



# 2013 ARMADA

OWNER'S MANUAL

For your safety, read carefully and keep in this vehicle.

## FOREWORD

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

This manual was prepared to help you understand the operation and maintenance of your vehicle so that you may enjoy many miles (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.

In addition to factory installed options, your vehicle may also be equipped with additional accessories installed by NISSAN or by your NISSAN dealer prior to delivery. It is important that you familiarize yourself with all disclosures,

warnings, cautions and instructions concerning proper use of such accessories prior to operating the vehicle and/or accessory. See a NISSAN dealer for details concerning the particular accessories with which your vehicle is equipped.

## READ FIRST—THEN DRIVE SAFELY

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 REMINDERS 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. Pre-teen 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.

For descriptions specified for four-wheel drive models, a **4x4** mark is placed at the beginning of the applicable sections/items.

**As with other vehicles with features for off-road use, failure to operate four-wheel drive models correctly may result in loss of control or an accident. Be sure to read “Driving safety precautions” in the “Starting and driving” section of this manual.**

#### **ON-PAVEMENT AND OFF-ROAD DRIVING**

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

**Be sure to read “On-pavement and off-road driving precautions”, and “Avoiding collision and rollover”, and “Driving safety precautions”, in the “Starting and driving” section of this manual.**

#### **MODIFICATION OF YOUR VEHICLE**

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

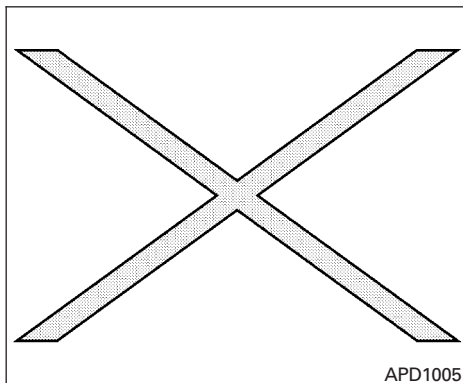
You will see various symbols in this manual. They are used in the following ways:

#### **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.**

#### **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/](http://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  
or via e-mail at:  
nnaconsumeraffairs@nissan-usa.com**

### **For Canadian customers**

**Nissan Canada Inc.  
5290 Orbitor Drive  
Mississauga, Ontario L4W 4Z5  
or via e-mail at:  
information.centre@nissancanada.com**

If you prefer, visit us at:

**www.nissanusa.com** (for U.S. customers) or  
**www.nissan.ca** (for Canadian customers)

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

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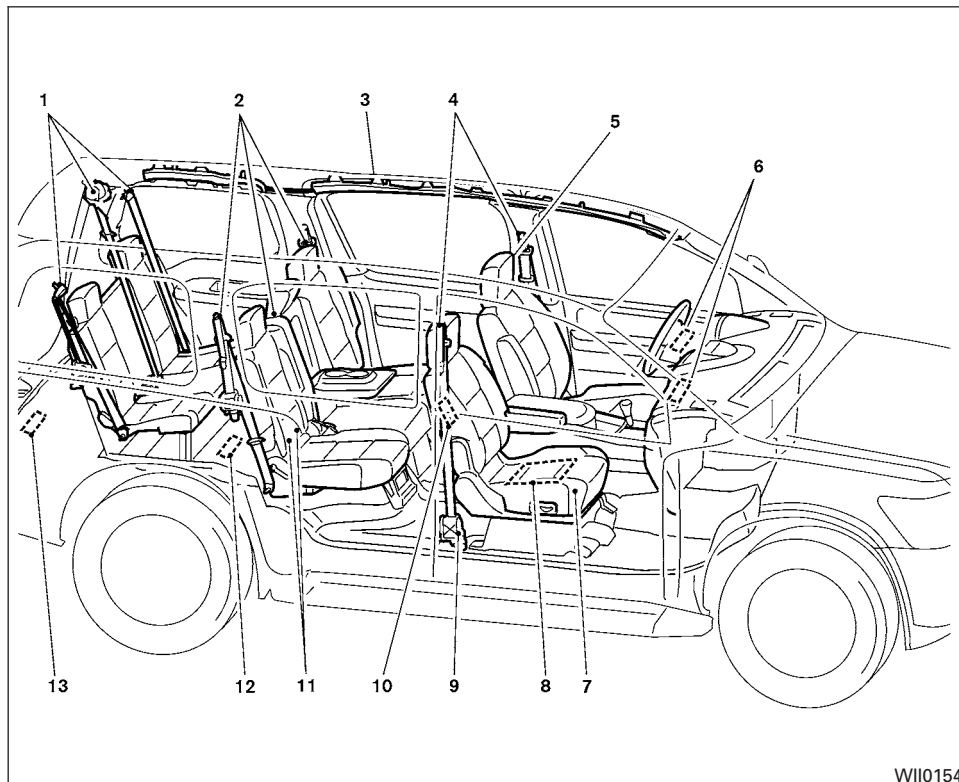


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## AIR BAGS, SEAT BELTS AND CHILD RESTRAINTS

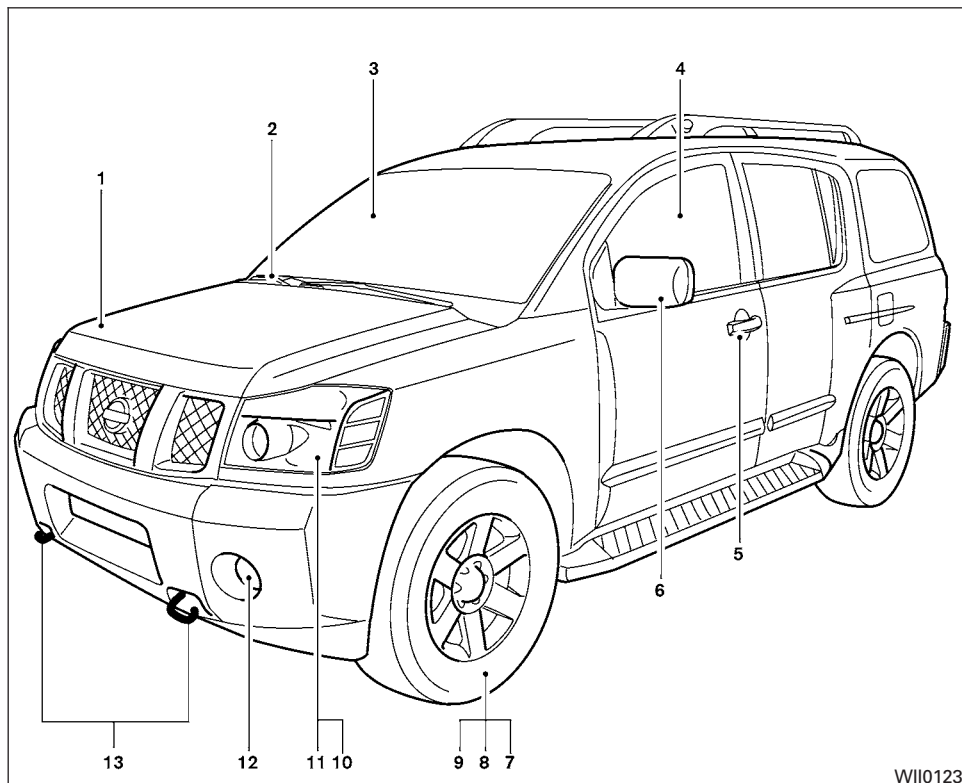


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**See the page number indicated in parentheses for operating details.**

WII0154

## EXTERIOR FRONT

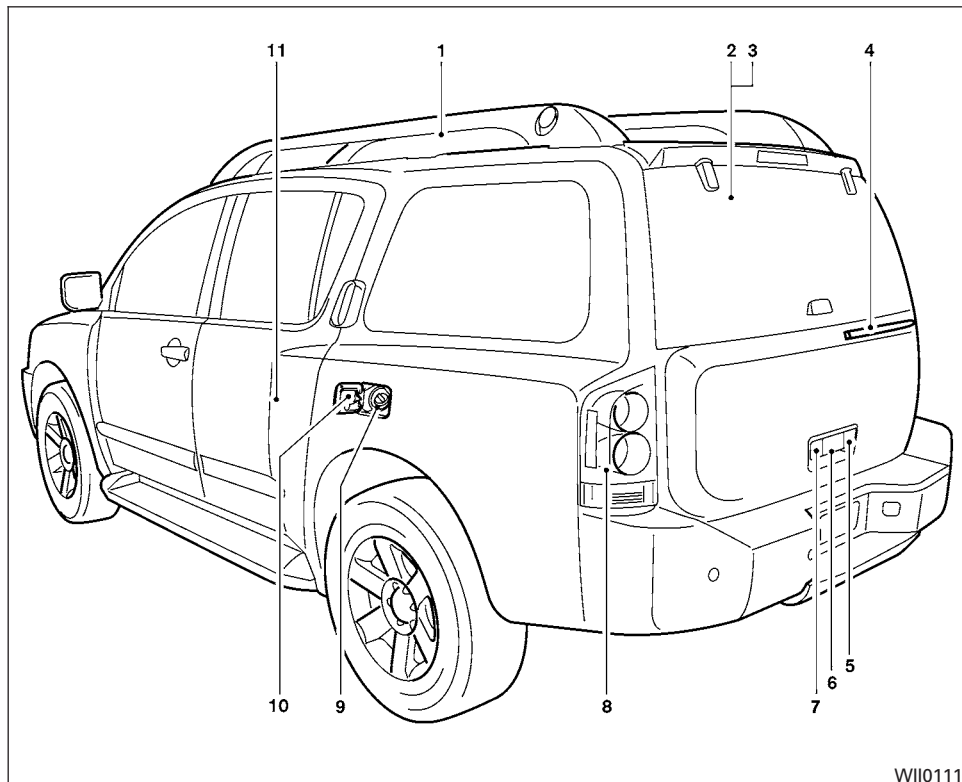


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**See the page number indicated in parentheses for operating details.**

WII0123

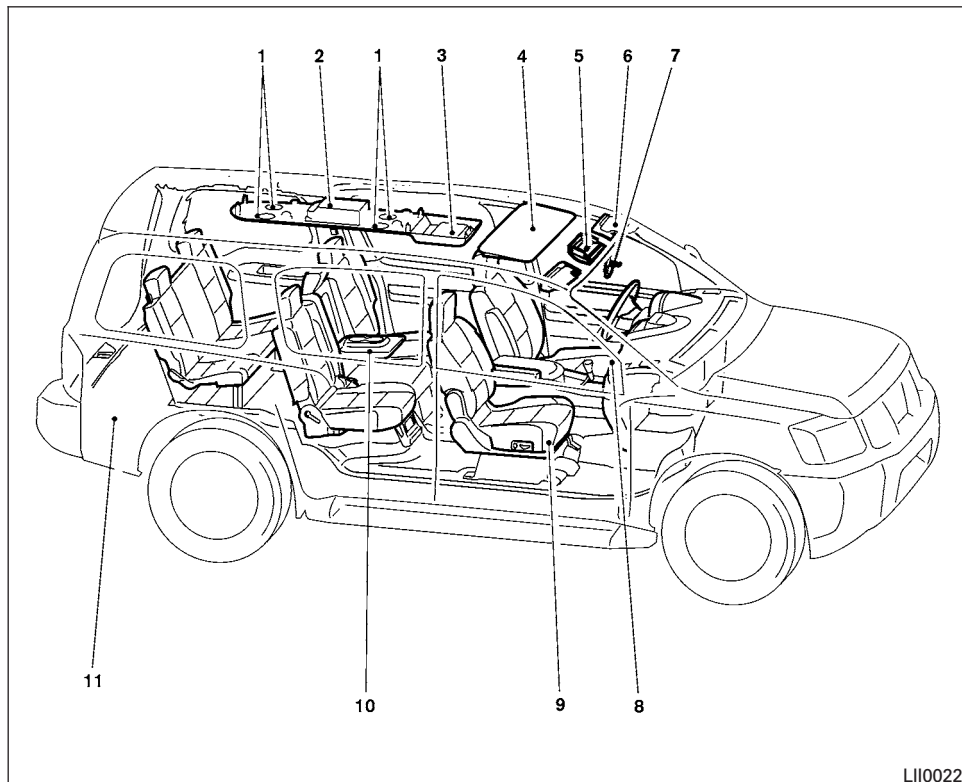
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W110111

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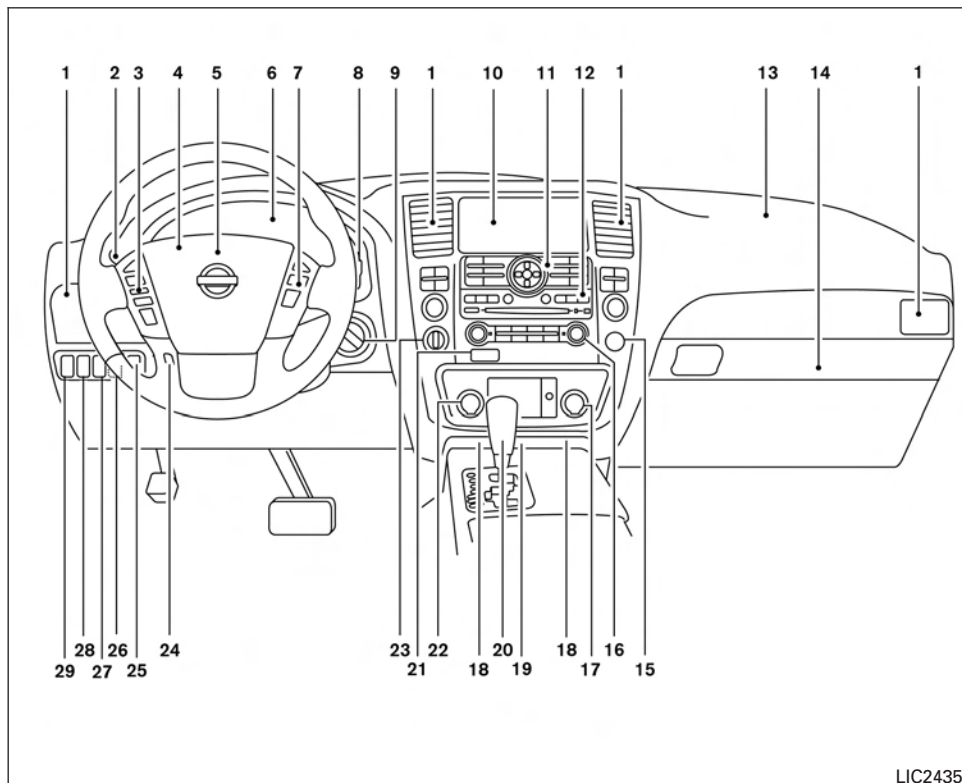


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LII0022

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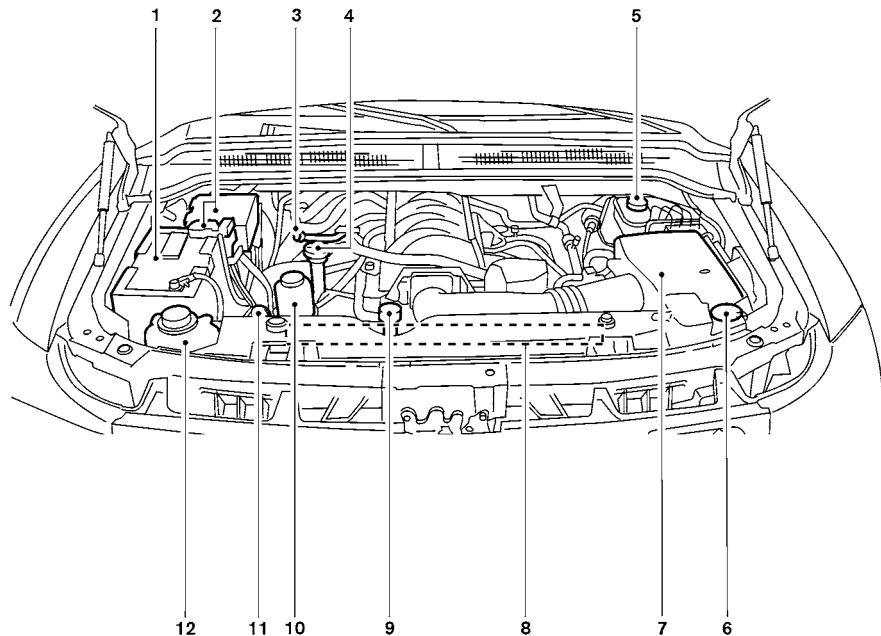
LIC2435

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\*: Refer to the separate Navigation System Owner's Manual (if so equipped).

**See the page number indicated in parentheses for operating details.**

## ENGINE COMPARTMENT CHECK LOCATIONS



















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**See the page number indicated in parentheses for operating details.**

WDI0630







## WARNING/INDICATOR LIGHTS



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Warning light	Name	Page
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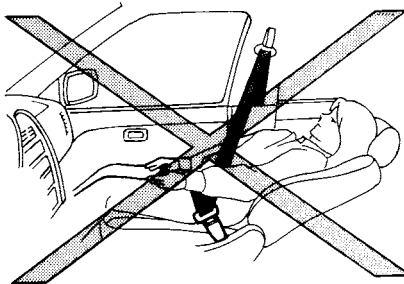
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# 1 Safety—Seats, seat belts and supplemental restraint system

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## SEATS



ARS1152

### WARNING

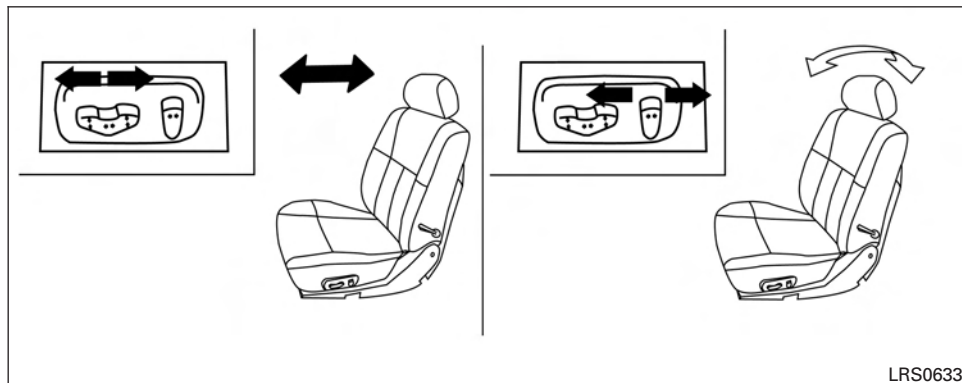
- Do not ride in a moving vehicle when the seatback is reclined. This can be dangerous. The shoulder belt will not be against your body. In an accident, you could be thrown into it and receive neck or other serious injuries. You could also slide under the lap belt and receive serious internal injuries.

- 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.

### CAUTION

When adjusting the seat positions, be sure not to contact any moving parts to avoid possible injuries and/or damage.



## FRONT POWER SEAT ADJUSTMENT

### 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” in “Pre-driving checks and adjustments” for automatic drive positioner operation.

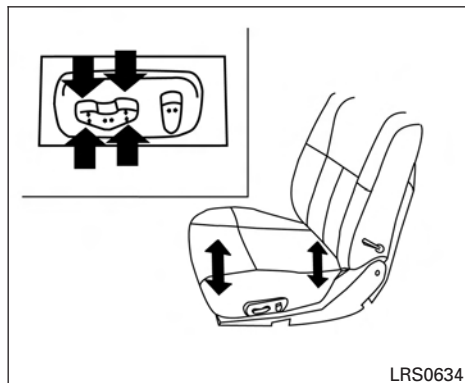
### Forward and backward

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

### Reclining

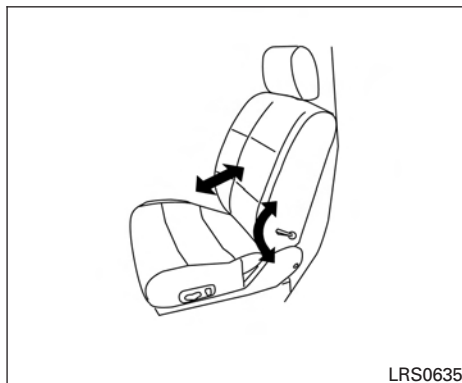
Move the recline switch backward until the desired angle is obtained. To bring the seatback forward again, move the switch forward and move your body forward. The seatback will move forward.

The reclining feature allows adjustment of the seatback for occupants of different sizes for added comfort and to help obtain proper seat 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 shift selector is in P (Park).



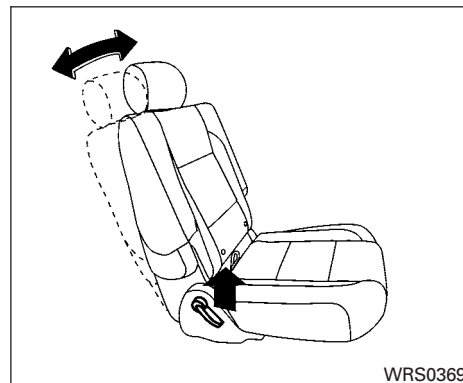
### Seat lifter (driver's seat)

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.

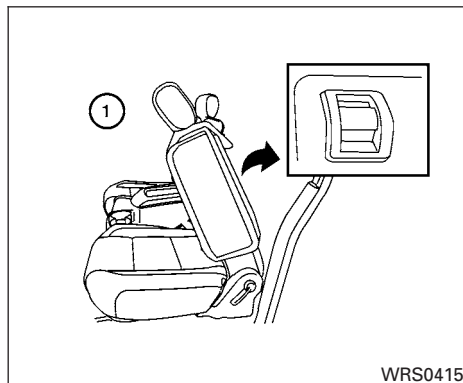


### 2ND ROW CAPTAIN'S CHAIR ADJUSTMENT (if so equipped)

#### Reclining

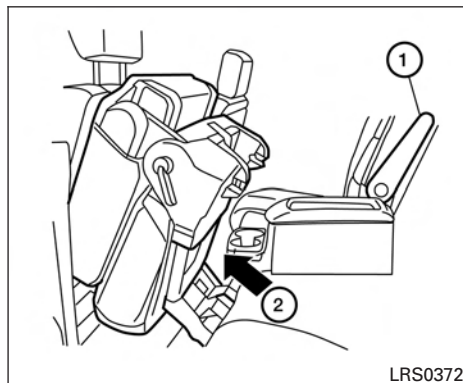
To recline the seatback, pull up on the lever and lean back.

The recline 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 shift selector is in P (Park).

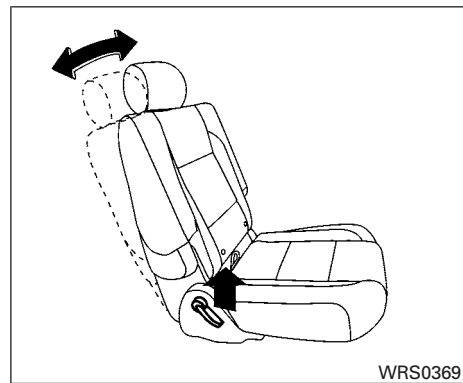


### Tip up for easy entry to the 3rd row

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 ①, raise the armrest so it is parallel to the seatback and in the stowed position, then lift up on the seatback latch located on the upper corner of the seatback on the 2nd row captain's chair and fold the seatback forward at an angle over the seat base. This will release the back of the seat so it may be tipped forward.



Then ② lift up on the lower corner of the seat base and tip the 2nd row captain's chair forward. To exit the 3rd row bench seat, lift up on the same seatback latch and fold the seatback forward onto the seat base. Then lift up on the seat base and tip it forward.



### Outboard seats

### 2ND ROW BENCH SEAT ADJUSTMENT (if so equipped)

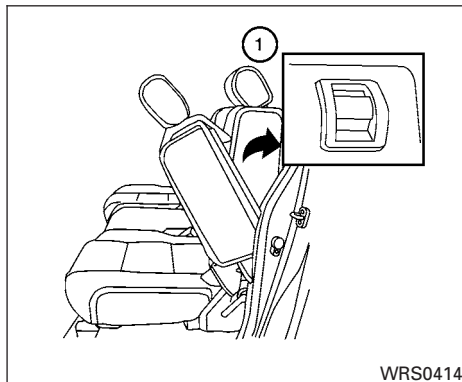
#### Reclining

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

The recline 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 shift selector is in P (Park).

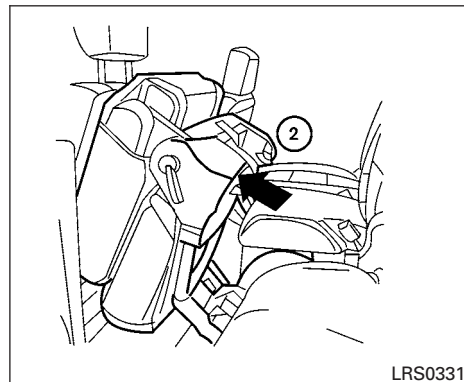
### **⚠ WARNING**

- After adjustment, gently rock in the seat to make sure it is securely locked.
- 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 and adjust the seat belt properly. See “Precautions on seat belt usage” later in this section.



#### **Tip up for easy entry to the 3rd row**

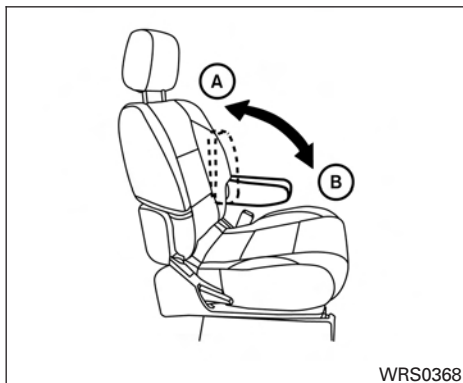
The outboard seating positions on the 2nd row bench seat can be tipped forward for easy entry or exit from the 3rd row bench seat. To enter the 3rd row ①, lift up on the seatback latch located on the upper corner of the seatback on the 2nd row bench seat and fold the seatback forward at an angle over the seat base. This will release the back of the seat so it may be tipped forward.



Then ② lift up on the lower corner of the seat base and tip the outboard seating position of the 2nd row bench seat forward. To exit the 3rd row bench seat, lift up on the same seatback latch and fold the seatback forward onto the seat base. Then lift up on the seat base and tip it forward.

### **⚠ WARNING**

**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.**



## ARMRESTS

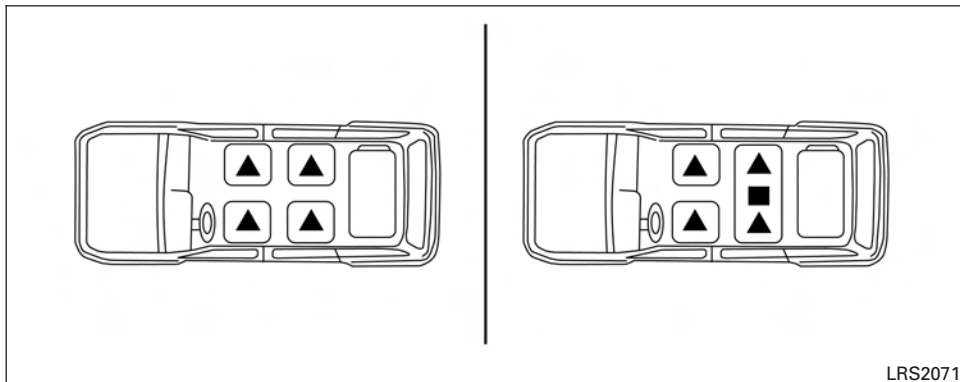
To use the armrests, pull them down to the resting position.

- (A) Stowed position
- (B) Resting position

## HEAD RESTRAINTS (1st row only)

### WARNING

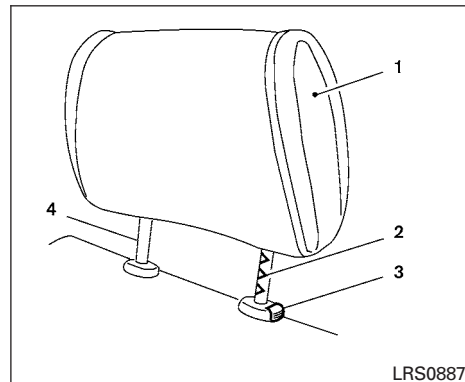
Head restraints supplement the other vehicle safety systems. They may provide additional protection against injury in certain rear end collisions. Adjust the head restraints properly, as specified in this section. Check the adjustment after someone else uses the seat. Do not attach anything to the head restraint stalks. Do not use the seat if the head restraint has been removed. If the head restraint was removed, reinstall and properly adjust the head restraint before an occupant uses the seating position. Failure to follow these instructions can reduce the effectiveness of the head restraints. This may increase the risk of serious injury or death in a collision.



The illustration shows the seating positions equipped with head restraints. The first row head restraints are adjustable.

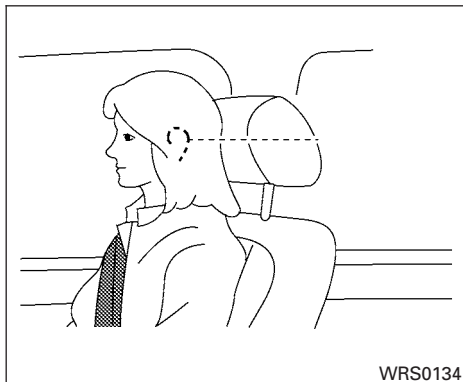
▲ Indicates the seating position is equipped with a head restraint.

■ Indicates the seating position is equipped with an adjustable headrest.



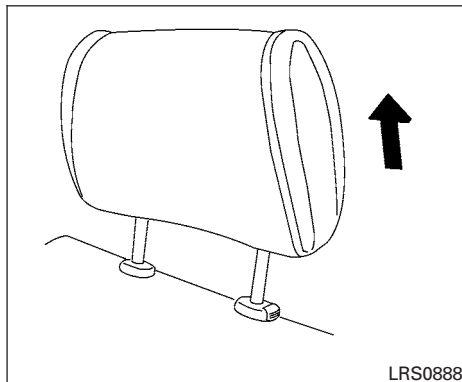
## Components

1. Head restraint
2. Adjustment notches
3. Lock knob
4. Stalks

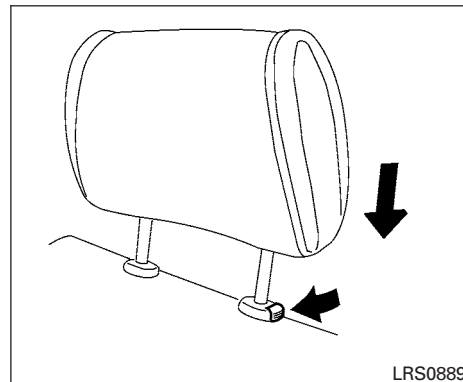


## Adjustment

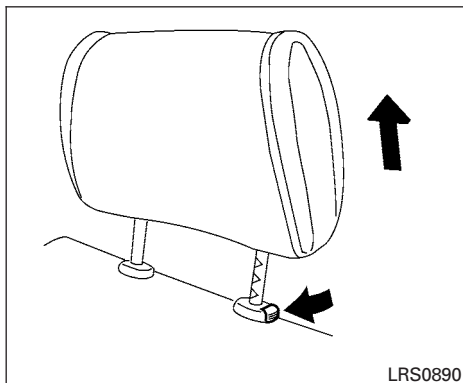
Adjust the head restraint so the center is level with the center of the seat occupant's ears.



To raise the head restraint, pull it up.



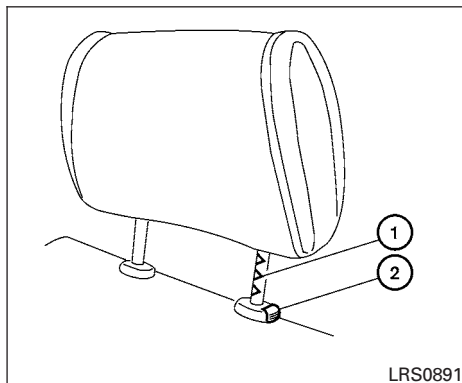
To lower, push and hold the lock knob and push the head restraint down.



### Removal

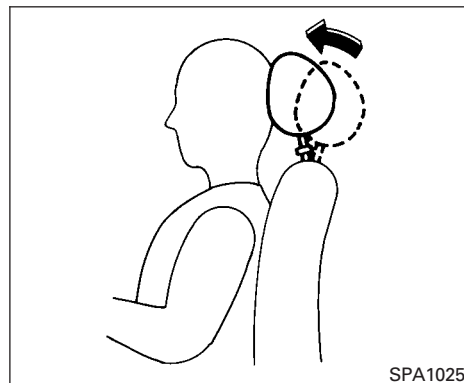
Use the following procedure to remove the adjustable head restraints.

1. Pull the head restraint up to the highest position.
2. Push and hold the lock knob.
3. Remove the head restraint from the seat.
4. Store the head restraint properly so it is not loose in the vehicle.
5. Reinstall and properly adjust the head restraint before an occupant uses the seating position.



### Install

1. Align the head restraint stalks with the holes in the seat. Make sure the head restraint is facing the correct direction. The stalk with the adjustment notches ① must be installed in the hole with the lock knob ②.
2. Push and hold the lock knob and push the head restraint down.
3. Properly adjust the head restraint before an occupant uses the seating position.



### Front-seat Active Head Restraints

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 injury occurs most.

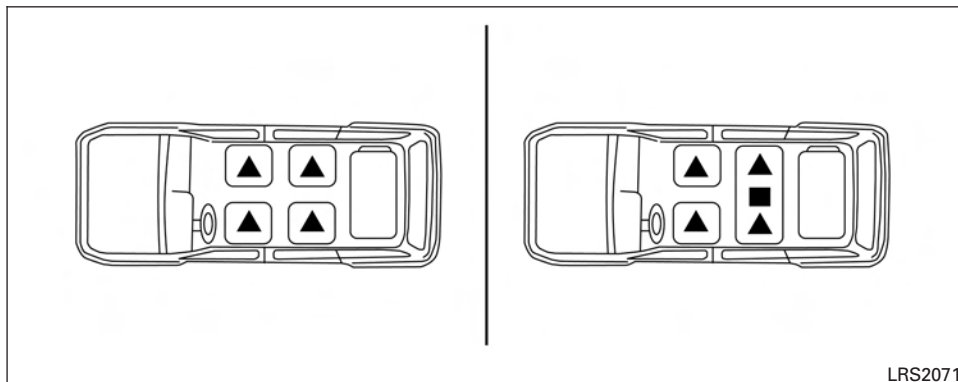
Active Head Restraints operate only in certain rear-end collisions. After the collision, the head restraints return to their original position.

Adjust the Active Head Restraints properly as described in this section.

## HEAD RESTRAINTS (2nd row – outboard positions only)

### WARNING

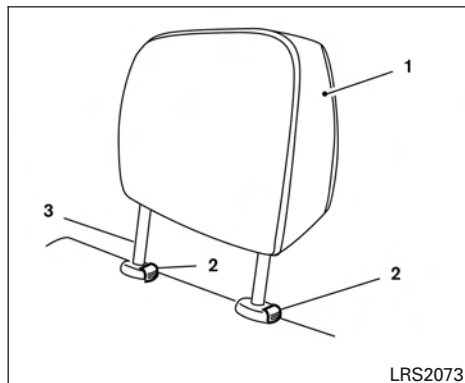
Head restraints supplement the other vehicle safety systems. They may provide additional protection against injury in certain rear end collisions. Adjust the head restraints properly, as specified in this section. Check the adjustment after someone else uses the seat. Do not attach anything to the head restraint stalks. Do not use the seat if the head restraint has been removed. If the head restraint was removed, reinstall and properly adjust the head restraint before an occupant uses the seating position. Failure to follow these instructions can reduce the effectiveness of the head restraints. This may increase the risk of serious injury or death in a collision.



The illustration shows the seating positions equipped with head restraints. The second row head restraints are removable but not adjustable.

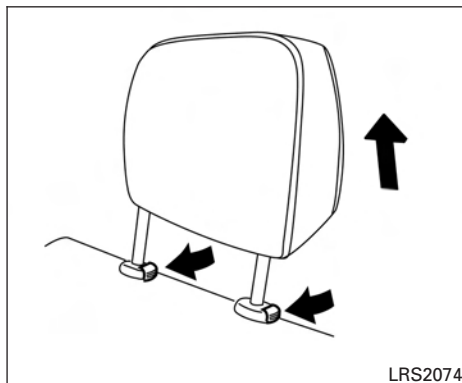
▲ Indicates the seating position is equipped with a head restraint.

■ Indicates the seating position is equipped with an adjustable headrest.



### Components

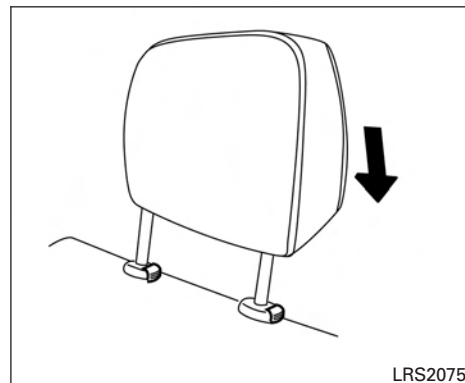
1. Head restraint
2. Lock knob
3. Stalks



### Removal

Use the following procedure to remove the head restraints.

1. Adjust the seat or seatback as necessary.
2. Push and hold the lock knob(s).
3. Pull the head restraint up until it is removed from the seat.
4. Store the head restraint properly so it is not loose in the vehicle.
5. Reinstall the head restraint and properly adjust the seat or seatback before an occupant uses the seating position.



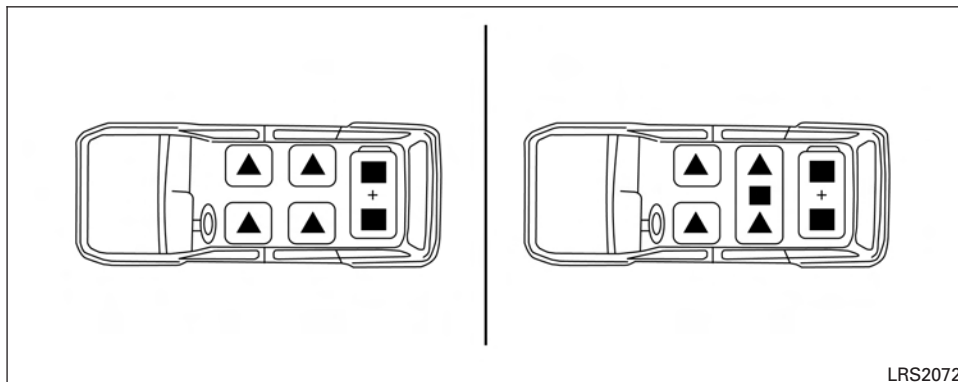
### Install

1. Align the head restraint stalks with the holes in the seat. Make sure the head restraint is facing the correct direction.
2. Push the head restraint down until it locks in place.

## ADJUSTABLE HEADREST

### WARNING

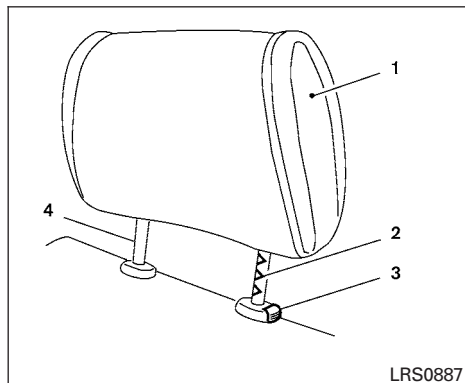
The adjustable headrests supplement the other vehicle safety systems. They may provide additional protection against injury in certain rear end collisions. Adjust the headrests properly, as specified in this section. Check the adjustment after someone else uses the seat. Do not attach anything to the adjustable headrest stalks. Do not use the seat if the adjustable headrests have been removed. If the headrest was removed, reinstall and properly adjust the headrest before an occupant uses the seating position. Failure to follow these instructions can reduce the effectiveness of the adjustable headrests. This may increase the risk of serious injury or death in a collision.



The illustration shows the seating positions equipped with adjustable headrests. All of the headrests are adjustable.

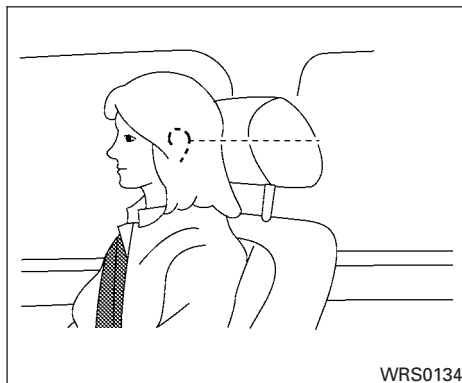
■ Indicates the seating position is equipped with an adjustable headrest.

+ Indicates the seating position is not equipped with a head restraint or adjustable headrest.



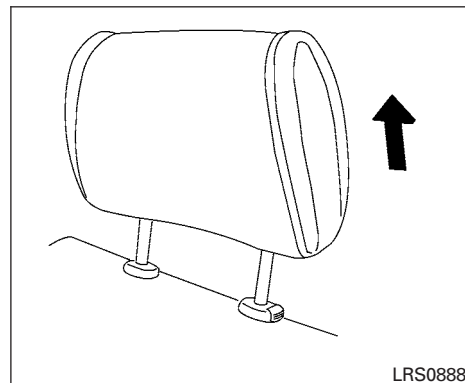
### Components

1. Adjustable headrest
2. Adjustment notches
3. Lock knob
4. Stalks

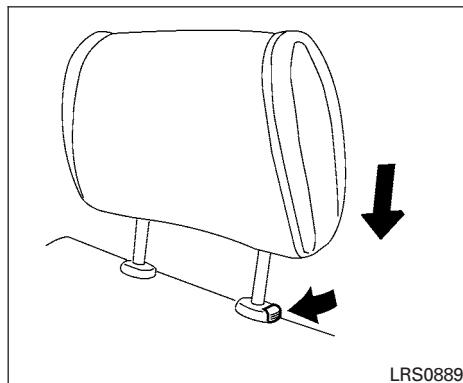


### Adjustment

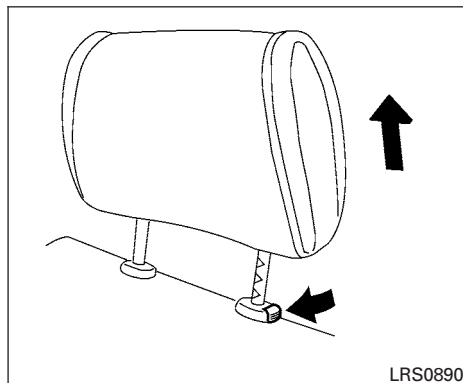
Adjust the headrest so the center is level with the center of the seat occupant's ears.



To raise the headrest, pull it up.



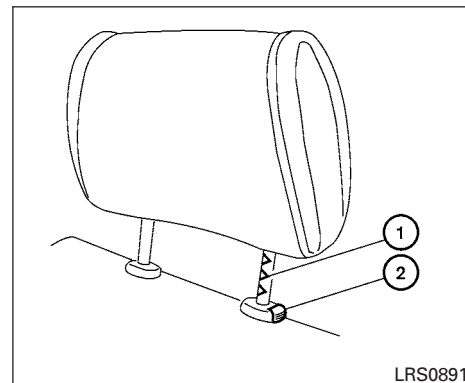
To lower, push and hold the lock knob and push the headrest down.



## Removal

Use the following procedure to remove the adjustable headrests.

1. Pull the headrest up to the highest position.
2. Push and hold the lock knob.
3. Remove the headrest from the seat.
4. Store the headrest properly so it is not loose in the vehicle.
5. Reinstall and properly adjust the headrest before an occupant uses the seating position.



## Install

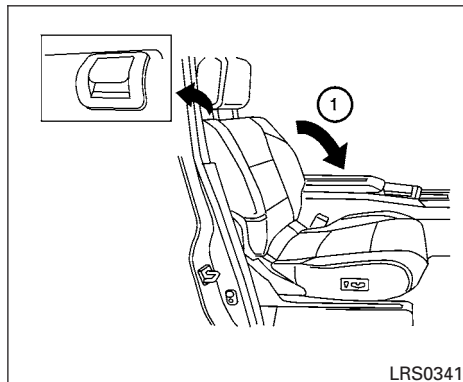
1. Align the headrest stalks with the holes in the seat. Make sure the headrest is facing the correct direction. The stalk with the adjustment notches ① must be installed in the hole with the lock knob ②.
2. Push and hold the lock knob and push the headrest down.
3. Properly adjust the headrest before an occupant uses the seating position.

## FLEXIBLE SEATING

### WARNING

- 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.

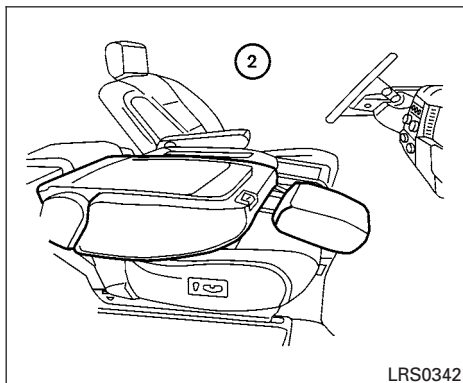
- If the head restraints are removed for any reason, they should be securely stored to prevent them from causing injury to passengers or damage to the vehicle in case of sudden braking or an accident.
- When returning the seatbacks to the upright position, be certain they are completely secured in the 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.



Folding the front passenger's seatback (if so equipped)

To fold the front passenger's seatback flat for extra storage length when transporting long items:

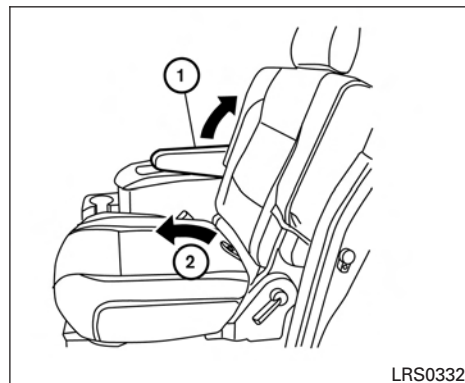
- ① Slide the seat to the rear-most position by moving the switch backward until the seat comes to a stop. Then recline the seatback as far forward as possible using the recline switch. Lift up on the latch located on the upper corner of the seatback to release the back of the seat.



- ② Once the seatback is released, it will enable you to fold the front passenger seatback flat over the seat cushion.
3. To return the front passenger's seat to a seating position, lift up on the seatback and push it up to an upright position. Move the recline switch backward until the desired angle is obtained.

### **⚠ WARNING**

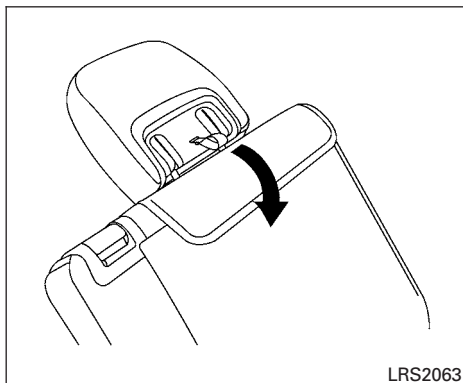
- If you fold the front passenger's seatback flat forward to carry longer objects, be sure this cargo is properly secured and not near an air bag. In a crash, an inflating air bag might force that object toward a person. This could cause severe injury or even death. Secure objects away from the area in which an air bag would inflate. See "Precautions on supplemental restraint system" later in this section.
- **Never allow anyone to ride in the cargo area or on the front passenger's seat when it is in the fold-down position. Use of these areas by passengers could result in serious injury in an accident or sudden stop.**



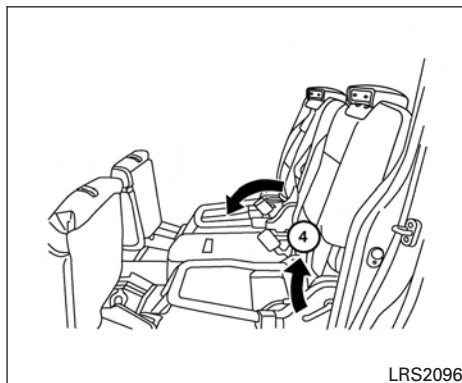
Folding the 2nd row captain's chairs (if so equipped)

To fold the 2nd row captain's chairs flat for maximum cargo hauling:

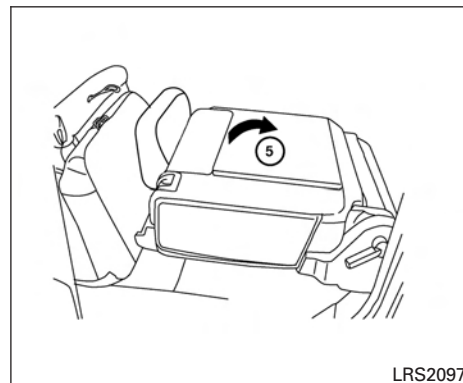
- ① Raise the armrest to the stowed position. Remove the 2nd row center console, see "2nd row center console" in the "Instruments and controls" section of this Owner's Manual.
- ② Pull the strap forward, located in the center of the seat cushion, and fold the seat cushion toward the front of the vehicle.



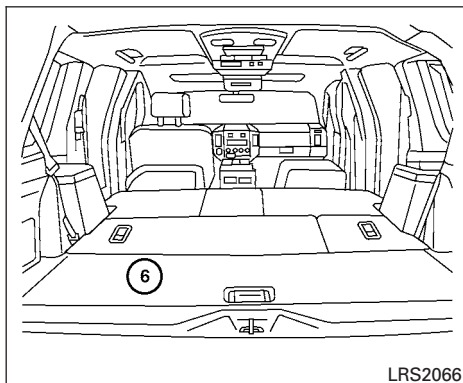
- ③ Pull the strap to release the head restraint rearward.



- ④ Then lift up on the recline lever to fold the seatback flat forward.



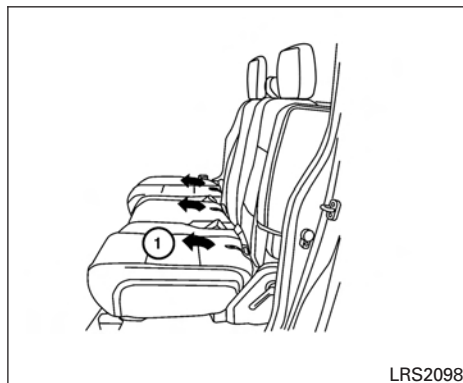
- ⑤ There is a carpet panel flap that can be folded toward the back of the vehicle.



- ⑥ The carpet panel flaps provide a level cargo floor when the 3rd row seats are also folded flat. Reverse this process to return the 2nd row captain's chairs to a seating position. **Make sure to properly raise the seat-back to an upright position and push the seat cushion down into place.**
7. Rotate the head restraint forward to return it to the normal seating position.

### WARNING

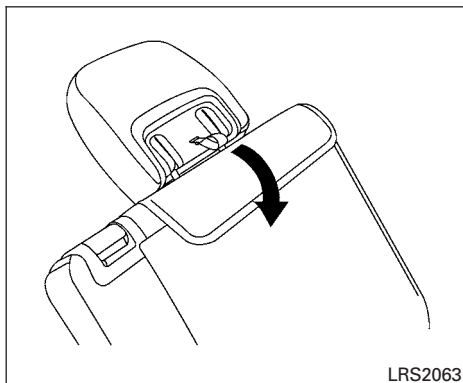
**When the seat is returned to the normal seating position, the head restraints must be returned to the upright position to properly protect vehicle occupants.**



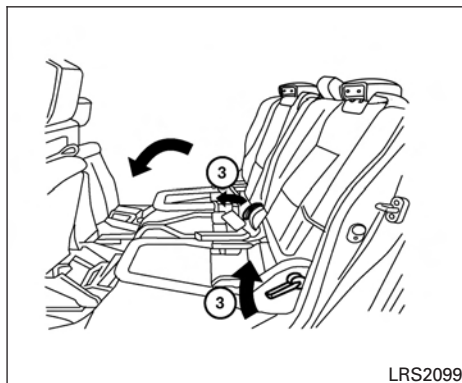
### Folding the 2nd row bench seat (if so equipped)

To fold the 2nd row bench seat flat for maximum cargo hauling:

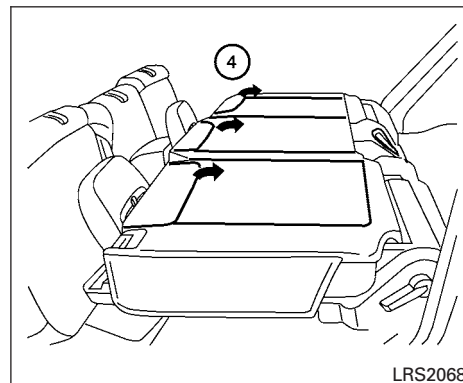
- ① Pull the strap forward, located in the center of each seat cushion, and fold each seat cushion toward the front of the vehicle.



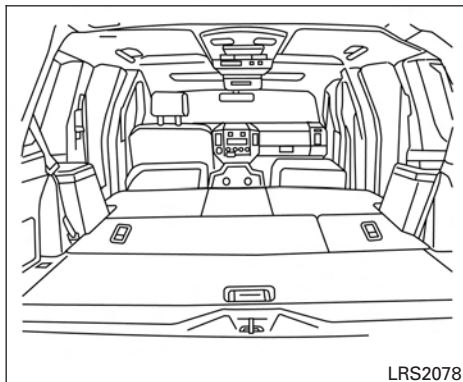
- ② Pull the strap to release the head restraint rearward.



- ③ Then lift up on the recline lever on the side of the outboard seats to fold the outboard seatbacks flat. To fold the center seatback flat, pull up on the strap on the edge of the center seat cushion and fold the seatback toward the front of the vehicle.



- ④ There is a carpet panel flap on the back of each seat that can be folded toward the back of the vehicle.

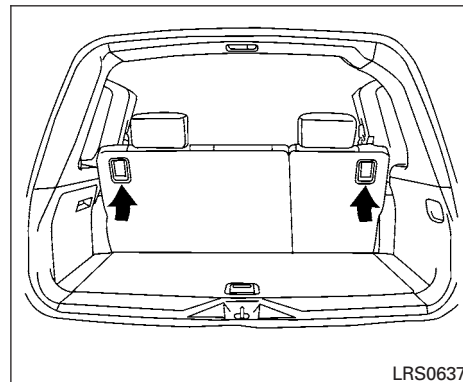


- ⑤ The carpet panel flap provides a level cargo floor when the 3rd row seats are also folded flat.
6. To return the outboard 2nd row bench seats to a seating position, reverse the process for the outboard seats.
7. To return the center seat to a seating position, lift up on the pull strap on the back of the seat base while lifting on the seatback. Then push the seat cushion back into place. **Make sure to hold the seat belts above the seat cushion and properly raise the seatback to an upright position. Then push the seat cushion down into place.**

8. Rotate the head restraint forward to return it to the normal seating position.

### **⚠ WARNING**

**When the seat is returned to the normal seating position, the head restraints must be returned to the upright position to properly protect vehicle occupants.**



### **Folding the 3rd row split bench seat (if so equipped)**

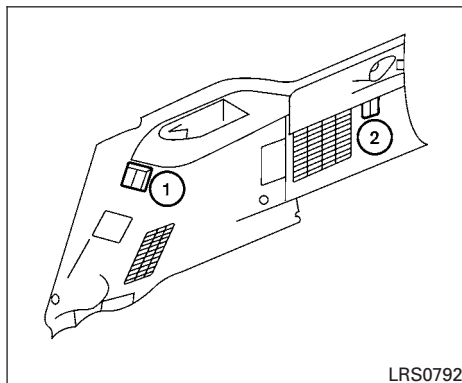
To fold the 3rd row split bench seat flat for maximum cargo capacity:

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.
2. Lower the head restraints to the full down position.
3. Then pull up on the latch located on the outside corner of each seatback and fold the seatback forward over the seat base.

To return the 3rd row split bench seat to a seating position, unfold the seatback and push it back until it latches into position.

### **⚠ WARNING**

- **When returning the seatbacks, be sure to attach the rear center seat belt connector.**
- **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.**



### **3RD ROW POWER FOLDING SEATS (if so equipped)**

The 3rd row power folding seat controls are located behind the 2nd row seat (passenger's side) on the 3rd row cup holder console (1). There are also controls located on the rear quarter trim panel behind the 3rd row seats (passenger's side) (2).

Before operating the 3rd row seats:

- Make sure the 2nd row seatback isn't reclined.
- Lower the 3rd row headrest to the full down position.

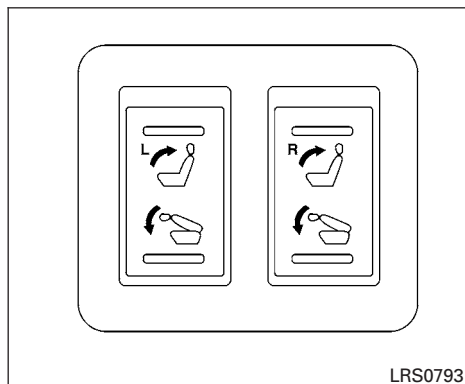
- Disconnect and secure the center seat belt and tongues into the retractor base. See "Stowing the 3rd row center seat belt" later in this section.
  - Always reconnect the center seat belt when the seat is returned to the upright position.
- Make sure that there are no objects on the seatback cushion.

### **⚠ CAUTION**

**Make sure the seat(s) is returned to the full upright position before a passenger sits in the seat(s).**

**When folding or returning the seat(s) to the upright position, to avoid injury to yourself and others:**

- **Make sure that the seat path is clear before moving the seat.**
- **Be careful not to allow hands or feet to get caught or pinched in the seat.**



To fold down the 3rd row seats, push and hold the bottom portion of the switch.

To raise the 3rd row seats, push and hold the top portion of the switch.

A chime will sound three times to indicate the start of the operation.

A warning beep will sound 5 times if the seat isn't in the full upright or folded position when the ignition switch is placed in the ON position. If the warning beep is still present after one complete cycle and if the seats are in the full upright or folded position, bring your vehicle in for service.

If the ignition switch is off, the power folding seats are always operational.

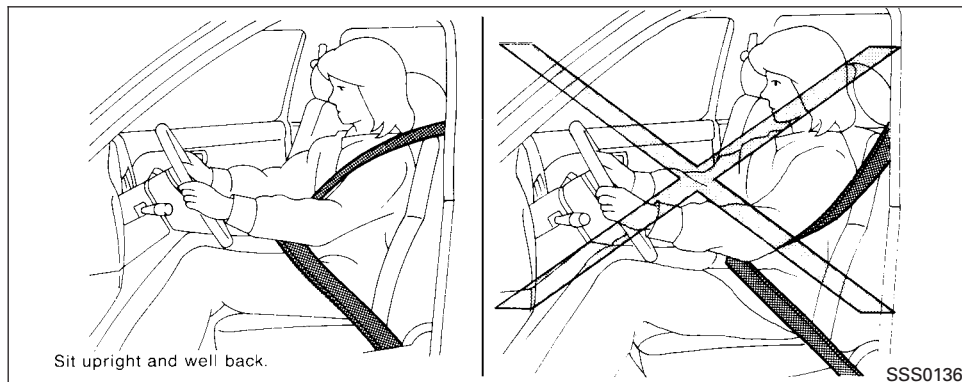
If the ignition switch is on, the power folding seats are only operational when the shift selector is in P (Park) or N (Neutral).

If the engine is started during operation, the seat(s) will temporarily pause.

**NOTE:**

**Operating the power folding seats can discharge the vehicle battery if the vehicle is not running.**

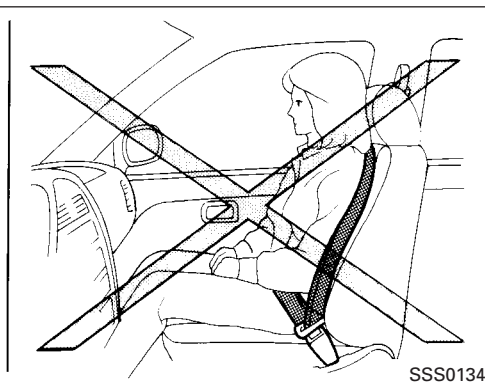
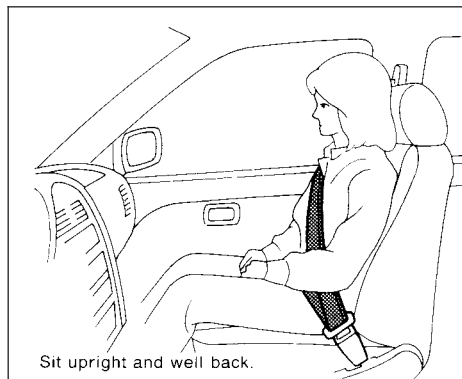
## SEAT BELTS



### PRECAUTIONS ON SEAT BELT USAGE

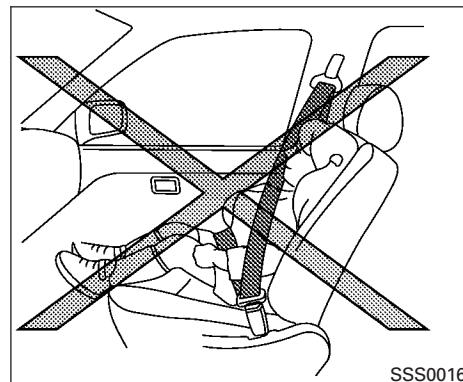
If you are wearing your seat belt properly adjusted and you are sitting upright and well back in your seat with both feet on the floor, your chances of being injured or killed in an accident and/or the severity of injury may be greatly reduced. NISSAN strongly encourages you and all of your passengers 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.**



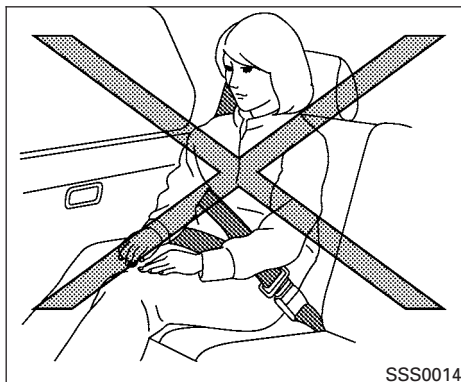
**⚠ WARNING**

- 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.



**⚠ WARNING**

- 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.

## 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

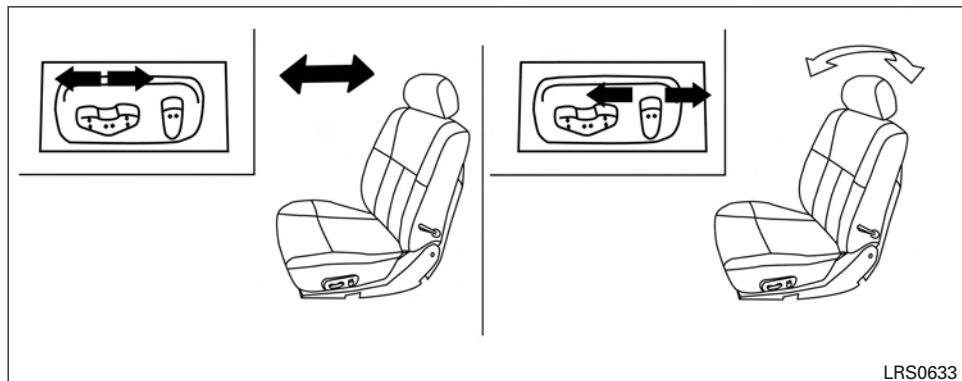
NISSAN recommends that injured persons use seat belts. Check with your doctor for specific recommendations.

## 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.**

- **Do not allow children to play with the seat belts. Most seating positions are equipped with Automatic Locking Retractor (ALR) mode seat belts. If the seat belt becomes wrapped around a child's neck with the ALR mode activated, the child can be seriously injured or killed if the seat belt retracts and becomes tight. This can occur even if the vehicle is parked. Unbuckle the seat belt to release the child. If the seat belt cannot be unbuckled or is already unbuckled, release the child by cutting the seat belt with a suitable tool (such as a knife or scissors) to release the seat belt.**

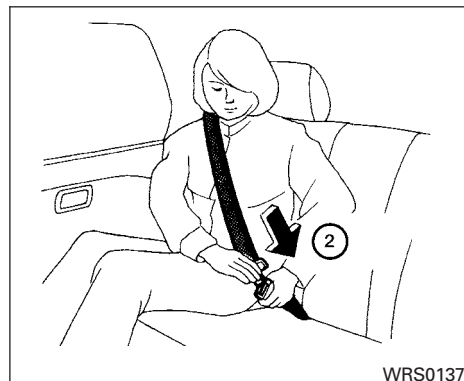


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Front seat shown

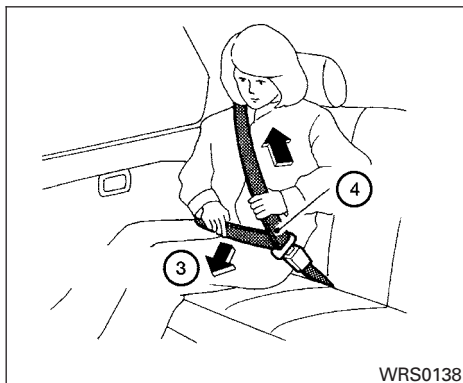
## Fastening the seat belts

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



WRS0137

2. 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.**



- ③ Position the lap belt portion **low and snug on the hips** as shown.
- ④ 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 and the rear seating positions 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.

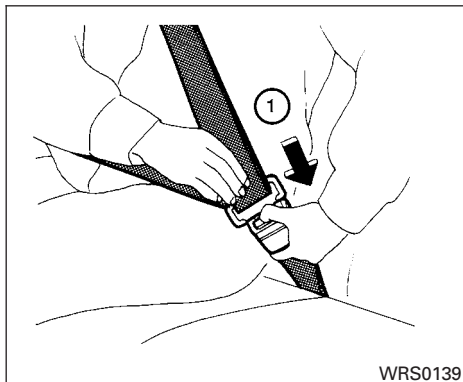
The Automatic Locking Retractor (ALR) mode (child restraint mode) locks the seat belt for child restraint installation.

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.**

#### **WARNING**

**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

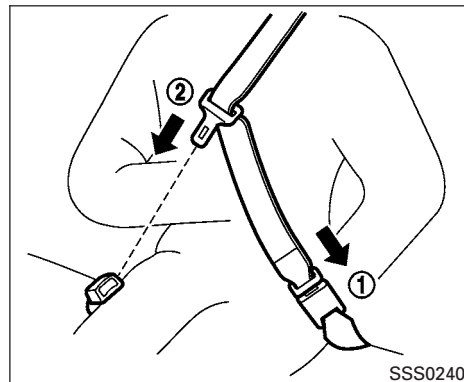
Seat belt retractors are designed to lock seat belt movement by two separate methods:

- 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:

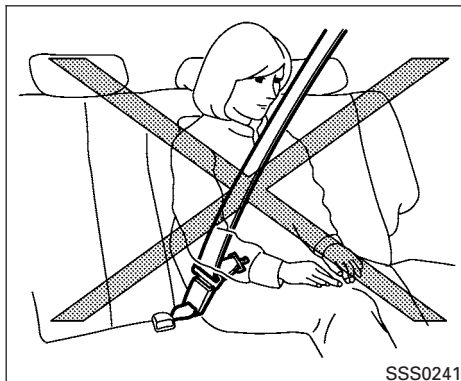
- Grasp the shoulder belt and pull forward quickly. The retractor should lock and restrict further belt movement.

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



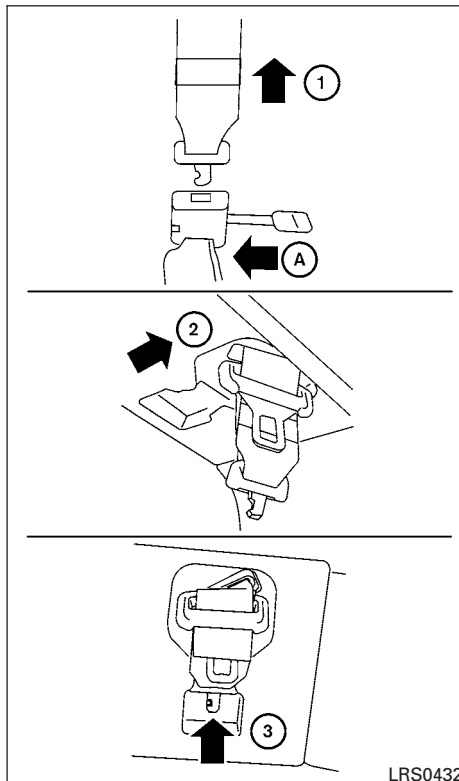
### Center of the 3rd row bench seat

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.



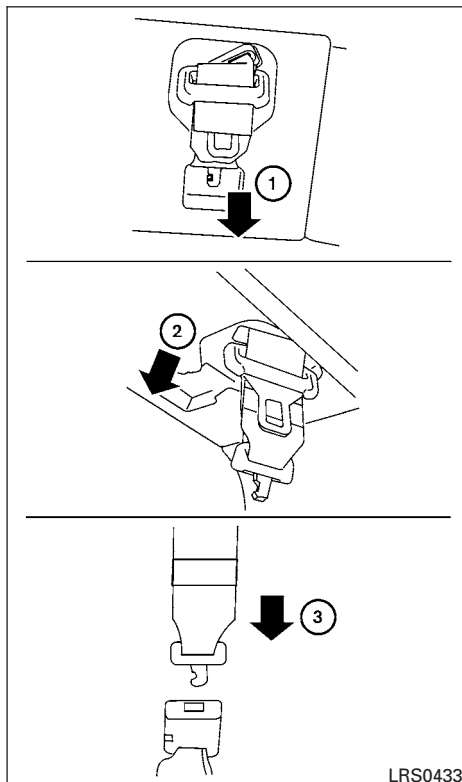
### **Stowing the 3rd row center seat belt**

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.

### **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.

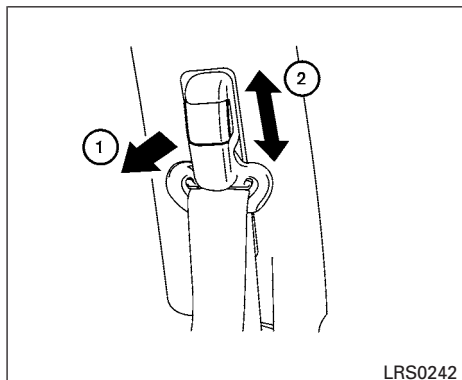
The center seat belt connector tongue and receiver buckle are indicated by the > and < marks.

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 and 2nd row outboard seats**

#### **Shoulder belt height adjustment (front and 2nd row outboard 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, pull out ① the adjustment button 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.

### **⚠ WARNING**

- 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 that is compatible with the installed seat belts is available that can be purchased. 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 with purchasing an extender if an extender is required.

### **WARNING**

- **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.**

## 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 guide** of the seat belt anchors, the seat belts may retract slowly. Wipe the shoulder belt guide with a clean, dry cloth.
- **Periodically check to see that the seat belt and the metal components,** such as buckles, tongues, retractors, flexible wires and anchors, work properly. If loose parts, deterioration, cuts or other damage on the webbing is found, the entire seat belt assembly should be replaced.

## CHILD SAFETY

### **WARNING**

**Do not allow children to play with the seat belts. Most seating positions are equipped with Automatic Locking Retractor (ALR) mode seat belts. If the seat belt becomes wrapped around a child's neck with the ALR mode activated, the child can be seriously injured or killed if the seat belt retracts and becomes tight. This can occur even if the vehicle is parked. Unbuckle the seat belt to release the child. If the seat belt cannot be unbuckled or is already unbuckled, release the child by cutting the seat belt with a suitable tool (such as a knife or scissors) to release the seat belt.**

**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
- Forward-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. Forward-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 forward-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.

A child restraint may be secured in the vehicle by using either the LATCH (Lower Anchor and Tethers for CHildren) system or with the vehicle seat belt. See "Child restraints" later in this section for more information.

**NISSAN recommends that all pre-teens and children be restrained in the rear seat. Studies show that 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 1 year old and weigh at least 20 lbs (9 kg) should remain in a rear-facing child restraint as long as possible up to the height or weight limit of the child restraint. Children who outgrow the height or weight limit of the rear-facing child restraint and are at least 1 year old should be secured in a forward-facing child restraint with a harness. 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 should remain in a forward-facing child restraint with a harness until they reach the maximum height or weight limit allowed by the child restraint manufacturer.

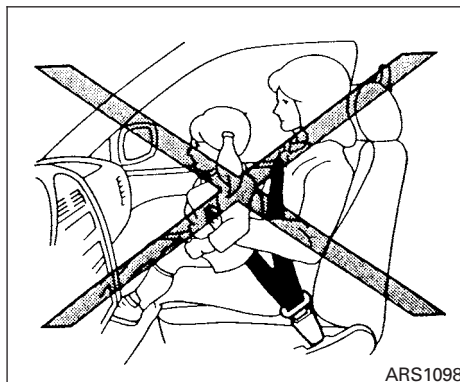
Once a child outgrows the height or weight limit of the harness-equipped forward-facing child restraint, NISSAN recommends that the child be placed in a commercially available booster seat to obtain proper seat belt fit. For a seat belt to fit

## CHILD RESTRAINTS

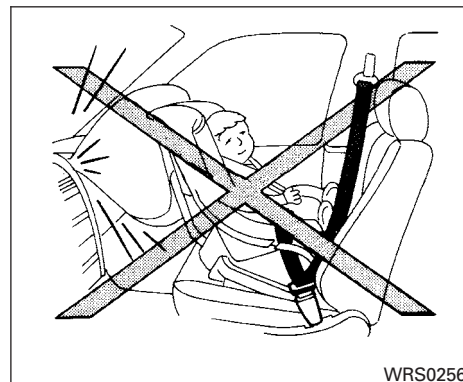
properly, the booster seat should raise the child so that the shoulder belt is properly positioned across the chest and the top, middle portion of the shoulder. The shoulder belt should not cross the neck or face and should not fall off the shoulder. The lap belt should lie snugly across the lower hips or upper thighs, not the abdomen. 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 and the lap belt can be positioned properly across the lower hips or upper thighs use the seat 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 area. The child could be seriously injured or killed in a sudden stop or collision.**



### PRECAUTIONS ON CHILD RESTRAINTS



### WARNING

- Failure to follow the warnings and instructions for proper use and installation of child restraints could result in serious injury or death of a child or other passengers in a sudden stop or collision:
  - The child restraint must be used and installed properly. Always follow all of the child restraint manufacturer's instructions for installation and use.

- Infants and children should never be held on anyone's lap. Even the strongest adult cannot resist the forces of a collision.
- Do not put a seat belt around both a child and another passenger.
- NISSAN recommends that all child restraints be installed in the rear seat. Studies show that children are safer when properly restrained in the rear seat than in the front seat. If you must install a forward-facing child restraint in the front seat, see "Forward-facing child restraint installation using the seat belts" later in this section.
- Even with the NISSAN Advanced Air Bag System, never install a rear-facing child restraint in the front seat. An inflating air bag could seriously injure or kill a child. A rear-facing child restraint must only be used in the rear seat.
- Be sure to purchase a child restraint that will fit the child and vehicle. Some child restraints may not fit properly in your vehicle.

- Child restraint anchor points are designed to withstand loads from child restraints that are properly fitted.
- Never use the anchor points for adult seat belts or harnesses.
- A child restraint with a top tether strap should not be used in the front passenger seat.
- Keep seatbacks as upright as possible after fitting the child restraint.
- Infants and children should always be placed in an appropriate child restraint while in the vehicle.
- When the child restraint is not in use, keep it secured with the LATCH system or a seat belt. In a sudden stop or collision, loose objects can injure occupants or damage the vehicle.

#### CAUTION

A child restraint in a closed vehicle can become very hot. Check the seating surface and buckles before placing a child in the child restraint.

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

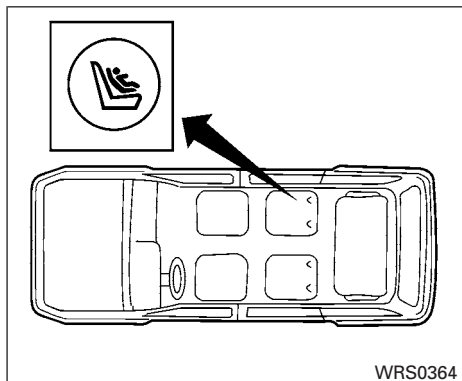
If you do not have a LATCH compatible child restraint, the vehicle seat belts can be used.

Several manufacturers offer child restraints for infants and 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 your child. Choose a child restraint that is designed for your child's height and weight. Always follow all recommended procedures.

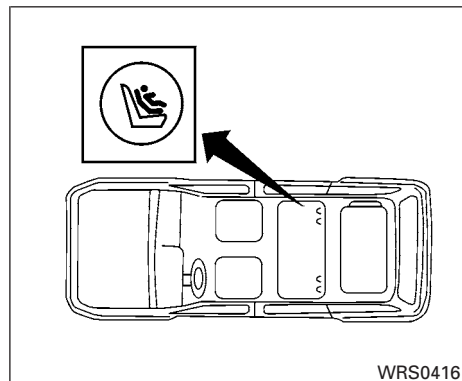
**All U.S. states and Canadian provinces or territories require that infants and small children be restrained in an approved child restraint at all times while the vehicle is being operated. Canadian law requires the top tether strap on forward-facing child restraints be secured to the designated anchor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



**LATCH system lower anchor locations - captain's chairs**

### 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. 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.



**LATCH system lower anchor locations - bench seat**

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

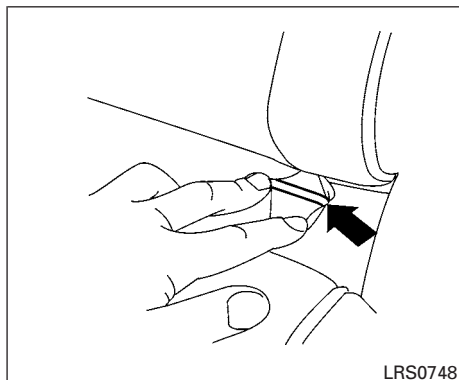
- 2nd row captain's chairs (if so equipped)
- 2nd row bench seat outboard positions only (if so equipped)

## LATCH lower anchor

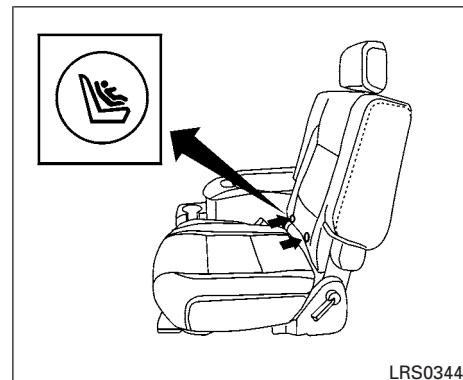
### **WARNING**

Failure to follow the warnings and instructions for proper use and installation of child restraints could result in serious injury or death of a child or other passengers in a sudden stop or collision:

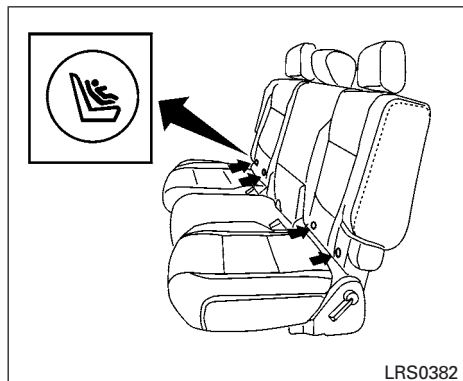
- Attach LATCH system compatible child restraints only at the locations shown in the illustration.
- Do not secure a child restraint in the center rear seating position using the LATCH lower anchors. The child restraint will not be secured properly.
- Inspect the lower anchors by inserting your fingers into the lower anchor area. Feel to make sure there are no obstructions over the anchors such as seat belt webbing or seat cushion material. The child restraint will not be secured properly if the lower anchors are obstructed.



**LATCH lower anchor location**



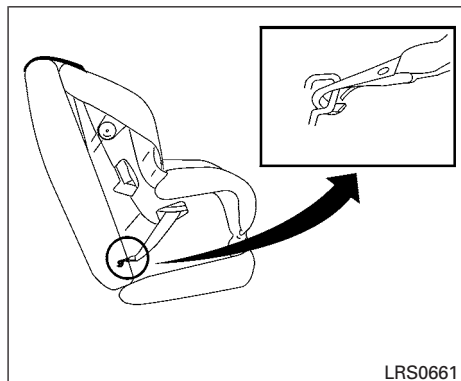
**LATCH label locations 2nd row captain's chairs (if so equipped)**



**LATCH label locations 2nd row bench (if so equipped)**

### LATCH lower anchor location

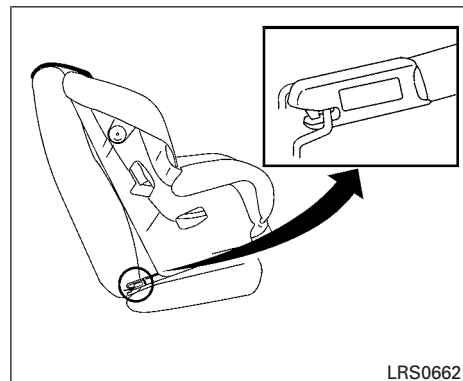
The LATCH lower anchors are located at the rear of the seat cushion near the seatback. A label is attached to the seatback to help you locate the LATCH lower anchors.



### LATCH webbing-mounted attachment

#### Installing child restraint LATCH lower 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. 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 LATCH. This information may also be in the instructions provided by the child restraint manufacturer.



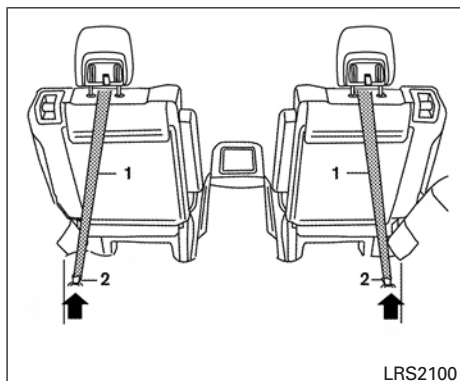
### LATCH rigid-mounted attachment

When installing a child restraint, carefully read and follow the instructions in this manual and those supplied with the child restraint.

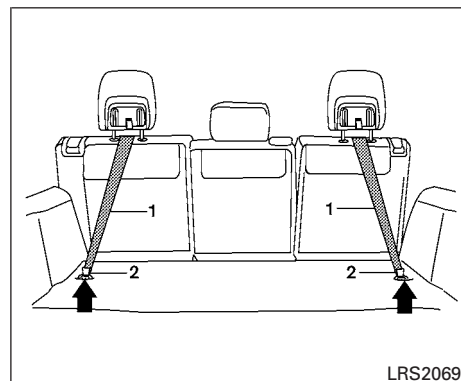
## Top tether anchor

### WARNING

- If the cargo cover (if so equipped) contacts the top tether strap when it is attached to the top tether anchor, remove the cargo cover from the vehicle or secure it on the cargo floor below its attachment location. If the cargo cover is not removed, it may damage the top tether strap during a collision. A child could be seriously injured or killed in a collision if the child restraint top tether strap is damaged.
- 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. A child could be seriously injured or killed in a collision if the top tether strap is damaged.

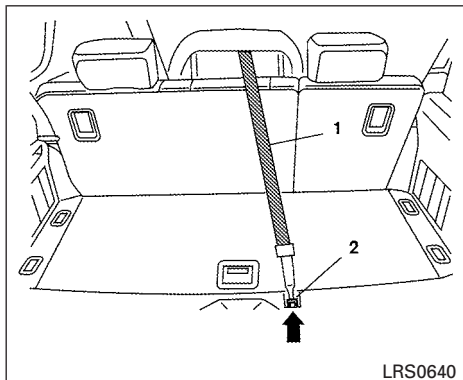


2nd row captain's chairs (if so equipped)



2nd row bench seat (if so equipped)

1. Top tether strap
2. Anchor point



**3rd row bench seat**

### Top tether anchor point locations

Anchor points are located in the following locations:

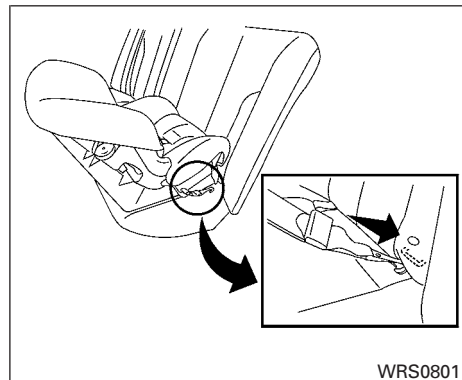
- 2nd row bench (if so equipped) on the floor behind the outboard seating positions as shown.
- 2nd row captain's chairs (if so equipped) on the floor behind the seats as shown.
- 3rd row bench seat on the floor of the cargo area behind the center seat position as shown.

## REAR-FACING CHILD RESTRAINT INSTALLATION USING LATCH

Refer to all Warnings and Cautions in the "Child Safety" and "Child Restraint" sections before installing a child restraint.

