

## 2017 **JUKE**

OWNER'S MANUAL and MAINTENANCE INFORMATION

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 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. 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.

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. It is recommended you see a NISSAN dealer for details concerning the particular accessories with which your vehicle is equipped.

Your NISSAN dealer knows your vehicle best.

When you require any service or have any questions, we will be glad to assist you with the extensive resources available to us.

#### READ FIRST — THEN DRIVE SAFELY

Before driving your vehicle, read your 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!

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

- NEVER drive under the influence of alcohol or drugs.
- ALWAYS observe posted speed limits and never drive too fast for conditions.
- ALWAYS give your full attention to driving and avoid using vehicle features or taking other actions that could distract you.
- ALWAYS use your seat belts and appropriate child restraint systems.

Pre-teen children should be seated in the rear seat.

- ALWAYS provide information about the proper use of vehicle safety features to all occupants of the vehicle.
- ALWAYS review this Owner's Manual for important safety information.

## On-pavement and off-road driving

This vehicle will handle and maneuver differently from an ordinary passenger car because it has a higher center of gravity. 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 "Avoiding collision and rollover" and "Driving safety precautions" in the "5. Starting and driving" section of this manual.

#### MODIFICATION OF YOUR VEHI-CLE

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



#### **WARNING**

Installing an aftermarket On-Board Diagnostic (OBD) plug-in device that uses the port during normal driving, for example remote insurance company monitoring, remote vehicle diagnostics, telematics or engine reprogramming, may cause interference or damage to vehicle systems. We do not recommend or endorse the use of any aftermarket OBD plug-in devices, unless specifically approved by NISSAN. The vehicle warranty may not cover damage caused by any aftermarket plug-in device.

#### 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/nowners/navigation/manualsGuide. If you have guestions 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:



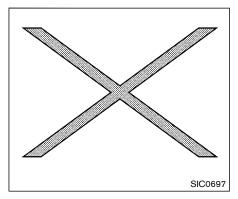
#### **WARNING**

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.



#### A CAUTION

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



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





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









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









Arrows in an illustration that are similar to those

above call attention to an item in the illustration.
CALIFORNIA PROPOSITION 65
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.

## CANADA'S PRODUCTS CONTAINING MERCURY REGULATIONS

The xenon headlights (if so equipped) on your vehicle contain mercury. If these parts require disposal, the repair facility vehicle dismantler or recycler should make sure they are recycled or disposed of as hazardous waste in accordance with applicable laws. For information on safe handling procedures, disposal and recycling options in accordance with Canada's Products Containing Mercury Regulations, go to http://www.ec.gc.ca/mercure-mercury/.

#### CALIFORNIA PERCHLORATE ADVI-SORY

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



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#### ((SiriusXMi))

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## NISSAN CUSTOMER CARE PROGRAM

#### **NISSAN CARES ...**

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

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

For U.S. customers 1-800-NISSAN-1 (1-800-647-7261) For Canadian customers 1-800-387-0122

The Consumer Affairs Department will ask for the following information:

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

OR

You can write to NISSAN with the information at:

For U.S. customers
Nissan North America, Inc.
Consumer Affairs Department
P.O. Box 685003
Franklin, TN 37068-5003
or via e-mail at:
nnaconsumeraffairs@nissan-usa.com

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

If you prefer, visit us at:

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

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

# Table of Contents

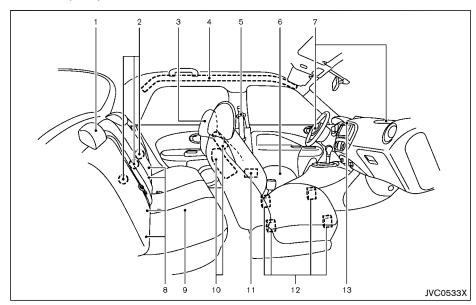
Safety — Seats, seat belts and supplemental restraint system	1
Instruments and controls	2
Pre-driving checks and adjustments	3
Heater, air conditioner, audio and phone systems	4
Starting and driving	5
In case of emergency	6
Appearance and care	7
Do-it-yourself	8
Maintenance and schedules	9
Technical and consumer information	10
Index	11

## **0 Illustrated table of contents**

Seats, seat belts and Supplemental Restraint	
System (SRS)	0-2
Exterior front	
Exterior rear	0-4
Exterior (NISMO models)	0-5
Passenger compartment	0-6

Cockpit	. 0-7
Instrument panel	. 0-8
Meters and gauges	. 0-9
Engine compartment	0-11
MR16DDT engine	0-11
Warning and indicator lights	0-12

#### SEATS, SEAT BELTS AND SUPPLEMENTAL RESTRAINT SYSTEM (SRS)



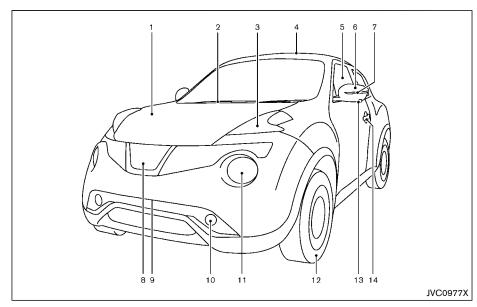
- 1. Rear head restraints (Page 1-5)
- Child restraint anchor points (for top tether strap child restraint) (P.1-30, P.1-34)
- Front head restraints (P.1-5)
   Front-seat Active Head Restraints\* (P.1-9)
- Roof-mounted curtain side-impact and rollover supplemental air bags (P.1-38)

- 5. Seat belts (P.1-10)
- 6. Front seats (P.1-3)
- 7. Supplemental front-impact air bags (P.1-38)
- LATCH (Lower Anchors and Tethers for CHildren) system (P.1-20)
- 9. Rear seats (P.1-4)
  - Child restraints (P.1-18)

- Front seat-mounted side-impact supplemental air bags (P.1-38)
- 11. Seat belt with pretensioners (P.1-52)
- Occupant classification sensors (weight sensors)
  - Advanced Air Bag System (P.1-44)
- 13. Front passenger air bag status light (P.1-46)
- \*: if so equipped

#### 0-2 Illustrated table of contents

#### **EXTERIOR FRONT**

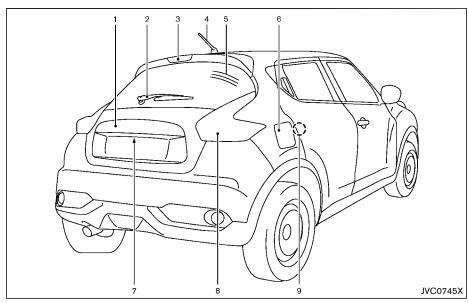


- Hood (P.3-15)
- Windshield wiper and washer
  - Switch operation (P.2-36)
  - Blade replacement (P.8-15)
  - Window washer fluid (P.8-9)

- Parking lights, turn signal lights and front side marker lights
  - Switch operation (P.2-39)
  - Bulb replacement (P.8-26)
- Moonroof\* (P.2-52)
- Power windows (P.2-50)
- Outside mirrors (P.3-22)

- Side turn signal lights
  - Switch operation (P.2-43)
  - Bulb replacement (P.8-26)
- Front view camera\* (P.4-13)
- License plate installation (P.10-13)
- Fog lights\*
  - Switch operation (P.2-44)
  - Bulb replacement (P.8-26)
- 11. Headlights
  - Switch operation (P.2-39)
    - Bulb replacement (P.8-23)
- 12. Tires
  - Wheels and tires (P.8-28, P.10-9)
  - Flat tire (P.6-3)
  - Tire Pressure Monitoring System (TPMS) (P.2-18, P.5-3)
- 13. Side view camera\* (P.4-13)
- 14. Doors
  - Keys (P.3-2)
  - Door locks (P.3-4)
  - Intelligent Key system (P.3-6)
  - Security system (P.2-33)
- if so equipped

#### **EXTERIOR REAR**



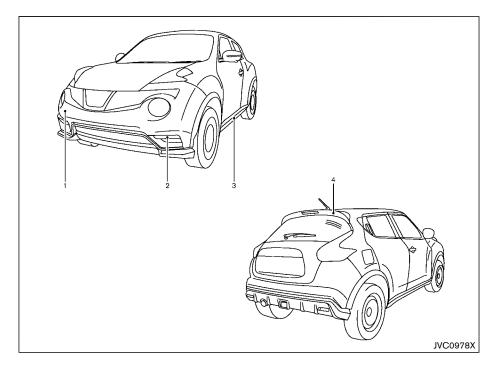
- 1. Liftgate (P.3-16)
  - Intelligent Key system (P.3-6)
- 2. Rear window wiper and washer
  - Switch operation (P.2-37)
  - Window washer fluid (P.8-9)
- 3. High-mounted stop light (P.8-23)

- 4. Antenna (P.4-75)
  - Satellite radio antenna\* (P.4-35)
- 5. Rear window defroster (P.2-38)
- 6. Fuel-filler door
  - Operation (P.3-18)
  - Fuel information (P.10-4)

- Rear view camera
  - RearView Monitor\* (P.4-8)
  - Around View® Monitor\* (P.4-13)
- 8. Rear combination lights
  - Bulb replacement (P.8-26)
- 9. Child safety rear door lock (P.3-6)
- : if so equipped

#### 0-4 Illustrated table of contents

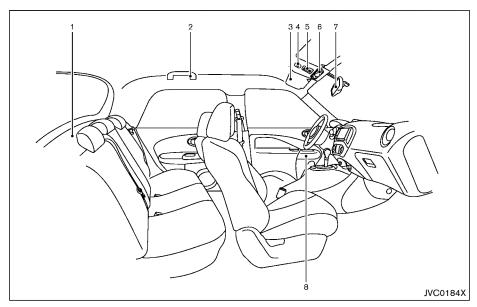
#### **EXTERIOR (NISMO models)**



For NISMO models, the vehicle parts listed below require special care or caution for cleaning. Refer to the additional information in each section.

- 1. Front bumper (P.3-17)
- Daytime running light (P.2-42, P.3-17, P.8-23, P.8-26)
- Side sill extensions (P.3-17)
- Rear spoiler (P.3-17, P.7-3)

#### PASSENGER COMPARTMENT

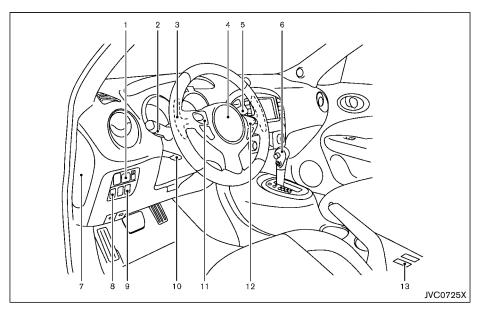


- 1. Cargo area
  - Cargo cover\* (P.2-49)
  - Cargo light (P.2-55, P.8-23)
- 2. Coat hook (P.2-48)
- 3. Sun visors (P.3-21)
- 4. Microphone (P.4-80, P.4-89)
- 5. Moonroof switch\* (P.2-52)

- 6. Room light and map lights (P.2-54)
- 7. Inside rearview mirror (P.3-21)
- 8. Door armrest
  - Power window switch (P.2-50)
  - Power door lock switch (P.3-5)
- the if so equipped

#### 0-6 Illustrated table of contents

#### COCKPIT

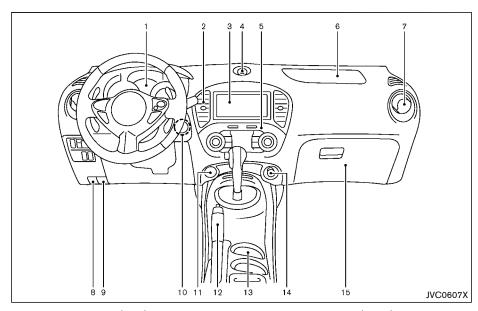


- Outside mirror remote control switch (P.3-22)
- Headlight, fog light and turn signal switch
  - Headlight (P.2-40)
  - Turn signal light (P.2-43)
  - Fog light\* (P.2-44)
- Paddle shifter\* (P.5-16)

- Steering wheel
  - Electric power steering (P.5-34)
  - Horn (P.2-44)
  - Driver's supplemental air bag (P.1-38)
- Wiper and washer switch (P.2-36)

- Shift lever
  - Continuously Variable Transmission (CVT) (P.5-14)
  - Manual Transmission (MT) (P.5-19)
- Fuse box cover (P.8-19)
- Vehicle Dynamic Control (VDC) OFF switch (P.5-37)
- All-Wheel Drive (AWD) switch\* (P.5-29)
- Tilting steering wheel lever (P.3-20)
- Steering-wheel-mounted controls (left side)
  - Audio control (P.4-73)
  - Siri® Eyes Free (P.4-76)
  - Bluetooth® Hands-Free Phone System control (P.4-80, P.4-89)
  - NISSAN Voice Recognition System (with navigation system)\* (P.4-96)
- 12. Steering-wheel-mounted controls (right side)
  - Cruise control switches (P.5-26)
- 13. Heated seat switch\* (P.2-45)
- if so equipped

#### **INSTRUMENT PANEL**



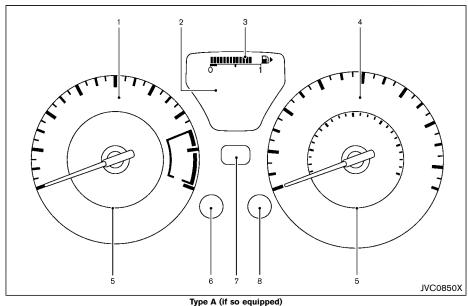
- 1. Meters and gauges (P.2-5)
- Center ventilator (P.4-27)
- 3. Audio system\* or Navigation system\*\* (P.4-35)
- 4. Hazard warning flasher switch (P.6-2)
- 5. Integrated Control System\* (P.2-24)
  - Drive mode (P.5-22)
  - Heater and air conditioner control (P.4-28)

- Defroster switch (P.2-38)
- Heater and air conditioner control (models without Integrated Control System) (P.4-28)
  - Defroster switch (P.2-38)
- 6. Front passenger supplemental air bag (P.1-38)
- 7. Side ventilator (P.4-27)
- 8. Fuel-filler door release handle (P.3-18)

- 9. Hood release handle (P.3-15)
- 10. Push-button ignition switch (P.5-9)
- Auxiliary input jack/USB connection port\* (P.4-38)
- 12. Parking brake (P.5-25)
- 3. Cup holder (P.2-47)
- 14. Power outlet (P.2-46)
- 15. Glove box (P.2-48)
- : if so equipped
- \*\*: Refer to the separate Navigation System Owner's Manual.

#### 0-8 Illustrated table of contents

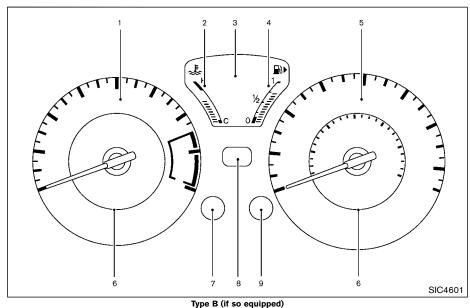
#### **METERS AND GAUGES**



- Tachometer (P.2-9)
- Vehicle information display (P.2-11)
  - Odometer/twin trip odometer (P.2-7)
  - Trip computer (P.2-13)
  - Torque vectoring AWD (AWD model) (P.2-14)
  - Outside air temperature (P.2-12)

- - Fuel gauge (P.2-11)
  - Speedometer (P.2-7)
  - Warning/indicator lights (P.2-15)
  - Instrument brightness control knob (P.2-43)
  - Continuously Variable Transmission (CVT) position indicator\* (P.2-12)

- RESET switch for trip odometer (P.2-7)/Trip computer mode switch (P.2-13)
- if so equipped



Tachometer (P.2-9)

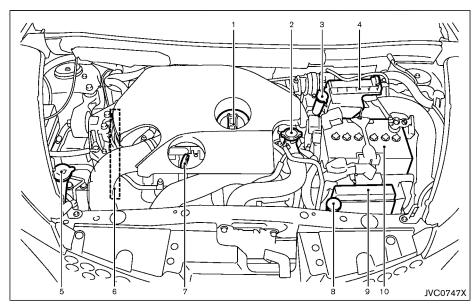
- 2. Engine coolant temperature gauge (P.2-10)
- 3. Vehicle information display (P.2-11)
  - Odometer/twin trip odometer (P.2-7)
    - Trip computer (P.2-13)
  - Torque vectoring AWD (AWD model) (P.2-14)

- Outside air temperature (P.2-12)
- 4. Fuel gauge (P.2-11)
- 5. Speedometer (P.2-7)
- 6. Warning/indicator lights (P.2-15)
- 7. Instrument brightness control knob (P.2-43)
- 8. Continuously Variable Transmission (CVT) position indicator\* (P.2-12)

- RESET switch for trip odometer (P.2-7)/Trip computer mode switch (P.2-13)
- \*: if so equipped

#### 0-10 Illustrated table of contents

#### **ENGINE COMPARTMENT**



#### MR16DDT ENGINE

- Engine oil filler cap (P.8-5)
- Radiator filler cap (P.8-5)
- Vehicle overheat (P.6-11)
- Brake and clutch\* fluid reservoir (P.8-9)
- Air cleaner (P.8-14)
- Window washer fluid reservoir (P.8-9)

- Engine drive belt location (P.8-12) 6.
- Engine oil dipstick (P.8-5)
- Engine coolant reservoir (P.8-5)
- Fuse/fusible link holder (P.8-17)
- Battery (P.8-10)
  - Jump starting (P.6-9)
- for Manual Transmission (MT) models

#### **WARNING AND INDICATOR LIGHTS**

Warning light	Name	Page
AWD	All-Wheel Drive (AWD) warning light (yellow) (AWD model)	2-16
ABS	Anti-lock Braking System (ABS) warning light	2-16
BRAKE	Brake warning light	2-16
+	Charge warning light	2-17
(Į)	Door open warning light	2-17
PS	Electric power steering warning light	2-17
þ	Engine oil pressure warning light	2-17
<u>ш</u> }}	High temperature warning light (if so equipped)	2-18
¥¶	Intelligent Key system warning light	2-18
	Low fuel warning light	2-18
<u>:</u>	Low tire pressure warning light	2-18
	Low washer fluid warning light (if so equipped)	2-20
P‡ SHIFT	P position selecting warning light	2-20

Warning light	Name	Page
為	Seat belt warning light	2-20
Ř	Supplemental air bag warning light	2-20
?	Vehicle Dynamic Control (VDC) warning light	2-21

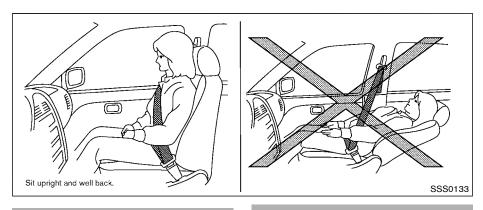
Indicator light	Name	Page
AWD	All-Wheel Drive (AWD) indicator light (green) (AWD model)	2-21
AWD-V	All-Wheel Drive (AWD)-V indicator light (green) (AWD model)	2-21
CVT	Continuously Variable Trans- mission (CVT) indicator light (if so equipped)	2-21
CRUISE	Cruise indicator light	2-21
1	Engine start operation indicator light	2-21
∃Dd≣	Exterior light indicator	2-22
≢D	Front fog light indicator light (if so equipped)	2-22
PASS AIR BAG OFF 2	Front passenger air bag status light	2-22
	High beam indicator light	2-22
SERVICE ENGINE SOON	Malfunction Indicator Light (MIL)	2-22
(F)	Security indicator light	2-23
$\Diamond \Diamond$	Turn signal/hazard indicator lights	2-23
OFF	Vehicle Dynamic Control (VDC) off indicator light	2-23

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

Rear seats	1-3 1-4 1-5
Head restraints/headrests	1-5
Toda Todi airio/Hoda Todo	
Adjustable head restraint/headrest components	1-6
Non-adjustable head	
reer ame read ear ear perions in	1-7
. 10.1.0.0	1-7
Install	1-7
Adjust	1-8
Front-seat Active Head Restraints (if	
so equipped)	1-9
Seat belts 1	-10
	-10
Pregnant women 1	-12
Injured persons 1	-12
Three-point type seat belt 1	-12
Seat belt extenders 1	-15
Seat belt maintenance 1	-15
Child safety 1	-16
Infants 1	-17
Small children 1	-17
Larger children 1	-17

Child restraints	1-18
Precautions on child restraints	1-19
Lower Anchors and Tethers for CHildren System (LATCH)	1-20
Rear-facing child restraint installation using LATCH	1-23
Rear-facing child restraint installation using the seat belts	1-25
Forward-facing child restraint installation	
using LATCH	1-28
Forward-facing child restraint installation using the	<del>!</del>
seat belts	1-30
Booster seats	1-34
Supplemental restraint system	1-38
Precautions on supplemental restraint system	1-38
NISSAN Advanced Air Bag System	
(front seats)	1-44
Front seat-mounted side-impact supplemental air bag and roof-mounted curtain side-impact and	
rollover supplemental air bag systems	1-51
Seat belts with pretensioners (front seats)	1-52
Supplemental air bag warning labels	1-54
Supplemental air bag warning light	1-54
Repair and replacement procedure	1-55

#### **SEATS**

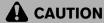




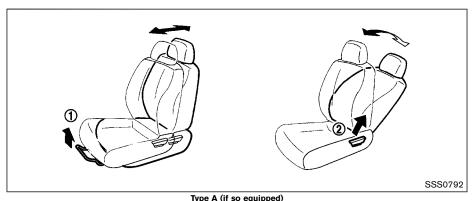
- Do not ride in a moving vehicle when the seatback is reclined. This can be dangerous. The shoulder belt will not be against your body. In an accident, you could be thrown into it and receive neck or other serious injuries. You could also slide under the lap belt and receive serious internal injuries.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

- well back and upright in the seat with both feet on the floor and adjust the seat properly. See "Precautions on seat belt usage" (P.1-10).
- 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.

- To help avoid risk of injury or death through unintended operation of the vehicle and/or its systems, do not leave children, people who require the assistance of others or pets unattended in your vehicle. Additionally, the temperature inside a closed vehicle on a warm day can quickly become high enough to cause a significant risk of injury or death to people and pets.
- 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.



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



JVR0342X

Type B (if so equipped)

#### FRONT SEATS

Front manual seat adjustment

#### Forward and backward:

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

#### Reclining (Type A) (if so equipped):

To recline the seatback, pull the lever (2) 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" (P.1-10).) Also, the seatback can be reclined to allow occupants to rest when the vehicle is stopped and the transmission is in the P (Park) position or N (Neutral) position with the parking brake fully applied.

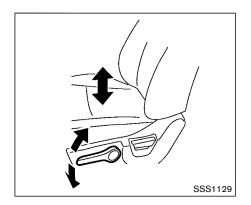
#### Reclining (Type B) (if so equipped):

To recline the seatback, turn the adjusting dial (2) toward the rear of the vehicle and lean back. To bring the seatback forward, turn the adjusting dial toward the front of the vehicle and lean your body forward.

The reclining feature allows adjustment of the seatback for occupants of different sizes for added comfort and to help obtain proper seat belt fit. (See "Precautions on seat belt usage" (P.1-10).) Also, the seatback can be reclined to allow occupants to rest when the vehicle is stopped and the transmission is in the P (Park) position or N (Neutral) position with the parking brake fully applied.

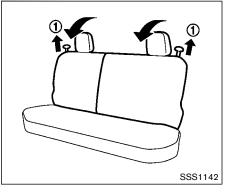
#### NOTE:

- Depending on the passenger's seat sliding position when the passenger seat is unoccupied while driving, a noise may be heard as the side part of the passenger's seat contacts the seat belt tongue. In this case, move the seat to the rearmost position to avoid interference.
- If you are having difficulty turning the adjusting dial, park the vehicle and then open the door or get out of the vehicle to operate the dial.



#### Seat lifter (for driver's seat):

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



**REAR SEATS** 

#### Folding

#### Before folding the rear seats:

Secure the seat belts on the seat belt hooks on the side wall. (See "Seat belt hooks" (P.1-15).)

To fold the seatback, pull the adjusting knob (1).

To return the seatback to the seating position, lift up each seatback and push it to the upright position until it is latched.

#### **HEAD RESTRAINTS/HEADRESTS**

## **CAUTION**

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

Make sure that the seat path is clear before moving the seat.

## WARNING

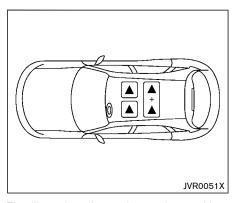
- Do not fold down the rear seats when occupants are in the rear seat area or any objects are on the rear seats.
- Never allow anyone to ride in the cargo area or on the rear seats when they are in the fold-down position. Use of these areas by passengers without proper restraints could result in serious injury in an accident or sudden stop.
- Properly secure all cargo with ropes or straps to help prevent it from sliding or shifting. Do not place cargo higher than the seatbacks. In a sudden stop or collision, unsecured cargo could cause personal

iniury.

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.

### WARNING

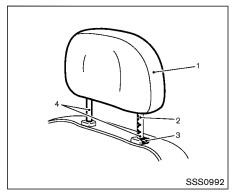
Head restraint/headrest supplement the other vehicle safety systems. They may provide additional protection against injury in certain rear end collisions. Adjustable head restraints/headrests must be adjusted properly, as specified in this section. Check the adjustment after someone else uses the seat. 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 restraint/ headrest. This may increase the risk of serious injury or death in a collision.



The illustration shows the seating positions equipped with head restraint/headrest.

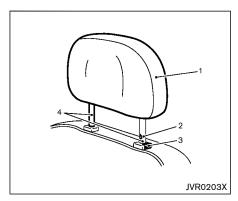
- ▲ Indicates the seating position is equipped with a head restraint.
- Indicates the seating position is equipped with a headrest.
- + Indicates the seating position is not equipped with a head restraint or headrest.
- Your vehicle is equipped with a head restraint/headrest that may be integrated, adjustable or non-adjustable.
- Adjustable head restraints/headrests have multiple notches along the stalk to lock them in a desired adjustment position.

- The non-adjustable head restraints/headrests have 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.



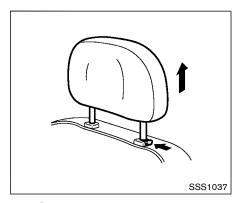
#### ADJUSTABLE HEAD RESTRAINT/ HEADREST COMPONENTS

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



#### NON-ADJUSTABLE HEAD RE-STRAINT/HEADREST COMPONENTS

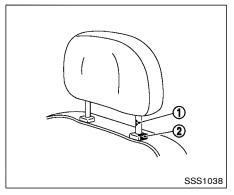
- Removable head restraint/headrest
- Single notch
- Lock knob
- 4. Stalks



#### **REMOVE**

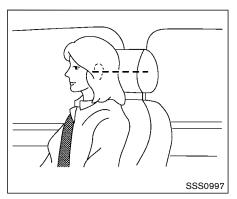
Use the following procedure to remove the head restraint/headrest.

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



#### INSTALL

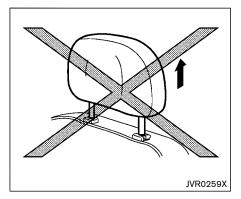
- 1. Align the head restraint/headrest stalks with the holes in the seat. Make sure that the head restraint/headrest is facing the correct direction. The stalk with the adjustment notch (1) must be installed in the hole with the lock knob (2).
- 2. Push and hold the lock knob and push the head restraint/headrest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





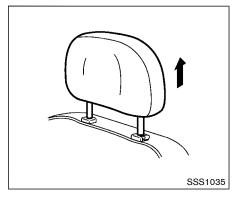
#### For adjustable head restraint/headrest

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.



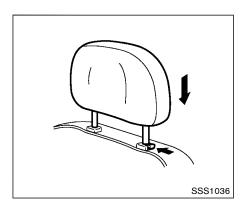
For non-adjustable head restraint/head-rest

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

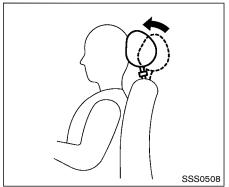
To raise the head restraint/headrest, pull it up. Make sure the head restraint/headrest is positioned so the lock knob is engaged in the notch before riding in that designated seating position.



#### 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.



FRONT-SEAT ACTIVE HEAD RE-STRAINTS (if so equipped)

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

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

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

The front head restraints have multiple adjustment notches.

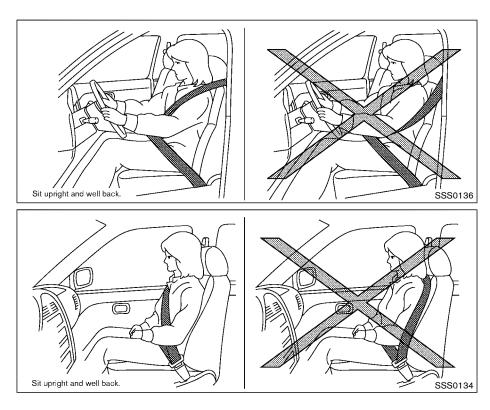
Properly adjust the Active Head Restraints as described in this section.

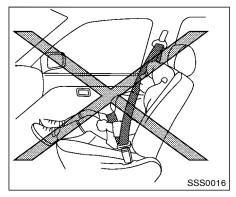
#### **SEAT BELTS**

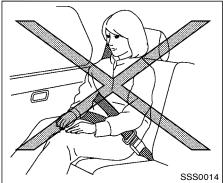
#### PRECAUTIONS ON SEAT BELT **USAGE**

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

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







## **WARNING**

- Every person who drives or rides in this vehicle should use a seat belt at all times. Children should be properly restrained in the rear seat and, if appropriate, in a child restraint.
- 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.
- 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. It is recommended you visit a NISSAN dealer for this service.
- 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. It is recommended you visit a NISSAN dealer for this service.
- All seat belt assemblies, including retractors and attaching hardware, should be inspected after any collision. It is recommended you visit a NISSAN dealer for this service. 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 put the lap/shoulder belt over your abdominal area. Contact your doctor for specific recommendations.

#### INJURED PERSONS

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

#### THREE-POINT TYPE SEAT BELT



#### 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 and upright 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 can not 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.

#### Fastening the seat belts

1. Adjust the seat. (See "Seats" (P.1-2).)



- 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 belt to move and allows you some freedom of movement in the seat.
  - If the seat belt cannot be pulled from its fully retracted position, firmly pull the belt and release it. Then smoothly pull the belt out of the retractor.



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

The front passenger seat and the rear seating positions three-point seat belts have two modes of operation:

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

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

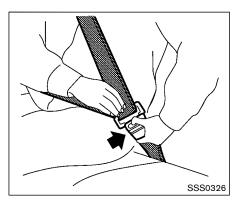
The Automatic Locking Retractor (ALR) mode (child restraint mode) locks the seat belt for child restraint installation.

When 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. For additional information, see "Child restraints" (P.1-18).

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

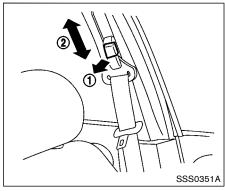
## **WARNING**

When fastening the seat belts, be certain that 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

To unfasten the seat belt, push the button on the buckle. The seat belt automatically retracts.



Shoulder belt height adjustment (for front seats)

The shoulder belt anchor height should be adjusted to the position best for you. (See "Precautions on seat belt usage" (P.1-10).)

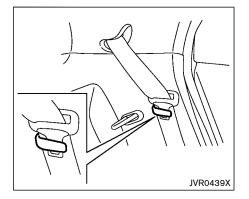
To adjust, pull the adjustment button ①, and then move the shoulder belt anchor to the desired position ②, so that the belt passes over the center of the shoulder. The belt should be away from your face and neck, but not falling off of your shoulder. Release the adjustment button to lock the shoulder belt anchor into position.

The range of height adjustment of the shoulder

belt may vary depending on the model.



- 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 hooks

When the rear seat belts are not in use and when folding down the rear seats, hook the rear seat belts on the seat belt hooks.

#### 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. It is recommended you visit a NISSAN dealer for assistance with purchasing an extender if an

extender is required.



### **WARNING**

- It is recommended that only NISSAN seat belt extenders, made by the same company which made the original equipment seat belts. 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 or killed 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 carpets. 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.

### **CHILD SAFETY**

- 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.

# A

# **WARNING**

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

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

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

There are three basic types of child restraint

#### systems:

- Rear-facing child restraint
- Forward-facing child restraint
- Booster seat

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



# **WARNING**

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

All U.S. states and Canadian provinces or territories require the use of approved child restraints for infants and small children. See "Child restraints" (P.1-18).

