



2014 NV200 TAXI

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.
- **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.

DRIVING

This vehicle will handle and maneuver differently from an ordinary passenger vehicle because it has a higher center of gravity. 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 "Driving precautions," "Avoiding collision and rollover" and "Driving safety precautions" in the "Starting and driving" section of this manual.

MODIFICATION OF YOUR VEHICLE

WARNING

Any modifications or alterations of this vehicle that do not comply with the NISSAN NV200 Taxi Body Builder's Guide may affect the safety of the vehicle which may result in a collision, serious personal injury or death. An electronic copy of the NISSAN NV200 Taxi Body Builder's Guide is available at www.nissancommercialvehicles.com.

Modifications made to this vehicle by conversion companies or dealers may affect the final certification of the engine, vehicle or equipment. The conversion company or dealer has the responsibility to certify that the altered vehicle and equipment complies or continues to comply with all applicable motor vehicle safety standards and emissions regulations. The conversion company or dealer is responsible for making sure the modifications or installed equipment does not affect the safety of the vehicle.

NISSAN does not assume the responsibility as the final stage manufacturer for modified or altered vehicles. NISSAN is not responsible for the final certification, product liability claims, or warranty claims, resulting from any component, assembly, or system being altered. NISSAN is not responsible for modifications which cause the vehicle to become non-compliant with any of the motor vehicle safety standards, emissions regulations, or modifications that cause the vehicle to be or become defective or unsafe.

Your vehicle's warranty may not cover damage resulting from alterations, modifications, installation of non-approved accessories, or improper installation of accessories. See your 2014 NV200 Taxi Warranty Information Booklet for complete details.

WHEN READING THE MANUAL

This manual includes information for all features and equipment available on this model. Features and equipment in your vehicle may vary depending on model, trim level, options selected, order, date of production, region or availability. Therefore, you may find information about features or equipment that are not included or installed on 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, performance, design or component suppliers without notice and without obligation. From time to time, NISSAN may update or revise this manual to provide Owners with the most accurate information currently available. Please carefully read and retain with this manual all revision updates sent to you by NISSAN to ensure you have access to accurate and up-to-date information regarding your vehicle. Current versions of vehicle Owner's Manuals and any updates can also be found in the Owner section of the NISSAN website at <https://owners.nissanusa.com/owners/navigation/manualsGuide>. If you have questions concerning any information in your Owner's Manual, contact NISSAN Consumer Affairs. See the NISSAN CUSTOMER CARE PROGRAM page in this Owner's Manual for contact information.

IMPORTANT INFORMATION ABOUT THIS MANUAL

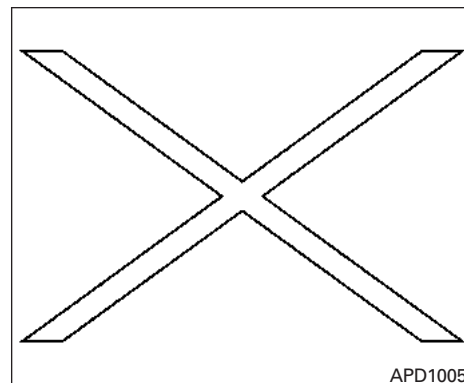
You will see various symbols in this manual. They are used in the following ways:

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.



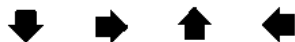
If you see this symbol, it means **“Do not do this”** or **“Do not let this happen.”**



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/”.



BLUETOOTH® is a trademark owned by Bluetooth SIG, Inc. and licensed to Visteon.



SiriusXM® Satellite Radio requires subscription, sold separately. Not available in Alaska, Hawaii or Guam. For more information, visit www.siriusxm.com.

© 2013 NISSAN NORTH AMERICA, INC.

All rights reserved. No part of this Owner's Manual may be reproduced or stored in a retrieval system, or transmitted in any form, or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of Nissan North America, Inc.

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
877-NIS-NCV1
(877-647-6281)

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

If you prefer, visit us at:
www.nissanusa.com

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

Table of Contents

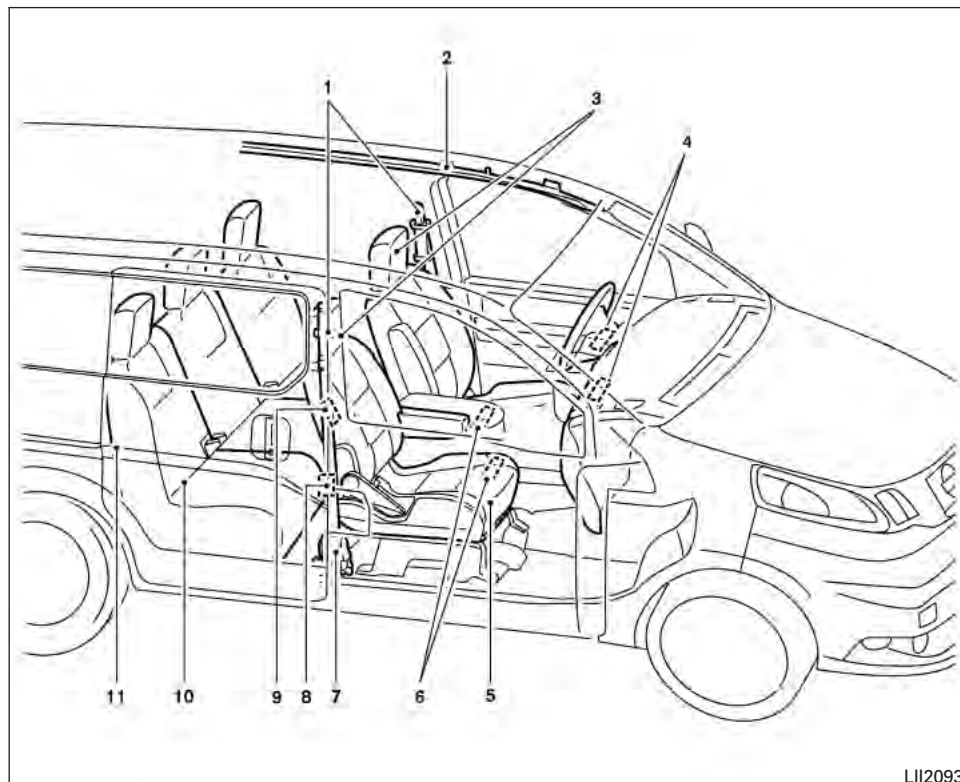
Illustrated table of contents	0
Safety—Seats, seat belts and supplemental restraint system	1
Instruments and controls	2
Pre-driving checks and adjustments	3
Monitor, climate, audio, phone and voice recognition systems	4
Starting and driving	5
In case of emergency	6
Appearance and care	7
Maintenance and do-it-yourself	8
Technical and consumer information	9
Index	10

0 Illustrated table of contents

Air bags, seat belts and child restraints	0-2
Exterior front	0-3
Exterior rear	0-4
Passenger compartment	0-5

Instrument panel	0-6
Engine compartment check locations	0-7
Warning/indicator lights	0-8

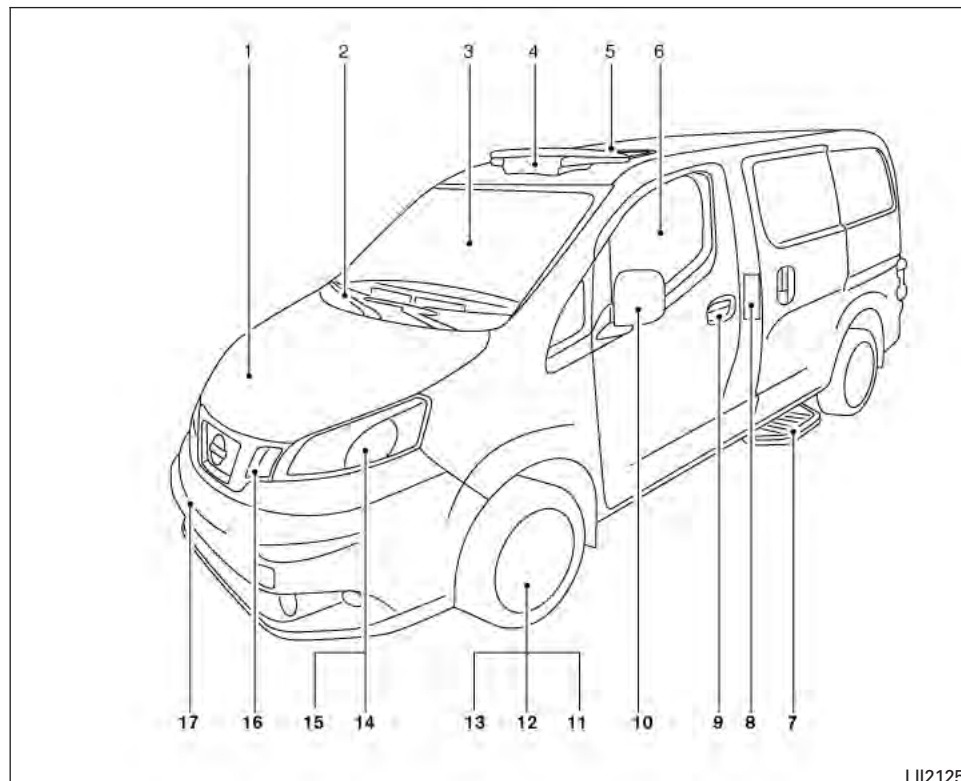
AIR BAGS, SEAT BELTS AND CHILD RESTRAINTS



1. Seat belts (P. 1-11)
2. Roof-mounted curtain side-impact and rollover supplemental air bag (P. 1-39)
3. Head restraints/headrests (P. 1-4)
4. Supplemental front-impact air bags (P. 1-39)
5. Seats (P. 1-2)
6. Occupant classification sensor (weight sensor) (P. 1-39)
7. Seat belt with pretensioners (P. 1-53)
8. Front seat-mounted side-impact supplemental air bag (P. 1-39)
9. Front seat-mounted side-impact supplemental air bag modules (P. 1-39)
10. LATCH (Lower Anchors and Tethers for Children) (P. 1-21)
11. Rear seat top tether strap anchor (located on bottom of seatback) (P. 1-23)

See the page number indicated in parentheses for operating details.

EXTERIOR FRONT

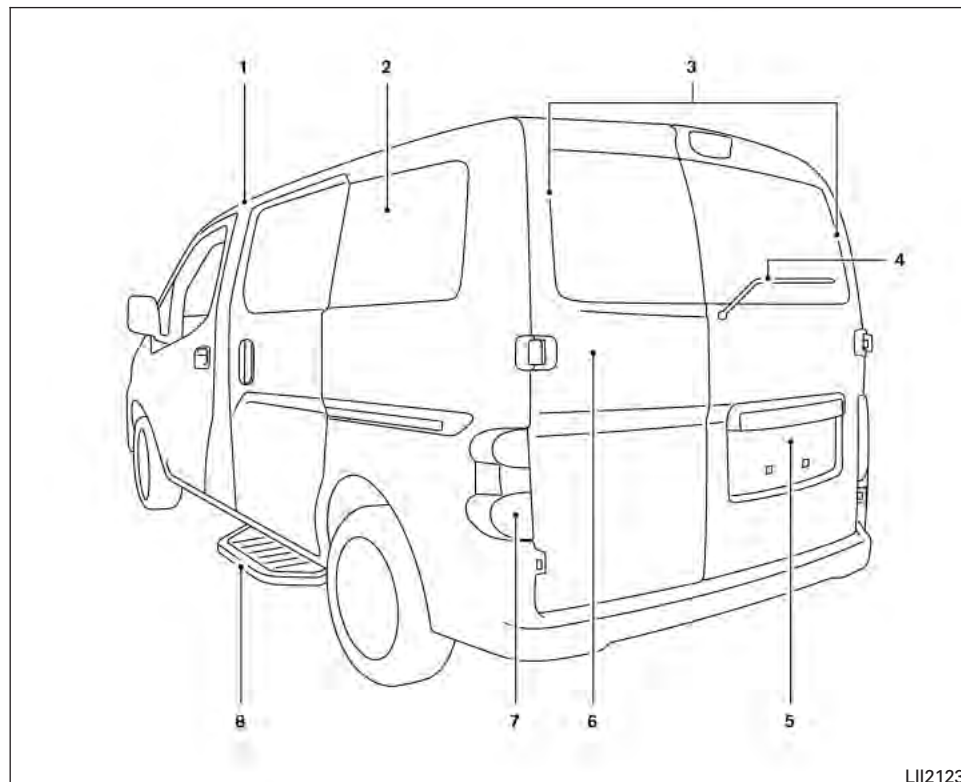


1. Engine hood (P. 3-10)
2. Windshield wiper and washer switch (P. 2-16)
3. Windshield (P. 8-18)
4. Roof lamp (P. 8-24)
5. Moonroof, Panoramic sunshade (P. 2-24)
6. Power windows (P. 2-24)
7. Power side step (P. 2-31)
8. Fuel filler cap, fuel recommendation (P. 2-24, 2-24)
9. Door locks, keys (P. 3-3, 3-2)
10. Mirrors (P. 3-14)
11. Tire pressure (P. 9-10)
12. Flat tire (P. 6-2)
13. Tire chains (P. 8-39)
14. Replacing bulbs (P. 8-24)
15. Headlight and turn signal switch (P. 2-18)
16. Trouble lamp (P. 2-24)
17. License bracket (P. 2-24)

See the page number indicated in parentheses for operating details.

LII2125

EXTERIOR REAR

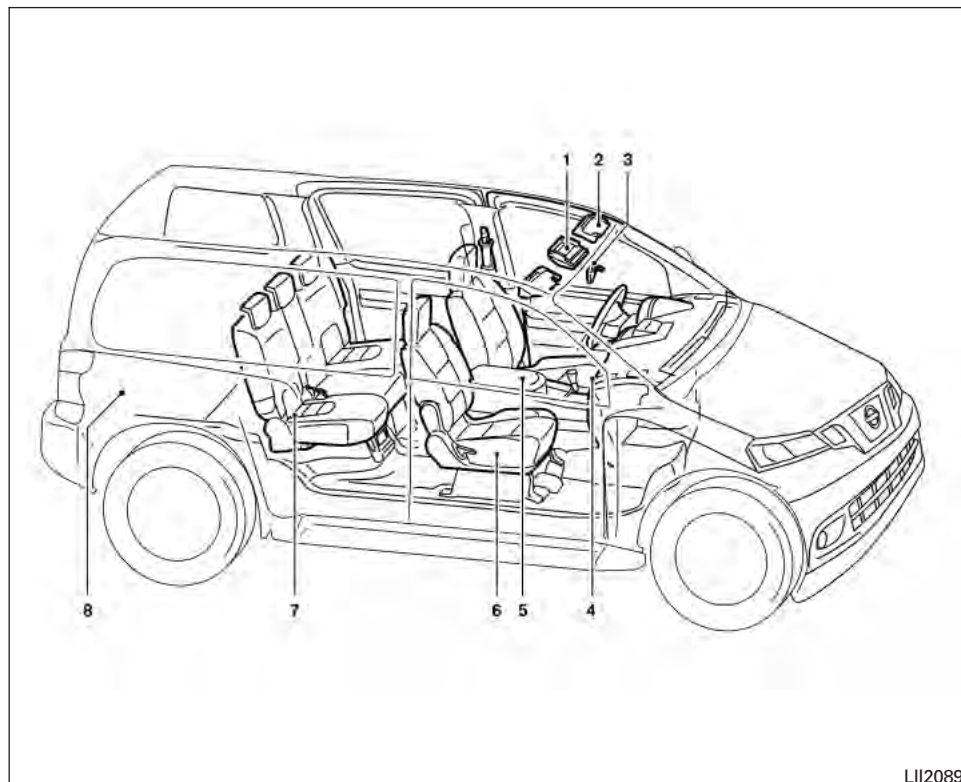


1. Roof lamp (P. 8-24)
2. Slide window (P. 9-12)
3. Exit lamp (P. 8-24)
4. Rear window wiper and washer switch (P. 8-18)
5. RearView Monitor (P. 4-8)
6. Back doors (P. 3-7)
7. Replacing bulbs (P. 8-24)
8. Power side step (P. 2-31)

See the page number indicated in parentheses for operating details.

LII2123

PASSENGER COMPARTMENT

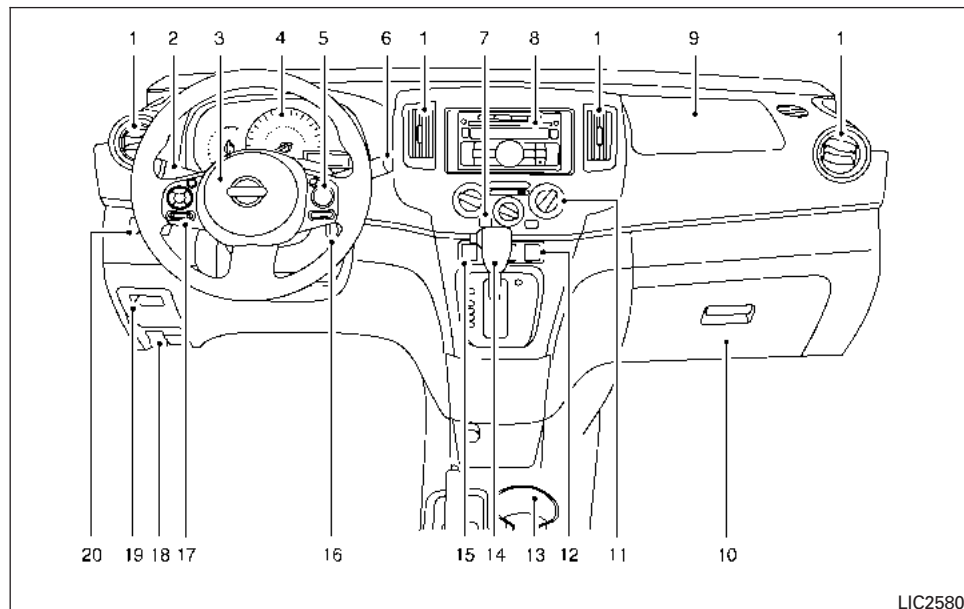


1. Map lights (P. 2-28)
2. Sun visors (P. 3-13)
3. Inside mirror (P. 3-14)
4. Glove box (P. 2-24)
5. Cup holders (P. 2-23)
6. Front seats (P. 1-2)
7. Rear seats (P. 1-2)
8. Storage (P. 2-22)

See the page number indicated in parentheses for operating details.

LII2089

INSTRUMENT PANEL

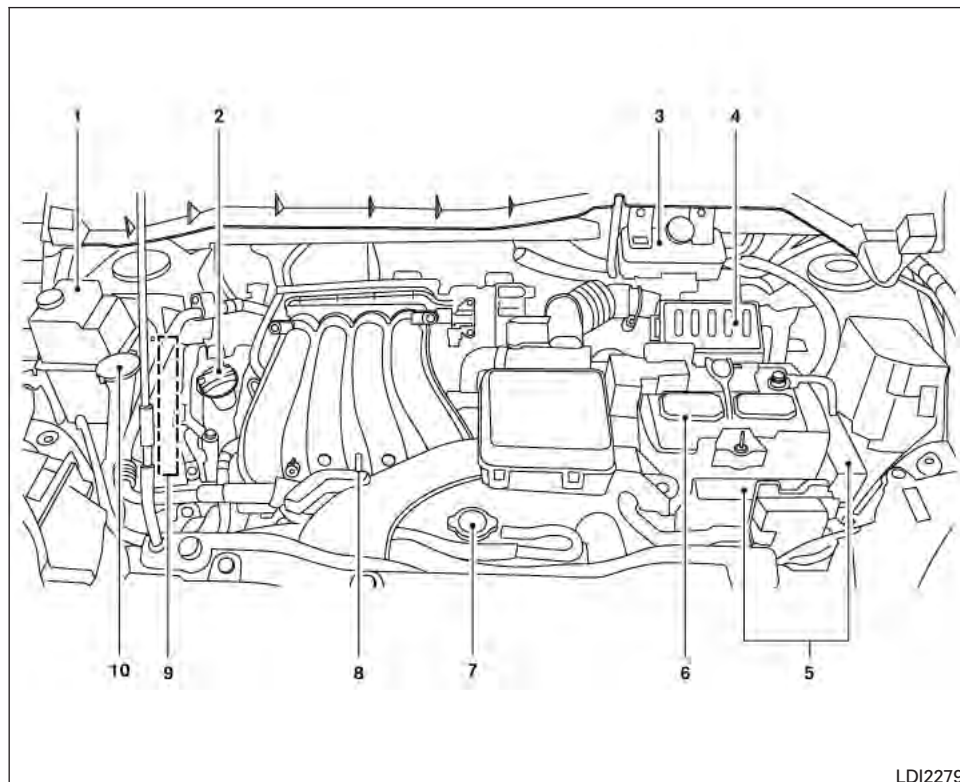


- | | |
|--|---|
| 1. Vents (P. 4-13) | 6. Windshield wiper/washer switch (P. 2-16) |
| 2. Headlight/turn signal switch (P. 2-18) | 7. Rear window defroster switch (P. 2-18) |
| 3. Driver's supplemental air bag /horn (P. 1-39, 2-20) | 8. Audio system (P. 4-22) |
| 4. Meters and gauges (P. 2-3) | 9. Passenger's supplemental air bag (P. 1-39) |
| 5. Cruise control switches (P.5-15) | |

- | |
|---|
| 10. Glove box (P. 2-24) |
| 11. Climate controls (P. 4-13) |
| 12. Front passenger air bag status light (P. 2-13) |
| 13. Cup holders (P. 2-23) |
| 14. Shift lever (P. 5-11) |
| 15. Hazard warning flasher switch (P. 6-2) |
| 16. Ignition switch (P. 5-7) |
| 17. Audio control switches (P.4-46) |
| 18. Fuel-filler lid release lever (P. 3-11)/Hood release lever (P. 3-10) |
| 19. Fuse box (P. 8-20) |
| 20. Vehicle Dynamic Control (VDC) off switch (P. 2-21)/Trouble light switch (P. 2-29) |

See the page number indicated in parentheses for operating details.

ENGINE COMPARTMENT CHECK LOCATIONS



MR20DE engine

1. Engine coolant reservoir (P. 8-7)
2. Engine oil filler cap (P. 8-10)
3. Brake fluid reservoir (P. 8-12)
4. Air cleaner (P. 8-17)
5. Fuse and relay box (P. 8-20)
6. Battery (P. 8-13)
7. Radiator cap (P. 8-7)
8. Engine oil dipstick (P. 8-9)
9. Drive belt location (P. 8-16)
10. Windshield-washer fluid reservoir (P. 8-12)

LDI2279

WARNING/INDICATOR LIGHTS

Warning light	Name	Page
 or 	Anti-lock Braking System (ABS) warning light	2-9
 or 	Brake warning light	2-9
	Charge warning light	2-9
	Door open warning light	2-10
	Engine oil pressure warning light	2-10
	High temperature warning light (red)	2-10

Warning light	Name	Page
	Low fuel warning light	2-10
	Low tire pressure warning light	2-10
	Low windshield-washer fluid warning light	2-11
	Power steering warning light	2-12
	Seat belt warning light and chime	2-12
	Supplemental air bag warning light	2-12
Indicator light	Name	Page
	Auto step indicator light	2-13

Indicator light	Name	Page
	Continuously Variable Transmission (CVT) position indicator light	2-13
	Cruise main switch indicator light	2-13
	Front passenger air bag status light	2-13
	High beam indicator light (blue)	2-13
	Malfunction Indicator Light (MIL)	2-13
	Overdrive off indicator light	2-14
	Security indicator light	2-14
	Slip indicator light	2-14

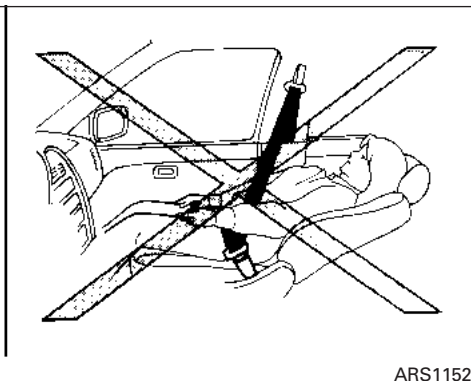
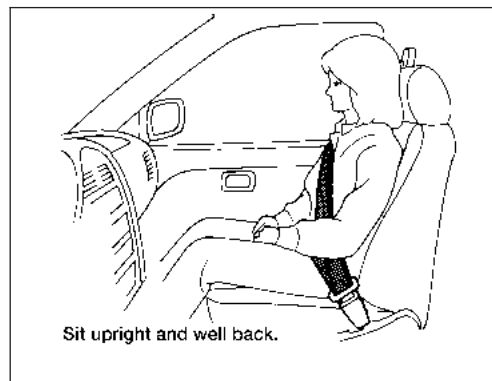
Indicator light	Name	Page
	Turn signal/hazard indicator lights	2-14
	Vehicle Dynamic Control (VDC) off indicator light	2-14

MEMO

1 Safety—Seats, seat belts and supplemental restraint system

Seats	1-2	LATCH (Lower Anchors and Tethers for CHildren) System	1-21
Front manual seat adjustment	1-2	Rear-facing child restraint installation using LATCH	1-24
Head restraints/Headrests	1-4	Rear-facing child restraint installation using the seat belts	1-26
Flexible seating	1-8	Forward-facing child restraint installation using LATCH	1-29
Seat belts	1-11	Forward-facing child restraint installation using the seat belts	1-31
Precautions on seat belt usage	1-11	Installing top tether strap (rear bench seat)	1-35
Pregnant women	1-14	Booster seats	1-35
Injured persons	1-14	Supplemental restraint system	1-39
Three-point type seat belt with retractor	1-14	Precautions on supplemental restraint system	1-39
Seat belt extenders	1-17	Supplemental air bag warning labels	1-54
Seat belt maintenance	1-17	Supplemental air bag warning light	1-55
Child safety	1-18		
Infants	1-18		
Small children	1-19		
Larger children	1-19		
Child restraints	1-19		
Precautions on child restraints	1-19		

SEATS



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.

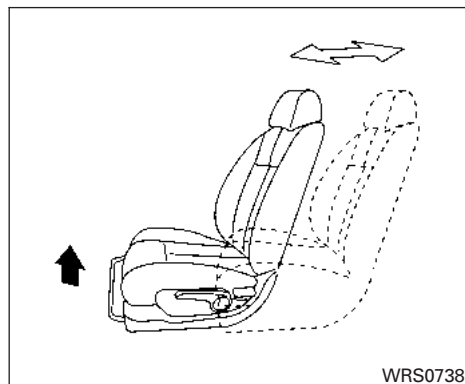
- For the most effective protection when the vehicle is in motion, the seat should be upright. Always sit well back in the seat with both feet on the floor and adjust the seat properly. See “Precautions on seat belt usage” in this section.
- After adjustment, gently rock in the seat to make sure it is 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.

- Do not adjust the driver's seat while driving so full attention may be given to vehicle operation. The seat may move suddenly and could cause loss of control of the vehicle.
- 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

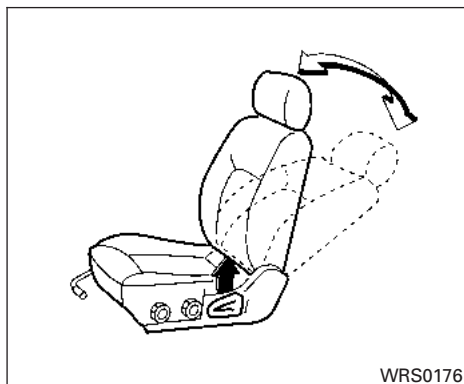
When adjusting the seat positions, be sure not to contact any moving parts to avoid possible injuries and/or damage.

FRONT MANUAL SEAT ADJUSTMENT



Forward and backward

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



Reclining

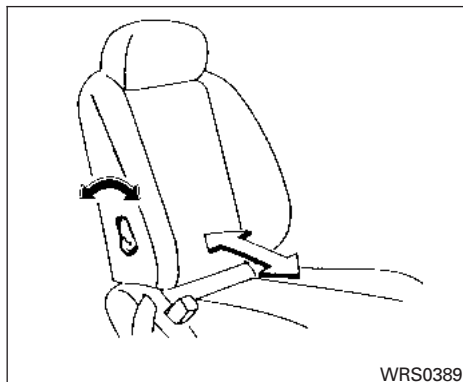
To recline the seatback, pull the lever up and lean back. To bring the seatback forward, pull the lever up and lean your body forward. Release the lever to lock the seatback in position.

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



Seat lifter (driver's seat)

Pull up or push down the adjusting lever to adjust the seat height until the desired position is achieved.



Lumbar support (driver's seat)

The lumbar support feature provides adjustable lower back support to the driver. Move the lever forward or backward to adjust the seat lumbar area.



Armrest (driver's side only)

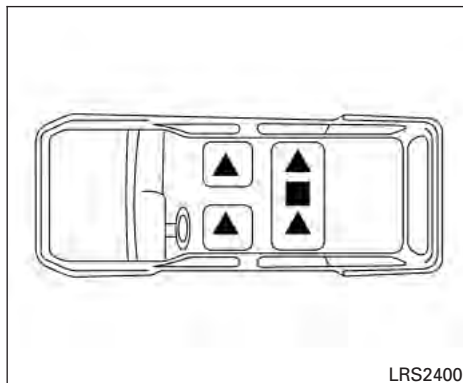
To use the armrest, pull it down to the resting position.

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

HEAD RESTRAINTS/HEADRESTS

⚠ WARNING

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



The illustration shows the seating positions equipped with head restraints/headrests.

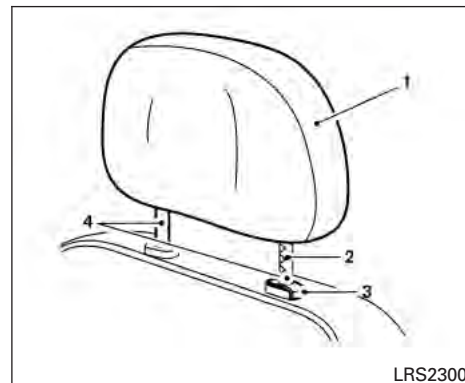
▲ Indicates the seating position is equipped with a head restraint.

■ Indicates the seating position is equipped with a headrest.

+ Indicates the seating position is not equipped with a head restraint or headrest (if applicable).

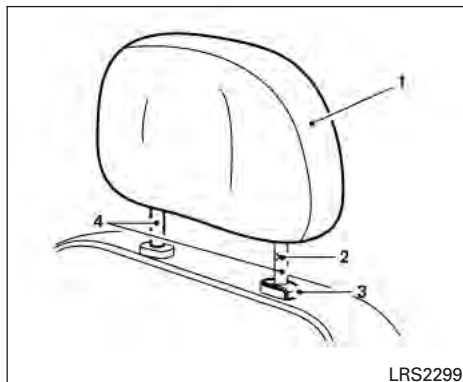
- Your vehicle is equipped with a head restraint/headrest that may be integrated, adjustable or non-adjustable.

- Adjustable head restraints/headrests have multiple notches along the stalks to lock them in a desired adjustment position.
- The non-adjustable head restraints/headrests have a single locking notch to secure them to the seat frame.
- Proper Adjustment:
 - For the adjustable type, align the head restraint/headrest so the center of your ear is approximately level with the center of the head restraint/headrest.
 - If your ear position is still higher than the recommended alignment, place the head restraint/headrest at the highest position.
- If the head restraint/headrest has been removed, ensure that it is reinstalled and locked in place before riding in that designated seating position.



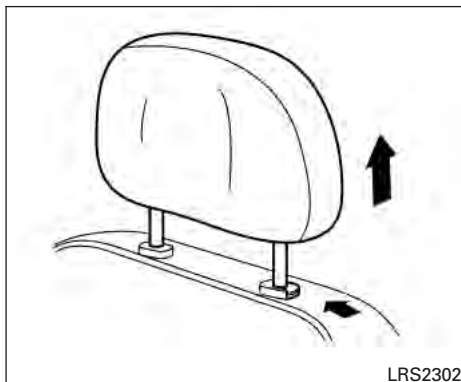
Adjustable head restraint/headrest components

1. Removable head restraint/headrest
2. Multiple notches
3. Lock knob
4. Stalks



Non-adjustable head restraint/ headrest components

1. Removable head restraint/headrest
2. Single Notch
3. Lock knob
4. Stalks

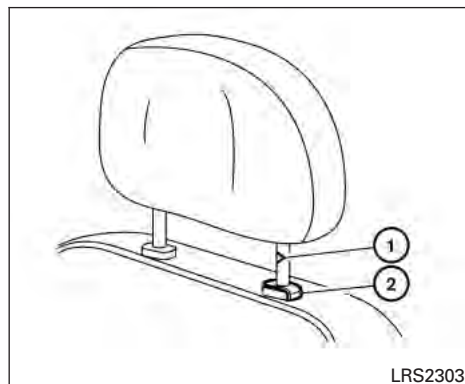


Remove

Use the following procedure to remove the head restraint/headrest.

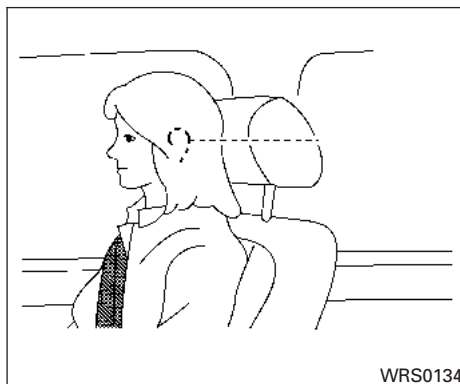
1. Pull the head restraint/headrest up to the highest position.
2. Push and hold the lock knob.
3. Remove the head restraint/headrest from the seat.
4. Store the head restraint/headrest properly in a secure place so it is not loose in the vehicle.

5. Reinstall and properly adjust the head restraint/headrest before an occupant uses the seating position.



Install

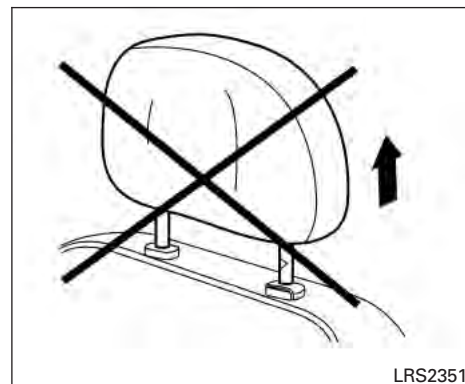
1. Align the head restraint/headrest stalks with the holes in the seat. Make sure the head restraint/headrest is facing the correct direction. The stalk with the notch (notches) ① must be installed in the hole with the lock knob ②.
2. Push and hold the lock knob and push the head restraint/headrest down.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



Adjust

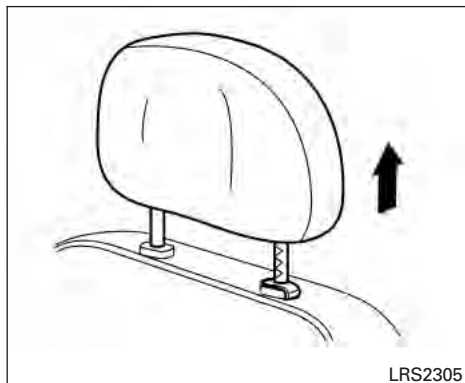
For adjustable head restraint/headrest

Adjust the head restraint/headrest so the center is level with the center of your ears. If your ear position is still higher than the recommended alignment, place the head restraint/headrest at the highest position.



For non-adjustable head restraint/headrest

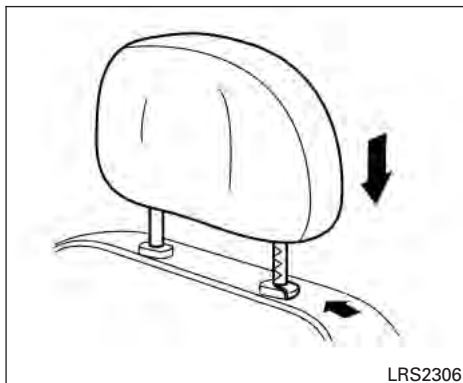
Make sure the head restraint/headrest is positioned so the lock knob is engaged in the notch before riding in that designated seating position.



Raise

To raise the head restraint/headrest, pull it up.

Make sure the head restraint/headrest is positioned so the lock knob is engaged in the notch before riding in that designated seating position.



Lower

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

Make sure the head restraint/headrest is positioned so the lock knob is engaged in the notch before riding in that designated seating position.

FLEXIBLE SEATING

⚠ WARNING

- 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.
- 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.
- Head restraints/headrests 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/headrests 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.

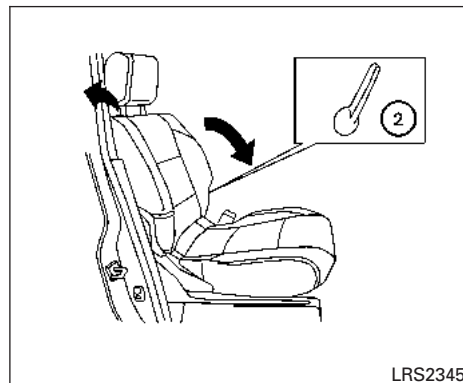
- When returning the seatbacks to the upright position, be certain they are completely secured in the latched position. If they are not completely secured, passengers may be injured in an accident or sudden stop.



Folding the front passenger's seatback

To fold the front passenger's seatback flat for extra storage:

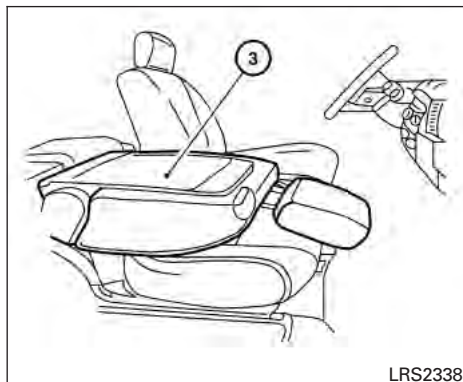
1. Slide the seat to the rearmost position. Lift up on the recline lever ①, located on the outside edge of the seat, and fold the seatback forward as far as it will go. Then lift up on the latch ② located on the inside of the seatback to release the back of the seat.



NOTE:

When the seat is folded forward the belt buckle must be in the forward position to prevent excessive wear.

2. Once the seatback is released, it will enable you to fold the front passenger seatback ③ 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. Then pull up on the recline lever ① and lean the seatback to a proper seating position. Release the lever to lock the seatback in position.

⚠ WARNING

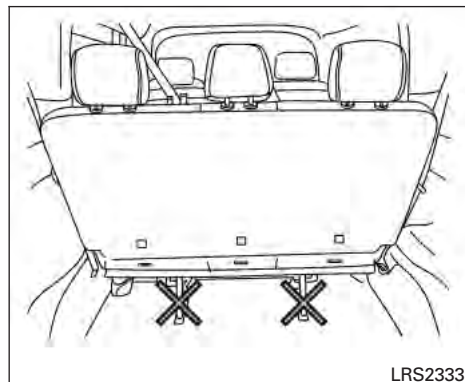
- If you fold the front passenger's seatback flat forward to carry objects, be sure this cargo is properly secured and not near an air bag. In a crash, an inflating air bag might force that object toward a person. This could cause severe injury or even death. Secure objects away from the area in which an air bag would inflate. See "Precautions on supplemental restraint system" 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.
- 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 (even if the vehicle is equipped with a partition dividing the seating area and the cargo area).

⚠ CAUTION

Do not place objects on the seatback unless it is folded completely horizontal. If seatback is in any other position it could cause damage.

Rear bench seat

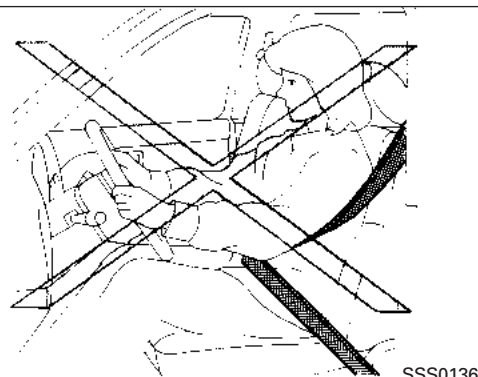
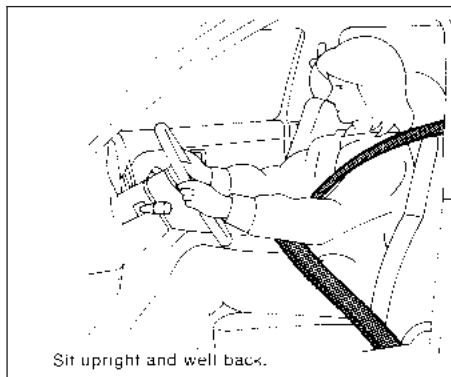
SEAT BELTS



If the rear bench seat requires servicing, have it checked by a NISSAN dealer.

WARNING

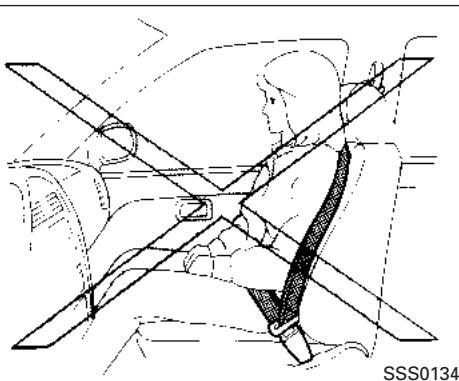
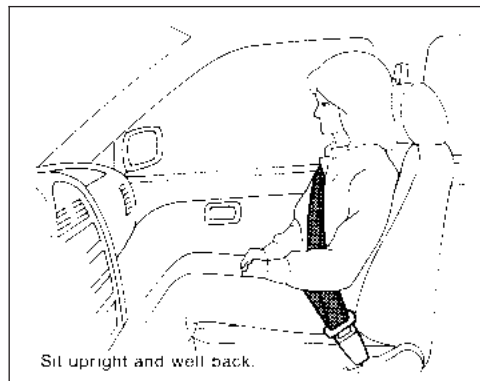
To avoid vehicle damage or serious personal injury, do not operate or pull on the straps.



PRECAUTIONS ON SEAT BELT USAGE

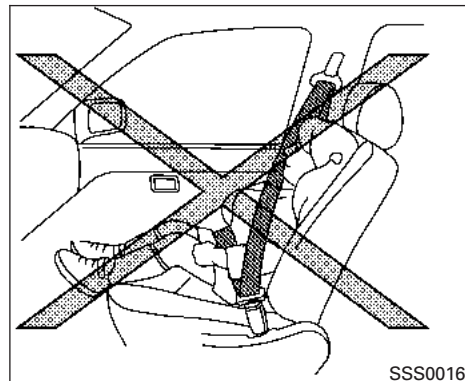
If you are wearing your seat belt properly adjusted and you are sitting upright and well back in your seat with both feet on the floor, your chances of being injured or killed in an accident and/or the severity of injury may be greatly reduced. NISSAN strongly encourages you and all of your passengers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

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



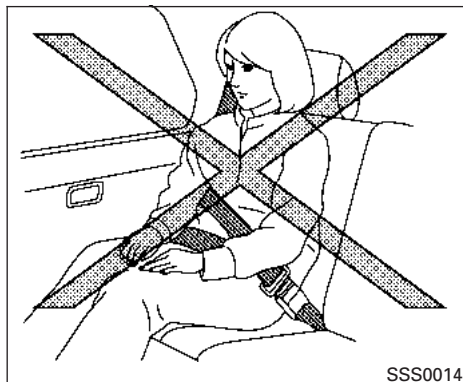
⚠ WARNING

- 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.**

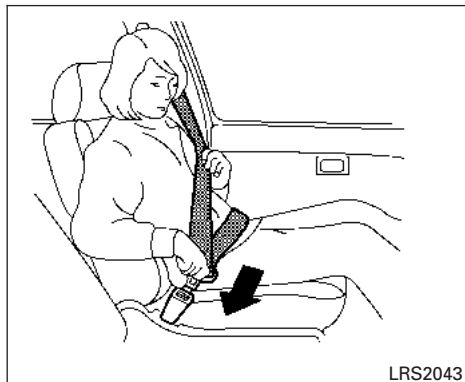
- **Do not ride in a moving vehicle when the seatback is reclined. This can be dangerous. The shoulder belt will not be against your body. In an accident, you could be thrown into it and receive neck or other serious injuries. You could also slide under the lap belt and receive serious internal injuries.**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



Manual front seat shown

Fastening the seat belts

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



LRS2043

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.**



LRS2044

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 rear seat three-point seat belt has 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.

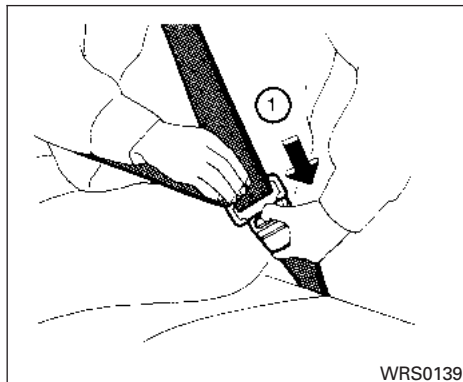
The Automatic Locking Retractor (ALR) mode (child restraint mode) locks the seat belt for child restraint installation.

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" in this section for more information.

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

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

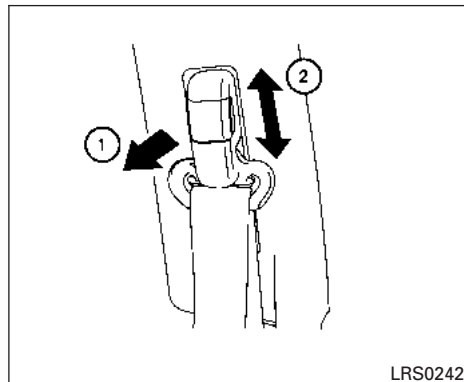
Seat belt retractors are designed to lock seat belt movement by two separate methods:

- 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.



Shoulder belt height adjustment (front seats)

The shoulder belt anchor height should be adjusted to the position best for you. See "Precautions on seat belt usage" in this section. To adjust, pull out the adjustment button ① and move the shoulder belt anchor to the desired position ②, 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

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

- **Never put a rear-facing child seat in the front seat.**

- **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.**
- **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.**
- **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.**

A child restraint may be secured in the vehicle by using either the LATCH (Lower Anchors and Tethers for CHildren) system or with the vehicle seat belt. See "Child restraints" 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" 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. You should choose a child restraint that fits your vehicle and always follow the manufacturer's instructions for installation and use.

CHILD RESTRAINTS

SMALL CHILDREN

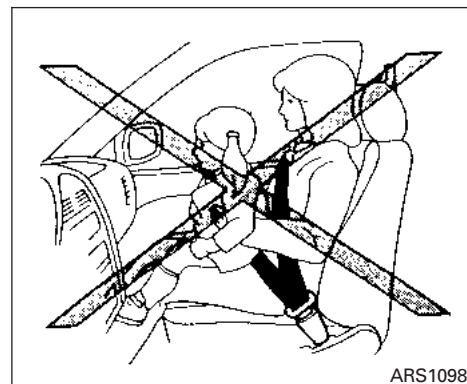
Children that are over 1 year old and weigh at least 20 lbs (9 kg) should remain in a rear-facing child restraint as long as possible up to the height or weight limit of the child restraint. Children who outgrow the height or weight limit of the rear-facing child restraint and are at least 1 year old 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. You should choose a child restraint that fits your vehicle and always follow the manufacturer's instructions for installation and use.