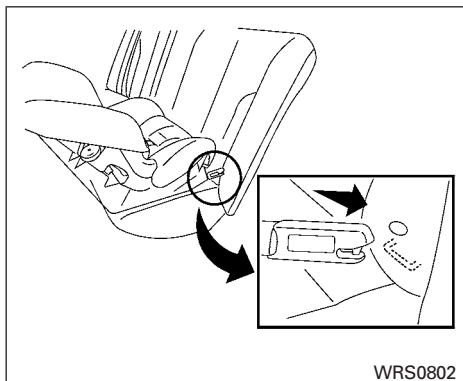
Follow these steps to install a rear-facing child restraint in the 2nd row seats using the LATCH system:

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

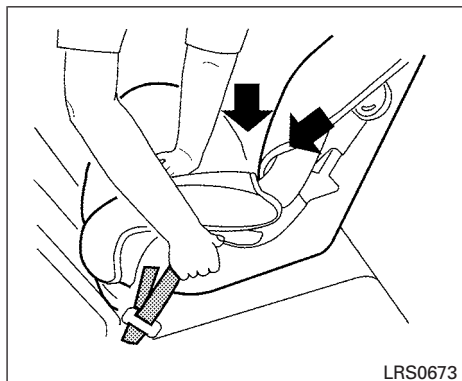


### Rear-facing web-mounted – step 2

2. 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.

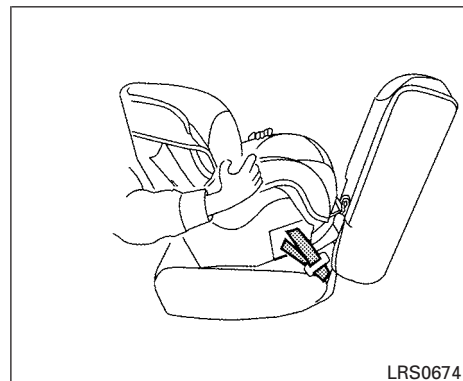


**Rear-facing rigid-mounted – step 2**



**Rear-facing – step 3**

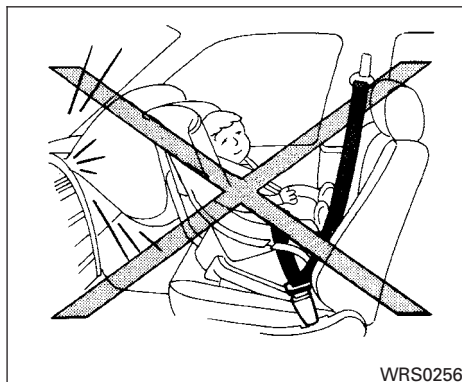
3. For child restraints that are equipped with webbing-mounted attachments, remove any additional slack from the anchor attachments. Press downward and rearward firmly in the center of the child restraint with your hand to compress the vehicle seat cushion and seatback while tightening the webbing of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



**Rear-facing – step 4**

4. After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the child restraint 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 or try installing by using the vehicle seat belt (if applicable). Not all child restraints fit in all types of vehicles.

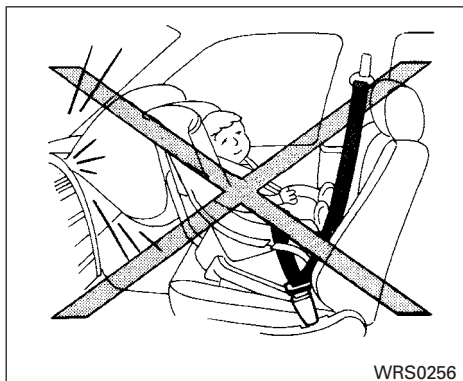
5. Check to make sure the child restraint is properly secured prior to each use. If the child restraint is loose, repeat steps 2 through 4.



REAR-FACING CHILD RESTRAINT  
INSTALLATION USING THE SEAT  
BELTS

**⚠ WARNING**

- The three-point seat belt with Automatic Locking Retractor (ALR) 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 be loose and cause injury to a 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” in this section.

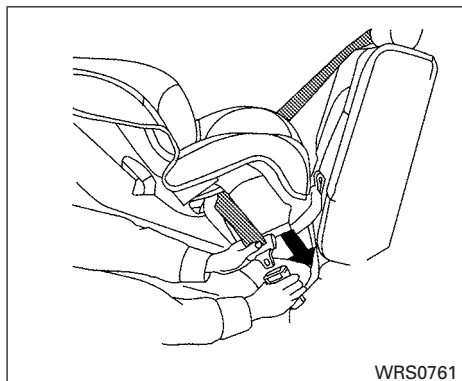


### Rear-facing – step 1

Refer to all Warnings and Cautions in the “Child Safety” and “Child Restraint” sections before installing a child restraint.

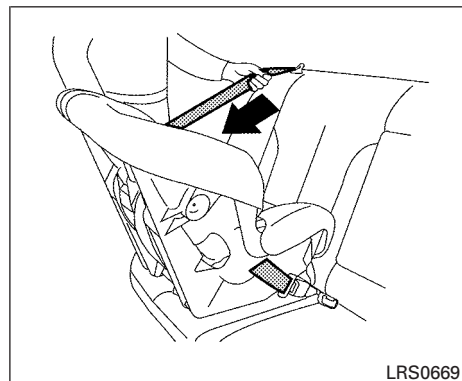
Follow these steps to install a rear-facing child restraint using the vehicle seat belts in the rear seats:

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.



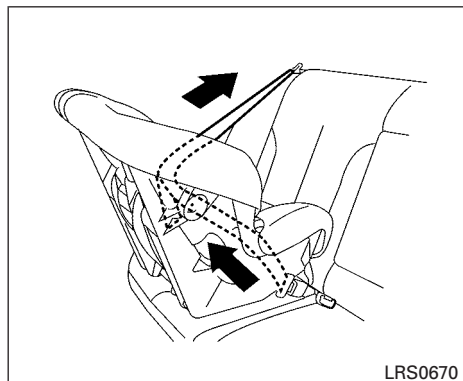
### Rear-facing – step 2

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.



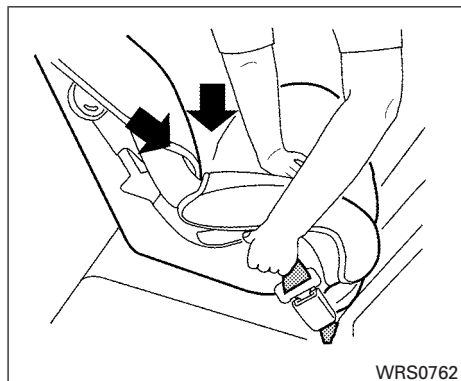
### Rear-facing – step 3

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.



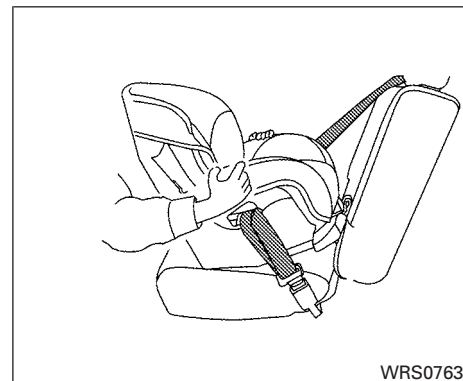
#### Rear-facing – step 4

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 seat belt; 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.



#### 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 child restraint 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 seat 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 that the child restraint is properly secured prior to each use. If the seat belt is not locked, repeat steps 3 through 6.

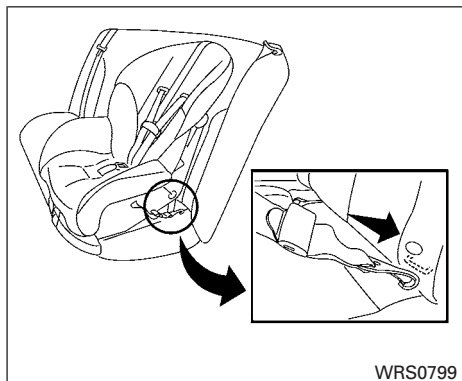
After the child restraint is removed and the seat belt fully retracted, the ALR mode (child restraint mode) is canceled.

## FORWARD-FACING CHILD RESTRAINT INSTALLATION USING LATCH

Refer to all Warnings and Cautions in the “Child Safety” and “Child Restraints” sections before installing a child restraint.

Follow these steps to install a forward-facing child restraint in the 2nd row seats using the LATCH system:

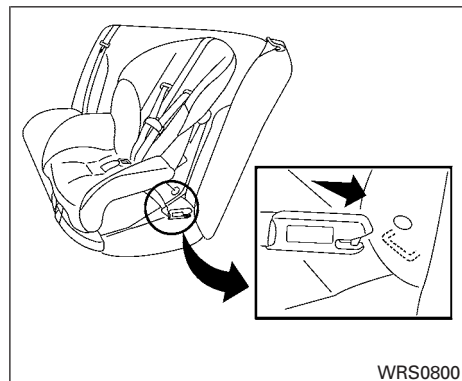
1. Position the child restraint on the seat. Always follow the child restraint manufacturer's instructions.



### Forward-facing web-mounted – step 2

2. 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.

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 “Installing top tether strap” in this section. Do not install child restraints that require the use of a top tether strap in seating positions that do not have a top tether anchor.

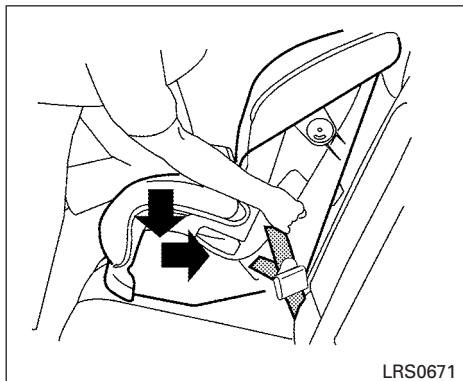


### Forward-facing rigid-mounted – step 2

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

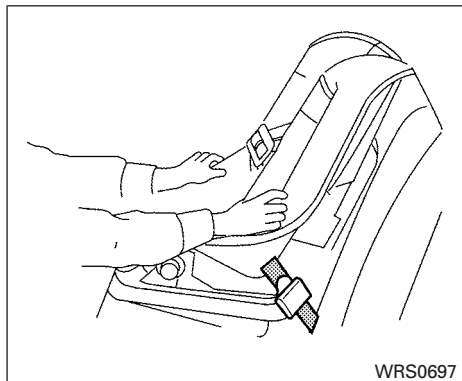
If necessary, adjust or remove the head restraint to obtain the correct child restraint fit. If the head restraint is removed, store it in a secure place. **Be sure to reinstall the head restraint when the child restraint is removed.** See “Head restraints” in this section for head restraint adjustment information.

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.



#### Forward-facing – step 4

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



#### Forward-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 child restraint 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.

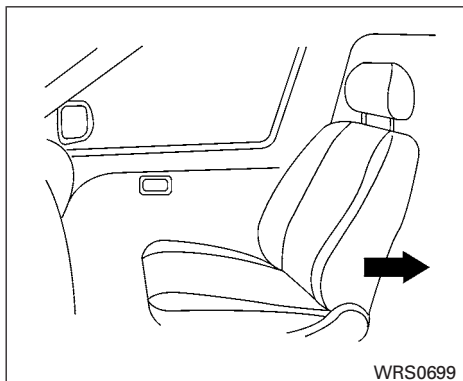
7. Check to make sure the child restraint is properly secured prior to each use. If the child restraint is loose, repeat steps 3 through 6.

### FORWARD-FACING CHILD RESTRAINT INSTALLATION USING THE SEAT BELTS

#### **⚠ WARNING**

**The three-point seat belt with Automatic Locking Retractor (ALR) 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 be loose and cause injury to a 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" in this section.**



### Forward-facing (front passenger seat) – step 1

Refer to all Warnings and Cautions in the “Child Safety” and “Child Restraint” sections before installing a child restraint.

Follow these steps to install a forward-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 forward-facing direction only. Move the seat to the rearmost position. Child restraints for infants must be used in**

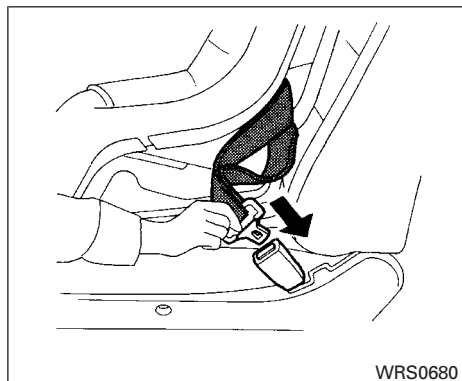
**the rear-facing direction and, therefore, must not be used in the front seat.**

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.

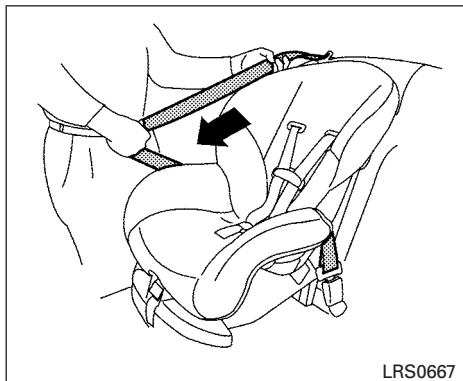
If necessary, adjust or remove the head restraint or headrest to obtain the correct child restraint fit. If the head restraint or headrest is removed, store it in a secure place. **Be sure to reinstall the head restraint or headrest when the child restraint is removed.** See “Head restraints” or “Adjustable headrest” in this section for head restraint or headrest adjustment, removal and installation information.

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



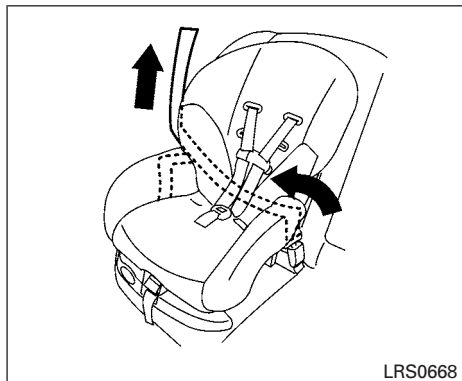
### Forward-facing – step 3

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.



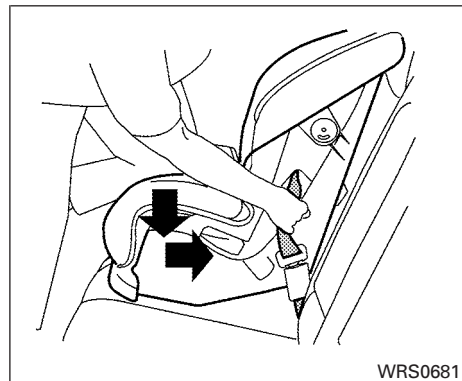
#### Forward-facing – step 4

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 Emergency Locking Retractor (ELR) mode when the seat belt is fully retracted.



#### Forward-facing – step 5

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



#### Forward-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.
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 (rear seat installation only). See "Installing top tether strap" in this section. Do not install child restraints that require the use of a top tether strap in seating positions that do not have a top tether anchor.




#### Forward-facing – step 8

8. After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the child restraint 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 seat 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.

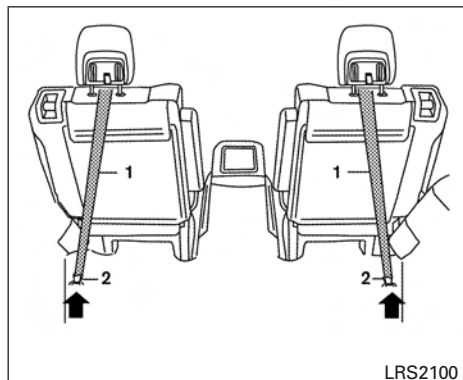
9. Check to make sure the child restraint is properly secured prior to each use. If the seat belt is not locked, repeat steps 3 through 8.



#### Forward-facing – step 10

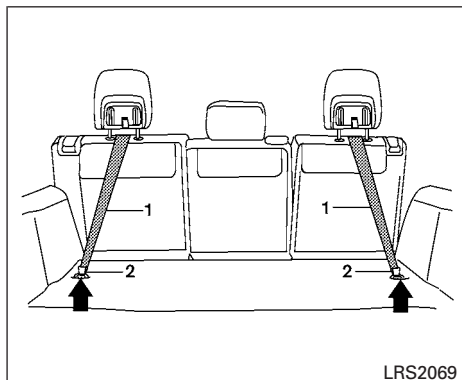
10. If the child restraint is installed in the front passenger seat, place the ignition switch in the ON position. The front passenger air bag status light  should illuminate. If this light is not illuminated, see "Front passenger air bag and status light" in this section. **Move the child restraint 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.



LRS2100

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



LRS2069

**2nd row bench seat (if so equipped)**

### INSTALLING TOP TETHER STRAP (2nd row captain's chairs or 2nd row bench seat [if so equipped] )

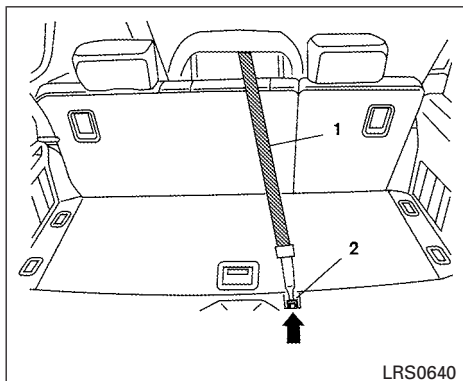
First, secure the child restraint with the LATCH lower anchors (2nd row captain's or bench outboard seating positions only) or the seat belt, as applicable.

1. If necessary, raise or remove the head restraint to position the top tether strap ① over the top of the seatback. 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. **See**

**"Head restraint adjustment" in this section for head restraint adjustment, removal and installation information.**

2. Secure the tether strap to the tether anchor point ② on the floor behind the child restraint.
3. Refer to the appropriate child restraint installation procedure steps in this section before tightening the tether strap.

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



3rd row bench seat

### INSTALLING TOP TETHER STRAP (3rd row bench seat)

#### **⚠ 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.

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

First, secure the child restraint with the seat belt, as applicable.

1. Position the top tether strap ① over the top of the center seating position seatback.
2. Secure the tether strap to the tether anchor point ② on the floor behind the child restraint.
3. Refer to the appropriate child restraint installation procedure steps in this section before tightening the tether strap.

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

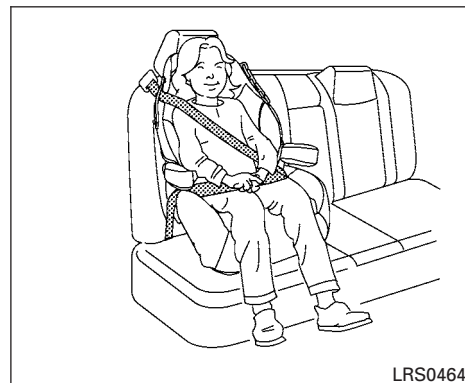
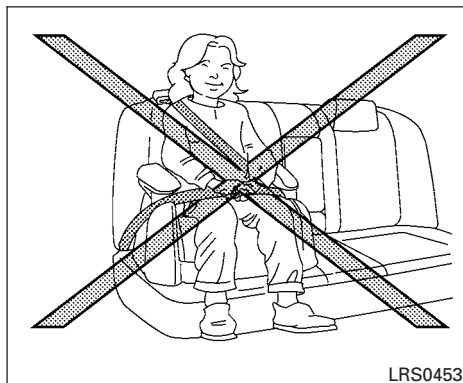
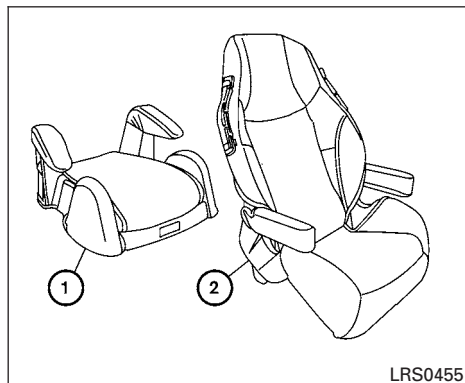
## BOOSTER SEATS

### Precautions on booster seats

#### **⚠ WARNING**

**If a booster seat and seat belt are not used properly, the risk of a child being injured in a sudden stop or collision greatly increases:**

- 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 stomach.
- Make sure the shoulder belt is not behind the child or under the child's arm.
- A booster seat must only be installed in a seating position that has a lap/shoulder belt.



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 the child in the booster seat and check the various adjustments to be sure the booster seat is compatible with the 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.

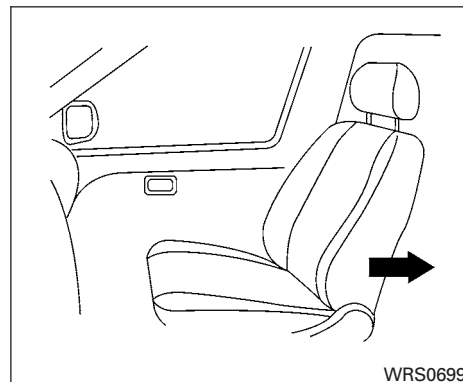
## Booster seat installation

### **⚠ CAUTION**

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

Refer to all Warnings and Cautions in the "Child Safety", "Child Restraint" and "Booster Seats" sections before installing a child restraint.

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 rear-most 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.



LRS0454

### Front passenger position

3. 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. 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.** See "Head restraints" in this section for head restraint adjustment, removal and installation information.

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.

4. 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.
6. 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 front-impact air bag (NISSAN Advanced Air Bag System)
- Front seat-mounted side-impact supplemental air bag
- Roof-mounted curtain side-impact and rollover 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 bags:**

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

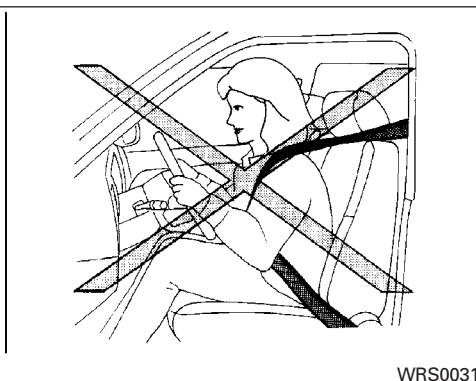
#### **Roof-mounted curtain side-impact and rollover supplemental air bag system:**

This system can help cushion the impact force to the head of occupants in front and rear outboard seating positions in certain side impact or rollover collisions. In a side impact, the curtain air bags are designed to inflate on the side where the vehicle is impacted. In a rollover, both curtain and rollover air bags are designed to inflate and remain inflated for a short time.

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 placed 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**

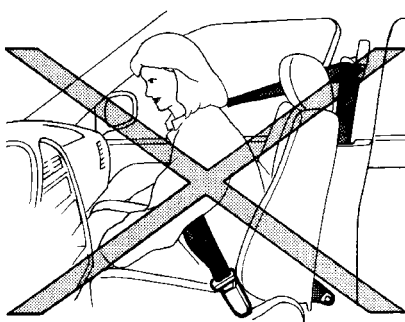
- The front air bags ordinarily will not inflate in the event of a side impact, rear impact, rollover, or lower severity frontal collision. Always wear your seat belts to help reduce the risk or severity of injury in various kinds of accidents.
- The front passenger air bag will not inflate if the passenger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

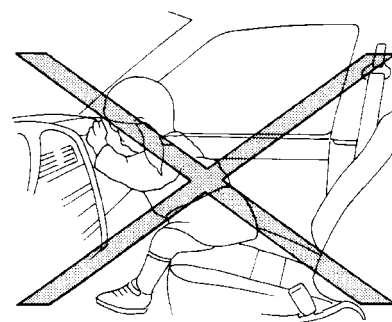
- The driver and front passenger seat belt buckles are equipped with sensors that detect if the seat belts are fastened. The Advanced Air Bag System monitors the severity of a collision and seat belt usage then inflates the air bags as needed. Failure to properly wear seat belts can increase the risk 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.



Sit upright and well back.



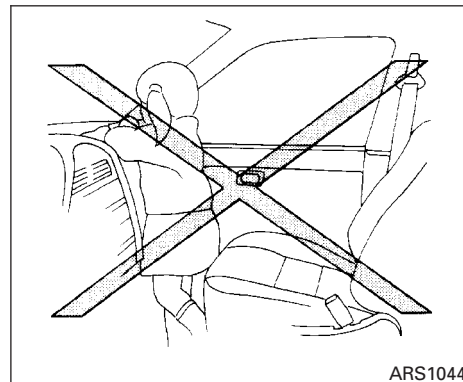
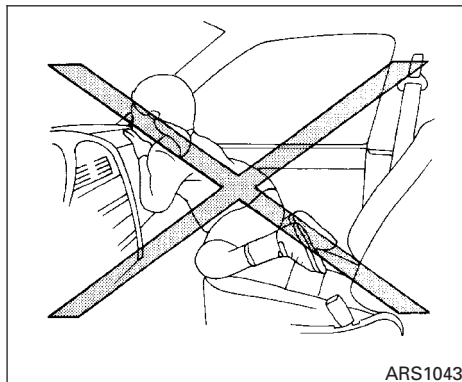
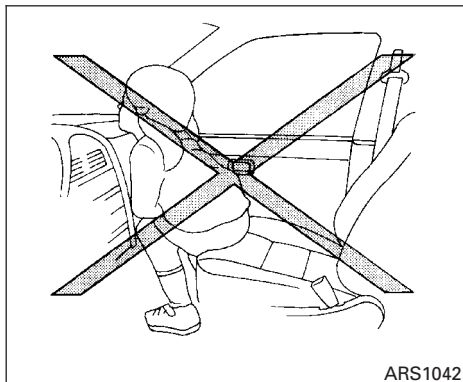
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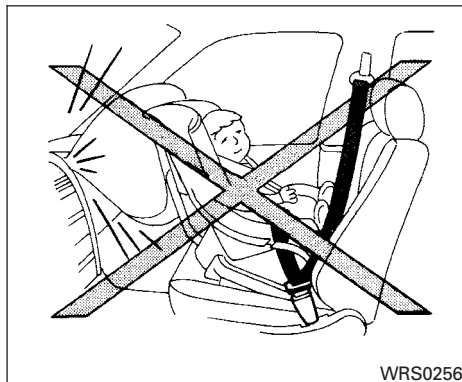
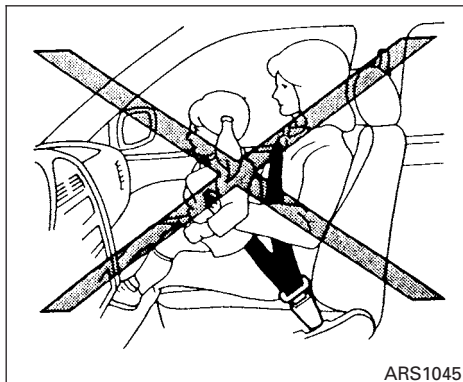
#### **⚠ WARNING**

- **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.**



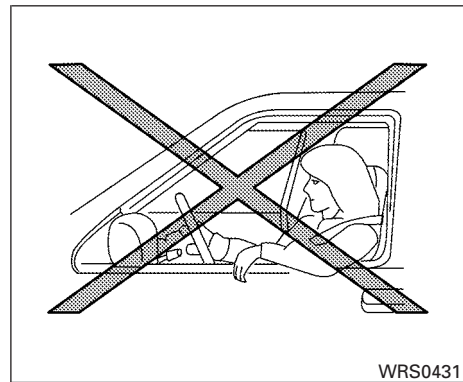
**⚠ WARNING**

- 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.

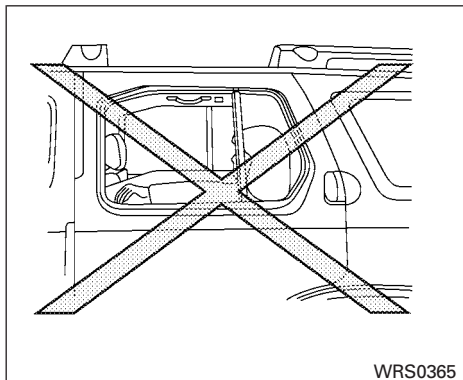


**Do not lean against the door.**

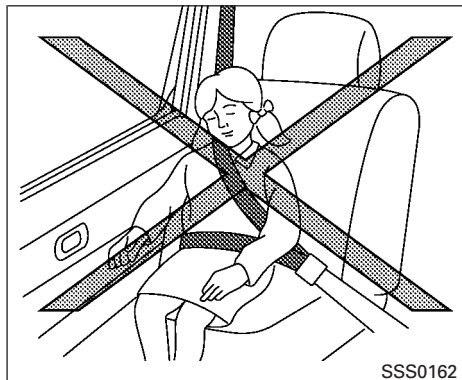
**⚠ WARNING**

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

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



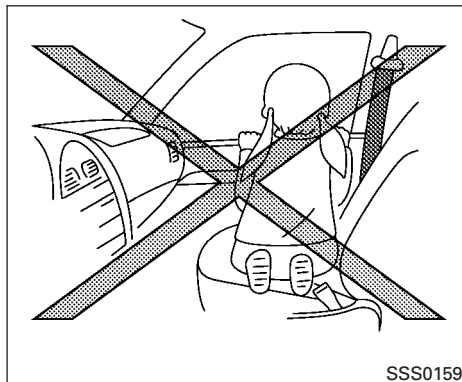
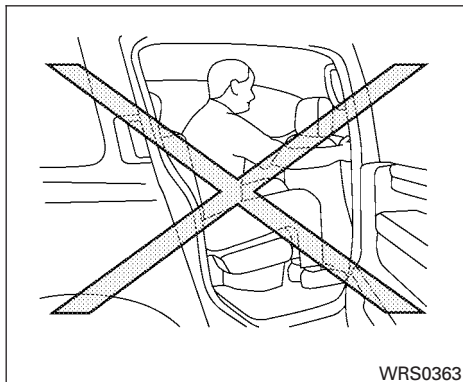
**Do not lean against doors or windows.**



**Do not lean against doors or windows.**

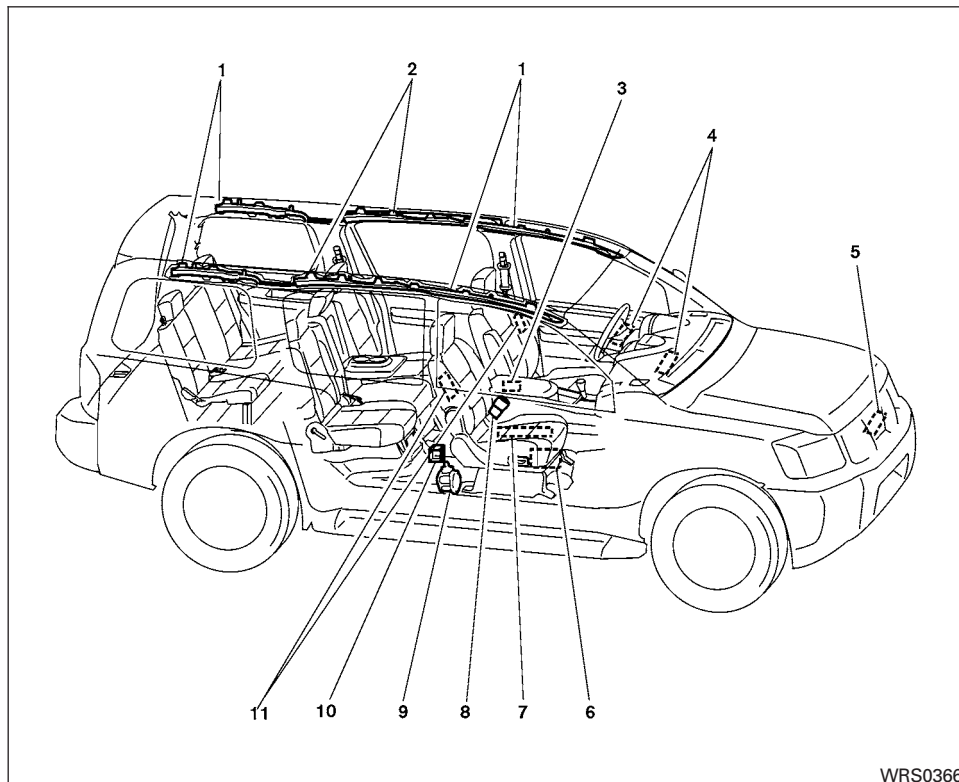
**⚠ WARNING**

- The seat belts, the side air bags and curtain and rollover air bags are most effective when you are sitting well back and upright in the seat. The side air bag and curtain and rollover 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.



1. Roof-mounted curtain side-impact supplemental air bag inflators
2. Roof-mounted curtain side-impact and rollover supplemental air bags
3. Air bag Control Unit (ACU)
4. Supplemental front-impact air bag modules
5. Crash zone sensor
6. Occupant classification system control unit
7. Occupant classification sensor (pressure sensor)
8. Seat belt buckle switches
9. Seat belt with pretensioner
10. Satellite sensors
11. Front seat-mounted side-impact supplemental air bag modules

#### 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.**

WRS0366

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. 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 NISSAN Advanced Air Bags, 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 placed 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.**




WRS0475




### 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 under the climate controls. After the ignition switch is placed in the "ON" position, the front passenger air bag status light on the instrument panel illuminates for about 7 seconds and then turns off or remains illuminated depending on the front passenger seat occupied status. The light operates as follows:

- Unoccupied passenger's seat: The  is OFF and the front passenger air bag is OFF and will not inflate in a crash.
- Passenger's 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 (child restraint 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 (child restraint 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 on the driver's side of the instrument panel, will blink. Have the system checked by a NISSAN dealer.

### **Other supplemental front-impact air bag precautions**

#### **WARNING**

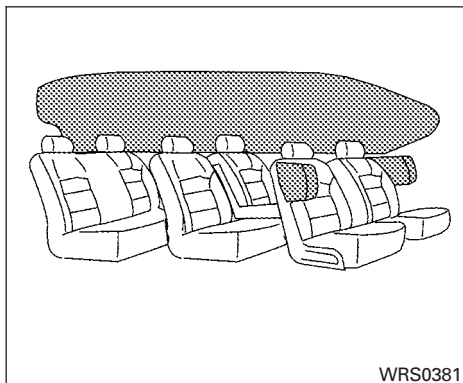
- Do not place any objects on the steering wheel pad or on the instrument panel. Also, do not place any objects between any occupant and the steering wheel or instrument panel. Such objects may become dangerous projectiles and cause injury if the front air bags inflate.
- Immediately after inflation, 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 roof-mounted curtain side-impact and rollover supplemental air bag systems

The side air bags are located in the outside of the seatback of the front seats. The curtain and rollover air bags are located in the side roof rails in all 3 rows. 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 and rollover 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.

Curtain and rollover air bags are also designed to inflate in certain types of rollover collisions or near rollovers. As a result, certain vehicle movements (for example, during severe off roading) may cause the curtain and rollover air bags to inflate.

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

When the side air bags and curtain and rollover 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 and rollover air bags help to cushion the impact force to the head of occupants in the front and rear outboard seating positions in all rows. They can help save lives and reduce serious injuries. However, an inflating side air bag or curtain and rollover air bag may

cause abrasions or other injuries. Side air bags and curtain and rollover 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 and rollover air bags inflate quickly in order to help protect the occupants. Because of this, the force of the side air bags and curtain and rollover air bags 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 will deflate quickly after the collision is over.

The curtain and rollover air bag will remain inflated for a short time.

**The side air bags and curtain and rollover air bags operate only when the ignition switch is placed 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 seat-back 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 and rollover 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 and rollover air bag systems. This is to prevent damage to or accidental inflation of the side air bag and curtain and rollover 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 curtain and rollover air bag systems.

- **Tampering with the side air bag system may result in serious personal injury. For example, do not change the front seats by placing material near the seat-backs 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 and rollover 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 or curtain and rollover air bag systems.**

**\* The SRS wiring harness or connectors are yellow or orange for easy identification.**

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

Seat belts with pretensioners (Front seats)

### **WARNING**

- **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 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. Incorrect disposal procedures could cause personal injury.**

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

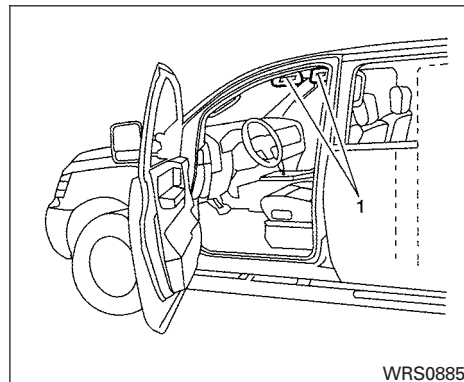
The pretensioner is encased with the seat belt retractor. These seat belts are used the same way as conventional seat belts.

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.

The supplemental air bag warning light  is used to indicate malfunctions in the pretensioner system. (See "SUPPLEMENTAL AIR BAG WARNING LIGHT" in this section for more details.) If the operation of the supplemental air bag warning light indicates there is a malfunction, have the system checked by a NISSAN dealer.

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



#### 1. SRS Air Bag Warning Labels

The warning labels are located on the surface of the sun visor.


### SUPPLEMENTAL AIR BAG WARNING LABELS

Warning labels about the supplemental front-impact air bag system are placed in the vehicle as shown in the illustration.



LRS0100

## SUPPLEMENTAL AIR BAG WARNING LIGHT

The supplemental air bag warning light, displaying  in the instrument panel, monitors the circuits for the air bag systems, 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 and rollover 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 and rollover air bag or pretensioner systems may not operate properly. They must be checked and repaired. Take your vehicle to the nearest NISSAN dealer.

### WARNING

**If the supplemental air bag warning light is on, it could mean that the front air bag, side air bag, curtain and rollover 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 and rollover 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 and rollover air bags, pretensioners and related parts should be pointed out to the person performing the maintenance. The ignition switch should always be in the LOCK position when working under the hood or inside the vehicle.

### WARNING

- **Once a front air bag, side air bag, or curtain and rollover air bag has inflated, the air bag module will not function again and must be replaced. Additionally, the activated pretensioners must also be replaced. The air bag module and pretensioner should be replaced by a NISSAN dealer. The air bag module and pretensioner cannot be repaired.**
- **The front air bag, side air bag, curtain and rollover 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. Incorrect disposal procedures could cause personal injury.**



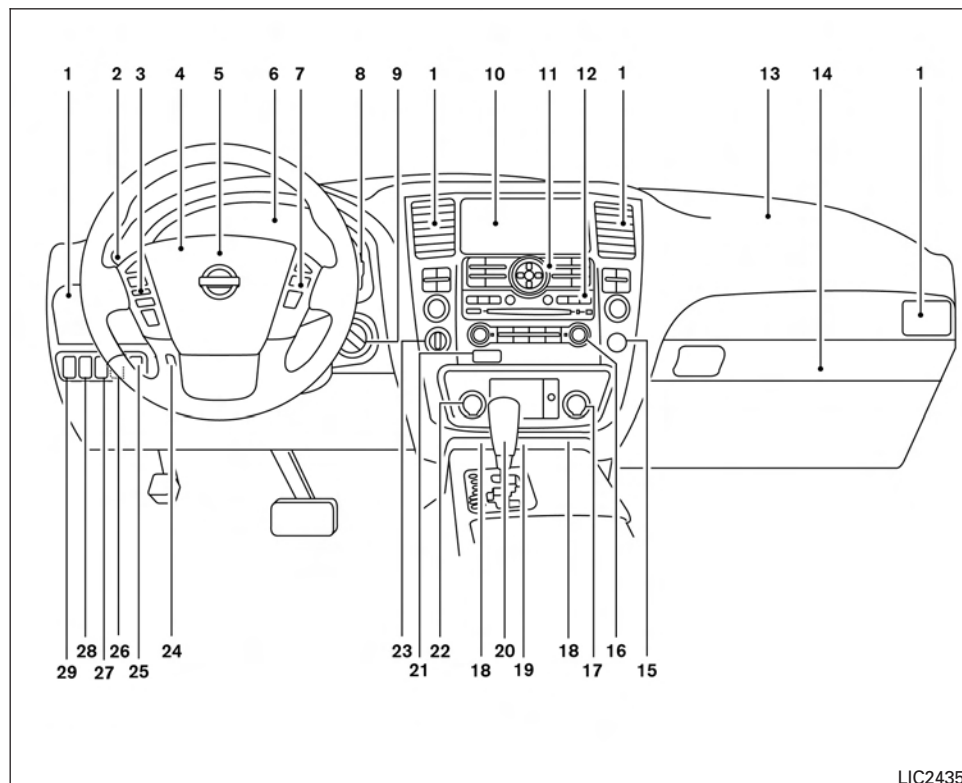
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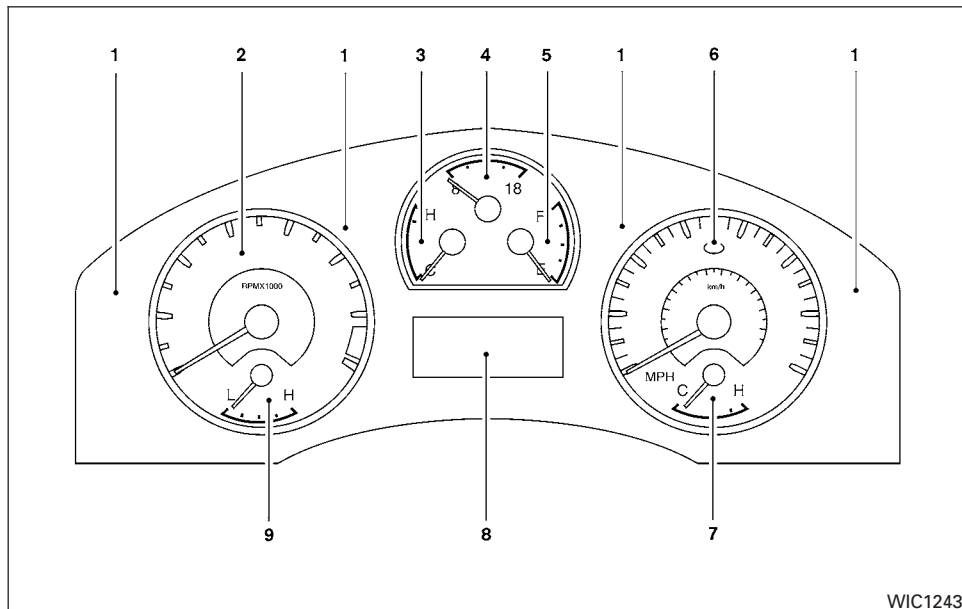
LIC2435

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\*: Refer to the separate Navigation System Owner's Manual (if so equipped).

**See the page number indicated in parentheses for operating details.**

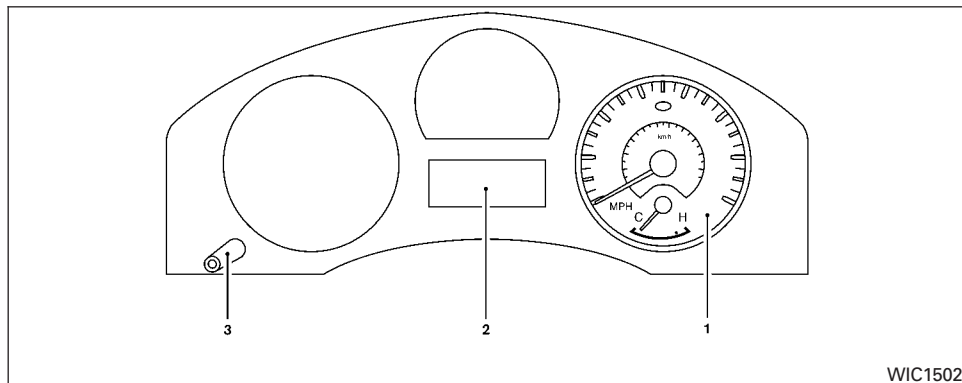
## METERS AND GAUGES



WIC1243

- |                                     |  |
|-------------------------------------|--|
| 1. Warning/indicator lights         | 7. Automatic transmission fluid temperature gauge          |
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| 4. Voltmeter                        |  |
| 5. Fuel gauge                       |  |
| 6. Speedometer                      |  |

### 2-4 Instruments and controls



WIC1502

1. Speedometer
2. Odometer/twin trip display
3. Change button

## SPEEDOMETER AND ODOMETER

### Speedometer

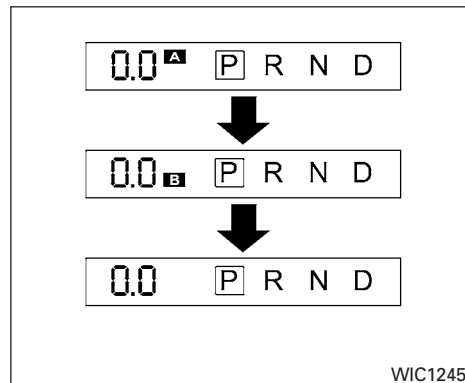
The speedometer indicates vehicle speed.

### 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.



WIC1245

### Changing the display:

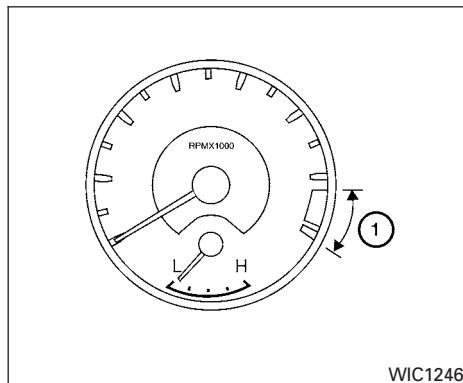
Pushing the change button changes the display as follows:

Trip **A** → Trip **B** → Odometer only

Elapsed time, driving distance and average speed information is also available for vehicles with navigation system (if so equipped). Refer to "Control panel buttons" in the "Display screen, heater, air conditioner and audio systems" section later in this manual.

### Resetting the trip odometer:

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



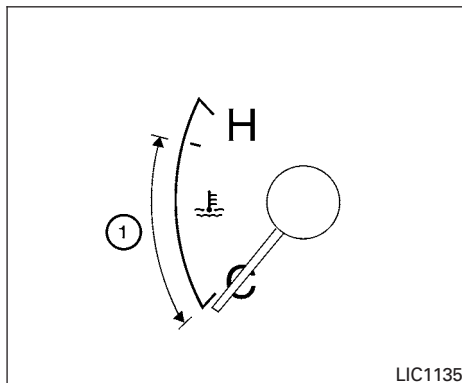
WIC1246

## TACHOMETER

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

### **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.**



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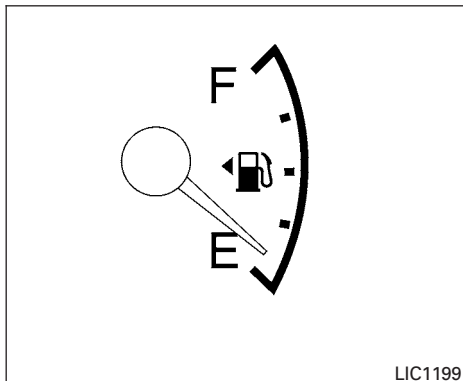
## ENGINE COOLANT TEMPERATURE GAUGE

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.

### **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.**



## FUEL GAUGE


The gauge indicates the **approximate** fuel level in the tank.

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



The gauge needle returns to E (Empty) after the ignition key is turned to OFF.

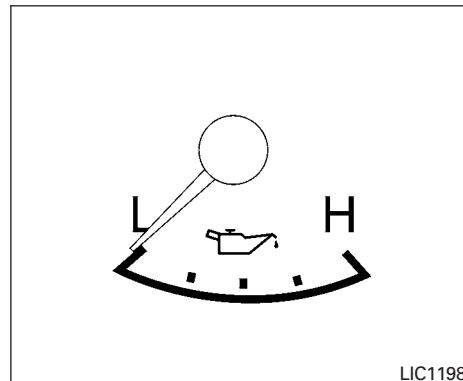
The low fuel warning light comes on when the amount of fuel in the tank is getting low.

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

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

### CAUTION

- If the vehicle runs out of fuel, the  Malfunction Indicator Light (MIL) may come on. Refuel as soon as possible. After a few driving trips, the  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.

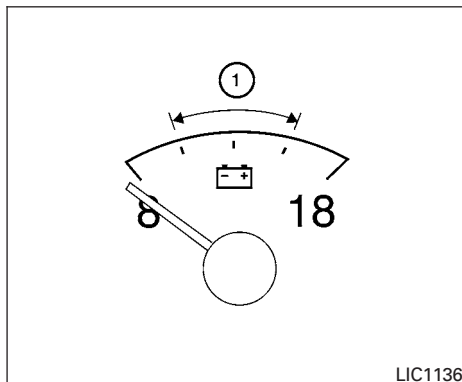


## ENGINE OIL PRESSURE GAUGE

The gauge indicates the engine lubrication system oil pressure while the engine is running. The needle should be in the middle of the gauge when the engine is running.

### **⚠ CAUTION**

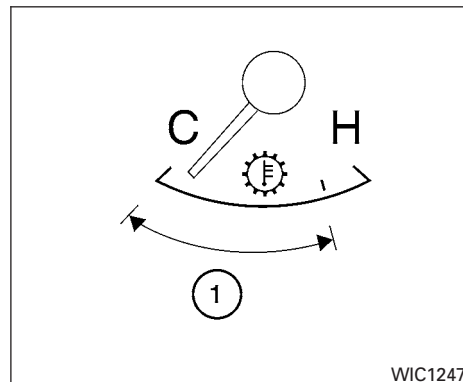
- This gauge is not designed to indicate low engine oil level. Use the dipstick to check the oil level. (See “Engine oil” in the “Maintenance and do-it-yourself” section.)
- If the gauge needle does not move with the proper amount of engine oil, have the vehicle checked by a NISSAN dealer. Continued vehicle operation in such a condition could cause serious damage to the engine.



### **VOLTMETER**

When the ignition switch is placed in the ON position, the voltmeter indicates the battery voltage. When the engine is running, it indicates the generator voltage.

While cranking the engine, the volts drop below the normal range. If the needle is not in the normal range (11 – 15 volts) ① while the engine is running, it may indicate that the charging system is not functioning properly. Have the system checked by a NISSAN dealer.



### **AUTOMATIC TRANSMISSION FLUID TEMPERATURE GAUGE**



This gauge indicates the temperature of the automatic transmission fluid. The automatic transmission fluid temperature is in the normal range ① when the gauge needle points within the zone shown in the illustration.

## COMPASS DISPLAY (if so equipped)


### CAUTION

- **This gauge is not designed to indicate low automatic transmission fluid level. Use the dipstick to check the fluid level. (See “5-speed automatic transmission fluid” in the “Maintenance and do-it-yourself” section.)**
- **If the gauge indicates automatic transmission fluid temperature over the normal range, stop the vehicle as soon as safely possible. Have the vehicle checked by a NISSAN dealer. Continued operation of the vehicle may seriously damage the transmission.**


This unit measures terrestrial magnetism and indicates the heading direction of the vehicle.

With the ignition switch in the ON position, press the  or  button as described in the charts below to activate various features of the automatic anti-glare rearview mirror.

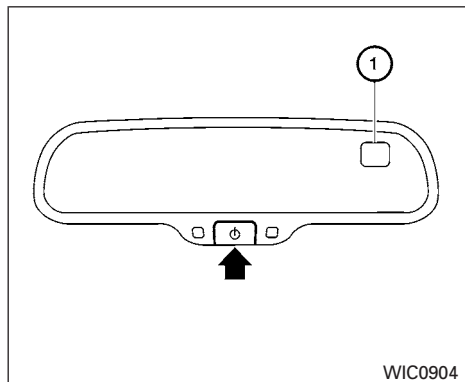
### Type A

Push and hold the  button for about:	Feature: (Push button again for about 1 second to change settings)
1 second	Compass display toggles on/off
8 seconds	Automatic anti-glare/indicator light toggles on/off
11 seconds	Compass zone can be changed to correct false compass readings
13 seconds	Compass enters calibration mode

### Type B



Push and hold the  button for about:	Feature: (Push button again for about 1 second to change settings)
1 second	Compass display toggles on/off
8 seconds	Compass zone can be changed to correct false compass readings
10 seconds	Compass enters calibration mode

For information about the automatic anti-glare feature, refer to “Automatic anti-glare rearview mirror” in the “Pre-driving checks and adjustments” section.

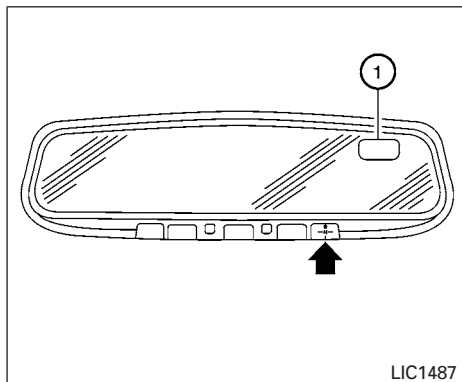


**Type A**

## COMPASS DISPLAY

Push the  or  button for about 1 second when the ignition switch is placed in the ON position to toggle the compass direction display ① on or off. The display will indicate the direction that the vehicle is heading.

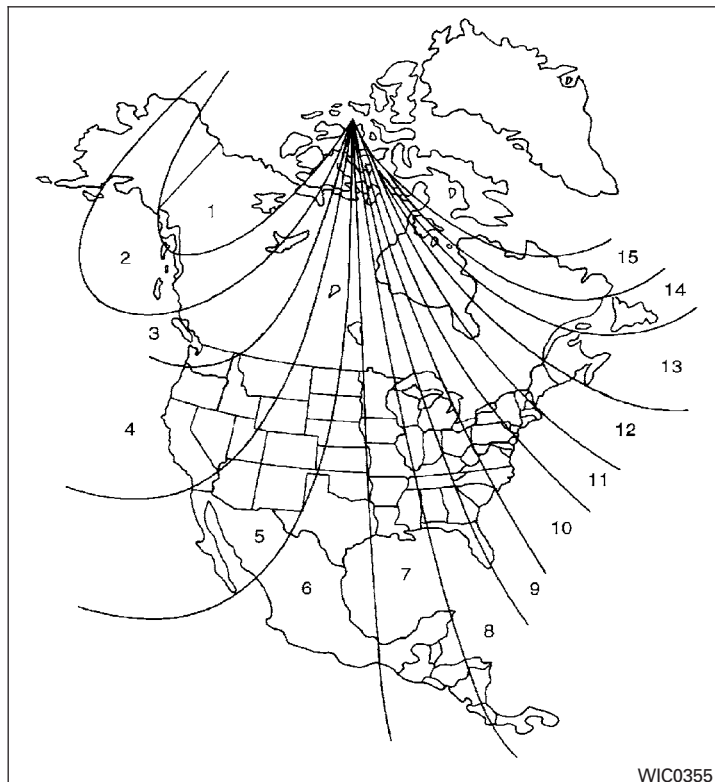
N: North  
E: East  
S: South  
W: West



**Type B**

If the display reads “C”, calibrate the compass by driving the vehicle in three complete circles at less than 5 MPH (8 km/h).



You can also calibrate the compass by driving your vehicle on your everyday route. The compass will be calibrated once it has tracked three complete circles.



WIC0355

## Zone variation change procedure

The difference between magnetic north and geographical north is known as variance. In some areas, this difference can sometimes be great enough to cause false compass readings. Follow these instructions to set the variance for your particular location if this happens:


1. Press and hold the  button for about 5 seconds. The current zone number will appear in the display. Release the button.
2. Find your current location on the zone map. Refer to the illustration.
3. Press the  button repeatedly to toggle through the zone numbers until the desired number appears in the display. Once you have selected a zone number, the display will show a compass direction within a few seconds.

### NOTE:

**Use zone number 5 for Hawaii.**

### Inaccurate compass direction:



















The compass display is equipped with automatic correction function. If the correct direction is not shown, follow this procedure.

1. With the display turned on, press and hold the  button for about 10 seconds. The "CAL" icon in the compass display will illuminate.
  2. Calibrate the compass by driving the vehicle one and a half circles at a maximum speed of 6 MPH (10 km/h).
  3. After completing the circles, the display should return to normal.
- If the compass deviates from the correct indication soon after repeated adjustment, have the compass checked at an authorized NISSAN dealer.
  - The compass may not indicate the correct compass point in tunnels or while driving up or down a steep hill. (The compass returns to the correct compass point when the vehicle moves to an area where the geomagnetism is stabilized.)
  - If a magnet is located in or near the overhead console in the front of the vehicle or the vehicle is driven where the terrestrial magnetism is disturbed, the compass display may not indicate the correct direction.

#### CAUTION






- **Do not install a ski rack, antenna, etc., which are attached to the vehicle by means of a magnet. They affect the operation of the compass.**
- **When cleaning the mirror, use a paper towel or similar material dampened with glass cleaner. Do not spray glass cleaner directly on the mirror as it may cause the liquid cleaner to enter the mirror housing.**

## WARNING/INDICATOR LIGHTS AND AUDIBLE REMINDERS

<b>ABS</b> or  Anti-lock Braking System (ABS) warning light	<b>4WD</b> 4WD warning light (  model)	 High beam indicator light (Blue)
<b>AT CHECK</b> Automatic Transmission check warning light	 Low fuel warning light	 Malfunction indicator light (MIL)
<b>ATP</b> Automatic transmission park warning light (  model)	 Low tire pressure warning light	 Security indicator light
<b>BRAKE</b> or  Brake warning light	 Master warning light	 Slip indicator light
 Charge warning light	 Seat belt warning light and chime	<b>TOW</b> Tow mode ON indicator light (if so equipped)
<b>CK SUSP</b> Check suspension warning light (if so equipped)	 Supplemental air bag warning light	 Turn signal/hazard indicator lights
 Engine oil pressure low/engine coolant temperature high warning light	 Front passenger air bag status light	 Vehicle Dynamic Control (VDC) OFF indicator light

## 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 (if so equipped):

 , **BRAKE** or  ,  ,  ,  , **4WD**

The following lights come on briefly and then go off (if so equipped):

**ABS** or  ,  ,  ,  ,  ,   
 **AT CHECK** , **CK SUSP**

**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

For additional information on warnings and indicators, see “Vehicle information display” later in this section.

**ABS**



Anti-lock Braking  
System (ABS)  
warning light

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.

**AT  
CHECK**

Automatic Transmission check  
warning light

When the ignition switch is placed in the ON position, the light comes on for about 2 seconds. If the light comes on at any other time, it may indicate the automatic transmission system is not functioning properly. Have the system checked by a NISSAN dealer.

**ATP**

Automatic transmission park  
warning light (  model)

### WARNING

- **If the ATP light is ON, this indicates that the automatic transmission P (Park) position will not function and the transfer case is in neutral.**
- **When parking, always make sure that the 4WD shift indicator light illuminates and the parking brake is set. Failure to engage the transfer position in 2WD, AUTO, 4H or 4LO could result in the vehicle moving unexpectedly, resulting in serious personal injury or property damage.**

- **The warning light may come on when the ignition switch is ON and the shift selector is placed in the P position while shifting the transfer case between 4H and 4LO. Shift the 4WD shift switch to the 2WD, AUTO, 4H, or 4LO position again to turn off the ATP warning light when the warning light comes on. Before shifting the 4WD switch into the 4LO position or out of 4LO in the 4H position, move the shift selector into the N position. Shift the shift selector into the P position and make sure that the 4WD shift indicator light is ON and the ATP warning light is OFF.**

This light indicates that the automatic transmission parking function is not engaged. If the transfer control is not secured in any drive position while the shift selector is in the P (Park) position, the transmission will disengage and the drive wheels will not lock.

**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:

1. Check the brake fluid level. Add brake fluid as necessary. See "Brake fluid" in the "Maintenance and do-it-yourself" section of this manual.
2. 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.**

## Anti-lock Braking System (ABS) warning indicator

When the parking brake is released and the brake fluid level is sufficient, if both the brake warning light and the Anti-lock Braking System (ABS) warning light illuminate, it may indicate the ABS is not functioning properly. Have the brake system checked, and if necessary, repaired by a NISSAN dealer promptly. Avoid high-speed driving and abrupt braking. (See "Anti-lock Braking System (ABS) warning light" in this section.)



## 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.

## CAUTION

- **Do not ground electrical accessories directly to the battery terminal. Doing so will bypass the variable control system and the vehicle battery may not charge completely. Refer to "Variable voltage control system" in the "Maintenance and do-it-yourself" section later in this manual.**
- **Do not continue driving if the generator belt is loose, broken or missing.**



## Check suspension warning light (if so equipped)

This light may indicate a malfunction in the auto-leveling suspension.

For additional information, refer to "Jacking up vehicle and removing the damaged tire" in the "In case of emergency" section of this manual.



## Engine oil pressure low/ Engine coolant temperature high warning light

This light warns of low engine oil pressure or high engine coolant temperature.


If the light flickers or comes on during normal driving, pull off the road in a safe area, stop the engine and allow it to cool. If the light remains on after checking the oil and coolant, stop the engine **immediately** and call a NISSAN dealer or other authorized repair shop.

**This light is not designed to indicate a low oil or low coolant level.** Check the oil level with the dipstick and check the coolant level on the reservoir. See “Engine oil” and “Checking engine coolant level” in the “Maintenance and do-it-yourself” section of this manual. Also see “If your vehicle overheats” in the “In case of emergency” section of this manual.

#### 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.**
- **If the gauge indicates engine coolant temperature 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.**

4WD

4WD warning light  
( model)

The 4WD warning light comes on when the ignition switch is placed in the ON position. It turns off soon after the engine is started.

If the engine or vehicle is not functioning properly, the warning light will either remain illuminated or blink. See “4WD warning light” in the “Starting and driving” section.

#### CAUTION

- **If the warning light comes on or blinks during operation, have your vehicle checked by a NISSAN dealer as soon as possible.**
- **Do not drive on dry hard surface roads in the 4H or 4LO position. If the 4WD warning light turns on when you are driving on dry hard surface roads:**
  - in the AUTO or 4H position, shift the 4WD shift switch to 2WD.
  - in the 4LO position, stop the vehicle, move the shift selector to the N position and shift the 4WD shift switch to 2WD.

- **If the warning light is still on after the above operation, have your vehicle checked by a NISSAN dealer as soon as possible.**



Low fuel warning light

This light comes on when the fuel level in the fuel tank is getting low. Refuel as soon as it is convenient, preferably before the fuel gauge reaches E (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. A **CHECK TIRE PRESSURE** warning also appears in the vehicle information display. 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.

The **CHECK TIRE PRESSURE** warning appears each time the ignition switch is placed in the ON position as long as the low tire pressure warning light remains illuminated.

For additional information, see "Vehicle information display" in the "Instruments and controls" section and "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. The **CHECK TIRE PRESSURE** warning does not appear if the low tire pressure warning light illuminates to indicate a TPMS malfunction.

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 in this manual.

### **WARNING**

- **Radio waves could adversely affect electrical medical equipment. Those who use a pacemaker should contact the electric medical equipment manufacturer for the possible influences before use.**

- **If the light does not illuminate with the ignition switch 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 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 located in the driver's door opening to turn the low tire pressure warning light OFF. If the light still comes on 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.

### 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.



### Master warning light

When the ignition is in the ON position, the master warning light illuminates if any of the following are displayed on the vehicle information display.

- No key warning
- Low fuel warning
- Low windshield-washer fluid warning
- Parking brake release warning
- Door/liftgate open warning
- Loose fuel cap
- Check tire pressure warning



### 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, front seat-mounted side-impact air bag, roof-mounted curtain and rollover 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 system (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 bag, side air bag, curtain air bag systems 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.**

## INDICATOR LIGHTS

For additional information on warnings and indicators, see “Vehicle information display” later in this section.



### Front passenger air bag status light

The front passenger air bag status light (  ) 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  light 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 vehicle is not ready for an emission control system inspection/maintenance test. See “Readiness 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 LOOSE FUEL CAP warning appears in the vehicle information display. If the fuel-filler cap is loose or missing, tighten or install the cap and continue to drive the vehicle. The  light should turn off after a few driving trips. If the  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 your vehicle towed to the dealer.

### 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.**



### Security indicator light

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

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



### Slip indicator light

This indicator will blink when the VDC system or the traction control system is operating, thus alerting that the vehicle is nearing its traction limits. The road surface may be slippery.



### Tow mode ON indicator light (if so equipped)

This light comes on when the tow mode function is ON.




### Turn signal/hazard indicator lights

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

Both lights flash when the hazard switch is turned on.



### Vehicle Dynamic Control (VDC) OFF indicator light

This indicator light comes on when the Vehicle Dynamic Control off switch is pushed to OFF, the transfer case is in the 4LO position (  model), or when the Vehicle Dynamic Control system is not functioning properly. 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 OFF 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.

## VEHICLE INFORMATION DISPLAY

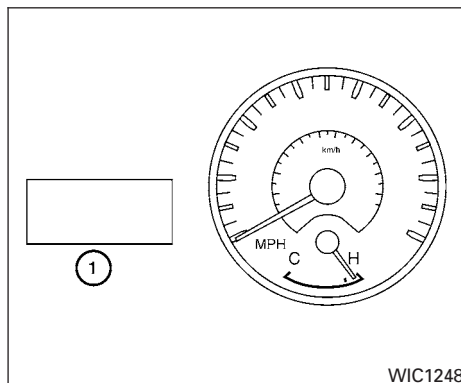
### Key reminder chime

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.

### 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.

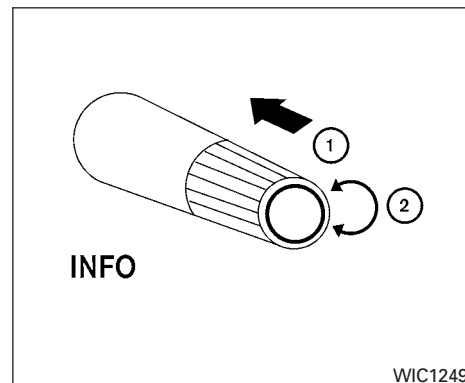
Turn the headlight control switch off before leaving the vehicle.



The vehicle information display ① is located to the left of the speedometer. It displays such items as:

- automatic transmission position indicator
- cruise control system information
- Intelligent Key operation information (if so equipped)
- some indicators and warnings
- other information

For details about the Intelligent Key, see "NISSAN Intelligent Key®" in the "Pre-driving checks and adjustments" section.



### HOW TO USE THE VEHICLE INFORMATION DISPLAY

Press the vehicle information display INFO button ① located on the instrument panel to toggle through the following modes.

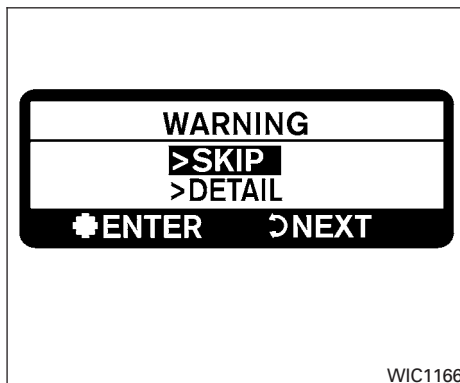
MPG → Range → Warning

Rotate the INFO button ② to highlight the desired menu option within the selected mode. Press the INFO button ① to enter the highlighted menu.

The icons at the bottom of the display screen show the options available:

⬇ ENTER — Press the INFO button to select a highlighted option.

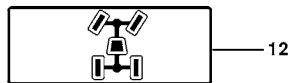
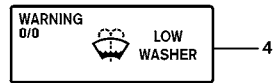
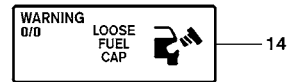
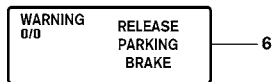
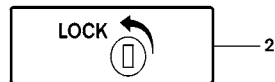
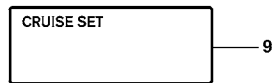
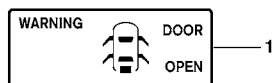
↻ NEXT — Rotate the INFO button to highlight an option.



### Warning mode

The warning mode can be selected to view any warnings that may be present. Once the screen is selected you have the option of skipping the warning or viewing it in detail.



Warnings can be present for issues such as an open door or low fuel. For more information about potential warnings see “Vehicle information display warnings and indicators” later in this section.



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## Vehicle information display warnings and indicators

1. Door and liftgate open warning
2. Lock warning (NISSAN Intelligent Key® model)
3. Low fuel warning
4. Low windshield-washer fluid warning
5. No key warning (NISSAN Intelligent Key® model)
6. Parking brake warning
7. Shift P warning (NISSAN Intelligent Key® model)
8. Cruise main switch indicator
9. Cruise set switch indicator

10. NISSAN Intelligent Key® battery discharge indicator (NISSAN Intelligent Key® model)
11. Transfer 4LO position indicator (  model)
12. 4WD shift indicator (  model)
13. Automatic transmission position indicator
14. Loose fuel cap warning
15. Check tire pressure warning

### Door and liftgate open warning

This warning illuminates when a door, the liftgate or the liftgate glass has been opened when the ignition switch is placed in the ON position.

### Lock warning (NISSAN Intelligent Key® model)

This warning illuminates and a chime sounds if the ignition switch has been in the ACC or ON position and then placed in the OFF position.

Place the ignition switch in the LOCK position and the warning and chime will turn off.

Refer to “Shift P warning” in this section for additional information.

### Low fuel warning

This warning illuminates when the fuel level in the fuel tank is getting low. Refuel as soon as it is

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

### Low windshield-washer fluid warning

This warning illuminates when the windshield-washer fluid is at a low level. Add windshield-washer fluid as necessary. See “Windshield-washer fluid” in the “Maintenance and do-it-yourself” section of this manual.

### No key warning (NISSAN Intelligent Key® model)

This warning illuminates following two conditions:

1. When the ignition switch is pushed and the Intelligent Key cannot be recognized by the system. If this warning illuminates, you cannot start the engine.

Check for the following causes and perform the assigned remedies:

- The battery of the Intelligent Key carried with you is discharged completely. Replace the battery with a new one.
- The Intelligent Key carried with you is not registered to the system. Use the registered Intelligent Key.

- You do not have an Intelligent Key with you. Carry an Intelligent Key with you.

2. When the door is closed with the Intelligent Key left outside the vehicle and the ignition switch is in the ACC or ON position. A chime will also sound.

### Parking brake warning

This warning illuminates when the parking brake is set and the vehicle is driven.

### SHIFT P warning (NISSAN Intelligent Key® model)

This warning illuminates when the ignition switch is in the ACC or OFF position and the shift selector is in any position other than (Park) position. Also, a chime sounds when the ignition switch is in the OFF position.

If this warning illuminates, move the shift selector to the P (Park) position or start the engine.

If the shift selector is moved to the P (Park) position, the lock warning will appear. Refer to “Lock warning” in this section.

For additional information about Intelligent Key, see “NISSAN Intelligent Key®” in the “Pre-driving checks and adjustments” section.

### **Cruise main switch indicator**

This indicator illuminates when the cruise control main switch is pushed. The indicator turns off when the main switch is pushed again. When the cruise main switch indicator illuminates, the cruise control system is operational.

### **Cruise set switch indicator light**

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.

### **NISSAN Intelligent Key® battery discharge indicator (NISSAN Intelligent Key® model)**

This indicator illuminates when the Intelligent Key battery is running out of power.

If this indicator illuminates, replace the battery with a new one. See “Battery replacement” in the “Maintenance and do-it-yourself” section.

### **Transfer 4LO position indicator ( 4x4 model)**

This indicator illuminates when the 4WD shift switch is set in the 4LO position with the ignition switch placed in the ON position.

If the 4WD shift switch is set in the 4LO position and the indicator blinks, stop the vehicle, drive slowly forward and the indicator will turn on.

When you shift between 4H and 4LO, stop the vehicle, move the shift selector to the N (Neutral) position, then depress and turn the 4WD shift switch to 4LO or 4H.

The transfer case may be damaged if you shift the switch while driving.

You cannot move the transfer 4WD shift switch between 4H and 4LO unless you have first stopped the vehicle and moved the shift selector to N (Neutral). Make sure the transfer 4LO position indicator illuminates when you shift the 4WD shift switch to 4LO.

### **The indicator may blink while shifting from one drive mode to the other.**

#### **4WD shift indicator ( 4x4 model)**

While the engine is running, the 4WD shift indicator will illuminate the position selected by the 4WD shift switch.

### **The 4WD shift indicator may blink while shifting from one drive mode to the other.**

### **Automatic transmission position indicator**

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

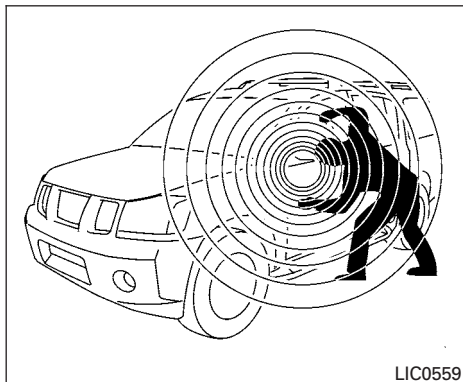
### **Loose fuel cap warning**

This warning appears when the fuel-filler cap is not tightened correctly after the vehicle has been refueled. See “Fuel-filler cap” in the “Pre-driving checks and adjustments” section.

### **Check tire pressure warning**

This warning appears when the low tire pressure warning light in the meter illuminates and low tire pressure is detected. If this warning appears, stop the vehicle and adjust the tire pressure to the recommended COLD tire pressure shown on the Tire and Loading Information label. See “Low tire pressure warning light” earlier in this section and “Tire Pressure Monitoring System (TPMS)” in the “Starting and driving” section.

## SECURITY SYSTEMS



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. Place the ignition switch in the LOCK position and remove the key.
3. Close all doors. Lock all doors. The doors can be locked with:
  - the power door lock switch (if the door is opened, locked and then closed).
  - the key — master or mechanical (NISSAN Intelligent Key® models).
  - any request switch (NISSAN Intelligent Key® models).
  - the keyfob or NISSAN Intelligent Key®.

Keyfob and NISSAN Intelligent Key® operation:

- Push the  button. All doors lock. The hazard 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 lights flash twice and the horn beeps once as a reminder that the doors are already locked.


The horn may or may not beep. Refer to “Silencing the horn beep feature” in the Pre-driving checks and adjustments” section or “Comfort & Convenience settings” in the “Monitor, climate, audio, phone and voice recognition systems” section.

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, a request switch, the keyfob or Intelligent Key, or if 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 a period of time, unlock the 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 a period of time. 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, a request switch or by pressing the  button on the keyfob or Intelligent Key.

The alarm is activated by:

- opening a door without using the key, a request switch, keyfob or Intelligent Key (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, pressing the  button on the keyfob or Intelligent Key, or by unlocking all doors with any request switch (Intelligent Key models).

## 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.

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

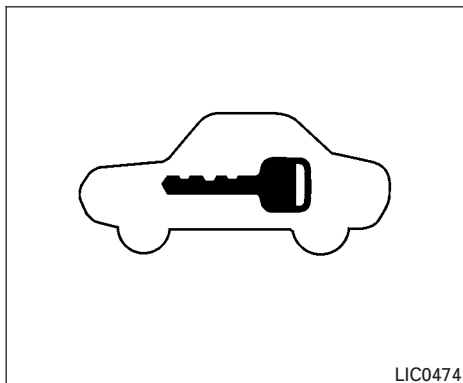
If the no start condition re-occurs, NISSAN recommends placing the registered key on a separate key ring to avoid interference from other devices.

**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 EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.**



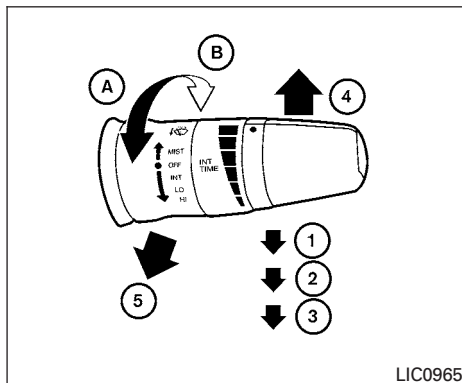
### Security indicator light

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 in the ON position.

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

- ① Intermittent (INT) — intermittent operation can be adjusted by turning the knob toward (A) (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. Refer to “Comfort & convenience settings” in the “Monitor, climate, audio, phone and voice recognition systems” section later in this manual.

- ② Low (LO) — continuous low speed operation
- ③ 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.

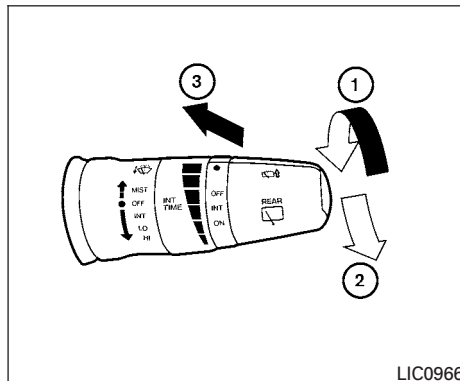
### **⚠ WARNING**

**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.**

## REAR WINDOW WIPER AND WASHER SWITCH

### ⚠ CAUTION

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



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.

- ① 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.

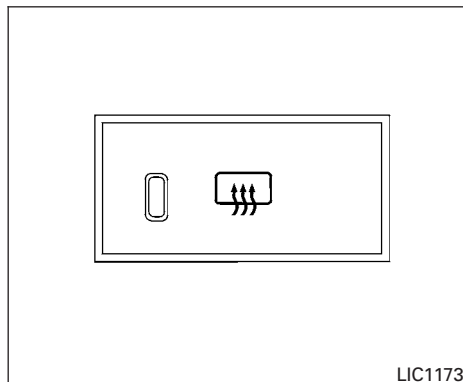
### ⚠ WARNING

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.

### ⚠ CAUTION

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

## REAR WINDOW AND OUTSIDE MIRROR DEFROSTER SWITCH



To defrost the rear window glass and outside mirrors:

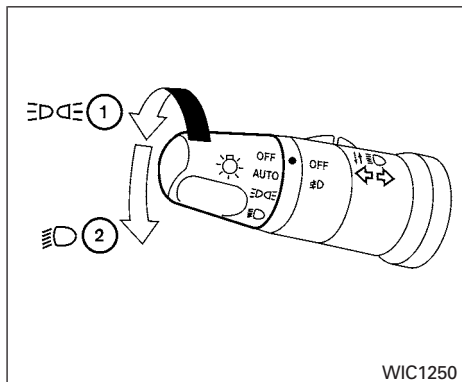
Start the engine and push the rear window defroster switch. The rear window defroster indicator light on the display screen comes on. Push the switch again to turn the defroster off.

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

### CAUTION

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



## HEADLIGHT AND TURN SIGNAL SWITCH

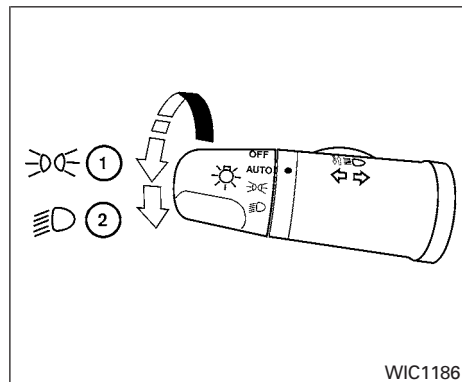


### Type A

## HEADLIGHT CONTROL SWITCH

### Lighting

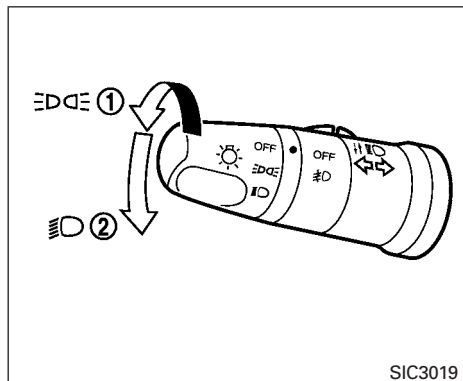
- ① When turning the switch to the  position, the front parking, tail, license plate and instrument panel lights come on.
- ② When turning the switch to the  position, the headlights come on and all the other lights remain on.



### Type B

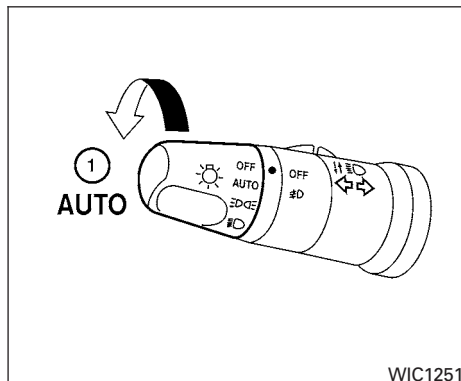
### CAUTION

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



**Type C**

SIC3019



WIC1251

## Autolight system

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 a period of time after you place the ignition switch in the OFF position and all doors are closed.



## NOTE:

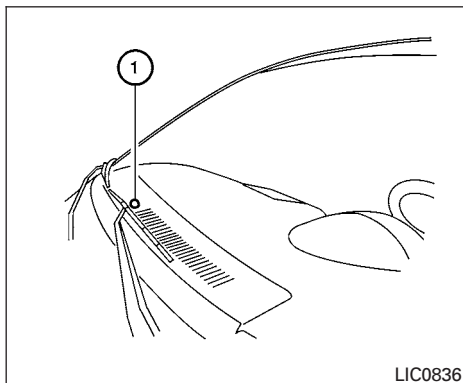
**Autolight activation sensitivity and the time delay for autolight shutoff can be adjusted. See “Comfort & convenience settings” in the “Monitor, climate, audio, phone and voice recognition systems” section later in this manual.**

To turn on the autolight system:

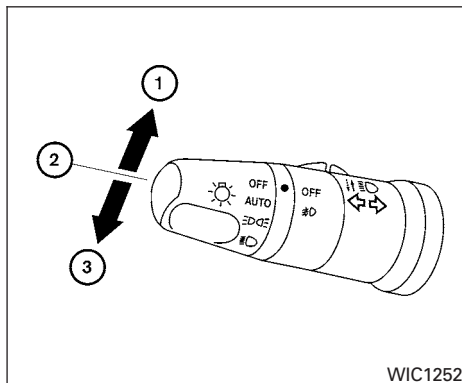
1. Turn the headlight switch to the AUTO position ①.
2. Turn the ignition switch to ON.
3. The autolight system automatically turns the headlights on and off.

Initially, if the ignition switch is turned OFF and a door is opened and left open, the headlights remain ON for a period of time. If another door is opened while the headlights are on, then the timer is reset.


To turn the autolight system off, turn the switch to the OFF, , or  position.





Be sure you do not put anything on top of the autolight sensor ① located in the top side 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 placed in the ON position, your vehicle's battery could become discharged.







### Headlight beam select

- ① To select the high beam function, push the lever forward. The high beam lights come on and the  light illuminates.
- 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  or  position, the headlights will turn off after a period of time.

After the headlights automatically turn off with the headlight switch in the  or  position, the headlights will illuminate again if the headlight switch is moved to the OFF position and then turned to the  or  position.

### 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.**

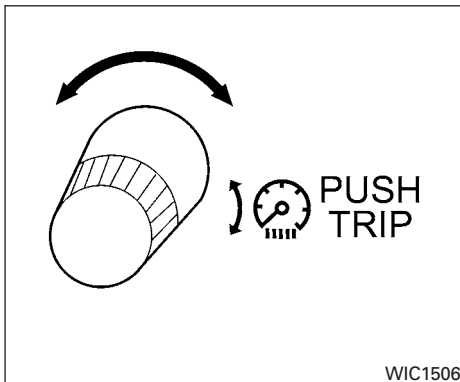
## DAYTIME RUNNING LIGHT SYSTEM (Canada only)

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  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.

### WARNING

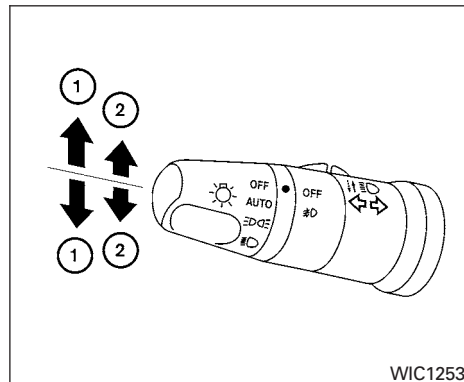
**When the daytime running light system is active, tail lights on your vehicle are not on. It is necessary at dusk to turn on your headlights. Failure to do so could cause an accident injuring yourself and others.**



## INSTRUMENT BRIGHTNESS CONTROL

The instrument brightness control operates when the headlight control switch is in the ,  or AUTO position (with auto-lights activated).

Turn the control to adjust the brightness of instrument panel lights when driving at night.



## TURN SIGNAL SWITCH

### Turn signal

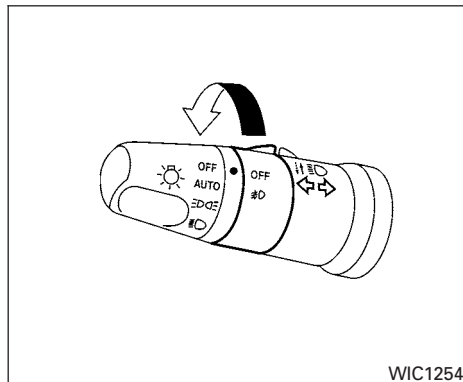
- ① Move the lever up or down to signal the turning direction. When the turn is completed, the turn signals cancel automatically.

### Lane change signal



- ② 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.


The turn signal will flash three times automatically.