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" (P.1-18) 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" (P.1-38).

## **INFANTS**

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

### SMALL CHILDREN

Children that are over 1 year old and weigh at least 20 lbs (9 kg) should remain in a rear-facing child restraint as long as possible up to the height or weight limit of the child restraint. Children who outgrow the height or weight limit of the rear-facing child restraint and are at least 1 year old should be secured in a forward-facing child restraint with a harness. Refer to the manufacturer's instructions for minimum and maximum weight and height recommendations. NISSAN recommends that small children be placed in child restraints that comply with Federal Motor Vehicle Safety Standards or Canadian Motor Vehicle Safety Standards. You should choose a child restraint that fits your vehicle and always follow the manufacturer's instructions for installation and use.

### LARGER CHILDREN

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

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

so that the shoulder belt is properly positioned across the chest and the top, middle portion of the shoulder. The shoulder belt should not cross. the neck or face and should not fall off the shoulder. The lap belt should lie snugly across the lower hips or upper thighs, not the abdomen.

A booster seat can only be used in seating positions that have a three-point type seat belt. The booster seat should fit the vehicle seat and have a label certifying that it complies with Federal Motor Vehicle Safety Standards or Canadian Motor Vehicle Safety Standards.

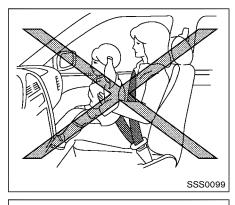
A booster seat should be used until the child can pass the seat belt fit test below:

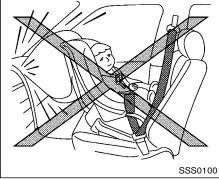
- · Are the child's back and hips against the vehicle seatback?
- Is the child able to sit without slouching?
- Do the child's knees bend easily over the front edge of the seat with feet flat on the floor?
- Can the child safely wear the seat belt (lap belt low and snug across the hips and shoulder belt across mid-chest and shoulder)?
- Is the child able to use the properly adjusted head restraint/headrest?
- Will the child be able to stay in position for the entire ride?



injured or killed in a sudden stop or collision.

### CHILD RESTRAINTS





If you answered no to any of these questions, the child should remain in a booster seat using a three-point type seat belt.

### NOTE:

Laws in some communities may follow different guidelines. Check local and state regulations to confirm your child is using the correct restraint system before traveling.



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

## PRECAUTIONS ON CHILD RE-**STRAINTS**



# 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" (P.1-30).
- 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 vour 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 "Lower Anchors and Tethers for CHildren System (LATCH)" (P.1-20).

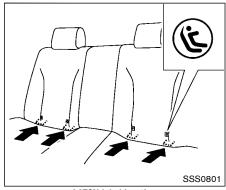
If you do not have a LATCH compatible child restraint, the vehicle seat belts can be used.

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

- Choose only a restraint with a label certifying that it complies with Federal Motor Vehicle Safety Standard 213 or Canadian Motor Vehicle Safety Standard 213.
- Check the child restraint in your vehicle to be sure it is compatible with the vehicle's seat and seat belt system.
- If the child restraint is compatible with your vehicle, place your child in the child restraint and check the various adjustments to be sure the child restraint is compatible with your child. Choose a child restraint that is designed for your child's height and weight. Always follow all recommended procedures.
- If the combined weight of the child and child restraint is less than 65 lbs (29.5 kg), you may use either the LATCH anchors or the seat belt to install the child restraint (not both at the same time).

- If the combined weight of the child and child restraint is greater than 65 lbs (29.5 kg), use the vehicle's seat belt (not the lower anchors) to install the child restraint.
- Be sure to follow the child restraint manufacturer's instructions for installation.

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



**LATCH** label location

## Lower Anchors and Tethers for CHildren System (LATCH)

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 unless the combined weight of the child and child restraint exceeds 65 lbs (29.5 kg). If the combined weight of the child and child restraint is greater than 65 lbs (29.5 kg), use the vehicle's seat belt (not the lower anchors) to install the child restraint. Be sure to follow the

child restraint manufacturer's instructions for installation.

### LATCH lower anchor



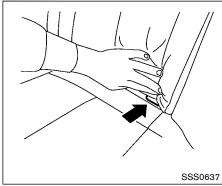
## WARNING

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

- Attach LATCH system compatible child restraints only at the locations shown in the illustration.
- Do not secure a child restraint in the center rear seating position using the LATCH lower anchors. The child restraint will not be secured properlv.
- 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 ob-

#### structed.

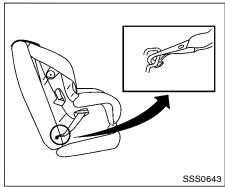
Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used to attach adult seat belts, or other items or equipment to the vehicle. Doing so could damage the child restraint anchorages. The child restraint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



LATCH lower anchor location

### LATCH lower anchor location

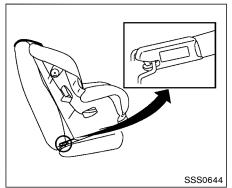
The LATCH lower anchors are located at the rear of the seat cushion near the seatback. A label is attached to the seatback to help you locate the LATCH lower anchors.



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 attachment

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

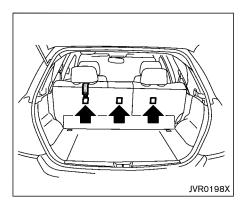
Top tether anchor



# **WARNING**

Properly secure cargo and do not allow it to contact the top tether strap when it is attached to the top tether anchor. Cargo that is not properly secured or cargo that contacts the top tether strap may damage the top tether strap during a collision. If the cargo cover (if so

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



Top tether anchor point locations



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 anchorage, and a child could be seriously injured or killed

### in a collision.

Anchor points are located on the back side of the seatbacks.

The child restraint top tether strap must be used when installing child restraints with the LATCH lower anchor attachments or seat belts.

If you have any questions when installing a top tether strap child restraint on the rear seat, it is recommended you visit a NISSAN dealer for this service.

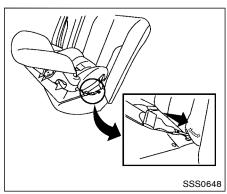
## REAR-FACING CHILD RESTRAINT IN-STALLATION USING LATCH

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

Do not use the lower anchors if the combined weight of the child and the child restraint exceeds 65 lbs (29.5 kg). If the combined weight of the child and the child restraint is greater than 65 lbs (29.5 kg), use the vehicle's seat belt (not the lower anchors) to install the child restraint. Be sure to follow the child restraint manufacturer's instructions for installation.

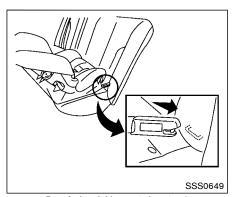
Follow these steps to install a rear-facing child restraint using the LATCH system:

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

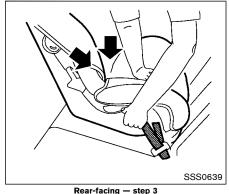


Rear-facing web-mounted - step 2

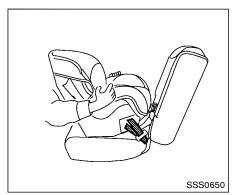
2. Secure the child restraint anchor attachments to the LATCH lower anchors. Check to make sure the LATCH attachment is properly attached to the lower anchors.



Rear-facing rigid-mounted - step 2



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



Rear-facing - step 4

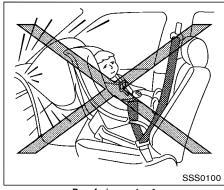
4. After attaching the child restraint, test it before you place the child in it. Push it from side to side while holding the child restraint near the LATCH attachment path. The child restraint should not move more than 1 inch (25 mm), from side to side. Try to tug it forward and check to see if the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

5. Check to make sure the child restraint is properly secured prior to each use. If the child restraint is loose, repeat steps 1 through 4.

REAR-FACING CHILD RESTRAINT IN-STALLATION USING THE SEAT BELTS



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" (P.1-46).



Rear-facing - step 1

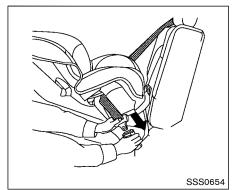
Refer to all Warnings and Cautions in the "Child safety" (P.1-16) and "Child restraints" (P.1-18) before installing a child restraint.

Do not use the lower anchors if the combined weight of the child and the child restraint exceeds 65 lbs (29.5 kg). If the combined weight of the child and the child restraint is greater than 65 lbs (29.5 kg), use the vehicle's seat belt (not the lower anchors) to install the child restraint. Be sure to follow the child restraint manufacturer's instructions for installation.

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

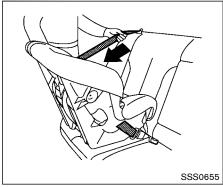
#### seats:

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.



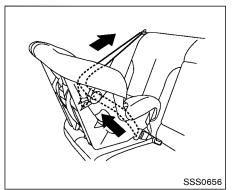
Rear-facing - step 2

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.



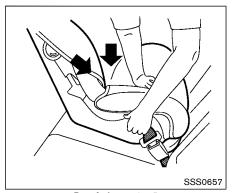
Rear-facing - step 3

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.



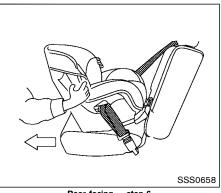
Rear-facing - step 4

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



Rear-facing - step 5

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

- 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.

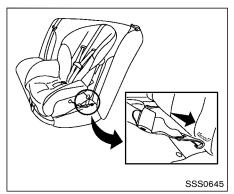
## FORWARD-FACING CHILD RE-STRAINT INSTALLATION USING LATCH

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

Do not use the lower anchors if the combined weight of the child and the child restraint exceeds 65 lbs (29.5 kg). If the combined weight of the child and the child restraint is greater than 65 lbs (29.5 kg), use the vehicle's seat belt (not the lower anchors) to install the child restraint. Be sure to follow the child restraint manufacturer's instructions for installation.

Follow these steps to install a forward-facing child restraint using the LATCH system:

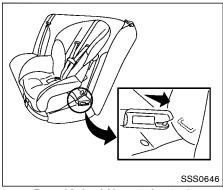
1. Position the child restraint on the seat. Always follow the child restraint manufacturer's instructions.



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" (P.1-30). Do not install child restraints that require the use of a top tether strap in seating positions that do not have a top tether anchor.

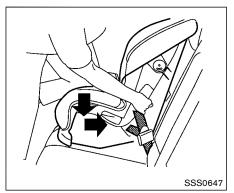


Forward-facing rigid-mounted - step 2

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

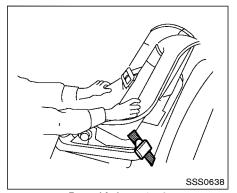
If necessary, adjust or remove the head restraint to obtain the correct child restraint fit. If the head restraint is removed, store it in a secure place. Be sure to reinstall the head restraint when the child restraint is removed. See "Head restraints/headrests" (P.1-5) for head restraint adjustment information.

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



Forward-facing - step 4

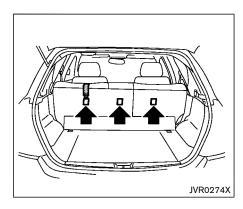
- 4. For child restraints that are equipped with webbing-mounted attachments, remove any additional slack from the anchor attachments. Press downward and rearward firmly in the center of the child restraint with your knee to compress the vehicle seat cushion and seatback while tightening the webbing of the anchor attachments.
- 5. Tighten the tether strap according to the manufacturer's instructions to remove any slack.



Forward-facing - step 6

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

child restraint is loose, repeat steps 1 through 6.



Installing top tether strap



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 anchorage, and a child could be seriously injured or killed

### in a collision.

The child restraint top tether strap must be used when installing the child restraint with the LATCH lower anchor attachments.

First, secure the child restraint with the LATCH lower anchors (rear outboard seat positions only).

 Remove the head restraint and store it in a secure place. Be sure to reinstall the head restraint when the child restraint is removed (rear outboard seat positions).

See "Head restraints/headrests" (P.1-5) for head restraint adjustment, removal and installation information.

Position the top tether strap over the top of the seatback.

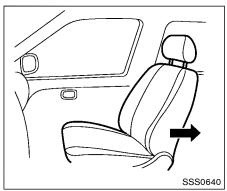
- Secure the top tether strap to the tether anchor point on the back of the seatback behind the child restraint.
- Refer to the appropriate child restraint installation procedure steps in this section before tightening the tether strap.

If you have any questions when installing a top tether strap, consult your NISSAN dealer for details. FORWARD-FACING CHILD RE-STRAINT 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" (P.1-46).



Forward-facing (front passenger seat) - step 1

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

Do not use the lower anchors if the combined weight of the child and the child restraint exceeds 65 lbs (29.5 kg). If the combined weight of the child and the child restraint is greater than 65 lbs (29.5 kg), use the vehicle's seat belt (not the lower anchors) to install the child restraint. Be sure to follow the child restraint manufacturer's instructions for installation.

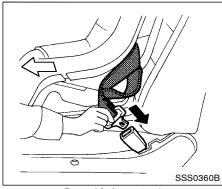
Follow these steps to install a forward-facing child restraint using the vehicle seat belt in the rear seats or in the front passenger seat:

- 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 to obtain the correct child restraint fit. If the head restraint is removed, store it in a secure place. Be sure to reinstall the head restraint when the child restraint is removed. See "Head restraints/headrests" (P.1-5) for head restraint adjustment, removal and installation information.

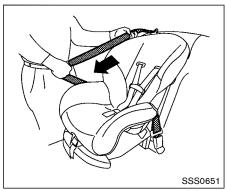
If the seating position does not have an adjustable head restraint and it is interfering with the proper child restraint fit, try another seating position or a different child restraint.



Forward-facing - step 3

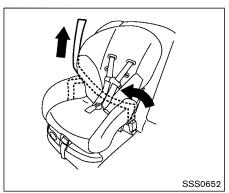
Route the seat belt tongue through the child restraint and insert it into the buckle until you hear and feel the latch engage. Be sure to follow the child restraint manufacturer's instructions for belt routing.

If the child restraint is equipped with a top tether strap, route the top tether strap and secure the tether strap to the tether anchor point (rear seat installation only). See "Installing top tether strap" (P.1-34). 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.



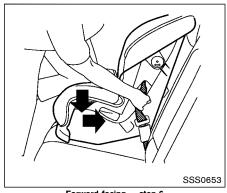
Forward-facing - step 4

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

- 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

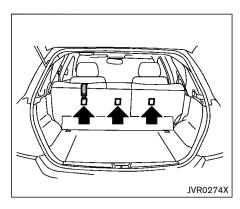
seat belt is not locked, repeat steps 2 through 8.



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" (P.1-46). Move the child restraint to another seating position. Have the system checked. It is recommended you visit a NISSAN dealer for this service.

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



Installing top tether strap



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 anchorage, and a child could be seriously injured or killed

### in a collision.

The child restraint top tether strap must be used when installing the child restraint with the seat belts.

First, secure the child restraint with the seat belt.

- Remove the head restraint and store it in a secure place. Be sure to reinstall the head restraint when the child restraint is removed (rear outboard seat positions).
  - See "Head restraints/headrests" (P.1-5) for head restraint adjustment, removal and installation information.
  - Position the top tether strap over the top of the seatback.
- Secure the top tether strap to the tether anchor point on the back of the seatback behind the child restraint.
- 3. Refer to the appropriate child restraint installation procedure steps in this section before tightening the tether strap.

If you have any questions when installing a top tether strap, it is recommended you visit a NISSAN dealer for this service.

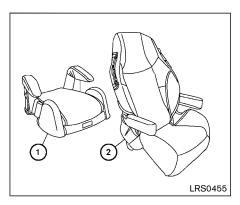
### **BOOSTER SEATS**

Precautions on booster seats



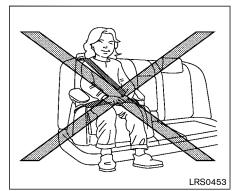
If a booster seat and seat belt are not used properly, the risk of a child being injured in a sudden stop or collision greatly increases:

- Make sure the shoulder portion of the belt is away from the child's face and neck and the lap portion of the belt does not cross the stomach.
- Make sure the shoulder belt is not behind the child or under the child's arm.
- A booster seat must only be installed in a seating position that has a lap/shoulder belt.



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

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



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



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

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

Booster seat installation

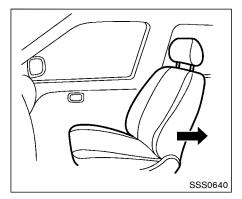


Do not use the lap/shoulder belt Automatic Locking Retractor (ALR) mode

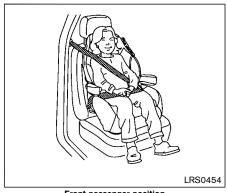
### when using a booster seat with the seat belts.

Refer to all Warnings and Cautions in the "Child safety", "Child restraints" and "Booster seats" sections earlier in this section 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 rearmost position.
- 2. Position the booster seat on the seat. Only place it in a forward-facing direction. Always follow the booster seat manufacturer's instructions.



Front passenger position

3. The booster seat should be positioned on the vehicle seat so that it is stable.

If necessary, adjust or remove the head restraint to obtain the correct booster seat fit. If the head restraint is removed, store it in a secure place. Be sure to reinstall the head restraint when the booster seat is removed. See "Head restraints/headrests" (P.1-5) for head restraint adjustment, removal and installation information.

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

- 4. Position the lap portion of the seat belt low and snug on the child's hips. Be sure to follow the booster seat manufacturer's instructions for adjusting the seat belt routing.
- 5. Pull the shoulder belt portion of the seat belt toward the retractor to take up extra slack. Be sure the shoulder belt is positioned across the top, middle portion of the child's shoulder. Be sure to follow the booster seat manufacturer's instructions for adjusting the seat belt routing.
- 6. Follow the warnings, cautions and instructions for properly fastening a seat belt shown in "Seat belts" (P.1-10).

# **PASS AIR BAG**



SSS1135

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 used. See "Front passenger air bag and status light" (P.1-46).

# SUPPLEMENTAL RESTRAINT SYSTEM

# PRECAUTIONS ON SUPPLEMENTAL RESTRAINT SYSTEM

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

- Driver and passenger supplemental frontimpact air bag (NISSAN Advanced Air Bag System)
- Front seat-mounted side-impact supplemental air bag
- Roof-mounted curtain side-impact 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 pelvic area of the driver and front passenger in certain side impact collisions. The side air bag is designed to inflate on the side where the vehicle is impacted.

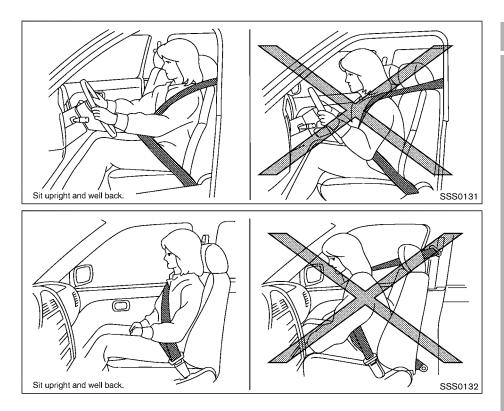
Roof-mounted curtain side-impact and rollover supplemental air bag system: This system can help cushion the impact force to the

head of occupants in front and rear outboard seating positions in certain side impact or rollover collisions. In a side-impact, the curtain air bags are designed to inflate on the side where the vehicle is impacted. In a rollover, the curtain air bags on both sides are designed to inflate. Under both side-impact and rollover situations, the curtain air bags will remain inflated for a short period of time.

These supplemental restraint systems are designed to **supplement** the crash protection provided by the driver and 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" (P.1-10) for instructions and precautions on seat belt usage.)

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

After the ignition is placed 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 systems are operational.



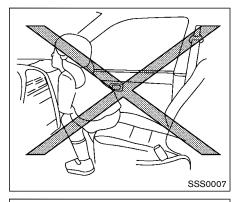
# **WARNING**

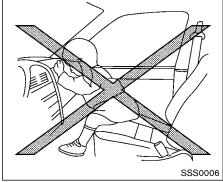
- The front air bags ordinarily will not inflate in the event of a side impact, rear impact, rollover, or lower severity frontal collision. Always wear your seat belts to help reduce the risk or severity of injury in various kinds of accidents.
- The front passenger air bag will not inflate if the front passenger air bag status light is lit or if the front passenger seat is unoccupied. See "Front passenger air bag and status light" (P.1-46).
- 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

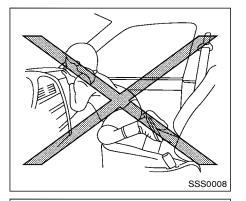
back against the seatback and as far-away as practical from the steering wheel or instrument panel. Always use the seat belts.

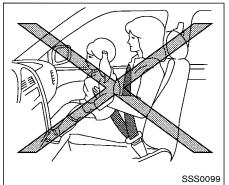
- The driver and front passenger seat belt buckles are equipped with sensors that detect if the seat belts are fastened. The Advanced Air Bag System monitors the severity of a collision and seat belt usage then inflates the air bags. Failure to properly wear seat belts can increase the risk or severity of injury in an accident.
- The front passenger seat is equipped with occupant classification sensors (weight sensors) that turn 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" (P.1-46).
- Keep hands on the outside of the steering wheel. Placing them inside the steering wheel rim could increase the risk that they are injured

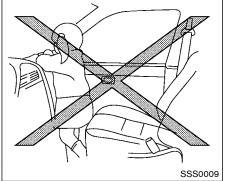
if the front air bag inflates.

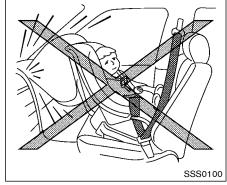








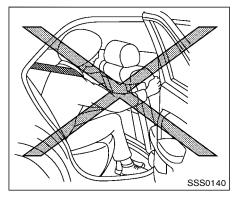


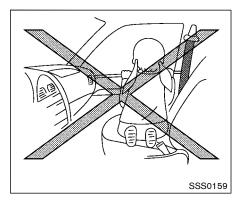


# **WARNING**

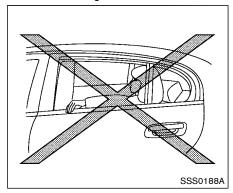
- Never let children ride unrestrained or extend their hands or face out of the window. Do not attempt to hold them in your lap or arms. Some examples of dangerous riding positions are shown in the illustrations.
- Children may be severely injured or killed when the front air bags, side air bags or curtain air bags inflate if they are not properly restrained. Pre-teens and children should be properly restrained in the rear seat, if possible.
- **Even with the NISSAN Advanced Air** Bag System, never install a rearfacing child restraint in the front seat. An inflating front air bag could seriously injure or kill your child. See "Child restraints" (P.1-18) for details.

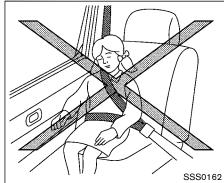






Do not lean against doors or windows.





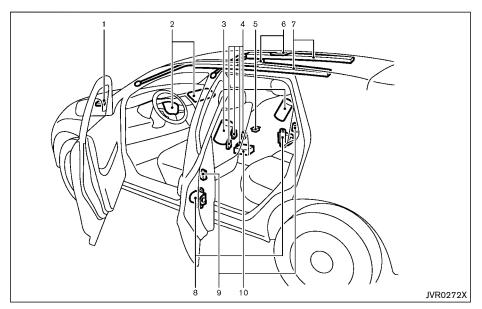


Front seat-mounted side-impact supplemental air bags and roof-mounted curtain side-impact and rollover supplemental air bags:

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

- The curtain air bags ordinarily will not inflate in the event of a front 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.
- 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. The side air bag and curtain air bag inflate with great force. Do not allow anyone to place their hand, leg or face near the side air bag on the side of the seatback of the front seat or near the side roof rails. Do not allow anyone sitting in the front seats or rear outboard seats to extend their hand out of the window or lean against the door. Some examples of dangerous riding positions are shown in the previous illustrations.
- When sitting in the rear seat, do not hold onto the seatback of the front seat. If the side air bag inflates, you may be seriously injured. Be especially careful with children, who should always be properly re-

- strained. Some examples of dangerous riding positions are shown in the illustrations.
- Do not use seat covers on the front seatbacks. They may interfere with side air bag inflation.



- Crash zone sensor
- 2. Supplemental front-impact air bag modules
- Front seat-mounted side-impact supplemental air bag modules
- Occupant classification sensors (weight sensors)
- 5. Occupant classification system control unit

- Roof-mounted curtain side-impact and rollover supplemental air bag inflators
- Roof-mounted curtain side-impact and rollover supplemental air bags modules
- 8. Seat belt with pretensioners
- Satellite sensors
- 10. Air bag Control Unit (ACU)

# 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 allow a passenger in the rear seat to push or pull on the seatback pocket.
- Do not place heavy loads heavier than 9.1 lbs. (4 kg) on the seatback, head restraint or in the seatback pocket.
- Do not store luggage behind the seat that can press into the seatback.
- 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, it is recommended you visit a NISSAN dealer to check the occupant classification system.

#### 1-44 Safety — Seats, seat belts and supplemental restraint 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. It is also permitted in Canada. All of the information, cautions and warnings in this manual apply and must be followed.

The driver supplemental front-impact air bag is located in the center of the steering wheel. The passenger supplemental front-impact air bag is mounted in the instrument panel 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 operation.

The NISSAN Advanced Air Bag System has dual stage air bag inflators. The system monitors information from the Air bag Control Unit (ACU), seat belt buckle sensors and the occupant

classification sensors (weight sensors). 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 and whether the front occupants are belted or unbelted. Additionally, the front passenger air bag may be automatically turned OFF under some conditions, depending on the information provided by the occupant classification sensors. If the front passenger air bag is OFF, the front 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" (P.1-46) 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, it is recommended you visit a NISSAN dealer to obtain information about the system. 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 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.

Front air bags, along with the use of seat belts, help to cushion the impact force on the head and chest of the front occupants. They can help save lives and reduce serious injuries. However, an inflating front air bag may cause facial abrasions or other injuries. Front air bags do not provide restraint to the lower body.

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

The front air bags deflate quickly after a collision.

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

After the ignition is placed 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.

# PASS AIR BAG



SSS1135

Front passenger air bag status light

Front passenger air bag and status light



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

#### an accident.

### Status light:

The front passenger seat is equipped with the occupant classification sensors (weight sensors) that turn the front passenger air bag on or off depending on the weight applied to the front passenger seat. The status of the front passenger air bag (ON or OFF) is indicated by the front passenger air bag status light which is located on the instrument panel. After the ignition switch is placed in the "ON" position, the front passenger air bag status light illuminates for about 7 seconds and then turns off or illuminates depending on the front passenger seat occupied status. The light operates as follows:

- Unoccupied passenger seat: The light 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 light 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.

In addition to the above, certain objects placed on the front passenger seat may also cause the light to operate as described above depending on their weight.

For additional information related to the normal operation and troubleshooting of this occupant classification sensor system, please refer to "Normal operation" (P.1-48) and "Troubleshooting" (P.1-48) in this section.

### Front passenger air bag:

The front passenger air bag is designed to automatically turn OFF when the vehicle is operated under some conditions as described below as permitted by 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.

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 does not sit in the seat properly (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 sensors 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. Failing to properly secure child restraints and to use the Automatic Locking Retractor (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" (P.1-18) for proper use and installation.)

If the front passenger seat is not occupied, the passenger air bag is designed not to inflate in a crash. However, heavy objects placed on the seat could result in air bag inflation, because of the object being detected by the occupant classification sensors. 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 front passenger air bag status light, you can monitor when the front passenger air bag is automatically turned OFF with the seat occupied. The light will not illuminate when the front passenger seat is unoccupied.

If an adult occupant is in the seat but the front 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.

If a child restraint must be used in the front seat. the front 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 front passenger 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 front passenger air bag status light is not illuminated, reposition the occupant or child restraint in a rear seat.

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

The air bag system and front passenger air bag status light will take a few seconds to register a change in the passenger seat status. However, if the seat becomes unoccupied, the front passenger air bag status light will remain off.

If a malfunction occurs in the front passenger air bag system, the supplemental air bag warning light 🐉, located in the meter and gauges area, will blink. Have the system checked. It is recommended you visit a NISSAN dealer for this service.

### Normal operation:

In order for the occupant classification sensor system to classify the front passenger based on weight, please follow the precautions and steps outlined below:

#### Precautions:

- Make sure that there are no objects weighing over 9.1 lbs (4 kg) hanging on the seat or placed in the seatback pocket.
- Make sure that a child restraint or other object is not pressing against the rear of the seatback.
- Make sure that a rear passenger is not pushing or pulling on the back of the front passenger seat.
- Make sure that the front passenger seat or seatback is not forced back against an object on the seat or floor behind it.
- Make sure that there is no object placed under the front passenger seat.

### Steps:

- 1. Adjust the seat as outlined. (See "Seats" (P.1-2).) Sit upright, leaning against the seatback, and centered on the seat cushion with your feet comfortably extended to the floor.
- 2. Make sure there are no objects on your lap.
- 3. Fasten the seat belt as outlined. (See "Seat belts" (P.1-10).)
- 4. Remain in this position for 30 seconds allowing the system to classify the front passenger before the vehicle is put into motion.
- 5. Ensure proper classification by checking the front passenger air bag status light.

### NOTE:

This vehicle's occupant classification sensor system locks the classification during driving so it is important that you confirm that the front passenger is properly classified prior to driving. Also, the occupant classification sensor system may recalculate the weight of the occupant when the vehicle comes to a stop (i.e. stop light, stop sign, etc.), so the front passenger seat occupant should continue to remain seated as outlined above.

### **Troubleshooting:**

If you think the front passenger air bag status light is incorrect:

1. If the light is ON with no front passenger and no objects on the front passenger seat:

This may be due to the following conditions that may be interfering with the weight sensors:

- An object weighing over 9.1 lbs (4 kg) hanging on the seat or placed in the seatback pocket.
- A child restraint or other object pressing against the rear of the seatback.
- A rear passenger pushing or pulling on the back of the front passenger seat.
- Forcing the front seat or seatback against an object on the seat or floor behind it.
- An object placed under the front passenger seat.
- An object placed between the seat cushion and center console or between the seat cushion and the door.

If the vehicle is moving, please come to a stop when it is safe to do so. Check and correct any of the above conditions. Restart the vehicle and wait 1 minute.

#### NOTE:

A system check will be performed during which the front passenger air bag status

### light will remain lit for about 7 seconds initially.

If the light is still ON after this, it is recommended that the vehicle should be checked by a NISSAN dealer as soon as possible.

- If the light is ON with an adult occupying the front passenger seat:
- Occupant is a small adult the front passenger air bag status light is functioning as intended. The front passenger air bag is suppressed.

However, if the occupant is not a small adult, then this may be due to the following conditions that may be interfering with the weight sensors:

- Occupant is not sitting upright, leaning against the seatback, and centered on the seat cushion with his/her feet comfortably extended to the floor.
- A child restraint or other object pressing against the rear of the seatback.
- A rear passenger pushing or pulling on the back of the front passenger seat.
- Forcing the front seat or seatback against an object on the seat or floor behind it.
- An object placed under the front passenger seat.
- An object placed between the seat cushion and center console or between the seat cushion and the door.

If the vehicle is moving, please come to a stop when it is safe to do so. Check and correct any of the above conditions. Restart the vehicle and wait 1 minute.

#### NOTE:

## A system check will be performed during which the front passenger air bag status light will remain lit for about 7 seconds initially.

If the light is still ON after this, the person should be advised not to ride in the front passenger seat and it is recommended that the vehicle should be checked by a NISSAN dealer as soon as possible.

- If the light is OFF with a small adult, child or child restraint occupying the front passenger seat. This may be due to the following conditions that may be interfering with the weight sensors:
- Small adult or child is not sitting upright, leaning against the seatback, and centered on the seat cushion with his/her feet comfortably extended to the floor.
- The child restraint is not properly installed, as outlined. (See "Child restraints" (P.1-18).)
- An object weighing over 9.1 lbs (4 kg) hanging on the seat or placed in the seatback pocket.

- · A child restraint or other object pressing against the rear of the seatback.
- A rear passenger pushing or pulling on the back of the front passenger seat.
- Forcing the front seat or seatback against an object on the seat or floor behind it.
- An object placed under the front passenger seat.
- An object placed between the seat cushion and center console.

If the vehicle is moving, please come to a stop when it is safe to do so. Check and correct any of the above conditions. Restart the vehicle and wait 1 minute.

### NOTE:

## A system check will be performed during which the front passenger air bag status light will remain lit for about 7 seconds initially.

