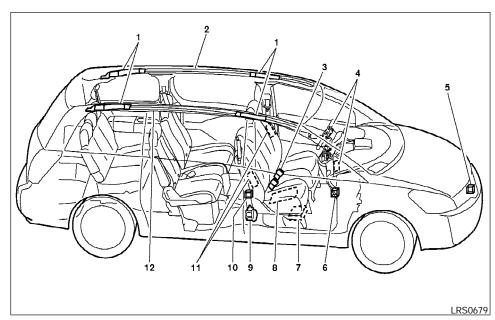
The seat belts, the side air bags and curtain air bags are most effective when you are sitting well back and upright in the seat with both feet on the floor. The side air bag and curtain air bag inflate with great force. Do not allow anyone to place their hand, leg or face near the side air bag on the side of the seatback of the front seat or near the side roof rails. Do not allow anyone sitting in the front seats or rear outboard seats to extend their hand out of the window or lean against the door. Some examples of dangerous riding positions are shown in the previous illustrations.



# **WARNING**

- When sitting in the 2nd row rear seat, do not hold onto the seatback of the front seat. If the side air bag inflates, you may be seriously injured. Be especially careful with children, who should always be properly restrained. Some examples of dangerous riding positions are shown in the illustrations.
- Do not use seat covers on the front seatbacks. They may interfere with side air bag inflation.





- Roof-mounted curtain side-impact supplemental air bag inflators
- 2. Roof-mounted curtain side-impact supplemental air bag (driver's side)
- 3. Seat belt buckle switches

- Supplemental front-impact air bag modules
- 5. Crash zone sensor
- 6. Air bag Control Unit (ACU)
- Occupant classification system control unit

- 8. Occupant classification sensor (pressure sensor)
- Seat belt with pretensioner
- 10. Satellite sensors
- 11. Front seat-mounted side-impact supplemental air bag modules
- 12. Roof-mounted curtain side-impact supplemental air bag (passenger's side)

# NISSAN Advanced Air Bag System (front seats)

This vehicle is equipped with the NISSAN Advanced Air Bag System for the driver and front passenger seats. This system is designed to meet certification requirements under U.S. regulations. It is also permitted in Canada. However, all of the information, cautions and warnings in this manual still apply and must be followed.

The driver supplemental front-impact air bag is located in the center of the steering wheel. The passenger supplemental front-impact air bag is mounted in the dashboard above the glove box. The front 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. They may not inflate in certain frontal collisions.

#### 1-60 Safety—Seats, seat belts and supplemental restraint system

Vehicle damage (or lack of it) is not always an indication of proper front air bag system operation.

The NISSAN Advanced Air Bag System has dual stage inflators. It also monitors information from the crash zone sensor, the Air bag Control Unit (ACU), seat belt buckle sensors, occupant classification sensor (pressure sensor) and passenger seat belt tension sensor. Inflator operation is based on the severity of a collision and seat belt usage for the driver. For the front passenger, it additionally monitors the weight of an occupant or object on the seat and seat belt tension. Based on information from the sensors, only one front air bag may inflate in a crash, depending on the crash severity and whether the front occupants are belted or unbelted. Additionally, the front passenger air bag may be automatically turned OFF under some conditions, depending on the weight detected on the passenger seat and how the seat belt is used. If the front passenger air bag is OFF, the passenger air bag status light will be illuminated (if the seat is unoccupied, the light will not be illuminated, but the air bag will be off). See "Front passenger air bag and status light" later in this section for further details. One front air bag inflating does not indicate improper performance of the system.

If you have any questions about your air bag system, please contact NISSAN or your NISSAN dealer. If you are considering modification of your vehicle due to a disability, you may also contact NISSAN. Contact information is contained in the front of this Owner's Manual.

When a front air bag inflates, a fairly loud noise may be heard, followed by the release of smoke. This smoke is not harmful and does not indicate a fire. Care should be taken to not inhale it, as it may cause irritation and choking. Those with a history of a breathing condition should get fresh air promptly.

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 front air bag may cause facial abrasions or other injuries. Front air bags do not provide restraint to the lower body.

Even with the NISSAN Advanced Air Bag System, seat belts should be correctly worn and the driver and passenger seated upright as far as practical away from the steering wheel or instrument panel. The front air bags inflate quickly in order to help protect the front occupants. Because of this, the force of the front air bag inflating can increase the risk of injury if the occupant is too close to, or is against, the front air bag module during inflation.

The front air bags deflate quickly after a collision.

The front air bags operate only when the ignition switch is in the ON or START position.

After placing the ignition switch in 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.



Front passenger air bag and status light

## **WARNING**

The front passenger air bag is designed to automatically turn OFF under some conditions. Read this section carefully to learn how it operates. Proper use of the seat, seat belt and child restraints is necessary for most effective protection. Failure to follow all instructions in this manual concerning the use of seats, seat belts and child restraints can increase the risk or severity of injury in an accident.

#### Status light

The front passenger air bag status light 🌋 is located near the climate controls in the center of the instrument panel. The light operates as follows:

- Unoccupied passenger seat: The is OFF and the front passenger air bag is OFF and will not inflate in a crash.
- Passenger seat occupied by a small adult, child or child restraint as outlined in this section: The 🌋 illuminates to indicate that the front passenger air bag is OFF and will not inflate in a crash.
- Occupied passenger seat and the passenger meets the conditions outlined in this section: The light \* is OFF to indicate that the front passenger air bag is operational.

#### Front passenger air bag

The front passenger air bag is designed to automatically turn OFF when the vehicle is operated under some conditions as described below in accordance with U.S. regulations. If the front passenger air bag is OFF, it will not inflate in a crash. The driver air bag and other air bags in your vehicle are not part of this system.

The purpose of the regulation is to help reduce the risk of injury or death from an inflating air bag to certain front passenger seat occupants, such as children, by requiring the air bag to be automatically turned OFF. Certain sensors are used to meet the requirements.

One sensor used is the occupant classification sensor (pressure sensor). It is in the bottom of the front passenger seat cushion and is designed to detect an occupant and objects on the seat by weight. It works together with seat belt sensors described later. For example, if a child is in the front passenger seat, the Advanced Air Bag System is designed to turn the passenger air bag OFF in accordance with the regulations. Also, if a child restraint of the type specified in the regulations is on the seat, its weight and the child's weight can be detected and cause the air bag to turn OFF. Occupant classification sensor operation can vary depending on the front passenger seat belt sensors.

The front passenger seat belt sensors are designed to detect if the seat belt is buckled and the amount of tension on the seat belt, such as when it is in the Automatic Locking Retractor (ALR) mode (child restraint mode). Based on the weight on the seat detected by the occupant classification sensor and the belt tension detected on the seat belt, the Advanced Air Bag System determines whether the front passenger

air bag should be automatically turned OFF as required by the regulations.

Front passenger seat adult occupants who are properly seated and using the seat belt as outlined in this manual should not cause the passenger air bag to be automatically turned OFF. For small adults it may be turned OFF, however, if the occupant takes his/her weight off the seat cushion (for example, by not sitting upright, by sitting on an edge of the seat, or by otherwise being out of position), this could cause the sensor to turn the air bag OFF. In addition, if the occupant improperly uses the seat belt in the ALR mode, this could cause the air bag to be turned OFF. Always be sure to be seated and wearing the seat belt properly for the most effective protection by the seat belt and supplemental air bag.

NISSAN recommends that pre-teens and children be properly restrained in a rear seat. NISSAN also recommends that appropriate child restraints and booster seats be properly installed in a rear seat. If this is not possible, the occupant classification sensor and seat belt sensors are designed to operate as described above to turn the front passenger air bag OFF for specified child restraints as required by the regulations. Failing to properly secure child restraints and to use the ALR mode may allow the restraint to tip or move in an accident or sudden stop. This can also result in the passenger air bag inflating in a crash instead of being OFF. See "Child restraints" earlier in this section for proper use and installation.

If the front passenger seat is not occupied, the passenger air bag is designed not to inflate in a crash. However, heavy objects placed on the seat could result in air bag inflation because of the object's weight detected by the occupant classification sensor. Other conditions could also result in air bag inflation, such as if a child is standing on the seat, or if two children are on the seat, contrary to the instructions in this manual. Always be sure that you and all vehicle occupants are seated and restrained properly.

Using the passenger air bag status light, you can monitor when the front passenger air bag is automatically turned OFF with the seat occupied. The light will not illuminate when the front passenger seat is unoccupied.

If an adult occupant is in the seat but the passenger air bag status light is illuminated (indicating that the air bag is OFF), it could be that the person is a small adult or is not sitting on the seat properly or not using the seat belt properly.

If a child restraint must be used in the front seat. the passenger air bag status light may or may not be illuminated, depending on the size of the child and the type of child restraint being used. If the air bag status light is not illuminated (indicating that the air bag might inflate in a crash), it could be

that the child restraint or seat belt is not being used properly. Make sure that the child restraint is installed properly, the seat belt is used properly and the occupant is positioned properly. If the air bag status light is not illuminated, reposition the occupant or child restraint in a rear seat.

If the passenger air bag status light will not illuminate even though you believe that the child restraint, the seat belts and the occupant are properly positioned, the system may be sensing an unoccupied seat (in which case the air bag is OFF). Your NISSAN dealer can check that the system is OFF by using a special tool. However, until you have confirmed with your dealer that your air bag is working properly, reposition the occupant or child restraint in a rear seat.

The air bag system and passenger air bag status light will take a few seconds to register a change in the passenger seat status. For example, if a large adult who is sitting in the front passenger seat exits the vehicle, the passenger air bag status light will go from OFF to ON for a few seconds and then to OFF. This is normal system operation and does not indicate a malfunction.

If a malfunction occurs in the front passenger air bag system, the supplemental air bag warning light \* , located in the meter and gauges area of the instrument panel, will blink. Have the system checked by a NISSAN dealer.

Other supplemental front-impact air bag precautions

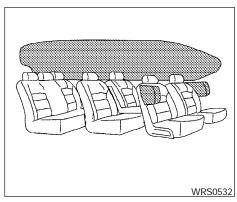
#### **AWARNING**

- Do not place any objects on the steering wheel pad or on the instrument panel. Also, do not place any objects between any occupant and the steering wheel or instrument panel. Such objects may become dangerous projectiles and cause injury if the front air bags inflate.
- Immediately after inflation, several front air bag system components will be hot. Do not touch them; you may severely burn yourself.
- No unauthorized changes should be made to any components or wiring of the supplemental air bag system. This is to prevent accidental inflation of the supplemental air bag or damage to the supplemental air bag system.
- Do not make unauthorized changes to your vehicle's electrical system, suspension system or front end structure.
   This could affect proper operation of the front air bag system.

- Tampering with the front air bag system may result in serious personal injury.
   Tampering includes changes to the steering wheel and the instrument panel assembly by placing material over the steering wheel pad and above the instrument panel or by installing additional trim material around the air bag system.
- Modifying or tampering with the front passenger seat may result in serious personal injury. For example, do not change the front seats by placing material on the seat cushion or by installing additional trim material, such as seat covers, on the seat that are not specifically designed to assure proper air bag operation. Additionally, do not stow any objects under the front passenger seat or the seat cushion and seatback. Such objects may interfere with the proper operation of the occupant classification sensor (pressure sensor).
- No unauthorized changes should be made to any components or wiring of the seat belt system. This may affect the front air bag system. Tampering with the seat belt system may result in serious personal injury.

- Work on and around the front air bag system should be done by a NISSAN dealer. Installation of electrical equipment should also be done by a NISSAN dealer. The Supplemental Restraint System (SRS) wiring should not be modified or disconnected. Unauthorized electrical test equipment and probing devices should not be used on the air bag system.
- A cracked windshield should be replaced immediately by a qualified repair facility. A cracked windshield could affect the function of the supplemental air bag system.
- The SRS wiring harness connectors are yellow and orange for easy identification.

When selling your vehicle, we request that you inform the buyer about the front air bag system and guide the buyer to the appropriate sections in this Owner's Manual.



Front seat-mounted side-impact supplemental air bag and roofmounted curtain side-impact supplemental air bag systems

The side air bags are located in the outside of the seatback of the front seats. The curtain air bags are located in the side roof rails. These systems are designed to meet voluntary guidelines to help reduce the risk of injury to out-of-position occupants. However, all of the information, cautions and warnings in this manual still apply and must be followed. The side air bags and curtain air bags are designed to inflate in higher severity side collisions, although they may

inflate if the forces in another type of collision are similar to those of a higher severity side impact. They are designed to inflate on the side where the vehicle is impacted. They may not inflate in certain side collisions.

Vehicle damage (or lack of it) is not always an indication of proper side air bag and curtain air bag operation.

When the side air bags and curtain air bags inflate, a fairly loud noise may be heard, followed by release of smoke. This smoke is not harmful and does not indicate a fire. Care should be taken not to inhale it, as it may cause irritation and choking. Those with a history of a breathing condition should get fresh air promptly.

Side air bags, along with the use of seat belts, help to cushion the impact force on the chest of the front occupants. Curtain air bags help to cushion the impact force to the head of occupants in the front and rear outboard seating positions. They can help save lives and reduce serious injuries. However, an inflating side air bag and curtain air bag may cause abrasions or other injuries. Side air bags and curtain 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 side air bag. Rear seat passengers should be seated as far away as

practical from the door finishers and side roof rails. The side air bags and curtain air bags inflate quickly in order to help protect the front and rear outboard occupants. Because of this, the force of the side air bag and curtain air bag inflating can increase the risk of injury if the occupant is too close to, or is against, these air bag modules during inflation. The side air bag and curtain air bag will deflate quickly after the collision is over.

The side air bags and curtain air bags operate only when the ignition switch is in the ON or START position.

After placing the ignition switch in 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**

Do not place any objects near the seatback of the front seats. Also, do not place any objects (an umbrella, bag, etc.) between the front door finisher and the front seat. Such objects may become dangerous projectiles and cause injury if a side air bag inflates.

- Right after inflation, several side air bag and curtain air bag system components will be hot. Do not touch them: you may severely burn yourself.
- No unauthorized changes should be made to any components or wiring of the side air bag and curtain air bag systems. This is to prevent damage to or accidental inflation of the side air bag and curtain air bag systems.
- Do not make unauthorized changes to your vehicle's electrical system, suspension system or side panel. This could affect proper operation of the side air bag and curtain air bag systems.
- Tampering with the side air bags may result in serious personal injury. For example, do not change the front seats by placing material near the seatbacks or by installing additional trim material, such as seat covers, around the side air bag.

- Work around and on the side air bag and curtain air bag systems should be done by a NISSAN dealer. Installation of electrical equipment should also be done by a NISSAN dealer. The SRS wiring harnesses\* should not be modified or disconnected. Unauthorized electrical test equipment and probing devices should not be used on the side air bag system.
- \* The SRS wiring harness connectors are yellow and orange for easy identification.

When selling your vehicle, we request that you inform the buyer about the side air bag and curtain air bag systems and guide the buyer to the appropriate sections in this Owner's Manual.

Seat belts with pretensioners (front seats)

#### **AWARNING**

• The pretensioners cannot be reused after activation. They must be replaced together with the retractor and buckle as a unit.

- If the vehicle becomes involved in a frontal collision but a pretensioner is not activated, be sure to have the pretensioner system checked and, if necessary, replaced by your NISSAN dealer.
- No unauthorized changes should be made to any components or wiring of the pretensioner system. This is to prevent damage to or accidental activation of the pretensioners. Tampering with the pretensioner system may result in serious personal injury.
- Work around and on the pretensioner system should be done by a NISSAN dealer. Installation of electrical equipment should also be done by a NISSAN dealer. Unauthorized electrical test equipment and probing devices should not be used on the pretensioner system.
- If you need to dispose of a pretensioner or scrap the vehicle, contact a NISSAN dealer. Correct pretensioner disposal procedures are set forth in the appropriate NISSAN Service Manual Incorrect disposal procedures could cause personal injury.

The pretensioner system activates in conjunction with the front air bag system. Working with the seat belt retractor, it helps tighten the seat belt when the vehicle becomes involved in certain types of collisions, helping to restrain front seat occupants.

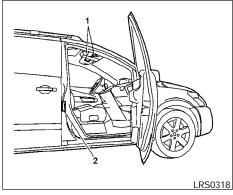
The pretensioner is encased within the seat belt retractor. These seat belts are used the same way as conventional seat belts.

When a pretensioner activates, smoke is released and a loud noise may be heard. This smoke is not harmful and does not indicate a fire. Care should be taken not to inhale it, as it may cause irritation and choking. Those with a history of a breathing condition should get fresh air promptly.

After pretensioner activation, load limiters allow the seat belt to release webbing (if necessary) to reduce forces against the chest.

If any abnormality occurs in the pretensioner system, the supplemental air bag warning light \* will not come on, will flash intermittently or will turn on for 7 seconds and remain on after the ignition switch has been placed in the ON or START position. In this case, the pretensioner system may not function properly. They must be checked and repaired. Take your vehicle to the nearest NISSAN dealer.

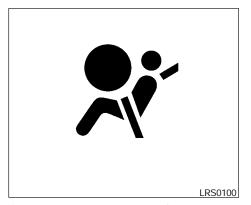
When selling your vehicle, we request that you inform the buyer about the pretensioner system and quide the buyer to the appropriate sections in this Owner's Manual.



- SRS Air Bag Warning Labels (located on the sun visors)
- SRS Side Air Bag Warning Labels (located on the door pillar)

## SUPPLEMENTAL AIR BAG WARNING LABELS

Warning labels about the supplemental frontimpact air bag, front seat-mounted side-impact supplemental air bag and roof-mounted curtain side-impact supplemental air bag systems are placed in the vehicle as shown in the illustration.



# SUPPLEMENTAL AIR BAG WARNING LIGHT

The supplemental air bag warning light, displaying in the instrument panel, monitors the circuits of the supplemental front-impact air bag, front seat-mounted side-impact supplemental air bag, roof-mounted curtain side-impact supplemental air bag and seat belt pretensioner systems. The monitored circuits include the Air bag Control Unit (ACU), crash zone sensor, satellite sensors, occupant classification system, front air bag modules, side air bag modules, curtain air bag modules, pretensioners and all related wiring.

When the ignition switch is placed in the ON or START position, the supplemental air bag warning light illuminates for about 7 seconds and then turns off. This means the system is operational.

If any of the following conditions occur, the front air bag, side air bag, curtain air bag and pretensioner systems need servicing:

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

Under these conditions, the front air bag, side air bag, curtain air bag or pretensioner systems may not operate properly. They must be checked and repaired. Take your vehicle to the nearest NISSAN dealer.

## **A** WARNING

If the supplemental air bag warning light is on, it could mean that the front air bag, side air bags, curtain air bag and/or pretensioner systems will not operate in an accident. To help avoid injury to yourself or others, have your vehicle checked by a NISSAN dealer as soon as possible.

# Repair and replacement procedure

The front air bags, side air bags, curtain air bags and pretensioners are designed to inflate on a one-time-only basis. As a reminder, unless it is damaged, the supplemental air bag warning light remains illuminated after inflation has occurred. Repair and replacement of these supplemental air bag systems should be done only by a NISSAN dealer.

When maintenance work is required on the vehicle, the front air bags, side air bags, curtain air bags, pretensioners and related parts should be pointed out to the person performing the maintenance. The ignition switch should always be placed in the LOCK position when working under the hood or inside the vehicle.

## **A**WARNING

 Once a front air bag, side air bag, or curtain air bag has inflated, the air bag module will not function again and must be replaced. Additionally, if any of the front air bags inflate, the activated pretensioners must also be replaced. The air bag module and pretensioners should be replaced by a NISSAN dealer. The air bag module and pretensioners cannot be repaired.

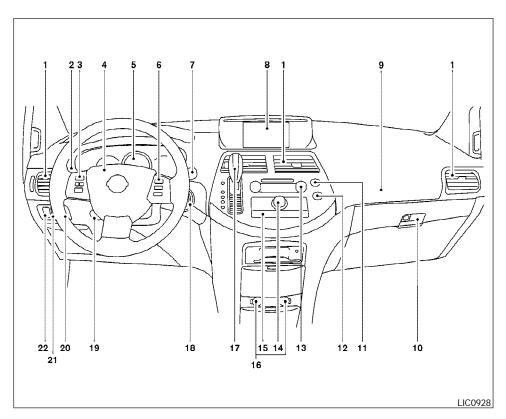
- The front air bag, side air bag, curtain air bag systems and the pretensioner system should be inspected by a NISSAN dealer if there is any damage to the front end or side portion of the vehicle.
- If you need to dispose of a supplemental air bag or pretensioner or scrap the vehicle, contact a NISSAN dealer. Correct supplemental air bag and pretensioner system disposal procedures are set forth in the appropriate NISSAN Service Manual. Incorrect disposal procedures could cause personal injury.

# 2 Instruments and controls

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#### **INSTRUMENT PANEL**

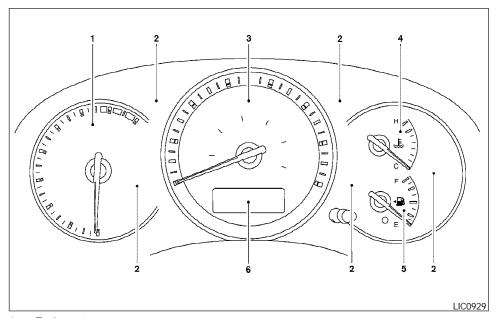


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#### **METERS AND GAUGES**

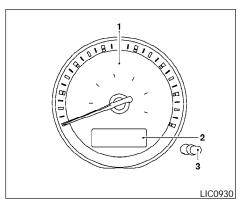
- Power outlets (P. 2-26)
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See the page number indicated in parentheses for operating details.



- **Tachometer**
- Warning/indicator lights
- Speedometer
- Engine coolant temperature gauge
- Fuel gauge
- Odometer/Twin trip odometer

- Speedometer
- Odometer
- Change button



## SPEEDOMETER AND ODOMETER

# Speedometer

The speedometer indicates vehicle speed.

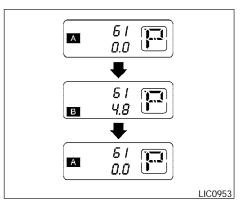
# Odometer/Twin trip odometer

The odometer/twin trip odometer is displayed when the ignition switch is placed in the ON position.

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

The twin trip odometer records the distance of individual trips.

#### 2-4 Instruments and controls



#### Changing the display:

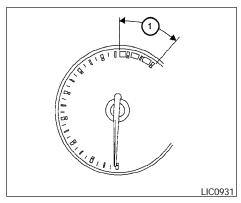
Pushing the change button changes the display as follows:

Trip 
$$\mathbf{A} \rightarrow \text{Trip } \mathbf{B} \rightarrow \text{Trip } \mathbf{A}$$

#### Resetting the trip odometer:

Pushing the change button for more than 1 second resets the currently displayed trip odometer to zero.

Elapsed time, driving distance and average speed information is also available. Refer to "Control panel buttons" in the "Display screen, heater, air conditioner, audio and phone systems" section later in this manual.

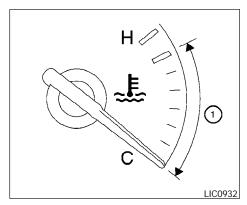


#### **TACHOMETER**

The tachometer indicates engine speed in revolutions per minute (rpm). Do not rev the engine into the red zone  $\widehat{1}$ .

# **A**CAUTION

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



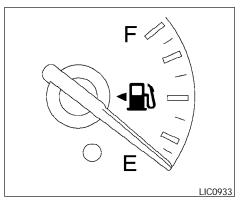
# **FNGINF COOLANT TEMPERATURE GAUGE**

The gauge indicates the engine coolant temperature. The engine coolant temperature is within the normal range (1) when the gauge needle points within the zone shown in the illustration.

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

#### **A** CAUTION

If the gauge indicates coolant temperature near the hot (H) end of the normal range, reduce vehicle speed to decrease temperature. If the gauge is over the normal range, stop the vehicle as soon as safely possible. If the engine is overheated, continued operation of the vehicle may seriously damage the engine. See "If your vehicle overheats" in the "In case of emergency" section for immediate action required.



#### **FUFL 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 hills.

The gauge needle returns to E (Empty) after the ignition switch is placed in the OFF position.

The low fuel warning light comes on when the amount of fuel in the tank is getting low.

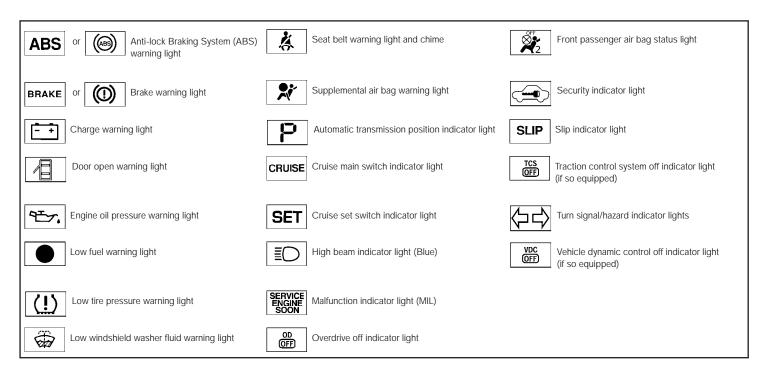
Refill the fuel tank before the gauge registers E (Empty).

indicates that the fuel-filler door is located on the driver's side of the vehicle.

## **A**CAUTION

- If the vehicle runs out of fuel, the ENGINE Malfunction Indicator Light SOON (MIL) may come on. Refuel as soon as possible. After a few driving trips, the ENGINE light should turn off. If the light remains on after a few driving trips, have the vehicle inspected by a NISSAN dealer.
- For additional information, see "Malfunction Indicator Light (MIL)" later in this section.

#### WARNING/INDICATOR LIGHTS AND **AUDIBLE REMINDERS**

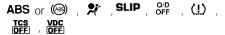


#### **CHECKING BULBS**

With all doors closed, apply the parking brake and place the ignition switch in the ON position 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



When the ignition switch is placed in the ON position, the Anti-lock Braking System (ABS) warning light illuminates and then turns off. This indicates the ABS is operational.

If the ABS warning light illuminates while the engine is running, or while driving, it may indicate the ABS is not functioning properly. Have the system checked by a NISSAN dealer.

If an ABS malfunction occurs, the anti-lock function is turned off. The brake system then operates normally, but without anti-lock assistance. See "Brake system" in the "Starting and driving" section.

BRAKE



Brake warning light

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

#### Parking brake indicator

When the ignition switch is placed in the ON position, the light comes on when the parking brake is applied.

## Low brake fluid warning light

When the ignition switch is placed in the ON position, 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:

 Check the brake fluid level. Add brake fluid as necessary. See "Brake fluid" in the "Maintenance and do-it-yourself" section of this manual. If the brake fluid level is correct, have the warning system checked by a NISSAN dealer.

#### **WARNING**

- Your brake system may not be working properly if the warning light is on. Driving could be dangerous. If you judge it to be safe, drive carefully to the nearest service station for repairs. Otherwise, have your vehicle towed because driving it could be dangerous.
- Pressing the brake pedal with the engine stopped and/or a low brake fluid level may increase your stopping distance and braking will require greater pedal effort as well as pedal travel.
- If the brake fluid level is below the MINIMUM or MIN mark on the brake fluid reservoir, do not drive until the brake system has been checked at a NISSAN dealer.



Charge warning light

If this 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 generator belt. If the belt is loose, broken, missing, or if the light remains on, see a NISSAN dealer immediately.

## **A** CAUTION

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



Door open warning light

This light comes on when any of the doors are not closed securely while the ignition switch is placed in the ON position.



Engine oil pressure warning

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

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 "Maintenance and do-it-yourself" section of this manual.

## **A** CAUTION

Running the engine with the engine oil pressure warning light on could cause serious damage to the engine almost immediately. Such damage is not covered by warranty. Turn off the engine as soon as it is safe to do so.



Low fuel warning light

This light comes on when the fuel level in the fuel tank is getting low. The low fuel warning chime will also sound under certain conditions. See "Low fuel warning chime" later in this section.

Refuel as soon as it is convenient, preferably before the fuel gauge reaches E (Empty). There will be a small reserve of fuel in the tank when the fuel gauge needle reaches E (Empty).



Low tire pressure warning light

Your vehicle is equipped with a Tire Pressure Monitoring System (TPMS) that monitors the tire pressure of all tires except the spare.

The low tire pressure warning light warns of low tire pressure or indicates that the TPMS is not functioning properly.

After the ignition switch is placed in the ON position, this light illuminates for about 1 second and turns off.

#### Low tire pressure warning:

If the vehicle is being driven with low tire pressure, the warning light will illuminate. If you select the tire pressure information in the display (if so equipped), the LOW PRESSURE warning message will be displayed. The tire pressure for each tire will also be displayed.

When the low tire pressure warning light illuminates, you should stop and adjust the tire pressure of all 4 tires to the recommended COLD tire pressure shown on the Tire and Loading Information label located in the driver's door opening. The low tire pressure warning light does not automatically turn off when the tire pressure is adjusted. After the tire is inflated to the recommended pressure, the vehicle must be driven at speeds above 16 MPH (25 km/h) to activate the TPMS and turn off the low tire pressure warning light. Use a tire pressure gauge to check the tire pressure.

For additional information, see "Tire Pressure Monitoring System (TPMS)" in the "Starting and driving" section and in the "In case of emergency" section.

#### TPMS malfunction:

If the TPMS is not functioning properly, the low tire pressure warning light will flash for approximately 1 minute when the ignition switch is placed in the ON position. The light will remain on after the 1 minute. Have the system checked by a NISSAN dealer.

For additional information, see "Tire Pressure Monitoring System (TPMS)" in the "Starting and driving" section and "Tire pressure" in the "Maintenance and do-it-yourself" section.

## **WARNING**

- If the light does not illuminate with the ignition switch placed in the ON position, have the vehicle checked by a NISSAN dealer as soon as possible.
- If the light illuminates while driving, avoid sudden steering maneuvers or abrupt braking, reduce vehicle speed, pull off the road to a safe location and stop the vehicle as soon as possible. Driving with under-inflated tires maypermanently damage the tires and increase the likelihood of tire failure. Serious vehicle damage could occur and

may lead to an accident and could result in serious personal injury. Check the tire pressure for all four tires. Adjust the tire pressure to the recommended COLD tire pressure shown on the Tire and Loading Information label located in the driver's door opening to turn the low tire pressure warning light OFF. If the light still illuminates while driving after adjusting the tire pressure, a tire may be flat. If you have a flat tire, replace it with a spare tire as soon as possible.

- When a spare tire is mounted or a wheel is replaced, tire pressure will not be indicated, the TPMS will not function and the low tire pressure warning light will flash for approximately 1 minute. The light will remain on after 1 minute. Contact your NISSAN dealer as soon as possible for tire replacement and/or system resetting.
- Replacing tires with those not originally specified by NISSAN could affect the proper operation of the TPMS.

## **A** CAUTION

- The TPMS is not a substitute for the regular tire pressure check. Be sure to check the tire pressure regularly.
- If the vehicle is being driven at speeds of less than 16 MPH (25 km/h), the TPMS may not operate correctly.
- Be sure to install the specified size of tires to the 4 wheels correctly.



Low windshield washer fluid warning light

This light comes on when the windshield washer fluid is at a low level. Add windshield washer fluid as necessary. See "Window washer fluid" in the "Maintenance and do-it-yourself" section of this manual.



Seat belt warning light and chime

The light and chime remind you to fasten your seat belts. The light illuminates whenever the ignition switch is placed in the ON or START position and remains illuminated until the driver's seat belt is fastened. At the same time, the chime sounds for about 6 seconds unless the driver's seat belt is securely fastened.

The seat belt warning light may also illuminate if the front passenger's seat belt is not fastened when the front passenger's seat is occupied. For 7 seconds after the ignition switch is placed in the ON position, the system does not activate the warning light for the front passenger.

Refer to "Seat belts" in the "Safety—Seats, seat belts and supplemental restraint system" section for precautions on seat belt usage.



# Supplemental air bag warning light

When the ignition switch is placed in the ON or START position, the supplemental air bag warning light illuminates for about 7 seconds and then turns off. This means the system is operational.

If any of the following conditions occur, the front air bag, side air bag, curtain air bag and pretensioner systems need servicing and your vehicle must be taken to a NISSAN dealer:

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

Unless checked and repaired, the supplemental restraint systems (air bag system) and/or the pretensioners may not function properly. For additional details, see "Supplemental restraint system" in the "Safety-Seats, seat belts and supplemental restraint system" section of this manual.

## **WARNING**

If the supplemental air bag warning light is on, it could mean that the front air bags, side air bags, curtain air bags and/or pretensioners will not operate in an accident. To help avoid injury to yourself or others, have your vehicle checked by a NISSAN dealer as soon as possible.

#### INDICATOR LIGHTS



Automatic transmission position indicator light

When the ignition switch is placed in the ON position, the indicator in the tachometer shows the shift selector position. See "Driving the vehicle" in the "Starting and driving" section of this manual.



# Cruise main switch indicator light

The light comes on when the cruise control main switch is pushed. The light goes out when the main switch is pushed again. When the cruise main switch indicator light comes on, the cruise control system is operational.



# Cruise set switch indicator

The light comes on while the vehicle speed is controlled by the cruise control system. If the light blinks while the engine is running, it may indicate the cruise control system is not functioning properly. Have the system checked by a NISSAN dealer.



# Front passenger air bag status light

The front passenger air bag status light ( R ) will be lit and the passenger front air bag will be OFF depending on how the front passenger seat is being used.

For front passenger air bag status light operation, see "Front passenger air bag and status light" in the "Safety — Seats, seat belts and supplemental restraint system" section of this manual.



# High beam indicator light (blue)

This blue light comes on when the headlight high beams are on and goes out when the low beams are selected.

The high beam indicator light also comes on when the passing signal is activated.



# Malfunction Indicator Light (MIL)

If this indicator light comes on steady or blinks while the engine is running, it may indicate a potential emission control malfunction.

The Malfunction Indicator Light may also come on steady if the fuel-filler cap is loose or missing, or if the vehicle runs out of fuel. Check to make sure the fuel-filler cap is installed and closed tightly, and that the vehicle has at least 3 gallons (11.4 liters) of fuel in the fuel tank.

After a few driving trips, the service soon liaht should turn off if no other potential emission control system malfunction exists.

If this indicator light comes on steady for 20 seconds and then blinks for 10 seconds when the engine is not running, it indicates that the tem inspection/maintenance test. See "Readi-

vehicle is not ready for an emission control sys-

ness for inspection/maintenance (I/M) test" in the "Technical and consumer information" section of this manual.

#### Operation

The Malfunction Indicator Light will come on in one of two ways:

- Malfunction Indicator Light on steady An emission control system malfunction has been detected. Check the fuel-filler cap. If the fuel-filler cap is loose or missing, tighten or install the cap and continue to drive the vehicle. The service light should turn off after a few driving trips. If the ENGINE light does not turn off after a few driving trips, have the vehicle inspected by a NISSAN dealer. You do not need to have your vehicle towed to the dealer.
- Malfunction Indicator Light blinking An engine misfire has been detected which may damage the emission control system. To reduce or avoid emission control system damage:
  - do not drive at speeds above 45 MPH (72 km/h).
  - avoid hard acceleration or deceleration.
  - avoid steep uphill grades.

- if possible, reduce the amount of cargo being hauled or towed.

The Malfunction Indicator Light may stop blinking and come on steady. Have the vehicle inspected by a NISSAN dealer. You do not need to have vour vehicle towed to the dealer.

#### **A** CAUTION

Continued vehicle operation without having the emission control system checked and repaired as necessary could lead to poor driveability, reduced fuel economy, and possible damage to the emission control system.

O/D **OFF**  Overdrive off indicator light

This light comes on when the overdrive function is OFF.

The automatic transmission overdrive function is controlled by the overdrive switch.

See "Driving the vehicle" in the "Starting and driving" section of this manual.



# Security indicator light

This light blinks whenever the ignition switch is placed in the LOCK, OFF or ACC position. This function indicates the security system equipped on the vehicle is operational.

2-12 Instruments and controls

For additional information, see "Security systems" later in this section.



# Slip indicator light

This indicator light will blink when the traction control system is limiting wheel spin. Slippery road conditions may exist if the slip indicator blinks on. If this happens, adjust your driving accordingly.

The slip indicator light also comes on when you place the ignition switch in the ON position. The light will turn off after about 2 seconds if the system is operational. If the light does not come on or does not go off, have the traction control system checked by a NISSAN dealer.



# Traction Control System off indicator light (if so equipped)

This indicator light comes on when the traction control off switch is pushed to OFF. This indicates the Traction Control System is not operating.

Push the traction control off switch again or restart the engine and the system will operate normally. See "Traction Control System (TCS)" in the "Starting and driving" section of this manual.

The traction control light also comes on when you place the ignition switch in the ON position. The light will turn off after about 2 seconds if the Traction Control System (TCS) is operational. If the light stays on or comes on along with the SLIP indicator light while you are driving, have the Traction Control System checked by a NISSAN dealer.

While the Traction Control System is operating, you might feel slight vibration or hear the system working when starting the vehicle or accelerating, but this is normal.



# Turn signal/hazard indicator liahts

The appropriate light flashes when the turn signal switch is activated

Both lights flash when the hazard switch is turned on.



# Vehicle Dynamic Control off indicator light (if so equipped)

This indicator light comes on when the Vehicle Dynamic Control off switch is pushed to OFF. This indicates the Vehicle Dynamic Control system is not operating.

Push the Vehicle Dynamic Control off switch again or restart the engine and the system will operate normally. See "Vehicle Dynamic Control (VDC) system" in the "Starting and driving" section of this manual.

The Vehicle Dynamic Control light also comes on when you place the ignition switch in the ON position. The light will turn off after about 2 seconds if the system is operational. If the light stays on or comes on along with the SLIP indicator light while you are driving, have the Vehicle Dynamic Control system checked by a NISSAN dealer.

While the Vehicle Dynamic Control system is operating, you might feel slight vibration or hear the system working when starting the vehicle or accelerating, but this is normal.

#### AUDIBLE REMINDERS

# Brake pad wear warning

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

# Key reminder chime

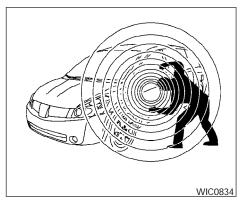
A chime sounds if the driver's door is opened while the key is left in the ignition switch. Remove the key and take it with you when leaving the vehicle

#### **SECURITY SYSTEMS**

# Light reminder chime

With the ignition switch placed in the OFF position, a chime sounds when the driver's door is opened if the headlights or parking lights are on.

Turn the headlight control switch off before leaving the vehicle.



Your vehicle has two types of security systems:

- Vehicle security system
- NISSAN Vehicle Immobilizer System

#### VEHICLE SECURITY SYSTEM

The vehicle security system provides visual and audible alarm signals if someone opens the doors when the system is armed. It is not, however, a motion detection type system that activates when a vehicle is moved or when a vibration occurs.

The system helps deter vehicle theft but cannot prevent it, nor can it prevent the theft of interior or exterior vehicle components in all situations. Always secure your vehicle even if parking for a

brief period. Never leave your keys in the ignition, and always lock the vehicle when unattended. Be aware of your surroundings, and park in secure, well-lit areas whenever possible.

Many devices offering additional protection, such as component locks, identification markers, and tracking systems, are available at auto supply stores and specialty shops. Your NISSAN dealer may also offer such equipment. Check with your insurance company to see if you may be eligible for discounts for various theft protection features.

# How to arm the vehicle security system

- 1. Close all windows. (The system can be armed even if the windows are open.)
- 2. Remove the key from the ignition switch.
- 3. Close all doors, Lock all doors. The doors can be locked with the key, power door lock switch or with the keyfob.

#### Keyfob operation:

 Push the button on the keyfob. All doors lock. The hazard lights flash twice and the horn beeps once to indicate all doors are locked.

button is pushed with When the all doors locked, the hazard lights flash twice and the horn beeps once as a reminder that the doors are already locked.

The horn may or may not beep. For vehicles with monochrome screen, refer to "Silencing the horn beep feature" in the "Pre-driving checks and adjustments" section later in this manual. For vehicles with color screen, refer to "Vehicle electronic systems" in the "Display screen, heater, air conditioner, audio and phone systems" section later in this manual.

4. Confirm that the indicator light comes on. The light stays on for about 30 seconds. The vehicle security system is now pre-armed. After about 30 seconds, the vehicle security system automatically shifts into the armed phase. The ( light begins to flash once every 3 seconds. If, during the 30-second pre-arm time period, the driver's door is unlocked by the key or the keyfob or the ignition switch is placed in the ACC or ON position, the system will not arm.

- If the key is turned slowly when locking the driver's door, the system may not arm. Furthermore, if the key is turned beyond the vertical position toward the unlock position to remove the key, the system may be disarmed when the key is removed. If the indicator light fails to glow for 30 seconds, unlock the driver's door once and lock it again.
- Even when the driver and/or passengers are in the vehicle, the system will arm with all doors closed and locked with the ignition switch placed in the OFF position.

# Vehicle security system activation

The vehicle security system will give the following alarm:

- The headlights blink and the horn sounds intermittently.
- The alarm automatically turns off after approximately 50 seconds. However, the alarm reactivates if the vehicle is tampered with again. The alarm can be shut off by unlocking the driver's door with the key or by pressing button on the keyfob.

The alarm is activated by:

 opening a door without using the key or keyfob (even if the door is unlocked by using the inside lock knob or the power door lock switch).

# How to stop an activated alarm

The alarm stops only by unlocking the driver's door with the key or by pressing the button on the keyfob.

# NISSAN VEHICLE IMMOBILIZER **SYSTEM**

The NISSAN Vehicle Immobilizer System will not allow the engine to start without the use of a registered key.

If the engine fails to start using a registered key (for example, when interference is caused by another registered key, an automated toll road device or automatic payment device on the key ring), restart the engine using the following procedures:

- 1. Leave the ignition switch placed in the ON position for approximately 5 seconds.
- 2. Place the ignition switch in the OFF or LOCK position and wait approximately 10 seconds.

#### 3. Repeat steps 1 and 2.

 Restart the engine while holding the device (which may have caused the interference) separate from the registered key.

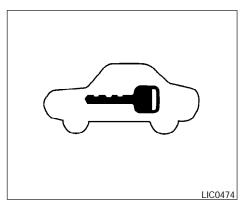
If the no start condition re-occurs, NISSAN recommends placing the registered key on a separate key ring to avoid interference from other devices.

Statement related to Section 15 of FCC Rules for NISSAN Vehicle Immobilizer System (CONT ASSY — IMMOBILIZER, ANT ASSY — IMMOBILIZER)

This device complies with part 15 of the FCC Rules and RSS-210 of Industry Canada. Operation is subject to the following two conditions;

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

CHANGES OR MODIFICATIONS NOT EX-PRESSLY APPROVED BY THE PARTY RE-SPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPER-ATE THE EQUIPMENT.



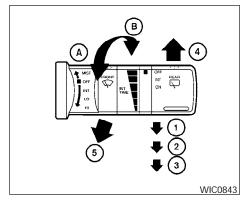
## Security indicator light

The security indicator light blinks whenever the ignition switch is placed in the LOCK, OFF or ACC position. This function indicates the NISSAN Vehicle Immobilizer System is operational.

If the NISSAN Vehicle Immobilizer System is malfunctioning, the light will remain on while the ignition switch is placed in the ON position.

If the light still remains on and/or the engine will not start, see a NISSAN dealer for NISSAN Vehicle Immobilizer System service as soon as possible. Please bring all registered keys that you have when visiting your NISSAN dealer for service.

# WINDSHIELD WIPER AND WASHER SWITCH



#### **SWITCH OPERATION**

The windshield wiper and washer operates when the ignition switch is placed in the ON position.

Push the lever down to operate the wiper at the following speed:

 Intermittent (INT) — intermittent operation can be adjusted by turning the knob toward
 (Slower) or (B) (Faster). Also, the intermittent operation speed varies in accordance with the vehicle speed. (For example, when the vehicle speed is high, the intermittent operation speed will be faster.)

#### NOTE:

You can turn on or turn off the driving speed dependent intermittent wiper function for vehicles with color display screen. Refer to "Vehicle electronic systems" in the "Display screen, heater, air conditioner, audio and phone systems" section later in this manual.

- Low (LO) continuous low speed operation
- High (HI) continuous high speed operation

Push the lever up (4) to have one sweep operation (MIST) of the wiper.

Pull the lever toward you (5) to operate the washer. The wiper will also operate several times.

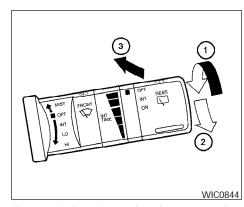
#### **WARNING**

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

#### **A** CAUTION

- Do not operate the washer continuously for more than 30 seconds.
- Do not operate the washer if the reservoir tank is empty.
- Do not fill the window washer reservoir tank with washer fluid concentrates at full strength. Some methyl alcohol based washer fluid concentrates may permanently stain the grille if spilled while filling the window washer reservoir tank.
- Pre-mix washer fluid concentrates with water to the manufacturer's recommended levels before pouring the fluid into the window washer reservoir tank. Do not use the window washer reservoir tank to mix the washer fluid concentrate and water.

#### REAR WINDOW WIPER AND WASHER SWITCH



The rear window wiper and washer operate when the ignition switch is placed in the ON position.

Turn the switch clockwise from the OFF position to operate the wiper.

- Intermittent (INT) intermittent operation (not adjustable)
- (2) ON continuous low speed operation

Push the switch forward (3) to operate the washer. The wiper will also operate several times.

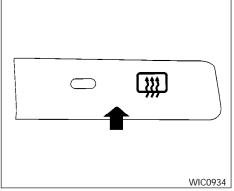
# **WARNING**

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

#### **A** CAUTION

- Do not operate the washer continuously for more than 30 seconds.
- Do not operate the washer if the reservoir tank is empty.
- Do not fill the window washer reservoir tank with washer fluid concentrates at full strength. Some methyl alcohol based washer fluid concentrates may permanently stain the grille if spilled while filling the window washer reservoir tank.
- Pre-mix washer fluid concentrates with water to the manufacturer's recommended levels before pouring the fluid into the window washer reservoir tank. Do not use the window washer reservoir tank to mix the washer fluid concentrate and water.

## REAR WINDOW AND OUTSIDE MIRROR (if so equipped) DEFROSTER SWITCH



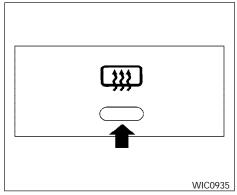
Type A

To defrost the rear window glass and outside mirrors (if so equipped), start the engine and push the rear window defroster switch on. The rear window defroster indicator light comes on. Push the switch again to turn the defroster off.

The rear window defroster automatically turns off after approximately 15 minutes.

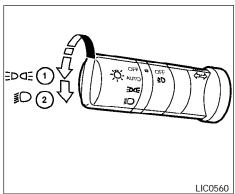
## **A** CAUTION

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



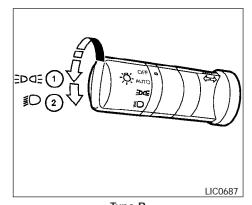
Type B

#### **HEADLIGHT AND TURN SIGNAL SWITCH**



Type A HEADLIGHT CONTROL SWITCH Lighting

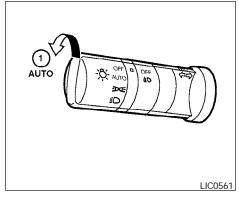
- When turning the switch to the EDGE position, the front parking, tail, license plate and instrument panel lights come on.
- When turning the switch to the tion, the headlights come on and all the other lights remain on.



Type B

# **A** CAUTION

Use the headlights with the engine running to avoid discharging the vehicle battery.



# Autolight system (if so equipped)

The autolight system allows the headlights to be set so they turn on and off automatically. The autolight system can:

- Turn on the headlights, front parking, tail, license plate and instrument panel lights automatically when it is dark.
- Turn off all the lights when it is light.
- Keep all the lights on for 45 seconds after the ignition switch is placed in the OFF position and all doors are closed.

#### NOTE:

Autolight activation sensitivity and the time delay for autolight shutoff is adjustable for vehicles with color display screen. See "Vehicle electronic systems" in the "Display screen, heater, air conditioner, audio and phone systems" section later in this manual.

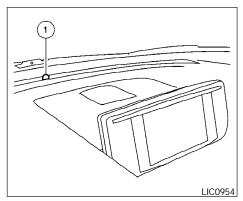
To turn on the autolight system:

- 1. Turn the headlight switch to the AUTO position ①.
- 2. Place the ignition switch in the ON position.
- 3. The autolight system automatically turns the headlights on and off.

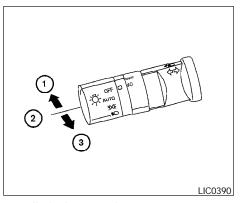
Initially, if the ignition switch is placed in the OFF position and a door is opened and left open, the headlights remain on for 5 minutes. During that 5 minutes:

- if all doors are closed, the headlights remain on for 45 seconds, then turn off.
- if another door is opened, then the 5 minute timer is reset.

To turn the autolight system off, turn the switch to the OFF,  $\exists Pd\exists$ , or  $\not \! D$  position.



Be sure you do not put anything on top of the autolight sensor ① located on top of the instrument panel. The autolight sensor controls the autolight; if it is covered, the autolight sensor reacts as if it is dark out and the headlights will illuminate. If this occurs while parked with the engine off and the ignition switch is placed in the ON position, your vehicle's battery could become discharged.



# Headlight beam select

- 2 Pull the lever back to select the low beam.
- 3 Pulling and releasing the lever flashes the headlight high beams on and off.

## Battery saver system

If the ignition switch is placed in the OFF position while the headlight switch is in the **EDQ** or **P** position, the headlights will turn off after 5 minutes

After the headlights automatically turn off with the headlight switch in the EDGE or ID position. the headlights will illuminate again for 5 minutes if the headlight switch is moved to the OFF position and then turned to the **ED □** position.

## **A** CAUTION

Even though the battery saver feature automatically turns off the headlights after a period of time, you should turn the headlight switch to the OFF position when the engine is not running to avoid discharging the vehicle battery.

# DAYTIME RUNNING LIGHT SYSTEM (Canada only)

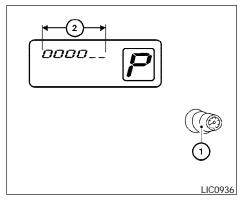
The headlights automatically illuminate at a reduced intensity when the engine is started with the parking brake released. The daytime running lights operate with the headlight switch in the OFF position or in the EDGE position. Turn the headlight switch to the 

□ position for full illumination when driving at night.

If the parking brake is applied before the engine is started, the daytime running lights do not illuminate. The daytime running lights illuminate when the parking brake is released. The daytime running lights will remain on until the ignition switch is placed in the OFF position.

#### **AWARNING**

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

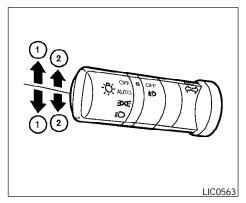


# INSTRUMENT BRIGHTNESS CONTROL

The instrument brightness control operates when the headlight control switch is in the **EDG**E , **■**D or AUTO position (with autolights activated).

Turn the control (1) to adjust the brightness of the instrument panel lights when driving at night. The brightness indicator (2) will illuminate in the odometer when the control is turned. The indicator will turn off a few seconds after the control is released.

The instrument brightness control will not adjust the brightness when the headlights or parking lights are off.



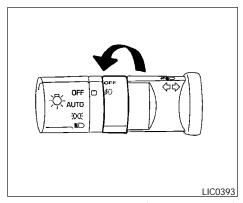
#### TURN SIGNAL SWITCH

# Turn signal

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

# Lane change signal

To signal a lane change, move the lever up or down to the point where the indicator light begins to flash, but the lever does not latch.



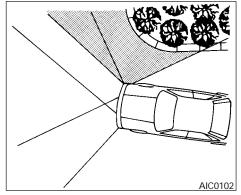
# FOG LIGHT SWITCH (if so equipped)

To turn the fog lights on, turn the headlight switch to the D position, then turn the fog light switch to the position.

To turn the fog lights on with the headlight switch in the AUTO position (if so equipped), the headlights must be on, then turn the fog light switch to the #D position.

To turn the fog lights off, turn the fog light switch to the OFF position.

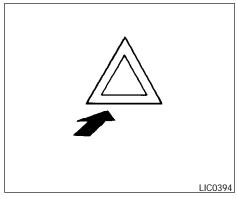
The headlights must be on and the low beams selected for the fog lights to operate. The fog lights automatically turn off when the high beam headlights are selected.



#### **CORNERING LIGHT**

The cornering light provides additional illumination toward the turning direction. The cornering light will illuminate on the turning direction side when a turn is signaled with the headlights on.

### HAZARD WARNING FLASHER **SWITCH**



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

#### **WARNING**

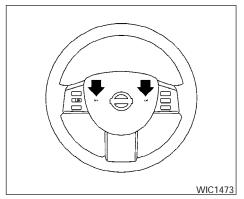
- · If stopping for an emergency, be sure to move the vehicle well off the road.
- Do not use the hazard warning flashers while moving on the highway unless unusual circumstances force you to drive so slowly that your vehicle might become a hazard to other traffic.
- Turn signals do not work when the hazard warning flasher lights are on.

### HORN

# **HEATED SEAT (if so equipped)**

The flashers will operate with the ignition switch placed in any position.

Some state laws may prohibit the use of the hazard warning flasher switch while driving.



To sound the horn, push the center pad area of the steering wheel near the horn icons.

# **A** WARNING

Do not disassemble the horn. Doing so could affect proper operation of the supplemental front air bag system. Tampering with the supplemental front air bag system may result in serious personal injury.



The front seats are warmed by built-in heaters (if so equipped). The switches are located at the sides of the seats.

- Start the engine.
- 2. Push the (low) or — (high) position of the switch, as desired, depending on the temperature. The indicator light in the switch will illuminate.