## HORN



### FOG LIGHT SWITCH (if so equipped)

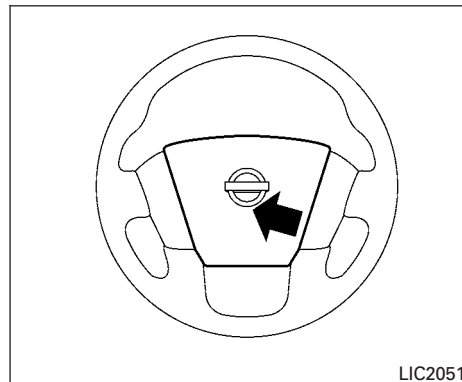
To turn the fog lights on, turn the headlight switch to the  position, then turn the fog light switch to the  position.

To turn the fog lights on with the headlight switch in the AUTO position, the headlights must be on, then turn the fog light switch to the  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.

## 2-34 Instruments and controls

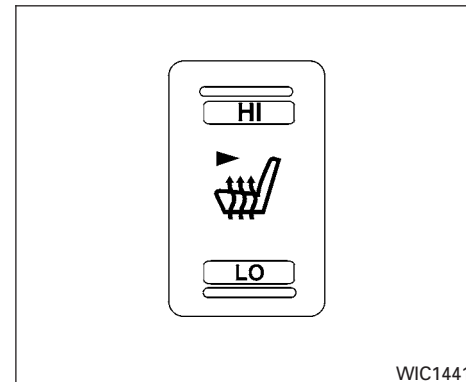


To sound the horn, push near the horn icon of the steering wheel.

### 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.**

## HEATED SEATS (if so equipped)



1. Start the engine.
2. Push the LO or HI 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.

### WARNING

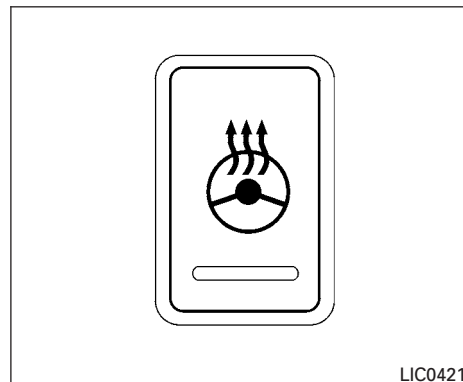
Do not use or allow occupants to use the seat heater if you or the occupants cannot monitor elevated seat temperatures or have an inability to feel pain in body parts that contact the seat. Use of the seat heater by such people could result in serious injury.

### 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 malfunctions 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.

## HEATED STEERING WHEEL (if so equipped)



The heated steering wheel system is designed to operate only when the surface temperature of the steering wheel is below approximately 68°F (20°C).

Push the heated steering wheel switch to warm the steering wheel after the engine starts. The indicator light will come on.

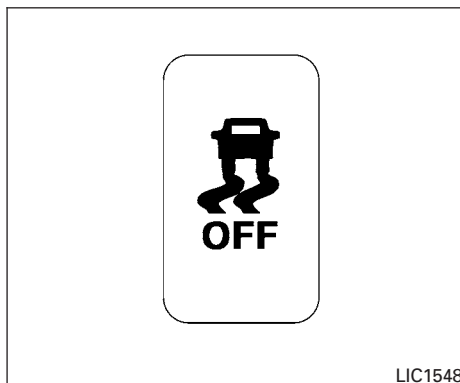
If the surface temperature of the steering wheel is below 68°F (20°C), the system will heat the steering wheel to approximately 86°F (30°C), then turn off automatically.

Push the switch again to turn the heated steering wheel off manually. The indicator light will go off.

## VEHICLE DYNAMIC CONTROL (VDC) OFF SWITCH


### NOTE:

The heated steering wheel switch is equipped with a 30 minute timer. After the switch has been activated for 30 minutes, the system will automatically turn off. If the surface temperature of the steering wheel is above 68°F (20°C) when the switch is turned on, the system will not heat the steering wheel. This is not a malfunction.



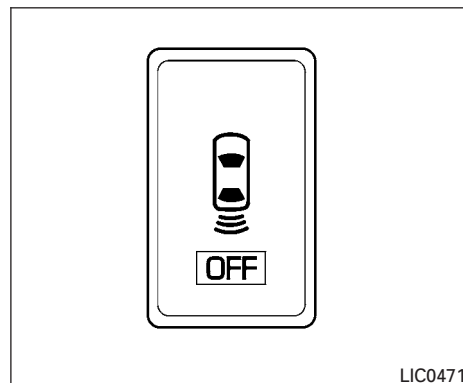
The vehicle should be driven with the Vehicle Dynamic Control (VDC) system on for most driving conditions.

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  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 is active when the ignition switch is placed in the ON position and the shift selector is in R (Reverse).

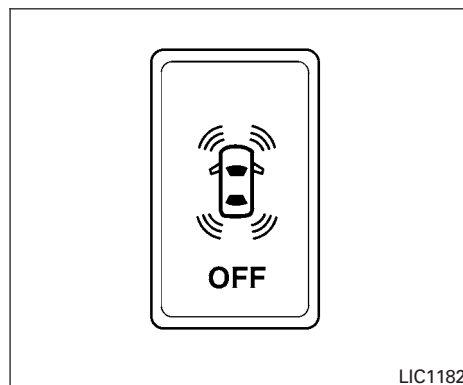
When sensors detect obstacles within 5.9 ft (1.8 m) of the rear bumper, a beeping tone is emitted.

## FRONT AND REAR SONAR SYSTEM OFF SWITCH (if so equipped)

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.



### WARNING

- **The front sonar system is a convenience but it is not a substitute for proper driving.**
- **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 front sonar system:

- is active when the ignition is in the ON position and the shift selector is in a forward gear position.
- a beeping tone is emitted when the sensors detect obstacles within 3 ft (1.0 m) of the front bumper.

The rear sonar system:

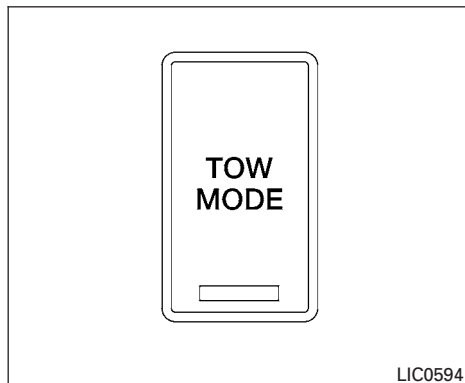
- is active when the ignition is in the ON position and the shift selector is in R (Reverse).
- a beeping tone is emitted when the sensors detect obstacles within 5.9 ft (1.8 m) of the rear bumper.

The front and rear sonar system can be disabled by pushing the OFF switch. When the system is disabled, the indicator light on the switch will illuminate. Push the switch again to enable the system. The indicator light will go off.

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

See "Front sonar system" in the "Starting and driving" section.

## TOW MODE SWITCH



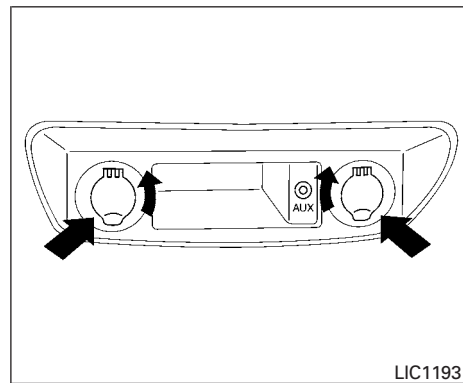
Tow mode should be used when pulling a heavy trailer or hauling a heavy load. Driving the vehicle in the tow mode with no trailer/load or light trailer/light load will not cause any damage. However, fuel economy may be reduced, and the transmission/engine driving characteristics may feel unusual.

Press the tow mode switch to activate tow mode. The indicator light on the tow mode switch illuminates when tow mode is selected. Press the tow mode switch again to turn tow mode OFF.

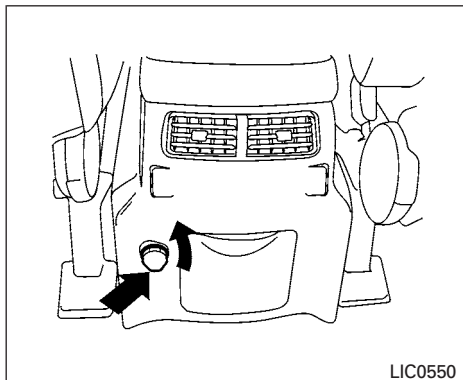
Tow mode is automatically canceled when the ignition switch is placed in the OFF position.

For additional information, refer to "Tow mode" in the "Technical and consumer information" section later in this manual.

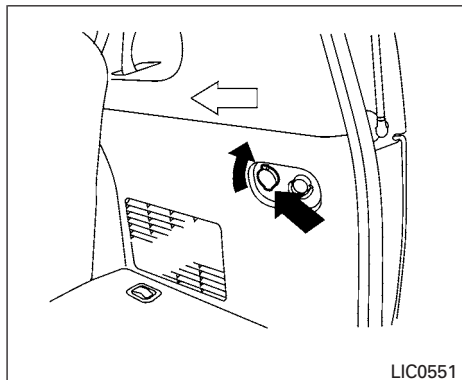
## POWER OUTLET



**Front row**



**2nd row**



**Luggage area**

The power outlets are for powering electrical accessories such as cellular telephones. They are rated at 12 volt, 120W (10A) maximum.

The power outlets are powered only when the ignition switch is in the ACC or ON position.

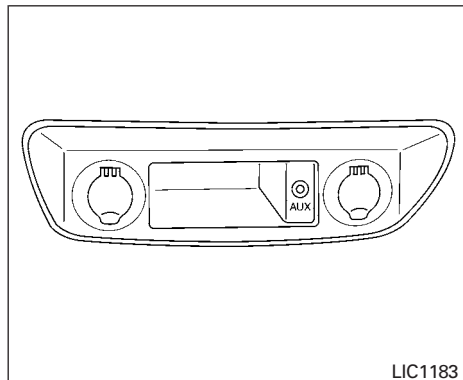
Open the cap to use a power outlet.

**⚠ CAUTION**

- **The outlet and plug may be hot during or immediately after use.**

- **Only certain power outlets are designed for use with a cigarette lighter unit. Do not use any other power outlet for an accessory lighter. See your NISSAN dealer for additional information.**
- **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.**
- **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 or any other liquid to contact the outlet.**

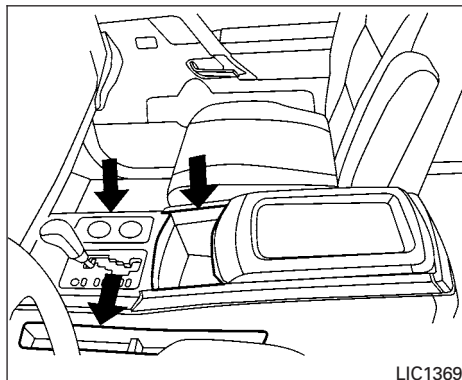
## STORAGE



**Center stack storage**  
**INSTRUMENT PANEL STORAGE**  
**TRAYS**

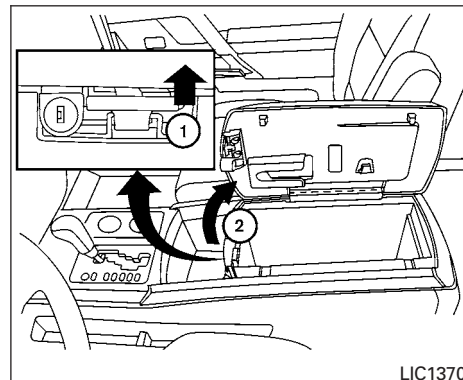
### **⚠ WARNING**

**Do not place sharp objects in the trays to help prevent injury in an accident or sudden stop.**



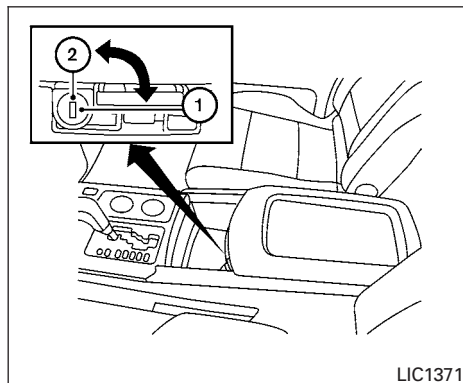
### **CONSOLE BOX**

Console box storage trays



### **Console box storage**

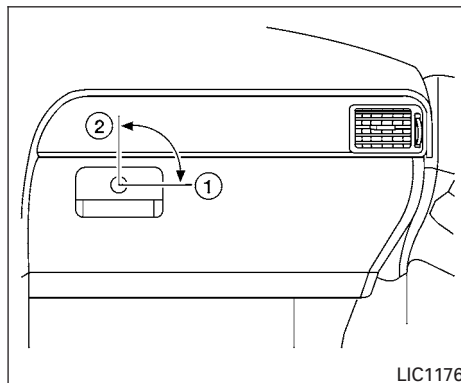
Pull up on the lever ① to open the console box lid ②.



LIC1371

### Console box lock

Use the master key to lock ① or unlock ② the console box.



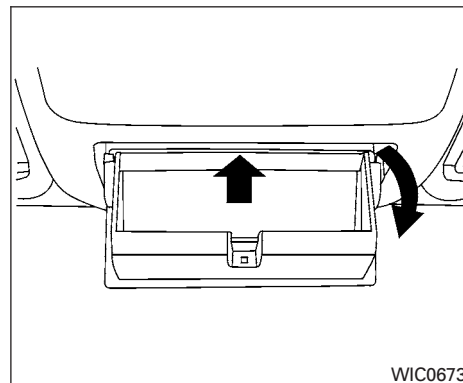
LIC1176

### GLOVE BOX

Open the glove box by pulling the handle. Use the master key when locking ① or unlocking ② the glove box.

#### **⚠ WARNING**

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



WIC0673

### SUNGLASSES HOLDER

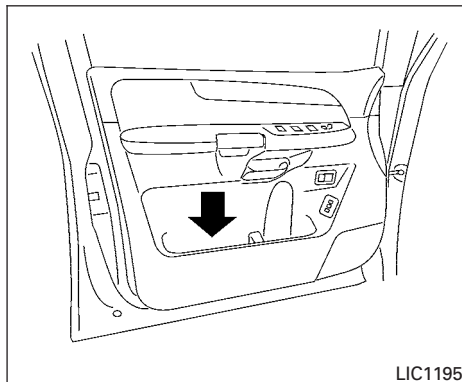
To open the sunglasses holder, push and release. Only store one pair of sunglasses in the holder.

#### **⚠ WARNING**

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

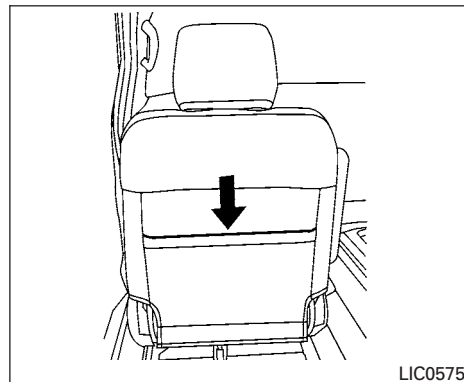
**⚠ CAUTION**

- 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.



LIC1195

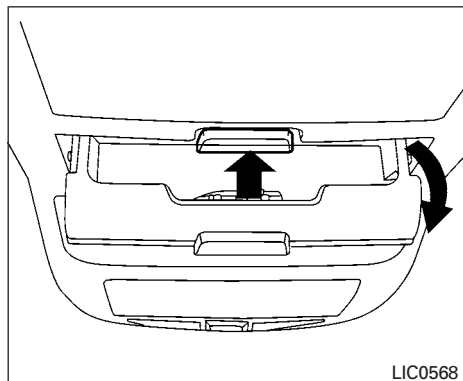
**MAP POCKETS**



LIC0575

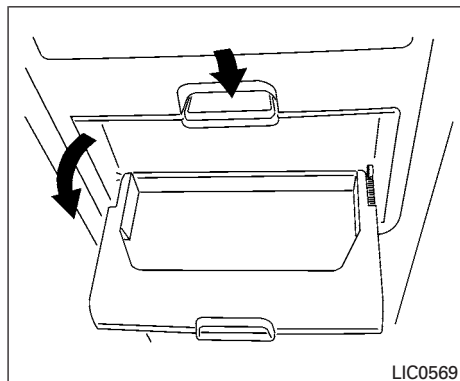
**SEATBACK POCKET**

The seatback pocket is located on the back of the driver seat. The pocket can be used to store maps.



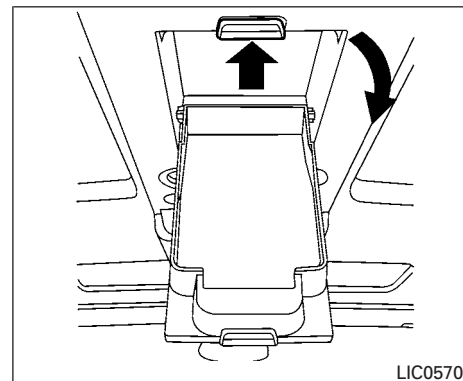
**Small bin**

## OVERHEAD CONSOLE



**Medium bin (if so equipped)**

## Storage bins



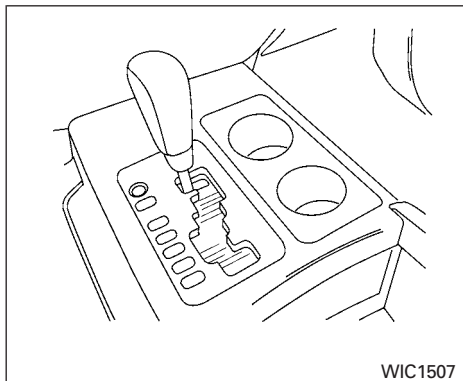
**Large bin**

### **WARNING**

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

Push the button to open a storage bin.

Push the lid up to close.

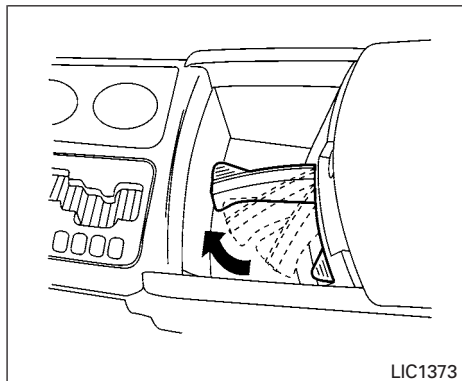


**Front**

## CUP HOLDERS

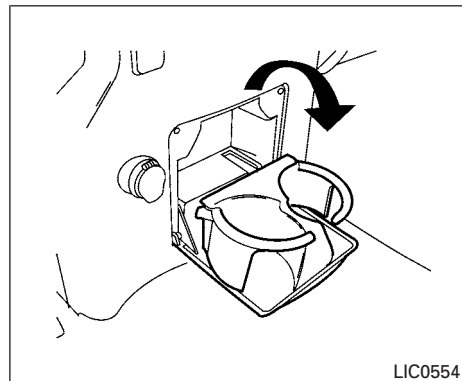
### CAUTION

- **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.**



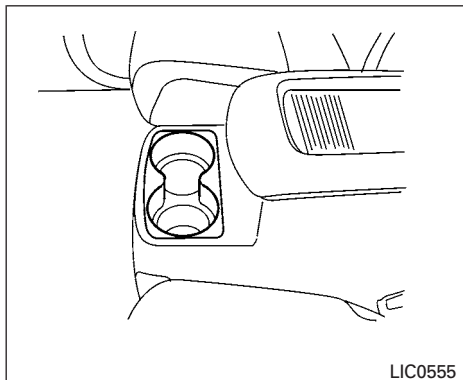
**Adjustable**

Position the arm on the adjustable cup holder so that the cup is held securely.

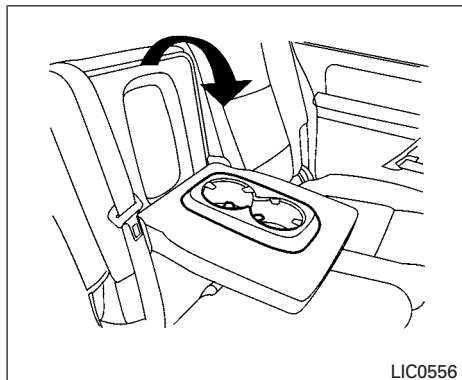


**2nd row (rear of front console)**

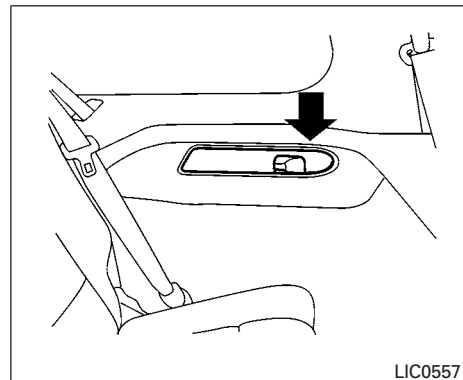
To open the 2nd row cup holders (rear of the front console), lower the lid. To close, raise the lid.



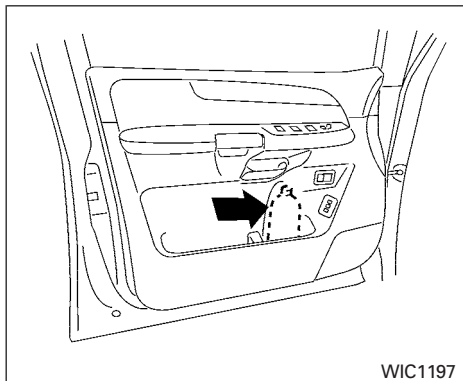
**2nd row center console (if so equipped)**



**2nd row bench (if so equipped)**



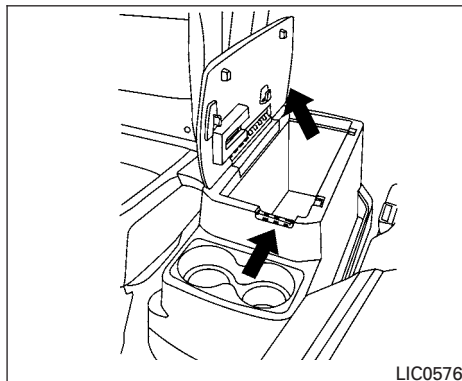
**3rd row**



**Bottle holder**

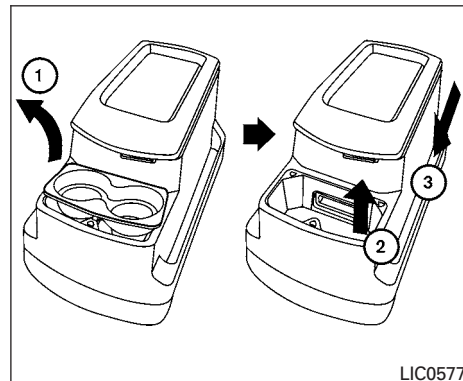
**⚠ CAUTION**

- **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.**



**2ND ROW CENTER CONSOLE (if so equipped)**

Pull up on the lever to open the console box lid.



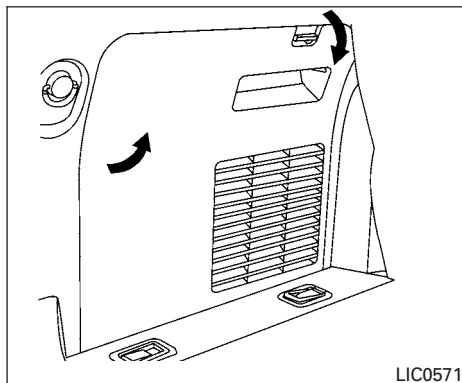
**Removing the 2nd row center console box**

To remove the 2nd row center console box:

- ① Lift out the cup holder tray.
- ② Pull up on the handle to tilt the console box up.
- ③ Move the console box toward the front of the vehicle and lift it out.

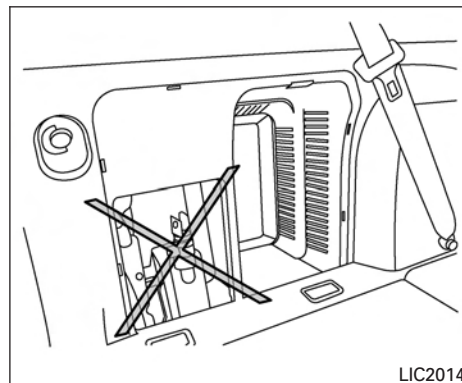
To reinstall the 2nd row center console box:

1. Slide the console box over the base toward the rear of the vehicle.
2. Push down to lock the console box in place.
3. Replace the cup holder tray.



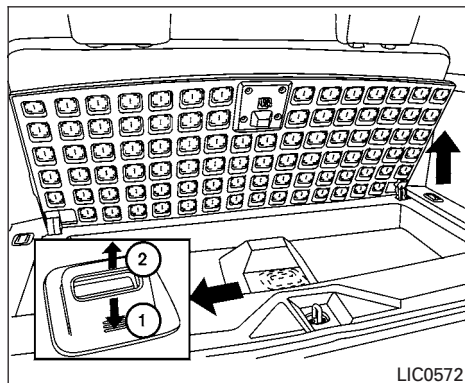
### CARGO AREA STORAGE BIN

To open the cargo area storage bin, pull down on the tab and pull the lid off.



### **⚠ CAUTION**

**Placing additional items in the area specified for the jack may dent body panel or damage power back door assembly (if so equipped).**



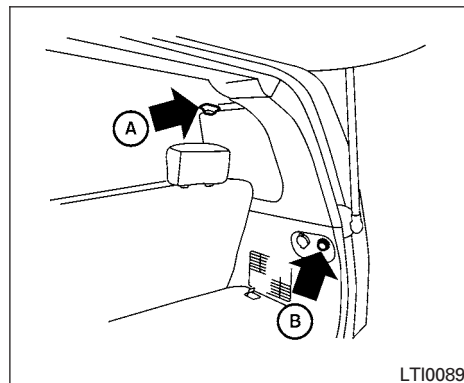
To access the floor storage area, push down ① to raise the handle, then pull up on the handle ② to lift the luggage board.

## LUGGAGE HOOKS

The luggage hooks can be used to secure cargo with ropes or other types of straps.

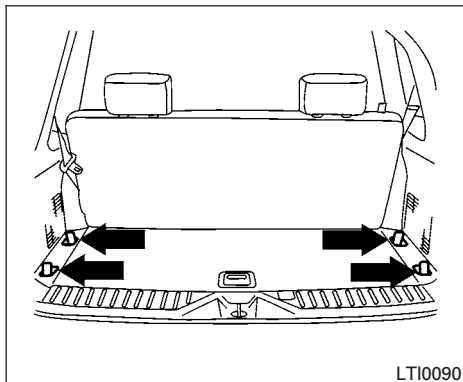
### **⚠ WARNING**

- 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.
- Use suitable ropes and hooks to secure cargo.
- Never allow anyone to ride in the luggage area. It is extremely dangerous to ride in a cargo area inside of 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.
- The child restraint top tether strap may be damaged by contact with items in the cargo area. Secure any items in the cargo area. Your child could be seriously injured or killed in a collision if the top tether strap is damaged.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.



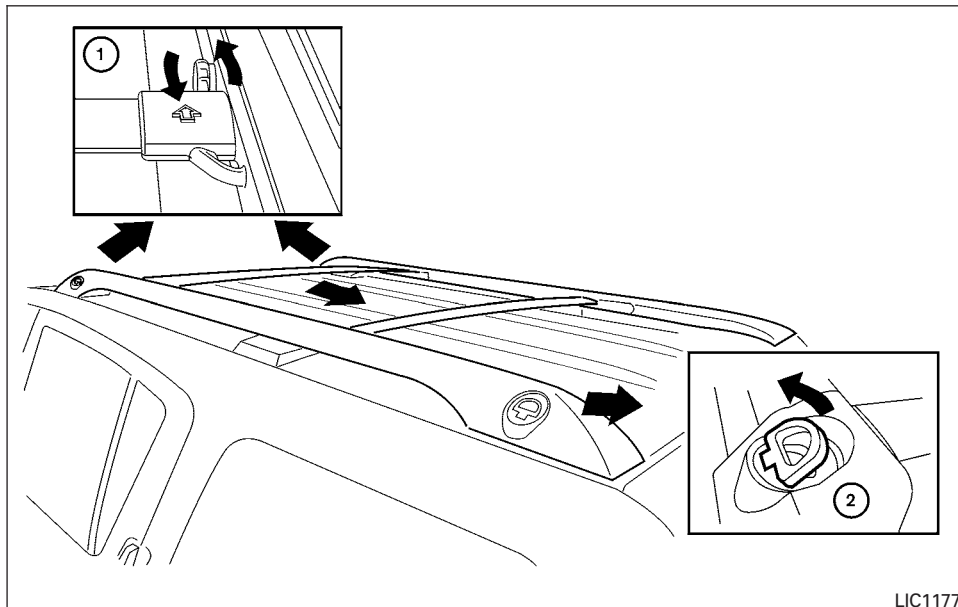
### Side finisher

When hooking on ropes, do not apply a load of more than 55 lb (245 N) to a single ① hook or 44 lb (196 N) to a single ② hook.



### Floor hooks

Do not apply a load of more than 110 lb (490 N) to a single hook.



### ROOF RACK

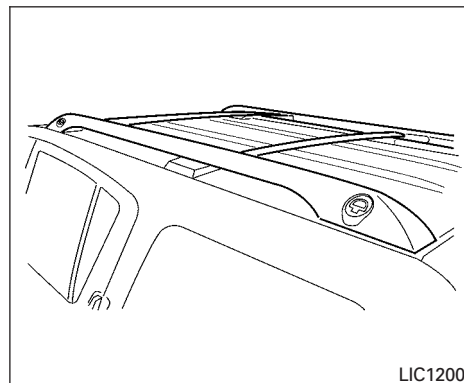
### WARNING

- **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.**

### 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.**

Always distribute the luggage evenly on the roof rack. Do not load more than 200 lbs (91 kg) on entire roof rack. Be sure load is evenly distributed across both crossbars. 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.



The crossbars can be adjusted forward and backward. Loosen the thumbwheel ① and adjust the crossbar to the desired position. Tighten the thumbwheel. Place your luggage on the bars and secure the luggage with rope to the utility loops ②. Do not place luggage on the side rails or tie rope directly to the side rails. Always be sure the thumbwheels are fully tightened to keep the crossbar in place. Do not use utility loops for any purpose other than securing luggage.

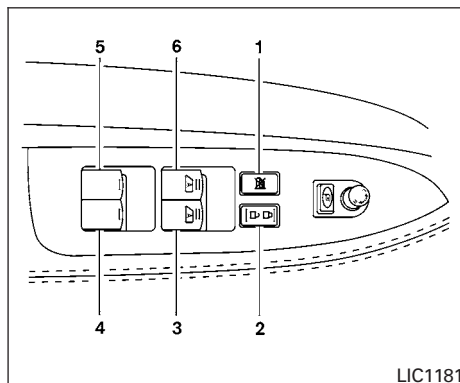
## WINDOWS

### 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.**

The power windows operate when the ignition switch is placed in the ON position, or for a period of time after the ignition switch is placed in the OFF position. If the driver's or passenger's door is opened during this period of time, the power to the windows is canceled.

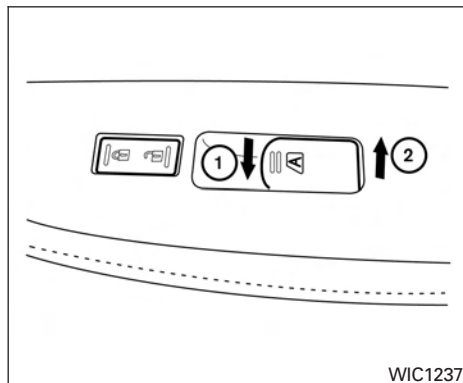


1. Window lock button
2. Power door lock switch
3. Front passenger side automatic switch
4. Right rear passenger window switch
5. Left rear passenger window switch
6. Driver side automatic switch

#### Driver's side power window switch

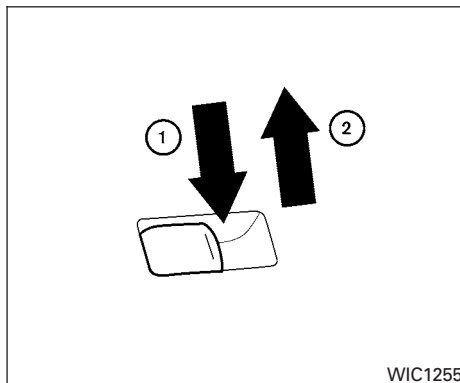
The driver's side control panel is equipped with switches to open or close the front and rear passenger windows.

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.

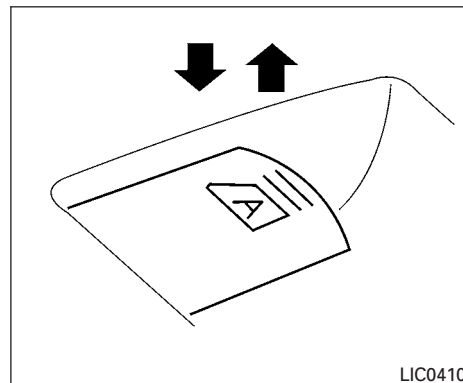


### Rear power window switch

The rear power window switches open or close only the corresponding windows. 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 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.

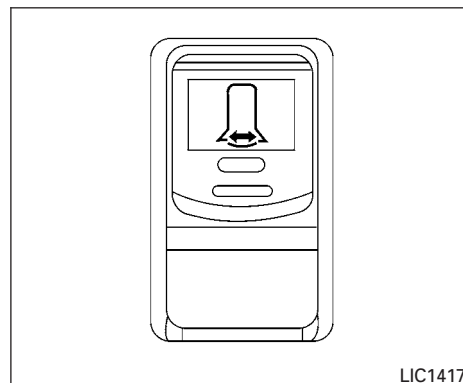
If the control unit detects something caught in a window equipped with automatic operation as it is closing, the window will be immediately lowered.

## When power window switch does not operate

If the power window automatic function (closing only) does not operate properly, perform the following procedure to initialize the power window system:

1. Place the ignition switch in the ON position.
2. Open the window more than halfway by operating the power window switch.
3. Pull the power window switch and hold it to close the window, and then hold the switch more than 3 seconds after the window is closed.
4. Release the power window switch. Operate the window by the automatic function to confirm the initialization is complete. The power window automatically opens or closes depending on if the automatic down or up function is selected.
5. Perform steps 2 through 4 above for other windows.

If the power window function does not operate properly after performing the above procedure, see a NISSAN dealer for assistance.



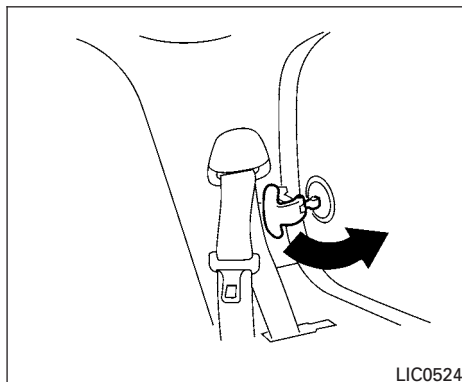
## POWER VENT WINDOWS (if so equipped)

Use the vent window switch located on the driver's side of the instrument panel to open and close the power vent windows. The windows cannot be operated separately.

To open the power vent windows press and hold the switch.

To close the windows pull and hold the switch.

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



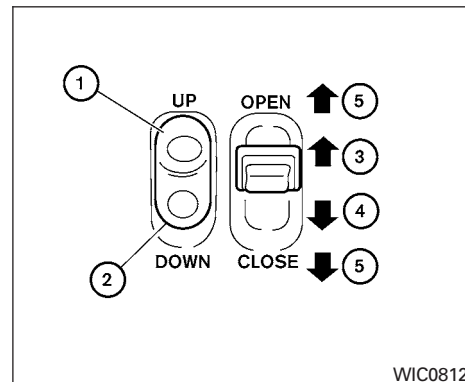
### MANUAL VENT WINDOWS (if so equipped)

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.

### 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 a period of time, 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 time, the power to the moonroof is canceled.

### 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 ⑤ while the moonroof 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.

### Restarting 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.

1. If the moonroof lid is open, push the tilting switch repeatedly toward the down position ② to fully close the lid.
2. Push and hold the tilting switch for more than 2 seconds toward the down position ② to reestablish 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 a period of time 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.**

#### 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.

#### WARNING

- 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.

#### CAUTION

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

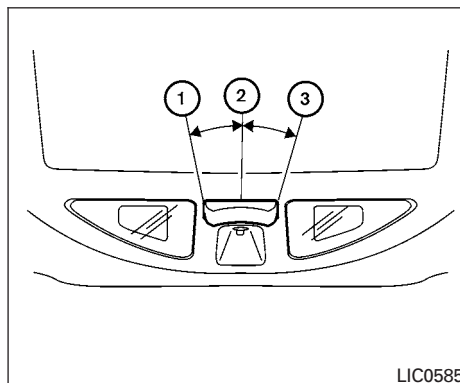
## INTERIOR LIGHT

### 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 interior light has a three-position switch and operates regardless of ignition switch position.

When the switch is in the ON position ①, the interior lights illuminate, regardless of door position. The lights will go off after a period of time unless the ignition switch is in the ON position.

When the switch is in the DOOR position ②, the interior lights and puddle lights (if so equipped) will stay on for a period of time 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 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 lights will turn off while the 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.

When the switch is in the OFF position ③, the interior lights do not illuminate, regardless of door position. The puddle lights (if so equipped) come on when any front or rear passenger door is opened.

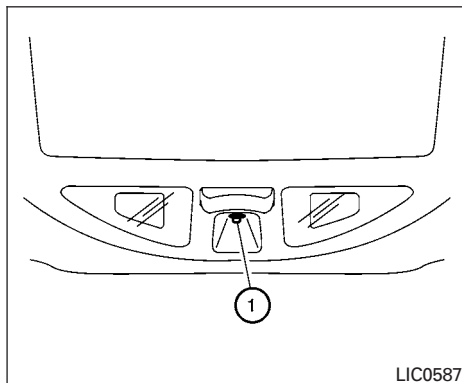
The lights will turn off automatically after a period of time while doors are open to prevent the battery from becoming discharged.

#### NOTE:

The footwell lights (if so equipped) and door step lights illuminate when the driver and passenger doors are open regardless of the interior light switch position. These lights will turn off automatically after a period of time while doors are open to prevent the battery from becoming discharged.

#### CAUTION

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

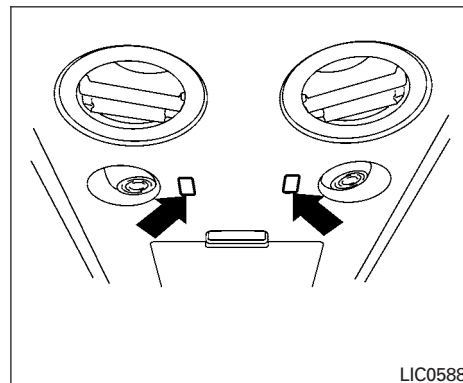


#### CONSOLE LIGHT

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

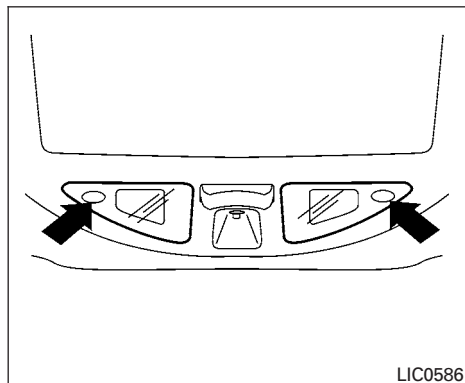
The console light brightness can be adjusted with the illumination brightness control.

#### PERSONAL LIGHTS



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

## MAP LIGHTS

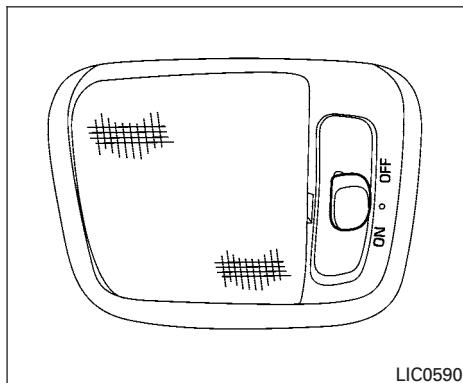


To turn the map lights on, press the switches. To turn them off, press the switches again.

### CAUTION

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

## CARGO LIGHT



The cargo light on the overhead trim has a three-position switch. To operate, push the switch to the desired position.

ON: The light is illuminated.

Normal (center) position: The light illuminates when the lift gate or glass hatch is opened. The light turns off when the lift gate or glass hatch is closed.

OFF: The light does not illuminate regardless of lift gate position or lock status.

## 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.

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

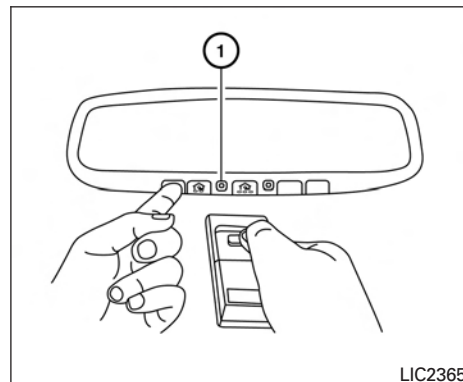
## **PROGRAMMING HOMELINK®**

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

### **NOTE:**

**It is also recommended that a new battery be placed in the hand-held transmitter of the device being programmed to HomeLink® for quicker programming and accurate transmission of the radio-frequency.**

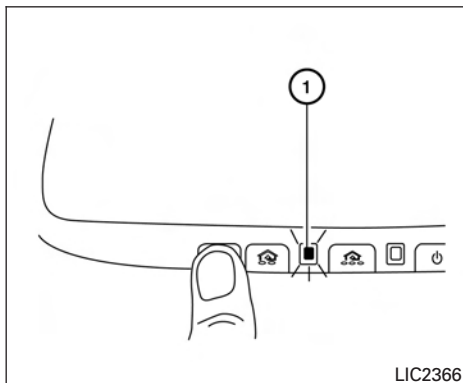
1. Position the end of your hand-held transmitter 1–3 inches (2–8 cm) away from the HomeLink® surface, keeping the HomeLink® indicator light ① in view.



2. Using both hands, simultaneously press and hold the desired HomeLink® button and handheld transmitter button. DO NOT release until the HomeLink® indicator light ① flashes slowly and then rapidly. When the indicator light flashes rapidly, both buttons may be released. (The rapid flashing indicates successful programming.)

### **NOTE:**

**Some devices may require you to replace Step 2 with the cycling procedure noted in the “Programming HomeLink® for Canadian customers and gate openers” section.**



3. Press and hold the programmed HomeLink® button and observe the indicator light.

- If the indicator light ① is **solid/continuous**, programming is **complete** and your device should activate when the HomeLink® button is pressed and released.
- If the indicator light ① blinks **rapidly for two seconds and then turns to a solid/continuous light**, continue with Steps 4-6 for a rolling code device. A second person may make the following steps easier. Use a ladder or other device.

Do not stand on your vehicle to perform the next steps.

4. At the receiver located on the garage door opener motor in the garage, locate the “learn” or “smart” button (the name and color of the button may vary by manufacturer but it is usually located near where the hanging antenna wire is attached to the unit). If there is difficulty locating the button, reference the garage door opener’s manual.
5. Press and release the “learn” or “smart” button.
6. Return to the vehicle and firmly press and hold the trained HomeLink® button for two seconds and release. Repeat the “press/hold/release” sequence up to 3 times to complete the training process. HomeLink® should now activate your rolling code equipped device.
7. If you have any questions or are having difficulty programming your HomeLink® buttons, refer to the HomeLink® web site at: [www.homelink.com](http://www.homelink.com) or call 1-800-355-3515.

## PROGRAMMING HOMELINK® FOR CANADIAN CUSTOMERS AND GATE OPENERS

Canadian radio-frequency laws require transmitter signals to “time-out” (or quit) after several seconds of transmission – which may not be long enough for HomeLink® to pick up the signal during training. Similar to this Canadian law, some U.S. gate operators are designed to “time-out” in the same manner.

If you live in Canada or you are having difficulties training a gate operator **or** garage door opener by using the “Training” procedures, **replace** “Programming HomeLink®” **Step 2** with the following:

### NOTE:

**When programming a garage door opener, etc., unplug the device during the “cycling” process to prevent possible damage to the garage door opener components.**

1. See “Programming HomeLink®” step 1 earlier in this section.
2. Using both hands, simultaneously press and hold the desired HomeLink® button and the hand-held transmitter button. During training, your hand-held transmitter may automatically stop transmitting. Continue to

press and hold the desired HomeLink® button while you press and re-press (“cycle”) your hand-held transmitter every two seconds until the frequency signal has been learned. The HomeLink® indicator light will flash slowly and then rapidly after several seconds upon successful training. **DO NOT** release until the HomeLink® indicator light flashes slowly and then rapidly. When the indicator light flashes rapidly, both buttons may be released. The rapid flashing indicates successful training.

Proceed with “Programming HomeLink®” step 3 to complete.

If the device was unplugged during the programming procedure, remember to plug it back in when programming is completed.

## OPERATING THE HOMELINK® UNIVERSAL TRANSCEIVER

The HomeLink® Universal Transceiver, after it is programmed, can be used to activate the programmed device. To operate, simply press and release the appropriate programmed HomeLink® Universal Transceiver button. The amber indicator light will illuminate while the signal is being transmitted.

For convenience, the hand-held transmitter of the device may also be used at any time.

## PROGRAMMING TROUBLE- DIAGNOSIS

If the HomeLink® does not quickly learn the hand-held 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 have any questions or are having difficulty programming your HomeLink® buttons, refer to the HomeLink® web site at: [www.homelink.com](http://www.homelink.com) or call 1-800-355-3515.

## CLEARING THE PROGRAMMED INFORMATION

The following procedure clears the programmed information from both buttons. Individual buttons cannot be cleared. However, individual buttons can be reprogrammed, see “Reprogramming a single HomeLink® button” in this section.

To clear all programming:

1. Press and hold the two outer HomeLink® buttons until the indicator light begins to flash in approximately 10 seconds. Do not hold for longer than 20 seconds.
2. Release both buttons.

HomeLink® is now in the programming mode and can be programmed at any time beginning with “Programming HomeLink®” - Step 1.

## REPROGRAMMING A SINGLE HOMELINK® BUTTON

To reprogram a HomeLink® Universal Transceiver button, complete the following:

1. Press and hold the desired HomeLink® button. **DO NOT** release the button.
2. The indicator light will begin to flash after 20 seconds. Without releasing the HomeLink® button, proceed with "Programming HomeLink®" - Step 1.

For questions or comments, contact HomeLink® at: [www.homelink.com](http://www.homelink.com) or 1-800-355-3515.

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.**

### FCC Notice:

#### For USA:

**This device complies with Part 15 of the FCC Rules. 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. Note: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

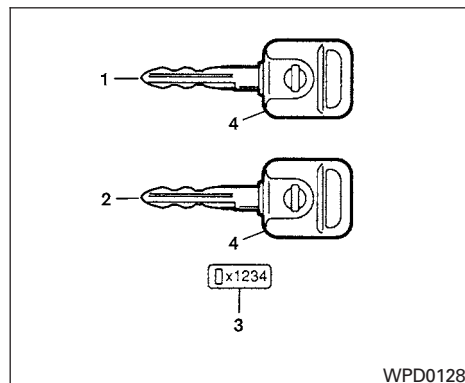
#### For Canada:

**This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.**

# 3 Pre-driving checks and adjustments

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## KEYS

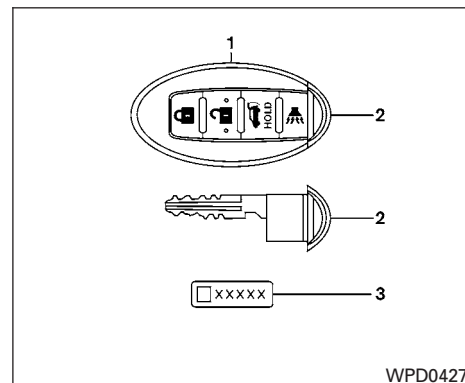


WPD0128

1. 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.



WPD0427

1. Two Intelligent Keys
2. Mechanical keys (inside Intelligent Keys)
3. Key number plate

**NISSAN INTELLIGENT KEY®** (if so equipped)

Your vehicle can only be driven with the Intelligent Keys which are registered to your vehicle's Intelligent Key components and NISSAN Vehicle Immobilizer System components.

### 3-2 Pre-driving checks and adjustments

### Never leave these keys in the vehicle.

As many as 4 Intelligent Keys can be registered and used with one vehicle. The new keys must be registered by a NISSAN dealer prior to use with the Intelligent Key and NISSAN Vehicle Immobilizer System of your vehicle. Since the registration process requires erasing all memory in the Intelligent Key components when registering new keys, be sure to take all Intelligent Keys that you have to the NISSAN dealer.

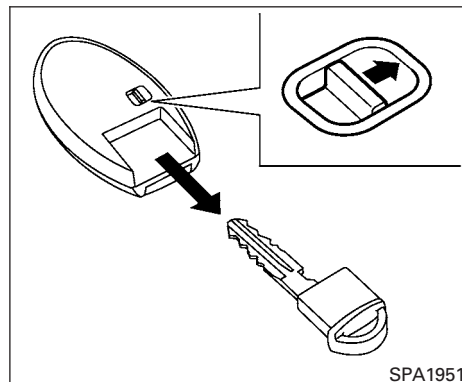
#### CAUTION

Listed below are conditions or occurrences which will damage the Intelligent Key:

- Do not allow the Intelligent Key, which contains electrical components, to come into contact with water or salt water. This could affect the system function.
- Do not drop the Intelligent Key.
- Do not strike the Intelligent Key sharply against another object.
- Do not change or modify the Intelligent Key.

- Wetting may damage the Intelligent Key. If the Intelligent Key gets wet, immediately wipe until it is completely dry.
- Do not place the Intelligent Key for an extended period in an area where temperatures exceed 140°F (60°C).
- Do not attach the Intelligent Key with a key holder that contains a magnet.
- Do not place the Intelligent Key near equipment that produces a magnetic field, such as a TV, audio equipment and personal computers.

If an Intelligent Key is lost or stolen, NISSAN recommends erasing the ID code of that Intelligent Key from the vehicle. This may prevent the unauthorized use of the Intelligent Key to operate the vehicle. For information regarding the erasing procedure, contact a NISSAN dealer.



SPA1951

### Mechanical key

The Intelligent Key contains the mechanical key, which can be used in case of a discharged battery.

To remove the mechanical key, release the lock knob on the back of the Intelligent Key.

To install the mechanical key, firmly insert it into the Intelligent Key until the lock knob returns to the lock position.

The mechanical key can be used for operation in the same way as an ordinary key.

### CAUTION

**Always carry the mechanical key installed in the Intelligent Key slot.**

See “Doors” in this section and “Storage” in the “Instruments and controls” section of this manual.

### Valet hand-off

When you have to leave a key with a valet, give them the Intelligent Key itself and keep the mechanical key with you to protect your belongings.

To prevent the glove box or console box from being opened during valet hand-off, follow the procedure below.

1. Remove the mechanical key from the Intelligent Key.
2. Lock the glove box or console box with the mechanical key.
3. Hand the Intelligent Key to the valet and keep the mechanical key with you.

See “Storage” in the “Instruments and controls” section of this manual.

## 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 console box lock.

To protect 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 because 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.

### CAUTION

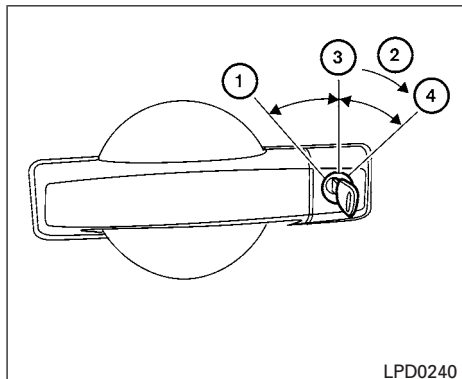
**Do not allow the immobilizer system key, which contains an electrical transponder, to come into contact with water or salt water. This could affect system function.**

## DOORS

When the doors are locked using one of the following methods, the doors can not be opened using the inside or outside door handles. The doors must be unlocked to open the doors.

### 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.



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.

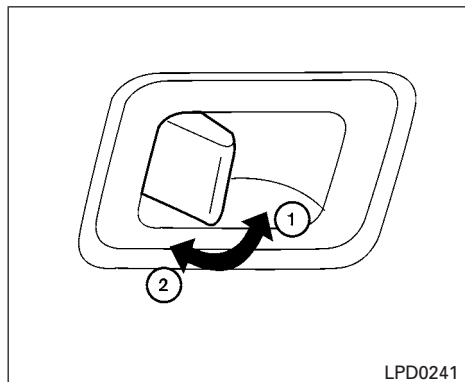
Turning the key one time toward the rear ② of the vehicle unlocks that door. From that position, returning the key to neutral ③ (where the key can only be removed and inserted) and turning it toward the rear again within 5 seconds unlocks all doors ④.

### 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 toward the front of the vehicle for **longer than 1 second** after the door is locked.

Windows stop when the key cylinder is released.

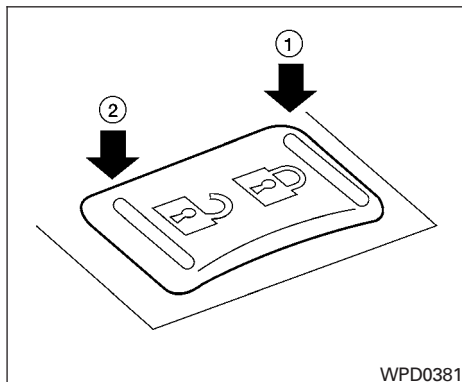


#### Inside lock

### 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.



### 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 switch and any door open, all doors will lock and then unlock automatically. This helps to prevent the keys from being accidentally locked inside the vehicle.

### AUTOMATIC DOOR LOCKS

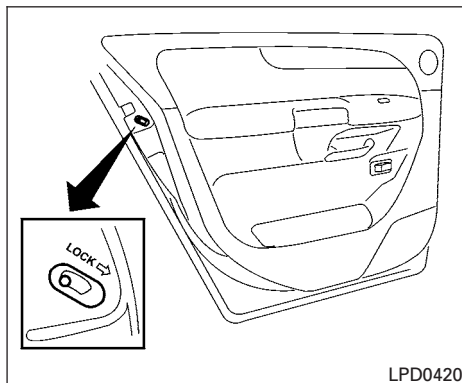
- All doors lock automatically when the vehicle speed reaches 15 MPH (24 km/h).
- All doors unlock automatically when the ignition is placed in the OFF position (models with Intelligent Key system) or when the key is removed from the ignition switch (models without Intelligent Key system).

**The automatic unlock function can be deactivated or activated.** To deactivate or activate the automatic door unlock system, perform the following procedure:

1. Close all doors.
2. Place the ignition switch in the ON position.
3. Within 20 seconds of performing Step 2, push and hold the power door lock switch to the ② position (UNLOCK) for more than 5 seconds.
4. When activated, the hazard indicator will flash twice. When deactivated, the hazard indicator will flash once.

5. The ignition switch must be placed in the OFF and ON position again between each setting change.

When the automatic door unlock system is deactivated, the doors do not unlock when the ignition switch is placed in the OFF position (models with Intelligent Key system) or when the key is removed from the ignition switch (models without Intelligent Key system). To unlock the door manually, use the inside lock knob or the power door lock switch (driver's or front passenger's side).



### CHILD SAFETY REAR DOOR LOCK

Child safety locks help prevent the rear doors from being opened accidentally, especially when small children are in the vehicle.

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

**When the lever is in the LOCK position, the door can be opened only from the outside.**

## REMOTE KEYLESS ENTRY SYSTEM (if so equipped)

### 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 remote keyless entry 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 remote keyless entry 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 lights (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 without navigation system, refer to "Silencing the horn beep feature" later in this section. For vehicles with navigation system, refer to "Comfort & convenience settings" in the "Monitor, climate, audio, phone and voice recognition 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 maximum 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.**

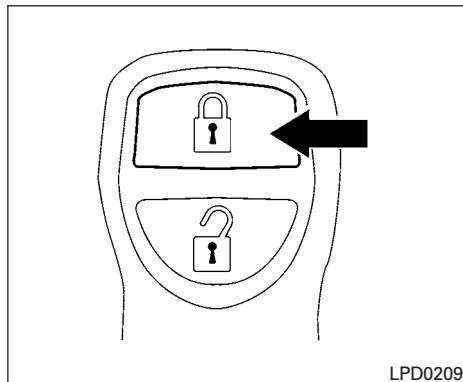
**⚠ CAUTION**

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

- **Do not allow the keyfob, which contains electrical components, to come into contact with water or salt water. This could affect the system function.**
- **Do not drop the keyfob.**


- **Do not strike the keyfob sharply against another object.**
- **Do not change or modify the keyfob.**
- **Wetting may damage the keyfob. If the keyfob gets wet, immediately wipe until it is completely dry.**
- **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, 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.**



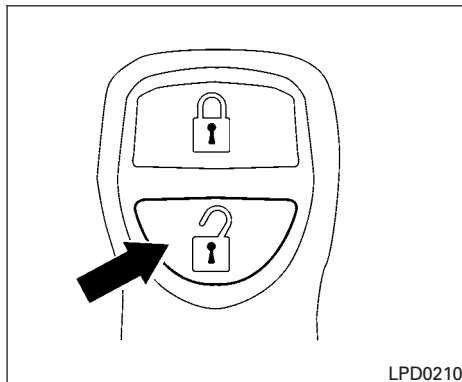
## HOW TO USE REMOTE KEYLESS ENTRY SYSTEM

### Locking doors

1. Close all windows.
2. Remove the key from the ignition switch.
3. Close the hood and all doors.
4. Press 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 pressed 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 press 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 without navigation system, refer to “Silencing the horn beep feature” later in this section. For vehicles with navigation system, refer to “Comfort & convenience settings” in the “Monitor, climate, audio, phone and voice recognition system” section of this manual.



## Unlocking doors

Press the  button on the keyfob once.


- Only the driver's door unlocks.
- The hazard warning lights flash once if all doors are completely closed with the ignition switch in any position except the ON position.
- The interior lights and puddle lights (if so equipped) turn on and the light timer activates for a period of time when the interior light switch is in the DOOR position with the ignition switch in any position except the ON position.

Press the  button on the keyfob again within 5 seconds.

- All doors unlock.
- The hazard warning lights flash once if all doors are completely closed.

The interior lights can be turned off without waiting by inserting the key into the ignition switch and placing it in 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 pressed, all doors will lock automatically within 1 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 cycled from OFF to ON.

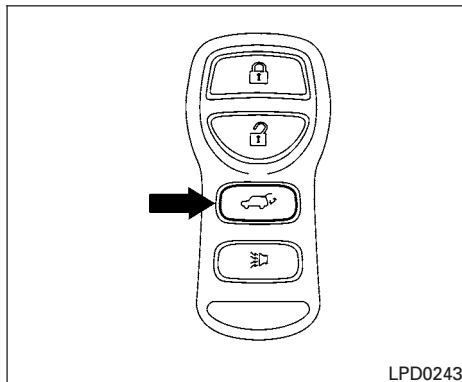
## Opening windows

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

- To open the windows, press the  button on the keyfob for **longer than 3 seconds** after all doors are unlocked.

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

**The door windows cannot be closed by using the keyfob.**

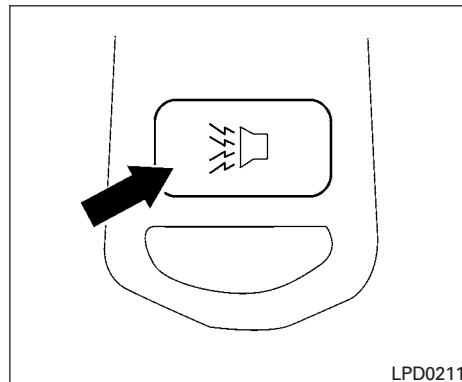


### Operating the power liftgate (if so equipped)


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

The liftgate 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 "Liftgate" 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 pressing and holding the  button on the keyfob for **longer than 0.5 seconds**.

The panic alarm and headlights will stay on for a period of time.

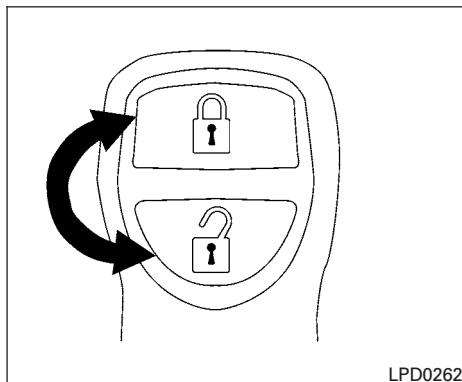
The panic alarm stops when:

- it has run for a period of time, or
- any button is pressed on the keyfob.

## Using the interior lights

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

For additional information, refer to "Interior light" in the "Instruments and controls" section in this manual.



## Silencing the horn beep feature



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

### NOTE:

**If you change the horn beep and light flash feature with the keyfob, the display screen (if so equipped) 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.**

**To deactivate:** Press and hold the  and  buttons **for at least 2 seconds**.

The hazard warning lights will flash 3 times to confirm that the horn beep feature has been deactivated.

**To activate:** Press and hold the  and  buttons **for at least 2 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.

## NISSAN INTELLIGENT KEY® (if so equipped)

### 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 Intelligent Key transmits radio waves when the buttons are pressed. The FAA advises the radio waves may affect aircraft navigation and communication systems. Do not operate the Intelligent Key while on an airplane. Make sure the buttons are not operated unintentionally when the unit is stored for a flight.**

The Intelligent Key can operate all the door locks using the remote controller function or pushing the request switch on the vehicle without taking the key out from a pocket or purse. The operating environment and/or conditions may affect the Intelligent Key operation.

Be sure to read the following before using the Intelligent Key.

### CAUTION

- **Be sure to carry the Intelligent Key with you when operating the vehicle.**
- **Never leave the Intelligent Key in the vehicle when you leave the vehicle.**

The Intelligent Key is always communicating with the vehicle as it receives radio waves. The Intelligent Key transmits weak radio waves. Environmental conditions may interfere with the operation of the Intelligent Key under the following operating conditions.

- When operating near a location where strong radio waves are transmitted, such as a TV tower, power station and broadcasting station.
- When in possession of wireless equipment, such as a cellular telephone, transceiver, and CB radio.
- When the Intelligent Key is in contact with or covered by metallic materials.
- When any type of radio wave remote control is used nearby.
- When the Intelligent Key is placed near an electric appliance such as a personal computer.
- When the vehicle is parked near a parking meter.

In such cases, correct the operating conditions before using the Intelligent Key function or use the mechanical key.

Although the life of the battery varies depending on the operating conditions, the battery's life is approximately 2 years. If the battery is discharged, replace it with a new one.

When the Intelligent Key battery is low, the Intelligent Key indicator will illuminate after the ignition switch is placed in the ON position.

Since the Intelligent Key is continuously receiving radio waves, if the key is left near equipment which transmits strong radio waves, such as signals from a TV and personal computer, the battery life may become shorter.

For information regarding replacement of a battery, see "Battery replacement" in the "Maintenance and do-it-yourself" section of this manual.

For models with a steering wheel lock mechanism: Because the steering wheel is locked electrically, unlocking the steering wheel with the ignition switch in the LOCK position is impossible when the vehicle battery is completely discharged. Unlocking the steering wheel is impossible even if the Intelligent Key is inserted into the ignition switch. Pay special attention that the vehicle battery is not completely discharged.

As many as 4 Intelligent Keys can be registered and used with one vehicle. For information about the purchase and use of additional Intelligent Keys, contact a NISSAN dealer.

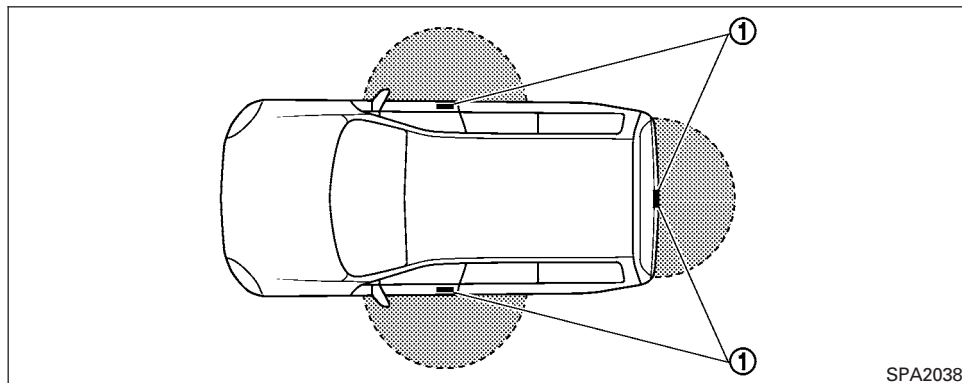
 **CAUTION**

**Listed below are conditions or occurrences which will damage the Intelligent Key:**

- **Do not allow the Intelligent Key, which contains electrical components, to come into contact with water or salt water. This could affect the system function.**
- **Do not drop the Intelligent Key.**
- **Do not strike the Intelligent Key sharply against another object.**
- **Do not change or modify the Intelligent Key.**
- **Wetting may damage the Intelligent Key. If the Intelligent Key gets wet, immediately wipe until it is completely dry.**
- **Do not place the Intelligent Key for an extended period in an area where temperatures exceed 140°F (60°C).**
- **Do not attach the Intelligent Key with a key holder that contains a magnet.**

- **Do not place the Intelligent Key near equipment that produces a magnetic field, such as a TV, audio equipment and personal computers.**

If an Intelligent Key is lost or stolen, NISSAN recommends erasing the ID code of that Intelligent Key from the vehicle. This may prevent the unauthorized use of the Intelligent Key to operate the vehicle. For information regarding the erasing procedure, contact a NISSAN dealer.



## OPERATING RANGE

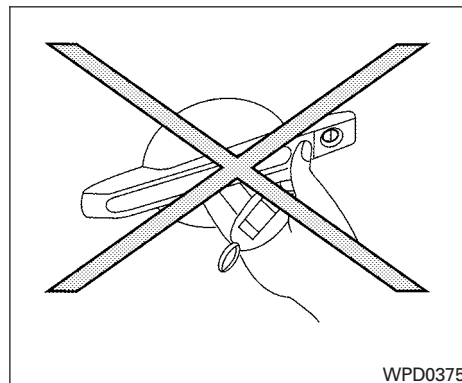
The Intelligent Key functions can only be used when the Intelligent Key is within the specified operating range from the request switch ①.

When the Intelligent Key battery is discharged or strong radio waves are present near the operating location, the Intelligent Key operating range becomes narrower, and the Intelligent Key may not function properly.

The operating range is within 31.50 in (80 cm) from each request switch ①.

If the Intelligent Key is too close to the door glass, handle or rear bumper, the request switches may not function.

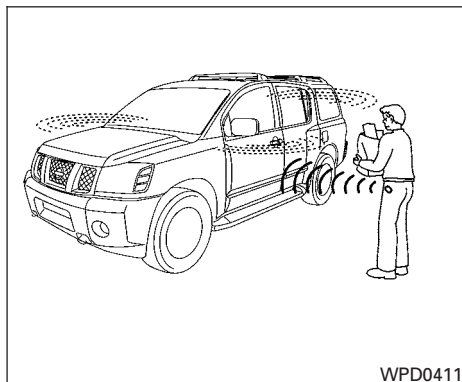
When the Intelligent Key is within the operating range, it is possible for anyone, even someone who does not carry the Intelligent Key, to push the request switch to lock/unlock the doors.



## DOOR LOCKS/UNLOCKS PRECAUTION

- Do not push the door handle request switch with the Intelligent Key held in your hand as illustrated. The close distance to the door handle will cause the Intelligent Key system to have difficulty recognizing that the Intelligent Key is outside the vehicle.
- After locking with the door handle request switch, verify the doors are securely locked by testing them.

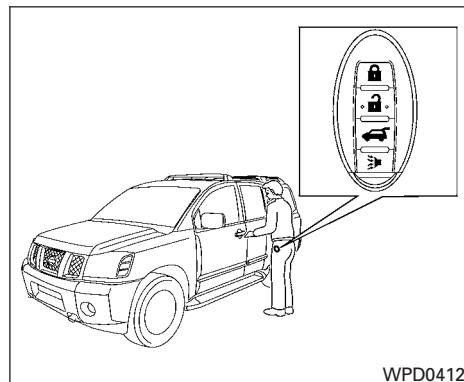
- To prevent the Intelligent Key from being left inside the vehicle, make sure you carry the Intelligent Key with you and then lock the doors.
- Do not pull the door handle before pushing the door handle request switch. The door will be unlocked but will not open. Release the door handle once and pull it again to open the door.



### NISSAN INTELLIGENT KEY® OPERATION

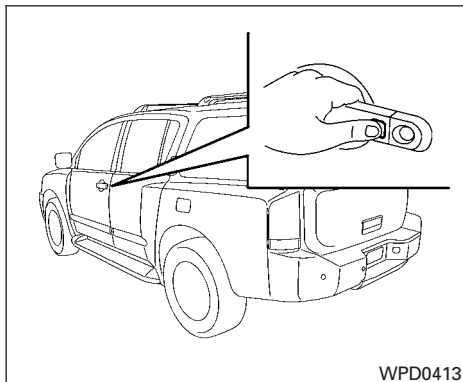
You can lock or unlock the doors without taking the Intelligent Key out of your pocket or bag.

When you carry the Intelligent Key with you, you can lock or unlock all doors by pushing the door handle request switch within the range of operation.



### Locking doors

1. Move the shift selector to the P (Park) position, place the ignition switch in the LOCK position and make sure you carry the Intelligent Key with you.
2. Close all doors.
3. Push any door handle request switch while carrying the Intelligent Key with you.
4. All doors and the rear liftgate will lock.
5. The hazard warning lights flash twice and the outside buzzer sounds twice.



**NOTE:**

- Doors lock with the door handle request switch while the ignition switch is not in the LOCK position.
- Doors do not lock by pushing the door handle request switch while any door is open. However, doors lock with the mechanical key even if any door is open.
- Doors do not lock with the door handle request switch with the Intelligent Key inside the vehicle and a beep sounds to warn you. However, when an Intelligent Key is inside the vehicle, doors can be locked with another Intelligent Key.

**3-16 Pre-driving checks and adjustments**

**⚠ CAUTION**

- After locking the doors using the request switch, make sure that the doors have been securely locked by operating the door handles or the rear liftgate opener switch.
- When locking the doors using the request switch, make sure to have the Intelligent Key in your possession before operating the request switch to prevent the Intelligent Key from being left in the vehicle.
- The request switch is operational only when the Intelligent Key has been detected by the Intelligent Key system.

**Lockout protection**

To prevent the Intelligent Key from being accidentally locked in the vehicle, lockout protection is equipped with the Intelligent Key system.

When the driver's side door is open, the doors are locked, and then the Intelligent Key is put inside the vehicle and all the doors are closed; the lock will automatically unlock and the door buzzer sounds.

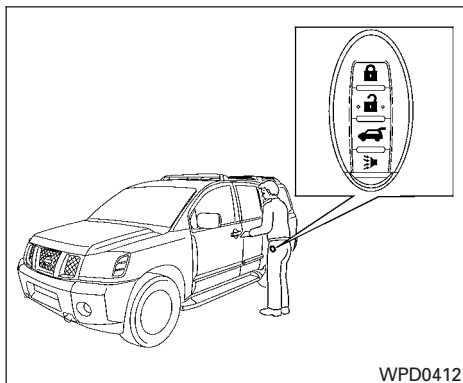
**NOTE:**

The doors may not lock when the Intelligent Key is in the same hand that is operating the request switch to lock the door. Put the Intelligent Key in a purse, pocket or your other hand.

**⚠ CAUTION**

The lockout protection may not function under the following conditions:

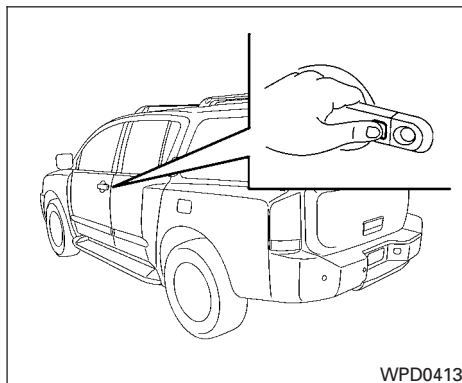
- When the Intelligent Key is placed on top of the instrument panel.
- When the Intelligent Key is placed inside the glove box or a storage bin.
- When the Intelligent Key is placed inside the door pockets.
- When the Intelligent Key is placed inside or near metallic materials.



WPD0412

## Unlocking doors

1. Carry the Intelligent Key.
2. Push the door handle request switch.
3. The hazard warning lights flash once and the outside buzzer sounds once.
4. Push the door handle request switch again within 30 seconds to unlock all doors.



WPD0413

For power liftgate opening:

1. Carry the Intelligent Key.
2. Pull the power liftgate handle or press the power liftgate button.
3. Power back door open.

If a door handle is pulled while unlocking the doors, that door may not be unlocked. Returning the door handle to its original position will unlock the door. If the door does not unlock after returning the door handle, push the door handle request switch to unlock the door.

All doors will be locked automatically unless one of the following operations is performed within 1 minute after pushing the request switch.

- Opening any door.
- Pushing the ignition switch.

The interior light timer illuminates for a period of time when a door is unlocked and the room light switch is in the DOOR position.

The interior light can be turned off without waiting by performing one of the following operations.

- Placing the ignition switch in the ON position.
- Locking the doors with the remote controller.
- Switching the room light switch to the OFF position.

## HOW TO USE THE REMOTE KEYLESS ENTRY FUNCTION

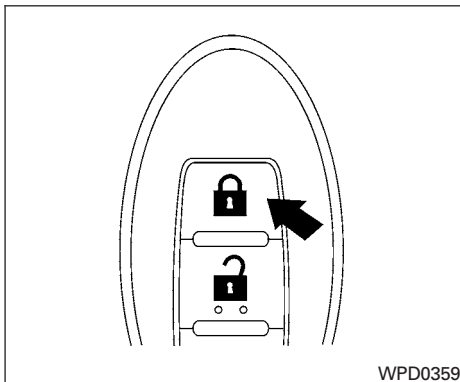
The remote keyless entry function can operate all door locks using the remote keyless function of the Intelligent Key. The remote keyless function can operate at a distance of 33 ft (10 m) away from the vehicle. The operating distance depends upon the conditions around the vehicle.

The remote keyless entry function will not function under the following conditions:


- When the Intelligent Key is not within the operational range.
- When the doors or the rear liftgate are open or not closed securely.
- When the Intelligent Key battery is discharged.

**⚠ CAUTION**

**When locking the doors using the Intelligent Key, be sure not to leave the key in the vehicle.**

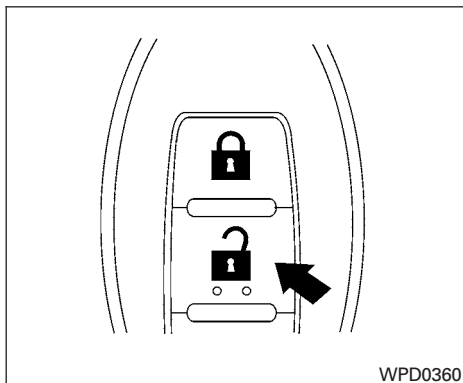


### Locking doors


1. Place the ignition switch in the LOCK position.
2. Close all doors.
3. Press the  button on the Intelligent Key.
4. The hazard warning lights flash twice and the horn beeps once.
5. All doors will be locked.


**⚠ CAUTION**

**After locking the doors using the Intelligent Key, be sure that the doors have been securely locked by operating the door handles.**



## Unlocking doors

1. Press the  button on the Intelligent Key.
2. The hazard warning lights flash once.
3. Press the  button again within 5 seconds to unlock all doors.

All doors will be locked automatically unless one of the following operations is performed within 1 minute after pressing the  button:

- Opening any doors.
- Pushing the ignition switch.


The interior light illuminates for a period of time when a door is unlocked and the room light switch is in the DOOR position.


The light can be turned off without waiting by performing one of the following operations:

- Placing the ignition switch in the ON position.
- Locking the doors with the Intelligent Key.
- Switching the room light switch to the OFF position.

## Opening windows

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

- To open the windows, press the  button on the Intelligent Key for **longer than 3 seconds** after all doors are unlocked.

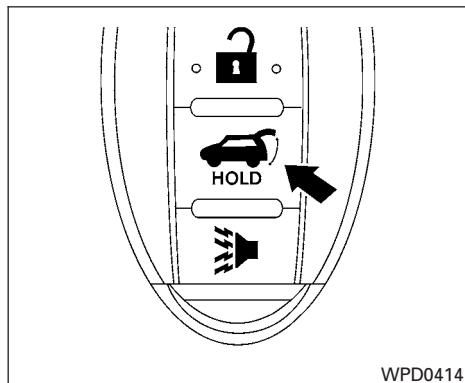
The door windows will open while pressing the  button on the Intelligent Key.

**The door windows cannot be closed by using the Intelligent Key.**


## Linking the keyfob to automatic drive positioner memory

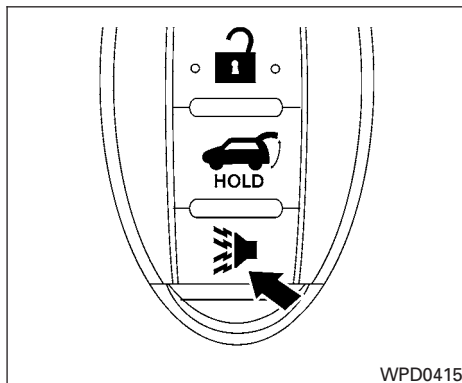
If the vehicle is equipped with automatic drive positioner, the keyfob can be linked to a memory setting.

See "Automatic drive positioner" in this section.




### Releasing the rear liftgate

Press the  button for longer than 0.5 seconds to open the rear liftgate. The rear liftgate release button will not operate when the ignition switch is in the ON position.



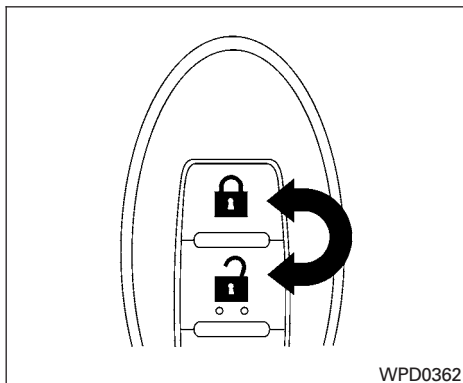
### Using the panic alarm

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

The panic alarm and headlights will stay on for a period of time.

The panic alarm stops when:

- It has run for a period of time, or
- Any button is pressed on the Intelligent Key.
- The request switch on the driver or passenger door has been pushed and the Intelligent Key is in range of the door handle.



## Silencing the horn beep feature



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

### NOTE:

**If you change the horn beep and light flash feature with the Intelligent Key, the display screen (if so equipped) will not show the current mode and cannot be used to change the mode. Use the Intelligent Key to return to the previous mode and re-enable the display screen control.**

**To deactivate:** Press and hold the  and  buttons **for at least 2 seconds.**

The hazard warning lights will flash 3 times to confirm that the horn beep feature has been deactivated.

**To activate:** Press and hold the  and  buttons **for at least 2 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.

## WARNING SIGNALS

To help prevent the vehicle from moving unexpectedly by erroneous operation of the Intelligent Key or to help prevent the vehicle from being stolen, a chime or buzzer sounds from inside and outside the vehicle and a warning is displayed in the instrument panel.

When a chime or beep sounds or a warning is displayed, be sure to check the vehicle and the Intelligent Key.

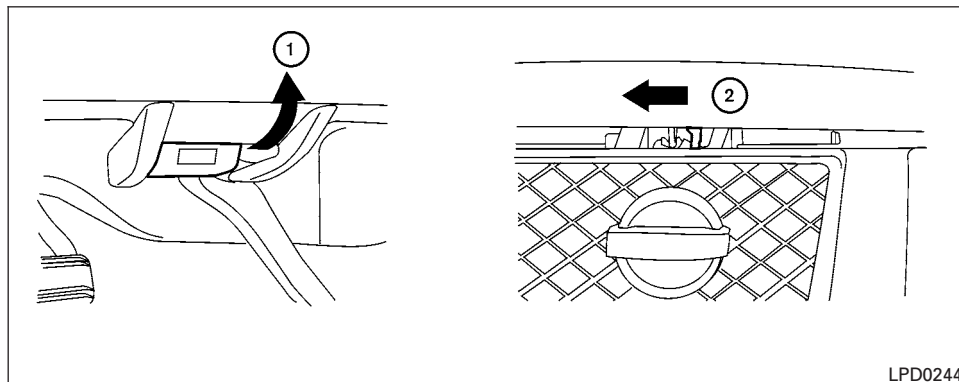
See the “Troubleshooting guide” in this section and “Vehicle information display” in the “Instruments and controls” section of this manual.

## TROUBLESHOOTING GUIDE

Verify the location of all Intelligent Keys that are programmed for the vehicle. If another Intelligent Key is in range or inside the vehicle, the vehicle system may respond differently than expected.

Symptom		Possible Cause	Remedy
When stopping the engine	The SHIFT P warning appears on the display and the inside warning chime sounds continuously.	The shift selector is not in the P (Park) position.	Move the shift selector to the P (Park) position.
When opening the driver's door to get out of the vehicle	The inside warning chime sounds continuously.	The ignition switch is in the ACC position.	Place the ignition switch in the OFF position.
When closing the door after getting out of the vehicle	The NO KEY warning appears on the display, the outside chime sounds 3 times and the inside warning chime sounds for approximately 3 seconds.	The ignition switch is in the ACC or ON position.	Place the ignition switch in the OFF position.
	The NO KEY warning appears on the display and the outside chime sounds continuously.	The ignition switch is in the ACC position and the shift selector is not in the P (Park) position.	Move the shift selector to the P (Park) position and place the ignition switch in the OFF position.
When closing the door with the inside lock knob turned to LOCK	The outside chime sounds for approximately 3 seconds and all the doors unlock.	The Intelligent Key is inside the vehicle.	Carry the Intelligent Key with you.
When pushing the door handle request switch to lock the door	The outside chime sounds for approximately 2 seconds.	The Intelligent Key is inside the vehicle.	Carry the Intelligent Key with you.
		A door is not closed securely.	Close the door securely.
		The door handle request switch is pushed before the door is closed.	Push the door handle request switch after the door is closed.

## HOOD



- ① Pull the hood lock release handle located below the driver side instrument panel. The hood will spring up slightly.
- ② Push the lever at the front of the hood to the side as illustrated with your fingertips and raise the hood.

When closing the hood, lower it slowly and make sure it locks into place.

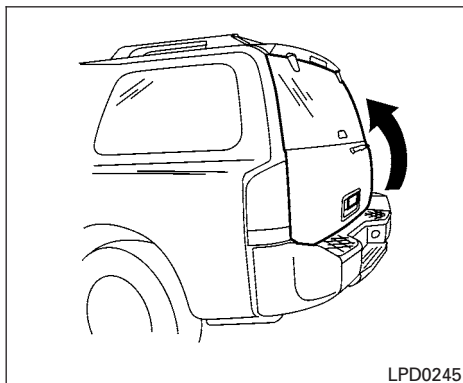
### WARNING

- 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.

## LIFTGATE

### WARNING

- Always be sure the liftgate has been closed securely to prevent it from opening while driving.
- Do not drive with the liftgate 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 liftgate.

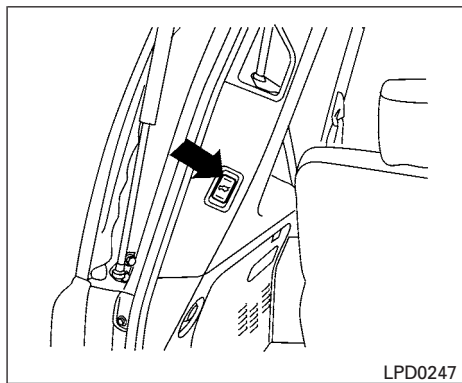


### OPERATING THE MANUAL LIFTGATE (if so equipped)

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

To open the liftgate, pull up on the handle.

To close, lower and push the liftgate down securely.



### Rear pillar switch

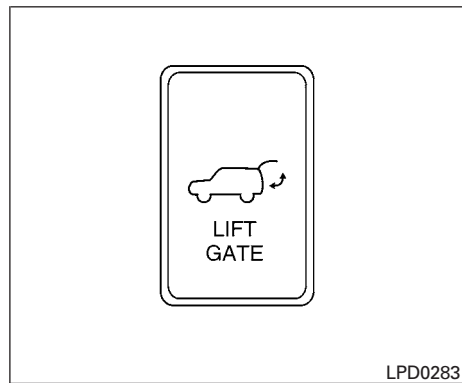
### OPERATING THE POWER LIFTGATE (if so equipped)

#### NOTE:

**To open, close or reverse the power liftgate, the shift selector must be in P (Park). Also, the power liftgate will not operate if battery voltage is low. Additionally, the glass hatch must be fully closed in order to open, close or reverse the power liftgate.**

#### Power Open:

The power liftgate automatically moves from the fully closed position to the fully open position in



### Instrument panel switch

approximately 5 – 8 seconds. The power open feature can be activated by the switch on the keyfob, the instrument panel switch and by the outside opener handle. The hazard lights flash and a chime sounds to indicate the power open sequence has been started.