LARGER CHILDREN

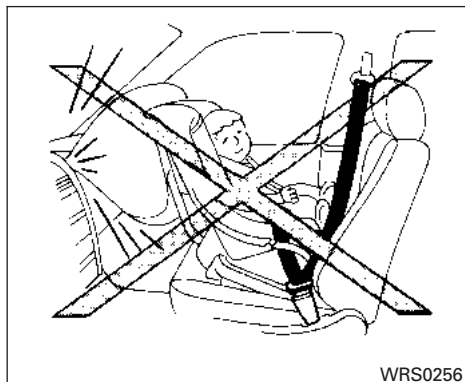
Children should remain in a forward-facing child restraint with a harness until they reach the maximum height or weight limit allowed by the child restraint manufacturer.

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 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. 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.



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" 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.

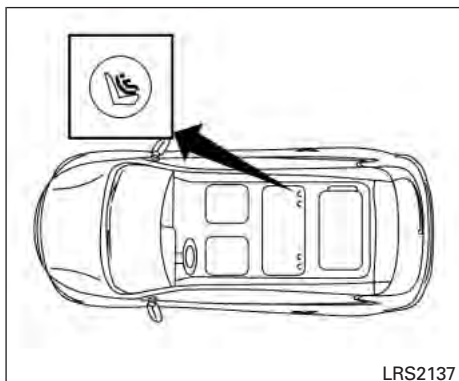
This vehicle is equipped with a universal child restraint anchor system, referred to as the LATCH (Lower Anchors and Tethers for CHildren) system. Some child restraints include rigid or webbing-mounted attachments that can be connected to these anchors. For details, see "LATCH (Lower Anchors and Tethers for CHildren) system" 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.
- 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 require that infants and small children be restrained in an approved child restraint at all times while the vehicle is being operated.



LATCH system lower anchor locations - bench seat

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.

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

- 2nd row bench seat – outboard seating positions

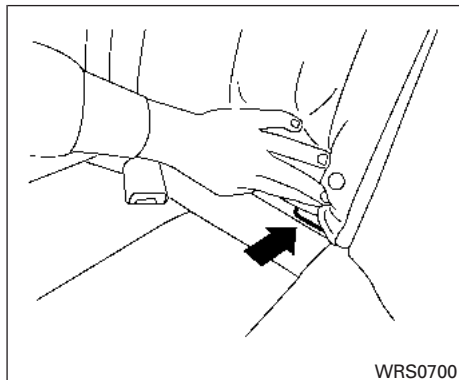
LATCH lower anchor

⚠ 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 2nd row center position using the LATCH system 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.**
- **Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used to attach adult seat belts, or other items or equipment to the vehicle. Doing so could damage the child restraint anchorages. The child restraint will not be properly installed using the damaged anchorages, and a child could be seriously injured or killed in a collision.**



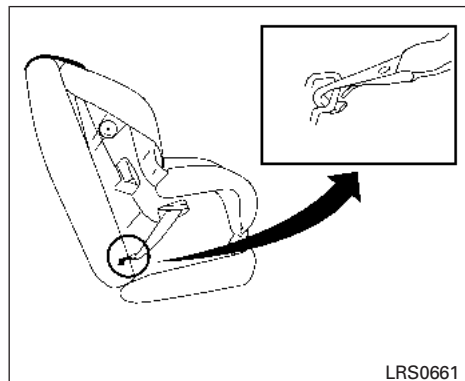
LATCH lower anchor location



LATCH label locations 2nd row bench

LATCH lower anchor location

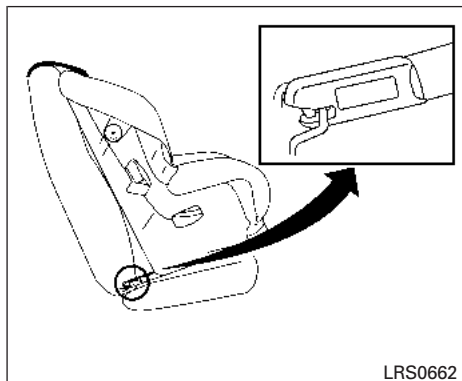
The LATCH lower anchors are located at the rear of the seat cushion near the seatback. A label is attached to the seatback to help you locate the LATCH lower anchors.



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

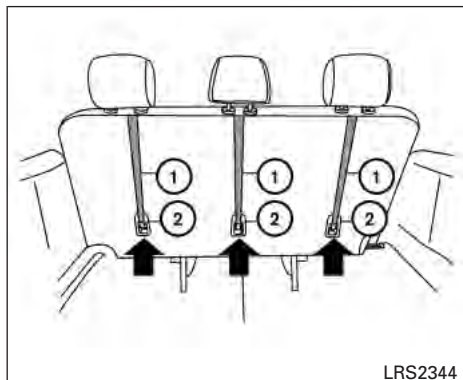
The child restraint top tether strap must be used when installing the child restraint with LATCH lower anchor attachments or seat belts. See "Installing top tether strap" in this section for installation instructions.

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

Top tether anchor

⚠ WARNING

- **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.**



Rear bench seat

1. Top tether straps
2. Anchor points

Top tether anchor point locations

Anchor points are located in the following locations:

- Rear bench seat on the floor behind the outboard seating positions at the bottom of seatback as shown.
- Rear bench seat center at the bottom of seatback as shown.

If you have any questions when installing a top tether strap, consult your NISSAN dealer for details.

⚠ WARNING

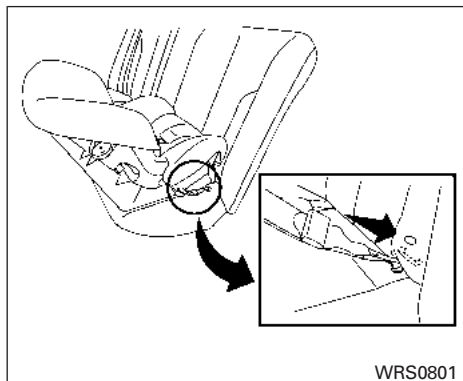
Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are Child restraint anchorages designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used to attach adult seat belts, or other items or equipment to the vehicle. Doing so could damage the child restraint anchorages. The child restraint will not be properly installed using the damaged anchorage, and a child could be seriously injured or killed in a collision.

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:

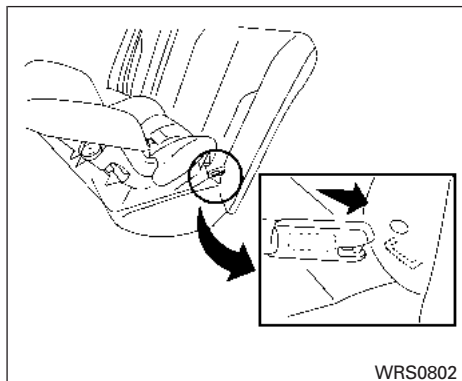
1. Position the child restraint on the seat. Always follow the child restraint manufacturer's instructions.



WRS0801

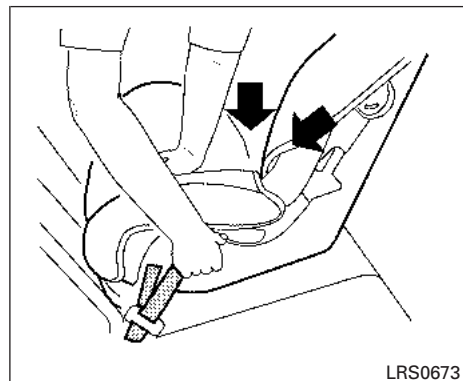
Rear-facing web-mounted – step 2

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.



WRS0802

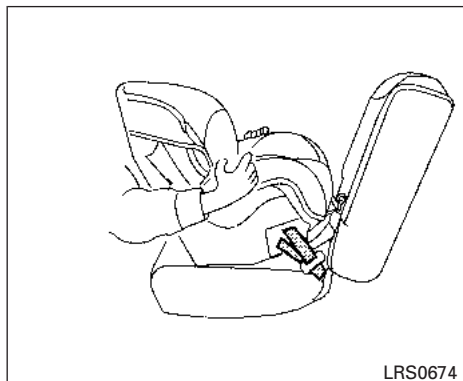
Rear-facing rigid-mounted – step 2



LRS0673

Rear-facing – step 3

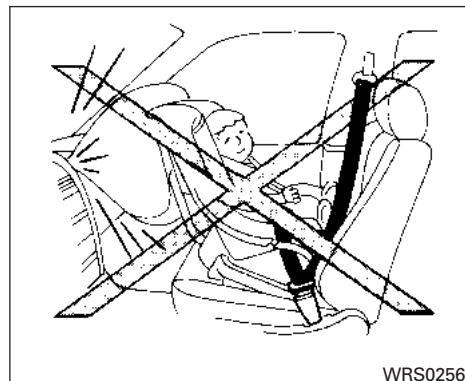
3. For child restraints that are equipped with webbing-mounted attachments, remove any additional slack from the anchor attachments. Press downward and rearward firmly in the center of the child restraint with your hand to compress the vehicle seat cushion and seatback while tightening the webbing of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

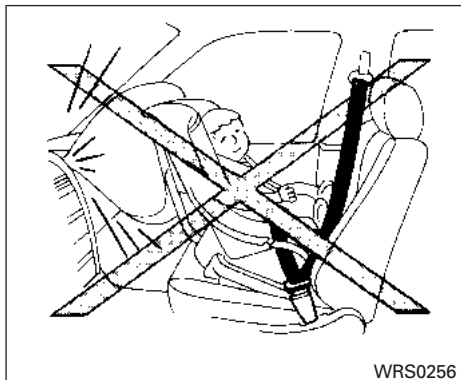
5. Check to make sure the child restraint is properly secured prior to each use. If the child restraint is loose, repeat steps 2 through 4.



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 "Supplemental air bag warning light" in this section.

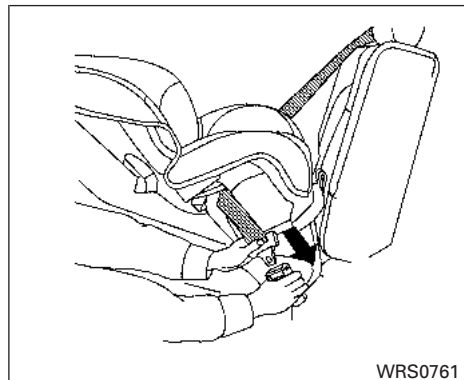


Rear-facing – step 1

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

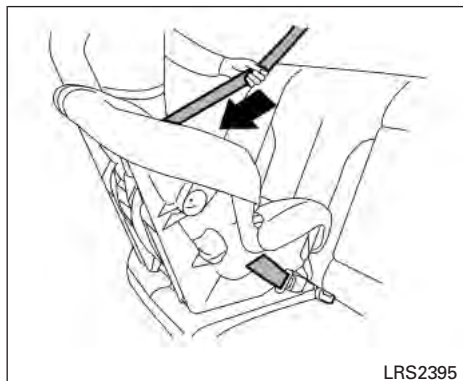
Follow these steps to install a rear-facing child restraint using the vehicle seat belts in the rear seats:

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.



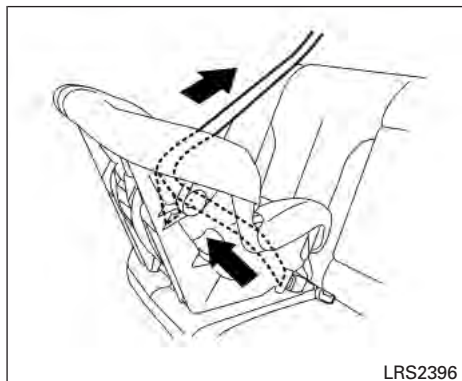
Rear-facing – step 2

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.



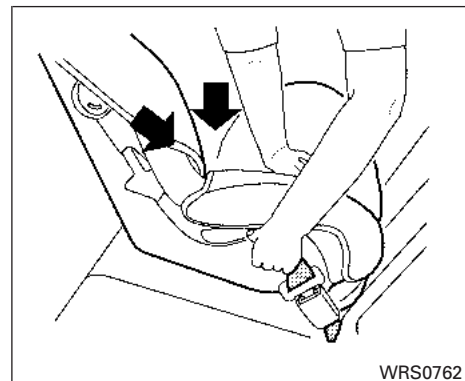
Rear-facing – step 3

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 1 through 6.

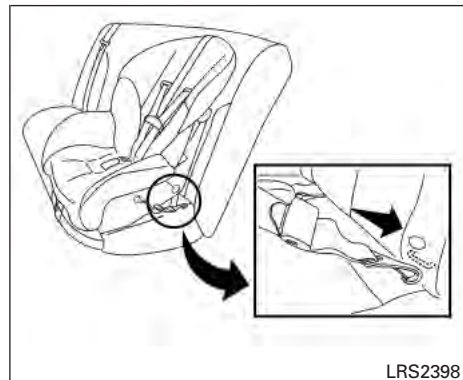
After the child restraint is removed and the seat belt fully retracted, the ALR mode (child restraint mode) is canceled.

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.



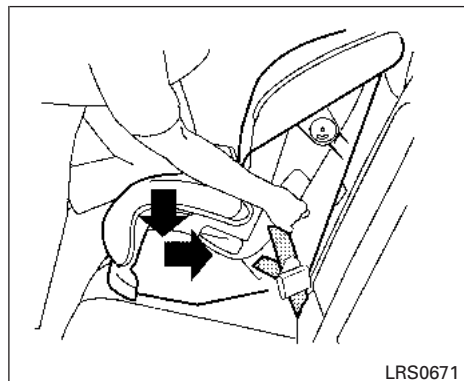
LRS2399

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

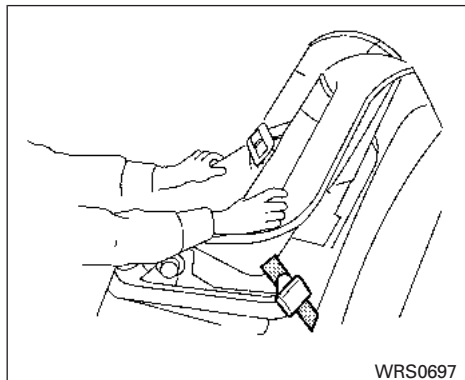
If the seating position does not have an adjustable head restraint/headrest and it is interfering with the proper child restraint fit, try another seating position or a different child restraint.



LRS0671

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

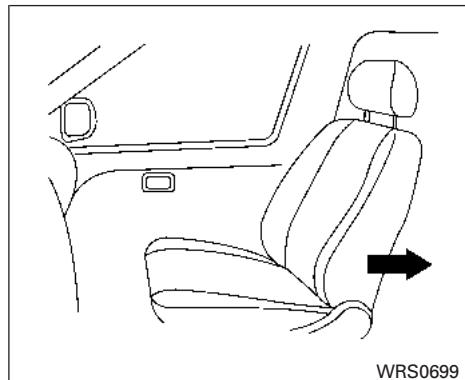
6. After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the child restraint near the LATCH attachment path. The child restraint should not move more than 1 inch (25 mm), from side to side. Try to tug it forward and check to see if the 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” 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:

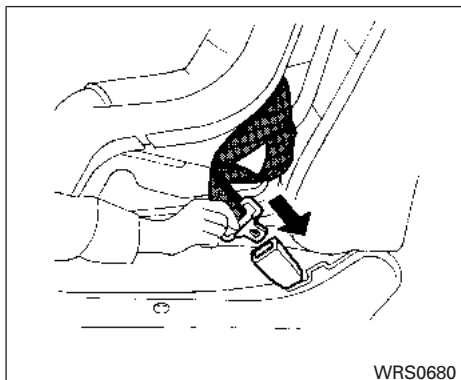
1. **If you must install a child restraint in the front seat, it should be placed in a forward-facing direction only. Move the seat to the rearmost position. Child restraints for infants must be used in the rear-facing direction and, therefore, must not be used in the front seat.**

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/headrest to obtain the correct child restraint fit. If the head restraint/headrest is removed, store it in a secure place. **Be sure to reinstall the head restraint/headrest when the child restraint is removed.** See "Head restraints/headrests" in this section for head restraint/headrest adjustment, removal and installation information.

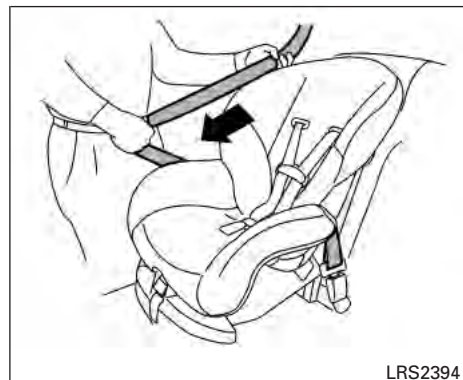
If the seating position does not have an adjustable head restraint/headrest and it is interfering with the proper child restraint fit, try another seating position or a different child restraint.



Forward-facing – step 3

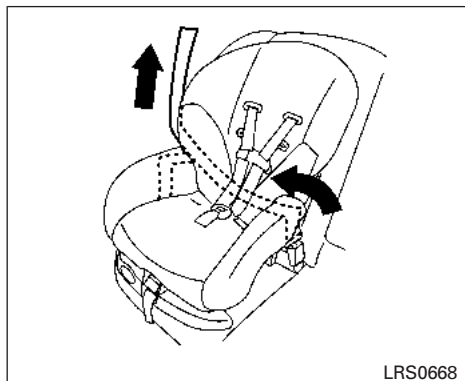
3. Route the seat belt tongue through the child restraint and insert it into the buckle until you hear and feel the latch engage. Be sure to follow the child restraint manufacturer's instructions for belt routing.

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 (2nd row 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.



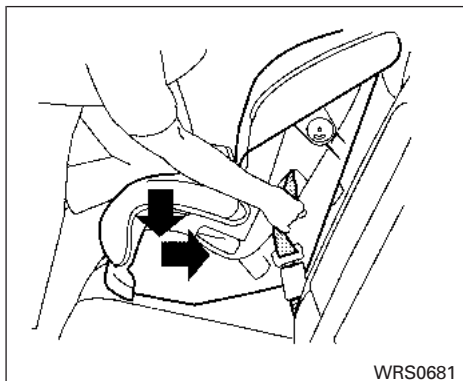
Forward-facing – step 4

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.



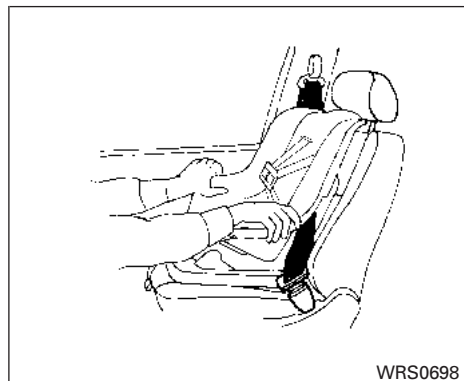
Forward-facing – step 5

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



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.

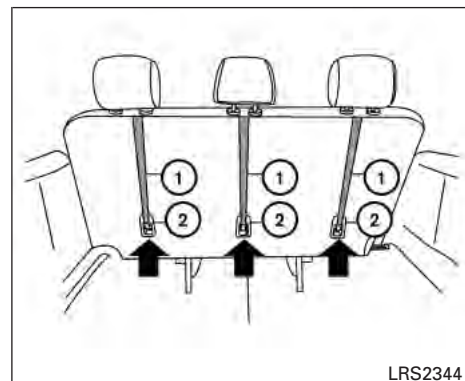
9. Check to make sure the child restraint is properly secured prior to each use. If the seat belt is not locked, repeat steps 2 through 8.



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.



Rear bench seat

1. Top tether strap
2. Anchor point

INSTALLING TOP TETHER STRAP (rear bench seat)

WARNING

Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are Child restraint anchorages designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used to attach adult seat belts, or other items or equipment to the vehicle. Doing so could damage the child restraint anchorages. The child restraint will not be properly installed using the damaged anchorage, and a child could be seriously injured or killed in a collision.

First, secure the child restraint with the LATCH lower anchors (rear bench outboard seating positions only) or the seat belt, as applicable.

1. OUTBOARD SEATING POSITIONS

If necessary, raise or remove the head restraint/headrest to position the top tether strap ① over the top of the seatback. If the head restraint/headrest is removed, store it in a secure place. Be sure to reinstall the head restraint/headrest when the child restraint is removed. **See “Head restraint/headrest**

adjustment” in this section for head restraint/headrest adjustment, removal and installation information.

CENTER SEATING POSITION

Remove the head restraint/headrest and position the top tether strap ① over the seatback or adjust the head restraint/headrest to the lowest position and position the top tether strap over the head restraint/headrest. If the head restraint/headrest is removed, store it in a secure place. Be sure to reinstall the head restraint/headrest when the child restraint is removed. **See “Head restraint/headrest” in this section for head restraint/headrest adjustment, removal and installation information.**

2. Secure the tether strap to the tether anchor point ② on the bottom of the seatback behind the child restraint.
3. Tighten the tether strap according to the manufacturer's instructions to remove any slack. Make sure the head restraint/headrest does not contact the top tether strap.

If you have any questions when installing a top tether strap, consult your NISSAN dealer for details.

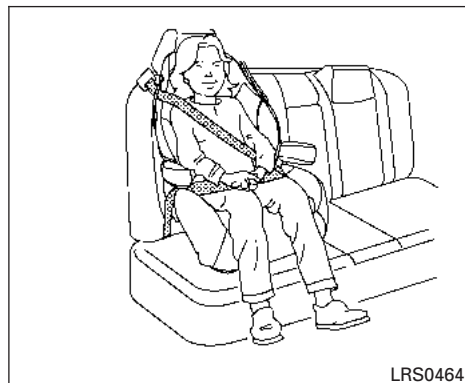
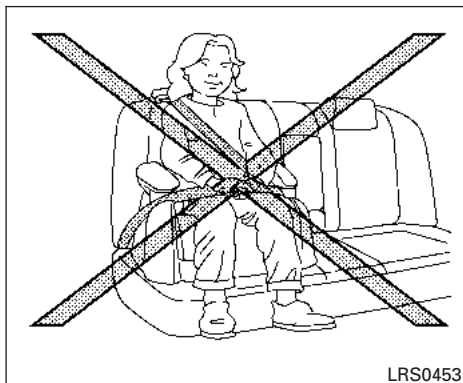
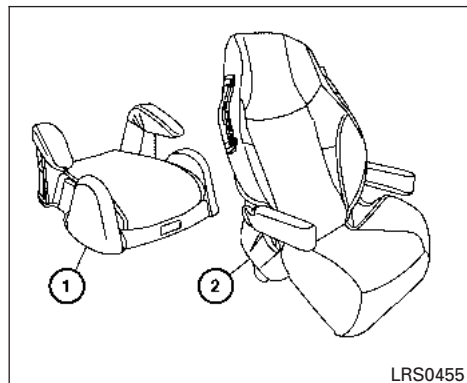
BOOSTER SEATS

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.
- 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 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.

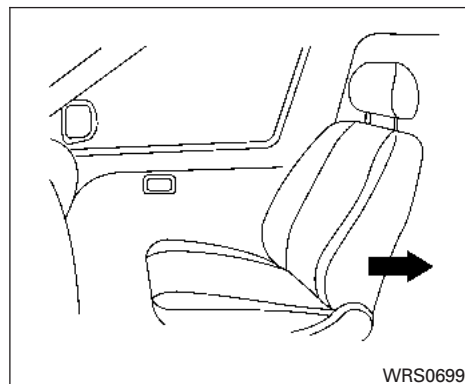
Booster seat installation

CAUTION

Do not use the lap/shoulder belt in the Automatic Locking Retractor (ALR) 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/headrest to obtain the correct booster seat fit. If the head restraint/headrest is removed, store it in a secure place. **Be sure to reinstall the head restraint/headrest when the booster seat is removed.** See "Head restraints/headrests" in this section for head restraint/headrest adjustment, removal and installation information.

If the seating position does not have an adjustable head restraint/headrest 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" in this section.



LRS0865

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" 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 bag system:

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

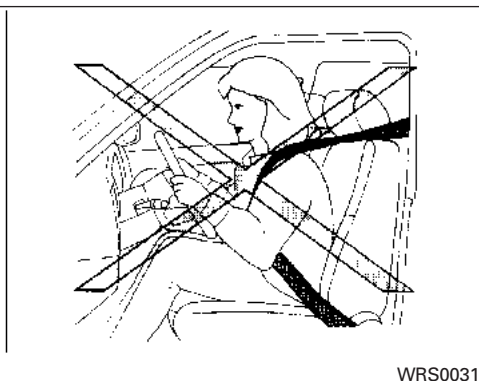
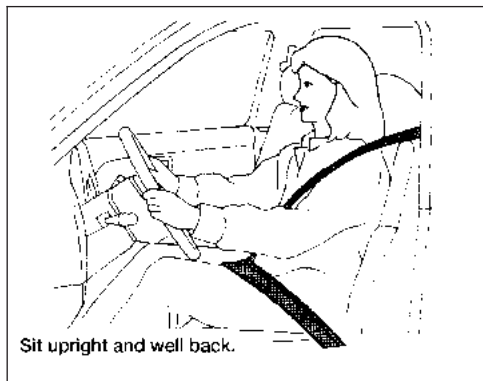
Roof-mounted curtain side-impact and rollover supplemental air bag system:

This system can help cushion the impact force to the head of occupants in front 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, curtain 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 driver and front passenger 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" 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 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.



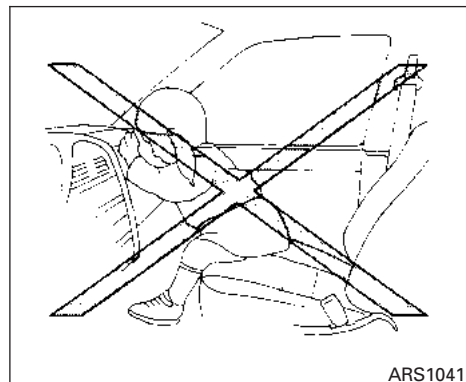
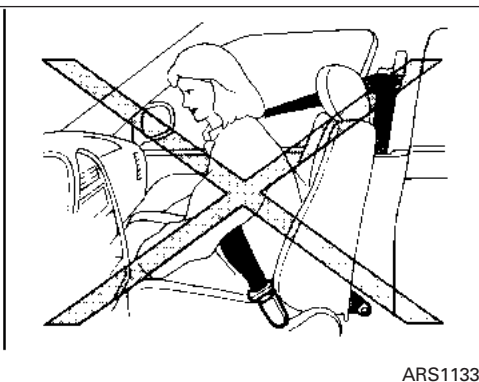
⚠ WARNING

- 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" 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 with both feet on the floor. 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

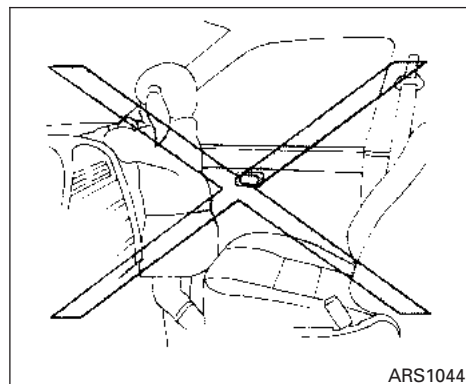
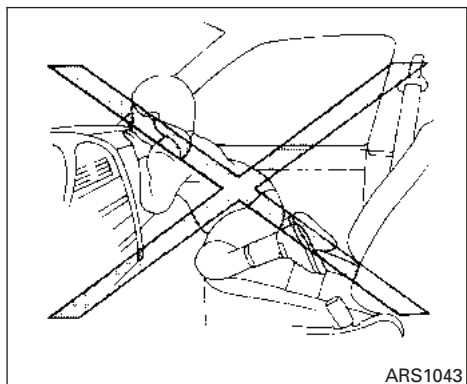
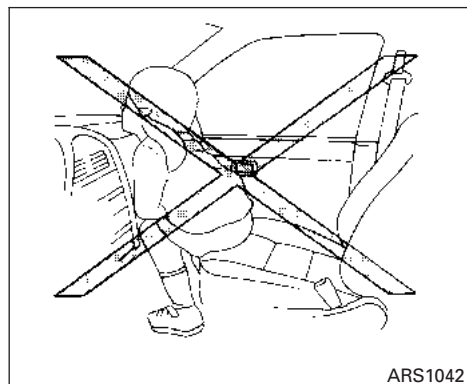
front air bag if you are up against it when it inflates. Always sit back against the seatback and as far away as practical from the steering wheel or instrument panel. Always use the seat belts.

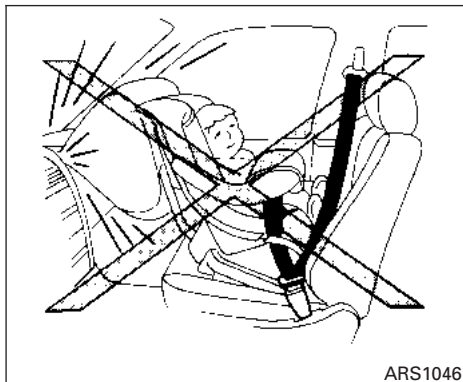
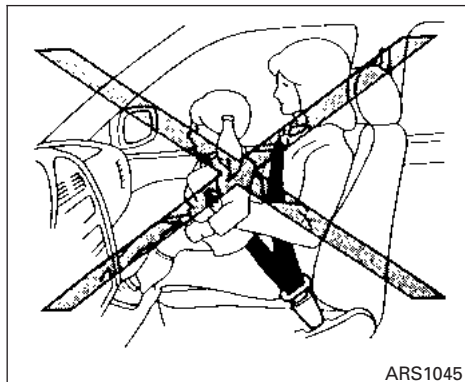
- The driver and front passenger seat belt buckles are equipped with sensors that detect if the seat belts are fastened. The Advanced Air Bag System monitors the severity of a collision and seat belt usage then inflates the air bags as needed. Failure to properly wear seat belts can increase the risk or severity of injury in an accident.
- The front passenger seat is equipped with an Occupant Classification Sensor (weight 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" in this section.
- Keep hands on the outside of the steering wheel. Placing them inside the steering wheel rim could increase the risk that they are injured when the front air bag inflates.



⚠ WARNING

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

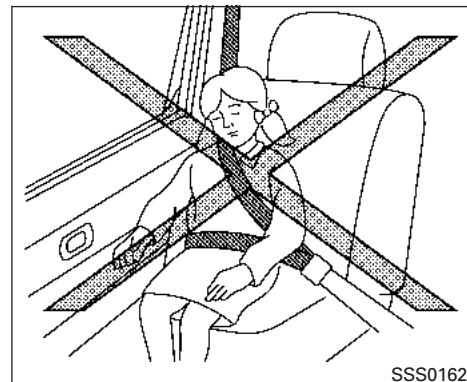
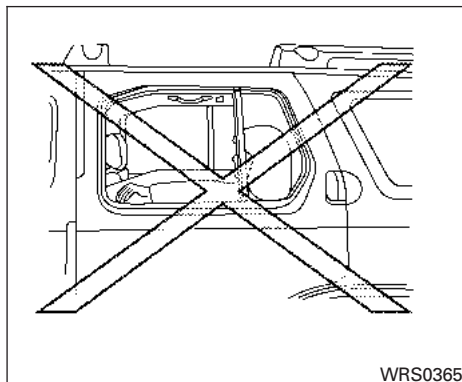
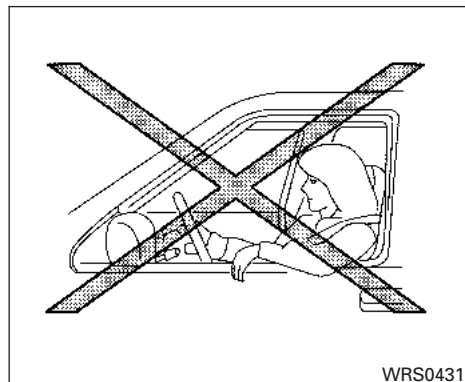




- Even with the NISSAN Advanced Air Bag System, never install a rear-facing child restraint in the front seat. An inflating front air bag could seriously injure or kill your child. See “Child restraints” in this section for details.

WARNING

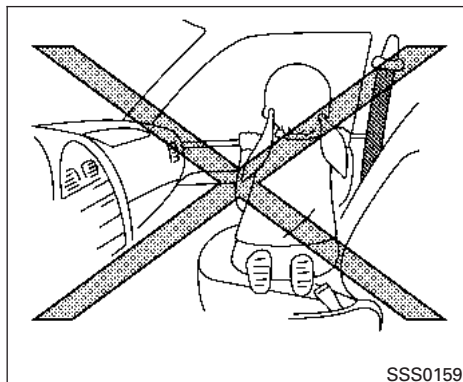
- Children may be severely injured or killed when the front air bags, side air bags or curtain air bags inflate if they are not properly restrained.
- Pre-teens and children should be properly restrained in the rear seat if possible.



⚠ WARNING

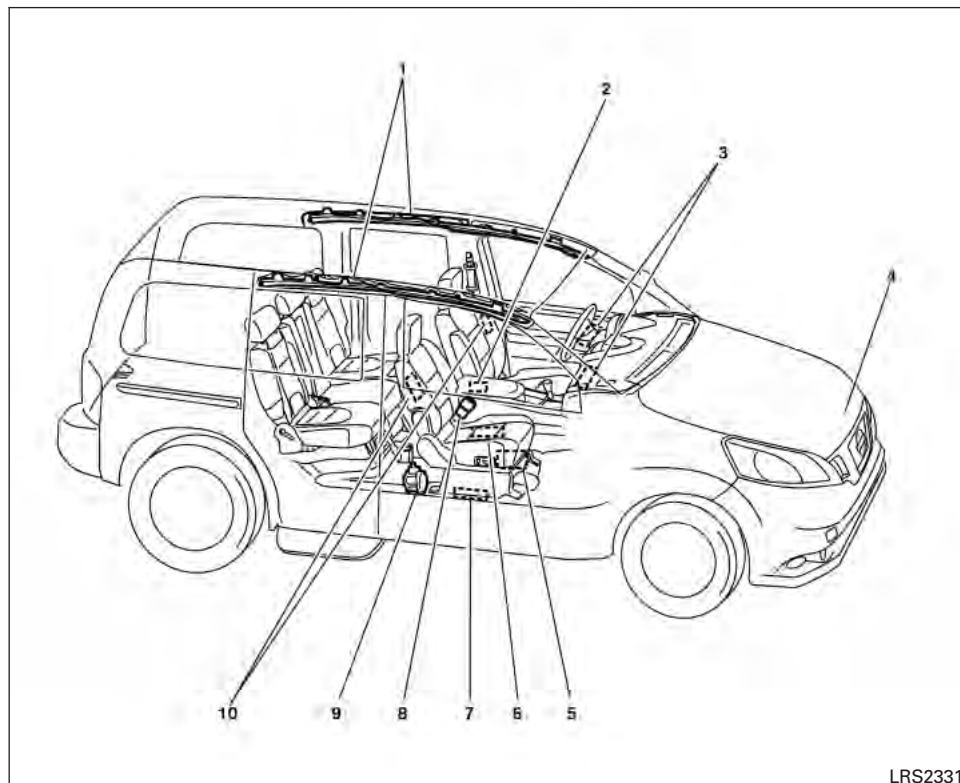
Front seat-mounted side-impact supplemental air bags and roof-mounted curtain side-impact and rollover supplemental air bags:

- The side air bags and curtain 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.



⚠ WARNING

- The seat belts, the side air bags and curtain air bags are most effective when you are sitting well back and upright in the seat with both feet on the floor. The side air bag and curtain air bag inflate with great force. Do not allow anyone to place their hand, leg or face near the side air bag on the side of the seatback of the front seat or near the side roof rails. Do not allow anyone sitting in the front seats 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.
- Do not use seat covers on the front seatbacks. They may interfere with side air bag inflation.



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

LRS2331

NISSAN Advanced Air Bag System (front seats)

WARNING

To ensure proper operation of the passenger's advanced air bag system, please observe the following items.

- Do not place heavy loads heavier than 2.2 lb (1 kg) on the seatback, head restraint/headrest or in the seatback pocket.
- Do not store luggage behind the seat. It can press into the seatback.
- Do not position the front passenger seat so it contacts the partition. If the front seat does contact the partition, the air bag system may determine a sensor malfunction has occurred and the front passenger air bag status light may illuminate and the supplemental air bag warning light may flash.

- If a forward-facing child restraint is installed in the front passenger seat, do not position the front passenger seat so the child restraint contacts the instrument panel. If the child restraint does contact the instrument panel, the system may determine the seat is occupied and the passenger air bag may deploy in a collision. Also the front passenger air bag status light may not illuminate. See "Child restraints" in this section for information about installing and using child restraints.
- Confirm the operating condition with the front passenger air bag status light.
- If you notice that the front passenger air bag status light is not operating as described in this section, please take your vehicle to your NISSAN dealer to check the occupant classification system.
- Until you have confirmed with your dealer that your passenger seat occupant classification system is working properly, position the occupants in the rear seating positions.

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. **All of the information, cautions and warnings in this manual must be followed.**

The driver supplemental front-impact air bag is located in the center of the steering wheel. The passenger supplemental front-impact air bag is mounted in the dashboard above the glove box. The front air bags are designed to inflate in higher severity frontal collisions, although they may inflate if the forces in another type of collision are similar to those of a higher severity frontal impact. They may not inflate in certain frontal collisions. 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 and the Air Bag Control Unit (ACU). Inflator operation is based on the severity of a collision and seat belt usage for the driver. For the front passenger, the occupant classification sensors are also monitored. Based on information from the sensors, only one front air bag may inflate in a crash, depending on the crash severity. Additionally, the front passenger air bag may be automatically turned OFF under some conditions, depending on the weight de-

tected 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" 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.

1-48 Safety—Seats, seat belts and supplemental restraint system

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 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 right 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 operates 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 right 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.

The occupant classification sensors (weight sensors) are on the seat cushion frame under the front passenger seat and are designed to detect an occupant and objects on the seat. 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, the occupant classification sensors can detect it and cause the air bag to turn OFF.

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. 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 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" in this section for proper use and installation.

If the right 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 right 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 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.**
- **Do not place objects with sharp edges on the seat. Also, do not place heavy objects on the seat that will leave permanent impressions in the seat. Such objects can damage the seat or occupant classification sensors (weight sensors). This can affect the operation of the air bag system and result in serious personal injury.**
- **Do not use water or acidic cleaners (hot steam cleaners) on the seat. This can damage the seat or occupant classification sensors. This can also affect the operation of the air bag system and result in serious personal injury.**

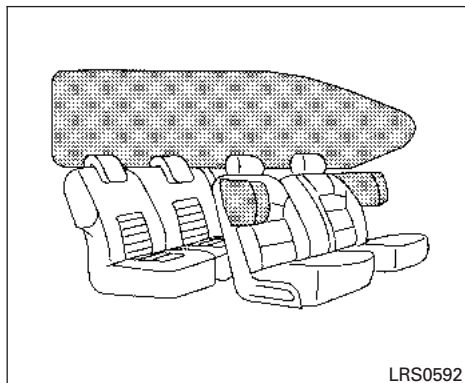
- Immediately after inflation, several front air bag system components will be hot. Do not touch them; you may severely burn yourself.
- No unauthorized changes should be made to any components or wiring of the supplemental air bag system. This is to prevent accidental inflation of the supplemental air 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.
- Removing or modifying the front passenger seat may affect the function of the air bag and result in serious personal injury.

- 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 (weight 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 harnesses* 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 air bags are located in the side roof rails. **All of the information, cautions and warnings in this manual must be followed.** The side air bags and curtain air bags are designed to inflate in higher severity side collisions, although they may inflate if the forces in another type of collision are similar to those of a higher severity impact. They

are designed to inflate on the side where the vehicle is impacted. They may not inflate in certain side collisions.

Curtain 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 air bags to inflate.

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

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

Side air bags, along with the use of seat belts, help to cushion the impact force on the chest and pelvis of the front occupants. Curtain air bags help to cushion the impact force to the head of occupants in the front and rear outboard seating positions. They can help save lives and reduce serious injuries. However, an inflating side air bag or curtain air bag may cause abrasions or other injuries. Side air bags and curtain air bags do not provide restraint to the lower body.

The seat belts should be correctly worn and the driver and passenger seated upright as far as practical away from the side air bag. Rear seat passengers should be seated as far away as practical from the door finishers and side roof rails. The side air bags and curtain air bags inflate quickly in order to help protect the occupants. Because of this, the force of the side air bags and curtain 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 air bag will remain inflated for a short time.

The side air bags and curtain air bags operate only when the ignition switch is placed in the ON 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 air bag system components will be hot. Do not touch them; you may severely burn yourself.
- No unauthorized changes should be made to any components or wiring of the side air bag and curtain air bag systems. This is to prevent damage to or accidental inflation of the side air bag and curtain air bag systems.
- Do not make unauthorized changes to your vehicle's electrical system, suspension system or side panel. This could affect proper operation of the side air bag and curtain air bag systems.

- **Tampering with the side air 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 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 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 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.

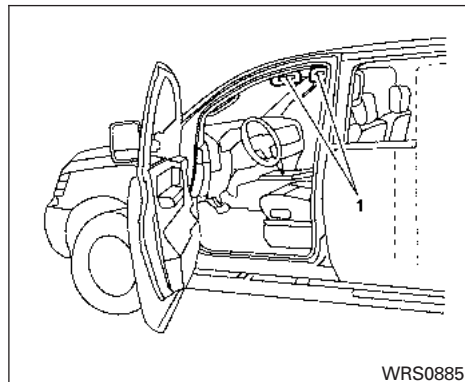
The pretensioner is encased with the seat belt retractor. These seat belts are used the same way as conventional seat belts.

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.



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

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

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

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

When maintenance work is required on the vehicle, the front air bags, side air bags, curtain air bags, pretensioners and related parts should be pointed out to the person performing the maintenance. The ignition key 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 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 pretensioners should be replaced by a NISSAN dealer. The air bag module and pretensioner cannot be repaired.**

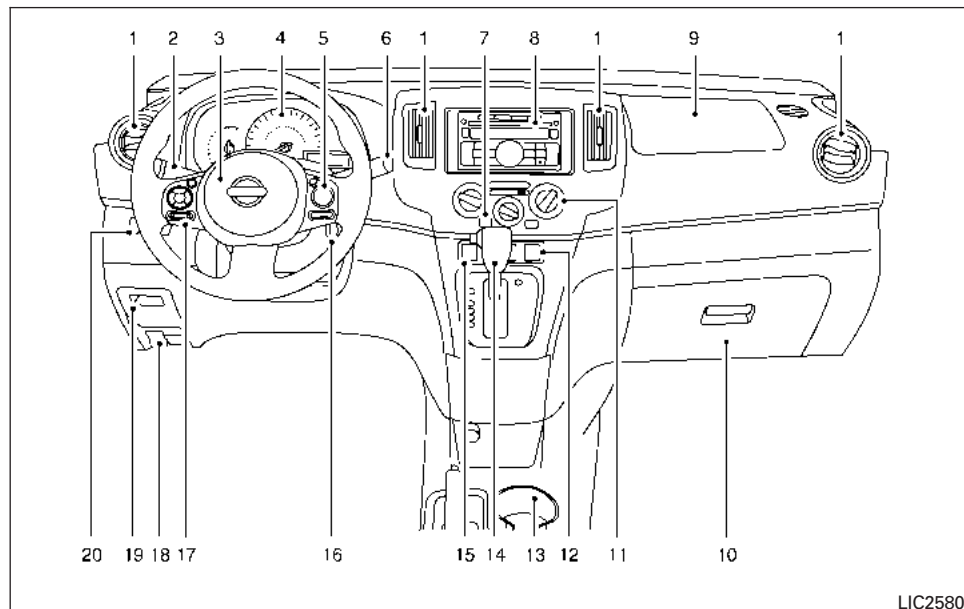
- The front air bag, side air bag, curtain air bag systems and the pretensioner system should be inspected by a **NISSAN** dealer if there is any damage to the front end or side portion of the vehicle.
- If you need to dispose of a supplemental air bag or pretensioners or scrap the vehicle, contact a **NISSAN** dealer. Correct supplemental air bag and pretensioner system disposal procedures are set forth in the appropriate **NISSAN** Service Manual. Incorrect disposal procedures could cause personal injury.
- If there is an impact to your vehicle from any direction, your occupant detection sensor (ODS) should be checked by a **NISSAN** dealer to verify it is still functioning correctly. The ODS should be checked even if no air bags deploy as a result of the impact. Failure to verify proper ODS function may result in an improper air bag deployment resulting in injury or death.

2 Instruments and controls

Instrument panel	2-2
Meters and gauges	2-3
Speedometer and odometer	2-3
Tachometer	2-5
Fuel gauge	2-6
Trip computer	2-6
Outside temperature display	2-7
Warning/indicator lights and audible reminders	2-8
Checking bulbs	2-8
Warning lights	2-9
Indicator lights	2-13
Audible reminders	2-15
Security systems	2-15
NISSAN vehicle immobilizer system	2-15
Windshield wiper and washer switch	2-16
Switch operation	2-16
Rear window wiper and washer switch	2-17
Rear window defroster switch	2-18
Headlight and turn signal switch	2-18
Headlight control switch	2-18
Instrument brightness control	2-20
Turn signal switch	2-20

Horn	2-20
Vehicle Dynamic Control (VDC) off switch	2-21
Power outlet	2-22
Storage	2-22
Map pockets	2-23
Under-seat storage bins	2-23
Cup holders	2-23
Glove box	2-24
Windows	2-24
Power windows	2-24
Sliding rear window	2-27
Moonroof	2-27
Panoramic sunshade	2-27
Cargo light	2-27
Personal lights	2-28
Map light	2-28
Rear room light	2-29
Trouble light switch	2-29
Intercom system switch	2-30
Personal light switches	2-30
Auto step switch	2-31

INSTRUMENT PANEL



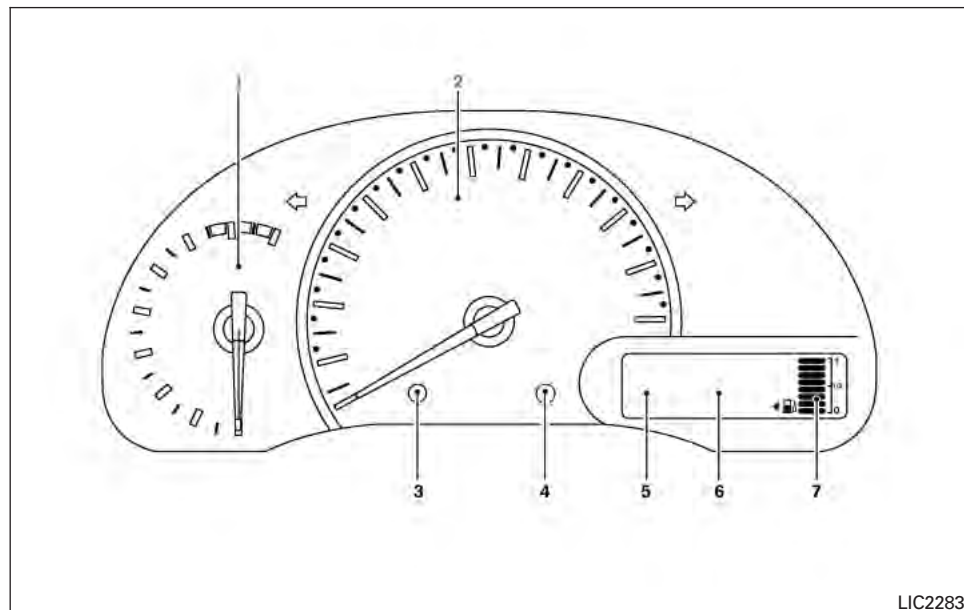
- | | |
|--|---|
| 1. Vents (P. 4-13) | 6. Windshield wiper/washer switch (P. 2-16) |
| 2. Headlight/turn signal switch (P. 2-18) | 7. Rear window defroster switch (P. 2-18) |
| 3. Driver's supplemental air bag /horn (P. 1-39, 2-20) | 8. Audio system (P. 4-22) |
| 4. Meters and gauges (P. 2-3) | 9. Passenger's supplemental air bag (P. 1-39) |
| 5. Cruise control switches (P.5-15) | |

10. Glove box (P. 2-24)
11. Climate controls (P. 4-13)
12. Front passenger air bag status light (P. 2-13)
13. Cup holders (P. 2-23)
14. Shift lever (P. 5-11)
15. Hazard warning flasher switch (P. 6-2)
16. Ignition switch (P. 5-7)
17. Audio control switches (P.4-46)
18. Fuel-filler lid release lever (P. 3-11)/Hood release lever (P. 3-10)
19. Fuse box (P. 8-20)
20. Vehicle Dynamic Control (VDC) off switch (P. 2-21)/Trouble light switch (P. 2-29)

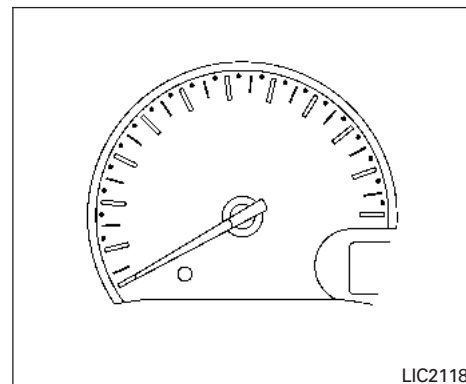
See the page number indicated in parentheses for operating details.