If the light is still OFF after this, the small adult, child or child restraint should be repositioned in the rear seat and it is recommended that the vehicle should be checked by a NISSAN dealer as soon as possible.

Other supplemental front-impact air bag precautions



- 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.

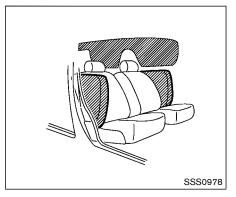
- Removing or modifying the front passenger seat may affect the function of the air bag system and result in serious personal injury.
- Modifying or tampering with the front passenger seat may result in serious personal injury. For example, do not change the front seats by placing material on the seat cushion or by installing additional trim material, such as seat covers, on the seat that is 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 sensors.
- 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.
- It is recommended you visit a NISSAN dealer for work on and around the front air bag. It is also

recommended vou visit a NISSAN dealer for installation of electrical equipment. 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 vellow 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-IM-PACT SUPPLEMENTAL AIR BAG AND ROOF-MOUNTED CURTAIN SIDE-IM-PACT AND ROLLOVER SUPPLEMEN-TAL 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 apply and must be followed. The side air bags and curtain air bags are designed to inflate in higher severity side collisions, although they may inflate if the forces in another type of collision are similar to those of a higher severity side impact. They are designed to inflate

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

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 pelvic area 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 bags. 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. In a rollover, the curtain air bags on both sides are designed to inflate. Under both side-impact situations, the curtain air bags will remain inflated for a short period of time.

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

After turning the ignition switch to the ON position, the supplemental air bag warning light illuminates. The supplemental air bag warning light will turn off after about 7 seconds if the systems are operational.



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

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

air bag.

 It is recommended you visit a NISSAN dealer for work on and around the side air bag and curtain air bag. It is also recommended you visit a NISSAN dealer for installation of electrical equipment. 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 side air bag or curtain air bag systems.

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

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

SEAT BELTS WITH PRETENSIONERS (front seats)



 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, repaired. It is recommended vou visit a NISSAN dealer for this service.
- 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.
- It is recommended you visit a NISSAN dealer for work on and around the pretensioner system. It is also recommended you visit a NISSAN dealer for installation of electrical equipment. 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, it is recommended you visit a NISSAN

dealer for this service. Correct pretensioner disposal procedures are set forth in the appropriate NISSAN Service Manual, 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, it helps tighten the seat belt when the vehicle becomes involved in certain types of collisions, helping to restrain front seat occupants.

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

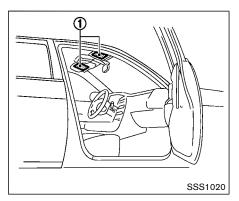
When a pretensioner activates, smoke is released and a loud noise may be heard. The smoke is not harmful and does not indicate a fire. Care should be taken not to inhale it, as it may cause irritation and choking. Those with a history of a breathing condition should get fresh air promptly.

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" (P.1-54). If the operation of the supplemental air bag warning light indicates there is a malfunction, have the system checked. It is recommended you visit a NISSAN dealer for this service.

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.



### SUPPLEMENTAL AIR BAG WARNING LABELS

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

### (1) SRS air bag

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



### SUPPLEMENTAL AIR BAG WARNING LIGHT

The supplemental air bag warning light, displaying \* in the instrument panel, monitors the circuits for the air bag systems, pretensioners and all related wiring.

When the ignition switch is in the ON 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 air bag and/or 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 air bag and/or pretensioner systems may not operate properly. They must be checked and repaired. It is recommended you visit a NISSAN dealer for this service.



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 iniury to vourself or others, have your vehicle checked as soon as possible. It is recommended you visit a NISSAN dealer for this service.

### REPAIR AND REPLACEMENT PRO-**CEDURE**

The front air bags, side air bags, curtain air bags and pretensioners are designed to activate on a one-time-only basis. As a reminder, unless it is damaged, the supplemental air bag warning light will remain illuminated after inflation has occurred. These systems should be repaired and/ or replaced as soon as possible. It is recommended you visit a NISSAN dealer for this service.

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

# WARNING

Once a front air bag, side air bag or curtain air bag has inflated, the air bag module will not function again and must be replaced. Additionally, the activated pretensioners must also be replaced. The air bag module and pretensioner should be replaced. It is recommended you visit a NISSAN dealer for this service. However, the air bag modules and pretensioner system cannot be repaired.

- The front air bag, side air bag and curtain air bag systems, and pretensioner system should be inspected if there is any damage to the front end or side portion of the vehicle. It is recommended you visit a NISSAN dealer for this service.
- If you need to dispose of a supplemental air bag or pretensioner or scrap the vehicle, it is recommended vou visit 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 Classification Sensor (OCS) should be checked to verify it is still functioning correctly. It is recommended that you visit a NISSAN dealer for this service. The OCS should be checked even if no air

bags deploy as a result of the impact. Failure to verify proper OCS function may result in an improper air bag deployment resulting in injury or death.

# **MEMO**

# **MEMO**

# **MEMO**

# 2 Instruments and controls

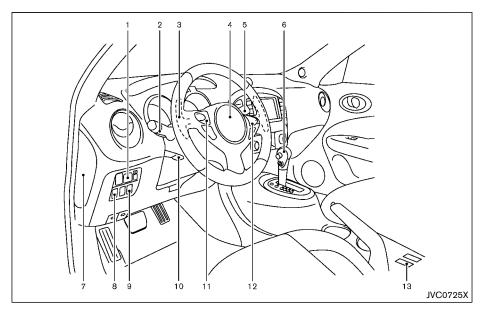
Cockpit	2-3
Instrument panel	2-4
Meters and gauges	2-5
Speedometer and odometer	2-7
Tachometer	2-9
Engine coolant temperature gauge (Type B) (if	2-10
so equipped)	
Fuel gauge	2-11
Vehicle information display (Type A) (if so equipped)	2-11
Vehicle information display (Type B) (if	
so equipped)	2-12
Outside air temperature	
Continuously Variable Transmission (CVT) position	
indicator (if so equipped)	2-12
Trip computer	2-13
Warning lights, indicator lights and	
audible reminders	2-15
Checking lights	2-16
Warning lights	2-16
Indicator lights	2-21
Audible reminders	2-23
Integrated control system (if so equipped)	2-24
Drive mode	2-24
Setup function	2-25

Drive information	2-30
Eco information	2-31
Security systems	2-33
Vehicle Security System	2-33
NISSAN Vehicle Immobilizer System	2-34
Wiper and washer switch	2-36
Rear window wiper and washer switch	2-37
Rear window and outside mirror defroster switch	2-38
Headlight and turn signal switch	2-39
Xenon headlights (if so equipped)	2-39
Headlight switch	2-40
Turn signal switch	2-43
Fog light switch (if so equipped)	2-44
Horn	2-44
Vehicle Dynamic Control (VDC) off switch	2-44
Heated seats (if so equipped)	2-45
Power outlet	2-46
Storage	2-47
Cup holders	2-47
Cargo floor box	2-48
Glove box	2-48
Coat hook	2-48
Cargo cover (if so equipped)	2-49
Windows	2-50
Power windows	2-50

Moonroof (if so equipped)		
Power moonroof	2-52	
Interior lights	2-54	
Map lights (if so equipped)	2-54	

Map light control switch (if so equipped)	2-55
Cargo light	2-55

### COCKPIT

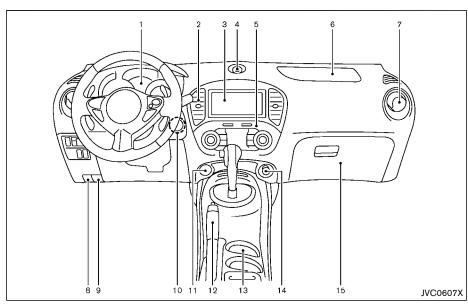


- 1. Outside mirror remote control switch
- 2. Headlight, fog light and turn signal switch
  - Headlight
  - Turn signal light
  - Fog light\*
- 3. Paddle shifter\*

- 4. Steering wheel
  - Electric power steering
  - Horn
  - Driver's supplemental air bag
- 5. Wiper and washer switch

- Shift lever
  - Continuously Variable Transmission (CVT)
  - Manual Transmission (MT)
- 7. Fuse box cover
- 3. Vehicle Dynamic Control (VDC) OFF switch
- 9. All-Wheel Drive (AWD) switch\*
- 10. Tilting steering wheel lever
- 1. Steering-wheel-mounted controls (left side)
  - Audio control
  - Siri<sup>®</sup> Eyes Free
  - Bluetooth<sup>®</sup> Hands-Free Phone System control
  - NISSAN Voice Recognition System (with navigation system)\*
- 12. Steering-wheel-mounted controls (right side)
  - Cruise control switches
- 13. Heated seat switch\*
- \*: if so equipped

### **INSTRUMENT PANEL**



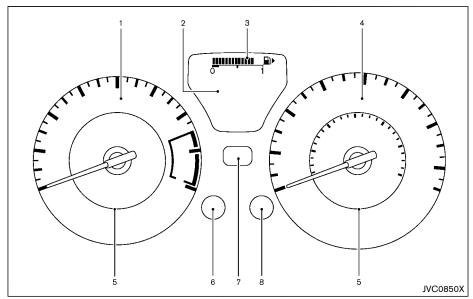
- Meters and gauges
- Center ventilator
- 3. Audio system\* or Navigation system\*\*
- 4. Hazard warning flasher switch
- 5. Integrated Control System\*
  - Drive mode
  - Heater and air conditioner control

- Defroster switch
- Heater and air conditioner control (models without Integrated Control System)
  - Defroster switch
- 6. Front passenger supplemental air bag
- 7. Side ventilator
- 8. Fuel-filler door release handle

- 9. Hood release handle
- 10. Push-button ignition switch
- 11. Auxiliary input jack/USB connection port\*
- 12. Parking brake
- 13. Cup holder
- 14. Power outlet
- 15. Glove box
- \*: if so equipped
- \*\*: Refer to the separate Navigation System Owner's Manual.

### 2-4 Instruments and controls

### **METERS AND GAUGES**



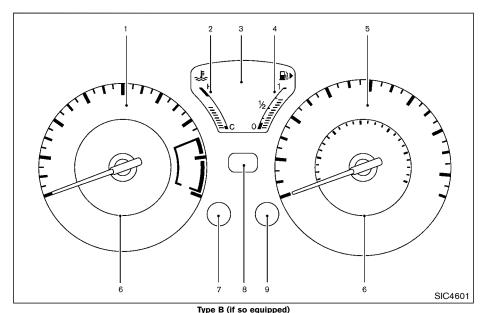
Type A (if so equipped)

- Tachometer
- Vehicle information display
  - Odometer/twin trip odometer
  - Trip computer
  - Torque vectoring AWD (AWD model)
  - Outside air temperature
- Fuel gauge

- Speedometer
- Warning/indicator lights
- Instrument brightness control knob
- Continuously Variable Transmission (CVT) position indicator\*
- RESET switch for trip odometer/Trip computer mode switch

### if so equipped

The needle indicators may move slightly after the ignition switch is placed in the OFF or LOCK position. This is not a malfunction.



Fuel gauge

Speedometer

tion indicator\*

Warning/indicator lights

Instrument brightness control knob

Continuously Variable Transmission (CVT) posi-

- . Tachometer
- 2. Engine coolant temperature gauge
- 3. Vehicle information display
  - Odometer/twin trip odometer
  - Trip computer
  - Torque vectoring AWD (AWD model)
  - Outside air temperature

mode switch

RESET switch for trip odometer/Trip computer

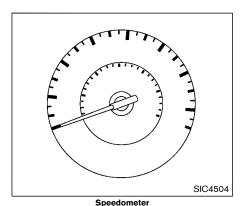
\*: if so equipped

The needle indicators may move slightly after the ignition switch is placed in the OFF or LOCK position. This is not a malfunction.

# **A** CAUTION

- For cleaning, use a soft cloth, dampened with water. 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 cause discoloration to the lens.
- Do not spray any liquid such as water on the meter lens. Spraying liquid may cause the system to malfunction.

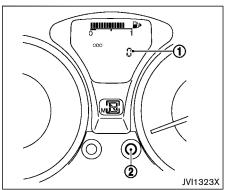
#### 2-6 Instruments and controls



### SPEEDOMETER AND ODOMETER

### Speedometer

The speedometer indicates vehicle speed in miles per hour (MPH) and kilometers per hour (km/h).



Odometer/twin trip odometer

# Odometer/twin trip odometer (Type A) (if so equipped)

The odometer and twin trip odometer (1) are displayed when the ignition switch is in the ON position.

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

The twin trip odometer records the distance of individual trips.

### Changing the display:

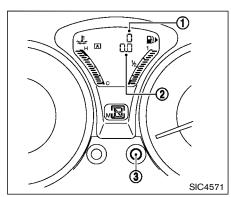
Pushing the reset switch (2) located on the meter panel changes the display as follows:

ODO  $\rightarrow$  TRIP A  $\rightarrow$  TRIP B  $\rightarrow$  Trip computer  $mode \rightarrow ODO$ 

For trip computer information, see "Trip computer" (P.2-13).

### Resetting the trip odometer:

Pushing the reset switch (2) for approximately 1 second resets the trip odometer to zero.



Odometer/twin trip odometer

Odometer/twin trip odometer (Type B) (if so equipped)

The odometer ① /twin trip odometer ② are displayed when the ignition switch is in the ON position.

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

The twin trip odometer records the distance of individual trips.

### Changing the display:

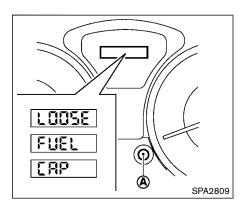
Pushing the reset switch ③ located on the meter panel changes the display as follows:

TRIP A  $\rightarrow$  TRIP B  $\rightarrow$  Trip computer mode  $\rightarrow$  TRIP A

For trip computer information, see "Trip computer" (P.2-13).

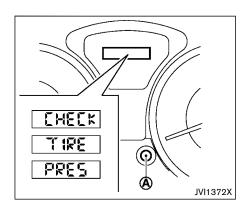
### Resetting the trip odometer:

Pushing the reset switch ③ for approximately 1 second resets the trip odometer to zero.



# Loose fuel cap warning message

Push the reset switch (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" (P.3-18) 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 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

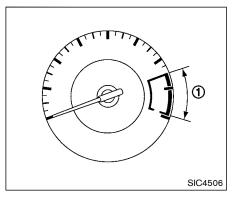
position as long as the low tire pressure warning light (!) remains illuminated.

The CHECK TIRE PRES warning message can be turned off by pushing the reset switch (A).

For more information see "Low tire pressure warning light" (P.2-18), "Tire Pressure Monitoring System (TPMS)" (P.5-3), and "Wheels and tires" (P.8-28).

Extended storage fuse warning message

The SHIP PHASE On/PUSH FUSE In warning message may be displayed if the extended storage fuse switch is not pushed in (switched on). When this message is displayed, push in (switch on) the extended storage fuse switch to turn off the message. For more information, see "Extended storage fuse switch" (P.8-20).

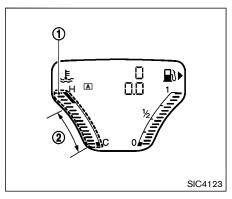


### **TACHOMETER**

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

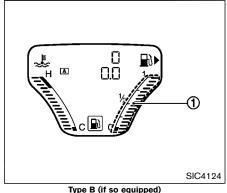


When engine speed approaches the red zone, shift to a higher gear or reduce engine speed. Operating the engine in the red zone may cause serious engine damage.



normal range, reduce vehicle speed to decrease temperature. If gauge is over the normal range, stop the vehicle as soon as safely possible. If the engine is overheated, continued operation of the vehicle may seriously damage the engine. See "If your vehicle overheats" (P.6-11) for immediate action required.

# ODO JVI1324X Type A (if so equipped)



# ENGINE COOLANT TEMPERATURE GAUGE (Type B) (if so equipped)

The gauge (1) indicates the engine coolant temperature.

The engine coolant temperature is within the normal range when the gauge is within the zone (2) shown in the illustration.

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



If the gauge indicates engine coolant temperature near the hot (H) end of the

#### FUEL GAUGE

The gauge (1) indicates the approximate fuel level in the tank.

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

### Refill the fuel tank before the gauge registers 0 (empty).

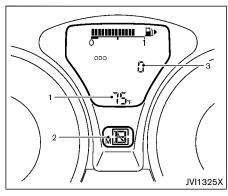
The low fuel warning light | illuminates when the amount of fuel in the tank is getting low. Refuel as soon as it is convenient, preferably before the gauge reaches 0. There will be a small reserve of fuel in the tank when the fuel gauge reaches 0.

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

# **CAUTION**

If the vehicle runs out of fuel, the SERVICE malfunction indicator light (MIL) may come on. Refuel as soon as possible. After a few driving trips, the service light should turn off. If the light remains on after a few driving trips, have the vehicle inspected. It is recommended you visit a NISSAN dealer for this service.

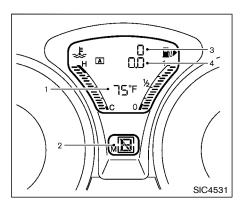
For additional information, see "Malfunction Indicator Light (MIL)" (P.2-22).



# VEHICLE INFORMATION DISPLAY (Type A) (if so equipped)

When the ignition switch is placed in the ON position, the vehicle information display shows the following information:

- Outside air temperature
- Continuously Variable Transmission (CVT) position indicator (if so equipped)
- Twin trip odometer/Odometer/Trip computer/ Instrument brightness control display



# VEHICLE INFORMATION DISPLAY (Type B) (if so equipped)

When the ignition switch is placed in the ON position, the vehicle information display shows the following information:

- Outside air temperature
- Continuously Variable Transmission (CVT) position indicator (if so equipped)
- Odometer/Instrument brightness control display
- Twin trip odometer/Trip computer

### OUTSIDE AIR TEMPERATURE

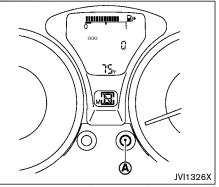
The outside air temperature is displayed in °F or °C.

When the outside air temperature becomes 37°F (3°C) or lower, the outside air temperature display blinks to give a warning. The display will stop blinking after 1 minute or when the outside air temperature becomes 39°F (4°C) or above.

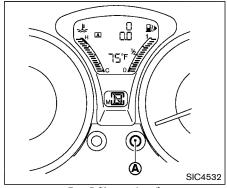
The display may differ from the actual outside temperature displayed on various signs or billboards.

# CONTINUOUSLY VARIABLE TRANS-MISSION (CVT) POSITION INDICATOR (if so equipped)

The Continuously Variable Transmission (CVT) position indicator indicates the shift lever position when the ignition switch is in the ON position.



Type A (if so equipped)



Type B (if so equipped)

### TRIP COMPUTER

The switch for the trip computer is located on the meter panel.

When the ignition switch is placed in the ON position, modes of the trip computer can be selected by pushing the trip computer mode switch (A).

Each time the trip computer mode switch (A) is pushed, the display will change as follows:

### For Type A (if so equipped):

ODO → (TRIP A → TRIP B) → Current fuel consumption → Distance to empty (dte) → Average fuel consumption → Torque vectoring AWD (AWD model) → ODO

## For Type B (if so equipped):

(TRIP A → TRIP B) → Current fuel consumption → Distance to empty (dte) → Average fuel consumption → Elapsed time → Torque vectoring AWD (AWD model) (→ TRIP A)

# Current fuel consumption

The current fuel consumption mode shows the current fuel consumption.

### Distance to empty (dte — mls or km)

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

The display is updated every 30 seconds.

The dte mode includes a low range warning feature. When the fuel level is low, the dte mode is automatically selected and the dte display will blink. Push the trip computer mode switch (A) to return to the mode that was selected before the warning occurred.

When the fuel level drops even lower, the dte display will change to "----".

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

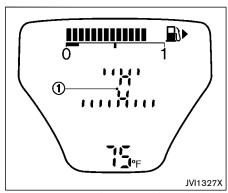
### Average fuel consumption (mpg or I (liter)/100 km)

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

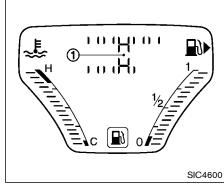
The display is updated every 30 seconds. At about the first 1/3 mile (500 m) after a reset, the display shows "---".

# Elapsed time (Type B) (if so equipped)

The elapsed time mode shows the time since the last reset. The displayed time can be reset by pushing the trip computer mode switch (A) for approximately 1 second.



Type A (if so equipped)



Type B (if so equipped)

### Torque vectoring AWD (AWD model)

The Torque vectoring mode shows the current amount of torque distributed to each wheel. Each torque indicator is displayed as a bar graph ① divided into 3 segments. The upper indicator displays the current amount of torque distribution (left and right) for the front wheels. The lower indicator displays the current amount of torque distribution (left and right) for the rear wheels. The number of segments shows the amount of torque currently distributed to each wheel.

### Resetting displays

### For Type A (if so equipped):

When the average fuel consumption or TRIP B is displayed, push the trip computer mode switch (A) for longer than 3 seconds. The average fuel consumption and trip odometer (TRIP B only) displays will be reset at the same time.

### For Type B (if so equipped):

When the average fuel consumption, elapsed time or TRIP B is displayed, push the trip computer mode switch (a) for longer than 3 seconds. The average fuel consumption, elapsed time and trip odometer (TRIP B only) displays will be reset at the same time.

# WARNING LIGHTS, INDICATOR LIGHTS AND AUDIBLE REMINDERS

AWD	All-Wheel Drive (AWD) warning light (AWD model) (if so equipped)	<b>H</b>	Low fuel warning light	17	Engine start operation indicator light
ABS	Anti-lock braking System (ABS) warning	(!)	Low tire pressure warning light	EDDE	Exterior light indicator
(ABS)			Low washer fluid warning light (if so equipped)	却	Front fog light indicator light (if so equipped)
BRAKE	Brake warning light	P± SHIFT	P position selecting warning light	OFF 2	Front passenger air bag status light
(0)		<b>A</b>	Seat belt warning light		High beam indicator light
- +	Charge warning light	×	Supplemental air bag warning light	SERVICE ENGINE SOON	Malfunction Indicator Light (MIL)
<b>E</b>	Door open warning light	\$	Vehicle Dynamic Control (VDC) warning light	( <del>-</del>	Security indicator light
PS	Electric power steering warning light	AWD	All-Wheel Drive (AWD) indicator light (AWD model) (if so equipped)	$\langle \neg \downarrow \rangle$	Turn signal/hazard indicator lights
<del>م</del> ي∠،	Engine oil pressure warning light	AWD-V	All-Wheel Drive (AWD)-V indicator light (AWD model) (if so equipped)	OFF	Vehicle Dynamic Control (VDC) off indicator light
<b>≈₽</b>	High temperature warning light (if so equipped)	CVT	Continuously Variable Transmission (CVT) indicator light (if so equipped)		
KEY —0	Intelligent Key system warning light	CRUISE	Cruise indicator light		

### CHECKING LIGHTS

With all doors closed, apply the parking brake, fasten the seat belts and place the ignition switch in the ON position without starting the engine. The following lights (if so equipped) will come on:

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

If any light does not come on or operates in a way other than described, it may indicate a burned-out bulb and/or a system malfunction. It is recommended you have the system checked by a NISSAN dealer.

#### WARNING LIGHTS

AWD All-Wheel Drive (AWD) warning light (AWD model)

When the ignition switch is in the "ON" position, the All-Wheel Drive (AWD) warning light will illuminate. It will turn off soon after the engine is started.

If the AWD system malfunctions or the revolution or radius of the front and the rear wheel differs, the AWD warning light will either remain illuminated or blink. (See "All-Wheel Drive (AWD)" (P.5-29).)

ABS or 6 Anti-lock Braking System (ABS) warning light

When the ignition switch is 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. It is recommended you visit a NISSAN dealer for this service.

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" (P.5-35).)

BRAKE or | (1) | Brake warning light

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

### Parking brake indicator:

When the ignition switch is in the ON position, the light illuminates when the parking brake is applied.

### Low brake fluid warning light:

When the ignition switch is in the ON position,

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

- 1. Check the brake fluid level. If brake fluid is necessary, add fluid and have the system checked. It is recommended you have this service performed by a NISSAN dealer. (See "Brake and clutch fluid" (P.8-9).)
- 2. If the brake fluid level is correct, have the warning system checked. It is recommended you have this service performed by 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. It is recommended you visit a NISSAN dealer for this service. (See "Anti-lock Braking System (ABS) warning light" (P.2-16).)

#### 2-16 Instruments and controls

# 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 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. It is recommended you visit a NISSAN dealer for this service.

# Charge warning light

If the light illuminates while the engine is running, it may indicate the charging system is not functioning properly. Turn the engine off and check the alternator belt. If the belt is loose. broken, missing or if the light remains on, have your vehicle serviced immediately. It is recommended you visit a NISSAN dealer for this service.



# **CAUTION**

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



# Door open warning light

This light illuminates when any of the doors and/ or liftgate are not closed securely while the ignition switch is in the ON position.

liaht

# **PS** Electric power steering warning

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

If the electric power steering warning light illuminates while the engine is running, it may indicate the electric power steering is not functioning properly and may need servicing. Have the electric power steering checked. It is recommended you visit a NISSAN dealer for this service.

When the electric power steering warning light illuminates with the engine running, the power assist to the steering will cease operation but you will still have control of the vehicle. At this time, greater steering efforts are required to operate the steering wheel, especially in sharp turns and at low speeds.

See "Electric power steering" (P.5-34).

# Engine oil pressure warning light

This light warns of low engine oil pressure. If the light flickers or illuminates 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" (P.8-5).)

# A CAUTION

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

High temperature warning light (if so equipped)

When the ignition switch is 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. (For the immediate action required, see "If your vehicle overheats" (P.6-11).)

Intelligent Key system warning light After the ignition switch is placed in the ON position, this light comes on for about 2 seconds and then turns off.

This light illuminates or blinks as follows:

- The light blinks in yellow when the door is closed with the Intelligent Key left outside the vehicle and the ignition switch in the ACC or ON position. Make sure that the Intelligent Key is inside the vehicle.
- The light blinks in green when the Intelligent Key battery is running out of power. Replace the battery with a new one. (See "Intelligent Key battery replacement" (P.8-20).)
- The light illuminates in yellow when it warns of a malfunction with Intelligent Key system.

If the warning light illuminates in yellow while the engine is stopped, it may be impossible to start the engine. If the light comes on while the engine is running, you can drive the vehicle. However in these cases, it is recommended you visit a NISSAN dealer for repair as soon as possible.



Low fuel warning light

This light illuminates when the fuel in the tank is getting low. Refuel as soon as it is convenient, preferably before the fuel gauge reaches the 0 (empty) position.

There will be a small reserve of fuel remaining in the tank when the fuel gauge reaches the 0 position.

(!) 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 vehicle information display.

When the low tire pressure warning light illuminates, you should stop and adjust the tire

pressure to the recommended COLD tire pressure shown on the Tire and Loading Information label. 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" (P.2-9), "Tire Pressure Monitoring System (TPMS)" (P.5-3) and "Tire Pressure Monitoring System (TPMS)" (P.6-3).

#### **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 1 minute. The CHECK TIRE PRES warning message is not displayed if the low tire pressure warning light illuminates to indicate a TPMS malfunction. Have the system checked. It is recommended you visit a NISSAN dealer for this service.

For additional information, see "Tire Pressure Monitoring System (TPMS)" (P.5-3).



# WARNING

- If the light does not illuminate with the ignition switch placed in the ON position, have the vehicle checked. It is recommended you visit a NISSAN dealer for this service 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 to turn the low tire pressure warning light OFF. If the light still illuminates while driving after adjusting the tire pressure, a tire may be flat or the TPMS may be malfunctioning. If you have a flat tire, replace it with a spare tire as soon as possible. If no tire is flat and all tires are properly inflated, it is recommended you consult a NISSAN dealer.

- Since the spare tire is not equipped with the TPMS, 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. Have your tires replaced and/or TPMS system reset as soon as possible. It is recommended you visit a NISSAN dealer for these services.
- 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 four wheels correctly.

Low washer fluid warning light (Canada only)

This light illuminates when the washer fluid is at a low level. Add washer fluid as necessary. (See "Window washer fluid" (P.8-9).)

P position selecting warning light

The warning light blinks in red when the ignition switch is pushed to stop the engine with the shift lever in any position except the P (Park) position.

If this warning appears, move the shift lever to the P (Park) position or push the ignition switch to the ON position.

An inside warning chime will also sound. See "Intelligent Key system" (P.3-6).

# Seat belt warning light

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

The seat belt warning light for the front passenger will illuminate if the seat belt is not fastened when the front passenger's seat is occupied. For about 5 seconds after the ignition switch is in the ON position, the system does not activate the warning light for the front passenger.

See "Seat belts" (P.1-10) for precautions on seat belt usage.

Supplemental air bag warning light After placing the ignition switch in the ON position, the supplemental air bag warning light will illuminate. The supplemental air bag warning light will turn off after about 7 seconds if the supplemental front air bag and supplemental side air bag, curtain air bag systems and/or pretensioner seat belt are 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 illuminate at all.

It is recommended you visit a NISSAN dealer for these services.

Unless checked and repaired, the Supplemental Restraint Systems and/or the pretensioners may not function properly.

For additional information, see "Supplemental restraint system" (P.1-38).



# **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. It is recommended you visit a NISSAN dealer for this service.

# □ Vehicle Dynamic Control (VDC) warning light

When the ignition switch is in the "ON" position, the Vehicle Dynamic Control (VDC) warning light illuminates and then turns off.

The light will blink when the Vehicle Dynamic Control (VDC) system or the traction control system is operating, thus alerting the driver that the vehicle is nearing its traction limits. The road surface may be slippery.

If the VDC warning light illuminates while the VDC system is on, this light alerts the driver to the fact that the VDC system's fail-safe mode is operating, for example the VDC system may not be functioning properly. Have the system checked. It is recommended you visit a NISSAN dealer for this service. If a malfunction occurs in the system, the VDC system function will be canceled but the vehicle is still driveable. For additional information, see "Vehicle Dynamic Control (VDC) system" (P.5-37) of this manual.

### INDICATOR LIGHTS

AWD All-Wheel Drive (AWD) indicator light (AWD model)

When the ignition switch is in the "ON" position, the All-Wheel Drive (AWD) indicator light illuminates and then turns off.

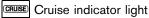
When selecting AWD mode while the engine is running, the AWD indicator light illuminates. (See "All-Wheel Drive (AWD)" (P.5-29).)

All-Wheel Drive (AWD-V) indicator light (AWD model)

When selecting AWD-V mode while the engine is running, the AWD-V indicator light illuminates. (See "All-Wheel Drive (AWD)" (P.5-29).)

CVT Continuously Variable Transmission (CVT) indicator light (if so equipped)

When the ignition switch is in the "ON" position, the Continuously Variable Transmission (CVT) indicator light illuminates and then turns off.



### Cruise main switch indicator:

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

#### Cruise malfunction:

If the cruise indicator light blinks while the engine is running, it may indicate the cruise control system is not functioning properly. Have the system checked. It is recommended you visit a NISSAN dealer for this service.

See "Cruise control" (P.5-26).



Engine start operation indicator

This light appears when the shift lever is in the P (Park) position (Continuously Variable Transmission (CVT) models) or N (Neutral) position (Manual Transmission (MT) models). This light means that the engine will start by pushing the ignition switch with the brake pedal (CVT models) or clutch pedal (MT models) depressed. You can start the engine directly in any position.

# Exterior light indicator

This indicator illuminates when the headlight switch is turned to the AUTO (if so equipped), =Dod= or ⊚ position and the front parking lights, instrument panel lights, rear combination lights, license plate lights or headlights are on. The indicator turns off when these lights are turned off.

# ≱D Front fog light indicator light (if so equipped)

The front fog light indicator light illuminates when the front fog lights are on. (See "Fog light switch" (P.2-44).)

# Front passenger air bag status light

The front passenger air bag status light (located on the center of the instrument panel) 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 "NISSAN Advanced Air Bag System (front seats)" (P.1-44) of this manual.



# High beam indicator light

This light illuminates when the headlight high beam is on and goes out when the low beam is selected.



# Malfunction Indicator Light (MIL)

If the malfunction indicator light comes on steady or blinks while the engine is running, it may indicate a potential emission control and/or Continuously Variable Transmission (CVT) malfunction.

The malfunction indicator light may also illuminate 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 US gallons (11.4 liters) of fuel in the fuel tank.

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

If this indicator light remains on 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" (P.10-21).)