- The liftgate can be opened by the instrument panel switch and the keyfob even if the vehicle is locked. The liftgate will individually unlock and open. Once the liftgate is closed, its lock will align to the vehicle's lock or unlock status.

- The keyfob button must be held for 0.5 second before the liftgate opens.
- The liftgate must be unlocked to open it with the outside opener handle.
- The switch on the rear pillar cannot be used to open the liftgate.

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

#### **Power Close:**

The power liftgate automatically moves from the fully open position to the secondary position. When the liftgate reaches the secondary position, the cinching motor engages and pulls the liftgate to its primary latch position. Power close takes approximately 7 – 10 seconds. The power close feature can be activated by the switch on the keyfob, the instrument panel 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 second before the liftgate closes.
- The switch on the rear pillar can only be used to close the liftgate if the cancel switch is not in the on position.

#### **Reverse:**

The power liftgate will reverse direction immediately during power open or power close if the keyfob, instrument panel or rear pillar switch is pushed or if the outside handle is lifted. 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 liftgate will reverse direction and return to the full open or full close position. If a second obstacle is detected, the liftgate motion will stop and the drive motor will disengage. The liftgate will enter manual mode.

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

#### **NOTE:**

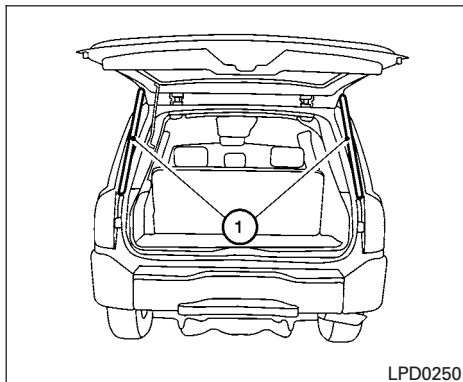
**If the pinch strip is damaged or removed, the power close function will not operate.**

#### **⚠ 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 lift gate.**

#### **Manual Mode:**

If power operation is not available, the liftgate may be operated manually. Power operation may not be available if the cancel switch is in the on position, if multiple obstacles have been detected in a single power cycle, or if battery voltage is low.



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### Safe Mode:

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

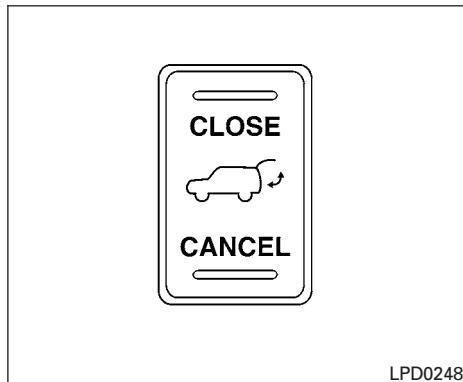
The power liftgate cannot be opened using the switches at any time in the safe mode.

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

Do not operate the liftgate again until it is checked by your NISSAN dealer.

### 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.



LPD0248

### CANCEL SWITCH

Push the switch toward the CANCEL position to disable the rear pillar switch. The liftgate can still be opened and closed using the switch on the instrument panel and keyfob. The liftgate can also be opened manually with the outside handle if the liftgate is unlocked.

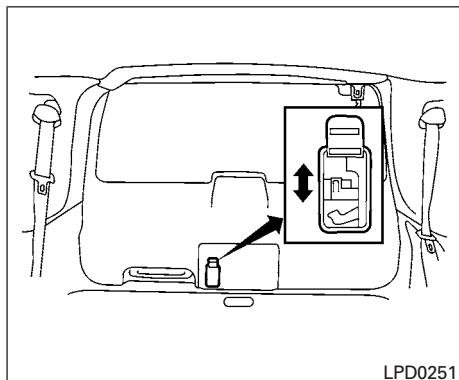
## LIFTGATE RELEASE

### **⚠ WARNING**

- Always be sure the liftgate has been closed securely to prevent it from opening while driving.
- Do not drive with the liftgate 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.

### **⚠ CAUTION**

- If the power liftgate does not stay open or if the liftgate unexpectedly closes at any time while a continuous warning chime sounds, do not operate the liftgate. There may be a pressure loss in one or both of the liftgate gas stays. Have the liftgate inspected by a NISSAN dealer.
- Do not activate the power liftgate if one or both of the liftgate gas stays are removed. Damage to the liftgate or power liftgate mechanisms may occur.

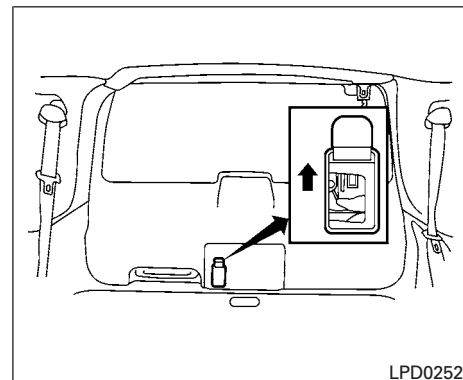


#### **Manual liftgate release**

##### **Manual liftgate (if so equipped)**

If the liftgate 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 liftgate.
2. Move the lever up to lock or down to unlock.



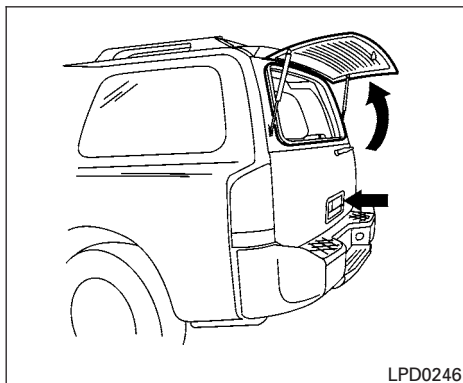
#### **Power liftgate release**

##### **Power liftgate (if so equipped)**

If the liftgate 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 liftgate.
2. Move the lever up to open the liftgate.

## GLASS HATCH



To open, pull up on the smaller outside handle to release the glass hatch, then pull up on the glass hatch. To close, lower and push the glass hatch down securely.

### NOTE:

The liftgate must be unlocked in order to open the glass hatch.


### WARNING

Do not drive with the glass hatch 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.

## FUEL-FILLER DOOR

### FUEL-FILLER CAP

### 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 (MIL) 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 filling.
- Keep the pump nozzle in contact with the container while you are filling it.
- Use only approved portable fuel containers for flammable liquid.

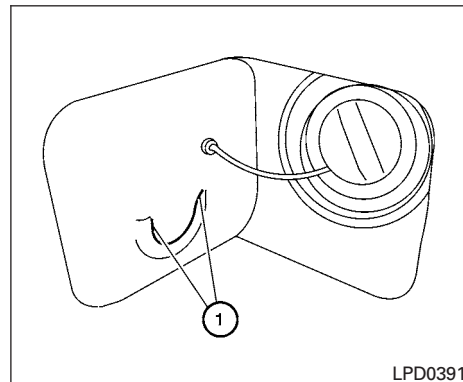
### **⚠ CAUTION**

- Only vehicles with the E-85 filler door label can operate on up to E-85 fuel. Fuel system or other damage can occur if up to E-85 fuel is used in vehicles that are not designed to run on E-85 fuel. For further information see the “Fuel recommendation” in the “Technical and consumer information” section of this manual.

- The **LOOSE FUEL CAP** warning will appear if the fuel-filler cap is not properly tightened. Failure to tighten the fuel-filler cap properly after the **LOOSE FUEL CAP** warning appears may cause the  **Malfunction Indicator Light (MIL)** to illuminate.

- Failure to tighten the fuel-filler cap properly may cause the  **Malfunction Indicator Light (MIL)** to illuminate. If the  light illuminates because the fuel-filler cap is loose or missing, tighten or install the cap and continue to drive the vehicle. The  light should turn off after a few driving trips. If the  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 in this manual.
- If fuel is spilled on the vehicle body, flush it away with water to avoid paint damage.

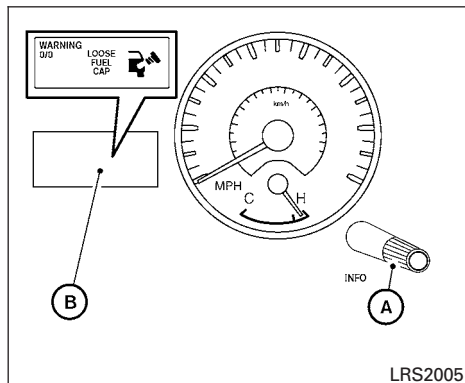


To remove the fuel-filler cap:

1. Turn the fuel-filler cap counterclockwise to remove.
2. Put the fuel-filler cap on the cap holder ① while refueling.

To install the fuel-filler cap:

1. Insert the fuel-filler cap straight into the fuel-filler tube.
2. Turn the fuel-filler cap clockwise until a single click is heard.



### Loose Fuel Cap warning

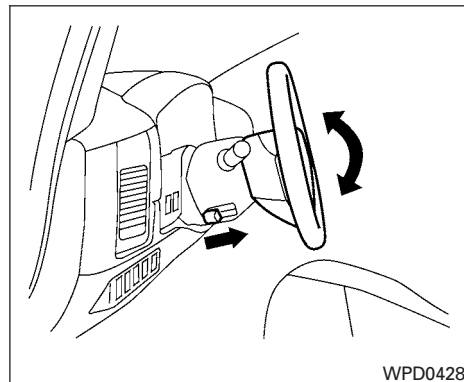
The LOOSE FUEL CAP warning appears in the vehicle information display when the fuel-filler cap is not tightened correctly after the vehicle has been refueled. It may take a few driving trips for the message to be displayed. To turn off the warning, perform the following:

1. Remove and install the fuel-filler cap as previously described as soon as possible.
2. Tighten the fuel-filler cap until it clicks.

3. Push the INFO button (A) on the instrument panel located behind the steering wheel for about 1 second to turn off the LOOSE FUEL CAP warning (B) after tightening the fuel-filler cap.

For additional information, see “Fuel recommendation” and “Flexible fuel vehicle (FFV) fuel recommendation” in the “Technical and consumer information” section in this manual.

## STEERING WHEEL



### TILT OPERATION

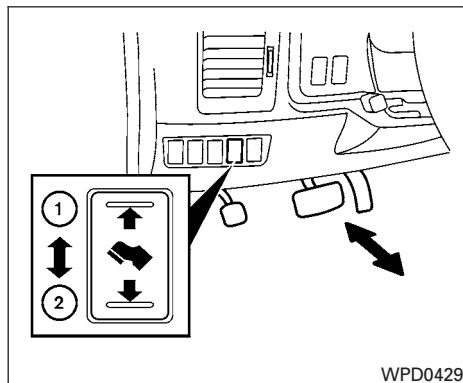
#### **⚠ WARNING**

**Do not adjust the steering wheel while driving. You could lose control of your vehicle and cause an accident.**

Pull the lock lever forward and hold it to adjust the steering wheel up or down to the desired position.

Release the lock lever to lock the steering wheel in place.

## PEDAL POSITION ADJUSTMENT



The accelerator and brake pedals can be adjusted for driving comfort.

Use the pedal adjusting switch to adjust the brake and accelerator pedal position away from the driver ① or toward the driver ②.

The brake and accelerator pedals cannot be adjusted separately.

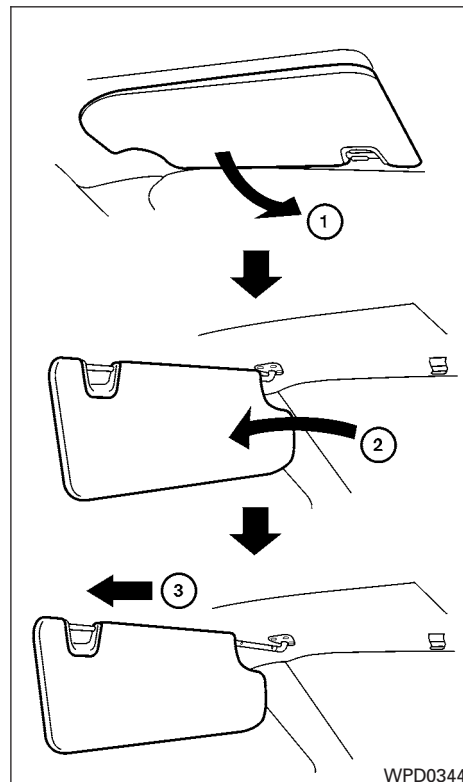
### **⚠ WARNING**

**Do not adjust the pedal position while driving. You could lose control of your vehicle and cause an accident.**

### **⚠ CAUTION**

**Do not adjust the pedal position with your foot on the pedal.**

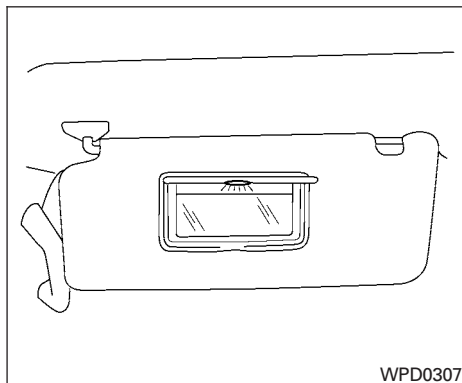
## SUN VISORS



- ① 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.
- ③ To extend the sun visor, slide in or out as needed.

#### **CAUTION**

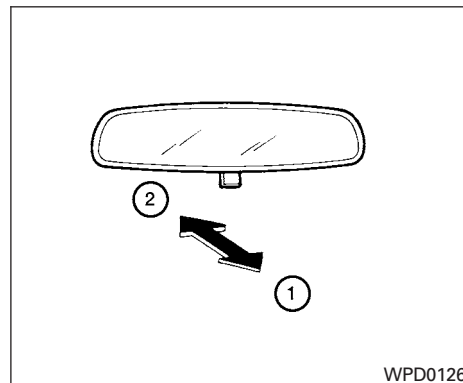
- Do not store the sun visor before returning the extension to its original position.
- Do not pull the extension sun visor forcedly downward.



#### **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.

## **MIRRORS**



#### **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.

#### **WARNING**

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

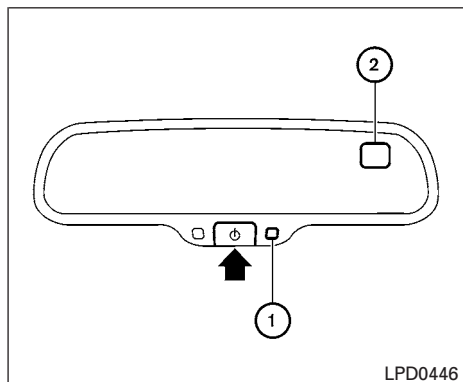
## AUTOMATIC ANTI-GLARE REARVIEW MIRROR (if so equipped)

The inside mirror is designed so that it automatically dims during night time conditions and according to the intensity of the headlights of the vehicle following you. The automatic anti-glare feature is activated when the ignition switch is in the ON position.

The indicator light will illuminate when the automatic anti-glare feature is operating.

### NOTE:

**Do not hang any objects over the sensors ① or apply glass cleaner to the sensors. Doing so will reduce the sensitivity of the sensors, resulting in improper operation.**



Type A

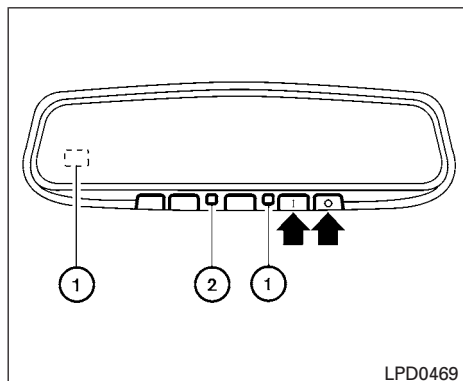
### Type A

With the ignition switch placed in the ON position, press the ⏻ button as described:

- To turn off the anti-glare feature, press the ⏻ button. The indicator light will turn off.
- To turn on the anti-glare feature, press the ⏻ button again. The indicator light will turn on.

The indicator light will illuminate when the automatic anti-glare feature is operating.

For more information about the compass and compass features ② (if so equipped), see "Compass display" in the "Instruments and controls" section of this manual.





**Type B - Without compass**

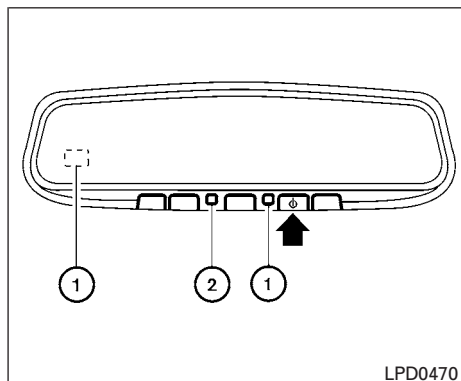
### Type B and Type C

The indicator light ② will illuminate when the automatic anti-glare feature is operating.

To turn off the automatic anti-glare feature, press:



- the  button for inside mirrors without compass.
- the  button for inside mirrors with compass.

The indicator light will turn off.



**Type C - With compass**

To turn on the automatic anti-glare feature again, press:

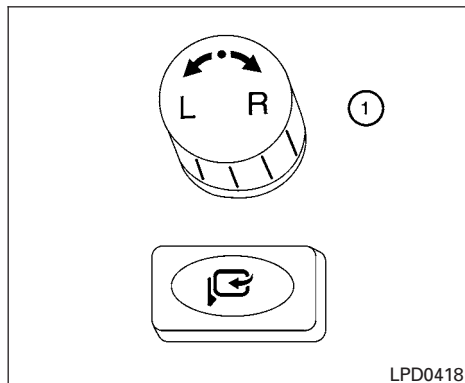
- the  button for inside mirrors without compass.
- the  button for inside mirrors with compass.

The indicator light will turn on.

Some vehicles are also equipped with automatic anti-glare outside mirrors. For additional information, see "Automatic anti-glare outside mirrors" in this section.

For information on HomeLink® Universal Transceiver operation, see the "HomeLink® Universal Transceiver" in the "Instruments and controls" section of this manual.

For information on the compass display (if so equipped), see "Compass display" in the "Instruments and controls" section of this manual.



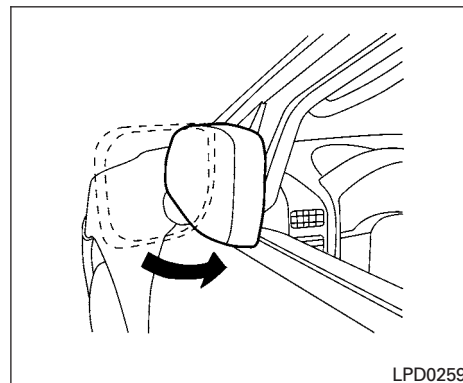
## OUTSIDE MIRRORS

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

Rotate the round switch ① to select the right or left mirror. Adjust each mirror to the desired position pushing the round switch.

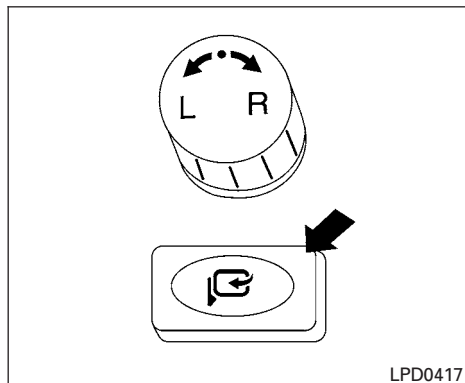
### WARNING

- 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.
- Do not adjust the mirrors while driving. You could lose control of your vehicle and cause an accident.



Manual folding outside mirrors (if so equipped)

Pull the outside mirror toward the door to fold it.



Power folding outside mirrors (if so equipped)

### ⚠ CAUTION

**Do not manually fold the power folding mirrors. Manually folding the mirrors can damage the mirrors.**

Press the switch to open or close the mirrors.

If one of the mirrors are manually operated or bumped, the mirror body can become loose at the pivot point. To correct electronic mirror operation, cycle the mirrors by pushing the "CLOSE" switch until completely closed, then


push the "OPEN" switch until the mirrors are in the open position.

### Automatic anti-glare outside mirror (Driver's side only) (if so equipped)

The outside mirror will automatically dim during nighttime conditions to reduce the glare from the headlights of trailing vehicles. The automatic anti-glare feature operates only when the ignition switch is placed 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 operating.

To turn off the anti-glare feature, press the  button on the rearview mirror. The indicator light will turn off.

To turn on the anti-glare feature again, press the  button on the rearview mirror. 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.

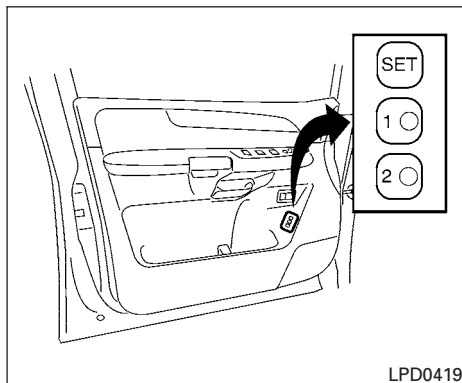
### Heated mirrors

The outside mirrors can be heated to defrost, defog, or de-ice for improved visibility. For additional information, see "Rear window and outside mirror defroster switch" in the "Instruments and controls" section of this manual.

## 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.

1. Place the shift selector in the P (Park) position.
2. Place the ignition switch in the ON position.
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 information,

see "Seats" in the "Safety—Seats, seat belts and supplemental restraint system" section of this manual and "Pedal position adjustment" and "Outside mirrors" earlier in this section.

During this step, do not place the ignition switch in 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  button 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 or the ignition switch is moved to OFF, press the  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

- Place the ignition switch in the ON position 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 2 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" 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
- Place the ignition switch in 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 placed 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 ignition switch placed in the LOCK position.
- When the ignition switch is turned from ACC to LOCK with the driver's door open.

The driver's seat will return to the 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 ignition switch placed in the LOCK position.
- When the ignition switch 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. For vehicles with navigation system, see "Comfort & convenience settings" in the "Monitor, climate, audio, phone and voice recognition systems" section of this manual. For vehicles without navigation system, see your NISSAN dealer.

### 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.

1. Connect the battery cable or replace the fuse.
2. Open and close the driver's door more than 2 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. For vehicles with navigation system, see "Comfort & convenience settings" in the "Monitor, climate, audio, phone and voice recognition systems" section of this manual. For vehicles without navigation system, see your NISSAN dealer.

# MEMO

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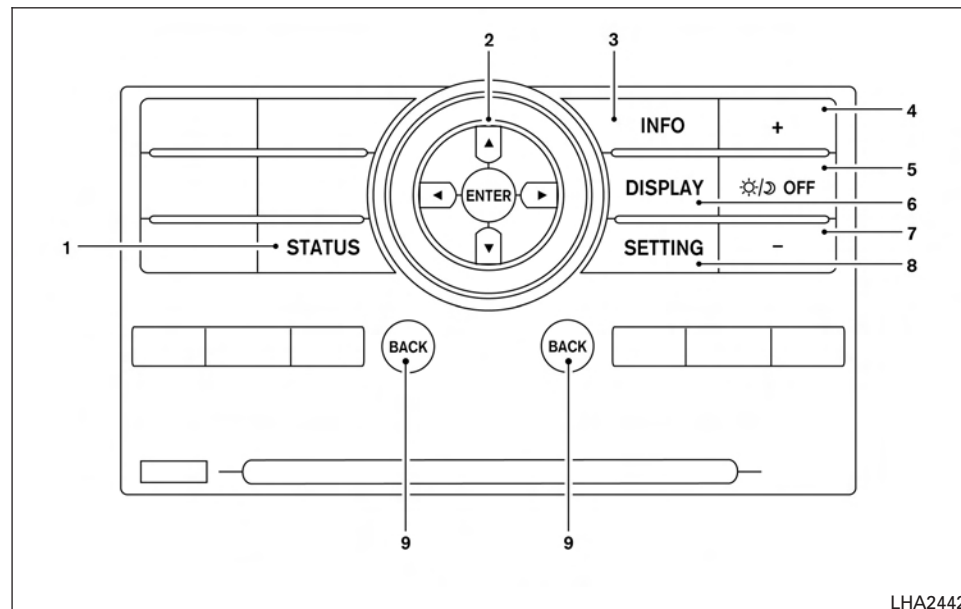
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## CONTROL PANEL BUTTONS — COLOR SCREEN WITHOUT NAVIGATION SYSTEM (if so equipped)

### WARNING

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



LHA2442

1. STATUS button (P. 4-6)
2. NISSAN controller (P. 4-5)
3. INFO button (P. 4-6)
4. BRIGHT + (brightness control) button
5.  OFF brightness control button (P. 4-15)
6. DISPLAY button (P. 4-9)
7. BRIGHT - (brightness control) button
8. SETTING button (P. 4-9)
9. BACK (previous) button (P. 4-5)

### CAUTION

- The glass display screen may break if it is hit with a hard or sharp object. If the glass screen breaks, do not touch it. Doing so could result in an injury.
- 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.

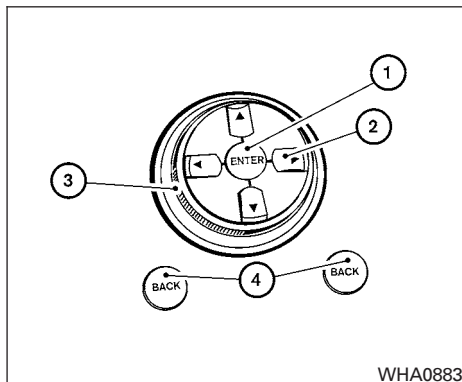
When you use this system, make sure the engine is running.

**If you use the system with the engine not running (ignition ON or ACC) for a long time, it will discharge the battery, and the engine will not start.**

Reference symbols:

ENTER button — This is a button on the control panel.

“Example” — Words marked in quotes refer to a key shown on the display. These keys can only be selected using the NISSAN controller.



## HOW TO USE THE NISSAN CONTROLLER

Use the NISSAN controller to choose an item on the display screen. Highlight an item on the display using the main directional buttons ② or the center dial ③. Then press the ENTER button ① to select the item or perform the action.

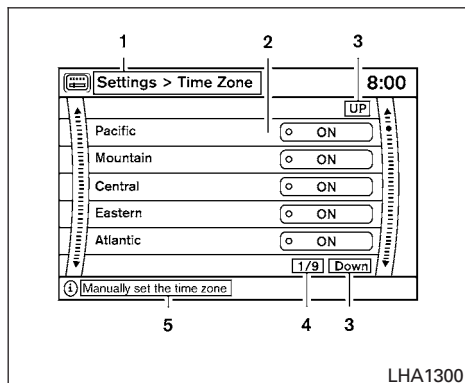
The BACK button ④ has two functions:

- Go back to the previous display (cancel).

If you press the BACK button ④ 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 ④ accepts the changes made during setup.



## HOW TO SELECT MENUS ON THE SCREEN

Vehicle functions are viewed on the center display screen in menus. Whenever a menu selection is made or menu item is highlighted, different areas on the screen provide you with important information. See the following for details:

### 1. Header:

Shows the path used to get to the current screen (for example, press the SETTING button > then select the "Clock" key, then select the "Time Zone" key).

### 2. Menu Selections:

Shows the options to choose within that menu screen (for example, Pacific time zone, Mountain time zone, etc.).

### 3. UP/DOWN Movement Indicator:

Shows that the NISSAN controller may be used to move UP/DOWN on the screen and select more options.

### 4. Screen Count:

Shows the number of menu selections available for that screen (for example, 1/9).

### 5. Footer/Information Line:

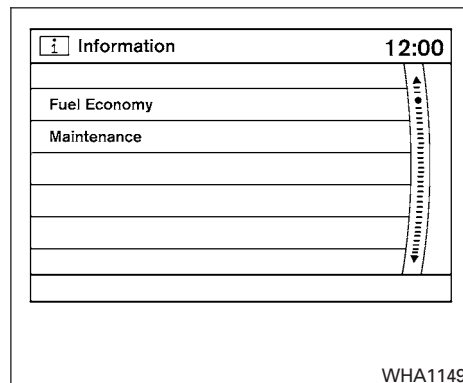
Provides more information (if available) about the menu selection currently highlighted (for example, Manually set the time zone).

## HOW TO USE THE STATUS BUTTON

To display the status of the audio, climate control system and fuel consumption, press the STATUS button.

The following information will appear when the STATUS button is pressed multiple times:

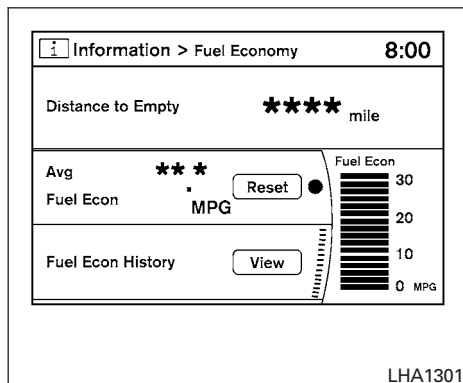
Audio → Audio and climate control system → Audio and fuel consumption → Audio



## HOW TO USE THE INFO BUTTON

Press the INFO button. The display screen shows vehicle information for your convenience.

The information shown on the screen should be a guide to determine the condition of the vehicle. See the following for details.



## Fuel economy

Press the INFO button, then select the “Fuel Economy” key using the NISSAN controller to display Average Fuel Economy, Distance to Empty and Fuel Economy History.

### 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:

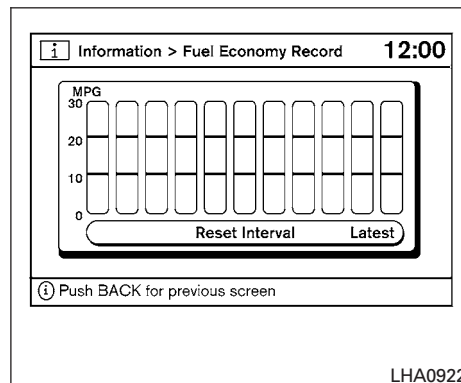
- If the amount of fuel added while the ignition switch is OFF is small, the display just before the ignition switch is placed in the OFF position may continue to be displayed.
- When driving uphill or rounding curves, the fuel in the tank shifts, which may momentarily change the display.

### 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 mi (500 m). After a reset or connecting the battery cables, the display might show (\*\*.\*).

### Resetting fuel economy

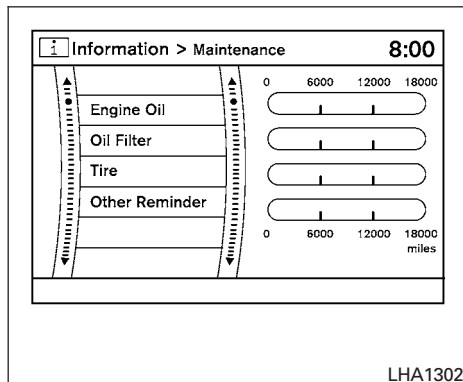
The average fuel economy calculation can be reset to 0. Press the INFO button and select the “Fuel Economy” key, then select the “Reset” key using the NISSAN controller.



## Fuel economy record

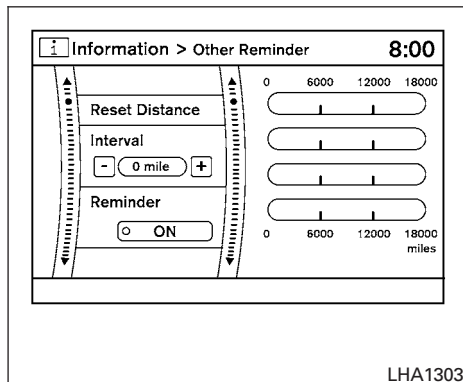
Press the INFO button, then select the “Fuel Economy” key, then select the “View” key using the NISSAN controller.

The average fuel consumption history will be displayed in a graph form along with the average fuel for the previous reset-to-reset period.



## Maintenance items

Press the INFO button and select the “Maintenance” key using the NISSAN controller; the maintenance information will be displayed on the screen.



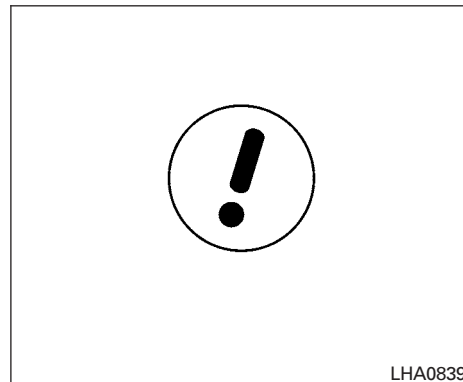
## Changing the maintenance interval

Select one of the Reminder keys (Engine Oil, Oil Filter, Tire or Other Reminder) using the NISSAN controller to display the screen to change the maintenance interval.

Select the “Interval” key using the NISSAN controller. Use the NISSAN controller to change the maintenance interval. To accept the changes, press the BACK button.

## Resetting the maintenance interval

To reset the reminder schedule (distance) to 0 mi (km), select the “Reset Distance” key using the NISSAN controller.



## Displaying the maintenance notice reminder

Select the “Interval Reminder ON” key to display the MAINTENANCE INFORMATION automatically at the set maintenance interval. The indicator light will illuminate when it is ON.

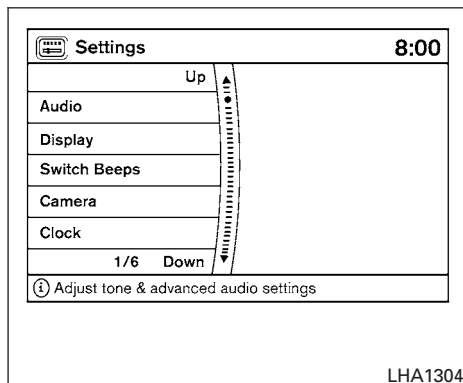
The MAINTENANCE NOTICE screen will be automatically displayed as shown when both of the following conditions are met:

- The vehicle is driven the set distance and the ignition switch is placed in the OFF position.
- The ignition switch is placed in the ON position the next time the vehicle is driven.

To return to the previous display after the MAINTENANCE 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:

- The “Reset” key is selected.
- The “Interval Reminder ON” key is set to OFF (indicator light not illuminated).
- The maintenance interval is set again.

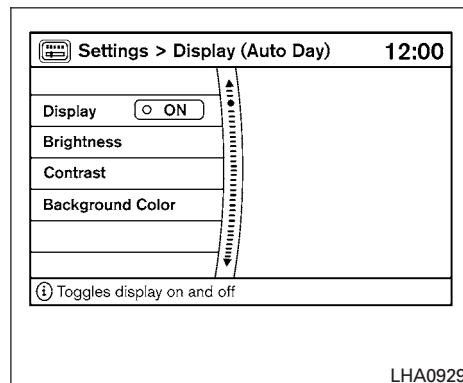


## HOW TO USE THE SETTING BUTTON

When the SETTING button is pressed, the Settings screen will appear on the display. You can select and/or adjust several functions, features and modes that are available for your vehicle. Use the NISSAN controller to select each item to be set.

### Audio settings

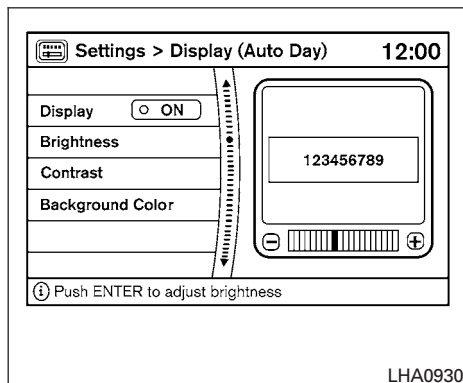
For audio settings, refer to “Audio System” in this section.



## Display settings

Select the “Display” key. The Display settings screen will appear.

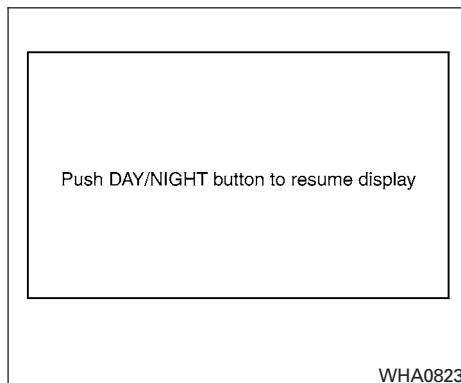
This settings screen can also be accessed directly by pressing the DISPLAY button on the control panel.



### Brightness/contrast:

Select the “Brightness” key or the “Contrast” key to adjust the brightness or contrast of the map background. Use the NISSAN controller 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 ON” key. The amber indicator next to “Display ON” turns off 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.

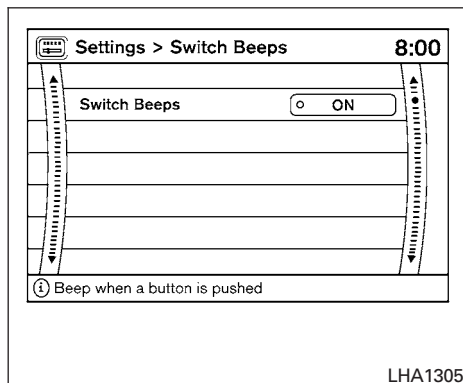
To turn the screen on:

- Press the SETTING button, select the “Display” key and then select the “Display ON” key. Then set the screen to on by pressing the ENTER button, or
- Hold the OFF button for approximately 2 seconds and the message “resuming display” will appear and the “Display ON” key will be automatically turned on (no amber indicator).

### Background color:

Select the “Background Color” key; the display color changes between day and night.

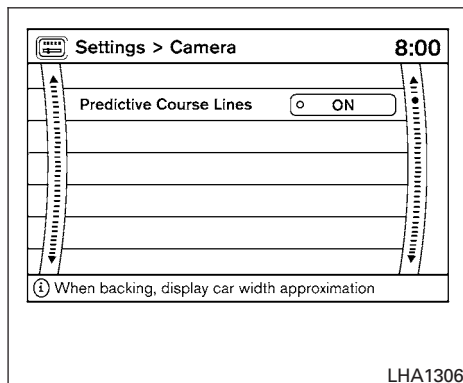
The new settings are automatically saved when you exit the setting screen by pressing the BACK button or any other mode button.



## Switch beeps settings

Select the “Switch Beeps” key to adjust the switch beeps settings.

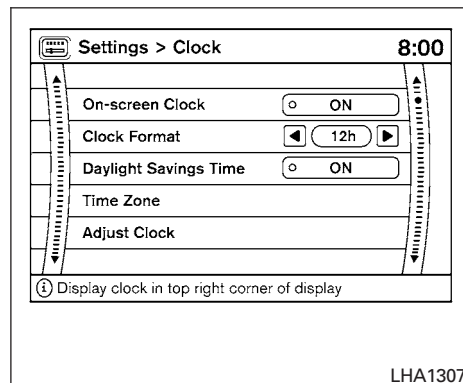
With this option on (indicator light illuminated), a beep will sound if any control panel button is pressed.



## Camera settings

Select the “Camera” key. The Camera settings screen will appear.

When this option is on (indicator light illuminated), predictive course lines will be displayed when the RearView monitor is displayed on the screen. See “RearView Monitor” in this section for more information.



## Clock

The following display will appear after pressing the SETTING button, then selecting the “Clock” key using the NISSAN controller.

### On-screen Clock:

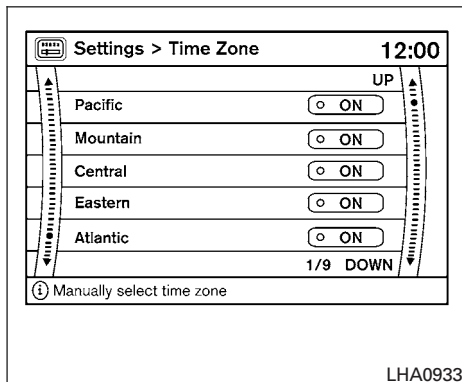
When this item is enabled (indicator light illuminated), a clock is always displayed in the upper right corner of the screen.

### Clock Format:

Choose either the 12h (12-hour) clock display or the 24h (24-hour) clock display.

### Daylight Savings Time:

When this item is enabled (indicator light illuminated), daylight savings time is on. To turn off the daylight savings time, touch the “ON” key; the amber indicator light will go out.



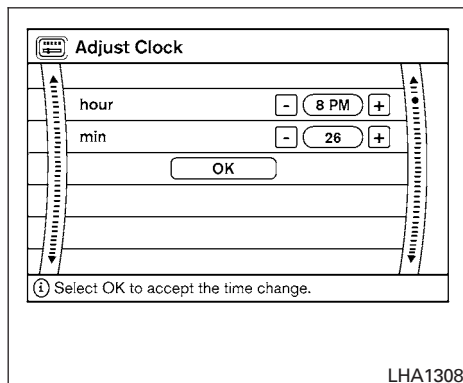
- Newfoundland
- Aleutian
- Hawaii
- Alaska

### Time Zone:

Select the “Time Zone” key; the Time Zone screen will appear.

Select one of the following zones, depending on the current location, by selecting the correct time zone key to enable that time zone (indicator light will illuminate for that location).

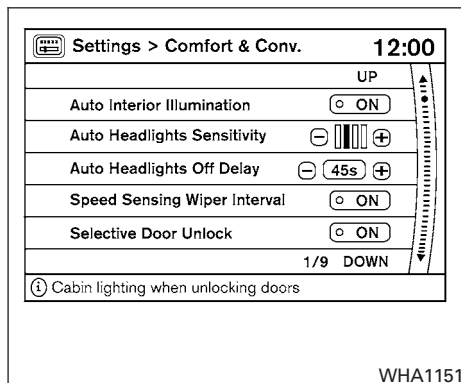
- Pacific
- Mountain
- Central
- Eastern
- Atlantic



### Adjust Clock:

To adjust the time, select the + or - key for the hour until the desired number is reached. Repeat the process for the minutes on the line below.

To accept the changes made and return to the Clocks Settings screen, select the OK key.



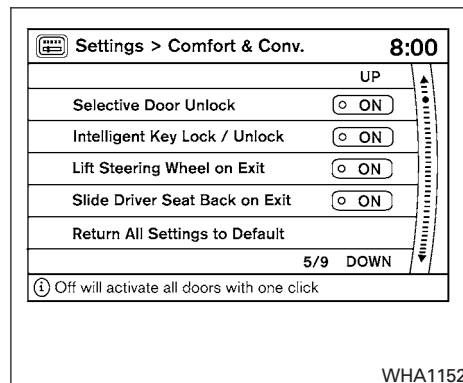
### Comfort & Convenience settings

Select the "Comfort & Conv." key by using the NISSAN controller. The comfort and convenience option screen will be displayed.

You can set the following operating conditions by highlighting the desired item using the NISSAN controller. The amber indicator (box at the right 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



**Auto Interior Illumination:** Select to turn on or turn off the illumination of the interior lights when any door is unlocked.

**Auto Headlights Sensitivity:** Select to adjust the sensitivity of the automatic headlights higher (right) or lower (left).

**Auto Headlights Off Delay:** Select to change the duration of the automatic headlight off timer from 0-, 30-, 45-, 60-, 90-, 120-, 150- and 180-second periods.

**Speed Sensing Wiper Interval:** Select to turn on or turn off the wiper interval adjusted automatically according to the vehicle speed.

**Selective Door Unlock:** When this item is turned on, only the driver's door is unlocked first after the door unlock operation. When the door handle request switch on the driver's or front passenger's side door is pushed to be unlocked, only the corresponding door is unlocked first. All the doors can be unlocked if the door unlock operation is performed again within 1 minute.

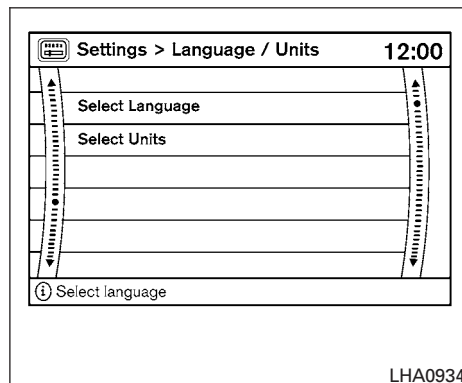
When this item is turned to off, all the doors will be unlocked after the door unlock operation is performed once.

**Intelligent Key Lock / Unlock:** Select to turn on or turn off the door lock/unlock function by pushing the door handle request switch.

**Lift Steering Wheel on Exit:** Select to turn on or turn off the steering wheel moving upward for easy exit when the ignition switch is in the OFF position and the driver's door is opened. After getting into the vehicle and pushing the ignition switch to the ACC position, the steering wheel moves to the previous position.

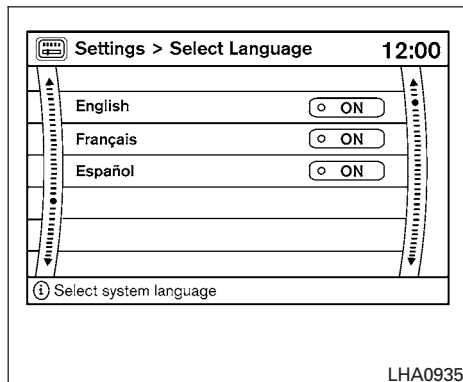
**Slide Driver Seat Back on Exit:** Select to turn on or turn off the driver's seat moving backward for easy exit when the ignition switch is in the OFF position and the driver's door is opened. After getting into the vehicle and pushing the ignition switch to the ACC position, the driver's seat moves to the previous position.

**Return All Settings to Default:** Select to change all the comfort and convenience systems to their default settings.



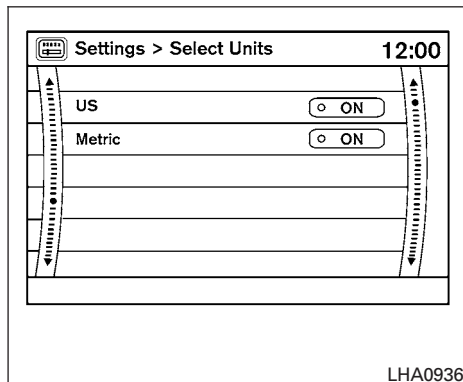
## Language / Units

Use the NISSAN controller to select the "Language / Units" key. Select which setting you want to change using the NISSAN controller.



### Select Language:



Select the “English” key, the “Français” key or the “Español” key to change the language shown on the display.



### Select Units:

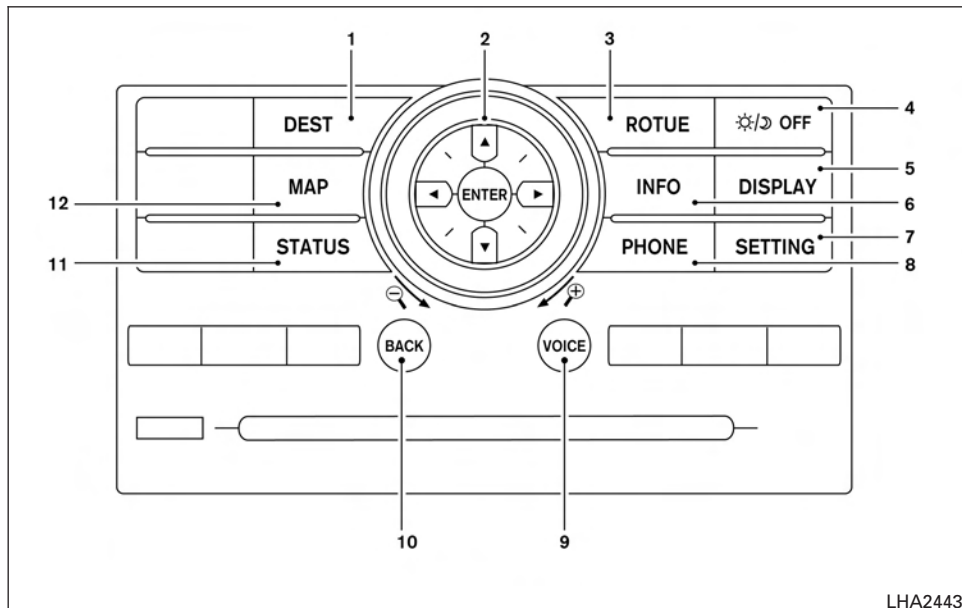
Select the “US” (mi, °F, MPG) key or the “Metric” (km, °C, L/100 km) key to change the units shown on the display.

### ☀/🌙 OFF BUTTON

To change the display brightness, press the ☀/🌙 OFF button. Pressing the button again will change the display to the day  or the night  display. The brightness can then be adjusted using the NISSAN controller.

Press and hold the ☀/🌙 OFF button for more than 2 seconds to turn the display off. Press the button again to turn the display on.

## CONTROL PANEL BUTTONS — COLOR SCREEN WITH NAVIGATION SYSTEM (if so equipped)



1. DEST button\*
2. NISSAN controller (P. 4-17)
3. ROUTE button\*
4. ☀/🌙 OFF brightness control button (P. 4-30)
5. DISP button (P. 4-23)
6. INFO button (P. 4-20)
7. SETTING button (P. 4-23)
8. PHONE button\*\*
9. VOICE button\*
10. BACK (previous) button (P. 4-17)
11. STATUS button (P. 4-19)
12. MAP button\*

9. VOICE button\*

10. BACK (previous) button (P. 4-17)

11. STATUS button (P. 4-19)

12. MAP button\*

\*For Navigation system control buttons, refer to the separate Navigation System Owner's Manual.

\*\*For information on the PHONE button, see "Bluetooth® Hands-Free Phone System with Navigation System" in this section.

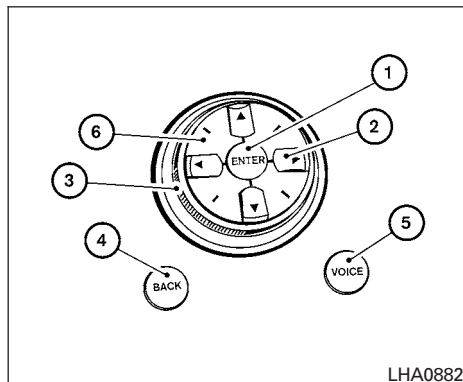
When you use this system, make sure the engine is running.

**If you use the system with the engine not running (ignition ON or ACC) for a long time, it will discharge the battery, and the engine will not start.**

Reference symbols:

ENTER button — This is a button on the control panel.

"Example" — Words marked in quotes refer to a key shown only on the display. These keys can be selected by touching the screen or using the NISSAN controller.



## HOW TO USE THE NISSAN CONTROLLER

Use the NISSAN controller to choose an item on the display screen. Highlight an item on the display using the main directional buttons (2) (certain Navigation System functions use the additional directional buttons (6)) or the center dial (3). Then press the ENTER button (1) to select the item or perform the action.

The BACK button (4) has two functions:

- Go back to the previous display (cancel).

If you press the BACK button (4) 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 (4) accepts the changes made during setup.

For the VOICE button (5) functions, refer to the separate Navigation System Owner's Manual.

## HOW TO USE THE TOUCH SCREEN

### ⚠ CAUTION

- **The glass display screen may break if it is hit with a hard or sharp object. If the glass screen breaks, do not touch it. Doing so could result in an injury.**
- **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.**

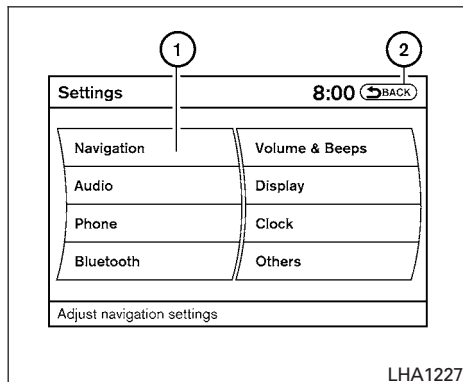
To help ensure safe driving, some functions cannot be operated while driving.

The on-screen functions that are not available while driving will be "grayed out" or muted.

Park the vehicle in a safe location and then operate the navigation system.

### ⚠ WARNING

- **ALWAYS give your full attention to driving.**
- **Avoid using vehicle features that could distract you. If distracted, you could lose control of your vehicle and cause an accident.**

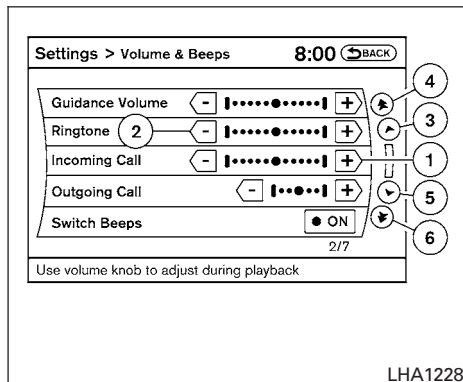


## Touch screen operation

With this system, the same operations as those for the NISSAN controller are possible using the touch screen operation.

### Selecting the item:

Touch an item to select. To select the "Navigation" key, touch the "Navigation" key ① on the screen. Touch the "BACK" key ② to return to the previous screen.

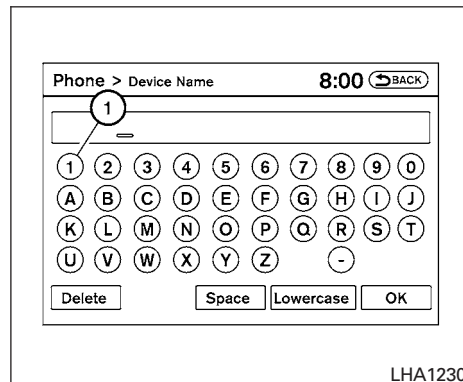


### Adjusting the item:

Touch the "+" key ① or the "-" key ② to adjust the settings of an item.

Touch the up arrow ③ to scroll up the page one item at a time, or touch the double up arrow ④ to scroll up an entire page.

Touch the down arrow ⑤ to scroll down the page one item at a time, or touch the double down arrow ⑥ to scroll down an entire page.



### Inputting characters:

Touch the letter or number key ①.

There are some options available when inputting characters.

- **Uppercase:**  
Shows uppercase characters.
- **Lowercase:**  
Shows lowercase characters.
- **Space:**  
Inserts a space.

- **Delete:**

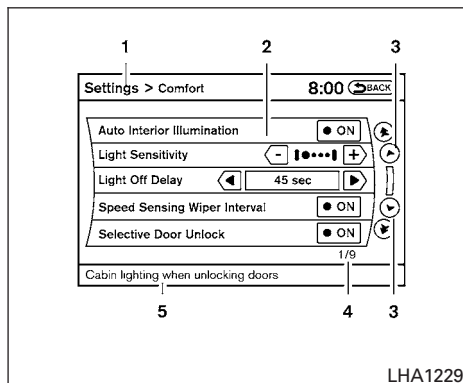
Deletes the last inputted character with one touch. Touch and hold the “Delete” key to delete all of the characters.

- **OK:**

Completes the character input.

## Touch screen maintenance

If you clean the display screen, use a dry, soft cloth. If additional cleaning is necessary, use a small amount of neutral detergent with a soft cloth. Never spray the screen with water or detergent. Dampen the cloth first, and then wipe the screen.



## HOW TO SELECT MENUS ON THE SCREEN

Vehicle functions are viewed on the center display screen in menus. Whenever a menu selection is made or menu item is highlighted, different areas on the screen provide you with important information. See the following for details.

1. Header:

Shows the path used to get to the current screen (for example, press the SETTING button > then select the “Comfort” key).

2. Menu Selections:

Shows the options to choose within that menu screen (for example, Auto Interior Illumination, etc.).

3. Up/Down Movement Indicator:

Shows that the NISSAN controller may be used to move up or down on the screen and select more options.

4. Screen Count:

Shows the number of menu selections available for the current menu, even if they are on multiple pages (for example, 1/9).

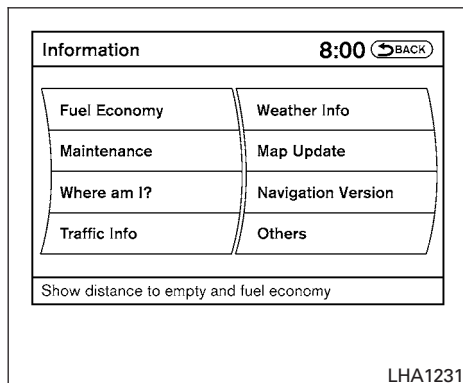
5. Footer/Information Line:

Provides more information (if available) about the menu selection currently highlighted (for example, Cabin lighting when unlocking doors).

## HOW TO USE THE STATUS BUTTON

The STATUS button is used to display system information. Three different split screens of information are available. Press the STATUS button multiple times to cycle through these screens as follows:

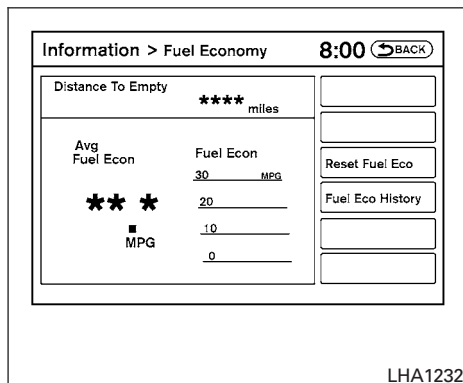
Audio with Turn Information for Navigation → Audio with Fuel Economy Information → Audio with Climate Control Information → Audio with Turn Information for Navigation



## HOW TO USE THE INFO BUTTON

Press the INFO button; the display screen shows vehicle and navigation information for your convenience.

The information shown on the screen should be a guide to determine the condition of the vehicle. See the following for details:



## Fuel economy

Press the INFO button, then select the “Fuel Economy” key using the NISSAN controller to display Distance to Empty, Average Fuel Economy and Fuel Economy History.

### 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:

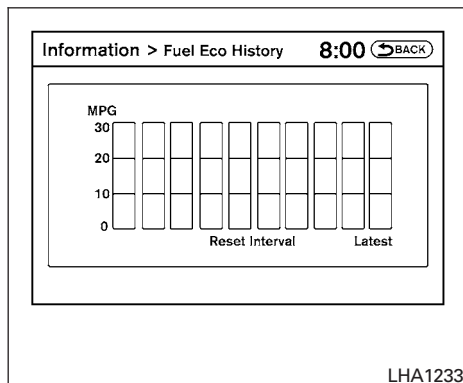
- If the amount of fuel added while the ignition switch is OFF is small, the display just before the ignition switch is placed in the OFF position may continue to be displayed.
- When driving uphill or rounding curves, the fuel in the tank shifts, which may momentarily change the display.

### 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 mi (500 m). After a reset or connecting the battery cables, the display might show (\*\*.\*).

### Resetting fuel economy

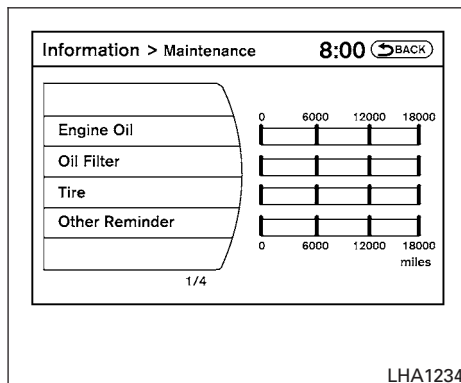
The average fuel economy calculation can be reset to 0. Press the INFO button and select the “Fuel Economy” key, then select the “Reset Fuel Eco” key using the NISSAN controller.



### Fuel economy record

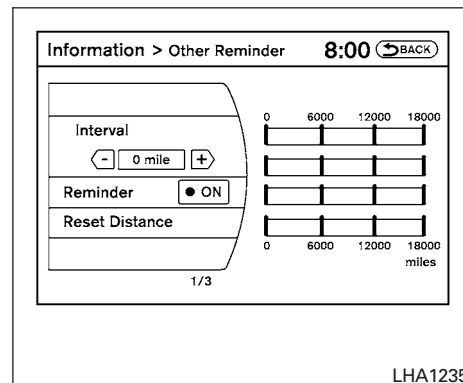
Press the INFO button, then select the "Fuel Economy" key, then select the "Fuel Eco History" key using the NISSAN controller.

The average fuel consumption history will be displayed in a graph form along with the average fuel for the previous Reset-to-Reset period.



### Maintenance items

Press the INFO button and select the "Maintenance" key using the NISSAN controller; the maintenance information will be displayed on the screen.



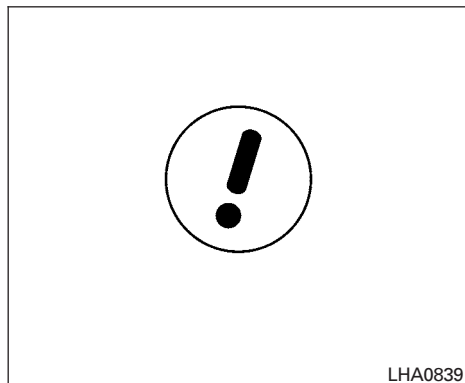
### Changing the maintenance interval

Select one of the maintenance reminder keys using the NISSAN controller to display the screen to change the maintenance interval. You can choose between Engine Oil, Oil Filter, Tire and Other Reminder.

Select the "Interval" key using the NISSAN controller. Touch the "+" or "-" keys or turn the NISSAN controller to choose the desired distance. To accept the changes, press the BACK button.

### Resetting the maintenance interval

To reset the reminder schedule (distance) to 0 mi (km), select the "Reset Distance" key using the NISSAN controller.



### Displaying the maintenance notice reminder

Select the "Interval Reminder ON" key to display the MAINTENANCE INFORMATION automatically at the set maintenance interval. The indicator light will illuminate when it is ON.

The MAINTENANCE NOTICE screen will be automatically displayed as shown when both of the following conditions are met:

- The vehicle is driven the set distance and the ignition switch is placed in the OFF position.
- The ignition switch is placed in the ON position the next time the vehicle is driven.

To return to the previous display after the MAINTENANCE 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:

- The "Reset" key is selected.
- The "Interval Reminder ON" key is set to OFF (indicator light not illuminated).
- The maintenance interval is set again.

### Where am I?

Refer to the separate Navigation System Owner's Manual for information regarding this item.

### Traffic Info

Refer to the separate Navigation System Owner's Manual for information regarding this item.

### Weather Info

Refer to the separate Navigation System Owner's Manual for information regarding this item.

### Map Update

Refer to the separate Navigation System Owner's Manual for information regarding this item.

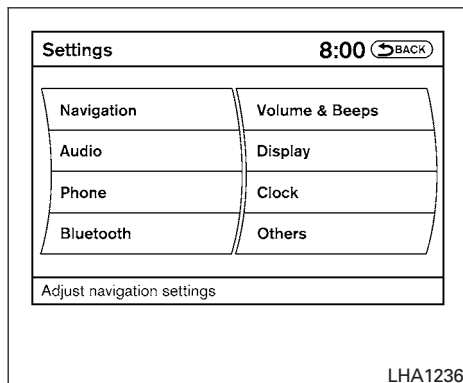
### Navigation Version

Refer to the separate Navigation System Owner's Manual for information regarding this item.

### Other options

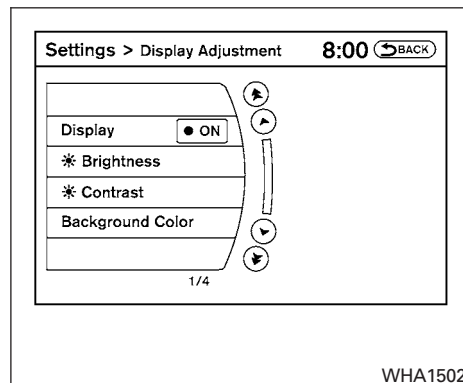
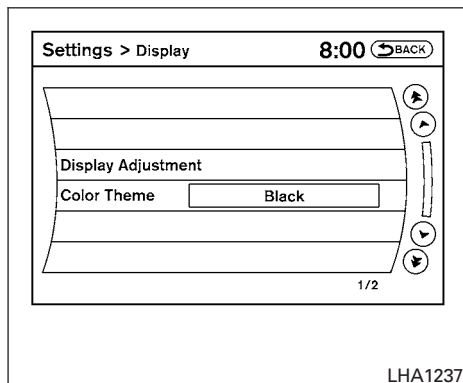
For Voice Recognition settings, refer to "NISSAN Voice Recognition system" in this section.

For GPS Position, refer to the separate Navigation System Owner's Manual.



## HOW TO USE THE SETTING BUTTON

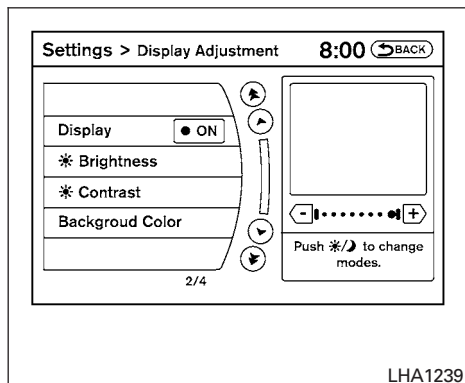
When the SETTING button is pressed, the Settings screen will appear on the display. You can select and/or adjust several functions, features and modes that are available for your vehicle. Use the NISSAN controller to select each item to be set.



## Display settings

Select the "Display" key. On the screen above, select the "Display Adjustment" key. The Display Adjustment screen will appear.

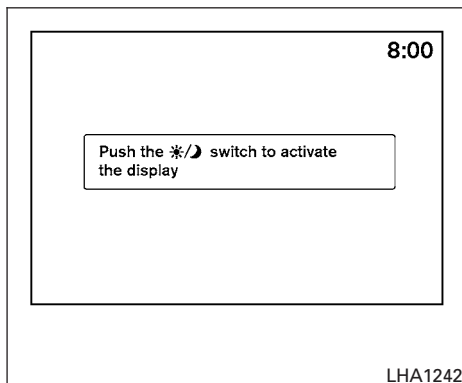
This settings screen can also be accessed directly by pressing the DISPLAY button on the control panel.



### Brightness/contrast:

Select the “Brightness” key or the “Contrast” key to adjust the brightness or contrast of the display background. Use the NISSAN controller 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 ON” key. The indicator of the “Display ON” turns off 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.

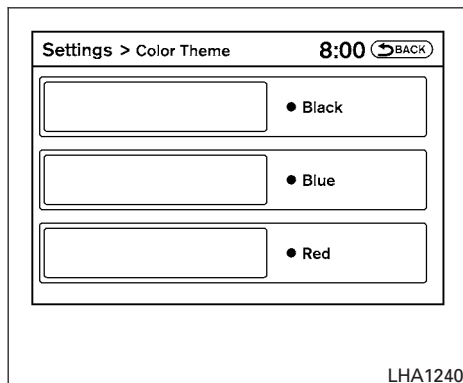
To turn the screen on:

- Press the SETTING button and select the “Display” key and then select the “Display ON” key, or
- Press the ☀/🌙 OFF button and the message “resuming display” will appear and the “Display ON” key will be automatically turned on (no amber indicator).

### Background color:

Select the “Background Color” key; the display color changes between day and night.

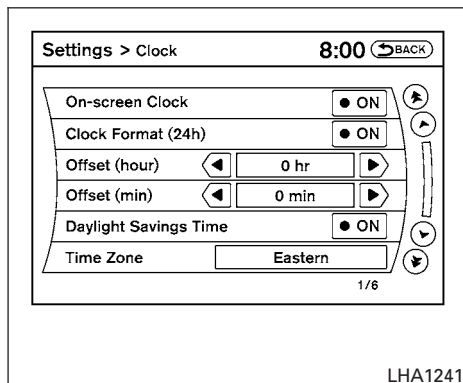
The new settings are automatically saved when you exit the setting screen by pressing the BACK button or any other mode button.



### Color theme:

Select the “Display” key, then select the “Color Theme” key. The Color Theme select screen will appear.

Select the key for the desired color. The appearance of the background, arrows and bars will change for all screens accordingly. You can choose a black, blue or red color theme.



### Clock

The following display will appear after pressing the SETTING button, then selecting the “Clock” key using the NISSAN controller.

### On-screen Clock:

When this item is enabled (indicator light illuminated), a clock is always displayed in the upper right corner of the screen.

This clock will indicate the time almost exactly because it is always adjusted by the GPS system.

### Clock Format (24h):

When this item is enabled (indicator light illuminated), the clock format will change from the default 12-hour display to a 24-hour display.

### Offset (hour):

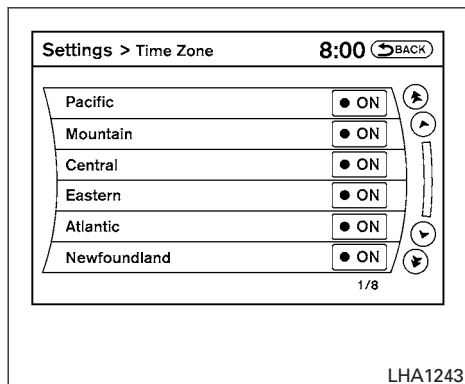
Adjust the time by increasing or decreasing the hours.

### Offset (minute):

Adjust the time by increasing or decreasing the minutes.

### Daylight Savings Time:

When this item is enabled (indicator light illuminated), daylight savings time is on. To turn off the daylight savings time, touch the “ON” key; the amber indicator light will go out.



### Time Zone:

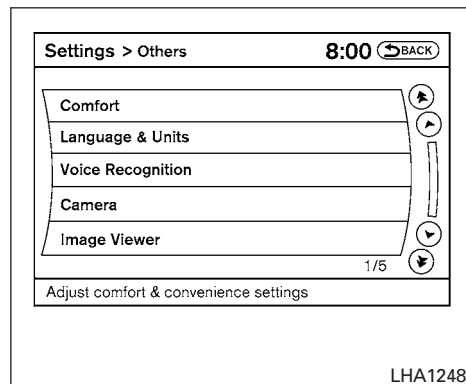
Select the “Time Zone” key; the Time Zone screen will appear.

Select one of the following zones, depending on the current location, by selecting the correct time zone key to enable that time zone (indicator light will illuminate for that location).

- Pacific
- Mountain
- Central
- Eastern
- Atlantic

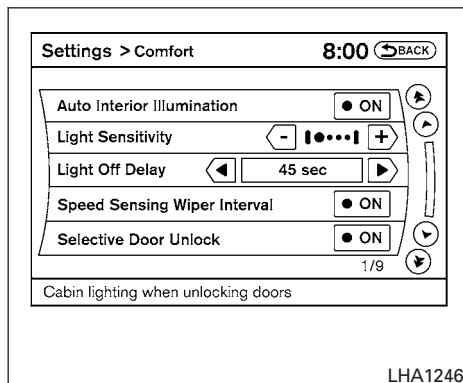
- Newfoundland
- Hawaii
- Alaska

After selection/settings, press the BACK button or any other mode button to accept the changes.



### Others settings

Select the “Others” key using the NISSAN controller. Voice recognition, language and units setting screen will be displayed.



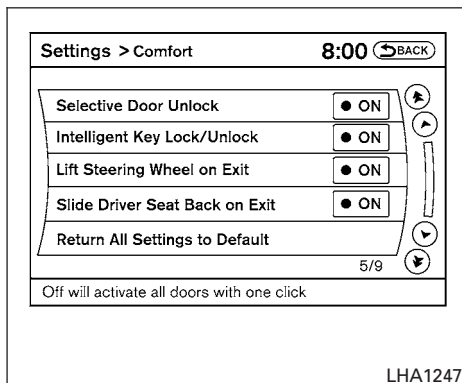
### Comfort settings

Select the “Others” key using the NISSAN controller, then select the “Comfort” key. The Comfort settings screen will be displayed.

You can set the following operating conditions by selecting the desired item using the NISSAN controller. The indicator light (box at the right of the selected item) alternately turns on and off each time the item is touched or the ENTER button is pressed.

Indicator light is illuminated — ON

Indicator light is not illuminated — OFF



**Auto Interior Illumination:** Select to turn on or turn off the illumination of the interior lights when any door is unlocked.

**Light Sensitivity:** Select to adjust the sensitivity of the automatic headlights higher (right) or lower (left). After selecting the item, turn the NISSAN controller or touch the “+” or “-” key to change the setting.

**Light Off Delay:** Select to change the duration of the automatic headlight off timer. After selecting the item, turn the NISSAN controller or touch the “+” or “-” key to change the setting. The available delays are 0, 30, 45, 60, 90, 120, 150 and 180 seconds.

**Speed Sensing Wiper Interval:** Select to turn on or turn off the wiper interval adjusted automatically according to the vehicle speed.

**Selective Door Unlock:** When this item is turned on, only the driver’s door is unlocked first after the door unlock operation. When the door handle request switch on the driver’s or front passenger’s side door is pushed to be unlocked, only the corresponding door is unlocked first. All the doors can be unlocked if the door unlock operation is performed again within one minute.

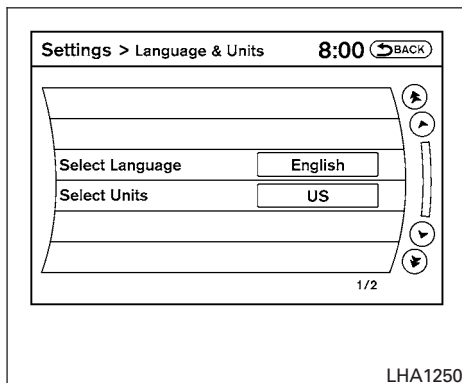
When this item is turned to off, all the doors will be unlocked after the door unlock operation is performed once.

**Intelligent Key Lock / Unlock:** Select to turn on or turn off the door lock/unlock function by pushing the door handle request switch.

**Lift Steering Wheel on Exit:** Select to turn on or turn off the steering wheel moving upward for easy exit when the ignition switch is in the OFF position and the driver’s door is opened. After getting into the vehicle and placing the ignition switch in the ACC position, the steering wheel moves to the previous position.

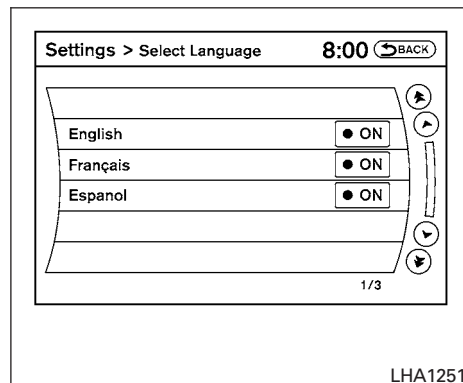
**Slide Driver Seat Back on Exit:** Select to turn on or turn off the driver's seat moving backward for easy exit when the ignition switch is in the OFF position and the driver's door is opened. After getting into the vehicle and placing the ignition switch in the ACC position, the driver's seat moves to the previous position.

**Return All Settings to Default:** Select to change all the comfort and convenience systems to their default settings.



#### Language & Units:

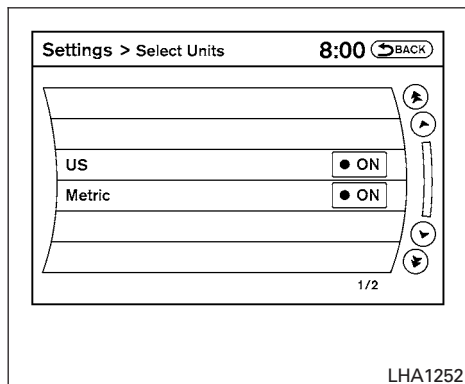
Use the NISSAN controller to select the “Language & Units” key. Select which setting you want to change using the NISSAN controller and selecting either the “Select Language” key or the “Select Units” key.



#### Select Language:

Select the “English” key or the “Français” key to change the language shown on the display.

If you select the “Français” key, French language will be displayed, so please use the French Owner's Manual. To obtain a French Owner's Manual, please see “Owner's Manual/Service Manual Order Information” in the “Technical and consumer information” section.

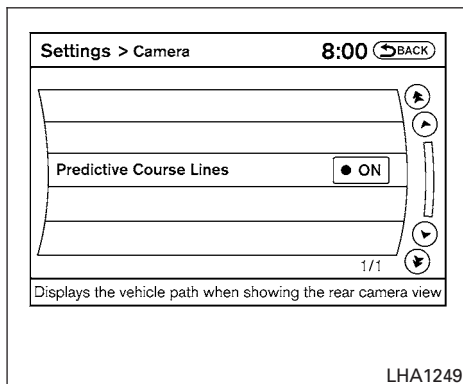


### Select Units:

Select the "US" (mi, °F, MPG) key or the "Metric" (km, °C, L/100 km) key to change the units shown on the display.

### Voice Recognition:

For Voice Recognition settings, refer to "NISSAN Voice Recognition system" in this section.



### Camera settings

Select the "Camera" key. The Camera settings screen will appear.

When this option is on (indicator light illuminated), predictive course lines will be displayed when the RearView monitor is displayed on the screen. See "RearView Monitor" in this section for more information.

### Image viewer settings

For information about these settings, refer to "Image viewer" in this section.

## Navigation settings

Refer to the separate Navigation System Owner's Manual for information regarding these settings.

## Audio settings

For audio settings, refer to "Audio System" in this section.

## Phone settings

For phone settings refer to "Bluetooth® Hands-Free Phone System with Navigation System" in this section.

## Bluetooth® settings

For Bluetooth® phone settings, refer to "Bluetooth® Hands-Free Phone System with Navigation System" in this section.

For Bluetooth® audio settings, refer to "Bluetooth® streaming audio" in this section.

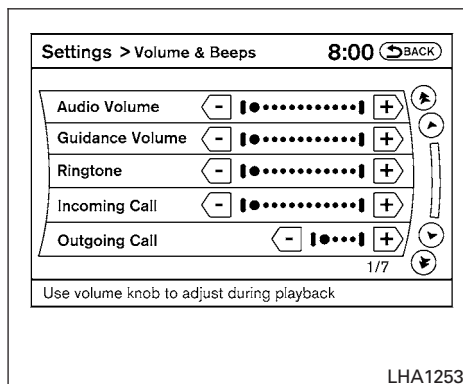
## Volume & beeps settings

### Navigation volume

For navigation volume settings, refer to the separate Navigation System Owner's Manual for information regarding these settings.

### Phone volume

For phone volume settings refer to "Bluetooth® Hands-Free Phone System with Navigation System" in this section.



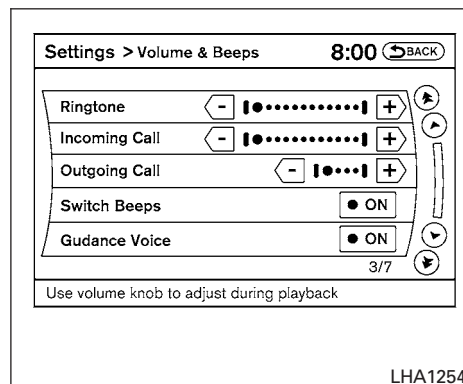
### Switch beeps

With this option on (indicator light illuminated), a beep will sound if any control panel button is pressed.

### ☀/🌙 OFF BUTTON

To change the display brightness, press the ☀/🌙 OFF button. Pressing the button again will change the display to the day ☀ or the night 🌙 display. The brightness can then be adjusted using the NISSAN controller.

If no operation is performed within 5 seconds, the display will return to the previous display.



Press and hold the ☀/🌙 OFF button for more than two seconds to turn the display off. Press the button again to turn the display on.

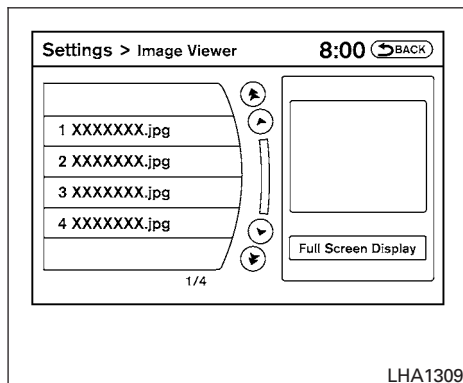
## IMAGE VIEWER (if so equipped)

### USING THE IMAGE VIEWER

When a compatible portable storage device is plugged into the USB jack located in the center console, compatible image files stored on the device can be viewed on the control panel device.

#### Connecting the portable storage device

To connect a portable storage device to the system so that images stored on it can be viewed, insert the device into the USB jack located in the center console.



#### Viewing images

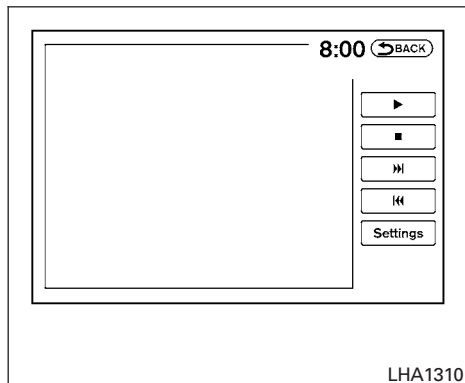
To view an image, press the SETTING button and then select the "Image Viewer" key with the NISSAN controller. The Image Viewer screen will be displayed.

A list of compatible images on the storage device is displayed on the left side of the screen, while the selected image is displayed on the right side of the screen. To choose a different picture from the list, use the NISSAN controller to scroll through the list once the desired image is highlighted.

Select the "Full Screen Display" key and press the ENTER button to view a full screen version of the image.

#### Image requirements:

- Image type: JPEG
- File extensions: \*.jpg, \*.jpeg
- Maximum resolution: 2048 x 1536
- Maximum size: 2 MB
- Colors: 32,768 (15-bit)
- Maximum file name length: 253 bytes (display only shows first 8 characters)
- Maximum folders: 500
- Maximum images per folder: 1024

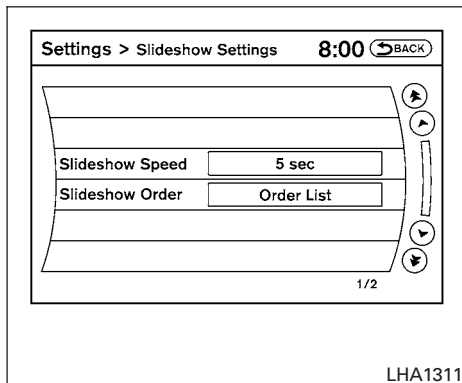


## Viewing images in a slideshow

To view all of the images on the device in a slideshow, first enter the full screen mode while viewing one of the images. The slideshow control buttons are located on the right side of the screen.

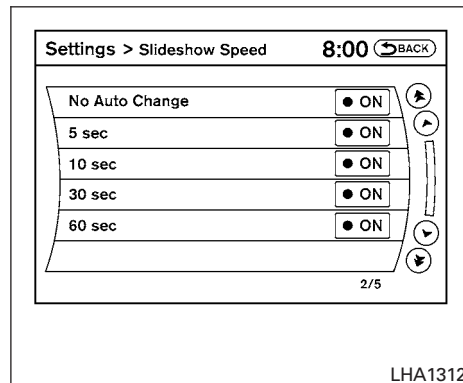
Select the play key **▶** to begin the slideshow. The images shown on the screen will periodically change at a given interval of time. To skip through the images without waiting for them to change automatically, select the **⏮** key to skip backward or the **⏭** key to skip forward. Select the stop key **■** to end the slideshow and return to the full screen display of the image currently on the screen.

## 4-32 Monitor, climate, audio, phone and voice recognition systems



## Slideshow settings

While in slideshow mode, select the “Settings” key. The Slideshow Settings screen will be displayed. The following settings can be accessed:

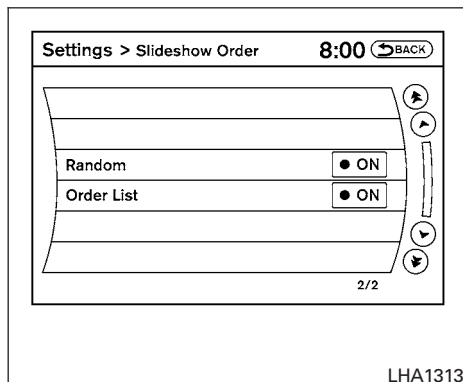


## Slideshow speed:

To change the interval of time at which images are changed during a slideshow, select the desired interval key. The indicator light to the right of the interval will come on to show that it is selected.

If the option “No Auto Change” is chosen, the slideshow will not change images automatically. The slideshow can then only be operated using the manual controls.

To return to the slideshow screen, select the “Back” key or press the BACK button on the control panel.



#### Slideshow order:

Select the “Random” key to display the images in a random order during a slideshow. Select the “Order List” key to display the images in the order in which they are stored on the storage device.

Select the “Back” key or press the BACK button on the control panel to return to the slideshow screen.

## REARVIEW MONITOR (if so equipped)

When the shift selector is shifted into the R (Reverse) position, the monitor display shows a rearward view from the vehicle.

The system is designed as an aid to the driver in situations such as slot parking or parallel parking.