The heater is controlled by a thermostat, automatically turning the heater on and off. The indicator light will remain on as long as the switch is on.

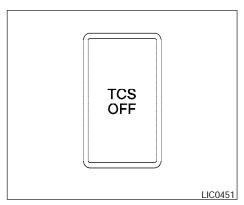
3. When the seat is warmed or before you leave the vehicle, be sure to turn the switch off.

# TRACTION CONTROL SYSTEM (TCS) OFF SWITCH (if so equipped)

# VEHICLE DYNAMIC CONTROL (VDC) OFF SWITCH (if so equipped)

## **A** CAUTION

- Do not use the seat heater for extended periods or when no one is using the seat.
- Do not put anything on the seat which insulates heat, such as a blanket, cushion, seat cover, etc. Otherwise, the seat may become overheated.
- Do not place anything hard or heavy on the seat or pierce it with a pin or similar object. This may result in damage to the heater.
- Any liquid spilled on the heated seat should be removed immediately with a dry cloth.
- When cleaning the seat, never use gasoline, benzine, thinner, or any similar materials.
- If any abnormalities are found or the heated seat does not operate, turn the switch off and have the system checked by your NISSAN dealer.
- The battery could run down if the seat heater is operated while the engine is not running.

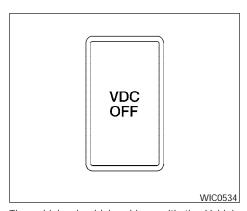


The vehicle should be driven with the Traction Control System (TCS) on for most driving conditions.

If the vehicle is stuck in mud or snow, the TCS reduces the engine output to reduce wheel spin. The engine speed will be reduced even if the accelerator is depressed to the floor. If maximum engine power is needed to free a stuck vehicle, turn the TCS off.

To turn off the TCS, push the TCS OFF switch. The **TCS** indicator will come on.

Push the TCS OFF switch again or restart the engine to turn ON the system. See "Traction Control System (TCS)" in the "Starting and driving" section.



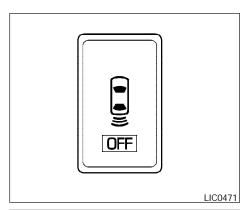
The vehicle should be driven with the Vehicle Dynamic Control (VDC) system on for most driving conditions.

If the vehicle is stuck in mud or snow, the VDC system reduces the engine output to reduce wheel spin. The engine speed will be reduced even if the accelerator is depressed to the floor. If maximum engine power is needed to free a stuck vehicle, turn the VDC system off.

To turn off the VDC system, push the VDC OFF switch. The off indicator will come on.

Push the VDC OFF switch again or restart the engine to turn on the system. See "Vehicle Dynamic Control (VDC) system" in the "Starting and driving" section.

# REAR SONAR SYSTEM OFF SWITCH (if so equipped)



### **▲** WARNING

The rear sonar system is a convenience but it is not a substitute for proper backing. Always turn and check that it is safe to do so before backing up. Always back up slowly.

The rear sonar system (if so equipped) is active when the ignition switch is placed in the ON position and the shift selector is in R (Reverse).

When sensors detect obstacles within 6 ft. (1.8 m) of the rear bumper, a beeping tone is emitted.

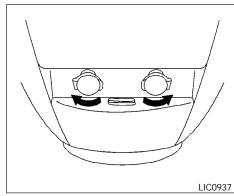
#### **POWER OUTLET**

The rear sonar system can be disabled by pushing the OFF switch. When the system is disabled, the indicator light on the switch will illuminate.

The system will automatically reset the next time the ignition switch is placed in the ON position.

See "Rear sonar system" in the "Starting and

driving" section.



1st row

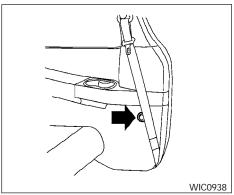
The power outlets are for powering electrical accessories such as cellular telephones.

The power outlets located in the 1st row (passenger's side) and 2nd row are powered only when the ignition switch is placed in the ACC or ON position.

The power outlets located in the 1st row (driver's side) and the cargo area are powered directly by the vehicle's battery.

Open the cap to use a power outlet.

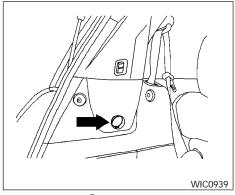
#### **STORAGE**



2nd row

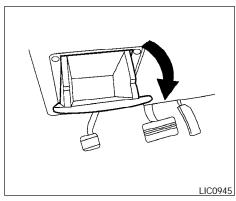
## **A** CAUTION

- The outlet and plug may be hot during or immediately after use.
- This power outlet is not designed for use with a cigarette lighter unit.
- Do not use with accessories that exceed a 12 volt, 120W (10A) power draw. Do not use double adapters or more than one electrical accessory.
- Use power outlets with the engine running to avoid discharging the vehicle battery.



Cargo area

- Avoid using power outlets when the air conditioner, headlights or rear window defroster is on.
- Before inserting or disconnecting a plug, be sure the electrical accessory being used is turned OFF.
- Push the plug in as far as it will go. If good contact is not made, the plug may overheat or the internal temperature fuse may open.
- When not in use, be sure to close the cap. Do not allow water to contact the outlet.



SUNGLASSES HOLDER

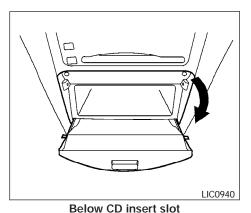
Pull the lid down to open the sunglasses holder.

## **AWARNING**

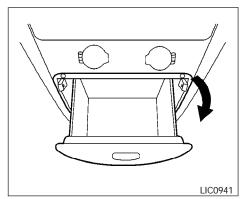
Keep the sunglasses holder closed while driving to prevent an accident.

## **A** CAUTION

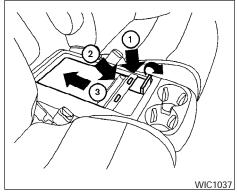
- Do not use for anything other than sunglasses.
- Do not leave sunglasses in the sunglasses holder while parking in direct sunlight. The heat may damage the sunglasses.



(if so equipped) INSTRUMENT PANEL STORAGE



Below power outlets

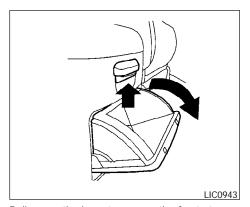


CONSOLE BOX (if so equipped)

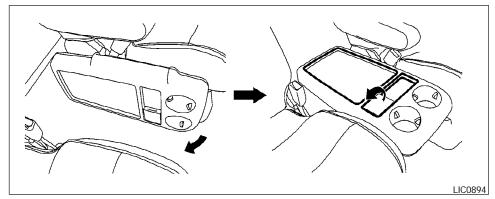
Push the corresponding button 1 to open the small storage compartments.

Press the front portion of the lid (2) down from the handle area until it stops.

While keeping the downward force applied, push the lid rearward 3 to the desired opening amount. The CD/DVD tray is removable.



Pull up on the lever to access the front storage bin on the console box.



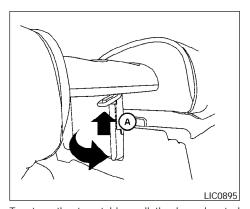
CENTER TRAY TABLE (if so equipped)

To use the center tray table, raise it up until it locks into the upright position.

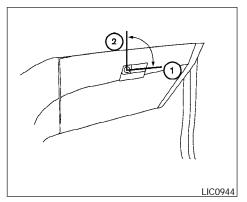
To access the small storage compartment on the top of the tray table, raise the lid.

# **A**CAUTION

To avoid damaging it, do not apply a total load of more than 50 lbs (23 kg) to the center tray table.



To store the tray table, pull the lever located beneath the tray table up  $(\mathbf{A})$  and gently lower the tray table to its original position.

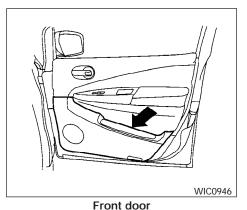


**GLOVE BOX** 

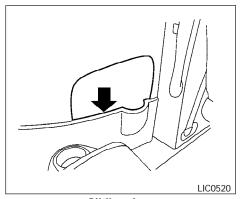
Open the glove box by pulling the handle. Use the master key when locking 1 or unlocking 2 the glove box. The valet key cannot be used to lock or unlock the glove box.

## **WARNING**

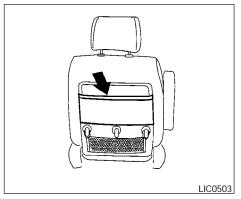
Keep glove box lid closed while driving to help prevent injury in an accident or a sudden stop.



MAP POCKETS

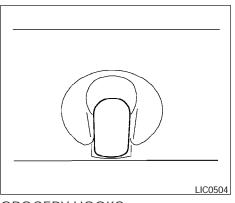


Sliding door



SEATBACK POCKETS

The seatback pockets are located on the back of the driver's and passenger's seats. The pockets can be used to store maps.

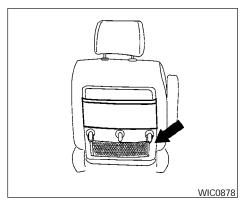


**GROCERY HOOKS** 

The grocery hooks allow for standard size plastic grocery bags to hang side by side.

# **A**CAUTION

Do not apply a total load of more than 18 lbs (8 kg) to a single grocery hook.

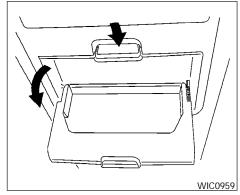


CARGO NET (if so equipped)

The net located on the back of the driver's seat can be used to hold small objects.

### **A** WARNING

- Do not place sharp objects in the net. Such objects may become dangerous projectiles and cause injury when the vehicle is moving or if the vehicle is involved in a collision.
- The cargo restrained in the net must not exceed 18 lbs (8 kg) or the net may not stay secured.



**OVERHEAD CONSOLE** 

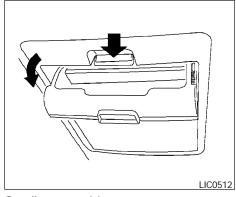
## **A** WARNING

Keep storage bins closed while driving to help prevent injury in an accident or a sudden stop.

Large storage bin

Push the button to open the storage bin.

Push the lid up to close.



Small storage bin

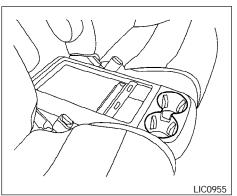
Push the button to open the small storage bin.

Push the lid up to close.

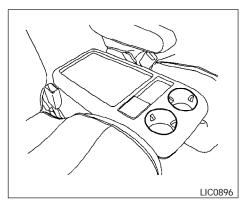
#### **CUP HOLDERS**

## **A**CAUTION

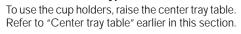
- Avoid abrupt starting and braking when the cup holder is being used to prevent spilling the drink. If the liquid is hot, it can scald you or your passenger.
- Use only soft cups in the cup holder. Hard objects can injure you in an accident.

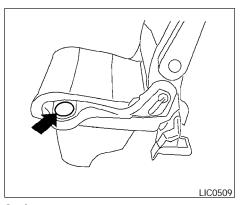


Type A Front

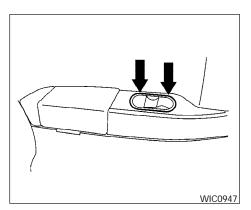


Type B

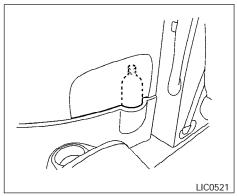




2nd row



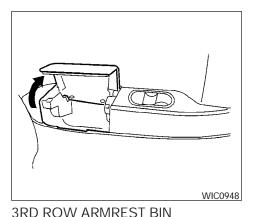
3rd row



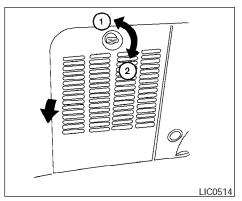
Sliding door bottle holder Soft bottle holder

# **A**CAUTION

- Do not use bottle holder for any other objects that could be thrown about in the vehicle and possibly injure people during sudden braking or an accident.
- Do not use bottle holder for open liquid containers.



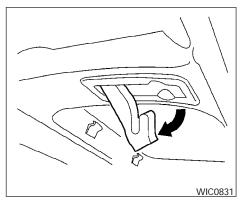
Raise the lid to open the 3rd row armrest bin.



### CARGO AREA STORAGE BIN

To open the cargo area storage bin, turn the knob counterclockwise (1). The lid can be removed.

To close, replace the lid and turn the knob clockwise (2).

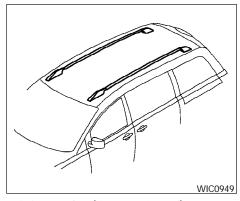


## **GARMENT HOOK**

To store garments, pull the garment hook down to the use position.

### **A**CAUTION

Do not apply a total load of more than 55 lbs (25 kg) to the hook.



ROOF RACK (if so equipped)

Always distribute the luggage evenly on the roof rack. Do not load more than 125 lbs (56 kg). Be careful that your vehicle does not exceed the Gross Vehicle Weight Rating (GVWR) or its Gross Axle Weight Rating (GAWR front and rear). The GVWR and GAWR are located on the F.M.V.S.S. label (located on the driver's door pillar). For more information regarding GVWR and GAWR, refer to "Vehicle loading information" in the "Technical and consumer information" section later in this manual.

#### **WINDOWS**

### **WARNING**

- Drive extra carefully when the vehicle is loaded at or near the cargo carrying capacity, especially if the significant portion of that load is carried on the roof rack.
- Heavy loading of the roof rack has the potential to affect the vehicle stability and handling during sudden or abnormal handling maneuvers.
- Roof rack load should be evenly distributed.
- Do not exceed maximum roof rack load weight capacity.
- Properly secure all cargo with ropes or straps to help prevent it from sliding or shifting. In a sudden stop or collision, unsecured cargo could cause personal injury.

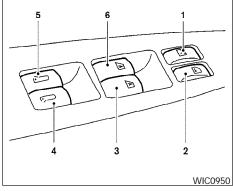
#### **A** CAUTION

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

#### **POWER WINDOWS**

### **WARNING**

- Make sure that all passengers have their hands, etc. inside the vehicle while it is in motion and before closing the windows. Use the window lock switch to prevent unexpected use of the power windows.
- Do not leave children unattended inside the vehicle. They could unknowingly activate switches or controls and become trapped in a window. Unattended children could become involved in serious accidents.

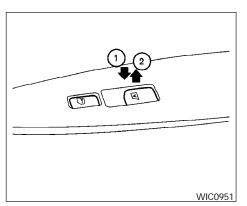


- Window lock button
- Power door lock switch
- Front passenger's side automatic switch
- Right rear power vent window switch (if so equipped)
- Left rear power vent window switch (if so equipped)
- Driver's side automatic switch

## Driver's side power window switch

The driver's side control panel is equipped with switches to open or close all of the windows.

The power windows operate when the ignition switch is placed in the ON position, or for about 45 seconds after the ignition switch is placed in the OFF position. If the driver's or passenger's door is opened during this period of about 45 seconds, power to the windows is canceled. To open a window, push the switch and hold it down. To close a window, pull the switch and hold it up. To stop the opening or closing function at any time, simply release the switch.

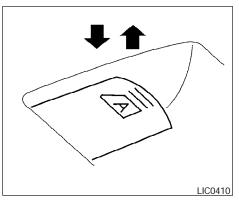


## Front passenger's power window switch

The passenger's window switch operates only the corresponding passenger's window. To open the window, push the switch and hold it down (1). To close the window, pull the switch up (2).

## Locking passengers' windows

When the window lock button is depressed, only the driver's side window can be opened or closed. Push it again to cancel the window lock function.



# Automatic operation

To fully open a window equipped with automatic operation, press the window switch down (only driver's side shown) to the second detent and release it: it need not be held. The window automatically opens all the way. To stop the window, lift the switch up while the window is opening.

To fully close a window equipped with automatic operation, pull the switch up to the second detent and release it; it need not be held. To stop the window, press the switch down while the window is closing.

#### Auto-reverse function

The auto-reverse function can be activated when a window is closed by automatic operation.

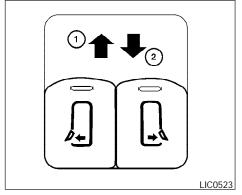
Depending on the environment or driving conditions, the auto-reverse function may be activated if an impact or load similar to something being caught in the window occurs.

#### **WARNING**

There are some small distances immediately before the closed position which cannot be detected. Make sure that all passengers have their hands, etc., inside the vehicle before closing the window.

If the vehicle's battery is disconnected, replaced, or jump started, the power window auto-reverse function may not operate properly. If this occurs, please contact the dealer to re-initialize the power window auto-reverse system.

If the control unit detects something caught in a window equipped with automatic operation as it is closing, the window will be immediately lowered.



# POWER VENT WINDOWS (if so equipped)

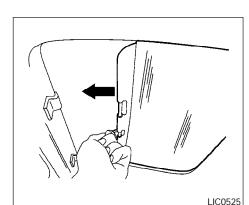
Use the vent window switches on the driver's side window controls to open and close the power vent windows.

To open a power vent window, press the switch down (1).

To close the window, lift the switch up (2).

The power vent windows operate when the ignition switch is placed in the ON position, or for 45 seconds after the ignition switch is placed in the OFF position. If the driver's or passenger's door is opened during this 45 second period, power to the vent windows is cancelled.

# SKYVIEW™ GLASS-PANELED ROOF (if so equipped)



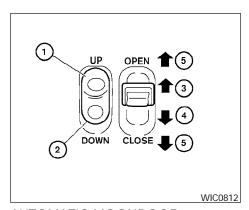
To close the SkyView roof sunshade, pull the tab to draw out the shade. Lock the shade in place by positioning the rod on the holder.

To open the shade, lift the rod from the holder and ease the shade back into its stored position.

## **A**CAUTION

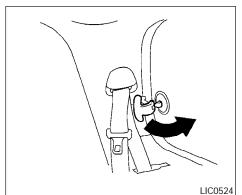
Do not pull the SkyView roof sunshade straight down. This can damage the shade.

# MOONROOF (if so equipped)



# AUTOMATIC MOONROOF

The moonroof will only operate when the ignition switch is placed in the ON position. The automatic moonroof is operational for about 45 seconds, even if the ignition switch is placed in the ACC or OFF position. If the driver's door or the front passenger's door is opened during this period of about 45 seconds, power to the moonroof is canceled.



# MANUAL VENT WINDOWS (if so equipped)

To open a manual vent window, pull the latch handle toward you until it releases.

To lock the window in the open position, push the latch handle rearward until it locks.

To close a manual vent window, pull the latch handle toward you and push the rear portion of the latch toward the rear of the vehicle until it locks.

# Sliding the moonroof

To fully open the moonroof, push the switch toward the open position (3).

To fully close the moonroof, push the switch toward the close position **4**.

To open or close the moonroof part way, push the switch in any direction (§) while the roof is sliding open or closed to stop it in the desired position.

## Tilting the moonroof

To tilt the moonroof up, push the tilt switch toward the up position ①. When the moonroof is open, it will automatically close and then tilt up.

To tilt the moonroof down, push the tilt switch toward the down position ②.

# Resetting the moonroof sliding switch

The sliding switch will become inoperable after the battery terminal is disconnected, the electrical supply interrupted and/or some abnormality detected. Use the following reset procedure to return moonroof operation to normal:

 If the moonroof lid is open, push the tilting switch repeatedly toward the down position
 to fully close the lid.  Push and hold the tilting switch for more than 2 seconds toward the down position
 to re-establish the lid's home position.

The moonroof should now operate normally.

# Auto-reverse function (when closing or tilting down the moonroof)

The auto-reverse function can be activated when the moonroof is closed or tilted down by automatic operation when the ignition switch is placed in the ON position or for about 45 seconds after the ignition switch is placed in the OFF position.

Depending on the environment or driving conditions, the auto-reverse function may be activated if an impact or load similar to something being caught in the moonroof occurs.

### **A** WARNING

There are some small distances immediately before the closed position which cannot be detected. Make sure that all passengers have their hands, etc., inside the vehicle before closing the moonroof.

#### When closing:

If the control unit detects something caught in the moonroof as it moves to the front, the moonroof will immediately open backward.

### When tilting down:

If the control unit detects something caught in the moonroof as it tilts down, the moonroof will immediately tilt up.

If the auto-reverse function malfunctions and repeats opening or tilting up the moonroof, keep pushing the tilt down switch within 5 seconds after it happens; the moonroof will fully close gradually. Make sure nothing is caught in the moonroof.

### **AWARNING**

- In an accident you could be thrown from the vehicle through an open moonroof. Always use seat belts and child restraints.
- Do not allow anyone to stand up or extend any portion of their body out of the moonroof opening while the vehicle is in motion or while the moonroof is closing.

#### LIGHTS ON DEMAND SWITCH

#### **A** CAUTION

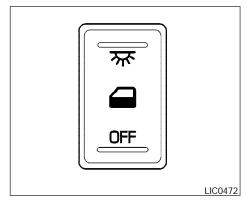
- Remove water drops, snow, ice or sand from the moonroof before opening.
- Do not place heavy objects on the moonroof or surrounding area.

#### Sunshade

Open and close the sunshade by sliding it forward or backward.

If the moonroof does not close

Have your NISSAN dealer check and repair the moonroof.



The lights on demand switch allows the driver to select one of three lighting modes for the interior lights. The lights on demand switch operates regardless of ignition switch position.

· The interior lights illuminate. The lights will turn off automatically after 30 minutes to prevent the battery from becoming discharged.

OFF: The interior lights do not illuminate.

: The interior lights illuminate when a door is opened.

If the lights on demand switch is in the position, the lights will stay on for about 30 seconds when:

- The doors are unlocked by the keyfob, a key or the power door lock switch while all doors are closed and the ignition switch is placed in the OFF position.
- The driver's door is opened and then closed while the key is removed from the ignition switch.
- The key is removed from the ignition switch while all doors are closed.

The interior lights will turn off while the 30second timer is activated when:

- The driver's door is locked by the keyfob, a key, or the power door lock switch.
- The ignition switch is placed in the ON position.

The lights will turn off automatically after 30 minutes while doors are open to prevent the battery from becoming discharged.

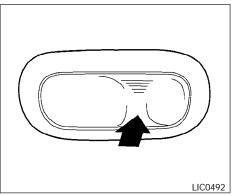
#### PERSONAL LIGHTS

#### NOTE:

The footwell and door step lights illuminate when the driver and passenger doors are open regardless of the lights on demand switch position. These lights will turn off automatically after 30 minutes while doors are open to prevent the battery from becoming discharged.

## **A** CAUTION

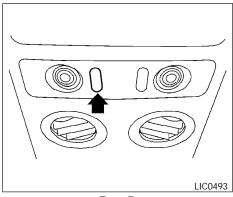
Do not use for extended periods of time with the engine stopped. This could result in a discharged battery.



Type A

The rear seating positions have personal lights located on the headliner or on the overhead console. There is also a light above the cargo area on the overhead trim.

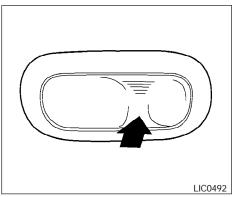
To operate a personal light located on the headliner (Type A), push the light.



Type B

The personal lights on the overhead console (Type B) can be swiveled 360 degrees. To turn on the light, press the button. Press the button again to turn off the light.

#### MAP LIGHTS



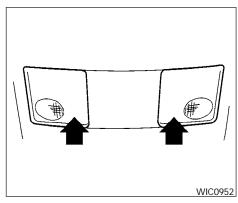
Type C

The cargo light on the overhead trim (Type C) has a three-position switch. To operate, push the light.

On: The light is illuminated

Normal: The light illuminates when any door is opened or unlocked by the keyfob. The light turns off after 30 seconds or when all doors are closed.

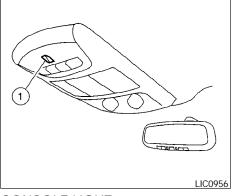
Off: The light does not illluminate, regardless of door position or lock status.



To turn the map lights on, press the switches. To turn them off, press the switches again.

## **A** CAUTION

Do not use for extended periods of time with the engine stopped. This could result in a discharged battery.



**CONSOLE LIGHT** 

The console light 1 will turn on whenever the parking lights or headlights are illuminated.

The console light brightness can be adjusted (if so equipped) with the illumination brightness control.

# HOMELINK® UNIVERSAL TRANSCEIVER (if so equipped)

The HomeLink® Universal Transceiver provides a convenient way to consolidate the functions of up to three individual hand-held transmitters into one built-in device

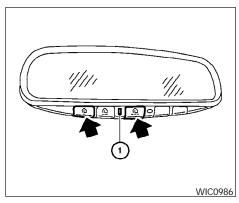
#### HomeLink® Universal Transceiver:

- Will operate most Radio Frequency (RF) devices such as garage doors, gates, home and office lighting, entry door locks and security systems.
- Is powered by your vehicle's battery. No separate batteries are required. If the vehicle's battery is discharged or is disconnected, HomeLink® will retain all programming.

Once the HomeLink® Universal Transceiver is programmed, retain the original transmitter for future programming procedures (Example: new vehicle purchases). Upon sale of the vehicle, the programmed HomeLink® Universal Transceiver buttons should be erased for security purposes. For additional information, refer to "Programming HomeLink®" later in this section.

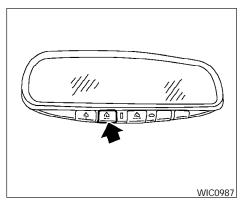
### **WARNING**

- Do not use the HomeLink® Universal Transceiver with any garage door opener that lacks safety stop and reverse features as required by federal safety standards. (These standards became effective for opener models manufactured after April 1, 1982), A garage door opener which cannot detect an object in the path of a closing garage door and then automatically stop and reverse, does not meet current federal safety standards. Using a garage door opener without these features increases the risk of serious injury or death.
- During the programming procedure your garage door or security gate will open and close (if the transmitter is within range). Make sure that people or objects are clear of the garage door, gate, etc. that you are programming.
- Your vehicle's engine should be turned off while programming the HomeLink® Universal Transceiver.



## PROGRAMMING HOMFLINK®

- 1. To begin, press and hold the two outer HomeLink® buttons (to clear the memory) until the indicator light (1) blinks (after 20 seconds). Release both buttons.
- 2. Position the end of the hand-held transmitter. 1 - 3 inches (26 - 76 mm) away from the Homel ink® surface.



- Using both hands, simultaneously press and hold both the HomeLink® button you want to program and the hand-held transmitter button.
  - DO NOT release the buttons until step 4 has been completed.
- 4. Hold down both buttons until the indicator light on the HomeLink® flashes, changing from a "slow blink" to a "rapidly flashing blink". This could take up to 90 seconds. When the indicator light flashes rapidly, both buttons may be released. The rapidly flashing light indicates successful programming. To activate the garage door or other pro-

- grammed device, press and hold the programmed HomeLink® button releasing when the device begins to activate.
- 5. If the indicator light on the HomeLink® blinks rapidly for 2 seconds and then turns solid, HomeLink® has picked up a "rolling code" garage door opener signal. You will need to proceed with the next steps to train the HomeLink® to complete the programming which may require a ladder and another person for convenience.
- 6. Press and release the "smart" or "learn" program button located on the garage door opener's motor to activate the "training mode". This button is usually located near the antenna wire that hangs down from the motor. If the wire originates from under a light lens, you will need to remove the lens to access the program button.

#### NOTE:

Once you have pressed and released the program button on the garage door opener's motor and the "training light" is lit, you have 30 seconds in which to perform step 7. Use the help of a second person for convenience to assist when performing this step.

7. Within 30 seconds of pressing and releasing the garage door opener's program but-

- ton, quickly and firmly press and release the HomeLink® button you've just programmed. Press and release the HomeLink® button up to 3 times to complete the training.
- 8. Your HomeLink® button should now be programmed. (To program the remaining HomeLink® buttons for additional door or gate openers, follow steps 2-4 only.)

#### NOTE:

Do not repeat step 1 unless you want to "clear" all previously programmed HomeLink® buttons.

If you have any questions or are having difficulty programming your HomeLink® buttons, refer to the HomeLink® web site at: www.homelink.com or call 1-800-355-3515.

# PROGRAMMING HOMELINK® FOR CANADIAN CUSTOMERS

Prior to 1992, D.O.C. regulations required handheld transmitters to stop transmitting after 2 seconds. To program your hand-held transmitter to HomeLink®, continue to press and hold the HomeLink® button (see steps 2 - 4 under "Programming HomeLink®") while you press and repress ("cycle") your hand-held transmitters every 2 seconds until the indicator light flashes rapidly (indicating successful programming).

#### NOTE:

When programming a garage door opener, etc., it is advised to unplug the device during the "cycling" process to prevent possible damage to the garage door opener components.

# OPERATING THE HOMELINK® UNIVERSAL TRANSCEIVER

The HomeLink® Universal Transceiver (once programmed) may now be used to activate the garage door, etc. To operate, simply press the appropriate programmed HomeLink® Universal Transceiver button. The red indicator light will illuminate while the signal is being transmitted.

## PROGRAMMING TROUBLE-DIAGNOSIS

If the HomeLink® does not quickly learn the handheld transmitter information:

- replace the hand-held transmitter batteries with new batteries.
- position the hand-held transmitter with its battery area facing away from the HomeLink® surface.
- press and hold both the HomeLink® and hand-held transmitter buttons without interruption.

position the hand-held transmitter 1 - 3 inches (26 - 76 mm) away from the HomeLink® surface. Hold the transmitter in that position for up to 15 seconds. If HomeLink® is not programmed within that time, try holding the transmitter in another position – keeping the indicator light in view at all times.

If you continue to have programming difficulties, please contact the NISSAN Consumer Affairs Department. The phone numbers are located in the Foreword of this manual.

# CLEARING THE PROGRAMMED INFORMATION

Individual buttons cannot be cleared. However, to clear all programming, press and hold the two outside buttons and release when the indicator light begins to flash (approximately 20 seconds).

# REPROGRAMMING A SINGLE HOMELINK® BUTTON

To reprogram a HomeLink  $\!\!^{\text{\tiny \$}}$  Universal Transceiver button, complete the following.

 Press and hold the desired HomeLink® button. **Do not** release the button until step 4 has been completed.

- When the indicator light begins to flash slowly (after 20 seconds), position the hand-held transmitter 1 - 3 inches (26 - 76 mm) away from the HomeLink® surface.
- Press and hold the hand-held transmitter button.
- The HomeLink® indicator light will flash, first slowly and then rapidly. When the indicator light begins to flash rapidly, release both buttons.

The HomeLink® Universal Transceiver button has now been reprogrammed. The new device can be activated by pushing the HomeLink® button that was just programmed. This procedure will not affect any other programmed HomeLink® buttons

#### IF YOUR VEHICLE IS STOLEN

If your vehicle is stolen, you should change the codes of any non-rolling code device that has been programmed into HomeLink®. Consult the Owner's Manual of each device or call the manufacturer or dealer of those devices for additional information.

When your vehicle is recovered, you will need to reprogram the HomeLink® Universal Transceiver with your new transmitter information.

#### 2-46 Instruments and controls

#### FCC Notice:

This device complies with FCC rules part 15 and RSS-210 of Industry Canada. Operation is subject to the following two conditions:

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

This transmitter has been tested and complies with FCC and DOC/MDC rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

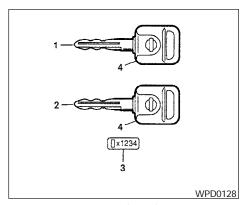
DOC: ISTC 1763K1313

FCC I.D. CV2V67690

# **MEMO**

# 3 Pre-driving checks and adjustments

Keys	Operating the power lift gate	
NISSAN vehicle immobilizer system keys 3-2	(if so equipped)	3-16
Doors	Lift gate release	3-18
Locking with key	Fuel-filler door	
Locking with inside lock knob	Opener operation	3-19
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Operating the manual sliding door	Steering wheel	
(if so equipped)	Tilt operation	
Using the main ON/OFF switch for the	Pedal position adjustment (if so equipped)	
power sliding door (if so equipped)	Sun visors	
Operating the power sliding door (if so equipped)	Vanity mirrors	
Automatic Door Locks	Mirrors	
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Remote keyless entry system	Automatic anti-glare rearview mirror	
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Operating the manual lift gate3-15	Memory storage function	
Using the main ON/OFF switch for the	Entry/exit function	
power lift gate (if so equipped)	System operation	



- Two master keys (black) with transponder chip and chrome NISSAN brand symbol on one side
- 2. Valet key (black) with transponder chip
- 3. Key number plate
- 4. Transponder chip

A key number plate is supplied with your keys. Record the key number and keep it in a safe place (such as your wallet), not in the vehicle. If you lose your keys, see a NISSAN dealer for duplicates by using the key number. 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, your NISSAN dealer can duplicate it.

# NISSAN VEHICLE IMMOBILIZER SYSTEM KEYS

You can only drive your vehicle using the master or valet keys which are registered to the NISSAN Vehicle Immobilizer System components in your vehicle. These keys have a transponder chip in the key head.

The master key can be used for all the locks.

The valet key cannot be used for the glove box lock.

To protect your belongings when you leave a key with someone, give them the valet key only.

## Never leave these keys in the vehicle.

Additional or replacement keys:

If you still have a key, the key number is not necessary when you need extra NISSAN Vehicle Immobilizer System keys. Your dealer can duplicate your existing key. As many as five NISSAN Vehicle Immobilizer System keys can be used with one vehicle. You should bring all NISSAN Vehicle Immobilizer System keys that you have to your NISSAN dealer for registration. This is be-

cause the registration process will erase the memory of all key codes previously registered into the NISSAN Vehicle Immobilizer System. After the registration process, these components will only recognize keys coded into the NISSAN Vehicle Immobilizer System during registration. Any key that is not given to your dealer at the time of registration will no longer be able to start your vehicle.

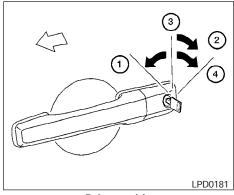
Do not allow the immobilizer system key, which contains an electrical transponder, to come into contact with salt water. This could affect system function.

### **WARNING**

- Always have the doors locked while driving. Along with the use of seat belts. this provides greater safety in the event of an accident by helping to prevent persons from being thrown from the vehicle. This also helps keep children and others from unintentionally opening the doors, and will help keep out intruders.
- Before opening any door, always look for and avoid oncoming traffic.
- Do not leave children unattended inside. the vehicle. They could unknowingly activate switches or controls. Unattended children could become involved in serious accidents.
- Always be sure that hands and feet are clear of the door frame to avoid injury while closing a sliding door.

#### **A** CAUTION

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



Driver's side LOCKING WITH KEY

The power door lock system allows you to lock or unlock all doors at the same time.

Turning the key toward the front (1) of the vehicle locks all doors.

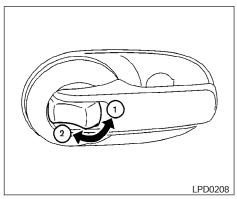
Turning the key one time toward the rear (2) of the vehicle unlocks that door. From that position, returning the key to neutral (3) (where the key can only be removed and inserted) and turning it toward the rear again within five seconds unlocks all doors (4).

# Opening and closing windows

The driver's door key operation allows you to open and close windows equipped with automatic operation at the same time.

- To open the windows, turn the driver's door key toward the rear of the vehicle for longer than 1 second after the door is unlocked.
- To close the windows, turn the driver's door key to the front of the vehicle for longer than 1 second after the door is locked.

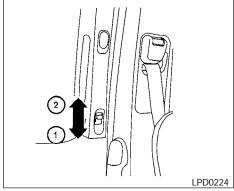
Windows stop when the key cylinder is released.



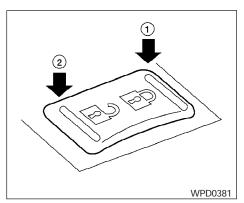
Inside lock for front doors LOCKING WITH INSIDE LOCK **KNOB** 

To lock the door without the key, move the inside lock knob to the lock position (1), then close the door.

To unlock the door without the key, move the inside lock knob to the unlock position (2).



Inside lock for sliding doors



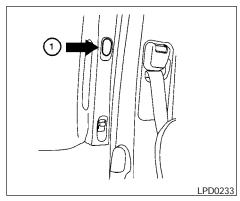
## Door lock switch LOCKING WITH POWER DOOR LOCK SWITCH

To lock all the doors without a key, push the door lock switch (driver's or front passenger's side) to the lock position (1). When locking the door this way, be certain not to leave the key inside the vehicle.

To unlock all the doors without a key, push the door lock switch (driver's or front passenger's side) to the unlock position (2).

## Lockout protection

When the power door lock switch (driver's or front passenger's side) is moved to the lock position with the key in the ignition switchand any door open, all doors will lock and then unlock automatically. This helps to prevent the keys from being accidently locked inside the vehicle.



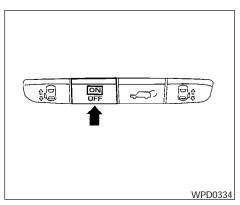
# OPERATING THE MANUAL SLIDING DOOR (if so equipped)

The manual sliding door can be opened from the inside or the outside.

To open a sliding door from the inside, push the button (1) and pull the handle toward the rear of the vehicle.

To open a sliding door from the outside, pull out the outside handle.

The driver side sliding door cannot be opened fully when the fuel-filler door is open.



USING THE MAIN ON/OFF SWITCH FOR THE POWER SLIDING DOOR (if so equipped)

The main ON/OFF switch is located in the overhead console.

Push the switch ON to enable the door pillar switches and the power assist feature. An indicator light will illuminate when the switch is in the ON position.

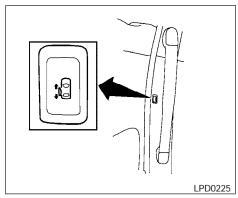
Push the switch OFF to disable the door pillar switches and the power assist feature. An indicator light will illuminate when the switch is in the OFF position.

3-6 Pre-driving checks and adjustments

When the switch is in the OFF position, the sliding door can still be opened with the keyfob or overhead console switch. The sliding door can also be opened manually with the inside or outside handle.

#### NOTE:

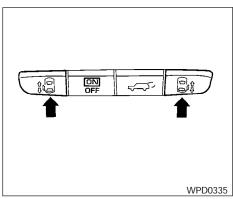
If the child safety lock is in the lock position, the door pillar switch will not operate the sliding door regardless of the main ON/OFF switch position.



Door pillar switch
OPERATING THE POWER SLIDING
DOOR (if so equipped)

#### NOTE:

To open, close or reverse a power sliding door, the ignition switch must be OFF, or, if the ignition switch is ON, the shift selector must be in P (Park). Also, the power sliding doors will not operate if battery voltage is low.



Overhead console switch

#### Power Assist:

If the main on/off switch is ON and a sliding door is unlocked and manually moved toward the open or closed position using the inside or outside handle, the power assist feature will be activated and the door will complete its motion automatically.

#### Power Open:

The door automatically moves from the fully closed position to the fully open position in approximately three to six seconds. The power open feature can be activated by the switches on the keyfob, the overhead console and the door pillar.

- · A sliding door can be opened by the overhead console switch and the keyfob even if the vehicle is locked. The door will individually unlock and open. When the sliding door is closed, it will remain unlocked. The vehicle must be re-locked to lock the door.
- The keyfob button must be held for 0.5 seconds before the door opens.
- The switch on the door pillar can only be used to open the door if the main ON/OFF switch is ON, the door is unlocked and the child lockout switch is not set.

A warning chime will sound if the shift selector is moved out of P (Park) during a power open operation.

The driver's side power sliding door cannot be power opened when the fuel lid door is open. A warning chime will sound if an open operation is attempted. The door can be opened manually part way.

#### Power Close:

The door automatically moves from the fully open position to the secondary position. When the sliding door reaches the secondary position, the cinching motor engages and pulls the door to its primary latch position. Power close takes approximately four to seven seconds. The power

close feature can be activated by the switches on the keyfob, the overhead console and the door pillar.

- If the inside or outside handle is activated while the cinching motor is engaged, the cinching motor will disengage and release the latch.
- The keyfob button must be held for 0.5 seconds before the door closes.
- The switch on the door pillar can only be used to close the door if the main ON/OFF switch is ON.

#### Reverse:

The door will reverse direction immediately during power open or power close if the keyfob, overhead console or door pillar switch is pressed. A chime will sound to announce the reversal.

#### Auto Reverse:

If an obstacle is detected during power open or power close, a warning chime will sound and the door will reverse direction and return to the full open or full close position. If a second obstacle is detected, the door motion will stop and the clutch mode will be engaged.

### **WARNING**

There are some small distances immediately before the closed position which cannot be detected. Make sure that all passengers have their hands, etc., inside the vehicle before closing the door.

#### Clutch Mode:

To help prevent unexpected slams due to gravity, the clutch mode is engaged intermittently for approximately 5 – 8 seconds when power open or close is interrupted due to multiple obstacles, low battery voltage or the main ON/OFF switch is turned to OFF. The door must then be opened or closed manually.

## Restarting the power sliding door

Some power sliding door functions will become disabled after the battery terminal is disconnected and/or the electrical supply is interrupted.

The following procedure must be used to restart each power sliding door so that all functions are enabled:

- 1. Turn the main on/off switch to OFF.
- 2. Manually open the power sliding door to its fully open position.
- 3. Turn the main on/off switch to ON.
- 3-8 Pre-driving checks and adjustments

- Press and hold the power sliding door switch on the overhead console until the door closes.
- 5. Release the switch.
- Press and hold the power sliding door switch on the overhead console until the door opens as far as it can.
- 7. Release the switch.
- Press and hold the power sliding door switch on the overhead console until the door closes.
- 9. Release the switch.

The power sliding door should now work properly.

#### NOTE:

The restarting procedure must be completed for both the left-hand and right-hand power sliding doors (if so equipped).

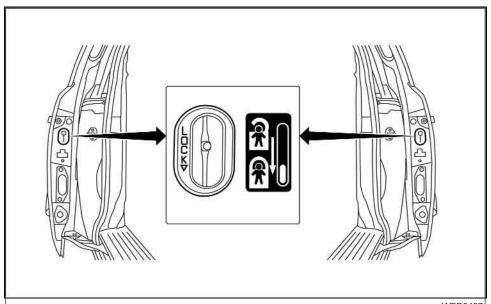
#### **AUTOMATIC DOOR LOCKS**

- All doors lock automatically when the vehicle speed reaches 15 MPH (24 km/h).
- All doors unlock automatically when the ignition is placed in the OFF position (Intelligent Key equipped vehicles) or when the key is removed from the ignition switch (mechanical key equipped vehicles).

The automatic lock and unlock functions can be deactivated or activated independently of each other. To deactivate or activate the automatic door lock or unlock system, perform the following procedure:

- 1. Close all doors.
- 2. Place the ignition switch in the ON position.
- 3. Do one of the following within 20 seconds of performing Step #2:
  - To change AUTO UNLOCK settings: push and hold the power door lock switch to the position (UNLOCK) for more than 5 seconds
  - To change AUTO LOCK settings: push and hold the power door lock switch to the position (LOCK) for more than 5 seconds
- When activated, the hazard indicator will flash twice. When deactivated, the hazard indicator will flash once.
- The ignition switch must be placed in the OFF and ON position again between each setting change.

#### REMOTE KEYLESS ENTRY SYSTEM



#### WPD0437

## CHILD SAFETY SLIDING DOOR LOCK

The child safety lock helps prevent the sliding door from being opened accidentally, especially when small children are in the vehicle.

The child safety lock levers are located on the edge of the sliding doors.

When the lever is in the lock position, the door can be opened only from the outside, by the overhead console switch or using the keyfob.

### **WARNING**

- Radio waves could adversely affect electric medical equipment. Those who use a pacemaker should contact the electric medical equipment manufacturer for the possible influences before use.
- The keyfob transmits radio waves when the buttons are pushed. The FAA advises radio waves may affect aircraft navigation and communication systems. Do not operate the keyfob while on an airplane. Make sure the buttons are not operated unintentionally when the unit is stored for a flight

It is possible to lock/unlock all doors, turn on the interior lights and puddle lamps (if so equipped), and activate the panic alarm by using the keyfob from outside the vehicle.

Some settings for the keyfob, such as horn beep, can be adjusted. For vehicles with monochrome screen, refer to "Silencing the horn beep feature" later in this section. For vehicles with color screen, refer to "Vehicle electronic systems" in the "Display screen, heater, air conditioner, audio and phone systems" section later in this manual.

#### Be sure to remove the key from the vehicle before locking the doors.

The keyfob can operate at a distance of approximately 33 ft (10 m) from the vehicle. The effective distance depends upon the conditions around the vehicle.

As many as 5 keyfobs can be used with one vehicle. For information concerning the purchase and use of additional keyfobs, contact a NISSAN dealer.

The keyfob will not function when:

- the battery is discharged
- the distance between the vehicle and the keyfob is over 33 ft (10 m)

The panic alarm will not activate when the key is in the ignition switch.

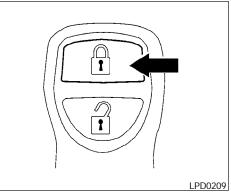
#### **A** CAUTION

Listed below are conditions or occurrences which will damage the keyfob:

- Do not allow the keyfob to become wet. If the keyfob gets wet, immediately wipe until it is completely dry.
- Do not drop the keyfob.

- Do not strike the keyfob sharply against another object.
- Do not place the keyfob for an extended period in an area where temperatures exceed 140°F (60°C).
- Do not attach the keyfob with a key holder that contains a magnet. . Do not place the keyfob near equipment that produces a magnetic field, such as a TV, equipment audio and personal computers.
- Do not place the keyfob near equipment that produces a magnetic field, such as a TV, audio equipment and personal computers.

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



## HOW TO USE REMOTE KEYLESS **FNTRY SYSTEM**

## Locking doors

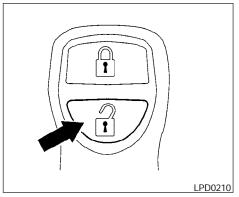
- Close all windows.
- 2. Remove the key from the ignition switch.
- Close the hood and all doors.
- 4. Push the button on the keyfob. All the doors lock. The hazard warning lights flash twice and the horn beeps once to indicate all doors are locked.

- When the button is pushed with all doors locked, the hazard warning lights flash twice and the horn beeps once as a reminder that the doors are already locked.
- If a door is open and you push the button, the doors will lock but the horn will not beep and the hazard warning lights will not flash.

The horn may or may not beep. For vehicles with monochrome screen, refer to "Silencing the horn beep feature" later in this section. For vehicles with color screen, refer to "Vehicle electronic systems" in the "Monitor, climate, audio, phone and voice recognition systems" section later in this manual.

#### NOTE:

If you use the keyfob to change the horn beep and lamp flash feature for vehicles with color screen, the display will not show the current mode and cannot be used to change the mode. Use the keyfob to return to the previous mode and re-enable the display screen control. Refer to "Vehicle electronic systems" in the "Monitor, climate, audio, phone and voice recognition systems" section for additional information.



#### Unlocking doors

Push the button on the keyfob once.

- Only the driver's door unlocks.
- The hazard indicator flashes once if all doors. are completely closed with the ignition key in any position except the ON position.
- The interior lights and puddle lamps (if so equipped) turn on and the light timer activates for 30 seconds when the lights on demand switch is in the position with the ignition key in any position except the ON position.

Push the button on the keyfob again within 5 seconds.

- All doors unlock.
- The hazard indicator flashes once if all doors are completely closed.

The interior lights and puddle lamps (if so equipped) can be turned off without waiting 30 seconds by inserting the key into the ignition and turning to the ON or START position, locking the doors with the keyfob or pushing the interior light switch to the OFF position.

#### Auto relock

When the button on the keyfob is pushed, all doors will lock automatically within one minute unless one of the following operations is performed:

- Any door is opened.
- A key is inserted into the ignition switch and the switch is turned from OFF to ON.

#### Opening windows

The keyfob allows you to open windows equipped with automatic operation simultaneously.

• To open the windows, press the ton on the keyfob for longer than 3 seconds after all doors are unlocked.

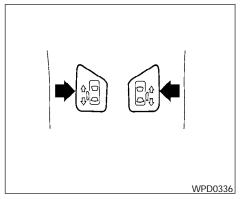
The door windows will open while pressing A button on the keyfob.

The door windows cannot be closed by using the keyfob.

Linking the keyfob to automatic drive positioner memory

If the vehicle is equipped with automatic drive positioner, the keyfob can be linked to a memory setting.

See "Automatic drive positioner" later in this section.

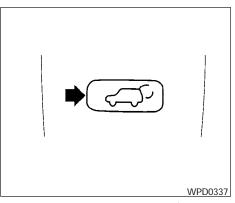


#### Operating the power sliding door (if so equipped)

Push and hold the button on the keyfob for about 0.5 seconds to open or close the power sliding door.

The door will reverse direction immediately during power open or power close if the keyfob button is pressed. A chime will sound to announce the reversal.

For more information, see "Operating the power sliding door" earlier in this section.

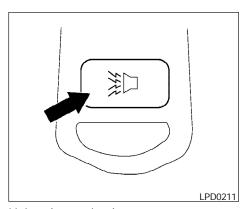


#### Operating the power lift gate (if so equipped)

Push and hold the button on the keyfob for about 0.5 seconds to open or close the lift gate. The hazard warning lights flash and a chime sounds to indicate the power open or power close sequence has started.

The lift gate will reverse direction immediately during power open or power close if the keyfob button is pressed. A chime will sound to announce the reversal.

For more information, see "Lift gate" later in this section.



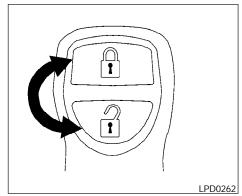
Using the panic alarm

If you are near your vehicle and feel threatened, you may activate the panic alarm to call attention by pushing and holding the D button on the keyfob for longer than 0.5 seconds.

The panic alarm and headlights will stay on for 25 seconds

The panic alarm stops when:

- it has run for 25 seconds, or
- any button is pushed on the keyfob.



Silencing the horn beep feature

If desired, the horn beep feature can be deactivated using the keyfob.

#### NOTE:

If you use the keyfob to change the horn beep and lamp flash feature for vehicles with color screen, the display will not show the current mode and cannot be used to change the mode. Use the keyfob to return to the previous mode and re-enable the display screen control. Refer to "Vehicle electronic systems" in the "Monitor, climate, audio, phone and voice recognition systems" section for additional information.

To deactivate: Press and hold the buttons for at least two seconds.

The hazard warning lights will flash three times to confirm that the horn beep feature has been deactivated.

To activate: Press and hold the buttons for at least two seconds once more.

The hazard warning lights will flash once and the horn will sound once to confirm that the horn beep feature has been reactivated.

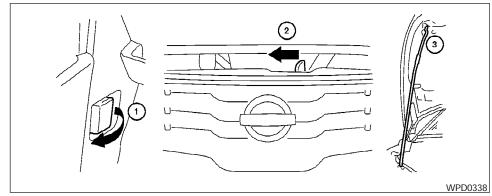
Deactivating the horn beep feature does not silence the horn if the alarm is triggered.

#### HOOD

#### Using the interior lights

Push the button on the keyfob once to turn on the interior lights and puddle lamps (if so equipped).

For additional information, refer to "Lights on demand switch" in the "Instruments and controls" section earlier in this manual.



- Pull the hood lock release handle located below the driver's side instrument panel. The hood will spring up slightly.
- Push the lever at the front of the hood to the side as illustrated with your fingertips and raise the hood.
- Insert the support rod into the slot on the underside of the hood.

When closing the hood, return the hood rod to its original position. Lower the hood approximately 12 inch (30 cm) above the latch and release it. This allows proper engagement of the hood latch.

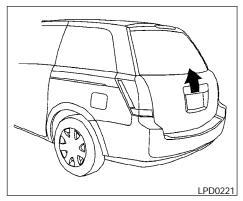
#### **WARNING**

- Make sure the hood is completely closed and latched before driving. Failure to do so could cause the hood to fly open and result in an accident.
- If you see steam or smoke coming from the engine compartment, to avoid injury do not open the hood.

#### LIFT GATE

#### **WARNING**

- Always be sure the lift gate has been closed securely to prevent it from opening while driving.
- Do not drive with the lift gate open. This could allow dangerous exhaust gases to be drawn into the vehicle. See "Exhaust gas" in the "Starting and driving" section of this manual.
- Do not leave children unattended inside the vehicle. They could unknowingly activate switches or controls. Unattended children could become involved in serious accidents.
- Always be sure that hands and feet are clear of the door frame to avoid injury while closing the lift gate.

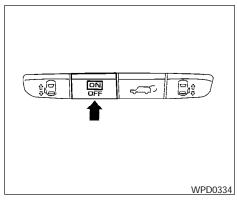


#### **OPERATING THE MANUAL LIFT GATE**

The power door lock system allows you to lock or unlock all doors including the lift gate simultaneously.

To open the lift gate, depress the opener handle and lift up.

To close, lower and push the lift gate down securely.



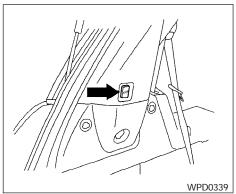
#### USING THE MAIN ON/OFF SWITCH FOR THE POWER LIFT GATE (if so equipped)

The main ON/OFF switch is located in the overhead console.

Push the switch ON to enable the rear pillar switch. An indicator light will illuminate when the switch is in the ON position.

Push the switch OFF to disable the rear pillar switch. An indicator light will illuminate when the switch is in the OFF position. Pushing the switch OFF while the lift gate is opening or closing will cancel the operation and the lift gate will go to manual mode.

When the switch is in the OFF position, the lift gate can still be opened with the keyfob or overhead console switch. The lift gate can also be opened manually with the outside handle if the lift gate is unlocked.