### Operation:

The malfunction indicator light will come on in one of two ways:

- Malfunction indicator light illuminated steady - An emission control system and/or CVT malfunction has been detected. Check the fuel-filler cap if the LOOSE FUEL CAP warning message is displayed on the twin trip odometer. If the fuel-filler cap is loose or missing, tighten or install the cap and continue to drive the vehicle. The service light should turn off after a few driving trips. If the FRINE light does not turn off after a few driving trips, have the vehicle inspected. It is recommended you visit a NISSAN dealer for this service. 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:

- 1) Do not drive at speeds above 45 MPH (72 km/h).
- 2) Avoid hard acceleration or deceleration.
- 3) Avoid steep uphill grades.
- 4) If possible, reduce the amount of cargo being hauled or towed.

The malfunction indicator light may stop

blinking and remain on.

Have the vehicle inspected. It is recommended you visit a NISSAN dealer for this service. You do not need to have your vehicle towed to the dealer.



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

# Security indicator light

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

If the security system is malfunctioning, this light will remain on while the ignition switch is in the ON position. For additional information, see "Security systems" (P.2-33).

| 👉 🖒 | Turn signal/hazard indicator lights

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

Vehicle Dynamic Control (VDC) off indicator light

When the ignition switch is in the "ON" position, the Vehicle Dynamic Control (VDC) off indicator light illuminates and then turns off.

The light comes on when the Vehicle Dynamic Control (VDC) off switch is pushed to OFF. This indicates that the VDC system and traction control system are not operating.

### AUDIBLE REMINDERS

### Key reminder chime

A chime will sound if the driver side door is opened while the ignition switch is pushed to the ACC position.

Make sure the ignition switch is pushed to the OFF position, and take the Intelligent Key with you when leaving the vehicle.

### Light reminder chime

The light reminder chime will sound when the driver side door is opened with the headlight switch in the spas or position, and the ignition switch is in the ACC, OFF or LOCK position.

Turn the light switch off when you leave the vehicle.

### Brake pad wear warning

The disc brake pads have audible wear warnings. When a brake pad requires replacement, it will make a high pitched scraping sound when the vehicle is in motion. This scraping sound will first occur only when the brake pedal is depressed. After more wear of the brake pad, the sound will always be heard even if the brake pedal is not depressed. Have the brakes checked as soon as possible if the warning sound is heard.

### Parking brake reminder chime

The parking brake reminder chime will sound if the vehicle is driven at more than 4 MPH (7 km/h) with the parking brake applied. Stop the vehicle and release the parking brake.

### INTEGRATED CONTROL SYSTEM (if so equipped)

### Seat belt warning chime

The seat belt warning chime will sound for about 6 seconds unless the driver's seat belt is securely fastened.

The Integrated Control System is located below the audio system or navigation system (if so equipped). Two Integrated Control System modes can be selected: Drive mode and Climate Control mode.

Depending on which Integrated Control System mode is selected (Drive mode or Climate Control mode), the screen display and some button functions will change.

#### Drive mode

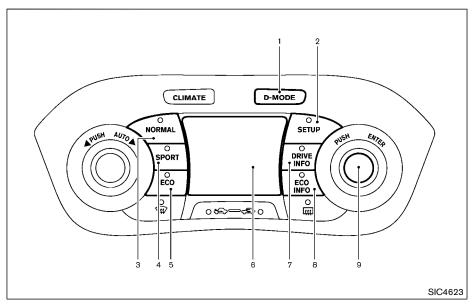
In the Drive mode, three types of driving modes can be selected: NORMAL, SPORT and ECO. See "Drive mode" (P.5-22). In addition, while in the Drive mode, SETUP, Drive information and ECO information can be displayed and adjusted. See "Drive mode" (P.2-24).

#### Climate Control mode

In the Climate Control mode, the climate control can be set and adjusted. See "Automatic air conditioner (with Integrated Control System)" (P.4-32).

### DRIVE MODE

When the Drive mode select button is pressed, the display and buttons appear as shown.



- Drive mode select button
- SFTUP button
- Drive mode NORMAL button
- Drive mode SPORT button
- Drive mode ECO button
- Display screen
- Drive information button

- ECO information button
- ENTER button/Selection dial

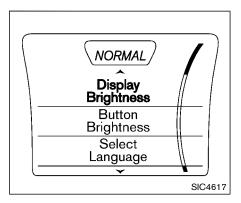
### SETUP FUNCTION

While in the Drive mode, the following items can be set up by pressing the SETUP button.

- Display Brightness
- **Button Brightness**
- Clock Time Setting
- Select Language
- Select Units
- Auto Interior Illumination
- Selective Door unlock
- Auto Headlight Sensitivity (if so equipped)
- CLIMATE ECO

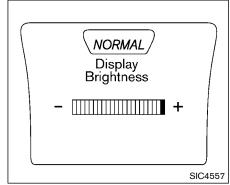
#### NOTE:

- The SETUP function cannot be adjusted while driving.
- . When the battery is disconnected, the SETUP memory is erased and reverts to the default settings. If necessary, reset the SETUP memory after reconnecting the battery.



## Setting Display Brightness and Button **Brightness**

- 1. Press the Drive Mode Select button.
- Press the SETUP button.
- 3. Turn the Selection dial to "Display Brightness" or "Button Brightness" then press the ENTER button.



4. Turn the Selection dial to + to increase brightness or to - to decrease brightness, then press the ENTER button to apply the selection.

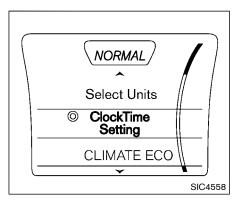
Display Brightness and Button Brightness can be manually adjusted during the day (when the headlight switch is off) or at night (when the headlight switch is on).

When the bar is at the minimum or maximum brightness level, the brightness level is the same as the daytime level (headlight switch is on) or nighttime level (headlight switch off).

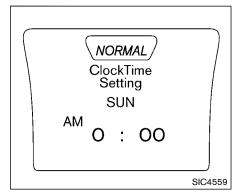
Clock Time Setting

#### NOTE:

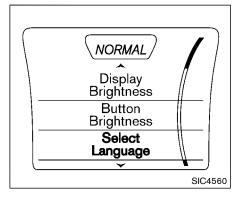
Clock Time Setting is used for displaying the ECO information. See "Eco information" (P.2-31).



- Press the Drive Mode Select button.
- Press the SFTUP button.
- Turn the Selection dial to "Clock Time Setting", then press the ENTER button.

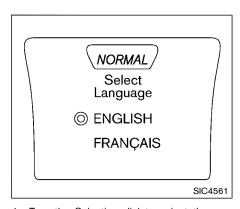


- 4. Turn the Selection dial to select the day of the week, then press the ENTER button to apply the selection.
- 5. Turn the Selection dial to select the hour and AM or PM, then press the ENTER button to apply the selection.
- 6. Turn the Selection dial to select the minutes. then press the ENTER button to apply the selection.

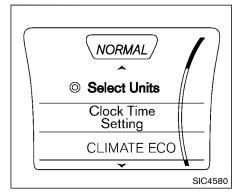


# Select Language

- 1. Press the Drive Mode Select button.
- 2. Press the SETUP button.
- 3. Turn the Selection dial to "Select Language", then press the ENTER button.

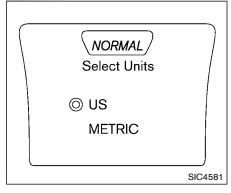


Turn the Selection dial to select the preferred language, then press the ENTER button to apply the selection.

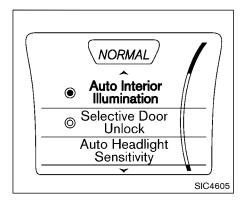


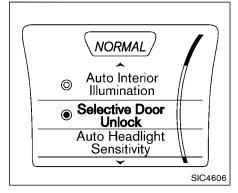
### Select Units

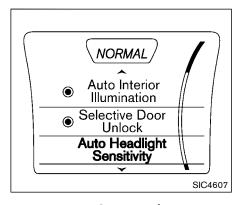
- 1. Press the Drive Mode Select button.
- 2. Press the SETUP button.
- 3. Turn the Selection dial to "Select Units" then press the ENTER button.



4. Turn the Selection dial to select "US" or "METRIC", then press the ENTER button to apply the selection.







### Auto Interior Illumination

Select to turn the illumination of the interior lights on or off when any door is unlocked.

- 1. Press the Drive Mode Select button.
- Press the SFTUP button.
- 3. Turn the Selection dial to "Auto Interior Illumination" then press the ENTER button to switch on or off.

### Selective Door Unlock

When this item is turned on, only the driver's door is unlocked after the door unlock operation is performed once. All of the doors can be unlocked if the door unlock operation is performed again within 1 minute.

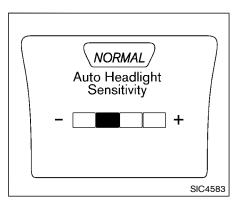
When this item is turned off, all the doors will be unlocked after the door unlock operation is performed once.

- 1. Press the Drive Mode Select button.
- 2. Press the SETUP button.
- 3. Turn the Selection dial to "Selective Door Unlock" then press the ENTER button to switch on or off.

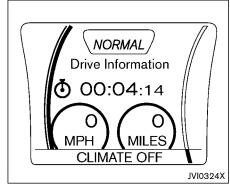
### Auto Headlight Sensitivity (if so equipped)

Select to adjust the sensitivity of the automatic headlight.

- Press the Drive Mode Select button.
- 2. Press the SETUP button.
- 3. Turn the Selection dial to "Auto Headlight Sensitivity" then press the ENTER button.



Turn the Selection dial to + to increase sensitivity or to - to decrease sensitivity, then press the ENTER button to apply the selection.



### **DRIVE INFORMATION**

While in the Drive mode, push the Drive information button to display elapsed time, average speed and trip distance. Pressing the Drive information button a second time will display the G (gravity)-Force screen.

# Elapsed time

The elapsed time shows the time since the last reset.

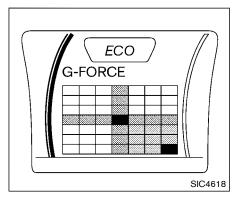
### Average speed (km/h or MPH)

The average speed shows the average vehicle speed since the last reset.

# Trip distance (km or MILES)

The trip distance shows the distance driven since the last reset.

To reset the elapsed time, average speed and trip distance, push the ENTER button for more than one second. All three drive information displays will reset at the same time.



The following ECO INFO mode will appear on the display by pushing the ECO information button, then turning the selection dial to scroll through the different screens.

While driving, only one ECO information screen is displayed. The vehicle must be stopped to scroll through the different screens.

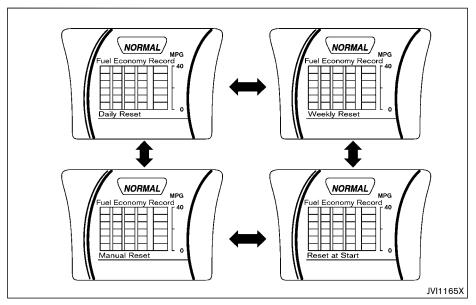
#### G-Force screen

The G (gravity)-Force screen displays the current acceleration and deceleration (front-torear) and cornering (side-to-side) G-Force on the vehicle.

### **ECO INFORMATION**



Do not adjust the display controls while driving so that full attention may given to vehicle operation.



# Daily Reset

Records of up to the past 4 days of fuel consumption can be shown on the display.

# Weekly Reset

Records of up to the past 4 weeks of each week's fuel consumption can be shown on the display.

#### NOTE:

When the clock is not set, the ECO information (daily and weekly) cannot be used.

### Reset at Start

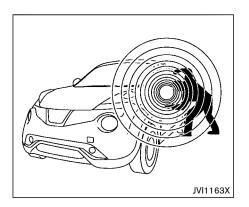
Records of up to the past 4 times of each time of ignition switch ON fuel consumption can be shown on the display.

### Manual Reset

Records of up to the past 4 times of resetting fuel consumption can be shown on the display.

The displayed ECO INFO can be reset by pushing the ENTER button for longer than 1 second.

#### **SECURITY SYSTEMS**



Your vehicle has two types of security systems, as follows:

- Vehicle security system
- NISSAN Vehicle Immobilizer System

The security condition will be shown by the security indicator light.

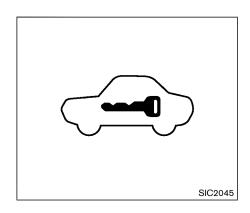
### VEHICLE SECURITY SYSTEM

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

The system helps deter vehicle theft but cannot

prevent it, nor can it prevent the theft of interior or exterior vehicle components in all situations. Always secure your vehicle even if parking for a brief period. Never leave your keys in the vehicle, and always lock it when unattended. Be aware of your surroundings, and park in secure, well-lit areas whenever possible.

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



How to arm the vehicle security system

Close all windows.

The system can be armed even if the windows are open.

- 2. Place the ignition switch in the OFF position and remove the Intelligent Key from the vehicle.
- 3. Close all doors. Lock all doors. The doors can be locked with:
  - the LOCK A button on the Intelligent Key
  - · any request switch
  - · the power door lock switch

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

Even when the driver and/or passengers are in the vehicle, the system will activate with all doors locked with the ignition switch in the LOCK position. When placing the ignition switch in the ACC or ON position, the system will be released.

Vehicle security system activation

The vehicle security system will give the following alarm:

- The headlights blink and the horn sounds intermittently.
- The alarm automatically turns off after approximately 50 seconds. However, the alarm reactivates if the vehicle is tampered with again.

The alarm is activated by:

 Unlocking the door without using the Intelligent Key, the request switch or the key. (Even if the door is opened by releasing the door inside lock knob, the alarm will activate.)

### How to stop an activated alarm

The alarm will stop by unlocking a door by pushing the UNLOCK ab button on the Intelligent Key, pushing the request switch or using the key. The alarm will not stop if the ignition switch is placed in the ACC or ON position.

If the system does not operate as described above, have it checked. It is recommended you visit a NISSAN dealer for this service.

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

- 1. Leave the ignition switch in the ON position for approximately 5 seconds.
- Place the ignition switch in the OFF or LOCK position and wait approximately 10 seconds.
- Repeat step 1 and 2 again.
- Restart the engine while holding the device (which may have caused the interference) separate from the registered key.

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

Statement related to section 15 of FCC rules for NISSAN Vehicle Immobilizer System (CONT ASSY-BCM. ANT ASSY-IMMOBILISER)

#### **FCC Notice:**

### For USA:

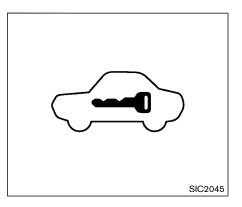
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 Industry Canada licence-exempt RSS standard(s), 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.



soon as possible. Please bring all registered keys that you have. It is recommended vou visit a NISSAN dealer for this service.

# Security indicator light

The security indicator light is located on the meter panel. It indicates the status of the NISSAN Vehicle Immobilizer System.

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

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

If the light still remains on and/or the engine will not start, seek service for the NISSAN Vehicle Immobilizer System as

### WIPER AND WASHER SWITCH



# **WARNING**

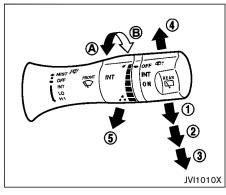
In freezing temperatures the washer solution may freeze on the windshield and obscure your vision which may lead to an accident. Warm windshield with the defroster before you wash the windshield.



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

reservoir tank. Do not use the window washer reservoir tank to mix the washer fluid concentrate and water.

If the windshield wiper operation is interrupted by snow or ice, the wiper may stop moving to protect its motor. If this occurs. turn the wiper switch to the OFF position and remove the snow or ice that is on and around the wiper arms. In approximately 1 minute, turn the switch on again to operate the wiper.



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:

- Intermittent intermittent operation can be adjusted by turning the knob toward (A) (Slower) or (B) (Faster).
- 2 Low continuous low speed operation
- (3) High continuous high speed operation

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

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

### Pulling up the wiper arm:

The windshield wipers must be in the service position in order to replace the wiper blades.

To move the wiper blades to the service position. follow this procedure:

When the ignition switch is in the "ON" position or within 60 seconds of placing the ignition switch to the "OFF" position, lift the lever up (4) two times in less than 0.5 seconds. The windshield wipers will move to the service position automatically, and the wiper blades can now be replaced. To replace the wiper blades, see "Windshield wiper blades" (P.8-15).

To move the wiper blades back to the original position:

Lift the lever up (4) or push the lever down to operate at any wiper speed.



# **CAUTION**

This function can be operated even if the ignition switch is in the "ON" position. However, to prevent an accident or damage when pulling up the wiper arm, be sure to observe the following precautions.

- Make sure the shift lever is in the P (Park) position (Continuously Variable Transmission models).
- Make sure the shift lever is in the N (Neutral) position, with the parking brake fully applied (Manual Transmission models).
- Never allow the passengers to operate the windshield wiper switch inadvertently.
- Do not operate the windshield wiper while the wiper arm is pulled up. The wiper arm may be damaged.

### **REAR WINDOW WIPER AND** WASHER SWITCH



# WARNING

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

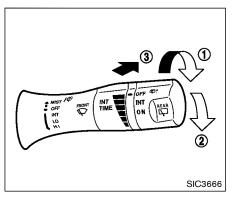


# **CAUTION**

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

window washer reservoir tank to mix the washer fluid concentrate and water.

If the rear window wiper operation is interrupted by snow or ice, the wiper may stop moving to protect its motor. If this occurs, turn the wiper switch to the OFF position and remove the snow or ice that is on and around the wiper arms. In approximately 1 minute, turn the switch on again to operate the wiper.

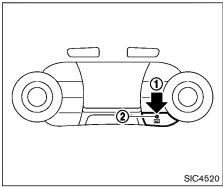


The rear window wiper and washer operate when the ignition switch is in the ON position.

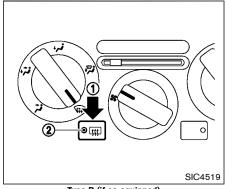
Turn the switch clockwise from the OFF position to operate the wiper.

- Intermittent (INT) intermittent operation (not adjustable)
- Low (ON) continuous low speed operation Push the switch forward (3) to operate the washer. Then the wiper will also operate several times.

### **REAR WINDOW AND OUTSIDE** MIRROR DEFROSTER SWITCH



Type A (if so equipped)



Type B (if so equipped)

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

To defog/defrost the rear window glass and outside mirrors (if so equipped), start the engine and push the switch (1) on. The indicator light (2) will illuminate. Push the switch again to turn the defroster off.

It will automatically turn off in approximately 15 minutes.

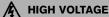


When cleaning the inner side of the rear window, be careful not to scratch or damage the rear window defroster.

XENON HEADLIGHTS (if so equipped)



# WARNING

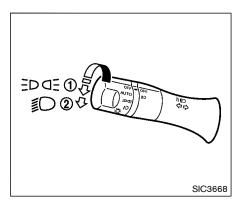


- When xenon headlights are on, they produce a high voltage. To prevent an electric shock, never attempt to modify or disassemble. It is recommended to have your xenon headlights replaced at a NISSAN dealer.
- Xenon headlights provide considerably more light than conventional headlights. If they are not correctly aimed, they might temporarily blind an oncoming driver or the driver ahead of you and cause a serious accident. If headlights are not aimed correctly, it is recommended to take vour vehicle to a NISSAN dealer and have the headlights adjusted correctly.

When the xenon headlight is initially turned on, its brightness or color varies slightly. However. the color and brightness will soon stabilize.

The life of xenon headlights will be shortened by frequent on-off opera-

- tion. It is generally desirable not to turn off the headlights for short intervals (for example, when the vehicle stops at a traffic signal).
- If the xenon headlight bulb is close to burning out, the brightness will drastically decrease, the light will start blinking, or the color of the light will become reddish. If one or more of the above signs appear, it is recommended you visit a NISSAN dealer.



### **HEADLIGHT SWITCH**

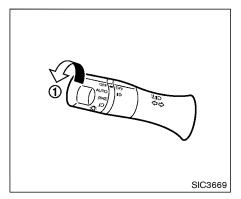
# Lighting

1) Turn the switch to the spas position:

The front parking, side marker, tail, license plate, instrument lights will come on. However, the daytime running light (for NISMO models and Canada) will turn off.

(2) Turn the switch to the position:

Headlights will come on and all the other lights remain on. However, the daytime running light (for NISMO models and Canada) will turn off.



# Autolight system (if so equipped)

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

To set the autolight system:

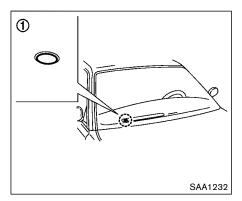
- 1. Make sure the headlight switch is in the AUTO position (1).
- 2. Place the ignition switch in the ON position.
- The autolight system automatically turns the headlights on and off.

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

The autolight system can turn on the headlights automatically when it is dark and turn off the headlights when it is light.

The headlights will also be turned on automatically at twilight or in rainy weather (when the windshield wiper is operated continuously).

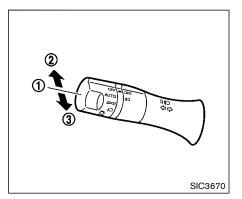
If the ignition switch is placed in the OFF position and one of the doors is opened and this condition is continued, the headlights remain on for 5 minutes.



Be sure not to put anything on top of the photo sensor (1) located on the top of the instrument panel. The photo sensor controls the autolight; if it is covered, the photo sensor reacts as if it is dark and the headlights will illuminate.

# Automatic headlights off delay

You can keep the headlights on for up to 45 seconds after you place the ignition switch in the OFF position and open any door then close all the doors.



### Headlight beam select

- To select the low beam, put the lever in the neutral position as shown.
- To select the high beam, push the lever forward while the switch is in the ( position, Pull it back to select the low beam.
- Pulling the lever toward you will flash the headlight high beam even when the headlight switch is in the OFF position.

### Battery saver system

- When the headlight switch is in the spas or position while the ignition switch is in the ON position, the lights will automatically turn off within a period of time after the ignition switch has been placed in the OFF position.
- When the headlight switch remains in the EDGE or position after the lights automatically turn off, the lights will turn on when the ignition switch is placed in the ON position.

# CAUTION

- When you turn on the headlight switch again after the lights automatically turn off, the lights will not turn off automatically. Be sure to turn the light switch to the OFF position when you leave the vehicle for extended periods of time, otherwise the battery will be discharged.
- Never leave the light switch on when the engine is not running for extended periods of time even if the headlights turn off automatically.

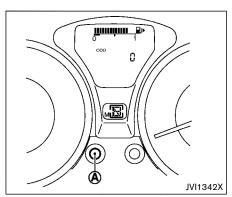
### Daytime running light system (for NISMO models and Canada)

The daytime running lights automatically illuminate when the engine is started with the parking brake released. The daytime running lights operate with the headlight switch in the OFF position. Turn the headlight switch to the position for full illumination when driving at night. (The daytime running lights will turn off.)

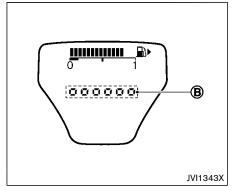
If the parking brake is applied before the engine is started, the daytime running lights do not illuminate. The daytime running lights illuminate once the parking brake is released. The daytime running lights will remain on until the ignition switch is placed in the OFF position.

# **WARNING**

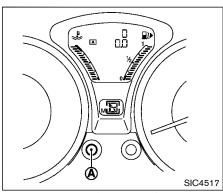
When the daytime running light system is active, tail lights on your vehicle are not on. It is necessary at dusk to turn on vour headlights. Failure to do so could cause an accident injuring yourself and others.



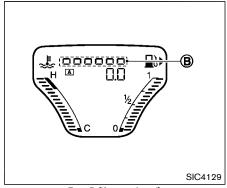
Type A (if so equipped)



Type A (if so equipped)



Type B (if so equipped)



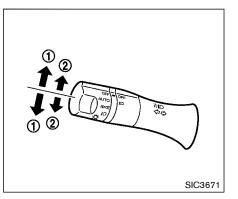
Type B (if so equipped)

### Instrument brightness control

The instrument brightness control operates when the ignition switch is in the ON position.

Push the control knob (A) to adjust the brightness of the instrument panel lights. The brightness indicator (B) will be shown briefly in the vehicle information display when the control is turned.

When the brightness level reaches the maximum or minimum, a beep will sound.



Choose the appropriate method to signal a lane change based on road and traffic conditions.

### TURN SIGNAL SWITCH

# 1 Turn signal

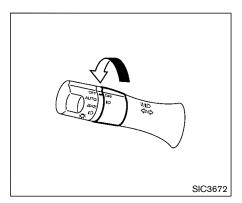
Move the lever up or down to signal the turning direction. When the turn is completed, the turn signals cancel automatically.

# (2) Lane change signal

Move the lever up or down until the turn signal begins to flash, but the lever does not latch, to signal a lane change. Hold the lever until the lane change is completed.

Move the lever up or down until the turn signal begins to flash, but the lever does not latch, and release the lever. The turn signal will automatically flash three times.

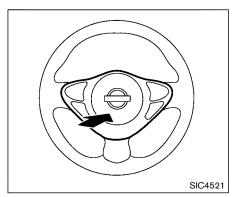
### HORN



### FOG LIGHT SWITCH (if so equipped)

To turn the fog lights on, turn the headlight switch to the position, then turn the switch to the #D position. To turn them off, turn the switch to the OFF position.

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

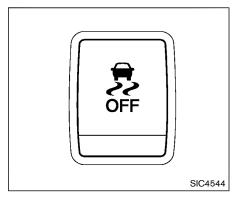


To sound the horn, push the center pad area of the steering wheel.

# **WARNING**

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

### **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 

Push the VDC OFF switch again or restart the engine to turn on the system. (See "Vehicle Dynamic Control (VDC) system" (P.5-37).)

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

# **A** WARNING

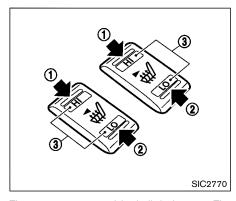
Do not use or allow occupants to use the seat heater if you or the occupants cannot monitor elevated seat temperatures or have an inability to feel pain in body parts that contact the seat. Use of the seat heater by such people could result in serious injury.

# **A** CAUTION

- The battery could run down if the seat heater is operated while the engine is not running.
- Do not use the seat heater for extended periods or when no one is using the seat.
- Do not put anything on the seat which insulates heat, such as a blanket, cushion, seat cover, etc.
   Otherwise, the seat may become overheated.
- Do not place anything hard or heavy on the seat or pierce it with a pin or similar object. This may result in

damage to the heater.

- Any liquid spilled on the heated seat should be removed immediately with a dry cloth.
- When cleaning the seat, never use gasoline, thinner, or any similar materials.
- If any malfunctions are found or the heated seat does not operate, turn the switch off and have the system checked. It is recommended you visit a NISSAN dealer for this service.



The seats are warmed by built-in heaters. The switches located on the center console can be operated independently of each other.

- 1. Start the engine.
- 2. Select heat range.
  - 1 For high heat, push the HI (High) side of the switch.
  - 2 For low heat, push the LO (Low) side of the switch.

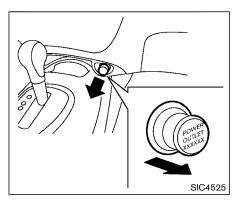
The indicator light in the switch ③ will illuminate when the heater is on.

To turn off the heater, return the switch to the level position. Make sure the indicator light goes off.

### **POWER OUTLET**

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

When the vehicle's interior is warmed, or before you leave the vehicle, be sure to turn off the switch.



The power outlet is located in the instrument panel.

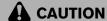
# CAUTION

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

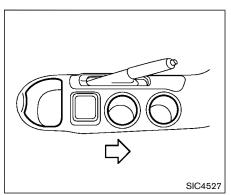
- Avoid using power outlet when the air conditioner, headlights or rear window defroster is on.
- This power outlet is not designed for use with a cigarette lighter unit.
- Push the plug in as far as it will go. If good contact is not made, the plug may overheat or the internal temperature fuse may open.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

### **STORAGE**

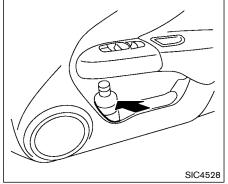
### **CUP HOLDERS**



- 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.



Center console



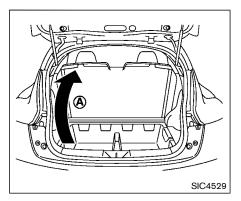
Door (front and rear)

### Soft bottle holders



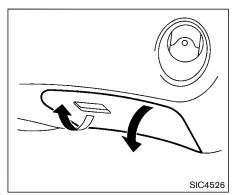
# CAUTION

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





1. To open the cargo floor box, pull the board **A** .



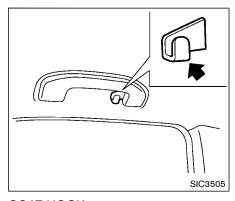
### **GLOVE BOX**



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

To open the glove box, pull the handle.

To close, push the lid in until the lock latches. The glove box light illuminates when the headlight switch is turned on.



# **COAT HOOK**

The coat hook is located above the rear side window.



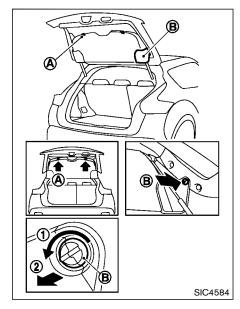
Do not apply a total load of more than 2 kg (4 lb) to the hook.

### CARGO COVER (if so equipped)

# **WARNING**

- Never put anything on the cargo cover, no matter how small. Any object on it could cause an injury in an accident or sudden stop.
- Do not leave the cargo cover in the vehicle with it disengaged from the holder.
- The child restraint top tether strap may be damaged by contact with the cargo cover or items in the luggage area. Remove the cargo cover from the vehicle or secure it and any luggage. Your child could be seriously injured or killed in a collision if the top tether strap is damaged.

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



To install the cargo cover:

- 1. Open the liftgate.
- 2. Fix the clip (A) on the liftgate lower garnish.
- 3. Fix the clip (B) on the liftgate side garnish.
- 4. Hook the rope on the clip located on the liftgate side garnish.

To remove the cargo cover:

- 1. Open the liftgate.
- 2. Remove the rope from the liftgate side garnish.
- Remove the clip (B) from the liftgate side garnish.
- Remove the clip (A) from the liftgate lower garnish.

### **WINDOWS**

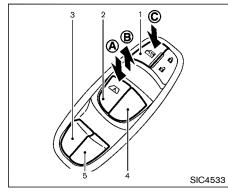
#### POWER WINDOWS



# **WARNING**

- Make sure that all passengers have their hands, etc. inside the vehicle while it is in motion and before closing the windows. Use the window lock switch to prevent unexpected use of the power windows.
- To help avoid risk of injury or death through unintended operation of the vehicle and or its systems, including entrapment in windows or inadvertent door lock activation. do not leave children, people who require the assistance of others or pets unattended in your vehicle. Additionally, the temperature inside a closed vehicle on a warm day can quickly become high enough to cause a significant risk of injury or death to people and pets.

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



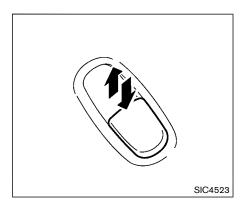
- Window lock button
- Driver side window
- Rear left passenger side window
- Front passenger side window
- Rear right passenger side window

### Main power window switch (driver's side)

To open or close the window, push down (A) or pull up (B) the switch and hold it. The main switch (driver side switches) will open or close all the windows.

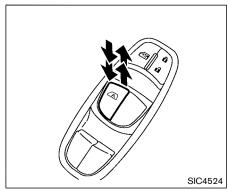
### Locking passengers' windows

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



### Passenger side power window switch

The passenger side switch will open or close only the corresponding window. To open or close the window, push down or pull up the switch and hold it.



### Automatic operation

The automatic operation is available for the switch that has an A mark on its surface.

To fully open or close the window, completely push down or pull up the switch and release it; the switch need not be held. The window will automatically open or close all the way. To stop the window, just push or lift the switch in the opposite direction.

A light push or pull on the switch will cause the window to open or close until the switch is released.

#### Auto-reverse function



# **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 control unit detects something caught in the window as it is closing, the window will be immediately lowered.

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

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

If the windows do not close automatically 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.
- Close the door.
- 3. Open the window completely by operating the power window switch.
- 4. Pull the power window switch and hold it to close the window, and then hold the switch more than 3 seconds after the window is closed completely.
- 5. Release the power window switch. Operate the window by the automatic function to confirm the initialization is complete.