### WARNING

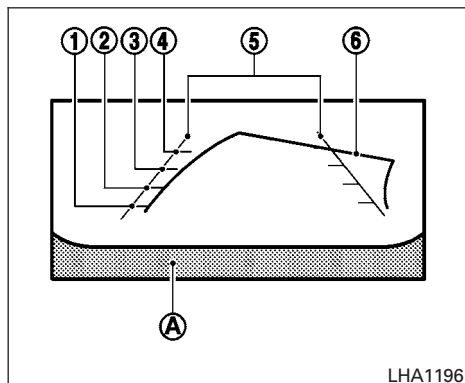
- The rear view camera is a convenience but it is not a substitute to check behind the vehicle when backing up.
- The driver is always responsible for safety during parking and other maneuvers.
- Objects viewed in the RearView Monitor differ from actual distance because a wide-angle lens is used.
- Make sure that the liftgate is securely closed when backing up.
- Underneath the bumper and the corner areas of the bumper cannot be viewed on the RearView Monitor because of its monitoring range limitation.
- Do not put anything on the rear view camera. The rear view camera is installed above the license plate.

- When washing the vehicle with high-pressure 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.
- Objects in the rearview will appear visually opposite than when viewed in the rearview and outside mirrors.

### CAUTION

Do not scratch the camera lens when cleaning dirt or snow from the lens.



## HOW TO READ THE DISPLAYED LINES

Guiding lines which indicate the vehicle width and distances to objects with reference to the vehicle body line (A) are displayed on the monitor.

### Distance guide lines:

Indicate distances from the vehicle body.

- Red line ①: approx. 1.5 ft (0.5 m)
- Yellow line ②: approx. 3 ft (1 m)
- Green line ③: approx. 7 ft (2 m)
- Green line ④: approx. 10 ft (3 m)

### Vehicle width guide lines ⑤:

Indicate the vehicle width when backing up.

### Predicted course lines ⑥:

Indicate the predicted course when backing up. The predicted course lines will be displayed on the monitor when the shift selector is in the R (Reverse) position and the steering wheel is turned. The predicted course lines will move depending on how much the steering wheel is turned and will not be displayed while the steering wheel is in the neutral position.

The vehicle width guide lines and the width of the predicted course lines are wider than the actual width and course.

## HOW TO PARK WITH PREDICTED COURSE LINES

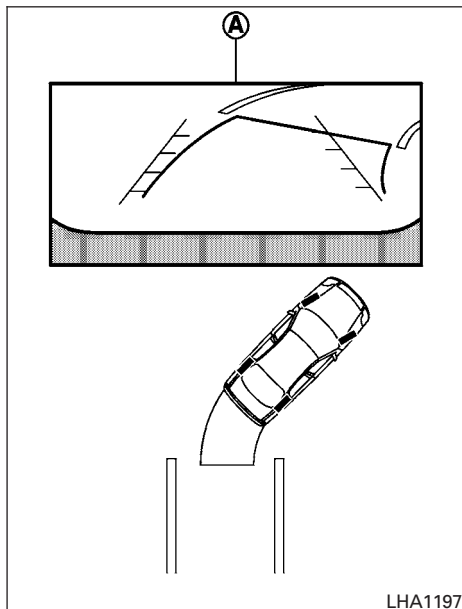
### ⚠ WARNING

- **Always turn and check that it is safe to do so before backing up. Always back up slowly.**
- **Use the displayed lines as a reference. The lines are highly affected by the number of occupants, fuel level, vehicle position, road conditions and road grade.**

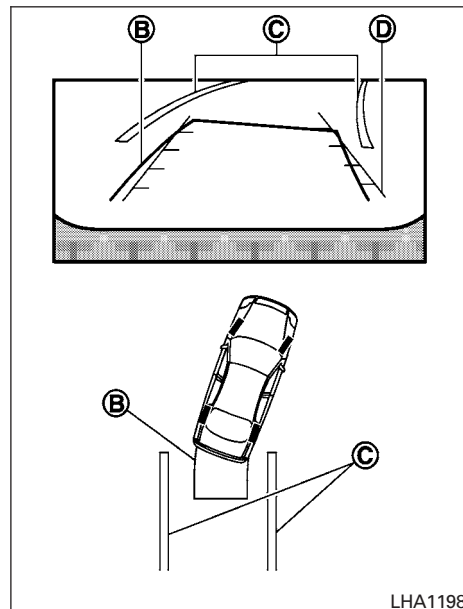
- **If the tires are replaced with different sized tires, the predicted course lines may be displayed incorrectly.**
- **On a snow-covered or slippery road, there may be a difference between the predicted course line and the actual course line.**
- **If the battery is disconnected or becomes discharged, the predicted course lines may be displayed incorrectly. If this occurs, please perform the following procedures:**
  - **Turn the steering wheel from lock to lock while the engine is running.**
  - **Drive the vehicle on a straight road for more than 5 minutes.**
- **When the steering wheel is turned with the ignition switch in the ACC position, the predicted course lines may be displayed incorrectly.**

- The distance guide line and the vehicle width line should be used as a reference only when the vehicle is on a level paved surface. The distance viewed on the monitor is for reference only and may be different than the actual distance between the vehicle and displayed objects.
- When backing up the vehicle up a hill, objects viewed in the monitor are further than they appear. When backing up the vehicle down a hill, objects viewed in the monitor are closer than they appear. Use the inside mirror or glance over your shoulder to properly judge distances to other objects.

The vehicle width and predicted course lines are wider than the actual width and course.



1. Visually check that the parking space is safe before parking your vehicle.
2. The rear view of the vehicle is displayed on the screen (A) when the shift selector is moved to the R (Reverse) position.

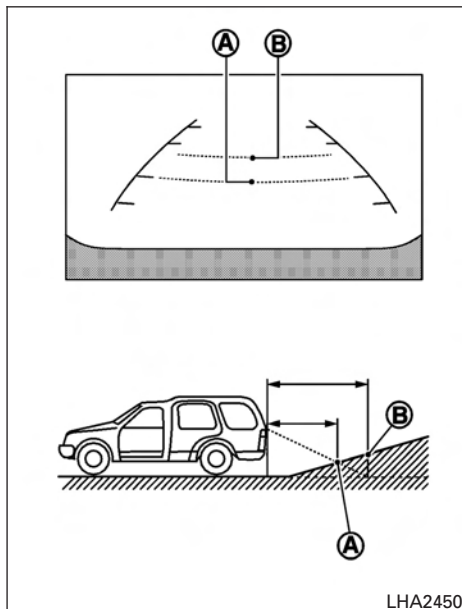


3. Slowly back up the vehicle adjusting the steering wheel so that the predicted course lines (B) enter the parking space (C).

4. Maneuver the steering wheel to make the vehicle width guide lines **(D)** parallel to the parking space **(C)** while referring to the predicted course lines.
5. When the vehicle is parked in the space completely, move the shift selector to the P (Park) position and apply the parking brake.

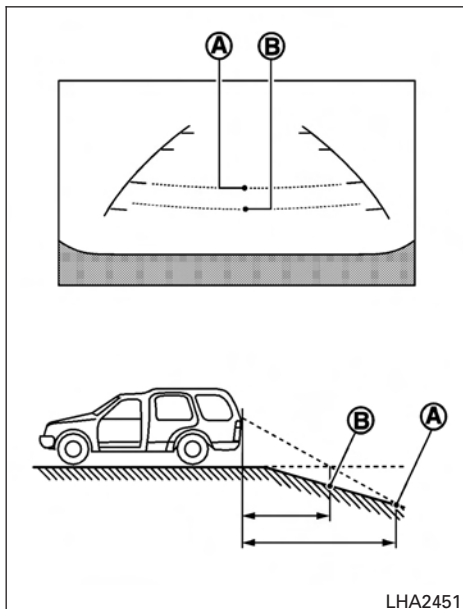
## DIFFERENCE BETWEEN PREDICTED AND ACTUAL DISTANCES

The distance guide line and the vehicle width guide line should be used as a reference only when the vehicle is on a level, paved surface. The distance viewed on the monitor is for reference only and may be different than the actual distance between the vehicle and displayed objects.



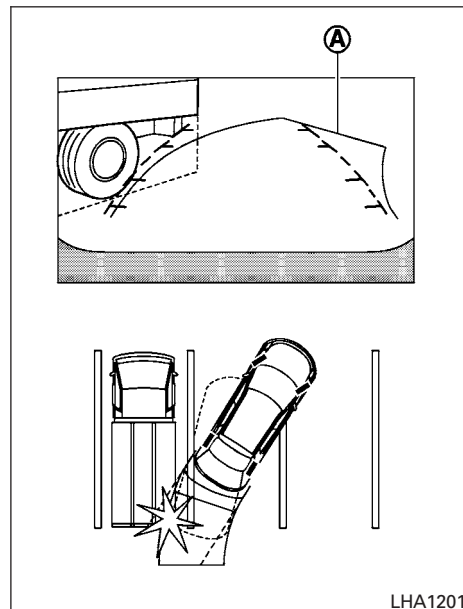
## Backing up on a steep uphill

When backing up the vehicle up a hill, the distance guide lines and the vehicle width guide lines are shown closer than the actual distance. For example, the display shows 3 ft (1.0 m) to the place **(A)**, but the actual 3 ft (1.0 m) distance on the hill is the place **(B)**. Note that any object on the hill is further than it appears on the monitor.



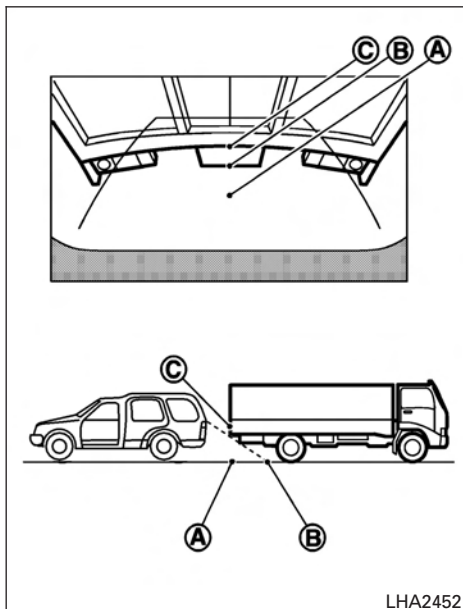
### Backing up on a steep downhill

When backing up the vehicle down a hill, the distance guide lines and the vehicle width guide lines are shown farther than the actual distance. For example, the display shows 3 ft (1.0 m) to the place ①, but the actual 3 ft (1.0 m) distance on the hill is the place ②. Note that any object on the hill is closer than it appears on the monitor.



### Backing up near a projecting object

The predicted course lines ① do not touch the object in the display. However, the vehicle may hit the object if it projects over the actual backing up course.



### Backing up behind a projecting object

The position ③ is shown farther than the position ② in the display. However, the position ③ is actually at the same distance as the position ①. The vehicle may hit the object when backing up to the position ① if the object projects over the actual backing up course.

## 4-38 Monitor, climate, audio, phone and voice recognition systems

### HOW TO ADJUST THE SCREEN

To adjust the Display ON/OFF, Brightness, Tint, Color, Contrast and Black Level of the RearView Monitor, press the SETTING button with the RearView Monitor on and select the "Display" key. Select one of the items and change the value by touching the "+" or "-" key or by turning the NISSAN controller.

Do not adjust the Brightness, Tint, Color, Contrast and Black Level of the RearView Monitor while the vehicle is moving. Make sure the parking brake is firmly applied.

### OPERATING TIPS

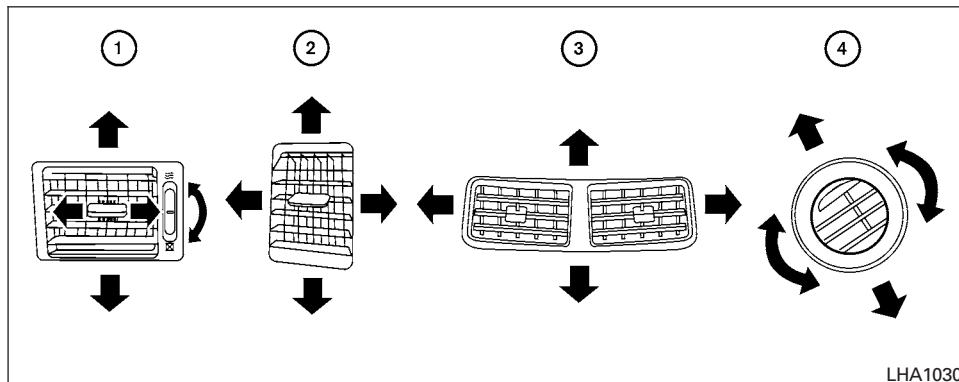
#### ⚠ CAUTION

- **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 diluted mild cleaning agent and then wipe with a dry cloth.**
- **Do not damage the camera as the monitor screen may be adversely affected.**



- When the shift selector is shifted to the R (Reverse) position, the display screen automatically changes to the RearView Monitor mode. However, the radio can be heard.
- It may take some time until the RearView Monitor or the normal screen is displayed after the shift selector has been shifted to R (Reverse) from another position or to another position from R (Reverse). Objects may be distorted momentarily until the RearView Monitor screen is displayed completely.
- 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. This is not a malfunction.
- 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.

## VENTS

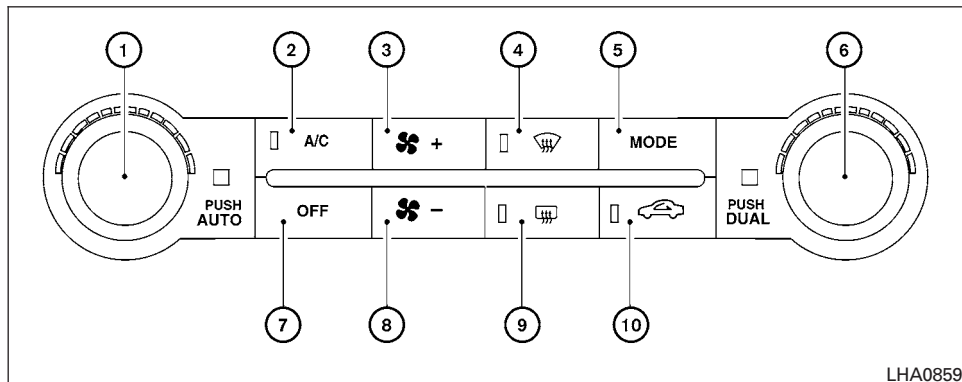
- Objects on the monitor may not be clear in a dark place or at night. This is not a malfunction.
- If dirt, rain or snow attaches to the camera, the RearView Monitor may not clearly display objects. Clean the camera.
- Do not use wax on the camera window. Wipe off any wax with a clean cloth dampened with mild detergent diluted with water.



Adjust air flow direction for the driver's and passenger's side vents ①, center vents ②, and rear passengers' vents ③ and ④ by moving the vent slide and/or vent assemblies.

For the driver's and passenger's side vents ①, open or close by using the dial. Move the dial toward the  position to open the vents or toward the  position to close them.

## HEATER AND AIR CONDITIONER (automatic)



1. Driver's temperature control dial/AUTO button
2. A/C ON/OFF button
3. Fan speed control (increase)
4. Front window defroster button
5. MODE button
6. Passenger's temperature control dial/DUAL button
7. System OFF
8. Fan speed control (decrease)
9. Rear window defroster button
10. Air recirculation button

### 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. Press the AUTO button on. (AUTO will be displayed.)
  2. 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 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.

- 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 vents in hot, humid conditions as the air is cooled rapidly. This does not indicate a malfunction.


## Dehumidified defrosting or defogging

1. Press the defroster control button  to 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 the fan control speed button until it reaches the maximum speed .
  - As soon as possible after the windshield is clean, press the AUTO button to return to the auto mode.

- When the defroster control button  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 pressed even if the air flow MODE control button is used to select a position other than the  position. 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.

Press the AUTO button to return to automatic control of the fan speed.






## Air recirculation

The  mode automatically turns off, allowing outside air to be drawn into the passenger compartment to prevent fogging in defrost, floor or def/floor modes.

Push the air recirculation button  to recirculate interior air inside the vehicle. Push the AUTO button to return to automatic mode.

## Air flow control

Pressing the MODE button manually controls air flow and selects the air outlet:

-  — Air flows from center and side vents.
-  — Air flows from center and side vents and foot outlets.
-  — Air flows mainly from foot outlets.
-  — Air flows from defroster and foot outlets.
-  — Air flows from defroster outlets.

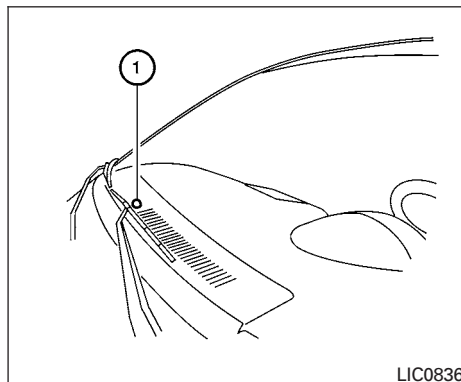
## To turn system off

Press the OFF button.

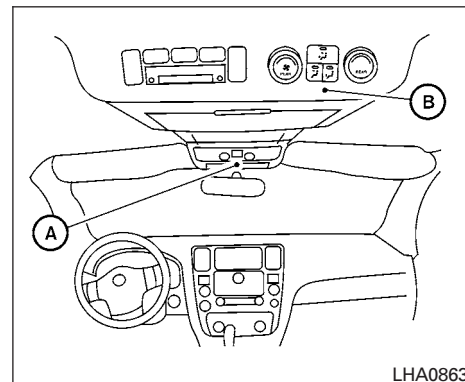
## REAR SEAT AIR CONDITIONER

### 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.

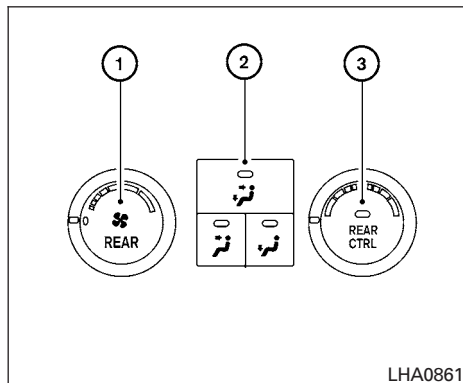


Rear seat temperature and fan speed can be controlled from both the front seat overhead console controls (A) or the rear seat overhead console controls (B).

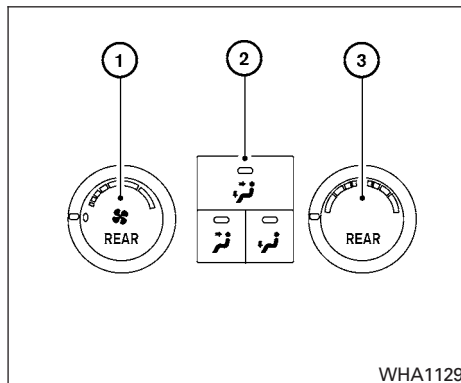
Press the REAR CTRL button to transfer control of the rear climate functions to the rear passengers.

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.



1. Rear fan speed control dial
2. Rear airflow mode buttons
3. Rear temperature control dial



## CONTROLS

### Fan control dial

The fan control dial turns the rear vent fan on and off and controls fan speed.

### Airflow mode buttons

The airflow mode buttons select where the air flow is directed from.

### 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.

### WARNING

**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

Place the ignition switch in the ACC or ON position and press the VOL (volume)/ON-OFF (power) knob to turn the radio on. If you listen to the radio with the engine not running, the ignition switch should be placed in 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 mi (40 – 48 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 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.

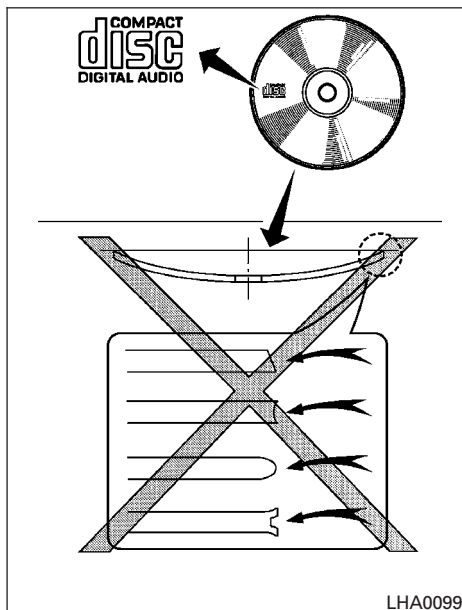
The satellite radio mode will be skipped unless an optional satellite receiver and antenna are installed and a SiriusXM Satellite Radio service subscription is active. Satellite radio is not available in Alaska, Hawaii and Guam.

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.

XM® is a registered trademark of SiriusXM Satellite Radio, Inc.



## AUDIO OPERATION PRECAUTIONS

Compact disc (CD) player (models without Navigation System)

### ⚠ 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 pre-recorded 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).

CD/DVD combination player (models with Navigation System)

- Do not force a disc into the CD/DVD insert slot. This could damage the CD/DVD player.
- During cold weather or rainy days, the player may malfunction due to the humidity. If this occurs, remove the CD/DVD and dehumidify or ventilate the player completely.
- The player may skip while driving on rough roads.
- The CD/DVD player sometimes cannot function when the passenger compartment temperature is extremely high. Decrease the temperature before use.
- Only use high quality 4.7 in (12 cm) round discs that have the "COMPACT disc DIGITAL AUDIO" or "DVD Video" logo on the disc or packaging.
- Do not expose the CD/DVD to direct sunlight.
- CDs/DVDs that are of poor quality, dirty, scratched, covered with fingerprints, or that have pinholes may not work properly.

- The following CDs/DVDs are not guaranteed to play:
  - Copy control compact discs (CCCD)
  - Recordable compact discs (CD-R)
  - Rewritable compact discs (CD-RW)
  - Recordable compact discs (DVD±R, DVD±R DL)
  - Rewritable compact discs (DVD±RW, DVD±RW DL)
- Do not use the following CDs/DVDs as they may cause the CD/DVD player to malfunction.
  - 3.1 in (8 cm) discs
  - CDs/DVDs that are not round
  - CDs/DVDs with a paper label
  - CDs/DVDs that are warped, scratched, or have abnormal edges
  - This audio system can only play pre-recorded CDs/DVDs. It has no capabilities to record or burn CDs/DVDs.
- If the CD/DVD cannot be played, one of the following messages will be displayed.

#### Disc Read Error:

- Confirm that the CD/DVD is inserted correctly (the label side is facing up, etc.).

- Confirm that the CD/DVD is not bent or warped and it is free of scratches.

#### Please Eject Disc:

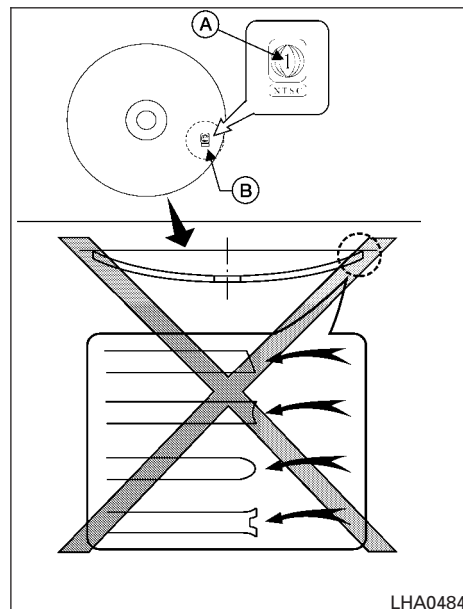
This error may be due to the temperature inside the player getting too high. Remove the CD/DVD by pushing the EJECT button, and after a short time reinsert the CD/DVD. The CD/DVD can be played when the temperature of the player returns to normal. If the error persists, consult your local dealership.

#### Unplayable File:

- The file may be copy protected.
- The file is not MP3, WMA, AAC, M4A or DIVX type.



#### Region Invalid

- The DVD is not for region 1 or all regions.
- Use DVDs with a region code "1", "ALL" or "1 included" for your DVD entertainment system. (The region code (A) is displayed as a small symbol printed on the top of the DVD (B).) This vehicle-installed DVD player cannot play DVDs with a region code other than "1" or "ALL".



#### Copyright and trademark

- The technology protected by the U.S. patent and other intellectual property rights owned by Macrovision Corporation and other right holders is adopted for this system.

- This copyright protected technology cannot be used without a permit from Macrovision Corporation. It is limited to personal use, etc., as long as the permit from Macrovision Corporation is not issued.
- Modifying or disassembling is prohibited.
- Dolby digital is manufactured under license from Dolby Laboratories, Inc.
- Dolby and the double D mark “ ” are trademarks of Dolby Laboratories, Inc.
- DTS and DTS Digital Surround “ ” are registered trademarks of Digital Theater Systems, Inc.

USB (Universal Serial Bus) memory (if so equipped)

#### WARNING

Do not connect or disconnect the USB device while driving. Doing so can be a distraction. If distracted you could lose control of your vehicle and cause an accident or serious injury.

#### CAUTION

- Do not force the USB device into the USB port. Inserting the USB device tilted or up-side-down into the port may damage the USB device and the port. Make sure that the USB device is connected correctly into the USB port.
- Do not grab the USB port cover (if so equipped) when pulling the USB device out of the port. This could damage the port and the cover.
- Do not leave the USB cable in a place where it can be pulled unintentionally. Pulling the cable may break the wire, USB device or the port.
- To avoid damage and loss of function when using a USB device, note the following precautions.
  - Do not bend the cable excessively (1.6 in [40 mm]) radius minimum.
  - Do not twist the cable excessively (more than 180 degrees).
  - Do not pull or drop the cable.
  - Do not hit or press the USB port or USB device with hands, feet, or objects.

- Do not store objects with sharp edges in the storage area where the cable is stored.
- Do not leave the USB device and attached devices in the vehicle compartment. When not in use for extended periods of time, store the cable and USB device in a clean, dust free environment at room temperature and without direct sun exposure.
- Do not use the cable for any other purposes than its intended use in the vehicle.

The vehicle is not equipped with a USB device. USB devices should be purchased separately as necessary.

This system cannot be used to format USB devices. To format a USB device, use a personal computer.

In some states/area, the USB device for the front seats plays only sound without images for regulatory reasons, even when the vehicle is parked.

This system supports various USB memory devices, USB hard drives and iPod® players. Some USB devices may not be supported by this system.

- Partitioned USB devices may play correctly.
- Some characters used in other languages (Chinese, Japanese, etc.) may not appear properly in the display. Using English language characters with a USB device is recommended.

#### General notes for USB use:

- The USB device may not function when the passenger compartment temperature is extremely high. Lower the temperature before use.
- During cold weather or rainy days, the player may malfunction due to humidity. If this occurs, remove the USB device and dehumidify or ventilate the USB player completely.

- Do not connect a USB device if a connector, cable or USB port is wet. Allow the connector, cable, and USB port to dry completely before connecting the USB device. (Wait for 24 hours or more until it is dry.) If the connector and USB port are exposed to fluids other than water, evaporative residue may cause a short circuit between the connector pins and USB port. In this case, replace the cable and USB port. Otherwise damage to the USB device and a loss of function may occur.
- If the cable is damaged (insulation cut, connectors cracked, contamination such as liquids, dust, dirt, etc. in the connectors), do not use the cable. Replace the cable with a new one.
- Do not put a USB device in a location where static electricity occurs, electrical noise is generated or hot air from the air conditioner blows directly on it. Doing so may cause the data stored on the USB device to be corrupted.

#### Notes for iPod® use:

iPod® is a trademark of Apple Inc., registered in the U.S. and other countries.

- Improperly plugging in the iPod may cause a checkmark to be displayed on and off (flickering). Always make sure that the iPod is connected properly.
- An iPod® nano (1st Generation) may remain in fast forward or rewind mode if it is connected during a seek operation. In this case, please manually reset the iPod.
- An iPod® nano (2nd Generation) will continue to fast-forward or rewind if it is disconnected during a seek operation.
- An incorrect song title may appear when the Play Mode is changed while using an iPod® nano (2nd Generation).
- Audiobooks may not play in the same order as they appear on an iPod®.
- Large video files cause slow responses in an iPod®. The vehicle center display may momentarily black out, but will soon recover.
- If an iPod® automatically selects large video files while in the shuffle mode, the vehicle center display may momentarily black out, but will soon recover.

## Bluetooth® streaming audio (if so equipped)

- Some Bluetooth® audio devices may not be recognized by the in-vehicle audio system.
- It is necessary to set up the wireless connection between a compatible Bluetooth® audio device and the in-vehicle Bluetooth® module before using the Bluetooth® audio.
- Operating procedure of the Bluetooth® audio will vary depending on the devices. Make sure how to operate your audio device before using it with this system.
- The Bluetooth® audio may be stopped under the following conditions:
  - Receiving a call on the Hands-Free Phone System.
  - Checking the connection to the hands-free phone.
- Do not place the Bluetooth® audio device in an area surrounded by metal or far away from the in-vehicle Bluetooth® module to prevent tone quality degradation and wireless connection disruption.
- While an audio device is connected through the Bluetooth® wireless connection, the battery power of the device may discharge quicker than usual.

- This system supports the Bluetooth® Audio Distribution Profile (A2DP, AVRCP).



BLUETOOTH® is a trademark owned by Bluetooth SIG, Inc. and licensed to Clarion Co., Ltd.

## CD or USB with Compressed Audio Files (models without Navigation System)

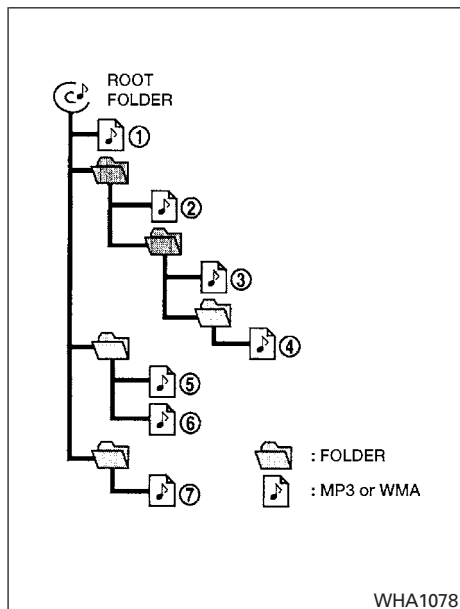
The file types supported by this system are MP3 and WMA.

### Explanation of 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®, Windows Media® and Windows Vista® 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, USB 2.0
Supported file systems			CD, CD-R, CD-RW, ISO9660 LEVEL1, ISO9660 LEVEL2, Romeo, Joliet * ISO9660 Level 3 (packet writing) is not supported. * Files saved using the Live File System component (on a Windows Vista® operating system-based computer) are not supported.
			UDF Bridge (UDF 1.02 + ISO9660), UDF 1.5, UDF 2.0 VDF 1.5/VDF 2.0 (packet writing) is not supported.
			USB memory: FAT16, FAT32
Supported versions	MP3	Version	MPEG1, MPEG2, MPEG2.5
		Sampling frequency	8 kHz - 48 kHz
		Bit rate	8 kbps - 320 kbps, VBR*2
	WMA*1	Version	WMA7, WMA8
		Sampling frequency	8 kHz - 48 kHz
		Bit rate	8 kbps - 320 kbps, VBR*2
Tag information (Song title and artist name)			ID3 tag VER1.0, VER1.1, VER2.2, VER2.3, VER 2.4 (MP3 only) WMA tag (WMA only)
Folder levels			Folder levels: 8, Folders: 255 (including root folder), Files: 512 (Max. 255 files for one folder)
Text character number limitation			64 characters
Displayable character codes*3			01: ASCII, 02: ISO-8859-1, 03: UNICODE (UTF-16 LE), 04: UNICODE (UTF-16 BE), 05: UNICODE (UTF-8)

\*1 Protected WMA files (DRM) cannot be played.

\*2 When VBR files are played, the playback time may not be displayed correctly.

\*3 Available codes depend on what kind of media, versions and information are going to be displayed.

## Troubleshooting guide:

Symptom	Cause and Countermeasure
Cannot play	Check if the CD/USB device was inserted correctly.
	Check if the CD 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 player will play correctly after it returns to the normal temperature.
	If there is a mixture of music CD files (CD-DA data) and compressed audio files on a CD, only the music CD files (CD-DA data) will be played.
	Files with extensions other than ".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 disc or file is generated in an irregular format. This may occur depending on the variation or the setting of the compressed audio file writing application or other text editing applications.
	Check if the finalization process, such as session close and disc close, is done for the disc.
Poor sound quality	Check if the CD is scratched or dirty.
It takes a relatively long time before the music starts playing.	If there are many folders or file levels on the CD/USB device, 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	If an unsupported compressed audio file has been given a supported extension like ".MP3", or when play is prohibited by copyright protection, 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.
	Random/Shuffle may be active on the audio system or on the USB device.

## CD, DVD or USB with Compressed Audio Files (models with Navigation System)

The file types supported by this system are MP3, WMA, AAC/M4A and ATRAC3.

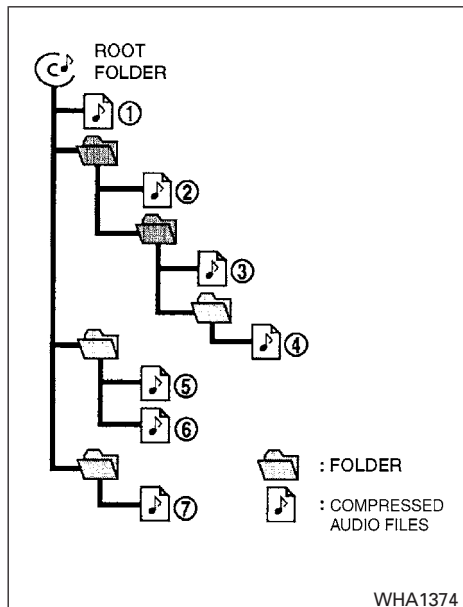
### Explanation of terms:

- **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 can reduce the file size by approximately 10:1 ratio (Sampling: 44.1 kHz, Bit rate: 128 kbps) with virtually no perceptible loss in quality. The compression reduces certain parts of sound that seem inaudible to most people.
- **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.

- **AAC/M4A** — Advanced Audio Coding (AAC) is a lossy audio compression format. Audio files that have been encoded with AAC are generally smaller in size and deliver a higher quality of sound than MP3.
- **ATRAC3, ATRAC3 Plus** — Adaptive Transform Acoustic Coding (ATRAC) is a lossy audio compression format developed by Sony.
- **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, album title, encoding bit rate, track time duration, etc. ID3 tag information is displayed on the Album/Artist/Track title line on the display.

\* Windows®, Windows Media® and Windows Vista® are registered trademarks or trademarks of Microsoft Corporation in the United States of America and/or other countries.



**Playback order chart**

### **Playback order:**

Music playback order of a CD, DVD or USB device with compressed audio files is as illustrated.

- The folder names of folders not containing compressed audio files are not shown in the display.
- If there is a file in the top level of the disc/USB, "Root Folder" is displayed.
- The playback order is the order in which the files were written by the writing software, so the files might not play in the desired order.

## Specification chart:

Supported media			CD, CD-R, CD-RW, DVD-ROM, DVD±R, DVD±RW, DVD±R DL, USB 2.0
Supported file systems			CD, CD-R, CD-RW, DVD-ROM, DVD±R, DVD±RW, DVD±R DL, ISO9660 LEVEL1, ISO9660 LEVEL2, Romeo, Joliet
			* ISO9660 Level 3 (packet writing) is not supported.
			* Files saved using the Live File System component (on a Windows Vista® operating system-based computer) are not supported.
			UDF Bridge (UDF 1.02 + ISO9660), UDF 1.5, UDF 2.0
			* VDF 1.5/VDF 2.0 (packet writing) is not supported.
			USB memory: FAT16, FAT32
Supported versions*1	MP3	Version	MPEG1, MPEG2, MPEG2.5
		Sampling frequency	8 kHz - 48 kHz
		Bit rate	8 kbps - 320 kbps, VBR*4
	WMA*2	Version	WMA7, WMA8, WMA9
		Sampling frequency	32 kHz - 48 kHz
		Bit rate	32 kbps - 192 kbps, VBR*4
	AAC	Sampling frequency	8 kHz - 96 kHz
		Bit rate	16 kbps - 320 kbps, VBR*4
	ATRAC	Version	ATRAC3, ATRAC3 Plus
Tag information (Song title and artist name)			ID3 tag VER1.0, VER1.1, VER2.2, VER2.3, VER 2.4 (MP3 only)
			WMA tag (WMA only)
Folder levels			Folder levels: 8, Folders: 255 (including root folder), Files: 512 (Max. 255 files for one folder)
Text character number limitation			128 characters
Displayable character codes*3			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), 07: SHIFT-JIS

\*1 Files created with a combination of 48 kHz sampling frequency and 64 kbps bit rate cannot be played.

\*2 Protected WMA files (DRM) cannot be played.

\*3 Available codes depend on what kind of media, versions and information are going to be displayed.

\*4 When VBR files are played, the playback time may not be displayed correctly.

## 4-56 Monitor, climate, audio, phone and voice recognition systems

## Troubleshooting guide:

Symptom	Cause and Countermeasure
Cannot play	Check if the CD/DVD/USB device was inserted correctly.
	Check if the CD/DVD 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 player will play correctly after it returns to the normal temperature.
	If there is a mixture of music CD files (CD-DA data) and compressed audio files on a CD, only the music CD files (CD-DA data) will be played.
	Files with extensions other than ".MP3", ".WMA", ".AAC", ".M4A" or ".AA3" 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 disc or file is generated in an irregular format. This may occur depending on the variation or the setting of the compressed audio file writing application or other text editing applications.
	Check if the finalization process, such as session close and disc close, is done for the disc.
Poor sound quality	Check if the CD/DVD is scratched or dirty.
It takes a relatively long time before the music starts playing.	If there are many folders or file levels on the CD/DVD/USB device, 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	If an unsupported compressed audio file has been given a supported extension like ".MP3", or when play is prohibited by copyright protection, 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.
	Random/Shuffle may be active on the audio system or on the USB device.

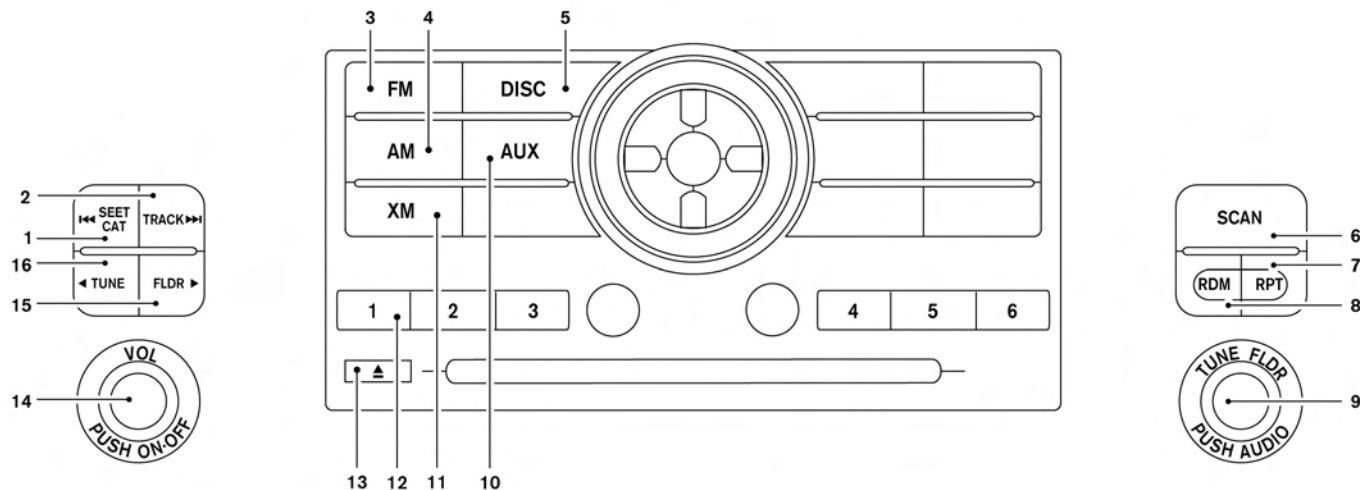
## Compressed Video Files (models with Navigation System)

### Explanation of terms:

- DivX – DivX refers to the DivX® codec owned by Div, Inc. used for a lossy compression of video based on MPEG-4.
- AVI – AVI stands for Audio Video Interleave. It is standard file format originated by Microsoft Corporation. A .divx encoded file can be saved into the .avi file format for playback on this system if it meets the requirements stated in the table in this section. However, all .avi files are not playable on this system since different encodings can be used other than the DivX® codec.
- ASF – ASF stands for Advanced Systems Format. It is a file format owned by Microsoft Corporation. Note: Only .asf files that meet the requirements stated in the table in this section can be played.
- Bit rate — Bit rate denotes the number of bits per second used by a digital video files. The size and quality of a compressed digital audio file is determined by the bit rate used when encoding the file.

## Requirements for Supporting Video Playback:

Media	CD, CD-R, CD-RW, DVD, DVD±R, DVD±RW, DVD±RW DL, USB 2.0 Memory		
File Systems	CD, CD-R, CD-RW, DVD, DVD±R, DVD±RW, DVD±RW DL	ISO9660 LEVEL1, ISO9660 LEVEL2, Romeo, Joliet, UDF Bridge (UDF1.02+ISO9660), UDF1.5, UDF2.0 * ISO9660 Level 3 (packet writing) is not supported. * Files saved using the Live File System component (on a Windows Vista-based computer) are not supported. * VDF1.5/VDF2.0 (packet writing) is not supported.	
	USB Memory	FAT16, FAT32	
File Types	.divx, .avi	Video Codecs	DivX3, DivX4, DivX5, DivX6
		Audio Codecs	MP3, MPEG2.5 Audio Layer3, AC3, LPCM
	.asf	Video Codec	ISO-MPEG4
		Audio Codec	G.726
Bit Rates	.divx, .avi	Maximum Average	4 Mbps
		Maximum Peak	8 Mbps
Resolution	.divx, .avi	Minimum	32 x 32
		Maximum	720 x 480
	.asf	Minimum	32 x 32
		Maximum	720 x 576



LHA2444

- |                       |   |                                    |
|-----------------------|---|------------------------------------|
| 1. ◀◀ SEEK/CAT button | 7. RPT button   | 12. Station select (1 - 6) buttons |
| 2. ▶▶ TRACK button    | 8. RDM button   | 13. ▲ CD eject button              |
| 3. FM button          | 9. TUNE/FLDR and AUDIO control knob<br>(Bass, Treble, Fade and Balance) | 14. VOL/ON-OFF control knob        |
| 4. AM button          | 10. AUX button  | 15. FLDR ▶ button                  |
| 5. DISC button        | 11. XM button*  | 16. ◀ TUNE button                  |
| 6. SCAN button        |   |                                    |

\*No satellite radio reception is available when the XM button is pressed to access satellite radio stations unless optional satellite receiver and antenna are installed and a SiriusXM Satellite Radio service subscription is active. Satellite radio is 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" in this section.

### Audio main operation

#### **VOL/ON-OFF control:**

Place the ignition switch in the ACC or ON position and push the VOL/ON-OFF control knob while the system is off to call up the mode that was playing immediately before the system was turned off.

To turn the system off, press the VOL/ON-OFF control knob.

Turn the VOL/ON-OFF control knob to adjust the volume.

This vehicle has Speed Sensitive Volume (SSV) for audio. The audio volume changes as the driving speed changes.

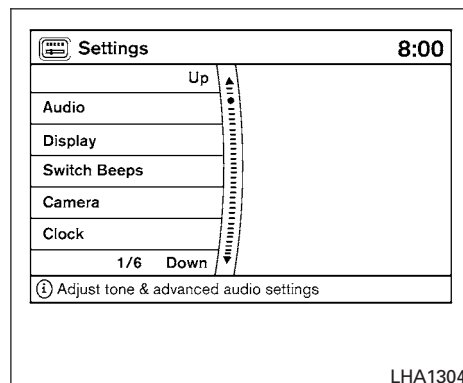
#### **AUDIO control knob (Bass, Treble, Balance and Fade):**

Press the AUDIO control knob to change the mode as follows:

Bass → Treble → Balance → Fade

To adjust Bass, Treble, Balance and Fade, press the AUDIO control knob until the desired mode appears in the display. Turn the tuning knob to adjust Bass and Treble to the desired level. You can also use the tuning knob to adjust Fade and Balance modes. Fade adjusts the sound level between the front and rear speakers and Balance adjusts the sound between the right and left speakers.

Once you have adjusted the sound quality to the desired level, press the AUDIO control knob repeatedly until the radio or CD display reappears. If the control knob is not pressed for approximately 10 seconds, the radio or CD display will automatically reappear.

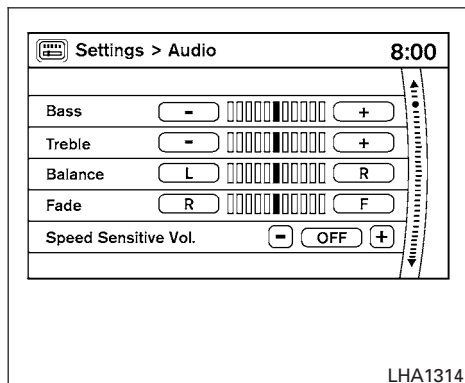


#### **Speed Sensitive Volume (SSV):**

To change the SSV mode from OFF to 5, press the SETTING button. Then select the "Audio" key using the NISSAN controller; the audio settings screen will be displayed. Select the "—" key or "+" key to change the SSV.

While in this screen you can also adjust the other audio settings by selecting the corresponding key.

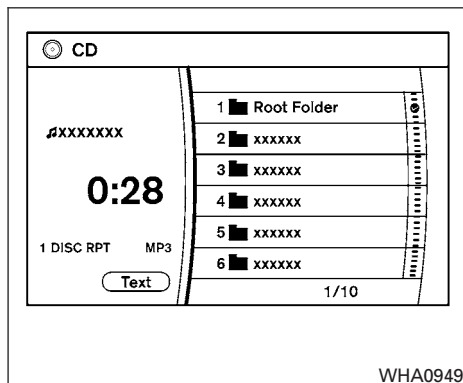
Once you have adjusted the sound quality to the desired level, press the BACK button.



For information on how to use the NISSAN controller, see “How to use the NISSAN controller” in this section.

### Clock operation

For additional information on setting the clock, see “Adjusting the time” in this section.

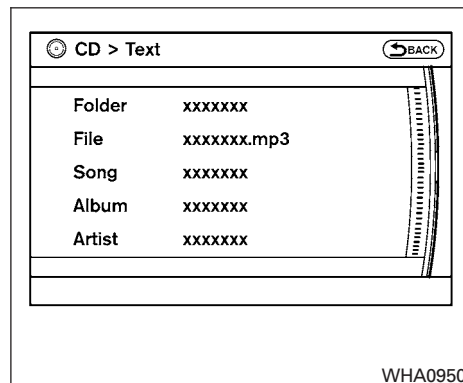


### CD/MP3 display mode

While listening to a CD or an MP3/WMA CD, certain text might be able to be displayed (when CD encoded with text is being used).

Depending on how the CD or MP3/WMA CD is encoded, the following text might be able to be displayed by selecting the “Text” key:

- Folder displays the name of the current folder being accessed.
- File displays the name of the file currently playing.
- Song displays the ID3 encoded tag of the song name.



- Album displays the ID3 encoded tag of the album name.
- Artist displays the ID3 encoded tag of the artist's name.
- Disc displays the disc name of the CD currently playing.
- Track displays the name of the song on the CD currently playing.

Some of this text or modes might not display while playing a regular CD. Select the “Menu” key with the NISSAN controller, then select the “Text” key to display the text for the CD.

Press the BACK button to exit the CD text display screen.

## FM/AM/SAT radio operation

### FM/AM band select:

Press the AM button to change to the AM band.

Press the FM button to change the band as follows:

FM1  $\longleftrightarrow$  FM2

When the FM or AM button is pressed with the ignition switch in the ACC or ON position, the radio will come on at the station last played.

The last station played will also come on when the VOL/ON-OFF control knob is pressed ON.

If a compact disc is playing when the FM-AM 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 illuminate during FM stereo reception. When the stereo broadcast signal is weak, the radio will automatically change from stereo to monaural reception.

### XM band select:

Press the XM button to change the band as follows:

XM1\*  $\rightarrow$  XM2\*  $\rightarrow$  XM3\*  $\rightarrow$  XM1\*

When the XM button is pressed with the ignition switch in the ACC or ON position, the radio will come on at the station last played.

The last station played will also come on when the VOL/ON-OFF control knob is pressed ON.

\*When the XM button is pressed, the satellite radio mode will not be available unless an optional satellite receiver and antenna are installed and a SiriusXM Satellite Radio service subscription is active. Satellite radio is not available in Alaska, Hawaii and Guam.

If a compact disc is playing when the XM button is pressed, the compact disc will automatically be turned off and the last radio station played will come on.

### Manual tuning:

To manually tune the radio, turn the TUNE/FLDR knob to the right or left or use the ◀ TUNE and FLDR ▶ buttons.



### SEEK/CAT and TRACK tuning buttons:

Press the SEEK/CAT ◀◀ button or the TRACK ▶▶ button to tune from high to low or low to high frequencies and stop at the next broadcasting station.

### SCAN tuning:

Press the SCAN button to stop at each broadcasting station for 5 seconds. Pressing the SCAN button again during this five 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.

### 1 to 6 Station memory operations:

Six stations can be set for the AM band. Twelve stations can be set for the FM band (6 for FM1, 6 for FM2). Eighteen stations can be set for the XM band (6 for XM1, 6 for XM2, 6 for XM3).

1. Choose the radio band AM, FM1 or FM2 using the AM or FM buttons or choose the satellite band XM1, XM2 or XM3 using the XM button.

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.
3. The channel indicator will then come on and the sound will resume. Programming is now complete.
4. Other buttons can be set in the same manner.

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”.

When the “Text” key is selected with the NISSAN controller on the display while the radio is playing, additional information is displayed on the screen.

If the station broadcasts RDS information, the RDS icon is displayed.

### **Compact disc (CD) player operation**

Place the ignition in 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 the VOL/ON-OFF control knob will start the compact disc.

### **DISC button:**

When the DISC button is pressed with the system off and a compact disc loaded, the system will turn on and the compact disc will start to play.

When the DISC button is pressed with a compact disc loaded with the radio playing, the radio will automatically be turned off and the compact disc will start to play.



### **SEEK/CAT and TRACK buttons:**

When the SEEK/CAT ◀◀ 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 TRACK ▶▶ button is pressed 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.)

The NISSAN controller can also be used to select tracks when a CD is playing.



### **SEEK/CAT and TRACK (Rewind and Fast Forward) buttons:**

Press and hold the SEEK/CAT ◀◀ (rewind) button or the TRACK ▶▶ (fast forward) button while a compact disc is playing; the compact disc will play while rewinding or fast forwarding. When the button is released, the compact disc will return to normal play speed.

### TUNE/FLDR knob

While playing an MP3/WMA CD, turn the TUNE/FLDR knob right or left to scan forward or backward through available folders. This can also be performed using the ◀ TUNE and FLDR ▶ buttons.

### RPT button:

Press the RPT button to change the play pattern as follows:

#### CD:

Repeat All ↔ 1 Track Repeat

#### CD with compressed audio files:

Repeat All → 1 Folder Repeat → 1 Track Repeat → Repeat All

Repeat All: Normal play mode. All tracks will constantly play in sequential order.

1 Folder Repeat: The folder that is currently being accessed will be repeated.

1 Track Repeat: The track that is currently playing will be repeated.

### RDM button:

Press the RDM button to change the play pattern as follows:

#### CD:

Repeat All ↔ 1 Disc Random

#### CD with compressed audio files:

Repeat All → 1 Disc Random → 1 Folder Random → Repeat All

Repeat All: Normal play mode. All tracks will constantly play in sequential order.

1 Disc Random: The tracks on the disc that is currently playing will be played in a mixed order.

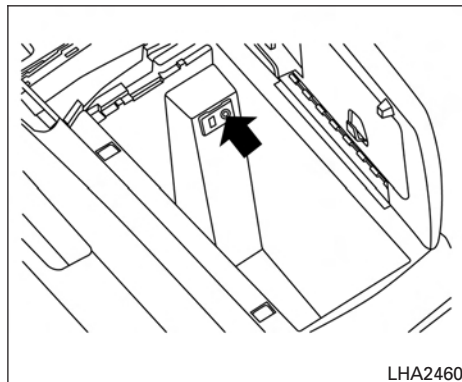
1 Folder Random: The tracks in the folder that is currently playing will be played in a mixed order.



### CD EJECT button:

When the ▲ button is pressed with the compact disc loaded, the compact disc will be ejected.

When the ▲ button is pressed while the compact disc is being played, the compact disc will eject and the system will turn off.



### AUX (auxiliary) input jacks

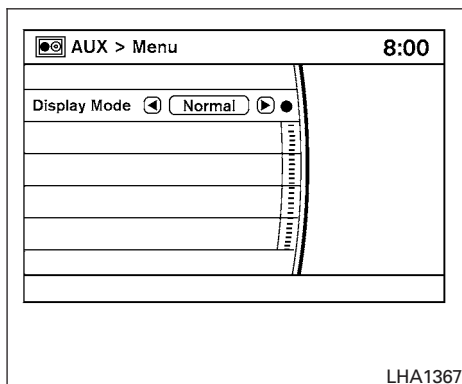
The auxiliary input jacks are located inside the center console ①. NTSC compatible devices such as video games, camcorders and portable video players can be connected to the auxiliary input jacks. Audio devices, such as some MP3 players, can also be connected to the system through the auxiliary input jacks.

The auxiliary input jacks are color coded for identification purposes:

- Red – right channel audio input
- White – left channel audio input
- Yellow – video input

Before connecting a device to the auxiliary input jacks, turn off the power of the portable device.

With a compatible device connected to the auxiliary input jacks, press the AUX button until the AUX mode appears in the display. The output from the device will be played through the display (when the vehicle is in the (P) Park position and the parking brake engaged) and audio system.



### AUX settings

Select the "Settings" key using the NISSAN controller and press the ENTER button.

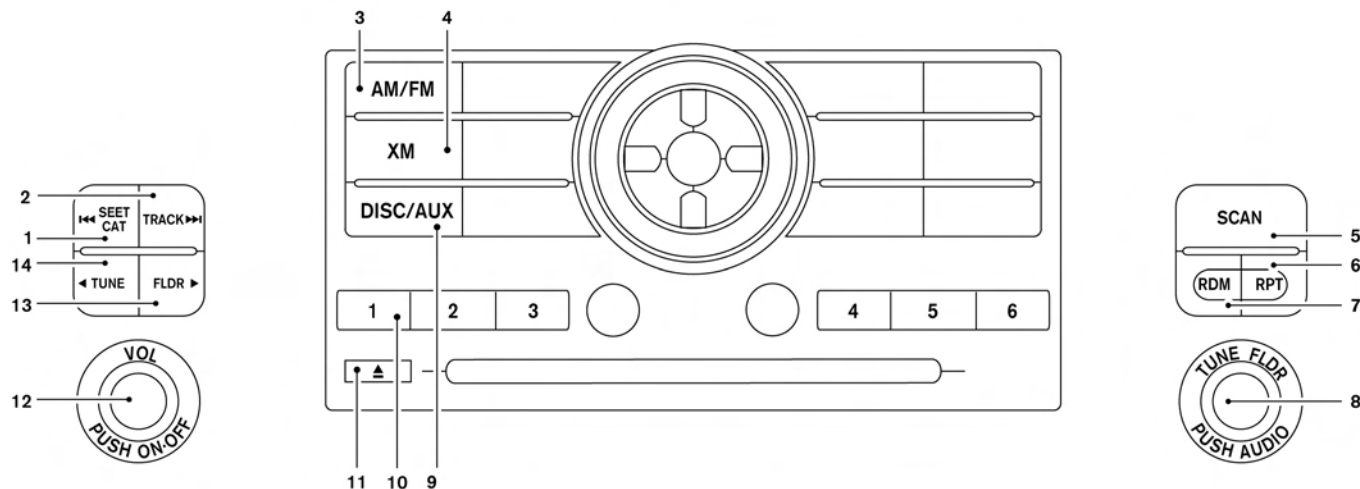
Choose one of the display modes by selecting the "◀" key or the "▶" key:

- Normal
- Wide
- Cinema

### Additional features

For more information about the iPod® player available with this system, see "iPod® player operation without Navigation System" in this section.

For more information about the USB interface available with this system, see "USB interface (models without Navigation System)" in this section.



LHA2445

1. ◀◀ SEEK/CAT button
2. ▶▶ TRACK button
3. AM/FM button
4. XM button\*
5. SCAN button
6. RPT button

7. RDM button
8. TUNE/FLDR and AUDIO control knob  
(Bass, Treble, Fade and Balance)
9. DISC/AUX button
10. Station select (1 - 6) buttons
11. ▲ CD eject button

12. VOL/ON-OFF control knob
13. FLDR ▶ button
14. ◀ TUNE button

\*No satellite radio reception is available when the XM button is pressed to access satellite radio stations unless optional satellite receiver and antenna are installed and a SiriusXM Satellite Radio service subscription is active. Satellite radio is not available in Alaska, Hawaii and Guam.

## FM/AM/SAT RADIO WITH CD/DVD PLAYER (if so equipped)

For all operation precautions, see "Audio operation precautions" in this section.

### Audio main operation

#### **VOL/ON-OFF control:**

Place the ignition switch in the ACC or ON position and push the VOL/ON-OFF control knob while the system is off to call up the mode that was playing immediately before the system was turned off.

To turn the system off, press the VOL/ON-OFF control knob.

Turn the VOL/ON-OFF control knob to adjust the volume.

This vehicle has Speed Sensitive Volume (SSV) for audio. The audio volume changes as the driving speed changes.

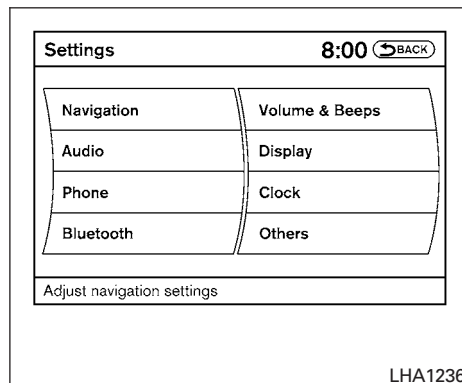
#### **AUDIO control knob (Bass, Treble, Balance and Fade):**

Press the AUDIO control knob to change the mode as follows:

Bass → Treble → Balance → Fade

To adjust Bass, Treble, Balance and Fade, press the AUDIO control knob until the desired mode appears in the display. Turn the tuning knob to adjust Bass and Treble to the desired level. You can also use the tuning knob to adjust Fade and Balance modes. Fade adjusts the sound level between the front and rear speakers and Balance adjusts the sound between the right and left speakers.

Once you have adjusted the sound quality to the desired level, press the AUDIO control knob repeatedly until the radio or CD display reappears. If the control knob is not pressed for approximately 10 seconds, the radio or CD display will automatically reappear.

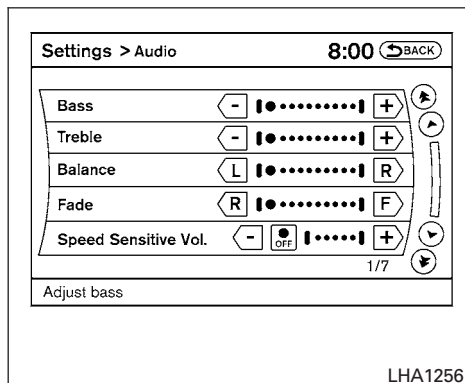


#### **Speed Sensitive Volume (SSV):**

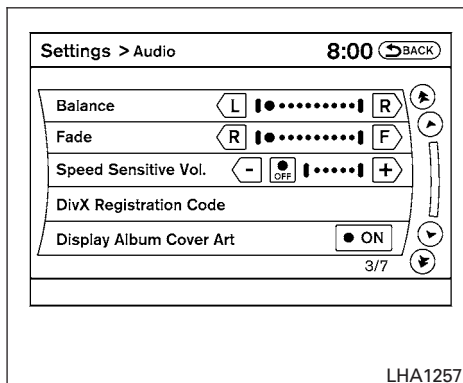
To change the SSV mode from OFF to 5, press the SETTING button. Then select the "Audio" key using the NISSAN controller, then press the ENTER button; the audio settings screen will be displayed. Select the "-" key or "+" key to change the SSV.

While in this screen you can also adjust the other audio settings by selecting the corresponding key.

Once you have adjusted the sound quality to the desired level, press the BACK button.



For information on how to use the NISSAN controller, see “How to use the NISSAN controller” in this section.



#### Display album cover art:

When an audio source encoded with album cover art is played, the album cover art can be displayed on the screen. To toggle this feature on or off, touch the “Display Album Cover Art” key. When the feature is activated, the amber indicator next to the word ON will illuminate.



#### CD, DVD or USB with compressed audio files

While listening to a CD or compressed audio files, certain text might be able to be displayed (when CD encoded with text is being used).

Depending on how the CD or compressed audio files are encoded, the following text might be displayed:

- Folder displays the name of the current folder being accessed.
- File displays the name of the file currently playing.

- Song displays the ID3 encoded tag of the song name.
- Album displays the ID3 encoded tag of the album name.
- Artist displays the ID3 encoded tag of the artist's name.

Some of this text might not display while playing a regular CD.

## FM/AM/SAT radio operation

### AM/FM band select:

Press the AM/FM button to change the band as follows:

AM → FM1 → FM2 → AM

When the FM/AM button is pressed with the ignition switch in the ACC or ON position, the radio will come on at the station last played.

The last station played will also come on when the VOL/ON-OFF control knob is pressed ON.

If a compact disc is playing when the AM/FM button is pressed, the compact disc will automatically be turned off and the last radio station played will come on.

The FM stereo indicator STEREO will illuminate during FM stereo reception. When the stereo

broadcast signal is weak, the radio will automatically change from stereo to monaural reception.

### XM band select:

Press the XM button to change the band as follows:

XM1\* → XM2\* → XM3\* → XM1\*

When the XM button is pressed with the ignition switch in the ACC or ON position, the radio will come on at the station last played.

The last station played will also come on when the VOL/ON-OFF control knob is pressed ON.

\*When the XM button is pressed, the satellite radio mode will not be available unless an optional satellite receiver and antenna are installed and a SiriusXM Satellite Radio service subscription is active. Satellite radio is not available in Alaska, Hawaii and Guam.

If a compact disc is playing when the XM button is pressed, the compact disc will automatically be turned off and the last radio station played will come on.

### Manual tuning:

To manually tune the radio, turn the TUNE/FLDR knob to the right or left or use the ◀ TUNE and FLDR ▶ buttons.



### SEEK/CAT and TRACK tuning buttons:

For AM or FM:

Press the SEEK/CAT ◀◀ button or the TRACK ▶▶ button to tune from high to low or low to high frequencies and stop at the next broadcasting station.

For XM:

Press the SEEK/CAT ◀◀ button or the TRACK ▶▶ button to go to the first channel of the previous or next category.

### SCAN tuning:

Press the SCAN button to stop at each broadcasting station for 5 seconds. Pressing the SCAN button again during this five 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.

### 1 to 6 Station memory operations:

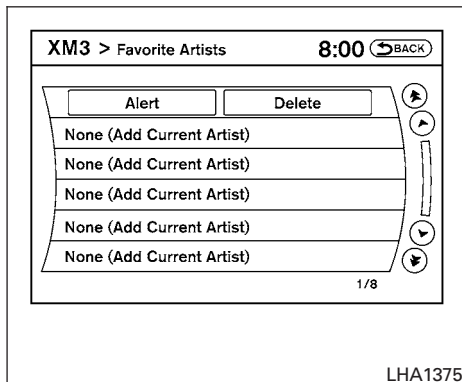
Six stations can be set for the AM band. Twelve stations can be set for the FM band (6 for FM1, 6 for FM2). Eighteen channels can be set for the SAT radio (6 for XM1, 6 for XM2, 6 for XM3 – if so equipped).

1. Choose the radio band AM, FM1 or FM2 using the FM-AM select button, or choose the satellite band XM1, XM2 or XM3 using the SAT button.
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 the preset number is updated on the display and the sound is briefly muted.
3. The channel indicator will then come on and the sound will resume. Programming is now complete.
4. Other buttons can be set in the same manner.

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

### List (AM and FM)

Select the "List" key using the NISSAN controller or touchscreen to see a list of the presets in the AM, FM1 or FM2 preset banks.



### Menu (SiriusXM Satellite Radio, if so equipped)

Select the "Menu" key using the NISSAN controller or touchscreen to see a list of options:

- Preset List – Displays the list of presets. Press and hold the touchscreen or ENTER button on the NISSAN controller to save a preset.
- Customize Channel List – deselect channels to skip while using the TUNE/FOLDER knob.

- Favorite Artist & Songs
  - Tags the current artist or song playing on XM as a favorite.
  - Turn the Alert ON to indicate whenever a favorite artist or song is playing on XM. The audio system must be playing XM radio for this feature to work.
  - Delete a favorite artist or song.
- Categories – Displays a category list for XM radio. Select a category to select the first channel for that category.
- Direct Tune – Tune to a channel by entering the channel number.

### 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".
- Station specific text.

If the station broadcasts RDS information, the text information is automatically displayed.

### Compact disc (CD) player operation

Place the ignition in 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 the VOL/ON-OFF control knob will start the compact disc.


#### **DISC/AUX button:**


When the DISC/AUX 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 DISC/AUX 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/CAT and TRACK buttons:**



When the SEEK/CAT  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 TRACK  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.)



The NISSAN controller can also be used to select tracks when a CD is being played.

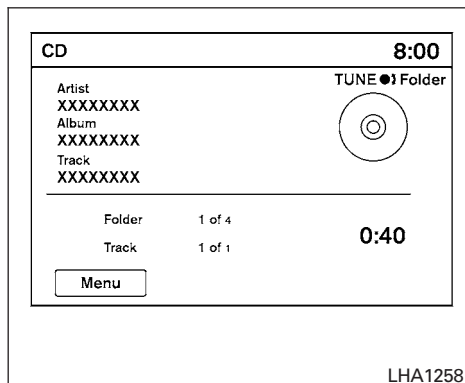


**SEEK/CAT and TRACK (Rewind and Fast Forward) buttons:**

Press and hold the SEEK/CAT  (rewind) button or the TRACK  (fast forward) button while a compact disc is playing; the compact disc will play while rewinding or fast forwarding. When the button is released, the compact disc will return to normal play speed.

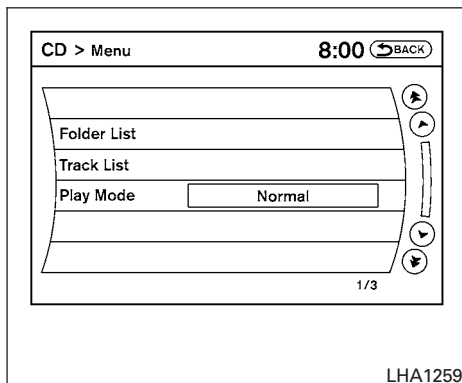
#### **TUNE/FLDR knob**

While playing an MP3/WMA CD, turn the TUNE/FLDR knob right or left to scan forward or backward through available folders. This can also be performed using the  TUNE and FLDR  buttons.



### CD menu

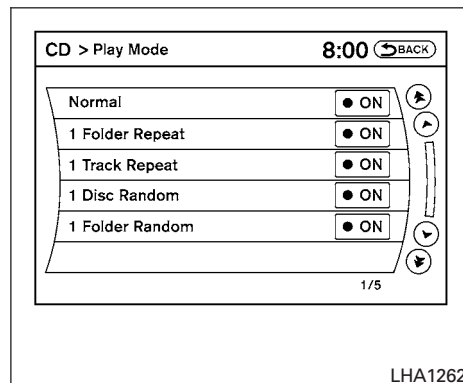
Touch the “Menu” key on the display while a CD or CD with compressed audio files is playing to bring up a list of options. Depending on the type of CD being played, the following options may be available:



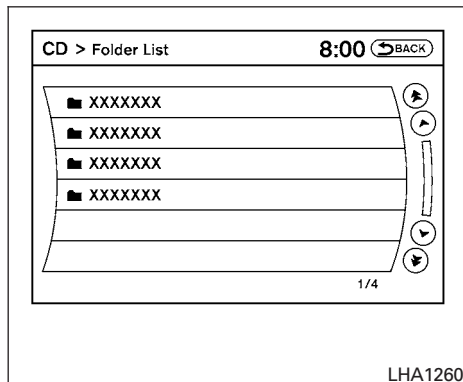
- Play Mode

This option allows you to alter the play pattern of the CD. Touch the key of the mode you wish to apply. The modes change the play pattern as follows:

- 1 Track Repeat - the current track is repeated.
- 1 Disc Random- tracks from the entire disc are played randomly.
- 1 Folder Repeat (compressed audio files CD only) - the current folder is repeated.
- 1 Folder Random (compressed audio files CD only) - tracks from the current folder are played randomly.

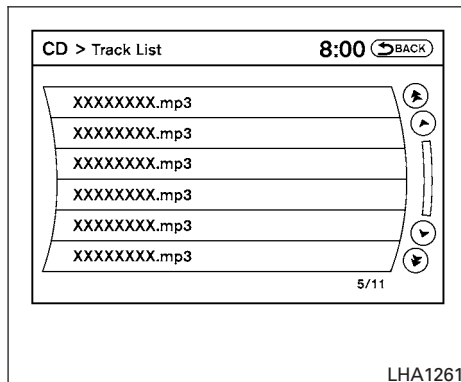


Normal - Plays all tracks on the CD in sequential order until stopped.



#### ● Folder List

The folders on the disc are displayed. Select the key of a folder name to begin playing tracks from that folder.



#### ● Track List

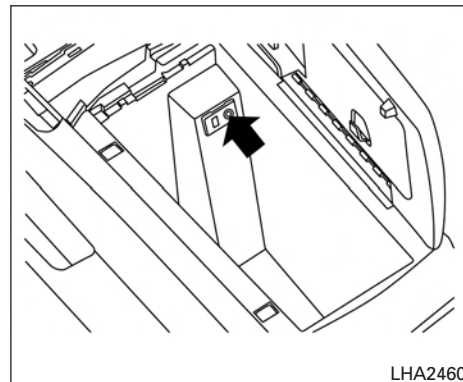
The tracks on the disc are displayed. Select the key of a track name to begin playing that track.



#### CD EJECT button:

When the ▲ button is pressed with the compact disc loaded, the compact disc will be ejected.

When the ▲ button is pressed while the compact disc is being played, the compact disc will eject and the system will turn off.



#### AUX (auxiliary) input jacks

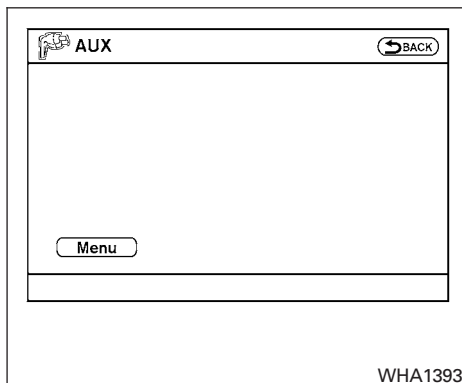
The auxiliary input jacks are located inside the center console ①. NTSC compatible devices such as video games, camcorders and portable video players can be connected to the auxiliary input jacks. Audio devices, such as some MP3 players, can also be connected to the system through the auxiliary input jacks.

The auxiliary input jacks are color coded for identification purposes:

- Red – right channel audio input
- White – left channel audio input
- Yellow – video input

Before connecting a device to the auxiliary input jacks, turn off the power of the portable device.

With a compatible device connected to the auxiliary input jacks, press the DISC/AUX button repeatedly until the AUX mode appears in the display. The output from the device will be played through the display (when the vehicle is in the (P) Park position and the parking brake engaged) and audio system.



### AUX settings

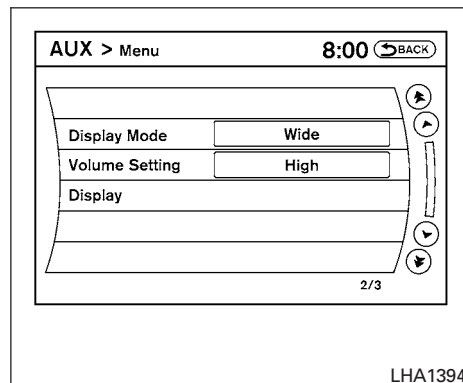
Select the "Settings" key using the NISSAN controller.

The display mode can be set to Normal, Wide or Cinema. The volume setting can be set to Low, Medium or High.

### Additional features

For more information about the iPod® player available with this system, see "iPod® player operation with Navigation System" in this section.

For more information about the USB interface available with this system, see "USB interface (models with Navigation System)" in this section.



For more information about the Bluetooth® streaming audio feature available with this system, see "Bluetooth® streaming audio" in this section.

## DIGITAL VERSATILE DISC (DVD) PLAYER OPERATION (models with Navigation System)

### Precautions

Start the engine when using the DVD entertainment system.

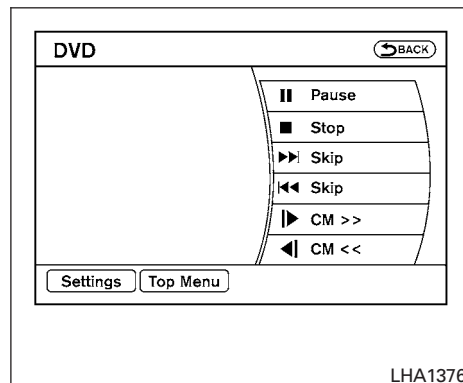
Movies will not be shown on the front display while the vehicle is in any drive position to reduce driver distraction. Audio is available when a movie is played. To view movies on the front display, stop the vehicle in a safe location, move the shift selector to the P (Park) position and apply the parking brake.

### ⚠ WARNING

- **The driver must not attempt to operate the DVD system or wear the headphones while the vehicle is in motion so that full attention may be given to vehicle operation.**
- **Do not attempt to modify the system to display a movie on the front screen while the vehicle is being driven. Doing so may distract the driver and may cause a collision and serious personal injury or death.**

### ⚠ 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.**
- **While playing VIDEO-CD media, this DVD player does not guarantee complete functionality of all VIDEO-CD formats.**



### Playing a DVD

#### DISC-AUX button

Park the vehicle in a safe location for the front seat occupants to operate the DVD drive while watching the images.

Press the DISC-AUX button until the DVD mode is active on the display.

When a DVD is loaded, it will be replayed automatically.

The operation screen will be turned on when the DISC-AUX button is pressed while a DVD is playing. The operation screen will turn off auto-



matically after a period of time. To turn it on again, press the DISC-AUX button.

### DVD operation keys

When the DVD is playing without the operation screen being shown, you may use the touchscreen to select items from the displayed video. You may also use the NISSAN controller to select an item from the displayed video. When the operation screen is being shown, use the NISSAN controller or the touchscreen to select an item from the displayed menus.




#### PAUSE:

Select the  key to pause the DVD. To resume playing the DVD, use the  key.



#### PLAY:

Select the  key to start playing the DVD or resume playing the DVD after it has been paused.





#### STOP:

Select the  key to stop playing the DVD.





#### NEXT/PREVIOUS CHAPTER:

Select the  key to skip the chapter(s) of the disc forward. Select the  key to skip the chapter(s) of the disc backward. The chapters will advance forward or backward the number of times the respective key is touched or selected with the NISSAN controller.



#### CM SKIP:

This function is only for DVD-VIDEO and DVD-VR. Select the  or  key to fast forward or rewind a set interval of time based on the CM settings. For more information, see "DVD settings" in this section.

### Top Menu:

When the "Top Menu" key is selected while the DVD is playing, the top menu specific to each disc will be displayed. For details, see the instructions attached to the disc.

### DVD settings

Select the "Settings" key to adjust the following settings:

- **Key** (DVD-VIDEO)  
Displays the operation keys for the specific DVD menu.

- Select the directional keys to move the cursor on the DVD menu.
- Select the "Enter" key to fix the selected menu item.
- Select the "Move" key to move the location of the operation keys on the screen.
- Select the "Back" key to return to the previous menu screen.
- Select the "Hide" key to hide the operation keys.

- **Title Menu** (DVD-VIDEO)

Some menus specific to each disc will be shown. For details, see the instructions attached to the disc.

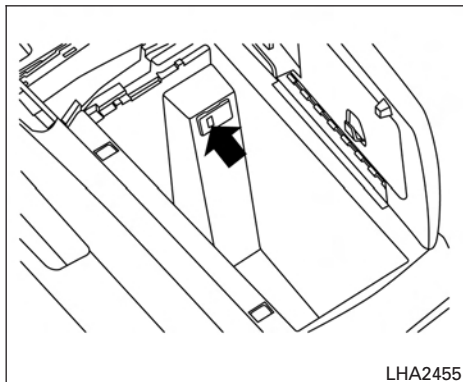
- **Title Search** (DVD-VIDEO, DVD-VR)

The scene with the specified title will be displayed the number of times the "+" or "-" side is selected.

- **Group Search** (VIDEO CD)

The scene with the specified group will be displayed the number of times the "+" or "-" side is selected.

- **10 Key Search** (DVD-VIDEO, VIDEO CD, CD-DA, DVD-VR)  
Select the "10 Key Search" key to open the number entry screen. Input the number you want to search for and select the "OK" key. The specified Title/Chapter or Group/Track will be played.
- **Select No.** (VIDEO CD)  
Select the "Select No." key to open the number entry screen. Input the number you want to search for and select the "OK" key. The specified scene will be played.
- **Angle** (DVD-VIDEO)  
If the DVD contains different angles (such as moving images), the current image angle can be switched to another one. Select the "Angle" key and use the "+" or "-" key to change the angle.
- **Angle Mark** (DVD-VIDEO)  
When this item is turned on, an angle mark will be shown on the bottom of the screen if the scene can be seen from a different angle.
- **Menu Skip** (DVD-VIDEO)  
DVD menus are automatically configured and the contents will be played directly when the "Menu Skip" key is turned on. Note that some discs may not be played directly even if this item is turned on.
- **CM Skip** (DVD-VIDEO)  
Select the "CM Skip" key to choose the setting time for CM backward and forward operations. Use the "+" or "-" key to choose a setting time of 15, 30 or 60 seconds.
- **DRC** (DVD-VIDEO, DVD-VR)  
DRC (Dynamic Range Compression) automatically adjusts the soundtrack volume level to maintain a more even sound to the speakers.
- **DVD Language** (DVD-VIDEO, VIDEO CD)  
Select the "DVD Language" key to open the number entry screen. Input the number corresponding to the preferred language and select the "OK" key. The DVD top menu language will be changed to the one specified.
- **Display**  
Adjust the image quality of the screen by selecting the preferred adjustment items.
- **Audio**  
Choose the preferred language for the audio.
- **Subtitle** (DVD-VIDEO, DVD-VR)  
Choose the preferred language for the subtitles.
- **Display Mode** (DVD-VIDEO, VIDEO CD, DVD-VR)  
Choose from the "Full", "Wide", "Normal" or "Cinema" mode.
- **Title List** (DVD-VR)  
Choose the preferred title from the list.
- **Play Mode**  
Choose the preferred play mode.
- **PG/PL Mode** (DVD-VR)  
Choose from the "PG" or "PL" mode.



USB INTERFACE (models without Navigation System) (if so equipped)

Connecting a device to the USB input jack

### **CAUTION**

- Depending on size and shape of USB device, the console lid may not fully close. Do not force console lid closed as this may damage USB device.

- Do not force the USB device into the USB port. Inserting the USB device tilted or up-side-down into the port may damage the USB device and the port. Make sure that the USB device is connected correctly into the USB port. (Some USB devices come with a USB mark as a guide. Make sure that the mark is facing the correct direction before inserting the device.)
- Do not locate objects near the USB device to prevent the objects from leaning on the USB device and the port. Pressure from the objects may damage the USB device and the port.

The USB input jack is located in the center console. Insert the USB device into the jack ①.

When a compatible storage device is plugged into the jack, compatible audio files on the storage device can be played through the vehicle's audio system.

## Audio file operation

### AUX button:

Place the ignition switch in the ON or ACC position and press the AUX button to switch to the USB input mode. If another audio source is playing and a USB memory device is inserted, press the AUX button repeatedly until the center display changes to the USB memory mode.

If the system has been turned off while the USB memory was playing, push the ON-OFF/VOL control knob to restart the USB memory.






**SEEK/CAT and TRACK**  
(Reverse or Fast Forward)  
buttons:

Press and hold the SEEK/CAT ◀◀ (rewind) button or TRACK ▶▶ (fast forward) button for 1.5 seconds while an audio file on the USB device is playing to reverse or fast forward the track being played. The track plays at an increased speed while reversing or fast forwarding. When the button is released, the audio file returns to normal play speed.




### **SEEK/CAT and TRACK buttons:**

Press the SEEK/CAT button  while an audio file on the USB device is playing to return to the beginning of the current track. Press the SEEK/CAT button  several times to skip backward several tracks.

Press the TRACK button  while an audio file on the USB device is playing to advance one track. Press the TRACK button  several times to skip forward several tracks. If the last track in a folder on the USB device is skipped, the first track of the next folder is played.

### **Folder selection:**

To change to another folder in the USB memory, turn the TUNE/FLDR knob or choose a folder displayed on the screen.

This can also be performed using the  TUNE and FLDR  buttons.

### **RDM button:**

When the RDM button is pressed while an audio file on the USB device is playing, the play pattern can be changed as follows:

All Random → 1 Folder Random → OFF

All Random: all tracks on the USB device will be played randomly.

1 Folder Random: all tracks in the current folder will be played randomly.

OFF: No random play pattern is applied. The indicator on the display will turn off.

The current play pattern of the USB device is displayed on the screen unless no pattern is applied.

### **RPT button:**

When the RPT button is pressed while an audio file on the USB device is playing, the play pattern can be changed as follows:

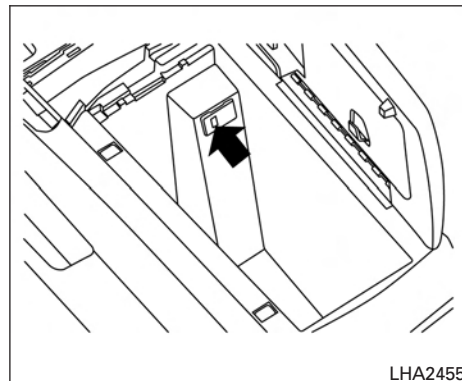
1 Folder Repeat → 1 Track Repeat → OFF

1 Track Repeat: the current track will be repeated.

1 Folder Repeat: the current folder will be repeated.

OFF: No repeat play pattern is applied. The indicator on the display will turn off.

The current play pattern of the USB device is displayed on the screen unless no pattern is applied.






## USB INTERFACE (models with Navigation System)

Connecting a device to the USB input jack

### **⚠ CAUTION**

- Depending on size and shape of USB device, the console lid may not fully close. Do not force console lid closed as this may damage USB device.

- Do not force the USB device into the USB port. Inserting the USB device tilted or up-side-down into the port may damage the USB device and the port. Make sure that the USB device is connected correctly into the USB port. (Some USB devices come with a  mark as a guide. Make sure that the mark is facing the correct direction before inserting the device.)
- Do not locate objects near the USB device to prevent the objects from leaning on the USB device and the port. Pressure from the objects may damage the USB device and the port.

The USB input jack is located in the center console. Insert the USB device into the jack ①.

When a compatible storage device is plugged into the jack, compatible audio and video files on the storage device can be played through the vehicle's audio system and center display screen.

When there are both audio and movie files in the USB memory, the mode select screen is displayed. Use the touchscreen or the NISSAN controller to select the preferred type of file. When there is only type of file in the USB memory, that audio or movie operation screen is displayed and starts to play.

When you play a file with limited playing time, the confirmation screen will be displayed before starting to play the file. Confirm the playing time and select "yes" to start playing.

## Audio file operation



### **DISC/AUX button:**

Place the ignition switch in the ON or ACC position and press the DISC/AUX button to switch to the USB input mode. If another audio source is playing and a USB memory device is inserted, press the DISC/AUX button repeatedly until the center display changes to the USB memory mode.

If the system has been turned off while the USB memory was playing, push the ON-OFF/VOL control knob to restart the USB memory.



### **SEEK/CAT and TRACK (Reverse or Fast Forward) buttons:**

Press and hold the SEEK/CAT  (rewind) button or TRACK  (fast forward) button for 1.5 seconds while an audio file on the USB device is playing to reverse or fast forward the track being played. The track plays at an increased speed while reversing or fast forwarding. When the button is released, the audio file returns to normal play speed.



### SEEK/CAT and TRACK buttons:

Press the SEEK/CAT button while an audio file on the USB device is playing to return to the beginning of the current track. Press the SEEK/CAT button several times to skip backward several tracks.

Press the TRACK button while an audio file on the USB device is playing to advance one track. Press the TRACK button several times to skip forward several tracks. If the last track in a folder on the USB device is skipped, the first track of the next folder is played.

### Folder selection:

To change to another folder in the USB memory, turn the TUNE/FLDR knob or choose a folder displayed on the screen.

This can also be performed using the TUNE and FLDR buttons.

### RDM button:

When the RDM button is pressed while an audio file on the USB device is playing, the play pattern can be changed as follows:

All Random → 1 Folder Random → OFF

All Random: all tracks on the USB device will be played randomly.

1 Folder Random: all tracks in the current folder will be played randomly.

OFF: No random play pattern is applied. The indicator on the display will turn off.

The current play pattern of the USB device is displayed on the screen unless no pattern is applied.