Rear pillar switch

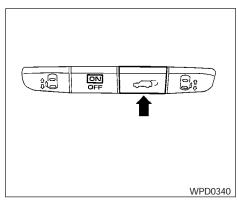
**OPERATING THE POWER LIFT** GATE (if so equipped)

#### NOTE:

To open, close or reverse the power lift gate, the shift selector must be in P (Park). Also, the power lift gate will not operate if battery voltage is low.

#### Power Open:

The power lift gate automatically moves from the fully closed position to the fully open position in approximately five to eight seconds. The power open feature can be activated by the switch on



#### Overhead console switch

the keyfob and the overhead console and by the outside opener handle. The hazard lights flash and a chime sounds to indicate the power open sequence has been started.

- The lift gate can be opened by the overhead console switch and the keyfob even if the vehicle is locked. The lift gate will individually unlock and open. Once the lift gate is closed, its lock will align to the vehicle's lock or unlock status.
- The keyfob button must be held for 0.5 seconds before the lift gate opens.

- The lift gate must be unlocked to open it with the outside opener handle.
- The switch on the rear pillar cannot be used to open the lift gate.

A warning chime will sound if the shift selector is moved out of P (Park) during a power open operation.

#### Power Close:

The power lift gate automatically moves from the fully open position to the secondary position. When the lift gate reaches the secondary position, the cinching motor engages and pulls the lift gate to its primary latch position. Power close takes approximately seven to ten seconds. The power close feature can be activated by the switch on the keyfob, the overhead console and the rear pillar. The hazard lights flash and a chime sounds to indicate the power close sequence has been started.

- If the outside opener handle is activated while the cinching motor is engaged, the cinching motor will disengage and release the latch.
- The keyfob button must be held for 0.5 seconds before the lift gate closes.
- The switch on the rear pillar can only be used to close the lift gate if the main ON/OFF switch is ON.

#### Reverse:

The power lift gate will reverse direction immediately during power open or power close if the keyfob, overhead console or rear pillar switch is pressed. A chime will sound to announce the reversal.

#### Auto Reverse:

If an obstacle is detected during power open or power close, a warning chime will sound and the lift gate will reverse direction and return to the full open or full close position. If a second obstacle is detected, the lift gate motion will stop and the drive motor will disengage. The lift gate will enter manual mode.

A pinch strip is mounted on each side of the lift gate. If an obstacle is detected by a pinch strip during power close, the lift gate will reverse direction and return to the full open position.

#### NOTE:

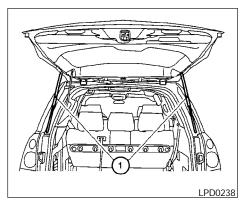
If the pinch strip is damaged or removed, the power close function will not operate.

#### **AWARNING**

There are some small distances immediately before the closed position which cannot be detected. Make sure that all passengers have their hands, etc., inside the vehicle before closing the lift gate.

#### Manual Mode:

If power operation is not available, the lift gate may be operated manually. Power operation may not be available if the main ON/OFF switch is in the OFF position, if multiple obstacles have been detected in a single power cycle, or if battery voltage is low.



#### Safe Mode:

If the lift gate gas stays ① lose pressure, the power lift gate safe mode is activated. When the safe mode is activated, the lift gate slowly closes. A continuous warning chime sounds until the lift gate is in the fully down position. Then the lift gate will be pulled to the closed and latched position by a motor.

The power lift gate cannot be opened using the switches at any time in the safe mode.

The auto reverse function remains active while the lift gate is closing in the safe mode.

Do not operate the lift gate again until it is checked by your NISSAN dealer.

#### **A** CAUTION

- If the power lift gate does not stay open or if the lift gate unexpectedly closes at any time while a continuous warning chime sounds, do not operate the lift gate. There may be a pressure loss in one or both of the lift gate gas stays. Have the lift gate inspected by a NISSAN dealer.
- Do not activate the power lift gate if one or both of the lift gate gas stays are removed. Damage to the lift gate or power lift gate mechanisms may occur.

#### LIFT GATE RELEASE

#### **WARNING**

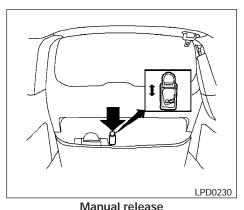
- Always be sure the lift gate has been closed securely to prevent it from opening while driving.
- Do not drive with the lift gate open. This could allow dangerous exhaust gases to be drawn into the vehicle. See "Exhaust gas" in the "Starting and driving" section of this manual.

#### **A**CAUTION

- If the power lift gate does not stay open or if the lift gate unexpectedly closes at any time while a continuous warning chime sounds, do not operate the lift gate. There may be a pressure loss in one or both of the lift gate gas stays. Have the lift gate inspected by a NISSAN dealer.
- Do not activate the power lift gate if one or both of the lift gate gas stays are removed. Damage to the lift gate or power lift gate mechanisms may occur.

#### 3-18 Pre-driving checks and adjustments

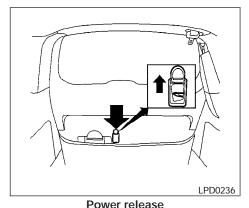
#### **FUEL-FILLER DOOR**



Manual lift gate (if so equipped)

If the lift gate cannot be locked or unlocked with the door lock switch or the keyfob due to a discharged battery, follow these steps:

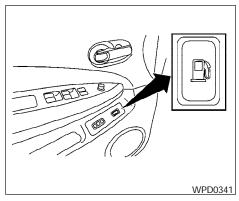
- 1. Remove the cover on the inside of the lift gate.
- 2. Move the lever down to lock or up to unlock.



Power lift gate (if so equipped)

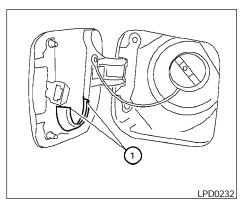
If the lift gate cannot be opened with the door lock switch or keyfob due to a discharged battery, follow these steps:

- 1. Remove the cover on the inside of the lift gate.
- 2. Move the lever up to open the lift gate.



#### **OPENER OPERATION**

The fuel-filler door release is located on the driver's door. To open the fuel-filler door, push the release. To lock, close the fuel-filler door securely.



#### FUFI-FILLER CAP

The fuel-filler cap is a ratcheting type. Turn the cap counterclockwise to remove. To tighten, turn the cap clockwise until ratcheting clicks are heard.

Put the fuel-filler cap on the cap holder (1) while refueling.

#### **WARNING**

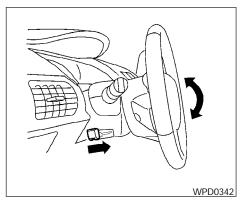
- Gasoline is extremely flammable and highly explosive under certain conditions. You could be burned or seriously injured if it is misused or mishandled. Always stop the engine and do not smoke or allow open flames or sparks near the vehicle when refueling.
- Do not attempt to top off the fuel tank after the fuel pump nozzle shuts off automatically. Continued refueling may cause fuel overflow, resulting in fuel spray and possibly a fire.
- Use only an original equipment type 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. It could also cause the malfunction indicator light to come on.
- Never pour fuel into the throttle body to attempt to start your vehicle.

- Do not fill a portable fuel container in the vehicle or trailer. Static electricity can cause an explosion of flammable liquid, vapor or gas in any vehicle or trailer. To reduce the risk of serious injury or death when filling portable fuel containers:
- Always place the container on the ground when filling.
- Do not use electronic devices when fillina.
- Keep the pump nozzle in contact with the container while you are filling it.
- Use only approved portable fuel containers for flammable liquid.

#### STEERING WHEEL

#### **A** CAUTION

- If fuel is spilled on the vehicle body, flush it away with water to avoid paint damage.
- Insert the fuel-filler cap straight into the fuel-filler tube, then tighten until the fuel-filler cap clicks. Failure to tighten the fuel-filler cap properly may cause the ENGINE Malfunction Indicator Light (MIL) to illuminate. If the ENGINE light illuminates because the fuel-filler cap is loose or missing, tighten or install the cap and continue to drive the vehicle. The ENGINE light should turn off after a few driving trips. If the ENGINE light does not turn off after a few driving trips, have the vehicle inspected by a NISSAN dealer
- For additional information, see the "Malfunction Indicator Light (MIL)" in the "Instruments and Controls" section. earlier in this manual.



#### TILT OPERATION

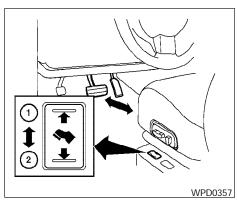
Pull the lock lever forward and adjust the steering wheel up or down to the desired position.

Push the lock lever back to lock the steering wheel in place.

#### **AWARNING**

Do not adjust the steering wheel while driving. You could lose control of your vehicle and cause an accident.

#### PEDAL POSITION ADJUSTMENT (if so equipped)



The accelerator and brake pedals can be adjusted for driving comfort.

Use the pedal adjusting switch to adjust the brake and accelerator pedal position forward (1) or backward (2).

The brake and accelerator pedals cannot be adjusted separately.

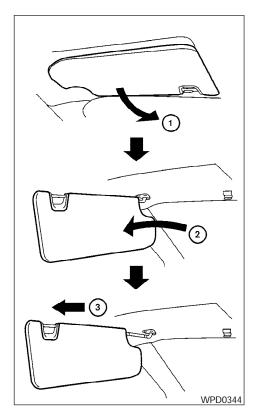
#### **WARNING**

Do not adjust the pedal position while driving. You can lose control of your vehicle and cause an accident.

#### **SUN VISORS**

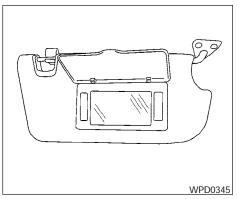
#### **A**CAUTION

Do not adjust the pedal position with your foot on the pedal.



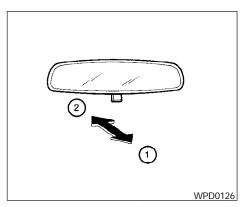
- To block glare from the front, swing down the main sun visor.
- 2 To block glare from the side, remove the main sun visor from the center mount and swing the visor to the side.
- Slide the sun visor in or out as needed.

#### **MIRRORS**



#### **VANITY MIRRORS**

To access the vanity mirror, pull the sun visor down and flip open the mirror cover. The vanity mirror will illuminate when the mirror cover is open.



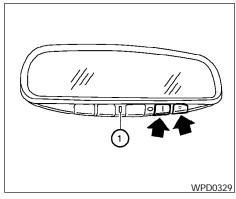
#### REARVIEW MIRROR (if so equipped)

The night position 1 reduces glare from the headlights of vehicles behind you at night.

Use the day position (2) when driving in daylight hours.

#### **AWARNING**

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



#### AUTOMATIC ANTI-GLARE REARVIEW MIRROR (if so equipped)

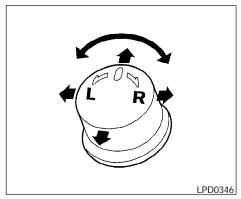
The inside mirror is designed so that it automatically changes reflection according to the intensity of the headlights of the vehicle following you.

The indicator light (1) will illuminate when the automatic anti-glare feature is on.

To turn off the automatic anti-glare feature, press O button. the

To turn on the automatic anti-glare feature, press the button.

For information on HomeLink® Universal Transceiver operation, see the "HomeLink® Universal Transceiver" in the "Instrument and controls" section of this manual.



**OUTSIDE MIRRORS** 

#### **AWARNING**

Objects viewed in the outside mirror on the passenger side are closer than they appear. Be careful when moving to the right. Using only this mirror could cause an accident. Use the inside mirror or glance over your shoulder to properly judge distances to other objects.

The outside mirror remote control only operates when the ignition switch is in the ACC or ON position.

Rotate the control lever to select the right or left mirror. Adjust the mirror to the desired position by moving the control lever.

#### Automatic anti-glare outside mirrors (if so equipped)

The outside mirrors will automatically dim during nighttime conditions to reduce the glare from the headlights of trailing vehicles. The automatic antiglare feature operates only when the ignition switch is in the ON position.

The automatic anti-glare feature will be on when starting the vehicle. The indicator light on the automatic anti-glare rearview mirror will illuminate when the automatic anti-glare feature is on.

To turn off the automatic anti-glare feature, press the O button on the rearview mirror.

The indicator light will turn off.

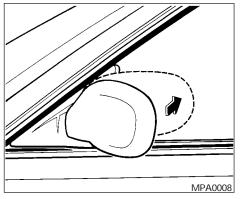
To turn on the automatic anti-glare feature again, button on the rearview mirror press the

The indicator light will turn on.

For information on the automatic anti-glare rearview mirror, see "Automatic anti-glare rearview mirror" earlier in this section.

#### Heated mirrors (if so equipped)

Some outside mirrors can be heated to defrost. defog, or de-ice for improved visibility. For additional information, see "Rear window and outside mirror (if so equipped) defroster switch" in the "Instrument and controls" section of this manual.



Manual folding outside mirrors

Push the mirrors backward to fold them.

Reverse tilt-down feature (if so equipped)

The reverse tilt-down feature will turn the selected outside mirror surface downward to provide better rear visibility close to the vehicle.

When the ignition switch is in the ON position, turn the outside mirror control switch to the left or right position. Only one mirror can be selected at a time.

Move the shift selector lever to R (Reverse). The selected mirror will turn downward.

The selected mirror surface will return to its original position when any of the following have occurred:

- The shift selector lever is moved to any position other than R (Reverse).
- The outside mirror control switch is set to the neutral or center position.
- The ignition switch is turned OFF.

#### NOTE:

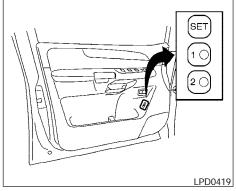
If the outside mirror control switch is in the neutral position, neither mirror will turn downward when the shift selector lever is moved to R (Reverse).

For more information regarding this feature, refer to "Automatic drive positioner" later in this section.

#### **AUTOMATIC DRIVE POSITIONER (if** so equipped)

The automatic drive positioner system has two features:

- Memory storage function
- Entry/exit function



#### MEMORY STORAGE FUNCTION

Two positions for the driver's seat, accelerator and brake pedals, and outside mirrors can be stored in the automatic drive positioner memory. Follow these procedures to use the memory system.

- Set the automatic transmission shift selector. to the P (Park) position.
- 2. Turn the ignition switch ON.
- 3. Adjust the driver's seat, accelerator and brake pedals, and outside mirrors to the desired positions by manually operating each adjusting switch. For additional infor-

mation, see "Seats" in the "Safety—Seats, seat belts and supplemental restraint system" section and "Pedal position adjustment" and "Outside mirrors" earlier in this section.

During this step, do not turn the ignition switch to any position other than ON.

4. Push the SET switch and, within 5 seconds. push the memory switch (1 or 2).

The indicator light for the pushed memory switch will come on and stay on for approximately 5 seconds after pushing the switch. After the indicator light goes off, the selected positions are stored in the selected memory (1 or 2).

If a new memory is stored in the same memory switch, the previous memory will be deleted.

#### Linking a keyfob to a stored memory position

Each keyfob can be linked to a stored memory position (memory switch 1 or 2) with the following procedure.

1. Follow the steps for storing a memory position.

2. While the indicator light for the memory switch being set is illuminated for 5 seconds, press the distribution on the keyfob. The indicator light will blink. After the indicator light goes off, the keyfob is linked to that memory setting.

With the key removed from the ignition switch, button on the keyfob. The driver's seat, accelerator and brake pedals, and outside mirrors will move to the memorized position.

#### NOTE:

If a new memory position is saved to the memory switch, the keyfob automatically re-links.

#### Confirming memory storage

 Turn the ignition switch ON and push the SET switch. If the main memory has not been stored, the indicator light will come on for approximately 0.5 seconds. When the memory has stored the position, the indicator light will stay on for approximately 5 seconds.

- If the battery cable is disconnected, or if the fuse opens, the memory storage function will be canceled and must be restarted before a stored memory position can be set again. Drive the vehicle over 25 MPH (40 km/h) to restart the memory storage function. You can also restart the memory storage function using the following procedure.
- 1. Connect the battery cable or replace the fuse.
- 2. Open and close the driver's door more than two times with the ignition switch in the LOCK position.

Once the memory storage function has been restarted, you can store a memory position. See "Memory storage function" earlier in this section.

#### Selecting the memorized position

Set the shift selector to the P (Park) position, then:

- Within 45 seconds of opening the driver's door, push the memory switch (1 or 2) or
- Turn the ignition switch to the ON position and push the memory switch (1 or 2).

The driver's seat, accelerator and brake pedals, and outside mirrors will move to the memorized position with the indicator light blinking, and then the light will stay on for approximately 5 seconds.

#### ENTRY/EXIT FUNCTION

This system is designed so that the driver's seat will automatically move when the shift selector is in the P (Park) position. This allows the driver to get into and out of the driver's seat more easily.

The driver's seat will slide backward:

- When the key is removed from the ignition switch and the driver's door is opened.
- When the driver's door is opened with the key turned to LOCK.
- When the key is turned from ACC to LOCK with the driver's door open.

The driver's seat will return to previous position:

- When the key is inserted into the ignition switch and the driver's door is closed.
- When the driver's door is closed with the key turned to LOCK.
- When the key is turned from ACC to ON while the shift selector is in the P (Park) position.

The entry/exit function can be adjusted or canceled. See "Vehicle electronic systems" in the "Monitor, climate, audio, phone and voice recognition systems" section of this manual.

#### Restarting the entry/exit function

If the battery cable is disconnected or if the fuse opens, the entry/exit function will be disabled. Drive the vehicle over 25 MPH (40 km/h) to restart the entry/exit function. You can also restart the entry/exit function using the following procedure.

- Connect the battery cable or replace the fuse.
- Open and close the driver's door more than two times with the ignition switch in the LOCK position.

The entry/exit function should now work properly.

#### SYSTEM OPERATION

The automatic drive positioner system will not work or will stop operating under the following conditions:

- When the vehicle speed is above 4 MPH (7 km/h).
- When any of the memory switches are pushed while the automatic drive positioner is operating.

- When the adjusting switch for the driver's seat is turned on while the automatic drive positioner is operating.
- When the seat has been already moved to the memorized position.
- When no seat position is stored in the memory switch.
- When the shift selector is moved from P (Park) to any other position.
- When the driver's door remains open more than 45 seconds and the ignition switch is not in the ON position.

The automatic drive positioner system can be adjusted and canceled. See "Vehicle electronic systems" in the "Display screen, heater, air conditioner, audio and phone systems" section of this manual.

#### 3-28 Pre-driving checks and adjustments

#### **MEMO**

# 4 Display screen, heater, air conditioner, audio and phone systems

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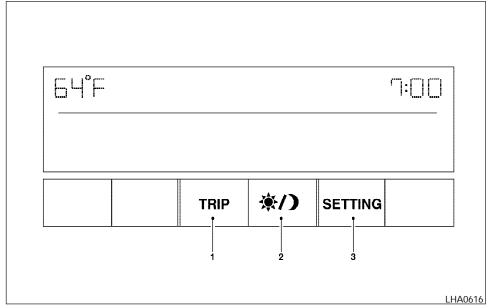
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## CONTROL PANEL BUTTONS — WITH MONOCHROME SCREEN (if so equipped)

#### **A** WARNING

- Do not disassemble or modify this system. If you do, it may result in accidents, fire, or electrical shock.
- Do not use this system if you notice any abnormality, such as a frozen screen or lack of sound. Continued use of the system may result in accident, fire or electric shock.
- In case you notice any foreign object in the system hardware, spill liquid on it, or notice smoke or smell coming from it, stop using the system immediately and contact your nearest NISSAN dealer. Ignoring such conditions may lead to accidents, fire or electrical shock.



- 1. TRIP button (P. 4-3)
- 2. ☆/⊅ brightness control button (P. 4-6)
- SETTING button (P. 4-5)

#### **A** CAUTION

- The glass screen on the liquid crystal display may break if it is hit with a hard or sharp object. If the glass breaks, do not touch the liquid crystalline material, which contains a small amount of mercury. In case of contact with skin, wash immediately with soap and water.
- To clean the display, never use a rough cloth, alcohol, benzine, thinner or any kind of solvent or paper towel with a chemical cleaning agent. They will scratch or deteriorate the panel.
- Do not splash any liquid such as water or car fragrance on the display. Contact with liquid will cause the system to malfunction.

When you use this system, make sure the engine is running.

If you use the system with the engine not running (ignition ON or ACC) for a long time, it will use up all the battery power, and the engine will not start.

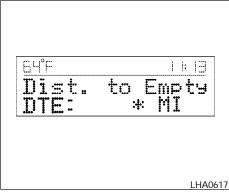
Reference symbols:

TRIP button — This is a button on the control panel. By pressing this button you can select the item or perform this action.

#### HOW TO USE THE TRIP BUTTON

When the TRIP button is pressed, the following modes will display on the screen.

Dist. to Empty → Average Speed → Fuel Economy → Tire Pressure → Audio or OFF → Dist. to Empty



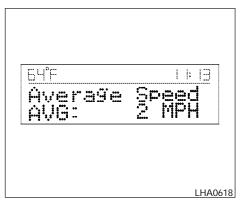
#### Distance to empty (MI or km)

The Distance To Empty (DTE) mode provides you with an estimation of the distance that can be driven before refueling. The DTE is constantly calculated based on the amount of fuel in the fuel tank and the actual fuel consumption. The display is updated every 30 seconds. When the fuel level is low, the DTE display will change to —.

#### NOTE:

 If the amount of fuel added while the ignition switch is OFF is small, the display just before the ignition switch is turned OFF may continue to be displayed.

 When driving uphill or rounding curves, the fuel in the tank shifts, which may momentarily change the display.



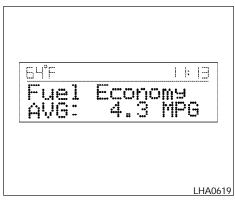
#### Average speed (MPH or km/h)

The Average Speed mode shows the average speed since the last reset. To calculate the average speed, driving distance is divided by driving time.

For approximately the first 30 seconds after a reset or reconnecting the battery cables, the display will show —.

#### Resetting average speed

The average speed calculation can be reset to 0. Press the TRIP button for more than approximately 2 seconds.



#### Fuel economy (MPG or L/100 km)

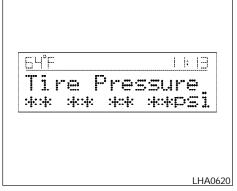
The Fuel Economy mode shows the average fuel economy since the last reset.

For approximately the first 30 seconds and 1/3 mile (500 m) after a reset or connecting the battery cables, the display will show —.

#### Resetting fuel economy

The fuel economy calculation can be reset to 0. Press the TRIP button for more than approximately 2 seconds.

#### 4-4 Display screen, heater, air conditioner, audio and phone systems



#### Tire pressure information

Pressure indication in \*\*psi on the screen indicates that the pressure is being measured. After a few driving trips, the pressure for each tire will be displayed randomly.

The order of the tire pressure figures displayed on the screen does not correspond with the actual order of the tire position.

Tire pressure rises and falls depending on the heat caused by the vehicle's operation and the outside temperature.

In case of low tire pressure, a message "LOW PRESSURE" or "CHECK ALL TIRES" is displayed on the screen:

LOW PRESSURE — CHECK ALL TIRES.

#### **A** WARNING

- When a spare tire is mounted or a wheel is replaced, tire pressure will not be indicated, the Tire Pressure Monitoring System (TPMS) will not function and the low tire pressure warning light will flash for approximately 1 minute. The light will remain on after 1 minute. Contact your NISSAN dealer as soon as possible for tire replacement and/or system resetting.
- Replacing tires with those not originally specified by NISSAN could affect the proper operation of the TPMS.

#### HOW TO USE THE SETTING BUTTON

Pressing the SETTING button will change the settings menu as follows:

Backlight → Day Mode Brightness → Night Mode Brightness → Clock Adjust HOURS →

Clock Adjust MINUTES → Units → Lang → MP3 Disp Type (if so equipped) → Audio or OFF → Backlight

#### Backlight

To turn off the screen, select "OFF" in the Backlight mode by pressing the TUNE button.

The message "Press SETTINGS to resume" will display for approximately 5 seconds then the screen will turn off.

To turn on the screen, press the SETTING button and select "ON" by pressing the TUNE button.

When any button besides SETTING is pressed with the screen off, the screen turns on for further operation. The screen will turn off automatically after the operation is finished.

#### Day mode brightness

The brightness of the screen during the day can be changed by pressing the TUNE button.

For additional information, see " \(\sigma \) button" later in this section.

#### Night mode brightness

The brightness of the screen during the night can be changed by pressing the TUNE button.

For additional information, see "\$\psi/\Delta button" later in this section.

#### Clock operation

The digital clock displays time when the ignition switch is in the ACC or ON position.

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

#### Clock adjust hours

Press the SETTING button until Clock Adjust HOURS is shown in the display. Press the TUNE button up or down to adjust the hour.

#### Clock adjust minutes

Press the SETTING button again until Clock Adjust Minutes is shown in the display. Press the TUNE button up or down to adjust the minutes.

To exit clock adjustment, press the SETTING button repeatedly. The screen will return to the audio display if the audio is on. If the audio is not on, the screen will return to a blank display.

#### Units

To change the units, press the TUNE button to select "ENGLISH" or "METRIC".

Unit: US — MI, °F, MPG Metric — km, °C, L/100 km

#### Language

The language can be changed to "ENGLISH" or "FRANÇAIS" by pressing the TUNE button.

#### MP3 display type (if so equipped)

To change how MP3 discs are displayed, press the TUNE button to select "DISC NUMBER" or "FOLDER NUMBER".

Disc number mode will display the file number in the disc.

Folder number mode will display the file number in the current folder.

For additional information, see "Audio System" later in this section.

#### ∯/⊅ BUTTON

To change the display brightness, press the AD button. Pressing the button with the headlights off will prompt the "BRIGHTNESS NIGHT (MANUAL)" or "BRIGHTNESS AUTOMATIC". If "BRIGHTNESS NIGHT (MANUAL)" is selected, the brightness of the screen will not be affected by the headlight operation. The brightness of the screen will be dependent on the settings in the Night Mode Brightness described earlier in this section.

Pressing the button with the headlights on will prompt the "BRIGHTNESS DAY (MANUAL)" or "BRIGHTNESS AUTOMATIC". If "BRIGHTNESS DAY (MANUAL)" is selected, the brightness of the screen will not be affected by the headlight operation. The brightness of the screen will be dependent on the settings in the Day Mode Brightness described earlier in this section.

#### 4-6 Display screen, heater, air conditioner, audio and phone systems

### SOF 12:08 DOOR OPEN FRONT LHA0643

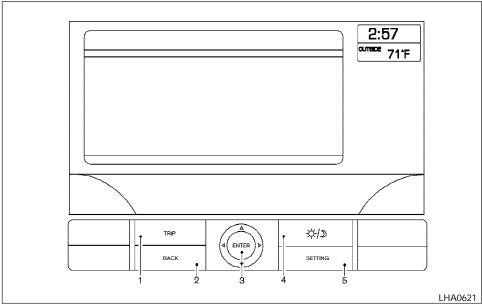
#### DOOR WARNING

The DOOR OPEN screen will be automatically displayed as shown when both of the following conditions are met:

- The vehicle is driven with a door(s) open for longer than 2.5 seconds.
- The vehicle speed is greater than 3 MPH (5 km/h).

Beeping will occur during the door warning; to disable the beeping press any button. If a change in any door condition occurs during the time the beep is cancelled, a warning will return.

#### CONTROL PANEL BUTTONS — COLOR **SCREEN WITHOUT NAVIGATION** SYSTEM (if so equipped)



Display screen without navigation

TRIP button (P. 4-8) 1.

- SETTING button (P. 4-12)
- BACK (previous) button (P. 4-8)
- Joystick and ENTER button (P. 4-8)
- ☆/♪ brightness control button (P. 4-17)

#### **A**CAUTION

- The glass screen on the liquid crystal display may break if it is hit with a hard or sharp object. If the glass breaks, do not touch the liquid crystalline material, which contains a small amount of mercury. In case of contact with skin, wash immediately with soap and water.
- To clean the display, never use a rough cloth, alcohol, benzine, thinner or any kind of solvent or paper towel with a chemical cleaning agent. They will scratch or deteriorate the panel.
- Do not splash any liquid such as water or car fragrance on the display. Contact with liquid will cause the system to malfunction.

If you use the system with the engine not running (ignition ON or ACC) for a long time, it will use up all the battery power, and the engine will not start.

Reference symbols:

ENTER button — This is a button on the control panel. By pressing this button you can select the item or perform this action.

"Display" key — This is a select key on the screen. By selecting this key you can proceed to the next function.

### HOW TO USE THE JOYSTICK AND ENTER BUTTON

Use the joystick to choose an item on the display screen. Move the joystick up, down, left or right to highlight an item. Then press the ENTER button to select the item or perform the action.

#### HOW TO USE THE BACK BUTTON

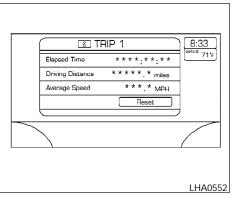
This button has two functions:

Go back to the previous display (cancel).

If you press the BACK button during setup, the setup will be canceled and/or the display will return to the previous screen.

Finish setup.

In some screens, pressing the BACK button accepts the changes made during setup.



#### HOW TO USE THE TRIP BUTTON

When the TRIP button is pressed, the following modes will display on the screen.

Warning message (if any)  $\rightarrow$  TRIP 1  $\rightarrow$  TRIP 2  $\rightarrow$  FUEL ECONOMY  $\rightarrow$  MAINTENANCE  $\rightarrow$  Audio or OFF  $\rightarrow$  TRIP 1

Each trip display tracks an independent trip and displays the following:

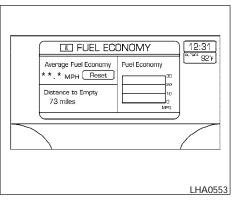
- Elapsed Time Journey time since the last reset up to a maximum of 99 hours and 59 minutes.
- Driving Distance Distance driven (mile or km) since the last reset.

Average Speed - Average speed driven (MPH or km/h) since the last reset.

#### Resetting trip 1 and trip 2

Each trip screen can be reset to 0. Press the TRIP button to select the TRIP screen to be reset.

- Select the "Reset" key on screen by pressing the ENTER button, or
- Press the TRIP button for more than approximately 1.5 seconds.



#### Fuel economy

Press the TRIP button to display Average Fuel Economy and Distance To Empty.

#### Average fuel economy (MPG or L/100 km)

The Average Fuel Economy is calculated based on fuel consumption since the last reset. The display is updated every 30 seconds and 1/3 mile (500 m). After a reset or connecting the battery cables, the display will show (\*\*.\*).

#### Resetting fuel economy

The average fuel economy calculation can be reset to 0. Press the TRIP button repeatedly until the FUEL ECONOMY menu is shown, then either:

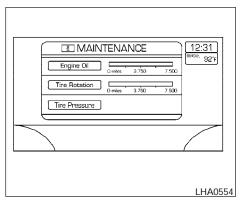
- Select the "Reset" key on screen by pressing the ENTER button, or
- Press the TRIP button for more than approximately 1.5 seconds.

#### Distance to empty (MI or km)

The Distance To Empty (DTE) mode provides you with an estimation of the distance that can be driven before refueling. The DTE is constantly calculated based on the amount of fuel in the fuel tank and the actual fuel consumption. The display is updated every 30 seconds. When the fuel level is low, the DTE display will change to (\*).

#### NOTE:

- If the amount of fuel added while the ignition switch is OFF is small, the display just before the ignition switch is turned OFF may continue to be displayed.
- When driving uphill or rounding curves, the fuel in the tank shifts, which may momentarily change the display.

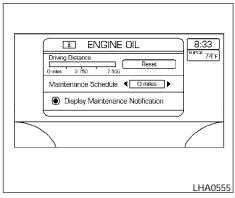




Press the TRIP button to display maintenance information or set maintenance intervals for the following:

- Engine Oil
- Tire Rotation
- Tire Pressure (if so equipped)

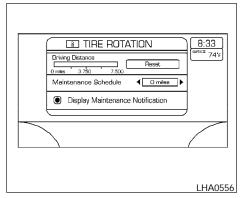
For setting the Tire Pressure display, refer to "Tire pressure information" later in this section.



#### Changing the maintenance interval

Select the "Engine Oil" or "Tire Rotation" key using the joystick and press the ENTER button to display the screen to change the maintenance interval.

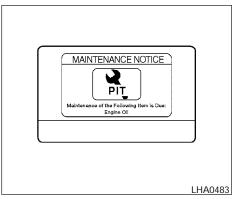
Select the "Maintenance Schedule" key using the joystick and move the joystick to the right or left to set the maintenance interval.



#### Resetting the maintenance interval

The ENGINE OIL and TIRE ROTATION maintenance intervals can be reset to 0 miles (kilometers).

Select the "Reset" key using the joystick and press the ENTER button.



#### Displaying the maintenance notice reminder

Select the "Display Maintenance Notification" key and press the ENTER button to display the MAINTENANCE INFORMATION automatically at the set maintenance interval.

The MAINTENANCE NOTICE screen (ENGINE OIL and TIRE ROTATION) will be automatically displayed as shown when both of the following conditions are met:

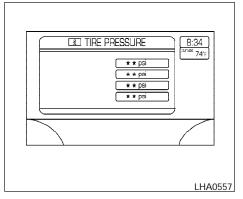
The vehicle is driven the set distance and the ignition key is turned OFF.

• The ignition key is turned ON the next time the vehicle will be driven.

To return to the previous display after the MAIN-TENANCE NOTICE screen is displayed, press the BACK button.

The MAINTENANCE NOTICE screen displays each time the key is turned ON until one of the following conditions are met:

- "Reset" key is selected.
- "Display Maintenance Notification" is set OFF.
- The maintenance interval is set again.



#### Tire pressure information

To display tire pressure information, press the TRIP button repeatedly until the MAINTENANCE screen is displayed. Select the "Tire Pressure" key using the joystick and press the ENTER button.

Pressure indication in \*\* psi on the screen indicates that the pressure is being measured. After a few driving trips, the pressure for each tire will be displayed randomly.

The order of tire pressure figures displayed on the screen does not correspond with the actual order of the tire position.

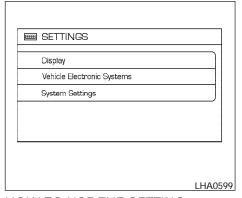
Tire pressure rises and falls depending on the heat caused by the vehicle's operation and the outside temperature.

In case of low tire pressure, a message is displayed on the screen:

LOW PRESSURF — Check All Tires.

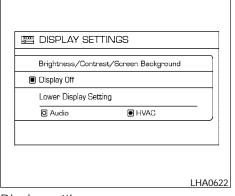
#### **WARNING**

- When a spare tire is mounted or a wheel is replaced, tire pressure will not be indicated, the Tire Pressure Monitoring System (TPMS) will not function and the low tire pressure warning light will flash for approximately 1 minute. The light will remain on after 1 minute. Contact your NISSAN dealer as soon as possible for tire replacement and/or system resetting.
- Replacing tires with those not originally specified by NISSAN could affect the proper operation of the TPMS.



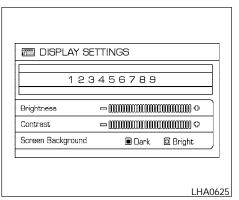
#### HOW TO USE THE SETTING BUTTON

When the SETTING button is pressed, the SET-TINGS screen will appear on the display. You can select and/or adjust several functions, features and modes that are available for your vehicle. Move the joystick and press the ENTER button to select each item to be set.



#### Display settings

Select the "Display" key and press the ENTER button. The DISPLAY SETTINGS screen will appear.

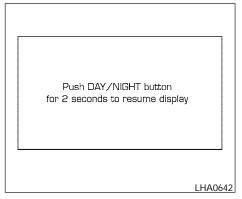


#### Brightness/contrast/screen background:

Select the "Brightness/Contrast/Screen Background" key to adjust the brightness and contrast of the screen. Use the joystick to select and adjust the brightness to darker or brighter and the contrast to lower or higher.

Use the joystick to select the "Screen Background" key. Press the ENTER button or move the joystick right or left to choose a "Dark" or "Bright" screen background.

The new settings are automatically saved when you exit the setting screen by pressing the BACK button or any other mode button.

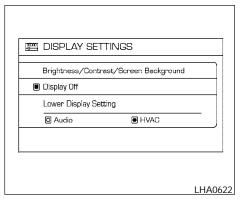


#### Display off:

Select the "Display Off" key. The indicator of the "Display Off" turns amber and the message above will be displayed briefly. When the audio, HVAC (Heater and air conditioner), or any mode button on the control panel is operated, the display turns on for that operation. If one of the control panel buttons is pressed, the display will not automatically turn off until that operation is finished. Otherwise, the screen turns off automatically after 5 seconds.

#### To turn the screen on:

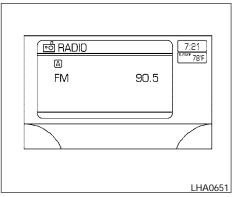
- Press the SETTING button and select the "Display" key and then select the "Display Off" key. Then set the screen to "on" by pressing the ENTER button, or
- Hold the ☼/೨ button for approximately 2 seconds and the message "resuming display" will appear and the "Display Off" key will be automatically turned on (no amber indicator).



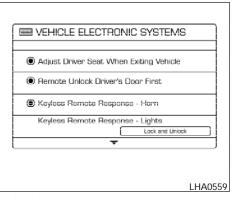
#### Lower display setting:

You can choose to display the audio or HVAC (Heater and air conditioner) functions on the lower part of the display. Select the "Lower Display Setting" key by using the joystick. Then select the "Audio" or "HVAC" key using the joystick or by pressing the ENTER button.

The new settings are automatically saved when you exit the setting screen by pressing the BACK button or any other mode button.



Any time audio information is shown on the main part of the screen, HVAC information will be displayed on the lower part of the screen. HVAC information will be shown even if "Audio" is selected to be displayed on the lower part of the screen.



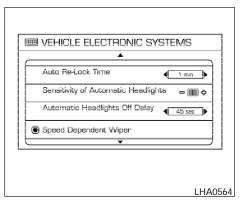
#### Vehicle electronic systems

Select the "Vehicle Electronic Systems" key by using the joystick and pressing the ENTER button. The VEHICLE ELECTRONIC SYSTEMS screen will be displayed.

You can set the following operating conditions by selecting the desired item using the joystick, then pressing the ENTER button. The indicator light (the box at the left of the selected item) alternately turns on and off each time the ENTER button is pressed.

Indicator light is illuminated — ON Indicator light is not illuminated — OFF

#### 4-14 Display screen, heater, air conditioner, audio and phone systems

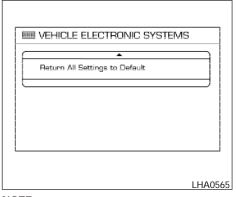


Adjust driver seat when exiting vehicle: Select so the driver's seat automatically moves back and returns to the original position for ease of exit and entry.

Remote unlock driver's door first: Select to change which doors will unlock first during an unlocking operation:

Only the driver's door  $\longleftrightarrow$  All the doors

**Keyless remote response** — horn: Select to turn on or turn off the horn chirp mode used when the LOCK or UNLOCK button on the keyfob is pressed.



#### NOTE:

If you change the horn beep or the lamp flash feature with the keyfob, the display screen will not show the current mode. Use the keyfob to return to the previous mode and re-enable the display screen control.

Keyless remote response — lights: Select to turn on or turn off the hazard indicator flash mode. used when the LOCK or UNLOCK button on the keyfob is pressed.

#### NOTE:

If you change the horn beep or the lamp flash feature with the keyfob, the mode will not be changed with the display. Use the keyfob to return to the previous mode and re-enable the display control.

Auto re-lock time: Select to set the length of time before doors automatically re-lock.

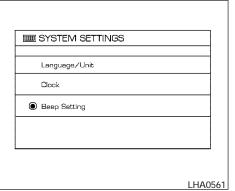
Sensitivity of automatic headlights: Select to change the sensitivity setting of the automatic headlights:

- Lower: less sensitive, automatic headlights will take longer to come on when the headlight sensor senses less ambient light.
- Higher: more sensitive, automatic headlights will come on quicker when the headlight sensor senses less ambient light.

Automatic headlights off delay: Select to change the setting for the length of time the automatic headlights remain on after exiting the vehicle.

**Speed dependent wiper:** Select to turn on or turn off the driving speed dependent intermittent wiper function.

**Return all settings to default:** Select to change all VEHICLE ELECTRONICS SYSTEMS to their default settings.



any othe

You can select the language and unit using the joystick or pressing the ENTER button.

The settings are automatically saved when you exit the menu by pressing the BACK button or any other mode button.

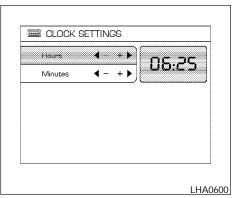
#### System settings

Select the "System Settings" key by using the joystick and pressing the ENTER button. The SYSTEM SETTINGS menu will be displayed.

#### Language/unit

The LANGUAGE/UNIT screen will appear when selecting the "Language/Unit" key and pressing the ENTER button.

Language: English or French
Unit: US — mile, °F, MPG
Metric — km, °C, L/100 km



#### Clock

#### Adjusting the time:

Select the "Hours" or "Minutes" key and move the joystick to the right or left to adjust the time.

The time will change step by step.

The new settings are automatically saved when you exit the setting screen by pressing the BACK or any other mode button.

#### Beep setting

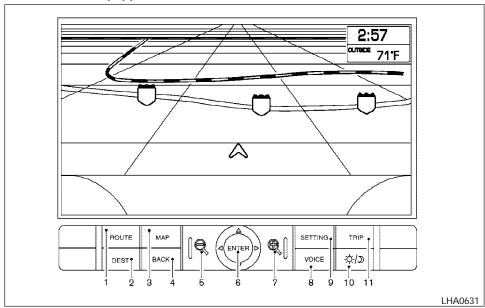
With this option ON, a beep will sound if any audio button is pressed.

#### ☆/⊅ BUTTON

To change the display brightness, press the ☼/⊅ button. Pressing the button again will change the display to "DAY" or "NIGHT" display. Then, adjust the brightness by moving the joystick right or left.

If no operation is done within 10 seconds, or if the BACK button is pressed, the display will return to the previous display.

## CONTROL PANEL BUTTONS — COLOR SCREEN WITH NAVIGATION SYSTEM (if so equipped)



#### Display screen with navigation

- ROUTE button\*
- DEST button\*
- MAP button\*
- 4. BACK (previous) button (P. 4-19)
- 5. <sup>Q</sup> zoom out button\*

- Joystick and ENTER button (P. 4-19)
- VOICE button\*
- 9. SETTING button (P. 4-23)

- 10. ☼/⊅ brightness control button (P. 4-29)
- 11. TRIP button (P. 4-19)

\*For Navigation system control buttons, refer to the separate Navigation System Owner's Manual.

#### **A**CAUTION

- The glass screen on the liquid crystal display may break if it is hit with a hard or sharp object. If the glass breaks, do not touch the liquid crystalline material, which contains a small amount of mercury. In case of contact with skin, wash immediately with soap and water.
- To clean the display, never use a rough cloth, alcohol, benzine, thinner or any kind of solvent or paper towel with a chemical cleaning agent. They will scratch or deteriorate the panel.
- Do not splash any liquid such as water or car fragrance on the display. Contact with liquid will cause the system to malfunction.

If you use the system with the engine not running (ignition ON or ACC) for a long time, it will use up all the battery power, and the engine will not start.

4-18 Display screen, heater, air conditioner, audio and phone systems

#### Reference symbols:

ENTER button — This is a button on the control panel. By pressing this button you can select the item or perform the action.

"Display" key — This is a select key on the screen. By selecting this key you can proceed to the next function.

#### HOW TO USE THE JOYSTICK AND **ENTER BUTTON**

Use the joystick to choose an item on the display screen. Move the joystick up, down, left or right to highlight an item. Then press the ENTER button to select the item or perform the action.

#### HOW TO USE THE BACK BUTTON

This button has two functions.

Go back to the previous display (cancel).

If you press the BACK button during setup, the setup will be canceled and/or the display will return to the previous screen.

Finish setup.

In some screens pressing the BACK button accepts the changes made during setup.

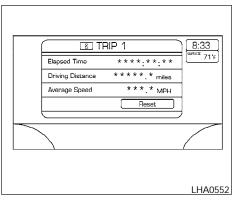
#### SETTING UP THE START-UP **SCRFFN**

When you turn the ignition key to ACC or ON, the system start-up warning is displayed on the screen. Read the warning and select the "OK" key by pressing the ENTER button.

If you do not press the ENTER button, the Navigation system will not proceed to the next step in the Navigation display.

If you do not touch a button or screen key for more than 1 minute on the system start-up warning screen, the screen will change to the audio screen automatically.

To proceed to the next step, refer to the separate Navigation System Owner's Manual.



#### HOW TO USE THE TRIP BUTTON

When the TRIP button is pressed, the following modes will display on the screen.

Warning message (if any)  $\rightarrow$  TRIP 1  $\rightarrow$  TRIP 2  $\rightarrow$ FUEL ECONOMY → MAINTENANCE → Audio or OFF → TRIP 1

Each trip display tracks an independent trip and displays the following:

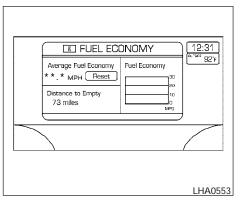
- Elapsed Time Journey time since the last reset up to a maximum of 99 hours and 59 minutes.
- Driving Distance Distance driven (mile or km) since the last reset.

 Average Speed - Average speed driven (MPH or km/h) since the last reset.

#### Resetting trip 1 and trip 2

Each trip screen can be reset to 0. Press the TRIP button to select the TRIP screen to be reset.

- Select the "Reset" key on screen by pressing the ENTER button, or
- Press the TRIP button for more than approximately 1.5 seconds.



#### Fuel economy

Press the TRIP button to display Average Fuel Economy and Distance To Empty.

#### Average fuel economy (MPG or L/100 km)

The Average Fuel Economy is calculated based on fuel consumption since the last reset. The display is updated every 30 seconds and 1/3 mile (500 m). After a reset or connecting the battery cables, the display will show (\*\*.\*).

#### Resetting fuel economy

The average fuel economy calculation can be reset to 0. Press the TRIP button repeatedly until the FUEL ECONOMY menu is shown, then either:

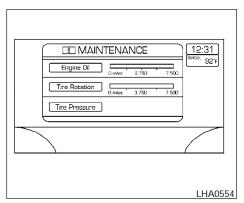
- Select the "Reset" key on screen by pressing the ENTER button, or
- Press the TRIP button for more than approximately 1.5 seconds.

#### Distance to empty (MI or km)

The Distance To Empty (DTE) mode provides you with an estimation of the distance that can be driven before refueling. The DTE is constantly calculated based on the amount of fuel in the fuel tank and the actual fuel consumption. The display is updated every 30 seconds. When the fuel level is low, the DTE display will change to (\*).

#### NOTE:

- If the amount of fuel added while the ignition switch is OFF is small, the display just before the ignition switch is turned OFF may continue to be displayed.
- When driving uphill or rounding curves, the fuel in the tank shifts, which may momentarily change the display.

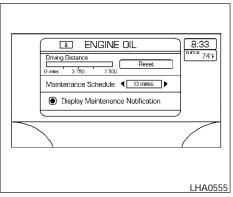




Press the TRIP button to display maintenance information or set maintenance intervals for the following:

- Engine Oil
- Tire Rotation
- Tire Pressure (if so equipped)

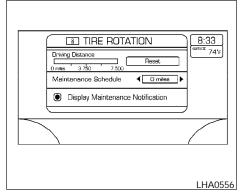
For setting the Tire Pressure display, refer to "Tire pressure information" later in this section.



#### Changing the maintenance interval

Select the "Engine Oil" or "Tire Rotation" key using the joystick and press the ENTER button to display the screen to change the maintenance interval.

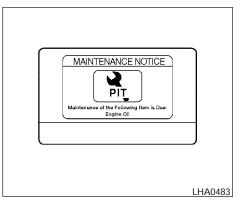
Select the "Maintenance Schedule" key using the joystick and move the joystick to right or left to set the maintenance interval.



#### Resetting the maintenance interval

The ENGINE OIL and TIRE ROTATION maintenance intervals can be reset to 0 miles (kilometers).

Select the "Reset" key using the joystick and press the ENTER button.



## Displaying the maintenance notice reminder

Select the "Display Maintenance Notification" key and press the ENTER button to display the MAINTENANCE INFORMATION automatically at the set maintenance interval.

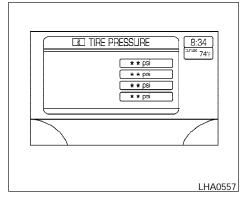
The MAINTENANCE NOTICE screen (ENGINE OIL and TIRE ROTATION) will be automatically displayed as shown when both of the following conditions are met:

 The vehicle is driven the set distance and the ignition key is turned OFF.  The ignition key is turned ON the next time the vehicle will be driven.

To return to the previous display after the MAIN-TENANCE NOTICE screen is displayed, press the BACK button.

The MAINTENANCE NOTICE screen displays each time the key is turned ON until one of the following conditions are met:

- "Reset" key is selected.
- "Display Maintenance Notification" is set to OFF.
- The maintenance interval is set again.



#### Tire pressure information

To display tire pressure information, press the TRIP button repeatedly until the MAINTENANCE screen is displayed. Select the "Tire Pressure" key using the joystick and press the ENTER button.

Pressure indication in \*\* psi on the screen indicates that the pressure is being measured. After a few driving trips, the pressure for each tire will be displayed randomly.

The order of tire pressure figures displayed on the screen does not correspond with the actual order of the tire position.

#### 4-22 Display screen, heater, air conditioner, audio and phone systems

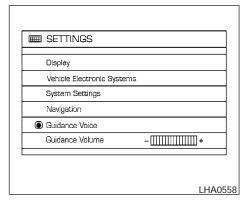
Tire pressure rises and falls depending on the heat caused by the vehicle's operation and the outside temperature.

In case of low tire pressure, a message is displayed on the screen:

LOW PRESSURF — Check All Tires.

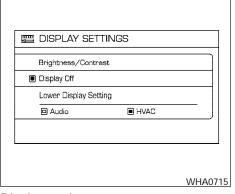
#### **WARNING**

- When a spare tire is mounted or a wheel is replaced, tire pressure will not be indicated, the Tire Pressure Monitoring System (TPMS) will not function and the low tire pressure warning light will flash for approximately 1 minute. The light will remain on after 1 minute. Contact your NISSAN dealer as soon as possible for tire replacement and/or system resetting.
- Replacing tires with those not originally specified by NISSAN could affect the proper operation of the TPMS.



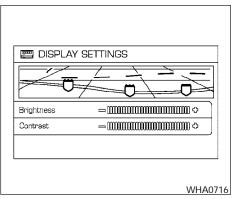
#### HOW TO USE THE SETTING BUTTON

When the SETTING button is pressed, the SET-TINGS screen will appear on the display. You can select and/or adjust several functions, features and modes that are available for your vehicle. Move the joystick and press the ENTER button to select each item to be set.



#### Display settings

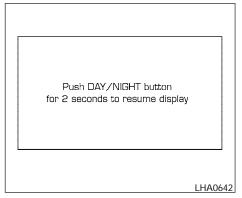
Select the "Display" key and press the ENTER button. The DISPLAY SETTINGS screen will appear.



#### Brightness/contrast:

Select the "Brightness/Contrast" key to adjust the brightness and contrast of the map background. Use the joystick to adjust the brightness to darker or brighter and the contrast to lower or higher.

The new settings are automatically saved when you exit the setting screen by pressing the BACK button or any other mode button.



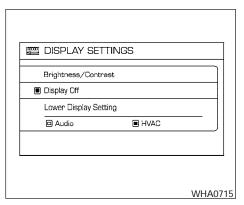
#### Display off:

Select the "Display Off" key. The indicator of the "Display Off" turns amber and the message above will be displayed briefly. When the audio, HVAC (Heater and air conditioner), or any mode button on the control panel is operated, the display turns on for that operation. If one of the control panel buttons is pressed, the display will not automatically turn off until that operation is finished. Otherwise, the screen turns off automatically after 5 seconds.

To turn the screen on,

- Press the SETTING button and select the "Display" key and then select the "Display Off" key. Then set the screen to on by pressing the ENTER button, or
- Hold the ☼/⊅ button for approximately 2 seconds and the message "resuming display" will appear and the "Display Off" key will be automatically turned on (no amber indicator).

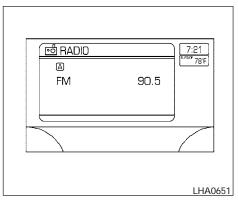
#### 4-24 Display screen, heater, air conditioner, audio and phone systems



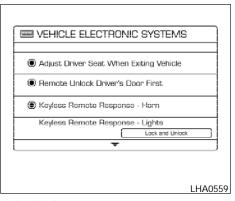
#### Lower display setting:

You can choose to display the audio or HVAC (Heater and air conditioner) functions on the lower part of the display. Select the "Lower Display Setting" key by using the joystick. Then select the "Audio" or "HVAC" key using the joystick or by pressing the ENTER button.

The new settings are automatically saved when you exit the setting screen by pressing the BACK button or any other mode button.



Any time audio information is shown on the main part of the screen, HVAC information will be displayed on the lower part of the screen. HVAC information will be shown even if "Audio" is selected to be displayed on the lower part of the screen.

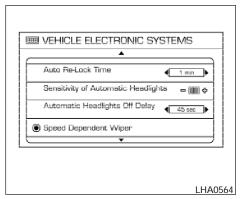


#### Vehicle electronic systems

Select the "Vehicle Electronic Systems" key by using the joystick and pressing the ENTER button. The VEHICLE ELECTRONIC SYSTEMS screen will be displayed.

You can set the following operating conditions by selecting the desired item using the joystick, then pressing the ENTER button. The indicator light, box at the left of the selected item, alternately turns on and off each time the ENTER button is pressed.