2-2 Instruments and controls

METERS AND GAUGES



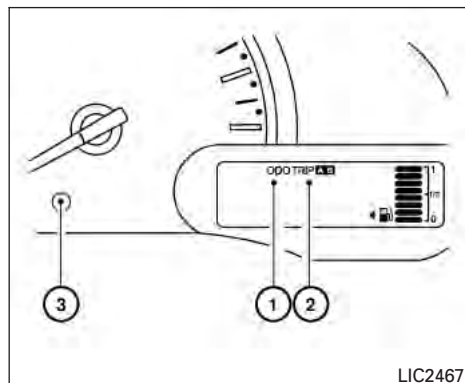
- | | |
|--|--|
| 1. Tachometer | 5. Continuously Variable Transmission (CVT) position indicator |
| 2. Speedometer | 6. Odometer/twin trip odometer/trip computer |
| 3. Trip odometer reset switch/trip computer mode | 7. Fuel gauge |
| 4. Instrument brightness control | |



SPEEDOMETER AND ODOMETER

Speedometer

The speedometer indicates the 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 ① records the total distance the vehicle has been driven.

The twin trip odometer ② records the distance of individual trips.

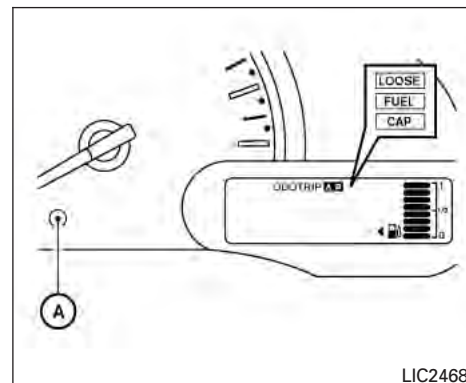
Changing the display:

Press the change button ③ to change the display as follows:

Odometer (ODO) → Trip **A** → Trip **B** → Instant fuel consumption → Average fuel consumption → DTE (cruising range) → Odometer (ODO)

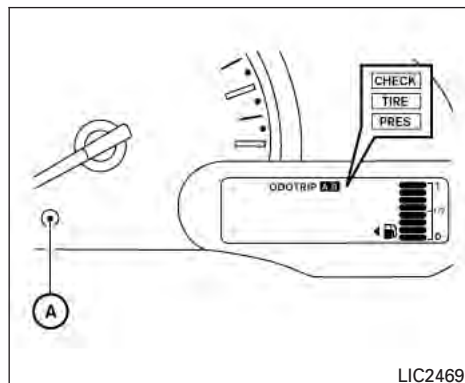
Resetting the trip odometer:

Press the change button ③ for more than 1 second to reset the currently displayed trip odometer to zero.



Loose fuel cap warning message

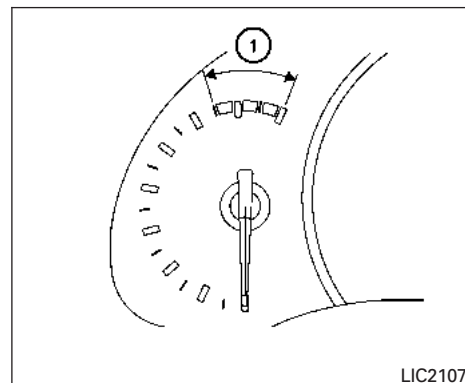
Push the reset button **A** for more than 1 second to reset the LOOSE FUEL CAP warning message after the fuel cap has been tightened. For additional information see "Fuel-filler cap" in the "Pre-driving checks and adjustments" section of this manual.



Check tire pressure warning message

The CHECK TIRE PRES (pressure) warning message is displayed when the low tire pressure warning light is illuminated and low tire pressure is detected. Check and adjust the tire pressure to the recommended COLD tire pressure shown on the Tire and Loading Information label. The CHECK TIRE PRES (pressure) warning message turns off when the low tire pressure warning light turns off.

The low tire pressure warning light remains illuminated until the tires are inflated to the recommended COLD tire pressure. The CHECK TIRE PRES (pressure) warning message is displayed each time the ignition switch is placed in the ON position as long as the low tire pressure warning light remains illuminated. For more information see “Low tire pressure warning light” in the “Instruments and controls” section, “Tire Pressure Monitoring System (TPMS)” in the “Starting and driving” section, and “Wheels and tires” in the “Maintenance and do-it-yourself” section of this Owner’s Manual.



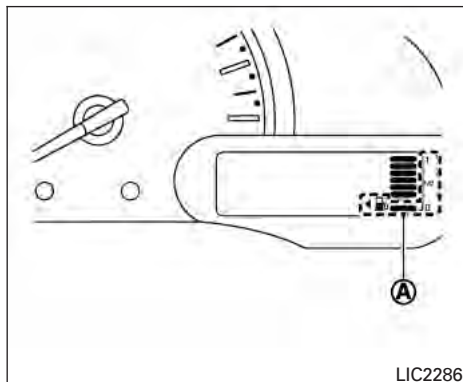
TACHOMETER

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.



FUEL GAUGE

The gauge indicates (A) the **approximate** fuel level in the tank when the ignition switch is placed in the ON position.

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

Type A: The fuel level segments will blink when the amount of fuel in the tank is getting low.

Type B: The low fuel warning light will turn on when the amount of fuel in the tank is getting low.

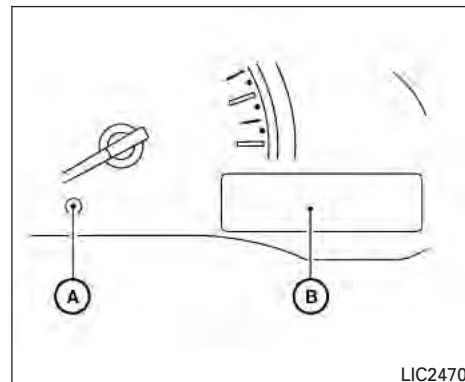
Refill the fuel tank before the gauge registers E (Empty).

2-6 Instruments and controls

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  check engine light 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)” in this section.



TRIP COMPUTER

When the ignition switch is placed in the ON position, modes of the trip computer can be selected by pushing the trip computer change button (A) on the instrument panel located near the speedometer. The following modes can be selected in the display (B):

- Trip A
- Trip B
- Instant fuel economy
- Average fuel consumption
- Distance to empty

Trip A

Measures the distance of one specific trip.

Trip B

Measures the distance of a second specific trip.

Instant fuel economy

The instant fuel economy mode shows the instant fuel economy. The display updates instantly when driving.

Average fuel consumption

The average fuel consumption mode shows the average fuel consumption since the last reset. Resetting is done by pushing the trip computer change button (A) for more than approximately 1 second.

Distance to empty

The distance to empty mode provides you with an estimation of the distance that can be driven before refueling. The range is constantly being calculated, based on the amount of fuel in the fuel tank and the actual fuel consumption.

The distance to empty includes a low range warning feature: when the fuel level is low, the distance to empty is automatically selected and the digits blink in order to draw the driver's attention. Press the trip computer change button (A) if you wish to return to the mode that was selected before the warning occurred.

When the fuel level drops even lower, the distance to empty will display (----).

Trip computer reset

Pushing the change button for more than 3 seconds will reset all modes except Trip A and distance to empty (dte).

OUTSIDE TEMPERATURE DISPLAY

The outside temperature function provides a display of the outside temperature when the ignition switch is placed in the ON position.

The display of positive temperatures is unsigned (blank); negative temperatures are prefixed with a minus sign.

WARNING/INDICATOR LIGHTS AND AUDIBLE REMINDERS

 or  Anti-lock Braking System (ABS) warning light	 Low windshield-washer fluid warning light	 High beam indicator light (blue)
 or  Brake warning light	 Power steering warning light	 Malfunction Indicator Light (MIL)
 Charge warning light	 Seat belt warning light and chime	 Overdrive off indicator light
 Door open warning light	 Supplemental air bag warning light	 Security indicator light
 Engine oil pressure warning light	 Auto step indicator light	 Slip indicator light
 High temperature warning light (red)	 Continuously Variable Transmission (CVT) position indicator light	 Turn signal/hazard indicator lights
 Low fuel warning light	 Cruise main switch indicator light	 Vehicle Dynamic Control (VDC) off indicator light
 Low tire pressure warning light	 Front passenger air bag status 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:

 or , , , , , PS

If equipped, the following lights come on briefly and then go off:

 or ,  (red), , , , , 

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

WARNING LIGHTS

or 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.

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

CAUTION

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



Door open warning light

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



Engine oil pressure warning light

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

The engine oil pressure warning light is not designed to indicate a low oil level. Use the dipstick to check the oil level. See “Engine oil” in the “Maintenance and do-it-yourself” section of this manual.

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.



High temperature warning light

When the ignition switch is placed in the ON position, the high temperature warning light illuminates and then turns off. This indicates that the high temperature sensor in the engine coolant system is operational.

CAUTION

If the high temperature warning light illuminates while the engine is running, it may indicate the engine temperature is extremely high. Stop the vehicle safely as soon as possible. If the vehicle is overheated, continuing vehicle operation may seriously damage the engine. See “If your vehicle overheats” in the “In case of emergency” section.



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 0 (Empty). **There will be a small reserve of fuel in the tank when the fuel gauge reaches 0 (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 PRES (pressure) warning message is also displayed in the odometer.

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 low tire pressure warning light remains illuminated until the tires are inflated to the recommended COLD tire pressure. The CHECK TIRE PRES warning message is displayed 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 "Check tire pressure warning message" in this 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 PRES warning message is not displayed 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.

WARNING

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



Low windshield-washer fluid warning light

This light comes on when the windshield-washer fluid is at a low level. Add windshield-washer fluid

as necessary. See “Windshield-washer fluid” in the “Maintenance and do-it-yourself” section of this manual.



Power steering warning light

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.**
- **When the power steering warning light illuminates with the engine running, there will be no power assist for the steering. You will still have control of the vehicle but the steering will be harder to operate. Have the power steering system checked by a NISSAN dealer.**

When the ignition switch is placed in the ON position, the power steering warning light illuminates. After starting the engine, the power steering warning light turns off. This indicates the power steering system is operational.

If the power steering warning light illuminates while the engine is running, it may indicate the power steering system is not functioning properly and may need servicing. Have the power steering system checked by a NISSAN dealer.

2-12 Instruments and controls

When the power steering warning light illuminates with the engine running, there will be no power assist for the steering but you will still have control of the vehicle. At this time, greater steering effort is required to operate the steering wheel, especially in sharp turns and at low speeds.

See “Power steering” in the “Starting and driving” section.



Seat belt warning light and chime

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

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

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



Supplemental air bag warning light

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

If any of the following conditions occur, the front air bag, side air bag, curtain air bag, and pretensioner seat belt 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



Auto step indicator light

This light comes on when the auto step system is on.



Continuously Variable Transmission (CVT) position indicator light

When the ignition key is turned to the ON position, this indicator light shows the shift lever position. See "Driving the vehicle" in the "Starting and driving" section of this manual.



Cruise main switch indicator light

The light comes on when the cruise control main switch is pushed. The light goes out when the main switch is pushed again. When the cruise main switch indicator light comes on, the cruise control system is operational. See "Cruise control" in the "Starting and driving" 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  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 gal (11.4 L) 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 message is displayed in the odometer, and 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.

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.



Overdrive OFF indicator light

The overdrive off indicator light illuminates when the overdrive off mode is selected.

For additional information, see “Continuously Variable Transmission (CVT)” in the “Starting and driving” section of this manual.



Security indicator light

This light blinks when the ignition switch is placed in the OFF, LOCK or ACC position.

The blinking security indicator light indicates that the security systems equipped on the vehicle are operational.

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



Slip indicator light

This indicator will blink when the Vehicle Dynamic Control (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.



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. This indicates the Vehicle Dynamic Control system is not operating.

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

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

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

AUDIBLE REMINDERS

Brake pad wear warning

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

Key reminder chime

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

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.

Parking brake reminder chime

A chime sounds if the parking brake is set and the vehicle is driven. The chime will stop if the parking brake is released or the vehicle speed returns to zero.

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.

FCC Notice:

For USA:

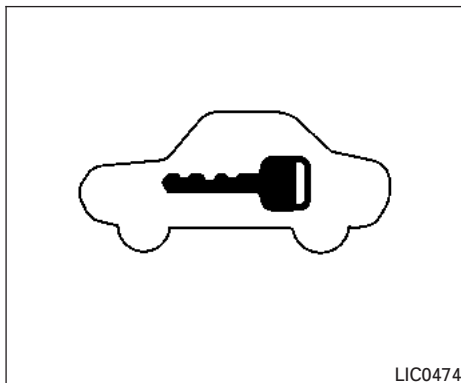
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.



Security indicator light

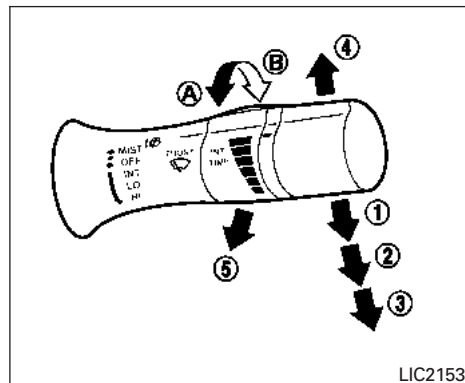
This light blinks whenever the ignition switch is placed in the LOCK, OFF or ACC position.

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).
- 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

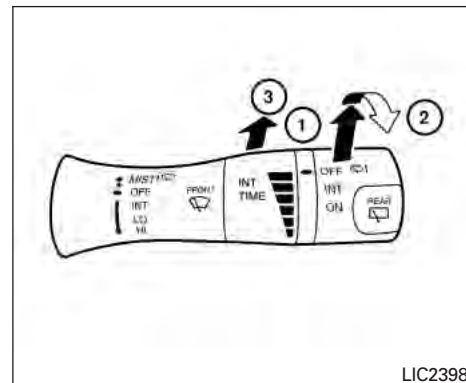
In freezing temperatures the washer solution may freeze on the windshield and obscure your vision which may lead to an accident. Warm the windshield with the defroster before you wash the windshield.

CAUTION

- Do not operate the washer continuously for more than 30 seconds.
- Do not operate the washer if the 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 windshield-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 windshield-washer fluid concentrate and water.

REAR WINDOW WIPER AND WASHER SWITCH



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

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

- 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.

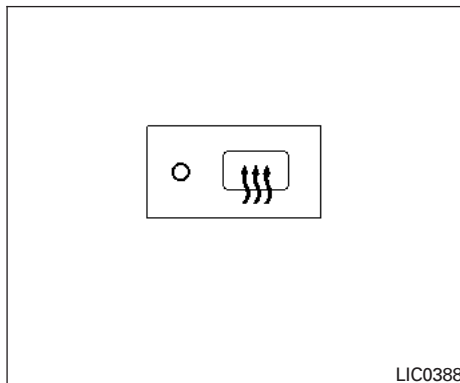
WARNING

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 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 DEFROSTER SWITCH



To defrost the rear window glass:

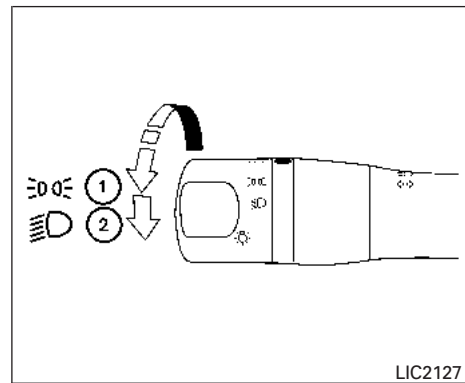
Start the engine and push the rear window defroster switch. The rear window defroster indicator light on the display screen comes on. Push the switch again to turn the defroster off.

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

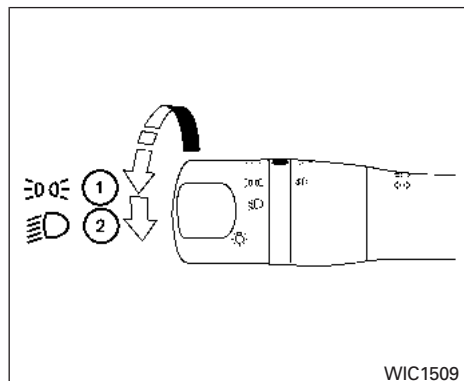


Type A

HEADLIGHT CONTROL SWITCH

Lighting

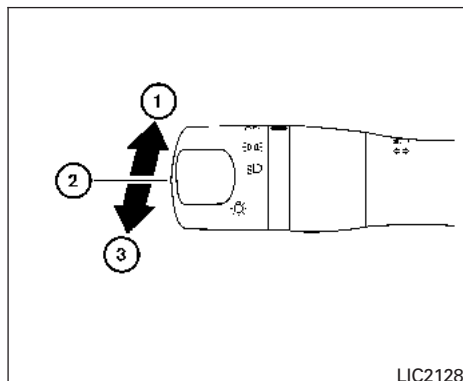
- ① When turning the switch to the  position, the front parking, tail, license plate and instrument panel lights come on.
- ② When turning the switch to the  position, the headlights come on and all the other lights remain on.



Type B

CAUTION

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



Headlight beam select

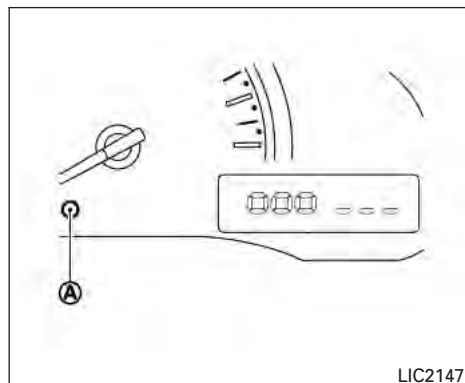
- ① To select the high beam function, push the lever forward. The high beam lights come on and the  light illuminates.
- ② Pull the lever back to select the low beam.
- ③ Pulling and releasing the lever flashes the headlight high beams on and off.

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.

CAUTION

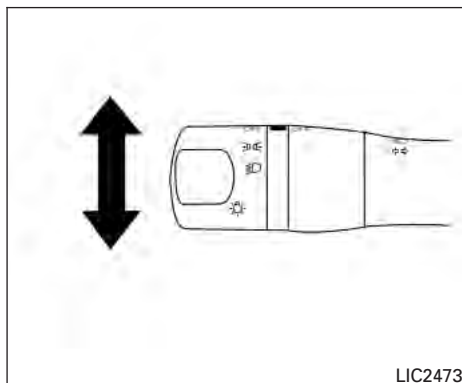
Even though the battery saver feature automatically turns off the headlights after a period of time, you should turn the headlight switch to the OFF position when the engine is not running to avoid discharging the vehicle battery.



INSTRUMENT BRIGHTNESS CONTROL

The instrument brightness control operates when the headlight control switch is in the or position.

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

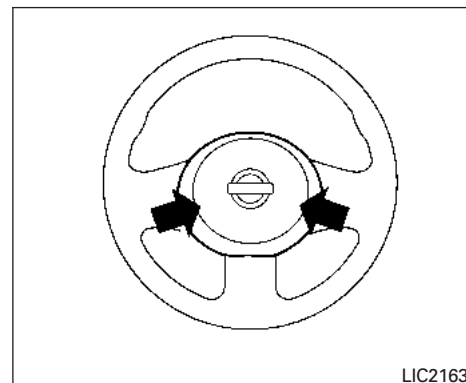


TURN SIGNAL SWITCH

Turn signal

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

HORN

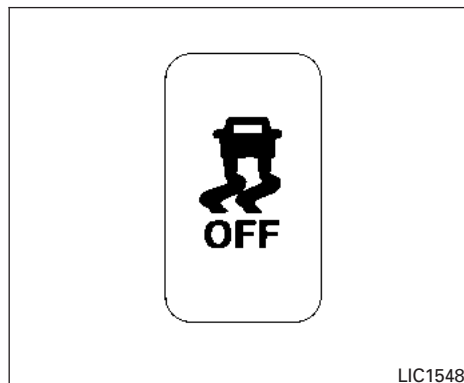


To sound the horn, push near the horn icon on the steering wheel.

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.

VEHICLE DYNAMIC CONTROL (VDC) OFF SWITCH

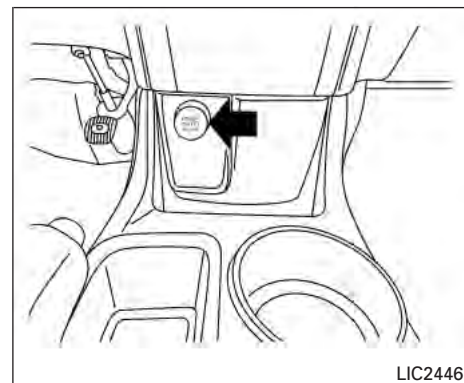


The vehicle should be driven with the Vehicle Dynamic Control (VDC) system on for most driving conditions.

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.

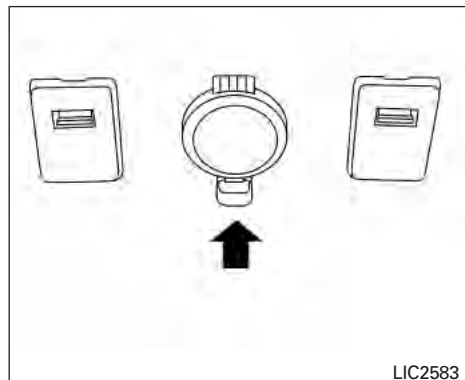
To turn off the VDC system, push the VDC OFF switch. The  indicator will come on.

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.



Front – Center Console

POWER OUTLET



Rear - Partition Wall

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

CAUTION

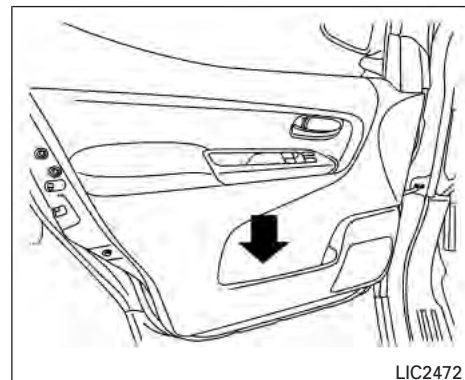
- The outlet and plug may be hot during or immediately after use.
- Only certain power outlets are designed for use with a cigarette lighter unit. Do not use any other power outlet for an accessory lighter. See your NISSAN dealer for additional information.

- Do not use with accessories that exceed a 12 volt, 120 W (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.

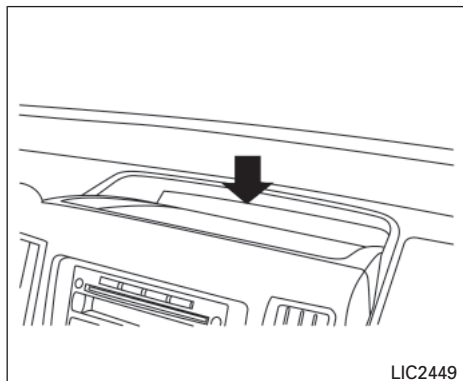
NOTE:

The USB ports that are located on each side of the rear power outlet are for charging purposes only.

STORAGE



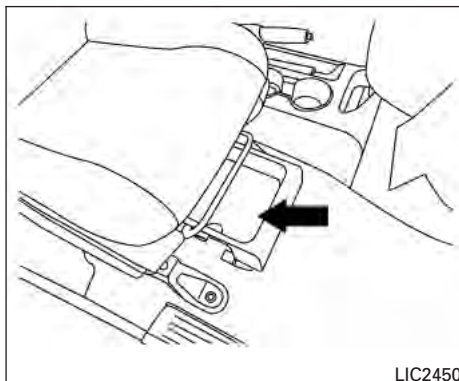
Door Panel



LIC2449

Instrument Panel

MAP POCKETS



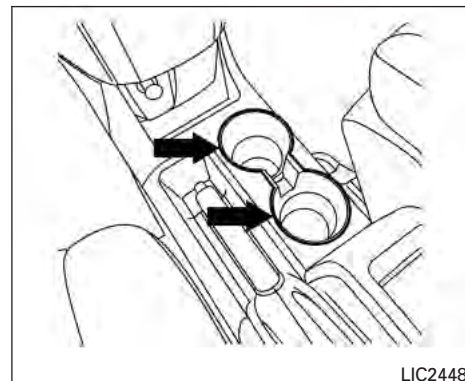
LIC2450

UNDER-SEAT STORAGE BINS

To open the drawer, lift up slightly and pull to open. To remove the drawer, pull to the point of resistance and lift up and pull.

CAUTION

To avoid damaging the tray under the seat, cargo in the trays should not exceed 4 lb (1.8 kg).



LIC2448

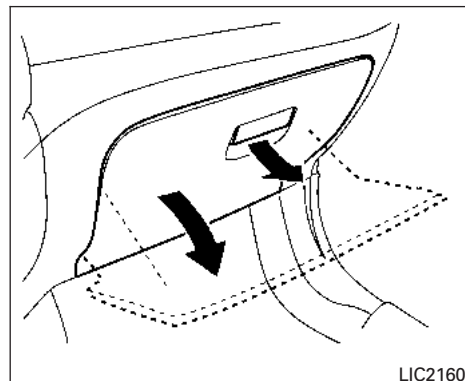
CUP HOLDERS

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.

WINDOWS

POWER WINDOWS



GLOVE BOX

Open the glove box by pulling the handle.

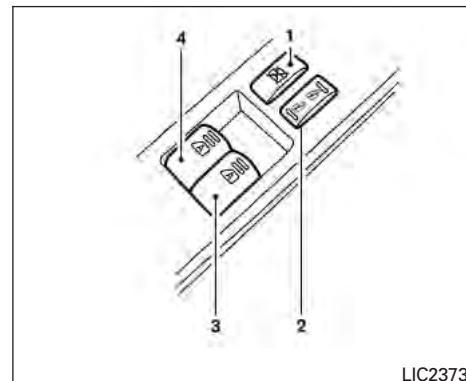
WARNING

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

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.

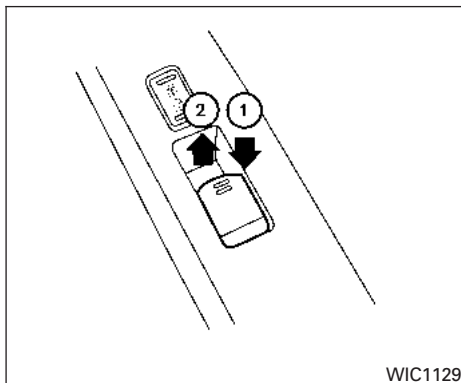


1. Window lock button
2. Power door lock switch (if so equipped)
3. Front passenger side (automatic switch)
4. Driver side automatic switch

Driver's side power window switch

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

To open a window, push the switch to the first detent and continue to hold down until the desired window position is reached. To close a window, pull the switch to the first detent and continue to hold up until the desired window position is reached.

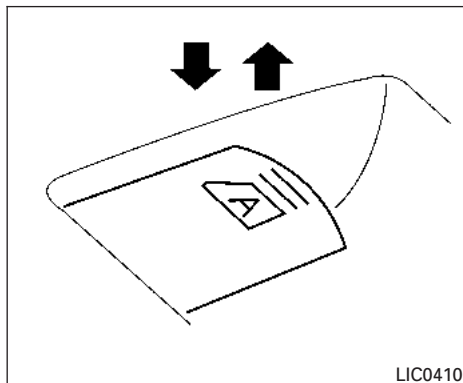


Front passenger's power window switch

The passenger's window switch operates only the corresponding passenger's window. To open the window, push the switch to the first detent and continue to hold it down until the desired window position is reached ①. To close the window, pull the switch to the first detent and continue to hold it up until the desired window position is reached 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.

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 a NISSAN 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.

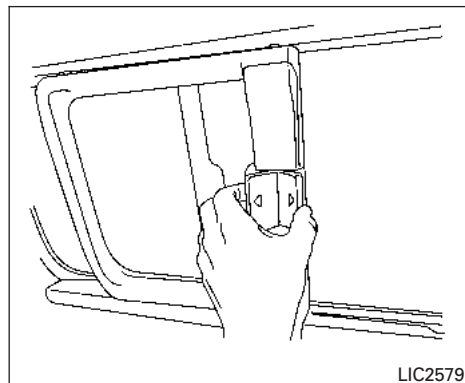
When power window switch does not operate

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 up and hold the window switch and hold it to close the window, and then hold the switch for more than 3 seconds after the window is closed completely.
4. Release the power window switch. Operate the window by automatic function to confirm the initialization is complete.
5. Perform steps 2 through 4 above for other windows.

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

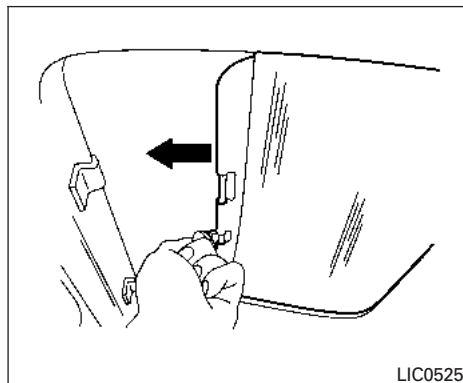
MOONROOF



SLIDING REAR WINDOW

The passenger's side rear window may be slid to two positions:

1. Squeeze and hold the latches to release the window.
2. Slide the window to the desired position.
3. Release the latches to lock the window in place.



PANORAMIC SUNSHADE

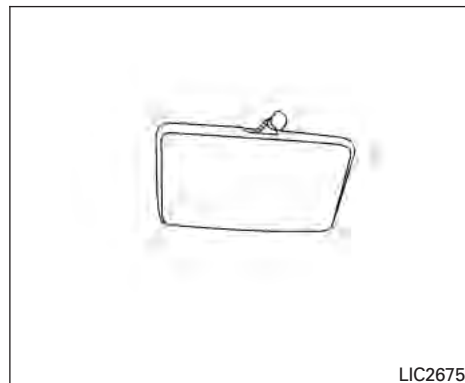
To open the sunshade, squeeze the handle to release and ease the shade back into its stored position.

To close the sunshade, pull the handle to draw out the shade.

CAUTION

**Do not pull the sunshade straight down.
This could damage the shade.**

CARGO LIGHT



The cargo light has a two-position switch and operates regardless of ignition switch position.

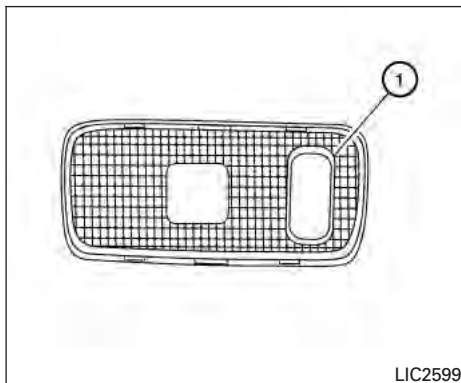
When the switch is in the ON position ①, the cargo light illuminates, regardless of door position. The light will go off after a period of time unless the ignition switch is placed in the ACC or ON position.

When the switch is in the OFF position, the cargo light will not illuminate, regardless of door position.

PERSONAL LIGHTS

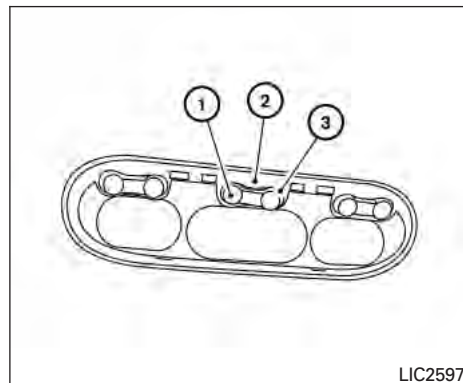
CAUTION

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



To turn the personal lights on or off, press the switch ①.

MAP LIGHT



The map light has a three-position switch and operates regardless of ignition switch position.

When the switch is in the ON position ③, the map light illuminates, regardless of door position. The light will go off after a period of time unless the ignition switch is placed in the ACC or ON position.

When the switch is in the DOOR position ②, the map light will stay on for a period of time when:

- The doors are unlocked by the key or the power door lock switch while all doors are closed and the ignition switch is placed in the OFF position.

REAR ROOM LIGHT

- 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 light will turn off while the timer is activated when:

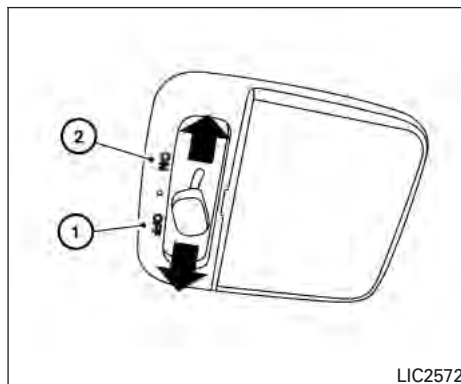
- The driver's door is locked by the key, or the power door lock switch.
- The ignition switch is placed in the ON position.

When the switch is in the OFF position ①, the map light does not illuminate, regardless of door position.

The light 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.



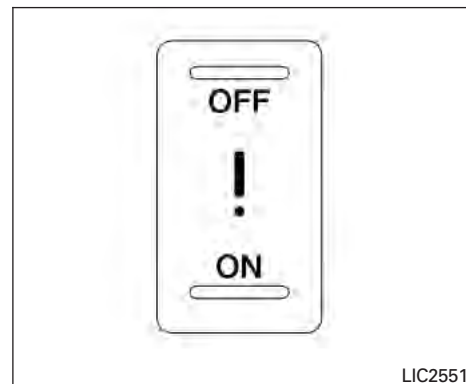
The rear room light on the overhead trim has a two-position switch. To operate, push the switch to the desired position.

- ① OFF: The light does not illuminate regardless of door position or lock status.
- ② ON: The light is illuminated.

CAUTION

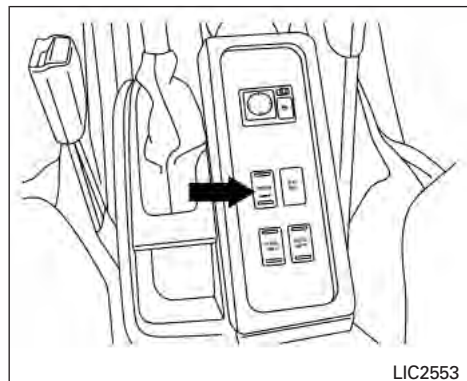
Do not use for extended periods of time with the engine stopped. This could result in a discharged battery.

TROUBLE LIGHT SWITCH



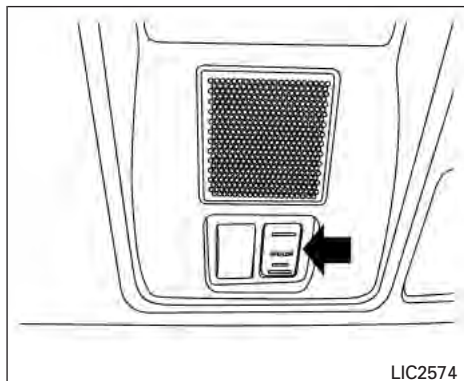
The trouble light switch is located on the instrument panel.

INTERCOM SYSTEM SWITCH



Front Intercom switch

The front intercom switch is located on the front center console.

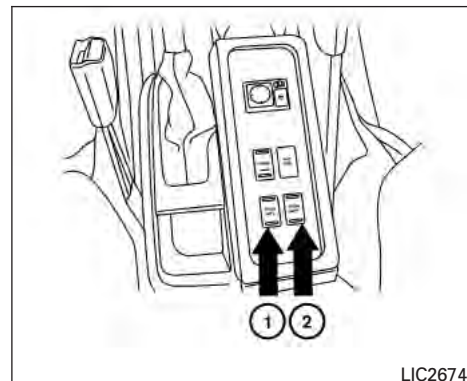


Rear Intercom switch

The rear intercom switch is located on the partition wall.

Refer to "Intercom System" in "Monitor, climate, audio, phone and voice recognition systems" for system operation.

PERSONAL LIGHT SWITCHES



The front personal light switches are located in the front center console.

The personal light switches operate the rear personal lights. To turn the left rear personal light on or off, press the left switch ①. To turn the right rear personal light on or off, press the right switch ②.

AUTO STEP SWITCH



The auto step switch is located on the partition wall.

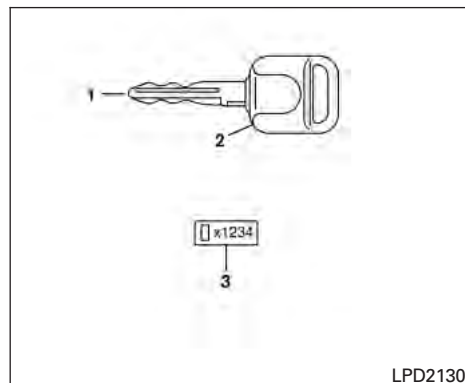
MEMO

3 Pre-driving checks and adjustments

Keys	3-2
NISSAN vehicle immobilizer system keys.....	3-2
Doors	3-3
Locking with key.....	3-3
Locking with inside lock knob.....	3-4
Locking with power door lock switch	3-5
Operating the sliding doors.....	3-6
Back doors	3-7
Automatic door locks	3-8
Child safety sliding door lock	3-9
Hood	3-10

Fuel-filler door	3-11
Opener operation.....	3-11
Fuel-filler cap	3-11
Steering wheel	3-13
Tilt operation.....	3-13
Sun visors	3-13
Card holder (driver's side only).....	3-14
Mirrors	3-14
Rearview mirror	3-14
Outside mirrors	3-14

KEYS



1. Master key
2. Transponder chip
3. Key number plate

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 make a duplicate. If you still have a key, your NISSAN dealer can duplicate it.

3-2 Pre-driving checks and adjustments

NISSAN VEHICLE IMMOBILIZER SYSTEM KEYS

You can only drive your vehicle using the master 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.

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 5 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

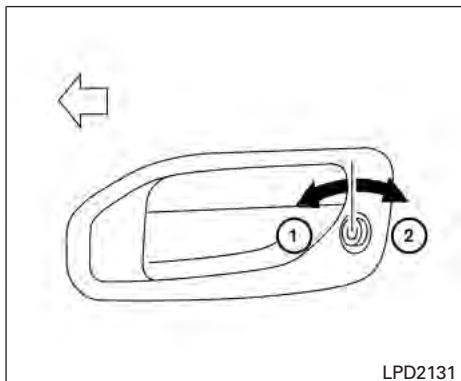
Do not allow the immobilizer system key, which contains an electrical transponder, to come into contact with water or salt water. This could affect system function.

DOORS

When the doors are locked using one of the following methods, the doors cannot 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.**



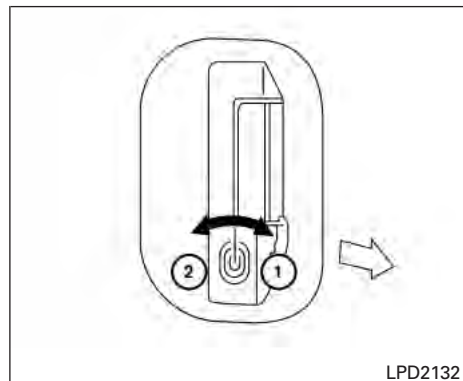
LPD2131

Driver's side and passenger side

LOCKING WITH KEY

Manual (if so equipped)

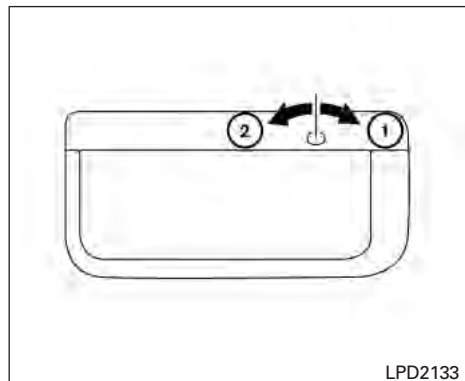
To lock a door, turn the key toward the front of the vehicle ①. To unlock, turn the key toward the rear ②.



LPD2132

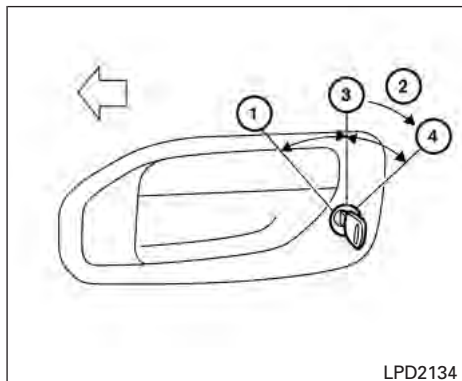
Sliding doors

To lock a door, turn the key toward the front of the vehicle ①. To unlock, turn the key toward the rear ②.



Back door

To lock a door, turn the key toward the right ① of the vehicle. To unlock, turn the key toward the left ② of the vehicle.



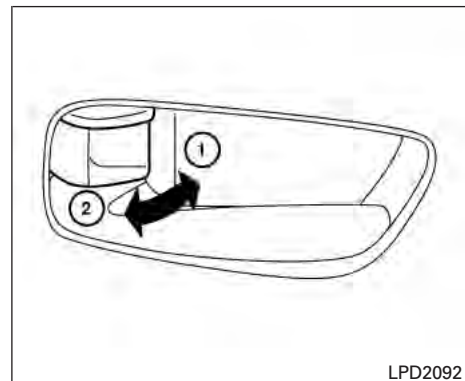
Driver's side and passenger side

Power (if so equipped)

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 the 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.

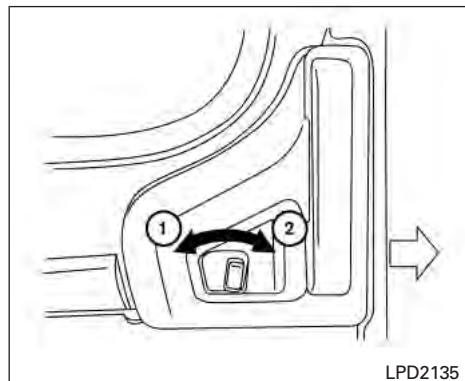


Inside lock – front driver and passenger

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.

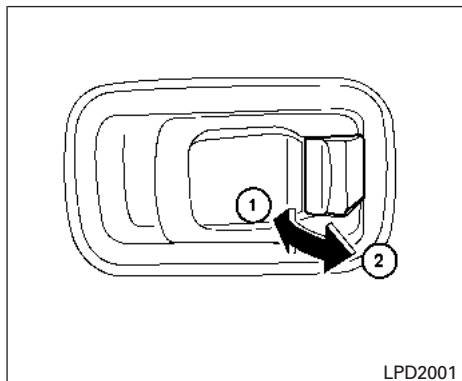


LPD2135

Inside lock – sliding doors

To lock the door without the key, move the inside lock knob to the lock position ②, then close the door.

To unlock the door without the key, move the inside lock knob to the unlock position ①.



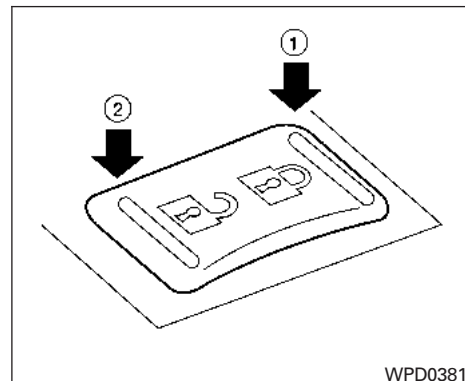
LPD2001

Inside lock – back door

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.

To open the door from the inside, pull the inside door handle toward you.



WPD0381

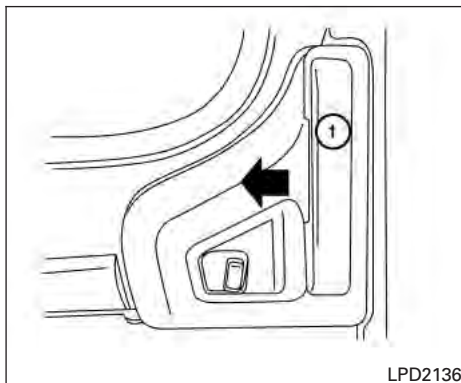
LOCKING WITH POWER DOOR LOCK SWITCH

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.



OPERATING THE SLIDING DOORS

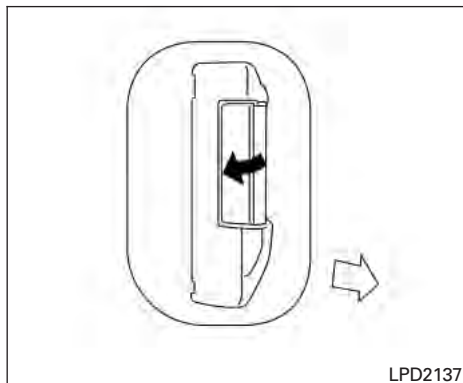
WARNING

- Always use the door handle to open or close the sliding door. Do not attempt to open or close the door by merely placing your hand on the door edge or door slide roller as this may cause injury.
- When opening the door on a slope, ensure that it is fully open and can be held in place by the detent. Failing to ensure the door remains open could result in serious injury.

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

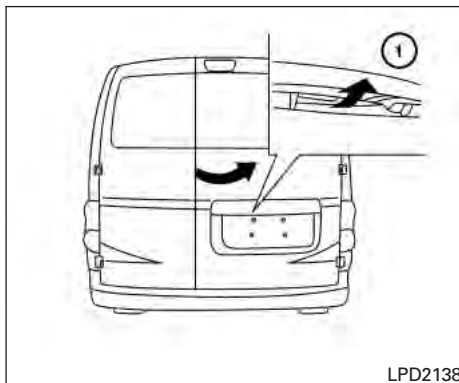
To open the sliding door from the inside, pull the handle ① toward the rear of the vehicle and slide the door until the door clicks into the detent.

To close the sliding door from the inside pull the handle ① toward the rear of the vehicle. The door will release from the open position and slide closed.



To open a sliding door from the outside, pull the outside handle and slide the door toward the rear of the vehicle until the door clicks into the detent.

To close the sliding door from the outside, pull the outside handle again. The door will release from the open position and slide closed.