### RPT button:

When the RPT button is pressed while an audio file on the USB device is playing, the play pattern can be changed as follows:

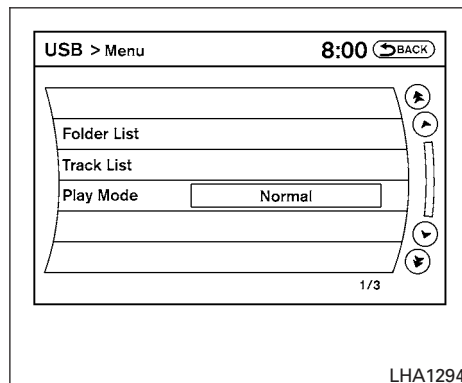
1 Folder Repeat → 1 Track Repeat → OFF

1 Track Repeat: the current track will be repeated.

1 Folder Repeat: the current folder will be repeated.

OFF: No repeat play pattern is applied. The indicator on the display will turn off.

The current play pattern of the USB device is displayed on the screen unless no pattern is applied.

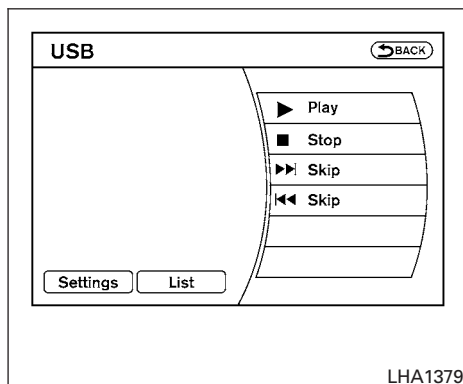


### Menu:

There are some options available during playback. Select one of the following that are displayed on the screen, if necessary. Refer to the following information for each item.

- **Movie Playback**  
Switch to the movie playback mode. This item is displayed only when the USB memory contains movie files.  
The shift selector must be in Park (P) with the parking brake engaged to watch movies from a USB device.

- **Folder List/Track List**  
Displays the folder or track list. The “Movie Playback” key is also displayed in this list screen and enables you to switch to the movie playback mode.
- **Play Mode**  
Choose the preferred play mode using the NISSAN controller or the touchscreen.



### Movie file operation

**Park the vehicle in a safe location for the front seat occupants to operate the USB memory while watching the images.**



### DISC/AUX button:

When the DISC/AUX button is pushed with the system off and the USB memory inserted, the system will turn on. If another audio source is playing and the USB memory is inserted, press the DISC/AUX button repeatedly until the center display changes to the USB memory mode.


### Operation keys:

To operate the USB memory, select the desired key displayed on the display screen.


-  **Pause:**

Select the  key to pause the movie file. To resume playing the movie file, use the  key.


-  **Play:**


Select the  key to start playing the movie file or resume the movie file if it has been paused.


-  **Stop:**

Select the  key to stop playing the movie file.

-  **Next Chapter/Fast Forward:**

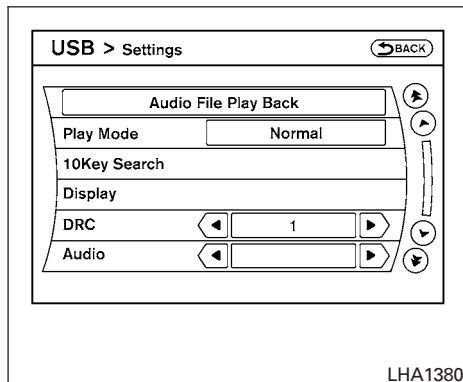
Select the  key to skip the chapter(s) of the disc forward. The chapters will advance the number of times the key is selected. Press and hold the key to fast forward the chapter.

-  Previous Chapter/Rewind:

Select the  key to skip the chapter(s) of the disc backward. The chapters will go back the number of times the key is selected. Press and hold the key to rewind the chapter.

### List:

Select the “List” key on the movie file operation screen to display the file list.



### Settings:

Select the “Settings” key to adjust the following settings:

- **Audio File Playback**

Switch to the audio playback mode. This item is displayed only when the USB memory contains audio files.

- **Play Mode**

Choose between the “Normal” or “1 Track Repeat” play modes.

- **10 Key Search**

Select the “10 Key Search” key to open the number entry screen. Input the number you want to search for and the specified file or folder will be played.

- **Display**

Adjust the image quality of the screen.

- **DRC**

DRC (Dynamic Range Compression) automatically adjusts the soundtrack volume level to maintain a more even sound to the speakers.

- **Audio**

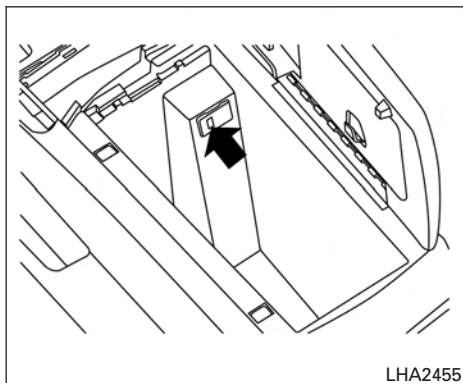
Choose the preferred language of the audio.

- **Subtitle**

Choose the preferred language of the subtitles.

- **Display Mode**

Choose between the “Normal”, “Wide”, “Cinema” or “Full” display modes.



iPod®\* PLAYER OPERATION  
WITHOUT NAVIGATION SYSTEM (if  
so equipped)

Connecting iPod®

#### **⚠ CAUTION**

- Depending on size and shape of the iPod® and iPod® cable, the console lid may not fully close. Do not force console lid closed as this may damage the iPod® and iPod® cable.

- Do not force the iPod® cable into the USB port. Inserting the USB device tilted or up-side-down into the port may damage the iPod® cable and the port. Make sure that the iPod® cable is connected correctly into the USB port. (Some iPod® cables come with a USB mark as a guide. Make sure that the mark is facing the correct direction before inserting the iPod® cable.)
- Do not locate objects near the iPod® cable to prevent the objects from leaning on the iPod® cable and the port. Pressure from the objects may damage the iPod® cable and the port.

To connect an iPod® to the vehicle so that the iPod® can be controlled with the audio system controls and display screen, use the USB jack located in the center console. Connect the iPod®-specific end of the cable to the iPod® and the USB end of the cable to the USB jack on the vehicle ①. If your iPod® supports charging via a USB connection, its battery will be charged while connected to the vehicle with the ignition switch in the ACC or ON position.

While connected to the vehicle, the iPod® can only be operated by the vehicle audio controls.

To disconnect the iPod® from the vehicle, remove the USB end of the cable from the USB jack on the vehicle, then remove the cable from the iPod®.

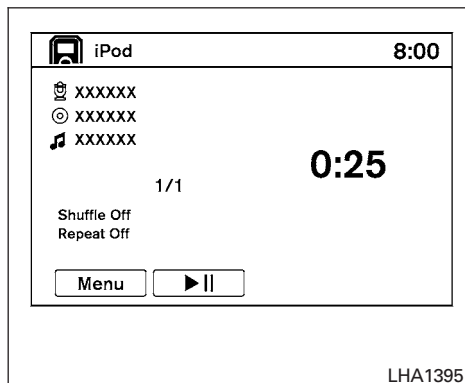
\* iPod® is a trademark of Apple Inc., registered in the U.S. and other countries.

### Compatibility

The following models are compatible:

- iPod® 5th Generation - version 1.2.1
- iPod® Classic - version 1.1
- iPod® Touch - version 2.1.0
- iPod® Nano - 1st generation version 1.3.1
- iPod® Nano - 2nd generation version 1.1.3
- iPod® Nano - 3rd generation version 1.0.2

Make sure that your iPod® firmware is updated to the version indicated above.



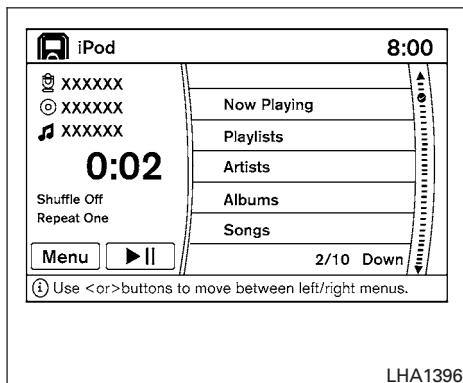
## Audio main operation

Place the ignition switch in the ACC or ON position. Press the AUX button repeatedly to switch to the iPod® mode.

If the system has been turned off while the iPod® was playing, pressing the VOL/ON-OFF control knob will start the iPod®.

### AUX button:

When the AUX button is pressed with the system off and the iPod® connected, the system will turn on. If another audio source is playing and the iPod® is connected, press the AUX button repeatedly until the center display changes to the iPod® mode.



### Interface:

The interface for iPod® operation shown on the vehicle center display is similar to the iPod® interface. Use the NISSAN controller and the BACK button to play the iPod® with your favorite settings.

The following items can be chosen from the menu list screen. For further information about each item, see the iPod® Owner's Manual.

- Playlists
- Podcasts
- Songs

- Albums
- Artists
- Genres
- Composers
- Audiobooks

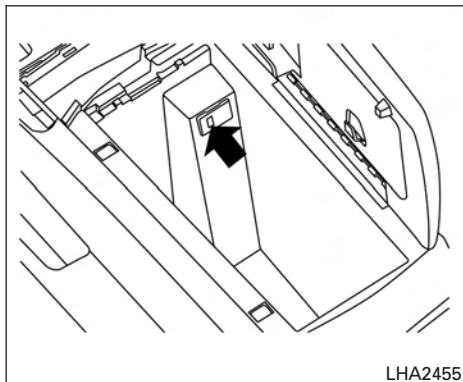
The following keys shown on the screen are also available:

- MENU: returns to the previous screen.
- ►|| : plays/pauses the music selected.

### SEEK/CAT and TRACK buttons:

When the ◀◀ SEEK/CAT button or ▶▶ TRACK button is pressed for less than 1.5 seconds while the iPod® is playing, the next track or the beginning of the current track on the iPod® will be played.

When the ◀◀ SEEK/CAT button or ▶▶ TRACK button is pressed for more than 1.5 seconds while the iPod® is playing, the iPod® will play while fast forwarding or rewinding. When the button is released, the iPod® will return to the normal play speed.



## iPod®\* PLAYER OPERATION WITH NAVIGATION SYSTEM (if so equipped)

### Connecting iPod®

#### **⚠ CAUTION**

- Depending on size and shape of the iPod® and iPod® cable, the console lid may not fully close. Do not force console lid closed as this may damage the iPod® and iPod® cable.

- Do not force the iPod® cable into the USB port. Inserting the USB device tilted or up-side-down into the port may damage the iPod® cable and the port. Make sure that the iPod® cable is connected correctly into the USB port. (Some iPod® cables come with a USB mark as a guide. Make sure that the mark is facing the correct direction before inserting the iPod® cable.)
- Do not locate objects near the iPod® cable to prevent the objects from leaning on the iPod® cable and the port. Pressure from the objects may damage the iPod® cable and the port.

To connect an iPod® to the vehicle so that the iPod® can be controlled with the audio system controls and display screen, use the USB jack located in the center console. Connect the iPod®-specific end of the cable to the iPod® and the USB end of the cable to the USB jack on the vehicle ①. If your iPod® supports charging via a USB connection, its battery will be charged while connected to the vehicle with the ignition switch in the ACC or ON position.

While connected to the vehicle, the iPod® can only be operated by the vehicle audio controls.

To disconnect the iPod® from the vehicle, remove the USB end of the cable from the USB jack on the vehicle, then remove the cable from the iPod®.

\* iPod® is a trademark of Apple Inc., registered in the U.S. and other countries.

## Compatibility

The following models are compatible:

- iPod® 5th Generation (firmware version 1.2.3 or later)
- iPod® Classic (firmware version 1.1.1 or later)
- iPod® Touch (firmware version 2.0.0 or later)\*
- iPod® Nano - 1st generation (firmware version 1.3.1 or later)
- iPod® Nano - 2nd generation (firmware version 1.1.3 or later)
- iPod® Nano - 3rd generation (firmware version 1.1.3 or later)
- iPod® Nano - 4th generation (firmware version 1.0.4 or later)

- iPod® Nano - 5th generation (firmware version 1.0.1 or later)

\* Some features of this iPod® may not be fully functional.

Make sure that your iPod® firmware is updated to the version indicated above.



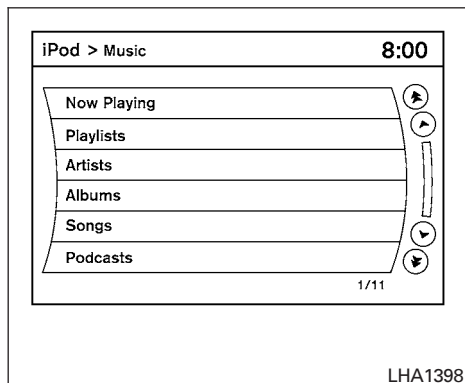
### Audio main operation

Place the ignition switch in the ACC or ON position. Press the DISC/AUX button repeatedly to switch to the iPod® mode.

If the system has been turned off while the iPod® was playing, pressing the VOL/ON-OFF control knob will start the iPod®.

### DISC/AUX button:

When the DISC/AUX button is pressed with the system off and the iPod® connected, the system will turn on. If another audio source is playing and the iPod® is connected, press the DISC/AUX button repeatedly until the center display changes to the iPod® mode.



### Interface:

The interface for iPod® operation shown on the vehicle center display is similar to the iPod® interface. Use the NISSAN controller and the BACK button to play the iPod® with your favorite settings. The touchscreen can also be used to control your favorite settings.

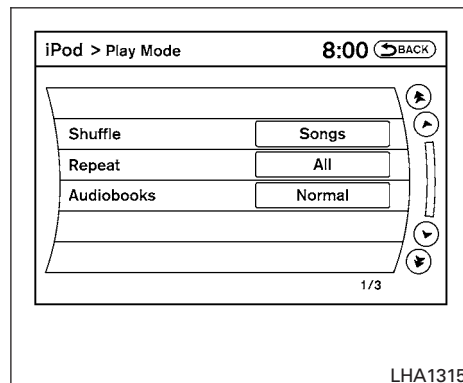
The following items can be chosen from the menu list screen. For further information about each item, see the iPod® Owner's Manual.

- Now Playing
- Playlists
- Artists

- Albums
- Songs
- Podcasts
- Genres
- Composers
- Audiobooks
- Shuffle Songs

The following keys shown on the screen are also available:

- MENU: returns to the previous screen.
- ►|| : plays/pauses the music selected.



### Play mode:

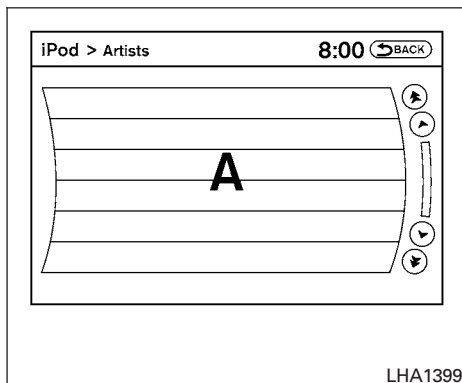
While the iPod® is playing, touch the “Menu” key to display the iPod® menu. Touch the “Play Mode” key to display the Play Mode screen and adjust the settings for Shuffle, Repeat and Audiobooks. For further information about each item, see the iPod® Owner's Manual.

### SEEK/CAT and TRACK buttons:

When the ◀◀ SEEK/CAT button or ▶▶ TRACK button is pressed for less than 1.5 seconds while the iPod® is playing, the next track or the beginning of the current track on the iPod® will be played.

When the ◀◀ SEEK/CAT button or ▶▶ TRACK button is pressed for more than 1.5 seconds while the iPod® is playing, the iPod® will play while fast forwarding or rewinding. When the button is released, the iPod® will return to the normal play speed.

The NISSAN controller can also be used to select tracks when the iPod® is playing.



#### Scrolling menus:

While navigating long lists of artists, albums or songs in the music menu, it is possible to scroll the list by the first letter. To activate letter indexing, perform one of the following:

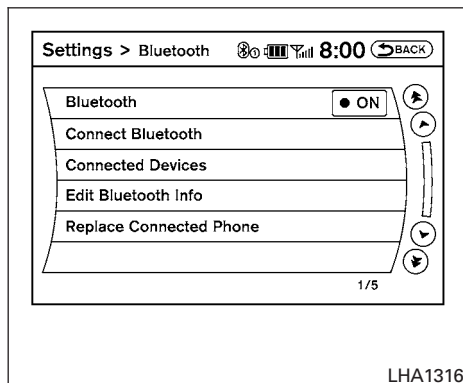
- Turn the NISSAN controller quickly.
- Press and hold the up/down directional arrows on the NISSAN controller.
- Touch and hold the page up/down arrows on the touchscreen.

To exit the scrolling by letter mode, perform one of the following:

- Press the ENTER button on the NISSAN controller.
- Push the ENTER switch on the steering wheel.
- Do not touch the controls for 2 seconds.

#### BLUETOOTH® STREAMING AUDIO (if so equipped)

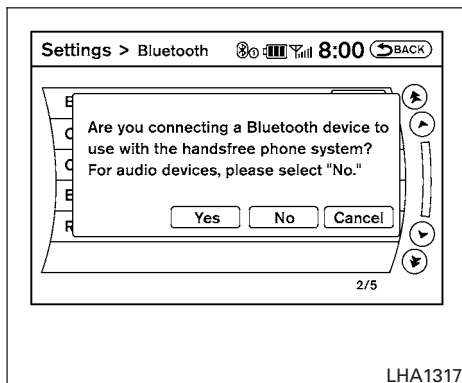
If you have a compatible Bluetooth® audio device that is capable of playing audio files, the device can be connected to the vehicle's audio system so that the audio files on the device play through the vehicle's speakers.



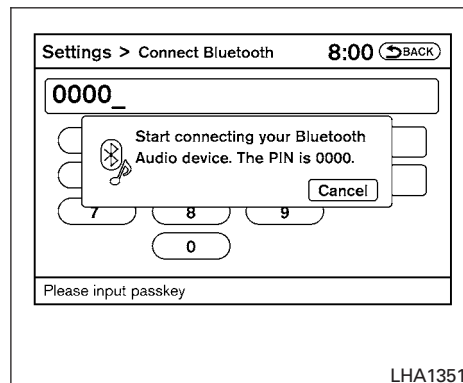
## Connecting Bluetooth® audio

To connect your Bluetooth® audio device to the vehicle, follow the procedure below:

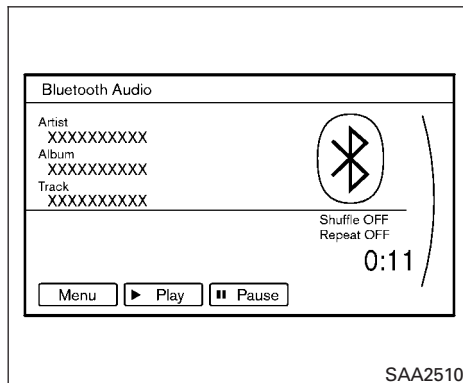
1. Press the SETTING button on the instrument panel.
2. Select the "Bluetooth" key.
3. Select the "Connect Bluetooth" key.



4. A screen will appear asking if you are connecting the device to use with the hands-free phone system. Select the "No" key.



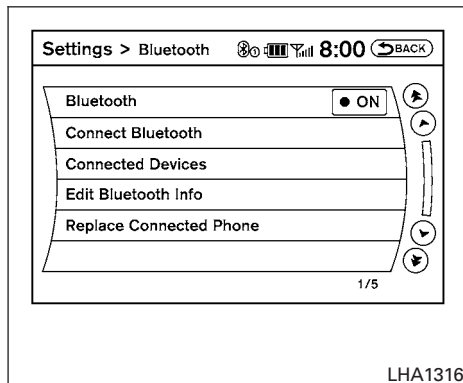
5. Enter a PIN of your choice. It will be needed by your Bluetooth® audio device to complete the connection process. See the Bluetooth® audio device's owner's manual for more information.



### Audio main operation

To switch to the Bluetooth® audio mode, press the DISC/AUX button repeatedly until the Bluetooth® audio mode is displayed on the screen.

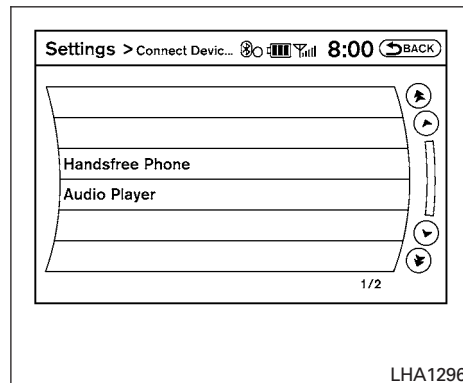
The controls for the Bluetooth® audio are displayed on the screen.



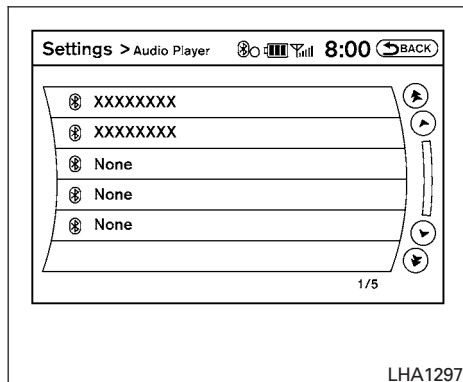
### Bluetooth® audio settings

To adjust the Bluetooth® audio settings, follow the procedure below:

1. Press the SETTING button on the instrument panel.
2. Select the "Bluetooth" key.
3. Select the "Connected Devices" key.

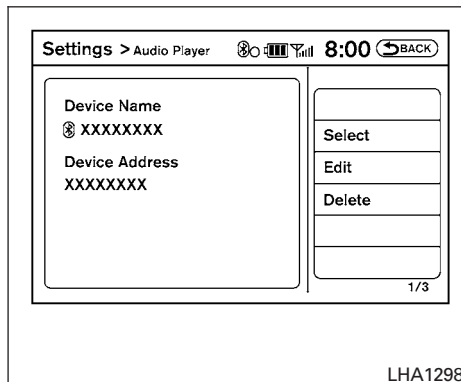


4. Select the "Audio Player" key.



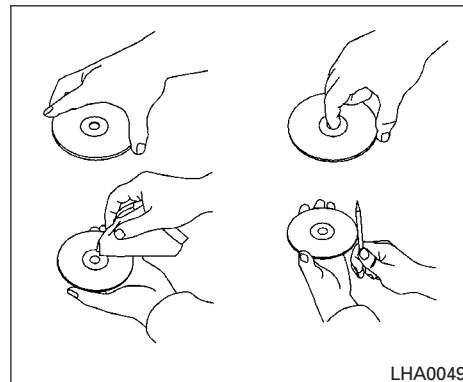
LHA1297

5. A list of the connected Bluetooth® audio players is displayed. Select the name of the device you wish to edit.



LHA1298

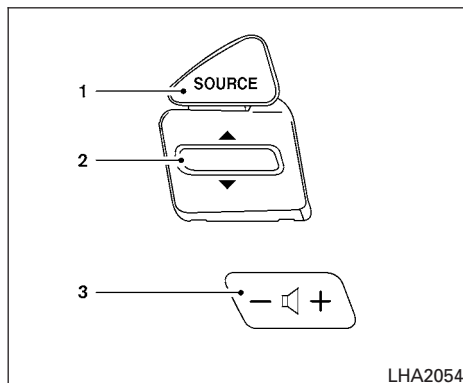
6. The Device Name and Device Address are displayed on the screen. Select the “Select” key to make this device the active Bluetooth® audio player. Select the “Edit” key to edit the details of the player, such as Device Name. Select the “Delete” key to delete the device.



LHA0049

## 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.



1. SOURCE select switch
2. Tuning switch
3. Volume control 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.

### SOURCE select switch

Push the source select switch to change the mode in the following sequence:

#### Models without Navigation System:

AM → FM1 → FM2 → XM1 → XM2 → XM3 (satellite radio, if so equipped) → USB/iPod®\* (if so equipped) → CD/DVD\* → AUX\* → AM.

#### Models with Navigation System:

AM → FM1 → FM2 → XM1 → XM2 → XM3 (satellite radio, if so equipped) → CD/DVD\* → USB/iPod® → Bluetooth® Audio\* → AUX\* → AM.

\* These modes are only available when compatible media storage is inserted into the device.

### Volume control switch

Push the volume control switch up or down to increase or decrease the volume.



Menu control  
switch/ENTER button

While the display is showing a MAP, STATUS or Audio screen, tilt the Menu Control switch upward or downward to select a station, track, CD or folder. For most audio sources, tilting the switch up/down for more than 1.5 seconds provides a different function than a tilting up/down for less than 1.5 seconds.

#### AM and FM:

- Tilt up/down for less than 1.5 seconds to increase or decrease the preset station.
- Tilt up/down for more than 1.5 seconds to seek up or down to the next station.
- Press the ENTER button to show the list of preset stations.

#### XM (if so equipped):

- Tilt up/down for less than 1.5 seconds to increase or decrease the preset station.
- Tilt up/down for more than 1.5 seconds to go to the next or previous category.
- Press the ENTER button to show the XM Menu.

#### **iPod® (if so equipped):**

- Tilt up/down for less than 1.5 seconds to increase or decrease the track number.
- Press the ENTER button to show the iPod Menu.

#### **CD:**

- Tilt up/down for less than 1.5 seconds to increase or decrease the track number.
- Tilt up/down for more than 1.5 seconds to increase or decrease the folder number (if playing compressed audio files).
- Press the ENTER button to show the CD Menu.

#### **DVD (if so equipped):**

- Tilt up/down for less than 1.5 seconds to increase or decrease the track number.
- Tilt up/down for more than 1.5 seconds to increase or decrease the title number.
- Press the ENTER button to select an item from the DVD display.
- When the transparent operation menu appears, the switch will control the menu.

#### **USB (if so equipped):**

- Tilt up/down for less than 1.5 seconds to increase or decrease the track number.
- Tilt up/down for more than 1.5 seconds to increase or decrease the folder number.
- Press the ENTER button to show the USB Menu.

#### **Bluetooth® Audio (if so equipped):**

- Tilt up/down for less than 1.5 seconds to increase or decrease the track number.

#### **AUX:**

- Press the ENTER button to show the AUX Menu.

#### **ANTENNA**

##### **Window antenna**

The antenna pattern is printed inside the rear passenger and driver side windows.

#### **⚠ 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.**

## CAR PHONE OR CB RADIO

When installing a CB, ham radio or car phone in your vehicle, be sure to observe the following precautions; otherwise, the new equipment may adversely affect the engine control system and other electronic parts.

### WARNING

- A cellular phone should not be used for any purpose while driving so full attention may be given to vehicle operation. Some jurisdictions prohibit the use of cellular phones 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.

### 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.
- Do not ground electrical accessories directly to the battery terminal. Doing so will bypass the variable voltage control system and the vehicle battery may not charge completely. Refer to “Variable voltage control system” in the “Maintenance and do-it-yourself” section later in this manual.
- Use electrical accessories with the engine running to avoid discharging the vehicle battery.

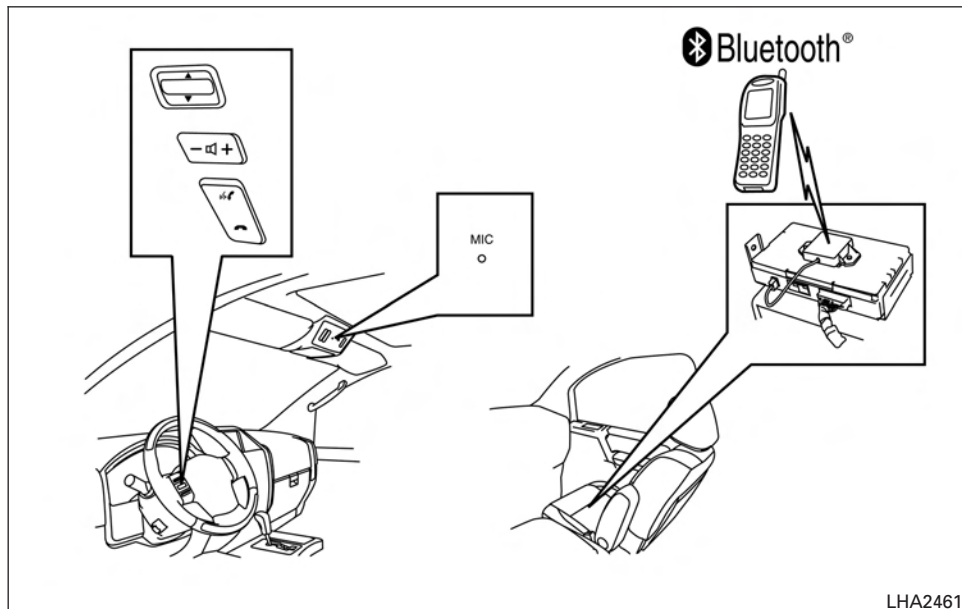
## BLUETOOTH® HANDS-FREE PHONE SYSTEM WITHOUT NAVIGATION SYSTEM (if so equipped)

### WARNING

- 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.

### CAUTION

To avoid discharging the vehicle battery, use a phone after starting the engine.



LHA2461

Your NISSAN is equipped with the Bluetooth® Hands-Free Phone System. If you have a compatible 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 in-vehicle 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 placed in 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 compatible 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](http://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" in this section. You can also visit [www.nissanusa.com/bluetooth](http://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.

## REGULATORY INFORMATION

### FCC Regulatory information

- CAUTION: To maintain compliance with FCC's RF exposure guidelines, use only the supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.
- Operation is subject to the following two conditions:
  1. This device may not cause interference and
  2. this device must accept any interference, including interference that may cause undesired operation of the device.

### IC Regulatory information

- Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

BLUETOOTH® is a trademark owned by Bluetooth SIG, Inc. and licensed to Visteon.




## 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. 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  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” in this section for more information.

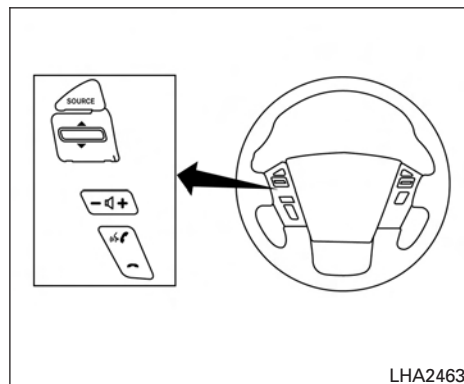
Example: 1-555-1212 \*123

- “One five 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.





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## CONTROL BUTTONS


The control buttons for the Bluetooth® Hands-Free Phone System are located on the steering wheel.

### PHONE/SEND

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.

## PHONE/END

Press the  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” 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 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.”



3. Press the  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 the  button within 5 seconds to change the language.**

Current language	Press  (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 **(G)**

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](http://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 **(G)**. 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  button on the steering wheel. A tone will sound.
2. 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 ex-


ample, 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" in this section, for more information.

4. When you have finished speaking the phone number, the system repeats it back and announces the available commands.
5. Say: "Dial" **(C)**. The system acknowledges the command and makes the call.


For additional command options, see "List of voice commands" 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 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  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" 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”

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 your voice.

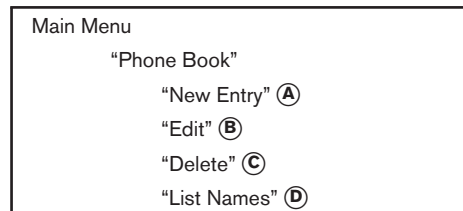
## NOTE:

**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.**



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” 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](http://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” 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](http://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.

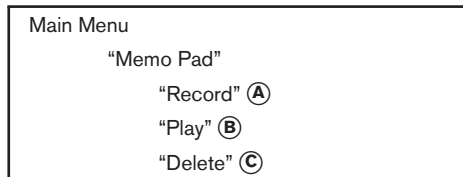
### "List names" (D)

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  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  or  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" (C)

The Delete command erases all memos. The system asks you to confirm this action before deleting all memos.

## “Setup”

Main Menu

“Setup”

“Pair Phone” (A)

“List Phone” (B)

“Select Phone” (C)

“Change Priority” (D)

“Delete Phone” (E)

“Select Ringtone” (F)

“Bluetooth Off” (G)

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 compatible 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” 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 procedure” 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” 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 placed in the OFF position 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”

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”

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”

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-of-dialect 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.


1. 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).
3. Press and hold the  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.

6. 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  button.
8. The SA mode will be explained. Follow the instructions provided by the system.
9. When training is finished, the system will tell you an adequate number of phrases have been recorded.
10. The system will ask you to say your name. Follow the instructions to register your name.
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 placed in 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" 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" 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" in this section.
	2. Replace one of the names being confused with a new name.

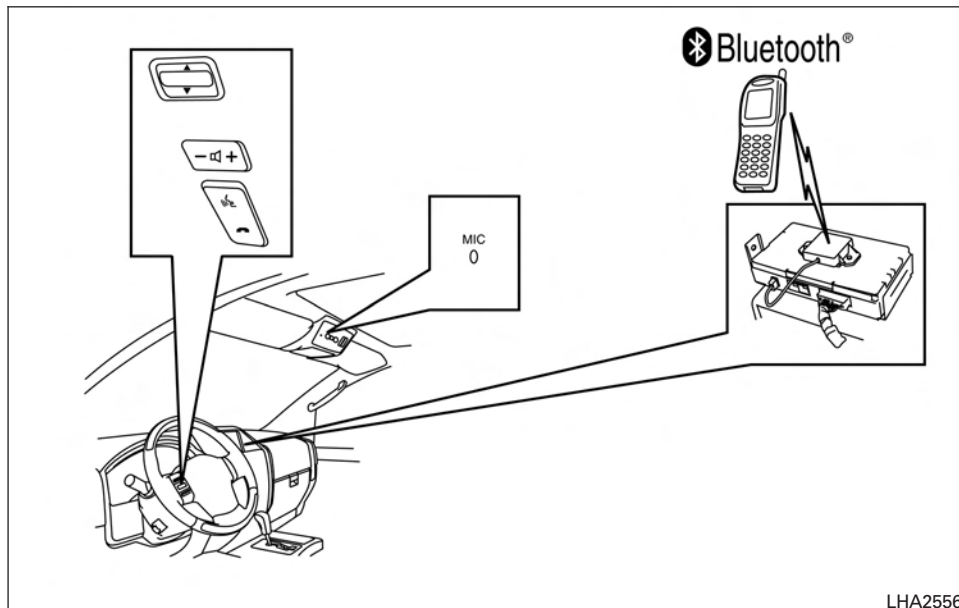
## BLUETOOTH® HANDS-FREE PHONE SYSTEM WITH NAVIGATION SYSTEM (if so equipped)

### ⚠ WARNING

- 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.

### ⚠ CAUTION

To avoid discharging the vehicle battery, use a phone after starting the engine.



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Your NISSAN is equipped with the Bluetooth® Hands-Free Phone System. If you have a compatible 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 connected to the in-vehicle 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 placed in the ON position with the connected 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.

NISSAN Voice Recognition system supports the phone commands, so dialing a phone number using your voice is possible. For more details, see “NISSAN Voice Recognition System” in this section.

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](http://www.nissanusa.com/bluetooth) for a recommended phone list and connecting.
- 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 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.
- Immediately after the ignition switch is placed in the ON position, it may be impossible to receive a call for a short period of time.
- 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” in this section. You can also visit [www.nissanusa.com/bluetooth](http://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.
- The signal strength display on the monitor will not coincide with the signal strength display of some cellular phones.
- If reception between callers is unclear, adjusting the incoming or outgoing call volume may improve the clarity. See “Call volume” in this section.

## REGULATORY INFORMATION

### FCC Regulatory information

- **CAUTION:** To maintain compliance with FCC's RF exposure guidelines, use only the supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.
- Operation is subject to the following two conditions:
  1. This device may not cause interference and
  2. this device must accept any interference, including interference that may cause undesired operation of the device.

### IC Regulatory information

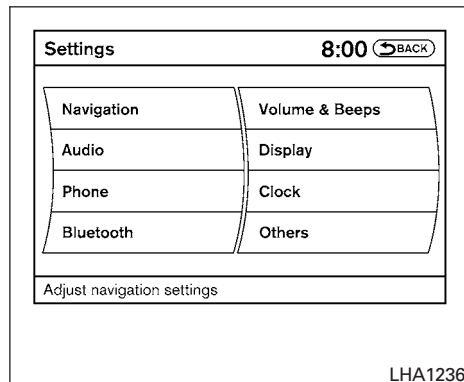
- Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.



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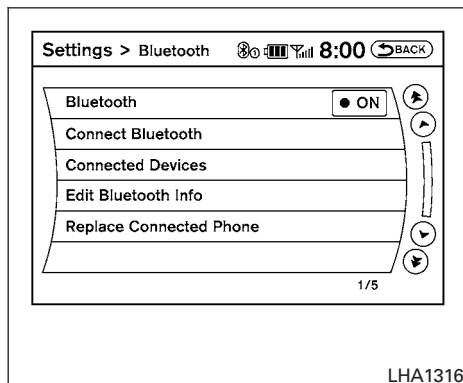
## VOICE COMMANDS

You can use voice commands to operate various Bluetooth® Hands-Free Phone System features using the NISSAN Voice Recognition system. For more details, see "NISSAN Voice Recognition System" in this section.

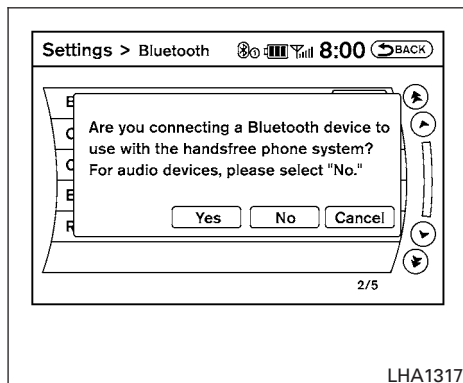


## CONNECTING PROCEDURE

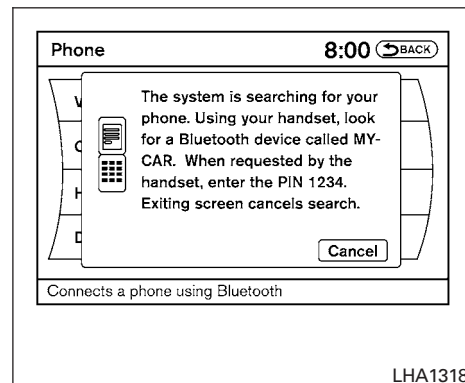
1. Press the SETTING button on the instrument panel and select the "Bluetooth" key on the display.



2. Select the "Connect Bluetooth" key.



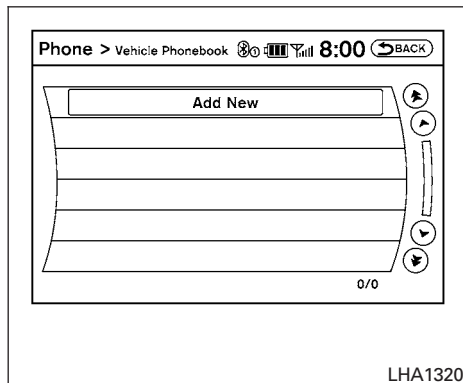
3. A popup box will appear on the screen, prompting you to confirm that the connection is for the phone system. Select the "Yes" key.



4. When a PIN code appears on the screen, operate the Bluetooth® cellular phone to enter the PIN code.

The connecting procedure of the cellular phone varies according to each cellular phone. See the cellular phone Owner's Manual for details. You can also visit [www.nissanusa.com/bluetooth](http://www.nissanusa.com/bluetooth) or call the NISSAN Consumer Affairs Department for instructions on connecting recommended cellular phones.

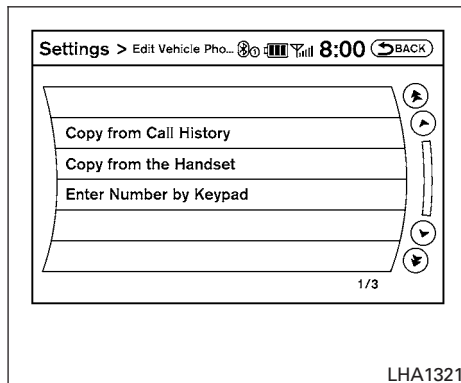
When the connecting is complete, the screen will return to the Bluetooth® settings screen.



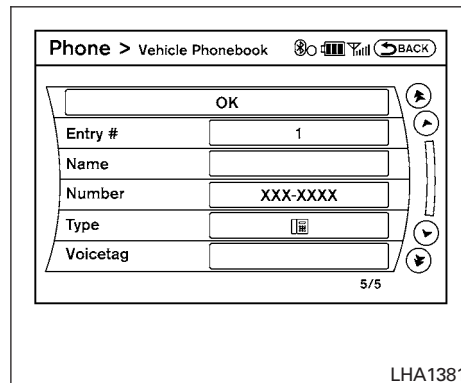
## VEHICLE PHONEBOOK

This vehicle has two phonebooks available for your use. Depending on your phone, the system may automatically download your entire cell phone's phonebook into the "Handset Phonebook". For the details on downloading your phonebook, see "Handset phonebook" in this section. If your phonebook does not automatically download, you may set up the vehicle phonebook for up to 40 entries. This phonebook allows you to record a name to speak while using voice recognition.

1. Push the PHONE button and select the "Vehicle Phonebook" key.



2. Select the "Add New" key at the top of the screen.
3. Choose the method for entering the phonebook entry. For this example, select "Enter Number by Keypad".
4. Enter the digits and select the "OK" key. For more information, see "How to use the touchscreen" in this section.



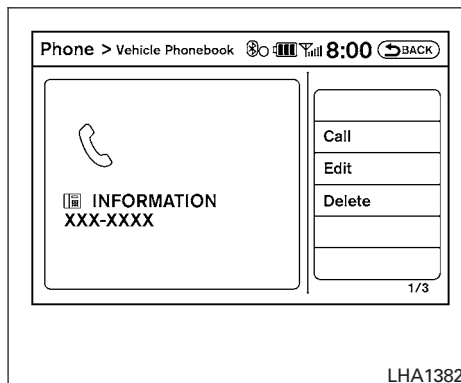
5. Select the "Voicetag" key to record a name to speak when using the Voice Recognition system.
6. Select the "Store" key and prepare to speak the name after the tone.
7. When the voicetag is successfully saved ( ), select the "OK" key to save the phonebook entry.
8. After the phonebook entry is saved, it will show a screen that is ready to call the number. Press the BACK button to return to the Vehicle Phonebook.

- **Copy from Call History**

The system will show a list of your incoming, outgoing or missed calls that were downloaded from your cell phone (depending on your phone's compatibility). You may select one of these entries to save in the vehicle phonebook.

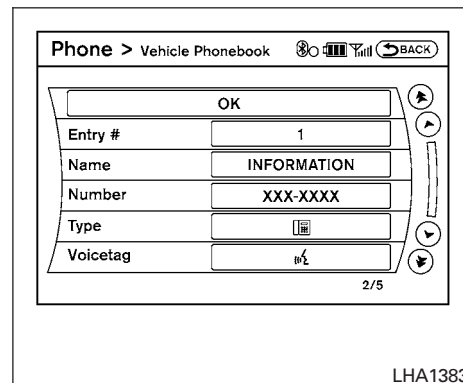
- **Copy from the Handset**

The system will show your cell phone's phonebook that was downloaded (depending on your phone's compatibility). You may select one of these entries to save in the vehicle phonebook.



- **Editing the Vehicle Phonebook**

1. Push the PHONE button and select the "Vehicle Phonebook" key.
2. Select the desired entry from the displayed list.
3. Select the "Edit" key.



4. Select the desired item to change.

The following editing items are available:

- **Entry #**  
Changes the displayed number of the selected entry.
- **Name**  
Edit the name of the entry using the keypad displayed on the screen.
- **Number**  
Edit the phone number using the keypad displayed on the screen.
- **Type**  
Select the icon from the icon list.

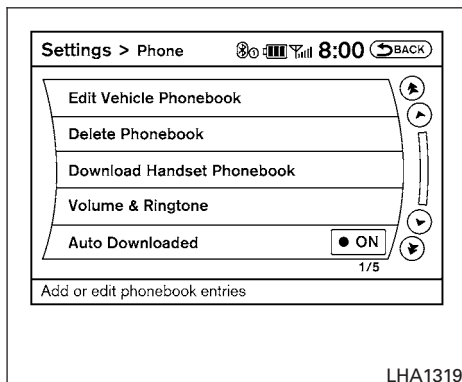
- Voicetag

Confirm and store the voicetag. Voicetags allow easy dialing using the NISSAN Voice Recognition system. For more information, see “NISSAN Voice Recognition System” in this section.

To delete an entry, select the “Delete” key at step 3.

## HANDSET PHONEBOOK

Many phones will support an automatic download of the cellular phone's phonebook. Since this method allows for up to 1000 numbers to be stored and entries are automatically assigned voice tags by the system, this is a useful function for easy dialing supported by the Voice Recognition system.




### Transferring the handset phonebook

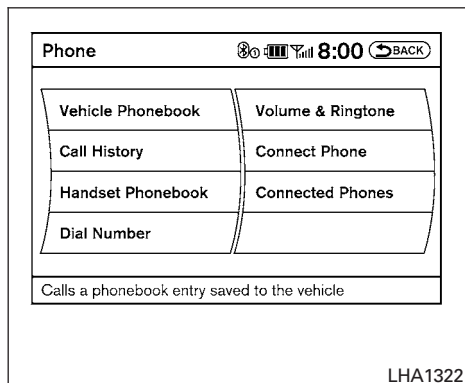
If your cellular phone supports automatic downloading, the system transfers the handset phonebook automatically by default. To ensure that this feature is activated, press the SETTING button on the instrument panel and select the “Phone” key. The “Auto Downloaded” selection should have the amber indicator next to the word ON activated. Select the “Auto Downloaded” key to toggle this feature on or off.

To transfer the handset phonebook to the vehicle manually, follow these steps:

1. Press the SETTING button on the instrument panel.
2. Select the “Phone” key.
3. Select the “Download Handset Phonebook” key.


Once the handset phonebook is transferred to the vehicle, it can be accessed by pressing the PHONE key on the instrument panel or the  button on the steering wheel, then selecting the “Handset Phonebook” key.


Whether the handset phonebook is transferred manually or automatically, the process can take up to five minutes to complete, depending on the size of the handset phonebook. See the cellular phone's owner's manual for more details.

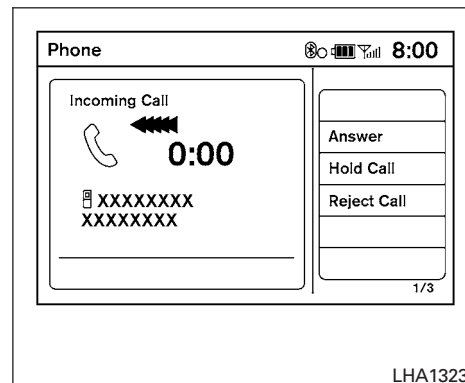


## MAKING A CALL

To make a call, follow the procedure below:


1. Press the PHONE button on the instrument panel or the  switch on the steering wheel. The "Phone" screen will appear on the display.
2. Select one of the following options to make a call:
  - Vehicle Phonebook: Select the name from an entry stored in the vehicle phonebook.
  - Handset Phonebook: Select the name from an entry stored in the handset phonebook.

- Call History: Select the name from the incoming or outgoing call history.
  - Dial Number: Input the phone number manually using a keypad displayed on the screen. For information on how to use the touchscreen, see "How to use the touchscreen" in this section.
3. For all of the methods listed in Step 2 except "Dial Number", dialing commences when the listed name is selected. Dialing commences when "OK" is selected if the number is inputted manually. The screen changes to the "Call in Progress" screen.
  4. After the call is over, perform one of the following to finish the call:
    - a. Select the "Hang up" key on the Call in Progress screen.
    - b. Press the  switch on the steering wheel.
    - c. When the "Call in Progress" screen is displayed, press the PHONE button on the instrument panel to hang up. If any other screen is currently displayed, press the PHONE button to display the "Call in Progress" screen first, then press the PHONE button again to hang up.



## RECEIVING A CALL

When you hear a phone ring, the display will change to phone mode. To receive a call, follow one of the procedures listed below.

- a. Select the "Answer" key on the display.
- b. Press the PHONE button on the instrument panel.
- c. Press the phone  button on the steering wheel switches.

There are some options available when receiving a call. Select one of the following displayed on the screen.

**Answer:**

Accept an incoming call to talk.


**Hold Call:**

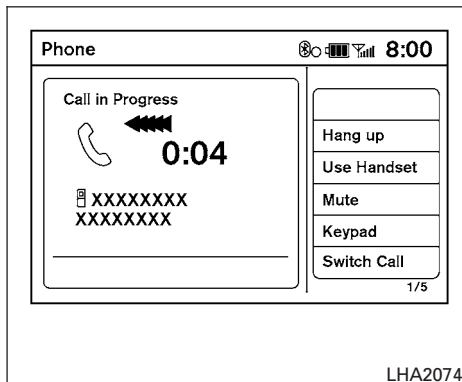
Put an incoming call on hold.

**Reject Call:**

Reject an incoming call.

To finish the call, follow one of the procedures listed below:

- Select the "Reject Call" key on the display.
- Press the PHONE button on the instrument panel.
- Press and hold the phone  button on the steering wheel switches.

**DURING A CALL**

There are some options available during a call. Select one of the following displayed on the screen, if necessary:

**Hang up:**

Finish the call.

**Use Handset:**

Transfer the call to the cellular phone.

**Mute:**

Mute your voice to the person.

**Keypad:**

Brings up a keypad; enter digits when needed. For example, entering your PIN number for voice-mail.

**NOTE:**

**Pushing the TALK  switch on the steering wheel during a call allows numbers and digits to be sent using Voice Recognition.**

**Cancel Mute:**

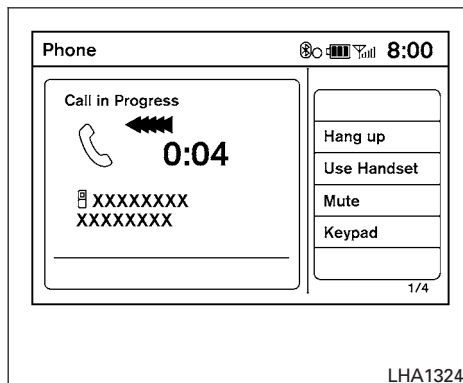
This will appear after the "Mute" key is selected. Mute will be cancelled.

**Switch Call:**

Select "Switch Call" to answer another incoming call. By selecting "Hang Up," you can end a call and can speak to a caller who is on hold again.


- This function may not be useable, depending on the model of phone.

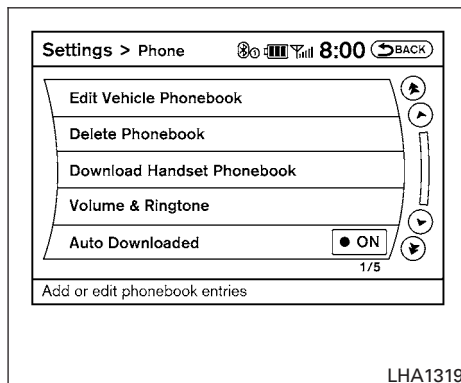
To adjust the person's voice to be louder or quieter, press the volume control switch located on the steering wheel switches or turn the volume control knob on the instrument panel while talking on the phone. This adjustment is also available in the SETTING mode.



## ENDING A CALL

To finish the call, perform one of the following procedures:

- Select the “Hang up” key on the “Call in Progress” display.
- Push the  switch on the steering wheel.
- When the “Call in Progress” screen is displayed, press the PHONE button on the instrument panel to hang up. If any other screen is currently displayed, press the PHONE button to display the “Call in Progress” screen first, then press the PHONE button again to hang up.



## PHONE SETTINGS

To set up the Bluetooth® Hands-Free Phone System to your preferred settings, press the SETTING button on the instrument panel and select the “Phone” key on the display.

### Edit Vehicle Phonebook:

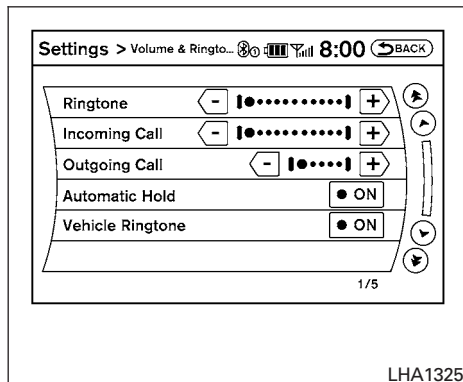
See “Vehicle Phonebook” in this section for adding, editing and deleting contacts in the vehicle phonebook.

### Delete Phonebook:

Delete a phonebook stored on the system.

### Download Handset Phonebook:

See “Handset Phonebook” in this section for adding, editing and deleting contacts in the handset phonebook.



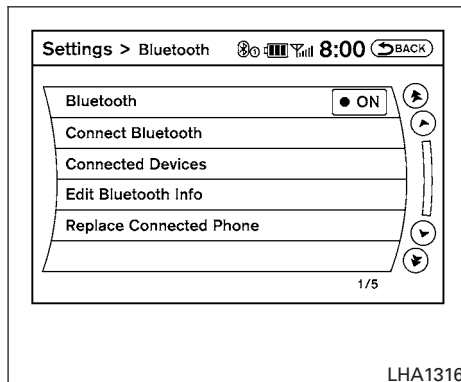
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### Volume & Ringtone:

Adjust the volume level of the ringtone, incoming call sound and outgoing call sound. When the “Automatic Hold” option is turned on, an incoming call will be placed on hold automatically after several rings. When the “Vehicle Ringtone” option is turned on, a specific ringtone that is different from the cellular phone’s will sound when receiving a call.

### Auto Downloaded:

See “Handset Phonebook” in this section for information about automatically downloading the handset phonebook.



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## BLUETOOTH SETTINGS

To set up the Bluetooth® Hands-Free Phone System to your preferred settings, press the SETTING button on the instrument panel and select the “Bluetooth” key on the display.

### Bluetooth:

Turn the Bluetooth® system on or off.

### Connect Bluetooth:

See “Connecting procedure” in this section for more information about connecting a phone.

### Connected Devices:

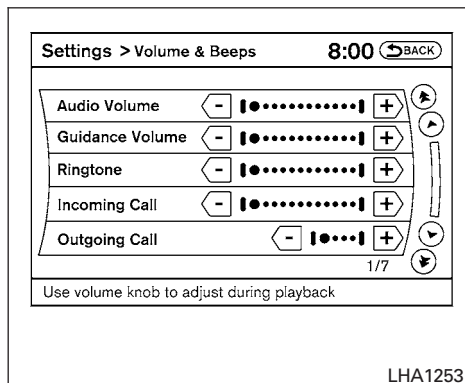
Display a list of the Bluetooth® devices connected to the system.

### Edit Bluetooth Info:

Check information about the device name, device address and device PIN.

### Replace Connected Phone:

Replace the phone currently connected to the system. This option allows you to keep any voicetags that were recorded using the previous phone.



## CALL VOLUME

Adjusting the incoming or outgoing call volume may improve clarity if reception between callers is unclear.

- Incoming call — adjusting this setting allows *you* to hear a difference in volume.
- Outgoing call — adjusting this setting allows *the person you are talking with* to hear a difference in volume.

To access the settings, press the SETTING button, then select “Volume & Beeps”.

You can also adjust the volume of an incoming voice during a call by pushing the volume control switch on the steering wheel or by turning the volume control knob on the instrument panel.


## NISSAN VOICE RECOGNITION SYSTEM (if so equipped)

NISSAN Voice Recognition allows hands-free operation of the systems equipped on this vehicle, such as phone and vehicle information.

There are two voice recognition modes of operation available. They are:

- Standard Mode
- Alternate Command Mode

In Standard Mode (the factory default setting), commands that are available are always shown on the display and announced by the system. You can complete your desired operation by simply following the prompts given by the system. Not all NISSAN Voice Recognition options are available while in Standard Mode.

For advanced operation, you can change to an Alternate Command Mode that enables the operation of the display and audio system through NISSAN Voice Recognition. When this mode is active, an expanded list of commands can be spoken after pushing the TALK  switch on the steering wheel, and the voice command menu prompts are turned off.

In Alternate Command Mode the recognition success rate may be affected because the number of available commands and the ways of speaking each command are increased. See “NISSAN Voice Recognition Alternate Command Mode” in this section.

To improve the recognition success rate when Alternate Command Mode is active, try using the Speaker Adaptation Function available in that mode. See “Speaker Adaptation Function” in this section. Otherwise, it is recommended that Alternate Command Mode be turned off and Standard Mode be used for the best recognition performance.

While using the NISSAN Voice Recognition system for certain Phone and Navigation features, you can switch to using manual controls (touchscreen, NISSAN controller, steering wheel controls) and the information you have already entered by voice control will be retained. To switch to manual controls, select the “Manual Controls” key on the display when it appears. The system will respond by speaking “Changing to manual operation. Please use manual controls to continue.”

For the voice commands for the navigation system, refer to the Navigation System Owner’s Manual of your vehicle.

For vehicles in the U.S., the factory default setting is the Standard Mode. See “Standard Mode” in this section. For vehicles in Canada, the factory default setting is the Alternate Command Mode. See “Alternate Command Mode” in this section.

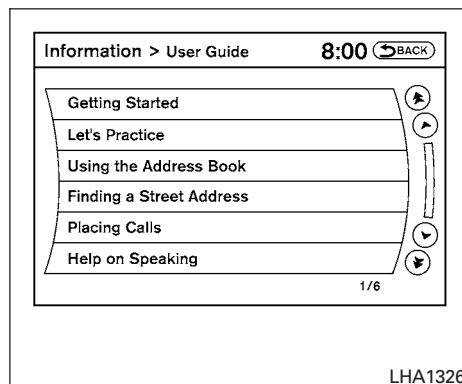
## NISSAN VOICE RECOGNITION STANDARD MODE

The Standard Mode enables control of navigation, phone and vehicle information. With this setting active, commands that are available are always shown on the display and announced by the system.

### Displaying user guide

If you use the NISSAN Voice Recognition system for the first time or you do not know how to operate it, you can display the User Guide for confirmation.

You can confirm how to use voice commands by accessing a simplified User Guide, which contains basic instructions and tutorials for several voice commands.



1. Press the INFO button on the instrument panel.
2. Select the “Others” key.
3. Select the “Voice Recognition” key.

### NOTE:

**You can skip steps 1 to 3 by pressing the  button and saying “Help”.**

4. Select the “User Guide” key.
5. Select an item.

## Available items:

- Getting Started

Describes the basics of how to operate the Voice Recognition system.

- Let's Practice

Initiates a practice session that demonstrates how to improve voice recognition by the system.

- Using the Address Book

Tutorial for using the Address Book

- Finding a Street Address

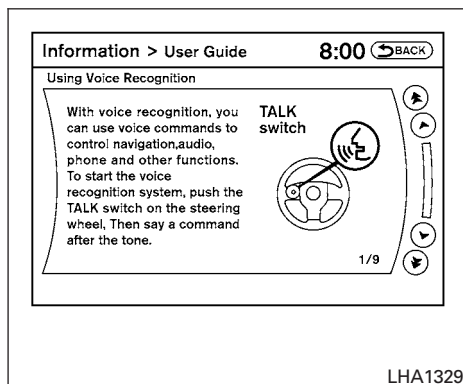
Tutorial for entering a destination by street address.

- Placing Calls

Tutorial for making a phone call by voice command operation.

- Help on Speaking

Displays useful tips of speaking for correct command recognition by the system.



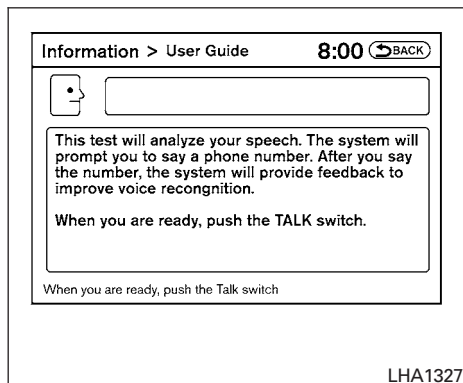
## Getting started

Before using the Voice Recognition system for the first time, you can confirm how to use commands by viewing the Getting Started section of the User Guide.

1. Select the "Getting Started" key.
2. You can confirm the page by scrolling the screen using the NISSAN controller or touching the page down key.

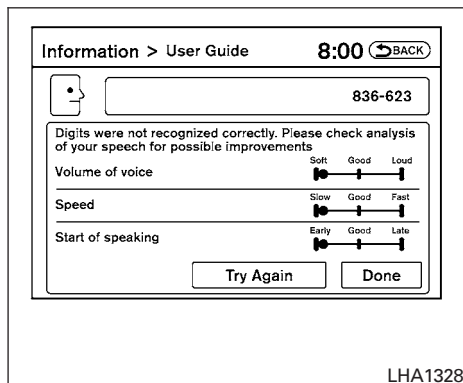
## Tutorials on the operation of the Voice Recognition system

If you choose "Finding a Street Address", "Using the Address Book" or "Placing Calls", you can view tutorials on how to perform these operations using Voice Recognition.

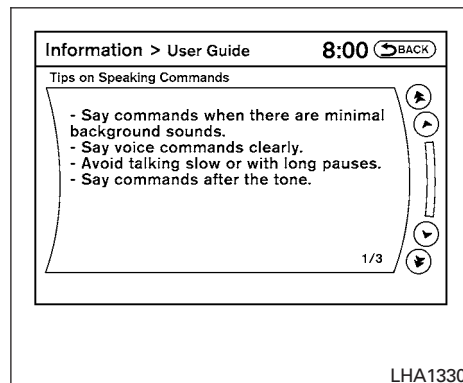


## Let's Practice

The system is equipped with a tutorial that allows you to practice saying commands and receive feedback on the volume, speed and timing of your speech.



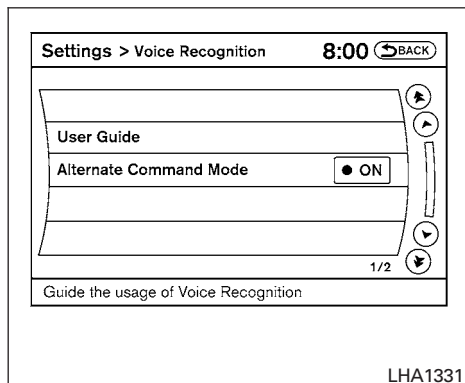
To initiate a practice session, access the User Guide and select the "Let's Practice" key. Follow the on-screen prompts until the session is complete. After the session is completed, a screen will be displayed that shows an analysis of different elements of your speech. Select the "Try Again" to repeat the session if improvement is needed. Select the "Done" key to return to the User Guide screen.



## Useful tips for correct operation

You can display useful speaking tips to help the system recognize your voice commands correctly.

1. Select "Help on Speaking".
2. You can confirm the page by scrolling the screen using the NISSAN controller or touching the page down key.




## Voice recognition settings

The available settings of the NISSAN Voice Recognition system are described.

1. Select "Voice Recognition".
2. You can confirm the page by scrolling the screen using the NISSAN controller.

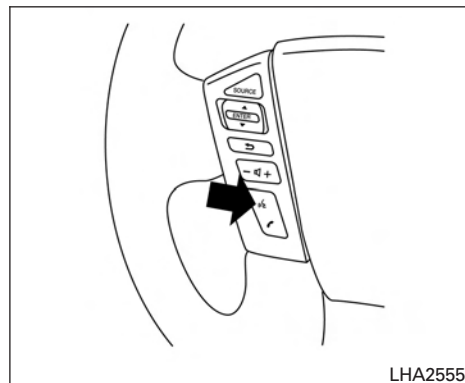
## USING THE SYSTEM Initialization

When the ignition switch is placed in the ON position, NISSAN Voice Recognition is initialized, which takes a few seconds. When completed, the system is ready to accept voice commands. If the  switch is pressed before the initialization completes, voice commands will not be accepted. Please wait until the NISSAN Voice Recognition initialization is completed.


## BEFORE STARTING

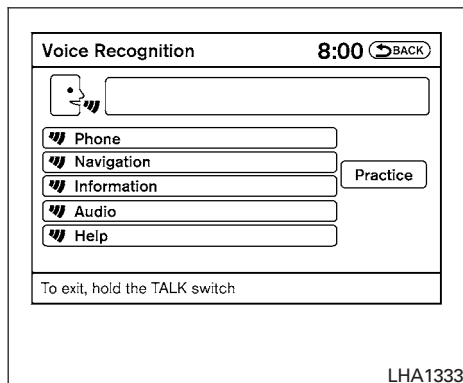
To get the best recognition performance from Voice Recognition, observe the following:



- The interior of the vehicle should be as quiet as possible. Close the windows to eliminate the surrounding noises (traffic noise and vibration sounds, etc.), which may prevent the system from correctly recognizing the voice commands.
- Wait until the tone sounds before speaking a command.
- Speak in a natural conversational voice without pausing between words.
- If the air conditioner is set to "Auto", the fan speed is automatically lowered so that your commands can be recognized more easily.




## GIVING VOICE COMMANDS



1. Press the  switch located on the steering wheel.



2. A list of commands appears on the screen, and the system announces, "Would you like to access Phone, Navigation, Information, Audio or Help?"
3. After the tone sounds and the icon on the screen changes from  to , speak a command.
4. Continue to follow the voice menu prompts and speak after the tone sounds until your desired operation is completed.

## Operating tips

- Say a command after the tone. Voice commands cannot be accepted when the icon is .

- Commands that are available are always shown on the display and spoken through voice menu prompts. Commands other than those that are displayed are not accepted. Please follow the prompts given by the system.
- If the command is not recognized, the system repeats the announcement. Repeat the command in a clear voice.
- Press the  switch on the steering wheel to return to the previous screen.
- If you want to cancel the command, press and hold the  switch. The message, "Voice cancelled" will be announced.
- If you want to adjust the volume of the system feedback, push the volume control switch on the steering wheel or use the audio system volume knob while the system is making an announcement.

## How to speak numbers

Voice Recognition requires a certain way to speak numbers when giving voice commands. Refer to the following examples.

### General rule:

- Only single digits 0 (zero) to 9 can be used.

- When saying the phone number 800-662-6200, the system will accept "eight-hundred" in addition to "eight zero zero" or "eight oh oh". 500, 700, and 900 are also supported.

### Examples:

- 1-800-662-6200
  - "One eight zero zero six six two six two zero zero"
  - "One eight hundred six six two six two zero zero"

### Improving Recognition of Phone numbers:

You can improve the recognition of phone numbers by saying the phone number in three groups of numbers. For example, when you try to call 800-662-6200, say "eight zero zero" first, and the system will then ask you for the next three digits. Then, say "six six two". After recognition, the system will then ask for the last four digits. Say, "six two zero zero". Using this method of phone digit entry can improve recognition performance.

### NOTE:

**When speaking a house number, speak the number "0" as "zero" or "oh". If the letter "O" is included in the house number, it will not be recognized as "0" even if you speak "oh" instead of "zero".**

## Standard Mode command list

### Category Command:

COMMAND	ACTION
Phone	Displays Phone function commands.
Navigation	Displays Navigation function commands.
Information	Displays Vehicle Information.
Audio	Displays Audio commands.
Help	Displays User Guide.

### Phone Command:

COMMAND	ACTION
Dial Number	Makes a call to a spoken phone number up to 10 digits.
Change Number	Corrects the phone number when it is not recognized (available during phone number entry).
Vehicle Phonebook	Makes a call to a contact that is stored in the vehicle phonebook.
Handset Phonebook	Makes a call to a contact that is stored in the handset phonebook.
Call History	Makes a call to a number in the incoming or outgoing call logs.
International Call	Makes an international call by allowing more than 10 digits to be spoken, as well as star (*), pound (#), and plus (+).

### Navigation Command:

COMMAND	ACTION
Home	Sets a route to your home that is stored in the Address Book.
Address	Searches for a location by the street address specified, and sets a route (for continental US and Canada only).
Places	Sets a route to a facility near the current vehicle location.
Address Book	Searches for a location stored in the Address Book.
Previous Destinations	Sets a route to a previous destination.

**Vehicle Information Command:**

COMMAND	ACTION
Fuel Economy	Displays Fuel Economy information.
Maintenance	Displays Maintenance information.
Traffic Info.	Turns the traffic information system on and off.
Where am I?	Displays current vehicle location.

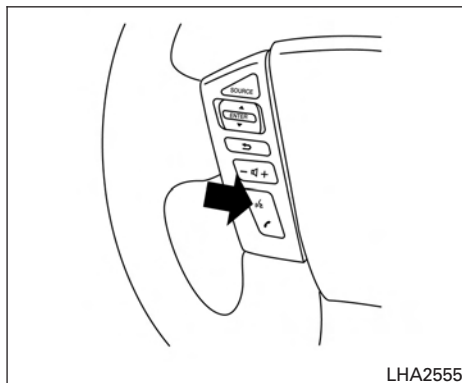
**Audio Command:**

COMMAND	ACTION
AM	Changes the audio system mode to AM radio.
FM	Changes the audio system mode to FM radio.
XM	Changes the audio system mode to satellite radio.
CD	Changes the audio system mode to CD.


## Voice command examples

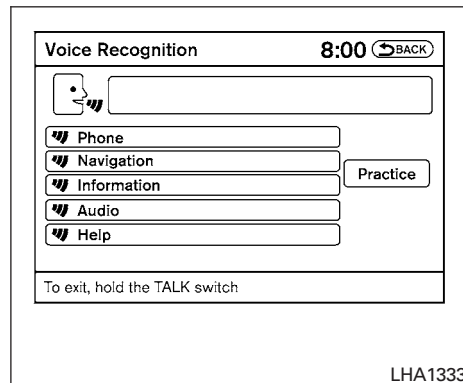
Some basic voice command examples are described here.

For navigation system commands, see the separate Navigation System Owner's Manual.

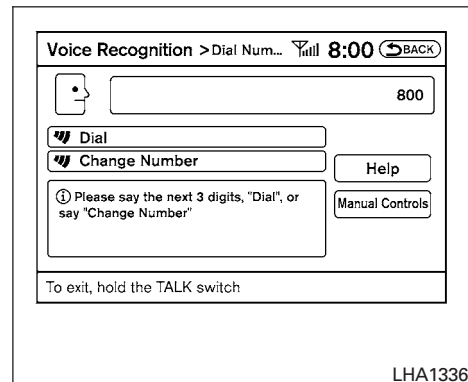
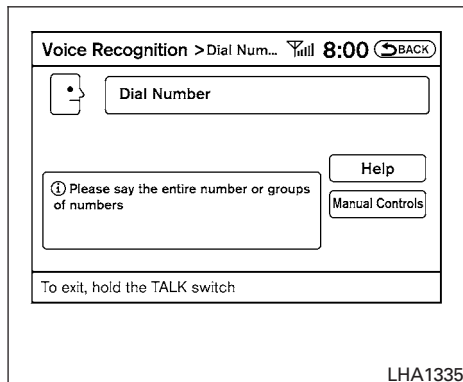
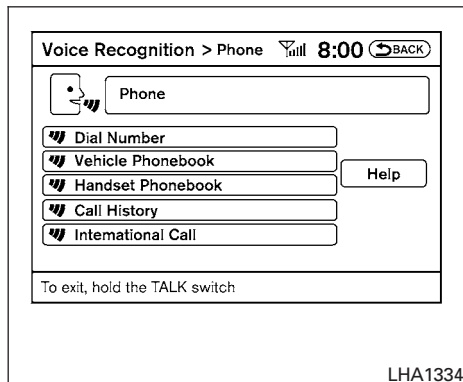


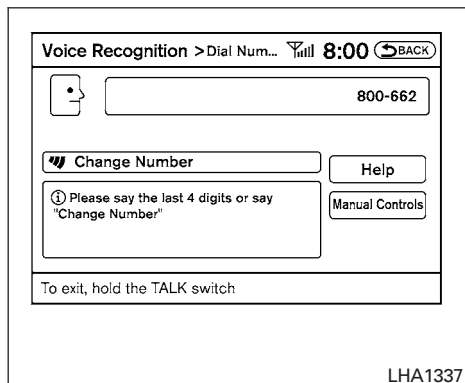
### Example 1 — Placing a call to the phone number 800-662-6200:

1. Press the  switch located on the steering wheel.

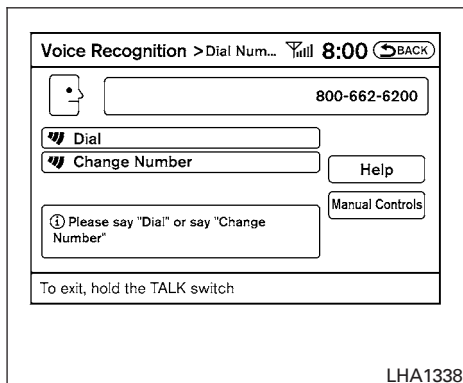


2. The system announces, "Would you like to access Phone, Navigation, Information, Audio or Help?"
3. Say "Phone".





8. The system announces, "Please say the last four digits or say change number."
9. Say "6200".

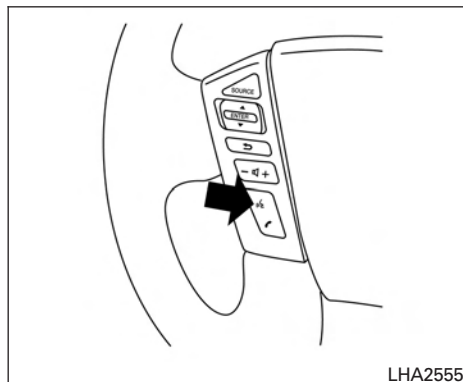


10. The system announces, "Dial or Change Number?"
11. Say "Dial".
12. The system makes a call to 800-662- 6200.


#### NOTE:

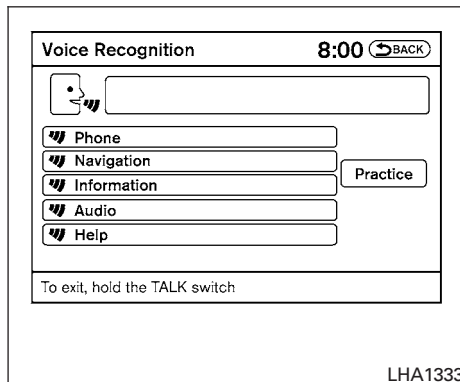
- You can also speak "800-662-6200" (10 continuous digits) or "662-6200" (7 continuous digits), if the area code is not necessary. However, the 3-3-4 digit grouping is recommended for improved recognition. See "How to speak numbers" in this section.

- You can only say a phone number using the 3-3-4 grouping, 7 digits, and 10 digits using this command. Please use the "International Call" command for all other formats, and when special characters such as star (\*), pound (#), and plus (+) need to be entered.
- If you say "Change Number" during phone number entry, the system will automatically request that you repeat the number using the 3-3-4 format. In this case please say the area code first and then follow the prompts.
- Do not add a "1" in front of the area code when speaking phone numbers.
- If the system does not recognize your command, please try repeating the command using a natural voice. Speaking too slowly or too loudly may further decrease recognition performance.

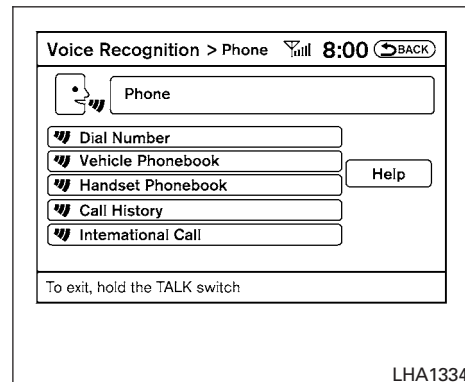


**Example 2 — Placing an international call to the phone number 011-81-111-222-3333:**

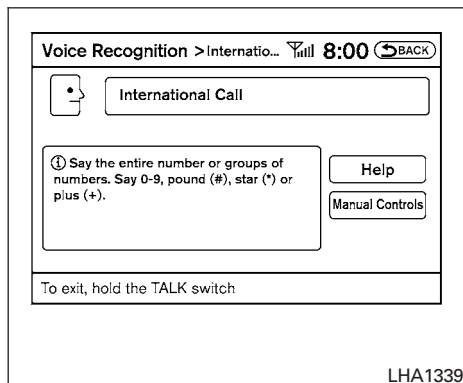
1. Press the  switch located on the steering wheel.



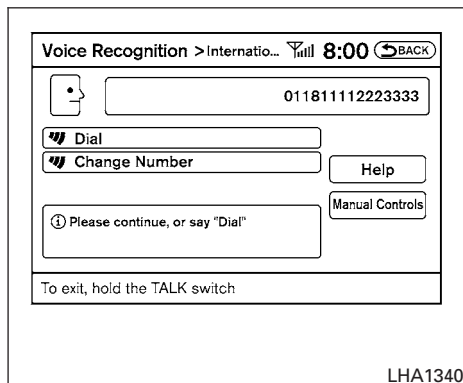
2. The system announces, "Would you like to access Phone, Navigation, Information, Audio or Help?"
3. Say "Phone".



4. Say "International Call".



5. Say "011811112223333".



6. Say "Dial".


7. The system makes a call to 011-81-111-222-3333.

#### NOTE:

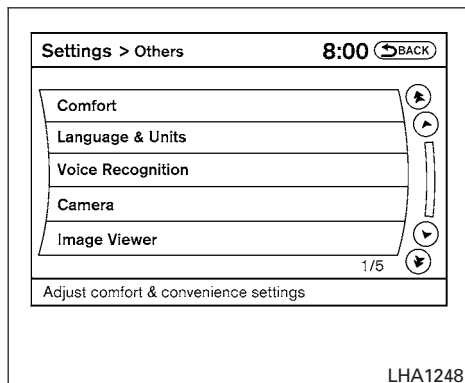
**Any digit input format is available in the International Number input process, as well as the special characters such as star (\*), pound (#), and plus (+).**

## NISSAN VOICE RECOGNITION ALTERNATE COMMAND MODE

The Alternate Command Mode enables control of the audio and display systems as well as additional commands for the Vehicle Information, Phone and Navigation systems. With this setting active, the system does not announce or display the available commands at each step.

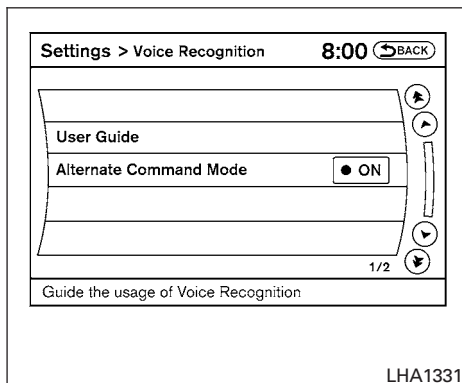
When Alternate Command Mode is activated, an expanded list of commands can be used after pushing the TALK  switch. Under this mode, the screen for Standard Mode commands is not available on the display. Please review the expanded command list, available when this mode is active, as some Standard Mode commands are replaced. Please see examples of Alternate Command Mode screens.

Please note that in this mode the recognition success rate may be affected as the number of available commands and ways of speaking each command are increased. You can turn this mode ON or OFF. When this mode is activated, the Voice Recognition Settings will change to show more options.

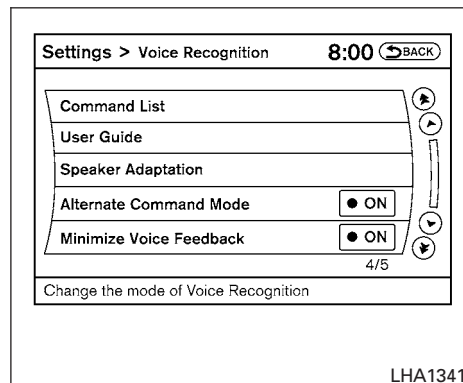


## Activating Alternate Command Mode

1. Press the **SETTING** button on the instrument panel.
2. Select the "Others" key on the display.
3. Select the "Voice Recognition" key.




4. Select the "Alternate Command Mode" key.
5. The confirmation message is displayed on the screen. Select the "OK" key to activate the Alternate Command Mode.

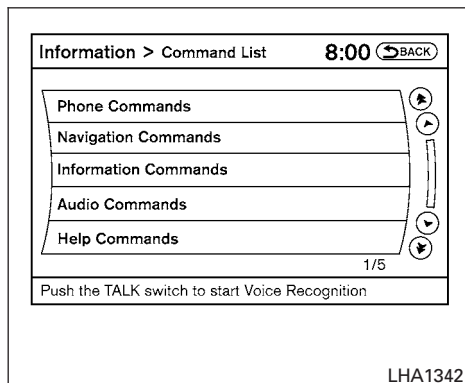


6. Alternate Command Mode is activated and the setting menu is expanded to include the Alternate Command Mode options. See "Settings menu" in this section for an explanation of the options.

## Displaying the command list

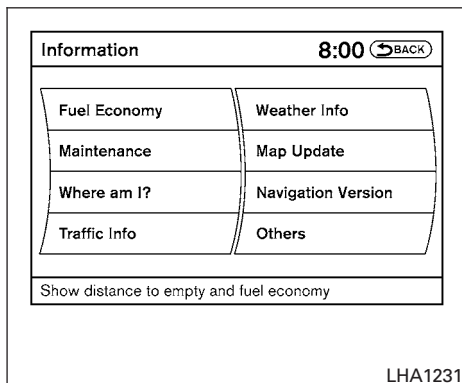
If you are controlling the system by voice commands for the first time or do not know the appropriate voice command, perform the following procedure for displaying the voice command list (available only in Alternate Command Mode).

Press the  switch, listen for the tone and say, "Help". The system will respond by displaying the command list main menu.



Only manual controls such as the touchscreen can navigate the command list menu.

As an alternative to the voice command “Help”, you may access the command list using the following steps:

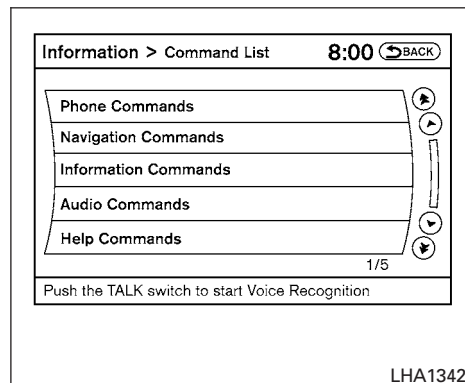


1. Press the INFO button on the instrument panel.
2. Select the “Others” key using the NISSAN controller.
3. Select the “Voice Recognition” key using the NISSAN controller.

#### NOTE:

**You can skip steps 1 to 3 if you say “Help”.**

4. Select the “Command List” key using the NISSAN controller.



5. Select a category using the NISSAN controller. The command list for the category selected is shown.
6. If necessary, scroll the screen using the NISSAN controller to view the entire list.
7. Press the BACK button to return to the previous screen.

## Alternate Command Mode command list

### Phone Command:

COMMAND	ACTION
Dial Number	Makes a call to a spoken phone number up to 10 digits.
Vehicle Phonebook	Makes a call to a contact in the vehicle phonebook.
Handset Phonebook	Makes a call to a contact in the handset phonebook.
International Call	Makes an international call by allowing more than 10 digits to be spoken, as well as star (*), pound (#), and plus (+).
Call <name>	Makes a call to a contact that is stored in either the Vehicle Phonebook or Handset Phonebook. Please say "Call" followed by a stored name.
Incoming Calls	Shows the last 5 incoming phone calls.
Outgoing Calls	Shows the last 5 outgoing phone calls.
Missed Calls	Shows the last 5 missed phone calls.

### Navigation Command:

COMMAND	ACTION
Home	Sets a route to your home that is stored in the Address Book.
Address	Searches for a location by the street address specified, and sets a route (for continental US and Canada only).
Places	Sets a route to a facility near the current vehicle location.
Address Book	Displays the first 5 entries of the Address Book.
Previous Destinations	Sets a route to a previous destination.
Previous Start Point	Calculates a route to your previous starting point of the last route.
Minimize Freeway Route	Recalculates a route to the current destination while minimizing freeway usage.
Fastest Route	Recalculates a route to the current destination using the fastest estimated time.
Shortest Route	Recalculates a route to the current destination using the shortest distance.
Cancel Route	Cancels the current route.
Delete Destination	Deletes the current destination.
Birdview Map	Changes the Map display to Birdview.

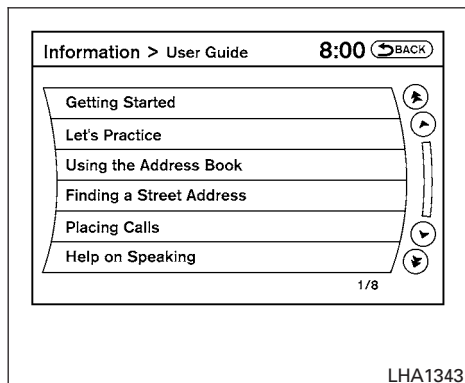
COMMAND	ACTION
Planview Map	Changes the Map display to a 2-dimensional view.
North Up	Changes the Map display to keep north pointing up on the screen.
Heading Up	Changes the Map display to keep the direction of the vehicle pointing up on the screen.
Zoom In <1 to 13>	Changes the map scale to a smaller number.
Zoom Out <1 to 13>	Changes the map scale to a larger number.
Guidance Voice ON/OFF	Turns the navigation voice guidance on or off.
Guide Voice Repeat	Repeats the last navigation voice guidance.