Indicator light is illuminated — ON Indicator light is not illuminated — OFF

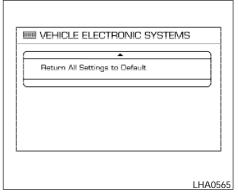


Adjust Driver Seat When Exiting Vehicle: Select so the driver's seat automatically moves back and returns to the original position for ease of exit and entry.

Remote Unlock Driver's Door First: Select to change which doors will unlock first during an unlocking operation:

Only the driver's door ← → All the doors

**Keyless Remote Response** — **Horn:** Select to turn on or turn off the horn chirp mode used when the LOCK button on the keyfob is pressed.



#### NOTE:

If you change the horn beep or the lamp flash feature with the keyfob, the display screen will not show the current mode. Use the keyfob to return to the previous mode and re-enable the display screen control.

**Keyless Remote Response** — **Lights**: Select to turn on or turn off the hazard indicator flash mode used when the LOCK or UNLOCK button on the keyfob is pressed.

#### NOTE:

If you change the horn beep or the lamp flash feature with the keyfob, the mode will not be changed with the display. Use the keyfob to return to the previous mode and re-enable the display control.

**Auto Re-Lock Time:** Select to set the length of time before doors automatically re-lock.

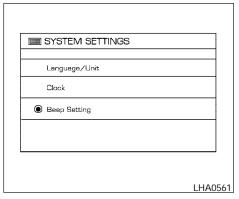
**Sensitivity of Automatic Headlights:** Select to change the sensitivity setting of the automatic headlights:

- Lower: less sensitive, automatic headlights will take longer to come on when the headlight sensor senses less ambient light.
- Higher: more sensitive, automatic headlights will come on quicker when the headlight sensor senses less ambient light.

Automatic Headlights Off Delay: Select to change the setting for the length of time the automatic headlights remain on after exiting the vehicle.

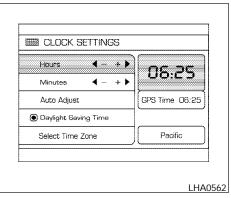
**Speed Dependent Wiper:** Select to turn on or turn off the driving speed dependent intermittent wiper function.

**Return All Settings to Default:** Select to change all VEHICLE ELECTRONICS SYSTEMS to their default settings.



You can select the language and unit using the joystick or pressing the ENTER button.

The settings are automatically saved when you exit the menu by pressing the BACK button or any other mode button.



#### System settings

Select the "System Settings" key by using the joystick and pressing the ENTER button. The SYSTEM SETTINGS screen will be displayed.

#### Language/unit

The LANGUAGE/UNIT screen will appear when selecting the "Language/Unit" key and pressing the ENTER button.

Language: English or French Unit: US — mile, °F, MPG Metric — km, °C, L/100 km

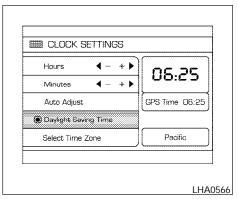
#### Clock

#### Adjusting the time:

Select the "Hours" or "Minutes" key and move the joystick to the right or left to adjust the time.

The time will change step by step.

The new settings are automatically saved when you exit the setting screen by pressing the BACK button or any other mode button.

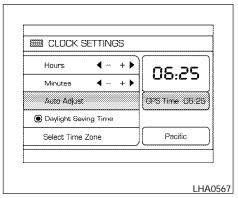




Use the "Daylight Saving Time" key to adjust the clock to daylight savings time.

ON: Automatically adjusts for daylight savings time.

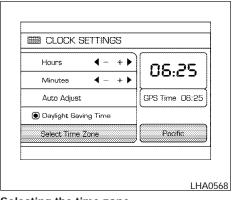
OFF: The current time is displayed.



#### Adjusting the time to the GPS:

Select the "Auto Adjust" key.

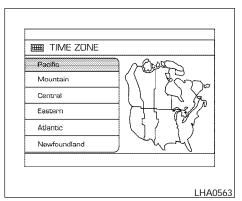
The time will be reset to the GPS time.



#### Selecting the time zone:

1. Select the "Select Time Zone" key.

The TIME ZONE screen will appear.



- 2. Select one of the following zones, depending on the current location.
  - Pacific zone
  - Mountain zone
  - Central zone
  - Fastern zone
  - Atlantic zone
  - Newfoundland zone

After selection, the CLOCK SETTINGS screen will appear.

The GPS time (manual time) corresponding to the selected zone will be displayed. Pacific zone has been set as the initial (default) setting.

#### Beep setting

With this option ON, a beep will sound if any audio button is pressed.

#### Navigation settings

Refer to the separate Navigation System Owner's Manual for information regarding these settings.

#### Guidance voice settings

Refer to the separate Navigation System Owner's Manual for information regarding these settings.

#### ☆/⊅ BUTTON

To change the display brightness, press the 0/2 button. Pressing the button again will change the display to "DAY" or "NIGHT" display. Then, adjust the brightness by moving the joystick right or left.

If no operation is done within 10 seconds, or if the BACK button is pressed, the display will return to the previous display.

#### **REARVIEW MONITOR (if so** equipped)

When the shift selector is shifted into the R (Reverse) position, the monitor display shows the view directly to the rear of the vehicle.

#### **AWARNING**

- The system is designed as an aid to the driver in detecting large stationary objects to help avoid damaging the vehicle. The system will not detect small objects below the bumper, and may not detect objects close to the bumper or on the ground.
- The RearView Monitor is a convenience but it is not a substitute for proper backing. Always turn and check that it is safe to do so before backing up. Always back up slowly.
- Objects viewed in the RearView Monitor differ from actual distance because a wide-angle lens is used.
- Make sure that the lift gate is securely closed when backing up.
- Do not put anything on the rearview camera. The rearview camera is installed beside the license plate light.

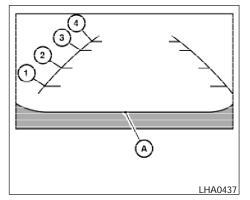
- When washing the vehicle with highpressure water, be sure not to spray it around the camera. Otherwise, water may enter the camera unit causing water condensation on the lens, a malfunction, fire or an electric shock.
- Do not strike the camera. It is a precision instrument. Otherwise, it may malfunction or cause damage resulting in a fire or an electric shock.

#### **A**CAUTION

There is a plastic cover over the camera. Do not scratch the cover when cleaning dirt or snow from the cover.

#### HOW TO READ THE DISPLAYED LINES

Lines which indicate the vehicle clearance and distances to objects with reference to the bumper line (A) are displayed on the monitor.



They are indicated as reference distances to objects. The lines and colors in the display indicate distances from the back bumper line (A) in the illustration.

- (1) 1.5 ft (0.5 m) red
- (2) 3 ft (1 m) yellow
- 7 ft (2 m) green
- 10 ft (3 m) green

The vehicle clearance lines are wider than the actual clearance.

#### ADJUSTING THE SCREEN

To adjust the quality of the screen, refer to "HOW TO USE THE SETTING BUTTON" in this section.

- When it is difficult to see in the rearward direction due to shady conditions, press the ENTER button to make objects in the monitor brighter.
- To change the brightness, press the ENTER button again, turn the key switch OFF or shift to R (Reverse) and wait for 10 seconds.

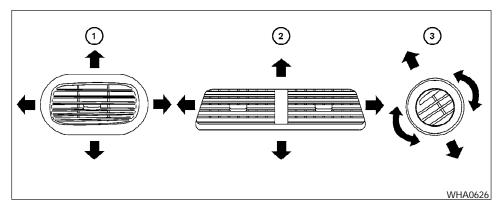
#### **OPFRATING TIPS**

- When the shift selector is shifted to R (Reverse), the monitor screen automatically changes to the RearView Monitor mode. However, the radio can be heard.
- It may take some time until the RearView Monitor is displayed after the shift selector has been shifted to R (Reverse). Objects may be distorted momentarily until the Rear-View Monitor screen is displayed completely. When the shift selector is returned to a position other than R (Reverse), it may take some time until the screen changes. Objects on the screen may be distorted until they are completely displayed.

- When the temperature is extremely high or low, the screen may not clearly display objects. This is not a malfunction.
- When strong light directly enters the camera, objects may not be displayed clearly.
- Vertical lines may be seen in objects on the screen. This is due to strong reflected light from the bumper. This is not a malfunction.
- The screen may flicker under fluorescent light. This is not a malfunction.
- The colors of objects on the RearView Monitor may differ somewhat from those of the actual object.
- When the contrast of objects is low at night, pressing the ENTER button may not change the brightness.
- Objects on the monitor may not be clear in a dark place or at night.
- If dirt, rain or snow attaches to the camera. the RearView Monitor may not display objects. Clean the camera.
- Do not use alcohol, benzine or thinner to clean the camera. This will cause discoloration. To clean the camera, wipe with a cloth dampened with a diluted mild cleaning agent and then wipe with a dry cloth.

- Do not damage the camera as the monitor screen may be adversely affected.
- Do not use body wax on the camera window. If body wax does get on the camera window, wipe off the wax with a clean cloth dampened with mild detergent diluted with water.

#### **VENTS**

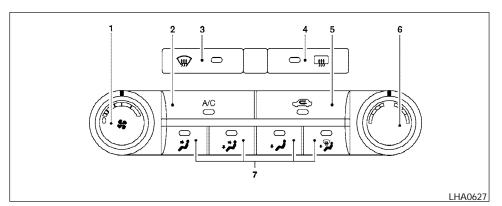


Adjust air flow direction for the driver and passenger side(1), center (2), and rear passenger (3) ventilators by moving the ventilator slide and/or ventilator assemblies.

#### **HEATER AND AIR CONDITIONER** (manual) (if so equipped)

#### **WARNING**

- The air conditioner cooling function operates only when the engine is running.
- Do not leave children or adults who would normally require the assistance of others alone in your vehicle. Pets should also not be left alone. 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.
- Do not use the recirculation mode for long periods as it may cause the interior air to become stale and the windows to fog up.



- Fan speed control dial
- Air conditioner button
- 3. Front window defrost/defog button
- 4. Rear window defroster switch
- Air recirculation button
- Temperature control dial
- Air flow control buttons

#### **CONTROLS**

#### Fan control dial

The fan control dial turns the fan on and off, and controls fan speed.

#### Air flow control buttons

The air flow control buttons allow you to select the air flow outlets.

 Air flows from center and side ventilators.

 Air flows from center and side ventilators and the front and rear floor outlets.

Air flows mainly from the front and rear floor outlets.

> Air flows from defroster outlets and the front and rear floor outlets.

 Air flows from defroster outlets. Temperature control dial

The temperature control dial allows you to adjust the temperature of the outlet air. To lower the temperature, turn the dial to the left. To increase the temperature, turn the dial to the right.



Air recirculation button

#### ON position:

Push the see button to recirculate air inside the vehicle.

Push the button to the on position when:

- driving on a dusty road.
- to prevent traffic fumes from entering passenger compartment.
- for maximum cooling when using the air conditioner.

The air recirculation mode is only functional when the air flow control mode is in the following positions: \*\* or \*\*\*

#### OFF position:

Push the see button again to turn air recirculation off. Outside air is drawn into the passenger compartment and distributed through the selected outlet.

Use the off position for normal heater or air conditioner operation.

### A/C

#### Air conditioner button

Start the engine, turn the fan control dial to the desired position and push the A/C button to turn on the air conditioner. A/C will appear on the display when the air conditioner is operating. To turn off the air conditioner, push the A/C button again. The display will show A/C OFF.

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

#### Rear window defroster switch

For more information about the rear window defroster switch, see "Rear window defroster switch" in the "Instruments and controls" section of this manual.

#### **HEATER OPERATION**

#### Heating

This mode is used to direct heated air to the foot outlets. Some air also flows from the defrost outlets.

 Push the button to the OFF position for normal heating ( shown on display).

- 2. Press the in air flow control button.
- Turn the fan control dial to the desired position.
- 4. Turn the temperature control dial to the desired position between the middle and the hot position.

#### Ventilation

This mode directs outside air to the side and center ventilators.

- 2. Press the air flow control button.
- 3. Turn the fan control dial to the desired position.
- 4. Turn the temperature control dial to the desired position.

#### Defrosting or defogging

This mode directs the air to the defrost outlets to defrost/defog the windows.

- 1. Press the defrost/defog button
- 2. Turn the fan control dial to the desired position.

- Turn the temperature control dial to the desired position between the middle and the hot position.
- To quickly remove ice or fog from the windows, turn the fan control dial to the highest setting and the temperature control to the full HOT position.
- When the www position is selected, the air conditioner automatically turns on (however, A/C will not appear on the display) if the outside temperature is more than 36°F (2°C). The air conditioning system will continue to operate until the fan control dial is turned to OFF or the vehicle is shut off, even if an air flow control button other than will is selected. This dehumidifies the air which helps defog the windshield. The compared automatically turns off, allowing outside air to be drawn into the passenger compartment to further improve the defogging performance.

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#### Bi-level heating

The bi-level mode directs warmed air to the side and center vents and to the front and rear floor outlets.

- 1. Push the Sport button to the OFF position (shown on display).
- 2 Press the pair flow control button.
- 3. Turn the fan control dial to the desired position.
- 4. Turn the temperature control dial to the desired position.

#### Heating and defogging

This mode heats the interior and defogs the windshield.

- 1 Press the air flow control button.
- 2. Turn the fan control dial to the desired position.
- 3. Turn the temperature control dial to the desired position between the middle and the hot position.

• When the position is selected, the air conditioner automatically turns on (however, A/C will not appear on the display) if the outside temperature is more than 36°F (2°C). The air conditioning system will continue to operate until the fan control dial is turned to OFF or the vehicle is shut off, even if an air flow control button other than is selected. This dehumidifies the air which helps defog the windshield. The mode automatically turns off, allowing outside air to be drawn into the passenger compartment to further improve the defogging performance.

#### Operating tips

Clear snow and ice from the wiper blades and air inlet in front of the windshield. This improves heater operation.

#### AIR CONDITIONER OPERATION

Start the engine, turn the fan control dial to the desired position, and push in the A/C button to activate the air conditioner. When the air conditioner is on, cooling and dehumidifying functions are added to the heater operation.

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

#### Cooling

This mode is used to cool and dehumidify the air.

- 1. Push the button to the OFF position.
- 2. Press the **i** air flow control button.
- 3. Turn the fan control dial to the desired position.
- 4. Push the A/C button. A/C will appear on the display.
- 5. Turn the temperature control dial to the desired position.
- For quick cooling when the outside temperature is high, push the button to the ON position ( shown on display). Be sure to return the to the OFF position for normal cooling ( shown on display).

#### Dehumidified heating

This mode is used to heat and dehumidify the air.

- 1. Push the button to the OFF position (shown on display).
- 2. Press the vi air flow control button.
- 3. Turn the fan control dial to the desired position.

- 4. Push the A/C button. The display shows A/C
- 5. Turn the temperature control dial to the desired position.

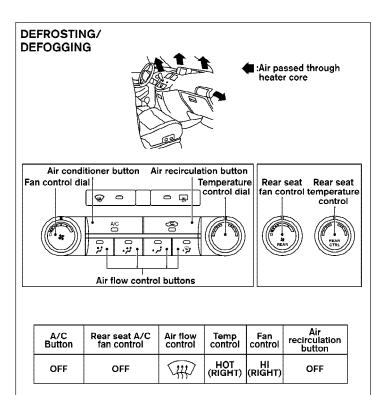
#### Operating tips

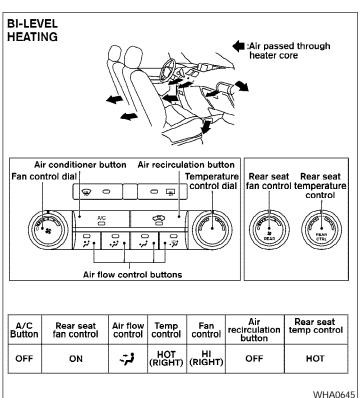
- Keep the windows closed while the air conditioner is in operation.
- After parking in the sun, drive for 2 or 3 minutes with the windows open to vent hot air from the passenger compartment. Then, close the windows. This allows the air conditioner to cool the interior more quickly.
- The air conditioning system should be operated for approximately 10 minutes at least once a month. This helps prevent damage to the system due to lack of lubrication.
- 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.

• If the engine coolant temperature gauge indicates engine coolant temperature over the normal range, turn the air conditioner off. See "If your vehicle overheats" in the "In case of emergency" section of this manual.

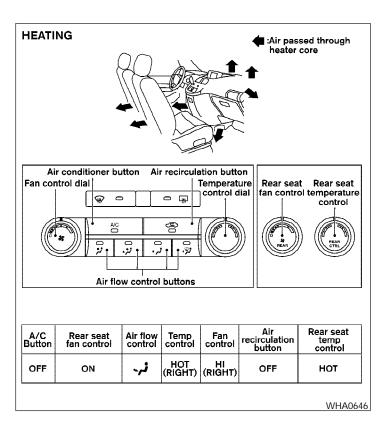
#### AIR FLOW CHARTS

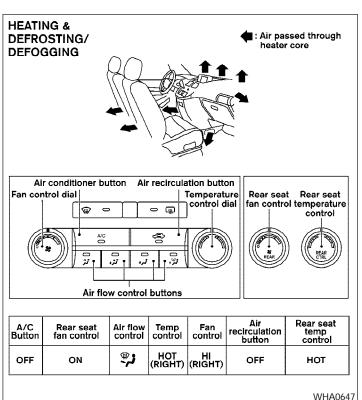
The following charts show the button and dial positions for MAXIMUM AND QUICK heating, cooling or defrosting. For additional information on heating and cooling, see "Heater and air conditioner" in this section. The air recirculation ( \$\square\$ ) button should always be in the OFF position for heating and defrosting.

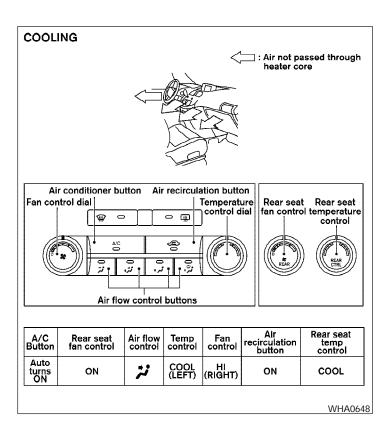


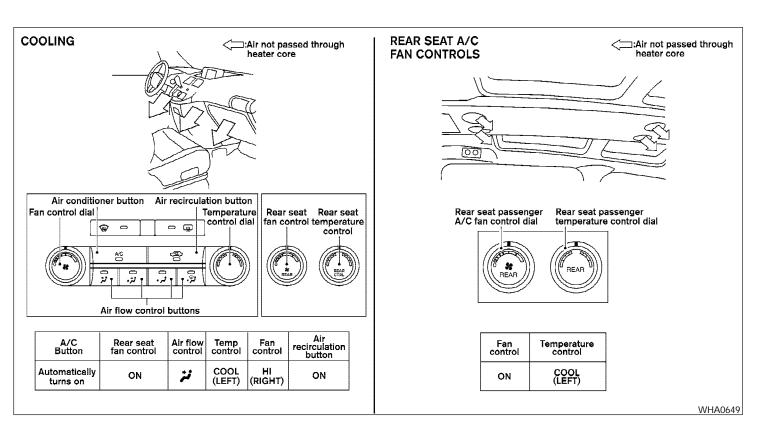


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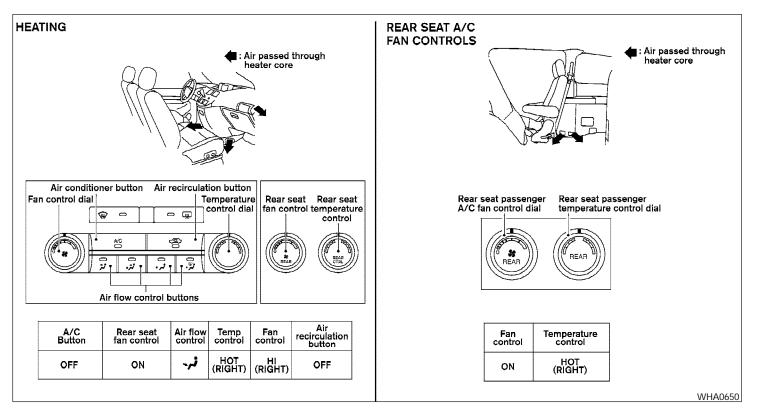




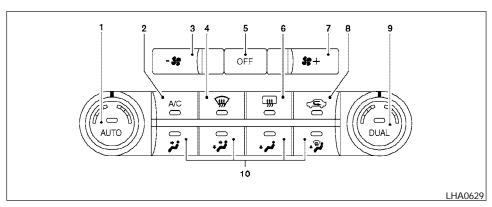




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## HEATER AND AIR CONDITIONER (automatic) (if so equipped)



- Driver temperature control dial/AUTO button
- A/C ON/OFF button
- 3. Fan speed control (decrease)
- 4. Front window defroster button
- System off button
- 6. Rear window defroster button
- Fan speed control (increase)
- 8. Air recirculation button
- Passenger temperature control dial/ DUAL button
- 10. Air flow/MODE buttons

#### **WARNING**

- The air conditioner cooling function operates only when the engine is running.
- Do not leave children or adults who would normally require the assistance of others alone in your vehicle. Pets should also not be left alone. 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.

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

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

#### **AUTOMATIC OPERATION**

#### Cooling or heating (auto)

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

- 1. Push the AUTO button on. (AUTO will be displayed.)
- Turn the driver's side temperature control dial to the left or right to set the desired temperature. Driver and passenger temperatures can be set independently. Press DUAL or turn the passenger temperature control dial to the left or right to activate dual climate control functions. Turn the passenger's side temperature control dial to the left or right to set the desired passenger's temperature.
- Adjust the temperature dial to about 75°F (24°C) for normal operation.

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- The temperature of the passenger compartment will be maintained automatically. Air flow distribution, fan speed and A/C on/off are also controlled automatically.
- 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.

#### Dehumidified defrosting or defogging

- 1. Push the defroster control button \(\pi\) turn the system on. The display will show the defrost icon.
- 2. Turn the temperature dial to the left or right to set the desired temperature.
- To quickly remove ice from the outside of the windows, press and hold the \$\mathscr{C}\$ + button to set the fan speed to maximum.
- As soon as possible after the windshield is clean, push the AUTO button to return to the auto mode.

 When the DEF control is activated. the air conditioner will automatically be turned on at outside temperatures above 36°F (2°C). If in defrost mode for more than one minute, the air conditioning system will continue to operate until the fan control is turned OFF, the vehicle is shut off, or the A/C button is used to turn off the compressor even if an air flow MODE button other is selected. This dehumidifies the air which helps defog the windshield. The air recirculation mode automatically turns off, allowing outside air to be drawn into the passenger compartment to further improve the defogging performance.

#### MANUAL OPERATION

#### Fan speed control buttons

Press the fan speed control buttons & to manually control the fan speed.

Press OFF to turn the system off.

Push the AUTO button to return to automatic control of the fan speed.

#### Air recirculation

The seem mode automatically turns off, allowing outside air to be drawn into the passenger compartment to prevent fogging.

Push the air recirculation button to recirculate interior air inside the vehicle. Push the AUTO button to return to automatic mode.

The air recirculation button will not be activated when the air conditioner is in DEF mode.

#### Air flow control

Pushing the MODE button manually controls air flow and selects the air outlet:

- Air flows from center and side ventilators.
- Air flows from center and side ventilators and foot outlets.
- Air flows mainly from foot outlets.
  - Air flows from defroster and foot outlets.
- Air flows from defroster outlets.

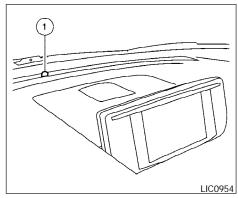
To turn system off

Press the OFF button.

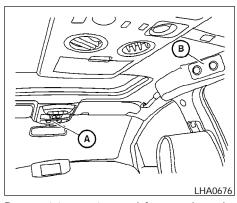
#### REAR SEAT AIR CONDITIONER

#### **OPERATING TIPS**

 When the engine coolant temperature and outside air temperature are low, the air flow from the foot outlets may not operate for a maximum of 150 seconds. However, this is not a malfunction. After the coolant temperature warms up, air flow from the foot outlets will operate normally.



The sunload sensor ①, located on the top center of the instrument panel, helps the system maintain a constant temperature. Do not put anything on or around this sensor.



Rear seat temperature and fan speed can be controlled from both the front seat overhead console controls (A) or the rear seat overhead console controls (B).

Press the REAR CTRL button to transfer control of the rear climate functions to the rear passenger's.

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

If the rear seat fan control dial is set to (0), the air conditioner is turned off. If it is set to any of the fan speed positions, air is discharged from the rear vents at the corresponding speed.

# WHA0630

#### Rear seat rear climate controls

- Rear fan speed control dial
- Rear temperature control dial

#### **CONTROLS**

#### Fan control dial

The fan control dial turns the rear vent fan on and off and controls fan speed.

#### Temperature control dial

The temperature control dial allows rear passengers to adjust the temperature of the outlet air.

#### SERVICING AIR CONDITIONER

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

#### This refrigerant does not harm the earth's ozone layer.

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

A NISSAN dealer is able to service your "environmentally friendly" air conditioning system.

#### **AWARNING**

The air conditioner system contains refrigerant under high pressure. To avoid personal injury, any air conditioner service should be done only by an experienced technician with proper equipment.

#### **AUDIO SYSTEM**

#### **RADIO**

Turn the ignition key to the ACC or ON position and press the POWER/VOLUME control knob to turn the radio on. If you listen to the radio with the engine not running, the key should be turned to the ACC position.

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

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

#### Radio reception

Your NISSAN radio system is equipped with state-of-the-art electronic circuits to enhance radio reception. These circuits are designed to extend reception range, and to enhance the quality of that reception.

However, there are some general characteristics of both FM and AM radio signals that can affect radio reception quality in a moving vehicle, even when the finest equipment is used. These characteristics are completely normal in a given reception area and do not indicate any malfunction in your NISSAN radio system.

Reception conditions will constantly change because of vehicle movement. Buildings, terrain, signal distance and interference from other vehicles can work against ideal reception. Described below are some of the factors that can affect your radio reception.

Some cellular phones or other devices may cause interference or a buzzing noise to come from the audio system speakers. Storing the device in a different location may reduce or eliminate the noise.

#### **FM RADIO RECEPTION**

Range: FM range is normally limited to  $25-30\,\mathrm{mi}$  ( $40-48\,\mathrm{km}$ ), with monaural (single channel) FM having slightly more range than stereo FM. External influences may sometimes interfere with FM station reception even if the FM station is within 25 mi ( $40\,\mathrm{km}$ ). The strength of the FM signal is directly related to the distance between the transmitter and receiver. FM signals follow a line-of-sight path, exhibiting many of the same characteristics as light. For example, they will reflect off objects.

Fade and drift: As your vehicle moves away from a station transmitter, the signals will tend to fade and/or drift.

Static and flutter: During signal interference from buildings, large hills or due to antenna position (usually in conjunction with increased distance from the station transmitter), static or flutter can be heard. This can be reduced by adjusting the treble control to reduce treble response.

Multipath reception: Because of the reflective characteristics of FM signals, direct and reflected signals reach the receiver at the same time. The signals may cancel each other, resulting in momentary flutter or loss of sound.

#### AM RADIO RECEPTION

AM signals, because of their low frequency, can bend around objects and skip along the ground. In addition, the signals can be bounced off the ionosphere and bent back to earth. Because of these characteristics, AM signals are also subject to interference as they travel from transmitter to receiver.

Fading: Occurs while the vehicle is passing through freeway underpasses or in areas with many tall buildings. It can also occur for several seconds during ionospheric turbulence even in areas where no obstacles exist.

Static: Caused by thunderstorms, electrical power lines, electric signs and even traffic lights.

## SATELLITE RADIO RECEPTION (if so equipped)

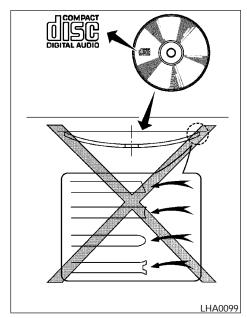
When the satellite radio is used for the first time or the battery has been replaced, the satellite radio may not work properly. This is not a malfunction. Wait more than 10 minutes with satellite radio ON and the vehicle outside of any metal or large building for satellite radio to receive all of the necessary data.

No satellite radio reception is available and "NO SAT" is displayed when the SAT band option is selected unless optional satellite receiver and antenna are installed and an XM® satellite radio service subscription is active. Satellite radio is not available in Alaska, Hawaii and Guam.

Satellite radio performance may be affected if cargo carried on the roof blocks the satellite radio signal.

If possible, do not put cargo over the satellite antenna.

A build up of ice on the satellite radio antenna can affect satellite radio performance. Remove the ice to restore satellite radio reception



**AUDIO OPERATION PRECAUTIONS** 

#### Compact disc (CD) player

#### **A** CAUTION

- Do not force a compact disc into the CD insert slot. This could damage the CD and/or CD changer/player.
- Trying to load a CD with the CD door closed could damage the CD and/or CD changer.
- Only one CD can be loaded into the CD player at a time.
- Only use high quality 4.7 in (12 cm) round discs that have the "COMPACT disc DIGITAL AUDIO" logo on the disc or packaging.
- 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 cannot function when the compartment temperature is extremely high or low.
   Decrease/increase the temperature before use.

- Do not expose the CD to direct sunlight.
- CDs that are in poor condition or are dirty, scratched or covered with fingerprints may not work properly.
- The following CDs may not work properly:
  - Copy control compact discs (CCCD)
  - Recordable compact discs (CD-R)
  - Rewritable compact discs (CD-RW)
- Do not use the following CDs as they may cause the CD player to malfunction:
  - 3.1 in (8 cm) discs with an adapter
  - · CDs that are not round
  - CDs with a paper label
  - CDs that are warped, scratched, or have abnormal edges
- This audio system can only play prerecorded CDs. It has no capability to record or burn CDs.
- If the CD cannot be played, one of the following messages will be displayed.

#### CHECK DISC:

- Confirm that the CD is inserted correctly (the label side is facing up, etc.).
- Confirm that the CD is not bent or warped and it is free of scratches.

#### PRESS EJECT:

This is an error due to excessive temperature inside the player. Remove the CD by pressing the EJECT button. After a short time, reinsert the CD. The CD can be played when the temperature of the player returns to normal.

#### UNPLAYABLE:

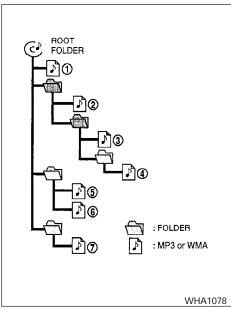
The file is unplayable in this audio system (only MP3 or WMA (if so equipped) CD).

#### Compact Disc with MP3 or WMA

#### Terms:

- MP3 MP3 is short for Moving Pictures Experts Group Audio Layer 3. MP3 is the most well-known compressed digital audio file format. This format allows for near "CD quality" sound, but at a fraction of the size of normal audio files. MP3 conversion of an audio track from CD-ROM can reduce the file size by approximately a 10:1 ratio with virtually no perceptible loss in quality. MP3 compression removes the redundant and irrelevant parts of a sound signal that the human ear doesn't hear.
- WMA Windows Media Audio (WMA)\* is a compressed audio format created by Microsoft as an alternative to MP3. The WMA codec offers greater file compression than the MP3 codec, enabling storage of more digital audio tracks in the same amount of space when compared to MP3s at the same level of quality.
- Bit rate Bit rate denotes the number of bits per second used by a digital music file.
   The size and quality of a compressed digital audio file is determined by the bit rate used when encoding the file.

- Sampling frequency Sampling frequency is the rate at which the samples of a signal are converted from analog to digital (A/D conversion) per second.
- Multisession Multisession is one of the methods for writing data to media. Writing data once to the media is called a single session, and writing more than once is called a multisession.
- ID3/WMA Tag The ID3/WMA tag is the part of the encoded MP3 or WMA file that contains information about the digital music file such as song title, artist, encoding bit rate, track time duration, etc. ID3 tag information is displayed on the Artist/song title line on the display.
- \* Windows® and Windows Media® are registered trademarks and trademarks in the United States of America and other countries of Microsoft Corporation of the USA.



Playback order chart

#### Playback order:

Music playback order of a CD with MP3 or WMA files is as illustrated.

- The names of folders not containing MP3 or WMA files are not shown in the display.
- If there is a file in the top level of the disc, "Root Folder" is displayed.
- The playback order is the order in which the files were written by the writing software. Therefore, the files might not play in the desired order.

#### Specification chart:

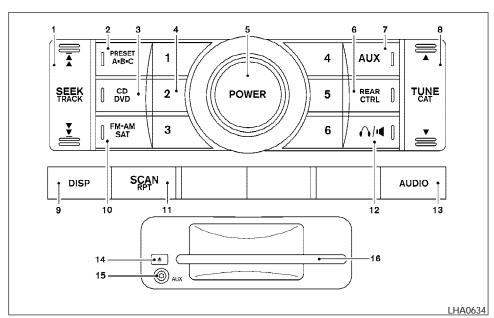
Supported media			CD, CD-R, CD-RW
Supported file systems			ISO9660 LEVEL1, ISO9660 LEVEL2, Apple ISO, Romeo, Joliet * ISO9660 Level 3 (packet writing) is not supported.
Supported versions*1	MP3	Version	MPEG1, MPEG2, MPEG2.5
		Sampling frequency	8 kHz - 48 kHz
		Bit rate	8 kbps - 320 kbps, VBR
	WMA	Version	WMA7, WMA8, WMA9
		Sampling frequency	32 kHz - 48 kHz
		Bit rate	48 kbps - 192 kbps, VBR
Tag information			ID3 tag VER1.0, VER1.1, VER2.2, VER2.3 (MP3 only)
Folder levels			Folder levels: 8, Max folders: 255 (including root folder), Files: 512 (Max. 255 files for one folder)
Text character number limitation			128 characters
Displayable character codes*2			01: ASCII, 02: ISO-8859-1, 03: UNICODE (UTF-16 BOM Big Endian), 04: UNICODE (UTF-16 Non-BOM Big Endian), 05: UNICODE (UTF-8), 06: UNICODE (Non-UTF-16 BOM Little Endian)

<sup>\*1</sup> Files created with a combination of 48 kHz sampling frequency and 64 kbps bit rate cannot be played.

<sup>\*2</sup> Available codes depend on what kind of media, versions and information are going to be displayed.

#### Troubleshooting guide:

Symptom	Cause and Countermeasure		
	Check if the disc was inserted correctly.		
	Check if the disc is scratched or dirty.		
	Check if there is condensation inside the player. If there is, wait until the condensation is gone (about 1 hour) before using the player.		
	If there is a temperature increase error, the CD player will play correctly after it returns to the normal temperature.		
Cannot play	If there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD, only the music CD files (CD-DA data) will be played.		
	Files with extensions other than ".MP3",".WMA", ".mp3" or ".wma" cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.		
	Check if the finalization process, such as session close and disc close, is done for the disc.		
	Check if the disc is protected by copyright.		
Door cound quality	Check if the disc is scratched or dirty.		
Poor sound quality	Bit rate may be too low.		
It takes a relatively long time before the music starts playing.	If there are many folders or file levels on the MP3/WMA disc, or if it is a multisession disc, some time may be required before the music starts playing		
Music cuts off or skips	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width, etc., might not match the specifications. Try using the slowest writing speed.		
Skipping with high bit rate files	Skipping may occur with large quantities of data, such as for high bit rate data.		
Moves immediately to the next song when playing	When a non-MP3/WMA file has been given an extension of ".MP3", ".WMA", ."mp3"or ".wma", or when play is prohibited by copyright protection, the will be approximately 5 seconds of no sound and then the player will skip to the next song.		
Songs do not play back in the desired order	The playback order is the order in which the files were written by the writing software. Therefore, the files might not play in the desired order.		



- SFFK/TRACK button.
- 2. PRESET A·B·C button
- CD/DVD button
- 4. Station select (1 6) buttons
- POWER/VOLUME control knob
- REAR CTRL button

- 7. AUX button
- 8. TUNE/CAT button
- 9. DISP button
- 10. FM·AM/SAT (satellite) radio button\*
- 11. SCAN/RPT button

- 13. AUDIO button [BASS, MID, TREBLE, FADE, BALANCE and SSV (if so equipped)]
- 14. 📤 CD eject button
- 15. AUX iack
- 16. CD insert slot

\*No satellite radio reception is available and "NO SAT" is displayed when the SAT button is pressed unless optional satellite receiver and antenna are installed, and an XM® satellite radio service subscription is active. Satellite radio not available in Alaska, Hawaii and Guam.

# FM/AM/SAT RADIO WITH COMPACT DISC (CD) PLAYER (if so equipped)

For all operation precautions, see "Audio operation precautions" earlier in this section.

No satellite radio reception is available and "NO SAT" is displayed when the SAT button is pressed unless optional satellite receiver and antenna are installed, and an XM® satellite radio service subscription is active. Satellite radio not available in Alaska, Hawaii and Guam.

4-52 Display screen, heater, air conditioner, audio and phone systems

# Audio main operation

#### Power/Volume control:

Turn the ignition key to ACC or ON, and then press the POWER/VOLUME control knob while the system is off to call up the mode (radio or CD) which was playing immediately before the system was turned off.

To turn the system off, press the POWER/VOLUME control knob.

Turn the POWER/VOLUME control knob to adjust the volume.

This vehicle may be equipped with Speed Sensitive Volume (SSV) for audio. The audio volume changes as the driving speed changes.

# AUDIO button (BASS, MID, TREBLE, FADE, BALANCE and SSV if so equipped):

Press the AUDIO button to change the mode as follows:

 $BASS \rightarrow MID \rightarrow TREBLE \rightarrow FADE \rightarrow BALANCE$ → SSV (if so equipped)

To adjust Bass, Mid. Treble, Fade and Balance, press the AUDIO button until the desired mode appears in the display. Press the TUNE button to adjust Bass, Mid and Treble to the desired level. You can also use the TUNE Button to adjust Fader and Balance modes. Fader adjusts the sound level between the front and rear speakers and Balance adjusts the sound between the right and left speakers.

To change the SSV mode to OFF, LOW, MID or HIGH, press the TUNE button.

Once you have adjusted the sound quality to the desired level, press the AUDIO button repeatedly until the radio or CD display reappears. Otherwise, the radio or CD display will automatically reappear after about 10 seconds.

## DISP (display) button:

This DISP (display) button will show text about MP3 (if so equipped), CD or SAT information in the audio display.

## CD display mode:

To change the text displayed while playing a CD with text, press the DISP button. The DISP button will allow you to scroll through CD text as follows: Track number ←→ Disc title ←→ Track title.

- Track title mode displays the title of the selected CD track.
- Disc title mode displays the title of the CD being played.

• Track number mode displays the number selected disc and the track that is currently being played on the disc.

# MP3 display mode:

To change the text displayed when listening to an MP3 with MP3 text (when CD with text is being used), press the DISP button. The DISP button will scroll through the CD text as follows: Folder, Artist and Track title ←→ Folder title ←→ Artist title → Track title.

To change the default display mode, press the SETTING button repeatedly until MP3 Disp Type appears on the display, then press the TUNE button to select the following display modes: Folder number ← → Disc number.

Once a display mode is selected, press the SET-TING button again to store the setting.

- Folder number mode displays the folder number and the file number of the folder currently being played.
- Disc number mode displays the number selected disc and the track that is currently being played.

# Display satellite radio display mode (if so equipped)

To change the text displayed when listening to satellite radio (if so equipped) press the DISP button. The DISP button will scroll through the broadcast information as follows: Name ← Title ← Current display mode.

To change the default display mode press the AUDIO button to display mode and press the TUNE button to select the following display modes: Channel number ←→ Channel name ←→ Name ←→ Title. Once the display mode is selected press the AUDIO button again to store the setting. If the AUDIO button is not pressed after 8 seconds the display will refresh with the last selected display mode setting.

- Channel number mode displays the channel number of the selected satellite radio station.
- Channel name mode displays the channel name of the selected satellite radio station.
- Name mode displays the name of the artist, host or weather condition of the selected satellite radio station.
- Title mode displays the song title, show name, or temperature of the selected satellite radio station.

# FM/AM/SAT radio operation

#### FM/AM/SAT band select:

Pressing the FM·AM or SAT (satellite - if so equipped) radio select button will change the band as follows:

 $AM \longleftrightarrow FM \text{ or } SAT^*$ 

When FM·AM or SAT\* radio select button is pressed while the ignition switch is in the ACC or ON, the radio will come on at the station last played.

The last station played will also come on when the POWER/VOLUME control knob is pressed ON.

\*No satellite radio reception is available and "NO SAT" is displayed when the SAT button is pressed unless optional satellite receiver and antenna are installed, and an XM® satellite radio service subscription is active. Satellite radio is not available in Alaska. Hawaii and Guam.

If a compact disc is playing when the FM-AM or SAT\* radio select button is pressed, the compact disc will automatically be turned off and the last radio station played will come on.

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





# TUNE (Tuning):

To manually tune the radio, press the TUNE button  $\blacktriangle$  or  $\blacktriangledown$ .

To move quickly through the channels, hold either the ▲ or ▼ button down for more than 1.5 seconds.





# SEEK tuning:

Press the SEEK/TRACK button ♣ or ¥ for less than 1.5 seconds to tune from high to low or low to high frequencies and stop at the next broadcasting station.

# SCAN RPT tuning:

Press the SCAN RPT button for more than 1.5 seconds to stop at each broadcasting station (AM, FM or SAT if so equipped) for 5 seconds. Pressing the button again during this 5 second period will stop SCAN tuning and the radio will remain tuned to that station. If the SCAN RPT button is not pressed within 5 seconds, SCAN tuning moves to the next station.

# 4-54 Display screen, heater, air conditioner, audio and phone systems

#### Station memory operations:

18 stations can be set for the FM. AM and SAT radio to the A, B and C preset button in any combination of AM, FM or SAT\* stations.

- 1. Press the PRESET A·B·C button to change between storage banks. The radio displays the icon A. B or C to indicate which set of presets are active.
- 2. Tune to the desired station using manual, SEEK or SCAN tuning. Press and hold any of the desired station memory buttons (1 -6) until a beep sound is heard. (The radio mutes when the select button is pressed).
- 3. The channel indicator will then come on and the sound will resume. Memorizing is now complete.
- 4. Other buttons can be set in the same manner.
- \* SAT presets are only available on SAT equipped vehicles.

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

#### Radio data system (RDS):

RDS stands for Radio Data System and is a data information service transmitted by some radio

stations on the FM band (not AM band). Currently, most RDS stations are in large cities, but many stations are now considering broadcasting RDS data.

#### RDS can display:

- Station call sign, such as "WHFR 98.3".
- Station name, such as "The Groove".
- Music or programming type such as "Classical", "Country", or "Rock".
- Artist and song information.

If the station broadcasts RDS information, the RDS icon is displayed.

# Compact disc (CD) player operation

Turn the ignition key to the ACC or ON position and insert the compact disc into the slot with the label side facing up. The compact disc will be guided automatically into the slot and start playing.

If the radio is already operating, it will automatically turn off and the compact disc will play.

If the system has been turned off while the compact disc was playing, pressing POWER/VOLUME control knob will start the compact disc.

#### CD/DVD button:

When the CD/DVD button is pressed with the system off and the compact disc loaded, the system will turn on and the compact disc will start to play.

When the CD/DVD button is pressed with the compact disc loaded but the radio playing, the radio will automatically be turned off and the compact disc will start to play.





SEEK/TRACK (Fast Forward and Rewind):

When the SEEK/TRACK button is pressed for more than 1.5 seconds. (fast forward) (rewind) while the compact disc is being played, the compact disc will play while fast forwarding or rewinding. When the button is released, the compact disc will return to normal play speed.





# SEEK/TRACK:

When the ₹ button is pressed for less than 1.5 seconds while a compact disc is playing, the track being played returns to its beginning. Press several times to skip back through tracks. The compact disc will go back the number of times the button is pressed.

When the \$\frac{1}{2}\$ button is pressed for less than 1.5 seconds while a compact disc is playing, the next track will start to play from its beginning. Press several times to skip through tracks. The compact disc will advance the number of times the button is pressed. (When the last track on the compact disc is skipped through, the first track will be played.)

When the  $^{\frac{1}{4}}$  or  $^{\frac{4}{3}}$  button is pressed for more than 1.5 seconds, the CD will fast forward or rewind.

#### SCAN/RPT:

When the SCAN/RPT button is pressed while the compact disc is being played, the play pattern can be changed as follows:

- 1 DISC RPT → 1 TRACK RPT → 1 DISC RDM
- 1 DISC RPT: The disc that is currently playing will be repeated.
- 1 TRACK RPT: The track that is currently playing will be repeated.
- 1 DISC RDM: Tracks from the disc that is currently playing will be played randomly.

#### REAR CTRL:

Pressing the REAR CTRL button turns the rear seat audio controller on. REAR CTRL ON will display. Pressing it again will turn the rear seat audio controller off. REAR CTRL OFF will display.

If the vehicle is not equipped with a rear seat audio controller, the display will show "REAR AV N/A".

#### AUX (Auxiliary) button:

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

Press the AUX button to play a compatible device when it is plugged into the AUX jack.



# (SPEAKER CONTROL) button:

Press this  $^{\mathcal{M}}$  button to turn the rear speakers off and the headphones on. Press this  $^{\mathcal{M}}$  button again to turn rear seat speakers back on and the headphones off.



#### CD EJECT:

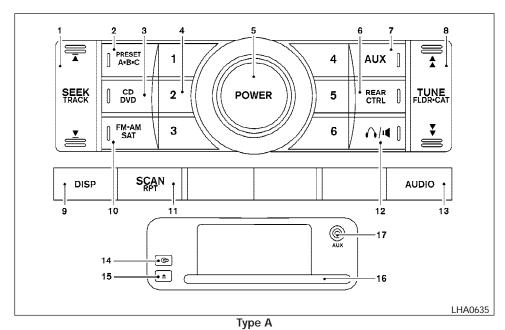
When the **b** button is pressed with the compact disc loaded, the compact disc will be ejected.

When the <u>button</u> is pressed while the compact disc is being played, the compact disc will eject and the system will turn off.

#### CD IN indicator:

CD IN indicator appears on the display when the CD is loaded with the system on.

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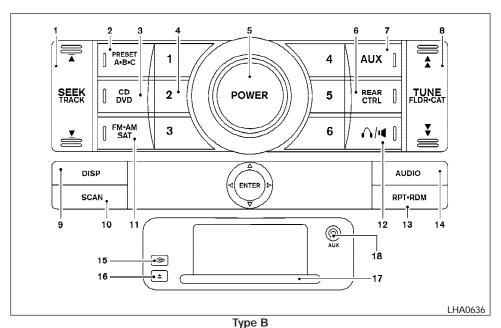


- 11. SCAN/RPT button
- 13. AUDIO button [BASS, MID, TREBLE, FADE, BALANCE and SSV (if so equipped)]
- CD load button
- ▲ CD eject button
- 16. CD insert slot
- 17. AUX jack

\*No satellite radio reception is available and "NO SAT" is displayed when the SAT button is pressed unless optional satellite receiver and antenna are installed, and an XM® satellite radio service subscription is active. Satellite radio not available in Alaska. Hawaii and Guam.

- SEEK/TRACK button
- PRESET A.B.C button
- CD/DVD button
- Station and CD select (1 6) buttons
- POWER/VOLUME control knob

- REAR CTRL button
- AUX button
- TUNE/FLDR-CAT button
- DISP button
- 10. FM·AM/SAT (satellite) radio button\*



- SEEK/TRACK button
- 2. PRESET A·B·C button
- 3. CD/DVD button

1.

- 4. Station and CD select (1 6) buttons
- 5. POWER/VOLUME control knob

- 6. REAR CTRL button
- 7. AUX button
- TUNE/FLDR·CAT button
- 9. DISP button
- 10. SCAN button

- 11. FM·AM/SAT (satellite) radio select button\*
- 12. A/■ Rear speaker control button
- 13. RPT-RDM button
- AUDIO button [BASS, MID, TREBLE, FADE, BALANCE and SSV (if so equipped)]

- 17. CD insert slot
- 18. AUX jack

\*No satellite radio reception is available and "NO SAT" is displayed when the SAT button is pressed unless optional satellite receiver and antenna are installed, and an XM® satellite radio service subscription is active. Satellite radio not available in Alaska, Hawaii and Guam.

# 4-58 Display screen, heater, air conditioner, audio and phone systems

# FM/AM/SAT RADIO WITH COMPACT DISC (CD) CHANGER (Type A and B) (if so equipped)

For all operation precautions, see "Audio operation precautions" earlier in this section.

No satellite radio reception is available and "NO SAT" is displayed when the SAT button is pressed unless optional satellite receiver and antenna are installed, and an XM® satellite radio service subscription is active. Satellite radio not available in Alaska. Hawaii and Guam.

# Audio main operation

#### Power/Volume control:

Turn the ignition key to ACC or ON, and then press the POWER/VOLUME control knob while the system is off to call up the mode (radio or CD) which was playing immediately before the system was turned off.

To turn the system press the POWER/VOLUME control knob.

Turn the POWER/VOLUME control knob to adjust the volume.

This vehicle may be equipped with Speed Sensitive Volume (SSV) for audio. The audio volume changes as the driving speed changes.

# AUDIO button (BASS, MID, TREBLE, FADE, BALANCE and SSV if so equipped):

Press the AUDIO button to change the mode as follows:

BASS → MID → TREBLE → FADE → BALANCE → SSV (if so equipped)

To adjust Bass, Mid, Treble, Fade and Balance, press the AUDIO button until the desired mode appears in the display. Press the TUNE button to adjust Bass, Mid and Treble to the desired level. You can also use the TUNE Button to adjust Fader and Balance modes. Fader adjusts the sound level between the front and rear speakers and Balance adjusts the sound between the right and left speakers.

To change the SSV mode to OFF, LOW, MID or HIGH, press the TUNE button.

Once you have adjusted the sound quality to the desired level, press the AUDIO button repeatedly until the radio or CD display reappears. Otherwise, the radio or CD display will automatically reappear after about 10 seconds.

#### DISP (display) button:

This DISP (display) button will show text about MP3 (if so equipped), CD or SAT information in the audio display.

#### CD display mode:

To change the text displayed while playing a CD with text, press the DISP button. The DISP button will allow you to scroll through CD text as follows: Track number ← → Disc title ← → Track title.

- Track title mode displays the title of the selected CD track.
- Disc title mode displays the title of the CD being played.
- Track number mode displays the number selected disc and the track that is currently being played on the disc.

#### MP3 display mode (if so equipped)

To change the text displayed when listening to an MP3 with MP3 text (when CD with text is being used), press the DISP button. The DISP button will scroll through the CD text as follows: Folder, Artist and Track title ←→ Folder title ←→ Artist title → Track title.

To change the default display mode, press the AUDIO button repeatedly until DISPLAY MODE appears on the display, then press the TUNE button to select the following display modes: Folder number ← → Disc number.

Once a display mode is selected, press the AU-DIO button again to store the setting.

- Folder number mode displays the folder number and the file number of the folder currently being played.
- Disc number mode displays the number selected disc and the track that is currently being played.

# Display satellite radio display mode (if so equipped)

To change the text displayed when listening to satellite radio (if so equipped) press the DISP button. The DISP button will scroll through the broadcast information as follows: Name ←→ Title ←→ Current display mode.

To change the default display mode press the AUDIO button to display mode and press the TUNE button to select the following display modes: Channel number ←→ Channel name ←→ Name ←→ Title. Once the display mode is selected press the AUDIO button again to store the setting. If the AUDIO button is not pressed after 8 seconds the display will refresh with the last selected display mode setting.

- Channel number mode displays the channel number of the selected satellite radio station.
- Channel name mode displays the channel name of the selected satellite radio station.

- Name mode displays the name of the artist, host or weather condition of the selected satellite radio station.
- Title mode displays the song title, show name, or temperature of the selected satellite radio station.

# FM/AM/SAT radio operation

#### FM/AM/SAT band select:

Pressing the FM·AM or SAT (satellite - if so equipped) radio select button will change the band as follows:

 $AM \longleftrightarrow FM \text{ or } SAT^*$ 

When FM-AM or SAT\* radio select button is pressed while the ignition switch is in the ACC or ON, the radio will come on at the station last played.

The last station played will also come on when the POWER/VOLUME control knob is pressed ON.

\*No satellite radio reception is available and "NO SAT" is displayed when the SAT button is pressed unless optional satellite receiver and antenna are installed, and an XM® satellite radio service subscription is active. Satellite radio is not available in Alaska, Hawaii and Guam.

If a compact disc is playing when the FM-AM or SAT\* radio select button is pressed, the compact disc will automatically be turned off and the last radio station played will come on.

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





# TUNE (Tuning):

To move quickly through the channels, hold either the **t** or **v** button down for more than 1.5 seconds.





# SEEK tuning:

Press the SEEK/TRACK button **▲** or **▼** for less than 1.5 seconds to tune from high to low or low to high frequencies and stop at the next broadcasting station.

# SCAN RPT tuning (Type A only):

Press the SCAN RPT button for more than 1.5 seconds to stop at each broadcasting station (AM, FM or SAT if so equipped) for 5 seconds. Pressing the button again during this 5 second period will stop SCAN tuning and the radio will

# 4-60 Display screen, heater, air conditioner, audio and phone systems

remain tuned to that station. If the SCAN RPT button is not pressed within 5 seconds, SCAN tuning moves to the next station.

# SCAN tuning (Type B only):

Press the SCAN button for more than 1.5 seconds to stop at each broadcasting station for 5 seconds. Pressing the button again during this 5 second period will stop SCAN tuning and the radio will remain tuned to that station. If the SCAN button is not pressed within 5 seconds, SCAN tuning moves to the next station.