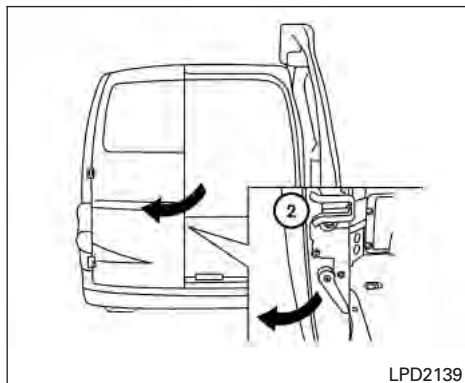
BACK DOORS

CAUTION

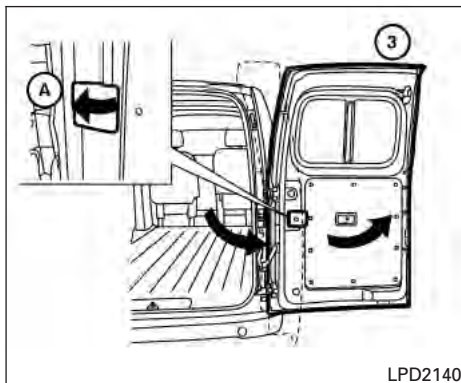
- **Do not operate the 180° release lever until the door has been fully opened. Doing so can result in damage to the vehicle and/or malfunction of the mechanism.**
- **Always look before fully opening the back door(s), to avoid an accident with oncoming traffic or pedestrians.**
- **When closing the back doors, be sure to close the left-side door before closing the right-side door.**

Open the back doors by performing the following:

1. From the outside of the vehicle, pull the door handle ① on the right side door and open door until it stops.



2. Pull the lever (2), located on the side of the left back door, toward the rear of the vehicle and pull the door to open until the door stops.



The back doors open approximately 180° to allow access to the rear of the vehicle.

3. To open either door to the wide open position (3) pull the release latch (A), located on the inside of each back door, toward the front of the vehicle to release the check link arm.
4. Open the door slowly until the door stops. The back doors are not designed to be latched in their fully open positions.

Park the vehicle in a safe and level place. Make sure that the area is clear of obstacles and there is enough clearance around the back doors.

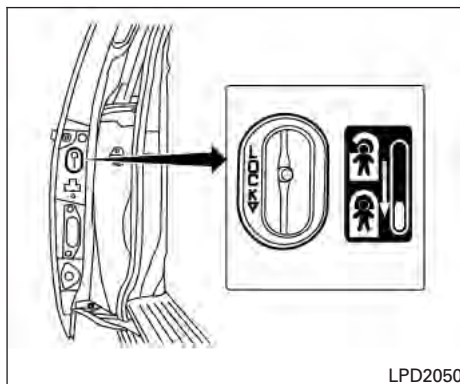
AUTOMATIC DOOR LOCKS

- All doors lock automatically when the vehicle speed reaches 15 MPH (24 km/h).
- All doors unlock automatically when the transmission is placed in the P (Park) position.

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 3 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 front doors do not unlock when the transmission is placed in the P (Park) position. 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 SLIDING DOOR LOCK

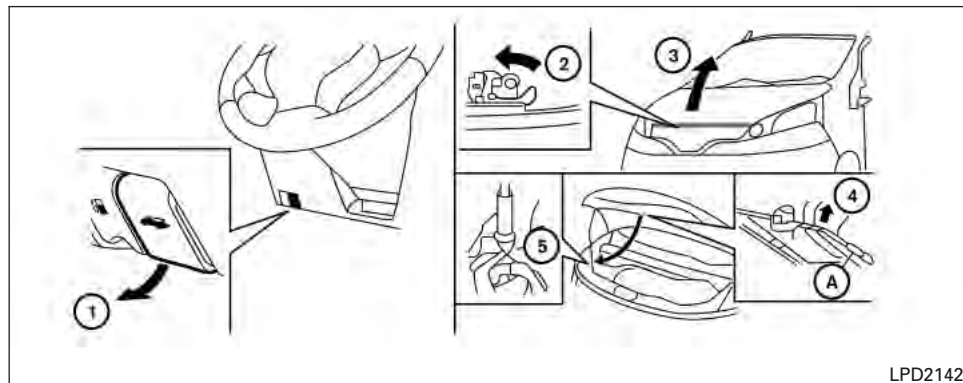
The child safety lock helps prevent the sliding door from being opened accidentally, especially when small children are in the vehicle.

The child safety lock lever is located on the edge of the sliding door.

When the lever is in the unlock position, the door can be opened from the outside or the inside.

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

HOOD



1. Pull the hood lock release handle (1) located below the instrument panel until the hood springs up slightly.
2. Locate the lever (2) in between the hood and grille and push the lever sideways with your fingertips.
3. Raise the hood (3).
4. Remove the support rod (4) and insert it into the slot (5).

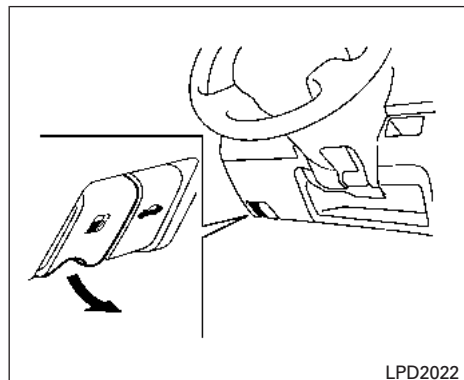
Hold the coated parts (A) when removing or resetting the support rod. Avoid direct contact with the metal parts, as they may be hot immediately after the engine has been stopped.

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

WARNING

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

FUEL-FILLER DOOR



Rear tank opener

OPENER OPERATION

The fuel-filler door release is located below the instrument panel. To open the fuel-filler door, pull the release. To lock, close the fuel-filler door securely.

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.

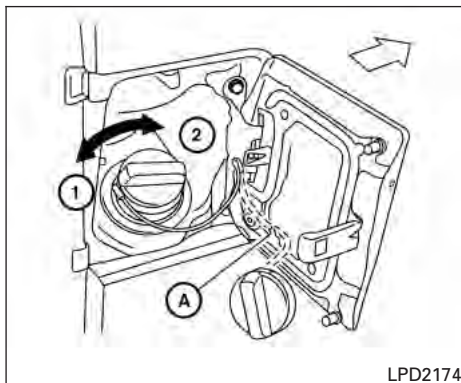
- Do not fill a portable fuel container in the vehicle or trailer. Static electricity can cause an explosion of flammable liquid, vapor or gas in any vehicle or trailer. To reduce the risk of serious injury or death when filling portable fuel containers:

- 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

- Do not use E-15 or E-85 fuel in your vehicle. For further information see the “Fuel Recommendation” in the “Technical and consumer information” section of this manual.

- 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.
- The LOOSE FUEL CAP warning message will be displayed if the fuel-filler cap is not properly tightened. It may take a few driving trips for the message to be displayed. Failure to tighten the fuel-filler cap properly after the LOOSE FUEL CAP warning message is displayed may cause the  Malfunction Indicator Light (MIL) to illuminate.
- 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.

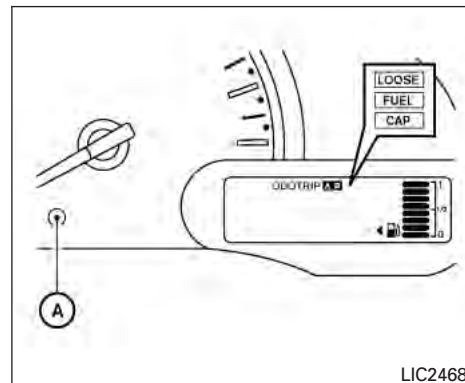


To remove the fuel-filler cap:

1. Turn the fuel-filler cap counterclockwise ① to remove.
2. Loop the tether strap around the hook (A) 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 ② until a single click is heard.



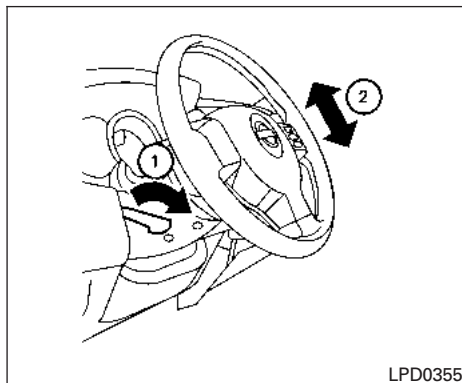
Loose Fuel Cap warning message

The LOOSE FUEL CAP warning message displays in the odometer 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 message, 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.

STEERING WHEEL

3. Press the loose fuel cap warning reset button (A) in the meter for about 1 second to turn off the LOOSE FUEL CAP warning message (B) after tightening the fuel-filler cap.



TILT OPERATION

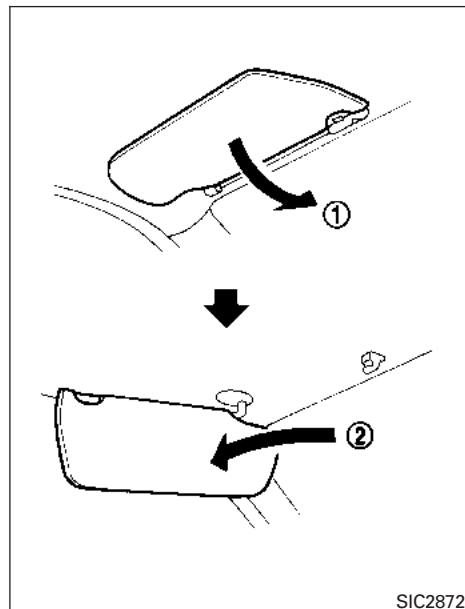
Push the lock lever (1) down and adjust the steering wheel up or down (2) to the desired position.

Pull the lock lever (1) up to lock the steering wheel in place.

WARNING

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

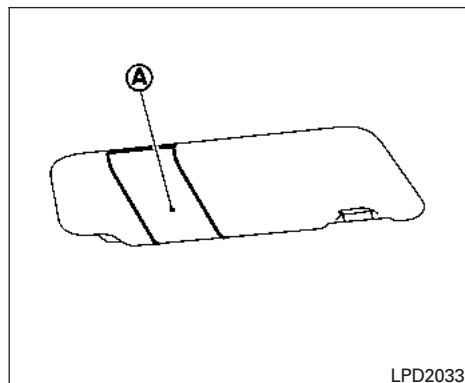
SUN VISORS



To block out glare from the front, swing down the sun visor (1).

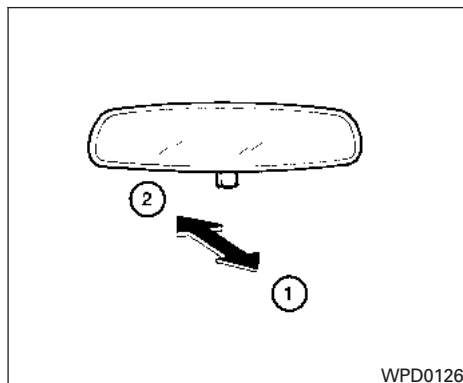
To block glare from the side, disconnect the sun visor from the center mount and swing it to the side (2).

MIRRORS



CARD HOLDER (driver's side only)

To access the card holder, pull the sun visor down and slide card in the card holder **A**. Do not view information while operating the vehicle.



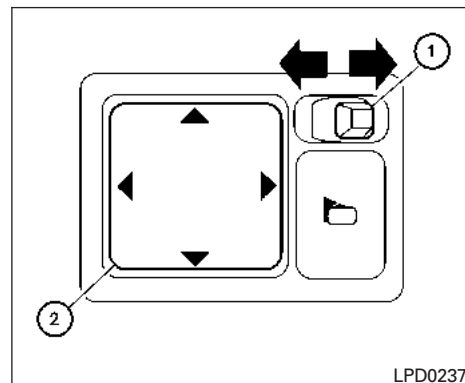
REARVIEW MIRROR

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.



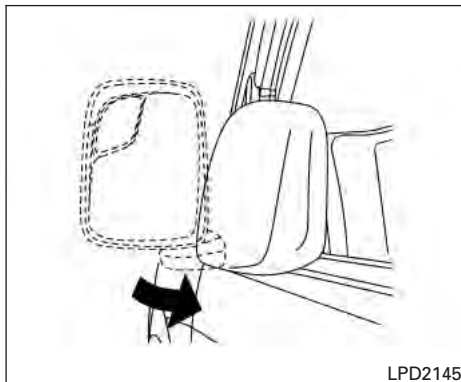
OUTSIDE MIRRORS

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

Move the small switch **1** to select the right or left mirror. Adjust each mirror to the desired position using the large switch **2**.

⚠ 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.**



Foldable outside mirrors

Pull the outside mirror toward the door to fold it.

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.

4 Monitor, climate, audio, phone and voice recognition systems

Control panel buttons — color screen with	
Navigation System.....	4-2
How to use the touch screen	4-3
How to use the BACK button	4-5
How to use the MENU button.....	4-5
☀/🌙 button.....	4-7
RearView Monitor	4-8
How to read the displayed lines	4-9
Difference between predicted and actual distances.....	4-9
Adjusting the screen.....	4-12
Operating tips.....	4-12
Vents	4-13
Heater and air conditioner (manual).....	4-13
Controls.....	4-14
Heater operation	4-15
Air conditioner operation	4-16
Air flow charts.....	4-17
Rear seat air conditioner	4-21
Servicing air conditioner.....	4-22
Audio system	4-22
Radio	4-22
FM radio reception	4-22
AM radio reception	4-23
Satellite radio reception	4-23
Audio operation precautions	4-23
FM/AM/SAT radio with compact disc (CD) player	4-30
USB interface.....	4-37
iPod®* player operation.....	4-38
Bluetooth® streaming audio	4-42
Pandora® audio (United States only) (if so equipped)	4-43
CD care and cleaning.....	4-45
Steering wheel switch for audio control	4-46
Antenna	4-46
Car phone or CB radio.....	4-47
Intercom System	4-47
Activation.....	4-47
Speaking	4-47
Bluetooth® Hands-Free Phone System with Navigation System.....	4-48
Regulatory Information	4-49
Voice commands	4-50
Connecting Procedure	4-50
Vehicle phonebook	4-51
Making a call.....	4-51

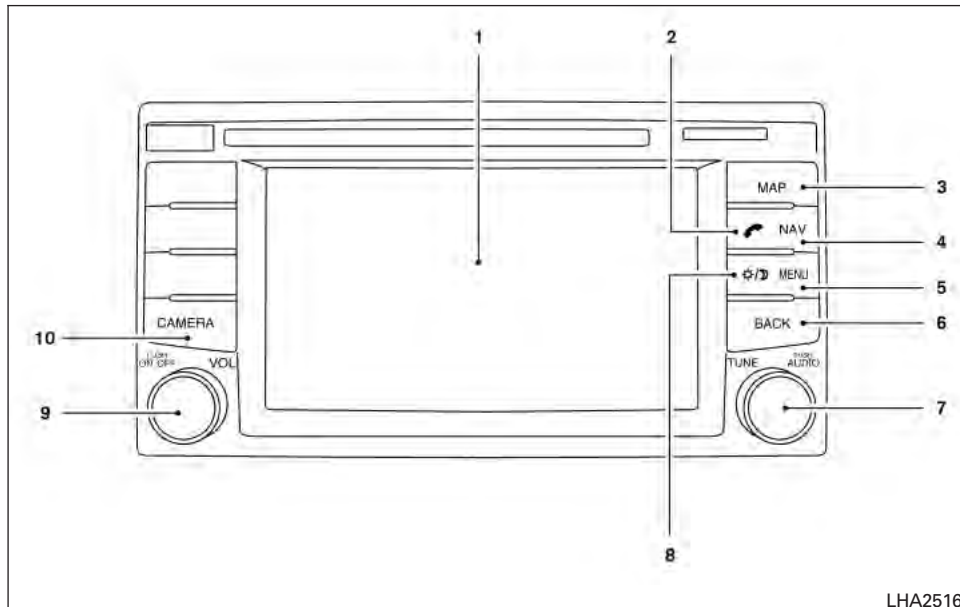
Receiving a call	4-51
During a call	4-51
Ending a call	4-51
Text messaging.....	4-52
Bluetooth® settings	4-53
Phone settings	4-54
NISSAN Voice Recognition System.....	4-54
Using the system	4-54

System features	4-56
Bluetooth® Hands-Free Phone System	
voice commands	4-57
Navigation System voice commands	4-58
Audio system voice commands.....	4-58
Information voice commands.....	4-59
Help voice commands	4-59
Troubleshooting guide	4-60

CONTROL PANEL BUTTONS — COLOR SCREEN WITH NAVIGATION SYSTEM

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.



LHA2516

- | | |
|---|--|
| 1. Display screen | 5. MENU button |
| 2.  button** | 6. BACK button |
| 3. MAP button* | 7. TUNE knob / AUDIO button |
| 4. NAV button* | 8.  (brightness control) button |

9. Power button/VOL (volume) control knob

10. CAMERA button

* For information regarding the Navigation system control buttons, refer to the separate Navigation System Owner's Manual.

** For information regarding the Bluetooth® Hands-Free Phone System control button, see "Bluetooth® Hands-Free Phone 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:

"Example" — Words marked in quotes refer to a key shown only on the display. These keys can be selected by touching the screen.

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.**

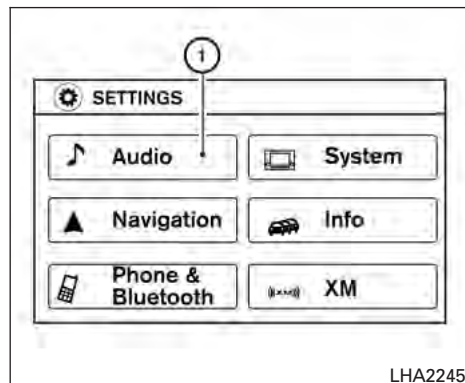
To help ensure safe driving, some functions cannot be operated while driving.

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

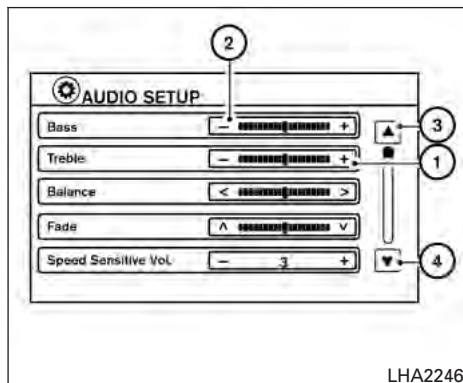
- **ALWAYS give your full attention to driving.**
- **Avoid using vehicle features that could distract you. If distracted, you could lose control of your vehicle and cause an accident.**



Touch screen operation

Selecting the item:

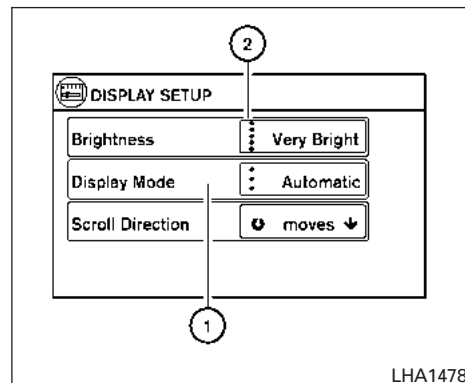
Touch an item to select. For example, to select the "Audio" key, touch the "Audio" key ① on the screen.



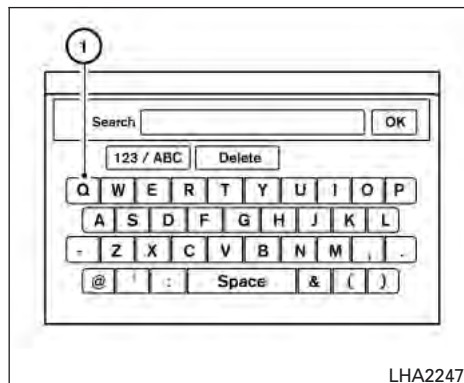
Adjusting the item:

For screens where an item can be adjusted incrementally, such as when adjusting the bass and treble for the audio system, touch the "+" key ① or the "-" key ② to adjust the settings of an item.

When there are more items than can be displayed on one screen, touch the up arrow ③ to scroll up the page or touch the down arrow ④ to scroll down the page.



Other items are adjusted by selecting one of a set number of conditions. For example, the Display Mode can be set to "Automatic", "Day" or "Night". To adjust this type of item, touch the item ①. The item will cycle through the available settings and the red indicator lights to the left of the setting condition ② will come on or turn off accordingly.



Inputting characters:

Touch the letter key ①.

There are some options available when inputting characters.

- **123 / ABC:**
Changes the available character set to numbers.
- **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.

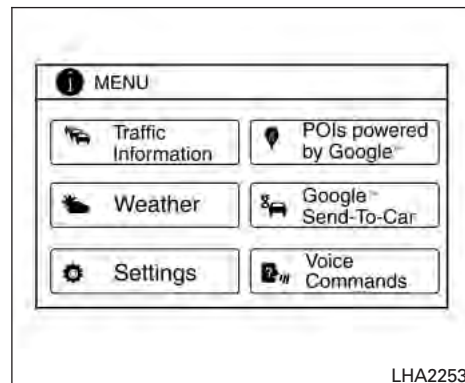
- **OK:**
Completes the character input.

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 USE THE BACK BUTTON

Press the BACK button to return to the previous screen.



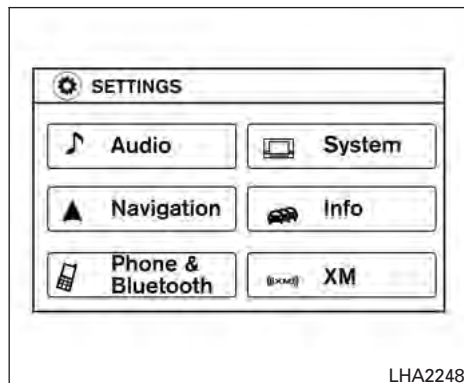
HOW TO USE THE MENU BUTTON

For more information about the "POIs Powered by Google™", "Google™ Send-To-Car", "Traffic Information" and "Weather" features, see the separate Navigation System Owner's Manual.

For more information about the "Voice Commands" key, see "NISSAN Voice Recognition System" in this section.

To select and/or adjust several functions, features and modes that are available for your vehicle:

1. Press the MENU button.
2. Select the "Settings" key.



LHA2248

3. Select the desired item.

Menu item		Result
Audio		For Audio Setup, refer to "Audio System" in this section.
Navigation		Refer to the separate Navigation System Owner's Manual for information regarding this item.
Phone & Bluetooth		For information regarding the Bluetooth® Hands-Free Phone System, see "Bluetooth® Hand-Free Phone System" in this section. For information regarding Bluetooth® audio, see Bluetooth® streaming audio in this section.
System		Select the "System" key to select and/or adjust various functions of the system. A screen with additional options will appear
	Display	Select this key to adjust the appearance of the display.
	Brightness	The brightness of the display can be set to Very Bright, Bright, Default, Dark or Very Dark. Touch the key to cycle through the options.
	Display Mode	Adjusts to fit the level of lighting in the vehicle. Touch key to cycle through options. "Day" and "Night" modes are suited for the respective times of day while "Auto" controls the display automatically.
	Scroll Direction	Adjusts the direction of the menu scroll. Choose either "Up" or "Down".
Clock		Select this key to adjust the time and appearance of the clock on the display.

4-6 Monitor, climate, audio, phone and voice recognition systems

Menu item		Result
	Time Format	The clock can be set to 12 hours or 24 hours.
	Date Format	Select from five possible formats of displaying the day, month, and year.
	Clock Mode	Adjust the mode for the clock. "Auto" uses the system's GPS to automatically maintain the time. "Manual" allows you to set the clock using the "Set Clock Manually" key. "Time Zone" maintains the time based upon the zone selected when selecting the "Time Zone" key.
	Set Clock Manually	Adjust the clock manually, Touch the "+" or "-" keys to adjust the hours, minutes, day, month and year up or down. "Clock Mode" must be set to manual for this option to be available.
	Daylight Savings Time	Adjusts the daylight savings time on or off.
	Time Zone	Choose the applicable time zone from the list.
	Language	Adjusts the language on the display. Choose from English, Français, or Español.
	Touchscreen Click	Toggles the touchscreen click feature on or off. When activated a click sound will be heard every time a key on the screen is touched.
	System Beeps	Toggle the system beep tones feature on or off. When activated, a beep sound will be heard when a pop-up message appears on the screen or a button on the unit (such as the  button) is pressed and held for 2 seconds.
	Reset all settings/ memory	Select this key to return all settings to default and to clear the memory.
Info		See the separate Navigation System Owner's Manual for more information
XM		For XM setup, refer to "Audio system" in this section.

BUTTON

To change the display brightness, press the  button. Pressing the button again will change the display to the day or the night display.

If no operation is performed within 5 seconds, the display will return to the previous display.

Press and hold the  button for more than two seconds to turn the display off. Press the button again to turn the display on.

REARVIEW MONITOR

When the shift lever is shifted into the R (Reverse) position, the monitor display shows the view to the rear of the vehicle.

WARNING

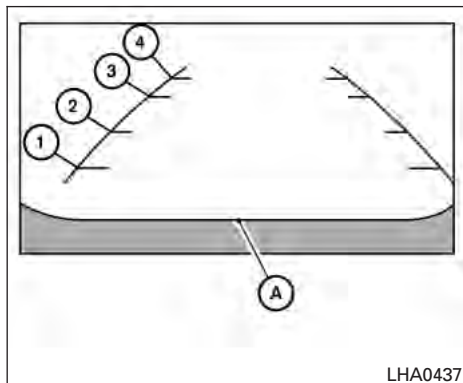
- Failure to follow the warnings and instructions for proper use of the RearView monitor could result in serious injury or death.
- The RearView Monitor is a convenience but it is not a substitute for proper backing. Always turn and look out the windows, and check mirrors to be sure that it is safe to move before operating the vehicle. Always back up slowly.
- The system is designed as an aid to the driver in showing large stationary objects directly behind the vehicle, to help avoid damaging the vehicle.
- The system cannot completely eliminate blind spots and may not show every object.

- Underneath the bumper and the corner areas of the bumper cannot be viewed on the RearView Monitor because of its monitoring range limitation. The system will not show small objects below the bumper, and may not show objects close to the bumper or on the ground.
- Objects viewed in the RearView Monitor differ from actual distance because a wide-angle lens is used.
- Objects in a RearView Monitor will appear visually opposite than when viewed in the rear view and outside mirrors.
- Make sure that the back doors are securely close when backing up.
- Do not put anything on the rearview camera. The rearview 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.

CAUTION

There is a plastic cover over the camera. Do not scratch the cover when cleaning dirt or snow from the cover.



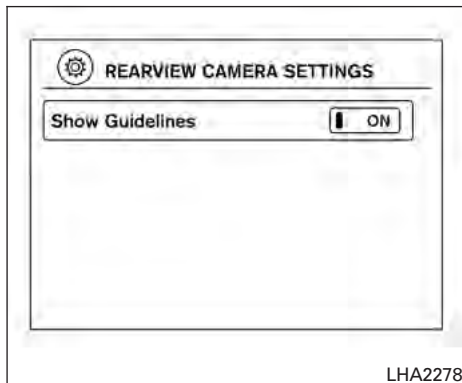
HOW TO READ THE DISPLAYED LINES

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)



The on-screen guidelines can be set to on or off.

With the shift lever in the R (Reverse) position:

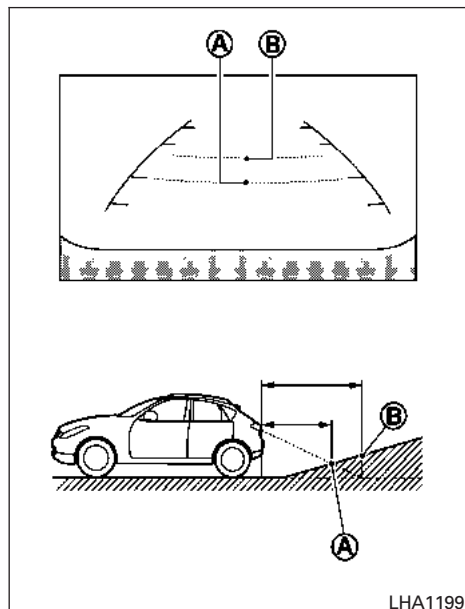
Press the CAMERA button to toggle the feature on and off.

With the shift lever in any position other than the R (Reverse) position:

1. Press the CAMERA button.
2. Select the "Show Guidelines" key to toggle the feature on or off.

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.

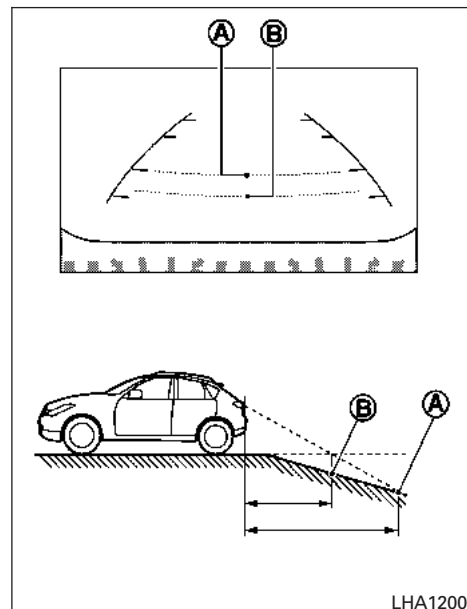


the hill is the place (B). Note that any object on the hill is further than it appears on the monitor.

Backing up on a steep 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

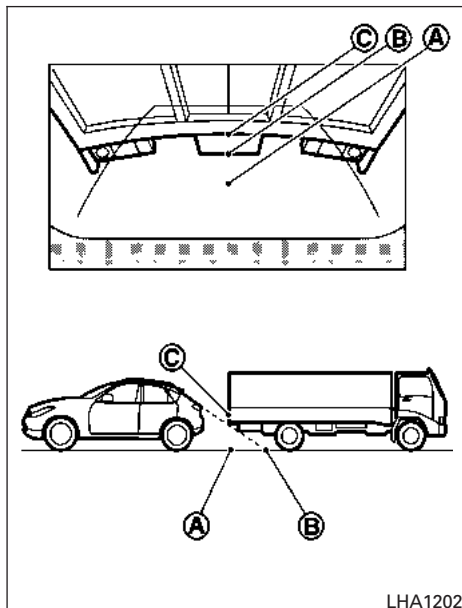
4-10 Monitor, climate, audio, phone and voice recognition systems



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 (A), but the actual 3 ft (1.0 m) distance on

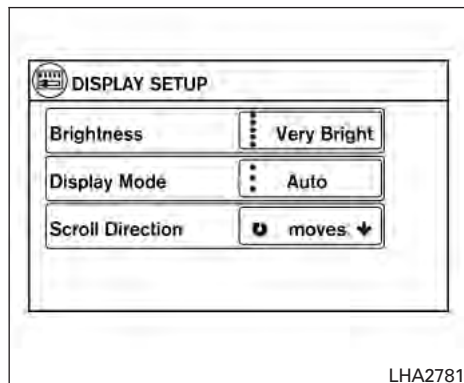
the hill is the place (B). Note that any object on the hill is closer than it appears on the monitor.



the position (A) if the object projects over the actual backing up course.

Backing up behind a projecting object

The position (C) is shown farther than the position (B) in the display. However, the position (C) is actually at the same distance as the position (A). The vehicle may hit the object when backing up to



ADJUSTING THE SCREEN

1. Press the MENU button.
 2. Select the "Settings" key.
 3. Select the "System" key.
 4. Select the "Display" key.
 5. Touch the "Brightness key and adjust the level to the desired setting.
- Do not adjust the display of the RearView Monitor while the vehicle is moving.

OPERATING TIPS

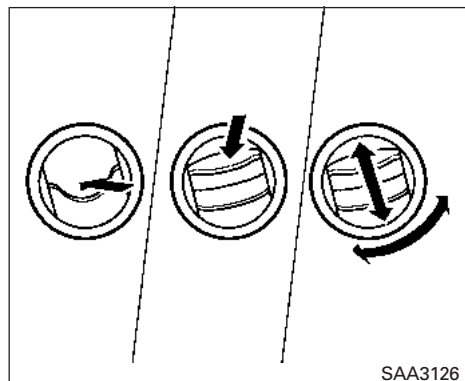
⚠ CAUTION

- **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 a diluted mild cleaning agent and then wipe with a dry cloth.**
- **Do not damage the camera as the monitor screen may be adversely affected.**

- When the shift lever is shifted to R (Reverse), the monitor screen automatically changes to the RearView Monitor mode. However, the radio can be heard.
- It may take some time until the RearView Monitor is displayed after the shift lever has been shifted to R (Reverse). Objects may be distorted momentarily until the RearView Monitor screen is displayed completely. When the shift lever is returned to a position other than R (Reverse), it may take some time until the screen changes. Objects on the screen may be distorted until they are completely displayed.
- When the temperature is extremely high or low, the screen may not clearly display objects. This is not a malfunction.

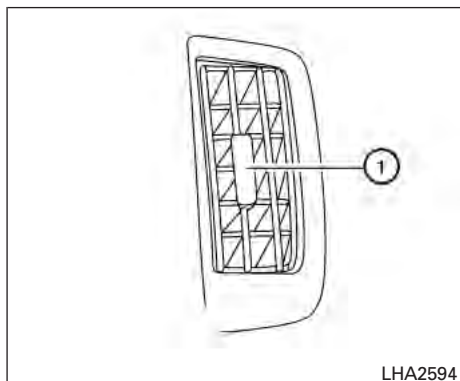
- When strong light directly enters the camera, objects may not be displayed clearly.
- Vertical lines may be seen in objects on the screen. This is due to strong reflected light from the bumper. This is not a malfunction.
- The screen may flicker under fluorescent light. This is not a malfunction.
- The colors of objects on the RearView Monitor may differ somewhat from those of the actual object.
- When the contrast of objects is low at night, pressing the SETTING button or MENU button may not change the brightness.
- Objects on the monitor may not be clear in a dark place or at night.
- If dirt, rain or snow attaches to the camera, the RearView Monitor may not display objects. Clean the camera.
- Do not use body wax on the camera window. If body wax does get on the camera window, wipe off the wax with a clean cloth dampened with mild detergent diluted with water.

VENTS



Side and rear vents

Adjust the air flow direction of the vents by opening, closing or rotating.



Center

Adjust the air flow direction of the vents by moving the slide ①.

HEATER AND AIR CONDITIONER (manual)

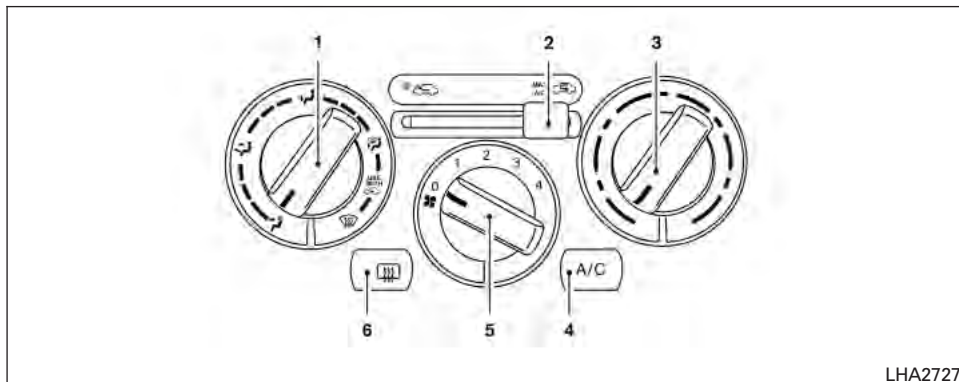
WARNING

- 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.

NOTE:

- Odors from inside and outside the vehicle can build up in the air conditioner unit. Odor can enter the passenger compartment through the vents.

- When parking, set the heater and air conditioner controls to turn off air recirculation to allow fresh air into the passenger compartment. This should help reduce odors inside the vehicle.



LHA2727

1. Air flow control dial
2. Air intake lever (Fresh air/Air recirculation)
3. Temperature control dial
4. Air conditioner button
5. Fan control dial
6. Rear window defroster switch (also controls side mirror defrosters)

CONTROLS

Fan control dial

The fan control dial turns the fan on and off, and controls fan speed.

Air flow control dial

The air flow control dial allows you to select the air flow outlets.

-  — 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 outlets and foot outlets.

 — Air flows mainly from defroster outlets.

Temperature control dial

The temperature control dial allows you to adjust the temperature of the outlet air. To lower the temperature, turn the dial to the left. To increase the temperature, turn the dial to the right.

Fresh air

Move the air intake lever to the  position. The air flow is drawn from outside the vehicle.

Air recirculation

Move the air intake lever to the  position to recirculate air inside the vehicle.

Use the  selection:

- when driving on a dusty road.
- to prevent traffic fumes from entering passenger compartment.
- for maximum cooling when using the air conditioner.

Air conditioner button

Start the engine, turn the fan control dial to the desired position and press the  button to turn on the air conditioner. The indicator light comes on when the air conditioner is operating. To turn off the air conditioner, press the  button again.

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

Rear window and outside mirror defroster switch

For more information about the rear window and outside mirror defroster switch, see "Rear window and outside mirror defroster switch" in the "Instruments and controls" section of this manual.

HEATER OPERATION

Heating

This mode is used to direct heated air to the foot outlets. Some air also flows from the defrost outlets.

1. Move the air intake lever to the  position for normal heating.
2. Turn the air flow control dial to the  position.

3. Turn the fan control dial to the desired position.
4. Turn the temperature control dial to the desired position between the middle and the hot position.

Ventilation

This mode directs outside air to the side and center vents.

1. Move the air intake lever to the  position.
2. Turn the air flow control dial to the  position.
3. Turn the fan control dial to the desired position.
4. Turn the temperature control dial to the desired position.

Defrosting or defogging

This mode directs the air to the defrost outlets to defrost/defog the windows.

1. Move the air intake lever to the  position.
2. Turn the air flow control dial to the  position.

3. Turn the fan control dial to the desired position.
 4. Turn the temperature control dial to the desired position between the middle and the hot position.
- To quickly remove ice or fog from the windows, turn the fan control dial to the maximum position and the temperature control dial to the full hot position.

When the  or  position is selected, press the A/C button to turn on the air conditioner for better performance. This will dehumidify the air and help defog the windows.

Bi-level heating

This mode directs cooler air from the side and center vents and warmer air from the floor outlets. When the temperature control dial is moved to the full hot or full cool position, the air between the vents and the floor outlets is the same temperature.

1. Move the air intake lever to  position.
2. Turn the air flow control dial to the  position.
3. Turn the fan control dial to the desired position.

4. Turn the temperature control dial to the desired position.

Heating and defogging

This mode heats the interior and defogs the windshield.

1. Move the air intake lever to the  position.
2. Turn the air flow control dial to the  position.
3. Turn the fan control dial to the desired position.
4. Turn the temperature control dial to the desired position between the middle and the hot position.

When the  or  position is selected, press the A/C button to turn on the air conditioner for better performance. This will dehumidify the air and help defog the windows.

Operating tips

Clear snow and ice from the wiper blades and air inlet in front of the windshield. This improves heater operation.

AIR CONDITIONER OPERATION

Start the engine, turn the fan control dial to the desired position, and press the A/C button to activate the air conditioner. When the air conditioner is on, cooling and dehumidifying functions are added to the heater operation.

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

Cooling

This mode is used to cool and dehumidify the air.

1. Move the air intake lever to the  position.
2. Turn the air flow control dial to the  position.
3. Turn the fan control dial to the desired position.
4. Press the A/C button. The indicator light comes on.
5. Turn the temperature control dial to the desired position.

- For quick cooling when the outside temperature is high, move the air intake lever to the  position. Be sure to return to the  position for normal cooling.

Dehumidified heating

This mode is used to heat and dehumidify the air.

1. Move the air intake lever to the  position.
2. Turn the air flow control dial to the  position.
3. Turn the fan control dial to the desired position.
4. Press the  button. The indicator light comes on.
5. Turn the temperature control dial to the desired position.

Dehumidified defogging

This mode is used to defog the windows and dehumidify the air.

1. Move the air intake lever to the  position.
2. Turn the air flow control dial to the  position.

3. Turn the fan control dial to the desired position. When the  or  position is selected, press the  button to turn on the air conditioner for better performance. This will dehumidify the air and help defog the windows.
4. Turn the temperature control dial to the desired position.

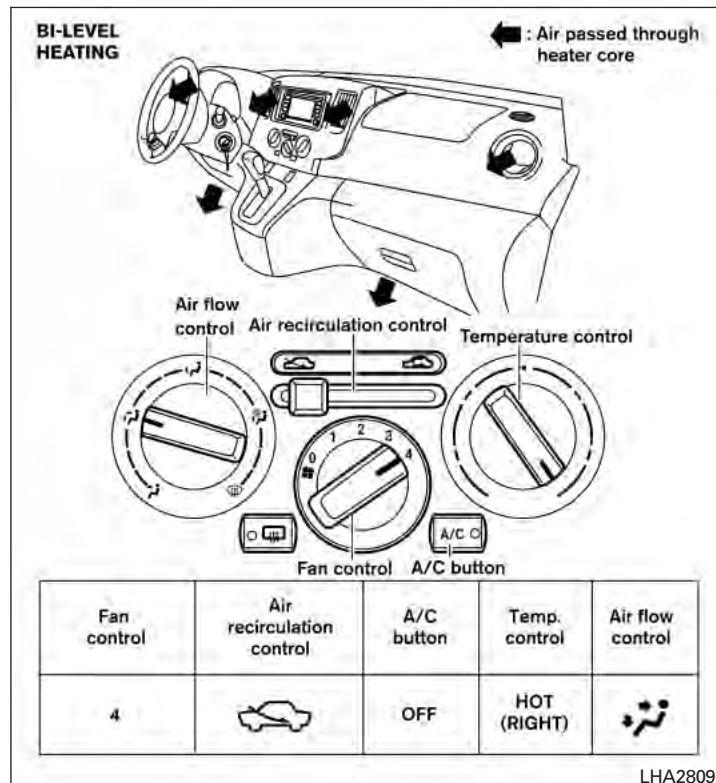
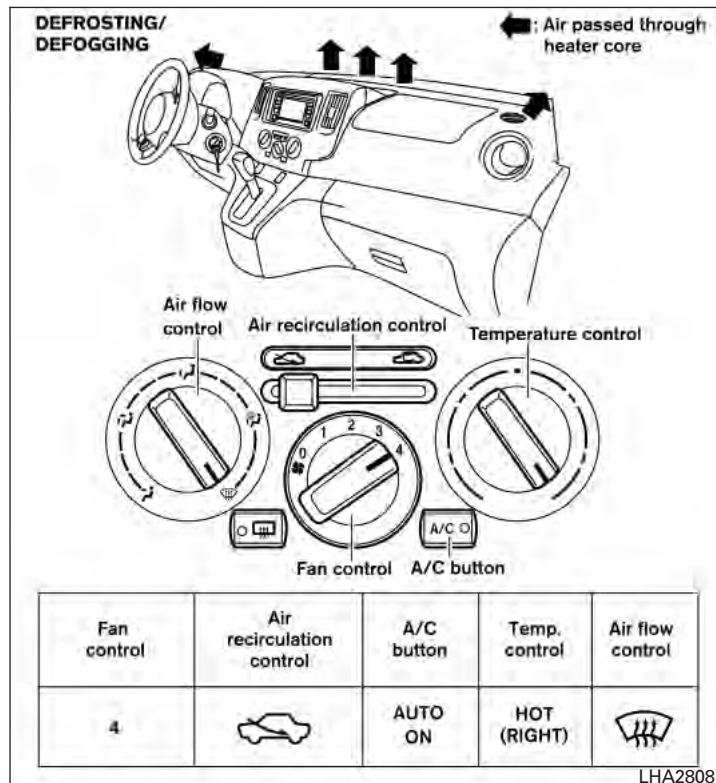
Operating tips

- Keep the windows closed while the air conditioner is in operation.
- After parking in the sun, drive for 2 or 3 minutes with the windows open to vent hot air from the passenger compartment before closing the windows. This allows the air conditioner to cool the interior more quickly.
- **The air conditioning system should be operated for approximately 10 minutes at least once a month. This helps prevent damage to the system due to lack of lubrication.**
- A visible mist may be seen coming from the ventilators in hot, humid conditions as the air is cooled rapidly. This does not indicate a malfunction.

- **If the high temperature warning light  illuminates in red indicating engine coolant temperature is over the normal range, turn the air conditioner off. See “If your vehicle overheats” in the “In case of emergency” section of this manual.**

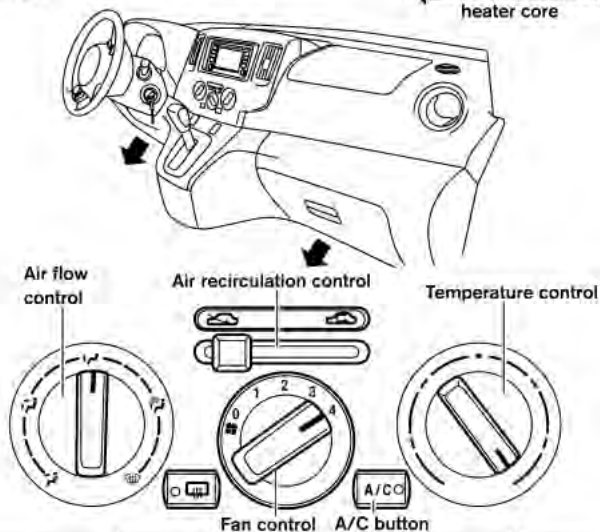
AIR FLOW CHARTS

The following charts show the button and dial positions for **MAXIMUM AND QUICK** heating, cooling or defrosting. **The air intake lever should always be in the  position for heating and defrosting.**



HEATING

← : Air passed through heater core

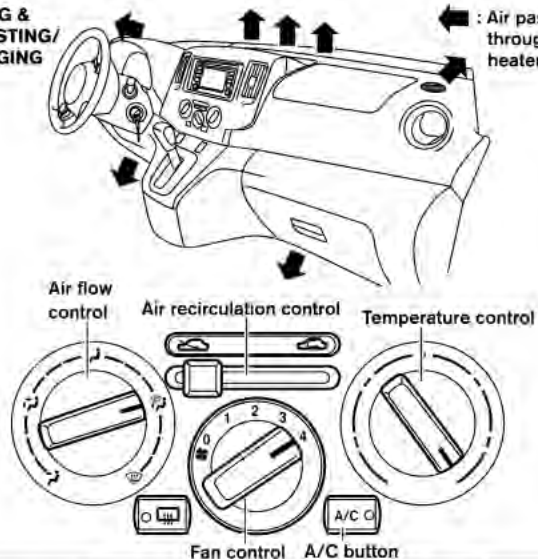


Fan control	Air recirculation control	A/C button	Temp. control	Air flow control
4		OFF	HOT (RIGHT)	

LHA2810

HEATING & DEFROSTING/DEFOGGING

← : Air passed through heater core

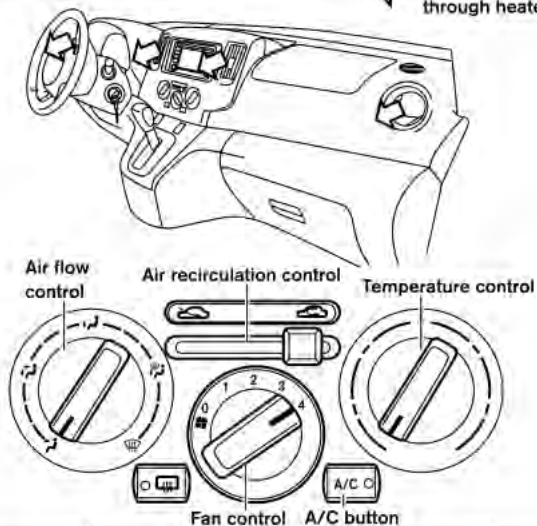


Fan control	Air recirculation control	A/C button	Temp. control	Air flow control
4		AUTO ON	HOT (RIGHT)	

LHA2811

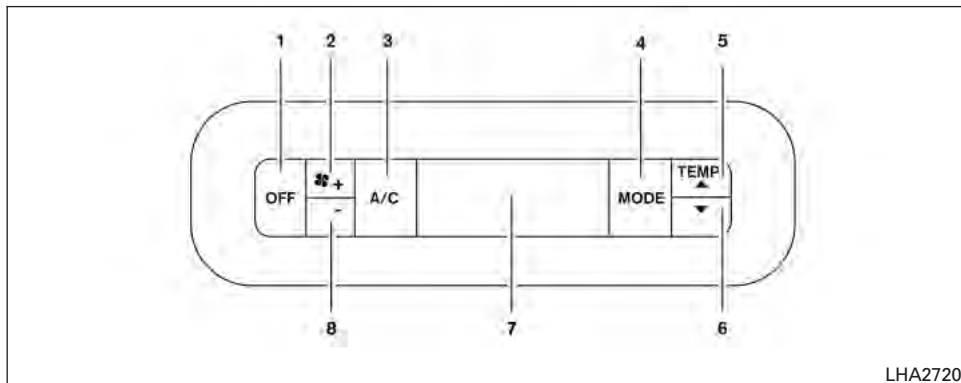
COOLING

← Air not passed through heater core



Fan control	Air recirculation control	A/C button	Temp. control	Air flow control
4	MAX A/C 	ON	COLD (LEFT)	

LHA2812



LHA2720

1. OFF button
2. Fan speed increase (+) button
3. A/C button
4. Mode button
5. Temperature increase (▲) button
6. Temperature decrease (▼) button
7. Display
8. Fan speed decrease (-) button

REAR SEAT AIR CONDITIONER

The rear seat passengers can adjust the rear automatic air conditioning system using the control switches at the rear of the center console.