If the power window automatic function does not operate properly after performing the procedure above, it is recommended you have your vehicle checked by a NISSAN dealer.

# MOONROOF (if so equipped)



# **WARNING**

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



# A CAUTION

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

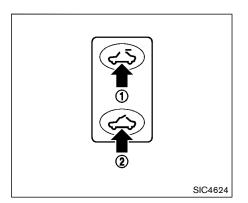
### POWER MOONROOF

The moonroof only operates when the ignition switch is in the ON position.

The moonroof is operational for about 45 seconds, even if the ignition switch is pushed to the OFF position. If the driver's door or the passenger's door is opened during this period of about 45 seconds, power to the moonroof is canceled.

### Sunshade

The sunshade will open automatically when the moonroof is opened. However, it must be closed manually.



# Sliding the moonroof

To fully open or close the moonroof, push the it: it need not be held. The roof will automatically open or close all the way. To stop the roof, push the switch in any direction while it is opening or closing.

# Tilting the moonroof

To tilt up, first close the moonroof by pushing the switch toward (2). Push the switch toward (2) again and release it; it need not be held. To tilt down the moonroof, push the switch toward  $\leq 5$  (1).

#### Auto reverse function



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

If the control unit detects something caught in the moonroof when it is closing, the moonroof will be immediately opened.

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

If the moonroof cannot be closed automatically when the auto reverse function activates due to a malfunction, push and hold the switch toward <> ②.

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

### INTERIOR LIGHTS

# If the moonroof does not operate

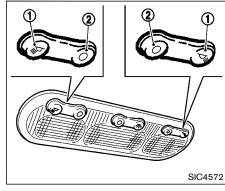
If the moonroof does not operate properly, perform the following procedure to initialize the moonroof operation system.

- 1. If the moonroof is open, close it fully by repeatedly pushing the switch toward < **(2)**.
- 2. Push and hold the switch toward (2) to tilt the moonroof up.
- 3. Release the moonroof switch after the moonroof moves slightly up and down.
- 4. Push and hold the switch toward (5) (1) to fully tilt the moonroof down.
- 5. Check if the moonroof switch operates normally.

If the moonroof does not operate properly after performing the procedure above, have your moonroof checked and repaired. It is recommended you visit a NISSAN dealer for this service.

# A CAUTION

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

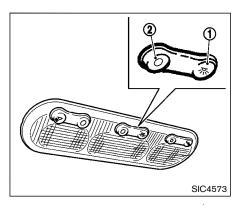


MAP LIGHTS (if so equipped)

Operate the map light switch to turn the map light on or off.

(1): ON position

(2): OFF position



# MAP LIGHT CONTROL SWITCH (if so equipped)

The map lights control switch has three positions: ON (1), OFF (2) and center.

### ON position

When the switch is in the ON position (1), the map lights will illuminate.

### OFF position

When the switch is in the OFF position (2), the map lights will not illuminate, regardless of the condition.

# Center position

When the switch is in the center position, the map lights will illuminate under the following conditions:

- ignition switch is placed in the OFF position
  - remain on for about 15 seconds.
- doors are unlocked by pushing the UN-LOCK button (on the Intelligent Key) or the request switch with the ignition switch in the LOCK position
  - remain on for about 15 seconds.
- any door is opened and then closed with the ignition switch in the LOCK position
  - remain on for about 15 seconds.
- any door is opened with the ignition switch in the ACC or ON position
  - remain on while the door is opened. When the door is closed, the lights go off.

The lights will turn off after a period of time when the lights remain illuminated to prevent the battery from becoming discharged.

### CARGO LIGHT

The cargo room lights illuminate when the liftgate is opened. When the liftgate is closed, the lights will turn off.

# **MEMO**

# 3 Pre-driving checks and adjustments

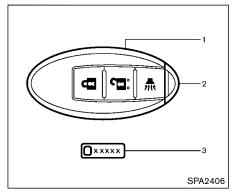
Keys 3-	2
Intelligent Keys 3-	2
Doors	4
Locking with key 3-	4
Locking with inside lock knob 3-	4
Locking with power door lock switch 3-	5
Automatic door locks 3-	5
Child safety rear door lock 3-	6
Intelligent Key system 3-	6
Intelligent Key operating range 3-	8
Door locks/unlocks precaution 3-	8
Intelligent Key operation 3-	9
Battery saver system 3-1	0
Warning lights and audible reminders	0
Troubleshooting guide 3-1	1
How to use remote keyless entry function 3-1	2

Hood	3-15
Liftgate	3-16
Front side and rear unique parts (NISMO models)	3-17
Fuel-filler door	3-18
Opening the fuel-filler door	3-18
Fuel-filler cap	3-18
Tilt steering column	3-20
Tilt operation	3-20
Sun visors	3-21
Mirrors	3-21
Inside mirror	3-21
Outside mirrors	3-22
Vanity mirror	3-23

#### **KEYS**

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, it is recommended you visit a NISSAN dealer for duplicates by using the key number. NISSAN does not record any key numbers so it is very important to keep track of vour kev number plate.

A key number is only necessary when you have lost all keys and do not have one to duplicate from. If you still have a key, it can be duplicated without knowing the key number.



- Intelligent Key (2 sets)
- Mechanical key (inside Intelligent Key) (2 sets)
- Key number plate

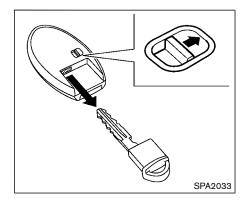
#### INTELLIGENT KEYS

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



- Be sure to carry the Intelligent Key with you when driving. The Intelligent Kev is a precision device with a built-in transmitter. To avoid damaging it, please note the following.
  - The Intelligent Key is water resistant; however, wetting may damage the Intelligent Key. If the Intelligent Key gets wet, immediately wipe until it is completely dry.
  - Do not bend, drop or strike it against another object.
  - If the outside temperature is below 14°F (-10°C) degrees, the battery of the intelligent key may not function properly.
  - Do not place the Intelligent Key for an extended period in a place where temperatures exceed 140°F (60°C).

- Do not change or modify the Intelligent Kev.
- Do not use a magnet key holder.
- Do not place the Intelligent Key near an electric appliance such as a television set, personal computer or cellular phone.
- Do not allow the Intelligent Key to come into contact with water or salt water, and do not wash it in a washing machine. This could affect the system function.
- If an Intelligent Key is lost or stolen, NISSAN recommends erasing the ID code of that Intelligent Key. This will prevent the Intelligent Key from unauthorized use to unlock the vehicle. For information regarding the erasing procedure, it is recommended you visit a NISSAN dealer.



### Mechanical key

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

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

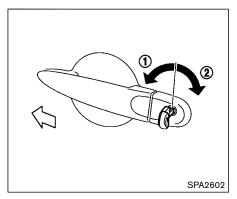
Use the mechanical key to lock or unlock the doors. (See "Doors" (P.3-4).)

# **CAUTION**

Always carry the mechanical key installed in the Intelligent Key.

# **WARNING**

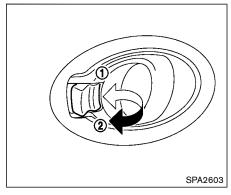
- Always have the doors locked while driving. Along with the use of seat belts, this provides greater safety in the event of an accident by helping to prevent persons from being thrown from the vehicle. This also helps keep children and others from unintentionally opening the doors, and will help keep out intruders.
- Before opening any door, always look for and avoid oncoming traffic.
- To help avoid risk of injury or death through unintended operation of the vehicle and or its systems, including entrapment in windows or inadvertent door lock activation, do not leave children, people who require the assistance of others or pets unattended in your vehicle. Additionally, the temperature inside a closed vehicle on a warm day can quickly become high enough to cause a significant risk of injury or death to people and pets.



### LOCKING WITH KEY

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

- Turning the driver's door key cylinder to the front of the vehicle (1) will lock all doors and the liftgate.
- Turning the driver's door key cylinder once to the rear of the vehicle ② will unlock the driver's door. After returning the key to the neutral position, turning it to the rear again within 5 seconds will unlock all doors and the liftgate.

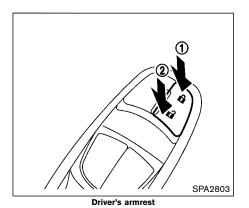


### LOCKING WITH INSIDE LOCK KNOB

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

To unlock, move the inside lock knob to the unlock position (2).

When locking the door without a key, be sure not to leave the key inside the vehicle.



### LOCKING WITH POWER DOOR LOCK **SWITCH**

Operating the power door lock switch will lock or unlock all the doors. The switch is located on the driver's door armrest.

To lock the doors, push the power door lock switch to the lock position (1) with the driver's door open, then close the door.

# When locking the door this way, be sure not to leave the key inside the vehicle.

To unlock the doors, push the power door lock switch to the unlock position (2).

# Lockout protection

Lockout protection function helps to prevent the keys from being accidentally locked inside the vehicle.

- When the power door lock switch is moved to the lock position with the ignition switch placed in the ACC or ON position and any door open, all doors will lock and then unlock automatically.
- When the power door lock switch is moved to the lock position with the Intelligent Key left in the vehicle and any door open, all doors will unlock automatically and a chime will sound after the door is closed.

### AUTOMATIC DOOR LOCKS

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

### The automatic unlock function can be deactivated or activated.

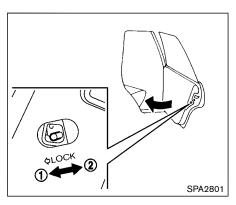
To deactivate or activate the automatic door unlock system, perform the following procedure.

- Close all doors.
- Place the ignition switch in the ON position.
- 3. Within 20 seconds, push and hold the power door lock switch to the A (UN-LOCK) position for more than 5 seconds.

- 4. When activated, the hazard warning lights will flash twice. When deactivated, the hazard warning lights will flash once.
- 5. The ignition switch must be placed in the OFF and ON position again between each setting change.

When the automatic door unlock system is deactivated, the doors do not unlock when the ignition is placed in the OFF position. To unlock the door manually, use the inside lock knob or the power door lock switch.

#### INTELLIGENT KEY SYSTEM



### CHILD SAFETY REAR DOOR LOCK

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

When the levers are in the lock position (1), the rear doors can be opened only from the outside.

To disengage, move the levers to the unlock position (2).

# **WARNING**

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

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

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

# **A** CAUTION

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

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

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

computer.

 When the vehicle is parked near a parking meter.

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

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

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

For information regarding replacement of a battery, see "Intelligent Key battery replacement" (P.8-20).

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

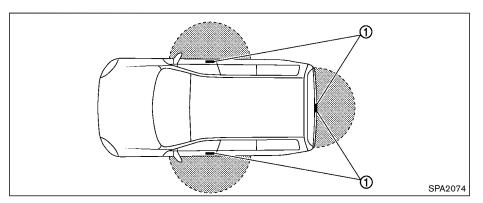
# CAUTION

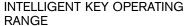
Do not allow the Intelligent Key, which contains electrical components, to come into contact with water or salt water. This could affect the system function.

- Do not drop the Intelligent Key.
- Do not strike the Intelligent Key sharply against another object.
- Do not change or modify the Intelligent Kev.
- Wetting may damage the Intelligent Key. If the Intelligent Key gets wet, immediately wipe until it is completely dry.
- If the outside temperature is below 14°F (-10°C) degrees, the battery of the Intelligent Key may not function properly.
- Do not place the Intelligent Key for an extended period in an area where temperatures exceed 140°F (60°C).
- Do not attach the Intelligent Key with a key holder that contains a magnet.
- Do not place the Intelligent Key near equipment that produces a magnetic field, such as a TV, audio equipment, personal computers or cellular phone.

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

The Intelligent Key function can be disabled. For information about disabling the Intelligent Key function, it is recommended that you contact a NISSAN dealer.





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

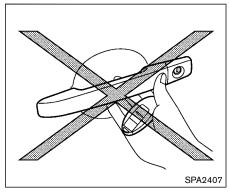
When the Intelligent Key battery is discharged or strong radio waves are present near the operating location, the Intelligent Key system's operating range becomes narrower, and the Intelligent Key may not function properly.

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

If the Intelligent Key is too close to the door glass, handle or rear bumper, the request

switches may not function.

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

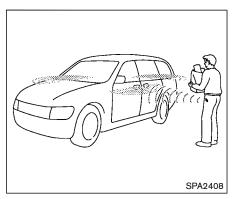


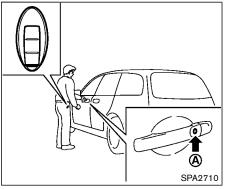
# DOOR LOCKS/UNLOCKS PRECAUTION

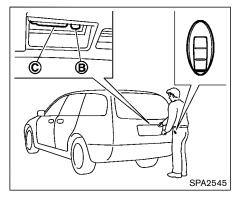
- Do not push the door handle request switch with the Intelligent Key held in your hand as illustrated. The close distance to the door handle will cause the Intelligent Key system to have difficulty recognizing that the Intelligent Key is outside the vehicle.
- After locking with the door handle request switch, verify the doors are securely locked by testing them.
- To prevent the Intelligent Key from being left inside the vehicle, make sure you carry the key with you and then lock the doors.

#### 3-8 Pre-driving checks and adjustments

Do not pull the door handle before pushing the door handle request switch. The door will be unlocked but will not open. Release the door handle once and pull it again to open the door.







### INTELLIGENT KEY OPERATION

You can lock or unlock the doors without taking the key out from your pocket or bag.

When you carry the Intelligent Key with you, you can lock or unlock all doors by pushing the door handle request switch (driver's or front passenger's) (A) or liftgate request switch (B) within the range of operation.

When you lock or unlock the doors, the hazard indicator will flash and the horn (or the outside chime) will sound as a confirmation. For details, see "Setting hazard indicator and horn mode" (P.3-13).

#### Locking doors

- Place the ignition switch in the OFF position and carry the Intelligent Key with you.\*1
- 2. Close all the doors.\*2
- Push the door handle request switch (driver's or front passenger's) (A) or the liftgate request switch (B) while carrying the Intelligent Key with you.\*3
- 4. All the doors and the liftgate will lock.
- The hazard indicator flashes twice and the outside chime sounds twice.
- \*1: Doors will lock with the request switch while the ignition switch is in the ACC or ON position.
- \*2: Doors will not lock with the request switch while any door is open.
- \*3: Doors will not lock with the request switch when the Intelligent Key is left inside the vehicle. However, when an Intelligent Key is inside the vehicle, doors can be locked with another registered Intelligent Key.

#### Unlocking doors

- Push the door handle request switch (A) or the liftgate request switch (B) while carrying the Intelligent Key with you.
- The hazard indicator flashes once and outside chime sounds once. The corresponding door or the liftgate will unlock.

- Push the request switch again within 1 minute.
- The hazard indicator flashes once and outside chime sounds once again. All the doors and the liftgate will unlock.

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

- Opening any door.
- Pushing the ignition switch.

During this 1-minute time period, if the UNLOCK

button on the Intelligent Key is pushed, all doors will be locked automatically after another 1 minute.

#### Opening liftgate

- 1. Carry the Intelligent Key.
- 2. Push the liftgate opener switch ©.
- 3. The liftgate will unlock.

#### BATTERY SAVER SYSTEM

When all the following conditions are met for a period of time, the battery saver system will cut off the power supply to prevent battery discharge.

 The ignition switch is in the ACC position, and

- All doors are closed, and
- The shift lever is in the P (Park) position (Continuously Variable Transmission models).

# WARNING LIGHTS AND AUDIBLE REMINDERS

To help prevent the vehicle from moving unexpectedly by erroneous operation of the Intelligent Key listed on the following chart or to help prevent the vehicle from being stolen, chime or beep sounds inside and outside the vehicle and a warning light illuminates or blinks.

When a chime or beep sounds or the warning light illuminates or blinks, be sure to check the vehicle and Intelligent Key.

See "Troubleshooting guide" (P.3-11) and "Warning lights, indicator lights and audible reminders" (P.2-15).

Intelligent Key system warning light:

P position selecting warning light:

#### TROUBLESHOOTING GUIDE

	Symptom	Possible cause	Action to take
		The shift lever is not in the P (Park) position.	Shift the shift lever to the P (Park) position.
When shifting the shift lever to the P (Park) position.	The inside warning chime sounds continuously (Continuously Variable Transmission models).	The ignition switch is in the ACC or ON position.	Push the ignition switch to the OFF position.
When opening the driver's door to get out of the vehicle	The inside warning chime sounds continuously.	The ignition switch is in the ACC position.	Push the ignition switch to the OFF position.
When closing the door after get-	The Intelligent Key system warning light in the meter blinks in yellow, and the outside chime sounds 3 times and the inside warning chime sounds for a few seconds.	The ignition switch is in the ACC or ON position.	Push the ignition switch to the OFF position.
ting out of the vehicle	The P position selecting warning light in the meter illuminates and the outside chime sounds continuously (Continuously Variable Transmission models).	The ignition switch is in the ACC or OFF position and the shift lever is not in the P (Park) position.	Move the shift lever to the P (Park) position and push the ignition switch to the OFF position.
When closing the door with the inside lock knob turned to LOCK	The outside chime sounds for a few seconds and all the doors unlock.	The Intelligent Key is inside the vehicle.	Carry the Intelligent Key with you.
When pushing the request switch		The Intelligent Key is inside the vehicle.	Carry the Intelligent Key with you.
or the LOCK f button on the Intelligent Key to lock the door	The outside chime sounds for a few seconds.	A door is not closed securely.	Close the door securely.
When pushing the ignition switch to start the engine	The Intelligent Key system warning light in the meter blinks in green.	The battery charge is low.	Replace the battery with a new one. (See "Intelligent Key battery replacement" (P.8-20).)
	The Intelligent Key system warning light in the meter blinks in yellow and the inside warning chime sounds for a few seconds.	The Intelligent Key is not in the vehicle.	Carry the Intelligent Key with you.
When pushing the ignition switch	The Intelligent Key system warning light in the meter illuminates in yellow.	It warns of a malfunction with the Intelligent Key system.	It is recommended that you contact a NISSAN dealer.

#### HOW TO USE REMOTE KEYLESS ENTRY FUNCTION



#### **WARNING**

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

#### **CAUTION**

Do not allow the Intelligent Key, which contains electrical components, to come into contact with water or salt water. This could affect the system function.

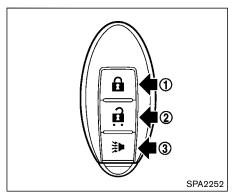
- Do not drop the Intelligent Key.
- Do not strike the Intelligent Key sharply against another object.
- Do not change or modify the Intelligent Kev.
- Wetting may damage the Intelligent Key. If the Intelligent Key gets wet, immediately wipe until it is completely dry.
- If the outside temperature is below 14°F (-10°C) degrees, the battery of the intelligent key may not function properly.
- Do not place the Intelligent Key for an extended period in an area where temperatures exceed 140°F (60°C).
- Do not attach the Intelligent Key with a key holder that contains a magnet.
- Do not place the Intelligent Key near equipment that produces a magnetic field, such as a TV, audio equipment, personal computers or cellular phone.

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

The remote keyless entry function will not operate:

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

The remote keyless entry function can also operate the vehicle alarm.



- 1 LOCK A button
- 2 UNLOCK 1 button
- 3 PANIC putton

When you lock or unlock the doors, the hazard indicator will flash and the horn will sound as a confirmation. For details, see "Setting hazard indicator and horn mode" (P.3-13).

#### Locking doors

- Place the ignition switch in the OFF position and carry the Intelligent Key with you.\*
- 2. Carry the Intelligent Key with you.
- 3. Close all the doors.
- 4. Push the LOCK ♠ button ① on the Intelligent Key.

- 5. All the doors and the liftgate will lock.
- The hazard indicator flashes twice and the horn chirps once.
- Doors will lock with the Intelligent Key while the ignition switch is in the ACC or ON position.

Operate the door handles to confirm that the doors have been securely locked.

#### Unlocking doors

- 1. Push the UNLOCK abutton 2 on the Intelligent Key once.
- The hazard indicator flashes once. The driver's door will unlock.
- Push the UNLOCK button again within 1 minute.
- The hazard indicator flashes once. All the doors and the liftgate will unlock.

All doors will be locked automatically unless one of the following operations is performed within 1 minute after pushing the UNLOCK button while the doors are locked.

- Opening any door (including the liftgate).
- Pushing the ignition switch.

During this 1-minute time period, if the UNLOCK button is pushed, all doors will be locked automatically after another 1 minute.

#### Using panic alarm

If you are near your vehicle and feel threatened, you may activate the alarm to call attention as follows:

- Push the PANIC ≱ button ③ on the Intelligent Key for more than 1 second.
- The theft warning alarm and headlights will stay on for 25 seconds.
- 3. The panic alarm stops when:
  - It has run for 25 seconds, or
  - Any of the buttons on the Intelligent Key is pushed. (Note: the PANIC button must be pushed for more than 1 second.)

#### Setting hazard indicator and horn mode

This vehicle is set in hazard indicator and horn mode when you first receive the vehicle.

In hazard indicator and horn mode, when the LOCK button 1 is pushed, the hazard indicator flashes twice and the horn chirps once. When the UNLOCK button 2 is pushed, the hazard indicator flashes once.

If horns are not necessary, the system can be switched to the hazard indicator mode.

In hazard indicator mode, when the LOCK button is pushed, the hazard indicator flashes twice. When the UNLOCK button is pushed, neither the hazard indicator nor the

horn operates.

#### Hazard indicator and horn mode:

Operation	DOOR LOCK	DOOR UNLOCK
t determine the queen controls	HAZARD - twice OUTSIDE CHIME - twice	HAZARD - <b>once</b> OUTSIDE CHIME - <b>once</b>
Pushing A or A hutton	HAZARD - twice HORN - once	HAZARD - <b>once</b> HORN - none

#### Hazard indicator mode:

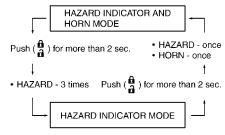
Operation	DOOR LOCK	DOOR UNLOCK
Pushing door handle request switch or liftgate request switch	117 127 11 12	HAZARD - none OUTSIDE CHIME - none
Pushing 🔒 or 🔒 button	HAZARD - <b>twice</b> HORN - none	HAZARD - none HORN - none

#### HOOD

#### Switching procedure:

To switch the hazard indicator and horn (chime) operation, push the LOCK A (1) and UN-LOCK (2) buttons on the Intelligent Key simultaneously for more than 2 seconds.

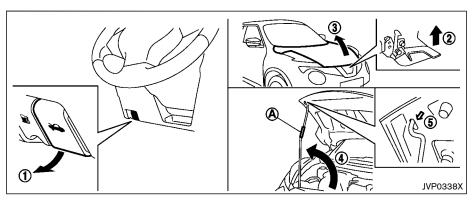
- When the hazard indicator mode is set, the hazard indicator flashes 3 times.
- When the hazard indicator and horn mode is set, the hazard indicator flashes once and the horn chirps once.



# WARNING

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

#### LIFTGATE



When opening the hood:

- 1. Pull the hood release handle (1) located below the instrument panel; the hood will then spring up slightly.
- 2. Locate the lever (2) in between the hood and grille, and pull the lever up with your fingertips.
- Raise the hood (3).
- Remove the support rod (4) and insert it into the slot (5).

Hold the coated part (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:

- 1. While supporting the hood, return the support rod to its original position.
- 2. Slowly lower the hood to about 8 to 12 in (20 to 30 cm) above the hood lock, then let it drop.
- 3. Make sure it is securely latched.

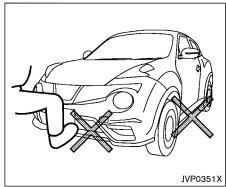
# **WARNING**

- Always be sure the liftgate has been closed securely to prevent it from opening while driving.
- Do not drive with the liftgate open. This could allow dangerous exhaust gases to be drawn into the vehicle. See "Exhaust gas (carbon monoxide)" (P.5-2) of this manual.
- Do not leave children unattended inside the vehicle. They could unknowingly activate switches or controls. Unattended children could become involved in serious accidents.
- Make sure that all passengers have their hands, etc. inside the vehicle before closing the liftgate.

#### FRONT SIDE AND REAR UNIQUE **PARTS (NISMO models)**

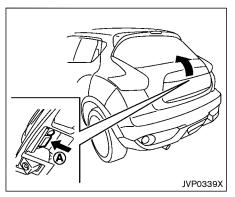
The NISMO models have the following unique parts on the front, side and rear of the vehicle.

- Front bumper
- Daytime running light (P.2-42, P.8-23, P.8-26)
- Side sill extensions
- Rear spoiler (P.7-3)





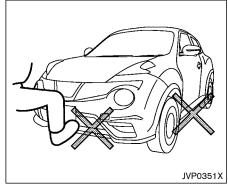
Do not place your foot on or step on the front bumper. Also, do not step on the side sill extensions when getting in or out of the vehicle. Doing so may result in damage to the front bumper and side sill extensions.



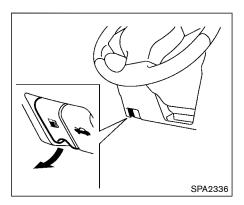
To open the liftgate, unlock it and push the liftgate opener switch (A) . Pull up the liftgate to open.

The liftgate can be unlocked by:

- pushing the UNLOCK a button on the Intelligent Key twice.
- pushing the liftgate request switch with the Intelligent Key carried with you.
- pushing the power door lock switch to the unlock position.
- inserting the key into the driver's door key cylinder and turning it to the rear of the vehicle twice.

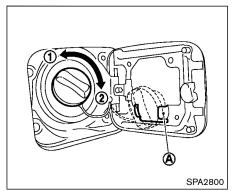


#### **FUEL-FILLER DOOR**



#### OPENING THE FUEL-FILLER DOOR

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



#### **FUEL-FILLER CAP**

To remove the fuel-filler cap:

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

To install the fuel-filler cap:

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

# **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 engine and do not smoke or allow open flames or sparks near the vehicle when refueling.
- Do not attempt to top off the fuel tank after the fuel pump nozzle shuts off automatically. Continued refueling may cause fuel overflow, resulting in fuel spray and possibly a fire.
- Use only an original equipment type fuel-filler cap as a replacement. It has a built-in safety valve needed for proper operation of the fuel system and emission control system. An incorrect cap can result in a serious malfunction and possible injury. It could also cause the malfunction indicator light to come on.
- Never pour fuel into the throttle body to attempt to start your vehicle.

- Do not fill a portable fuel container in the vehicle or trailer. Static electricity can cause an explosion of flammable liquid, vapor or gas in any vehicle or trailer. To reduce the risk of serious injury or death when filling portable fuel containers:
  - Always place the container on the ground when filling.
  - Do not use electronic devices when filling.
  - Keep the pump nozzle in contact with the container while you are filling it.
  - Use only approved portable fuel containers for flammable liquid.

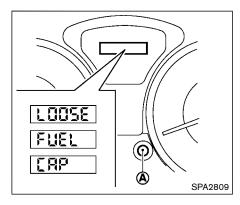
# **CAUTION**

- If fuel is spilled on the vehicle body, flush it away with water to avoid paint damage.
- Insert the cap straight into the fuelfiller tube, then tighten until the fuel-filler cap clicks. Failure to tighten the fuel-filler cap properly may

cause the SERVICE malfunction indicator light (MIL) to illuminate. If the SERVICE light illuminates because the fuelfiller cap is loose or missing, tighten or install the cap and continue to drive the vehicle. The SERVICE light should turn off after a few driving trips. If the ENGINE light does not turn off after a few driving trips, have the vehicle inspected. It is recommended you visit a NISSAN dealer for this service.

For additional information, see "Malfunction Indicator Light (MIL)" (P.2-22).

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 SERVICE Malfunction Indicator Light (MIL) to illuminate.



#### LOOSE FUEL CAP warning message

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

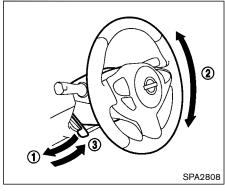
- 1. Remove and install the fuel-filler cap as previously described as soon as possible.
- 2. Tighten the fuel-filler cap until it clicks.
- 3. Push the trip computer mode switch (A) for about 1 second to turn off the LOOSE FUEL CAP warning message after tightening the

#### **TILT STEERING COLUMN**

fuel cap.



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

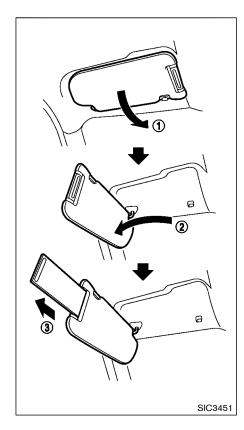


#### **TILT OPERATION**

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

Pull the lock lever up (3) securely to lock the steering wheel in place.

**SUN VISORS MIRRORS** 



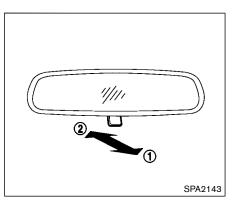
# **A** CAUTION

- Do not store the main sun visor before storing the extension sun visor.
- Do not pull the extension sun visor forcedly downward.
- 1. To block out glare from the front, swing down the main sun visor (1).
- 2. To block glare from the side, remove the main sun visor from the center mount and swing it to the side (2).
- 3. Draw out the extension sun visor (3) from the main sun visor to block from further glare.

# SPA2447

#### **INSIDE MIRROR**

Adjust the angle of the inside mirror to the desired position.



The night position (1) will reduce glare from the headlights of vehicles behind you at night.

Use the day position (2) when driving in daylight hours.

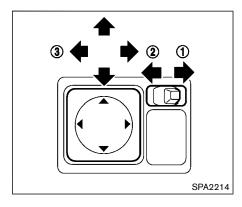


Use the night position only when necessary, because it reduces rear view clarity.

#### OUTSIDE MIRRORS



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.



#### Adjusting outside mirrors

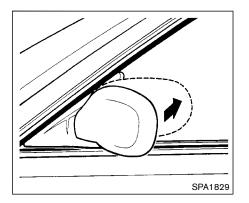
The outside mirror control switch is located at the lower part of the instrument panel.

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

Move the switch right (1) or left (2) to select the right or left side mirror, then adjust (3) using the control switch.

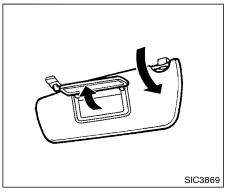
#### Defrosting outside mirrors (if so equipped)

The outside mirrors will be heated when the rear window defroster switch is operated. (See "Rear window and outside mirror defroster switch" (P.2-38).)



#### Foldable outside mirrors

Fold the outside mirror by pushing it toward the rear of the vehicle.



#### **VANITY MIRROR**

To use the front vanity mirror, pull down the sun visor and pull up the cover.