# Station memory operations:

18 stations can be set for the FM. AM and SAT radio to the A, B and C preset button in any combination of AM, FM or SAT\* stations.

- 1. Press the PRESET A·B·C button to change between storage banks. The radio displays the icon A. B or C to indicate which set of presets are active.
- 2. Tune to the desired station using manual. SEEK or SCAN tuning. Press and hold any of the desired station memory buttons (1 -6) until a beep sound is heard. (The radio mutes when the select button is pressed).
- 3. The channel indicator will then come on and the sound will resume. Memorizing is now complete.

- 4. Other buttons can be set in the same manner.
- \* SAT presets are only available on SAT equipped vehicles.

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

## Radio data system (RDS):

RDS stands for Radio Data System and is a data information service transmitted by some radio stations on the FM band (not AM band). Currently, most RDS stations are in large cities, but many stations are now considering broadcasting RDS data.

#### RDS can display:

- Station call sign, such as "WHFR 98.3".
- Station name, such as "The Groove".
- Music or programming type such as "Classical", "Country", or "Rock".
- Artist and song information.

If the station broadcasts RDS information, the RDS icon is displayed.

# Compact disc (CD) changer operation

Turn the ignition key to the ACC or ON position. To insert the disc, first press the LOAD button. Insert the compact disc into the slot with the label side facing up. The compact disc will be guided automatically into the slot and start playing

If the radio is already operating, it will automatically turn off and the compact disc will play.

If the system has been turned off while the compact disc was playing, pressing the POWER/VOLUME control knob will start the compact disc.



# CD LOAD button:

To insert a CD in the CD changer, press the ( load button for less than 1.5 seconds. Select the loading slot by pressing the CD insert select button (1 - 6), then insert the CD.

To insert 6 CDs into the CD changer, press the ( load button for more than 1.5 seconds.

The slot numbers (1 - 6) will illuminate on the display when CDs are loaded into the changer.

#### CD/DVD button:

When the CD/DVD button is pressed with the system off and the compact disc loaded, the system will turn on and the compact disc will start to play.

When the CD/DVD button is pressed with the compact disc loaded with the radio playing, the radio will automatically be turned off and the compact disc will start to play.





## SEEK/TRACK:

When the  $\ \ \ \ \$  button is pressed while a compact disc is playing, the track being played returns to its beginning. Press several times to skip back through tracks. The compact disc will go back the number of times the button is pressed.

When the **\( \)** button is pressed while the compact disc is playing, the next track will start to play from its beginning. Press several times to skip through tracks. The compact disc will advance the number of times the button is pressed. (When the last track on the compact disc is skipped through, the first track will be played.)





# TUNE/FLDR·CAT (Folder·Catalog):

While playing an MP3, press the TUNE/FLDR·CAT button  $\clubsuit$  or  $\blacktriangledown$  to scan through available folders.





# TUNE/FLDR·CAT (Fast Forward and Rewind):

When the TUNE/FLDR·CAT button is pressed for more than 1.5 seconds, ★ (fast forward) or ▼ (rewind) while the compact disc is being played, the compact disc will play while fast forwarding or rewinding. When the button is released, the compact disc will return to normal play speed.

#### CD select buttons:

To play another CD that has been loaded, press a CD select button (1 - 6).

# SCAN/RPT (Type A only):

When the SCAN/RPT button is pressed while the compact disc is being played, the play pattern can be changed as follows:

1 DISC REPEAT  $\rightarrow$  1 TRACK REPEAT  $\rightarrow$  ALL DISC RANDOM  $\rightarrow$  1 DISC RANDOM

- 1 DISC REPEAT: The disc that is currently playing will be repeated
- 1 TRACK REPEAT: The track that is currently playing will be repeated.
- ALL DISC RANDOM: Tracks from all discs will be played randomly.
- 1 DISC RANDOM: Tracks from the disc that is currently playing will be played randomly.

# RPT-RDM button (Type B only):

When the RPT-RDM button is pressed while the compact disc is played, the play pattern can be changed as follows:

- 1 DISC REPEAT  $\rightarrow$  1 TRACK REPEAT  $\rightarrow$  ALL DISC RANDOM  $\rightarrow$  1 DISC RANDOM
- 1 DISC REPEAT: The disc that is currently playing will be repeated.
- 1 TRACK REPEAT: The track that is currently playing will be repeated.
- ALL DISC RANDOM: Tracks from all discs will be played randomly.
- 1 DISC RANDOM: Tracks from the disc that is currently playing will be played randomly.

# **REAR CTRL:**

Pressing the REAR CTRL button turns the rear seat audio controller on. REAR CTRL ON will display. Pressing it again will turn the rear seat audio controller off. REAR CTRL OFF will display.

If the vehicle is not equipped with a rear seat audio controller, the display will show "REAR AV N/A".



# (SPEAKER CONTROL) button:

Press this <sup>↑/■</sup> button to turn the rear speakers off and the headphones on. Press this A button again to turn rear seat speakers back on and the headphones off.



#### CD EJECT:

#### Current/Selected disc:

 Press the button, then press the slot number (1 - 6) for the desired disc. The compact disc will be ejected. If no slot number (1 - 6) is pressed, the current loaded disc will be ejected. Also, if the ejected disc is not removed within 15 seconds, the disc will reload.

#### All discs:

Press and hold the **b**utton for more than 1.5 seconds. The compact discs will be ejected one by one. If a disc is not removed within 15 seconds or the  $\triangle$ button is pressed again during the eject sequence, the entire disc eject sequence will be canceled.

When this button is pressed while the compact disc is being played, the compact disc will eject and the last source will be played.

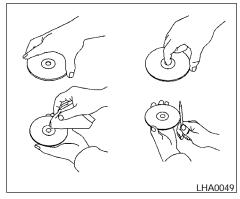
#### CD IN indicator:

The slot numbers (1 - 6) will illuminate if CDs have been loaded into the changer in CD mode only.

# AUX (Auxiliary) button:

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

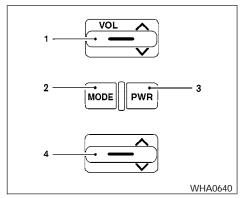
Press the AUX button to play a compatible device when it is plugged into the AUX jack.



# CD CARE AND CLEANING

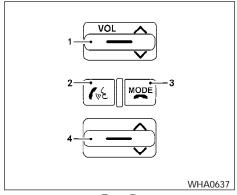
- Handle a CD by its edges. Do not bend the disc. Never touch the surface of the disc.
- Always place the discs in the storage case when they are not being used.
- To clean a disc, wipe the surface from the center to the outer edge using a clean, soft cloth. Do not wipe the disc using a circular motion.
- Do not use a conventional record cleaner or alcohol intended for industrial use.

 A new disc may be rough on the inner and outer edges. Remove the rough edges by rubbing the inner and outer edges with the side of a pen or pencil as illustrated.



Type A

- Volume control switch
- MODE select switch
- B. POWER on/off switch
- 4. Tuning switch



Type B

- Volume control switch
- 2. Phone operation switch
- 3. POWER on and MODE select switch
- 4. Tuning switch

# STEERING WHEEL SWITCH FOR AUDIO CONTROL

The audio system can be operated using the controls on the steering wheel.

## POWER on/off switch

If you have the Type A switch, with the ignition switch placed in the ACC or ON position, push the POWER switch to turn the audio system on or off.

If you have the Type B switch, with the ignition switch placed in the ACC or ON position, push the MODE switch to turn the audio system on.

#### MODE select switch

Push the MODE select switch to change the mode in the following sequence: PRESET A → PRESET B  $\rightarrow$  PRESET C  $\rightarrow$  CD  $\rightarrow$  DVD (if so equipped)  $\rightarrow$  AUX.

While in one of the preset radio station banks (A, B or C), use the tuning switch  $\vee$  or  $\wedge$  to select one of the preset radio stations (1-6).

## Volume control switch

Push the volume control switch up or down to increase or decrease the volume.





**Tuning** 

## Memory change (radio):

While in one of the preset radio station banks (A, B or C), push the tuning switch  $\vee$  or  $\wedge$ 

for less than 1.5 seconds to change to the next preset station in memory.

# Seek tuning (radio):

Push the tuning switch  $\vee$  or  $\wedge$  for more than 1.5 seconds to seek the next or previous radio station.

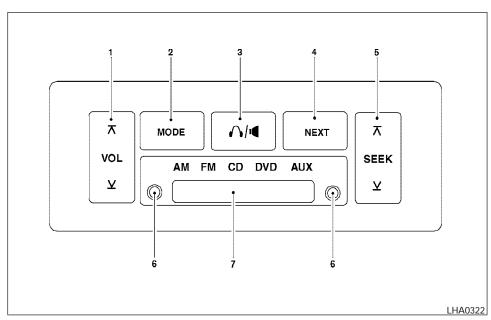
# Next/Previous track (CD):

Push the tuning switch  $\vee$  or  $\wedge$  for less than 1.5 seconds to return to the beginning of the present track or skip to the next track. Push several times to skip back or skip through tracks.

This system searches for the blank intervals between selections. If there is a blank interval within 1 program or there is no interval between programs, the system may not stop in the desired or expected location.

# Change disc (CD) (if so equipped):

Push the SEEK tuning switch ✓ or ∧ for more than 1.5 seconds to change the playing disc up or down.



- VOL (volume) control button
- MODE select button
- 4. NEXT button
- SEEK button
- 6. Headphone jacks

7. Infrared headphone transmitter lens\*

\*Red transmitters will be visible when infrared headphones are on.

# REAR AUDIO CONTROLS (if so equipped)

Press the REAR CTRL button on the front radio control panel to turn the rear controls on. Press the button again to turn the rear controls off.

The headphones symbol illuminates on the front display when the rear audio controls are on. Two headphone jacks are provided so two rear seat passengers may listen to the audio system privately.

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

One or two (if so equipped) infrared headphones are included if the vehicle is equipped with the DVD entertainment system. Most portable radio headphones work with the rear audio controls.

For vehicles equipped with the FM/AM/SAT radio with compact disc player, if the rear passengers turn off the rear speakers and are using headphones they may choose to listen to a different media than the front passengers. The rear passengers can listen to the radio along with the front passengers or they can listen to a CD or SAT radio (if so equipped).

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# VOL (volume) button:

The VOL button allows the rear passengers to adjust the headphone volume level. The vehicle volume can also be changed if the REAR CTRL is enabled and the rear audio mode is the same as the front



# (SPEAKER CONTROL) button:

Press this  $^{\wedge / \blacksquare}$  button to turn the rear speakers off and headphones on. Press this out button again to turn rear seat speakers back on and headphones off.

# MODE button (Type A only):

The MODE button allows the rear passengers to change between AM, FM, CD, DVD, AUX jack and AUX(SAT) (if so equipped). The media options are listed on the face plate of the rear audio controls. When a source of media is selected, the media label will be illuminated.

# MODE button (Type B and C):

The MODE button allows the rear passengers to change between AM, FM, CD, DVD and AUX-(SAT) (is so equipped). The media options are listed on the face plate of the rear audio controls. When a source of media is selected, the media label will be illuminated.

#### NOTE:

# The AUX jack can only be turned on by the front control panel.

For additional information on the AUX jack, see "AUX (Axiliary) button" earlier in this section.

#### SEEK button:

In AM or FM mode, the SEEK button allows the rear seat passengers to find the next radio station up or down the station band frequency.

In CD mode, the SEEK button allows the rear passengers to find the next or previous selection on the CD.

# **NEXT button:**

When the NEXT button is pressed while in AM, FM or SAT mode (if so equipped), the radio will change to the next preset.

When playing a CD in the CD changer (if so equipped), press the NEXT button to change between discs when multiple discs are loaded.

The NEXT button does not function while playing a DVD or single CD.

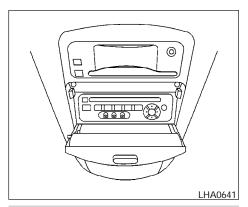
# **ANTENNA** Window antenna

The antenna pattern is printed inside the rear passenger and driver side windows.

# **A** CAUTION

- Do not place metalized film near the rear driver or passenger side window glass or attach any metal parts to it. This may cause poor reception or noise.
- When cleaning the inside of the rear driver or passenger side window, be careful not to scratch or damage the window antenna. Lightly wipe along the antenna with a dampened soft cloth.

# **DVD ENTERTAINMENT SYSTEM (if so** equipped)



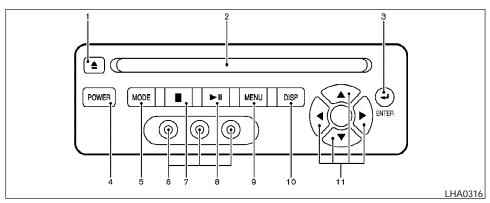
# **WARNING**

- The DVD Entertainment System is designed for rear seat passenger viewing only.
- The driver must not attempt to operate the DVD Entertainment System while the vehicle is in motion so that full attention may be given to vehicle operation.

# **A** CAUTION

- The glass screen on the liquid crystal display may break if hit with a hard or sharp object. If the glass breaks, do not touch the liquid crystalline material, which contains a small amount of mercury. In case of contact with skin, wash immediately with soap and water.
- Use a damp, soft cloth when cleaning the DVD Entertainment System components. Do not use solvents or cleaning solutions.
- To avoid discharging the vehicle battery, do not operate the system more than 15 minutes without starting the engine.

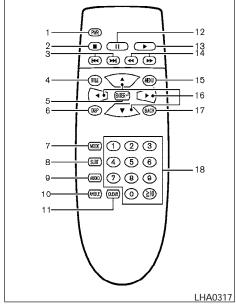
Do not attempt to use the system in extreme temperature conditions [below -4°F (-20°C) or above 158°F (70°C)]



- **EJECT** button
- DVD slot
- **ENTER** button
- POWER on/off button
- MODE button
- Input jacks
- STOP button
- PLAY/PAUSE button
- MENU button
- DISPLAY button
- **NAVIGATION** keys

# DIGITAL VIDEO DISC (DVD) PLAYER **CONTROLS**

Refer to "Playing a digital video disc (DVD)" later in this section for the function of each button.

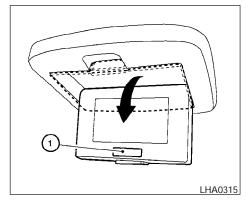


- POWER button
- STOP button
- NEXT TRACK/CHAPTER and PREVI-OUS TRACK/CHAPTER button
- TITLE button
- **ENTER** button

- DISPLAY button
- 7. MODE button
- 8. SUBTITLE button
- AUDIO button
- 10. ANGLE button
- 11. CLEAR button
- 12. PAUSE button
- 13. PLAY button
- 14. FAST FORWARD/FAST REVERSE button
- 15. MENU button
- 16. NAVIGATION keys
- 17. BACK button
- 18. NUMERIC KEYPAD

# REMOTE CONTROL

Refer to "Playing a digital video disc (DVD)" later in this section for the function of each button.



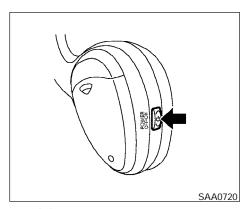
# FLIP-DOWN SCREEN

The flip-down screen has a wireless remote control receiver ① located at the bottom of the screen.

On vehicles equipped with 2 screens for second and third row passengers, both screens will have a remote control receiver.

# **A** CAUTION

- The glass screen on the liquid crystal display may break if hit with a hard or sharp object. If the glass breaks, do not touch the liquid crystalline material, which contains a small amount of mercury. In case of contact with skin, wash immediately with soap and water.
- The screen rotates down to view and up into the housing to store when not in use. Ensure that the screen is latched securely into the housing when stored.



# Headphones

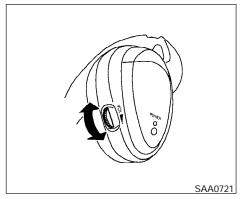
#### Power ON/OFF:

Press the power button to turn the headphones on or off.

#### Volume control:

Turn the volume control knob to adjust the volume.

The headphones will automatically be turned off in 30 seconds if there is no sound during that period. To prevent the battery from being discharged, keep the power supply turned off when not in use.



#### NOTE:

For optimum infrared headphone performance, increase the volume on the rear seat controller to the maximum level and adjust the infrared headphone volume using the volume control on the headphones. Using a lower volume setting on the rear seat controller can cause static noise in the infrared headphones.

# PLAYING A DIGITAL VIDEO DISC (DVD)

# **A** CAUTION

- Only operate the DVD while the vehicle engine is running. Operating the DVD for extended periods of time with the engine OFF can discharge the vehicle battery.
- Do not allow the system to get wet. Excessive moisture such as spilled liquids may cause the system to malfunction.
- The driver must not attempt to wear the headphones while the vehicle is in motion so that full attention may be given to vehicle operation.
- While playing video CD media, this DVD player does not guarantee complete functionality of all video CD formats.

With the DVD player, you can hear DVD videos, video CDs and CDs using headphones. Passengers in the rear seat can enjoy the sound independently of the front seat.

Press the CD/DVD button located on the front controls to hear the sound of the DVD player through the speakers.

Pressing the M button on the front controls turns the rear speakers on and off.

It is possible to operate the DVD player by remote control.

Headphones are a wireless type and no cables are necessary. You can use them in almost all the ranges in the rear seat. (It is not possible to use the headphones in the front seat.)

#### POWER on/off button:

With the ignition switch turned to the ACC or ON position, press the POWER button to turn the DVD player on or off.

Insert the DVD into the slot with the label side facing up. The DVD will be guided automatically into the slot.

If the DVD player is off and a DVD is inserted, the DVD player will automatically turn on.

## **A** CAUTION

Do not force the compact disc into the slot. This could damage the player.

#### MODE select button:

Press the MODE button to select Audio/Video source between DVD and AUX input (input jacks

on the faceplate, Red = right channel audio input, White = left channel audio input, and Yellow = Video input).

The display will show the "AUX" in the upper left corner of the display for 4 seconds once the Mode is changed to AUX.

To use the input jacks, refer to "Auxiliary input iacks" in this section.





PLAY:

When the PLAY/PAUSE button on the player or the PLAY button on the remote control is pressed, the player will play.

In play mode, the display will briefly show on the upper left corner of the display.





FF (Fast Forward), REW (Remote control only):

Press FAST FORWARD/FAST REVERSE buttons to carry out the fast forward or fast reverse presentation at 5 times normal play speed.

Press FAST FORWARD/FAST REVERSE buttons again or PLAY button to resume the normal play speed.





# NEXT CHAPTER/ PREVIOUS CHAPTER (Remote control only):

When the ►► (NEXT CHAPTER) button is pressed while the DVD is being played, the program next to the present one will start to play from its beginning. Press several times to skip through programs. The DVD will advance the number of times the button is pressed. When the I◄ (PREVIOUS CHAPTER) button is pressed, the program being played returns to its beginning. Press several times to skip back through programs. The DVD will go back the number of times the button is pressed.





PAUSE:

When the PLAY/PAUSE button on the player or the PAUSE button on the remote control is pressed, the player will pause playing of the media. In pause mode, the player will show II on the upper left corner of the display until the player is changed to another mode.



#### STOP:

Press the STOP button once to stop playing the media. The display will show in the upper left corner of the display for 4 seconds, and the last disc position will be stored. When the PLAY button is pressed again, it will resume at the stored disc track and time position.

If the STOP button is pressed again when the player is already in Stop mode, it will reinitialize the pointer to the beginning of the disc. In effect, it will ignore the last stored disc position and. upon receipt of the next play message, it will begin at the Title Menu, or at "the beginning of the disc".



#### EJECT:

When the EJECT button is pressed with the DVD loaded, it will be ejected.

The display will show the EJECT symbol  $\triangle$  in the upper left corner of the display for 4 seconds once the EJECT button is pressed.

If the DVD is not loaded, the display will show "NO DISC".

If the DVD comes out and is not removed within 25 seconds, it will be pulled back into the slot to protect it.

#### DISPLAY:

If the DISPLAY control is pressed for less than 2 seconds, the display menu will appear on the screen.

- The display menu will remain on the screen for 10 seconds if no subsequent control activations occur.
- Use NAVIGATION KEYS to navigate within the display menu, and use ENTER to select the item.
- Holding the DISPLAY control on the faceplate for longer than approximately 2 seconds while in the display menu will reset the display characteristics to their nominal values. (Faceplate feature only)

If the DISPLAY control button on the faceplate is pressed for more than 2 seconds, the media track/time information will be displayed along the bottom of the display. Pressing the DISPLAY control for more than 2 seconds will remove the media track/time information from the display. (Faceplate feature only)

#### NAVIGATION KEYS:

If media is in PLAY mode, activation of the NAVI-GATION KEYS (Up, Down, Left, and Right) will perform the following functions: chapter/track, previous chapter/track, fast reverse and fast forward, and the display will

show ► , I , • and ► respectively in the upper left corner of the display for 4 seconds. (Faceplate feature only)

If media is in PAUSE mode, activation of the NAVIGATION KEYS (Up, Down and Right) will perform the following functions: chapter/track, previous chapter/track and slow forward, and the display will show and a forward arrow symbol respectively in the upper left corner of the display for 4 seconds. (Faceplate feature only)

If media is in activated MENU mode, the NAVI-GATION KEYS will be used to navigate Up, Down, Left, and Right within the menu.

If display control menu is on, the NAVIGATION KEYS will be used to navigate Up, Down, Left, and Right within the menu.

#### ENTER:

In MENU mode, press the ENTER button to select MENU items.

In the display menu, press the ENTER button to select items for modification, as per the onscreen instructions.

#### MENU:

If the media is in PLAY mode and the MENU button is pressed, the DVD menu will appear on the screen. Use Navigation Keys to navigate within the menu, and use ENTER to select the item.

Press the MENU button again to return to PLAY mode.

# TITLE (Remote control only):

Press the TITLE button to return the DVD media to the "title" of the DVD.

Press the TITLE button again to return to the previous stop point and play.

# BACK (Remote control only):

Press the BACK button to exit the current active menu and return to the previous menu.

# SUBTITLE (Remote control only):

Press the SUBTITLE button to call up subtitle selection menu.

Repeatedly press the SUBTITLE button to cycle through each available subtitle.

# AUDIO (Remote control only):

Press the AUDIO button to call up audio menu.

Repeatedly press the AUDIO button to cycle through each available audio track.

# ANGLE (Remote control only):

Press the ANGLE button to call up the camera angle menu.

Repeatedly press the ANGLE button to cycle through each available angle.

#### CLEAR (Remote control only):

Press the CLEAR button to clear all numeric inputs, if actuated prior to expiration of the 3-second timer.

# NUMERIC KEYPAD (0-9 & $\geq$ 10) (Remote control only):

Press the NUMERIC KEYPAD to directly access disc chapters, titles or tracks by inputting their numeric value.

The "≥10" button inputs numbers greater than or equal to 10, allowing up to three digits to be input for selecting chapter/title/track number.

The subsequent actuation of numeric buttons will continuously shift the previously input number to the "left".

The chapter/title/track number will be automatically selected (if valid, based on media content) if 3 seconds expire without any keypad inputs.

The operator can cancel the input chapter/title/track number by actuating the CLEAR control prior to the expiration of the 3-second timer.

These functions can be used only for the DVD discs which correspond to them.

# Auxiliary input jacks

The auxiliary input jacks are located on the control panel. Compatible devices such as video games, camcorders and portable video players can be connected to the auxiliary jacks.

The auxiliary jacks are color coded for identification purposes.

- Yellow video input
- White left channel audio input
- · Red right channel audio input

To view the compatible device connected to the AUX jacks, press the MODE button. For more information, see "Mode select button" earlier in this section.

# 4-74 Display screen, heater, air conditioner, audio and phone systems

#### CARE AND MAINTENANCE

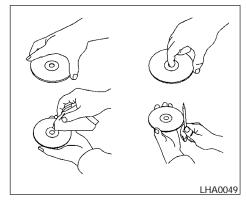
Use a lightly dampened, lint free cloth to clean the surfaces of your DVD Entertainment System. (DVD player face, screen, remote control, etc.)

# **A** CAUTION

- Do not use any solvents or cleaning solutions when cleaning the video system.
- Do not use excessive force on the monitor screen.
- Avoid touching or scratching the monitor screen as it may become dirty or damaged.

Do not attempt to use the system in extreme temperature conditions [below -4°F (-20°C) or above 158°F (70°C)]

Do not attempt to operate the system in extreme humidity conditions (less than 10% or more than 75%).

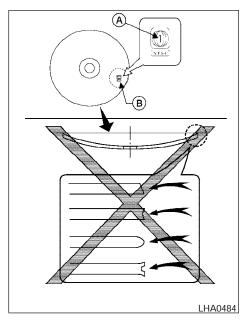


HOW TO HANDI F THE DVD

# **A** CAUTION

- Handle a DVD by its edges. Never touch the surface of the disc.
- To clean a disc, wipe the surface from the center to the outer edge using a clean, soft cloth. Do not wipe the disc using a circular motion.
- Do not use a conventional record cleaner, benzine, thinner or alcohol intended for industrial use.

- A new disc may be rough on its inner and outer edges. Remove the rough edges using the side of a pen or pencil as illustrated.
- Never attempt to use a DVD that has been cracked, deformed, or repaired using adhesive. Doing so may cause damage to the equipment.
- Handle the DVD carefully to avoid contamination or flaws. Otherwise, signals may not be read properly.
- Do not write, draw or attach anything on any side of the DVD.
- Do not store the DVD in locations with direct. sunlight or in high temperatures or humidity.
- Always place discs in the storage case when they are not being used.
- Do not put on any sticker or write anything on either surface of the DVD.



DVD player operation precautions

Do not use the following DVDs as they may cause the DVD player to malfunction:

• 3.1 in (8 cm) discs with an adapter.

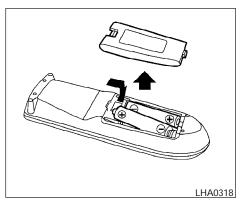
- DVDs with a region code other than "1". The region code (A) is displayed in a small symbol printed on the top of the DVD (B).
- DVDs that are not round.
- DVDs with a paper label.
- DVDs that are warped, scratched, or have unequal edges.
- Recordable digital video discs (DVD+R).
- Rewritable digital video discs (DVD+RW).

If a DVD with a paper label is used and becomes jammed, you may be able to reset the unit and eject the jammed disc with the following procedure:

- 1. Record the radio presets.
- 2. Disconnect the negative terminal from the battery for five minutes.
- 3. Reconnect the negative battery terminal.
- Check to see if the jammed DVD has been ejected. If it has not, try to eject the DVD by pushing the eject button.

- If the disc cannot be ejected see your NISSAN dealer for further assistance.
- 6. Re-program the radio presets.

4-76 Display screen, heater, air conditioner, audio and phone systems



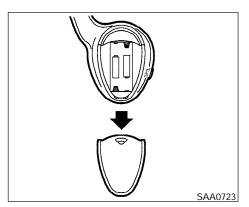
# Remote control and headphones battery replacement

Replace the battery as follows:

- 1. Open the lid.
- 2. Replace batteries with new ones.
- Size AA (remote control)
- Size AAA (headphones)

Make sure that the ⊕ and ⊖ ends on the batteries match the markings inside the compartment.

3. Close the lid securely.



If the battery is removed for any reason other than replacement, close the lid securely.

- If you will not be using the remote control for long periods of time, remove the batteries.
- Replacement of the batteries is needed when the remote control only functions at extremely close distances to the DVD player or not at all.
- Be careful not to touch the battery terminal.
- 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 remote control and headphones.

#### **FCC Notice:**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules and RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

#### CAR PHONE OR CB RADIO

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

# **A** WARNING

- A cellular telephone should not be used while driving so full attention may be given to vehicle operation. Some jurisdictions prohibit the use of cellular telephones while driving.
- If you must make a call while your vehicle is in motion, the hands free cellular phone operational mode (if so equipped) is highly recommended. Exercise extreme caution at all times so full attention may be given to vehicle operation.
- If you are unable to devote full attention to vehicle operation while talking on the phone, pull off the road to a safe location and stop your vehicle.

## **A** CAUTION

- Keep the antenna as far away as possible from the electronic control modules.
- Keep the antenna wire more than 8 in (20 cm) away from the electronic control system harnesses. Do not route the antenna wire next to any harness.
- Adjust the antenna standing-wave ratio as recommended by the manufacturer.
- Connect the ground wire from the CB radio chassis to the body.
- For details, consult a NISSAN dealer.

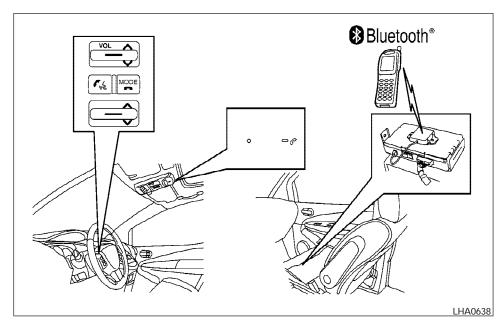
# BLUETOOTH® HANDS-FREE PHONE SYSTEM (if so equipped)

# **AWARNING**

- Use a phone after stopping your vehicle in a safe location. If you have to use a phone while driving, exercise extreme caution at all times so full attention may be given to vehicle operation.
- If you are unable to devote full attention to vehicle operation while talking on the phone, pull off the road to a safe location and stop your vehicle.

# **A**CAUTION

To avoid discharging the vehicle battery, use a phone after starting the engine.



Your NISSAN is equipped with the Bluetooth® Hands-Free Phone System. If you have an approved Bluetooth® enabled cellular phone, you can set up the wireless connection between your cellular phone and the in-vehicle phone module. With Bluetooth® wireless technology, you can make or receive a hands-free telephone call with your cellular phone in the vehicle.

Once your cellular phone is paired to the invehicle phone module, no other phone connecting procedure is required. Your phone is automatically connected with the in-vehicle phone

module when the ignition switch is turned to the ON position with the paired cellular phone turned on and carried in the vehicle.

You can register up to 5 different Bluetooth® cellular phones to the in-vehicle phone module. However, you can talk on only one cellular phone at a time.

Before using the Bluetooth® Hands-Free Phone System, refer to the following notes.

- Set up the wireless connection between a cellular phone and the in-vehicle phone module before using the hands-free phone system.
- Some Bluetooth® enabled cellular phones may not be recognized by the in-vehicle phone module. Please visit www.nissanusa.com/bluetooth for a recommended phone list and pairing.
- You will not be able to use a hands-free phone under the following conditions:
  - Your vehicle is outside of the cellular service area.
  - Your vehicle is in an area where it is difficult to receive a cellular signal; such as in a tunnel, in an underground parking garage, near a tall building or in a mountainous area.

- Your cellular phone is locked to prevent it from being dialed.
- When the radio wave condition is not ideal or ambient sound is too loud, it may be difficult to hear the other person's voice during a call.
- Do not place the cellular phone in an area surrounded by metal or far away from the in-vehicle phone module to prevent tone quality degradation and wireless connection disruption.
- While a cellular phone is connected through the Bluetooth® wireless connection, the battery power of the cellular phone may discharge quicker than usual. The Bluetooth® Hands-Free Phone System cannot charge cellular phones.
- If the hands-free phone system seems to be malfunctioning, see "Troubleshooting guide" later in this section. You can also visit www.nissanusa.com/bluetooth for troubleshooting help.
- Some cellular phones or other devices may cause interference or a buzzing noise to come from the audio system speakers. Storing the device in a different location may reduce or eliminate the noise.

 Refer to the cellular phone Owner's Manual regarding the telephone charges, cellular phone antenna and body, etc.

#### **USING THE SYSTEM**

The NISSAN Voice Recognition system allows hands-free operation of the Bluetooth® Phone System.

If the vehicle is in motion, some commands may not be available so full attention may be given to vehicle operation.

#### Initialization

When the ignition switch is placed in the ON position, NISSAN Voice Recognition is initialized, which takes a few seconds. When completed, the amber light on the overhead console illuminates and the system is ready to accept voice commands. If the button is pressed before the initialization completes, the system will announce "Hands-free phone system not ready" and will not react to voice commands.

# Operating tips

To get the best performance out of the NISSAN Voice Recognition system, observe the following:

- Keep the interior of the vehicle as quiet as possible. Close the windows to eliminate surrounding noises (traffic noises, vibration sounds, etc.), which may prevent the system from recognizing voice commands correctly.
- Wait until the tone sounds before speaking a command. Otherwise, the command will not be received properly.
- Start speaking a command within 5 seconds after the tone sounds.
- Speak in a natural voice without pausing between words.

# Giving voice commands

To operate NISSAN Voice Recognition, press and release the button located on the steering wheel. After the tone sounds, speak a command.

The command given is picked up by the microphone, and voice feedback is given when the command is accepted.

 If you need to hear the available commands for the current menu again, say "Help" and the system will repeat them.

- If a command is not recognized, the system announces, "Command not recognized. Please try again." Repeat the command in a clear voice.
- If you want to go back to the previous command, you can say "Go back" or "Correction" any time the system is waiting for a response.
- You can cancel a command when the system is waiting for a response by saying, "Cancel" or "Quit." The system announces "Cancel" and ends the VR session. You can also press the MODE button on the steering wheel at any time. Whenever the VR session is cancelled, a double beep is played to indicate you have exited the system.
- If you want to adjust the volume of the voice feedback, press the volume control switches (+ or -) on the steering wheel while being provided with feedback. You can also use the radio volume control knob.
- In most cases you can interrupt the voice feedback to speak the next command by pressing the button on the steering wheel.

• To speed the operation you can say multiple commands. For example, press the button then say "Phonebook, New entry" rather than "Phonebook." Wait for the voice feedback prompt then say "New entry".

#### How to say numbers

NISSAN Voice Recognition requires a certain way to speak numbers in voice commands. Refer to the following rules and examples.

• Either "zero" or "oh" can be used for "0".

Example: 1-800-662-6200

- "One eight oh oh six six two six two oh oh", or
- "One eight zero zero six six two six two oh oh"
- Words can be used for the first 4 digits places only.

Example: 1-800-662-6200

- "One eight hundred six six two six two oh oh",
- NOT "One eight hundred six six two sixty two hundred, and
- NOT "One eight oh oh six six two sixty two hundred.

 Numbers can be spoken in small groups. The system will prompt you to continue entering digits, if desired.

Example: 1-800-662-6200

"One eight zero zero"

The system repeats the numbers and prompts you to enter more.

"six six two"

The system repeats the numbers and prompts you to enter more.

- "six two zero zero"
- Say "pound" for "#". Say "star" for "\*" (available when using the "Call International" command and the "Send" command during a call).
- Say "plus" for "+" (available only when using the "Call International" command).
- Say "pause" for a 2 second pause (available only when storing a phone book number).

You can say "star" for "\*" and "pound" for "#" at any time in any position of the phone number (available only when using Call International command).

See "List of voice commands" and "International" later in this section for more information.

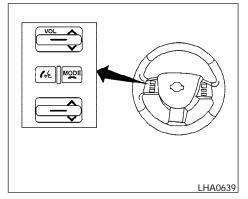
Example: 1-555-1212 \*123

 "One five five one two one two star. one two three"

#### NOTE:

#### For best results, say phone numbers as single digits.

The voice command "Help" is available at any time. Please use the "Help" command to get information on how to use the system.



#### CONTROL BUTTONS

The control buttons for the Bluetooth® Hands-Free Phone System are located on the steering wheel.

# 

Press the button to initiate a VR session or answer an incoming call.

You can also use the button to skip through system feedback and to enter commands during a call. See "List of voice commands" and "During a call" later in this section for more information.

# MODE PHONE/END

Press the MODE button to cancel a VR session or end a call.

## **GETTING STARTED**

The following procedures will help you get started using the Bluetooth® Hands-Free Phone System with NISSAN Voice Recognition. For additional command options, refer to "List of voice commands" later in this section.

# Choosing a language

You can interact with the Bluetooth® Hands-Free Phone System using English, Spanish or French.

To change the language, perform the following.

- 1. Press and hold the button for more than 5 seconds.
- 2. The system announces: "Press PHONE/SEND ( ) button for the hands-free phone system to enter the speaker adaptation mode or press the PHONE/END (MODE ) button to select a different language."

3. Press the MODE button.

For information on speaker adaptation, see "Speaker adaptation (SA) mode" later in this section.

4. The system announces the current language and gives you the option to change the language to Spanish (in Spanish) or French (in French). Use the following chart to select the language.

#### NOTE:

You must press the button or button within 5 seconds to change the language.

Current language	Press (W) (PHONE/SEND) to select	Press (PHONE/END) to select
English	Spanish	French
Spanish	English	French
French	English	Spanish

5. If you decide not to change the language, do not press either button. After 5 seconds, the VR session will end, and the language will not be changed.

Pairing procedure

#### NOTE:

The pairing procedure must be performed when the vehicle is stationary. If the vehicle starts moving during the procedure, the procedure will be cancelled.

```
Main Menu
 "Setup" (A)
   "Pair phone" (B)
      "New phone" (C)
        Initiate from handset (D)
            Name phone (E)
               Assign priority (F)
                  Choose ringtone ©
```

- 1. Press the button on the steering wheel. The system announces the available commands.
- 2. Say: "Setup" (A). The system acknowledges the command and announces the next set of available commands.
- 3. Say: "Pair phone" (B). The system acknowledges the command and announces the next set of available commands.

4. Say: "New phone" (C). The system acknowledges the command and asks you to initiate pairing from the phone handset (D).

The pairing procedure of the cellular phone varies according to each cellular phone model. See the cellular phone Owner's Manual for details. You can also visit www.nissanusa.com/bluetooth for instructions on pairing NISSAN recommended cellular phones.

When prompted for a Passkey code, enter "1234" from the handset. The Passkey code "1234" has been assigned by NISSAN and cannot be changed.

5. The system asks you to say a name for the phone (E).

If the name is too long or too short, the system tells you, then prompts you for a name again.

Also, if more than one phone is paired and the name sounds too much like a name already used, the system tells you, then prompts you for a name again.

- 6. The system asks you to assign a priority level (F). The priority level determines which phone is active when more than one paired Bluetooth® phone is in the vehicle. Follow the instructions provided by the system or refer to "Setup" later in this section for more information on changing priorities.
- 7. The system will ask if you would like to select a custom ring tone ⑤. Follow the instructions provided by the system or refer to "Setup" later in this section for more information on selecting ringtones.

# Making a call by entering a phone number

Main Menu
"Call" (A)

Number (speak digits) (B)
"Dial" (C)

- 1. Press the **C**<sub>w</sub> button on the steering wheel. A tone will sound.
- Say: "Call" (A). The system acknowledges the command and announces the next set of available commands.

Say: "Call International" to dial more than 10 digits or any special characters.

- 3. Say the number you wish to call starting with the area code in single digit format (B). If the system has trouble recognizing the correct phone number, try entering the number in the following groups: 3-digit area code, 3-digit prefix and the last 4-digits. For example, 555-121-3354 can be said as "five five five" as the 1st group, then "one two one" as the 2nd group, and "three three five four" as the 3rd group. For dialing more than 10 digits or any special characters, say "International". See "How to say numbers" earlier in this section, for more information.
- When you have finished speaking the phone number, the system repeats it back and announces the available commands.
- 5. Say: "Dial" ©. The system acknowledges the command and makes the call.

For additional command options, see "List of voice commands" later in this section.

# Receiving a call

When you hear the ring tone, press the button on the steering wheel.

Once the call has ended, press the button on the steering wheel.

#### NOTE:

If you do not wish to take the call when you hear the ring tone, press the button on the steering wheel.

For additional command options, see "List of voice commands" later in this section.

#### LIST OF VOICE COMMANDS

#### Main Menu

"Call" or "Call International"

"Phone Book"

"Memo Pad"

"Setup"

When you press and release the button on the steering wheel, you can choose from the commands on the Main Menu. The following pages describe these commands and the commands in each sub-menu.

# Remember to wait for the tone before speaking.

You can say "Help" to hear the list of commands currently available any time the system is waiting for a response.

If you want to end an action without completing it, you can say "Cancel" or "Quit" at any time the system is waiting for a response. The system will

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end the VR session. Whenever the VR session is cancelled, a double beep is played to indicate you have exited the system.

If you want to go back to the previous command, you can say "Go back" or "Correction" any time the system is waiting for a response.

When you get used to the menus in the system, you can talk ahead by saying more than one command at a time. For example, say, "Call five five five one two one two" or "Memo pad record."

Also, when you get used to the system responses, you can skip ahead to the tone by pressing the **f** button on the steering wheel. However, if you press the button when the system is waiting for a response from you it will end the VR session.

# "Call"

#### Main Menu

"Call" or "Call International"

Name (speak name) (A)

Number (speak digits) (B)

"Redial" (C)

"Call Back" (D)

# Name (speak name) (A)

If you have stored entries in the Phone Book, you can dial a number associated with a name and location.

See "Phone book" later in this section to learn how to store entries.

When prompted by the system, say the name of the phone book entry you wish to call. The system acknowledges the name.

If there are multiple locations associated with the name, the system asks you to choose the location.

Once you have confirmed the name and location, the system begins the call.

# Number (speak digits) (B)

When prompted by the system, say the number you wish to call. Refer to "How to say numbers" and "Making a call by entering a phone number" earlier in this section for more details.

# "Redial" (C)

Use the Redial command to call the last number that was dialed within the vehicle.

#### NOTE:

# The system will not redial the last number dialed by the handset keypad.

The system acknowledges the command, repeats the number and begins dialing.

If a redial number does not exist, the system announces, "There is no number to redial" and ends the VR session.

# "Call back" (D)

Use the Call Back command to dial the number of the last incoming call within the vehicle.

The system acknowledges the command, repeats the number and begins dialing.

If a call back number does not exist, the system announces, "There is no number to call back" and ends the VR session.

#### International

For dialing more than 10 digits or any special characters, please say "international". When the system acknowledges the command, the system will prompt you to speak the number.

## During a call

During a call there are several command options available. Press the button on the steering wheel to mute the receiving voice and enter commands.

- "Help" The system announces the available commands.
- "Go back/Correction" The system announces "Go back," ends the VR session and returns to the call.
- "Cancel/Quit" The system announces "Cancel." ends the VR session and returns to the call.
- "Send/Enter/Call/Dial" Use the Send command to enter numbers, "\*" or "#" during a call. For example, if you were directed to dial an extension by an automated system:

Say: "Send one two three four."

The system acknowledges the command and sends the tones associated with the numbers. The system then ends the VR session and returns to the call. Say "star" for "\*", Say "pound" for "#".

 "Transfer call" — Use the Transfer Call command to transfer the call from the Bluetooth® Hands-Free Phone System to the cellular phone when privacy is desired.

The system announces, "Transfer call. Call transferred to privacy mode." The system then ends the VR session.

You can also issue the Transfer Call command again to return to a hands-free call through the vehicle.

 "Mute" — Use the Mute command to mute your voice so the other party cannot hear it. Use the mute command again to unmute vour voice.

#### NOTE:

If a call is ended or the cellular phone network connection is lost while the Mute feature is on, the Mute feature will be reset to "off" for the next call so the other party can hear your voice.

"Phone book"

#### NOTE:

Phone book commands are not available when the vehicle is moving.

Main Menu "Phone Book" "New Entry" (A) "Edit" (B) "Delete" (C) "List Names" (D)

The Phone Book stores up to 40 names for each phone paired with the system. Each name can have up to 4 locations/phone numbers associated with it.

#### NOTE:

Each phone has its own separate phone book. You cannot access Phone A's phone book if you are currently connected with Phone B.

#### "New entry" (A)

Use the New Entry command to store a new name in the system.

When prompted by the system, say the name you would like to give the new entry.

For example, say: "Mary."

If the name is too long or too short, the system tells you, then prompts you for a name again.

Also, if the name sounds too much like a name already stored, the system tells you, then prompts you for a name again.

Once the system accepts the name and you confirm it is correct, the system asks for a location (Home, Office, Mobile or Other).

For example, say: "Home."

The system acknowledges the location.

The system will ask you to say a phone number or to transfer a phone number stored in the cellular phone's memory.

Enter a phone number by voice command:

For example, say: "five five five one two one two." See "How to say numbers" earlier in this section for more information.

To transfer a phone number stored in the cellular phone's memory:

Say "Transfer entry." The system acknowledges the command and asks you to initiate the transfer from the phone handset. The new contact phone number will be transferred from the cellular phone via the Bluetooth® communication link.

The transfer procedure varies according to each cellular phone. See the cellular phone Owner's Manual for details. You can also visit www.nissanusa.com/bluetooth for instructions on transferring phone numbers from NISSAN recommended cellular phones.

The system repeats the number and prompts you for the next command. When you have finished entering numbers or transferring an entry, choose "Store."

The system confirms the name, location and number. The system then asks if you would like to store another location for the same name. If you do not wish to store another location, the system ends the VR session.

# "Edit" (B)

Use the Edit command to alter an existing phone book entry or to add a 2nd, 3rd or 4th phone number to an existing entry.

When prompted by the system, say the name of the entry you wish to edit.

The system acknowledges the name and asks you for the location you would like to edit.

Say the name of the location.

The system acknowledges the location.

The system will ask you to say a phone number or to transfer a phone number stored in the cellular phone's memory.

Enter a phone number by voice command:

For example, say: "five five five one two one two. " See "How to say numbers" earlier in this section for more information.

To transfer a phone number stored in the cellular phone's memory:

Say "Transfer entry." The system acknowledges the command and asks you to initiate the transfer from the phone handset. The new contact phone number will be transferred from the cellular phone via the Bluetooth® communication link.

The transfer procedure varies according to each cellular phone. See the cellular phone Owner's Manual for details. You can also visit www.nissanusa.com/bluetooth for instructions on transferring phone numbers from NISSAN recommended cellular phones.

The system repeats the number and prompts you for the next command. When you have finished entering numbers, choose "Store."

The system confirms the name, location and number, then announces that the entry has been stored. The system then ends the VR session.

# "Delete" (C)

Use the Delete command to erase one entry from the phone book, all entries from the phone book, the current redial number or the current call back number.

To delete entries from the phone book, say a name or "All entries" when prompted by the system.

The system acknowledges the command and asks you to confirm the deletion.

To delete the current redial number or call back number, say "redial number" or "call back number" when prompted by the system.

If a redial number or a call back number exists, the system deletes them without asking for confirmation.

If there is no number for the entry you are trying to delete, the system says so and ends the VR session.

# "List names" (D)

Use the List Names command to hear all the names and locations in the phone book.

The system recites the phone book entries but does not include the actual phone numbers. When the playback of the list is complete, the system goes back to the main menu.

You can stop the playback of the list at any time by pressing the MODE button on the steering wheel. The system ends the VR session.

# "Memo pad"



The Memo Pad records a maximum of 6 voice memos, each up to 20 seconds long.

# "Record" (A)

The system announces "Recording" and a tone sounds, signaling you to begin.

Speak the information you wish to record clearly. When you are done, press the cos or mode button on the steering wheel.

A tone sounds and the system announces "Memo recorded." Another tone sounds to end the VR session.

If the memo pad is full, the system asks if you wish to record over the oldest memo.

# "Play" (B)

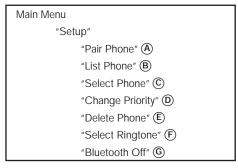
The system plays back all the memos in the order of newest to oldest. The system ends the VR session.

If there are no memos recorded, the system announces "No messages to play." The system ends the VR session.

# "Delete" ©

The Delete command erases all memos. The system asks you to confirm this action before deleting all memos.

# "Setup"



Use the Setup command to change options associated with the Bluetooth® Hands-Free Phone System.

# "Pair phone" (A)

Use the Pair Phone command to pair a phone to the Bluetooth® Hands-Free Phone System.

#### NOTE:

The pairing procedure must be performed when the vehicle is stationary. If the vehicle starts moving during the procedure, the procedure will be cancelled. Also, see "Pairing procedure" earlier in this section for additional information.

Up to 5 phones can be paired. If you try to pair a sixth phone, the system announces that you must first delete one phone or replace an existing phone.

If you try to pair a phone that has already been paired to your vehicle's system, the system announces the name the phone is already using. The pairing procedure will then be cancelled.

When prompted by the system, choose from the following commands:

- "New phone" Refer to "Pairing a phone" earlier in this section.
- "Replace phone" The system announces the names of the phones already paired and asks which you would like to replace.

Once you say the name of the phone you wish to replace, the pairing procedure will begin. Refer to "Pairing procedure" earlier in this section.

"List phone" – See the description below.

## "List phone" (B)

Use the List Phone command to hear the names of the phones currently paired. If no phones are paired, the system announces, "No paired phones to list." The system then ends the VR session

# "Select phone" (C)

Use the Select Phone command to select a phone of lesser priority when two or more phones paired with Bluetooth® Hands-Free Phone System are in the vehicle at the same time.

The system asks you to name the phone and confirm the selection.

Once the selection is confirmed, the selected phone remains active until the ignition switch is turned OFF or you select a new phone.

## "Change priority" (D)

Use the Change Priority command to change the priority level of the active phone.

The priority level determines which phone is active when more than one paired Bluetooth® phone is in the vehicle.

The system states the priority level of the active phone and asks for a new priority level (1, 2, 3, 4, 5).

If the new priority level is already being used for another phone, the two phones will swap priority levels.

For example, if the current priority levels are:

Priority Level 1 = Phone A

Priority Level 2 = Phone B

Priority Level 3 = Phone C

and you change the priority level of Phone C to Level 1, then:

Priority Level 1 = Phone C

Priority Level 2 = Phone B

Priority Level 3 = Phone A

# "Delete phone" (E)

Use the Delete Phone command to delete a specific phone or all phones from the Bluetooth® Hands-Free Phone System.

The system announces the names of the phones already paired with the system and their priority level. The system then gives you the option to delete a specific phone, all phones or listen to the list again.

Once you choose to delete a phone or all phones, the system asks you to confirm this action.

#### NOTE:

When you delete a phone, the associated phone book for that phone will also be deleted.

# "Select ringtone" (F)

Use the Select Ringtone command to select the tone heard in the vehicle when an incoming call is received.

The system announces the name of the active phone and asks you to choose from the following commands:

- "Ringtone" The system plays a ringtone and asks if you would like to select that tone.
   If you say "No", the system plays the next ringtone available and continues to cycle through the ringtones until you select one or quit.
- "Silent" The system asks you to confirm your wish to disable the ringtone.

# "Bluetooth off" (G

Use the Bluetooth Off command to turn off the Bluetooth® Hands-Free Phone System.

When the Bluetooth® Hands-Free Phone System is off, you will not be able to make or receive calls using NISSAN Voice Recognition. Also, you will not have access to the Phone Book.

You can still use the Memo Pad and access Setup.

# SPEAKER ADAPTATION (SA) MODE

Speaker Adaptation allows up to two out-ofdialect users to train the system to improve recognition accuracy. By repeating a number of commands, the users can create a voice model of their own voice that is stored in the system. The system is capable of storing a different speaker adaptation model for memory A and memory B.

If memory A is available, the system will use memory A to store the model. If memory A is in use and memory B is available, the system will use memory B to store the model. If both of the memory locations are in use, the system will ask the user to select which memory location should be overwritten.

# Training procedure

The procedure for training a voice is as follows.

- Position the vehicle in a reasonably quiet outdoor location.
- 2. Sit in the driver's seat with the engine running, the parking brake on, and the transmission in P (Park).
- Press and hold the w button for more than 5 seconds.

- 4. The system announces: "Press the PHONE/SEND ( ( ) button for the hands-free phone system to enter the speaker adaptation mode or press the PHONE/END ( ) button to select a different language."
- 5. Press the button.

For information on selecting a different language, see "Choosing a language" earlier in this section.

- Voice memory A or memory B is selected automatically. If both memory locations are already in use, the system will prompt you to overwrite one. Follow the instructions provided by the system.
- 7. When preparation is complete and you are ready to begin, press the **C** button.
- 8. The SA mode will be explained. Follow the instructions provided by the system.
- When training is finished, the system will tell you an adequate number of phrases have been recorded.
- The system will ask you to say your name.
   Follow the instructions to register your name.

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11. The system will announce that speaker adaptation has been completed and the system is ready.

#### The SA mode will stop if:

- The button is pressed for more than 5 seconds in SA mode.
- The vehicle begins moving during SA mode.
- The ignition switch is turned to the OFF or LOCK position.

# Training phrases

During the SA mode, the system instructs the trainer to say the following phrases. (The system will prompt you for each phrase.)

- phone book new entry
- dial three oh four two nine
- delete call back number
- setup pair phone
- memo pad play
- eight pause nine three two pause seven
- delete all entries
- call seven two four zero nine
- phone book delete entry

- memo pad record
- dial star two one seven oh
- Yes
- No
- select ring tone
- dial eight five six nine two
- Bluetooth on
- setup change priority
- call three one nine oh two
- nine seven pause pause three oh eight
- Cancel
- call back number
- call star two zero nine five
- delete phone
- dial eight three zero five one
- Home
- four three pause two nine pause zero
- delete redial number
- phone book list names
- call eight oh five four one

- Correction
- setup change ring tone
- dial seven four oh one eight
- setup main menu
- Delete.
- dial nine seven two six six
- memo pad delete
- call seven six three oh one
- go back
- call five six two eight zero
- dial six six four three seven

#### TROUBLESHOOTING GUIDE

The system should respond correctly to all voice commands without difficulty. If problems are encountered, try the following solutions.

Where the solutions are listed by number, try each solution in turn, starting with number 1, until the problem is resolved.

Symptom	Solution
System fails to interpret the command correctly.	1. Ensure that the command is valid. See "List of voice commands" earlier in this section.
	2. Ensure that the command is spoken after the tone.
	3. Speak clearly without pausing between words and at a level appropriate to the ambient noise level in the vehicle.
	4. Ensure that the ambient noise level is not excessive (for example, windows open or defroster on). NOTE: If it is too noisy to use the phone, it is likely that the voice commands will not be recognized.
	5. If more than one command was said at a time, try saying the commands separately.
	6. If the system consistently fails to recognize commands, the voice training procedure should be carried out to improve the recognition response for the speaker. See "Speaker adaptation (SA) mode" earlier in this section.
The system consistently selects the wrong entry from the phone book.	1. Ensure that the phone book entry name requested matches what was originally stored. This can be confirmed by using the "List Names" command. See "Phone book" earlier in this section.
	2. Replace one of the names being confused with a new name.