To activate the rear control buttons, press the fan speed increase button (+), fan speed decrease button (-), or the "A/C" button on the rear air conditioner control panel.

OFF button: Turns rear automatic air conditioning system off.

Fan speed increase and decrease buttons: Adjusts the rear fan speed up or down.

A/C button: Turns on air conditioner. "A/C" will be appear in display indicating when air conditioning is turned on.

Mode button: 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.

Temperature increase and decrease buttons: Adjusts the rear temperature up or down.

Rear Air Conditioning Reset Button

The rear air conditioning reset button allows the driver to reset the rear climate control settings from the front of the vehicle. The button is located on the center console. Upon pressing the button, the rear temperature setting will return to 75 degrees and the fan speed will return to the middle position.

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

With the ignition placed in the ACC or ON position, press the PWR (power)/VOL (volume) knob to turn the radio on. If you listen to the radio with the engine not running, the ignition 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

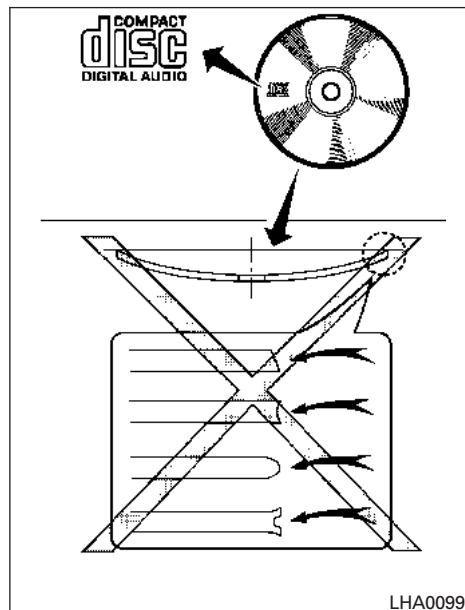
When the satellite radio is used for the first time or the battery has been replaced, the satellite radio may not work properly. This is not a malfunction. Wait more than 10 minutes with satellite radio ON and the vehicle outside of any metal or large building for satellite radio to receive all of the necessary data.

No satellite radio reception is available and "NO SAT" is displayed when the SAT band option is selected unless optional satellite receiver and antenna are installed and 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.



AUDIO OPERATION PRECAUTIONS

Compact disc (CD) player

CAUTION

- Do not force a compact disc into the CD insert slot. This could damage the CD and/or CD player.
- Trying to load a CD with the CD door closed could damage the CD and/or CD player.
- 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 CD).

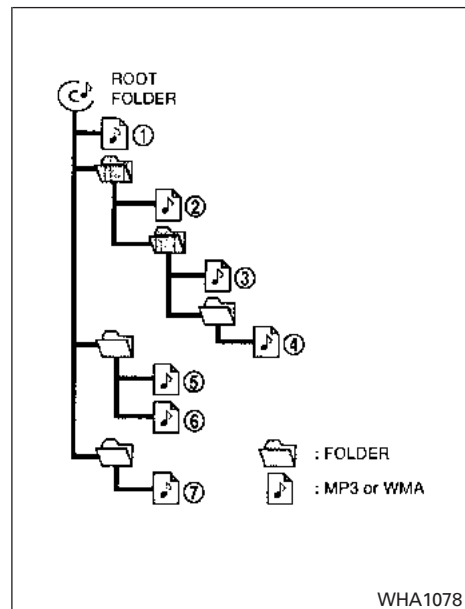
Compact disc with MP3 or WMA

Terms:

- **MP3** — MP3 is short for Moving Pictures Experts Group Audio Layer 3. MP3 is the most well-known compressed digital audio file format. This format allows for near “CD quality” sound, but at a fraction of the size of normal audio files. MP3 conversion of an audio track from CD-ROM can reduce the file size by approximately a 10:1 ratio with virtually no perceptible loss in quality. MP3 compression removes the redundant and irrelevant parts of a sound signal that the human ear doesn’t hear.
- **WMA** — Windows Media Audio (WMA)* is a compressed audio format created by Microsoft as an alternative to MP3. The WMA codec offers greater file compression than the MP3 codec, enabling storage of more digital audio tracks in the same amount of space when compared to MP3s at the same level of quality.
- **Bit rate** — Bit rate denotes the number of bits per second used by a digital music file. The size and quality of a compressed digital audio file is determined by the bit rate used when encoding the file.

- **Sampling frequency** — Sampling frequency is the rate at which the samples of a signal are converted from analog to digital (A/D conversion) per second.
- **Multisession** — Multisession is one of the methods for writing data to media. Writing data once to the media is called a single session, and writing more than once is called a multisession.
- **ID3/WMA Tag** — The ID3/WMA tag is the part of the encoded MP3 or WMA file that contains information about the digital music file such as song title, artist, encoding bit rate, track time duration, etc. ID3 tag information is displayed on the Artist/song title line on the display.

* Windows® and Windows Media® are registered trademarks and trademarks in the United States of America and other countries of Microsoft Corporation of the USA.



Playback order chart

Playback order:

Music playback order of a CD with MP3 or WMA files is as illustrated.

- The names of folders not containing MP3 or WMA files are not shown in the display.

- If there is a file in the top level of the disc, "Root Folder" is displayed.
- The playback order is the order in which the files were written by the writing software. Therefore, the files might not play in the desired order.

Specification chart:

Supported media			CD, CD-R, CD-RW
Supported file systems			ISO9660 LEVEL1, ISO9660 LEVEL2, Apple ISO, Romeo, Joliet * ISO9660 Level 3 (packet writing) is not supported.
Supported versions*1	MP3	Version	MPEG1, MPEG2, MPEG2.5
		Sampling frequency	8 kHz - 48 kHz
		Bit rate	8 kbps - 320 kbps, VBR
	WMA	Version	WMA7, WMA8, WMA9
		Sampling frequency	32 kHz - 48 kHz
		Bit rate	48 kbps - 192 kbps, VBR
Tag information			ID3 tag VER1.0, VER1.1, VER2.2, VER2.3 (MP3 only)
Folder levels			Folder levels: 8, Max folders: 255 (including root folder), Files: 512 (Max. 255 files for one folder)
Text character number limitation			128 characters
Displayable character codes*2			01: ASCII, 02: ISO-8859-1, 03: UNICODE (UTF-16 BOM Big Endian), 04: UNICODE (UTF-16 Non-BOM Big Endian), 05: UNICODE (UTF-8), 06: UNICODE (Non-UTF-16 BOM Little Endian)

*1 Files created with a combination of 48 kHz sampling frequency and 64 kbps bit rate cannot be played.

*2 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 disc was inserted correctly.
	Check if the disc is scratched or dirty.
	Check if there is condensation inside the player. If there is, wait until the condensation is gone (about 1 hour) before using the player.
	If there is a temperature increase error, the CD player will play correctly after it returns to the normal temperature.
	If there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD, only the music CD files (CD-DA data) will be played.
	Files with extensions other than ".MP3", ".WMA", ".mp3" or ".wma" cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.
	Check if the finalization process, such as session close and disc close, is done for the disc.
	Check if the disc is protected by copyright.
Poor sound quality	Check if the disc is scratched or dirty.
	Bit rate may be too low.
It takes a relatively long time before the music starts playing.	If there are many folders or file levels on the MP3/WMA disc, or if it is a <u>multisession disc</u> , some time may be required before the music starts playing.
Music cuts off or skips	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width, etc., might not match the specifications. Try using the slowest writing speed.
Skipping with high bit rate files	Skipping may occur with large quantities of data, such as for high bit rate data.
Moves immediately to the next song when playing	When a non-MP3/WMA file has been given an extension of ".MP3", ".WMA", ".mp3" or ".wma", or when play is prohibited by copyright protection, there will be approximately 5 seconds of no sound and then the player will skip to the next song.
Songs do not play back in the desired order	The playback order is the order in which the files were written by the writing software. Therefore, the files might not play in the desired order.

USB (Universal Serial Bus) memory

WARNING

Do not connect, disconnect, or operate 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 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 damage the port.**

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 not 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:

- Refer to your device manufacturer's owner information regarding the proper use and care of the device.

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.

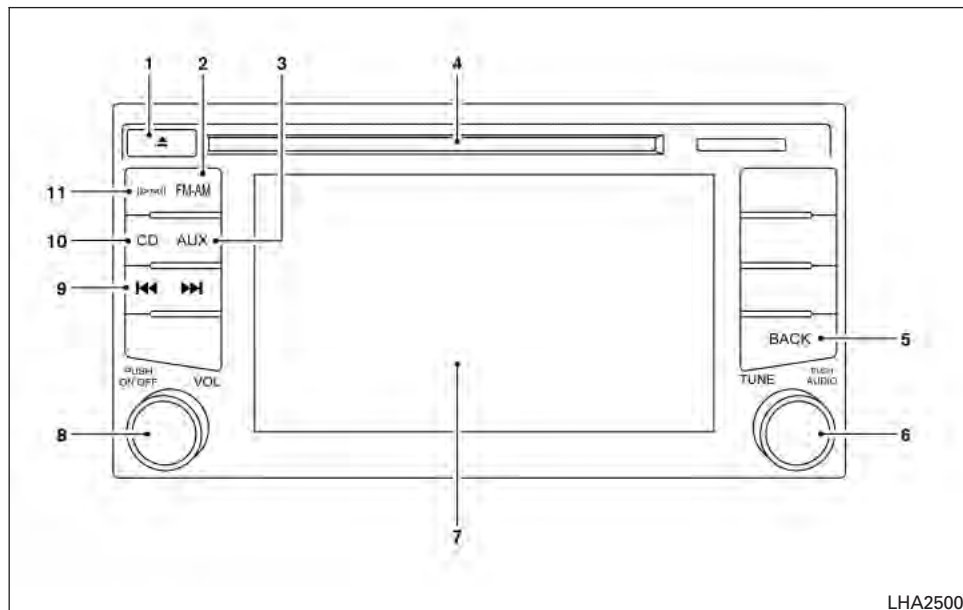
Bluetooth® streaming audio

- 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 Bosch.



1. ▲ CD eject button
2. FM-AM button
3. AUX button
4. CD insert slot
5. BACK button
6. TUNE knob / AUDIO button

7. Display screen
8. ON-OFF button / VOL (volume)
9. ◀◀ Backward seek button and ▶▶ Forward seek button
10. CD button

11. XM 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 an 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

For all operation precautions, see “Audio operation precautions” in this section.

Audio main operation

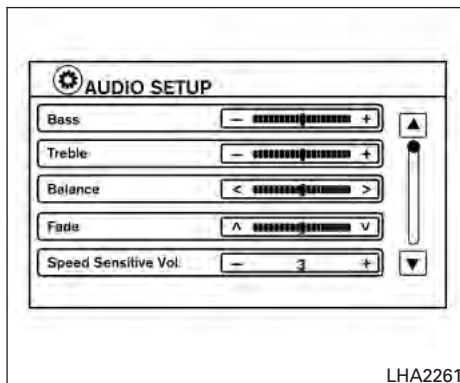
VOL (volume) / ON-OFF button:

Place the ignition switch in the ACC or ON position and press the ON-OFF button while the system is off to call up the mode (radio, CD, AUX, Bluetooth® audio USB or iPod®) that was playing immediately before the system was turned off.

To turn the system off, press the ON-OFF button.

Turn the VOL (volume) control knob to adjust the volume.

This vehicle may be equipped with Speed Sensitive Volume. When this feature is active, the audio volume changes as the driving speed changes.



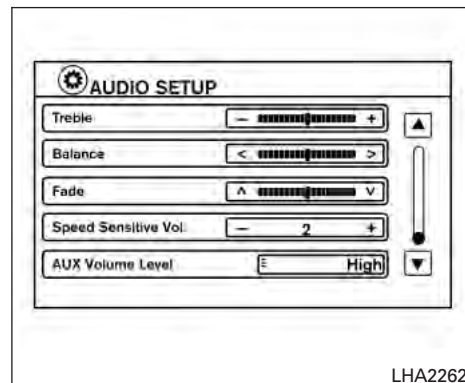
Audio settings:

1. Press the MENU button.
2. Select the "Settings" key.
3. Select the "Audio" key.

Use the touchscreen to adjust the following items to the desired setting:

Bass, Treble, Balance and Fade:

Controls the sound of the audio system. Balance adjusts the sound between the left and right speakers. Fade adjusts the sound between the front and rear speakers.

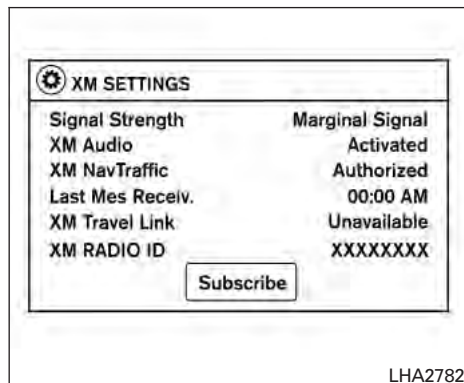


Speed Sensitive Vol.:

Controls the level to which the volume is adjusted as the vehicle's driving speed changes. Choose a setting or choose "0" to disable the feature entirely.

AUX Volume Level:

Controls the volume level of incoming sound when an auxiliary device is connected to the system. Available options are Low, Medium and High.



XM settings:

To view the XM settings:

1. Press the MENU button.
2. Select the "Settings" key.
3. Select the "XM" key.

The signal strength, activation status and other information are displayed on the screen.

FM/AM/SAT radio operation

FM-AM button:

Press the FM-AM button to change the band as follows:

AM → FM1 → FM2 → AM

If another audio source is playing when the FM-AM button is pressed, the audio source playing will automatically be turned off and the last radio station played will begin playing.

The FM stereo indicator (ST) is shown on the screen during FM stereo reception. When the stereo broadcast signal is weak, the radio automatically changes from stereo to monaural reception.

XM band select:

Pressing the XM button will change the band as follows:

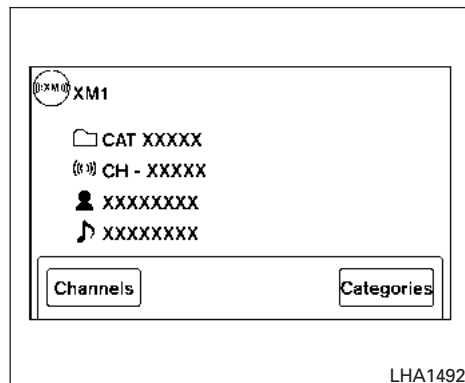
XM1* → XM2* → XM3* → XM1* (satellite)

When the XM button is pressed while the ignition switch is in the ACC or ON position, the radio will come on at the last station played.

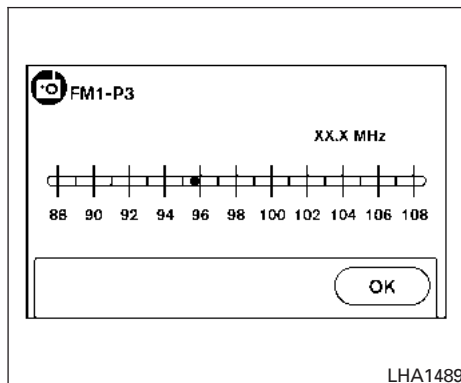
The last station played will also come on when the VOL/ON-OFF control knob is pressed to turn the radio on.

*When the XM button is pressed, 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.

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.



While the radio is in XM mode, the operation can be controlled through the touchscreen. Touch the “Channels” key to display a list of channels. Touch a channel displayed on the list to change to that channel. Touch the “Categories” key to display a list of categories. Touch a category displayed on the list to display options within that category.

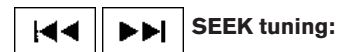


Tuning with the touchscreen:

When in AM or FM mode, the radio can be tuned using the touchscreen. To bring up the visual tuner, touch the “Tune” key on the lower right corner of the screen. A screen appears with a bar running from low frequencies on the left to high frequencies on the right. Touch the screen at the location of the frequency you wish to tune and the station will change to that frequency. To return to the regular radio display screen, touch the “OK” key.

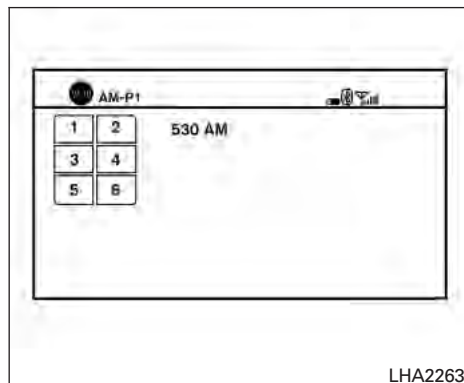
Tuning with the TUNE knob:

The radio can also be manually tuned using the TUNE knob. When in FM or AM mode, turn the TUNE knob to the left for lower frequencies or to the right for higher frequencies. When in XM mode, turn the TUNE knob to change the channel.



When in FM or AM mode, press the seek buttons ◀◀ or ▶▶ to tune from low to high or high to low frequencies and to stop at the next broadcasting station.

When in XM mode, press the seek buttons ◀◀ or ▶▶ to change the category.



1 to 6 Station memory operations:

Twelve stations can be set for the FM band (6 for FM1, 6 for FM2) and six stations can be set for the AM band. 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 FM-AM select button or choose the radio band XM1, XM2 or XM3 using the XM button.
2. Tune to the desired station using manual or seek 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.

Presets can also be selected by touching the desired preset number on the screen.

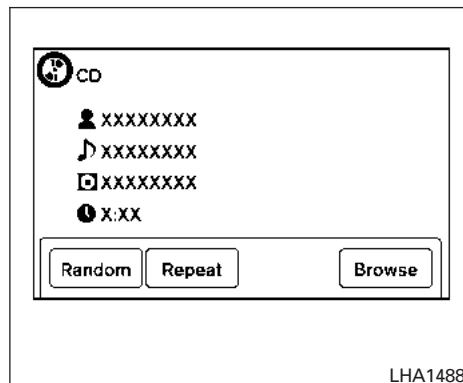
Compact disc (CD) player operation

If the radio is already operating, it automatically turns off and the compact disc begins to play.

CD button:

When the CD button is pressed with the system off and the compact disc loaded, the system will turn on and the compact disc will start to play.

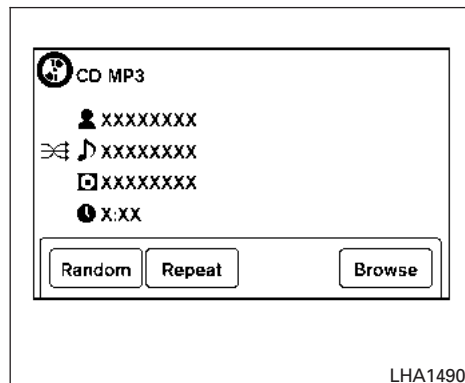
When the CD button is pressed with a compact disc loaded and the radio playing, the radio will automatically be turned off and the compact disc will start to play.



CD/MP3 display mode

While listening to a CD or an MP3/WMA CD, certain text may be displayed (when a CD encoded with text is being used). Depending on how the CD or MP3/WMA CD is encoded, the text is displayed listing the artist, album and song title.

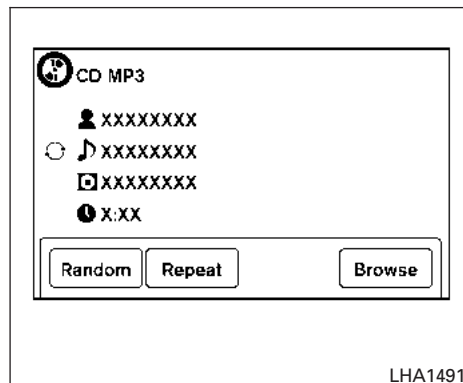
There are other keys displayed on the screen when a CD is playing:



LHA1490

Random:

Touch the “Random” key to apply a random play pattern to the CD. When the random mode is active, the  icon will be displayed to the left of the song title. If an MP3 CD is playing, touching “Random” alternates between randomly playing songs within the current folder and songs from the CD as a whole. The  icon is displayed to the left of the song title or folder name to denote which pattern is applied. To cancel Random mode, touch the “Random” key until no  icon is displayed.



LHA1491

Repeat:

Touch the “Repeat” key to apply a repeat play pattern to the CD. When the repeat mode is active, the  icon will be displayed to the left of the song title. If an MP3 CD is playing, touching “Repeat” alternates between repeating the current song and repeating the current folder. The  icon is displayed to the left of the song title or folder name to denote which pattern is applied. To cancel Repeat mode, touch the “Repeat” key until no  icon is displayed.

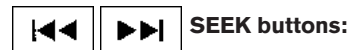
Browse:

Touch the “Browse” key to display the titles on the CD in list format. Touch the title of a song in the list to begin playing that song. If an MP3 CD is

playing, touching the “Browse” key will also list the folders on the disc. Follow the procedure for selecting a song with the touchscreen to choose a folder.



Press and hold the seek buttons  or  for 1.5 seconds while the compact disc is playing to reverse or fast forward the track being played. The compact disc plays at an increased speed while reversing or fast forwarding. When the button is released, the compact disc returns to normal play speed.



Press the seek button  while a CD or MP3/WMA CD is playing to return to the beginning of the current track. Press the seek button  several times to skip backward several tracks.

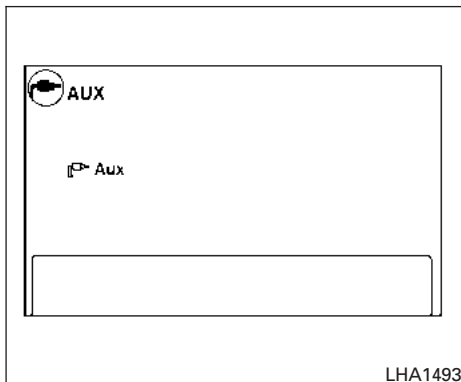
Press the seek button  while a CD or MP3/WMA CD is playing to advance one track. Press the seek button  several times to skip forward several tracks. If the last track on a CD is skipped, the first track on the disc is played. If the last track in a folder of an MP3/WMA CD is skipped, the first track of the next folder is played.



LHA2588

AUX button:

The AUX IN audio input jack is located on the center console below the heater and air conditioner controls ①. It accepts any standard analog audio input such as from a portable cassette tape/CD player, MP3 player or a laptop computer.



LHA1493

Press the AUX button to play a compatible device plugged into the AUX IN jack.



EJECT button:

When the  button is pressed with a compact disc loaded, the compact disc will eject and the last source will be played.

If the disc is not removed within 10 seconds, the disc will reload.

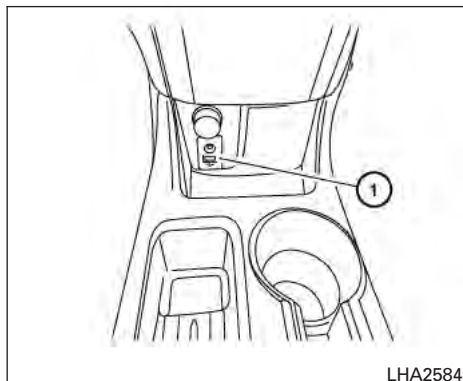
Additional features

For more information about the iPod® player available with this system, see “iPod® player operation” in this section.

For more information about the USB interface available with this system, see “USB interface” in this section.

For more information about the Bluetooth® audio interface available with this system, see “Bluetooth® streaming audio” in this section.

For more information about the Pandora® audio feature available with this system, see “Pandora® audio” in this section.



USB INTERFACE

Connecting a device to the USB input jack

WARNING

Do not connect, disconnect, or operate 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 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 damage the port.**

Refer to your device manufacturer's owner information regarding the proper use and care of the device.

The USB input jack is located in the center console. Insert the USB device into the jack ①.

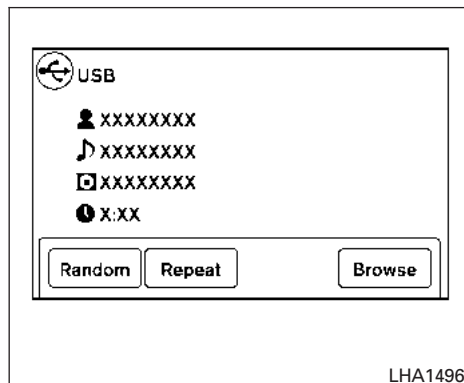
When a compatible storage device is plugged into the jack, compatible audio files on the storage device can be played through the vehicle's audio system.

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 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.



Play information:

Information about the audio files being played is shown on the display screen of the vehicle's audio system. Touch "Browse" to display the list of folders and files on the USB device. Touch the name of a song on the screen to begin playing that song.



Seeking buttons:

Press the ⏮ button while an audio file on the USB device is playing to return to the beginning of the current track. Press the ⏮ button several times to skip backward several tracks.

Press the ⏭ button while an audio file on the USB device is playing to advance one track. Press the ⏭ 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.

Random and repeat play mode:

While files on a USB device are playing, the play pattern can be altered so that songs are repeated or played randomly.

Random:

Touch the "Random" key to apply a random play pattern to the USB device. When the random mode is active, the  icon is displayed to the left of the song title or album name to denote which random pattern is applied. To cancel Random mode, touch the "Random" key until no  icon is displayed.

Repeat:

Touch the "Repeat" key to apply a repeat play pattern to the USB device. When the repeat mode is active, the  icon is displayed to the left of the song title or album name to denote which repeat pattern is applied. To cancel Repeat mode, touch the "Repeat" key until no  icon is displayed.



iPod®* PLAYER OPERATION

Connecting iPod®

WARNING

Do not connect/disconnect or operate 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 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 damage the port.**

Refer to your device manufacturer's owner information regarding the proper use and care of the device.

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 on the center console below the heater and air conditioner controls ①. 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. 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

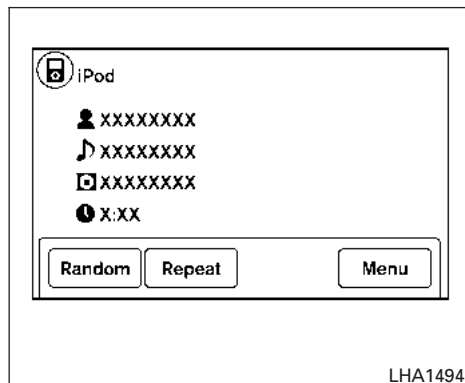
The following models are compatible:

- 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 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's audio system display screen is similar to the iPod® interface. Use the touchscreen, BACK button or the scrolling knob to navigate the menus on the screen.

When the iPod® is playing, touch the "Menu" key to bring up the iPod® interface.

Depending on the iPod® model, the following items may be available on the menu list screen. For further information about each item, see the iPod® Owner's Manual.

- Playlists

- Artists
- Albums
- Genres
- Songs
- Composers
- Audiobooks
- Podcasts

Random and repeat play mode:

While the iPod® is playing, the play pattern can be altered so that songs are repeated or played randomly.

Random:

Touch the “Random” key to apply a random play pattern to the iPod®. When the random mode is active, the  icon is displayed to the left of the song title or album name to denote which random pattern is applied. To cancel Random mode, touch the “Random” key until no  icon is displayed.

Repeat:

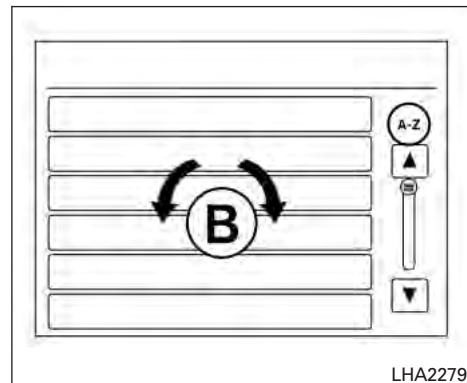
Touch the “Repeat” key to apply a repeat play pattern to the iPod®. When the repeat mode is active, the  icon is displayed to the left of the song title or album name to denote which repeat pattern is applied. To cancel Repeat mode, touch the “Repeat” key until no  icon is displayed.



Seek buttons:

Press the seek button  or  to skip backward or forward one track.

Press and hold the seek button  or  for 1.5 seconds while a track 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 track returns to normal play speed.



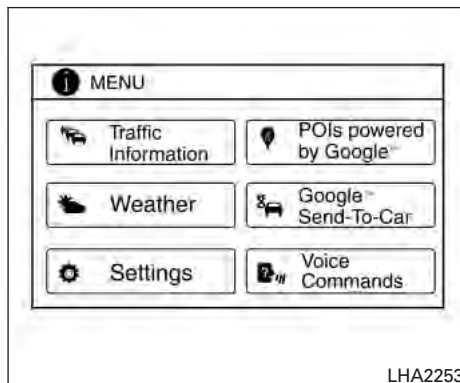
Scrolling menus:

While navigating long lists of artists, albums or songs in the music menu, it is possible to scroll the list by the first character in the name. To activate character indexing, touch and hold the “A-Z” key in the upper right corner of the screen. Turn the TUNE knob to choose the number or letter to jump to in the list and then press the ENTER button.

If no character is selected after two seconds, the display returns to normal.

BLUETOOTH® STREAMING AUDIO

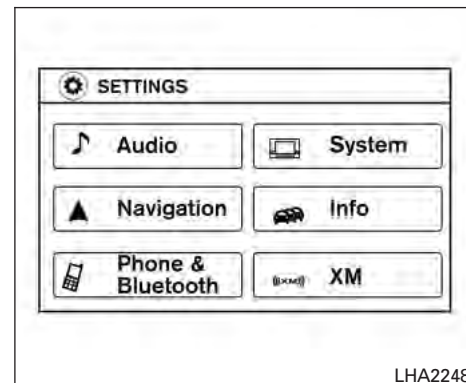
If you have a compatible Bluetooth® audio device that is capable of playing audio files, the device can be connected to the vehicle's audio system so that the audio files on the device play through the vehicle's speakers.



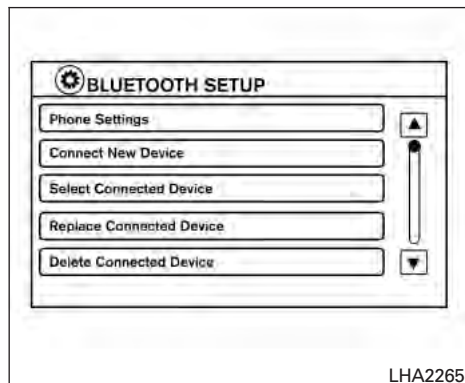
Connecting Bluetooth® audio

To connect your Bluetooth® audio device to the vehicle, follow the procedure below:

1. Press the MENU button.
2. Select the "Settings" key.



3. Select the "Phone & Bluetooth" key.



4. Select the “Connect New Device” key.
5. The system acknowledges the command and asks you to initiate connecting from the phone handset. The connecting procedure of the cellular phone varies according to each cellular phone model. See the cellular phone Owner’s Manual for details. You can also visit www.nissanusa.com/bluetooth for instructions on connecting NISSAN recommended cellular phones.

Audio main operation

To switch to the Bluetooth® audio mode, press the AUX button repeatedly until the Bluetooth® audio mode is displayed on the screen.

The controls for the Bluetooth® audio are displayed on the screen.

PANDORA® AUDIO (United States only) (if so equipped)

The vehicle’s audio system is capable of playing audio streaming through a compatible, USB-connected audio device using the Pandora® music service.

Connecting a device for use with Pandora® audio

Devices capable of streaming Pandora® audio can be connected to the vehicle’s audio system via the USB input jack. The USB input jack is located on the center console beneath the heater and air conditioner controls.

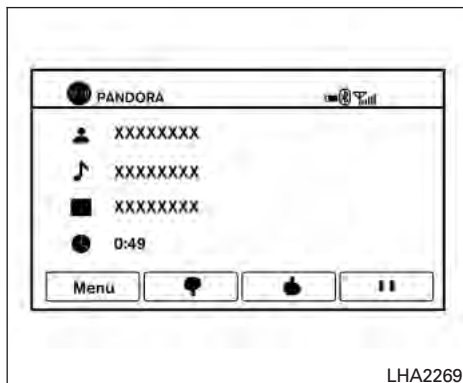
Launch the Pandora® application on the phone and then connect with the USB jack. Once connected, the Pandora® controls will be displayed on the control panel display screen.

Compatibility

The following iPhone® models are compatible with the system:

- iPhone® 3GS
- iPhone® 4
- iPhone® 4S
- iPhone® 5

The latest Pandora® application should be installed on the phone.



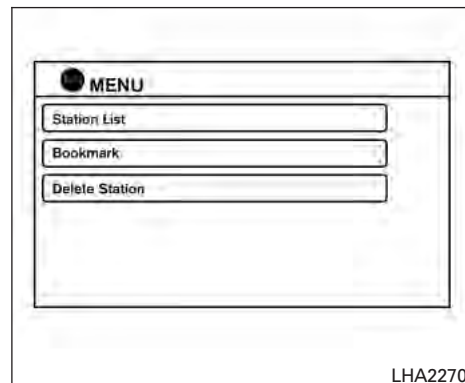
NOTE:

There is a limit of six skips per station per hour. If a “👎” (thumbs down) is given after the skip limit has been reached, the current track will continue to play but the feedback will be saved.

Audio main operation

To switch to the Pandora® audio mode, press the AUX button repeatedly until the Pandora® audio mode is displayed on the screen.

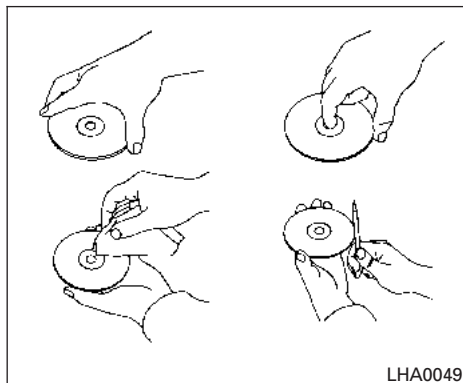
The controls for the Pandora® audio are displayed on the screen. Touch the keys on the screen to play or pause the audio. Touch the 👍 key to select “thumbs up” or the 👎 key to select “thumbs down”.



Pandora® audio settings

To adjust the Pandora® audio settings, select the “Menu” key.

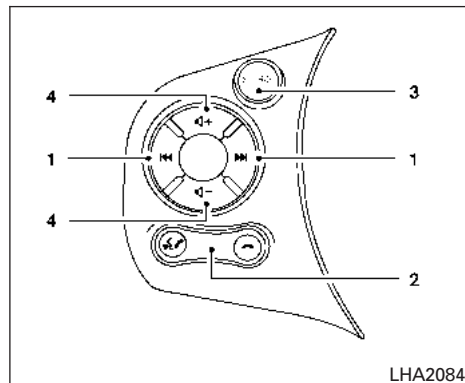
- Station List
Select to display a list of available Pandora® stations.
- Bookmark
Select to bookmark the current station.
- Delete Station
Select to remove the current station.



- 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.

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.



1. Tuning switches
2. Phone operation switches
3. POWER on and SOURCE select switch
4. Volume control switches

STEERING WHEEL SWITCH FOR AUDIO CONTROL

The audio system can be operated using the controls on the steering wheel.

POWER on switch

With the ignition switch in the ACC or ON position, push the POWER switch to turn the audio system on.

SOURCE select switch

Push the SOURCE select switch to change the mode in the following sequence: AM → FM → CD* → USB/iPod®* → Bluetooth® audio* → AUX* → AM

* These modes are only available when compatible media storage is inserted into the device.

Volume control switches

Push the volume control switch to increase or decrease the volume.



Tuning

Memory change (radio):

While in one of the preset radio station banks (A, B or C), push the tuning switch  or  for less than 1.5 seconds to change to the next preset station in memory.

Seek tuning (radio):

Push the tuning switch  or  for more than 1.5 seconds to seek the next or previous radio station.

Next/Previous track (CD):

Push the tuning switch  or  for less than 1.5 seconds to return to the beginning of the present track or skip to the next track. Push several times to skip back or skip through tracks.

ANTENNA

The antenna cannot be shortened, but can be removed. When you need to remove the antenna, turn the antenna rod counterclockwise.

To install the antenna rod, turn the antenna rod clockwise and hand tighten.

CAUTION

- Always properly tighten the antenna rod during installation or the antenna rod may break during vehicle operation.
- Be sure that the antenna is removed before the vehicle enters an automatic car wash.
- Be sure to fold down the antenna before the vehicle enters a garage with a low ceiling.

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.**

INTERCOM SYSTEM

This vehicle is equipped with an on-board intercom system to allow the driver and rear passengers to communicate.

ACTIVATION

The driver can activate the system by tilting the "Intercom" switch located on the console. The switch features an indicator lamp that will illuminate when the intercom system has been activated. The driver can then turn the system off by tilting the switch back. The rear passenger can activate or deactivate the system by tilting the "Intercom" switch located on the driver's side rear of the partition wall. This switch also features an indicator lamp that will illuminate to indicate that the intercom system is active. For more information on the intercom switches, see "Intercom System" in the "Instruments and Controls" section.

SPEAKING

Once the intercom system has been activated, the driver or passengers may speak. The microphones are located in the headliner in both the front and rear of the vehicle. The speakers are located in the front and rear of the partition wall.

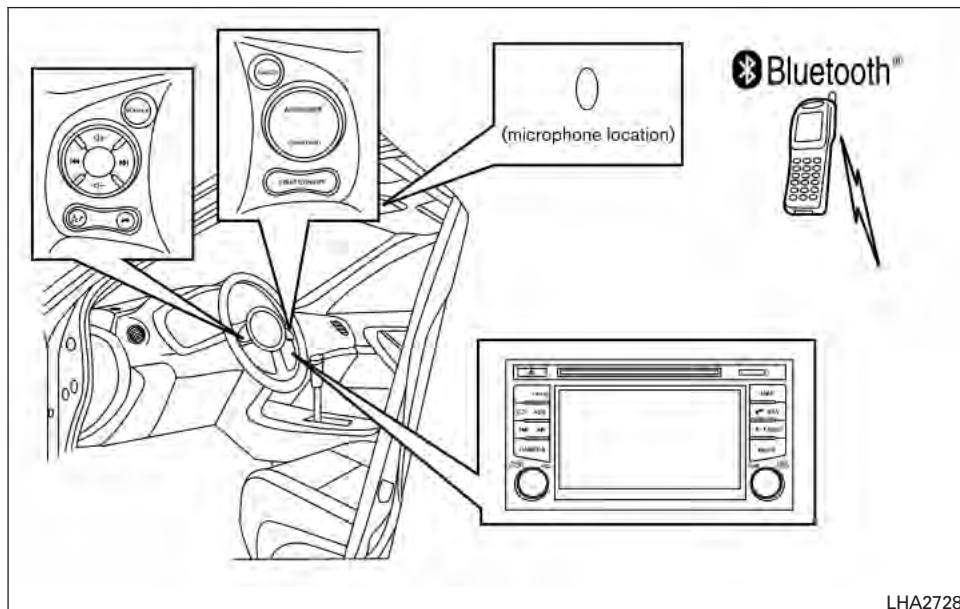
BLUETOOTH® HANDS-FREE PHONE SYSTEM WITH NAVIGATION SYSTEM

⚠ 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.



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 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 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.

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.



BLUETOOTH® is a trademark owned by Bluetooth SIG, Inc. and licensed to Bosch.

VOICE COMMANDS

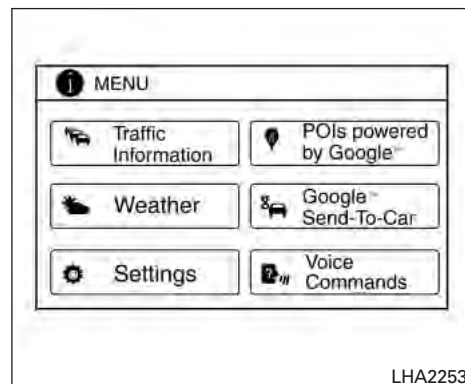
You can use voice commands to operate various Bluetooth® Hands-Free Phone System features using the NISSAN Voice Recognition system. For more details, see "NISSAN Voice Recognition System" in this section.

Voice Prompt Interrupt

While using the voice recognition system, the system voice can be interrupted to allow the user to speak commands. While the system is speaking, press the  button on the steering wheel. The system voice will stop and a tone will be heard. After the tone, speak desired command (displayed on the touch-screen).

One Shot Call

To use the system faster, you may speak the second level commands with the main menu command on the main menu. For example, press the  button and after the tone say, "Call Redial".



CONNECTING PROCEDURE

NOTE:

The connecting procedure must be performed when the vehicle is stationary. If the vehicle starts moving during the procedure, the procedure will be cancelled.

1. Press the MENU button on the control panel.
2. Select the "Settings" key.
3. Select the "Phone & Bluetooth" key.
4. Select the "Connect New Device" key.

5. Initiate the connecting process from the handset. The system will display the message: "Is PIN XXXXXX displayed on your Bluetooth device?". If the PIN is displayed on your Bluetooth® device, select "Yes" to complete the pairing process.

For more information, see the Bluetooth® device's Owner's Manual.

VEHICLE PHONEBOOK

To access the vehicle phonebook:

1. Press the  button on the control panel.
2. Select the "Phonebook" key.
3. Choose the desired entry from the displayed list.
4. The number of the entry will be displayed on the screen. Touch the number to initiate dialing.

NOTE:

To scroll quickly through the list, touch the "A-Z" key in the upper right corner of the screen. Turn the TUNE/SCROLL knob to choose a letter or number and then press ENTER. The list will move to the first entry that begins with that number or letter.

MAKING A CALL

To make a call, follow the procedure below:

1. Press the  button on the control panel. The "Phone" screen will appear on the display.
2. Select one of the following options to make a call:
 - "Phonebook": Select the name from an entry stored in the vehicle phonebook.
 - "Call Lists": Select the name from the incoming, outgoing or missed.
 - "Redial": Dial the last outgoing call from the vehicle.
 - "  ": 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.

RECEIVING A CALL

When a call is placed to the connected phone, the display will change to phone mode.

To accept the incoming call, either:

- Press the  button on the steering wheel, or

- Touch the green phone icon on the screen.

To reject the incoming call, either:

- Press the  button on the steering wheel, or
- Touch the red phone icon on the screen.

DURING A CALL

While a call is active, the following options are available on the screen:

- "Handset"
Select this option to switch control of the phone call over to the handset.
- "Mute Mic."
Select this option to mute the microphone. Select again to unmute the microphone.
- Red phone () icon
Select to end the phone call.

ENDING A CALL

To end a phone call, select the red phone () icon on the screen or press the  button on the steering wheel.

TEXT MESSAGING

WARNING

- **Laws in some jurisdictions may restrict the use of some of the applications and features, such as social networking and texting. Check local regulations for any requirements.**
- **Laws in some jurisdictions may restrict the use of “Text-to-Speech.” Check local regulations before using this feature.**
- **Use the text messaging feature after stopping your vehicle in a safe location. If you have to use the feature 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 using the text messaging feature, pull off the road to a safe location and stop your vehicle.**

The system allows for the sending and receiving of text messages through the vehicle interface.

Sending a text message:

1. Press the  button on the steering wheel.

2. Say “Send Text” after the tone.
3. The system will provide a list of available commands in order to determine the recipient of the text message. Choose from the following:

- To (a name)
- Enter Number
- Missed Calls
- Incoming Calls
- Outgoing Calls

For more information about these options, see “Voice commands” in this section.

4. Once a recipient is chosen, the system prompts for which message to send. Seven predefined messages are available as well as three custom messages. To choose one of the predefined messages, speak one of the following after the tone:

- “Driving, can’t text”
- “Call me”
- “On my way”
- “Running late”
- “Okay”
- “Yes”

- “No”

To send one of the custom messages, say “Custom Messages”. If more than one custom message is stored, the system will prompt for the number of the desired custom message. For more information on setting and managing custom text messages, see “Bluetooth® settings” in this section.

Reading a received text message:

1. Press the  button on the steering wheel.
2. Say “Read Text” after the tone.

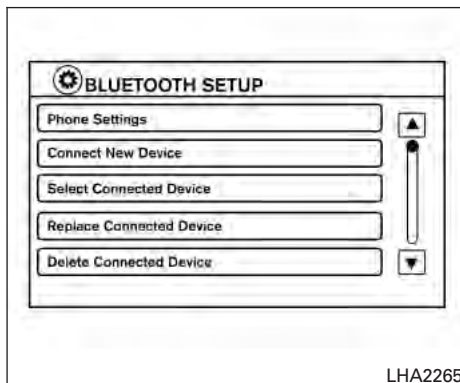
The text message, sender and delivery time are shown on the screen. Use the tuning switch to scroll through all text messages if more than one are available. Press the  button to exit the text message screen. Press the  button to access the following options for replying to the text message:

- **Call Back**
Speak this command to call the sender of the text message using the Bluetooth® Hands-Free Phone System.
- **Send Text**
Speak this command to send a text message response to the sender of the text message.

- Read Text
Speak this command to read the text message again.
- Previous Text
Speak this command to move to the previous text message (if available).
- Next Text
Speak this command to move to the next text message (if available).

NOTE:

Text messages are only displayed if the vehicle speed is less than 5 mph (8 km/h).



BLUETOOTH® SETTINGS

To access the phone settings:

1. Press the MENU button.
2. Select the "Settings" key.
3. Select the "Phone & Bluetooth" key.

Menu Item	Result
Phone Settings	See "Phone settings" in this section for more information.
Connect New Device	Select to connect a new Bluetooth® device to the Bluetooth® Hands-Free Phone System.
Select Connected Device	Select to choose a Bluetooth® device from a list of those devices connected to the Bluetooth® Hands-Free Phone System.
Replace Connected Device	Select to replace a Bluetooth® device from a list of those devices connected to the Bluetooth® Hands-Free Phone System.
Delete Connected Device	Select to delete a Bluetooth® device from a list of those devices connected to the Bluetooth® Hands-Free Phone System.
Bluetooth	Select to toggle Bluetooth® on and off.

PHONE SETTINGS

To access the phone settings:

1. Press the MENU button.
2. Select the "Settings" key.
3. Select the "Phone & Bluetooth" key.
4. Select the "Phone Settings" key and adjust the following settings as desired:
 - Sort Phonebook By:
Select "First Name" or "Last Name" to choose how phonebook entries are alphabetically displayed on the screen.
 - Use Phonebook From:
Select "Handset" to use the phone's phonebook. Select "SIM" to use the phonebook on the SIM card. Select "Both" to use both sources.
 - Download Phonebook Now:
Select to download the phonebook to the vehicle from the chosen source.
 - Record Name for Phonebook Entry:
Select to record a name for a phonebook entry for use with the NISSAN Voice Recognition System.