#### **MEMO**

# 4 Heater, air conditioner, audio and phone systems

Safety note	. 4-3
Control buttons and functions (models with	
navigation system)	. 4-3
How to use touch screen	. 4-4
How to use the BACK button	. 4-5
How to use the APPS-i button	
How to use brightness control button	. 4-8
How to use the ON-OFF button/Volume	
control knob	. 4-8
How to use the CAMERA button	. 4-8
RearView Monitor (models without	
navigation system)	. 4-8
RearView Monitor system operation	. 4-9
How to read the displayed lines	. 4-9
Adjusting the screen	4-11
RearView Monitor system limitations	
System maintenance	
Around View <sup>®</sup> Monitor (AVM) (models with	
navigation system)	4-13
Around View® Monitor system operation	4-14
How to adjust the screen view	4-20
Around View® Monitor system limitations	4-20
System maintenance	4-23

Moving Object Detection (MOD) (models with	
navigation system)	4-24
MOD system operation	4-24
MOD system limitations	4-26
System maintenance	4-27
Ventilators	4-27
Center ventilators	4-27
Side ventilators	4-28
Heater and air conditioner	4-28
Manual air conditioner (if so equipped)	4-29
Automatic air conditioner (with Integrated	
Control System)	4-32
Operating tips (for automatic air conditioner)	4-35
In-cabin microfilter	4-35
Servicing air conditioner	4-35
Audio system	4-35
Audio operation precautions	4-35
FM-AM radio with Compact Disc (CD) player (if	
so equipped)	4-45
FM-AM-SAT radio with Compact Disc (CD) player	
(Type A) (if so equipped)	4-53
FM-AM-SAT radio with Compact Disc (CD) player	
(Type B) (if so equipped)	4-62

CD/USB memory care and cleaning	4-73	Voice command	4-91
Steering wheel switch for audio control	4-73	Connecting procedure	4-92
Antenna	4-75	Vehicle phonebook	4-92
NissanConnect <sup>SM</sup> App smartphone integration	4-75	Making a call	4-92
Registering with NissanConnect <sup>SM</sup> App	4-75	Receiving a call	4-92
Connect phone	4-76	During a call	4-93
Application download	4-76	Ending a call	4-93
Siri <sup>®</sup> Eyes Free	4-76	Text messaging	
General Information	4-76	Bluetooth® settings	4-94
Requirements		Phone settings	4-96
Siri® Eyes Free Activation	4-77 N	NISSAN Voice Recognition System (models with	
Operating Siri® Eyes Free	4-77 r	navigation system)	
Changing Siri® Eyes Free Settings (models without		Using the system	
navigation system)		System features	4-98
Troubleshooting guide		Bluetooth® Hands-Free Phone System	
Car phone or CB radio		voice commands	
Bluetooth® Hands-Free Phone System (models withou		Navigation system voice commands	
navigation system)			4-100
Regulatory information			4-100
Using the system	4-82	My APPS voice commands	1-100
Bluetooth® Hands-Free Phone System (models with		- I	4-100
navigation system)		Troubleshooting guide	1-100
Regulatory information	4-91		

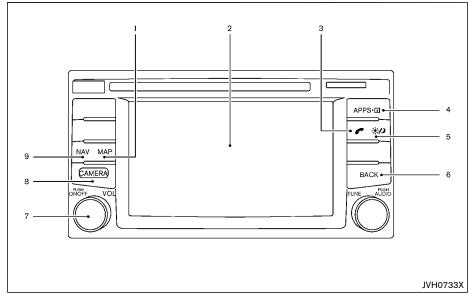
#### **SAFETY NOTE**

# **A** WARNING

- Do not disassemble or modify this system. If you do, it may result in accidents, fire, or electric 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. It is recommended you visit a NISSAN dealer for servicing. Ignoring such conditions may lead to accidents, fire, or electric shock.

Do not attempt to operate the system in extreme temperature conditions [below  $-4^{\circ}F$  ( $-20^{\circ}C$ ) and above  $158^{\circ}F$  ( $70^{\circ}C$ )]. Operating this system under these conditions may result in system malfunctions.

# CONTROL BUTTONS AND FUNCTIONS (models with navigation system)



- MAP button\*
- Display screen
- 3. **/** button (P.4-89)
- 1. APPS: button (P.4-5)
- . (brightness control) button (P.4-8)
- BACK button (P.4-5)

- ON-OFF button/VOL (volume) control knob (P.4-8)
- 8. CAMERA button (P.4-8)
- NAV button\*

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

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 TOUCH SCREEN

### **A** CAUTION

- The glass screen on the liquid crystal display may break if it is hit with a hard or sharp object. If the glass 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.

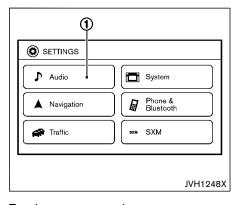
To help ensure safe driving, some functions cannot be operated while driving.

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.



- 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. To select the "Audio" key, touch the "Audio" key (1) on the screen.

#### Adjusting the item:

Touch the "+" key or the "-" key to adjust the settings of an item. Touch the up arrow to scroll up the page. Touch the down arrow to scroll down the page.

#### Inputting characters:

Touch the letter or number key. There are some options available when inputting characters.

4-4 Heater, air conditioner, audio and phone systems

#### 123/ABC:

Changes the keyboard between numbers and alphabets.

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:

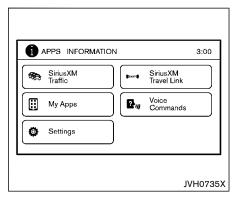
Completes the character input.

#### 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

Push the BACK button to return to the previous screen.

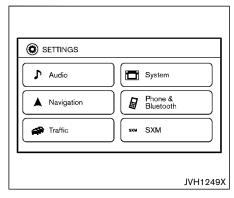


#### HOW TO USE THE APPS: BUTTON

For information about the "SiriusXM Travel Link". and "SiriusXM Traffic" features, see the separate Navigation System Owner's Manual.

For information about the "My Apps" key, see "NissanConnect<sup>SM</sup> App smartphone integration" (P.4-75).

For information about the "Voice Commands" key, see "NISSAN Voice Recognition System (models with navigation system)" (P.4-96).



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

- 1. Push the APPS-III button.
- 2. Touch the "Settings" key.
- 3. Touch the desired item.

	Menu Item	Result
Audio		For more details, see "FM-AM-SAT radio with Compact Disc (CD) player (Type B)" (P.4-62).
Navigation		See the separate Navigation System Owner's Manual for more information.
Phone & Blueto	ooth	For more details, see "Bluetooth® Hands-Free Phone System (models with navigation system)" (P.4-89).
System		Touch this key to select and/or adjust various functions of this system. A screen with additional options will appear.
Disp	play	Touch this key to adjust the appearance of the display.
	Brightness	Adjusts the brightness of the display.
	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 to either move up or down.
Clo	ock	Touch this key to adjust the time.
	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.
	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.
Lan	nguage	Touch this key to change the language on the display.
Car	mera Settings	Touch this key to change the camera settings.
	Display Mode	Touch this key to select the touch-screen display mode (day, night, or automatic).
	Brightness	Adjust touch-screen brightness.
	Contrast	Adjust touch-screen contrast.

#### 4-6 Heater, air conditioner, audio and phone systems

		Color	Adjust touch-screen color.
Temperature Unit		ıre Unit	Touch this key to change the temperature unit being displayed (Fahrenheit or Celsius).
	Touchscre	en click	Toggles the touch-screen click feature on or off. When activated a click sound will be heard every time a key on the screen is touched.
	System B	eeps	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 pushed and held for 2 seconds.
	Return to Factory Settings / Clear Memory		Touch this key to return all settings to default and to clear the memory.
	Software	Licenses	Touch this key to display software licensing information.
Traffic	•		Touch this key to display traffic settings. See the separate Navigation System Owner's Manual for more information.
SXM			Touch this key to display SXM status information. For SXM setup, see "FM-AM-SAT radio with Compact Disc (CD) player (Type B)" (P.4-62).

#### **REARVIEW MONITOR (models** without navigation system)

#### HOW TO USE BRIGHTNESS CON-TROL BUTTON

To change the display brightness, push the \*/ button. Pushing the button again will change the display to the day or the night display.

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

Push and hold the () button to turn the display off. Push the button again to turn the display on.

#### HOW TO USE THE ON-OFF BUTTON/ VOLUME CONTROL KNOB

Push the ON-OFF button to turn audio function on and off. Turn the volume control knob to adjust audio volume.

#### HOW TO USE THE CAMERA BUTTON

For more information regarding the CAMERA button, see "Around View® Monitor (AVM) (models with navigation system)" (P.4-13).

#### WARNING

Failure to follow the warnings and instructions for proper use of the Rear-View Monitor could result in serious iniury or death.

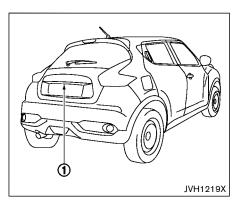
- The RearView Monitor is a convenience but it is not a substitute for proper backing. Always turn and look out the windows, and check mirrors to be sure that it is safe to move before operating the vehicle. Always back up slowly.
- The system is designed as an aid to the driver in showing large stationary objects directly behind the vehicle, to help avoid damaging the vehicle.
- The distance guide line and the vehicle width line should be used as a reference only when the vehicle is on a level paved surface. The distance viewed on the monitor is for reference only and may be different than the actual distance between the vehicle and displayed objects.

#### A CAUTION

Do not scratch the camera lens when cleaning dirt or snow from the front of the camera.

The RearView Monitor system automatically shows a rear view of the vehicle when the shift lever is placed in the "R" (Reverse) position.

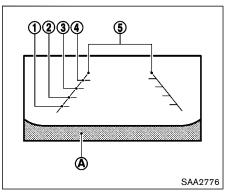
The radio can still be heard while the RearView Monitor is active.



To display the rear view, the RearView Monitor system uses a camera located just above the vehicle's license plate (1).

#### REARVIEW MONITOR SYSTEM OP-**FRATION**

With the ignition switch in the ON position, move the shift lever to the "R" (Reverse) position to operate the RearView Monitor.



#### HOW TO READ THE DISPLAYED LINES

Guiding lines which indicate the vehicle width and distances to objects with reference to the bumper line (A) are displayed on the monitor.

#### Distance quide lines:

Indicate distances from the bumper.

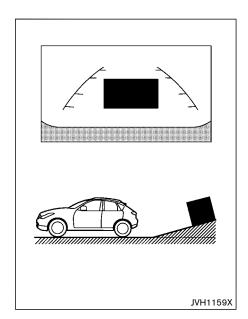
- Red line (1): approx. 1.5 ft (0.5 m)
- Yellow line (2): approx. 3 ft (1 m)
- Green line (3): approx. 7 ft (2 m)
- Green line (4): approx. 10 ft (3 m)

#### Vehicle width guide lines (5):

Indicate the vehicle width when backing up.

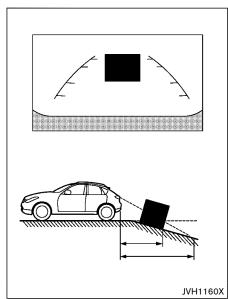
#### Difference between predictive and actual distances

The displayed guidelines and their locations on the ground are for approximate reference only. Objects on uphill or downhill surfaces or projecting objects will be actually located at distances different from those displayed in the monitor relative to the guidelines (refer to illustrations). When in doubt, turn around and view the objects as you are backing up, or park and exit the vehicle to view the positioning of objects behind the vehicle.



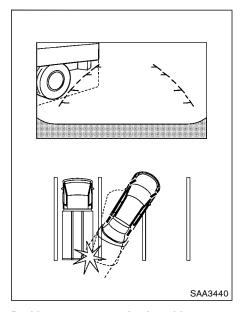


When backing up the vehicle up a hill, the distance guide lines and the vehicle width guide lines are shown closer than the actual distance. Note that any object on the hill is farther than it appears on the monitor.



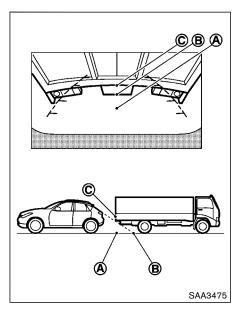
#### Backing up on a steep downhill:

When backing up the vehicle down a hill, the distance guide lines and the vehicle width guide lines are shown farther than the actual distance. Note that any object on the hill is closer than it appears on the monitor.



#### Backing up near a projecting object:

The vehicle may seem to nearly clear the object in the display. However, the vehicle may hit the object if it projects over the actual backing up course.



#### Backing up behind a projecting object:

The position (c) is shown farther than the 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 the position (A) if the object projects over the actual backing up

course.

#### ADJUSTING THE SCREEN

- 1. Push the ENTER/SETTING button while the RearView monitor screen is displayed.
- 2. Adjust the brightness using the TUNE-FOLDER or TUNE-SCROLL control knob.
- 3. Push the ENTER/SETTING button and adjust the contrast using the TUNE-FOLDER or TUNE-SCROLL control knob.
- 4. Push the ENTER/SETTING button to return to the RearView monitor screen.

#### NOTE:

Do not adjust any of the display settings of the RearView Monitor while the vehicle is moving. Make sure the parking brake is firmly applied.

REARVIEW MONITOR SYSTEM LIM-**ITATIONS** 



#### **WARNING**

Listed below are the system limitations for RearView Monitor. Failure to operate the vehicle in accordance with these system limitations could result in serious injury or death.

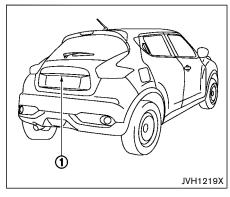
- The system cannot completely eliminate blind spots and may not show every object.
- Underneath the bumper and the corner areas of the bumper cannot be viewed on the RearView Monitor because of its monitoring range limitation. The system will not show small objects below the bumper. and may not show 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 the RearView Monitor will appear visually opposite compared to when viewed in the rear view and outside mirrors.
- Use the displayed lines as a reference. The lines are highly affected by the number of occupants, fuel level, vehicle position, road conditions and road grade.
- Make sure that the liftgate is securely closed 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.

The following are operating limitations and do not represent a system malfunction:

- When the temperature is extremely high or low, the screen may not clearly display obiects.
- When strong light is directly coming on 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.
- The screen may flicker under fluorescent light.
- The colors of objects on the RearView Monitor may differ somewhat from the actual color of objects.

- Objects on the monitor may not be clear in a dark environment.
- If dirt, rain or snow accumulates on the camera, the RearView Monitor may not display objects clearly. Clean the camera.
- Do not use wax on the camera window. Wipe off any wax with a clean cloth dampened with mild detergent diluted with water.



#### SYSTEM MAINTENANCE

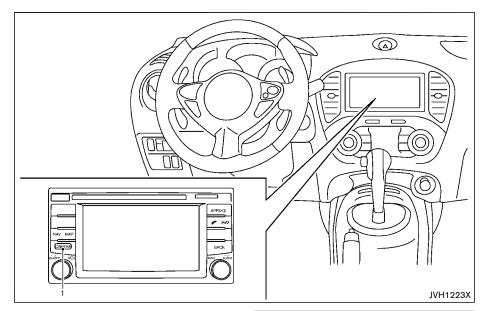


- Do not use alcohol, benzine or thinner to clean the camera. This will cause discoloration. To clean the camera, wipe with a cloth dampened with diluted mild cleaning agent and then wipe with a dry cloth.
- Do not damage the camera as the monitor screen may be adversely affected.

#### 4-12 Heater, air conditioner, audio and phone systems

# AROUND VIEW® MONITOR (AVM) (models with navigation system)

If dirt, rain or snow accumulates on the camera (1), RearView Monitor may not display objects clearly. Clean the camera by wiping it with a cloth dampened with a diluted mild cleaning agent and then wiping it with a dry cloth.



1. CAMERA button



#### **WARNING**

Failure to follow the warnings and instructions for the proper use of the

Around View<sup>®</sup> Monitor system could result in serious injury or death.

 The Around View<sup>®</sup> Monitor is a convenient feature but it is not a substitute for proper vehicle operation because it has areas where objects cannot be viewed. The four corners of the vehicle in particular, are areas where objects do not always appear in the bird's-eye, front, or rear views. Always check your surroundings to be sure that it is safe to move before operating the vehicle. Always operate the vehicle slowly. Always look out the windows and check mirrors to be sure that it is safe to move.

 The driver is always responsible for safety during parking and other maneuvers.

# **A** CAUTION

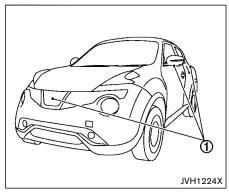
Do not scratch the lens when cleaning dirt or snow from the front of the camera.

The Around View<sup>®</sup> Monitor system is designed as an aid to the driver in situations such as slot parking or parallel parking.

The monitor displays various views of the position of the vehicle in a split screen format. All views are not available at all times.

#### Available views:

- Bird's-eye view
   The surrounding view of the vehicle.
- Front-side view
   The view around and ahead of the front passenger's side wheel.
- Front view
   The view to the front of the vehicle.
- Rear view
   The view to the rear of the vehicle.



To display the multiple views, the Around View<sup>®</sup> Monitor system uses cameras ① located in the front grill, on the vehicle's outside mirrors and one just above the vehicle's license plate.

# AROUND VIEW® MONITOR SYSTEM OPERATION

With the ignition switch in the ON position, push the CAMERA button on the instrument panel or move the shift lever to the R (Reverse) position to operate the Around View<sup>®</sup> Monitor.

#### 4-14 Heater, air conditioner, audio and phone systems

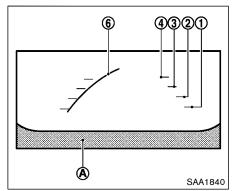
#### Available views



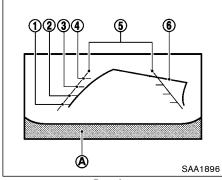
#### WARNING

- The distance guide lines and the vehicle width lines should be used as a reference only when the vehicle is on a paved, level 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.
- Use the displayed lines and the bird's-eye view as a reference. The lines and the bird's-eye view are greatly affected by the number of occupants, fuel level, vehicle position, road condition and road grade.
- If the tires are replaced with different sized tires, the predictive course lines and the bird's-eye view may be displayed incorrectly.
- When driving the vehicle up a hill, objects viewed in the monitor are farther than they appear. When driving the vehicle down a hill, objects viewed in the monitor are closer than they appear.

- Objects in the monitor will appear visually opposite compared to when viewed in the rear view and outside mirrors.
- Use the mirrors or actually look to properly judge distances to other objects.
- The distance between objects viewed in the rear view differs from actual distance because a wideangle lens is used.
- On a snow-covered or slippery road, there may be a difference between the predictive course line and the actual course line.
- The vehicle width and predictive course lines are wider than the actual width and course.
- The displayed lines on the rear view will appear slightly off to the right because the rear view camera is not installed in the rear center of the vehicle.



Front view



Rear view

#### Front and rear view:

Guiding lines, which indicate the vehicle width and distances to objects with reference to the vehicle body line (A), are displayed on the monitor.

#### Distance guide lines:

Indicate distances from the vehicle body.

Red line (1): approx. 1.5 ft (0.5 m)

Yellow line ②: approx. 3 ft (1 m)

Green line 3 : approx. 7 ft (2 m)

Green line 4 : approx. 10 ft (3 m)

#### Vehicle width guide lines (5):

Indicate the vehicle width when backing up.

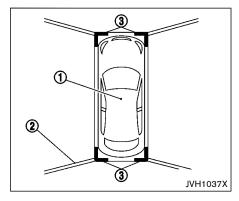
#### Predictive course lines 6:

Indicate the predictive course when operating the vehicle. The predictive course lines will be displayed on the monitor when the steering wheel is turned. The predictive course lines will move depending on how much the steering wheel is turned and will not be displayed while the steering wheel is in the straight ahead position.

The front view will not be displayed when the vehicle speed is above 6 MPH (10 km/h).

#### NOTE:

 When the monitor displays the front view and the steering wheel turns about 90 degrees or less from the straight ahead position, both the right and left predictive course lines 6 are displayed. When the steering wheel turns about 90 degrees or more, the predictive course line is displayed only on the opposite side of the turn.



#### Bird's-eye view:

The bird's-eye view shows the overhead view of the vehicle which helps confirm the vehicle position and the predicted course to a parking space.

The vehicle icon ① shows the position of the vehicle. Note that the distance between objects viewed in the bird's-eye view differs from the actual distance.

The areas that the cameras cannot cover ② are indicated in black.

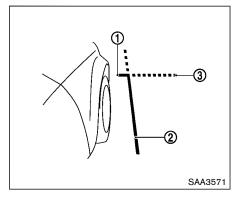
After the ignition switch is placed in the ON position, the non-viewable area ② is highlighted in yellow for 3 seconds after the bird's-

eye view is displayed.

In addition, the non-viewable corners are displayed in red (blink for the first 3 seconds) (3) to remind the drivers to be cautious.



- Objects in the bird's-eye view will appear farther than the actual distance because the bird's-eve view is a pseudo view that is processed by combining the views from the cameras on the outside mirrors, the front and the rear of the vehicle.
- Tall objects, such as a curb or vehicle, may be misaligned or not displayed at the seam of the views.
- Objects that are above the camera cannot be displayed.
- The view for the bird's-eve view may be misaligned when the camera position alters.
- A line on the ground may be misaligned and is not seen as being straight at the seam of the views. The misalignment will increase as the line proceeds away from the vehicle.



#### Front-side view:

#### **Guiding lines:**

Guiding lines that indicate the width and the front end of the vehicle are displayed on the monitor.

The front-of-vehicle line (1) shows the front part of the vehicle.

The side-of-vehicle line (2) shows the vehicle width including the outside mirrors.

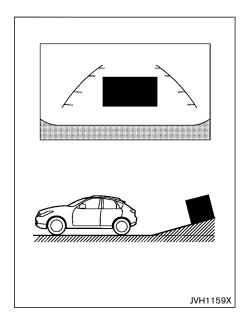
The extensions (3) of both the front (1) and side (2) lines are shown with a green dotted line.



The turn signal light may look like the side-of-vehicle line. This is not a malfunction.

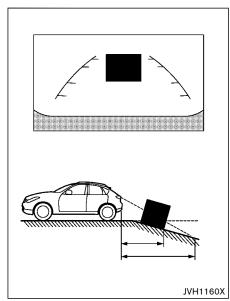
Difference between predictive and actual distances

The displayed guidelines and their locations on the ground are for approximate reference only. Objects on uphill or downhill surfaces or projecting objects will be actually located at distances different from those displayed in the monitor relative to the guidelines (refer to illustrations). When in doubt, turn around and view the objects as you are backing up, or park and exit the vehicle to view the positioning of objects behind the vehicle.



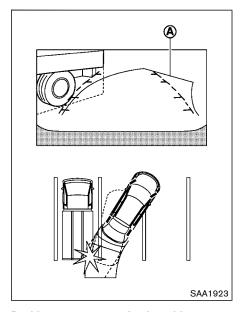


When backing up the vehicle up a hill, the distance guide lines and the vehicle width guide lines are shown closer than the actual distance. Note that any object on the hill is farther than it appears on the monitor.



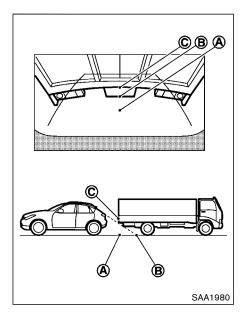
#### Backing up on a steep downhill:

When backing up the vehicle down a hill, the distance guide lines and the vehicle width guide lines are shown farther than the actual distance. Note that any object on the hill is closer than it appears on the monitor.



#### Backing up near a projecting object:

The predictive course lines (a) do not touch the object in the display. However, the vehicle may hit the object if it projects over the actual backing up course.



#### Backing up behind a projecting object:

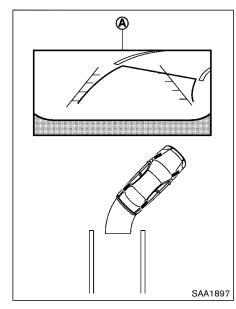
The position (c) is shown farther than the in the display. However, the position (c) is actually at the same distance as the position (A). The vehicle may hit the object when backing up to the position (A) if the object projects over the actual moving

course.

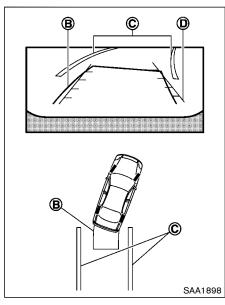
How to park with predictive course lines

#### **WARNING**

- If the tires are replaced with different sized tires, the predictive course lines may be displayed incorrectly.
- On a snow-covered or slippery road, there may be a difference between the predictive course line and the actual course line.
- If the battery is disconnected or becomes discharged, the predictive course lines may be displayed incorrectly. If this occurs, please perform the following procedures:
  - Turn the steering wheel from lock to lock while the engine is running.
  - Drive the vehicle on a straight road for more than 5 minutes.
- When the steering wheel is turned with the ignition switch in the ACC position, the predictive course lines may be displayed incorrectly.



- 1. Visually check that the parking space is safe before parking your vehicle.
- 2. The rear view of the vehicle is displayed on the screen (A) when the shift lever is moved to the R (Reverse) position.



- 3. Slowly back up the vehicle adjusting the steering wheel so that the predictive course lines (B) enter the parking space (C).
- Maneuver the steering wheel to make the vehicle width guide lines (D) parallel to the parking space (C) while referring to the predictive course lines.

 When the vehicle is parked in the space completely, move the shift lever to the P (Park) position and apply the parking brake.

#### How to switch the display

The Around View<sup>®</sup> Monitor can display two split views. Push the CAMERA button, change the shift lever position, to switch between the available views.

#### HOW TO ADJUST THE SCREEN VIEW

The display settings such as Display Mode, Brightness, Contrast and Color of the Around View<sup>®</sup> Monitor can be adjusted.

- 1. Push the APPS-II button.
- 2. Touch "Settings".
- 3. Touch "System" and then touch "Camera Settings".
- 4. Select an item you wish to adjust.
- Adjust the level of the setting item using the TUNE knob.

#### NOTE:

Do not adjust any of the display settings of the Around View<sup>®</sup> Monitor while the vehicle is moving. Make sure the parking brake is firmly applied.

# AROUND VIEW® MONITOR SYSTEM LIMITATIONS



#### **WARNING**

Listed below are the system limitations for Around View<sup>®</sup> Monitor. Failure to operate the vehicle in accordance with these system limitations could result in serious injury or death.

- Do not use the Around View<sup>®</sup> Monitor with the outside mirrors in the stored position, and make sure that the liftgate is securely closed when operating the vehicle using the Around View<sup>®</sup> Monitor.
- The distance between objects viewed on the Around View<sup>®</sup> Monitor differs from the actual distance.
- The cameras are installed above the front grille, the outside mirrors and above the rear license plate. Do not put anything on the cameras.
- When washing the vehicle with highpressure water, be sure not to spray it around the cameras. Otherwise, water may enter the camera unit causing water condensation on

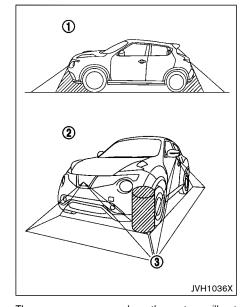
the lens, a malfunction, fire or an electric shock.

Do not strike the cameras. They are precision instruments. Doing so could cause a malfunction or cause damage resulting in a fire or an electric shock.

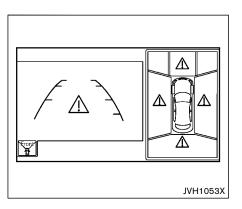
The following are operating limitations and do not represent a system malfunction:

- The screen displayed on the Around View® Monitor will automatically return to the previous screen 3 minutes after the CAM-ERA button has been pushed while the shift lever is in a position other than the R (Reverse) position.
- When the view is switched, the display images on the screen may be displayed with some delay.
- When the temperature is extremely high or low, the screen may not display objects clearly.
- When strong light is shining directly on the camera, objects may not be displayed clearly.
- The screen may flicker under fluorescent light.

- The colors of objects on the Around View® Monitor may differ somewhat from the actual color of objects.
- Objects on the monitor may not be clear and the color of the object may differ in a dark environment.
- There may be differences in sharpness between each camera view of the bird'seve view.
- If dirt, rain or snow accumulates on the camera, the Around View® Monitor may not display objects clearly. Clean the camera.
- Do not use wax on the camera lens. Wipe off any wax with a clean cloth that has been dampened with a mild detergent diluted with water.

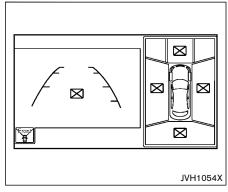


There are some areas where the system will not show objects and the system does not warn of moving objects. When in the front or the rear view display, an object below the bumper or on the ground may not be viewed (1). When in the bird's-eye view, a tall object near the seam (3) of the camera viewing areas will not appear in the monitor (2).

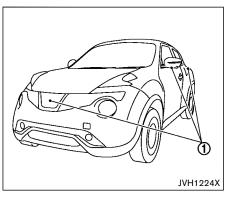


## System temporarily unavailable

When the " \( \lambda \) " icon is displayed on the screen, there will be abnormal conditions in the Around View® Monitor. This will not hinder normal driving operation but the system should be inspected. It is recommended you visit a NISSAN dealer.



When the "X " icon is displayed on the screen, the camera image may be receiving temporary electronic disturbances from surrounding devices. This will not hinder normal driving operation but the system should be inspected. It is recommended you visit a NISSAN dealer.



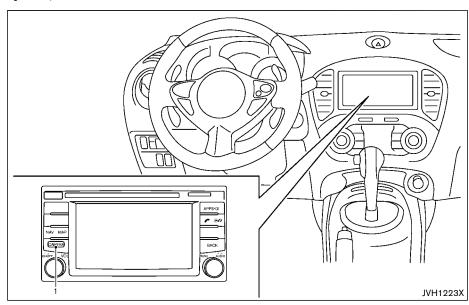
If dirt, rain or snow accumulates on any of the cameras (1), the Around View® Monitor may not display objects clearly. Clean the camera by wiping with a cloth dampened with a diluted mild cleaning agent and then wiping with a dry cloth.

#### SYSTEM MAINTENANCE

# **A** CAUTION

- Do not use alcohol, benzine or thinner to clean the camera. This will cause discoloration. To clean the camera, wipe with a cloth dampened with diluted mild cleaning agent and then wipe with a dry cloth.
- Do not damage the camera as the monitor screen may be adversely affected.

# MOVING OBJECT DETECTION (MOD) (models with navigation system)



1. CAMERA button



Failure to follow the warnings and instructions for proper use of the Mov-

ing Object Detection system could result in serious injury or death.

 The MOD system is not a substitute for proper vehicle operation and is not designed to prevent contact with the objects surrounding the vehicle. When maneuvering, always use the outside mirror and rearview mirror and turn and check the surrounding to ensure it is safe to maneuver.

- The system is deactivated at speeds above 5 MPH (8 km/h). It is reactivated at lower speeds.
- The MOD system is not designed to detect the surrounding stationary objects.

The Moving Object Detection (MOD) system can inform the driver of moving objects when driving out of garages, maneuvering into parking lots and in other such instances.

The MOD system detects moving objects by using image processing technology on the image shown in the display.

#### MOD SYSTEM OPERATION

The MOD system will turn on automatically under the following conditions:

- When the shift lever is in the R (Reverse) position.
- When the CAMERA button is pushed to switch from a different screen to the camera view on the display.

#### 4-24 Heater, air conditioner, audio and phone systems

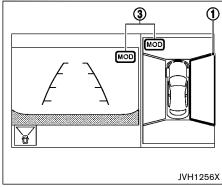
When vehicle speed decreases below approximately 5 MPH (8 km/h).

The MOD system operates in the following conditions when the camera view is displayed:

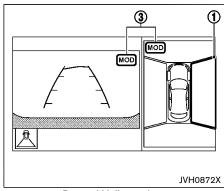
- When the shift lever is in the P (Park) or N (Neutral) position (CVT model) or the shift lever is out of the R (Reverse) position (MT model) and the vehicle is stopped, the MOD system detects the moving objects in the bird's-eye view. The MOD system will not operate if the outside mirrors are moving in or out or if either door is opened.
- When the shift lever is in the D (Drive) position (CVT model) or the shift lever is out of the R (Reverse) position (MT model), and the vehicle speed is below approximately 5 MPH (8 km/h), the MOD system detects moving objects in the front view.
- When the shift lever is in the R (Reverse) position and the vehicle speed is below approximately 5 MPH (8 km/h), the MOD system detects moving objects in the rear view. The MOD system will not operate if the liftgate is open.
- When the ignition switch is placed in the "OFF" position and then back to the "ON" position.

The MOD system does not detect moving objects in the front-side view. The MOD icon is not displayed on the screen when in this view.

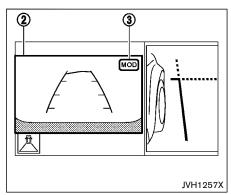
When the MOD system detects a moving object near the vehicle, the yellow frame will be displayed on the view where the objects are detected and a chime will sound once. While the MOD system continues to detect moving objects, the yellow frame continues to be displayed.



Front and bird's-eye views



Rear and bird's-eye views



Rear and front-side views

In the bird's-eye view, the yellow frame (1) is displayed on each camera image (front, rear, right, left) depending on where moving objects are detected.

The yellow frame (2) is displayed on each view in the front view and rear view modes.

A blue MOD icon (3) is displayed in the view where the MOD system is operative. A gray MOD icon (3) is displayed in the view where the MOD system is not operative.

If the MOD system is turned off, the MOD icon (3) is not displayed.

#### MOD SYSTEM LIMITATIONS

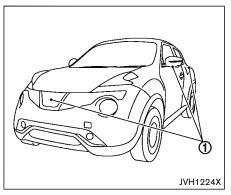


# **WARNING**

Listed below are the system limitations for MOD. Failure to operate the vehicle in accordance with these system limitations could result in serious injury or death.

- Excessive noise (for example, audio system volume or open vehicle window) will interfere with the chime sound, and it may not be heard.
- The MOD system performance will be limited according to environmental conditions and surrounding obiects such as:
  - When there is low contrast between background and the moving objects
  - When there is blinking source of liaht.
  - When strong light such as another vehicle's headlight or sunlight is present.