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### PRECAUTIONS WHEN STARTING AND DRIVING

#### **WARNING**

- Do not leave children or adults who would normally require the assistance of others alone in your vehicle. Pets should also not be left alone. 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.
- Properly secure all cargo with ropes or straps to help prevent it from sliding or shifting. Do not place cargo higher than the seatbacks. In a sudden stop or collision, unsecured cargo could cause personal injury.

# EXHAUST GAS (carbon monoxide)

## **WARNING**

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

- If you suspect that exhaust fumes are entering the vehicle, drive with all windows fully open, and have the vehicle inspected immediately.
- Do not run the engine in closed spaces such as a garage.
- Do not park the vehicle with the engine running for any extended length of time.
- Keep the lift gate and rear vent windows closed while driving, otherwise exhaust gases could be drawn into the passenger compartment. If you must drive with the lift gate or rear vent windows open, follow these precautions:
  - 1. Open all the windows.
  - 2. Set the sair recirculation button to off and the fan control dial to high to circulate the air.
- If electrical wiring or other cable connections must pass to a trailer through the seal on the lift gate or the body, follow the manufacturer's recommendation to prevent carbon monoxide entry into the vehicle.
- The exhaust system and body should be inspected by a qualified mechanic whenever:

- a. The vehicle is raised for service.
- b. You suspect that exhaust fumes are entering into the passenger compartment.
- c. You notice a change in the sound of the exhaust system.
- d. You have had an accident involving damage to the exhaust system, underbody, or rear of the vehicle.

#### THREE-WAY CATALYST

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

# **WARNING**

- The exhaust gas and the exhaust system are very hot. Keep people, animals or flammable materials away from the exhaust system components.
- Do not stop or park the vehicle over flammable materials such as dry grass, waste paper or rags. They may ignite and cause a fire.

# **A** CAUTION

- 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, 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.

# TIRE PRESSURE MONITORING SYSTEM (TPMS)

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label. you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a Tire Pressure Monitoring System (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

#### Additional information:

- The TPMS does not monitor the tire pressure of the spare tire.
- The TPMS will activate only when the vehicle is driven at speeds above 16 MPH (25 km/h). Also, this system may not detect a sudden drop in tire pressure (for example a flat tire while driving).

- The low tire pressure warning light does not automatically turn off when the tire pressure is adjusted. After all 4 tires are inflated to the recommended pressure, the vehicle must be driven at speeds above 16 MPH (25 km/h) to activate the TPMS and turn off the low tire pressure warning light. Use a tire pressure gauge to check the tire pressure.
- Tire pressure rises and falls depending on the heat caused by the vehicle's operation and the outside temperature. Low outside temperature can lower the temperature of the air inside the tire which can cause a lower tire inflation pressure. This may cause the low tire pressure warning light to illuminate. If the warning light illuminates in low ambient temperature, check the tire pressure for all four tires.
- The Tire and Loading Information label (also referred to as the vehicle placard or tire inflation pressure label) is located in the driver's door opening.
- You can also check the pressure of all tires (except the spare tire) on the display screen. The order of the tire pressure figures displayed on the screen does not correspond with the actual order of the tire position. See "Tire pressure information" in the "Display screen, heater, air conditioner and audio and phone systems" section.

For additional information, see "Low tire pressure warning light" in the "Instruments and controls" section and "Tire Pressure Monitoring System (TPMS)" in the "In case of emergency" section.

## **AWARNING**

• If the low tire pressure warning light illuminates while driving, avoid sudden steering maneuvers or abrupt braking, reduce vehicle speed, pull off the road to a safe location and stop the vehicle as soon as possible. Driving with underinflated tires may permanently damage the tires and increase the likelihood of tire failure. Serious vehicle damage could occur and may lead to an accident and could result in serious personal injury. Check the tire pressure for all four tires. Adjust the tire pressure to the recommended COLD tire pressure shown on the Tire and Loading Information label to turn the low tire pressure warning light OFF. If you have a flat tire, replace it with a spare tire as soon as possible. (See "Flat tire" in the "In case of emergency" section for changing a flat tire.)

- When a spare tire is mounted or a wheel is replaced, tire pressure will not be indicated, the TPMS will not function and the low tire pressure warning light will flash for approximately 1 minute. The light will remain on after 1 minute. Contact your NISSAN dealer as soon as possible for tire replacement and/or system resetting.
- Replacing tires with those not originally specified by NISSAN could affect the proper operation of the TPMS.
- Do not inject any tire liquid or aerosol tire sealant into the tires, as this may cause a malfunction of the tire pressure sensors.

# **A** CAUTION

Do not place metalized film or any metal parts (antenna, etc.) on the windows. This may cause poor reception of the signals from the tire pressure sensors, and the TPMS will not function properly.

Some devices and transmitters may temporarily interfere with the operation of the TPMS and cause the low tire pressure warning light to illuminate.

#### Some examples are:

- Facilities or electric devices using similar radio frequencies are near the vehicle.
- If a transmitter set to similar frequencies is being used in or near the vehicle.
- If a computer (or similar equipment) or a DC/AC converter is being used in or near the vehicle.

#### FCC Notice:

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

This device complies with Part 15 of the FCC Rules and RSS-210 of Industry Canada.

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

# AVOIDING COLLISION AND **ROLLOVER**

# **AWARNING**

Failure to operate this vehicle in a safe and prudent manner may result in loss of control or an accident.

Be alert and drive defensively at all times. Obey all traffic regulations. Avoid excessive speed, high speed cornering, or sudden steering maneuvers, because these driving practices could cause you to lose control of your vehicle. As with any vehicle, loss of control could result in a collision with other vehicles or objects or cause the vehicle to roll over, particularly if the loss of control causes the vehicle to slide sideways. Be attentive at all times, and avoid driving when tired. Never drive when under the influence of alcohol or drugs (including prescription or over-the-counter drugs which may cause drowsiness). Always wear your seat belt as outlined in the "Safety - Seats, seat belts and supplemental restraint system" section of this manual, and also instruct your passengers to do so.

Seat belts help reduce the risk of injury in collisions and rollovers. In a rollover crash, an unbelted or improperly belted person is significantly more likely to be injured or killed than a person properly wearing a seat belt.

#### OFF-ROAD RECOVERY

While driving, the right side or left side wheels may unintentionally leave the road surface. If this occurs, maintain control of the vehicle by following the procedure below. Please note that this procedure is only a general guide. The vehicle must be driven as appropriate based on the conditions of the vehicle, road and traffic.

- 1. Remain calm and do not overreact.
- 2. Do not apply the brakes.
- 3. Maintain a firm grip on the steering wheel with both hands and try to hold a straight course.
- 4. When appropriate, slowly release the accelerator pedal to gradually slow the vehicle.
- 5. If there is nothing in the way, steer the vehicle to follow the road while vehicle speed is reduced. Do not attempt to drive the vehicle back onto the road surface until vehicle speed is reduced.
- 6. When it is safe to do so, gradually turn the steering wheel until both tires return to the road surface. When all tires are on the road surface, steer the vehicle to stay in the appropriate driving lane.

 If you decide that it is not safe to return the vehicle to the road surface based on vehicle, road or traffic conditions, gradually slow the vehicle to a stop in a safe place off the road.

#### RAPID AIR PRESSURE LOSS

Rapid air pressure loss or a "blow-out" can occur if the tire is punctured or is damaged due to hitting a curb or pothole. Rapid air pressure loss can also be caused by driving on under-inflated tires.

Rapid air pressure loss can affect the handling and stability of the vehicle, especially at highway speeds.

Help prevent rapid air pressure loss by maintaining the correct air pressure and visually inspect the tires for wear and damage. See "Wheels and tires" in the "Maintenance and do-it-yourself" section of this manual. If a tire rapidly loses air pressure or "blows-out" while driving, maintain control of the vehicle by following the procedure below. Please note that this procedure is only a general guide. The vehicle must be driven as appropriate based on the conditions of the vehicle, road and traffic.

## **AWARNING**

The following actions can increase the chance of losing control of the vehicle if there is a sudden loss of tire air pressure. Losing control of the vehicle may cause a collision and result in personal injury.

- The vehicle generally moves or pulls in the direction of the flat tire.
- Do not rapidly apply the brakes.
- Do not rapidly release the accelerator pedal.
- Do not rapidly turn the steering wheel.
- Remain calm and do not overreact.
- Maintain a firm grip on the steering wheel with both hands and try to hold a straight course.
- 3. When appropriate, slowly release the accelerator pedal to gradually slow the vehicle.
- 4. Gradually steer the vehicle to a safe location off the road and away from traffic if possible.
- 5. Lightly apply the brake pedal to gradually stop the vehicle.
- 6. Turn on the hazard warning flashers and either contact a roadside emergency service to change the tire or see "Changing a flat

tire" in the "In case of emergency" section of this Owner's Manual.

# DRINKING ALCOHOL/DRUGS AND DRIVING

# **AWARNING**

Never drive under the influence of alcohol or drugs. Alcohol in the bloodstream reduces coordination, delays reaction time and impairs judgement. Driving after drinking alcohol increases the likelihood of being involved in an accident injuring yourself and others. Additionally, if you are injured in an accident, alcohol can increase the severity of the injury.

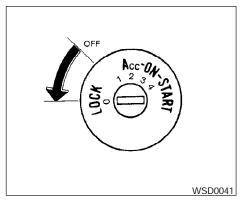
NISSAN is committed to safe driving. However, you must choose not to drive under the influence of alcohol. Every year thousands of people are injured or killed in alcohol-related accidents. Although the local laws vary on what is considered to be legally intoxicated, the fact is that alcohol affects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

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

#### **IGNITION SWITCH**

#### **WARNING**

- Never remove or turn the key to the LOCK position while driving. 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.
- Never turn the ignition switch to the LOCK position while driving. 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



#### AUTOMATIC TRANSMISSION

The ignition lock is designed so the key cannot be turned to the LOCK position and removed until the shift selector is moved to the P (Park) position.

When removing the key from the ignition, make sure the shift selector is in the P (Park) position.

If the shift selector is not returned to the P (Park) position, the key cannot be moved to the LOCK position.

When the key cannot be turned to the LOCK position, proceed as follows to remove the key:

- 1. Move the shift selector into the P (Park) position.
- 2. Turn the ignition key slightly toward the ON position.
- 3. Turn the key to the LOCK position.
- 4. Remove the key.

The shift selector is designed so it cannot be moved out of P (Park) and into any of the other gear positions if the ignition key is turned to OFF position or if the key is removed from the switch.

The shift selector can be moved if the ignition switch is in the ON position and the foot brake pedal is depressed.

There is an OFF position between the LOCK and ACC positions. The OFF position is indicated by a "1" on the key cylinder. When the ignition is in the OFF position, the steering wheel is not locked.

In order for the steering wheel to be locked, it must be turned about 1/8 of a turn clockwise from the straight up position.

To lock the steering wheel, turn the key to the LOCK position. Remove the key. To unlock the steering wheel, insert the key and turn it gently while rotating the steering wheel slightly right and left.

#### BEFORE STARTING THE ENGINE

#### **KEY POSITIONS**

LOCK: Normal parking position (0)

OFF: (Not used) (1) 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 ignition system and the electrical accessories.

START: (4)

This position starts the engine. As soon as the engine has started, release the key. It automatically returns to the ON position.

# NISSAN VEHICLE IMMOBILIZER SYSTEM

The NISSAN Vehicle Immobilizer system will not allow the engine to start without the use of the registered key.

If the engine fails to start using a registered key (for example, when interference is caused by another registered key, an automated toll road device or automatic payment device on the key ring), restart the engine using the following procedure:

- 1. Leave the ignition switch in the ON position for approximately 5 seconds.
- 2. Place the ignition switch in the OFF or LOCK position, and wait approximately 10 seconds.
- 3. Repeat steps 1 and 2.
- 4. Restart the engine while holding the device (which may have caused the interference) separate from the registered key.

If the no start condition re-occurs, NISSAN recommends placing the registered key on a separate key ring to avoid interference from other devices.

- Make sure the area around the vehicle is clear.
- Check fluid levels such as engine oil, coolant, brake fluid, and window washer fluid as frequently as possible, or at least whenever you refuel.
- Check that all windows and lights are clean.
- Visually inspect tires for their appearance and condition. Also check tires for proper inflation.
- Check that all doors are closed.
- Position seat and adjust head restraint.
- Adjust inside and outside mirrors.
- Fasten seat belts and ask all passengers to do likewise.
- Check the operation of warning lights when the ignition switch is turned to the ON (3) position. See "Warning/indicator lights and audible reminders" in the "Instruments and controls" section of this manual.

#### **DRIVING THE VEHICLE**

- 1. Apply the parking brake.
- Move the shift selector to P (Park) or N (Neutral). P (Park) is recommended.

The shift selector cannot be moved out of P (Park) and into any of the other gear positions if the ignition key is turned to the OFF position or if the key is removed from the ignition switch.

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

- 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 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 five to six 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.

# **A**CAUTION

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.

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

In cold weather, keep the engine running for a minimum of 2–3 minutes before shutting it off. Starting and stopping the engine over a short period of time may make the vehicle more difficult to start.

## **AUTOMATIC TRANSMISSION**

## **AWARNING**

- Do not depress the accelerator pedal while shifting from P (Park) or N (Neutral) to R (Reverse), or L (Low). Always depress the brake pedal until shifting is completed. Failure to do so could cause you to lose control and have an accident.
- Cold engine idle speed is high, so use caution when shifting into a forward or reverse gear before the engine has warmed up.
- Never shift to P (Park) or R (Reverse) while the vehicle is moving. This could cause an accident.

## **A** CAUTION

- When stopping the vehicle on an uphill grade, do not hold the vehicle by depressing the accelerator pedal. The foot brake should be used for this purpose.
- Do not downshift abruptly on slippery roads. This may cause a loss of control.

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

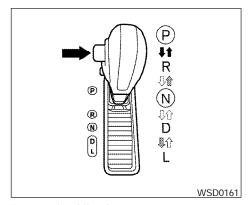
The recommended operating procedures for this transmission are shown on the following pages. Follow these procedures for maximum vehicle performance and driving enjoyment.

# Starting the vehicle

- 1. After starting the engine, fully depress the foot brake pedal before moving the shift selector out of the P (Park) position.
- 2. Keep the foot brake pedal depressed and move the shift selector into a driving gear.
- 3. Release the foot brake, then gradually start the vehicle in motion.

The automatic transmission is designed so the foot brake pedal MUST be depressed before shifting from P (Park) to any drive position while the ignition switch is in the ON position.

The shift selector cannot be moved out of P (Park) and into any of the other gear positions if the ignition key is turned to the LOCK, OFF or ACC position or if the key is removed.



To move the shift selector:



Push the button while depressing the brake pedal



Push the button to shift



Shift without pushing button

# Shifting

After starting the engine, fully depress the brake pedal and move the shift selector out of the P (Park) position.

## **WARNING**

Apply the parking brake if the selector lever is in any position while the engine is not running. Failure to do so could cause the vehicle to move unexpectedly or roll away and result in serious personal injury or property damage.

If the key is turned to the OFF or ACC position for any reason while the vehicle is in N (Neutral), or any D (Drive) position, the shift selector cannot be moved to P (Park). Additionally, the key cannot be turned to the LOCK position and be removed from the ignition switch. If this occurs, perform the following steps:

- 1. Apply the parking brake when the vehicle is stopped.
- 2. Turn the key to the ON position.
- 3. Depress the foot brake pedal.
- 4. Move the shift selector to P (Park) or N (Neutral) to restart the vehicle (P is preferred). Move the shift selector lever to P (Park) to park the vehicle and turn the ignition key to the LOCK position to remove the key.

## P (Park):

# **A** CAUTION

To prevent transmission damage, use the P (Park) or R (Reverse) position only when the vehicle is completely stopped.

Use the P (Park) shift selector position when the vehicle is parked or when starting the engine. Make sure the vehicle is completely stopped. The brake pedal should be depressed to move the shift selector from N (Neutral) or any drive position to P (Park). Apply the parking brake. When parking on a hill, apply the parking brake first, then shift the shift selector into the P (Park) position.

## R (Reverse):

# **A** CAUTION

To prevent transmission damage, use the P (Park) or R (Reverse) position only when the vehicle is completely stopped.

Use the R (Reverse) position to back up. Make sure the vehicle is completely stopped before selecting the R (Reverse) position. The brake pedal must be depressed to move the shift selector from P (Park), N (Neutral) or any drive position to R (Reverse).

#### N (Neutral):

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

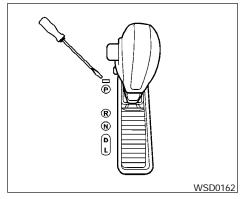
#### D (Drive):

Use this position for all normal forward driving.

#### L (Low gear):

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

Do not shift into the L position at speeds above 65 MPH (105 km/h). Do not exceed 65 MPH (105 km/h) in the L position.



Shift lock release

If the battery is discharged, the shift selector may not be moved from the P (Park) position even with the brake pedal depressed.

To move the shift selector, release the shift lock. The shift selector can be moved to N (Neutral). However, the steering wheel will be locked unless the ignition switch is turned to the ON position. This allows the vehicle to be moved if the battery is discharged.

To push the shift lock release, complete the following procedure:

- Turn the ignition switch to the LOCK position and remove the key
- 2. Apply the parking brake.
- 3. Remove the shift lock release cover as shown.
- 4. Insert a small screwdriver in the shift lock release slot and push down.
- Move the shift selector to the N (Neutral) position while holding down the shift lock release.
- Turn the ignition switch to the ON position to unlock the steering wheel. Now the vehicle may be moved to the desired location.

If the shift selector cannot be moved out of P (Park), have a NISSAN dealer check the automatic transmission system as soon as possible.

# **A**WARNING

If the selector lever cannot be moved from the P (Park) position while the engine is running and the brake pedal is depressed, the stop lights may not work. Malfunctioning stop lights could cause an accident injuring yourself and others.

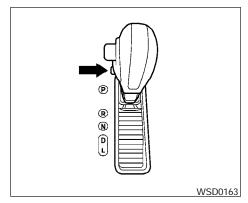
# Accelerator downshift — in D position —

For passing or hill climbing, depress the accelerator pedal to the floor. This shifts the transmission down into a lower gear, depending on the vehicle speed.

#### Fail-safe

When the fail-safe operation occurs, please note that the transmission will be locked in any of the forward gears according to the condition.

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



#### Overdrive switch

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

ON: With the engine running and the shift selector in the D (Drive) position, the transmission upshifts into Overdrive as vehicle speed increases.

Overdrive does not engage until the engine has reached operating temperature.

# 5-12 Starting and driving

#### PARKING BRAKE

OFF: For driving up and down long slopes where engine braking is necessary push the Overdrive switch once. The O/D OFF indicator light in the instrument panel comes on at this time.

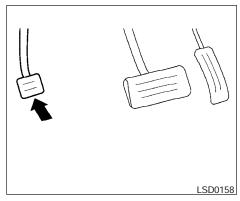
When cruising at a low speed or climbing a gentle slope, you may feel uncomfortable shift shocks as the transmission shifts into and out of Overdrive repeatedly. In this case, depress the Overdrive switch to turn the Overdrive off. The O/D OFF indicator light in the instrument panel comes on at this time.

When driving conditions change, depress the Overdrive switch to turn the Overdrive on.

Remember not to drive at high speeds for extended periods of time with the Overdrive off. This reduces fuel economy.

#### **WARNING**

- Be sure the parking brake is fully released before driving. Failure to do so can cause brake failure and lead to an accident.
- Do not release the parking brake from outside the vehicle.
- Do not use the gear shift in place of the parking brake. When parking, be sure the parking brake is fully engaged.
- Do not leave children unattended in a vehicle. They could release the parking brake and cause an accident.

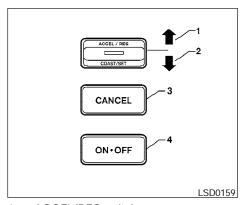


**To engage:** Firmly depress the parking brake.

#### To release:

- 1. Firmly apply the foot brake.
- 2. Move the shift selector to the P (Park) position.
- 3. Firmly depress the parking brake pedal and it will release.
- 4. Before driving, be sure the brake warning light goes out.

#### **CRUISE CONTROL**



- 1. ACCEL/RES switch
- 2. COAST/SET switch
- 3. CANCEL switch
- 4. ON-OFF switch

# PRECAUTIONS ON CRUISE CONTROL

- If the cruise control system malfunctions, it cancels automatically. The SET indicator light in the instrument panel then blinks to warn the driver.
- If the SET indicator light blinks, turn the cruise control switch off and have the system checked by a NISSAN dealer.

 The SET indicator light may blink when the cruise control switch is turned ON while pushing the ACCEL/RES, COAST/SET, or CANCEL switch. To properly set the cruise control system, use the following procedures.

#### **A** WARNING

Do not use the cruise control when driving under the following conditions:

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

Doing so could cause a loss of vehicle control and result in an accident.

## **CRUISE CONTROL OPERATIONS**

The cruise control allows driving at a speed between 25 - 89 MPH (40 - 144 km/h) without keeping your foot on the accelerator pedal.

**To turn on the cruise control**, push the ON•OFF switch. The CRUISE indicator light in the instrument panel comes on.

To set cruising speed, accelerate the vehicle to the desired speed, push the COAST/SET switch and release it. The SET indicator light in the instrument panel comes on. Take your foot off the accelerator pedal. Your vehicle maintains the set speed.

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

To cancel the preset speed, use one of the following three methods.

- Push the CANCEL button; the SET indicator light in the instrument panel goes out.
- Tap the brake pedal; the SET indicator light goes out.
- Push the ON•OFF switch. Both the CRUISE indicator light and SET indicator light in the instrument panel go out.

The cruise control is automatically canceled and the SET light in the instrument panel goes out if:

 you depress the brake pedal while pushing the ACCEL/RES or SET/COAST switch.
 The preset speed is deleted from memory.

# 5-14 Starting and driving

#### **BREAK-IN SCHEDULE**

- the vehicle slows down more than 8 MPH (13 km/h) below the set speed.
- you move the shift selector lever to N (Neutral).

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

- Depress the accelerator pedal. When the vehicle attains the desired speed, push and release the COAST/SFT switch.
- Push and hold the ACCEL/RES switch. When the vehicle attains the speed you desire, release the switch.
- Push and release the ACCEL/RES switch. Each time you do this, the set speed increases by about 1 MPH (1.6 km/h).

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

- Lightly tap the brake pedal. When the vehicle attains the desired speed, push the COAST/SET switch and release it.
- Push and hold the COAST/SET switch. Release the switch when the vehicle slows to the desired speed.
- Push and release the COAST/SFT switch. Each time you do this, the set speed decreases by about 1 MPH (1.6 km/h).

To resume the preset speed, push and release the ACCEL/RES switch. The vehicle returns to the last set cruising speed when the vehicle speed is over 25 MPH (40 km/h).

#### **A** CAUTION

During the first 1,200 miles (2,000 km), follow these recommendations to obtain maximum engine performance and ensure the future reliability and economy of your new vehicle. Failure to follow these recommendations may result in shortened engine life and reduced engine performance.

- Avoid driving for long periods at constant speed, either fast or slow, and do not run the engine over 4,000 rpm.
- Do not accelerate at full throttle in any gear.
- Avoid quick starts.
- Avoid hard braking as much as possible.
- Do not tow a trailer for the first 500 miles (800 km). Your engine, axle or other parts could be damaged.

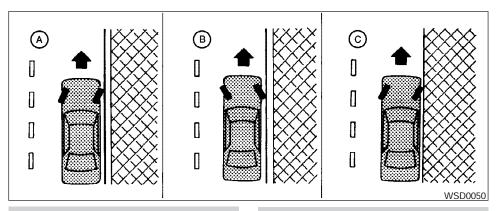
#### INCREASING FUEL ECONOMY

- Accelerate slowly and smoothly. Maintain cruising speeds with a constant accelerator position.
- Drive at moderate speeds on the highway.
   Driving at high speed lowers fuel economy.
- Avoid unnecessary stopping and braking. Maintain a safe distance behind other vehicles.
- Use a proper gear range which suits road conditions. On level roads, shift into high gear as soon as possible.
- Avoid unnecessary engine idling.
- Keep your engine tuned up.
- Follow the recommended periodic maintenance schedule.
- Keep the tires inflated to the correct pressure. Low tire pressure increases tire wear and lowers fuel economy.
- Keep the wheels in correct alignment. Improper alignment increases tire wear and lowers fuel economy.
- Air conditioner operation lowers fuel economy. Use the air conditioner only when necessary.

- When cruising at highway speeds, it is more economical to use the air conditioner and leave the windows closed to reduce drag.
- Use the recommended viscosity engine oil. See "Engine oil and oil filter recommendation" in "Technical and consumer information" later in this manual.

## 5-16 Starting and driving

#### PARKING/PARKING ON HILLS



# **WARNING**

- Do not stop or park the vehicle over flammable materials such as dry grass, waste paper or rags. They may ignite and cause a fire.
- Safe parking procedures require that both the parking brake be set and the transmission placed into P (Park). Failure to do so could cause the vehicle to move unexpectedly or roll away and result in an accident. Make sure the shift lever has been pushed as far forward as it can go and cannot be moved without depressing the foot brake pedal.

- Never leave the engine running while the vehicle is unattended.
- Do not leave children unattended inside the vehicle. They could unknowingly activate switches or controls. Unattended children could become involved in serious accidents.
- 1. Firmly apply the parking brake.
- 2. Move the shift selector to the P (Park) position.
- 3. To help prevent the vehicle from rolling into traffic when parked on an incline, it is a good practice to turn the wheels as illustrated.

HEADED DOWNHILL WITH CURB: (A)

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

HEADED UPHILL WITH CURB: (B)

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

• HEADED UPHILL OR DOWNHILL, NO CURB: (C)

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

4. Place the ignition switch to the LOCK position and remove the key.

#### **POWER STEERING**

The power assisted steering uses a hydraulic pump, driven by the engine, to assist steering.

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

# **AWARNING**

If the engine is not running or is turned off while driving, the power assist for the steering will not work. Steering will be harder to operate.

#### **BRAKE SYSTEM**

The brake system has two separate hydraulic circuits. If one circuit malfunctions, you will still have braking at two wheels.

#### BRAKE PRECAUTIONS

#### Vacuum assisted brakes

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

# Using the brakes

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

To help reduce brake wear 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.

## **WARNING**

- While driving on a slippery surface, be careful when braking, accelerating or downshifting. Abrupt braking or accelerating could cause the wheels to skid and result in an accident.
- If the engine is not running or is turned off while driving, the power assist for the brakes will not work. Braking will be harder.

### 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 the 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.

# Parking brake break-in

Break-in the parking brake shoes whenever the stopping effect of the parking brake is weakened or whenever the parking brake shoes and/or drum/rotors are replaced, in order to assure the best brake performance.

This procedure is described in the vehicle service manual and can be performed by a NISSAN dealer.

# ANTI-LOCK BRAKING SYSTEM (ABS)

# **WARNING**

• The Anti-lock Braking System (ABS) is a sophisticated device, but it cannot prevent accidents resulting from careless or dangerous driving techniques. It can help maintain vehicle control during braking on slippery surfaces. Remember that stopping distances on slippery surfaces will be longer than on normal surfaces even with ABS. Stopping distances may also be longer on rough, gravel or snow covered roads, or if you are using tire chains. Always maintain a safe distance from the vehicle in front of you. Ultimately, the driver is responsible for safety.

- Tire type and condition may also affect braking effectiveness.
  - When replacing tires, install the specified size of tires on all four wheels.
  - When installing a spare tire, make sure that it is the proper size and type as specified on the Tire and Loading Information label. See "Tire and Loading Information label" in the "Technical and consumer information" section of this manual.
  - detailed information. "Wheels and tires" in the "Maintenance and do-it-yourself" section of this manual.

The Anti-lock Braking System (ABS) controls the brakes so the wheels do not lock during hard braking 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 each wheel from locking, the system helps the driver maintain steering control and helps to minimize swerving and spinning on slippery surfaces.

# Using the system

Depress the brake pedal and hold it down. Depress the brake pedal with firm steady pressure, but do not pump the brakes. The ABS will operate to prevent the wheels from locking up. Steer the vehicle to avoid obstacles.

## **A** WARNING

Do not pump the brake pedal. Doing so may result in increased stopping distances.

# Normal operation

The ABS operates at speeds above 3 - 6 MPH (5 - 10 km/h). The speed varies according to road conditions.

When the ABS senses that one or more wheels are close to locking up, the actuator rapidly applies and releases hydraulic pressure.

This action is similar to pumping the brakes very quickly. You may feel a pulsation in the brake pedal and hear a noise from under the hood or feel a vibration from the actuator when it is operating. This is normal and indicates that the ABS is operating properly. However, the pulsation may indicate that road conditions are hazardous and extra care is required while driving.

# TRACTION CONTROL SYSTEM (TCS) (if so equipped)

### Self-test feature

The ABS includes electronic sensors, electric pumps, hydraulic solenoids and 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 does not indicate a malfunction. If the computer senses a malfunction, it switches the ABS off and illuminates the ABS warning light on the instrument panel. The brake system then operates normally, but without anti-lock assistance.

If the ABS warning light illuminates during the self-test or while driving, have the vehicle checked by a NISSAN dealer.

When accelerating on slippery surfaces the tire may spin or slip. With the vehicle Traction Control System (TCS), sensors detect these movements and control the braking and engine output to help improve vehicle road traction.

- When the TCS is operating, the SLIP indicator in the instrument panel blinks.
- If the **SLID** indicator blinks, the vehicle may be under slippery conditions. Be sure to drive carefully. See "Slip indicator light" and "Traction Control System (TCS) off indicator light" in the "Instruments and controls" section of this manual.
- If a malfunction occurs in the system, and off indicator lights the SLIP come on in the instrument panel.

As long as these lights are on, the traction control function is canceled. The vehicle will behave like a vehicle without the system.

# **WARNING**

- The Traction Control System is designed to help maintain traction with the road surface but does not prevent accidents due to abrupt steering operation at high speeds or by careless or dangerous driving techniques. Reduce vehicle speed and be especially careful when driving and cornering on slippery surfaces and always drive carefully.
- If brake related parts such as brake pads, rotors and calipers are not standard equipment or are extremely deteriorated, the Traction Control System may not operate properly and the OFF indicator light may come on.
- Do not modify the vehicle's suspension. If suspension parts such as shock absorbers, struts, springs, bushings and wheels are not standard equipment or are extremely deteriorated, the Traction Control System may not operate properly and the off indicator light may come on.

- When driving on extremely inclined surfaces such as higher banked corners, the Traction Control System may not operate properly and the OFF indicator light may come on. Do not drive on
- If wheels or tires other than the recommended ones are used, the Traction Control System may not operate properly and the off indicator light may come on.

these types of roads.

The Traction Control System is not a substitute for winter tires or tire chains. on a snow covered road.

# VEHICLE DYNAMIC CONTROL (VDC) SYSTEM (if so equipped)

The Vehicle Dynamic Control (VDC) system uses various sensors to monitor driver inputs and vehicle motion. Under certain driving situations, the system will control braking and engine output to help keep the vehicle on its steered path.

- When the Vehicle Dynamic Control (VDC) system is operating, the SLIP indicator in the instrument panel blinks:
- If the SLIP indicator blinks, the road conditions may be slippery. Be sure to adjust your speed and driving to these conditions. See "Slip indicator light", and "Vehicle Dynamic Control (VDC) off indicator light" in the "Instruments and controls" section.
- Indicator light If a malfunction occurs in the system, the **SLIP** and off indicator lights come on in the instrument panel.

As long as these indicator lights are on, the traction control function is canceled.

If the vehicle is operated with the Vehicle Dynamic Control system OFF using the VDC OFF switch, VDC and TCS functions will be turned off. The SLIP indicator will flash if wheel spin is detected. The ABS will still operate with the VDC system off.

When the VDC system is operating, you may feel a pulsation in the brake pedal and hear a noise or vibration from under the hood. This is normal and indicates that the VDC system is working properly.

The computer has a built in diagnostic feature that tests the system each time you start the engine and move the vehicle forward or in reverse at a slow speed. 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 a malfunction.

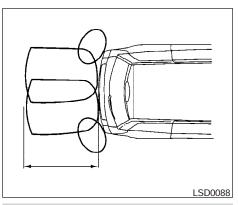
## **AWARNING**

The Vehicle Dynamic Control system is designed to help maintain traction with the road surface but does not prevent accidents due to abrupt steering operation at high speeds or by careless or dangerous driving techniques. Reduce vehicle speed and be especially careful when driving and cornering on slippery surfaces and always drive carefully.

- Do not modify the vehicle's suspension. If suspension parts such as shock absorbers, struts, springs, stabilizer bars, bushings and wheels are not NISSAN approved for your vehicle or are extremely deteriorated the Vehicle Dynamic Control system may not operate properly. This could adversely affect vehicle handling performance, and the VDC OFF indicator light may come on.
- If brake related parts such as brake pads, rotors and calipers are not standard equipment or are extremely deteriorated, the Vehicle Dynamic Control system may not operate properly and the Vehicle Dynamic Control off indicator light may come on.
- If engine related parts such as the muffler are not standard equipment or are extremely deteriorated, the "VDC OFF" indicator or SLIP" indicator or both indicator lights may illuminate.
- When driving on extremely inclined surfaces such as higher banked corners, the Vehicle Dynamic Control system may not operate properly and the VDC OFF indicator light may come on. Do not drive on these types of roads.

- When driving on an unstable surface such as a turntable, ferry, elevator or ramp, the Vehicle Dynamic Control off indicator light may illuminate. This is not a malfunction. Restart the engine after driving onto a stable surface.
- If wheels or tires other than the recommended ones are used, the Vehicle Dynamic Control system may not operate properly and the Vehicle Dynamic Control off indicator light may come on.
- The Vehicle Dynamic Control system is not a substitute for winter tires or tire chains on a snow covered road.

# **REAR SONAR SYSTEM (if so** equipped)



# **WARNING**

- Always turn and look back before backing up. The RSS is not a substitute for proper backing procedures.
- Read and understand the limitations of the rear sonar system as contained in this section. Inclement weather may affect the function of the RSS; this may include reduced performance or a false activation.
- This system is not designed to prevent contact with small or moving objects.

## COLD WEATHER DRIVING

- The system is designed as an aid to the driver in detecting large stationary objects to help avoid damaging the vehicle. The system will not detect small objects below the bumper, and may not detect objects close to the bumper or on the ground.
- If your vehicle sustains damage to the rear bumper fascia, leaving it misaligned or bent, the sensing zone may be altered causing inaccurate measurement of obstacles or false alarms.

The Rear Sonar System (RSS) sounds a tone to warn the driver of obstacles near the rear bumper when the shift selector is in R (Reverse). The system may not detect objects at speeds above 3 mph (5 km/h) and may not detect certain angular or moving objects.

The RSS detects obstacles up to 6 feet (1.8 m) from the rear bumper with a decreased coverage area at the outer corners of the bumper, (refer to the illustration for approximate zone coverage areas). As you move closer to the obstacle, the rate of the tone increases. When the obstacle is less than 10 inches (25.0 cm) away, the tone will sound continuously. If the RSS detects a stationary or receding object further than 10 inches (25.0 cm) from the side of the vehicle, the tone will sound for only three seconds. Once the system detects an object approaching, the tone will sound again.

The RSS automatically turns on when the shift selector lever is placed in R (Reverse) and the ignition is ON. The RSS OFF switch on the instrument panel allows the driver to turn the RSS on and off. To turn the RSS off, the ignition must be ON, and the shift selector lever in R (Reverse). An indicator light on the switch will illuminate when the system is turned off. If the indicator light illuminates when the RSS is not turned off, it may indicate a malfunction in the RSS.

Keep the RSS sensors (located on the rear bumper fascia) free from snow, ice and large accumulations of dirt (do not clean the sensors with sharp objects). If the sensors are covered, it will affect the accuracy of the RSS.

### FREEING A FROZEN DOOR LOCK

To prevent a door lock from freezing, apply deicer through the key hole. If the lock becomes frozen, heat the key before inserting it into the key hole or use the remote keyless entry keyfob (if so equipped).

#### **ANTI-FREEZE**

In the winter when it is anticipated that the temperature will drop below 32°F (0°C), check the anti-freeze to assure proper winter protection. For details, see "Engine cooling system" in the "Maintenance and do-it-yourself" section of this manual.

### **BATTFRY**

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 "Maintenance and do-it-yourself" section of this manual.

#### DRAINING OF COOLANT WATER

If the vehicle is to be left outside without antifreeze, drain the cooling system, including the engine block. Refill before operating the vehicle. For details, see "Changing engine coolant" in the "Maintenance and do-it-yourself" section of this manual

#### TIRE EQUIPMENT

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

Skid and traction capabilities of studded snow tires on wet or dry surfaces may be poorer than that of non-studded snow tires. Tire chains may be used. For details see "Tire chains" in the "Maintenance and do-ityourself" section of this manual.

#### SPECIAL WINTER EQUIPMENT

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

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

#### DRIVING ON SNOW OR ICE

# **WARNING**

 Wet ice (32°F, 0°C and freezing rain), very cold snow or ice can be slick and very hard to drive on. The vehicle will have much less traction or "grip" under these conditions. Try to avoid driving on wet ice until the road is salted or sanded.

- Whatever the condition, drive with caution. Accelerate and slow down with care. If accelerating or downshifting too fast, the drive wheels will lose even more traction.
- Allow more stopping distance under these conditions. Braking should be started sooner than on dry pavement.
- Allow greater following distances on slippery roads.
- Watch for slippery spots (glare ice).
   These may appear on an otherwise clear road in shaded areas. If a patch of ice is seen ahead, brake before reaching it. Try not to brake while on the ice, and avoid any sudden steering maneuvers.
- Do not use the cruise control on slippery roads.
- Snow can trap dangerous exhaust gases under your vehicle. Keep snow clear of the exhaust pipe and from around your vehicle.

#### 5-24 Starting and driving

# ENGINE BLOCK HEATER (if so equipped)

# **WARNING**

- Do not use your engine block heater with an ungrounded electrical system or a 2-pronged adapter. You can be seriously injured by an electrical shock if you use an ungrounded connection.
- Disconnect and properly store the engine block heater cord before starting the engine. Damage to the cord could result in an electrical shock and can cause serious injury.
- Use a heavy-duty 3-wire, 3-pronged extension cord rated for at least 10 A. Plug the extension cord into a Ground Fault Interrupt (GFI) protected, grounded 110-VAC outlet. Failure to use the proper extension cord or a grounded outlet can result in a fire or electrical shock and cause serious personal injury.

Engine block heaters are available through NISSAN dealers to assist in cold temperature starting. The engine block heater should be used when the outside temperature is 20° F (-7° C) or lower.

To use the engine block heater:

- 1. Turn the engine off.
- 2. Open the hood and unwrap the engine block heater cord.
- 3. Plug the engine block heater cord into a grounded 3 wire, 3 pronged extension cord.
- 4. Plug the extension cord into a Ground Fault Interrupt (GFI) protected, grounded 110volt AC (VAC) outlet.
- 5. The engine block heater must be plugged in for at least 2 - 4 hours, depending on outside temperatures, to properly warm the engine coolant. Use an appropriate timer to turn the engine block heater on.
- 6. Before starting the engine, unplug and properly store the cord to keep it away from moving parts.

# **MEMO**

# 6 In case of emergency

Flat tire
Tire Pressure Monitoring System (TPMS)6-2
Changing a flat tire6-2
Jump starting 6-7
Push starting

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#### **FLAT TIRE**

# TIRE PRESSURE MONITORING SYSTEM (TPMS)

This vehicle is equipped with the Tire Pressure Monitoring System (TPMS). It monitors tire pressure of all tires except the spare. When the low tire pressure warning light is lit, one or more of your tires is significantly under-inflated. If equipped, the system also displays pressure of all tires (except the spare tire) on the display screen by sending a signal from a sensor that is installed in each wheel. If the vehicle is being driven with low tire pressure, the TPMS will activate and warn you of it by the low tire pressure warning light. This system will activate only when the vehicle is driven at speeds above 16 MPH (25 km/h). For more details, refer to "Warning/indicator lights and audible reminders" in the "Instruments and controls" section, "Tire pressure information" in the "Monitor, climate, audio, phone and voice recognition systems" section and "Tire Pressure Monitoring System (TPMS)" in the "Starting and driving" section.

## **A** WARNING

- If the low tire pressure warning light illuminates while driving, avoid sudden steering maneuvers or abrupt braking, reduce vehicle speed, pull off the road to a safe location and stop the vehicle as soon as possible. Driving with underinflated tires may permanently damage the tires and increase the likelihood of tire failure. Serious vehicle damage could occur and may lead to an accident and could result in serious personal injury. Check the tire pressure for all four tires. Adjust the tire pressure to the recommended COLD tire pressure shown on the Tire and Loading Information label to turn the low tire pressure warning light OFF. If you have a flat tire, replace it with a spare tire as soon as possible.
- When a spare tire is mounted or a wheel is replaced, tire pressure will not be indicated, the TPMS will not function and the low tire pressure warning light will flash for approximately 1 minute. The light will remain on after 1 minute. Contact your NISSAN dealer as soon as possible for tire replacement and/or system resetting.

- Replacing tires with those not originally specified by NISSAN could affect the proper operation of the TPMS.
- Do not inject any tire liquid or aerosol tire sealant into the tires, as this may cause a malfunction of the tire pressure sensors.

#### CHANGING A FLAT TIRE

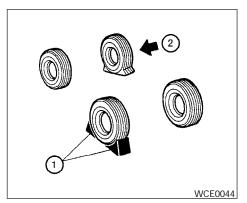
If you have a flat tire, follow the instructions below:

# Stopping the vehicle

- 1. Safely move the vehicle off the road and away from traffic.
- 2. Turn on the hazard warning flashers.
- 3. Park on a level surface and apply the parking brake. Move the shift selector to P (Park).
- 4. Turn off the engine.
- 5. Raise the hood to warn other traffic and to signal professional road assistance personnel that you need assistance.
- 6. 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 the parking brake is securely applied and the automatic transmission is shifted into P (Park).
- Never change tires when the vehicle is on a slope, ice or slippery areas. This is hazardous.
- Never change tires if oncoming traffic is close to your vehicle. Wait for professional road assistance.

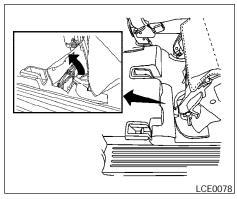


# Blocking wheels

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

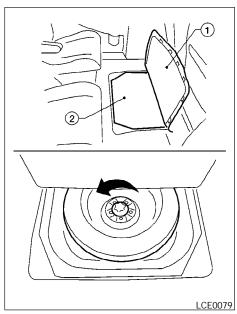
#### **WARNING**

Be sure to block the wheel as the vehicle may move and result in personal injury.



# Getting the spare tire and tools

- 1. Tip up the passenger's side second row captain's chair. Refer to "Tip up for easy entry to 3rd row" in the "Safety — seats, seat belts and supplemental restraint system" section of this owner's manual.
- 2. Lift up the floor carpeting and remove the jack.



- 3. Stow the center tray table (if so equipped).
- Move both front seats as forward as possible.
- 5. Lift up the floor carpeting ①. Remove the spare tire cover ② and jack tool kit.

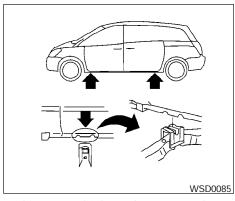
6. Turn the retainer counterclockwise and remove the spare tire.

Removing wheel cover (if so equipped)

# **A** CAUTION

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

Use caution not to scratch the wheel cover or wheel surface.



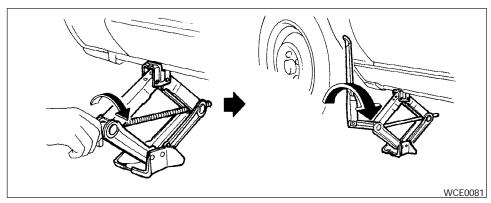
Jacking up vehicle and removing the damaged tire

## **AWARNING**

- Never get under the vehicle while it is supported only by the jack. If it is necessary to work under the vehicle, support it with safety stands.
- Use only the jack provided with your vehicle to lift the vehicle. Do not use the jack provided with your vehicle on other vehicles. The jack is designed for lifting only your vehicle during a tire change.

## 6-4 In case of emergency

- 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 the engine while vehicle is on the jack. It may cause the vehicle to move. This is especially true vehicles with limited gila for differentials.
- Do not allow passengers to stay in the vehicle while it is on the jack.
- Never run the engine with a wheel(s) off the ground. It may cause the vehicle to move.



Always refer to the proper illustrations for the correct placement and jack-up points for your specific vehicle model and jack type.

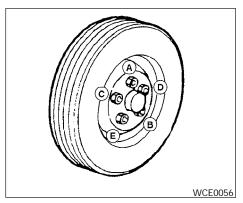
#### Carefully read the caution label attached to the jack body and the following instructions.

- 1. Loosen each wheel nut one or two turns by turning counterclockwise with the wheel nut wrench. Do not remove the wheel nuts until the tire is off the ground.
- 2. Place the jack directly under the jack-up point as illustrated so the top of the jack contacts the vehicle at the jack-up point. Align the jack head between the two

notches in the front or the rear as shown. Also fit the groove of the jack head between the notches as shown.

#### The jack should be used on firm and level ground.

3. To lift the vehicle, securely hold the jack lever and rod with both hands. Carefully raise the vehicle until the tire clears the ground. Remove the wheel nuts, and then remove the tire.



# Installing the spare tire

The spare tire is designed for emergency use. See specific instructions under the heading "Wheels and tires" in the "Maintenance and do-it-yourself" section of this manual.

- Clean any mud or dirt from the surface between the wheel and hub.
- 2. Carefully put the spare tire on and tighten the wheel nuts finger tight.
- With the wheel nut wrench, tighten wheel nuts alternately and evenly as illustrated until they are tight.

Lower the vehicle slowly until the tire touches the ground. Then, with the wheel nut wrench, tighten the wheel nuts securely in the sequence illustrated (A, B, C, D, E). Lower the vehicle completely.

## **AWARNING**

- Incorrect wheel nuts or improperly tightened wheel nuts can cause the wheel to become loose or come off. This could cause an accident.
- Do not use oil or grease on the wheel studs or nuts. This could cause the nuts to become loose.
- Retighten the wheel nuts when the vehicle has been driven for 600 miles (1,000 km) (also in cases of a flat tire, etc.).

As soon as possible, tighten the wheel nuts to the specified torque with a torque wrench.

Wheel nut tightening torque:

83 ft-lb (112 N·m)

The wheel nuts must be kept tightened to specification at all times. It is recommended that wheel nuts be tightened to specifications at each lubrication interval.

Adjust tire pressure to the COLD pressure.

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

COLD tire pressures are shown on the Tire and Loading Information label affixed to the driver side center pillar.

After adjusting tire pressure to the COLD tire pressure, the display of the tire pressure information may show higher pressure than the COLD tire pressure after the vehicle has been driven more than 1 mile (1.6 km). This is because the tire pressure increases as the tire temperature rises. This does not indicate a system malfunction.

Securely store the flat tire and jacking equipment in the vehicle.

# **AWARNING**

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

# 6-6 In case of emergency

### JUMP STARTING

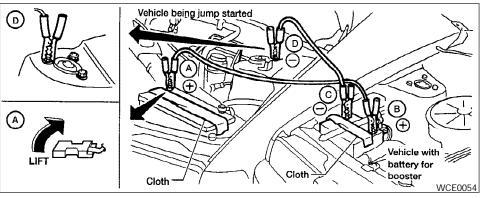
The spare tire is designed for emergency use. See specific instructions under the heading "Wheels and tires" in the "Maintenance and do-it-yourself" section of this manual.

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

## **WARNING**

- If done incorrectly, jump starting can lead to a battery explosion, resulting in severe injury or death. It could also damage your vehicle.
- Explosive hydrogen gas is always present in the vicinity of the battery. Keep all sparks and flames away from the battery.
- Do not allow battery fluid to come into contact with eyes, skin, clothing or painted surfaces. Battery fluid is a corrosive sulfuric acid solution which can cause severe burns. If the fluid should come into contact with anything, immediately flush the contacted area with water.
- Keep battery out of the reach of children.
- The booster battery must be rated at 12 volts. Use of an improperly rated battery can damage your vehicle.

- Whenever working on or near a battery, always wear suitable eye protectors (for example, goggles or industrial safety spectacles) and remove rings, metal bands, or any other jewelry. Do not lean over the battery when jump starting.
- Do not attempt to jump start a frozen battery. It could explode and cause serious injury.
- Your vehicle has an automatic engine cooling fan. It could come on at any time. Keep hands and other objects away from it.



## **AWARNING**

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

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

### Do not allow the two vehicles to touch.

 Apply the parking brake. Move the shift selector to P (Park). Switch off all unnecessary electrical systems (lights, heater, air conditioner, etc.).

- Remove the vent caps on the battery (if so equipped). Cover the battery with an old cloth to reduce explosion hazard.
- 4. Connect the jumper cables in the sequence illustrated ((A), (B), (C), (D)).

### **A** CAUTION

 Always connect positive (+) to positive (+) and negative (-) to body ground (for example, strut mounting bolt, engine lift bracket, etc.) — not to the battery.

- Make sure the jumper cables do not touch moving parts in the engine compartment and that the cable clamps do not contact any other metal.
- 5. Start the engine of the booster vehicle and let it run for a few minutes.
- Keep the engine speed of the booster vehicle at about 2,000 rpm and start the engine of the vehicle being jump started.

## **ACAUTION**

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

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

### 6-8 In case of emergency

### **PUSH STARTING**

### IF YOUR VEHICLE OVERHEATS

### **AWARNING**

Do not push start this vehicle. The three-way catalyst may be damaged.

## **A**CAUTION

Automatic transmission models cannot be push-started or tow-started. Attempting to do so may cause transmission damage.

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

## **WARNING**

- Do not continue to drive if your vehicle overheats. Doing so could cause engine damage or a vehicle fire.
- To avoid the danger of being scalded, never remove the radiator cap while the engine is still hot. When the radiator cap is removed, pressurized hot water will spurt out, possibly causing serious injury.
- Do not open the hood if steam is coming out.
- Move the vehicle safely off the road, apply the parking brake and move the shift selector to P (Park).

### Do not stop the engine.

Turn off the air conditioner. Open all the windows, move the heater or air conditioner temperature control to maximum hot and fan control to high speed.

- Get out of the vehicle. Look and listen for steam or coolant escaping from the radiator before opening the hood. (If steam or coolant is escaping, turn off the engine.) Do not open the hood further until no steam or coolant can be seen.
- 4. Open the engine hood.

### **WARNING**

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

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

## **AWARNING**

Be careful not to allow your hands, hair, jewelry or clothing to come into contact with, or get caught in, engine belts or the engine cooling fan. The engine cooling fan can start at any time.

### TOWING YOUR VEHICLE

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

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

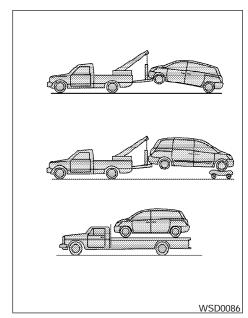
For information about towing your vehicle behind a recreational vehicle (RV), refer to "Flat towing" in the "Technical and consumer information" section of this manual.

### **AWARNING**

- Never ride in a vehicle that is being towed.
- Never get under your vehicle after it has been lifted by a tow truck.

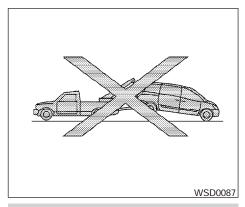
### **A** CAUTION

- When towing, make sure that the transmission, axles, steering system and powertrain are in working condition. If any of these conditions apply, dollies or a flatbed tow truck must be used.
- Always attach safety chains before towing.



## TOWING RECOMMENDED BY NISSAN

NISSAN recommends that your vehicle be towed with the driving (front) wheels off the ground or place the vehicle on a flat bed truck as illustrated.



## **A** CAUTION

- Never tow automatic transmission models with the front wheels on the ground or four wheels on the ground (forward or backward), as this may cause serious and expensive damage to the transmission. If it is necessary to tow the vehicle with the rear wheels raised always use towing dollies under the front wheels.
- When towing with the front wheels on towing dollies:

- Turn the ignition key to the OFF position, and secure the steering wheel in a straight-ahead position with a rope or similar device. Never secure the steering wheel by turning the ignition key to the LOCK position. This may damage the steering lock mechanism.
- Move the gearshift lever to the N (Neutral) position.
- When towing automatic with the rear wheels on the ground (if you do not use towing dollies): Always release the parking brake.

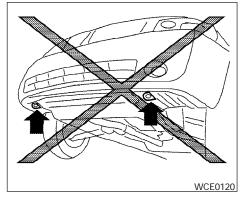
VEHICLE RECOVERY (freeing a stuck vehicle)

## **WARNING**

- Stand clear of a stuck vehicle.
- Do not spin your tires at high speed. This could cause them to explode and result in serious injury. Parts of your vehicle could also overheat and be damaged.

### **A** CAUTION

- Tow chains or cables must be attached only to the main structural members of the vehicle or the towing hooks (if so equipped). Otherwise, the vehicle body will be damaged.
- Use the towing hook (if so equipped) only to free a vehicle stuck in sand, snow, mud, etc. Never tow the vehicle for a long distance using only the towing hook.
- The towing hook is under tremendous force when used to free a stuck vehicle.
   Never pull the hook at an angle.
- Always pull the cable straight out from the front or rear of the vehicle.
- Pulling devices should be routed so they do not touch any part of the suspension, steering, brake or cooling systems.
- Pulling devices such as ropes or canvas straps are not recommended for use in vehicle towing or recovery.