- Text Messaging:
Select to toggle the text message functionality on or off.
- Show Incoming Text for:
Select "Driver" to have incoming text notifications shown in the vehicle information display. Select "Both" to have text notifications shown in both the vehicle information display and the center display screen. Select "Off" to turn off all text notifications.
- Auto Reply:
Select to toggle the auto reply functionality on or off.
- Auto Reply Message:
Select to indicate preferred message to be sent when "Auto Reply" function is activated.
- Use Vehicle's Signature:
Select to toggle on or off the addition of the vehicle signature to outgoing messages.
- Custom Text Messages:
Select this option to select a custom message to edit. There are 4 customer message slots available.

NISSAN VOICE RECOGNITION SYSTEM

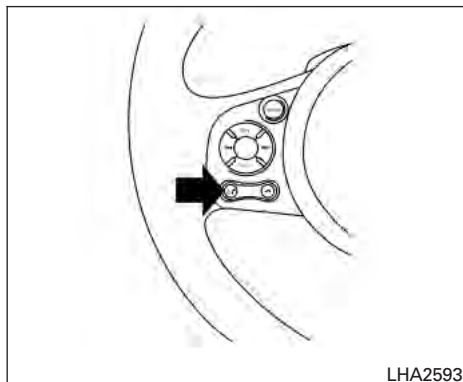
The NISSAN Voice Recognition system allows hands-free operation of the systems equipped on this vehicle, such as the phone and navigation systems.

To operate NISSAN Voice Recognition, press the  button located on the steering wheel. When prompted, speak the command for the system you wish to activate. The command given is picked up by the microphone and performed when it is properly recognized. NISSAN Voice Recognition will provide a voice response as well as a message in the center display to inform you of the command results.

USING THE SYSTEM

Initialization

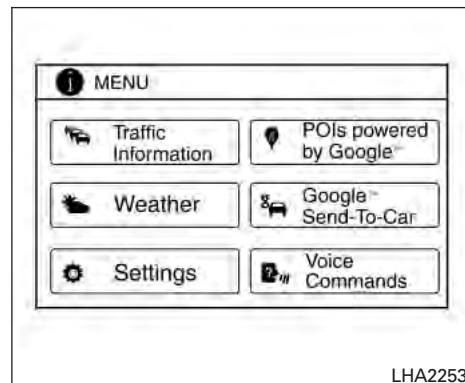
When the ignition switch is in the ON position, NISSAN Voice Recognition is initialized, which takes a few seconds. When completed, the system is ready to accept voice commands. If the  button is pressed before the initialization completes, the system will announce: "Voice Recognition System not ready. Please wait."



Giving voice commands

1. Press the  button.
2. The system announces: "Please say a command." A list of available commands is spoken by the system.
3. After the tone sounds and the face icon on the display changes, speak a command. Available commands are discussed in this section.
4. Voice and display feedback are provided when the command is accepted.

- If the command is not recognized, the system announces: "Available commands are." Repeat the command in a clear voice.
- If you want to cancel the command or go back to the previous menu of commands, press the  button. The system will announce: "Voice recognition canceled" or "Go back" depending on the current menu level.
- Press the BACK button on the control panel to move back through the menus displayed on the screen.
- If you want to adjust the volume of the voice feedback, use the volume control switches on the steering wheel or the volume knob on the control panel.



- The voice command screen can also be accessed using the control panel display:

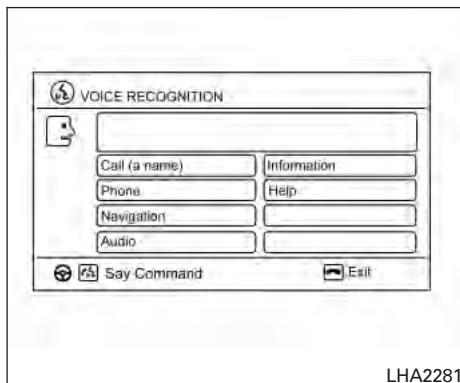
1. Press the MENU button.
2. Select the "Voice Commands" key.

Operating tips

To get the best performance out of 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.

- Wait until a tone sounds before speaking a command. Otherwise, the command will not be received properly.
- Start speaking a command within 3.5 seconds after the tone sounds.
- Speak in a natural voice without pausing between words.



SYSTEM FEATURES

NISSAN Voice Recognition can activate the following systems:

- Bluetooth Hands-Free Phone System
- Navigation
- Audio
- Information

For additional information on the navigation system, see the separate Navigation System Owner's Manual.

How to say numbers

NISSAN Voice Recognition requires a certain way to speak numbers in voice commands. Refer to the following examples.

General rule: Either "zero" or "oh" can be used for "0".

Phone numbers

Speak phone numbers according to the following example. For 1-800-662-6200, say dial number and then speak the phone number in any of the following formats:

- "one eight oh oh six six two six two oh oh"
- "one eight hundred six six two six two oh oh"
- "one eight zero zero six six two six two oh oh"

For the best voice recognition phone dialing results, say phone numbers as single digits. Also, full numbers can only be spoken for "800". For example, you cannot say 555-6000 as "five five five six thousand".

BLUETOOTH® HANDS-FREE PHONE SYSTEM VOICE COMMANDS

To access the Bluetooth® Hands-Free Phone System voice commands:

1. Press the  button.
2. Say "Call" and then a name in the vehicle phonebook to call that entry. Otherwise, say "Phone" to access various phone commands.

If the Bluetooth® has been set to "Off", the system announces: "Bluetooth® is off. Would you like to turn Bluetooth® on?"

If no phone is connected to the system and the vehicle is stationary, the system announces: "There is no phone connected. Would you like to connect a phone now?" Say "Yes" to connect a phone. All further Bluetooth® Hands-Free Phone System voice commands are only available if a phone is connected.

If a phone is connected and Bluetooth® is set to "On", the following voice commands are available:

- Call (a name)

Allows user to select a contact and dial immediately.

- Dial Number

Allows for up to 24 digits to be dialed. After the number is entered, say "Dial" to initiate dialing. Say "Correction" to correct the number entered. Say "Go Back" to return to the main menu.

- List Phonebook

Starting with the first alphabetical entry in the vehicle phonebook, the system prompts for an additional command. Say "Dial" to call the number of the phonebook entry. Say "Send Text" to send a text message to the number of the phonebook entry. Say "Next Entry" to skip to the next alphabetical entry in the vehicle phonebook, where the same options will then be available.

- Recent Calls

The system prompts for an additional command. Say "Missed Calls", "Incoming Calls" or "Outgoing Calls" to display a list of such calls on the screen.

Speak the number of the entry displayed on the screen to dial that number or say "Next Page" to view entries on the next page (if available).

- Redial

Redials the last called number.

- Read Text

Reads an incoming text message. For more information about text messaging with the Bluetooth® Hands-Free Phone System, see "Bluetooth® Hands-Free Phone System with Navigation System" in this section.

- Send Text

Sends a text message. For more information about text messaging with the Bluetooth® Hands-Free Phone System, see "Bluetooth® Hands-Free Phone System with Navigation System" in this section.

- Select Phone

The system replies "Please use manual controls to continue". Use manual controls to change the active phone from among the listed phones connected to the vehicle.

For more information about the Bluetooth® Hands-Free Phone System, see "Bluetooth® Hands-Free Phone System with Navigation System" in this section.

NAVIGATION SYSTEM VOICE COMMANDS

The following voice commands are available for the Navigation System:

- Places
- Street Address
- Address Book
- Home
- Previous Destination

For more information about these commands, see the separate Navigation System Owner's Manual.

AUDIO SYSTEM VOICE COMMANDS

To access the audio system voice commands:

1. Press the button.
2. Say "Audio"
3. Speak a command from the following available commands:
 - FM
Switches the audio system to the FM mode.
 - AM
Switches the audio system to the AM mode.

- XM (satellite radio)
Switches the audio system to the SiriusXM® Satellite Radio mode.
- CD
Switches the audio system to the CD mode. A CD must be inserted for this command to be functional.
- iPod®
Switches the audio system to the iPod® mode. An iPod® must be connected for this command to be available and functional.
The following sub-commands are available for iPod®:
 - Now Playing
 - Menu
 - Playlists
 - Artists
 - Albums
 - Genres
 - Songs
 - Shuffle Songs*
 - Composers*
 - Audiobooks*

- Podcasts*

* Say "Next Page" to access these commands. Say "Previous Page" to return to the first page of commands.

- USB
Switches the audio system to the USB mode. A USB device must be inserted for this command to be available and functional.
- Pandora®
Switches the audio system to the Pandora® audio mode. A compatible Bluetooth® audio device with a Pandora® application must be connected to the system for this command to be functional.
- Bluetooth®
Switches the audio system to the Bluetooth® audio mode. A compatible Bluetooth® audio device must be connected to the system for this command to be functional.
- AUX
Switches the audio system to the AUX mode. An AUX device must be connected for this command to be functional.

For more information about the audio system, see "Audio system" in this section.

INFORMATION VOICE COMMANDS

The following voice commands are available for the information functions of the Navigation System:

- Traffic
- Current Weather
- Weather Forecast
- Google Send-To-Car
- Google Search

For more information about these commands, see the separate Navigation System Owner's Manual.

HELP VOICE COMMANDS

The following voice commands can be spoken to have the system provide instructions and tips for using the NISSAN Voice Recognition system.

- List Commands
- What Can I Say?
- General Help
- Quit
- Exit

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
The system responds "Command Not Recognized" or the system fails to recognize the command correctly.	1. Ensure that the command format is valid. Use the "List Commands" or "What Can I Say?" command under the "Help" menu.
	2. Speak clearly without pausing between words and at a level appropriate to the ambient noise level.
	3. Ensure that the ambient noise level is not excessive (for example, with the windows open or the defroster on).
	NOTE: If it is too noisy to use the phone, it is likely that voice commands will not be recognized.
	4. If optional words of the command have been omitted, then the command should be tried with these in place.

5 Starting and driving

Precautions when starting and driving.....	5-2
Exhaust gas (carbon monoxide)	5-2
Three-way catalyst.....	5-2
Tire Pressure Monitoring System (TPMS).....	5-3
Avoiding collision and rollover.....	5-5
Off-road recovery.....	5-6
Rapid air pressure loss.....	5-6
Drinking alcohol/drugs and driving.....	5-7
Ignition switch.....	5-7
Continuously Variable Transmission (CVT).....	5-7
Ignition switch positions.....	5-8
NISSAN vehicle immobilizer system	5-8
Before starting the engine	5-9
Starting the engine	5-9
Driving the vehicle	5-10
Continuously Variable Transmission (CVT).....	5-10
Parking brake	5-14
Cruise control.....	5-15
Precautions on cruise control	5-15

Cruise control operations.....	5-15
Break-in schedule	5-16
Fuel efficient driving tips.....	5-16
Increasing fuel economy.....	5-17
Parking/parking on hills.....	5-18
Power steering	5-19
Brake system	5-19
Brake precautions	5-19
Anti-lock Braking System (ABS).....	5-20
Vehicle Dynamic Control (VDC) system	5-21
Cold weather driving.....	5-23
Freeing a frozen door lock	5-23
Anti-freeze.....	5-23
Battery	5-23
Draining of coolant water	5-23
Tire equipment	5-23
Special winter equipment.....	5-24
Driving on snow or ice	5-24

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 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, lift gates, 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. Turn the air recirculation mode off and set the fan speed control to the highest level to circulate the air.
- 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.**

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, located in the driver's door opening.

(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 all your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

Additional information:

- **The TPMS does not monitor the tire pressure of the spare tire.**
- The TPMS will activate only when the vehicle is driven at speeds above 16 MPH (25 km/h). Also, this system may not detect a sudden drop in tire pressure (for example a flat tire while driving).
- The low tire pressure warning light does not automatically turn off when the tire pressure is adjusted. After all your tires are inflated to the recommended pressure, the vehicle must be driven at speeds above 16 MPH (25 km/h) to activate the TPMS and turn off the low tire pressure warning light. Use a tire pressure gauge to check the tire pressure.
- The CHECK TIRE PRES (pressure) warning message is displayed in the odometer when the low tire pressure warning light is illuminated and low tire pressure is detected. The CHECK TIRE PRES warning message turns off when the low tire pressure warning light turns off.

- The low tire pressure warning light remains illuminated until the tires are inflated to the recommended COLD tire pressure. The CHECK TIRE PRES warning message is displayed each time the ignition switch is placed in the ON position as long as the low tire pressure warning light remains illuminated. Check tire pressure warning message “reset button” in the “Instruments and controls” section.
- The CHECK TIRE PRES warning message is not displayed 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, check the tire pressure for all four tires.
- The Tire and Loading Information label (also referred to as the vehicle placard or tire inflation pressure label) is located in the driver's door opening.

For additional information, see “Low tire pressure warning light” in the “Instruments and controls” section and “Tire Pressure Monitoring System (TPMS)” in the “In case of emergency” section.

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 harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

AVOIDING COLLISION AND ROLLOVER

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 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 overreact.
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.

IGNITION SWITCH

DRINKING ALCOHOL/DRUGS AND DRIVING

WARNING

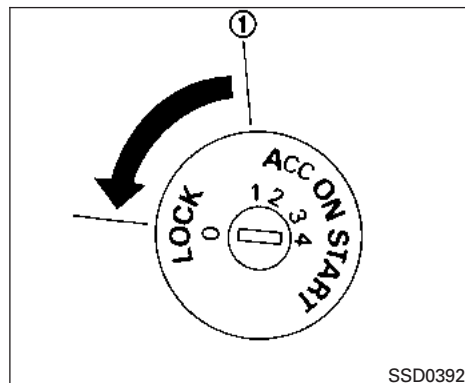
Never drive under the influence of alcohol or drugs. Alcohol in the bloodstream reduces coordination, delays reaction time and impairs judgement. Driving after drinking alcohol increases the likelihood of being involved in an accident injuring yourself and others. Additionally, if you are injured in 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! 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.

WARNING

- **Never remove the ignition key or 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.**



CONTINUOUSLY VARIABLE TRANSMISSION (CVT)

The ignition lock is designed so that the ignition switch cannot be turned to the LOCK position until the shift lever is moved to the P (Park) position.

- When placing the ignition switch in the LOCK position, make sure that the shift lever is in the P (Park) position
- When removing the key from the ignition switch (if it is inserted), make sure that the shift lever is in the P (Park) position.

When the ignition switch cannot be placed to the LOCK position:

1. Shift the shift lever to the P (Park) position.
2. Move the ignition switch slightly in the ON direction.
3. Turn the ignition switch to the LOCK position.
4. Remove the key if it is inserted in the ignition switch.

If the ignition switch is placed to the LOCK position, the shift lever cannot be moved from the P (Park) position.

The shift lever can be moved if the ignition switch is in the ON position and the foot brake pedal is depressed.

There is an OFF position ① between the LOCK and ACC positions. The OFF position is indicated by a “1” on the key cylinder.

IGNITION SWITCH POSITIONS

LOCK: Normal parking position (0)

OFF: (1)

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

ACC: (Accessories) (2)

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

ON: Normal operating position (3)

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

START: (4)

This position starts the engine. As soon as the engine has started, release the key. It automatically returns to the ON position.

NISSAN VEHICLE IMMOBILIZER SYSTEM

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

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

1. Leave the ignition switch in the ON position for approximately 5 seconds.

2. Place the ignition switch in the OFF or LOCK position, and wait approximately 10 seconds.

3. Repeat steps 1 and 2.

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

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

BEFORE STARTING THE ENGINE

- 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 restraints/headrests.
- 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 lever to P (Park) or N (Neutral). P (Park) is recommended.

The shift lever 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 lever 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.

DRIVING THE VEHICLE

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.

CONTINUOUSLY VARIABLE TRANSMISSION (CVT)

WARNING

- **Do not depress the accelerator pedal while shifting from P (Park) or N (Neutral) to R (Reverse), D (Drive) 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.**
- **Do not downshift abruptly on slippery roads. This may cause a loss of control.**
- **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.

The CVT 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.

NOTE:

Engine power may be automatically reduced to protect the CVT if the engine speed increases quickly when driving on slippery roads or while being tested on some dynamometers.

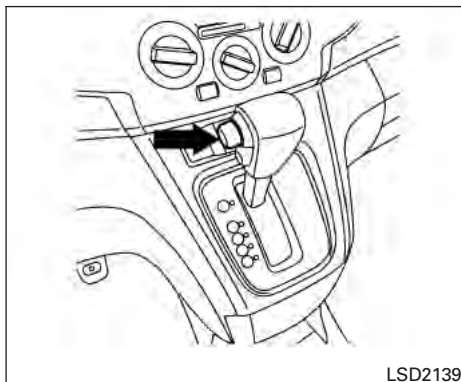
Starting the vehicle

1. After starting the engine, fully depress the foot brake pedal before moving the shift lever out of the P (Park) position.
2. Keep the foot brake pedal depressed and move the shift lever into a driving gear.

3. Release the foot brake, then gradually start the vehicle in motion.
4. Stop the vehicle completely before moving the shift lever into the P (Park) position.

The CVT 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 lever cannot be moved out of P (Park) and into any of the other gear positions if the ignition switch is placed in the LOCK, OFF or ACC position or if the key is removed.



Shifting

After starting the engine, fully depress the brake pedal and move the shift lever from P (Park) to any of the desired shift positions.

WARNING

Apply the parking brake if the shift lever is in any position while the engine is not running. Failure to do so could cause the vehicle to move unexpectedly or roll away and result in serious personal injury or property damage.

If the ignition switch is placed in the OFF or ACC position for any reason while the vehicle is in N (Neutral), or any drive position, the key cannot be turned to the LOCK position and be removed from the ignition switch. If this occurs, perform the following steps:

1. Apply the parking brake when the vehicle is stopped.
2. Move the shift lever to P (Park) to park the vehicle and place the ignition switch in the LOCK position to remove the key.

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 lever position when the vehicle is parked or when starting the engine. Make sure the vehicle is completely stopped. **The brake pedal must be depressed and the shift lever button pushed in to move the shift lever 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 place the shift lever 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. R (Reverse) speed is limited to 30 MPH (48 km/h). Do not exceed 30 MPH (48 km/h) in the R (Reverse) position. **The brake pedal must be depressed and the shift lever button pushed in to move the shift lever from P (Park), N (Neutral) or any drive position to R (Reverse).**

N (Neutral):

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

D (Drive):

Use this position for all normal forward driving.

L (Low):

Use this position for engine braking on steep downhill gradients/climbing steep slopes and whenever approaching sharp bends. Do not use the L (Low) position in any other circumstances.



Shift lock release

If the battery is discharged, the shift lever may not be moved from the P (Park) position even with the foot brake pedal depressed.

To move the shift lever, perform the following procedure:

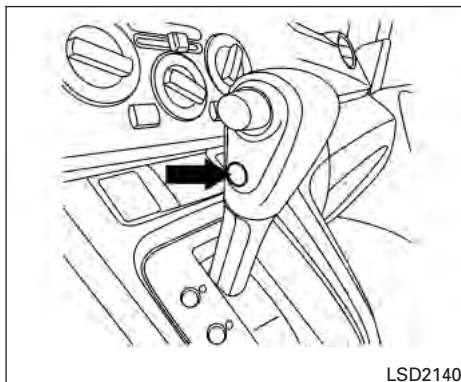
1. Place the ignition switch to the LOCK position and remove the key.
2. Apply the parking brake.
3. Remove the shift lock release cover using a suitable tool.

4. Push down the shift lock release using a suitable tool.
5. Push the shift lever button and move the shift lever to the N (Neutral) position while holding down the shift lock release.

Place the ignition switch in the ON position to unlock the steering wheel. The vehicle may be moved to the desired location.

Replace the removed shift lock release cover after the operation.

If the shift lever cannot be moved out of the P (Park) position, have a NISSAN dealer check the CVT system as soon as possible.



LSD2140

Overdrive (O/D) OFF switch

When the O/D OFF switch is pushed with the shift lever in the D (Drive) position, the ^{O/D}OFF light in the instrument panel illuminates. See “Overdrive off indicator light (CVT models)” in the “Instruments and controls” section of this manual.

Use the Overdrive off mode when you need improved engine braking.

To turn off the Overdrive off mode, push the O/D OFF switch again. The ^{O/D}OFF indicator light will turn off.

Each time the engine is started, or when the shift lever is shifted to any position other than D

(Drive), the Overdrive off mode will be automatically turned off.

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, the CVT will not be shifted into the selected driving position.

If the vehicle is driven under extreme conditions, such as excessive wheel spinning and subsequent hard braking, the fail-safe system may be activated. The MIL may come on to indicate the fail-safe mode is activated, see “Malfunction Indicator Light (MIL)” in the “Instruments and controls” section. This will occur even if all electrical circuits are functioning properly. In this case, place the ignition switch in the OFF position and wait for 10 seconds. Then place the ignition switch back in 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 if necessary.

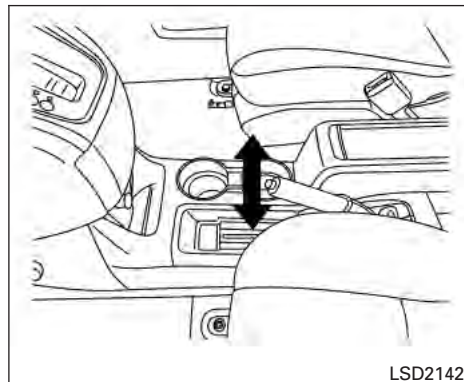
PARKING BRAKE

WARNING

When the high fluid temperature protection mode or fail-safe operation occurs, vehicle speed may be gradually reduced. The reduced speed may be lower than other traffic, which could increase the chance of a collision. Be especially careful when driving. If necessary, pull to the side of the road at a safe place and allow the transmission to return to normal operation, or have it repaired if necessary.

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 lever in place of the parking brake. When parking, be sure the parking brake is fully engaged.
- Do not leave children unattended in a vehicle. They could release the parking brake and cause an accident.

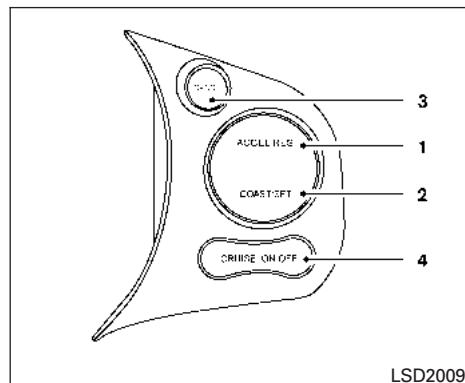


To engage: Pull the lever up.

To release:

1. Firmly apply the foot brake.
2. Move the shift lever to the P (Park) position.
3. While pulling up on the parking brake lever slightly, push the button and lower completely.
4. Before driving, be sure the brake warning light goes out.

CRUISE CONTROL



1. ACCEL/RES switch
2. COAST/SET switch
3. CANCEL switch
4. CRUISE ON/OFF switch

PRECAUTIONS ON CRUISE CONTROL

- If the cruise control system malfunctions, it cancels automatically.
- 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 30 - 89 MPH (48 - 144 km/h) without keeping your foot on the accelerator pedal.

To turn on the cruise control, push the ON-OFF switch. The CRUISE indicator light in the instrument panel comes on.

To set cruising speed, accelerate the vehicle to the desired speed, push the COAST/SET switch and release it. 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.
- Tap the brake pedal.
- Push the ON-OFF switch. The CRUISE indicator light in the instrument panel will go out.

The cruise control is automatically canceled 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 lever to N (Neutral).

BREAK-IN SCHEDULE

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 30 MPH (48 km/h).

5-16 Starting and driving

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.

FUEL EFFICIENT DRIVING TIPS

Follow these easy-to-use Fuel Efficient Driving Tips to help you achieve the most fuel economy from your vehicle.

1. Use Smooth Accelerator and Brake Pedal Application

- Avoid rapid starts and stops
- Use smooth, gentle accelerator and brake application whenever possible
- Maintain constant speed while commuting and coast whenever possible

2. Maintain Constant Speed

- Look ahead to try and anticipate and minimize stops
- Synchronizing your speed with traffic lights allows you to reduce your number of stops
- Maintaining a steady speed can minimize red light stops and improve fuel efficiency

3. Use Air Conditioning (A/C) at Higher Vehicle Speeds

- Below 40 MPH (64 km/h), it is more efficient to open windows to cool the vehicle due to reduced engine load
- Above 40 MPH (64 km/h), it is more efficient to use A/C to cool the vehicle due to increased aerodynamic drag

- Recirculating the cool air in the cabin when the A/C is on reduces cooling load
4. **Drive at Economical Speeds and Distances**
- Observing the speed limit and not exceeding 60 MPH (97 km/h) (where legally allowed) can improve fuel efficiency due to reduced aerodynamic drag
 - Maintaining a safe following distance behind other vehicles reduces unnecessary braking
 - Safely monitoring traffic to anticipate changes in speed permits reduced braking and smooth acceleration changes
 - Select a gear range suitable to road conditions
5. **Use Cruise Control**
- Using cruise control during highway driving helps maintain a steady speed
 - Cruise control is particularly effective in providing fuel savings when driving on flat terrains
6. **Plan for the Shortest Route**
- Utilize a map or navigation system to determine the best route to save time

7. **Avoid Idling**

- Shutting off your engine when safe for stops exceeding 30–60 seconds saves fuel and reduces emissions

8. **Buy an Automated Pass for Toll Roads**

- Automated passes permit drivers to use special lanes to maintain cruising speed through the toll and avoid stopping and starting

9. **Winter Warm Up**

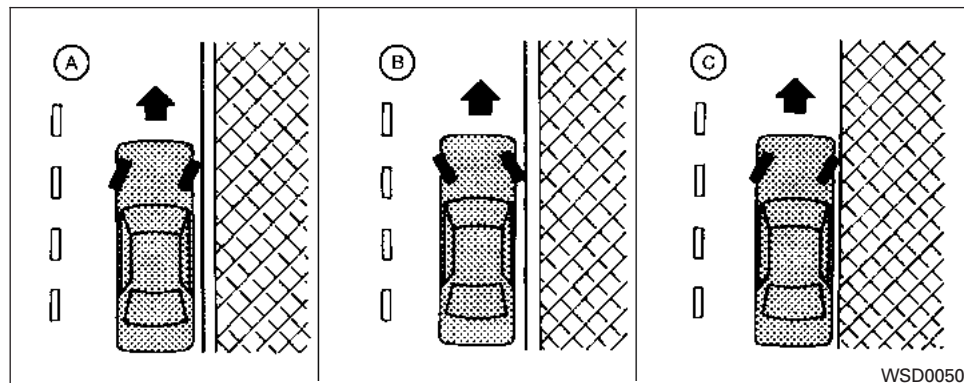
- Limit idling time to minimize impact to fuel economy
- Vehicles typically need no more than 30 seconds of idling at start-up to effectively circulate the engine oil before driving
- Your vehicle will reach its ideal operating temperature more quickly while driving versus idling

10. **Keeping your Vehicle Cool**

- Park your vehicle in a covered parking area or in the shade whenever possible
- When entering a hot vehicle, opening the windows will help to reduce the inside temperature faster, resulting in reduced demand on your A/C system

- Keep your engine tuned up.
- Follow the recommended scheduled maintenance.
- Keep the tires inflated to the correct pressure. Low tire pressure increases tire wear and lowers fuel economy.
- Keep the wheels in correct alignment. Improper alignment increases tire wear and lowers fuel economy.
- Use the recommended viscosity engine oil. See “Engine oil and oil filter recommendations” in “Technical and consumer information” in this manual.

PARKING/PARKING ON HILLS



WARNING

- Do not stop or park the vehicle over flammable materials such as dry grass, waste paper or rags. They may ignite and cause a fire.
- Safe parking procedures require that both the parking brake be set and the transmission placed into P (Park). Failure to do so could cause the vehicle to move unexpectedly or roll away and result in an accident. Make sure the shift lever has been pushed as far forward as it can go and cannot be moved without depressing the foot brake pedal.

- Never leave the engine running while the vehicle is unattended.
- Do not leave children unattended inside the vehicle. They could unknowingly activate switches or controls. Unattended children could become involved in serious accidents.

1. Firmly apply the parking brake.
2. Move the shift lever to the P (Park) position.
3. To help prevent the vehicle from rolling into traffic when parked on an incline, it is a good practice to turn the wheels as illustrated.

• HEADED DOWNHILL WITH CURB: (A)

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

• HEADED UPHILL WITH CURB: (B)

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

• HEADED UPHILL OR DOWNHILL, NO CURB: (C)

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

4. Place the ignition switch in the LOCK position.

POWER STEERING

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.**
- **When the power steering warning light illuminates with the engine running, there will be no power assist for the steering. You will still have control of the vehicle but the steering will be harder to operate. Have the power steering system checked by a NISSAN dealer.**

The power steering system is designed to provide power assist while driving to operate the steering wheel with light force.

When the steering wheel is operated repeatedly or continuously while parking or driving at a very low speed, the power assist for the steering wheel will be reduced. This is to prevent overheating of the power steering system and protect it from getting damaged. While the power assist is reduced, steering wheel operation will become heavy. When the temperature of the power steering system goes down, the power assist level will return to normal. Avoid repeating such steering wheel operations that could cause the power steering system to overheat.

You may hear a sound when the steering wheel is operated quickly. However, this is not a malfunction.

If the electric power steering warning light **PS** illuminates while the engine is running, it may indicate the power steering system is not functioning properly and may need servicing. Have the power steering system checked by a NISSAN dealer.

When the electric power steering warning light illuminates with the engine running, there will be no power assist for the steering but you will still have control of the vehicle. At this time, greater steering effort is required to operate the steering wheel, especially in sharp turns and at low speeds.

For additional information see “Power steering warning light” in the “Instruments and controls” section.

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 brake shoes whenever the effect of the parking brake is weakened or whenever the brake shoes and/or drums are replaced, in order to assure the best brake performance.

5-20 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 “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).
- 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 cannot prevent loss of vehicle control in all driving situations.

When the VDC system operates, the  indicator in the instrument panel flashes to 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 comes on in the instrument panel. The VDC system automatically turns off when the indicator light is 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 

5-22 Starting and driving

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.**

COLD WEATHER DRIVING

- 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.

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.

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.**

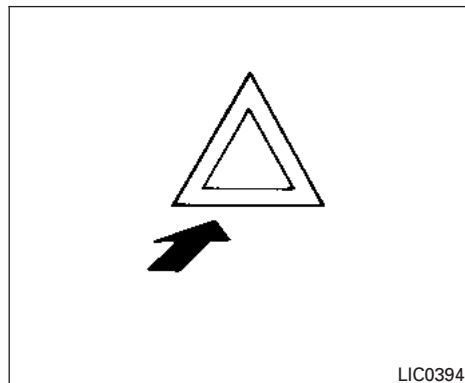
- **Allow more stopping distance under these conditions. Braking should be started sooner than on dry pavement.**
- **Allow greater following distances on slippery roads.**
- **Watch for slippery spots (glare ice). These may appear on an otherwise clear road in shaded areas. If a patch of ice is seen 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 (if so equipped) on slippery roads.**
- **Snow can trap dangerous exhaust gases under your vehicle. Keep snow clear of the exhaust pipe and from around your vehicle.**

6 In case of emergency

Hazard warning flasher switch	6-2
Flat tire	6-2
Tire Pressure Monitoring System (TPMS)	6-2
Changing a flat tire	6-3
Repairing a flat tire	6-9
Jump starting	6-14

Push starting	6-16
If your vehicle overheats	6-16
Towing your vehicle	6-17
Towing recommended by NISSAN	6-18
Vehicle recovery (freeing a stuck vehicle)	6-19

HAZARD WARNING FLASHER SWITCH



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

WARNING

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

6-2 In case of emergency

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.

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 PRES (pressure) warning appears in the odometer, one or more of your tires is significantly under-inflated. 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, and "Tire Pressure Monitoring System (TPMS)" in the "Starting and driving" 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.
- When a spare tire is mounted or a wheel is replaced, 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:

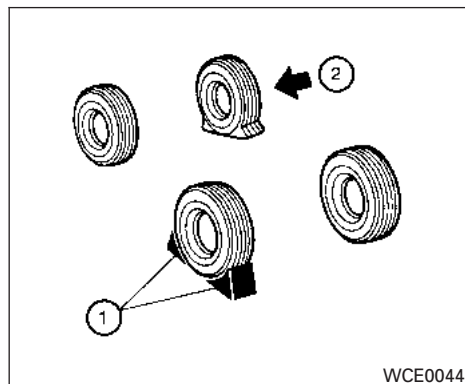
Stopping the vehicle

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 lever to P (Park).
4. Place the Auto Step switch in the OFF position.
5. Turn off the engine.
6. Raise the hood to warn other traffic and to signal professional road assistance personnel that you need assistance.

7. 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 CVT 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.

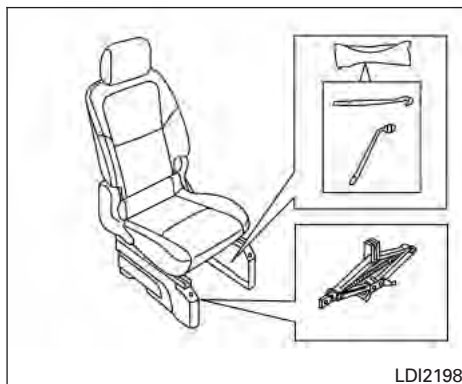


Blocking wheels

Place tire stoppers supplied in tool kit 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.

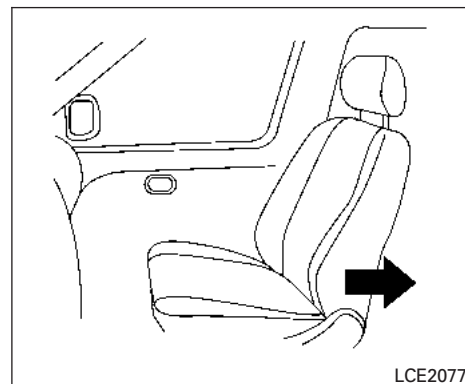
⚠ WARNING

Be sure to block the wheel as the vehicle may move and result in personal injury.

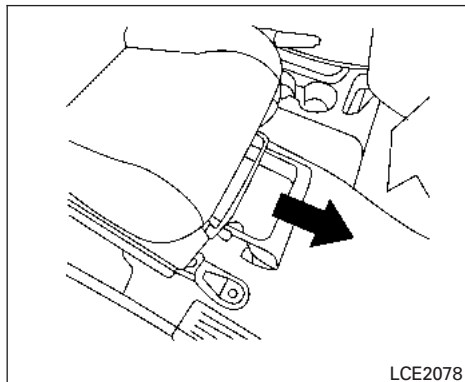


Getting the spare tire and tools

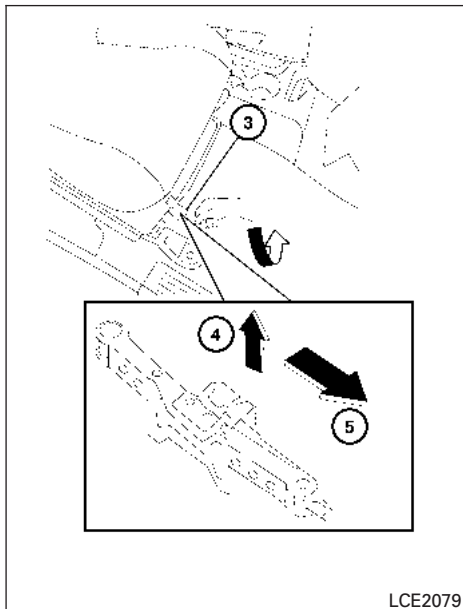
Remove the jack and necessary tools from under the passenger seat by performing the following steps:



1. Adjust the passenger seat rearward



2. Remove the tray under the passenger seat.



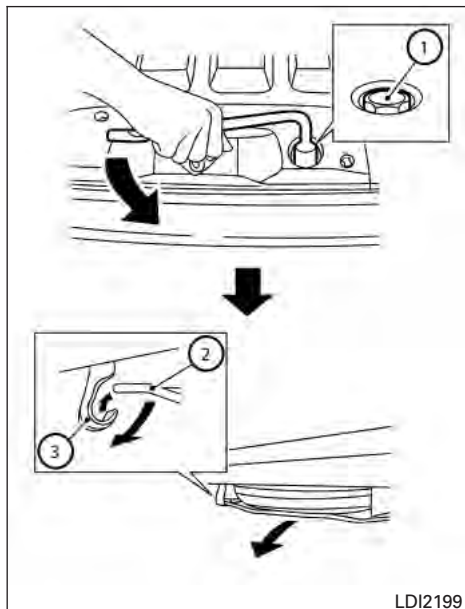
3. Loosen the jack screw counterclockwise.

4. Lift jack up.

5. Pull jack forward.

6. Release the belt strap to remove the tool bag.

Reverse steps 1 - 6 to install and secure the jack and tool bag.



7. Open the back door.
8. Loosen the bolt (1) counterclockwise approximately 40 turns to lower the spare. Be careful not to excessively loosen the bolt because the basket may fall abruptly.

9. Stop turning the bolt when the spare is lowered to the point where the tire basket (2) can be removed from the hook (3).
10. Remove the wheel basket by pushing the basket upward.
11. Lower the tire basket to the ground and take out the spare.

Spare wheel basket bolt tightening torque:
18 to 21 ft-lb (24.5 to 29.4 N-m)

Jacking up vehicle and removing the damaged tire

⚠ WARNING

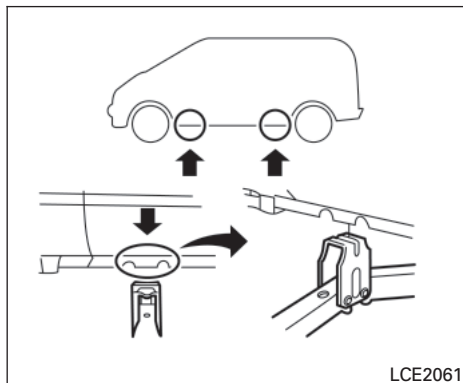
- **Never get under the vehicle while it is supported only by the jack. If it is necessary to work under the vehicle, support it with safety stands.**
- **Use only the jack provided with your vehicle to lift the vehicle. Do not use the jack provided with your vehicle on other vehicles. The jack is designed 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 the vehicle is on the jack. It may cause the vehicle to move.**
- **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.

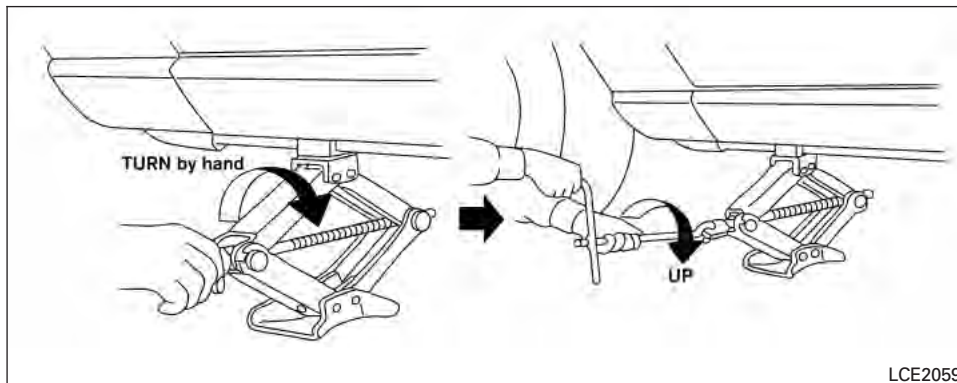
Carefully read the caution label attached to the jack body and the following instructions.

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.**

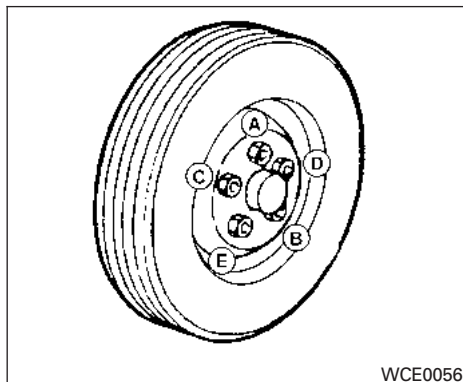


2. Place the jack directly under the jack-up point as illustrated so the top of the jack contacts the vehicle at the jack-up point. The jack-up points are indicated by stamped arrows on the side of the frame.

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.



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:

83 ft-lb (113 N·m)

The wheel nuts must be kept tightened to specification at all times. It is recommended that wheel nuts be tightened to specifications at each lubrication interval.

Adjust tire pressure to the COLD pressure.

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

COLD tire pressures are shown on the Tire and Loading Information label affixed to the driver side center pillar.

After adjusting tire pressure to the COLD tire pressure, the display of the tire pressure information may show higher pressure than the COLD tire pressure after the vehicle has been driven more than 1 mile (1.6 km). This is because the tire pressure increases as the tire temperature rises. This does not indicate a system malfunction.

5. Securely store the flat tire and jacking equipment in the vehicle.

⚠ 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.

REPAIRING A FLAT TIRE

If possible, have the vehicle towed to a facility that can repair or replace the flat tire. Using the tire emergency repair kit may cause a malfunction of the tire pressure sensors and cause the low tire pressure warning light to illuminate.

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 lever to P (Park).
4. Raise the hood to warn other traffic and to signal professional road assistance personnel that you need assistance.
5. Have all passengers get out of the vehicle and stand in a safe place, away from traffic and clear of the vehicle.

WARNING

- **Make sure the parking brake is securely applied and the shift lever is shifted into P (Park).**
- **Never repair tires when the vehicle is on a slope, ice or slippery areas. This is hazardous.**
- **Never repair tires if oncoming traffic is close to your vehicle. Wait for professional road assistance.**

Locating the emergency tire repair kit

Take out the emergency tire puncture repair kit located under the passenger seat. The repair kit consists of the following items:

1. Tire sealant bottle
2. Air compressor
3. Speed restriction sticker

NOTE:

For models with the emergency tire puncture repair kit, a spare tire, jack and rod may not be equipped as standard. These parts may be dealer options. Contact a NISSAN dealer about obtaining these parts. See “Changing a flat tire” earlier in this section for usage of jacking tools and tire replacement.

Before using the emergency tire repair kit

The emergency tire repair kit is not appropriate for the following situations. It will be necessary to contact a professional towing service in the following situations:

- The emergency repair kit's shelf life has expired.
- Cuts or punctures exceed approximately 4 mm (0.2 in).
- The tire sidewall is damaged.
- The tire is extremely low on air.
- The tire has come off of the inside or outside of the wheel.
- The wheel is damaged.
- The tire is punctured more than once.

Performing emergency repairs

WARNING

Observe the following precautions when using the tire repair compound.

- **Swallowing the compound is dangerous. Immediately drink as much water as possible and seek prompt medical assistance.**
- **Rinse well with lots of water if compound comes into contact with skin or eyes. If irritation persists seek prompt medical attention.**
- **Keep the repair compound out of reach of children.**
- **The emergency repair compound may cause a malfunction of the tire pressure sensors and cause the low tire pressure warning light to illuminate. Have the tire pressure sensor replaced as soon as possible.**

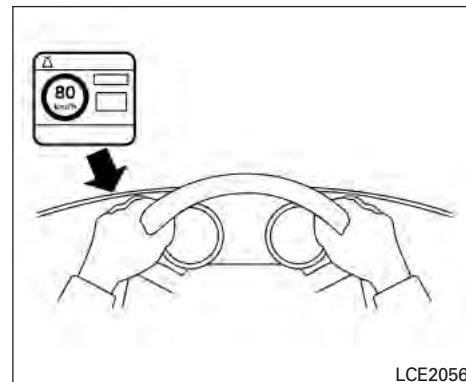
NOTE:

Do not remove any nails or screws that have penetrated the tire when performing repairs.

1. Remove the emergency repair compound and the air compressor and shake bottle well.

NOTE:

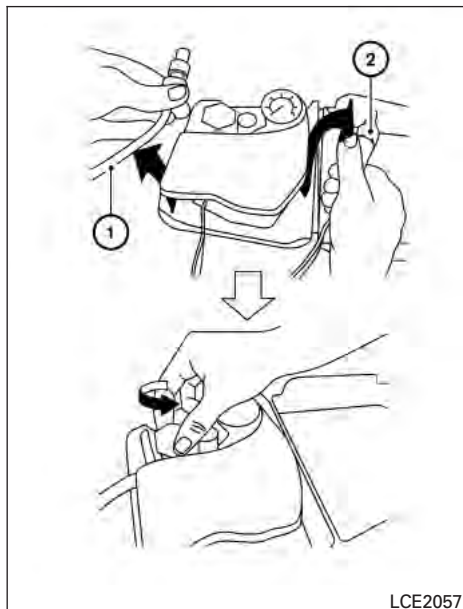
Make sure to shake the bottle well before attaching the hose. Doing so afterward may cause the repair compound to splatter.



2. Open the lid of the air compressor, take out the speed restriction sticker, and put it in a location where the driver can see it driving.

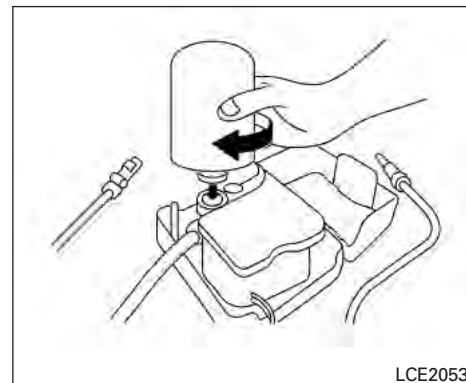
WARNING

- **Do not apply the label to the center of the steering wheel pad, as this can prevent the air bag from properly functioning and cause serious injury.**
- **Avoid applying the label where it can obstruct the view of the speedometer and warning indicators.**

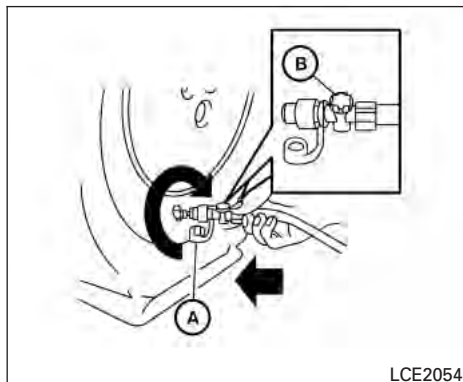


3. Take the hose① and the power plug② out of the air compressor. Remove the cap of the bottle holder from the air compressor.

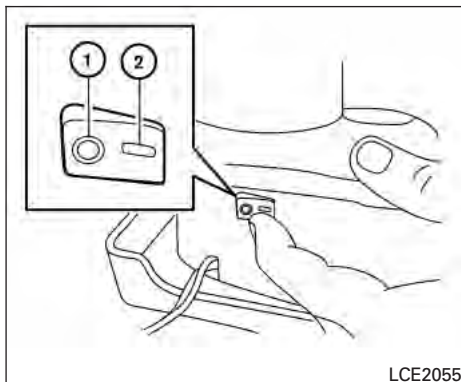
4. Remove the cap from the tire sealant bottle and screw the bottle clockwise into the bottle holder. Make sure an leave the bottle seal intact, screwing the bottle into the bottle holder will pierce the seal of the bottle.



5. Remove the cap from the tire valve on the flat tire.



6. Remove the protective cap (A) of the hose and screw the hose securely into the tire valve. Make sure that the pressure release valve (B) is securely tightened.



7. Make sure that the air compressor switch in the off position (1), then insert the power plug into the power outlet of the vehicle.
8. Push the ignition switch to the ACC position. Turn the compressor switch to the on position (2) and inflate the tire to the pressure that is specified on tire placard that is affixed to the driver's side center pillar if possible, or to the minimum of 26 psi (180 kPa). Turn the air compressor off briefly in order to check the tire pressure with the tire pressure gauge.

If the tire is inflated to higher than the specified pressure, lower the tire pressure by releasing air with the pressure release valve.

⚠ WARNING

The ring on the end of the air compressor hose may become hot after use so take care to avoid burns.

⚠ CAUTION

Operating the air compressor for an extended period of time can result in damage to the compressor and will not allow you to fill the tire to the required air pressure. Avoid continuous operation of the compressor exceeding 10 minutes.