- When there is dirt, water drops or snow on the camera lens.
- When the position of the moving objects in the display is not changed.
- The MOD system might detect flowing water droplets on the camera lens, white smoke from the muffler, moving shadows, etc.
- The MOD system may not function properly depending on the speed, direction, distance or shape of the moving objects.
- If your vehicle sustains damage to the parts where the camera is installed, leaving it misaligned or bent, the sensing zone may be altered and the MOD system may not detect objects properly.
- When the temperature is extremely high or low, the screen may not display objects clearly. This is not a malfunction.



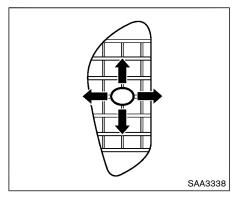
#### SYSTEM MAINTENANCE

# **CAUTION**

- Do not use alcohol, benzine or thinner to clean the camera. This will cause discoloration. To clean the camera, wipe with a cloth dampened with diluted mild cleaning agent and then wipe with a dry cloth.
- Do not damage the camera as the monitor screen may be adversely affected.

If dirt, rain or snow accumulates on any of the cameras (1), the MOD system may not operate properly. Clean the camera by wiping with a cloth dampened with a diluted mild cleaning agent and then wiping with a dry cloth.

#### **VENTILATORS**

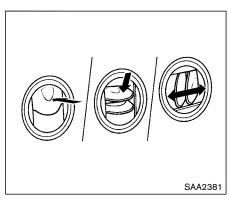


#### CENTER VENTILATORS

Adjust the air flow direction of ventilators as illustrated.

Adjust the air flow direction of the ventilators by moving the center knob (up/down and left/right) until the preferred position is achieved.

#### **HEATER AND AIR CONDITIONER**



#### SIDE VENTILATORS

Open or close the vents, and adjust the air flow direction of ventilators as illustrated.

# WARNING

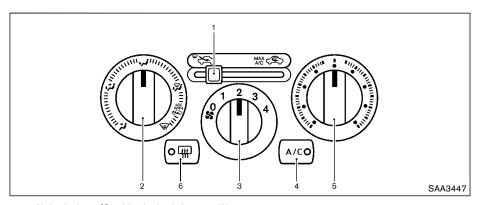
- The air conditioner cooling function operates only when the engine is running.
- Do not leave children or adults who would normally require the support of others alone in your vehicle. Pets should not be left alone either. On hot, sunny days, temperatures in a closed vehicle could quickly become high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

Start the engine and operate the heater and the air conditioner system.

#### 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.



- Air intake lever (Outside air circulation ← /Air recirculation ← )
- 2. Air flow control dial
- 3. Fan speed control 💲 dial
- 4. A/C (Air Conditioner) button
- 5. Temperature control dial
- Rear window defroster the button (See "Rear window and outside mirror defroster switch" (P.2-38).)

# MANUAL AIR CONDITIONER (if so equipped)

#### Controls

#### Outside air circulation:

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

#### Air recirculation:

Move the air intake lever to the position. The air flow is circulated inside the vehicle.

#### Air flow control:

Turn the air flow control dial to change the air flow mode.

- Air flows from the center and side ventilators.
- Air flows from the center and side ventilators and foot outlets.
  - Air flows mainly from the foot outlets.
- Air flows from the defroster and foot outlets.
- Air flows mainly from the defroster outlets.
- When the position is selected, the air conditioner will automatically turn on. This will dehumidify the air and help to defog the windows.

#### Fan speed control:

Turn the fan speed control \$\ \text{dial clockwise to} increase the fan speed.

Turn the fan speed control \$\ \text{dial counter-clockwise to decrease the fan speed.}

#### A/C (Air Conditioner) operation:

Push the A/C button to turn on or off the air conditioner. When the air conditioner is on, the A/C indicator light on the button illuminates.

#### **Temperature control:**

Turn the temperature control dial to set the desired temperature. Turn the dial between the middle and the right position to select the hot temperature. Turn the dial between the middle and the left position to select the cool temperature.

## Heater operation

#### Heating:

This mode is used to direct heated air to the foot outlets.

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

 Turn the temperature control dial to the desired position between the middle and the hot (right) position.

#### Ventilation:

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

- 1. Move the air intake lever to the 👟 position.
- 2. Turn the air flow control dial to the position.
- Turn the fan speed control \$\mathbb{s}\$ dial to the desired position.

#### **Defrosting or defogging:**

This mode directs the air to the defroster 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.
- Turn the fan speed control \$\square\$ dial to the desired position.
- Turn the temperature control dial to the desired position between the middle and the hot (right) position.
- To remove frost from the outside surface of the windshield quickly, turn the temperature control dial to the maximum hot position and the fan speed control \$\fomale\$\$ dial to the maximum position.

 When the wp position is selected, the air conditioner will automatically turn on. This will dehumidify the air and help to defog the windows.

#### Bi-level heating:

This mode directs cool air from the side and center vents and warm air from the foot outlets. When the temperature control dial is turned to the maximum hot or cool position, the air between the ventilators and the foot outlets is the same temperature.

- 1. Move the air intake lever to the seposition.
- 2. Turn the air flow control dial to the position.
- Turn the fan speed control \$\mathbb{s}\$ dial to the desired position.
- Turn the temperature control dial to the desired position.

#### Heating and defogging:

This mode heats the interior and defogs the windows.

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

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

When the position is selected, the air conditioner will automatically turn on. This will dehumidify the air and help to defog the windows.

#### Air conditioner operation

The air conditioner system should be operated for approximately 10 minutes at least once a month. This helps prevent damage to the air conditioner system due to the lack of lubrication.

### Cooling:

This mode is used to cool and dehumidify the air.

- 1. Move the air intake lever to the sposition.
- 2. Turn the air flow control dial to the 🔀 position.
- 3. Turn the fan speed control 🐉 dial to the desired position.
- 4. Push the A/C button on. (The A/C indicator light will illuminate.)
- 5. Turn the temperature control dial to the desired position between the middle and the cool (left) position.
- For quick cooling when the outside temperature is high, move the air intake lever to the some position. Be sure to move the air intake lever to the see position for normal

coolina.

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

#### **Dehumidified heating:**

This mode is used to heat and dehumidify the air.

- 1. Move the air intake lever to the sposition.
- 2. Turn the air flow control dial to the position.
- 3. Turn the fan speed control & dial to the desired position.
- 4. Push the A/C button on. (The A/C indicator light will illuminate.)
- 5. Turn the temperature control dial to the desired position between the middle and the hot (right) position.

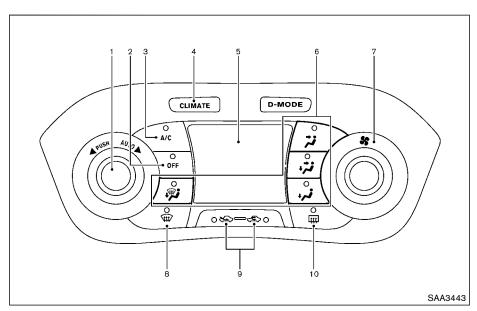
#### Dehumidified defogging:

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

- 1. Move the air intake lever to the seep position.
- 2. Turn the air flow control dial to the @ position.
- 3. Turn the fan speed control se dial to the desired position.

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

When the position is selected, the air conditioner will automatically turn on. This will dehumidify the air and help to defog the windows.



- 1. AUTO button/Temperature control dial
- 2. OFF button
- 3. A/C button
- CLIMATE button
- 5. Display screen\*
- 6. Air flow control buttons
- 7. Fan speed control 💲 dial

- 8. Front defroster www button
- Air intake button (Outside air circulation ← /Air recirculation ← )
- Rear window defroster [ttt] button (See "Rear window and outside mirror defroster switch" (P.2-38).)
- \*: Temperature is displayed in °F (US) or °C (Canada).

# AUTOMATIC AIR CONDITIONER (with Integrated Control System)

## Automatic operation (AUTO)

The AUTO mode may be used year-round as the system automatically controls constant temperature, air flow distribution and fan speed.

To turn off the heater and air conditioner, push the CLIMATE button to change to the Climate Control Mode, then push the OFF button.

#### Cooling and dehumidified heating:

- Push the AUTO button. (The AUTO indicator will be displayed.)
- Turn the temperature control dial to set the preferred temperature. The temperature range is between 60°F (18°C) and 90°F (32°C).

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

#### Dehumidified defrosting/defogging:

- Push the front defroster www button. (The indicator light will illuminate.)
- 2. Turn the temperature control dial to set the preferred temperature.

#### 4-32 Heater, air conditioner, audio and phone systems

- To remove moisture or fog on the front window guickly, set the temperature to the high temperature and the fan speed to their maximum level.
- After the windshield is cleared, push the front defroster w button again. (The indicator light will turn off.)
- When the front defroster www button is pushed, the air conditioner will automatically turn on to defog the windshield. The outside air circulation mode will be selected to improve the defogging performance.
- When the position is selected, the air recirculation mode cannot be turned on to prevent the windows from being fogged up.

#### Manual operation

The manual mode can be used to control the heater and air conditioner to your desired settings.

To turn off the heater and air conditioner, push the OFF button.

If the Drive Mode is indicated on the screen. push the CLIMATE button to change to the Climate Control Mode, then push the OFF button.

#### Fan speed control:

Turn the fan speed control \$\square\$ dial to adjust the fan speed.

#### Air flow control:

Push the air flow control buttons to change the air flow mode:

- Air flows from the center and side ventilators.
- نڼ. Air flows from the center and side ventilators and foot outlets.
- Air flows mainly from the foot outlets. – نہر،
- Air flows from the defroster outlets and foot outlets.

#### Temperature control:

Turn the temperature control dial to set the preferred temperature.

The temperature range is between 60°F (18°C) and 90°F (32°C).

#### Air intake control:

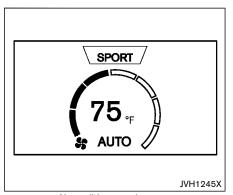
Push the air intake button to change the air circulation mode. When the indicator light on " side illuminates, the flowing air is recirculated inside the vehicle.

When the a or position is selected, the air recirculation mode cannot be turned on to prevent the windows from being fogged up.

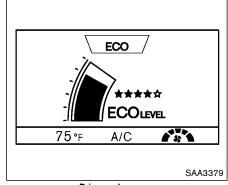
- Push the air intake button to change the air circulation mode. When the indicator light on "side illuminates, the flowing air is drawn from outside the vehicle.
- Push and hold the air intake button for more than 1.5 seconds to set the automatic control between the outside air circulation and air recirculation modes.

When the "w" or "" position is selected, the air recirculation mode does not activate.

When setting the automatic control mode, the indicator lights "see" and "see" will blink twice indicating that the system is in the automatic control mode.



Air conditioner mode screen



#### Drive mode screen

## Displaying Climate control

When in Climate Control Mode, the selected temperature and airflow, and automatic mode or manual mode are indicated on the display.

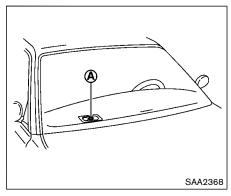
When in Drive Mode, the same items as above are indicated, but on the bottom of the display.

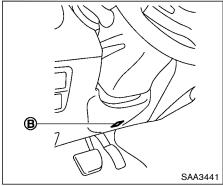
To switch to Climate Control Mode, push the CLIMATE control mode select button.

# Setting climate ECO

When in Drive Mode, CLIMATE ECO can be switched on or off. When CLIMATE ECO is switched on, the climate control system operates to enhance fuel economy.

See "Setting the climate ECO mode" (P.5-24).





# OPERATING TIPS (for automatic air conditioner)

- When the engine coolant temperature and outside air temperature are low, the air flow from the foot outlets may not operate. This is not a malfunction. After the coolant temperature warms up, air will flow normally from the foot outlets.
- The automatic air conditioner is equipped with sensors as illustrated. The sensors (A) and (B) on the instrument panel help maintain a constant temperature. Do not put anything on or around these sensors.

#### IN-CABIN MICROFILTER

The air conditioning system is equipped with an in-cabin microfilter which collects dirt, pollen, dust, etc. To make sure the air conditioner heats, defogs, and ventilates efficiently, replace the filter in accordance with the specified maintenance intervals listed in the "9. Maintenance and schedules" section. It is recommended to see a NISSAN dealer to replace the filter.

The filter should be replaced if the air flow decreases significantly or if windows fog up easily when operating the heater or air conditioning system.

#### SERVICING AIR CONDITIONER

The air conditioner system in your vehicle is charged with a refrigerant designed with the environment in mind. This refrigerant will not harm the earth's ozone layer. Special charging equipment and lubricant are required when servicing your vehicle air conditioner. Using improper refrigerants or lubricants will cause severe damage to your air conditioner system. (See "Capacities and recommended fluids/lubricants" (P.10-2) for air conditioner system refrigerant and lubricant recommendations.)

Your NISSAN dealer will be able to service your environmentally friendly air conditioner system.



# WARNING

The system contains refrigerant under high pressure. To avoid personal injury, any air conditioner service should be done only by an experienced technician with the proper equipment.

#### **AUDIO SYSTEM**

#### **AUDIO OPERATION PRECAUTIONS**

#### Radio

Place the ignition switch in the ACC or ON position and push the FM·AM button to turn on the radio. If you listen to the radio with the engine not running, the ignition switch should be placed in the ACC position.

Radio reception is affected by station signal strength, distance from radio transmitter, buildings, bridges, mountains and other external influences. Intermittent changes in reception quality normally are caused by these external influences.

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

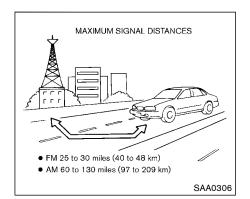
#### Radio reception:

Your vehicle 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 vehicle 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 to 30 miles (40 to 48 km), with monaural (single station) 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 miles (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 lowering the treble setting to reduce the treble response.

Multipath reception: Because of the reflective characteristics of FM signals, direct and reflected signals reach the receiver at the same time. The signals may cancel each other, resulting in momentary flutter or loss of sound.

## AM radio reception:

AM signals, because of their low frequency, can bend around objects and skip along the ground. In addition, the signals can be bounced off the ionosphere and bent back to earth. Because of these characteristics. AM signals are also subject to interference as they travel from transmitter to receiver.

Fading: Occurs while the vehicle is passing through freeway underpasses or in areas with many tall buildings. It can also occur for several seconds during ionospheric turbulence even in areas where no obstacles exist.

Static: Caused by thunderstorms, electrical power lines, electric signs and even traffic lights.

#### Satellite radio reception (if so equipped):

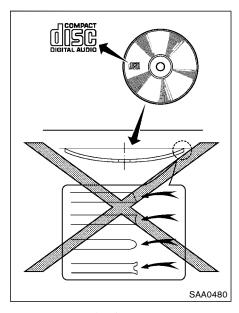
When the satellite radio is used for the first time or the battery has been replaced, the satellite radio may not work properly. This is not a malfunction. Wait more than 10 minutes with the satellite radio ON and the vehicle away from any metal or large buildings for the satellite radio to receive all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

The satellite radio mode requires an active SiriusXM Satellite Radio subscription. The 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 near the satellite antenna.

A buildup of ice on the satellite radio antenna can affect satellite radio performance. Remove the ice to restore satellite radio reception.



# Compact Disc (CD) player

- Do not force a compact disc into the CD insert slot. This could damage the CD and/or CD player.
- . During cold weather or rainy days, the player may malfunction due to the humidity. If this occurs, remove the CD

- and dehumidify or ventilate the player completely.
- The player may skip while driving on rough roads.
- The CD player sometimes cannot function when the passenger compartment temperature is extremely high. Decrease the temperature before use.
- Only use high quality 4.7 in (12 cm) round discs that have the "COMPACT disc DIGITAL AUDIO" logo on the disc or packaging.
- Do not expose the CD to direct sunlight.
- CDs that are of poor quality, dirty, scratched, covered with fingerprints. or that have pin holes 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

- CDs that are not round
- CDs with a paper label
- CDs that are warped, scratched, or have abnormal edges
- This audio system can only play prerecorded CDs. It has no capabilities to record or burn CDs.
- If the CD cannot be played, error messages as the following examples 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.

#### Push Eiect:

This is an error due to the temperature inside the player is too high. Remove the CD by pushing the EJECT button. and after a short time reinsert the CD. The CD can be played when the temperature of the player returns to normal.

#### **Unplayable Track:**

The file is unplayable in this audio system (only MP3 or WMA CD).

USB (Universal Serial Bus) Connection Port



# **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 be played correctly.
- Some characters used in other languages (Chinese, Japanese, etc.) are not displayed properly on 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<sup>®</sup> (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<sup>®</sup>.
- 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.

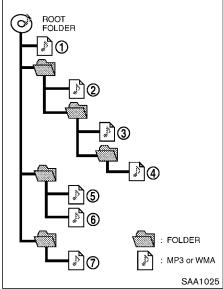
# Compressed Audio Files (MP3/WMA)

# **Explanation of terms:**

- MP3 MP3 is short for Moving Pictures Experts Group Audio Layer 3. MP3 is the most well known compressed digital audio file format. This format allows for near "CD quality" sound, but at a fraction of the size of normal audio files. MP3 conversion of an audio track can reduce the file size by approximately a 10:1 ratio (Sampling: 44.1 kHz, Bit rate: 128 kbps) with virtually no perceptible loss in quality. The compression reduces certain parts of sound that seem inaudible to most people.
- WMA Windows Media Audio (WMA) is a compressed audio format created by Microsoft as an alternative to MP3. The WMA codec offers greater file compression than the MP3 codec, enabling storage of more digital audio tracks in the same amount of space when compared to MP3s at the same level of quality.
- Bit rate Bit rate denotes the number of bits per second used by a digital music file. The size and quality of a compressed digital audio file is determined by the bit rate used when encoding the file.
- Sampling frequency Sampling frequency is the rate at which the samples of a signal

- are converted from analog to digital (A/D conversion) per second.
- Multisession Multisession is one of the methods for writing data to media. Writing data once to the media is called a single session, and writing more than once is called a multisession.
- ID3/WMA Tag The ID3/WMA tag is the part of the encoded MP3 or WMA file that contains information about the digital music file such as song title, artist, album title, encoding bit rate, track time duration, etc. ID3 tag information is displayed on the Album/Artist/Track title line on the display.
- \* Windows® and Windows Media® are registered trademarks or trademarks of Microsoft Corporation in the United States of America and/or other countries.

#### Playback order:



Playback order chart

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.

#### 4-40 Heater, air conditioner, audio and phone systems

## Specification chart (for models without navigation system):

Supported media			CD, CD-R, CD-RW, USB2.0
Supported file systems			CD, CD-R, CD-RW: ISO9660 LEVEL1, ISO9660 LEVEL2, Romeo, Joliet * ISO9660 Level 3 (packet writing) is not supported. * Files saved using the Live File System component (on a Windows Vista-based computer) are not supported.
			USB memory: FAT16, FAT32
Supported versions*1	МР3	Version	MPEG1 Audio Layer 3
		Sampling frequency	32 kHz - 48 kHz
		Bit rate	32 kbps - 320 kbps, VBR*4
	WMA*2	Version	WMA7, WMA8, WMA9
		Sampling frequency	32 kHz - 48 kHz
		Bit rate	32 kbps - 192 kbps, VBR4, 32 kbps - 320 kbps (WMA9 only)
Tag information (Song title and Artist name)			ID3 tag VER1.0, VER1.1, VER2.2, VER2.3, VER2.4 (MP3 only)
			WMA tag (WMA only)
Folder levels  CD, CD-R, CD- USB		CD, CD-R, CD-RW	Folder levels: 8, Folders: 255, Files: 999 (Max. 255 files for one folder)
		USB	Folder levels: 8, Folders 255, Files: 2500 (Max. 255 files for one folder) Memory size: 4GB
Displayable character codes*3			01: ASCII, 02: ISO-8859-1, 03: UNICODE (UTF-16 BOM Big Endian), 04: UNICODE (UTF-16 Non-BOM Big Endian), 05: UNICODE (UTF-8)

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

Protected WMA files (DRM) cannot be played.

Available codes depend on what kind of media, versions and information are going to be displayed.

When VBR files are played, the playback time may not be displayed correctly.

## Specification chart (for models with navigation system):

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		Version	MPEG1, MPEG2, MPEG2.5
	MP3	Sampling frequency	8 kHz - 48 kHz
		Bit rate	8 kbps - 320 kbps, VBR
		Version	WMA7, WMA8, WMA9
	WMA*2	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)

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

Available codes depend on what kind of media, versions and information are going to be displayed.

# Troubleshooting guide:

Symptom	Cause and Countermeasure		
	Check if the disc or USB device was inserted correctly.		
	Check if the disc is scratched or dirty.		
	Check if there is condensation inside the player. If there is, wait until the condensation is gone (about 1 hour) before using the player.		
	If there is a temperature increase error, the CD player will play correctly after it returns to the normal temperature.		
Cannot play	If there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD, only the music CD files (CD-DA data) will be played.		
	Files with extensions other than ".MP3", ".WMA", ".mp3" or ".wma" cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.		
	Check if the finalization process, such as session close and disc close, is done for the disc.		
	Check if the disc or USB device is protected by copyright.		
December of the	Check if the disc is scratched or dirty.		
Poor sound quality	Bit rate may be too low.		
It takes a relatively long time before the music starts playing.	If there are many folders or file levels on the MP3/WMA disc, or if it is a multisession disc, or USB device, 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., 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.		
Move 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.		

# Bluetooth® Audio player

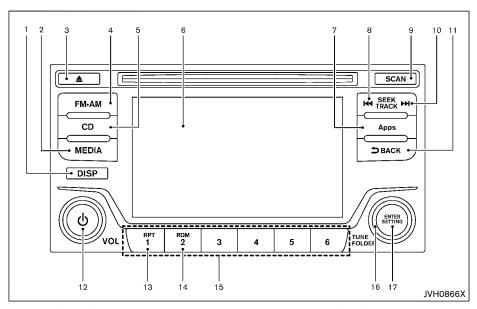
# Bluetooth'

Bluetooth<sup>®</sup> is a trademark owned by Bluetooth SIG, Inc. and licensed to Robert Bosch GmbH and Visteon Corporation.

- Some Bluetooth<sup>®</sup> 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<sup>®</sup> audio device and the in-vehicle Bluetooth<sup>®</sup> module before using the Bluetooth<sup>®</sup> audio player.
- Operating procedure of the Bluetooth<sup>®</sup> audio player will vary depending on the device. Make sure it is understood how to operate an audio device before using it with this system.
- The Bluetooth<sup>®</sup> audio player may be stopped under the following conditions:
  - Receiving a hands-free call.
  - Checking the connection to the handsfree phone.
- Do not place a Bluetooth<sup>®</sup> audio device in an area surrounded by metal or far away from the in-vehicle Bluetooth<sup>®</sup> module to prevent tone quality degradation and wireless connection disruption.
- While an audio device is connected through a Bluetooth<sup>®</sup> wireless connection, the bat-

- tery power of the device may discharge quicker than usual.
- This system supports the Bluetooth® Audio Distribution Profile (A2DP, AVRCP).
- Wireless LAN (Wi-Fi) and the Bluetooth<sup>®</sup> functions share the same frequency band (2.4 GHz). Using the Bluetooth<sup>®</sup> and the wireless LAN functions at the same time may slow down or disconnect the communication and cause undesired noise. It is recommended that you turn off the wireless LAN (Wi-Fi) when using the Bluetooth<sup>®</sup> functions.

#### 4-44 Heater, air conditioner, audio and phone systems



- 1. DISP (display) button
- 2. MEDIA button
- 3. CD eject button
- 4. FM-AM button
- 5. CD button
- 6. Color display
- 7. Apps button

- 8. SEEK TRACK (rewind) button
- 9. Radio SCAN tuning button
- 10. SEEK TRACK (forward) button
- 11. BACK button
- 12. Power button/VOL (volume) control knob
- RPT (repeat) play button
- 14. RDM (random) play button

- 15. Radio station preset select buttons
- TUNE-FOLDER knob
- 17. ENTER/SETTING button

# FM-AM RADIO WITH COMPACT DISC (CD) PLAYER (if so equipped)

Audio main operation

#### Head unit:

The auto loudness circuit enhances the low and high frequency ranges automatically.

# Power button/VOL (volume) control knob:

Push the Power button/VOL (volume) control knob to turn on and off the audio system.

Turn the Power button/VOL (volume) control knob to adjust the volume.

#### Audio settings:

The settings screen will appear when the ENTER/SETTING button is pushed.

The following items are available in the settings screen.

#### Bluetooth

It is possible to set the Bluetooth<sup>®</sup> settings. For details of the Bluetooth<sup>®</sup> settings, see "Bluetooth<sup>®</sup> settings" (P.4-88).

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.

Select the "Bass", "Treble", "Balance" or "Fade" using the TUNE-FOLDER knob, and then push the ENTER/SETTING button. Turn the TUNE-FOLDER knob to adjust the Bass, Treble, balance and Fade of the screen to the preferred level. Push the ENTER/SETTING button to apply the setting.

Speed Sensitive Vol.

To change the Speed Sensitive Volume (Speed Sensitive Vol.) level from off (0) to 5, turn the TUNE-FOLDER knob.

AUX Vol.

Controls the volume level of incoming sound when an auxiliary device is connected to the system. Choose a setting between +1 and +3 or choose 0 to disable the feature entirely.

Brightness and Contrast

Adjust the brightness and contrast of the screen.

Select "Brightness" or "Contrast" using the TUNE-FOLDER knob and then push the ENTER/SETTING button. Turn the TUNE-FOLDER knob to adjust the brightness and contrast of the screen to the

preferred level. Push the ENTER/SETTING button to apply the setting.

Clock Adjust

Adjust the clock according to the following procedure.

- Select "Clock Adjust" using the TUNE-FOLDER knob and then push the ENTER/SETTING button.
- Adjust the hour with the TUNE-FOLDER knob and then push the ENTER/ SETTING button.
- 3) Adjust the minute with the TUNE-FOLDER knob and then push the ENTER/SETTING button.

24 hour clock is not available.

On-Screen Clock

When this item is turned on, a clock is always displayed in the upper right corner of the screen.

Select the "On-Screen Clock" using the TUNE-FOLDER knob and then push the ENTER/SETTING button. You can toggle between ON and OFF using the TUNE-FOLDER knob.

RDS Display (if so equipped)

RDS (radio data system) information can be shown on the display. Select "RDS Display" using the TUNE-FOLDER knob and then push the ENTER/SETTING button. You can

toggle between ON and OFF using the TUNE-FOLDER knob. Push the ENTER/SETTING button to apply the setting.

Language Select

The language settings can be changed. Select "Language Select" using the TUNE-FOLDER knob and then push the ENTER/SETTING button. Use the TUNE-FOLDER knob to select the preferred language. Push the ENTER/SETTING button to apply the setting.

## DISP button:

Display of the screen can be canceled by pushing the pushing. You can still listen to music that is being played back even while the screen display is turned off. If you want to display the screen again, push the push button once more. Pushing some of the audio source buttons will also turn the screen back on and display the screens of the corresponding sources.

#### MEDIA button:

Pushing the MEDIA button will switch the audio source as follows:

 $USB/iPod \rightarrow Bluetooth Audio \rightarrow AUX \rightarrow USB/iPod$ 

# Apps Apps button:

The Apps button launches the Smartphone Integration mode, See "NissanConnect SM App smartphone integration" (P.4-75).

#### FM-AM Radio operation

## FM·AM radio (FM·AM) band select:

Push the band as follows:

 $AM \rightarrow FM1 \rightarrow FM2 \rightarrow AM$ 

#### TUNE (Tuning):

Turn the TUNE-FOLDER knob for manual tuning.

# 

Push the ▶ or ▶ button to tune from low to high or high to low frequencies and to stop at the next broadcasting station.

# SCAN SCAN tuning:

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

If the scan button is not pushed within this period, SCAN tuning moves to the next station.

# Radio memory buttons:

Up to 12 stations can be set for the FM band (6 each for FM1 and FM2) and 6 stations can be set for the AM band.

- 1. Choose the radio band using the [FM-AM] button.
- 2. Tune to the desired station.
- 3. Push and hold the desired station preset button 1 to 6 until beep sounds.
- 4. The station indicator will then come on. The station is now set to the button memory.
- 5. Other buttons can be set in the same manner.

If the battery cable is disconnected, or if the fuse opens, the station memory will be erased. In that case, reset the desired stations.

## CD player operation

Place the ignition switch in the ON or ACC position. Insert the Compact Disc (CD) into the slot with the label side facing up. The CD will be guided automatically into the slot and start playing.

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

If another audio source is already operating, it will automatically turn off and the CD will play.

If the system has been turned off while the CD was playing, pushing the Power button will start the CD.

# CD CD PLAY:

When the CD button is pushed while a CD is loaded, the CD will start playing.

# ▶► SEEK TRACK:

When the ◄ or ▶ button is pushed and hold while the CD is being played, the CD will play while fast forwarding or rewinding. When the button is released, the CD will return to normal play speed.

When the ◄ or ▶ button is pushed while the CD is being played, the next track or the beginning of the current track on the CD will be played. Push the 🖼 button again to select the previous track.

# RPT REPEAT (RPT):

When the RPT button is pushed while the CD is played, the play pattern can be changed as follows:

(CD)

(Normal) ⇔ 1 Track Repeat

(CD with compressed audio files)

(Normal) → 1 Folder Repeat → 1 Track Repeat  $\rightarrow$  (Normal)

# RDM RANDOM (RDM):

When the RDM button is pushed while a CD is being played, the play pattern can be changed as follows:

(CD)

(Normal) ⇔ 1 Disc Random

(CD with compressed audio files)

(Normal) → 1 Disc Random → 1 Folder Random → (Normal)



## CD eiect:

When the **b**utton is pushed with the CD loaded, the CD will be eiected.

If the CD comes out and is not removed, it will be pulled back into the slot to protect it.

USB (Universal Serial Bus) connection port



# 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.

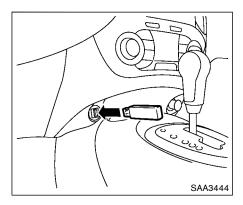


# **CAUTION**

Do not force the USB device into the USB port. Inserting a USB device tilted or upside-down into the port may damage the port. Make sure that the USB device is connected correctly to the USB port.

- Do not grab the USB port cover (if so equipped) when pulling a USB device out of the port. This could damage the port and the cover.
- Do not leave a 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.



#### **USB** main operation:

The USB connection port is located on the lower part of the instrument panel. Connect a USB memory device into the connector. When the audio system operates, the system will switch to the USB memory device mode automatically.

If the system has been turned off while the USB memory device was playing, pushing the Power button will start the USB memory device.

## MEDIA MEDIA button:

To change to the USB mode, push the MEDIA button with a USB connected until the USB mode is selected.

# I◀◀ I ▶▶I Next/Previous File and Fast Forward/Rewind:

When the ◄ or ▶ button is pushed and hold while a USB memory is being played, the USB memory will play while forwarding or rewinding. When the button is released, the USB memory will return to normal play speed.

When the ◄ or ▶ button is pushed while the USB memory is being played, the next track or the beginning of the current track on the USB memory will be played. Push the Hall button again to select the previous track.

#### Folder selection:

To change to another folder in the USB memory, choose a folder displayed on the screen using the TUNE-SCROLL knob.

# RPT REPEAT (RPT):

When the RPT button is pushed while the USB memory is played, the play pattern can be change as follows.

To change the play mode, push the RPT button repeatedly and the mode will change as follows.

(Normal) → 1 Folder Repeat → 1 Track Repeat → (Normal)

# RDM RANDOM (RDM):

When the RDM button is pushed while a USB memory is being played, the play pattern can be changed as follows.

To change the play mode, push the RDM button repeatedly, and the mode will change as follows.

(Normal) → All Random → 1 Folder Random → (Normal)

# BACK button:

When the BACK button is pushed, it returns to the previous display.

iPod® player operation

# **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.

# **A** 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.

# Connecting iPod®:

The USB connection port is located on the lower part of the instrument panel. Connect the iPod<sup>®</sup> cable to the USB connector. See "USB (Universal Serial Bus) connection port" (P.4-48). When the audio system operates, the system will switch to the iPod<sup>®</sup> mode automatically. The battery of the iPod<sup>®</sup> is charged while the cable is

connected to the vehicle.

Depending on the version of the iPod<sup>®</sup>, the display on the iPod<sup>®</sup> shows a NISSAN or Accessory Attached screen when the connection is completed. When the iPod<sup>®</sup> is connected to the vehicle, the iPod<sup>®</sup> music library can only be operated by the vehicle audio controls.