## Pulling a stuck vehicle

Do not use the hook (if so equipped) to tow the vehicle.

## Rocking a stuck vehicle

If your vehicle is stuck in sand, snow, mud, etc., use the following procedure:

- 1. Turn off the Vehicle Dynamic Control System (if so equipped).
- 2. Make sure the area in front and behind the vehicle is clear of obstructions.
- Turn the steering wheel right and left to clear an area around the front tires.

- Slowly rock the vehicle forward and backward.
  - Shift back and forth between R (Reverse) and D (Drive).
  - Apply the accelerator as little as possible to maintain the rocking motion.
  - Release the accelerator pedal before shifting between R (Reverse) and D (Drive).
  - Do not spin the tires above 35 mph (55 km/h).
- If the vehicle can not be freed after a few tries, contact a professional towing service to remove the vehicle.

# 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.

To protect the paint surfaces, please wash your vehicle as soon as you can:

- after a rainfall to prevent possible damage from acid rain.
- after driving on coastal roads.
- when contaminants 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, a special vehicle soap or general purpose dishwashing liquid mixed with clean, lukewarm (never hot) water.

## **A** CAUTION

- Do not use car washes that use acid in the detergent. Some car washes, especially brushless ones, use some acid for cleaning. The acid may react with some plastic vehicle components, causing them to crack. This could affect their appearance, and also could cause them not to function properly. Always check with your car wash to confirm that acid is not used.
- Do not wash the vehicle with strong household soap, strong chemical detergents, gasoline or solvents.
- Do not wash the vehicle in direct sunlight or while the vehicle body is hot, as the surface may become water-spotted.
- Avoid using tight-napped or rough cloths, such as washing mitts. Care must be taken when removing caked-on dirt or other foreign substances so the paint surface is not scratched or damaged.

Rinse the vehicle thoroughly with plenty of clean water.

Inside flanges, seams and folds on the doors, hatches and hood are particularly vulnerable to

the effects of road salt. Therefore, these areas must be cleaned regularly. Take care that the drain holes in the lower edge of the door are open. Spray water under the body and in the wheel wells to loosen the dirt and wash away road salt.

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

### WAXING

Regular waxing protects the paint surface and helps retain new vehicle appearance. Polishing is recommended to remove built-up wax residue and to avoid a weathered appearance before re-applying wax.

A 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.

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

### 7-2 Appearance and care

### **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 a NISSAN dealer or any automotive accessory store.

### UNDFRBODY

In areas where road salt is used in winter, it is necessary to clean the underbody regularly in order to prevent dirt and salt from building up and causing the acceleration of corrosion on the underbody and suspension. Before the winter period and again in the spring, the underseal must be checked and, if necessary, retreated.

### **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.

## **A** CAUTION

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

### ALUMINUM ALLOY WHEELS

Wash the wheels regularly with a sponge dampened in a mild soap solution, especially during winter months in areas where road salt is used. If not removed, road salt can discolor the wheels.

## **A**CAUTION

Follow the directions below to avoid staining or discoloring the wheels:

- Do not use a cleaner that uses strong acid or alkali contents to clean the wheels
- Do not apply wheel cleaners to the wheels when they are hot. The wheel temperature should be the same as ambient temperature.
- Rinse the wheel to completely remove the cleaner within 15 minutes after the cleaner is applied.

### CHROMF PARTS

Clean all chrome parts regularly with a nonabrasive chrome polish to maintain the finish.

### TIRE DRESSINGS

NISSAN does not recommend the use of tire dressings. Tire manufacturers apply a coating to the tires to help reduce discoloration of the rubber. If a tire dressing is applied to the tires, it may react with the coating and form a compound. This compound may come off the tire while driving and stain the vehicle paint.

If you choose to use a tire dressing, take the following precautions:

- Use a water-based tire dressing. The coating on the tire dissolves more easily than with an oil-based tire dressing.
- Apply a light coat of tire dressing to help prevent it from entering the tire tread/grooves (where it would be difficult to remove).
- Wipe off excess tire dressing using a dry towel. Make sure the tire dressing is completely removed from the tire tread/grooves.
- Allow the tire dressing to dry as recommended by the tire dressing manufacturer.

### **CLEANING INTERIOR**

Occasionally remove loose dust from the interior trim, plastic parts and seats using a vacuum cleaner or soft bristled 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.

Regular care and cleaning is required in order to maintain the appearance of the leather.

Before using any fabric protector, read the manufacturer's recommendations. Some fabric protectors contain chemicals that may stain or bleach the seat material.

Use a cloth dampened only with water to clean the meter and gauge lens.

## **WARNING**

Do not use water or acidic cleaners (hot steam cleaners) on the seat. This can damage the seat or occupant classification sensor. This can also affect the operation of the air bag system and result in serious personal injury.

### **A** CAUTION

- Never use benzine, thinner or any similar material.
- Small dirt particles can be abrasive and damaging to leather surfaces and should be removed promptly. Do not use saddle soap, car waxes, polishes, oils, cleaning fluids, solvents, detergents or ammonia-based cleaners as they may damage the leather's natural finish.
- Never use fabric protectors unless recommended by the manufacturer.
- Do not use glass or plastic cleaner on meter or gauge lens covers. It may damage the lens cover.

## AIR FRESHENERS

#### NOTE:

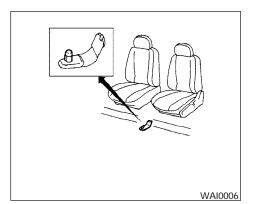
Hanging-type air fresheners can cause permanent discoloration when they contact vehicle surfaces. Place the air freshener in a location that allows it to hang free and not contact an interior surface. Carefully read and follow the manufacturer's instructions before using the air freshener product.

#### NOTE:

Liquid-type air freshener products typically clip on the vents. These products can cause immediate damage and discoloration when spilled on interior surfaces. Carefully read and follow the manufacturer's instructions before using the air freshener product.

### 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.



## Floor mat positioning aid (driver's side only)

This vehicle includes a front floor mat bracket to act as a floor mat positioning aid. NISSAN floor mats have been specially designed for your vehicle model. The driver's side floor mat has a grommet hole incorporated in it. Position the mat by placing the floor mat bracket hook through the floor mat grommet hole while centering the mat in the footwell.

Periodically check to make certain the mats are properly positioned.

### **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 in the shade before using them. See "Seat belt maintenance" in the "Safety - Seats, seat belts and supplemental restraint system" section of this manual.

## **WARNING**

Do not allow wet seat belts to roll up in the retractor. NEVER use bleach, dye or chemical solvents to clean the seat belts. since these materials may severely weaken the seat belt webbing.

### CORROSION PROTECTION

## MOST COMMON FACTORS CONTRIBUTING TO VEHICLE CORROSION

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

## **ENVIRONMENTAL FACTORS** INFLUENCE THE RATE OF **CORROSION**

### Moisture

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

## Relative humidity

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

## Temperature

High temperatures accelerate the rate of corrosion to those parts which are not well ventilated.

## Air pollution

Industrial pollution, the presence of salt in the air in coastal areas, or heavy road salt use accelerates the corrosion process. Road salt also accelerates the disintegration of paint surfaces.

## TO PROTECT YOUR VEHICLE FROM CORROSION

- Wash and wax your vehicle often to keep the vehicle clean.
- Always check for minor damage to the paint and repair it as soon as possible.
- Keep drain holes at the bottom of the doors open to avoid water accumulation.
- Check the underbody for accumulation of sand, dirt or salt. If present, wash with water as soon as possible.

## **A**CAUTION

- 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 as this may damage them.

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

## In winter, the underbody must be cleaned periodically.

For additional protection against rust and corrosion, which may be required in some areas, consult a NISSAN dealer.

# 8 Maintenance and do-it-yourself

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### MAINTENANCE REQUIREMENTS

Your new NISSAN has been designed to have minimum maintenance requirements with long service intervals to save you both time and money. However, some day-to-day and regular maintenance is essential to maintain your NISSAN's good mechanical condition, as well as its emission and engine performance.

It is the owner's responsibility to make sure that the scheduled maintenance, as well as general maintenance, is performed.

As the vehicle owner, you are the only one who can ensure that your vehicle receives proper maintenance. You are a vital link in the maintenance chain.

#### Scheduled maintenance

For your convenience, both required and optional scheduled maintenance items are described and listed in your "NISSAN Service and Maintenance Guide". You must refer to that guide to ensure that necessary maintenance is performed on your NISSAN at regular intervals.

### General maintenance

General maintenance includes those items which should be checked during normal day-to-day operation. They are essential for proper vehicle operation. It is your responsibility to perform these maintenance procedures regularly as prescribed. Performing general maintenance checks requires minimal mechanical skill and only a few general

These checks or inspections can be done by you, a qualified technician, or, if you prefer, a NISSAN dealer.

### Where to go for service

automotive tools.

If maintenance service is required or your vehicle appears to malfunction, have the systems checked and corrected by a NISSAN dealer.

NISSAN technicians are well-trained specialists who are kept up-to-date with the latest service information through technical bulletins, service tips, and in-dealership training programs. They are completely qualified to work on NISSAN vehicles **before** they work on your vehicle, rather than after they have worked on it.

You can be confident that a NISSAN dealer's service department performs the best job to meet the maintenance requirements on your vehicle — in a reliable and economical 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, vibrations or smells, be sure to check for the cause or have a NISSAN dealer do it promptly. In addition, you should notify a NISSAN dealer if you think that repairs are required.

When performing any checks or maintenance work, closely observe the "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 the doors and engine hood operate properly. Also ensure that all latches lock securely. Lubricate hinges, latches, latch pins, rollers and links as necessary. Make sure that the secondary latch keeps the hood from opening when the primary latch is released.

## 8-2 Maintenance and do-it-yourself

When driving in areas using road salt or other corrosive materials, check lubrication frequently.

**Lights\*** Clean the headlights on a regular basis. 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.

Road wheel nuts (lug nuts)\* When checking the tires, make sure no wheel nuts are missing, and check for any loose wheel nuts. Tighten if necessary.

**Tire rotation\*** Tires should be rotated every 7,500 miles (12,000 km).

Tires\* Check the pressure with a gauge often and always prior to long distance trips. If necessary, adjust the pressure in all tires, including the spare, to the pressure specified. Check carefully for damage, cuts or excessive wear.

Tire Pressure Monitoring System (TPMS) transmitter components Replace the TPMS transmitter grommet seal, valve core and cap when the tires are replaced due to wear or age.

Wheel alignment and balance If the vehicle should pull to either side while driving on a straight and level road, or if you detect uneven or abnormal tire wear, there may be a need for wheel alignment. If the steering wheel or seat vibrates at normal highway speeds, wheel balancing may be needed.

 For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the Warranty Information Booklet.

Windshield Clean the windshield on a regular basis. Check the windshield at least every six months for cracks or other damage. Have a damaged windshield repaired by a qualified repair facility.

Windshield wiper blades\* Check for cracks or wear if they do not wipe properly.

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.

Additional information on the following items with an "\*" is found later in this section.

Accelerator pedal Check the pedal for smooth operation and make sure the pedal does not bind or require uneven effort. Keep the floor mat away from the pedal.

Automatic transmission P (Park) position mechanism On a fairly steep hill check that your vehicle is held securely with the selector lever in the P (Park) position without applying any brakes.

Brake pedal Check the pedal for smooth operation. If the brake pedal suddenly goes down further than normal, the pedal feels spongy or the vehicle seems to take longer to stop, see a NISSAN dealer immediately. Keep the floor mat away from the pedal.

Brakes Check that the brakes do not pull the vehicle to one side when applied.

Parking brake Check the parking brake operation regularly. The vehicle should be securely held on a fairly steep hill with only the parking brake applied. If the parking brake needs adjustment, see a NISSAN dealer.

**Seats** Check seat position controls such as seat adjusters, seatback recliner, etc. to ensure they operate smoothly and all latches lock securely in every position. Check that the head restraints move up and down smoothly and the locks (if so equipped) hold securely in all latched positions.

Seat belts Check that all parts of the seat belt system (for example, 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 changes in the steering system, such as excessive freeplay, hard steering or strange noises.

Warning lights and chimes Make sure all warning lights and chimes are operating properly.

Windshield wiper and washer\* Check that the wipers and washer operate properly and that the wipers do not streak.

**Windshield defroster** Check that the air comes out of the defroster outlets properly and in sufficient quantity when operating the heater or air conditioner.

### Under the hood and vehicle

The maintenance items listed here should be checked periodically (for example, each time you check the engine oil or refuel).

**Battery\*** Check the fluid level in each cell. It should be between the MAX and MIN lines. Vehicles operated in high temperatures or under severe conditions require frequent checks of the battery fluid level.

**Brake fluid levels\*** Make sure that the brake fluid level is between the MIN and MAX lines on the reservoir.

**Engine coolant level\*** Check the coolant level when the engine is cold.

**Engine drive belts\*** Make sure the drive belts are not frayed, worn, cracked or oily.

Engine oil level\* Check the level after parking the vehicle on a level surface with the engine off. Wait more than 10 minutes for the oil to drain back into the oil pan.

**Exhaust system** Make sure there are no loose supports, cracks or holes. If the sound of the exhaust seems unusual or there is a smell of exhaust fumes, immediately have the exhaust system inspected by a NISSAN dealer. See the carbon monoxide warning in the "Starting and driving" section of this manual.

**Fluid leaks** Check under the vehicle for fuel, oil, water or other fluid leaks after the vehicle has been parked for a while. Water dripping from the air conditioner after use is normal. If you should notice any leaks or if gasoline fumes are evident, check for the cause and have it corrected immediately.

Power steering fluid level\* and lines Check the level when the fluid is cold, with the engine off. Check the lines for proper attachment, leaks, cracks, etc.

Radiator and hoses Check the front of the radiator and clean off any dirt, insects, leaves,

etc., that may have accumulated. Make sure the hoses have no cracks, deformation, rot or loose connections.

**Underbody** The underbody is frequently exposed to corrosive substances such as those used on icy roads or to control dust. It is very important to remove these substances from the underbody, otherwise rust may form on the floor pan, frame, fuel lines and exhaust system. At the end of winter, the underbody should be thoroughly flushed with plain water, in those areas where mud and dirt may have accumulated. See the "Appearance and care" section of this manual.

**Windshield washer fluid\*** Check that there is adequate fluid in the reservoir.

## 8-4 Maintenance and do-it-yourself

### 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.

### **A** WARNING

- Park the vehicle on a level surface, apply the parking brake securely and block the wheels to prevent the vehicle from moving. Move the shift selector lever to P (Park).
- Be sure the ignition key is in the OFF or LOCK position when performing any parts replacement or repairs.
- 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 secure or remove any loose clothing and remove any jewelry, such as rings, watches, etc. before working on your vehicle.
- Always wear eye protection whenever you work on your vehicle.

- Your vehicle is equipped with an automatic engine cooling fan. It may come on at any time without warning, even if the ignition key is in the OFF position and the engine is not running. To avoid injury, always disconnect the negative battery cable before working near the fan.
- If you must run the engine in an enclosed space such as a garage, be sure there is proper ventilation for exhaust gases to escape.
- 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 the fuel tank and battery.
- On gasoline engine models, 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.

## **A** CAUTION

Do not work under the hood while the engine is hot. Turn the engine off and wait until it cools down.

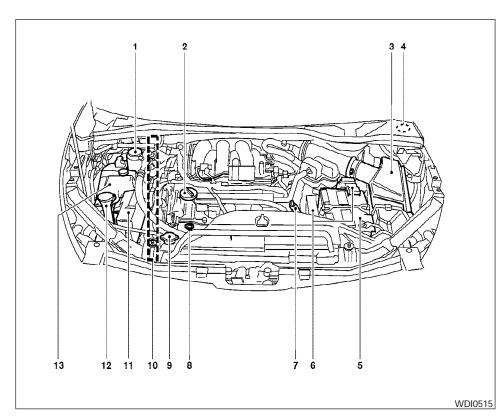
- Avoid contact with used engine oil and coolant. Improperly disposed engine oil, engine coolant and/or other vehicle fluids can damage the environment. Always conform to local regulations for disposal of vehicle fluid.
- Never leave the engine or automatic transmission related component harnesses disconnected while the ignition switch is in the ON position.
- Never connect or disconnect the battery or any transistorized component while the ignition switch is in the ON position.

This "Maintenance and do-it-yourself" section gives instructions regarding only those items which are relatively easy for an owner to perform.

A genuine NISSAN service manual is also available. See "Owner's Manual/Service Manual order information" in the "Technical and consumer information" section of this manual.

You should be aware that incomplete or improper servicing may result in operating difficulties or excessive emissions, and could affect warranty coverage. If in doubt about any servicing, have it done by a NISSAN dealer.

## ENGINE COMPARTMENT CHECK LOCATIONS



- 1. Power steering fluid reservoir
- 2. Engine oil filler cap
- 3. Air cleaner
- 4. Brake fluid reservoir
- 5. Battery
- 6. Fuse/fusible link box
- 7. Transmission dipstick
- 8. Engine oil dipstick
- 9. Radiator cap
- 10. Drive belt location
- 11. Fuse block
- 12. Windshield washer fluid reservoir
- 13. Engine coolant reservoir

### NOTE:

Engine cover removed for clarity.

### **ENGINE COOLING SYSTEM**

The engine cooling system is filled at the factory with Genuine NISSAN Long Life Antifreeze/Coolant to provide year-round antifreeze and coolant protection. The anti-freeze solution contains rust and corrosion inhibitors. Additional engine cooling system additives are not necessary.

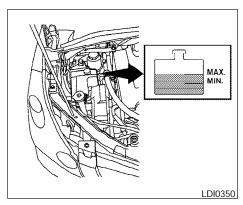
## **AWARNING**

- Never remove the radiator or coolant reservoir cap when the engine is hot. Wait until the engine and radiator cool down. Serious burns could be caused by high pressure fluid escaping from the radiator. See precautions in "If your vehicle overheats" found in the "In case of emergency" section of this manual.
- The radiator is equipped with a pressure type radiator cap. To prevent engine damage, use only a genuine NISSAN radiator cap.

### **A** CAUTION

When adding or replacing coolant, be sure to use only a Genuine NISSAN Long Life Antifreeze/Coolant (green) or equivalent with the proper mixture ratio of 50% antifreeze and 50% demineralized or distilled water. The use of other types of coolant solutions or coolant colors, such as orange, may damage the engine cooling system.

Outside temperature down to		Genuine NISSAN Long Life	Demineral- ized or dis- tilled water
°C	°F	Antifreeze/ Coolant or equivalent	
-34	-29.2	50%	50%



## CHECKING ENGINE COOLANT LEVEL

Check the coolant level in the reservoir when the engine is cold. If the coolant level is below the MIN level, add coolant to the MAX level. If the reservoir 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 up to the MAX level.

If the cooling system frequently requires coolant, have it checked by a NISSAN dealer.

### FNGINF OIL

### CHANGING ENGINE COOLANT

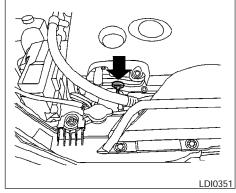
A NISSAN dealer can change the engine coolant. The service procedure can be found in the NISSAN Service Manual.

Improper servicing can result in reduced heater performance and engine overheating.

### **AWARNING**

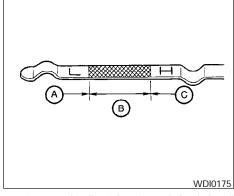
- To avoid the danger of being scalded, never change the coolant when the enaine is hot.
- Never remove the radiator cap when the engine is hot. Serious burns could be caused by high pressure fluid escaping from the radiator
- Avoid direct skin contact with used coolant. If skin contact is made, wash thoroughly with soap or hand cleaner as soon as possible.
- Keep coolant out of the reach of children and pets.

Engine coolant must be disposed of properly. Check your local regulations.



### CHECKING ENGINE OIL LEVEL

- 1. Park the vehicle on a level surface and apply the parking brake.
- 2. Start the engine and let it idle until it reaches operating temperature.
- 3. Turn off the engine. Wait more than 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.

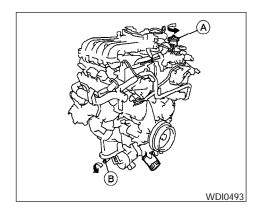


- 5. Remove the dipstick again and check the oil level. It should be between the H (High) and L (Low) marks (B). This is the normal operating oil level range. If the oil level is below the L (Low) mark (A), remove the oil filler cap and pour recommended oil through the opening. Do not overfill ©.
- 6. Recheck oil level with the dipstick.

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

### **A** CAUTION

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



### CHANGING FNGINF OIL

- 1. Park the vehicle on a level surface and apply the parking brake.
- 2. Start the engine and let it idle until it reaches operating temperature, then turn it off.
- 3. Remove the oil filler cap (A) by turning it counterclockwise.
- 4. Place a large drain pan under the drain plug (B)
- 5. Remove the drain plug (B) with a wrench by turning it counterclockwise and completely drain the oil.

If the oil filter is to be changed, remove and replace it at this time. See "Changing engine oil filter" later in this section.

- Waste oil must be disposed of properly.
- Check your local regulations.

## **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.

### **A** CAUTION

Be careful not to burn yourself. The engine oil may be hot.

6. Clean and reinstall the drain plug and a new washer. Securely tighten the drain plug with a wrench. Do not use excessive force.

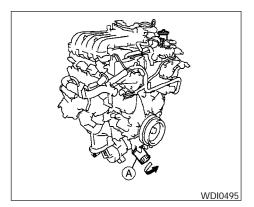
Drain plug tightening torque: 22 - 29 ft-lb (29 - 39 N·m)

Refill engine with recommended oil through the oil filler opening, then install the oil filler cap securely.

See "Capacities and recommended fuel/lubricants" in the "Technical and consumer information" section of this manual for drain and refill capacity.

The drain and refill capacity depends on the oil temperature and drain time. Use these specifications for reference only. Always use the dipstick to determine when the proper amount of oil is in the engine.

- Start the engine. Check for leakage around the drain plug and oil filter. Correct as required.
- Turn the engine off and wait more than 10 minutes. Check the oil level with the dipstick. Add engine oil if necessary.



### CHANGING ENGINE OIL FILTER

- 1. Park the vehicle on a level surface and apply the parking brake.
- 2. Turn the engine off.
- 3. Place a large drain pan under the oil filter (A).
- Loosen the oil filter (A) with an oil filter wrench by turning it counterclockwise. Then remove the oil filter by turning it by hand.

### **A** CAUTION

Be careful not to burn yourself. The engine oil may be hot.

5. Wipe the engine oil filter sealing surface with a clean rag.

### **A** CAUTION

Be sure to remove any old gasket material remaining on the sealing surface of the engine. Failure to do so could lead to engine damage.

- 6. Coat the gasket on the new filter with clean engine oil.
- 7. Screw on the oil filter until a slight resistance is felt, then tighten an additional 2/3 turn.
- 8. Start the engine and check for leakage around the oil filter. Correct as required.
- Turn the engine off and wait more than 10 minutes. Check the oil level. Add engine oil if necessary.

### 5-SPEED AUTOMATIC TRANSMISSION FLUID

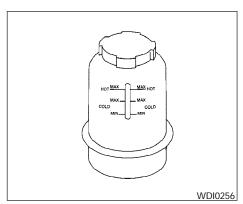
When checking or replacement is required, we recommend your NISSAN dealer for servicing.

### **A** CAUTION

- Use only Genuine NISSAN Matic K ATF. Do not mix with other fluids.
- Using automatic transmission fluid other than Genuine NISSAN Matic K ATF will cause deterioration in driveability and automatic transmission durability, and may damage the automatic transmission, which is not covered by the NISSAN new vehicle limited warranty.

The specified automatic transmission fluid is also described on caution labels located in the engine compartment.

### POWER STEERING FLUID



The fluid level should be checked using the HOT MAX range on the power steering fluid reservoir at fluid temperatures of 122° - 176°F (50° -80°C) or using the COLD MAX range on the power steering fluid reservoir at fluid temperatures of 32° - 86°F (0° - 30°C).

If the fluid is at or below the MIN line, add Genuine NISSAN PSF to HOT MAX or COLD MAX depending on system fluid temperature. Remove the cap and fill through the opening.

## **A** CAUTION

- DO NOT OVERFILL.
- Recommended fluid Genuine NISSAN PSF or equivalent.

### WINDOW WASHER FLUID

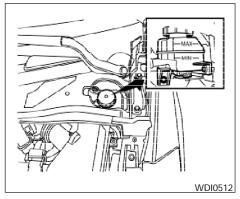
For further brake fluid specification information, refer to "Capacities and recommended fuel/lubricants" in the "Technical and consumer information" section of this manual.

### **AWARNING**

- Use only new fluid from a sealed container. Old. inferior or contaminated fluid may damage the brake system. The use of improper fluids can damage the brake system and affect the vehicle's stopping ability.
- Clean the filler cap before removing.
- Brake fluid is poisonous and should be stored carefully in marked containers out of reach of children.

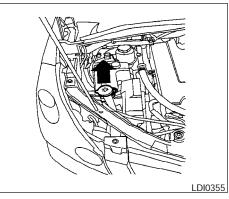
## **CAUTION**

Do not spill the fluid on any painted surfaces. This will damage the paint. If fluid is spilled, immediately wash the surface with water.



## **BRAKE FLUID**

Check the brake fluid level in the reservoir. If the fluid level is below the MIN line or the brake warning light comes on, add **DOT 3** brake fluid up to the MAX line. If fluid must be added frequently, the system should be checked by a NISSAN dealer.



## WINDOW WASHER FLUID **RFSFRVOIR**

Fill the window washer fluid reservoir periodically. Add window washer fluid when the low window washer fluid warning light comes on.

To fill the window washer fluid reservoir, lift the cap off the reservoir tank and pour the window washer fluid into the tank opening.

Add a washer solvent to the washer for better cleaning. In the winter season, add a windshield washer antifreeze. Follow the manufacturer's instructions for the mixture ratio.

### **BATTERY**

Refill the reservoir more frequently when driving conditions require an increased amount of window washer fluid.

Recommended fluid is Genuine NISSAN Windshield Washer Concentrate Cleaner & Antifreeze or equivalent.

## **A** CAUTION

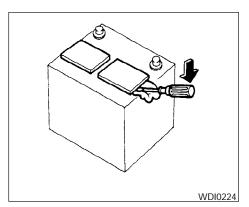
- Do not substitute engine anti-freeze coolant for window washer solution. This may result in damage to the paint.
- Do not fill the window washer reservoir tank with washer fluid concentrates at full strength. Some methyl alcohol based washer fluid concentrates may permanently stain the grille if spilled while filling the window washer reservoir tank.
- Pre-mix washer fluid concentrates with water to the manufacturer's recommended levels before pouring the fluid into the window washer reservoir tank. Do not use the window washer reservoir tank to mix the washer fluid concentrate and water.

- Keep the battery surface clean and dry. Clean the battery 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.

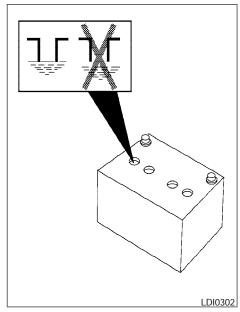
## **A** WARNING

- Do not expose the battery to flames, an electrical spark or a cigarette. Hydrogen gas generated by the battery is explosive. Explosive gases can cause blindness or injury. Do not allow battery fluid to contact your skin, eyes, fabrics or painted surfaces. Sulfuric acid can cause blindness or injury. 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.
- Do not tip the battery. Keep the vent caps tight and the battery level.

- 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.
- When working on or near a battery, always wear suitable eye protection and remove all jewelry.
- Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.
- Keep battery out of the reach of children.



 Remove the battery caps with a screwdriver as shown. Use a cloth to protect the battery case.



Check the fluid level in each cell. If it is necessary to add fluid, add only distilled water to bring the level up to the bottom of the filler opening. Do not overfill. Vehicles operated in high temperatures or under severe conditions require frequent checks of the battery fluid level.

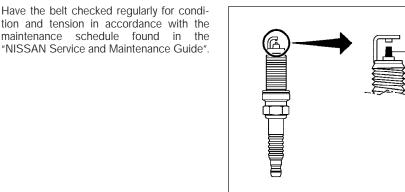
### JUMP STARTING

If jump starting is necessary, see "Jump starting" in the "In case of emergency" section of this manual. If the engine does not start by jump starting, the battery may have to be replaced. Contact a NISSAN dealer.

**DRIVE BELT** 

## 2. Have the belt checked regularly for condition and tension in accordance with the maintenance schedule found in the

LDI0564



**SPARK PLUGS** 

## REPLACING SPARK PLUGS

## Platinum-tipped spark plugs

It is not necessary to replace platinum-tipped (A) spark plugs as frequently as conventional type spark plugs because they last much longer. Follow the maintenance log shown in the "NISSAN Service and Maintenance Guide". Do not service platinum-tipped spark plugs by cleaning or regapping.

 Always replace spark plugs with recommended or equivalent ones.



- Generator
- Air conditioner compressor
- Crankshaft pulley

## **AWARNING**

Be sure the ignition switch is in the OFF or LOCK position before servicing drive belt. The engine could rotate unexpectedly.

1. Visually inspect the belt for signs of unusual wear, cuts, fraying or looseness. If the belt is in poor condition or is loose, have it replaced or adjusted by a NISSAN dealer.

SDI1895

### **AIR CLEANER**

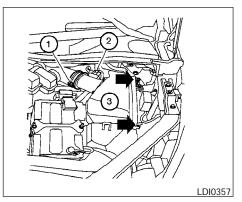
## **WARNING**

Be sure the engine and ignition switch are off and that the parking brake is engaged securely.

## **A**CAUTION

Be sure to use the correct socket to remove the spark plugs. An incorrect socket can damage the spark plugs.

If replacement is required, see your NISSAN dealer for assistance.



The air cleaner filter should not be cleaned and reused. Replace it according to the maintenance log shown in the "NISSAN Service and Maintenance Guide." When replacing the filter, wipe the inside of the air cleaner filter housing and the cover with a damp cloth.

To remove the air cleaner filter:

- Loosen the screw.
- Disconnect the electrical connector.
- Unlatch the clips and remove the air cleaner cover. Remove the air cleaner filter.

### NOTE:

After installing a new air cleaner, make sure the air cleaner cover is seated in the housing and the screw is tighten.

## **AWARNING**

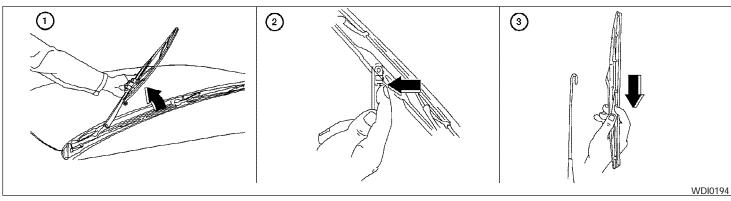
- Operating the engine with the air cleaner removed can cause you or others to be burned. The air cleaner not only cleans the air, it stops the flame if the engine backfires. If it isn't there, and the engine backfires, you could be burned. Do not drive with the air cleaner removed, and be careful when working on the engine with the air cleaner removed.
- Never pour fuel into the throttle body or attempt to start the engine with the air cleaner removed. Doing so could result in serious injury.

### IN-CABIN MICROFILTER

The in-cabin microfilter restricts the entry of airborne dust and pollen particles and reduces some objectionable outside odors. The filter is located behind the glove box. Refer to the "NISSAN Service and Maintenance Guide" for change intervals.

If replacement is required, see your NISSAN dealer.

### WINDSHIELD WIPER BLADES



### **CLEANING**

If your windshield is not clear after using the windshield washer or if a 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 each blade by wiping it with a cloth soaked in a washer solution or a mild detergent. Then rinse the blades with clear water. If your windshield is still not clear after cleaning the blades and using the wiper, replace the blades.

## **A** CAUTION

Worn windshield wiper blades can damage the windshield and impair driver vision.

## **RFPI ACING**

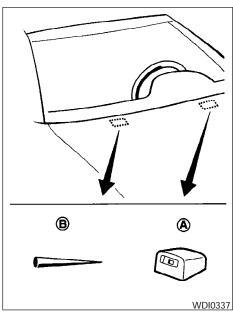
Replace the wiper blades if they are worn.

- Lift the wiper arm away from the windshield.
- (2) Push the release tab, then move the wiper blade down the wiper arm to remove.
- (3) Remove the wiper blade.

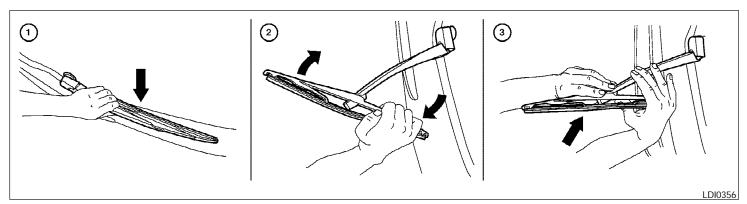
4. Insert the new wiper blade onto the wiper arm until it clicks into place.

## **A** CAUTION

- After wiper blade replacement, return the wiper arm to its original position; otherwise it may be damaged when the hood is opened.
- Make sure the wiper blades contact the glass; otherwise the arms may be damaged from wind pressure.



Be careful not to let anything get into the washer nozzle (a). This may cause clogging or improper windshield washer operation. If something gets into the nozzle, remove it with a needle or small pin (a).



## Rear window wiper blade

- Lift the wiper arm away from the rear window.
- 2 Push the wiper blade in and pivot until the blade becomes free.
- 3 Insert a new blade onto the wiper arm and snap into place.

BRAKES FUSES

If the brakes do not operate properly, have the brakes checked by a NISSAN dealer.

### SELF-ADJUSTING BRAKES

Your vehicle is equipped with self-adjusting brakes.

The front and rear disc-type brakes self-adjust every time the brake pedal is applied.

## **AWARNING**

See a NISSAN dealer for a brake system check if the brake pedal height does not return to normal.

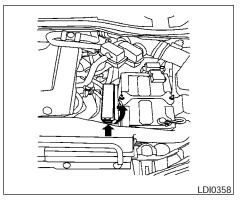
### BRAKE PAD WEAR INDICATORS

The disc brake pads on your vehicle have audible wear indicators. When a brake pad requires replacement, a high pitched scraping or screeching sound will be heard when the vehicle is in motion. The noise will be heard whether or not the brake pedal is depressed. Have the brakes checked as soon as possible if the wear indicator sound is heard.

Under some driving or climate conditions, occasional brake squeak, squeal or other noise may be heard. Occasional brake noise during light to moderate stops is normal and does not affect the function or performance of the brake system.

8-20 Maintenance and do-it-yourself

Proper brake inspection intervals should be followed. For more information regarding brake inspections, see the appropriate maintenance schedule information in the "NISSAN Service and Maintenance Guide".



### **ENGINE COMPARTMENT**

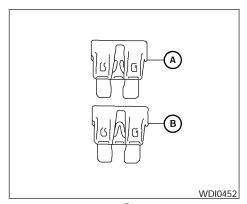
## **A** CAUTION

Never use a fuse of a higher or lower amperage rating than specified on the fuse box cover. This could damage the electrical system or cause a fire.

If any electrical equipment does not come on, check for an open fuse.

- 1. Be sure the ignition switch and the headlight switch are OFF.
- 2. Open the engine hood.

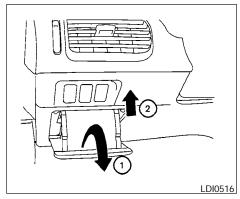
- 3. Remove the fuse box cover by pushing the tab and lifting the cover up.
- 4. Remove the fuse with the fuse puller. The fuse puller is located in the center of the fuse block in the passenger compartment.



- 5. If the fuse is open (A), replace it with a new fuse (B).
- 6. If a new fuse also opens, have the electrical system checked and repaired by a NISSAN dealer.

### **Fusible links**

If the electrical equipment does not operate and fuses are in good condition, check the fusible links. If any of these fusible links are melted, replace with only genuine NISSAN parts.



PASSENGER COMPARTMENT

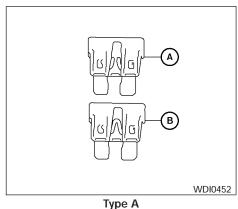
## **A** CAUTION

Never use a fuse of a higher or lower amperage rating than specified on the fuse box cover. This could damage the electrical system or cause a fire.

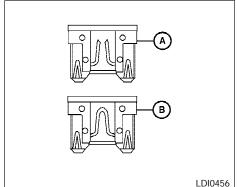
If any electrical equipment does not operate, check for an open fuse.

- 1. Be sure the ignition switch and the headlight switch are OFF
- 2. Pull the sunglasses holder down to open (1).

- 3. Pull up on the sunglasses holder 2 and remove to expose the fuse panel.
- 4. Remove the fuse with the fuse puller.



- 5. If the fuse is open (A), replace it with an equivalent good fuse (B).
- 6. Push the fuse box cover to install.
- 7. If a new fuse also opens, have the electrical system checked and repaired by a NISSAN dealer.

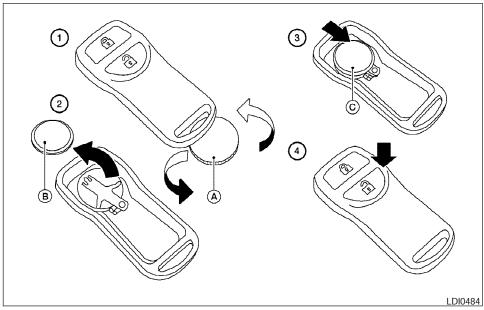


Type B

## **BATTERY REPLACEMENT**

## **A**CAUTION

Be careful not to allow children to swallow the battery or removed parts.



## **KEYFOB**

Replace the battery in the keyfob as follows:

- Open the lid using a coin (A).
- Remove the battery **B**.

- 3 Install a new battery © with the "+" facing down.
- Hold the battery by the edges. Holding the battery across the contact points will seriously deplete the storage capacity.

### **LIGHTS**

• Do not touch the internal circuit and electric terminals as it could cause a malfunction.

Recommended battery: CR2025 or equivalent.

- 4 Close the lid securely.
- 5. Press the button, then the button two or three times to check the keyfob operation.

If the battery is removed for any reason other than replacement, perform step 5.

- An improperly disposed battery can hurt the environment. Always confirm local regulations for battery disposal.
- The keyfob is water-resistant; however, if it does get wet, immediately wipe completely dry.
- The operational range of the keyfob extends to approximately 33 ft (10 m) from the vehicle. This range may vary with conditions.

#### FCC Notice:

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

This device complies with Part 15 of the FCC Rules and RSS-210 of Industry Canada.

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

## HEADLIGHTS

Replacing the halogen headlight bulb

The headlight is a semi-sealed beam type which uses a replaceable headlight (halogen) bulb. If replacement is required, see your NISSAN dealer.

### **A** 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.
- When handling the bulb, do not touch the glass envelope.
- DO NOT TOUCH THE BULB WITH BARE HANDS.
- Use the same number and wattage as shown in the chart.
- 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.
- Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, contact a NISSAN dealer.
- Use the same number and wattage as originally installed as shown in chart.

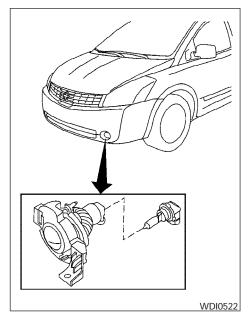
Fog may temporarily form inside the lens of the exterior lights in the rain or in a car wash. A temperature difference between the inside and the outside of the lens causes the fog. This is not a malfunction. If large drops of water collect inside the lens, contact a NISSAN dealer.

# FOG LIGHTS (if so equipped)

Replacing the fog light bulb

### **A** 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.
- When handling the bulb, do not touch the glass envelope.
- Use the same number and wattage as originally installed as shown in chart.
- Do not leave the bulb out of the fog light for a long period of time as dust, moisture and smoke may enter the fog light body and affect the performance of the fog light.
- DO NOT TOUCH THE BULB WITH BARE HANDS.



- 1. Disconnect the negative (-) battery cable.
- 2. Remove the three splash shield screws and move the splash shield out of the way.
- 3. Disconnect the bulb connector.

- 4. Rotate the bulb counterclockwise and remove.
- 5. Remove by pulling it straight out of the fog light assembly. Do not shake or rotate the bulb when removing it. Do not touch the glass envelope.
- 6. Install in the reverse order of removal.

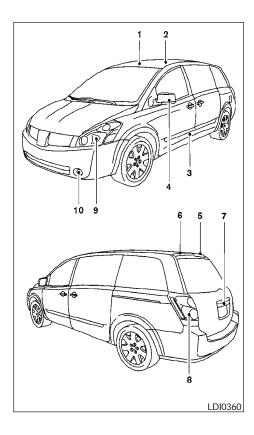
## **EXTERIOR AND INTERIOR LIGHTS**

Item	Wattage (W)	Bulb No.
Headlight assembly		
High	60	HB3/9005
Low*	51	HB4/9006
Park/Turn*	8/29	3457
Cornering*	27	3156
Front fog light	55	H11
Puddle lamp*	8	_
Room/map lights	8	PLW 578
Personal lights		
Type A	8	2GL T2P
Type B	8	TS578
Footwell	3.4	158
Glove box light	3.4	158
Vanity mirror light*	1.32	_
Step light	3.8	194
Cargo light	7	N1J
High-mounted stop light*	13	912
Rear combination light		
Tail/Stop	7/27	3157K
Backup (reversing)	18	921K
Turn	27	3156K
License plate light*	5	W5W

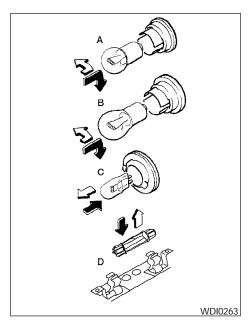
<sup>\*</sup> See a NISSAN dealer for replacement.

Always check with the Parts Department at a NISSAN dealer for the latest parts information.

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- Room/map light
- Front personal lights
- Step light
- Puddle lamp
- High-mounted stoplight
- Cargo light 6.
- License plate light
- 8. Rear combination light
- 9. Headlight assembly
- 10. Fog light



# Replacement procedures

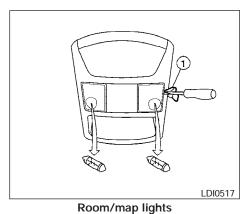
All other lights are either type A, B, C or D. When replacing a bulb, first remove the lens, lamp and/or cover.



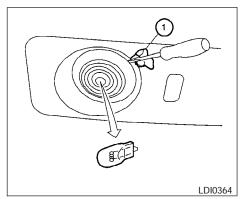
Indicates bulb removal



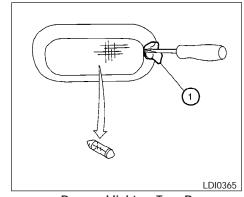
Indicates bulb installation



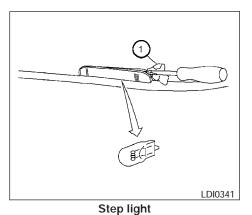
Use a cloth 1 to protect the housing.



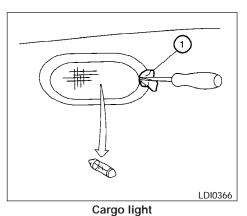
Personal lights - Type A Use a cloth 1 to protect the housing.



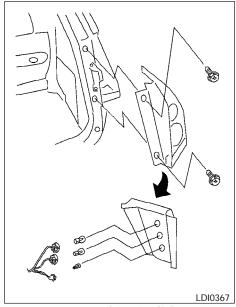
Personal lights - Type B Use a cloth 1 to protect the housing.



Use a cloth 1 to protect the housing.

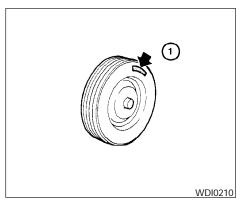


Use a cloth 1 to protect the housing.



Rear combination light

#### WHEELS AND TIRES



If you have a flat tire, see the "In case of emergency" section of this manual.

## TIRE PRESSURE

Tire Pressure Monitoring System (TPMS)

This vehicle is equipped with the Tire Pressure Monitoring System (TPMS). It monitors tire pressure of all tires except the spare. When the low tire pressure warning light is lit, one or more of your tires is significantly under-inflated. If equipped, the system also displays pres-

sure of all tires (except the spare tire) on the display screen by sending a signal from a sensor that is installed in each wheel.

The TPMS will activate only when the vehicle is driven at speeds above 16 MPH (25 km/h). Also, this system may not detect a sudden drop in tire pressure (for example a flat tire while driving).

For more details, refer to "Low tire pressure warning light" in the "Instruments and controls" section, "Tire pressure information" in the "Display screen, heater, air conditioner and audio and phone systems" section, "Tire Pressure Monitoring System (TPMS)" in the "Starting and driving" section, and "Flat tire" in the "In case of emergency" section.

## Tire inflation pressure

Check the tire pressures (including the spare) often and always prior to long distance trips. The recommended tire pressure specifications are shown on the F.M.V.S.S./C.M.V.S.S. certification label or the Tire and Loading Information label

under the "Cold Tire Pressure" heading. The Tire and Loading Information label is affixed to the driver side center pillar. Tire pressures should be checked regularly because:

- Most tires naturally lose air over time.
- Tires can lose air suddenly when driven over potholes or other objects or if the vehicle strikes a curb while parking.

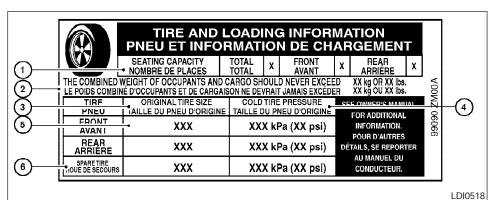
The tire pressures should be checked when the tires are cold. The tires are considered COLD after the vehicle has been parked for 3 or more hours, or driven less than 1 mile (1.6 km) at moderate speeds.

Incorrect tire pressure, including under inflation, may adversely affect tire life and vehicle handling.

## **AWARNING**

- Improperly inflated tires can fail suddenly and cause an accident.
- The Gross Vehicle Weight Rating (GVWR) is located on the F.M.V.S.S./C.M.V.S.S. certification label. The vehicle weight capacity is indicated on the Tire and Loading Information label (if so equipped). Do not load your vehicle beyond this capacity. Overloading your vehicle may result in reduced tire life, unsafe operating conditions due to premature tire failure, or unfavorable handling characteristics and could also lead to a serious accident. Loading beyond the specified capacity may also result in failure of other vehicle components.
- Before taking a long trip, or whenever you heavily load your vehicle, use a tire pressure gauge to ensure that the tire pressures are at the specified level.

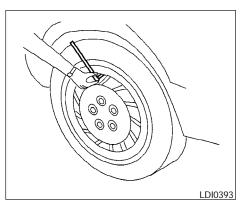
 For additional information regarding tires, refer to "Important Tire Safety Information" (US) or Safety "Tire Information" (Canada) in the Warranty Information Booklet.



Spare tire size or compact spare tire size (if so equipped).

Tire and loading information label

- ① Seating capacity: The maximum number of occupants that can be seated in the vehicle.
- 2 Vehicle load limit: See loading information in the "Technical and consumer information" section.
- ③ Original tire size: The size of the tires originally installed on the vehicle at the factory.
- 4 Cold tire pressure: Inflate the tires to this pressure when the tires are cold. Tires are considered COLD after the vehicle has been parked for 3 or more hours, or driven less than 1 mile (1.6 km) at moderate speeds. The recommended cold tire inflation is set by the manufacturer to provide the best balance of tire wear, vehicle handling, driveability, tire noise, etc., up to the vehicle's GVWR.
- Tire size refer to "Tire labeling" later in this section.

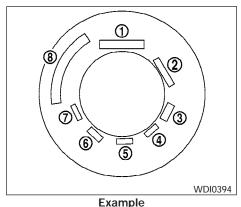


Checking tire pressure

- 1. Remove the valve stem cap from the tire.
- 2. Press the pressure gauge squarely onto the valve stem. Do not press too hard or force the valve stem sideways or air will escape. If the hissing sound of air escaping from the tire is heard while checking the pressure, reposition the gauge to eliminate this leakage.
- 3. Remove the gauge.

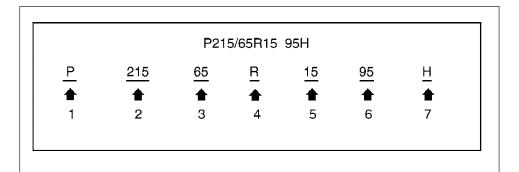
- 4. Read the tire pressure on the gauge stem and compare to the specification shown on the Tire and Loading Information label.
- 5. Add air to the tire as needed. If too much air is added, press the core of the valve stem briefly with the tip of the gauge stem to release pressure. Recheck the pressure and add or release air as needed
- 6. Install the valve stem cap.
- 7. Check the pressure of all other tires, including the spare.

Size	Cold Tire Inflation Pressure
Front Original Tire: P225/65/R16 P225/60/R17	240 kPa, 35 PSI
Rear Original Tire: P225/65/R16 P225/60/R17	240 kPa, 35 PSI
Spare Tire: T135/80D16	420 kPa, 60 PSI



#### TIRE LABELING

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides the tire identification number (TIN) for safety standard certification. The TIN can be used to identify the tire in case of a recall.



7. H: Tire speed rating. You should not drive the vehicle faster than the tire speed rating.

### Example

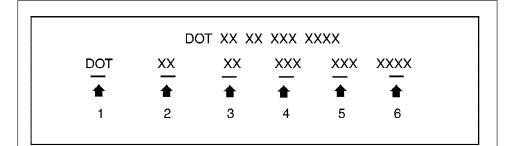
- 1 Tire size (example: P215/65R15 95H)
  - 1. P: The "P" indicates the tire is designed for passenger vehicles (not all tires have this information).
  - Three-digit number (215): This number gives the width in millimeters of the tire from sidewall edge to sidewall edge.
  - 3. Two-digit number (65): This number, known as the aspect ratio, gives the tire's ratio of height to width.

- 4. R: The "R" stands for radial.
- 5. Two-digit number (15): This number is the wheel or rim diameter in inches.

WDI0395

 Two- or three-digit number (95): This number is the tire's load index. It is a measurement of how much weight each tire can support. You may not find this information on all tires because it is not required by law.

8-34 Maintenance and do-it-yourself



WDI0396

#### Example

- (2) TIN (Tire Identification Number) for a new tire (example: DOT XX XXX XXXX)
  - 1. DOT: Abbreviation for the "Department Of Transportation" The symbol can be placed above, below or to the left or right of Tire Identification Number.
  - 2. Two-digit code: Manufacturer's identification mark
  - 3. Two-digit code: Tire size

- 4. Three-digit code: Tire type code (Optional)
- 5. Three-digit code: Date of Manufacture
- 6. Four numbers represent the week and year the tire was built. For example, the numbers 3103 means the 31st week of 2003. If these numbers are missing, then look on the other sidewall of the tire.

(3) Tire ply composition and material

The number of layers or plies of rubbercoated fabric in the tire. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others.

4) Maximum permissible inflation pressure

This number is the greatest amount of air pressure that should be put in the tire. Do not exceed the maximum permissible inflation pressure.

(5) Maximum load rating

This number indicates the maximum load in kilograms and pounds that can be carried by the tire. When replacing the tires on the vehicle, always use a tire that has the same load rating as the factory installed tire

**(6)** Term of "tubeless" or "tube type"

Indicates whether the tire requires an inner tube ("tube type") or not ("tubeless"). (7) The word "radial"

The word "radial" is shown if the tire has radial structure.

(8) Manufacturer or brand name Manufacturer or brand name is shown.

## Other Tire-related Terminology

In addition to the many terms that are defined throughout this section, Intended Outboard Sidewall is (1) the sidewall that contains a whitewall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire, or (2) the outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle.

#### TYPES OF TIRES

## **AWARNING**

- When changing or replacing tires, be sure all four tires are of the same type (i.e., Summer, All Season or Snow) and construction. A NISSAN dealer may be able to help you with information about tire type, size, speed rating and availability.
- Replacement tires may have a lower speed rating than the factory equipped tires, and may not match the potential maximum vehicle speed. Never exceed the maximum speed rating of the tire.
- Replacing tires with those not originally specified by NISSAN could affect the proper operation of the TPMS.
- For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the Warranty Information Booklet.

#### All season tires

NISSAN specifies All Season tires on some models to provide good performance all year, including snowy and icy road conditions. All Season tires are identified by ALL SEASON and/or M&S on the tire sidewall. Snow tires have better snow traction than All Season tires and may be more appropriate in some areas.

#### Summer tires

NISSAN specifies summer tires on some models to provide superior performance on dry roads. Summer tire performance is substantially reduced in snow and ice. Summer tires do not have the tire traction rating "M&S" on the tire sidewall.

If you plan to operate your vehicle in snowy or icy conditions, NISSAN recommends the use of SNOW tires or ALL SEASON tires on all four wheels.

#### Snow tires

If snow tires are needed, it is necessary to select tires equivalent in size and load rating to the original equipment tires. If you do not, it can adversely affect the safety and handling of your vehicle.

Generally, snow tires have lower speed ratings than factory equipped tires and may not match the potential maximum vehicle speed. Never exceed the maximum speed rating of the tire.

If you install snow tires, they must be the same size, brand, construction and tread pattern on all four wheels.

For additional traction on icy roads, studded tires may be used. However, some U.S. states and Canadian provinces prohibit their use. Check local, state and provincial laws before installing studded tires. Skid and traction capabilities of studded snow tires on wet or dry surfaces may be poorer than that of non-studded snow tires.