NOTE:

The compressor tire pressure gauge may show a pressure reading of 87 psi (600 kPa) for about 30 seconds while inflating the tire. The pressure gauge is indicating the pressure inside the sealant can. When the sealant been injected into the tire the pressure gauge will drop and indicate actual tire pressure.

WARNING

- **To avoid serious personal injury while using the emergency tire repair kit:**
 - **Securely tighten the air compressor hose to the tire valve. Failure to do so can cause the sealant to spray into the air and get into your eyes or on the skin.**
 - **Do not stand directly beside the damaged tire while it is being inflated because of the risk of rupture. If there are any cracks or bumps, turn the air compressor off immediately.**
- **To avoid serious injury when stowing the emergency**
 - **Keep the sealant bottle screwed into the compressor. Failure to do so can cause the sealant to spray into the air and get into your eyes or on the skin.**

If the tire pressure does not increase to **26 psi (180 kPa) within 10 minutes**, the tire may be seriously damaged and **the tire cannot be repaired with this tire repair kit**. Under this circumstance, contact a professional towing service for assistance.

9. When the tire pressure is at the specified pressure, turn the air compressor off. If the tire cannot be inflated to the specified pressure, the air compressor can be turned off at the minimum 26 psi (180 kPa). Remove the power plug from the outlet and quickly remove the hose from the tire valve. Attach the protective cap and valve cap. Properly stow the emergency tire repair kit in the cargo area.
10. Immediately drive the vehicle for 10 minutes or 3 km (2 mi) at a speed below 80 km/h (50 mph).
11. After driving, make sure that the air compressor switch is in the OFF position, then screw the hose into the tire valve. Check the pressure with the pressure gauge. Temporary repair is complete if the tire pressure does not drop.

Make sure that the tire pressure is adjusted to the pressure that is specified on the tire placard before driving.

CAUTION

If tire pressure falls below 18 PSI (130 kPa) and remains low, even after repeating steps 5-11, the tire is not repairable using the tire emergency repair kit. Stop driving the vehicle and contact a professional towing service.

- It is recommended to replace the repaired tire with a new tire.
- Although the wheel can be reused by removing the repair compound, the tire valve must be replaced.
- The remaining repair compound is not usable and must be replaced.
- When attempting to repair the punctured tire at a later time the puncture may not be detectable. It is important to carefully monitor the tire pressure of the repaired tire. If the tire should continually lose air pressure you will need to have the tire replaced.

After tire repair

See a NISSAN dealer for tire repair or replacement as soon as possible.

JUMP STARTING

WARNING

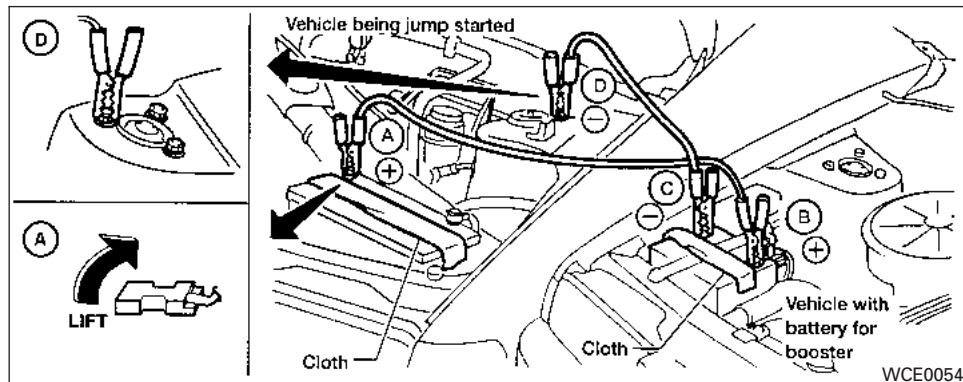
- After using Emergency Tire Sealant to repair a minor tire puncture, do not drive the vehicle at speeds faster than 80 km/h (50 MPH).
- Immediately after using Emergency Tire Sealant to repair a minor tire puncture, take your vehicle to a NISSAN dealer to inspect, and repair or replace the tire. The Emergency Tire Sealant cannot permanently seal a punctured tire. Continuing operation of the vehicle without a permanent tire repair can lead to a crash.
- If you used Emergency Tire Sealant to repair a minor tire puncture, your NISSAN dealer will also need to replace the TPMS sensor in addition to repairing or replacing the tire.
- NISSAN recommends using only NISSAN Genuine Emergency Tire Sealant provided with your vehicle. Other tire sealants may damage the valve stem seal which can cause the tire to lose air pressure.

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

WARNING

- If done incorrectly, jump starting can lead to a battery explosion, resulting in severe injury or death. It could also damage your vehicle.
- Explosive hydrogen gas is always present in the vicinity of the battery. Keep all sparks and flames away from the battery.
- Do not allow battery fluid to come into contact with eyes, skin, clothing or painted surfaces. Battery fluid is a corrosive sulfuric acid solution which can cause severe burns. If the fluid should come into contact with anything, immediately flush the contacted area with water.
- Keep battery out of the reach of children.
- The booster battery must be rated at 12 volts. Use of an improperly rated battery can damage your vehicle.

- Whenever working on or near a battery, always wear suitable eye protectors (for example, goggles or industrial safety spectacles) and remove rings, metal bands, or any other jewelry. Do not lean over the battery when jump starting.
- Do not attempt to jump start a frozen battery. It could explode and cause serious injury.



⚠ 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 lever to P (Park). Switch off all unnecessary electrical systems (lights, heater, air conditioner, etc.).

3. Remove vent caps on the battery (if so equipped). Cover the battery with an old cloth to reduce explosion hazard.
4. Connect jumper cables in the sequence 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, turn the key off 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

CAUTION

- Do not push start this vehicle. The three-way catalyst may be damaged.
- Continuously Variable Transmission (CVT) 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.
- 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.

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 lever 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.

TOWING YOUR VEHICLE

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.

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 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:

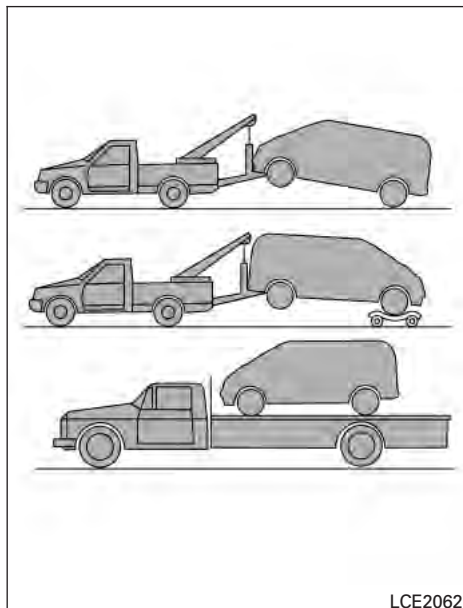
WARNING

- **Never ride in a vehicle that is being towed.**
- **Never get under your vehicle after it has been lifted by a tow truck.**

CAUTION

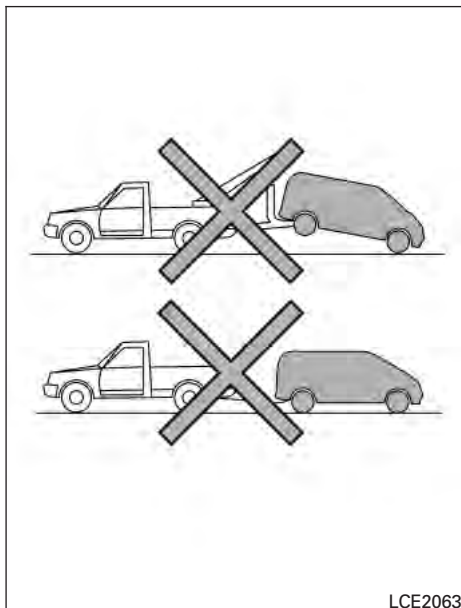
- **When towing, make sure that the transmission, axles, steering system and powertrain are in working condition. If any of these conditions apply, dollies or a flatbed tow truck must be used.**
- **Always attach safety chains before towing.**

For information about towing your vehicle behind a recreational vehicle (RV), refer to "Flat towing" in the "Starting and Driving" section of this manual.



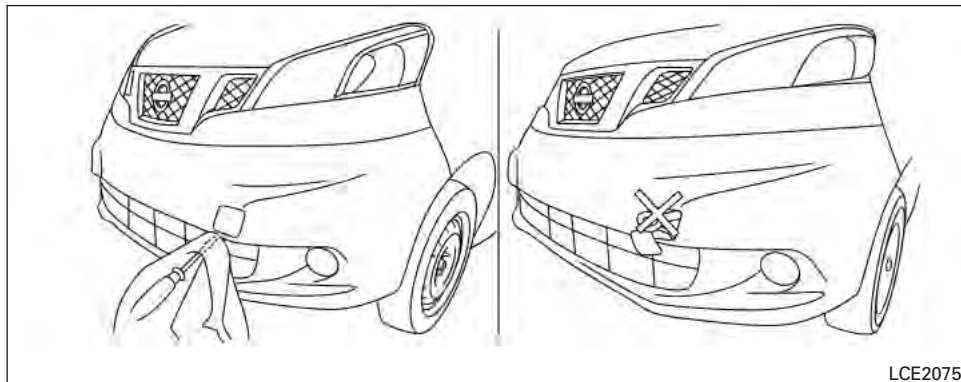
TOWING RECOMMENDED BY NISSAN

NISSAN recommends that your vehicle be towed with the driving (front) wheels off the ground or place the vehicle on a flat bed truck as illustrated.



⚠ CAUTION

- Never tow Continuously Variable Transmission (CVT) models with the front wheels on the ground or four wheels on the ground (forward or backward), as this may cause serious and expensive damage to the transmission. If it is necessary to tow the vehicle with the rear wheels raised always use towing dollies under the front wheels.
- When towing Continuously Variable Transmission (CVT) models with the front wheels 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.
 - Move the shift lever to the N (Neutral) position.
- When towing Continuously Variable Transmission (CVT) models with the rear wheels on the ground (if you do not use towing dollies): Always release the parking brake.



VEHICLE RECOVERY (freeing a stuck vehicle)

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 (Reverse) and D (Drive).
 - 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.

7 Appearance and care

Cleaning exterior	7-2
Washing	7-2
Waxing	7-2
Removing spots	7-3
Underbody	7-3
Glass	7-3
Chrome parts	7-3
Tire dressings	7-3
Cleaning interior	7-4

Air fresheners	7-4
Floor mats	7-4
Seat belts	7-5
Corrosion protection	7-5
Most common factors contributing to vehicle corrosion	7-5
Environmental factors influence the rate of corrosion	7-5
To protect your vehicle from corrosion	7-6

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.

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 brush. Wipe the vinyl surfaces with a clean, soft cloth dampened in mild soap solution, then wipe clean with a dry, soft cloth. Gently dab or tap soiled cloth areas with a moist, soft cloth. Before using any fabric protector, read the manufacturer's recommendations. Some fabric protectors contain chemicals that may stain or bleach the seat material.

Immediately clean spills on water repellent surfaces by wiping with soft, dry cloth.

Use a cloth dampened only with water to clean the meter and gauge lens.

CAUTION

- **Never use benzine, thinner or any similar material.**
- **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 vinyl flooring 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 two passenger's side front floor mat brackets to help keep your floor mats in place. Genuine NISSAN floor mats have been specially designed for your vehicle model. The driver's and passenger's side floor mats have two grommet holes incorporated in them. 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

Maintenance requirements	8-2
General maintenance	8-2
Explanation of general maintenance items	8-2
Maintenance precautions	8-5
Engine compartment check locations	8-6
Engine cooling system	8-7
Checking engine coolant level	8-8
Changing engine coolant	8-8
Engine oil	8-9
Checking engine oil level	8-9
Changing engine oil	8-10
Changing engine oil filter	8-11
Continuously Variable Transmission (CVT) fluid	8-11
Brake fluid	8-12
Windshield-washer fluid	8-12
Windshield-washer fluid reservoir	8-12
Battery	8-13
Jump starting	8-15
Variable voltage control system	8-15
Drive belt	8-16

Spark plugs	8-16
Replacing spark plugs	8-16
Air cleaner	8-17
Windshield wiper blades	8-18
Cleaning	8-18
Replacing	8-18
Brakes	8-19
Fuses	8-20
Engine compartment	8-20
Passenger compartment	8-22
Lights	8-24
Headlights	8-24
Park/turn signal lights	8-27
Exterior and interior lights	8-28
Wheels and tires	8-32
Tire pressure	8-32
Tire labeling	8-35
Types of tires	8-38
Tire Chains	8-39
Changing wheels and tires	8-39

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" in this section.

EXPLANATION OF GENERAL MAINTENANCE ITEMS

Additional information on the following items with " * " is found 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 5,000 miles (8,000 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" 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 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.

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.

Continuously Variable Transmission (CVT) P (Park) position mechanism On a fairly steep hill, check that the vehicle is held securely with the shift lever in the P (Park) position without applying any brakes.

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/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 (if so equipped).

Under the hood and vehicle

The maintenance items listed here should be checked periodically (for example, each time you check the engine oil or refuel).

Battery* Check the fluid level in each cell. It should be between the MAX and MIN lines. Vehicles operated in high temperatures or under severe conditions require frequent checks of the battery fluid level.

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 levels* Make sure that the brake and clutch 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 (if so equipped) 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.

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 lever 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.**

- **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.**

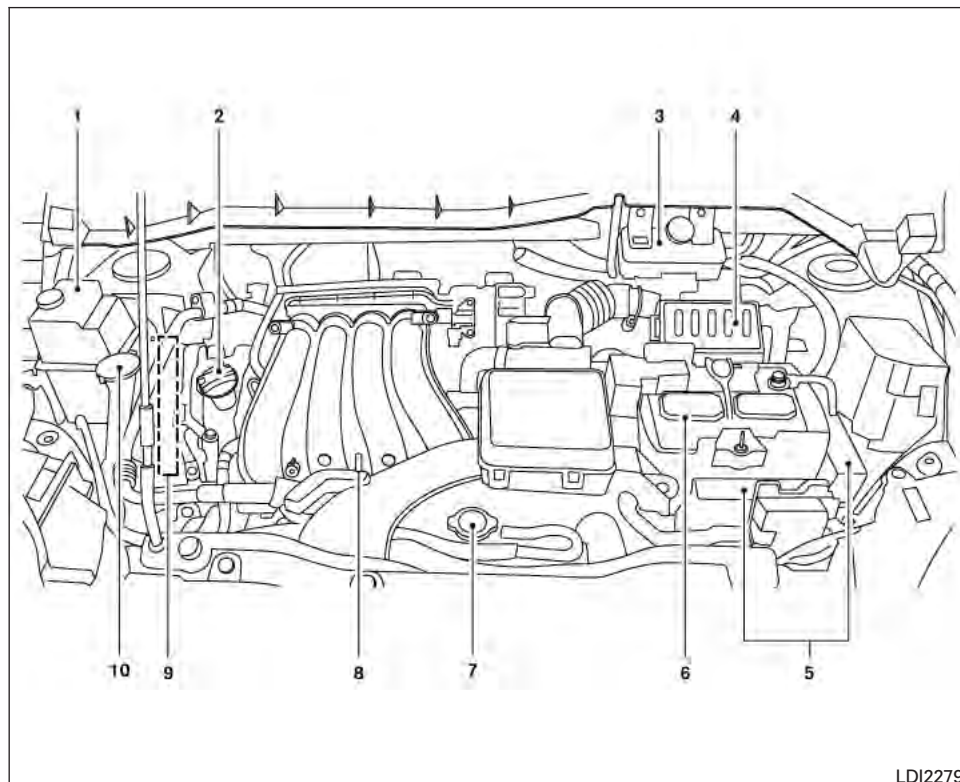
- **Never leave the engine or automatic transmission related component harnesses disconnected while the ignition switch is in the ON position.**
- **Never connect or disconnect the battery or any transistorized component while the ignition switch is in the ON position.**

This "Maintenance and do-it-yourself" section gives instructions regarding only those items which are relatively easy for an owner to perform.

A genuine NISSAN service manual is also available. See "Owner's Manual/Service Manual order information" in the "Technical and consumer information" section of this manual.

You should be aware that incomplete or improper servicing may result in operating difficulties or excessive emissions, and could affect warranty coverage. **If in doubt about any servicing, have it done by a NISSAN dealer.**

ENGINE COMPARTMENT CHECK LOCATIONS



MR20DE engine

1. Engine coolant reservoir
2. Engine oil filler cap
3. Brake fluid reservoir
4. Air cleaner
5. Fuse and relay box
6. Battery
7. Radiator cap
8. Engine oil dipstick
9. Drive belt location
10. Windshield-washer fluid reservoir

LDI2279

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.

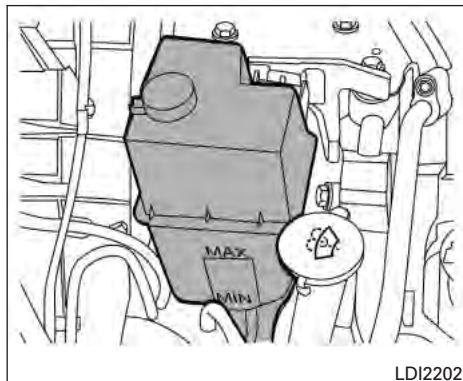
WARNING

- **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

8-8 Maintenance and do-it-yourself

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.

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

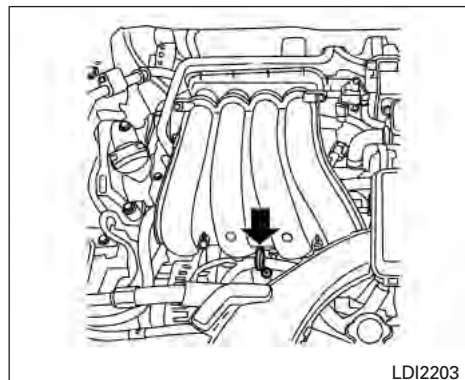
- **To avoid the danger of being scalded, never change the coolant when the engine is hot.**
- **Never remove the radiator or engine coolant reservoir cap when the engine is hot. Serious burns could be caused by high pressure fluid escaping from the radiator.**

- **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.

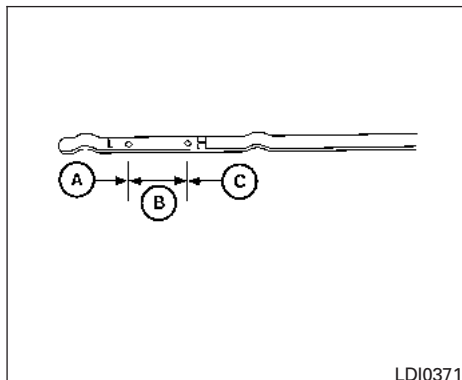
ENGINE OIL



MR20DE engine

CHECKING ENGINE OIL LEVEL

1. Park the vehicle on a level surface and apply the parking brake.
2. Start the engine and let it idle until it reaches operating temperature.
3. Turn off the engine. **Wait more than 10 minutes for the oil to drain back into the oil pan.**
4. Remove the dipstick and wipe it clean. Reinsert it all the way.



5. Remove the dipstick again and check the oil level. It should be between the H (High) and L (Low) marks (B). This is the normal operating oil level range. If the oil level is below the L (Low) mark (A), remove the oil filler cap and pour recommended oil through the opening. **Do not overfill (C).**
6. Recheck oil level with the dipstick.

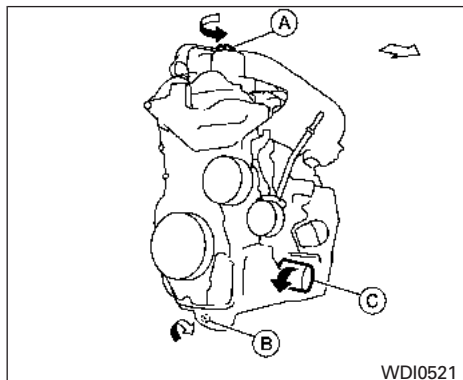
It is normal to add some oil between oil maintenance intervals or during the break-in period, depending on the severity of operating conditions.

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.

Make sure to follow the engine oil changing intervals in the maintenance booklet. Operating under the following conditions may require more frequent oil change:

- Repeated short distance driving
- Driving in dusty conditions
- Stop and go commuting



MR20DE engine

- (A) Oil filler cap
- (B) Oil drain plug
- (C) Oil filter

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:

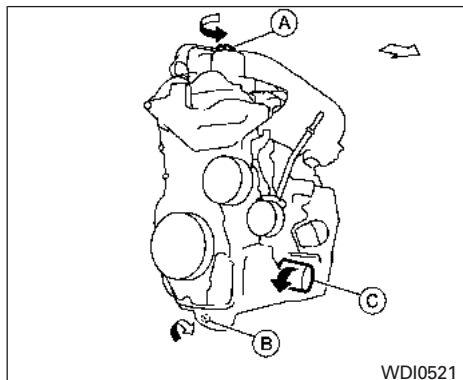
22 - 29 ft-lb (29 - 39 N-m)

7. Refill engine with recommended oil through the oil filler opening, then install the oil filler cap securely.

See "Recommended fluids/lubricants and capacities" 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.



MR20DE

- (A) Oil filler cap
- (B) Oil drain plug
- (C) Oil filter

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.
4. Loosen the oil filter (C) 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 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.

CONTINUOUSLY VARIABLE TRANSMISSION (CVT) FLUID

CAUTION

- Use only Genuine NISSAN CVT Fluid NS-3. Do not mix with other fluids.
- Using transmission fluid other than Genuine NISSAN CVT Fluid NS-3 will damage the CVT, which is not covered by the warranty.

When checking or replacement of CVT fluid is required, we recommend your NISSAN dealer for servicing.

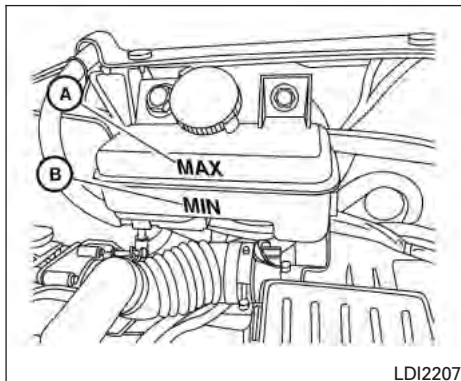
BRAKE FLUID

⚠ 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.

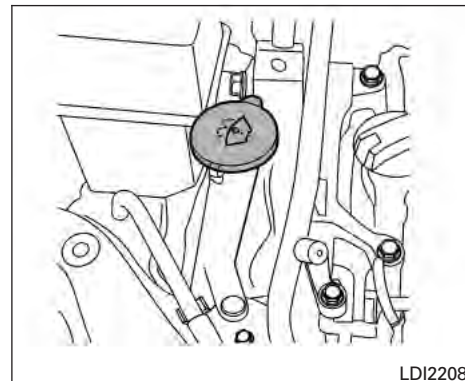


LDI2207

Check the fluid level in the reservoir. If the brake fluid is below the MIN line (B), the brake warning light will illuminate. Add brake fluid up to the MAX line (A). (See "RECOMMENDED FLUIDS/LUBRICANTS AND CAPACITIES" in the "Technical and consumer information" section for the recommended type of brake fluid.)

If the brake fluid must be added frequently, the brake system should be thoroughly checked by a NISSAN dealer.

WINDSHIELD-WASHER FLUID



LDI2208

WINDSHIELD-WASHER FLUID RESERVOIR

Fill the windshield-washer fluid reservoir periodically. Add windshield-washer fluid when the low windshield-washer fluid warning light (if so equipped) 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.

BATTERY

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.

- 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:

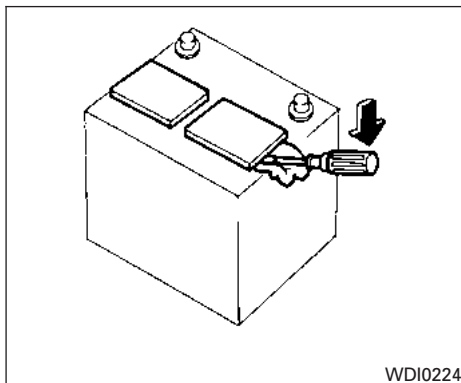
Care should be taken to avoid situations that can lead to potential battery discharge and potential no-start conditions such as:

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.

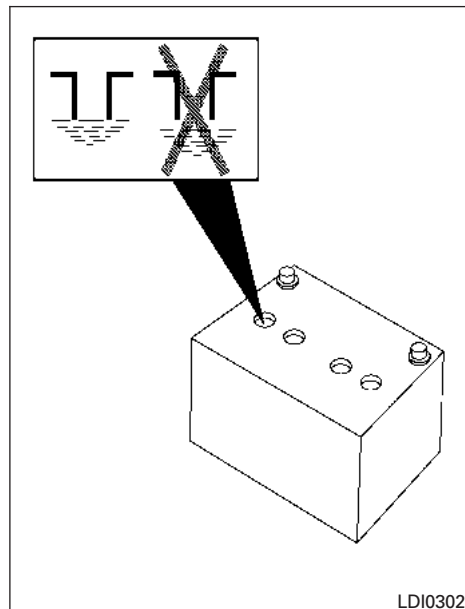
WARNING

- 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.



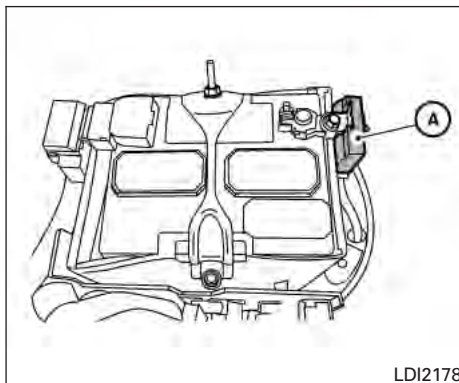
2. Check the fluid level in each cell. If it is necessary to add fluid, add only distilled water to bring the level up to the bottom of the filler opening. **Do not overfill.** Reinstall the vent caps.

VARIABLE VOLTAGE CONTROL SYSTEM

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.



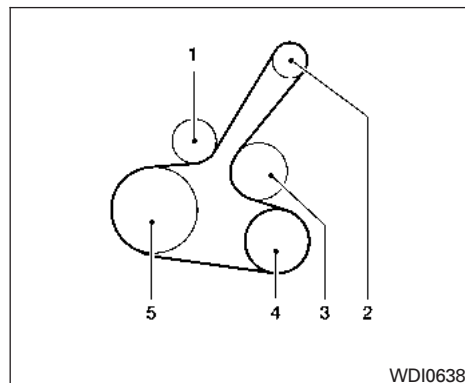
Your vehicle is equipped with a variable voltage control system. This system measures the amount of electrical discharge from the battery and controls voltage generated by the generator.

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.

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.

DRIVE BELT



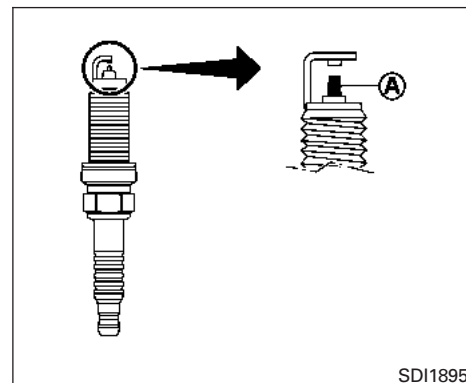
1. Automatic tensioner
2. Generator
3. Water pump
4. Air conditioner compressor
5. Crankshaft pulley

WARNING

Be sure the ignition switch is in the OFF or LOCK position before servicing drive belt. The engine could rotate unexpectedly.

1. Visually inspect the belt for signs of unusual wear, cuts, or fraying. If the belt is in poor condition, have it replaced or adjusted by a NISSAN dealer.
2. Have the belt checked regularly for condition.

SPARK PLUGS



REPLACING SPARK PLUGS

Iridium-tipped spark plugs

It is not necessary to replace iridium-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 iridium-tipped spark plugs by cleaning or regapping.

- **Always replace spark plugs with recommended or equivalent ones.**

AIR CLEANER

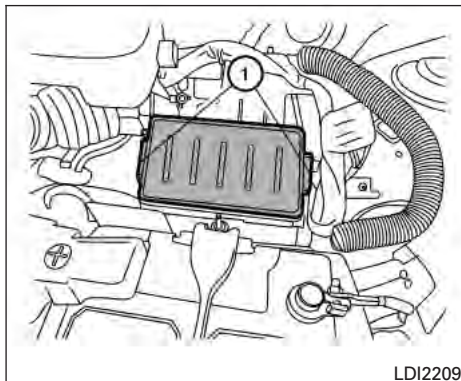
WARNING

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.

If replacement is required, see your NISSAN dealer for assistance.



The air cleaner filter should not be cleaned and reused. Replace it according to the maintenance log shown in the "NISSAN Service and Maintenance Guide."

To remove the air cleaner filter:

1. Push in the tabs ① 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.

WINDSHIELD WIPER BLADES

CLEANING

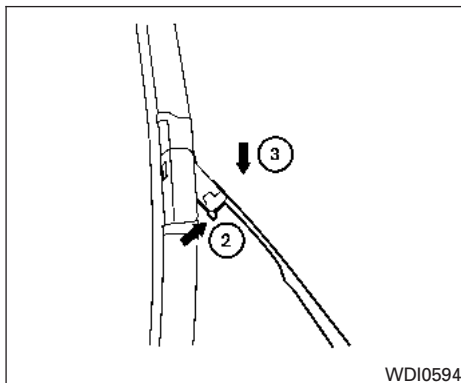
If your windshield is not clear after using the windshield washer or if a wiper blade chatters when running, wax or other material may be on the blade or windshield.

Clean the outside of the windshield with a washer solution or a mild detergent. Your windshield is clean if beads do not form when rinsing with clear water.

Clean each blade by wiping it with a cloth soaked in a washer solution or a mild detergent. Then rinse the blades with clear water. If your windshield is still not clear after cleaning the blades and using the wiper, replace the blades.

CAUTION

Worn windshield wiper blades can damage the windshield and impair driver vision.



REPLACING

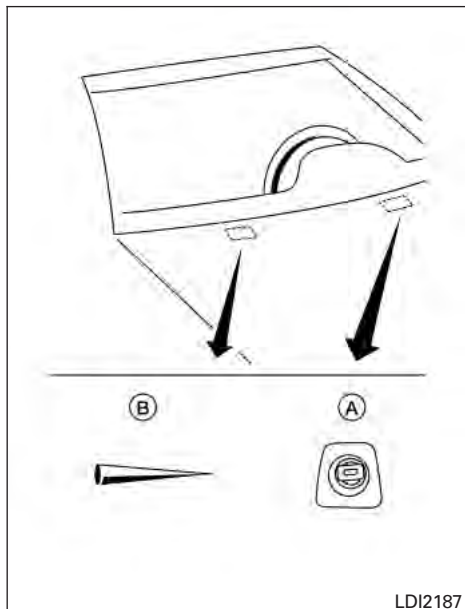
Replace the wiper blades if they are worn.

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 wiper blade so the dimple is in the groove.

6. 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.



Be careful not to let anything get into the washer nozzle (A). This may cause clogging or improper windshield washer operation. If something gets into the nozzle, remove it with a needle or small pin (B).

Rear window wiper blade

Contact a NISSAN dealer if checking or replacement is required.

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 disc-type brakes self-adjust every time the brake pedal is applied. The rear drum-type brakes self-adjust every time the parking brake is applied.

WARNING

See a NISSAN dealer for a brake system check if the brake pedal height does not return to normal.

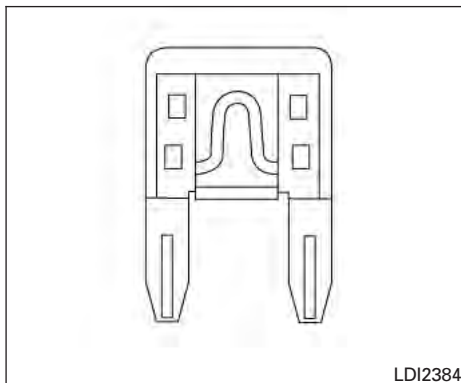
Brake pad wear indicators

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.

FUSES

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".

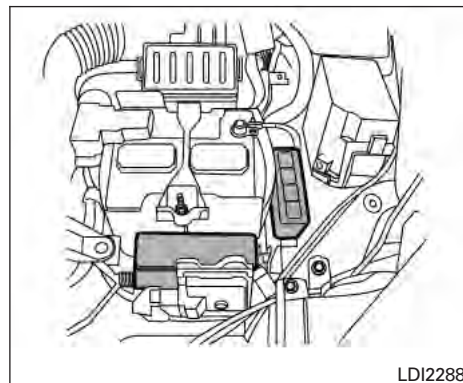


LDI2384

If any electrical equipment does not operate, check for an open fuse.

Fuses are used in the passenger and engine compartment. Spare fuses are provided and can be found in the passenger compartment fuse box.

When installing a fuse make sure the fuse is installed in the fuse box securely.



LDI2288

ENGINE COMPARTMENT

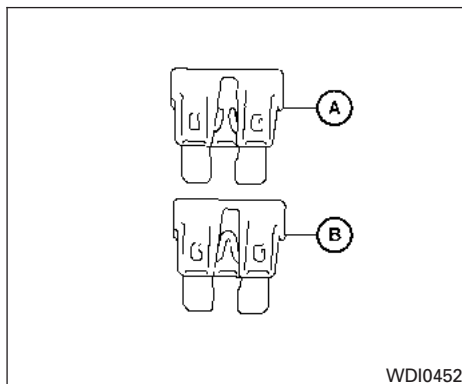
CAUTION

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.

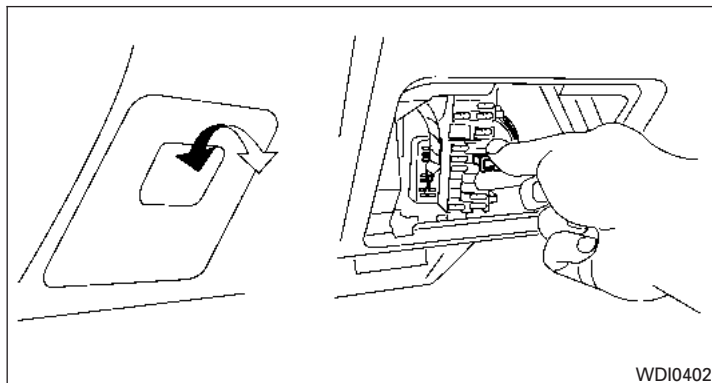
If any electrical equipment does not come on, check for an open fuse.

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.



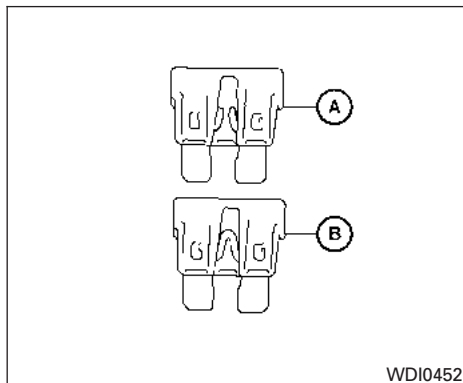
PASSENGER COMPARTMENT

⚠ CAUTION

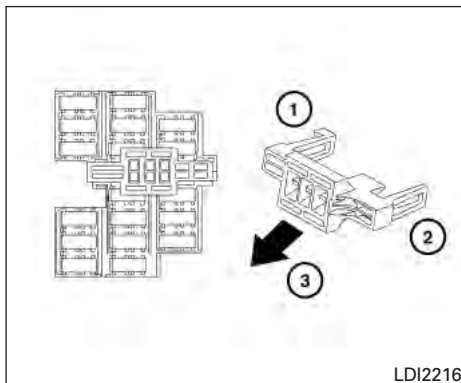
Never use a fuse of a higher or lower amperage rating than specified on the fuse box cover. This could damage the electrical system or cause a fire.

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. Pull the fuse box cover to remove.
3. Remove the fuse with the fuse puller.



4. If the fuse is open (A), replace it with an equivalent good fuse (B).
5. Push the fuse box cover to install.
6. If a new fuse also opens, have the electrical system checked and repaired by a NISSAN dealer.



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.

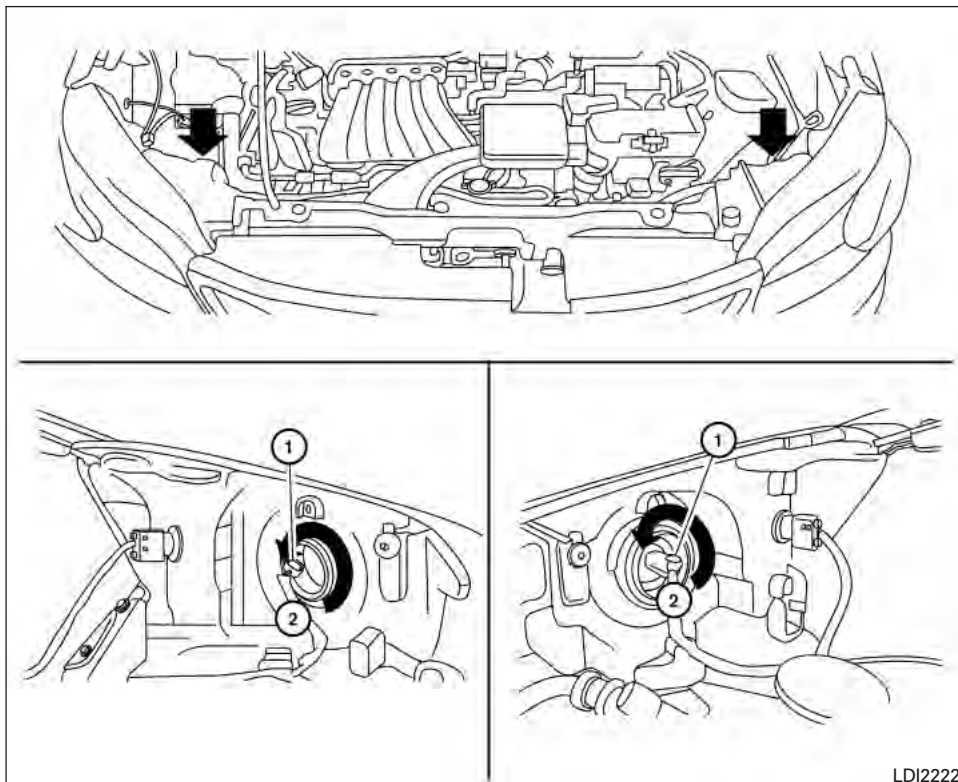
How to replace the extended storage switch:

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) and (2) found on each side of the storage switch.
5. Pull the storage switch straight out from the fuse box (3).

LIGHTS

HEADLIGHTS

Replacing the halogen headlight bulb



LDI2222

Disconnect the negative battery cable before replacement and installation of the headlight bulb.

- ① Release the clip on the connector.
- ② Rotate the bulb counterclockwise and pull out to remove. Replace as necessary.

CAUTION

- **Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, contact a NISSAN dealer.**
- **Do not leave the headlight assembly open without a bulb installed for a long period of time. Dust, moisture, smoke, etc. entering the headlight body may affect bulb performance. Remove the bulb from the headlight assembly just before a replacement bulb is installed.**
- **Only touch the base when handling the bulb. Never touch the glass envelope. Touching the glass could significantly affect bulb life and/or headlight performance.**
- **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.**
- **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.

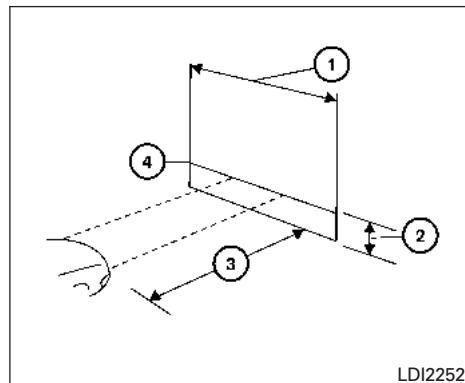
Aiming the headlights

The headlights on your vehicle are properly aimed at the assembly plant. If your vehicle has been in an accident, the alignment of your headlights should be checked by a NISSAN dealer.

Vertical aim adjustment

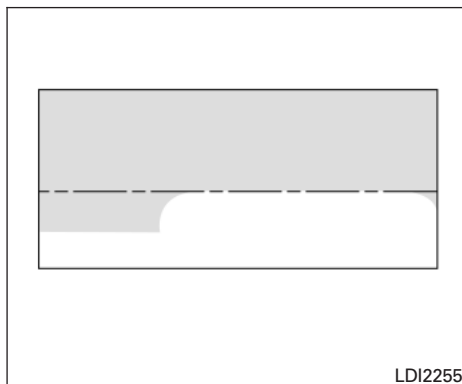
NOTE:

Due to a maximum load condition of the vehicle, headlight aiming adjustment may be necessary. Please perform the following procedure:

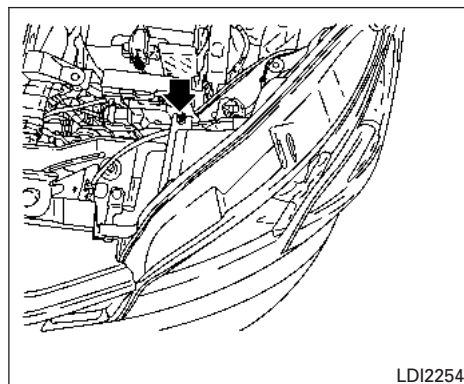


1. Park the vehicle directly in front of a wall or screen on a level surface, approximately 25 feet (7.6 meters) away.
 - ① 8 feet (2.4 meters)
 - ② Center height of headlight to ground
 - ③ 25 feet (7.6 meters)
 - ④ Horizontal reference line
2. Measure the height from the center of the headlight to the ground and mark an 8 foot (2.4 meter) horizontal reference line on the vertical wall or screen at this height (a piece of masking tape works well).

3. Turn on the low beam headlights to illuminate the wall or screen and open the hood.



4. On the wall or screen you will observe an area of high intensity light. The top of the high intensity area should touch the horizontal reference line. If not, the beam will need to be adjusted.



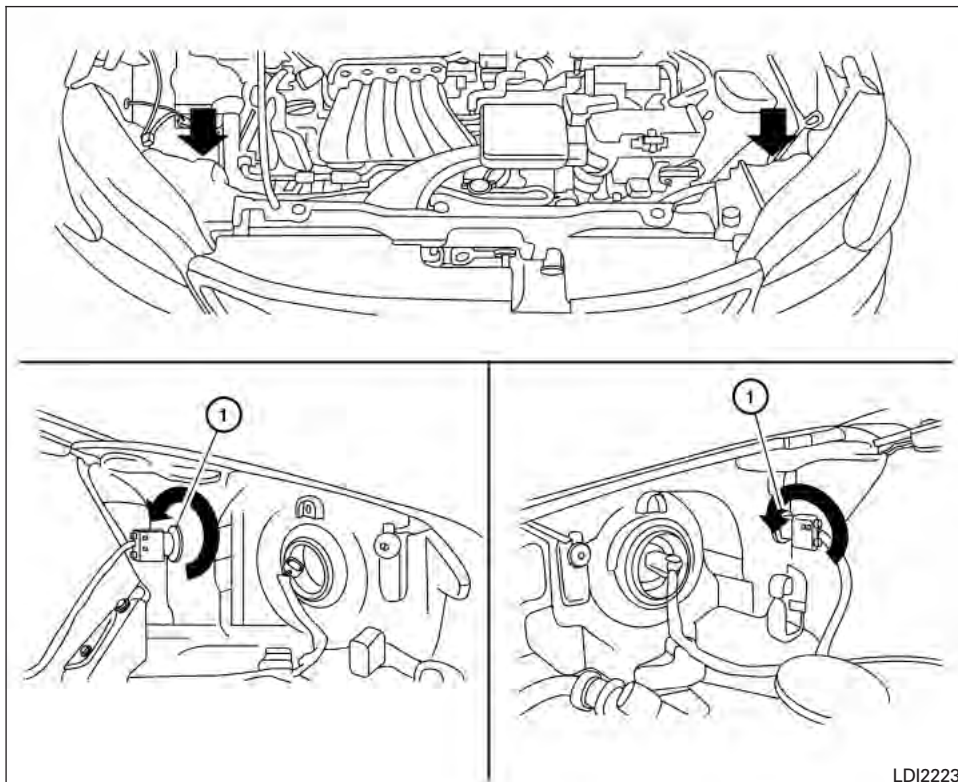
5. Locate the vertical adjuster on each headlight, then use a suitable tool to adjust the headlight up or down.
6. Close the hood and turn off the headlights.

NOTE:

Horizontal aim is not required for this vehicle and is not adjustable.

PARK/TURN SIGNAL LIGHTS

Replacing the park/turn signal bulb



Disconnect the negative battery cable before replacement and installation of the headlight bulb.

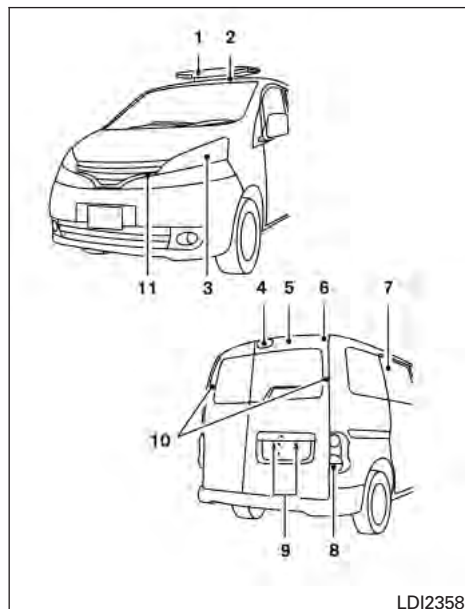
- ① Rotate the bulb counterclockwise and pull out to remove. Replace as necessary.

EXTERIOR AND INTERIOR LIGHTS

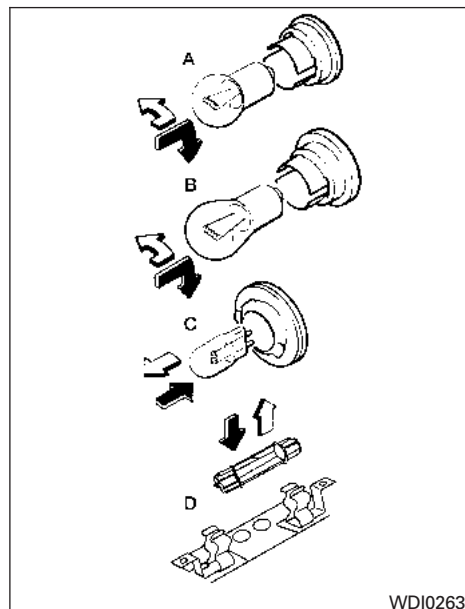
Item	Wattage (W)	Bulb No.
Headlight assembly		
High/ Low	60/55	H13
Park/Turn	28/8	3457NAK
Step light	5	T10
Map light	5	T10
Room light	8	T10
Cargo light	5	T10
Personal light	8	T10
High-mounted stop light	16	T16
Rear combination light		
Tail/Stop	27/7	3157K
Backup (reversing)	16	T16
Turn	27	3157AK
License plate light	5	T10
Trouble light	—	—
Roof light	—	—
Rear exit light	—	—

* See a NISSAN dealer for replacement.

Always check with the Parts Department at a NISSAN dealer for the latest parts information.