#### Information Command:

COMMAND	ACTION
Fuel Economy	Displays Fuel Economy information.
Maintenance	Display Maintenance information.
Traffic Information	Turns the traffic information system on and off.
Where am I?	Displays the current vehicle location.
Weather Information	Displays weather information.
Weather Map	Displays the current weather map.

#### Audio Command:

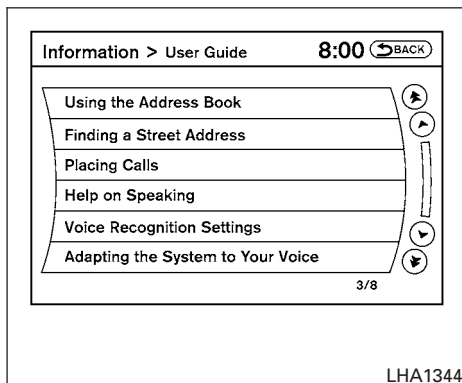
COMMAND	ACTION
AM	Turns to the AM band, selecting the station last played.
FM	Turns to the FM band, selecting the station last played.
XM	Turns to the SAT band, selecting the station last played.
CD	Starts to play a CD.
USB	Turns to the USB audio input.
Bluetooth Audio	Turns to the Bluetooth® audio system.
AUX	Turns to the AUX input.



## Displaying user guide

You can confirm how to use voice commands by accessing a simplified User Guide, which contains basic instructions and tutorials for several voice commands.

1. Press the INFO button on the instrument panel.
2. Select the "Others" key.
3. Select the "Voice Recognition" key.
4. Select the "User Guide" key.



5. Select an item.


### Available items:

- **Getting Started**  
Describes the basics of how to operate the Voice Recognition system.
- **Let's Practice**  
Initiates a practice session that demonstrates how to improve recognition by the system.

- **Using the Address Book**  
Tutorial for using the Address Book.
- **Finding a Street Address**  
Tutorial for Finding a Street Address.
- **Placing Calls**  
Tutorial for making a phone call by voice command operation.
- **Help on Speaking**  
Displays useful tips for how to correctly speak commands in order for them to be properly recognized by the system.
- **Voice Recognition Settings**  
Describes the available Voice Recognition settings.
- **Adapting the System to Your Voice**  
Tutorial for adapting the system to your voice.

## USING THE SYSTEM

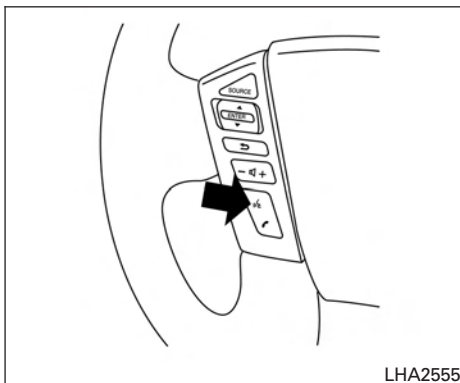
### Initialization

When the ignition switch is placed in the ON position, NISSAN Voice Recognition is initialized, which takes a few seconds. When completed, the system is ready to accept voice commands. If the  switch is pressed before the initialization completes, the display will show the message: "System not ready." or a beep sounds.


### Before starting

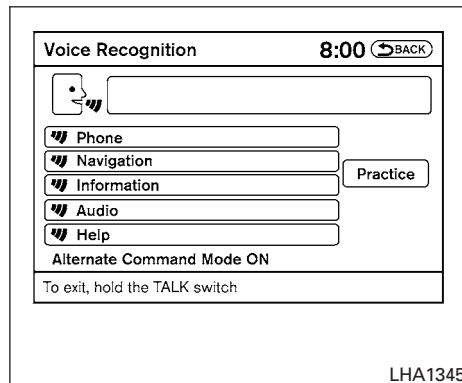
To get the best performance from NISSAN Voice Recognition, observe the following:



- Keep the interior of the vehicle as quiet as possible. Close the windows to eliminate the surrounding noises (traffic noises, vibration sounds, etc.), which may prevent the system from recognizing the voice commands correctly.
- When the climate control is in the AUTO mode, the fan speed decreases automatically for easy recognition.
- Wait until a tone sounds before speaking a command.
- Speak in a natural voice without pausing between words.



### Giving voice commands




1. Press and release the  button located on the steering wheel.



2. A list of commands appears on the screen, and the system announces, "Please say a command from the displayed list or say Help to show all commands."
3. After the tone sounds and the icon on the screen changes from  to , speak a command.
4. Once a command is recognized, the system will announce the recognized command and perform the requested action.

If the command is not recognized, the system repeats the announcement. Repeat the command in a clear voice after the tone.

## Operating tips

- Say a command after the tone. Voice commands cannot be accepted when the icon is .
- If the command is not recognized, the system repeats the announcement. Repeat the command in a clear voice.
- Press the  switch on the steering wheel to return to the previous screen.
- If you want to cancel the command, press and hold the  switch. The message, "Voice cancelled" will be announced.
- If you want to adjust the volume of the system feedback, push the volume control switch on the steering wheel or use the audio system volume knob while the system is making an announcement.
- To minimize the amount of prompts spoken by the system in Alternate Command Mode, use the Minimize Voice Feedback function. To access the Minimize Voice Feedback function press the SETTING button, then select the "Others" key. Then select the "Voice Recognition" key.

## How to speak numbers

Voice Recognition requires a certain way to speak numbers when giving voice commands. Refer to the following examples.

### General rule:

- Only single digits 0 (zero) to 9 can be used.
- When saying the phone number 800-662-6200, the system will accept "eight-hundred" in addition to "eight zero zero" or "eight oh oh". 500, 700, and 900 are also supported.

### Examples:

- 1-800-662-6200
  - "One eight zero zero six six two six two zero zero"
  - "One eight hundred six six two six two zero zero"

### Improving Recognition of Phone numbers:

You can improve the recognition of phone numbers by saying the phone number in three groups of numbers. For example, when you try to call 800-662-6200, say "eight zero zero" first, and the system will then ask you for the next three digits. Then, say "six six two". After recognition, the system will then ask for the last four digits.

Say, "six two zero zero". Using this method of phone digit entry can improve recognition performance.

### NOTE:

**When speaking a house number, speak the number "0" as "zero" or "oh". If the letter "O" is included in the house number, it will not be recognized as "0" even if you speak "oh" instead of "zero".**

## Settings menu

The content of the Settings Menu differs when the system is in the Alternate Command Mode.

### Command List:

Displays the command list for Alternate Command Mode.

### User Guide:

The user guide provides basic instructions for using Voice Recognition and accessing some voice commands.

### NOTE:

**The user guide can also be accessed from within the INFO menu after pressing the INFO button.**

### Speaker Adaptation:

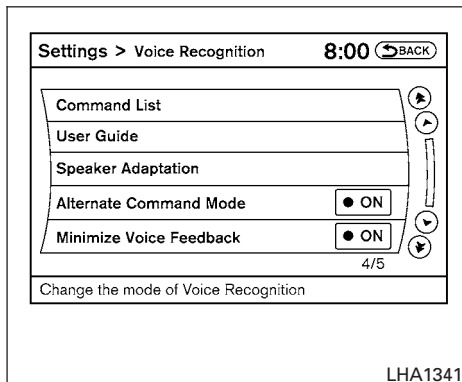
Starts a system training procedure to learn the specific sounds of your voice. See “Speaker adaptation function” in this section.

### Alternate Command Mode:

For advanced operation, an Alternate Command Mode is provided. This setting enables control of the Audio and Climate Control systems in addition to additional commands for the Phone and Navigation systems. With this setting active, the system does not announce or display the available commands at each step. When this mode is activated, the Voice Recognition Settings will change to show more options.

### Minimize Voice Feedback:

Reduces the amount of the information spoken for each voice instruction.

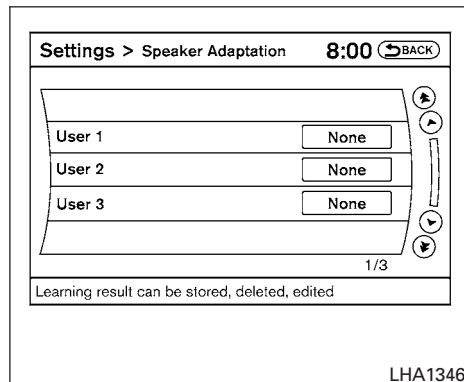


## SPEAKER ADAPTATION FUNCTION

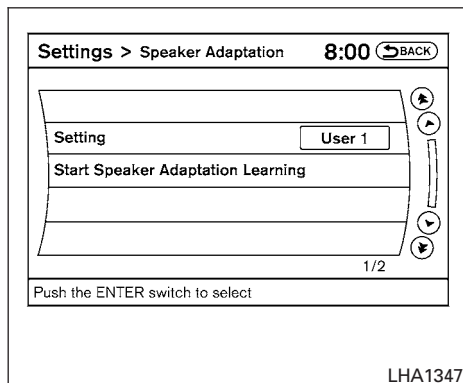
The Voice Recognition system has a function to learn the user's voice for better voice recognition performance. The system can memorize the voices of up to three persons.

### Having the system learn the user's voice

1. Press the SETTING button on the instrument panel, select the “Others” key on the display.
2. Select the “Voice Recognition” key.
3. Select the “Speaker Adaptation” key.



4. Select the user whose voice is to be memorized by the system.



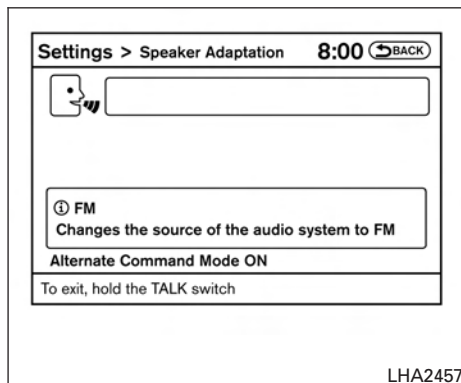
5. Select a category to be learned by the system from the following list:



- Phone
- Navigation
- Information
- Audio
- Help


The voice commands in the category are displayed.

6. Select a voice command to train.

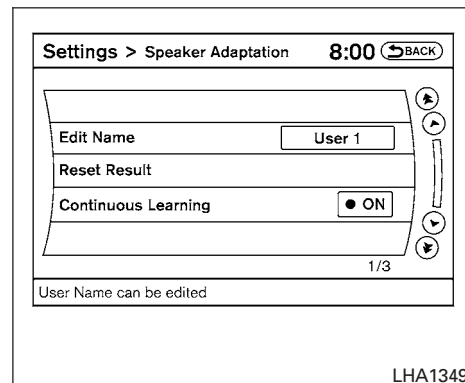
The Voice Recognition system starts.



7. The system requests that you repeat a command after a tone. This command is also displayed on the screen.
8. After the tone sounds and the icon on the screen changes from  to , speak the command that the system requested.
9. When the system has recognized the voice command, the voice of the user is learned.

Press the  switch or the BACK button to return to the previous screen.

If the system has learned the command correctly, the voice command indicator on the screen turns on.



## Speaker Adaptation function settings

### Edit Name:

Edit the user name using the keypad displayed on the screen.

### Reset Result:

Resets the user's voice that the Voice Recognition system has learned.

### Continuous Learning:

When this item is turned to ON, you can have the system learn the voice commands in succession, without selecting commands one by one.

## TROUBLESHOOTING GUIDE

The system should respond correctly to all voice commands without difficulty. If problems are encountered, follow the solutions given in this guide for the appropriate error.

Where the solutions are listed by number, try each solution in turn, starting with number one, until the problem is resolved.

Symptom/error message	Solution
Displays "COMMAND NOT RECOGNIZED" or the system fails to interpret the command correctly.	<ol style="list-style-type: none"><li>1. Ensure that the command format is valid, see "Standard Mode command list" or "Alternate Command Mode command list" in this section.</li><li>2. Speak clearly using your normal speech pattern and at a level appropriate to the ambient noise level.</li><li>3. Ensure that the ambient noise level is not excessive, for example, windows open or defrost on.</li></ol> <p><b>NOTE:</b></p> <p><b>If it is too noisy to use the phone, it is likely that voice commands will not be recognized.</b></p>
The system consistently selects the wrong voicetag in the phonebook.	<ol style="list-style-type: none"><li>1. Ensure that the voicetag requested matches what was originally stored. See "Bluetooth® Hands-Free Phone System with Navigation System" in this section.</li><li>2. Replace one of the voicetags being confused with a different voicetag.</li></ol>

# 5 Starting and driving

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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 rear vent windows, liftgates, doors and trunk lids (if so equipped) closed while driving, otherwise exhaust gases could be drawn into the passenger compartment. If you must drive with one of these open, follow these precautions:
  1. Open all the windows.
  2. Set the  air 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.**

### **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.**

## **ON-PAVEMENT AND OFF-ROAD DRIVING PRECAUTIONS**

### **Utility vehicles have a significantly higher rollover rate than other types of vehicles.**

They have higher ground clearance than passenger cars to make them capable of performing in a variety of on-pavement and off-road applications. This gives them a higher center of gravity than ordinary cars. An advantage of higher ground clearance is a better view of the road, allowing you to anticipate problems. However, they are not designed for cornering at the same speeds as conventional two-wheel drive vehicles any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions. If at all possible, avoid sharp turns at high speeds. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or vehicle rollover. In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt.

Be sure to read the driving safety precautions later in this section.

## **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.

## 5-4 Starting and driving

### 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 in all 4 tires. 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.
- The CHECK TIRE PRESSURE warning appears in the vehicle information display when the low tire pressure warning light is illuminated and low tire pressure is detected. The CHECK TIRE PRESSURE warning turns off when the low tire pressure warning light turns off.
- The CHECK TIRE PRESSURE warning does not appear if the low tire pressure warning light illuminates to indicate a TPMS malfunction.

- 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 4 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 "Monitor, climate, audio, phone, and voice recognition systems" section.

For additional information, see "Low tire pressure warning light" in the "Instruments and controls" section, "Tire Pressure Monitoring System (TPMS)" in the "In case of emergency" section.

### **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 under-inflated 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.

### **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:**

#### **For USA:**

**This device complies with Part 15 of the FCC Rules. 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.** Note: Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## For Canada:

**This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions:**

1. **This device may not cause interference, and**
2. **This device must accept any interference, include interference that may cause undesired operation of the device.**
3. **The term “IC:” before the radio certification number only signifies that Industry Canada technical specifications were met.**

## AVOIDING COLLISION AND ROLLOVER

### **WARNING**

**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**

## 5-6 Starting and driving

**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

If the right side or left side wheels unintentionally leave the road surface, 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.

### **WARNING**

**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.**

1. Remain calm and do not over react.

2. 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 manual.

## **DRINKING ALCOHOL/DRUGS AND DRIVING**

### **WARNING**

**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.

## **DRIVING SAFETY PRECAUTIONS**

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

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

Please observe the following precautions:

### **WARNING**

- Drive carefully when off the road and avoid dangerous areas. Every person who drives or rides in this vehicle should be seated with their seat belt fastened. This will keep you and your passengers in position when driving over rough terrain.
- Do not drive across steep slopes. Instead drive either straight up or straight down the slopes. Off-road vehicles can tip over sideways much more easily than they can forward or backward.
- Many hills are too steep for any vehicle. If you drive up them, you may stall. If you drive down them, you may not be able to control your speed. If you drive across them, you may roll over.
- Do not shift gears while driving on downhill grades as this could cause loss of control of the vehicle.
- Stay alert when driving to the top of a hill. At the top there could be a drop-off or other hazard that could cause an accident.

- If your engine stalls or you cannot make it to the top of a steep hill, never attempt to turn around. Your vehicle could tip or roll over. Always back straight down in R (Reverse) gear and apply brakes to control your speed.
- Heavy braking going down a hill could cause your brakes to overheat and fade, resulting in loss of control and an accident. Apply brakes lightly and use a low gear to control your speed.
- Unsecured cargo can be thrown around when driving over rough terrain. Properly secure all cargo so it will not be thrown forward and cause injury to you or your passengers.
- To avoid raising the center of gravity excessively, do not exceed the rated capacity of the roof rack and evenly distribute the load. Secure heavy loads in the cargo area as far forward and as low as possible. Do not equip the vehicle with tires larger than specified in this manual. This could cause your vehicle to roll over.

- Do not grip the inside or spokes of the steering wheel when driving off-road. The steering wheel could move suddenly and injure your hands. Instead drive with your fingers and thumbs on the outside of the rim.
- Before operating the vehicle, ensure that the driver and all passengers have their seat belts fastened.
- Lower your speed when encountering strong crosswinds. With a higher center of gravity, your NISSAN is more affected by strong side winds. Slower speeds ensure better vehicle control.
- Do not drive beyond the performance capability of the tires, even with 4WD engaged.
- For 4WD equipped vehicles, do not attempt to raise two wheels off the ground and shift the transmission to any drive or reverse position with the engine running. Doing so may result in drivetrain damage or unexpected vehicle movement which could result in serious vehicle damage or personal injury.

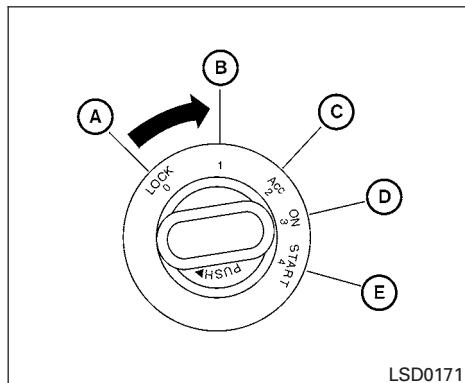
## IGNITION SWITCH

- Do not attempt to test a 4WD equipped vehicle on a 2-wheel dynamometer (such as the dynamometers used by some states for emissions testing), or similar equipment even if the other two wheels are raised off the ground. Make sure you inform test facility personnel that your vehicle is equipped with 4WD before it is placed on a dynamometer. Using the wrong test equipment may result in drivetrain damage or unexpected vehicle movement which could result in serious vehicle damage or personal injury.
- Accelerating quickly, sharp steering maneuvers or sudden braking may cause loss of control.
- If at all possible, avoid sharp turning maneuvers, particularly at high speeds. Your NISSAN four-wheel drive vehicle has a higher center of gravity than a passenger car. The vehicle is not designed for cornering at the same speeds as passenger cars.

- Always use tires of the same type, size, brand, construction (bias, bias-belted, or radial), and tread pattern on all four wheels. Install tire chains on the rear wheels when driving on slippery roads and drive carefully.
- Be sure to check the brakes immediately after driving in mud or water. See “Brake system” later in this section for “Wet brakes”.
- Avoid parking your vehicle on steep hills. If you get out of the vehicle and it rolls forward, backward or sideways, you could be injured.
- Whenever you drive off-road through sand, mud or water as deep as the wheel hub, more frequent maintenance may be required. See “Periodic maintenance” in the “NISSAN Service and Maintenance Guide.”

### WARNING

- Never remove or turn the key to the LOCK position while driving. The steering wheel will lock (for models with a steering lock mechanism). This may cause the driver to lose control of the vehicle and could result in serious vehicle damage or personal injury.
- Never place the ignition switch in the LOCK position while driving. The steering wheel will lock (for models with a steering lock mechanism). This may cause the driver to lose control of the vehicle and could result in serious vehicle damage or personal injury.



## NISSAN INTELLIGENT KEY® (if so equipped)

The ignition lock is designed so that the ignition switch cannot be turned to LOCK until the shift selector is moved to the P (Park) position.

When turning the ignition switch, make sure the shift selector is in the P (Park) position.

If the shift selector is not returned to the P (Park) position, the ignition switch cannot be moved toward LOCK.

When the ignition switch cannot be turned toward the LOCK position when the Intelligent Key is in range, proceed as follows:

### 5-10 Starting and driving

1. Move the shift selector into the P (Park) position.
2. Turn the ignition switch slightly in the ON direction.
3. Turn the switch toward the LOCK position.

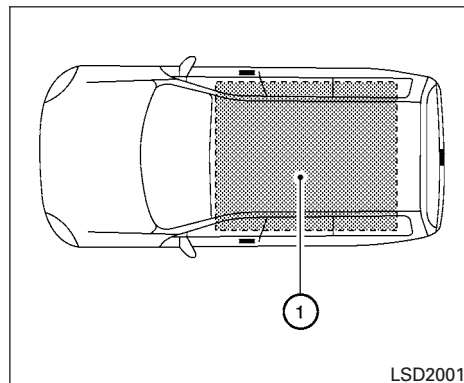
**The shift selector can be moved from the P (Park) position if the ignition switch is in the ON position and the foot brake pedal is depressed.**

There is an OFF position in between LOCK and ACC, although it does not show on the ignition switch. When the ignition switch is OFF, the steering wheel is not locked (for models with a steering wheel lock mechanism).

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

**To lock the steering wheel, turn the ignition switch to the LOCK position. To unlock the steering wheel, push the ignition switch in and turn it gently while rotating the steering wheel slightly right and left.**

**If the battery of the vehicle equipped with the Intelligent Key system is discharged, the ignition switch cannot be turned from the LOCK position, even using the mechanical key.**



## Operating range

The Intelligent Key functions can only be used when the Intelligent Key is within the specified operating range.

When the Intelligent Key battery is almost discharged or strong radio waves are present near the operating location, the Intelligent Key system's operating range becomes narrower and may not function properly.

If the Intelligent Key is within the operating range, it is possible for anyone, even someone who does not carry the Intelligent Key, to turn the ignition switch to start the engine.

The operating range of the engine start function is inside of the vehicle ①.

- The luggage area is not included in the operating range, but the Intelligent Key may function.
- If the Intelligent Key is placed on the instrument panel, inside the glove box, storage bin or door pocket, the Intelligent Key may not function.
- If the Intelligent Key is placed near the door or window outside the vehicle, the Intelligent Key may function.

## IGNITION SWITCH POSITIONS

Push in the ignition switch to the ② position when you turn it.

### LOCK (Normal parking position) ① :

The ignition switch can only be locked in the LOCK position.

The ignition switch will be unlocked when it is pushed in, and turned to the ACC position ③ while carrying the Intelligent Key.

### ACC (Accessories) ③ :

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

### ON (Normal operating position) ② :

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

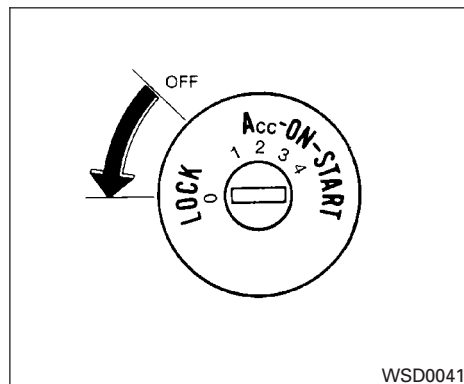
### START ④ :

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

The ignition switch cannot be turned back to the LOCK position unless the shift selector is in the P (Park) position. (It can be turned only to the ② position.)

## ⚠ CAUTION

**Do not leave the vehicle with the ignition switch in ACC or ON positions when the engine is not running for an extended period. This can discharge the battery.**



## AUTOMATIC TRANSMISSION

The ignition lock is designed so the ignition switch cannot be placed in the LOCK position and the key cannot be removed until the shift selector is moved to the P (Park) position.

When removing the key from the ignition switch, make sure the shift selector is in the P (Park) position.

If the shift selector is not returned to P (Park) position, the ignition switch cannot be placed in the LOCK position.

To remove the key from the ignition switch:

1. Shift the shift selector to the P (Park) position with the ignition switch in the ON position.
2. Place the ignition switch in the LOCK position.
3. Remove the key from the ignition switch.

If the shift selector is shifted to the P (Park) position after the ignition switch is placed in the OFF position or when the ignition switch cannot be placed in the LOCK position, proceed as follows to remove the key.

1. Move the shift selector into the P (Park) position.
2. Place the ignition switch slightly toward the ON position.
3. Place the ignition switch in the LOCK position.
4. Remove the key.

The shift selector is designed so it cannot move out of P (Park) and into any of the other gear positions if the ignition switch is placed in the 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 ON positions. The OFF position is indicated by a "1" on the ignition switch. For models without NISSAN vehicle immobilizer system: when the ignition switch 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 ignition 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.**

**If the key will not turn from the LOCK position, turn the steering wheel to the left or right while turning the key to unlock the key cylinder.**

## 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.

## BEFORE STARTING THE ENGINE

### 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 windshield-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 and headrests (if so equipped).
- 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 placed in the ON position. See "Warning/indicator lights and audible reminders" in the "Instruments and controls" section of this manual.

## STARTING THE ENGINE

1. Apply the parking brake.
2. 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 switch 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 is in any of the driving positions.**

3. Crank the engine **with your foot off the accelerator pedal** by placing the ignition switch in the START position. 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 5 to 6 seconds. After cranking the engine, release the accelerator pedal. Crank the engine **with your foot off the accelerator pedal** by turning the ignition key to START. Release the key when the engine starts. If the engine starts, but fails to run, repeat the above procedure.

### 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.**

4. 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.

### NOTE:

**Care should be taken to avoid situations that can lead to potential battery discharge and potential no-start conditions such as:**

1. Installation or extended use of electronic accessories that consume battery power when the engine is not running (Phone chargers, GPS, DVD players, etc.)
2. Vehicle is not driven regularly and/or only driven short distances. In these cases, the battery may need to be charged to maintain battery health.

## DRIVING THE VEHICLE

### ENGINE PROTECTION MODE



The engine has an engine protection mode to reduce the chance of damage if the coolant temperature becomes too high (for example, when climbing steep grades in high temperature with heavy loads, such as when towing a trailer). When the engine temperature reaches a certain level:

- The engine coolant temperature gauge will move toward the H position.
- Engine power may be reduced.
- The air conditioning cooling function may be automatically turned OFF for a short time (the blower will continue to operate).

Engine power and, under some conditions, vehicle speed will decrease. Vehicle speed can be controlled with the accelerator pedal, but the vehicle may not accelerate at the desired speed. The transmission will downshift or upshift as it reaches prescribed shift points. You can also shift manually.

As driving conditions change and engine coolant temperature is reduced, vehicle speed can be increased using the accelerator pedal, and air conditioning cooling function will automatically be turned back ON.

If:

1. The engine coolant temperature is not reduced.
2. The air conditioning cooling function does not turn back ON.
3. The engine oil pressure warning/engine coolant temperature high indicator  illuminates, this may indicate a malfunction. Move the vehicle off the road in a safe area and allow the engine to cool. If after checking the oil and coolant, the  remains on, do not continue to drive and call a NISSAN dealer.

The check engine light may also come ON. If **only** it remains on, you do not need to have your vehicle towed, but have it inspected soon by a NISSAN dealer. See “Check engine light” in the “Instruments and controls ” section of this manual.

#### WARNING

**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.**

#### 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.**

## AUTOMATIC TRANSMISSION

#### WARNING

- **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.**
- **Except in an emergency, do not shift to the N (Neutral) position while driving. Coasting with the transmission in the N (Neutral) position may cause serious damage to the transmission.**

### **⚠ 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.

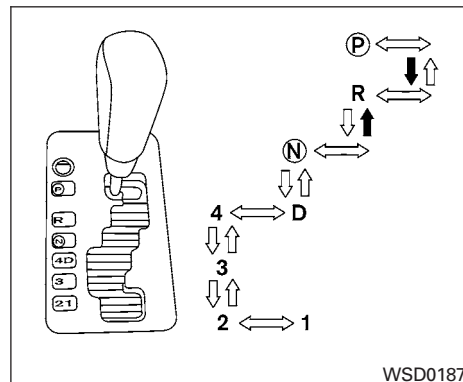
The recommended operating procedures for this transmission are shown on the following pages. Follow these procedures for maximum vehicle performance and driving enjoyment.

### **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 the P (Park) position and into any of the other gear positions if the ignition switch is placed in the LOCK or OFF position.



To move the shift selector:

- ➡ : Shift while depressing the brake pedal
- ⇔ : Shift without depressing brake pedal

### **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 shift selector 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 ignition switch is placed in the OFF or ACC position for any reason while the vehicle is in N (Neutral), or any D (Drive) position, the ignition switch cannot be turned to the LOCK position. Move the shift selector to the P (Park) position, then the ignition switch can be turned to LOCK.

### **P (Park):**

### 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 move the shift selector into the P (Park) position.

### **R (Reverse):**

### 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.

### **4 (Fourth gear):**

Use this position for driving up and down long slopes where engine braking would be advantageous.

Do not downshift into the 4 position at speeds over the following and do not exceed the following speeds in the 4 position.

4H:

62 MPH (100 km/h)

4LO:

31 MPH (50 km/h)

### **3 (Third gear):**

Use this position for driving up and down long slopes where engine braking would be advantageous.

### **2 (Second gear):**

Use this position for hill climbing or engine braking on downhill grades.

Do not downshift into the 2 position at speeds over the following and do not exceed the following speeds in the 2 position.

2WD and AUTO:

71 MPH (115 km/h) w/o tow mode

62 MPH (100 km/h) w/tow mode

4H:

62 MPH (100 km/h) w/o tow mode

62 MPH (100 km/h) w/tow mode

4LO:

31 MPH (50 km/h) w/o tow mode

27 MPH (44 km/h) w/tow mode

## 1 (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 downshift into the 1 position at speeds over the following and do not exceed the following speeds in the 1 position.

2WD and AUTO:

43 MPH (70 km/h) w/o tow mode

37 MPH (60 km/h) w/tow mode

4H:

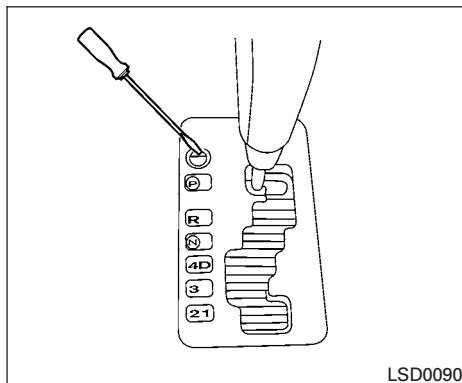
43 MPH (70 km/h) w/o tow mode

37 MPH (60 km/h) w/tow mode

4LO:

19 MPH (30 km/h) w/o tow mode

16 MPH (27 km/h) w/tow mode



## 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 placed in the ON position (for models with a steering lock mechanism). This allows the vehicle to be moved if the battery is discharged.

To push the shift lock release, complete the following procedure:

1. Place the ignition switch in the LOCK position and remove the key.
2. Apply the parking brake.
3. Remove the shift lock release cover as shown.
4. Use a protective cloth on the tip of a small screwdriver before inserting it in the shift lock release slot and pushing down.
5. Move the shift selector to the N (Neutral) position while holding down the shift lock release.
6. Place the ignition switch in the ON position to unlock the steering wheel (for models with a steering lock mechanism).
7. 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.

### **WARNING**

If the shift selector 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.

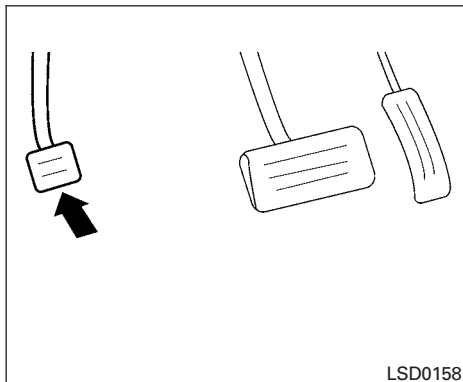
If the vehicle is driven under extreme conditions, such as excessive wheel spinning and subsequent hard braking, the fail-safe system may be activated. This will occur even if all electrical circuits are functioning properly. In this case, turn the ignition switch OFF and wait for 3 seconds. Then turn the ignition switch 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.

## PARKING BRAKE

### **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 shift selector 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.

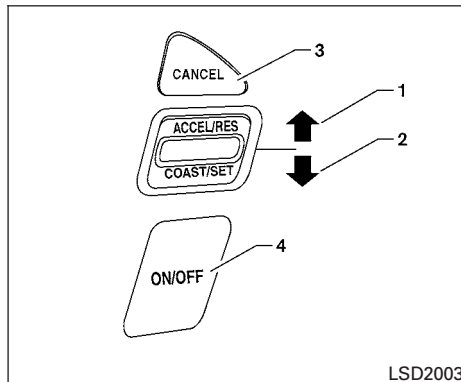
## CRUISE CONTROL



**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.



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 vehicle information display then blinks to warn the driver, see "Vehicle information display" in the "Instruments and controls" section.

- If the SET indicator light blinks, push the cruise control ON-OFF switch off and have the system checked by a NISSAN dealer.
- The SET indicator light may blink when the cruise control ON-OFF switch is pushed ON while pushing the ACCEL/RES, COAST/SET, or CANCEL switch. To properly set the cruise control system, use the following procedures.

### **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 on. The CRUISE indicator light in the vehicle information display will illuminate.

**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 vehicle information display will illuminate. 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 vehicle information display goes out.
- Tap the brake pedal; the SET indicator light goes out.

- Push the ON-OFF switch off. Both the CRUISE indicator light and SET indicator light in the vehicle information display go out.

The cruise control is automatically canceled and the SET light in the vehicle information display goes out if:

- you depress the brake pedal while pushing the ACCEL/RES or SET/COAST switch. The preset speed is deleted from memory.
- the vehicle slows down more than 8 MPH (13 km/h) below the set speed.
- you move the shift selector 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/SET 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/SET 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).

## BREAK-IN SCHEDULE

### 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 front 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.
- For vehicles equipped with **4x4**, use 4H or 4L position only when necessary. Four-wheel drive operation lowers fuel economy.

## USING FOUR WHEEL DRIVE (4WD)

### WARNING

- For 4WD equipped vehicles, do not attempt to raise two wheels off the ground and shift the transmission to any drive or reverse position with the engine running. Doing so may result in drivetrain damage or unexpected vehicle movement which could result in serious vehicle damage or personal injury.
- Do not attempt to test a 4WD equipped vehicle on a 2-wheel dynamometer (such as the dynamometers used by some states, provinces or territories for emissions testing), or similar equipment even if the other two wheels are raised off the ground. Make sure you inform test facility personnel that your vehicle is equipped with 4WD before it is placed on a dynamometer. Using the wrong test equipment may result in drivetrain damage or unexpected vehicle movement which could result in serious vehicle damage or personal injury.










### CAUTION


- Do not drive the vehicle in the 4H or 4LO position on dry hard surface roads. Driving on dry, hard surfaces in 4H or 4LO may cause unnecessary noise, tire wear and increased fuel consumption.  
  
If the 4WD warning light turns on when you are driving on dry hard surface roads:
  - in the 4H position, shift the 4WD shift switch to 2WD.
  - in the 4LO position, stop the vehicle, move the shift selector to the N position with the brake pedal depressed, and shift the 4WD shift switch to 2WD.
- If the warning light is still on after the above operation, have your vehicle checked by a NISSAN dealer as soon as possible.
- The transfer case may be damaged if you continue driving with the warning light blinking.

## TRANSFER CASE SHIFTING PROCEDURES

All mode 4WD system provides 4 positions (AUTO, 2WD, 4H and 4LO), so you can select the desired drive mode according to the driving conditions.

2WD or 4WD shift procedure:

4WD Shift Switch Position	Wheels Driven	Indicator Light		Use Conditions	4WD Shift Procedure
		4WD shift	Transfer 4LO position		
 AUTO	Rear wheels or 4 wheels			For driving on paved or slippery roads	Move the 4WD switch. 2WD <—> AUTO <—> 4H 4WD shift indicator light will indicate transfer shift position engaged. IT IS NOT NECESSARY TO MOVE THE SHIFT SELECTOR TO THE N POSITION IN THIS OPERATION. PERFORM THIS OPERATION WHEN DRIVING STRAIGHT.
 2WD	Rear wheels			For driving on dry, paved roads (Economy drive)	
 4H	4 wheels			For driving on rocky, sandy or snow-covered roads	
 4LO	Neutral		*1 May blink	Neutral disengages the automatic transmission mechanical parking lock, which will allow the vehicle to roll. Do not leave the transfer shift position in Neutral.*2	1. Stop the vehicle. 2. Move the shift selector to the N position. 3. Push the 4WD shift switch and move it to 4LO or 4H with the brake pedal depressed. YOU CANNOT MOVE THE TRANSFER 4WD SHIFT SWITCH BETWEEN 4H AND 4LO (OR 4LO TO 4H) UNLESS YOU HAVE FIRST STOPPED THE VEHICLE, DEPRESSED THE BRAKE PEDAL AND MOVED THE SHIFT SELECTOR TO NEUTRAL. *3
	4 wheels		Illuminated	For use when maximum power and traction is required (for example: on steep grades or rocky, sandy, muddy roads)	

- \*1: The transfer 4LO position indicator light may blink. Stop the vehicle. Be sure to shift the 4WD shift switch after the shift selector has been moved to the N position. If the indicator light keeps blinking after the 4WD shift procedure in the previous page, drive slowly without abrupt maneuvers for a while. Then the light will turn on or off.
- Avoid making a turn or abrupt starts while shifting to 4LO. Otherwise gears may grind, damaging the drive system.
- \*2: While changing in and out of 4LO, the ignition switch must be ON and the vehicle's engine must be running for a shift to take place and for the indicator lights (4WD shift and 4LO position indicator) to be operable. Otherwise, the shift will not take place and no indicator lights will be on or flashing.
- \*3: Make sure the transfer 4LO position indicator light turns on when you shift the 4WD shift switch to 4LO. The  indicator light will also turn on when 4LO is selected. See "Vehicle Dynamic Control (VDC) system" later in this section.

The transfer case 4WD shift switch is used to select either 2WD or 4WD depending on the driving conditions. There are four types of drive modes available, AUTO, 2WD, 4H and 4LO.

The 4WD shift switch electronically controls the transfer case operation. Rotate the switch to move between each mode, 2WD, AUTO, 4H and 4LO.

**You must push the switch in to select 4LO, and the vehicle **MUST** be stationary and the shift selector in the N position when changing into or out of 4LO.**

#### **WARNING**

When parking, apply the parking brake before stopping the engine and make sure that the 4WD shift indicator light is on and the ATP warning light goes off. Otherwise, the vehicle could unexpectedly move even if the automatic transmission is in the P position.

#### **CAUTION**

- **Never shift the 4WD shift switch between 4LO and 4H while driving.**
- **The 4H position provides greater traction. Avoid excessive speed, as it will cause increased fuel consumption and higher oil temperatures, and could damage drivetrain components. Speeds over 62 MPH (100 km/h) in 4H is not recommended.**
- **The 4LO position provides maximum power and traction. Avoid raising vehicle speed excessively, as the maximum speed is approximately 31 MPH (50 km/h).**
- **When driving straight, shift the 4WD shift switch to the 2WD, AUTO or 4H position. Do not move the 4WD shift switch when making a turn or reversing.**
- **Do not shift the 4WD shift switch (between 2WD, AUTO and 4H) while driving on steep downhill grades. Use the engine brake and low automatic transmission gears (D1 or D2) for engine braking.**

- **Do not operate the 4WD shift switch (between 2WD, AUTO and 4H) with the rear wheels spinning.**
- **Do not drive on dry hard surface roads in the 4H or 4LO position. Driving on dry hard surfaces in 4H or 4LO may cause unnecessary noise and tire wear. NISSAN recommends driving in the 2WD or AUTO position under these conditions.**
- **The 4WD transfer case may not be shifted between 4H and 4LO at low ambient temperatures and the transfer 4LO position indicator light may blink even when the 4WD shift switch is shifted. After driving for a while you can change the 4WD transfer case between 4H and 4LO.**

When driving on rough roads,

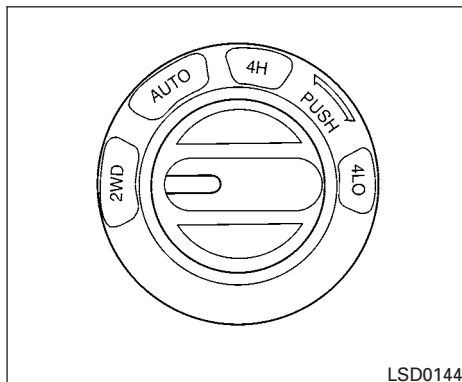
- Set the 4WD shift switch to AUTO, 4H or 4LO.
- Drive carefully according to the road surface conditions.

When the vehicle is stuck,

- Set the 4WD shift switch to 4H or 4LO.
- If it is difficult to free the vehicle, repeat forward and backward movement to increase the movement.
- If the vehicle is stuck deep in mud, place stones or wooden blocks under the tires. Then try the recovery procedures above. Tire chains may be effective.

#### CAUTION

- **Do not spin the tires excessively. Tires will sink deep into the mud, making it difficult to free the vehicle.**
- **Avoid shifting gears with the engine running at high speeds as this may cause malfunction.**



#### 4WD shift switch operations

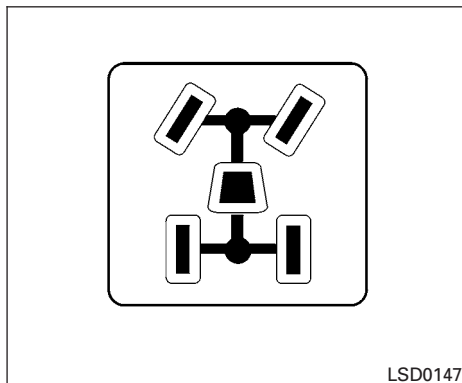
- Shift the 4WD shift switch to either the 2WD, AUTO, 4H or 4LO position, depending on driving conditions.
- With the switch set to the AUTO position, distribution of torque to the front and rear wheels changes automatically, depending on road conditions encountered [ratio; 0 : 100 (2WD) → 50 : 50 (4WD)]. This results in improved driving stability.

- If the 4WD shift switch is operated while making a turn, accelerating or decelerating or if the ignition switch is turned off while in the AUTO, 4H or 4LO, you may feel a jolt. This is not abnormal.
- When the vehicle is stopped after making a turn, you may feel a slight jolt after the shift selector is shifted to N or P. This occurs because the transfer clutch is released and not because of a malfunction.

#### CAUTION

- When driving straight, shift the 4WD shift switch to the 2WD, AUTO or 4H position. Do not move the 4WD shift switch when making a turn or reversing.
- Do not shift the 4WD shift switch while driving on steep downhill grades. Use the engine brake and low automatic transmission gears (D1 or D2) for engine braking.
- Do not operate the 4WD shift switch with the rear wheels spinning.

- Before placing the 4WD shift switch in the 4H position from 2WD or AUTO, ensure the vehicle speed is less than 62 MPH (100 km/h). Failure to do so can damage the 4WD system.
- Never shift the 4WD shift switch between 4LO and 4H while driving.
- Engine idling speed is high while warming up the engine. Be especially careful when starting or driving on slippery surfaces with the 4WD shift switch set in AUTO.



### 4WD shift indicator light

The 4WD shift indicator light is located in the vehicle information display.

The light should turn off within 1 second after turning the ignition switch to the ON position.

While the engine is running, the 4WD shift indicator light will illuminate the position selected by the 4WD shift switch.




- The 4WD shift indicator light may blink while shifting from one drive mode to the other. When the shifting is completed, the 4WD shift indicator light will come on. If the indicator light does not come on immediately, make sure the area around the vehicle is safe, and drive the vehicle straight, accelerate or decelerate or move the vehicle in reverse, then shift the 4WD shift switch.
- If the 4WD warning light comes on, the 4WD indicator light goes out.

### CAUTION

- When the 4WD shift switch is turned to the AUTO position at low ambient temperatures, the 4WD shift indicator light may show 4H. If this happens, all four wheels are driven as torque distribution is in the 4H position. Be careful as the vehicle may become difficult to turn. When the vehicle is driven, the 4WD shift indicator light should change to AUTO.

- If the 4WD shift indicator light indication changes to 2WD when the 4WD shift switch is shifted to the AUTO or 4H position at low ambient temperatures, the 2WD mode may be being engaged due to malfunctioning drive system. If the indicator does not return to normal and the 4WD warning light comes on, have the system checked by the nearest NISSAN dealer.

## 4WD warning light

Warning light	Comes on or blinks when:
 Comes on	There is a malfunction in the 4-wheel drive system
 Blinks rapidly	The transfer case oil temperature is abnormally high
 Blinks slowly	The difference in wheel rotation is large

The 4WD warning light is located in the meter.

The 4WD warning light comes on when the ignition switch is turned to ON. It turns off soon after the engine is started.

If any malfunction occurs in the 4WD system when the ignition switch is ON, the warning light will either remain illuminated or blink.

If the 4WD warning light comes on, the 4WD shift indicator light goes out.

High-temperature transfer case oil makes the warning light blink rapidly (about twice per second). If the warning light blinks rapidly during operation, stop the vehicle in a safe place immediately. Then if the light goes off after a while, you can continue driving.

A large difference between the diameters of front and rear wheels will make the warning light blink slowly (about once per two seconds). Change the 4WD shift switch into 2WD and do not drive fast.

## CAUTION

- If the warning light comes on or blinks slowly during operation or rapidly after stopping the vehicle for a while, have your vehicle checked by a NISSAN dealer as soon as possible.

- Shifting between 4H and 4LO is not recommended when the 4WD warning light turns on.

- When the warning light comes on, the 2WD mode may be engaged even if the 4WD shift switch is in AUTO or 4H. Be especially careful when driving. If corresponding parts are malfunctioning, the 4WD mode will not be engaged even if the 4WD shift switch is shifted.

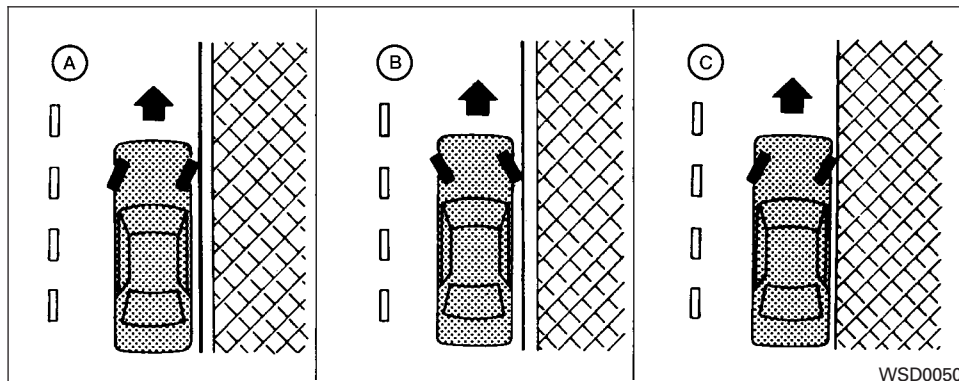
- Do not drive the vehicle in the 4H or 4LO position on dry hard surface roads. Driving on dry, hard surfaces in 4H or 4LO may cause unnecessary noise, tire wear and increased fuel consumption.

If the 4WD warning light turns on when you are driving on dry hard surface roads:

- in the AUTO or 4H position, shift the 4WD shift switch to 2WD.
- in the 4LO position, stop the vehicle, move the shift selector to the N position with the brake pedal depressed, and shift the 4WD shift switch to 2WD.

## PARKING/PARKING ON HILLS

- If the warning light is still on after the above operation, have your vehicle checked by a NISSAN dealer as soon as possible.
- The transfer case may be damaged if you continue driving with the warning light blinking.



### 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 selector 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.

## POWER STEERING

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: Ⓐ

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

- HEADED UPHILL WITH CURB: Ⓑ

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: Ⓒ

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 in the LOCK position.

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.

### WARNING

**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 2 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 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.

## 5-32 Starting and driving

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.**
- **For detailed information, see “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.

## **WARNING**

**Do not pump the brake pedal. Doing so may result in increased stopping distances.**

### 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.


### 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 1 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.

## **VEHICLE DYNAMIC CONTROL (VDC) SYSTEM**

The Vehicle Dynamic Control (VDC) system uses various sensors to monitor driver inputs and vehicle motion. Under certain driving conditions, the VDC System helps to perform the following functions:


- Controls brake pressure to reduce wheel slip on one slipping drive wheel so power is transferred to a non slipping drive wheel on the same axle.
- Controls brake pressure and engine output to reduce drive wheel slip based on vehicle speed (traction control function).
- If the 4WD transfer case is shifted into 4LO the  indicator light will come on and the VDC system will be turned off. See “Using four wheel drive (4WD)” earlier in this section.
- Controls brake pressure at individual wheels and engine output to help the driver maintain control of the vehicle in the following conditions:
  - understeer (vehicle tends to not follow the steered path despite increased steering input)
  - oversteer (vehicle tends to spin due to certain road or driving conditions)


The VDC system can help the driver to maintain control of the vehicle, but it can not prevent loss of vehicle control in all driving situations.



When the VDC system operates, the  indicator in the instrument panel flashes so note the following:

- The road may be slippery or the system may determine some action is required to help keep the vehicle on the steered path.
- 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.
- Adjust your speed and driving to the road conditions.

See "Slip indicator light" and "Vehicle Dynamic Control (VDC) OFF indicator light" in the "Instruments and controls" section.

If a malfunction occurs in the system, the  indicator light will come on in the instrument panel. The VDC system automatically turns off when these indicator lights are off.

The VDC OFF switch is used to turn off the VDC system. The  indicator illuminates to indicate the VDC system is off.







When the VDC switch is used to turn off the system, the VDC system still operates to prevent one drive wheel from slipping by transferring power to a non slipping drive wheel. The  indicator flashes if this occurs. All other VDC functions are off and the  indicator will not flash.

The VDC system is automatically reset to on when the ignition switch is placed in the off position then back to the on position.





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.

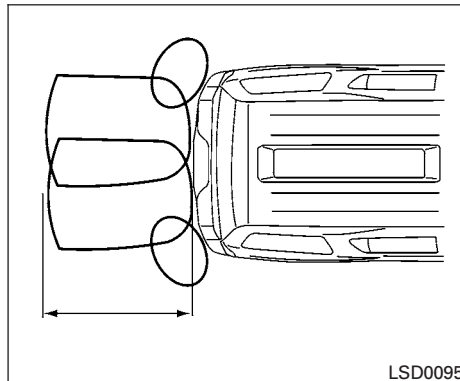
#### **WARNING**

- **The VDC system is designed to help the driver maintain stability 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 recommended for your vehicle or are extremely deteriorated, the VDC system may not operate properly. This could adversely affect vehicle handling performance, and the  indicator may flash or the  indicator light may illuminate.**
- **If brake related parts such as brake pads, rotors and calipers are not NISSAN recommended or are extremely deteriorated, the VDC system may not operate properly and the  indicator light may illuminate.**
- **If engine control related parts are not NISSAN recommended or are extremely deteriorated, the  indicator light may illuminate.**
- **When driving on extremely inclined surfaces such as higher banked corners, the VDC system may not operate properly and the  indicator may flash or the  indicator light may illuminate. Do not drive on these types of roads.**

## REAR SONAR SYSTEM (if so equipped)

- When driving on an unstable surface such as a turntable, ferry, elevator or ramp, the  indicator may flash or the  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 NISSAN recommended ones are used, the VDC system may not operate properly and the  indicator may flash or the  indicator light may illuminate.
- The VDC system is not a substitute for winter tires or tire chains on a snow covered road.



### 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.

- 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.

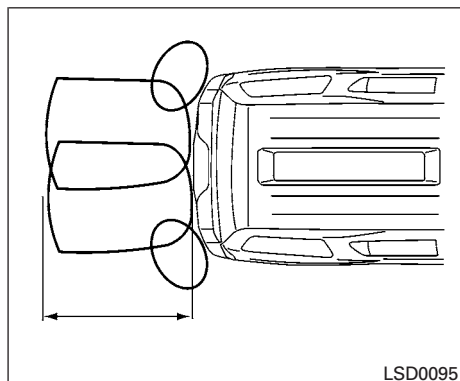
The RSS detects obstacles up to 3 ft (1.0 m) from the rear bumper with a decreased coverage area at the outer corners of the bumper, (refer to the illustration for approximate zone coverage areas). As you move closer to the obstacle, the rate of the tone increases. When the obstacle is less than 12 in (30.0 cm) away, the tone will sound continuously. If the RSS detects a stationary or receding object further than 12 in (30.0 cm) from the side of the vehicle, the tone

## FRONT AND REAR SONAR SYSTEM (if so equipped)

will sound for only 3 seconds. Once the system detects an object approaching, the tone will sound again.

The RSS automatically turns on when the shift selector is placed in R (Reverse) and the ignition switch is ON. The front and rear sonar system off switch on the instrument panel allows the driver to turn the RSS on and off. To turn the RSS off, the ignition switch must be ON, and the shift selector 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.

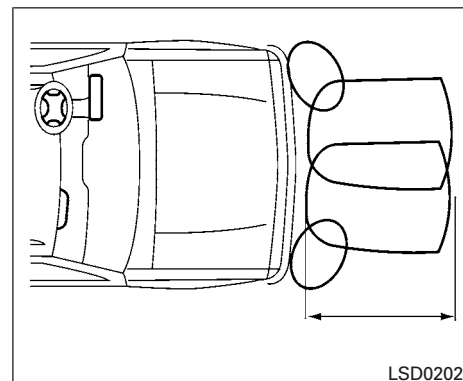
Keep the RSS sensors (located on the rear bumper fascia) free from snow, ice and large accumulations of dirt (do not clean the sensors with sharp objects). If the sensors are covered, it will affect the accuracy of the RSS.



**Rear Sensor**

### **WARNING**

- **Always turn and look back before backing up. The rear sonar system is not a substitute for proper backing procedures.**
- **Always look around before proceeding. The front sonar system is not a substitute for proper driving procedures.**



**Front Sensor**

- **Read and understand the limitations of the front and rear sonar system as contained in this section. Inclement weather may affect the function of the sonar system, this may include reduced performance or a false activation.**
- **This system is not designed to prevent contact with small or moving objects.**

- **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 front bumper fascia or 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 sounds a tone to warn the driver of obstacles near the rear bumper. The rear sonar system automatically turns on when the shift selector is placed in R (Reverse) and the ignition is ON. The system may not detect objects at speeds above 3 MPH (5 km/h) and may not detect certain angular or moving objects.

The Rear Sonar System detects obstacles up to 5.9 feet (1.8 meters) 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 it 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 Front Sonar System sounds a tone to warn the driver of obstacles near the front bumper. The front sonar system automatically turns on when the shift selector is placed in a forward gear and the ignition switch is in the ON position. The system may not detect objects at speeds above 3 MPH (5 km/h) and may not detect certain angular or moving objects.

The Front Sonar System detects obstacles up to 3 feet (1.0 m) from the front 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 it 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 front and rear sonar system OFF switch on the instrument panel allows the driver to turn the sonar system on and off. To turn the system off, the ignition must be ON, and the shift selector in R (Reverse) or D (Drive). An indicator light on the switch will illuminate when the system is turned off. If the indicator light illuminates when the system is not turned off, it may indicate a failure in the sonar system.

Keep the front and rear sonar sensors (located on the 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 sonar system.

## COLD WEATHER DRIVING

### FREEING A FROZEN DOOR LOCK

To prevent a door lock from freezing, apply de-icer 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) or the NISSAN Intelligent Key® (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.

### BATTERY

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

### DRAINING OF COOLANT WATER

If the vehicle is to be left outside without anti-freeze, 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.
2. 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.**

3. Tire chains may be used. For details see “Tire chains” in the “Maintenance and do-it-yourself” 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 washer fluid to refill the windshield-washer fluid reservoir.

### 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.**

## ENGINE BLOCK HEATER (if so equipped)

Engine block heaters are used to assist with cold temperature starting.

The engine block heater should be used when the outside temperature is 20°F (-7°C) or lower.

### **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.**

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 110-volt 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

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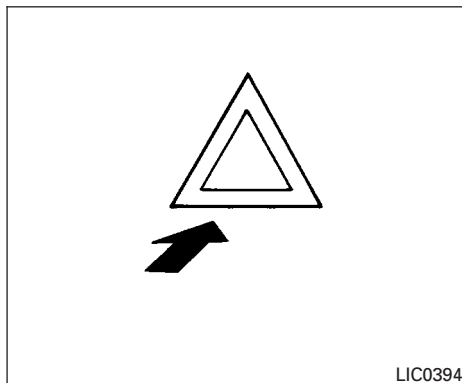
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## EMERGENCY ENGINE SHUT OFF (Push-button ignition models only)

To shut off the engine in an emergency situation while driving, perform the following procedure:

- Rapidly push the push-button ignition switch 3 consecutive times in less than 1.5 seconds, or
- Push and hold the push-button ignition switch for more than 2 seconds.

## 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.

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.**

### **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.

## 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, and the CHECK TIRE PRESSURE warning appears in the vehicle information display, 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.

#### 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.**
- **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 under-inflated 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:

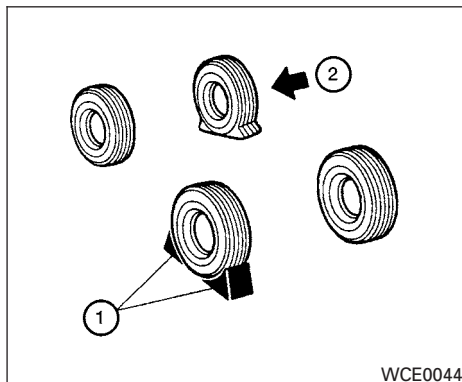
#### Stopping the vehicle

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.**

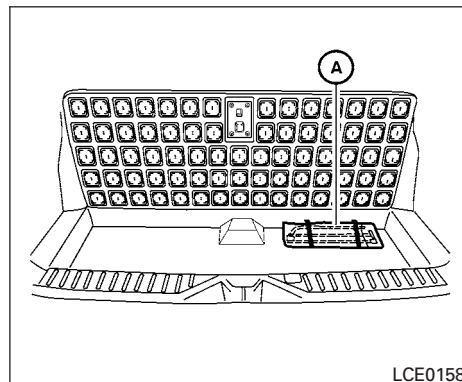


### Blocking wheels

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 jacked up.

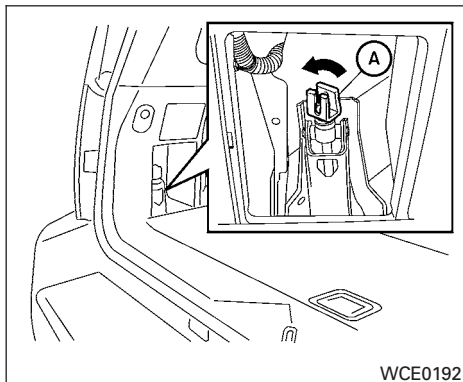
**⚠ WARNING**

**Be sure to block the wheel as the vehicle may move and result in personal injury.**

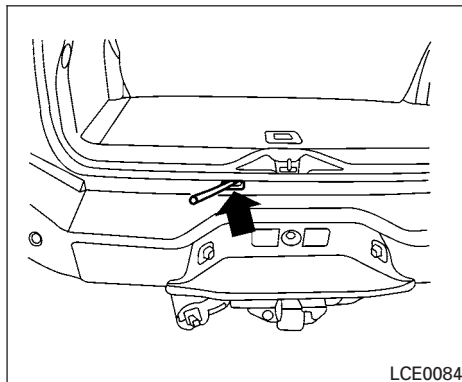


### Getting the spare tire and tools

1. Lift the luggage board in the cargo area and remove the jack tool kit ① from the storage area. See "Cargo area storage bin" in the "Instruments and controls" section.
2. Remove the cargo area storage bin cover. See "Cargo area storage bin" in the "Instruments and controls" section.



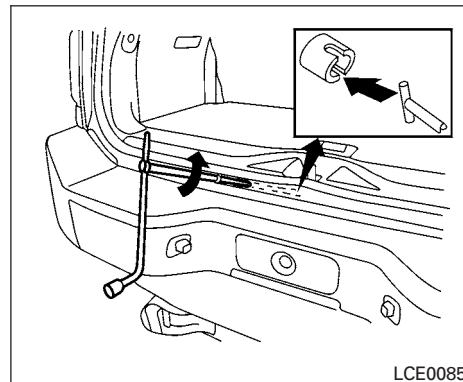
3. Unscrew the rotating mechanism (A) counterclockwise until loosened on cradle. Remove the jack.



4. Assemble the two straight pieces of the jack rod. Find the oval-shaped opening above the middle of the license plate. Pass the T-shaped end of the jack rod through the opening and direct it toward the spare tire winch, located directly above the spare tire.

### ⚠ CAUTION

**Do not insert the jack rod straight as it is designed to be inserted at an angle as shown.**



5. Fit the square end of the jack rod into the square hole of the wheel nut wrench to form a handle.
6. Seat the T-shaped end of the jack rod into the T-shaped opening of the tire winch. Apply pressure to keep the jack rod engaged in the spare tire winch and turn the jack rod counterclockwise to lower the spare tire.
7. Once the spare tire is completely lowered, reach under the vehicle, remove the retainer chain, and carefully slide the tire from under the rear of the vehicle.

### CAUTION

Be sure to center the spare tire suspending plate on the wheel and then lift the spare tire.

Jacking up vehicle and removing the damaged tire

### WARNING

- 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.
- 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 for vehicles with limited slip 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.

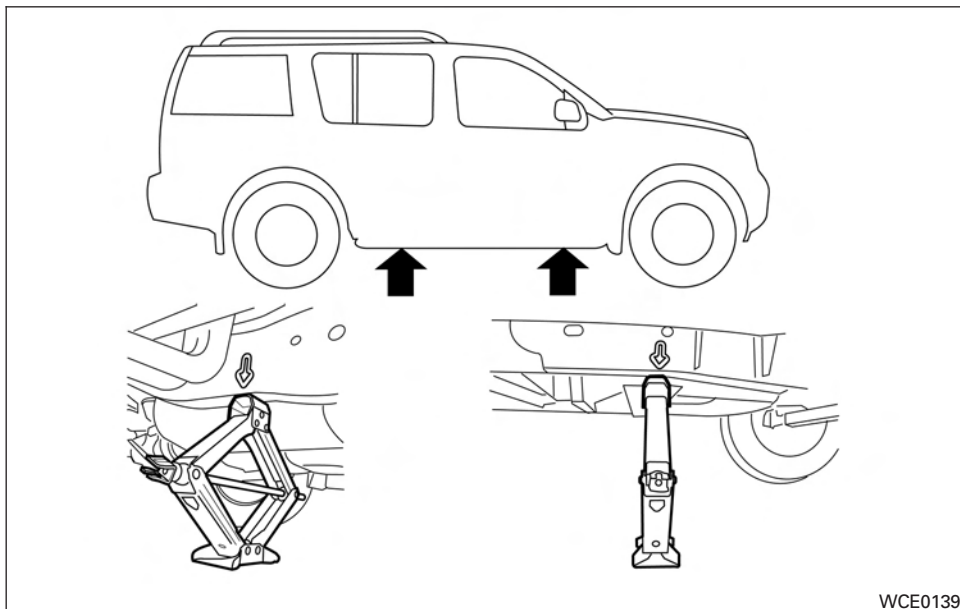
Always refer to the illustration for the correct placement and jack-up points for your specific vehicle model and jack type.

**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.**

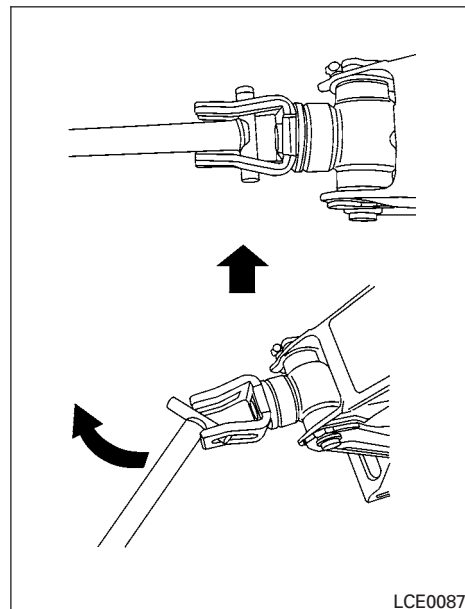
### NOTE:

Before jacking up the vehicle, make sure the ignition switch is placed in the OFF position. If the vehicle is lifted up with the ignition switch placed in the ON position the auto-leveling suspension (if so equipped) will become disabled after 60 seconds. To reset the auto-leveling suspension, cycle the ignition switch ON/OFF one time.



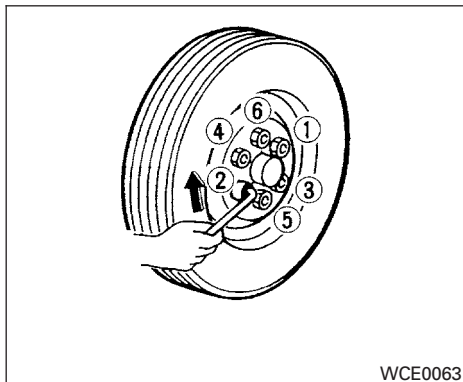
2. Place the jack directly under the jack-up point as illustrated so the top of the jack contacts the vehicle at the jack-up point. The jack-up points are indicated by stamped arrows on the side of the frame.

**The jack should be used on firm and level ground.**



3. Install the assembled jack rod into the jack as shown.
4. To lift the vehicle, securely hold the jack lever and rod. Carefully raise the vehicle until the tire clears the ground.
5. Remove the wheel nuts and then remove the tire.

**In case of emergency 6-7**



## 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.

1. 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.
3. With the wheel nut wrench, tighten wheel nuts alternately and evenly as illustrated until they are tight.

## 6-8 In case of emergency

4. 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. Lower the vehicle completely.

### WARNING

- 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:

**98 ft-lb (133 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 mi. (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(if so equipped) of the tire pressure information may show higher pressure than the COLD tire pressure after the vehicle has been driven more than 1 mi. (1.6 km). This is because the tire pressure increases as the tire temperature rises. This does not indicate a system malfunction.

5. Securely store the flat tire and jacking equipment in the vehicle.

## JUMP STARTING

### WARNING

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

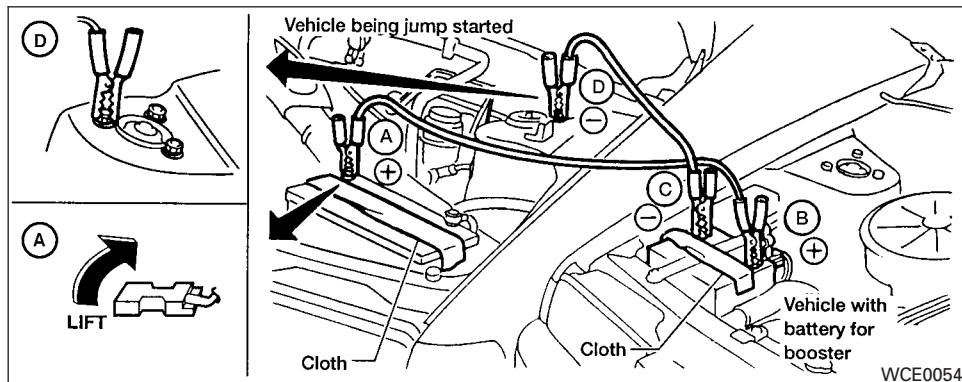
To start your engine with a booster battery, the instructions and precautions below must be followed.

If the battery of a vehicle equipped with the NISSAN Intelligent Key® is discharged, the ignition switch cannot be moved from the LOCK position, even when using the mechanical key or the valet key. Connect the jumper cables to another vehicle, as in the case of a discharged battery, and then the ignition switch can be moved from the LOCK position. Then, jump start the vehicle.

### 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.



### ⚠ WARNING

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

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

**Do not allow the two vehicles to touch.**

2. Apply the parking brake. Move the shift selector to P (Park). Switch off all unnecessary electrical systems (lights, heater, air conditioner, etc.).

3. 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).

### ⚠ 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.
6. Keep the engine speed of the booster vehicle at about 2,000 rpm and start the engine of the vehicle being jump started.

### ⚠ CAUTION

**Do not keep the starter motor engaged for more than 10 seconds. If the engine does not start right away, place the ignition switch in the OFF position and wait 3 to 4 seconds before trying again.**

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

## PUSH STARTING

### WARNING

**Do not push start this vehicle. The three-way catalyst may be damaged.**

### CAUTION

**Automatic transmission models cannot be push-started or tow-started. Attempting to do so may cause transmission damage.**

## IF YOUR VEHICLE OVERHEATS

### 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 or coolant reservoir cap while the engine is still hot. When the radiator or coolant reservoir cap is removed, pressurized hot water will spurt out, possibly causing serious injury.**
- **Do not open the hood if steam is coming out.**

If your vehicle is overheating (indicated by an extremely high temperature gauge reading and the illumination of the engine oil pressure/engine coolant temperature high indicator light), or if you feel a lack of engine power, detect abnormal noise, etc. take the following steps.

1. Move the vehicle safely off the road, apply the parking brake and move the shift selector to P (Park).

**Do not stop the engine.**

2. 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.

3. 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.

### WARNING

**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:

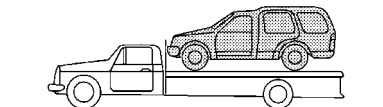
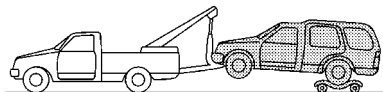
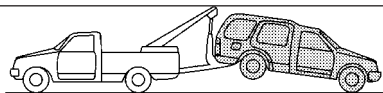
### WARNING

- **Never ride in a vehicle that is being towed.**
- **Never get under your vehicle after it has been lifted by a tow truck.**

### 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.**

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.



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TOWING RECOMMENDED BY  
NISSAN

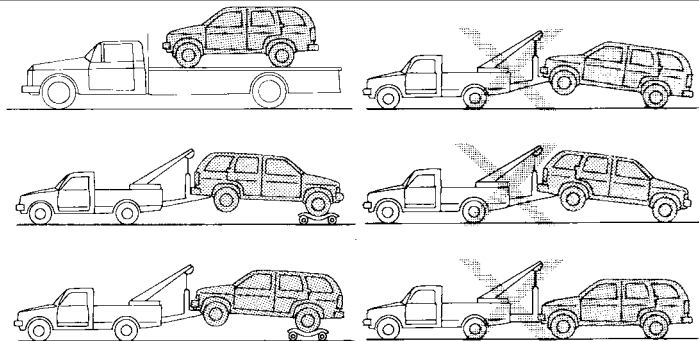
## Two-wheel drive models

NISSAN recommends that your vehicle be towed with the driving (rear) wheels off the ground or place the vehicle on a flat bed truck as illustrated.

### CAUTION

- **Never tow automatic transmission models with the rear 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 front wheels raised always use towing dollies under the rear wheels.**
- **When towing automatic transmission models with the front wheels on the ground or on towing dollies:**
  - **Place the ignition switch in 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 placing the ignition switch in the LOCK position. This may cause damage to the lock mechanism (for models with a steering lock mechanism).**

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



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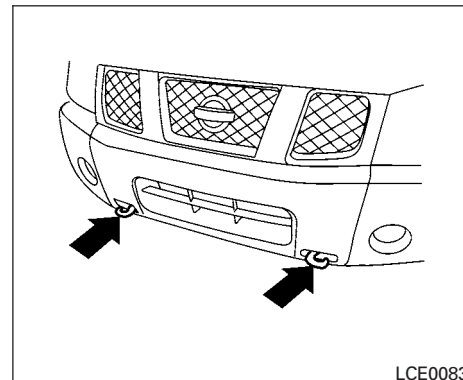
#### Four-wheel drive models

NISSAN recommends that towing dollies be used when towing your vehicle or place the vehicle on a flat bed truck as illustrated.

#### **⚠ CAUTION**

**Never tow 4WD models with any of the wheels on the ground as this may cause serious and expensive damage to the transfer case and transmission.**

#### VEHICLE RECOVERY (freeing a stuck vehicle)



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#### Pulling a stuck vehicle

#### **⚠ WARNING**

**To avoid vehicle damage, serious personal injury or death when recovering a stuck vehicle:**

- Contact a professional towing service to recover the vehicle if you have any questions regarding the recovery procedure.
- Attach recovery devices only to main structural members of the vehicle or the recovery hooks.

- **Do not use the vehicle tie-downs to tow or free a stuck vehicle.**
- **Only use devices specifically designed for vehicle recovery and follow the manufacturer's instructions.**
- **Always pull the recovery device straight out from the front of the vehicle. Never pull at an angle.**
- **Route recovery devices so they do not touch any part of the vehicle except the attachment point.**

If your vehicle is stuck in sand, snow, mud, etc., use a tow strap or other device designed specifically for vehicle recovery. Always follow the manufacturer's instructions for the recovery device.

Do not use the tie-down hooks for towing or vehicle recovery.

## Rocking 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.**

If your vehicle is stuck in sand, snow, mud, etc., use the following procedure:

1. Turn off the Vehicle Dynamic Control System (VDC).
2. Make sure the area in front and behind the vehicle is clear of obstructions.
3. Turn the steering wheel right and left to clear an area around the front tires.

4. 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 and D.
- Do not spin the tires above 35 MPH (55 km/h).

5. If the vehicle cannot be freed after a few tries, contact a professional towing service to remove the vehicle.

## MEMO

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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.

#### 7-2 Appearance and care

### 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.

## 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.

## UNDERBODY

In areas where road salt is used in winter, it is necessary to clean the underbody regularly in order to prevent dirt and salt from building up and causing 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.

### 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.

### 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.**

## CHROME PARTS

Clean all chrome parts regularly with a non-abrasive 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.**

### 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

Most air fresheners use a solvent that could affect the vehicle interior. If you use an air freshener, take the following precautions:

- Hanging-type air fresheners can cause permanent discoloration when they contact vehicle interior surfaces. Place the air freshener in a location that allows it to hang free and not contact an interior surface.
- Liquid-type air fresheners 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 fresheners.

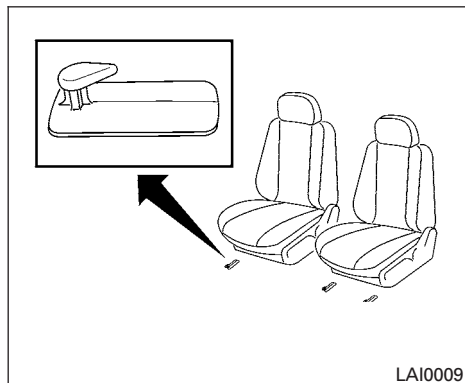
## FLOOR MATS

### WARNING

**To avoid potential pedal interference that may result in a collision or injury:**

- **NEVER place a floor mat on top of another floor mat in the driver front position.**
- **Use only genuine NISSAN floor mats specifically designed for use in your vehicle model. See your NISSAN dealer for more information.**
- **Properly position the mats in the floorwell using the floor mat positioning aid. See "Floor mat positioning aid" in this section.**

The use of genuine NISSAN floor mats can extend the life of your vehicle carpet and make it easier to clean the interior. Mats should be maintained with regular cleaning and replaced if they become excessively worn.



### Floor mat positioning aid

This vehicle includes two driver's side front floor mat brackets and one passenger's side front floor mat bracket to help keep your floor mats in place. Genuine NISSAN floor mats have been specially designed for your vehicle model. The driver's side floor mat has two grommet holes incorporated in it and the passenger's side has one grommet hole. Position each mat by placing the floor mat bracket hook through the floor mat grommet holes while centering the mat in the floorwell.

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.

### 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 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 emissions 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.

## 8-2 Maintenance and do-it-yourself

Performing general maintenance checks requires minimal mechanical skill and only a few general automotive tools.

These checks or inspections can be done by you, a qualified technician, or, if you prefer, a NISSAN dealer.

### Where to go for service

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.

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 shift selector 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 and headrests 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\* (for serviceable batteries)** 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.

## 8-4 Maintenance and do-it-yourself

### NOTE:

**Care should be taken to avoid situations that can lead to potential battery discharge and potential no-start conditions such as:** 1. **Installation or extended use of electronic accessories that consume battery power when the engine is not running (Phone chargers, GPS, DVD players, etc.)** 2. **Vehicle is not driven regularly and/or only driven short distances. In these cases, the battery may need to be charged to maintain battery health.**

**Brake fluid level\*** 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.

## 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.

### 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 to P (Park).**
- **Be sure the ignition switch 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 switch 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.**

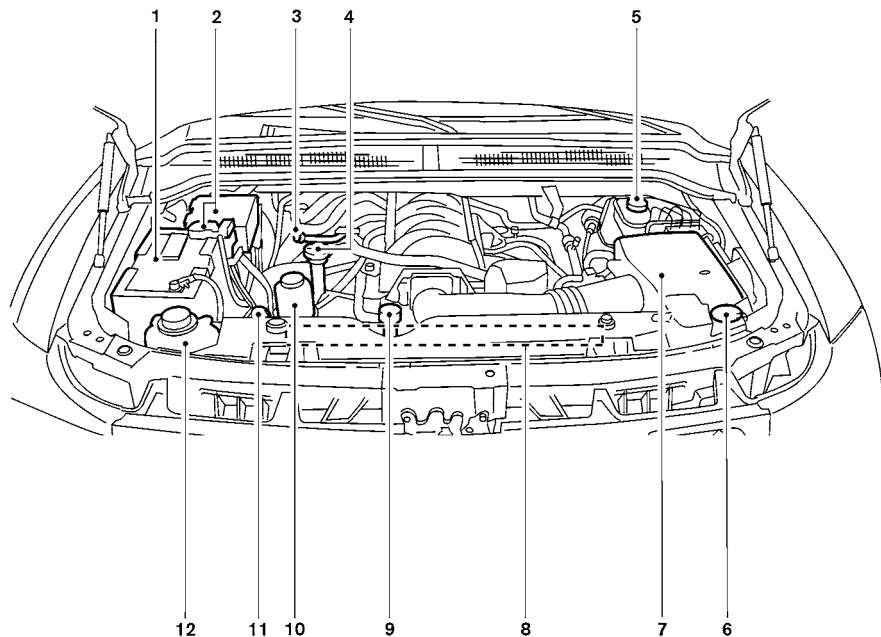
### CAUTION

- **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.

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. Battery
2. Fuse/fusible link box
3. Transmission dipstick
4. Engine oil filler cap
5. Brake fluid reservoir
6. Windshield-washer fluid reservoir
7. Air cleaner
8. Drive belt location
9. Radiator cap
10. Power steering fluid reservoir
11. Engine oil dipstick
12. Engine coolant reservoir

**NOTE:**

**Engine cover removed for clarity.**

WDI0630

## ENGINE COOLING SYSTEM

The engine cooling system is filled at the factory with a pre-diluted mixture of 50% Genuine NISSAN Long Life Antifreeze/Coolant (blue) and 50% water to provide year-round anti-freeze and coolant protection. The antifreeze solution contains rust and corrosion inhibitors. Additional engine cooling system additives are not necessary.

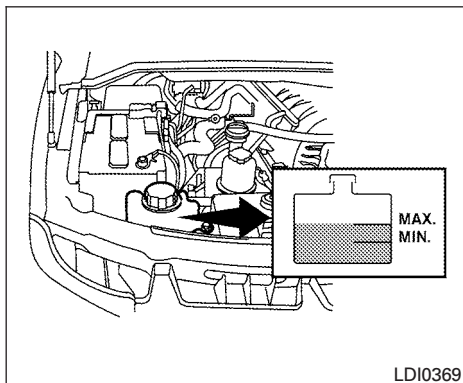
### WARNING

- **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.**

### CAUTION

- **Never use any cooling system additives such as radiator sealer. Additives may clog the cooling system and cause damage to the engine, transmission and/or cooling system.**
- **When adding or replacing coolant, be sure to use only Genuine NISSAN Long Life Antifreeze/Coolant (blue) or equivalent. Genuine NISSAN Long Life Antifreeze/Coolant (blue) is pre-diluted to provide antifreeze protection to -34° F (-37° C). If additional freeze protection is needed due to weather where you operate your vehicle, add Genuine NISSAN Long Life Antifreeze/Coolant (blue) concentrate following the directions on the container. If an equivalent coolant other than Genuine NISSAN Long Life Antifreeze/Coolant (blue) is used, follow the coolant manufacturer's instructions to maintain minimum antifreeze protection to -34° F (-37° C). The use of other types of coolant solutions other than Genuine NISSAN Long Life Antifreeze/Coolant (blue) or equivalent may damage the engine cooling system.**

- **The life expectancy of the factory-fill coolant is 105,000 miles (168,000 km) or 7 years. Mixing any other type of coolant other than Genuine NISSAN Long Life Antifreeze/Coolant (blue), including Genuine NISSAN Long Life Antifreeze/Coolant (green), or the use of non-distilled water will reduce the life expectancy of the factory-fill coolant. Refer to the Nissan Service and Maintenance Guide for more details.**



## 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.

This vehicle contains Genuine NISSAN Long Life Antifreeze/Coolant (blue). The life expectancy of the factory-fill coolant is 105,000 miles (168,000 km) or 7 years. Mixing any other type of coolant or the use of non-distilled water will reduce the life expectancy of the factory-fill coolant. Refer to the NISSAN Service and Maintenance Guide for more details.

**The engine coolant reservoir is a pressurized tank. When installing the cap, tighten it until a clicking sound is heard.**

**If the cooling system frequently requires coolant, have it checked by a NISSAN dealer.**

## CHANGING ENGINE COOLANT

A NISSAN dealer can change the engine coolant. The service procedure can be found in the NISSAN Service Manual.

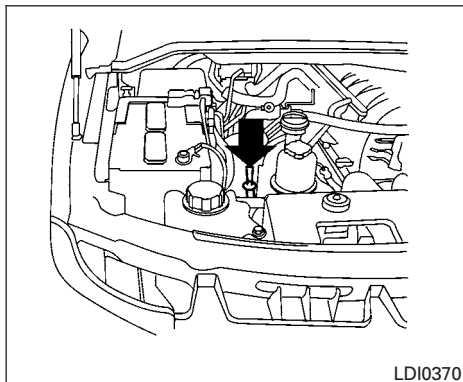
**Improper servicing can result in reduced heater performance and engine overheating.**

### WARNING

- **To avoid the danger of being scalded, never change the coolant when the engine is hot.**
- **Never remove the radiator cap when the engine is hot. Serious burns could be caused by high pressure fluid escaping from the radiator.**
- **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.**

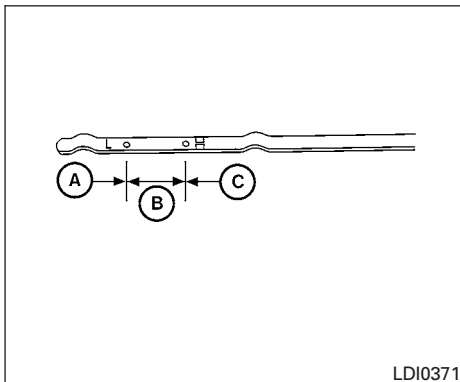
Engine coolant must be disposed of properly. Check your local regulations.

## ENGINE OIL



### 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. Re-insert it all the way.

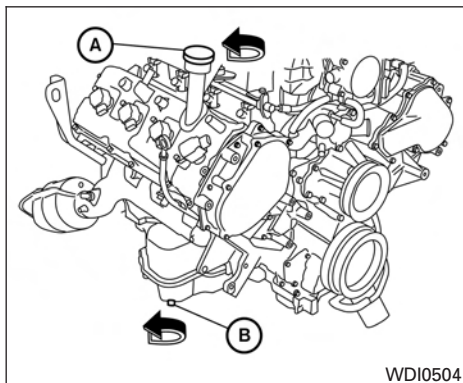


5. Remove the dipstick again and check the oil level. It should be between the H (High) and L (Low) marks **(B)**. This is the normal operating oil level range. If the oil level is below the L (Low) mark **(A)**, remove the oil filler cap and pour recommended oil through the opening. **Do not overfill (C).**
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.**

### 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 ENGINE 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” 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.**

### **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.

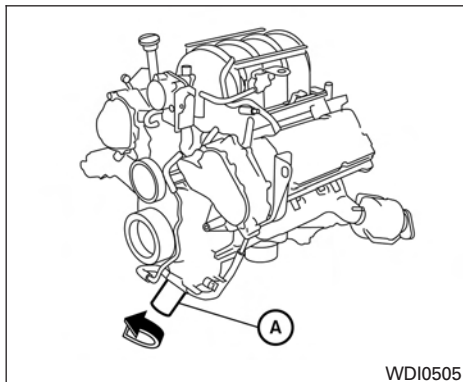
**Drain plug tightening torque:**  
**22 - 29 ft-lb (29 - 39 N-m)**

7. 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.

8. Start the engine. Check for leakage around the drain plug and oil filter. Correct as required.
9. 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).
4. Loosen the oil filter (A) with an oil filter wrench by turning it counterclockwise. Then remove the oil filter by turning it by hand.

### 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.

### CAUTION

**Be sure to remove any old gasket material remaining on the sealing surface of the engine. Failure to do so could lead to an oil leak and 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.
9. Turn the engine off and wait more than 10 minutes. Check the oil level. Add engine oil if necessary.