#### TIRE CHAINS

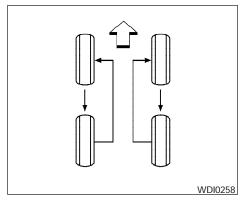
Use of tire chains may be prohibited according to location. Check the local laws before installing tire chains. When installing tire chains, make sure they are the proper size for the tires on your vehicle and are installed according to the chain manufacturer's suggestions. Use only SAE class "S" chains. Class "S" chains are used on vehicles with restricted tire to vehicle clearance. Vehicles that can use Class "S" chains are designed to meet the minimum clearances between the tire and the closest vehicle suspension or body component required to accommodate the use of a winter traction device (tire chains or cables). The minimum clearances are determined using the factory equipped tires. Other types may damage your vehicle. Use chain tensioners when recommended by the tire chain manufacturer to ensure a tight fit. Loose end links of the tire chain must be secured or removed to prevent the possibility of whipping action damage to the fenders or underbody. If possible, avoid fully loading your vehicle when using tire chains. In addition, drive

at a reduced speed. Otherwise, your vehicle may be damaged and/or vehicle handling and performance may be adversely affected.

Tire chains must be installed only on the front wheels and not on the rear wheels.

Never install tire chains on a TEMPORARY USF ONLY spare tire.

Do not use tire chains on dry roads. Driving with chains in such conditions can cause damage to the various mechanisms of the vehicle due to some overstress.



### CHANGING WHEELS AND TIRES

Tire rotation

NISSAN recommends rotating the tires every 7,500 miles (12,000 km).

See "Flat tire" in the "In case of emergency" section of this manual for tire replacing procedures.

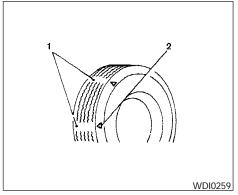
As soon as possible, tighten the wheel nuts to the specified torque with a torque wrench.

# Wheel nut tightening torque: 83 ft-lb (112 N·m)

The wheel nuts must be kept tightened to specifications at all times. It is recommended that wheel nuts be tightened to specification at each tire rotation interval

# **WARNING**

- After rotating the tires, check and adjust the tire pressure.
- Retighten the wheel nuts when the vehicle has been driven for 600 miles (1,000 km) (also in cases of a flat tire, etc.).
- Do not include the spare tire in the tire rotation.
- For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the Warranty Information Booklet.



- Wear indicator
- Location mark

Tire wear and damage

# **AWARNING**

Tires should be periodically inspected for wear, cracking, bulging or objects caught in the tread. If excessive wear, cracks, bulging or deep cuts are found, the tire(s) should be replaced.

- The original tires have built-in tread wear indicators. When the wear indicators are visible, the tire(s) should be replaced.
- Tires degrade with age and use. Have tires, including the spare, over 6 years old checked by a qualified technician because some tire damage may not be obvious. Replace the tires as necessary to prevent tire failure and possible personal injury.
- Improper service of the spare tire may result in serious personal injury. If it is necessary to repair the spare tire, contact a NISSAN dealer.
- For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the Warranty Information Booklet.

# Replacing wheels and tires

When replacing a tire, use the same size, tread design, speed rating and load carrying capacity as originally equipped. Recommended types and sizes are shown in "Wheels and tires" in the "Technical and consumer information" section of this manual.

# **A** WARNING

- The use of tires other than those recommended or the mixed use of tires of different brands, construction (bias, bias-belted or radial), or tread patterns can adversely affect the ride, braking, handling, VDC system, ground clearance, body-to-tire clearance, tire chain clearance, speedometer calibration, headlight aim and bumper height. Some of these effects may lead to accidents and could result in serious personal injury.
- If your vehicle was originally equipped with 4 tires that were the same size and you are only replacing 2 of the 4 tires, install the new tires on the rear axle. Placing new tires on the front axle may cause loss of vehicle control in some driving conditions and cause an accident and personal injury.

- If the wheels are changed for any reason, always replace with wheels which have the same off-set dimension. Wheels of a different off-set could cause premature tire wear, degrade vehicle handling characteristics, affect the VDC system and/or interference with the brake discs/drums. Such interference can lead to decreased braking efficiency and/or early brake pad/shoe wear. Refer to "Wheels and tires" in the "Technical and consumer information" section of this manual for wheel off-set dimensions.
- When a spare tire is mounted or a wheel is replaced, tire pressure will not be indicated, the TPMS will not function and the low tire pressure warning light will flash for approximately 1 minute. The light will remain on after 1 minute. Contact your NISSAN dealer as soon as possible for tire replacement and/or system resetting.
- Replacing tires with those not originally specified by NISSAN could affect the proper operation of the TPMS.

- Do not install a damaged or deformed wheel or tire even if it has been repaired. Such wheels or tires could have structural damage and could fail without warning.
- The use of retread tires is not recommended.
- For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the Warranty Information Booklet.

### Wheel balance

Unbalanced wheels may affect vehicle handling and tire life. Even with regular use, wheels can get out of balance. Therefore, they should be balanced as required.

Wheel balance service should be performed with the wheels off the vehicle. Spin balancing the wheels on the vehicle could lead to mechanical damage.

 For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the Warranty Information Booklet.

#### Care of wheels

- Wash the wheels when washing the vehicle to maintain their appearance.
- Clean the inner side of the wheels when the wheel is changed or the underside of the vehicle is washed.
- Do not use abrasive cleaners when washing the wheels.
- Inspect wheel rims regularly for dents or corrosion. Such damage may cause loss of pressure or poor seal at the tire bead.
- NISSAN recommends waxing the road wheels to protect against road salt in areas where it is used during winter.

# Spare tire (TEMPORARY USE ONLY spare tire)

Observe the following precautions if the TEM-PORARY USE ONLY spare tire must be used. Otherwise, your vehicle could be damaged or involved in an accident:

## **WARNING**

- The spare tire should be used for emergency use only. It should be replaced with the standard tire at the first opportunity to avoid possible tire or differential damage.
- Drive carefully while the TEMPORARY USE ONLY spare tire is installed. Avoid sharp turns and abrupt braking while driving.
- Periodically check spare tire inflation pressure. Always keep the pressure of the TEMPORARY USE ONLY spare tire at 60 psi (420 kPa, 4.2 bar).
- With the TEMPORARY USE ONLY spare tire installed do not drive the vehicle at speeds faster than 50 MPH (80 km/h).
- When driving on roads covered with snow or ice, the TEMPORARY USE ONLY spare tire should be used on the rear wheels and the original tire used on the front wheels (drive wheels). Use tire chains only on the front (original) tires.

- Tire tread of the TEMPORARY USE ONLY spare tire will wear at a faster rate than the standard tire. Replace the spare tire as soon as the tread wear indicators appear.
- Do not use the spare tire on other vehicles.
- Do not use more than one spare tire at the same time.
- Do not tow a trailer when the TEMPO-RARY USE ONLY spare tire is installed.

## **A** CAUTION

- Do not use tire chains on a TEMPO-RARY USE ONLY spare tire. Tire chains will not fit properly and may cause damage to the vehicle.
- Because the TEMPORARY USE ONLY spare tire is smaller than the original tire, ground clearance is reduced. To avoid damage to the vehicle, do not drive over obstacles. Also, do not drive the vehicle through an automatic car wash since it may get caught.

# 9 Technical and consumer information

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# CAPACITIES AND RECOMMENDED FUEL/LUBRICANTS

The following are approximate capacities. The actual refill capacities may be slightly different. When refilling, follow the procedure described in the "Maintenance and do-it-yourself" section to determine the proper refill capacity.

		Capacity (Approximate)			Recommended Fluids and Lubricants
		US measure	Imp measure	Liter	
Fuel		20 gal	16-5/8 gal	75.6	Unleaded gasoline with an octane rating of at least 87 AKI (RON 91)*1
Engine oil *7					
Drain	and Refill				
	With oil filter change	4-1/4 qt	3-1/2 qt	4.0	_ • Engine oil with API Certification Mark *2
	Without oil filter change	3-7/8 qt	3-1/4 qt	3.7	Viscosity SAE 5W-30
Cooling system					
0 7	With reservoir	2-3/4 gal	2-3/8 gal	10.5	50% Genuine NISSAN Long Life Antifreeze/Coolant or equivalent 50% Demineralized or distilled water
Automatic transn	nission fluid	_	_	_	Genuine NISSAN Matic K ATF *3
Power steering fluid (PSF)		Refill to the proper level according to the instructions in			Genuine NISSAN PSF or equivalent *4
Brake fluid the "Maintenance and do-it-yourself" section.*8		Genuine NISSAN Super Heavy Duty Brake Fluid *5 or equivalent DOT 3			
Multi-purpose gr	ease	_	_	_	NLGI No. 2 (Lithium Soap base)
Air conditioning s	system refrigerant	_	_	_	HFC-134a (R-134a) *6
Air conditioning s	system oil	_	_	_	NISSAN A/C System Oil Type S or equivalent *6
Windshield wash front and rear wip	ner fluid (shared between pers)	1-1/4 gal	1 gal	4.5	Genuine NISSAN Windshield Washer Concentrate Cleaner & Antifreeze or equivalent

<sup>\*1:</sup> For further details, see "Fuel recommendation."

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<sup>\*2:</sup> For further details, see "Engine oil and oil filter recommendations."

<sup>\*3:</sup> Using automatic transmission fluid other than Genuine NISSAN Matic K ATF will cause deterioration in driveability and automatic transmission durability, and may damage the automatic transmission, which is not covered by the NISSAN new vehicle limited warranty.

<sup>\*4:</sup> DEXRON™ VI type ATF or Canada NISSAN Automatic Transmission Fluid (ATF) may also be used.

<sup>\*5:</sup> Available in mainland USA through your NISSAN dealer.

<sup>\*6:</sup> For further details, see "Air conditioner system refrigerant and oil recommendations."

<sup>\*7:</sup> For further details, see "Engine Oil" in the "Maintenance and do-it-yourself" section of this manual.

<sup>\*8:</sup> See your NISSAN dealer for service.

#### **FUEL RECOMMENDATION**

Use unleaded premium gasoline with an octane rating of at least 91 AKI (Anti-Knock Index) number (Research octane number 96).

If unleaded premium gasoline is not available unleaded regular gasoline with an octane rating of 87 AKI (Anti-Knock Index) number (Research octane number 91) can be used, but only under the following precautions:

- Have the fuel tank filled only partially with unleaded regular gasoline, and fill up with unleaded premium as soon as possible.
- Avoid full throttle driving, and abrupt acceleration.

However, for maximum vehicle performance, the use of unleaded premium gasoline is recommended.

## **A**CAUTION

- Using a fuel other than that specified could adversely affect the emission control system, and may also affect the warranty coverage.
- Under no circumstances should a leaded gasoline be used, because this will damage the three-way catalyst.

Do not use E-85 fuel in your vehicle. Your vehicle is not designed to run on E-85 fuel. Using E-85 fuel can damage the fuel system components and is not covered by the NISSAN new vehicle limited warranty.

# Gasoline specifications

NISSAN recommends using gasoline that meets the World-Wide Fuel Charter (WWFC) specifications where it is available. Many of the automobile manufacturers developed this specification to improve emission control system and vehicle performance. Ask your service station manager if the gasoline meets the WWFC specifications.

## Reformulated gasoline

Some fuel suppliers are now producing reformulated gasolines. These gasolines are specially designed to reduce vehicle emissions. NISSAN supports efforts towards cleaner air and suggests that you use reformulated gasoline when available.

# Gasoline containing oxygenates

Some fuel suppliers sell gasoline containing oxygenates such as ethanol, MTBE and methanol with or without advertising their presence. NISSAN does not recommend the use of fuels of which the oxygenate content and the fuel compatibility for your NISSAN cannot be readily determined. If in doubt, ask your service station manager.

If you use oxygenate-blend gasoline, please take the following precautions as the usage of such fuels may cause vehicle performance problems and/or fuel system damage.

- The fuel should be unleaded and have an octane rating no lower than that recommended for unleaded gasoline.
- If an oxygenate-blend other than methanol blend is used, it should contain no more than 10% oxygenate. (MTBE may, however, be added up to 15%.)
- If a methanol blend is used, it should contain no more than 5% methanol (methyl alcohol, wood alcohol). It should also contain a suitable amount of appropriate cosolvents and corrosion inhibitors. If not properly formulated with appropriate cosolvents and corrosion inhibitors, such methanol blends may cause fuel system damage and/or vehicle performance problems. At this time, sufficient data is not available to ensure that all methanol blends are suitable for use in NISSAN vehicles.

If any driveability problems such as engine stalling and difficult hot-starting are experienced after using oxygenate-blend fuels, immediately change to a non-oxygenate fuel or a fuel with a low blend of MTBE.

Take care not to spill gasoline during refueling. Gasoline containing oxygenates can cause paint damage.

#### E-85 fuel

E-85 fuel is a mixture of approximately 85% fuel ethanol and 15% unleaded gasoline. E-85 can only be used in a Flexible Fuel Vehicle (FFV). Do not use E-85 in your vehicle. U.S. government regulations require fuel ethanol dispensing pumps to be identified by a small, square, orange and black label with the common abbreviation or the appropriate percentage for that region.

#### Aftermarket fuel additives

NISSAN does not recommend the use of any aftermarket fuel additives (for example, fuel injector cleaner, octane booster, intake valve deposit removers, etc.) which are sold commercially. Many of these additives intended for gum, varnish or deposit removal may contain active solvents or similar ingredients that can be harmful to the fuel system and engine.

# Octane rating tips

Using unleaded gasoline with an octane rating lower than recommended can cause persistent, heavy "spark knock." ("Spark knock" is a metallic rapping noise.) If severe, this can lead to engine damage. If you detect a persistent heavy spark knock even when using gasoline of the stated octane rating, or if you hear steady spark knock while holding a steady speed on level roads, have a NISSAN dealer correct the condition. Failure to correct the condition is misuse of the vehicle, for which NISSAN is not responsible.

Incorrect ignition timing may result in spark knock, after-run and/or overheating, which may cause excessive fuel consumption or engine damage. If any of the above symptoms are encountered, have your vehicle checked at a NISSAN dealer.

However, now and then you may notice light spark knock for a short time while accelerating or driving up hills. This is not a cause for concern, because you get the greatest fuel benefit when there is light spark knock for a short time under heavy engine load.

# **A**CAUTION

- Your vehicle is not designed to run on E-85 fuel. Using E-85 fuel in a vehicle not specifically designed for E-85 fuel can damage fuel system components and is not covered by the NISSAN new vehicle limited warranty.
- E-85 is a mixture of approximately 85% fuel ethanol and 15% unleaded gasoline.
- U.S. government regulations require ethanol dispensing pumps to be identified by a small, square, orange and black label with the common abbreviation or the appropriate percentage for that region.

#### 9-4 Technical and consumer information

#### **API** certification mark



#### API service symbol



WTI0183

# ENGINE OIL AND OIL FILTER RECOMMENDATIONS

# Selecting the correct oil

It is essential to choose the correct grade, quality and viscosity engine oil to ensure satisfactory engine life and performance. See "Capacities and recommended fuel/lubricants" earlier in this section. NISSAN recommends the use of an energy conserving oil in order to improve fuel economy.

Select only engine oils that meet the American Petroleum Institute (API) certification or International Lubricant Standardization and Approval Committee (ILSAC) certification and SAE viscosity standard. These oils have the API certification mark on the front of the container. Oils which do not have the specified quality label should not be used as they could cause engine damage.

#### Oil additives

NISSAN does not recommend the use of oil additives. The use of an oil additive is not necessary when the proper oil type is used and maintenance intervals are followed.

Oil which may contain foreign matter or has been previously used should not be used.

# Oil viscosity

The engine oil viscosity or thickness changes with temperature. Because of this, it is important to select the engine oil viscosity based on the temperatures at which the vehicle will be operated before the next oil change. Choosing an oil viscosity other than that recommended could cause serious engine damage.

# Selecting the correct oil filter

Your new NISSAN vehicle is equipped with a high-quality genuine NISSAN oil filter. When replacing, use a genuine NISSAN oil filter or its equivalent for the reason described in "Change intervals".

# Change intervals

The oil and oil filter change intervals for your engine are based on the use of the specified quality oils and filters. Using engine oil and filters that are not of the specified quality, or exceeding recommended oil and filter change intervals could reduce engine life. Damage to the engine caused by improper maintenance or use of incorrect oil and filter quality and/or viscosity is not covered by the NISSAN new vehicle limited warranty.

Your engine was filled with a high-quality engine oil when it was built. You do not have to change the oil before the first recommended change interval. Oil and filter change intervals depend upon how you use your vehicle.

Operation under the following conditions may require more frequent oil and filter changes:

- repeated short distance driving at cold outside temperatures
- driving in dusty conditions
- extensive idling
- towing a trailer
- stop and go commuting

Refer to the "NISSAN Service and Maintenance Guide" for the maintenance schedule.

# AIR CONDITIONER SYSTEM REFRIGERANT AND OIL RECOMMENDATIONS

The air conditioner system in your NISSAN vehicle must be charged with the refrigerant HFC-134a (R-134a) and the oil, NISSAN A/C system oil Type S or the exact equivalents.

## **A** CAUTION

The use of any other refrigerant or oil will cause severe damage to the air conditioning system and will require the replacement of all air conditioner system components.

The refrigerant HFC-134a (R-134a) in your NISSAN vehicle does not harm the earth's ozone layer. Although this refrigerant does not affect the earth's atmosphere, certain government regulations require the recovery and recycling of any refrigerant during automotive air conditioner system service. A NISSAN dealer has the trained technicians and equipment needed to recover and recycle your air conditioner system refrigerant.

Contact a NISSAN dealer when servicing your air conditioner system.

# **SPECIFICATIONS**

# **ENGINE**

Model	VQ35DE
Туре	Gasoline, 4-cycle, DOHC
Cylinder arrangement	6-cylinder, V-block, Slanted at 60°
Bore x Stroke in (mn	) 3.760 x 3.205 (95.5 x 81.4)
Displacement cu in (cm	) 213.5 (3,498)
Firing order	1-2-3-4-5-6
Idle speed	
A/T (in "N" position)	No adjustment is possessed
Ignition timing (degree B.T.D.C. at idle speed)	No adjustment is necessary.
CO % at idle	
Spark plug Standar	d PLFR5A-11
Spark plug gap (Nominal) in (mn	) 0.043 (1.1)
Camshaft operation	Timing chain

This spark ignition system complies with the Canadian standard ICES-002.

# WHEELS AND TIRES

Wheels		
		16 x 6.5JJ
		17 x 6.5JJ
Tires		
		P225/65R16
		P225/60R17
Spare tire		T135/80*16
Speed rating	16"	Н
	17"	Н
*: "R" or "D" depending on tire manufacturer		

# **DIMENSIONS AND WEIGHTS**

Overall length	in (mm)	204.1(5,185)
Overall width	in (mm)	78.1(1,983)
Overall height		
with roof rack	in (mm)	71.2(1,809)
without roof rack	in (mm)	70.0(1,778)
Front Track	in (mm)	67.3(1,710)
Rear Track	in (mm)	67.3(1,710)
Wheelbase	in (mm)	124.0(3,150)
Gross vehicle weight rating Gross axle weight rating	lb (kg)	See the "F.M.V.S.S./C.M. V.S.S. certification label" on the center pillar be-
Front	lb (kg)	tween the driver's side
Rear	lb (kg)	front and side doors.

## WHEN TRAVELING OR REGISTERING YOUR VEHICLE IN ANOTHER COUNTRY

When planning to drive your NISSAN vehicle in another country, you should first find out if the fuel available is suitable for your vehicle's engine.

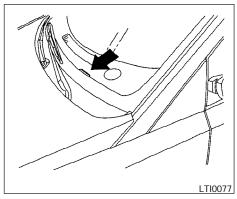
Using fuel with an octane rating that is too low may cause engine damage. All gasoline vehicles must be operated with unleaded gasoline. Therefore, avoid taking your vehicle to areas where appropriate fuel is not available.

When transferring the registration of your vehicle to another country, state, province or district, it may be necessary to modify the vehicle to meet local laws and regulations.

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

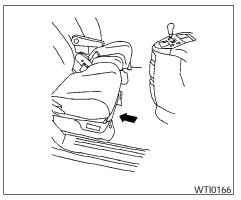
When any vehicle is to be taken into another country, state, province or district and registered, its modifications, transportation, and registration are the responsibility of the user. NISSAN is not responsible for any inconvenience that may result.

#### **VEHICLE IDENTIFICATION**



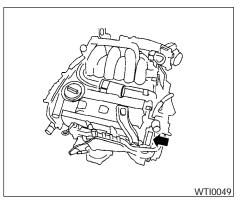
VEHICLE IDENTIFICATION NUMBER (VIN) PLATE

The vehicle identification number (VIN) plate is attached as shown. This number is the identification for your vehicle and is used in the vehicle registration.



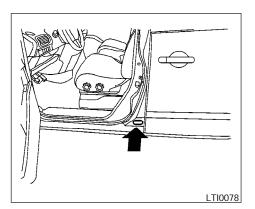
VEHICLE IDENTIFICATION NUMBER (chassis number)

The vehicle identification number is located as shown.



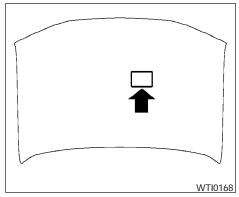
**ENGINE SERIAL NUMBER** 

The number is stamped on the engine as shown.



F.M.V.S.S./C.M.V.S.S. **CERTIFICATION LABEL** 

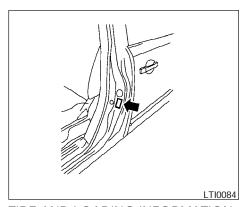
The Federal/Canadian Motor Vehicle Safety Standard (F.M.V.S.S./C.M.V.S.S.) certification label is affixed as shown. This label contains valuable vehicle information, such as: Gross Vehicle Weight Ratings (GVWR), Gross Axle Weight Rating (GAWR), month and year of manufacture, Vehicle Identification Number (VIN), etc. Review it carefully.



**EMISSION CONTROL INFORMATION LABEL** 

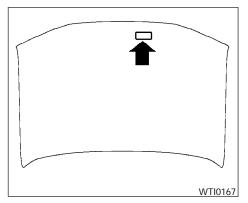
The emission control information label is attached to the underside of the hood as shown.

## **INSTALLING FRONT LICENSE PLATE**



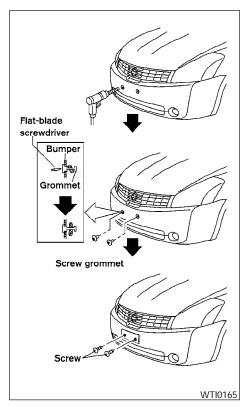
TIRE AND LOADING INFORMATION LABEL

The cold tire pressure is shown on the Tire and Loading Information label. The label is located as shown.



AIR CONDITIONER SPECIFICATION LABEL

The air conditioner specification label is affixed to the underside of the hood as shown.



#### VEHICLE LOADING INFORMATION

Use the following steps to mount the front license plate:

- (1) Make holes on the plastic finisher at the location mark (small dimple) using a 0.31 in (8 mm) drill. Apply light pressure to the drill. Install the license plate holder using the two screws provided with the holder.
- (2) Mount the license plate using two M6-14mm bolts.

License plate bolt tightening torque: 3.8 - 4.7 ft-lb (5.10 - 6.37 N·m)

## **AWARNING**

- It is extremely dangerous to ride in a cargo area inside a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

#### **TFRMS**

It is important to familiarize yourself with the following terms before loading your vehicle:

 Curb Weight (actual weight of your vehicle) - vehicle weight including: standard and optional equipment, fluids, emergency tools, and spare tire assembly. This weight does not include passengers and cargo.

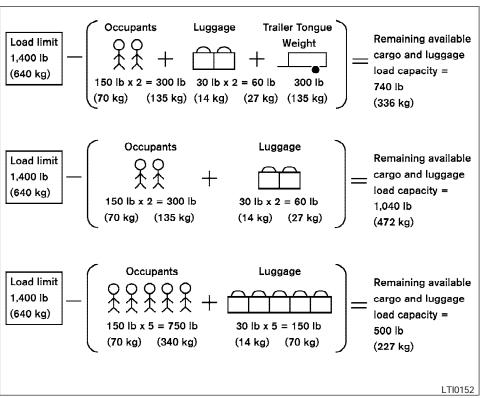
- GVW (Gross Vehicle Weight) curb weight plus the combined weight of passengers and cargo.
- GVWR (Gross Vehicle Weight Rating) - maximum total combined weight of the unloaded vehicle, passengers, luggage, hitch, trailer tongue load and any other optional equipment. This information is located on the F.M.V.S.S./C.M.V.S.S. certification label.
- GAWR (Gross Axle Weight Rating) maximum weight (load) limit specified for the front or rear axle. This information is located the Ωn F.M.V.S.S./C.M.V.S.S. certification label
- GCWR (Gross Combined Weight rating) - The maximum total weight rating of the vehicle, passengers, cargo, and trailer.

- Vehicle Capacity Weight, Load limit, Total load capacity - maximum total weight limit specified of the load (passengers and cargo) for the vehicle. This is the maximum combined weight of occupants and cargo that can be loaded into the vehicle. If the vehicle is used to tow a trailer, the trailer tongue weight must be included as part of the cargo load. This information is located on the Tire and Loading Information label (if so equipped).
- Cargo capacity permissible weight of cargo, the subtracted weight of occupants from the load limit.

#### VEHICLE LOAD CAPACITY

Do not exceed the load limit of your vehicle shown as "The combined weight of occupants and cargo" on the Tire and Loading Information label. Do not exceed the number of occupants shown as "Seating Capacity" on the Tire and Loading Information label.

To get "the combined weight of occupants and cargo", add the weight of all occupants, then add the total luggage weight. Examples are shown in the following illustration.



Steps for determining correct load limit

- Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs" on your vehicle's placard.
- 2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
- 4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the XXX amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400-750 (5 X 150) = 650 lbs) or (640-340 (5 X 70) = 300 kg.)

- 5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
- 6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

Before driving a loaded vehicle, confirm that you do not exceed the Gross Vehicle Weight Rating (GVWR) or the Gross Axle Weight Rating (GAWR) for your vehicle. See "Measurement of Weights" later in this section.

Also check tires for proper inflation pressures. See the Tire and Loading Information label.

#### LOADING TIPS

- The GVW must not exceed GVWR or GAWR as specified on the F.M.V.S.S./C.M.V.S.S. certification label.
- Do not load the front and rear axle to the GAWR. Doing so will exceed the GVWR.

## **AWARNING**

- Properly secure all cargo with ropes or straps to help prevent it from sliding or shifting. Do not place cargo higher than the seatbacks. In a sudden stop or collision, unsecured cargo could cause personal injury.
- Do not load your vehicle any heavier than the GVWR or the maximum front and rear GAWRs. If you do, parts of your vehicle can break, tire damage could occur, or it can change the way your vehicle handles. This could result in loss of control and cause personal injury.

Overloading not only can shorten the life of your vehicle and the tire, but can also cause unsafe vehicle handling and longer braking distances. This may cause a premature tire failure which could result in a serious accident and personal injury. Failures caused by overloading are not bv vehicle's covered the warranty.

### MEASUREMENT OF WEIGHTS

Secure loose items to prevent weight shifts that could affect the balance of your vehicle. When the vehicle is loaded, drive to a scale and weigh the front and the rear wheels separately to determine axle loads. Individual axle loads should not exceed either of the gross axle weight ratings (GAWR). The total of the axle loads should not exceed the gross vehicle weight rating (GVWR). These ratings are given on the vehicle certification label. If weight ratings are exceeded, move or remove items to bring all weights below the ratings.

### **TOWING A TRAILER**

## **A** WARNING

Overloading or improper loading of a trailer and its cargo can adversely affect vehicle handling, braking and performance and may lead to accidents.

## **A** CAUTION

- Do not tow a trailer or haul a heavy load for the first 500 miles (800 km). Your engine, axle or other parts could be damaged.
- For the first 500 miles (800 km) that you tow a trailer, do not drive over 50 mph (80 km/h) and do not make starts at full throttle. This helps the engine and other parts of your vehicle wear in at the heavier loads.

Your new vehicle was designed to be used primarily to carry passengers and cargo. Remember that towing a trailer places additional loads on your vehicle's engine, drive train, steering, braking and other systems.

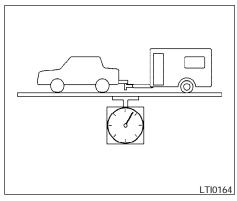
A NISSAN Towing Guide (U.S. only) is available on the website at www.nissanusa.com. This guide includes information on trailer towing capability and the special equipment required for proper towing.

# MAXIMUM LOAD LIMITS Maximum trailer loads

Never allow the total trailer load to exceed the value specified in the "Towing Load/Specification" chart found later in this section. The total trailer load equals trailer weight plus its cargo weight.

 When towing a trailer load of 1,000 lbs. (454 kg) or more, trailers with a brake system must be used.

The maximum Gross Combined Weight Rating (GCWR) should not exceed the value specified in the following "Towing Load/Specification" chart.



The GCWR equals the combined weight of the towing vehicle (including passengers and cargo) plus the total trailer load. Towing loads greater than these or using improper towing equipment could adversely affect vehicle handling, braking and performance.

The ability of your vehicle to tow a trailer is not only related to the maximum trailer loads, but also the places you plan to tow. Tow weights appropriate for level highway driving may have to be reduced for low traction situations (for example, on slippery boat ramps).

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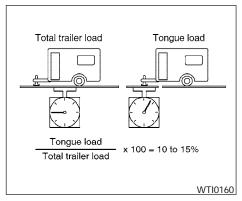
Temperature conditions can also affect towing. For example, towing a heavy trailer in high outside temperatures on graded roads can affect engine performance and cause overheating. The engine protection mode, which helps reduce the chance of engine damage, could activate and automatically decrease engine power. Vehicle speed may decrease under high load. Plan your trip carefully to account for trailer and vehicle load, weather and road conditions.

## **AWARNING**

Overheating can result in reduced engine power and vehicle speed. The reduced speed may be lower than other traffic, which could increase the chance of a collision. Be especially careful when driving. If the vehicle cannot maintain a safe driving speed, pull to the side of the road in a safe area. Allow the engine to cool and return to normal operation. See "If your vehicle overheats" in the "In case of emergency" section of this manual.

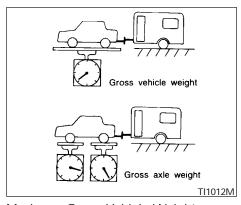
## **A** CAUTION

Vehicle damage resulting from improper towing procedures is not covered by NISSAN warranties.



# Tongue load

Keep the tongue load between 10 - 15 percent of the total trailer load or use the trailer tongue load specified by the trailer manufacturer. The tongue load must be within the maximum tongue load limits shown in the following "Towing Load/Specification" chart. If the tongue load becomes excessive, rearrange cargo to allow for proper tongue load.



Maximum Gross Vehicle Weight (GVW)/Maximum Gross Axle Weight (GAW)

The GVW of the towing vehicle must not exceed the Gross Vehicle Weight Rating (GVWR) shown on the E.M.V.S.S./C.M.V.S.S. certification label. The GVW equals the combined weight of the unloaded vehicle, passengers, luggage, hitch, trailer tongue load and any other optional equipment. In addition, front or rear GAW must not exceed the Gross Axle Weight Rating (GAWR) shown on the F.M.V.S.S./C.M.V.S.S. certification label.

Towing capacities are calculated assuming a base vehicle with driver and any options required to achieve the rating. Additional passengers, cargo and/or optional equipment, such as the trailer hitch, will add weight to the vehicle and reduce your vehicle's maximum towing capacity and trailer tongue load.

The vehicle and trailer need to be weighed to confirm the vehicle is within the GVWR, Front GAWR, Rear GAWR, Gross Combined Weight Rating (GCWR) and Towing capacity.

All vehicle and trailer weights can be measured using platform type scales commonly found at truck stops, highway weigh stations, building supply centers or salvage yards.

To determine the available payload capacity for tongue load, use the following procedure.

- 1. Locate the GVWR on the F.M.V.S.S./C.M.V.S.S. certification label.
- Weigh your vehicle on the scale with all of the passengers and cargo that are normally in the vehicle when towing a trailer.
- Subtract the actual vehicle weight from the GVWR. The remaining amount is the available maximum tongue load.

To determine the available towing capacity, use the following procedure.

- Find the GCWR for your vehicle on the "Towing Load/Specification" chart found later in this section.
- Subtract the actual vehicle weight from the GCWR. The remaining amount is the available maximum towing capacity.

To determine the Gross Trailer Weight, weigh your trailer on a scale with all equipment and cargo, that are normally in the trailer when it is towed. Make sure the Gross Trailer Weight is not more than the Gross Trailer Weight Rating shown on the trailer and is not more than the calculated available maximum towing capacity.

Also weigh the front and rear axles on the scale to make sure the Front Gross Axle Weight and Rear Gross Axle Weight are not more than Front Gross Axle Weight and Rear Gross Axle Weight on the F.M.V.S.S./C.M.V.S.S. certification label. The cargo in the trailer and vehicle may need to be moved or removed to meet the specified ratings.

#### Example:

 Gross Vehicle Weight (GVW) as weighed on a scale - including passengers, cargo and hitch - 5,517 lb. (2502 kg).

- Gross Vehicle Weight Rating (GVWR) from F.M.V.S.S./C.M.V.S.S. certification label -5,820 lb. (2640 kg).
- Gross Combined Weight Rating (GCWR) from "Towing Load/Specification" chart -8,500 lb. (3856 kg).
- Maximum Towing Load from "Towing Load/Specification" chart - 3,500 lb. (1587 kg).

5,820 lb. (2640 kg)	GVWR
- 5,517 lb. (2502 kg)	GVW
= 303 lb. (138 kg)	Available for tongue weight
8,500 lb. (3856 kg)	GCWR
- 5,517 lb. (2502 kg)	GVW
= 2,983 lb. (1354 kg)	Capacity available for towing
303 lb. (138 kg)	Available tongue weight
/ 2,983 lb. (1354 kg)	Available capacity
=	10 % tongue weight

The available towing capacity may be less than the maximum towing capacity due to the passenger and cargo load in the vehicle.

Remember to keep trailer tongue weight between 10 - 15% of the trailer weight or within the trailer tongue load specification recommended by the trailer manufacturer. If the tongue load becomes excessive, rearrange the cargo to obtain the proper tongue load. Do not exceed the maximum tongue weight specification shown in the "Towing load/specification" chart even if the calculated available tongue weight is greater than 15%. If the calculated tongue weight is less than 10%, reduce the total trailer weight to match the available tongue weight.

Always verify that available capacities are within the required ratings.

## TOWING LOAD/SPECIFICATION

	UNIT: lb (kg)
Maximum Towing Load *1	3,500 (1,588)
Maximum Tongue Load	350 (158)
Maximum Gross Combined Weight Rating	8,500 (3,856)

<sup>\*1:</sup> The towing capacity values are calculated assuming a base vehicle with driver and any options required to achieve the rating. Additional

passengers, cargo and/or optional equipment will add weight to the vehicle and reduce your vehicle's maximum towing capacity.

## TOWING SAFFTY

#### Trailer hitch

Choose a proper hitch for your vehicle and trailer. A genuine NISSAN trailer hitch is available from your NISSAN dealer (Canada only). Make sure the trailer hitch is securely attached to the vehicle, to help avoid personal injury or property damage due to sway caused by crosswinds, rough road surfaces or passing trucks.

## **AWARNING**

Trailer hitch components have specific weight ratings. Your vehicle may be capable of towing a trailer heavier than the weight rating of the hitch components. Never exceed the weight rating of the hitch components. Doing so can cause serious personal injury or property damage.

#### Hitch ball

Choose a hitch ball of the proper size and weight rating for your trailer:

- The required hitch ball size is stamped on most trailer couplers. Most hitch balls also have the size printed on the top of the ball.
- Choose the proper class hitch ball based on the trailer weight.
- The diameter of the threaded shank of the hitch ball must be matched to the ball mount hole diameter. The hitch ball shank should be no more than 1/16" smaller than the hole in the ball mount.
- The threaded shank of the hitch ball must be long enough to be properly secured to the ball mount. There should be at least 2 threads showing beyond the lock washer and nut.

## Sway control device

Sudden maneuvers, wind gusts, and buffeting caused by other vehicles can affect trailer handling. Sway control devices may be used to help control these affects. If you choose to use one, contact a reputable trailer hitch supplier to make sure the sway control device will work with the vehicle, hitch, trailer and the trailer's brake system. Follow the instructions provided by the manufacturer for installing and using the sway control device.

#### Class I hitch

Class I trailer hitch equipment (receiver, ball mount and hitch ball) can be used to tow trailers of a maximum weight of 2,000 lb (909 kg).

#### Class II hitch

Class II trailer hitch equipment (receiver, ball mount and hitch ball) can be used to tow trailers of a maximum weight of 3,500 lb (1,510 kg).

## **A** CAUTION

- Do not use axle-mounted hitches.
- The hitch should not be attached to or affect the operation of the impactabsorbing bumper.
- Do not modify the vehicle exhaust system, brake system, etc. to install a trailer hitch.
- To reduce the possibility of additional damage if your vehicle is struck from the rear, where practical, remove the receiver when not in use.
- After the hitch is removed, seal the bolt holes to prevent exhaust fumes, water or dust from entering the passenger compartment.

 Regularly check that all trailer hitch mounting bolts are securely mounted.

# Tire pressures

- When towing a trailer, inflate the vehicle tires to the recommended cold tire pressure indicated on the Tire and Loading Information label.
- Trailer tire condition, size, load rating and proper inflation pressure should be in accordance with the trailer and tire manufacturer's specifications.

## Safety chains

Always use suitable safety chains between your vehicle and the trailer. The safety chains should be crossed and should be attached to the hitch, not to the vehicle bumper or axle. Be sure to leave enough slack in the chains to permit turning corners.

# Trailer lights

## **A**CAUTION

When splicing into the vehicle electrical system, a commercially available powertype module/converter must be used to provide power for all trailer lighting. This unit uses the vehicle battery as a direct power source for all trailer lights while using the vehicle tail light, stoplight and turn signal circuits as a signal source. The module/converter must draw no more that 15 milliamps from the stop and tail lamp circuits. Using a module/converter that exceeds these power requirements may damage the vehicle's electrical system. See a reputable trailer dealer to obtain the proper equipment and to have it installed.

Trailer lights should comply with federal and/or local regulations. For assistance in hooking up trailer lights, contact a NISSAN dealer or reputable trailer dealer. A genuine NISSAN trailer tow harness is available from your NISSAN dealer.

### Trailer brakes

When towing a trailer load of 3,500 lbs. (1587 kg) or more, trailers with a brake system MUST be used. However, most states require a separate braking system on trailers with a loaded weight above a specific amount. Make sure the trailer meets the local regulations and the regulations where you plan to tow.

Several types of braking systems are available.

Surge Brakes - The surge brake actuator is mounted on the trailer tongue with a hydraulic line running to each trailer wheel. Surge brakes are activated by the trailer pushing against the hitch ball when the tow vehicle is braking. Hydraulic surge brakes are common on rental trailers and some boat trailers. In this type of system, there is no hydraulic or electric connection for brake operation between the tow vehicle and the trailer.

Electric Trailer Brakes - Electric braking systems are activated by an electronic signal sent from a trailer brake controller (special brakesensing module). If electric trailer brakes are used, see "Electric trailer brake controller" in this section.

Have a professional supplier of towing equipment make sure the trailer brakes are properly installed and demonstrate proper brake function testing.

# **WARNING**

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

# Pre-towing tips

- Be certain your vehicle maintains a level position when a loaded and/or unloaded trailer is hitched. Do not drive the vehicle if it has an abnormal nose-up or nose-down condition; check for improper tongue load, overload, worn suspension or other possible causes of either condition.
- Always secure items in the trailer to prevent load shift while driving.
- Keep the cargo load as low as possible in the trailer to keep the trailer center of gravity low.
- Load the trailer so approximately 60% of the trailer load is in the front half and 40% is in the back half. Also make sure the load is balanced side to side.
- Check your hitch, trailer tire pressure, vehicle tire pressure, trailer light operation, and trailer wheel lug nuts every time you attach a trailer to the vehicle.

- Be certain your rearview mirrors conform to all federal, state or local regulations. If not, install any mirrors required for towing before driving the vehicle.
- Determine the overall height of the vehicle and trailer so the required clearance is known.

# Trailer towing tips

In order to gain skill and an understanding of the vehicle's behavior, you should practice turning, stopping and backing up in an area which is free from traffic. Steering stability and braking performance will be somewhat different than under normal driving conditions.

- Always secure items in the trailer to prevent load shift while driving.
- Lock the trailer hitch coupler with a pin or lock to prevent the coupler from inadvertently becoming unlatched.
- Avoid abrupt starts, acceleration or stops.
- Avoid sharp turns or lane changes.
- Always drive your vehicle at a moderate speed.

 When backing up, hold the bottom of the steering wheel with one hand. Move your hand in the direction in which you want the trailer to go. Make small corrections and back up slowly. If possible, have someone guide you when you are backing up.

Always block the wheels on both vehicle and trailer when parking. Parking on a slope is not recommended; however, if you must do so:

# **A**CAUTION

If you move the shift selector lever to the P (Park) position before blocking the wheels and applying the parking brake, transmission damage could occur.

- 1. Apply and hold the brake pedal.
- 2. Have someone place blocks on the downhill side of the vehicle and trailer wheels.
- After the wheel blocks are in place, slowly release the brake pedal until the blocks absorb the vehicle load.
- 4. Apply the parking brake.
- 5. Shift the transmission into P (Park).
- 6. Turn off the engine.

To drive away:

- 1. Start the vehicle.
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- 2. Apply and hold the brake pedal.
- 3. Shift the transmission into gear.
- 4. Release the parking brake.
- 5. Drive slowly until the vehicle and trailer are clear from the blocks.
- 6. Apply and hold the brake pedal.
- 7. Have someone retrieve and store the blocks.
- While going downhill, the weight of the trailer pushing on the tow vehicle may deteriorate overall handling characteristics. Therefore, to maintain adequate control, reduce your speed and shift to a lower gear. Avoid long or repeated use of the brakes when descending a hill, as this reduces their effectiveness and could cause overheating. Shifting to a lower gear instead provides "engine braking" and reduces the need to brake as frequently.
- If the engine coolant temperature rises to a high temperature, refer to "If your vehicle overheats" in the "In case of emergency" section of this owner's manual.
- Trailer towing requires more fuel than normal circumstances.
- Avoid towing a trailer for your vehicle's first 500 miles (805 km).

- For the first 500 miles (805 km) that you do tow, do not drive over 50 MPH (80 km/h).
- Have your vehicle serviced more often than at intervals specified in the recommended Maintenance Schedule in the "NISSAN Service and Maintenance Guide".
- When making a turn, your trailer wheels will be closer to the inside of the turn than your vehicle wheels. To compensate for this, make a larger than normal turning radius during the turn.
- Crosswinds and rough roads will adversely affect vehicle/trailer handling, possibly causing vehicle sway. When being passed by larger vehicles, be prepared for possible changes in crosswinds that could affect vehicle handling.

Do the following if the trailer begins to sway:

- Take your foot off the accelerator pedal to allow the vehicle to coast and steer as straight ahead as the road conditions allow. This combination will help stabilize the vehicle
  - Do not correct trailer sway by steering or applying the brakes.

- 2. When the trailer sway stops, gently apply the brakes and pull to the side of the road in a safe area.
- 3. Try to rearrange the trailer load so it is balanced as described earlier in this section.
- Be careful when passing other vehicles. Passing while towing a trailer requires considerably more distance than normal passing. Remember, the length of the trailer must also pass the other vehicle before you can safely change lanes.
- Use the Tow Mode or downshift the transmission to a lower gear for engine braking when driving down steep or long hills. This will help slow the vehicle without applying the brakes.
- Avoid holding the brake pedal down too long or too frequently. This could cause the brakes to overheat, resulting in reduced braking efficiency.
- Increase your following distance to allow for greater stopping distances while towing a trailer. Anticipate stops and brake gradually.
- NISSAN recommends that the cruise control not be used while towing a trailer.

- Some states or provinces have specific regulations and speed limits for vehicles that are towing trailers. Obey the local speed limits.
- Check your hitch, trailer wiring harness connections, and trailer wheel lug nuts after 50 miles (80 km) of travel and at every break.
- When launching a boat, don't allow the water level to go over the exhaust tail pipe or rear bumper.
- Make sure you disconnect the trailer lights before backing the trailer into the water or the trailer lights may burn out.

When towing a trailer, final drive gear oil should be replaced and transmission oil/fluid should be changed more frequently. For additional information, see the "Maintenance and do-it-yourself" section earlier in this manual.

# **FLAT TOWING**

Towing your vehicle with all four wheels on the ground is sometimes called flat towing. This method is sometimes used when towing a vehicle behind a recreational vehicle, such as a motor home.

# **A** CAUTION

- Failure to follow these guidelines can result in severe transmission damage.
- Whenever flat towing your vehicle, always tow forward, never backward.
- DO NOT tow any automatic transmission vehicle with all four wheels on the ground (flat towing). Doing so WILL DAMAGE internal transmission parts due to lack of transmission lubrication.
- For emergency towing procedures refer to "Towing recommended by NISSAN" in the "In case of emergency" section of this manual.

## Automatic Transmission

To tow a vehicle equipped with an automatic transmission, an appropriate vehicle dolly MUST be placed under the towed vehicle's drive wheels. Always follow the dolly manufacturer's recommendations when using their product.

#### UNIFORM TIRE QUALITY GRADING

DOT (Department of Transportation) Quality Grades: All passenger car tires must conform to federal safety requirements in addition to these grades.

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example:

# Treadwear 200 Traction AA Temperature A

#### Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one-half (1 1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

#### Traction AA, A, B and C

The traction grades, from highest to lowest, are AA, A, B, and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

## **A** WARNING

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

## Temperature A, B and C

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat, and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

# **AWARNING**

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure.

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# EMISSION CONTROL SYSTEM WARRANTY

Your NISSAN vehicle is covered by the following emission warranties:

#### For USA

- 1. Emission Defects Warranty
- 2. Emissions Performance Warranty

Details of this warranty may be found with other vehicle warranties in your Warranty Information Booklet which comes with your NISSAN vehicle. If you did not receive a Warranty Information Booklet, or it is lost, you may obtain a replacement by writing to:

 Nissan North America, Inc. Consumer Affairs Department P.O. Box 685003 Franklin, TN 37068-5003

#### For Canada

**Emission Control System Warranty** 

Details of these warranties may be found with other vehicle warranties in your Warranty Information Booklet which comes with your NISSAN vehicle. If you did not receive a Warranty Information Booklet, or it is lost, you may obtain a replacement by writing to:

 Nissan Canada Inc. 5290 Orbitor Drive Mississauga, Ontario, L4W 4Z5

# REPORTING SAFETY DEFECTS (US only)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying NISSAN.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or NISSAN.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to http://www.safercar.gov; or write to: Administrator, NHTSA, 400 Seventh Street, SW., Washington, D.C. 20590. You can also obtain other information vehicle safety about motor from http://www.safercar.gov.

You may notify NISSAN by contacting our Consumer Affairs Department, toll-free, at 1-800-NISSAN-1.

# READINESS FOR INSPECTION/ MAINTENANCE (I/M) TEST

Due to legal requirements in some states and Canadian Provinces, your vehicle may be reguired to be in what is called the "ready condition" for an Inspection/Maintenance (I/M) test of the emission control system.

The vehicle is set to the "ready condition" when it is driven through certain driving patterns. Usually, the ready condition can be obtained by ordinary usage of the vehicle.

If a powertrain system component is repaired or the battery is disconnected, the vehicle may be reset to a "not ready" condition. Before taking the check the vehicle's I/M test. inspection/maintenance test readiness condition. Turn the ignition switch ON without starting the engine. If the Malfunction Indicator Light (MIL) comes on steady for 20 seconds and then blinks for 10 seconds, the I/M test condition is "not ready". If the MIL does not blink after 20 seconds, the I/M test condition is "ready". If the MIL indicates the vehicle is in a "not ready" condition, drive the vehicle through the following pattern to set the vehicle to the ready condition. If you cannot or do not want to perform the driving pattern, a NISSAN dealer can conduct it for you.

# **WARNING**

9. Turn the engine off.

step 7 is completed.

10. Repeat steps 1 - 8 at least one more time.

If steps 1 through 7 are interrupted, repeat the

preceding step. Any safe driving mode is accept-

able between steps. Do not stop the engine until

Always drive the vehicle in a safe and prudent manner according to traffic conditions and obey all traffic laws.

- Start the engine when the engine coolant temperature gauge needle points to C. Allow the engine to idle until the gauge needle points between the C and H (normal operating temperature).
- Accelerate the vehicle to 55 MPH (88 km/h), then quickly release the accelerator pedal completely and keep it released for at least 10 seconds.
- Quickly depress the accelerator pedal for a moment, then drive the vehicle at a speed of 53 - 60 MPH (86 - 96 km/h) for at least 9 minutes.
- 4. Stop the vehicle.
- 5. Accelerate the vehicle to 35 MPH (55 km/h) and maintain the speed for 20 seconds.
- 6. Repeat steps 4 through 5 at least 10 times.
- Accelerate the vehicle to 55 MPH (88 km/h) and maintain the speed for at least 3 minutes
- 8. Stop the vehicle. Place the shift selector in the P (Park) or N (Neutral) position.
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# **EVENT DATA RECORDERS (EDR)**

This vehicle is equipped with an Event Data Recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.
- Sounds are not recorded.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur. NOTE: EDR data are recorded by your vehicle only if a nontrivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g. name, gender, age and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with

# OWNER'S MANUAL/SERVICE MANUAL ORDER INFORMATION

the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer and NISSAN dealer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR. EDR data will only be accessed with the consent of the vehicle owner or lessee or as otherwise required or permitted by law.

A genuine NISSAN Service Manual is the best source of service and repair information for your vehicle. Filled with wiring diagrams, illustrations and step-by-step diagnostic and adjustment procedures, this manual is the same one used by the factory-trained technicians working at NISSAN dealerships. Also available are genuine NISSAN Owner's Manuals, and genuine NISSAN Service and Owner's Manuals for older NISSAN models.

#### For USA

For current pricing and availability of genuine NISSAN Service Manuals for the 2000 model year and later contact:

1-800-450-9491 www.nissan-techinfo.com

For current pricing and availability of genuine NISSAN Service Manuals for the 1999 model year and prior, see a NISSAN dealer, or contact:

1-800-247-5321

For current pricing and availability of genuine NISSAN Owner's Manuals for this model year and prior, see a NISSAN dealer, or contact:

1-800-247-5321

#### For Canada

To purchase a copy of a genuine NISSAN Service Manual or Owner's Manual please contact

your nearest NISSAN dealer. For the phone number and location of a NISSAN dealer in your area call the NISSAN Information Center at 1-800-387-0122 and a bilingual NISSAN representative will assist you.

Also available are genuine NISSAN Service and Owner's Manuals for older NISSAN models.

## IN THE EVENT OF A COLLISION

Unfortunately, accidents do occur. In this unlikely event, there is some important information you should know.

Many insurance companies routinely authorize the use of non-genuine collision parts in order to cut costs, among other reasons.

# Insist on the use of genuine NISSAN collision parts!

If you want your vehicle to be restored using parts made to NISSAN's original exacting specifications - if you want to help it to last and hold its resale value, the solution is simple. Tell your insurance agent and your repair shop to only use Genuine NISSAN Collision Parts. NISSAN does not warrant non-NISSAN parts, nor does NISSAN's warranty apply to damage caused by a non-genuine part.

Using Genuine NISSAN Parts can help protect your personal safety, preserve your warranty protection and maintain the resale value of your vehicle. And if your vehicle was leased, using Genuine NISSAN Parts may prevent or limit unnecessary excess wear and tear expenses at the end of your lease.

NISSAN designs its hoods with crumple zones to minimize the risk that the hood will penetrate the windshield of your vehicle in an accident. Nongenuine (imitation) parts may not provide such built-in safeguards. Also, non-genuine parts often show premature wear, rust and corrosion.

# Why should you take a chance?

In over 40 states, the law says you must be advised if non-genuine parts are used to repair your vehicle. And some states have enacted laws that restrict insurance companies from authorizing the use of non-genuine collision parts during the new vehicle warranty. These laws help protect you, so you can take action to protect yourself.

# It's your right!

If you should need further information visit us at: www.nissanusa.com (for U.S. customers) or www.nissan.ca (for Canadian customers).

#### 9-28 Technical and consumer information

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#### GAS STATION INFORMATION

### RECOMMENDED FUEL:

Use unleaded regular gasoline with an octane rating of at least 87 AKI (Anti-Knock Index) number (Research octane number 91).

NISSAN recommends the use of premium unleaded gasoline with an octane rating of at least 91 AKI number (Research octane number 96). If premium unleaded gasoline is not available you may use regular unleaded gasoline with an octane rating of at least 87 AKI number (Research octane number 91), but you may notice a decrease in performance.

## **A** CAUTION

- Using a fuel other than that specified could adversely affect the emission control system, and may also affect the warranty coverage.
- Under no circumstances should a leaded gasoline be used, because this will damage the three-way catalyst.
- Do not use E-85 fuel in your vehicle. Your vehicle is not designed to run on E-85 fuel. Using E-85 fuel can damage the fuel system components and is not covered by the NISSAN new vehicle limited warranty.

For additional information, see "Capacities and recommended fuel/lubricants" in the "Technical and consumer information" section.

### RECOMMENDED ENGINE OIL:

- Engine oil with API Certification Mark
- Viscosity 5W-30

See "Engine oil and oil filter recommendation" in the "Technical and consumer information" section of this manual.

### **COLD TIRE PRESSURE:**

See Tire and Loading Information label.

The label is typically located on the driver side center pillar or on the driver's door. For additional information, see "Wheels and tires" in the "Maintenance and do-it-yourself" section.

# RECOMMENDED NEW VEHICLE BREAK-IN PROCEDURE:

During the first 1,200 miles (2,000 km) of vehicle use, follow the recommendations outlined in the "BREAK-IN SCHEDULE" information found in the "Starting and driving" section of this manual. 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.