1. Roof light
2. Map light
3. Headlight assembly
4. High-mount stop light
5. Cargo light
6. Room light
7. Personal light
8. Rear combination light
9. License plate light
10. Rear exit light
11. Trouble light



Replacement procedures

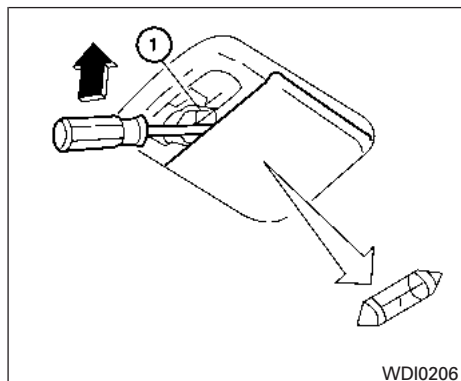
All other lights are either type A, B, C or D. When replacing a bulb, first remove the lens, lamp and/or cover.



Indicates bulb removal

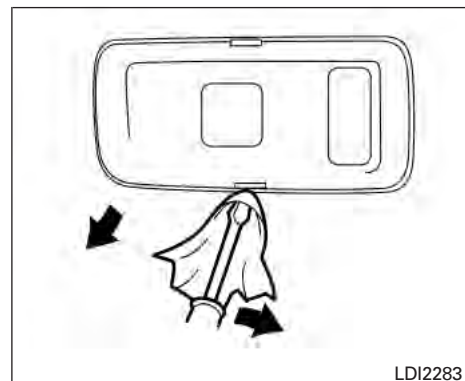


Indicates bulb installation



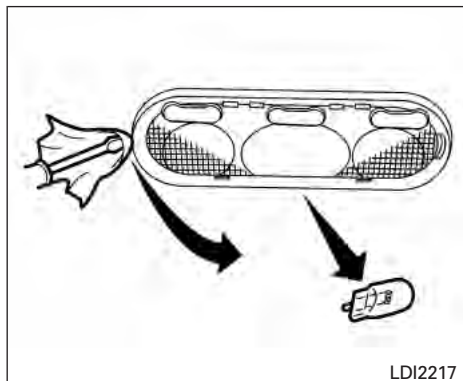
Room light

Use a cloth to protect the housing.



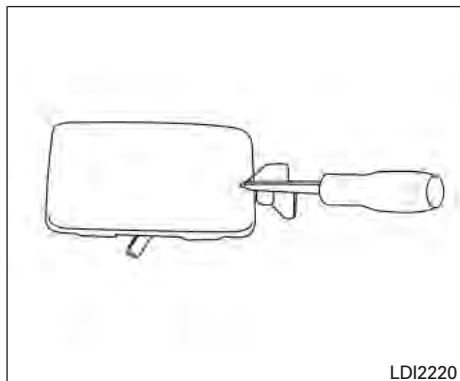
Personal light

Use a cloth to protect the housing.



Map light

Use a cloth to protect the housing.



Cargo light

Use a cloth to protect the housing.

WHEELS AND TIRES

If you have a flat tire, see “Flat tire” in the “In case of emergency” section of this manual.

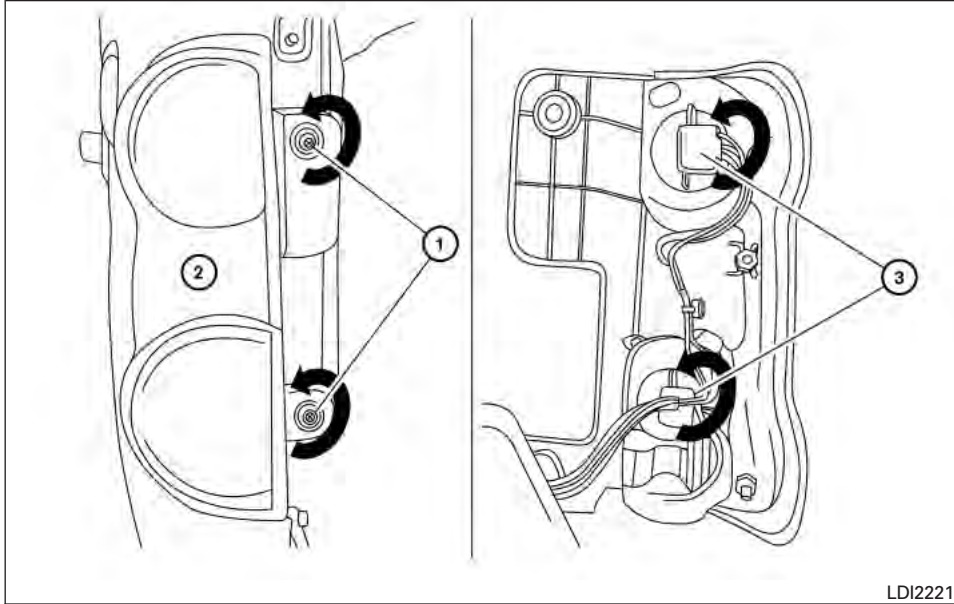
TIRE PRESSURE

Tire Pressure Monitoring System (TPMS)

This vehicle is equipped with the Tire Pressure Monitoring System (TPMS). It monitors tire pressure of all 4 tires except the spare. When the low tire pressure warning light is lit and the CHECK TIRE PRES (pressure) warning is displayed in the odometer, one or more of your tires is significantly under-inflated.

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 “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, “Tire



Rear combination light

- ① Remove the fasteners.
- ② Remove the rear combination light assembly.
- ③ Remove the bulb(s) and replace as necessary.

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. 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

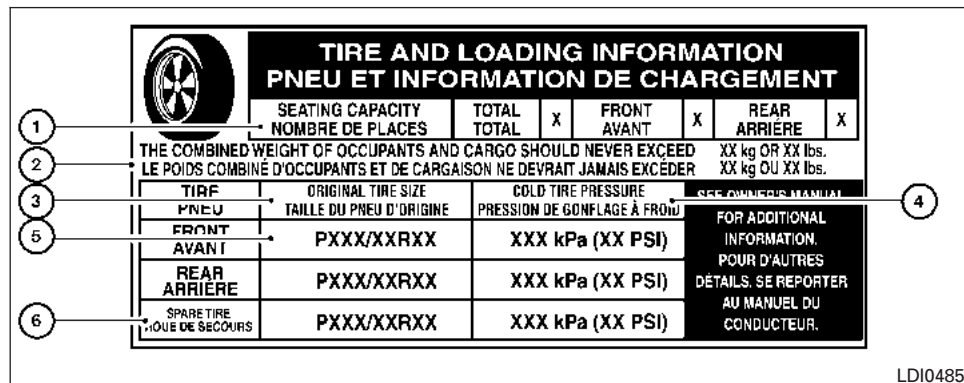
been parked for 3 or more hours, or driven less than 1 mile (1.6 km) at moderate speeds.

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. 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” in the Warranty Information Booklet.**



Tire and loading information label

- ① Seating capacity: The maximum number of occupants that can be seated in the vehicle.
- ② Vehicle load limit: See "Vehicle loading information" in the "Technical and consumer information" section.
- ③ Original tire size: The size of the tires originally installed on the vehicle at the factory.

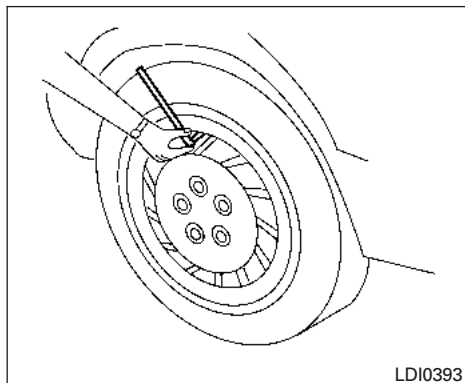
- ④ Cold tire pressure: Inflate the tires to this pressure when the tires are cold. Tires are considered COLD after the vehicle has been parked for 3 or more hours, or driven less than 1 mile (1.6 km) at moderate speeds. The recommended cold tire inflation is set by the manufacturer to provide the best balance of tire wear, vehicle handling, driveability, tire noise, etc., up to the vehicle's GVWR.
- ⑤ Tire size - refer to "Tire labeling" in this section.

⑥ Spare tire size.

Payload and replacement tire

Your vehicle is equipped with special high load index 94 tires to carry a payload of up to 1,500 lbs (680 kg) as indicated on your tire information placard. Some aftermarket replacement tires may have lower load index ratings. While NISSAN does not encourage you to do so, please note that if you choose to purchase a tire with a lower load index rating, the max payload capacity of your vehicle will be reduced (for example, tires with load index 84 would reduce max payload to 750 lbs (340 kg) and tires with load index 88 would reduce max payload to 1,200 lbs (544 kg)).

Please refer to replacement tire manufacturer usage recommendations and tire pressures.



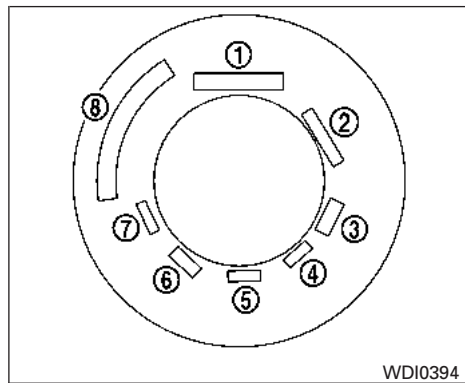
LDI0393

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: 185/65R15	42 psi (290 kPa)
Rear Original Tire: 185/65R15	42 psi (290 kPa)
Spare Tire: 185/65R15	42 psi (290 kPa)

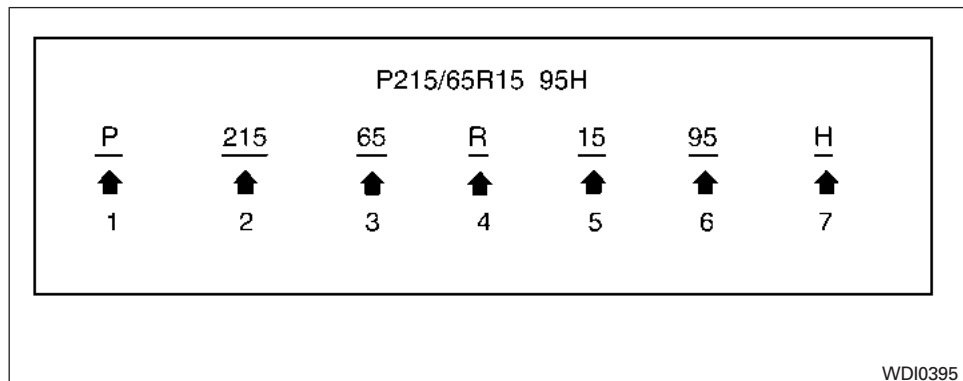


WDI0394

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.



Example

① Tire size (example: P215/65R15 95H)

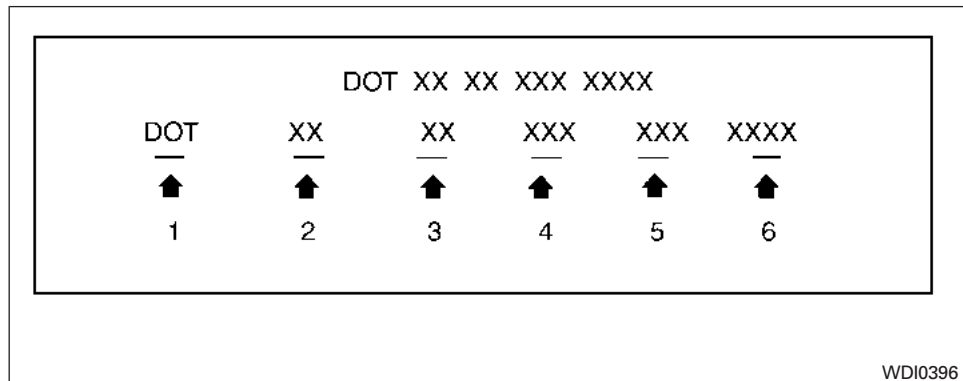
1. P: The "P" indicates the tire is designed for passenger vehicles (not all tires have this information).
2. Three-digit number (215): This number gives the width in millimeters of the tire from sidewall edge to sidewall edge.
3. Two-digit number (65): This number, known as the aspect ratio, gives the 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.



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” in the Warranty Information Booklet.**

All season tires

NISSAN specifies All Season tires on some models to provide good performance all year, including snowy and icy road conditions. All Season

tires are identified by ALL SEASON and/or M&S on the tire sidewall. Snow tires have better snow traction than All Season tires and may be more appropriate in some areas.

Summer tires

NISSAN specifies summer tires on some models to provide superior performance on dry roads. Summer tire performance is substantially reduced in snow and ice. Summer tires do not have the tire traction rating “M&S” on the tire sidewall.

If you plan to operate your vehicle in snowy or icy conditions, NISSAN recommends the use of SNOW tires or ALL SEASON tires on all four wheels.

Snow tires

If snow tires are needed, it is necessary to select tires equivalent in size and load rating to the original equipment tires. If you do not, it can adversely affect the safety and handling of your vehicle.

Generally, snow tires have lower speed ratings than factory equipped tires and may not match the potential maximum vehicle speed. Never exceed the maximum speed rating of the tire.

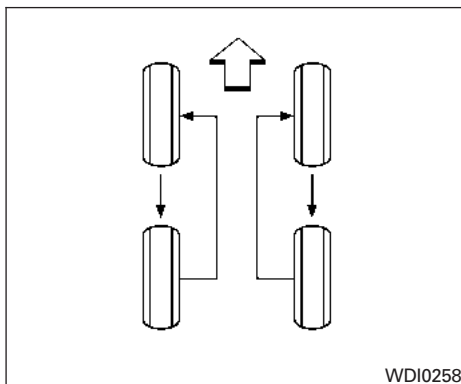
If you install snow tires, they must be the same size, brand, construction and tread pattern on all four wheels.

For additional traction on icy roads, studded tires may be used. However, some U.S. states and Canadian provinces prohibit their use. Check local, state and provincial laws before installing studded tires. Skid and traction capabilities of studded snow tires on wet or dry surfaces may be poorer than that of non-studded snow tires.

TIRE CHAINS

CAUTION

Do not use tire chains/cables on this vehicle. Doing so will cause damage to the vehicle.



CHANGING WHEELS AND TIRES

Tire rotation

NISSAN recommends rotating the tires every 5,000 miles (8,000 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:

83 ft-lb (113 N·m)

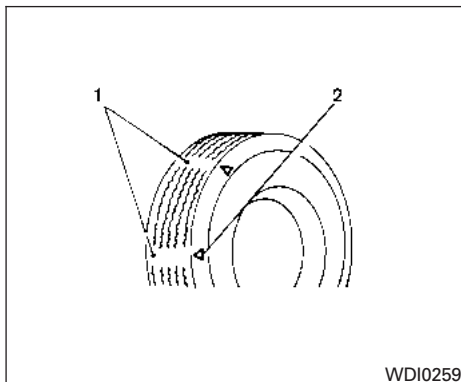
The wheel nuts must be kept tightened to specifications at all times. It is recommended that wheel nuts be tightened to specification at each tire rotation interval.

After rotating the tires, adjust the tire pressure to the cold tire pressure specification shown on the tire and loading information label, see “Checking tire pressure” in the “Maintenance and do it yourself” section and “Tire and loading information label” in the “Technical and consumer information” section.

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” in the Warranty Information Booklet.



WDI0259

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” or 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. Such interference can lead to decreased braking efficiency and/or early brake pad 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" in the Warranty Information Booklet.**

Wheel balance

Unbalanced wheels may affect vehicle handling and tire life. Even with regular use, wheels can get out of balance. Therefore, they should be balanced as required.

Wheel balance service should be performed with the wheels off the vehicle. Spin balancing the wheels on the vehicle could lead to mechanical damage.

- **For additional information regarding tires, refer to "Important Tire Safety Information" 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

Recommended fluids/lubricants and capacities	9-2	Tire warning label	9-11
Fuel recommendation	9-3	Air conditioner specification label	9-11
Engine oil and oil filter recommendations	9-5	Installing front license plate	9-11
Air conditioner system refrigerant and oil recommendations	9-6	Vehicle loading information	9-12
Specifications	9-7	Terms	9-12
Engine	9-7	Vehicle load capacity	9-13
Wheels and tires	9-8	Loading tips	9-15
Dimensions and weights	9-8	Measurement of weights	9-15
When traveling or registering your vehicle in another country	9-9	Towing a trailer	9-16
Vehicle identification	9-9	Flat towing	9-16
Vehicle identification number (VIN) plate	9-9	Uniform tire quality grading	9-16
Engine serial number	9-9	Emission control system warranty	9-17
F.M.V.S.S. certification label	9-10	Reporting safety defects	9-18
Emission control information label	9-10	Readiness for inspection/maintenance (I/M) test	9-18
Tire and loading information label	9-10	Event Data Recorders (EDR)	9-18
		Owner's Manual/Service Manual order information	9-19

RECOMMENDED FLUIDS/ LUBRICANTS AND CAPACITIES

The following are approximate capacities. The actual refill capacities may be a little 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	14-1/2 gal	12-1/8 gal	55	See “Fuel Recommendation” in this section.
Engine oil	For further details, see “Engine oil and oil filter recommendations” in this section.			
Drain and Refill				
With oil filter change	4-5/8 qt	3-7/8 qt	4.4	• Engine oil with API Certification Mark. • For further details, see “Engine oil and oil filter recommendations” in this section.
Without oil filter change	4-1/2 qt	3-3/4 qt	4.2	• Viscosity SAE 5W-30. • For further details, see “Changing engine oil” in the “Maintenance and do-it-yourself” section.
Cooling system				
With reservoir	2-1/8 gal	1-3/4 gal	8.2	• Pre-diluted Genuine NISSAN Long Life Antifreeze/Coolant (blue) or equivalent.
Continuously variable transmission fluid	Refill to the proper level according to the instructions in the “Maintenance and do-it-yourself” section.			• Genuine NISSAN CVT fluid NS-3. • Use only Genuine NISSAN CVT Fluid NS-3. Using transmission fluid other than Genuine NISSAN CVT Fluid NS-3 will damage the CVT, which is not covered by the NISSAN new vehicle limited warranty.
Brake fluid				• Genuine NISSAN Super Heavy Duty Brake Fluid (available in mainland USA through a NISSAN dealer) or equivalent DOT 3.
Multi-purpose grease	—	—	—	• NLGI No. 2 (Lithium Soap base)
Air conditioning system refrigerant	—	—	—	• HFC-134a (R-134a). • For further details, see “Air conditioner specification label” in this section.
Air conditioning system oil	—	—	—	• Genuine NISSAN A/C System Oil Type S or equivalent. • For further details, see “Air conditioner specification label” in this section.
Windshield-washer fluid	1-1/4 gal	1 gal	4.5	• Genuine NISSAN Windshield Washer Concentrate Cleaner & Antifreeze or equivalent

FUEL RECOMMENDATION

Use unleaded regular gasoline with an octane rating of at least 87 AKI (Anti-Knock Index) number (Research octane number 91).

CAUTION

- **Using a fuel other than that specified could adversely affect the emission control 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 com-

patibility 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.

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.

API certification mark



API service symbol



LT12061

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 "Recommended fluids/lubricants and capacities" 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	MR20DE
Type	Gasoline, 4-cycle, DOHC
Cylinder arrangement	4-cylinder, inline
Bore x Stroke	in (mm) 3.307x 3.547 (84 x 90.1)
Displacement	cu in (cm ³) 121.86 (1,997)
Firing order	1-3-4-2
Idle speed	No adjustment is necessary.
CVT (in "N" position)	
Ignition timing (degree B.T.D.C. at idle speed)	
CO % at idle	
Spark plug	FXE20HR-11
Spark plug gap (Nominal)	in (mm) 0.043 (1.1)
Camshaft operation	Timing chain

WHEELS AND TIRES

Wheels	15 x 5.5 JJ
Tires	185/65R15
Spare tire	Full size

DIMENSIONS AND WEIGHTS

Overall length	with front license plate	in (mm)	186.9 (4,746.8)
	without front license plate	in (mm)	186.3 (4,732.5)
Overall width		in (mm)	79.1 (2010)
Overall height	with roof light	in (mm)	74.5 (1,893.3)
	without roof light	in (mm)	73.7 (1872.7)
Front Track		in (mm)	60 (1,525)
Rear Track		in (mm)	59.8 (1,520)
Wheelbase		in (mm)	115.2 (2,925)
Gross vehicle weight rating		lb (kg)	See the "F.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.

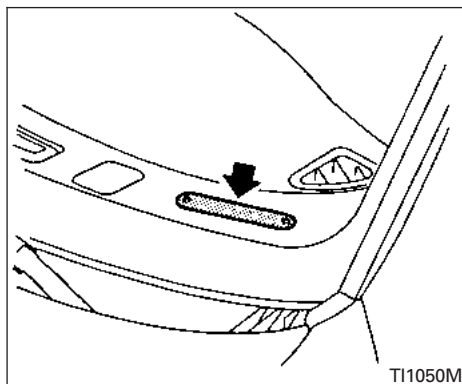
Using fuel with an octane rating that is too low may cause engine damage. All gasoline vehicles must be operated with unleaded gasoline. Therefore, avoid taking your vehicle to areas where appropriate fuel is not available.

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.

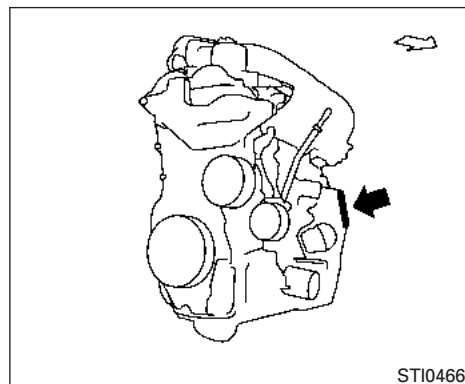
When any vehicle is to be taken into another country, state, province or district and registered, its modifications, transportation and registration are the responsibility of the user. NISSAN is not responsible for any inconvenience that may result.

VEHICLE IDENTIFICATION



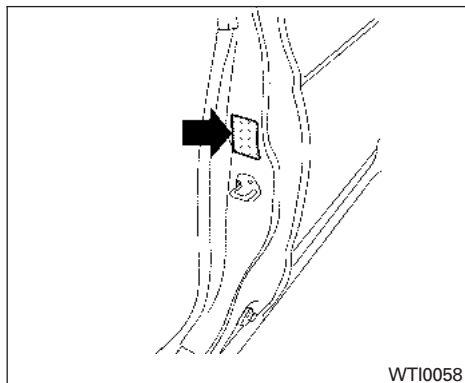
VEHICLE IDENTIFICATION NUMBER (VIN) PLATE

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.



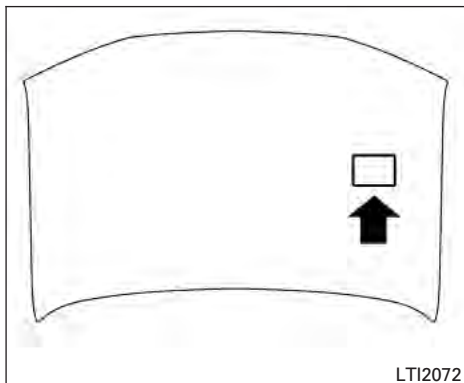
ENGINE SERIAL NUMBER

The number is stamped on the engine as shown.



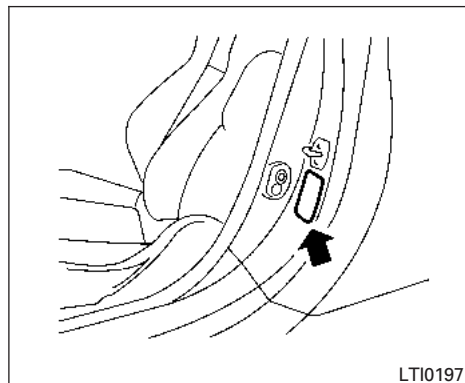
F.M.V.S.S. CERTIFICATION LABEL

The Federal Motor Vehicle Safety Standard (F.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

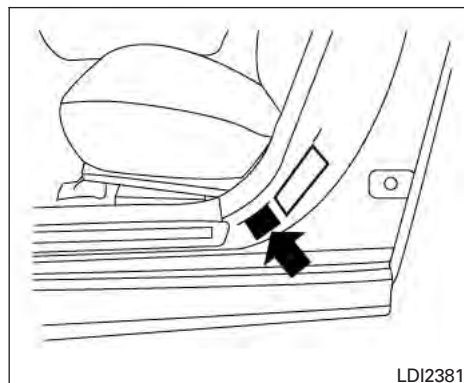
The emission control information label is attached to the underside of the hood as shown.



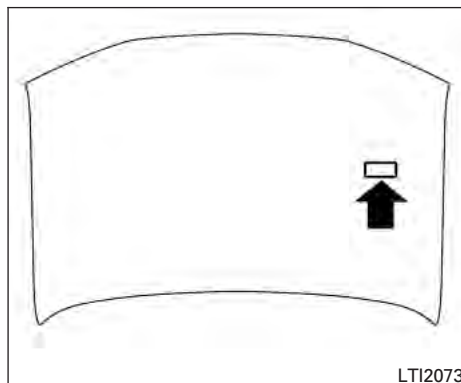
TIRE AND LOADING INFORMATION LABEL

The cold tire pressure is shown on the Tire and Loading Information label. The label is located as shown.

INSTALLING FRONT LICENSE PLATE

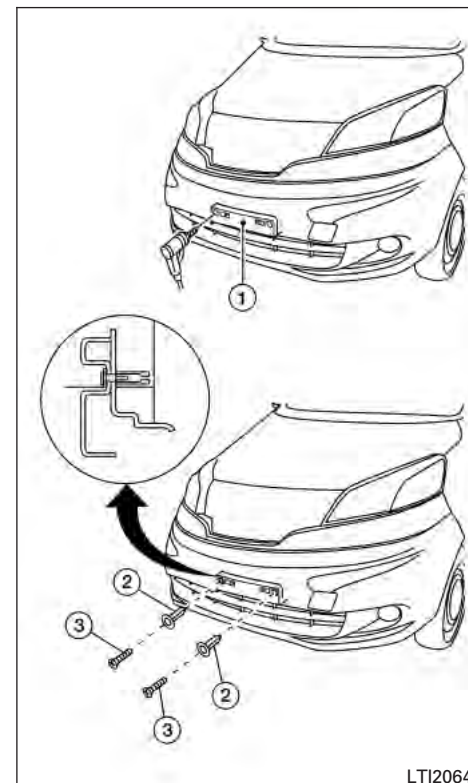


TIRE WARNING LABEL



AIR CONDITIONER SPECIFICATION LABEL

The air conditioner specification label is affixed to the underside of the hood as shown.



VEHICLE LOADING INFORMATION

Use the following steps to mount the front license plate:

Before mounting the license plate, confirm that the following parts are enclosed in the plastic bag:

- License plate bracket
- License plate screws x 2
- Screw grommets x 2

1. Hold the license plate bracket ① and make a shallow hole in the bumper fascia using a drill. To avoid damaging the area behind the fascia, apply only light pressure to the drill.
2. Insert the grommets ② into the holes in the bumper fascia.
3. Mount the license plate bracket using the two screws ③.
4. Mount the front license plate.

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. 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. certification label.
- **GCWR (Gross Combined Weight rating)** - The maximum total weight rating of the vehicle, passengers, cargo, and trailer.

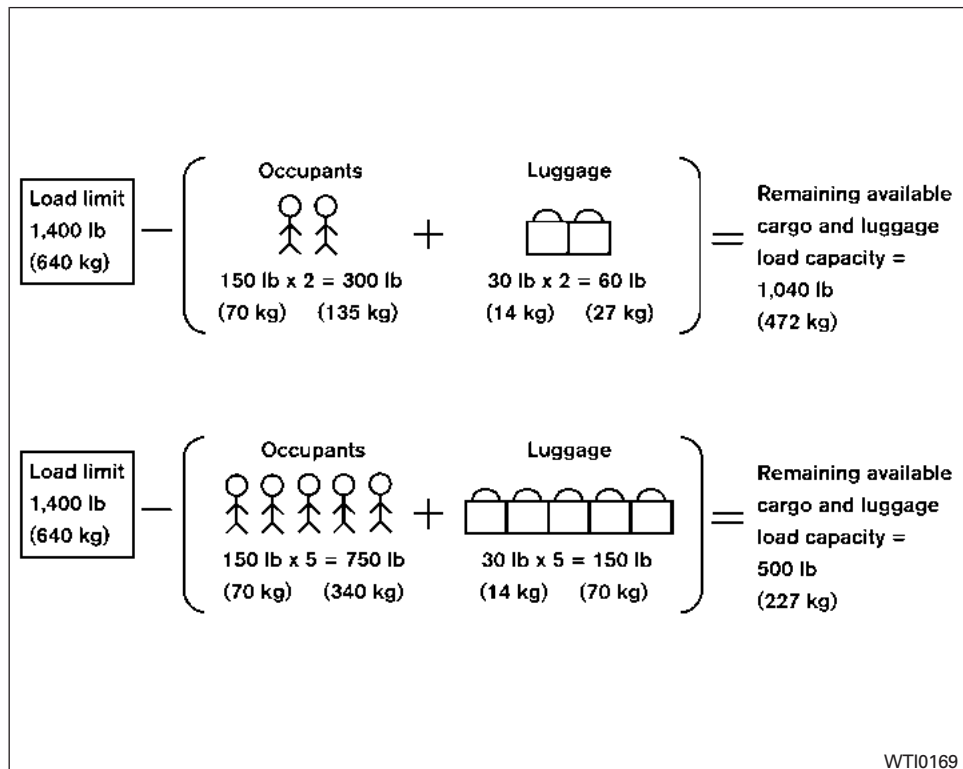
- Vehicle Capacity Weight, Load limit, Total load capacity - maximum total weight limit specified of the load (passengers and cargo) for the vehicle. This is the maximum combined weight of occupants and cargo that can be loaded into the vehicle. If the vehicle is used to tow a trailer, the trailer tongue 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

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. Both the GVWR and GAWR are located on the F.M.V.S.S. certification label. See “Measurement of weights” in this section.

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.



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" in this section.

Also check tires for proper inflation pressures. See the Tire and Loading Information label.

LOADING TIPS

- The GVW must not exceed GVWR or GAWR as specified on the F.M.-V.S.S. 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 and improper loading 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

Do not tow a trailer with your vehicle.

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 continuously variable 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.**

Continuously Variable Transmission

To tow a vehicle equipped with a continuously variable transmission, an appropriate vehicle dolly **MUST** be placed under the towed vehicle's drive wheels. **Always** follow the dolly manufacturer's recommendations when using their product.

UNIFORM TIRE QUALITY GRADING

DOT (Department of Transportation) Quality Grades: All passenger car tires must conform to federal safety requirements in addition to these grades.

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example:

Treadwear 200 Traction AA Temperature A

Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one-half (1 1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction AA, A, B and C

The traction grades, from highest to lowest, are AA, A, B, and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

 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:

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

REPORTING SAFETY DEFECTS

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 1-877-NIS-NCV1 (1-877-647-6281).

9-18 Technical and consumer information

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

OWNER'S MANUAL/SERVICE MANUAL ORDER INFORMATION

the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer and NISSAN dealer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR. EDR data will only be accessed with the consent of the vehicle owner or lessee or as otherwise required or permitted by law.

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 current pricing and availability of genuine **NISSAN Service Manuals**, contact:

1-800-450-9491
www.nissan-techinfo.com

For current pricing and availability of genuine **NISSAN Owner's Manuals**, contact:

1-800-247-5321

MEMO

10 Index

A

ABS (Anti-lock Braking System) 5-20
Air bag (See supplemental restraint system) 1-39
Air bag system
 Front (See supplemental front impact air bag system) 1-47
Air bag warning labels 1-54
Air bag warning light 1-55, 2-12
Air cleaner housing filter 8-17
Air conditioner
 Air conditioner operation 4-16
 Air conditioner service 4-22
 Air conditioner specification label 9-11
 Air conditioner system refrigerant and oil recommendations 9-6
 Heater and air conditioner controls 4-13
 Rear seat air conditioner 4-21
 Servicing air conditioner 4-22
Air flow charts 4-17
Anchor point locations 1-24
Antenna 4-46
Anti-lock brake warning light 2-9
Anti-lock Braking System (ABS) 5-20
Audible reminders 2-15
Audio system 4-22
 Bluetooth® audio 4-42
 Compact disc (CD) player 4-34
 FM/AM/SAT radio with compact disc (CD) player 4-30

Audio System
 iPod® Player 4-38
Audio system
 Radio 4-22
 Steering wheel audio control switch 4-46
 USB interface 4-37
Automatic
 Automatic power window switch 2-26
Automatic door locks 3-8
AUX jack 4-36

B

Battery 8-13
 Charge warning light 2-9
Before starting the engine 5-9
Belt (See drive belt) 8-16
Bluetooth® audio 4-42
Bluetooth® hands-free phone system 4-48
Booster seats 1-35
Brake
 Anti-lock Braking System (ABS) 5-20
 Brake fluid 8-12
 Brake light (See stop light) 8-28
 Brake system 5-19
 Brake warning light 2-9
 Brake wear indicators 2-15, 8-19
 Parking brake operation 5-14
 Self-adjusting brakes 8-19
Brakes 8-19
Break-in schedule 5-16
Brightness/contrast button 4-7

C

Brightness control
 Instrument panel 2-20
Bulb check/instrument panel 2-8
Bulb replacement 8-28
Capacities and recommended
fuel/lubricants 9-2
Cargo light 2-29
Cargo (See vehicle loading information) 9-12
Car phone or CB radio 4-47
CD care and cleaning 4-45
CD player (See audio system) 4-34
Child restraints 1-18, 1-19, 1-21
 Precautions on child restraints 1-19, 1-26, 1-31, 1-35
 Top tether strap anchor point locations 1-24
Child restraint with top tether strap 1-23
Child safety sliding door lock 3-9
Chimes, audible reminders 2-15
Cleaning exterior and interior 7-2
Cold weather driving 5-23
Compact disc (CD) player 4-34
Continuously Variable Transmission (CVT) 5-10
 Continuously Variable Transmission (CVT) fluid 8-11
 Driving with Continuously Variable Transmission (CVT) 5-10
Control panel buttons 4-2
 Brightness/contrast button 4-7
 Enter button 4-2

Setting button	.4-5
Controls	
Audio controls (steering wheel).	.4-46
Heater and air conditioner controls.	.4-13
Rear seat air conditioner	.4-21
Coolant	
Capacities and recommended	
fuel/lubricants	.9-2
Changing engine coolant	.8-8
Checking engine coolant level	.8-8
Corrosion protection	.7-5
Cruise control	.5-15
Cup holders	.2-23

D

Defroster switch	
Rear window and outside mirror defroster	
switch.	.2-18
Dimensions and weights	.9-8
Dimmer switch for instrument panel	.2-20
Display controls (see control panel buttons)	.4-2
Door locks	.3-3
Door open warning light.	.2-10
Drive belt	.8-16
Driving	
Cold weather driving.	.5-23
Driving with Continuously Variable	
Transmission (CVT)	.5-10
Precautions when starting and driving.	.5-2

E

Economy - fuel.	.5-17
-------------------------	-------

Emission control information label	.9-10
Emission control system warranty	.9-17
Engine	
Before starting the engine	.5-9
Capacities and recommended	
fuel/lubricants	.9-2
Changing engine coolant	.8-8
Changing engine oil	.8-10
Changing engine oil filter	.8-11
Checking engine coolant level	.8-8
Checking engine oil level	.8-9
Engine compartment check locations	.8-6
Engine cooling system	.8-7
Engine oil	.8-9
Engine oil and oil filter recommendation.	.9-5
Engine oil pressure warning light	.2-10
Engine oil viscosity	.9-5
Engine serial number	.9-9
Engine specifications	.9-7
Starting the engine	.5-9
Enter button	.4-2
Event data recorders	.9-18
Exhaust gas (Carbon monoxide)	.5-2
Extended storage switch	.8-23

F

Flashers (See hazard warning flasher switch)	.6-2
Flat tire	.6-2
Floor mat positioning aid	.7-5
Fluid	
Brake fluid	.8-12
Capacities and recommended	
fuel/lubricants	.9-2

Continuously Variable Transmission	
(CVT) fluid	.8-11
Engine coolant.	.8-7
Engine oil	.8-9
Windshield-washer fluid.	.8-12
F.M.V.S.S. certification label.	.9-10
Front air bag system	
(See supplemental restraint system)	.1-47
Front seats.	.1-2
Fuel	
Capacities and recommended	
fuel/lubricants	.9-2
Fuel economy	.5-17
Fuel-filler door and cap	.3-11
Fuel-filler door lock opener lever	.3-11
Fuel gauge.	.2-6
Fuel octane rating.	.9-4
Fuel recommendation.	.9-3
Loose fuel cap warning	.2-4, 3-11
Fuses	.8-20
Fusible links	.8-22

G

Gas cap	.3-11
Gauge	
Fuel gauge.	.2-6
Odometer	.2-4
Speedometer	.2-3
Tachometer	.2-5
Trip computer	.2-6
Trip odometer	.2-4
General maintenance	.8-2
Glove box.	.2-24
Glove box lock.	.2-24

H

Hands-free phone system, Bluetooth®	.4-48
Hazard warning flasher switch	.6-2
Headlight and turn signal switch	.2-18
Headlight control switch	.2-18
Headlights	.8-24
Head restraints	.1-4
Heater	
Heater and air conditioner controls. . . .	.4-13
Heater operation	.4-15
Rear seat air conditioner	.4-21
Hood release	.3-10
Horn	.2-20

I

Ignition switch	.5-7
Immobilizer system	.2-15, 3-2, 5-8
Important vehicle information label	.9-10
Increasing fuel economy.	.5-17
Indicator lights and audible reminders (See warning/indicator lights and audible reminders)	.2-8
Inside mirror	.3-14
Instrument brightness control	.2-20
Instrument panel	.0-6, 2-2
Instrument panel dimmer switch	.2-20
Interior light	.2-27, 2-28
iPod® Player	.4-38
ISOFIX child restraints	.1-21

J

Jump starting	.6-14
-------------------------	-------

K

Key	.3-2
---------------	------

L

Label	
Tire warning	.9-11
Labels	
Air conditioner specification label	.9-11
Emission control information label	.9-10
Engine serial number	.9-9
F.M.V.S.S. certification label.	.9-10
Tire and Loading Information label	.9-10
Vehicle identification number (VIN) plate .	.9-9
Warning labels (for SRS)	.1-54
LATCH (Lower Anchors and Tethers for CHildren)	
System	.1-21
Light	
Air bag warning light	.1-55, 2-12
Brake light (See stop light)	.8-28
Bulb check/instrument panel	.2-8
Bulb replacement	.8-28
Charge warning light	.2-9
Headlight and turn signal switch	.2-18
Headlight control switch	.2-18
Headlights	.8-24
Interior light	.2-27, 2-28
Light bulbs	.8-24
Low tire pressure warning light	.2-10

Low windshield-washer fluid warning light	.2-11
Passenger air bag and status light	.1-48
Security indicator light.	.2-14
Warning/indicator lights and audible reminders	.2-8
Lock	
Child safety sliding door lock.	.3-9
Door locks	.3-3
Fuel-filler door lock opener lever	.3-11
Glove box lock	.2-24
Power door locks	.3-5
Rear door lock.	.3-7
Loose fuel cap warning	.2-4, 3-11
Low fuel warning light	.2-10
Low tire pressure warning light	.2-10
Low windshield-washer fluid warning light. .	.2-11
Luggage (See vehicle loading information) .	.9-12

M

Maintenance	
General maintenance	.8-2
Inside the vehicle	.8-3
Maintenance precautions.	.8-5
Outside the vehicle	.8-2
Seat belt maintenance.	.1-17
Under the hood and vehicle	.8-4
Malfunction indicator light.	.2-13
Manual front seat adjustment.	.1-2
Map pocket.	.2-23
Meters and gauges	.2-3
Instrument brightness control	.2-20
Mirror	
Inside mirror	.3-14

Outside mirror control	.3-14
Outside mirrors	.3-14
Moonroof	.2-27

N

NISSAN vehicle immobilizer system	.2-15, 3-2, 5-8
NISSAN voice recognition system	.4-54

O

Octane rating (See fuel octane rating).	.9-4
Odometer	.2-4
Oil	
Capacities and recommended fuel/lubricants	.9-2
Changing engine oil	.8-10
Changing engine oil filter	.8-11
Checking engine oil level	.8-9
Engine oil	.8-9
Engine oil and oil filter recommendation.	.9-5
Engine oil viscosity	.9-5
One shot call.	.4-50
Outside mirror control	.3-14
Outside mirrors	.3-14
Overheat	
If your vehicle overheats.	.6-16
Owner's manual order form	.9-19
Owner's manual/service manual order information	.9-19

P

Pandora audio	.4-43
Parking	
Parking brake operation	.5-14
Parking/parking on hills	.5-18
Phone, Bluetooth® hands-free system.	.4-48
Power	
Power door locks	.3-5
Power outlet	.2-22
Power steering system	.5-19
Power windows	.2-24
Precautions	
Maintenance precautions.	.8-5
Precautions on child restraints.	.1-19, 1-26, 1-31, 1-35
Precautions on seat belt usage.	.1-11
Precautions on supplemental restraint system	.1-39
Precautions when starting and driving.	.5-2
Programmable features	.4-5
Push starting	.6-16

R

Radio	
Car phone or CB radio	.4-47
FM/AM/SAT radio with compact disc (CD) player.	.4-30
Steering wheel audio control switch	.4-46
Readiness for inspection maintenance (I/M) test	.9-18
Rear door	.3-7
Rear door lock.	.3-7

Rear seat air conditioner	.4-21
RearView Monitor	.4-8
Rear window and outside mirror defroster switch.	.2-18
Rear window wiper and washer switches	.2-17
Recorders	
Event data	.9-18
Refrigerant recommendation	.9-6
Registering your vehicle in another country	.9-9
Reporting safety defects (US only).	.9-18

S

Safety	
Child safety sliding door lock.	.3-9
Child seat belts	.1-19, 1-26, 1-31, 1-35
Reporting safety defects (US only).	.9-18
Seat adjustment	
Front manual seat adjustment	.1-2
Seat belt	
Child safety.	.1-18
Infants and small children	.1-18
Injured Person	.1-14
Larger children.	.1-19
Precautions on seat belt usage.	.1-11
Pregnant women.	.1-14
Seat belt extenders	.1-17
Seat belt maintenance.	.1-17
Seat belts.	.1-11
Shoulder belt height adjustment	.1-16
Three-point type with retractor	.1-14
Seat belt warning light.	.2-12
Seats	
Adjustment.	.1-2
Front seats.	.1-2

Manual front seat adjustment	.1-2
Security indicator light	.2-14
Security system (NISSAN vehicle immobilizer system), engine start	.2-15, 3-2, 5-8
Self-adjusting brakes	.8-19
Service manual order form	.9-19
Servicing air conditioner	.4-22
Setting button	.4-5
Shifting	
Continuously Variable Transmission (CVT)	.5-11
Shoulder belt height adjustment	.1-16
Sliding door	
Manual sliding door	.3-6
Sliding door locks	
Child safety sliding door locks	.3-9
Spark plug replacement	.8-16
Speedometer	.2-3
SRS warning label	.1-54
Starting	
Before starting the engine	.5-9
Jump starting	.6-14
Precautions when starting and driving	.5-2
Push starting	.6-16
Starting the engine	.5-9
Steering	
Power steering system	.5-19
Tilting steering wheel	.3-13
Steering wheel audio control switch	.4-46
Stop light	.8-28
Storage	.2-22
Storage tray	.2-23
Sunroof	.2-27
Sunroof (see Moonroof)	.2-27
Sun visors	.3-13
Supplemental air bag warning labels	.1-54

Supplemental air bag warning light	.1-55, 2-12
Supplemental front impact air bag system	.1-47
Supplemental restraint system	
Information and warning labels	.1-54
Precautions on supplemental restraint system	.1-39
Supplemental restraint system (Supplemental air bag system)	.1-39
Switch	
Automatic power window switch	.2-26
Hazard warning flasher switch	.6-2
Headlight and turn signal switch	.2-18
Headlight control switch	.2-18
Ignition switch	.5-7
Power door lock switch	.3-5
Rear window and outside mirror defroster switch	.2-18
Rear window wiper and washer switches	.2-17
Turn signal switch	.2-20
Vehicle dynamic control (VDC) off switch	.2-21
Windshield wiper and washer switch	.2-16

T

Tachometer	.2-5
Theft (NISSAN vehicle immobilizer system), engine start	.2-15, 3-2, 5-8
Three-way catalyst	.5-2
Tilting steering wheel	.3-13
Tire	
Flat tire	.6-2
Spare tire	.6-4
Tire and Loading Information label	.9-10

Tire placard	.9-10
Tire pressure	.8-32
Tire rotation	.8-39
Types of tires	.8-38
Uniform tire quality grading	.9-16
Wheels and tires	.8-32
Wheel/tire size	.9-8
Tire pressure	
Low tire pressure warning light	.2-10
Tire Pressure Monitoring System (TPMS)	.5-3
Tire warning label	.9-11
Top tether strap child restraint	.1-23
Towing	
Flat towing	.9-16
Tow truck towing	.6-17
Trailer towing	.9-16
Transmission	
Continuously Variable Transmission (CVT) fluid	.8-11
Driving with Continuously Variable Transmission (CVT)	.5-10
Travel (See registering your vehicle in another country)	.9-9
Trip computer	.2-6
Trip odometer	.2-4
Turn signal switch	.2-20

U

Uniform tire quality grading	.9-16
USB interface	
Audio file operation	.4-37

V

Variable voltage control system	.8-16
Vehicle dimensions and weights	.9-8
Vehicle dynamic control (VDC) off switch . .	.2-21
Vehicle dynamic control (VDC) system. . . .	.5-21
Vehicle identification	.9-9
Vehicle identification number (VIN) plate . .	.9-9
Vehicle loading information	.9-12
Vehicle recovery	.6-19
Vehicle security system (NISSAN vehicle immobi- lizer system), engine start	.2-15, 3-2, 5-8
Ventilators	.4-13
Visors	.3-13
Voice Prompt Interrupt.	.4-50
Voice recognition system	.4-54

W

Warning	
Air bag warning light	.1-55, 2-12
Anti-lock brake warning light	.2-9
Battery charge warning light	.2-9
Brake warning light	.2-9
Door open warning light.	.2-10
Engine oil pressure warning light	.2-10
Hazard warning flasher switch	.6-2
Low fuel warning light	.2-10
Low tire pressure warning light	.2-10
Low windshield-washer fluid warning light	.2-11
Passenger air bag and status light	.1-48
Seat belt warning light.	.2-12

Warning/indicator lights and audible reminders	.2-8
Warning labels (for SRS)	.1-54
Warning lights	.2-8
Washer switch	
Rear window wiper and washer switches	.2-17
Windshield wiper and washer switch . . .	.2-16
Weights (See dimensions and weights). . . .	.9-8
Wheels and tires.	.8-32
Wheel/tire size.	.9-8
When traveling or registering your vehicle in another country	.9-9
Windows	
Locking passengers' windows	.2-25
Power windows	.2-24
Windshield-washer fluid.	.8-12
Windshield wiper and washer switch	.2-16
Wiper	
Rear window wiper and washer switches	.2-17
Windshield wiper and washer switch . . .	.2-16
Wiper blades.	.8-18

MEMO

GAS STATION INFORMATION

RECOMMENDED FUEL:

Use unleaded regular gasoline with an octane rating of at least 87 AKI (Anti-Knock Index) number (Research octane number 91).

CAUTION

- **Using a fuel other than that specified could adversely affect the emission control system, and may also affect the warranty coverage.**
- **Under no circumstances should a leaded gasoline be used, because this will damage the three-way catalyst.**
- **Do not use E-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 "Recommended fluids/lubricants and capacities" in the "Technical and consumer information" section.

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.

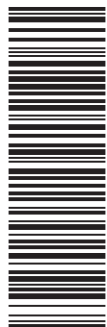
COLD TIRE PRESSURE:

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.



Printing : January 2014
Publication No.: OM14E TM20U2
Printed in U.S.A.

M20-D