## 5-SPEED AUTOMATIC TRANSMISSION FLUID

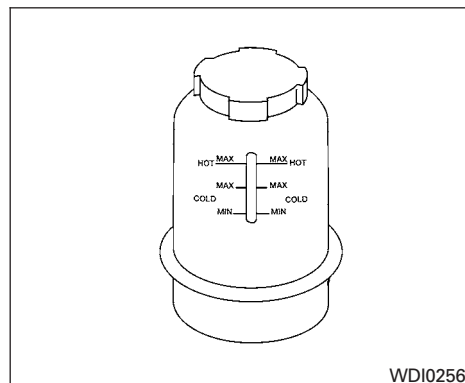
When checking or replacement is required, we recommend your NISSAN dealer for servicing.

### CAUTION

- Use Genuine NISSAN Matic S ATF. If Genuine NISSAN Matic S ATF is not available, Genuine NISSAN Matic J ATF may also be used.
- Using automatic transmission fluid other than Genuine NISSAN Matic S ATF or Matic J 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.

### CAUTION

- **DO NOT OVERFILL.**
- **Recommended fluid is Genuine NISSAN PSF or equivalent.**

## BRAKE FLUID

For further brake fluid specification information, refer to "Capacities and recommended fuel/lubricants" in the "Technical and consumer information" section of this manual.

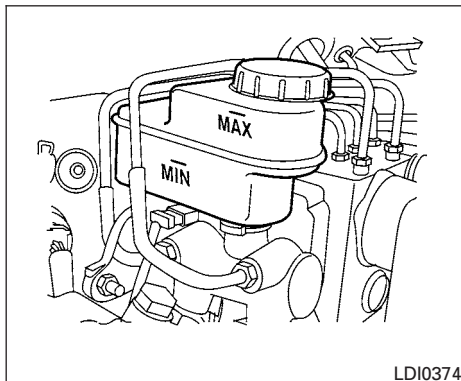
### WARNING

- **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

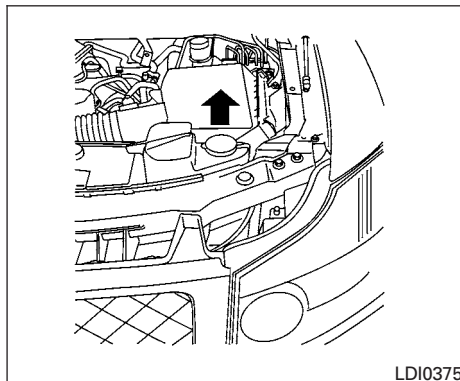
**Do not spill the fluid on any painted surfaces. This will damage the paint. If fluid is spilled, immediately wash the surface with water.**

## WINDSHIELD-WASHER FLUID



### 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 Genuine NISSAN Super Heavy Duty Brake Fluid or equivalent **DOT 3** fluid up to the MAX line. If fluid must be added frequently, the system should be checked by a NISSAN dealer.



### WINDSHIELD-WASHER FLUID RESERVOIR

Fill the windshield-washer fluid reservoir periodically. Add windshield-washer fluid when the low windshield-washer fluid warning light comes on.

To fill the windshield-washer fluid reservoir, lift the cap off the reservoir and pour the windshield-washer fluid into the reservoir 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.

Refill the reservoir more frequently when driving conditions require an increased amount of windshield-washer fluid.

Recommended fluid is Genuine NISSAN Windshield Washer Concentrate Cleaner & Anti-freeze or equivalent.

### CAUTION

- Do not substitute engine anti-freeze coolant for windshield-washer fluid. This may result in damage to the paint.
- Do not fill the windshield-washer fluid reservoir with washer fluid concentrates at full strength. Some methyl alcohol based washer fluid concentrates may permanently stain the grille if spilled while filling the windshield-washer fluid reservoir.
- Pre-mix washer fluid concentrates with water to the manufacturer's recommended levels before pouring the fluid into the windshield-washer fluid reservoir. Do not use the windshield-washer fluid reservoir to mix the washer fluid concentrate and water.

## BATTERY

- 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.

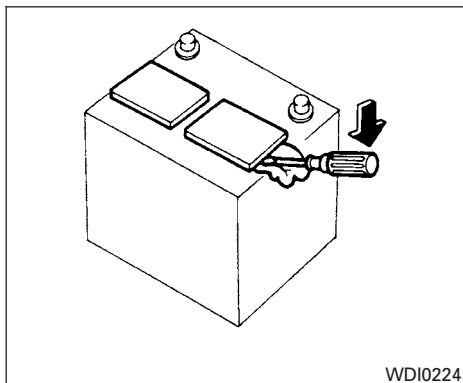
### NOTE:

Care should be taken to avoid situations that can lead to potential battery discharge and potential no-start conditions such as: 1. Installation or extended use of electronic accessories that consume battery power when the engine is not running (Phone chargers, GPS, DVD players, etc.) 2. Vehicle is not driven regularly and/or only driven short distances. In these cases, the battery may need to be charged to maintain battery health.

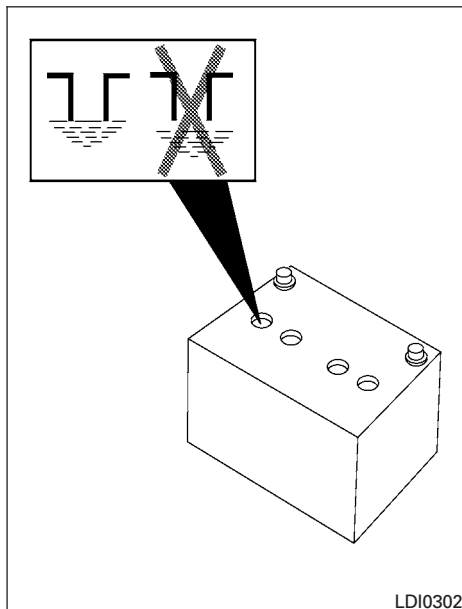
### WARNING

- 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 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.
- Do not tip the battery. Keep the vent caps tight and the battery level.



1. Remove the vent caps with a screwdriver as shown. Use a cloth to protect the battery case.



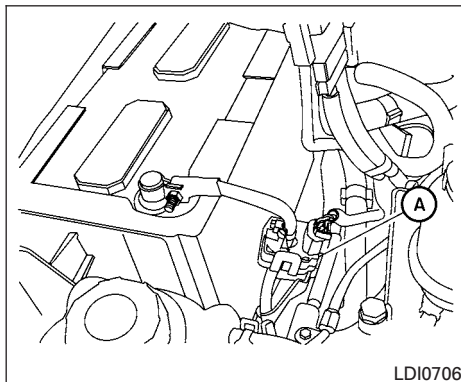
2. Check the fluid level in each cell. If it is necessary to add fluid, add only distilled water to bring the level up to the bottom of the filler opening. **Do not overfill.** Reinstall the vent caps.

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.

## VARIABLE VOLTAGE CONTROL SYSTEM



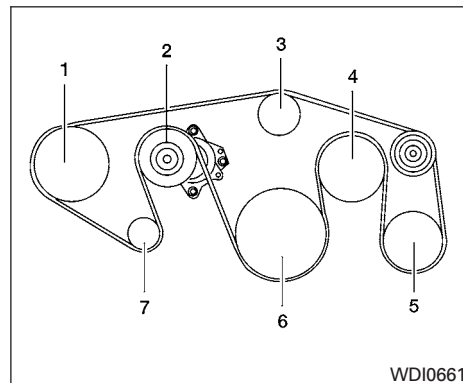
### ⚠ CAUTION

- Do not ground accessories directly to the battery terminal. Doing so will bypass the variable voltage control system and the vehicle battery may not charge completely.
- Use electrical accessories with the engine running to avoid discharging the vehicle battery.

Your vehicle is equipped with a variable voltage control system. This system measures the amount of electrical discharge from the battery and controls voltage generated by the generator.

The current sensor (A) is located near the battery along the negative battery cable. If you add electrical accessories to your vehicle, be sure to ground them to a suitable body ground such as the frame or engine block area.

## DRIVE BELT



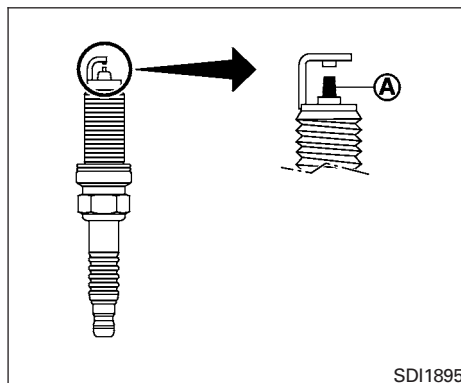
1. Power steering fluid pump
2. Automatic belt tensioner
3. Water pump
4. Cooling fan
5. Air conditioner compressor
6. Crankshaft pulley
7. Generator

### ⚠ WARNING

**Be sure the ignition switch is in the OFF or LOCK position before servicing drive belt. The engine could rotate unexpectedly.**

## SPARK PLUGS

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.
2. Have the belt checked regularly for condition and tension in accordance with the maintenance schedule found in the "NISSAN Service and Maintenance Guide".



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### 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 re-gapping.

- **Always replace spark plugs with recommended or equivalent ones.**

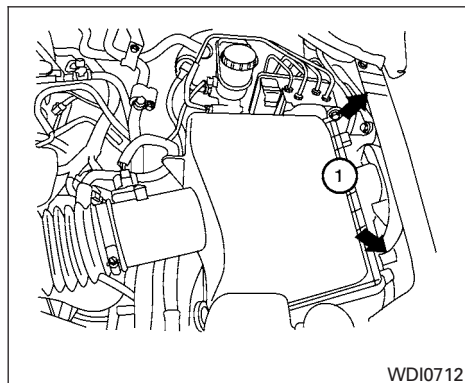
#### **⚠ WARNING**

**Be sure the engine and ignition switch are off and that the parking brake is engaged securely.**

#### **⚠ CAUTION**

**Be sure to use the correct socket to remove the spark plugs. An incorrect socket can damage the spark plugs.**

## AIR CLEANER



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."

To remove the air cleaner filter:

1. Unlatch the clips and move the air cleaner cover upward.
2. Remove the air cleaner filter.
3. Wipe the inside of the air cleaner filter housing and the cover with a damp cloth.

### NOTE:

After installing a new air cleaner, make sure the air cleaner cover is seated in the housing and latch the clips.

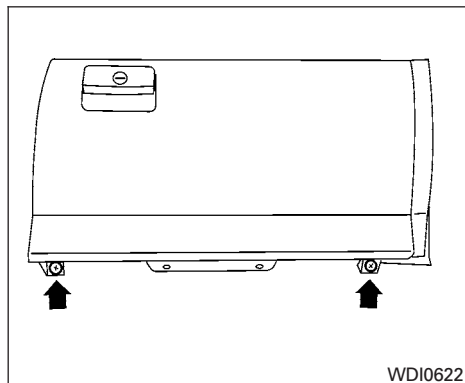
### WARNING

- 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.

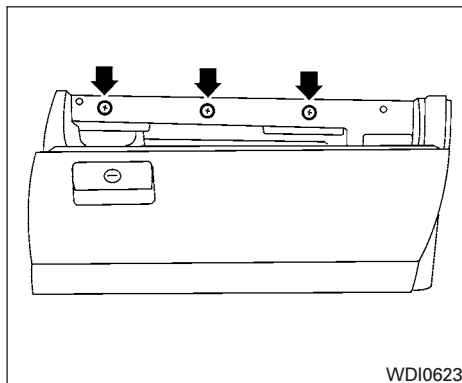
### IN-CABIN MICROFILTER (if so equipped)

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.

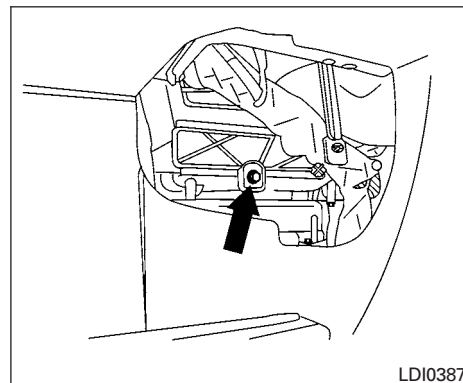
To replace the filter, perform the following procedure:



1. Remove the 2 lower glove box screws.

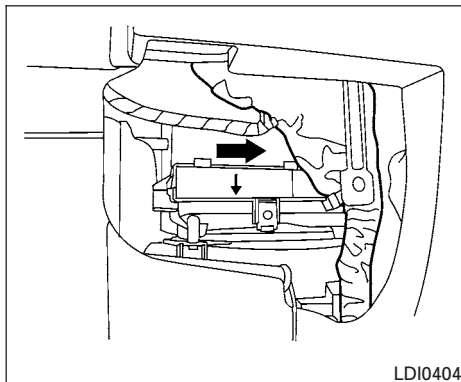


2. Open the glove box, then remove the three upper glove box screws. Remove the glove box assembly from the instrument panel to access the in-cabin microfilter cover.



3. Remove the filter cover bolt and remove the filter cover.

## WINDSHIELD WIPER BLADES



### NOTE:

**The filters are marked with air flow arrows. The end of the filter with the arrow should face the rear of the vehicle. The arrows should face downward.**

4. Insert the first filter into the housing and slide it over to the right. Insert the second filter into the housing.
5. Replace the filter cover.
6. Install the glove box assembly.
7. Fill out the date information on the small replacement label and attach it to the glove box lid.

## 8-20 Maintenance and do-it-yourself

### CLEANING

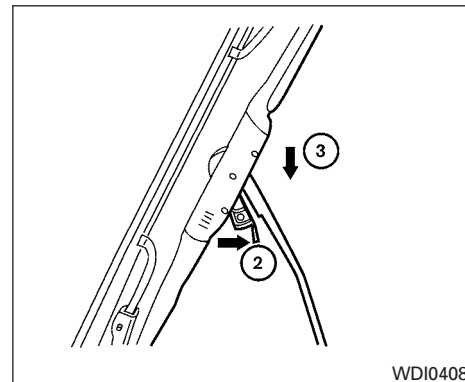
If your windshield is not clear after using the windshield washer or if a wiper blade chatters when running, wax or other material may be on the blade or windshield.

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.

### CAUTION

**Worn windshield wiper blades can damage the windshield and impair driver vision.**



### REPLACING

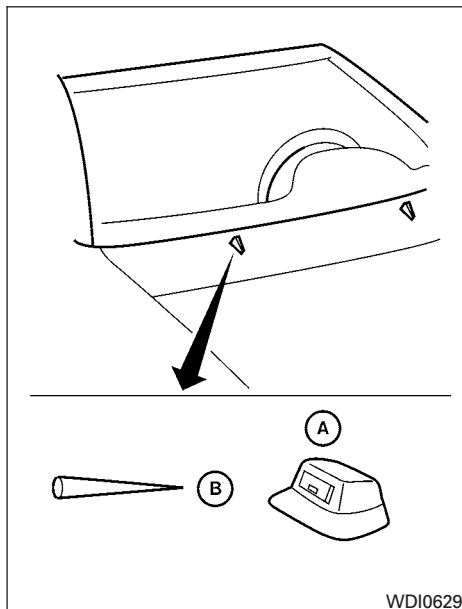
Replace the wiper blades if they are worn.

1. 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.
5. Rotate the wiper blade so the dimple is in the groove.

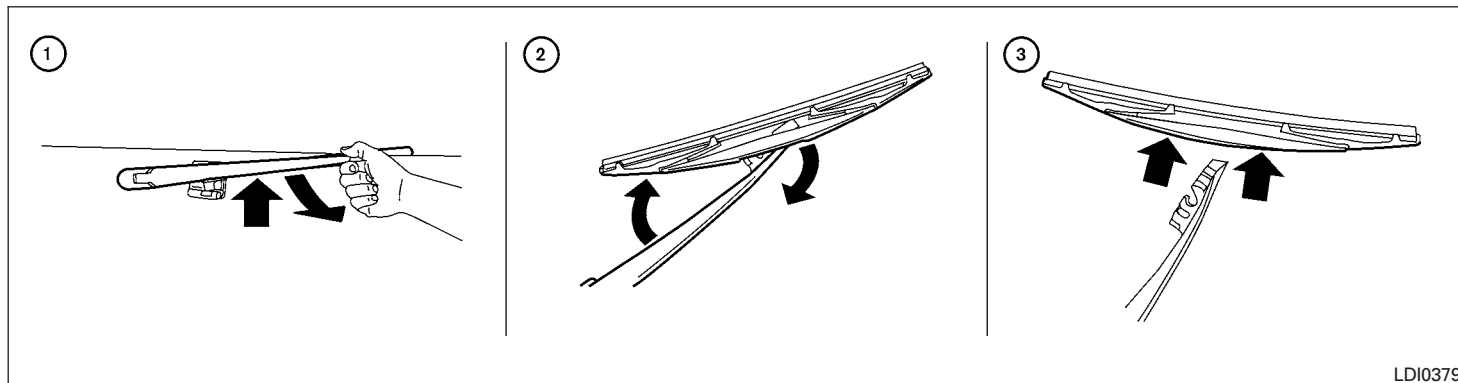
- Return the wiper to its original position and release it until it has made contact with the windshield.

**⚠ 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.



If you wax the surface of the hood, be careful not to let wax get into the windshield washer nozzle (A). This may cause clogging or improper windshield washer operation. If wax gets into the nozzle, remove it with a needle or small pin (B).



### Rear window wiper blade

- ① Lift the wiper arm away from the rear window.
- ② Rotate the blade until it becomes free.
- ③ Insert a new blade onto the wiper arm and snap into place.

## BRAKES

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.

#### WARNING

**See a NISSAN dealer for a brake system check if the brake pedal height does not return to normal.**

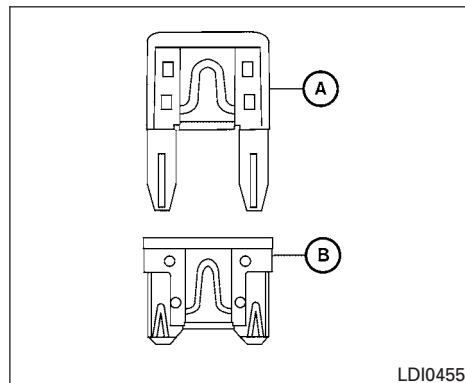
### Brake pad wear indicators

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.

**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”.

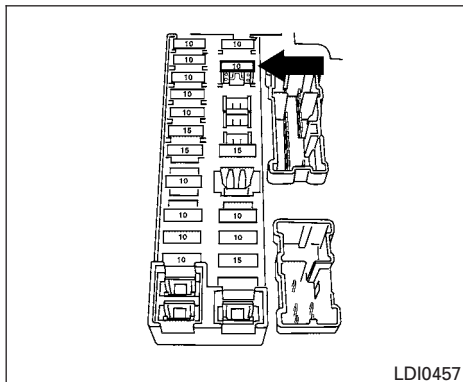
## FUSES



Two types of fuses are used. Type **A** is used in the fuse boxes in the engine compartment. Type **B** is used in the passenger compartment fuse box.

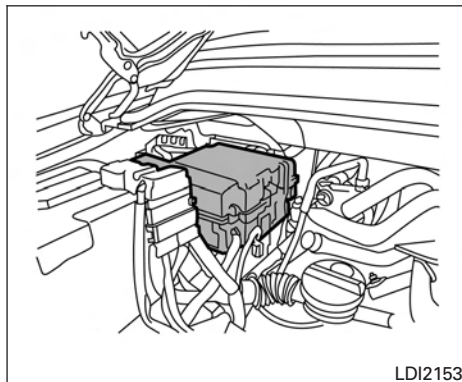
Type A fuses are provided as spare fuses. They are stored in the passenger compartment fuse box.

Type A fuses can be installed in the engine compartment and passenger compartment fuse boxes.



If a type A fuse is used to replace a type B fuse, the type A fuse will not be level with the fuse pocket as shown in the illustration. This will not affect the performance of the fuse. Make sure the fuse is installed in the fuse box securely.

Type B fuses cannot be installed in the underhood fuse boxes. Only use type A fuses in the underhood fuse boxes.



## ENGINE COMPARTMENT

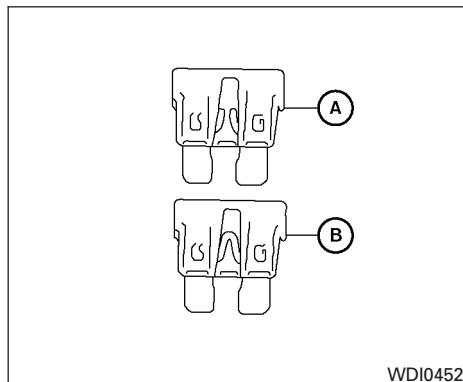
### CAUTION

**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.**

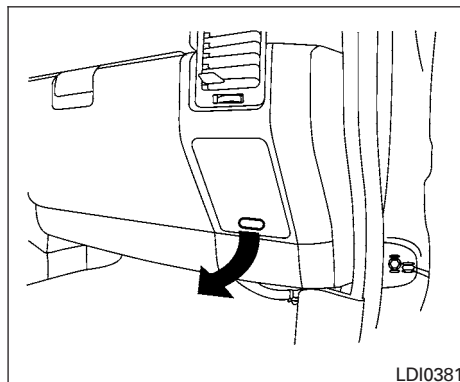
If any electrical equipment does not come on, check for an open fuse.

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.

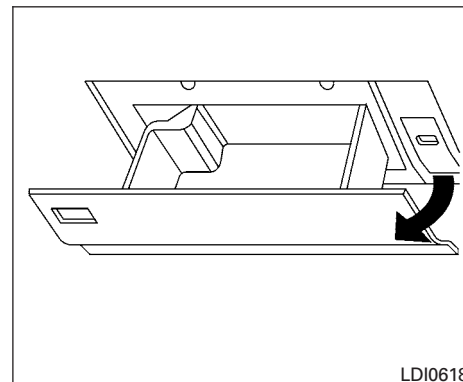


5. If the fuse is open (A), replace it with a new fuse (B).
6. If a new fuse also opens, have the electrical system checked and repaired by a NISSAN dealer.



### 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.



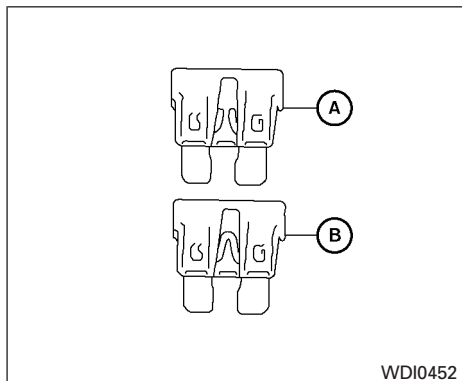
### PASSENGER COMPARTMENT

#### **⚠ CAUTION**

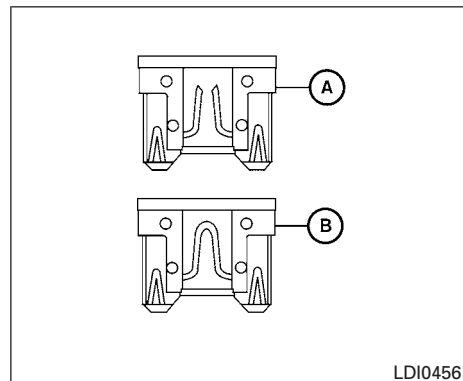
**Never use a fuse of a higher or lower amperage rating than specified on the fuse box cover. This could damage the electrical system or cause a fire.**

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. Open the glove box to access the fuse box cover.
3. Pull the fuse box cover to remove.
4. Remove the fuse with the fuse puller.



**Type A**



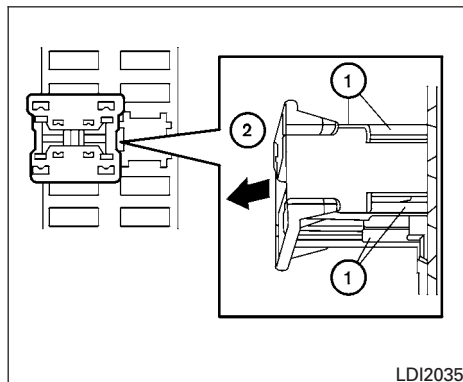
**Type B**

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.

## BATTERY REPLACEMENT

### CAUTION

**Be careful not to allow children to swallow the battery or removed parts.**



### Extended storage switch

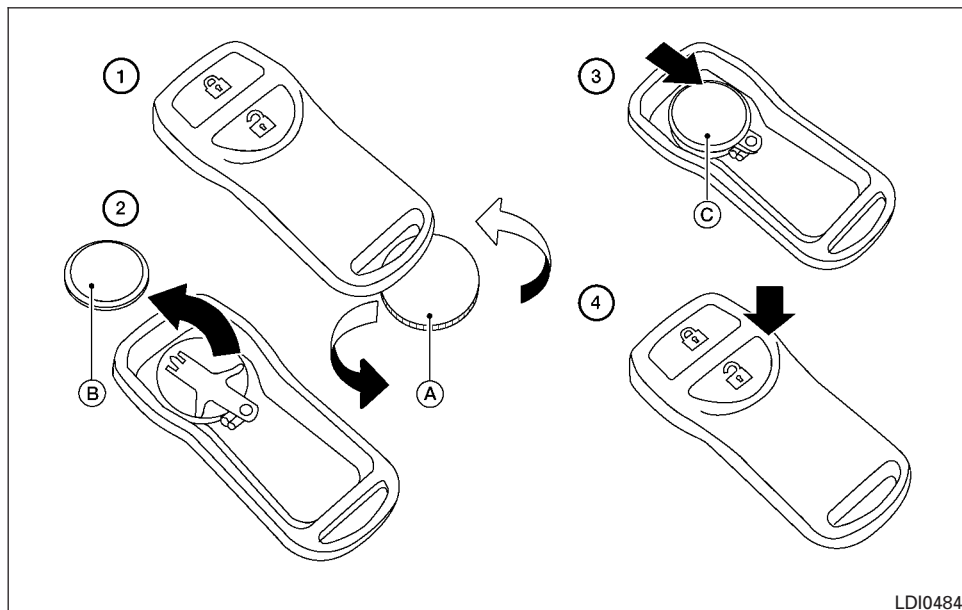
If any electrical equipment does not operate, remove the extended storage switch and check for an open fuse.

#### NOTE:

**The extended storage switch is used for long term vehicle storage. Even if the extended storage switch is broken it is not necessary to replace it. Replace only the open fuse in the switch with a new fuse.**

How to replace the extended storage switch:

1. To remove the extended storage switch, be sure the ignition switch is in the OFF or LOCK position.
2. Be sure the headlight switch is in the OFF position.
3. Remove the fuse box cover.
4. Pinch the locking tabs ① found on each side of the storage switch.
5. Pull the storage switch straight out from the fuse box ②.



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## KEYFOB (if so equipped)



Replace the battery in the keyfob as follows:

- ① Open the lid using a coin (A).
- ② Remove the battery (B).

- ③ Install a new battery (C) with the "+" facing down.
  - Hold the battery by the edges. Holding the battery across the contact points will seriously deplete the storage capacity.

- Do not touch the internal circuit and electric terminals as it could cause a malfunction.
- When changing the battery, do not let dust or oil get on the keyfob.
- There is danger of explosion if a lithium battery is incorrectly replaced. Replace only with the same or equivalent type.

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.**

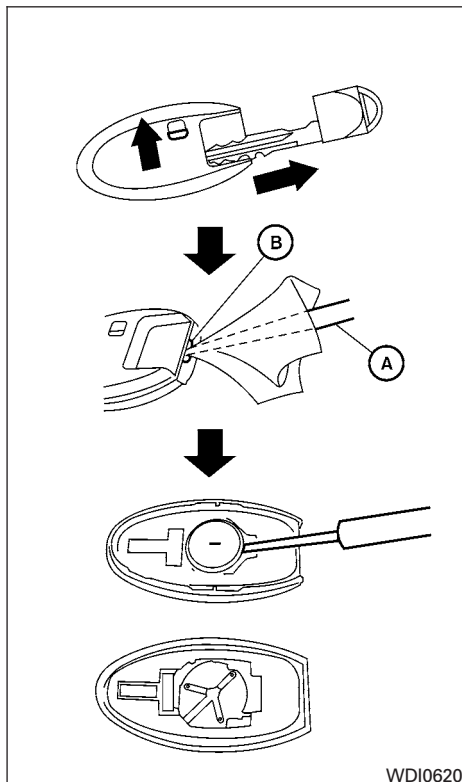
### FCC Notice:

#### For USA:

This device complies with Part 15 of the FCC Rules. 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. Note: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### For Canada:

This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.



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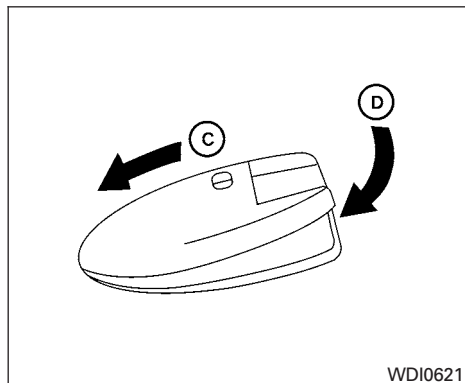
### NISSAN INTELLIGENT KEY® (if so equipped)

Replace the battery in the Intelligent Key as follows:

1. Remove the mechanical key from the Intelligent Key.
2. Insert a small screwdriver (A) into the slit (B) of the corner and twist it to separate the upper part from the lower part. Use a cloth to protect the casing.
3. Replace the battery with a new one.

Recommended battery: CR2025 or equivalent.

- Do not touch the internal circuit and electric terminals as doing so could cause a malfunction.
- Hold the battery by the edges. Holding the battery across the contact points will seriously deplete the storage capacity.
- Make sure that the + side faces the bottom of the case.



4. Close the lid securely as illustrated (C) (D).
5. Operate the buttons to check the operation.

See a NISSAN dealer if you need assistance for replacement.

#### FCC Notice:

##### For USA:

**This device complies with Part 15 of the FCC Rules. 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. Note: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

##### For Canada:

**This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.**

## LIGHTS

### HEADLIGHTS

#### Replacing the halogen headlight bulb

The headlight is a semi-sealed beam type which uses a replaceable headlight (halogen) bulb. Because the headlight assembly must be removed from the vehicle for bulb replacement, see your NISSAN dealer.

#### 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.**
- **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.**

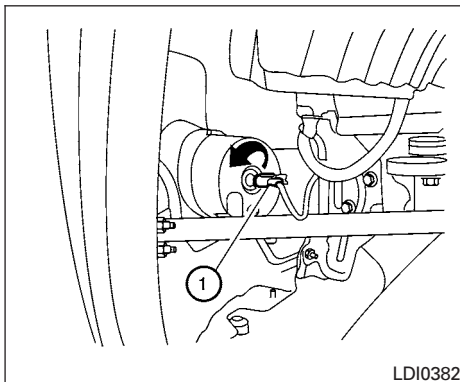
**NOTE:**

**Use the same number and wattage as shown in the 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****⚠ 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 the 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.**



1. Disconnect the negative (-) battery cable.
2. The fog light is accessible in front of the front tire and behind the bumper.
3. Disconnect the bulb connector ①.
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.

**NOTE:**

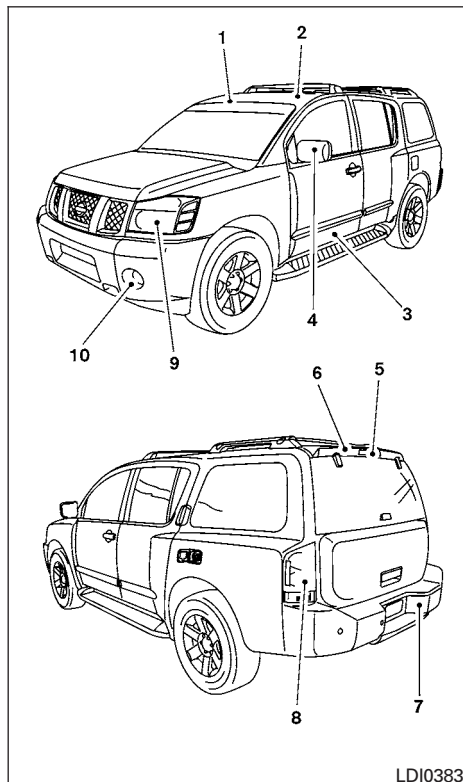
**To adjust the fog light vertical aim: Access the aiming screw from underneath the front bumper. The aiming screw is located on the bottom of the fog light housing. Turn the screw clockwise to raise the pattern. Turn the screw counterclockwise to lower the pattern.**

## EXTERIOR AND INTERIOR LIGHTS

Item	Wattage (W)	Bulb No.
Headlight assembly*		
High	65	9005 (HB3)
Low	55	9006 (HB4)
Park/Turn	28/8	3457K
Sidemarker	3.8	194
Side turn signal light* (if so equipped)	—	(LED)
Front fog light (if so equipped)	55	H11
Puddle lamp	9	906
Room/map lights	8	—
Personal lights	6	WXW52
Footwell*	3.4	1 58
Glove box light*	3.4	158
Vanity mirror light	1.8	—
Step light	3.8	194
Cargo light	8	AL67
High-mounted stop light*	—	(LED)
Rear combination light		
Tail/Stop	27/8	3157KX RD
Backup (reversing)	18	921LF
Turn	18	3156K
License plate light	5	W5W

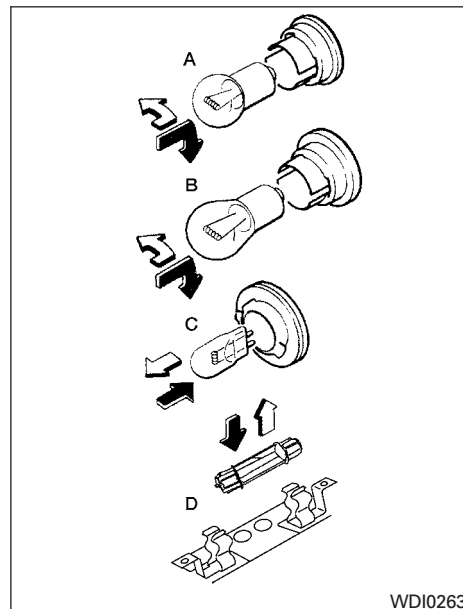
\* See a NISSAN dealer for replacement.

Always check with the Parts Department at a NISSAN dealer for the latest parts information.



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1. Room/map light
2. Front personal lights
3. Step light
4. Puddle lamp/Side turn signal light (if so equipped)
5. High-mount stoplight
6. Cargo light
7. License plate light
8. Rear combination light
9. Headlight assembly
10. Fog light (if so equipped)



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## Replacement procedures

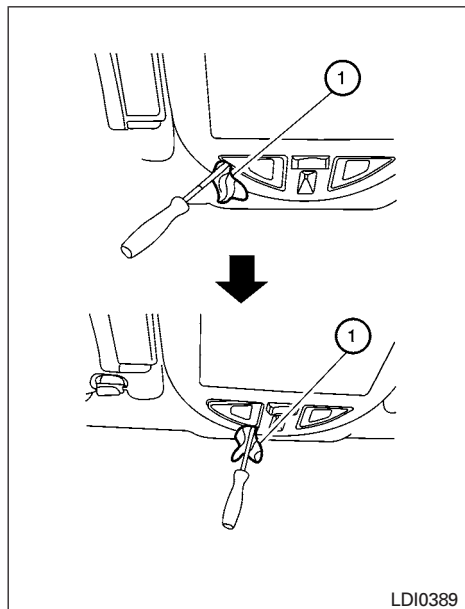
All other lights are either type A, B, C or D. When replacing a bulb, first remove the lens, lamp and/or cover.



Indicates bulb removal

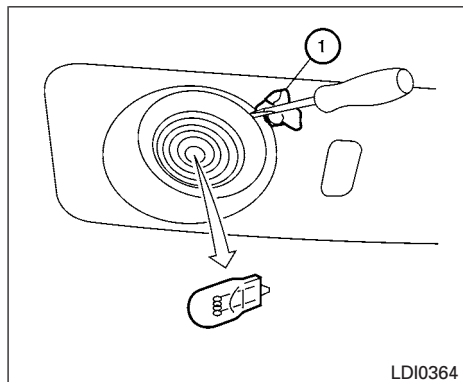


Indicates bulb installation



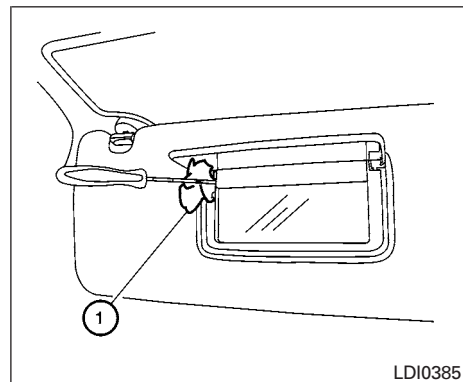
### Map lights

Use a cloth ① to protect the housing.



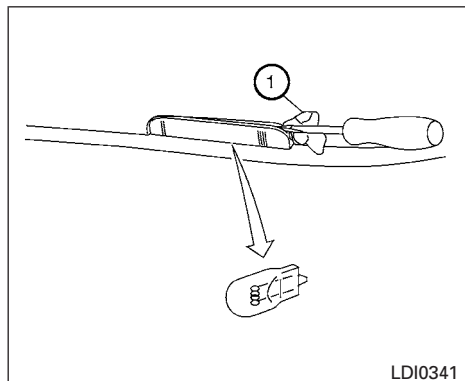
### Personal lights

Use a cloth ① to protect the housing.



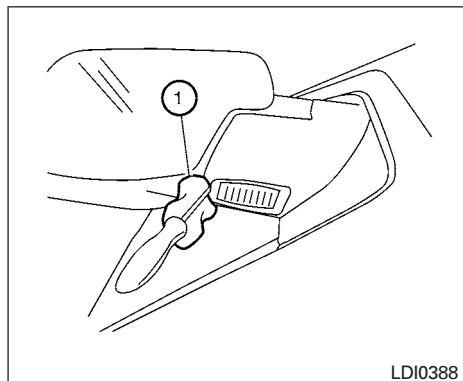
### Vanity mirror

Use a cloth ① to protect the housing.



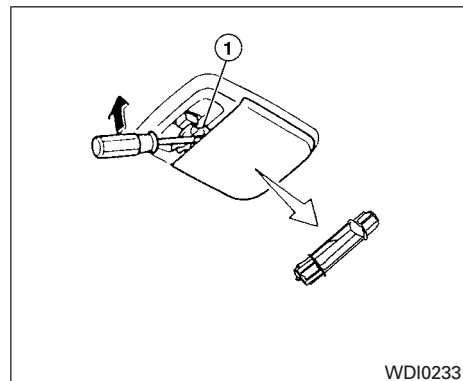
### Step light

Use a cloth ① to protect the housing.



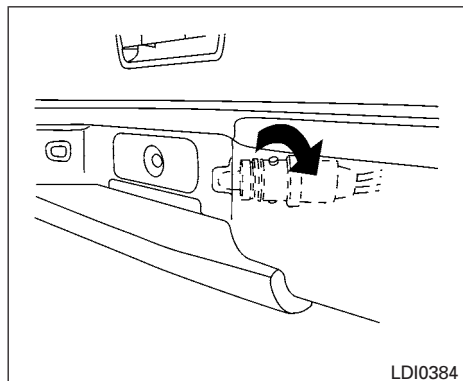
### Puddle light

Use a cloth ① to protect the housing.

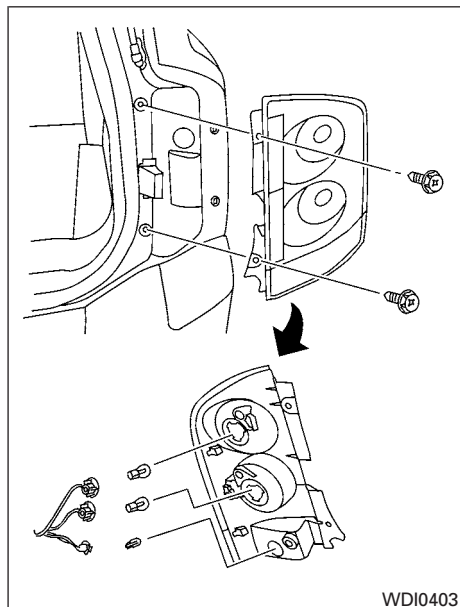


### Cargo light

Use a cloth ① to protect the housing.



**License plate light**



**Rear combination light**

## WHEELS AND TIRES

**If you have a flat tire, see “Flat tire” in 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 and the CHECK TIRE PRESSURE warning appears in the vehicle information display, 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.

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 “Monitor, climate, audio, phone and voice recognition 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.

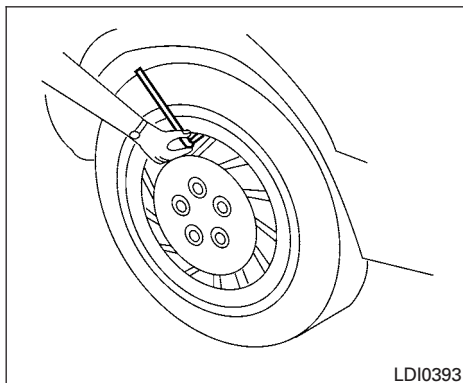
**Incorrect tire pressure, including under inflation, may adversely affect tire life and vehicle handling.**

### WARNING

- **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. 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 “Tire Safety Information” (Canada) in the Warranty Information Booklet.**



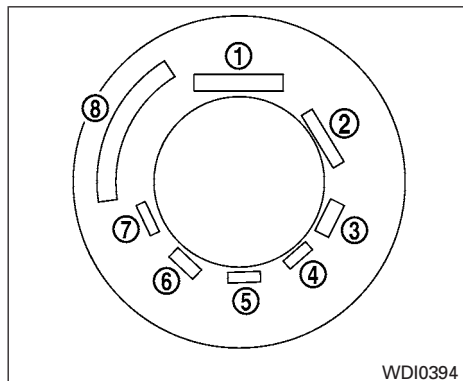


### Checking tire pressure

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: P265/70R18 P275/60R20	250 kPa, 36 PSI
Rear Original Tire: P265/70R18 P275/60R20	250 kPa, 36 PSI
Spare Tire: P265/70R18 P275/60R20	250 kPa, 36 PSI

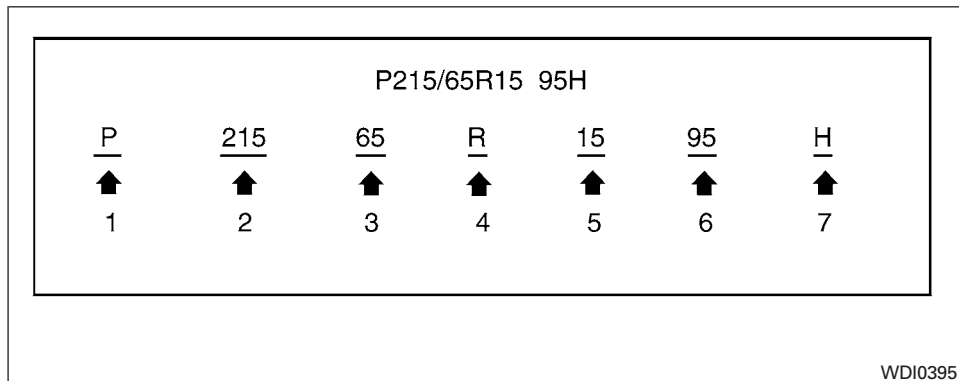


WDI0394

### Example

## 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.



WDI0395

### 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).
2. 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.
6. 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.
7. H: Tire speed rating. You should not drive the vehicle faster than the tire speed rating.

DOT XX XX XXX XXXX

DOT



1

XX



2

XX



3

XXX



4

XXX



5

XXXX



6

WDI0396

### Example

② TIN (Tire Identification Number) for a new tire (example: DOT XX 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 the 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 rubber-coated 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

### WARNING

- **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 low tire pressure warning system.**
- **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, includ-

ing 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

### CAUTION

**Tire chains/cables should not be installed on P275/60R20 size tires. Installation of the tire chains/cables on P275/60R20 size tires will cause damage to the vehicle. If you plan to use tire chains/cables, you should install P265/70R18 size tires on your vehicle.**

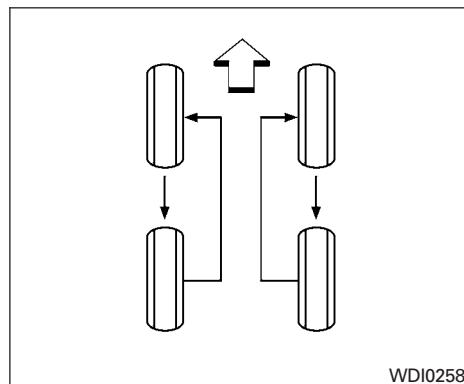
Use of tire chains may be prohibited according to location. Check the local laws before installing tire chains. When installing tire chains, make sure they are the proper size for the tires on your vehicle and are installed according to the chain manufacturer's suggestions. **Use only SAE class "S" chains.** Class "S" chains are used on vehicles with restricted tire to vehicle clearance. Vehicles that can use Class "S" chains are de-

signed 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 tire size. 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 rear wheels and not on the front wheels.**

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.

Use only the 2WD range when driving on clear paved roads.



## 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 in this manual for tire replacing procedures.

**As soon as possible, tighten the wheel nuts to the specified torque with a torque wrench.**

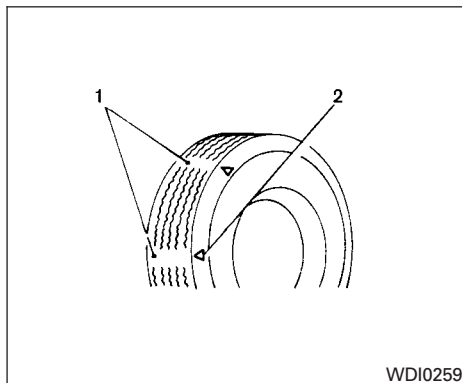
## Wheel nut tightening torque:

98 ft-lb (133 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.



1. Wear indicator
2. Location mark

Tire wear and damage

### WARNING

- 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.

### 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.

### Four-wheel drive models

### CAUTION

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

If excessive tire wear is found, it is recommended that all four tires be replaced with tires of the same size, brand, construction and tread pattern.

The tire pressure and wheel alignment should also be checked and corrected as necessary. Contact a NISSAN dealer.

## 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.

# 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	28 gal	23-1/4 gal	105.8	See “Fuel recommendations” later in this section.*1
Engine oil *8				
Drain and Refill				
With oil filter change	6-7/8 qt	5-3/4 qt	6.5	<ul style="list-style-type: none"> <li>Engine oil with API Certification Mark *2</li> <li>Viscosity SAE 5W-30</li> </ul>
Without oil filter change	6-1/2 qt	5-1/2 qt	6.2	
Cooling system				
With reservoir	3-3/4 gal	3-1/8 gal	14.4	Pre-diluted Genuine NISSAN Long Life Antifreeze/Coolant (blue) or equivalent
Automatic transmission fluid	Refill to the proper level according to the instructions in the “Maintenance and do-it-yourself” section.			Genuine NISSAN Matic S ATF *3
Power steering fluid (PSF)				Genuine NISSAN PSF or equivalent.*4
Brake fluid				Genuine NISSAN Super Heavy Duty Brake Fluid *5 or equivalent DOT 3
Multi-purpose grease	—	—	—	NLGI No. 2 (Lithium Soap base)
Air conditioning system refrigerant	—	—	—	HFC-134a (R-134a) *6
Air conditioning system oil	—	—	—	Genuine NISSAN A/C System Oil Type S or equivalent *6
Transfer fluid	3-1/8 qt	2-5/8 qt	3.0	Genuine NISSAN Matic D ATF recommended *7
Front differential gear oil	3-3/8 pt	2-7/8 pt	1.6	Genuine NISSAN Differential Oil Hypoid Super GL-5 80W-90 or API GL-5, Viscosity SAE 80W-90 *9
Rear differential gear oil	3-3/4 pt	3-1/8 pt	1.75	API GL-5 synthetic gear oil, Viscosity SAE 75W-90*10
Windshield-washer fluid (shared between front and rear wipers)	1-1/4 gal	1 gal	4.5	Genuine NISSAN Windshield Washer Concentrate Cleaner & Antifreeze or equivalent

\*1: For further details, see “Fuel recommendation” in this section.

\*2: For further details, see “Engine oil and oil filter recommendations” in this section.

\*3: If Genuine NISSAN Matic S ATF is not available, Genuine NISSAN Matic J ATF may also be used. Using automatic transmission fluid other than Genuine NISSAN Matic S ATF or Genuine NISSAN Matic J 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.

\*4: DEXTRON™ VI type ATF may also be used.

\*5: Available in mainland USA through your NISSAN dealer.

\*6: For further details, see “Air conditioner specification label” in this section.

\*7: Using fluid other than Genuine NISSAN Matic D ATF will cause deterioration in driveability and transfer case durability, and may damage the transfer case, which is not covered by the NISSAN new vehicle limited warranty.

\*8: For further details, see “Changing engine oil” in the “Maintenance and do-it-yourself” section.

\*9: For hot climates, viscosity SAE 80W-90 is suitable for ambient temperatures above 0° C (32° F).

\*10: See a NISSAN dealer for service for synthetic oil.

## 9-2 Technical and consumer information

## FUEL RECOMMENDATION (without Flexible Fuel Vehicle option)

Use unleaded regular gasoline with an octane rating of at least 87 AKI (Anti-Knock Index) number (Research octane number 91).

### CAUTION

- **Only vehicles with the E-85 filler door label can operate on E-85. Fuel system or other damage can occur if E-85 is used in vehicles that are not designed to run on E-85.**
- **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-15 or E-85 fuel in your vehicle. Your vehicle is not designed to run on E-15 or E-85 fuel. Using E-15 or E-85 fuel in a vehicle not specifically designed for E-15 or E-85 fuel can adversely affect the emission control devices and systems of the vehicle. Damage caused by such fuel is not covered by the NISSAN new vehicle limited warranty.**
- **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.**

## 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%.)**

- **E-15 fuel contains more than 10% oxygenate. E-15 fuel will adversely affect the emission control devices and systems of the vehicle and should not be used. Damage caused by such fuel is not covered by the NISSAN new vehicle limited warranty.**
- **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.**

## 9-4 Technical and consumer information

### E-15 fuel

E-15 fuel is a mixture of approximately 15% fuel ethanol and 85% unleaded gasoline. E-15 can only be used in vehicles designed to run on E-15 fuel. Do not use E-15 in your vehicle. U.S. government regulations require fuel ethanol dispensing pumps to be identified with small, square, orange and black label with the common abbreviation or the appropriate percentage for that region.

### 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.**

## FLEXIBLE FUEL VEHICLE (FFV) FUEL RECOMMENDATION (if so equipped)

Your vehicle is designed to use (E-85) Fuel Ethanol, "Regular" unleaded regular gasoline or any percentage of the two fuels combined.

**U.S. government regulations require Fuel Ethanol dispensing pumps to have a small, square, orange and black label with the common abbreviation or the appropriate percentage for that region.**

### CAUTION

**Use of other fuels such as Fuel Methanol may cause powertrain damage or a loss of vehicle performance.**

**Under no circumstances should a leaded gasoline be used, because this will cause damage to the three-way catalyst.**

## General information

This information is for Flexible Fuel vehicles (FFV) only. FFV vehicles can be identified by the fuel filler door label that states Ethanol (E-85) or Unleaded Gasoline Only. This section only covers those subjects that are unique to Flexible Fuel vehicles.

### CAUTION

**Only vehicles with the E-85 filler door label can operate on E-85. Fuel system or other damage can occur if E-85 is used in vehicles that are not designed to run on E-85.**

## Ethanol Fuel (E-85)

E-85 is a mixture of approximately 85% fuel ethanol and 15% unleaded gasoline.

### WARNING

- Ethanol vapors are extremely flammable and could cause serious personal injury.
- Never have any smoking materials lit in or near the vehicle when removing the fuel filler cap or filling the tank.
- Do not use E-85 as a cleaning agent and never use it near an open flame.

## Fuel requirements

Your vehicle will operate on both unleaded regular gasoline with an octane rating of at least 87 AKI (Anti-Knock Index) number (Research octane number 91), or E-85 fuel, or any mixture of these two.

For the best starting and vehicle driveability results, do not continually switch between E-85 and unleaded regular gasoline. If you must switch fuels, NISSAN recommends the following:

- do not switch when the fuel gauge indicates less than 1/4 full
- add more than 5 gallons of fuel
- operate the vehicle immediately after refueling for a period of at least 5 minutes

## NOTE:

**When the ambient temperature is above 90°F (32°C), you may experience hard starting and rough idle following start up even if the above recommendations are followed.**

## Starting

The characteristics of E-85 fuel make it unsuitable for use when ambient temperatures fall below 0°F (-18°C). In the range of 0°F (-18°C) to 32°F (0°C), you may experience an increase in the time it takes for you engine to start, and a deterioration in drivability (sags and/or hesitations) until the engine is fully warmed up.

## Fuel consumption

Because E-85 fuel contains less energy per gallon than gasoline, you will experience an increase in fuel consumption. You can expect your fuel mileage to decrease by about 30% compared to gasoline operation.

## Replacement parts

Many components in your Flexible Fuel Vehicle (FFV) are designed to be compatible with ethanol. Always be sure that your vehicle is serviced with correct ethanol compatible parts.

### CAUTION

**Replacing fuel system components with non-ethanol compatible components can damage your vehicle and may also affect the warranty coverage.**

## Maintenance

If you operate your vehicle using E-85 fuel, follow the correct maintenance log shown in the "NISSAN Service and Maintenance Guide".

### CAUTION

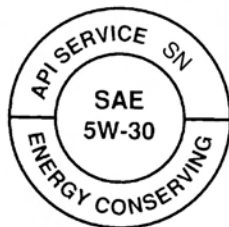
**Do not use ethanol mixture greater than 85% in your vehicle. It will cause difficulty in cold starting and may affect drivability.**

## 9-6 Technical and consumer information

API certification mark



API service symbol



LT12024

## 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 NISSAN A/C system oil Type S or the exact equivalents.**

### 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	VK56DE	
Type	Gasoline, 4-cycle, DOHC	
Cylinder arrangement	8-cylinder, V-block, Slanted at 90°	
Bore x Stroke	in (mm) 3.858 x 3.622 (98 x 92)	
Displacement	cu in (cm <sup>3</sup> ) 338.78 (5,552)	
Firing order	1-8-7-3-6-5-4-2	
Idle speed		
A/T (in "N" position)		
Ignition timing (degree B.T.D.C. at idle speed)	No adjustment is necessary.	
CO % at idle		
Spark plug	Standard Model DILFR5A-11	FFV Model DILFR5A-11D
Spark plug gap (Nominal)	in (mm) 0.043 (1.1)	
Camshaft operation	Timing chain	

**This spark ignition system complies with the Canadian standard ICES-002.**

## WHEELS AND TIRES

Wheels	
	18 x 8.0JJ
	20 x 8.0JJ
Tires	
	P265/70R18
	P275/60R20
Spare tire	Full size

## DIMENSIONS AND WEIGHTS

Overall length	in (mm)	207.7 (5,275)
Overall width	in (mm)	79.3 (2,016)
Overall height		
2wd with roof rack	in (mm)	77.2 (1,962)
4wd with roof rack	in (mm)	78.0 (1,982)
Front Track		
18 inch tire	in (mm)	67.5 (1,715)
20 inch tire	in (mm)	67.5 (1,715)
Rear Track		
18 inch tire	in (mm)	67.5 (1,715)
20 inch tire	in (mm)	67.5 (1,715)
Wheelbase	in (mm)	123.2 (3,130)
Gross vehicle weight rating	lb (kg)	See the "F.M.V.S.S./C.M.V. S.S. certification label" on the center pillar between the driver's side front and rear doors.
Gross axle weight rating		
Front	lb (kg)	
Rear	lb (kg)	

## 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.

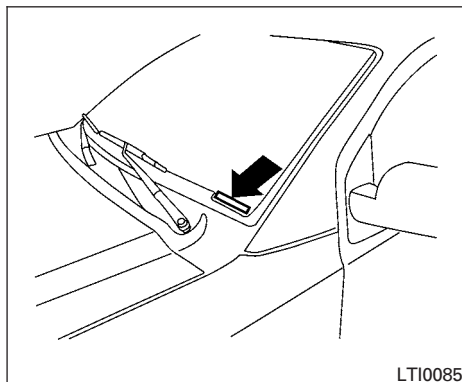
Using fuel with an octane rating that is too low may cause engine damage. All gasoline vehicles must be operated with unleaded gasoline. Therefore, avoid taking your vehicle to areas where appropriate fuel is not available.

**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.

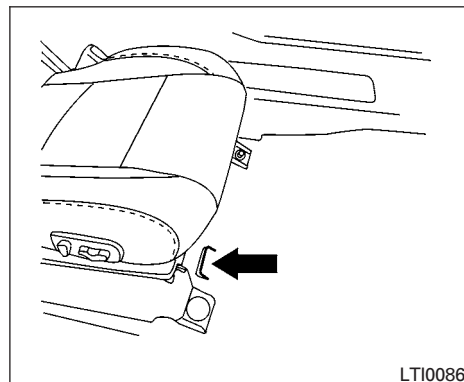
**When any vehicle is to be taken into another country, state, province or district and registered, its modifications, transportation, and registration are the responsibility of the user. NISSAN is not responsible for any inconvenience that may result.**

## VEHICLE IDENTIFICATION



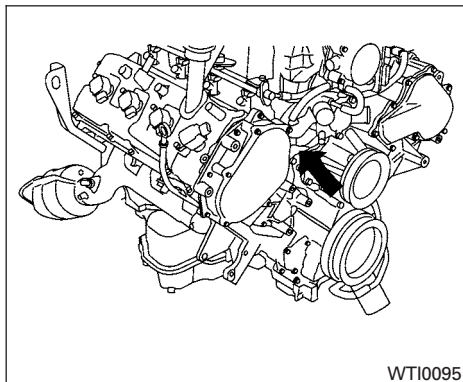
### VEHICLE IDENTIFICATION NUMBER (VIN) PLATE

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.



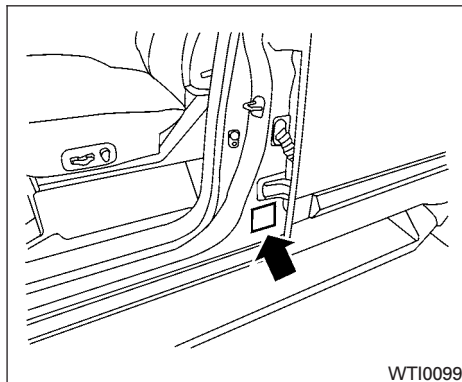
### VEHICLE IDENTIFICATION NUMBER (chassis number)

The vehicle identification number is located as shown.



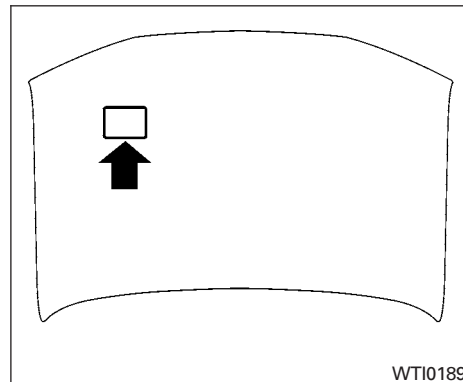
### ENGINE SERIAL NUMBER

The number is stamped on the engine as shown.



### F.M.V.S.S./C.M.V.S.S. CERTIFICATION LABEL

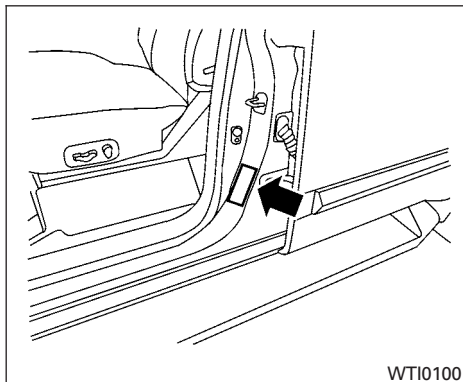
The Federal/Canadian Motor Vehicle Safety Standard (F.M.V.S.S./C.M.V.S.S.) certification label is affixed as shown. This label contains valuable vehicle information, such as: Gross Vehicle Weight Ratings (GVWR), Gross Axle Weight Rating (GAWR), month and year of manufacture, Vehicle Identification Number (VIN), etc. Review it carefully.



### EMISSION CONTROL INFORMATION LABEL

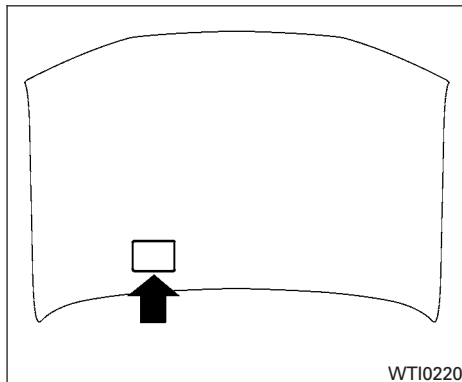
The emission control information label is attached to the underside of the hood as shown.

## INSTALLING FRONT LICENSE PLATE



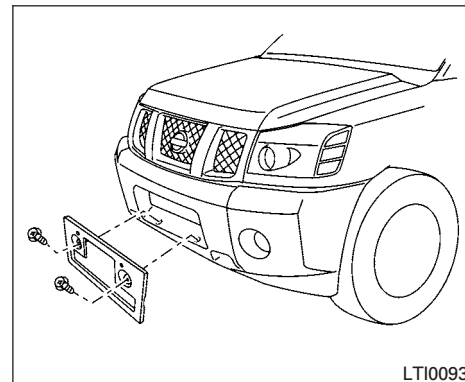
### TIRE AND LOADING INFORMATION LABEL

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.



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 0.20 in (5 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)**

## VEHICLE LOADING INFORMATION

### WARNING

- **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.**

### TERMS

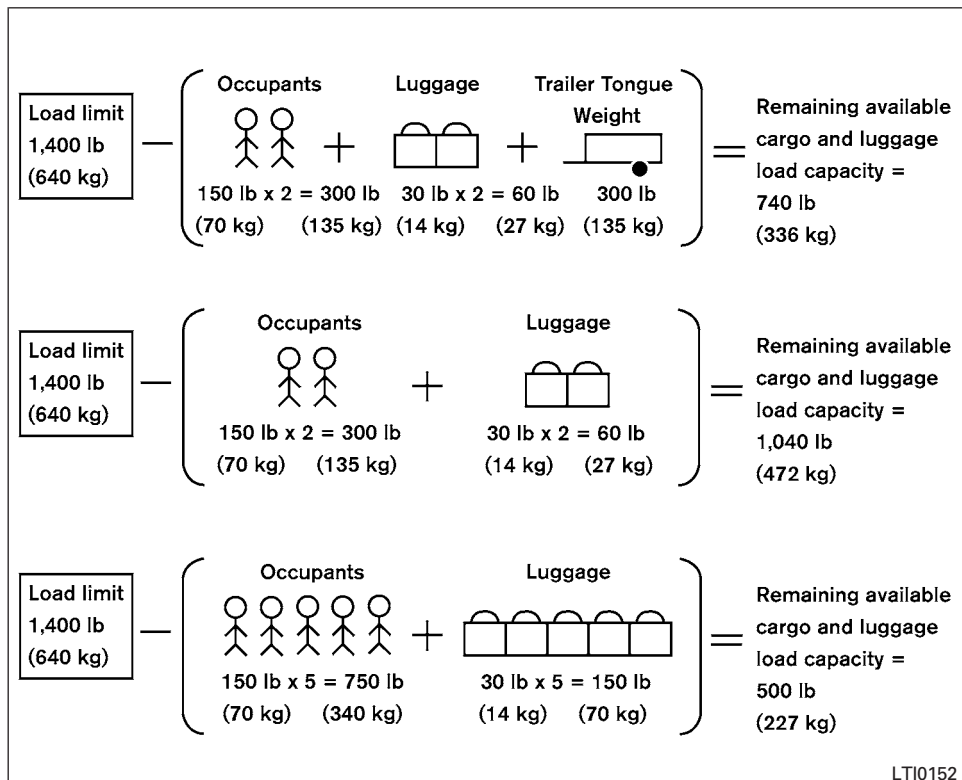
It is important to familiarize yourself with the following terms before loading your vehicle:

- 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 on the 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.
- 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.



LTI0152

### Example

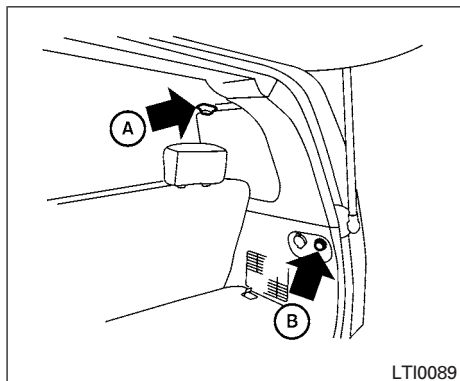
### Steps for determining correct load limit

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX lbs or XXX kg" on your vehicle's placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX lbs or XXX kg.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the XXX amount equals 1,400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1,400-750 (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.

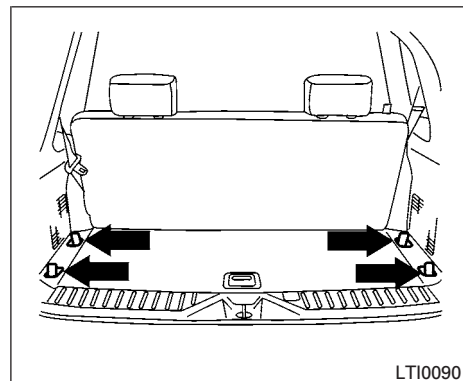


### Cargo area ceiling tie-down hooks SECURING THE LOAD

There are tie down hooks located in the cargo area as shown. The tie down hooks can be used to secure cargo with ropes or other types of straps.

**Do not apply a total load of more than 55 lbs. (245 N) to a single (A) plastic hook or 44 lbs. (196 N) to a single (B) plastic hook when securing cargo.**

**Do not apply a total load of more than 110 lbs. (490 N) to a single metal floor tie-down hook when securing cargo.**



### Cargo area floor tie-down hooks

#### **⚠ WARNING**

- **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.**
- **The child restraint top tether strap may be damaged by contact with items in the cargo area. Secure any items in the cargo area. Your child could be seriously injured or killed in a collision if the top tether strap is damaged.**

- **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.**

## 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.

## WARNING

- **Properly secure all cargo with ropes or straps to help prevent it from sliding or shifting. Do not place cargo higher than the seat-backs. 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 covered by the vehicle's 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

### WARNING

**Overloading or improper loading of a trailer and its cargo can adversely affect vehicle handling, braking and performance and may lead to accidents.**

### 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](http://www.nissanusa.com). This guide includes information on trailer towing capability and the special equipment required for proper towing.

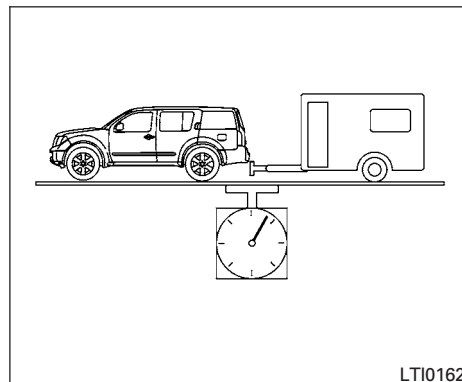
## MAXIMUM LOAD LIMITS

### 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 3,500 lbs. (1,587 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).

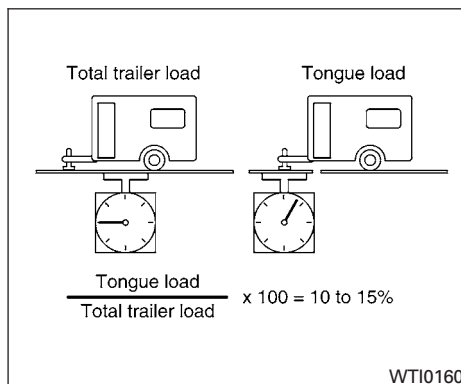
Temperature conditions can also affect towing. For example, towing a heavy trailer in high outside temperatures on graded roads can affect engine performance and cause overheating. The engine protection mode, which helps reduce the chance of engine damage, could activate and automatically decrease engine power. Vehicle speed may decrease under high load. Plan your trip carefully to account for trailer and vehicle load, weather and road conditions.

### WARNING

**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.**

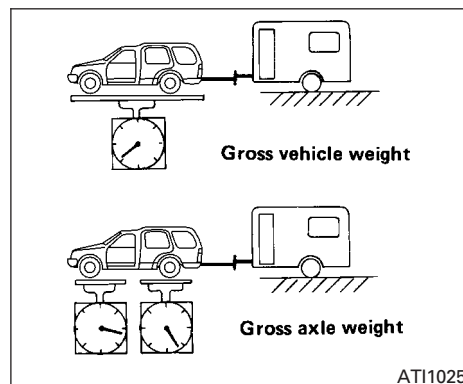
### CAUTION

**Vehicle damage resulting from improper towing procedures is not covered by NISSAN warranties.**



### Tongue load

When using a weight carrying or a weight distributing hitch, 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 F.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/king pin load, use the following procedure.

1. Locate the GVWR on the F.M.V.S.S./C.M.V.S.S. certification label.
2. Weigh your vehicle on the scale with all of the passengers and cargo that are normally in the vehicle when towing a trailer.
3. Subtract the actual vehicle weight from the GVWR. The remaining amount is the available maximum tongue/king pin load.

To determine the available towing capacity, use the following procedure.

1. Find the GCWR for your vehicle on the "Towing Load/Specification" chart found later in this section.
2. 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 - 6,350 lb. (2,880 kg).

- Gross Vehicle Weight Rating (GVWR) from F.M.V.S.S./C.M.V.S.S. certification label - 7,250 lb. (3,289 kg).
- Gross Combined Weight Rating (GCWR) from "Towing Load/Specification" chart - 15,100 lb. (6,849 kg).
- Maximum Trailer towing capacity from "Towing Load/Specification" chart - 9,100 lb. (4,128 kg).

7,250 lb. (3,289 kg)	GVWR
- 6,350 lb. (2,880 kg)	GVW
<hr/>	
= 900 lb. (409 kg)	Available for tongue weight
15,100 lb. (6,849 kg)	GCWR
- 6,350 lb. (2,880 kg)	GVW
<hr/>	
= 9,123 lb. (4,138 kg)	Capacity available for towing
900 lb. (409 kg)	Available tongue weight
/ 8,750 lb. (3,969 kg)	Available capacity
<hr/>	
=	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

		US	US	CAN
		2WD	4WD	4WD
Maximum Towing Capacity*1 *2	w/o tow package	6,500 lb. (2,948 kg)	6,500 lb. (2,948 kg)	6,500 lb. (2,948 kg)
	with tow package	9,100 lb. (4,128 kg)	9,000 lb. (4,082 kg)	9,000 lb. (4,082 kg)
Maximum Tongue Load	w/o tow package	650 lb. (295 kg)	650 lb. (295 kg)	650 lb. (295 kg)
	with tow package	910 lb. (413 kg)	900 lb. (408 kg)	900 lb. (408 kg)
Maximum Gross Combined Weight Rating	w/o tow package	12,800 lb. (5,806 kg)	13,000 lb. (5,897 kg)	13,000 lb. (5,897 kg)
	with tow package	15,100 lb. (6,849 kg)	15,100 lb. (6,849 kg)	15,100 lb. (6,849 kg)
*1: 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.				
*2: Use of a weight-distributing hitch system is recommended when towing over 5,000 lbs.				

## TOWING SAFETY

### Trailer hitch

Your vehicle may be equipped with an optional trailer tow package. The trailer tow package includes a receiver-type frame mounted hitch. This hitch is rated for the maximum towing capacity of this vehicle when the proper towing equipment is used. Choose a proper ball mount and hitch ball that is rated for the trailer to be towed. Genuine NISSAN ball mounts and hitch balls are available from your NISSAN dealer.

If your vehicle is not equipped with the optional trailer tow package, check the towing capacity of your bumper hitch or receiver-type frame mounted hitch. Choose a proper hitch for your vehicle and trailer. A genuine NISSAN trailer hitch is available from your NISSAN dealer. 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.

### WARNING

**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.

### Ball mount

The hitch ball is attached to the ball mount and the ball mount is inserted into the hitch receiver. Choose a proper class ball mount based on the trailer weight. Additionally, the ball mount should be chosen to keep the trailer tongue level with the ground.

### Weight carrying hitches

A weight carrying or "dead weight" ball mount is one that is designed to carry the whole amount of tongue weight and gross weight directly on the ball mount and on the receiver.

### Weight distribution hitch

This type of hitch is also called a "load-leveling" or "equalizing" hitch. A set of bars attach to the ball mount and to the trailer to distribute the tongue weight (hitch weight) of your trailer. Many vehicles can't carry the full tongue weight of a given trailer, and need some of the tongue weight transferred through the frame and pushing down on the front wheels. This gives stability to the tow vehicle.

A weight-distributing hitch system (Class IV) is recommended if you plan to tow trailers with a maximum weight over 5,000 lbs (2,268 kg) . Check with the trailer and towing equipment manufacturers to determine if they recommend the use of a weight-distributing hitch system.

## NOTE:

**A weight-distributing hitch system may affect the operation of trailer surge brakes. If you are considering use of a weight-distributing hitch system with a surge brake-equipped trailer, check with the surge brake, hitch or trailer manufacturer to determine if and how this can be done.**

Follow the instructions provided by the manufacturer for installing and using the weight-distributing hitch system.

General set-up instructions are as follows:

1. Park unloaded vehicle on a level surface. With the ignition on and the doors closed, allow the vehicle to stand for several minutes so that it can level.
2. Measure the height of a reference point on the front and rear bumpers at the center of the vehicle.
3. Attach the trailer to the vehicle and adjust the hitch equalizers so that the front bumper height is within 0 - .5 inches (0 - 13 mm) of the reference height measured in step 2. The rear bumper should be no higher than the reference height measured in step 2.

## WARNING

**Properly adjust the weight distributing hitch so the rear of the bumper is no higher than the measured reference height when the trailer is attached. If the rear bumper is higher than the measured reference height when loaded, the vehicle may handle unpredictably which could cause a loss of vehicle control and cause serious personal injury or property damage.**

## 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 (907 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 (1,587 kg).

## Class III hitch

Class III trailer hitch equipment (receiver, ball mount and hitch ball) can be used to tow trailers of a maximum weight of 5,000 lb (2,268 kg).

## Class IV hitch

Class IV trailer hitch equipment (receiver, ball mount and hitch ball) can be used to tow trailers of a maximum weight of 10,000 lb (4,535 kg). A weight distributing hitch should be used to tow trailers that weigh over 5,000 lb (2,268 kg).

Your vehicle may be equipped with Class IV trailer hitch equipment that has a 10,000 lb (4,535 kg) maximum weight rating, but your vehicle is only capable of towing the maximum trailer weights shown in the "Towing Load/Specification" chart earlier in this section.

### CAUTION

- **Special hitches which include frame reinforcements are required for towing above 2,000 lb (907 kg). Suitable genuine NISSAN hitches, ball mounts and hitch balls for pickup trucks and sport utility vehicles are available at a NISSAN dealer.**
- **The hitch should not be attached to or affect the operation of the impact-absorbing bumper.**
- **Do not use axle-mounted hitches.**
- **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.**
- **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 placard.
- 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. The safety chains can be attached to the bumper if the hitch ball is mounted to the bumper. Be sure to leave enough slack in the chains to permit turning corners.

### Trailer lights

#### CAUTION

**When splicing into the vehicle electrical system, a commercially available power-type 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 than 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. Vehicles equipped with the optional trailer tow package are equipped with a 7-pin trailer harness connector. If your trailer is equipped with a flat 4-pin connector, an adapter will be needed to connect the trailer lights to the vehicle. Adapters are available at NISSAN dealers as well as auto parts stores and hitch retailers.

## Trailer brakes

**When towing a trailer load of 3,500 lbs. (1,587 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.

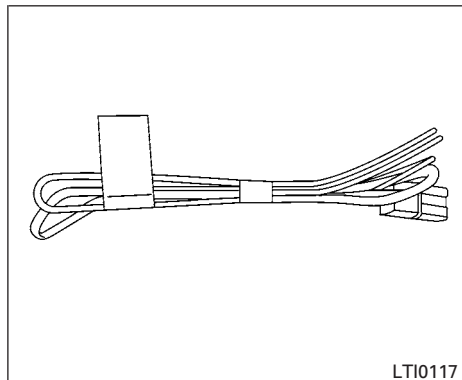
**Electric Trailer Brakes** -Electric braking systems are activated by an electronic signal sent from a trailer brake controller (special brake-sensing module). If electric trailer brakes are used, see "Electric trailer brake controller" in this section.

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.**



**example**

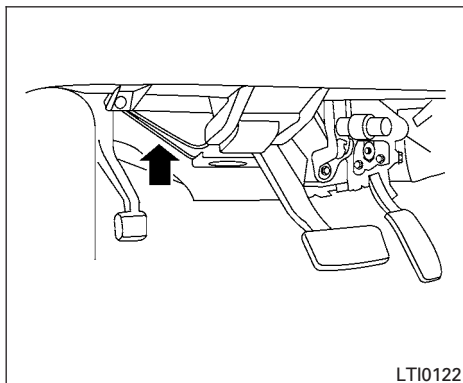
## Electric trailer brake controller

Trailers equipped with electric brakes may require the installation of an aftermarket trailer brake controller.

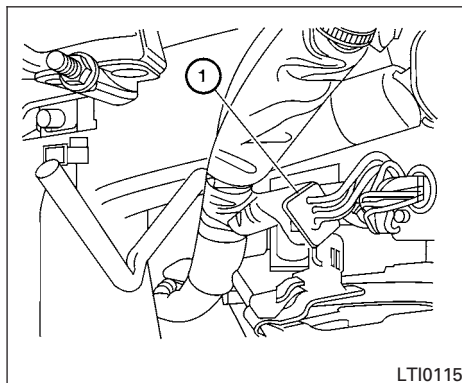
Your vehicle is equipped with a connector and jumper harness that is specifically designed to be used when installing an aftermarket brake controller.

To install the electric trailer brake controller jumper harness, perform the following procedure:

1. Open the driver door. Move the seat to the rearmost position.



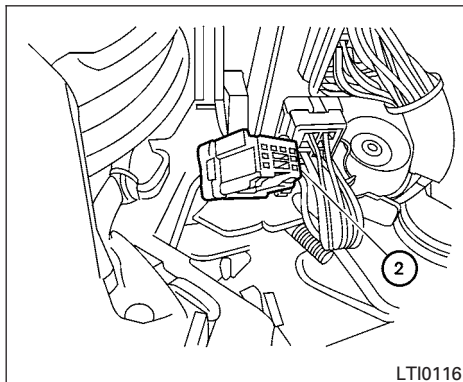
2. Apply the parking brake to access the jumper harness connector.



3. Locate the jumper harness connector under the lower portion of the instrument panel. The connector is taped to the wiring harness ① as indicated.
- The connector is marked with a white tag with "elec brake conn".

Wire color designation for electric trailer brake controller jumper harness.

WIRE COLOR	NOTE
RED/GREEN	Vehicle stop lamp switch to trailer brake controller.
BLACK	Brake controller ground (-).
BROWN/WHITE	Trailer brake controller switched output.
RED/BLUE	Trailer brake controller illumination.
RED	Fused trailer brake controller battery feed (B+).



4. Peel off the tape and connect the jumper harness to the connector (2).
5. Release the parking brake.
6. Install the aftermarket electric trailer brake controller according to the manufacturer's instructions.

## 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:

 **CAUTION**

**If you move the shift selector 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.
3. 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. Make sure the  indicator light (if so equipped) indicates the transfer case is in 4H, 4L, or 2H and that the ATP light is off. If the  indicator light is flashing, or the ATP light is ON, make sure the transmission is in P (Park) (A/T) and turn the 4WD switch to 2WD or 4H. See "Automatic transmission park warning light" in the "Instruments and

controls" section and "Using four wheel drive (4WD)" in the "Starting and driving" section.

7. Turn off the engine.

To drive away:

1. Start the vehicle.
  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 decrease overall stability. 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:

1. 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.**

## Tow mode (if so equipped)

Using tow mode is recommended when pulling a heavy trailer or hauling a heavy load. Press the TOW MODE switch to activate tow mode. The indicator light on the TOW MODE switch illuminates when tow mode is selected. Press the TOW MODE switch again to turn tow mode off. Tow mode is automatically cancelled when the ignition switch is turned OFF.

Tow mode includes the following features:

- Grade logic — Adjusts transmission shifts when pulling a trailer or hauling a load up a grade.
- Downhill Speed Control (DSC) — automatically downshifts when driving down a grade with a trailer or heavy load to help control vehicle speed.

Driving the vehicle in the tow mode with no trailer/load or light trailer/light load will not cause any damage. However, fuel economy may be reduced and the transmission/engine driving characteristics may feel unusual.

**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.**

## SNOW PLOW

### 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.

#### 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.

## 9-30 Technical and consumer information

#### WARNING

**Do not use this vehicle for snowplowing. Installing a snowplow may affect vehicle handling. This may cause the driver to lose control of the vehicle and could result in serious vehicle damage or personal injury.**

## 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.

### **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.

### **WARNING**

**The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure.**

## **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 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 Canada Inc.  
5290 Orbitor Drive  
Mississauga, Ontario, L4W 4Z5

## REPORTING SAFETY DEFECTS

### For USA

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 about motor vehicle safety from <http://www.safercar.gov>.

You may notify NISSAN by contacting our Consumer Affairs Department, toll-free, at 1-800-NISSAN-1.

### For Canada

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada in addition to notifying NISSAN.

If Transport Canada receives complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may request that NISSAN conduct a recall campaign. However, Transport Canada cannot become involved in individual problems between you, your dealer, or NISSAN.

You may contact Transport Canada's Defect Investigations and Recalls Division toll free at 1-800-333-0510. You may also report safety defects online at: <https://www.wapps.tc.gc.ca/Saf-Sec-Sur/7/PCDB-BDPP/Index.aspx>.

Additional information concerning motor vehicle safety may be obtained from Transport Canada's Road Safety Information Centre at 1-800-333-0371 or online at [www.tc.gc.ca/roadsafety](http://www.tc.gc.ca/roadsafety) (English speakers) or [www.tc.gc.ca/securiteroutiere](http://www.tc.gc.ca/securiteroutiere) (French speakers).

To notify NISSAN of any safety concerns please contact our Consumer Information Centre toll free at 1-800-387-0122.

## READINESS FOR INSPECTION/ MAINTENANCE (I/M) TEST

Due to legal requirements in some states and Canadian Provinces, your vehicle may be required 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 I/M test, check the vehicle’s inspection/maintenance test readiness condition. Place the ignition switch in the ON position 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”. Contact a NISSAN dealer to set the “ready condition” or to prepare the vehicle for testing.

## 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 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.

## **OWNER'S MANUAL/SERVICE MANUAL ORDER INFORMATION**

Genuine NISSAN Service Manuals for this model year and prior can be purchased. A genuine NISSAN Service Manual is the best source of service and repair information for your vehicle. This manual is the same one used by the factory-trained technicians working at NISSAN dealerships. Genuine NISSAN Owner's Manuals can also be purchased.

### **For USA**

For current pricing and availability of genuine **NISSAN Service Manuals**, contact:

1-800-450-9491  
[www.nissan-techinfo.com](http://www.nissan-techinfo.com)

For current pricing and availability of genuine **NISSAN Owner's Manuals**, contact:

1-800-247-5321

### **For Canada**

To purchase a copy of a genuine NISSAN Service Manual or Owner's Manual, for this model year and prior, 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.

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## GAS STATION INFORMATION

### RECOMMENDED FUEL (without Flexible Fuel Vehicle [FFV] option):

Use unleaded regular gasoline with an octane rating of at least 87 AKI (Anti-Knock Index) number (Research octane number 91).

#### CAUTION

- **Only vehicles with the E-85 filler door label can operate on E-85. Fuel system or other damage can occur if E-85 is used in vehicles that are not designed to run on E-85.**
- **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-15 or E-85 fuel in your vehicle. Your vehicle is not designed to run on E-15 or E-85 fuel. Using E-15 or E-85 fuel in a vehicle not specifically designed for E-15 or E-85 fuel can adversely affect the emission control devices and systems of the vehicle. Damage caused by such fuel is not covered by the NISSAN new vehicle limited warranty.**
- **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.**

For additional information, see “Capacities and recommended fuel/lubricants” in the “Technical and consumer information” section.

### FLEXIBLE FUEL VEHICLE (FFV) FUEL RECOMMENDATION (if so equipped):

If your vehicle is equipped as a Flexible Fuel vehicle (FFV) your vehicle is designed to use (E-85) Fuel Ethanol, “Regular” unleaded regular gasoline or any percentage of the two fuels combined.

#### 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.**

For additional information, see “Capacities and recommended fuel/lubricants in the “Technical and consumer information” section of this manual.

### RECOMMENDED ENGINE OIL:

- Engine oil with API Certification Mark
- Viscosity SAE 5W-30

See “Engine oil and oil filter recommendations” 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 of this manual.

## RECOMMENDED NEW VEHICLE BREAK-IN PROCEDURE:

During the first 1,200 mi (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.



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