\* iPod<sup>®</sup> and iPhone<sup>®</sup> are a trademark of Apple Inc., registered in the U.S. and other countries.

#### Compatibility:

The following models are compatible:

- iPod nano® 1G (Firmware version 1.3.1 -)
- iPod nano<sup>®</sup> 2G (Firmware version 1.1.3 -)
- iPod nano® 3G (Firmware version 1.0.0 -)
- iPod nano® 4G (Firmware version 1.0.2 -)
- iPod nano® 5G (Firmware version 1.0.1 -)
- iPod nano<sup>®</sup> 6G (Firmware version 1.0 -)
- iPod nano® 7G (Firmware version 1.0.0 -)
- iPod<sup>®</sup> 5G (Firmware version 1.2.1 -)
- iPod classic® (Firmware version 1.0.0 -)
- iPod Touch® (iOS 1.1 -)
- iPod Touch® 2G (iOS 2.1.1 -)
- iPod Touch® 3G (iOS 3.1 -)
- iPod Touch® 4G (iOS 4.1 -)
- iPod Touch<sup>®</sup> 5G (iOS 6.0.0 -)

- iPhone<sup>®</sup> (iOS 1.0.0 2.2.1)
- iPhone<sup>®</sup> 3G (iOS 2.1 -)
- iPhone® 3GS (iOS 3.0 -)
- iPhone® 4/4S (iOS 4.0 -)
- iPhone® 5 (iOS 6.0.0 -)

Operations attributable to firmware update by Apple are not guaranteed.

# iPod® main operation:

The system operates when the ignition switch is in the ON or ACC position. Push the MEDIA button repeatedly to switch to the iPod® mode.

If the system was turned off while the iPod<sup>®</sup> was playing, pushing the Power button will start the iPod<sup>®</sup>.

If another audio source is playing and the iPod® is connected, pushing the MEDIA button repeatedly will change the system to the iPod® mode.

When in the iPod® mode, the interface for iPod® operation is shown on the audio display. The items on the menu list can be scrolled by turning the TUNE·FOLDER dial while the iPod® is operational. To select an item, push the ENTER/SETTING button. The following items in the iPod® menu appear on the display.

- Now playing
- Playlists

#### 4-50 Heater, air conditioner, audio and phone systems

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

For more information about each item, see the iPod® Owner's Manual.

#### ▶▶ Next/Previous Track and Fast Forward/Rewind:

When the ▶ or ◄ button is pushed and hold while the iPod® is playing, the iPod® will play while fast forwarding or rewinding. When the button is released, the iPod® will return to the normal play speed.

When the ▶ or ◄ button is pushed while the iPod® is playing, the next track or the beginning of the current track on the iPod® will be played. track.

Push the ▶ or ◄ button more than once to skip through the tracks.

# RPT (repeat) button:

When the RPT button is pushed while a track is being played, the play pattern can be changed as follows:

(Repeat Off) → 1 Track Repeat → All Repeat → (Repeat Off)

# RDM RDM (random) button:

When the RDM button is pushed while a track is being played, the play pattern can be changed as follows:

(Shuffle Off) → Track Shuffle → (Shuffle Off)

#### BACK BACK button:

The display will return to the previous screen.

Bluetooth® audio player operation 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.

# Regulatory information:

#### Bluetooth® trademark:

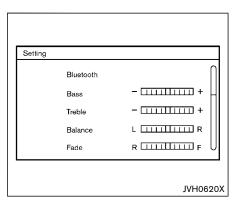


Bluetooth® is a trademark owned by Bluetooth SIG, Inc. and licensed to Visteon Corporation.

### Connecting Bluetooth® device:

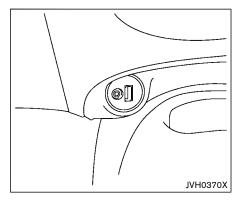
To connect your Bluetooth® device to the vehicle, follow the procedure below:

1. Push the ENTER/SETTING button.



audio mode is displayed on the screen.

The controls for the Bluetooth<sup>®</sup> audio are displayed on the screen. Use the Preset 3 button to play and use the Preset 4 button to pause.



- 2. Select "Bluetooth".
- Select "Add Phone or Device". This same screen can be accessed to remove, replace or select a different Bluetooth<sup>®</sup> device.
- 4. The system acknowledges the command and asks you to initiate a connection from the Bluetooth<sup>®</sup> device. The procedure for connecting a Bluetooth<sup>®</sup> device varies according to the cellular phone model. See the Owner's manual of the Bluetooth<sup>®</sup> device for details.

## Bluetooth® audio main operation:

To switch to the Bluetooth  $^{\otimes}$  audio mode, push the MEDIA button repeatedly until the Bluetooth  $^{\otimes}$ 

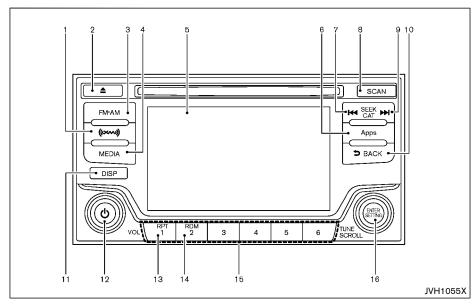
# AUX (Auxiliary) input jack

The AUX input jack is located on the lower part of the instrument panel. The AUX input jack accepts any standard analog audio input such as from a portable cassette tape/CD player, MP3 player or laptop computer.

Push the MEDIA button repeatedly to play a compatible device when it is plugged into the AUX input jack.

NISSAN strongly recommends using a stereo mini plug cable when connecting your music device to the audio system. Music may not play properly when a monaural cable is used.

#### 4-52 Heater, air conditioner, audio and phone systems



- XM band select button
- CD eject button
- FM-AM button
- MFDIA button
- Color display
- Apps button
- Radio CAT (category)/REW (rewind) button for SEEK/TRACK

- Radio SCAN tuning button
- Radio CAT (category)/FF (fast forward) button for SEEK/TRACK
- 10. BACK button
- DISP (display) button
- Power button/VOL (volume) control knob
- RPT (repeat) play button

- 14. RDM (random) play button
- Radio station preset select buttons
- ENTER/SETTING button/TUNE-SCROLL control knob

# FM-AM-SAT RADIO WITH COMPACT DISC (CD) PLAYER (Type A) (if so equipped)

For all operation precautions, see "Audio operation precautions" (P.4-35).

- No satellite radio reception is available when the SAT band option is selected unless the optional satellite receiver and antenna are installed, and there is an active SiriusXM Satellite Radio subscription.
- The satellite radio mode requires an active SiriusXM Satellite Radio subscription. The satellite radio is not available in Alaska. Hawaii and Guam.
- It may take some time to receive the activation signal after subscribing the SiriusXM Satellite Radio. After receiving the activation signal, an available channel list will be automatically updated in the radio. Push the ignition switch from LOCK to ACC to update the channel list.

#### Audio main operation

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

#### Head unit:

The auto loudness circuit enhances the low and high frequency ranges automatically.

# (I) Power button / VOL (volume) control knob:

Push the Power button/VOL (volume) control knob to turn on and off the audio system.

Turn the Power button/VOL (volume) control knob to adjust the volume.

#### Audio settings:

The settings screen will appear when pushing the ENTER/SETTING button.

The following items are available in the settings screen.

#### Bluetooth

It is possible to set the Bluetooth<sup>®</sup> settings. For details of the Bluetooth<sup>®</sup> settings, see "Bluetooth<sup>®</sup> settings" (P.4-88).

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.

 Select the "Bass", "Treble", "Balance" or

"Fade" using the TUNE-SCROLL control knob and then push the ENTER/SETTING button. Turn the TUNE-SCROLL control knob to adjust the Bass, Treble, balance and Fade of the screen to the preferred level. Push the ENTER/SETTING button to apply the setting.

#### Brightness and Contrast

Adjust the brightness and contrast of the screen.

Select the "Brightness" or "Contrast" using the TUNE-SCROLL control knob and then push the ENTER/SETTING button. Turn the TUNE-SCROLL control knob to adjust the brightness and contrast of the screen to the preferred level. Push the ENTER/SETTING button to apply the setting.

#### Clock Adjust

Adjust the clock according to the following procedure.

- Select "Clock Adjust" using the TU-NE-SCROLL control knob and then push the ENTER/SETTING button.
- Adjust the hour with the TUNE-SCROLL control knob and then push the ENTER/ SETTING button.
- Adjust the minute with the TUNE-SC-ROLL control knob and then push the ENTER/SETTING button.

24 hour clock is not available.

#### On-Screen Clock

When this item is turned on, a clock is always displayed in the upper right corner of the screen.

Select the "On-Screen Clock" using the TUNE-SCROLL control knob and then push the ENTER/SETTING button. You can toggle between ON and OFF using the TUNE-SCROLL control knob.

## RDS Display (if so equipped)

RDS (radio data system) information can be shown on the display. Select "RDS Display" using the TUNE·SCROLL control knob and then push the ENTER/SETTING button. You can toggle between ON and OFF using the TUNE·SCROLL control knob. Push the ENTER/SETTING button to apply the setting.

#### Speed Sensitive Vol.

To change the Speed Sensitive Volume (Speed Sensitive Vol.) level from off (0) to 5, turn the TUNE-SCROLL control knob.

#### AUX Vol.

Controls the volume level of incoming sound when an auxiliary device is connected to the system. Choose a setting between +1 and +3 or choose 0 to disable the feature entirely.

#### 4-54 Heater, air conditioner, audio and phone systems

#### Language Select

The language settings can be changed. Select "Language Select" using the TU-NE-SCROLL control knob and then push the ENTER/SETTING button. Use the TU-NE-SCROLL control knob to select the preferred language. Push the ENTER/ SETTING button to apply the setting.

## DISP button:

Display of the screen can be canceled by pushing the DISP button. You can still listen to music that is being played back even while the screen display is turned off. If you want to display the screen again, push the DISP button once more. Pushing some of the audio source buttons will also turn the screen back on and display the screens of the corresponding sources.

#### MEDIA button:

Pushing the MEDIA button will switch the audio source as follows:

CD →USB/iPod → Bluetooth Audio → AUX → CD

# Apps Apps button:

The Apps button launches the Smartphone Integration mode. See "NissanConnect SM App smartphone integration" (P.4-75).

FM-AM-SAT Radio operation

#### FM·AM radio (FM-AM) band select:

Pushing the FM·AM button will change the band as follows:

 $AM \rightarrow FM1 \rightarrow FM2 \rightarrow AM$ 

# XM radio (SAT) band select:

Pushing the XM band select button will change the band as follows:

 $XM1 \rightarrow XM2 \rightarrow XM3 \rightarrow XM1$ 

When the XM band select button is pushed while the ignition switch is in the ACC or ON position, the radio will come on at the channel last played.

The last channel played will also come on when the Power button is pushed to ON.

The satellite radio is not available in Alaska. Hawaii and Guam.

If another audio source is playing when the radio band select button is turned to ON, the audio source will automatically be turned off and the last radio channel played will come on.

When the stereo broadcast signal is weak, the radio will automatically change from stereo to monaural reception.

#### **TUNE** (Tuning):

- For AM and FM radio Turn the radio TUNE-SCROLL control knob for manual tuning.
- For SiriusXM Satellite Radio Turn the radio TUNE-SCROLL control knob to seek channels from all of the categories when any category is not selected.

# 

- For AM and FM radio Push the SEEK button 

  or 

  or 

  to tune from low to high or high to low frequencies and to stop at the next broadcasting station.
- For SiriusXM Satellite Radio Push the SEEK button 

  or 

  to tune to the first channel of the next or previous category.

# SCAN SCAN tuning:

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

If the SCAN tuning button is not pushed within 5 seconds, SCAN tuning moves to the next station.

Station memory operations: to

12 stations can be set for the FM band (6 each for FM1 and FM2) and 6 stations can be set for the AM band.

- 1. Choose the radio band using the [M-AM] button.
- 2. Tune to the desired station.
- Push and hold the desired station preset button 1 to 6 until beep sounds.
- 4. The station indicator will then come on. Memorizing is now complete.
- 5. Other buttons can be set in the same manner.

If the battery cable is disconnected, or if the fuse opens, the station memory will be erased. In that case, reset the desired stations.

## CD player operation

Place the ignition switch in the ON or ACC position, and insert the compact disc (CD) into the slot with the label side facing up. The CD will be guided automatically into the slot and start playing.

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

If another audio source is already operating, it will automatically turn off and the CD will play.

If the system was turned off while the CD was playing, pushing the Power button will start the CD.

# MEDIA PLAY:

With a CD loaded, press the MEDIA button until the CD mode is displayed on the screen.

## ▶▶ Next/Previous Track and Fast Forward/Rewind:

When the ◄ or ▶ button is pushed and hold while the CD is being played, the CD will play while fast forwarding or rewinding. When the button is released, the CD will return to normal play speed.

When the ◄ or ▶ button is pushed while the CD is being played, the next track or the beginning of the current track on the CD will be played. Push the 🖼 button again to select the previous track.

# RPT (repeat) button:

When the RPT button is pushed while the CD is played, the play pattern can be changed as follows:

(CD)

(Normal) ⇔ 1 Track Repeat

(CD with compressed audio files)

(Normal) → 1 Folder Repeat → 1 Track Repeat  $\rightarrow$  (Normal)

# RDM RDM (random) button:

When the RDM button is pushed while a CD is being played, the play pattern can be changed as follows:

(CD)

(Normal) ⇔ 1 Disc Random

(CD with compressed audio files)

(Normal) → 1 Disc Random → 1 Folder Random → (Normal)

# CD eiect button:

When the **button** is pushed with the CD loaded, the CD will be ejected.

If the CD comes out and is not removed, it will be pulled back into the slot to protect it.

USB (Universal Serial Bus) connection port



# 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.

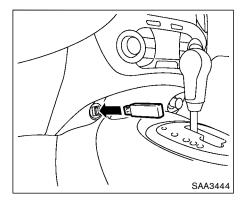


# **CAUTION**

- Do not force the USB device into the USB port, Inserting a USB device tilted or upside-down into the port may damage the port. Make sure that the USB device is connected correctly to the USB port.
- Do not grab the USB port cover (if so equipped) when pulling a USB device out of the port. This could damage the port and the cover.

 Do not leave a 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.



#### **USB** main operation:

The USB outlet connector is located on the lower part of the instrument panel. Connect a USB memory device into the connector. When the audio system operates, the system will switch to the USB memory device mode automatically.

If the system has been turned off while the USB memory device was playing, pushing the Power button will start the USB memory device.

# MEDIA MEDIA button:

To change to the USB mode, push the MEDIA button with a USB connected until the USB mode is selected.

### ▶▶ Next/Previous File and Fast Forward/Rewind:

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

When the ◄ or ▶ button is pushed while the USB memory is being played, the next track or the beginning of the current track on the USB memory will be played. Push the 🖼 button again to select the previous track.

#### Folder selection:

To change to another folder in the USB memory, choose a folder displayed on the screen using the TUNE-SCROLL knob.

### RPT REPEAT (RPT):

When the RPT button is pushed while the USB memory is played, the play pattern can be change as follows.

To change the play mode, push the RPT button repeatedly and the mode will change as follows.

(Normal) → 1 Folder Repeat → 1 Track Repeat → (Normal)

### RDM RANDOM (RDM):

When the RDM button is pushed while a USB memory is being played, the play pattern can be changed as follows.

To change the play mode, push the RDM button repeatedly, and the mode will change as follows. (Normal) → All Random → 1 Folder Random → (Normal)

### BACK button:

When the BACK button is pushed, it returns to the previous display.

iPod® player operation

# **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.

# A 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.

### Connecting iPod®:

The USB port is located on the lower part of the instrument panel. Connect the iPod® cable to the USB connector, See "USB (Universal Serial Bus) connection port" (P.4-57). When the audio system operates, the system will switch to the iPod® mode automatically. The battery of the iPod® is charged while the cable is connected to

the vehicle.

Depending on the version of the iPod®, the display on the iPod® shows a NISSAN or Accessory Attached screen when the connection is completed. When the iPod® is connected to the vehicle, the iPod® music library can only be operated by the vehicle audio controls.

\* iPod® and iPhone® are a trademark of Apple Inc., registered in the U.S. and other countries.

### Compatibility:

The following models are compatible:

- iPod nano® 1G (Firmware version 1.3.1 -)
- iPod nano® 2G (Firmware version 1.1.3 -)
- iPod nano® 3G (Firmware version 1.0.0 -)
- iPod nano® 4G (Firmware version 1.0.2 -)
- iPod nano® 5G (Firmware version 1.0.1 -)
- iPod nano® 6G (Firmware version 1.0 -)
- iPod nano® 7G (Firmware version 1.0.0 -)
- iPod® 5G (Firmware version 1.2.1 -)
- iPod classic® (Firmware version 1.0.0 -)
- iPod Touch® (iOS 1.1 -)
- iPod Touch® 2G (iOS 2.1.1 -)
- iPod Touch® 3G (iOS 3.1 -)
- iPod Touch® 4G (iOS 4.1 -)
- iPod Touch® 5G (iOS 6.0.0 -)

- iPhone® (iOS 1.0.0 2.2.1)
- iPhone® 3G (iOS 2.1 -)
- iPhone® 3GS (iOS 3.0 -)
- iPhone® 4/4S (iOS 4.0 -)
- iPhone® 5 (iOS 6.0.0 -)

Operations attributable to firmware update by Apple are not guaranteed.

### iPod® main operation:

The system operates when the ignition switch is in the ON or ACC position. Push the MEDIA button repeatedly to switch to the iPod® mode.

If the system was turned off while the iPod® was playing, pushing the Power button will start the iPod®.

If another audio source is playing and the iPod® is connected, pushing the MEDIA button repeatedly will change the system to the iPod® mode.

When in the iPod® mode, the interface for iPod® operation is shown on the audio display. The items on the menu list can be scrolled by turning the TUNE-SCROLL dial while the iPod® is operational. To select an item, push the ENTER/SETTING button. The following items in the iPod® menu appear on the display.

- Now playing
- **Playlists**

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

For more information about each item, see the iPod® Owner's Manual.

### ▶▶ Next/Previous Track and Fast Forward/Rewind:

When the ◄ or ▶ button is pushed and hold while the iPod<sup>®</sup> is playing, the iPod<sup>®</sup> will play while fast forwarding or rewinding. When the button is released, the iPod® will return to the normal play speed.

When the ◄ or ▶ button is pushed while the iPod<sup>®</sup> is playing, the next track or the beginning of the current track on the iPod® will be played. Push the ◄ button again to select the previous track.

### RPT (repeat) button:

When the RPT button is pushed while a track is being played, the play pattern can be changed as follows:

(Repeat Off) → 1 Track Repeat → All Repeat → (Repeat Off)

### RDM RDM (random) button:

When the RDM button is pushed while a track is being played, the play pattern can be changed as follows:

(Shuffle Off) → Track Shuffle → (Shuffle Off)

### BACK button:

The display will return to the previous screen.

### Bluetooth® audio player operation

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.

### Regulatory information:

### Bluetooth® trademark:

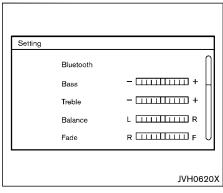


Bluetooth® is a trademark owned by Bluetooth SIG, Inc. and licensed to Visteon Corporation.

### Connecting Bluetooth® device:

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

1. Push the ENTER/SETTING button.

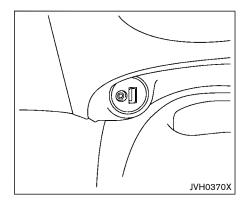


- 2. Select "Bluetooth".
- 3. Select "Add Phone". This same screen can be accessed to remove, replace or select a different Bluetooth® device.
- 4. The system acknowledges the command and asks you to initiate a connection from the Bluetooth® device. The procedure for connecting a Bluetooth® device varies according to the cellular phone model. See the Owner's manual of the Bluetooth® device for details.

### Bluetooth® audio main operation:

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

The controls for the Bluetooth® audio are displayed on the screen. Use the Preset 3 button to play and use the Preset 4 button to pause.

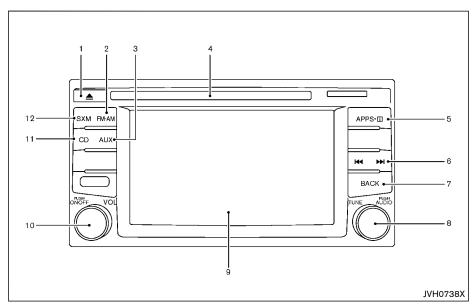


### AUX (Auxiliary) input jack

The AUX input jack is located on the lower part of the instrument panel. The AUX input jack accepts any standard analog audio input such as from a portable cassette tape/CD player, MP3 player or laptop computer.

Push the MEDIA button repeatedly to play a compatible device when it is plugged into the AUX input jack.

NISSAN strongly recommends using a stereo mini plug cable when connecting your music device to the audio system. Music may not play properly when a monaural cable is used.



- 1. CD eject button
- 2. FM·AM button
- 3. AUX button
- 4. CD insert slot
- APPS to display the apps information screen. For details, see "How to use the APPS button" (P.4-5).
- i◄ Backward seek button and ▶▶i Forward seek button
- 7. BACK button
- 8. TUNE knob / AUDIO button
- 9. Display screen
- 10. ON:OFF button / VOL (volume) control knob
- 11. CD button

#### 12. SXM button\*

# FM-AM-SAT RADIO WITH COMPACT DISC (CD) PLAYER (Type B) (if so equipped)

\*No satellite radio reception is available when the SXM button is pushed to access satellite radio stations unless optional satellite receiver and antenna are installed and a SiriusXM Satellite Radio service subscription is active. Satellite radio is not available in Alaska, Hawaii and Guam.

For all operation precautions, see "Audio operation precautions" (P.4-35).

### Audio main operation

# ON-OFF button / VOL (volume) control knob:

Place the ignition switch in the ACC or ON position and push the ON-OFF button while the system is off to call up the available audio source that was playing immediately before the system was turned off.

To turn the system off, push the  $\ensuremath{\mathsf{ON}}\xspace.\ensuremath{\mathsf{OFF}}$  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

#### 4-62 Heater, air conditioner, audio and phone systems

changes.

### Audio settings:

- 1. push the APPS button.
- 2. Touch the "Settings" key.
- 3. Touch the "Audio" key.

Use the touch-screen to adjust the following items to the desired setting:

• Bass:

Adjusts the bass to the desired level.

Treble:

Adjusts the treble to the desired level.

Balance:

Adjusts the balance to the desired level. Balance adjusts the sound level between the left and right speakers.

• Fade:

Adjusts the fade to the desired level. Fade adjusts the sound level between the front and rear speakers.

· Speed Sensitive Vol.:

Adjusts the speed sensitive volume function, which increases the volume of the audio system as the speed of the vehicle increases. Set to "OFF" to disable the feature. The higher the setting, the more the volume increases in relation to vehicle speed.

#### AUX Volume Level:

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

Bass, treble, balance and fade can also be adjusted by pushing the AUDIO control knob and turning it to select the item to adjust. When the desired item is shown on the display, turn the tuning to adjust and then push the AUDIO button until the display returns to the main audio screen. If the button is not pushed for approximately 10 seconds, the radio or CD display will automatically reappear.

### SXM settings:

To view the SXM settings:

- 1. Push the APPS button.
- 2. Touch the "Settings" key.
- 3. Touch the "SXM" key.

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

### FM/AM/SAT radio operation

#### FM-AM button:

Push the FM·AM button to change the band as follows:

$$AM \rightarrow FM1 \rightarrow FM2 \rightarrow AM$$

If another audio source is playing when the FM-AM button is pushed, 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.

#### SXM band select:

Pushing the SXM button will change the band as follows:

 $SXM1^* \rightarrow SXM2^* \rightarrow SXM3^* \rightarrow SXM1^*$  (satellite, if so equipped)

When the SXM button is pushed 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 ON-OFF button is pushed.

\*When the SXM button is pushed, 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 SXM button is pushed, the compact disc will automatically be turned off and the last radio station played will come on.

While the radio is in SXM mode, the operation can be controlled through the touch-screen. 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 touch-screen:

When in AM or FM mode, the radio can be tuned using the touch-screen. 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.

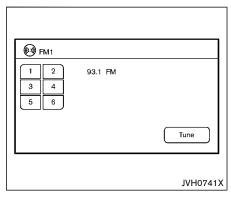
### **Tuning with the TUNE knob:**

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 SXM mode, turn the TUNE knob to change the channel.

### ▶▶ SEEK tuning:

When in FM or AM mode, push 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 SXM mode, push 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 SXM band (6 for SXM1, 6 for SXM2, 6 for SXM3).

- 1. Choose the radio band AM, FM1 or FM2 using the FM·AM select button or choose the radio band SXM1, SXM2, SXM3 using the SXM button.
- 2. Tune to the desired station using manual or seek tuning. Touch and hold any of the desired station memory keys (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 keys can be set in the same manner. If the battery cable is disconnected or if the fuse opens, the radio memory will be erased. 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 pushed 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 pushed 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/WMA display mode:

	Menu item	
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:
	Random	Touch the "Random" key to apply a random play pattern to the CD. If an MP3 CD is playing, touching "Random" or alternates between Random Folder, and Random All. This text will appear on the display. To cancel Random mode, touch the "Random" key until the key is no longer highlighted.
	Repeat	Touch the "Repeat" key to apply a repeat play pattern to the CD. If an MP3 CD is playing, touching "Repeat" alternates between repeating the current song and repeating the current folder. This text will appear on the display. To cancel Repeat mode, touch the "Repeat" key until the key is no longer highlighted.
	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 touch-screen to choose a folder.

### Idd | ▶▶ | SEEK (Fast Forward/Rewind) buttons:

Push 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.

### ▶► SEEK (Previous/Next Track) buttons:

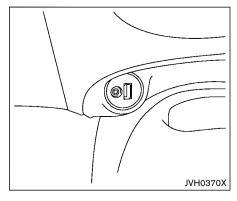
Push the seek button ◄ while a CD or MP3/ WMA CD is playing to return to the beginning of the current track. Push the seek button several times to skip backward several tracks.

Push the seek button ▶ while a CD or MP3/ WMA CD is playing to advance one track. Push 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.

### CD eject button:

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

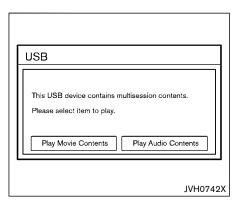
If the disc is not removed within 10 seconds, the disc will reload.



### AUX (Auxiliary) input

The AUX IN jack is located on the lower center of the instrument panel. The AUX IN jack accepts any standard analog audio input such as from a portable cassette tape/CD player, MP3 player or a laptop computer. Push the AUX button to play a compatible device plugged into the AUX IN iack.

NISSAN strongly recommends using a stereo mini plug cable when connecting your music device to the audio system. Music may not play properly when a monaural cable is used.



USB (Universal Serial Bus) connection port

Connecting a device to the USB port:



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 port is located on the lower center of the instrument panel. Insert the USB device into the port.

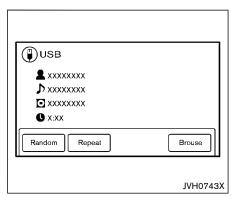
When a compatible storage device is plugged into the port, compatible audio files on the storage device can be played through the vehicle's audio system.

### Audio file operation:

#### AUX button:

Place the ignition switch in the ON or ACC position and push the AUX button to switch to the USB input mode. If another audio source is playing and a USB memory device is inserted, push 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 button 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 categories that can be used to narrow the search. Touch the name of a song on the screen to begin playing that song.

### I◀◀ ▶▶I Seek button:

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

Push the **>>** button while an audio file on the USB device is playing to advance one track.

Push 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:

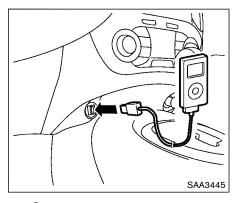
While files on a USB device are playing, the play pattern can be altered so that songs are repeated or played randomly.

#### Random:

Touch the "Random" key to apply a random play pattern to the USB device. To cancel Random mode, touch the "Random" key again.

### • Repeat:

Touch the "Repeat" key to apply a repeat play pattern to the USB device. To cancel Repeat mode, touch the "Repeat" key again.



iPod<sup>®</sup> player operation (if so equipped)

Connecting iPod<sup>®</sup>:



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.

4-68 Heater, air conditioner, audio and phone systems

# 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 port located on the lower center of the instrument panel. Connect the iPod®-specific end of the cable to the iPod® and the USB end of the cable to the USB port 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® may only be able to be operated by the vehicle audio controls.

To disconnect the iPod® from the vehicle. remove the USB end of the cable from the USB port 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.

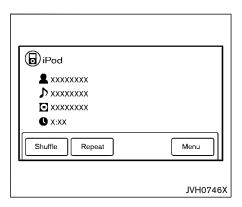
### Compatibility:

The following models are compatible:

- iPod Classic® 5th generation (firmware version 1.3.0 or later)
- iPod Classic® 6th generation (firmware version 2.0.1 or later)
- iPod Classic® 6th (6.1) generation (firmware version 2.0.1 or later)
- iPod Classic® 6th (6.2) generation (firmware version 2.0.4 or later)
- iPod Touch® 2nd generation (firmware version 4.2.1 or later)\*
- iPod Touch® 3rd generation (firmware version 5.1.1 or later)

- iPod Touch® 4th generation (firmware version 6.1.3 or later)
- iPod Touch® 5th generation (firmware version 6.1.3 or later)
- iPod nano<sup>®</sup> 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 1.0.2 or later)
- iPod nano® 6th generation (firmware version 1.2 or later)
- iPod nano® 7th generation (firmware version 1.2 or later)
- iPhone® 3G (firmware version 4.2.1 or later)
- iPhone<sup>®</sup> 3GS (firmware version 5.1.1or later)
- iPhone® 4 (firmware version 6.1.3 or later)
- iPhone® 4S (firmware version 6.1.3 or later)
- iPhone<sup>®</sup> 5 (firmware version 6.1.3 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.



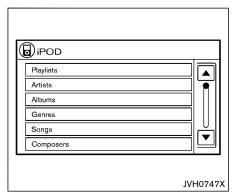
### Audio main operation:

Place the ignition switch in the ACC or ON position. Push the AUX button repeatedly to switch to the iPod® mode.

If the system has been turned off while the iPod<sup>®</sup> was playing, pushing the ON-OFF button will start the iPod<sup>®</sup>.

#### **AUX** button:

When the AUX button is pushed with the system off and the iPod<sup>®</sup> connected, the system will turn on. If another audio source is playing and the iPod<sup>®</sup> is connected, push the AUX button repeatedly until the center display changes to the iPod<sup>®</sup> mode.



### Interface:

The interface for iPod® operation shown on the vehicle's audio system display screen is similar to the iPod® interface. Use the touch-screen, BACK button or the TUNE knob to navigate the menus on the screen.

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

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

Playlists

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

### Shuffle and repeat play mode:

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

#### Shuffle:

Touch the "Shuffle" key to apply a random play pattern to the iPod®. When the Shuffle mode is active, the text is highlighted. To cancel Shuffle mode, touch the "Shuffle" key again until the text is no longer highlighted.

#### Repeat:

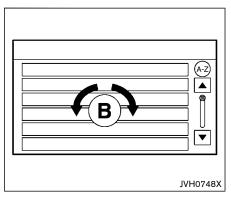
Touch the "Repeat" key to apply a repeat play pattern to the iPod<sup>®</sup>. When the repeat mode is active, the text is highlighted. To cancel Repeat mode, touch the "Repeat" key again until the text is no longer highlighted.



Push the seek button I◄ or ►►I to skip backward or forward one track.

#### 4-70 Heater, air conditioner, audio and phone systems

Push 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.

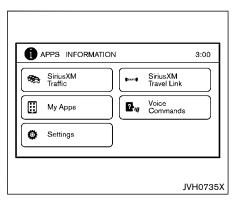


### Scrolling menus:

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 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 push the AUDIO button.

### Bluetooth® streaming audio

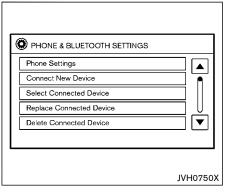
If you have a compatible Bluetooth® audio device that is capable of playing audio files, the device can be connected to the vehicle's audio system so that the audio files on the device play through the vehicle's speakers.



### Connecting Bluetooth® audio:

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

- 1. Push the APPS D button.
- Touch the "Settings" key.
- Touch the "Phone & Bluetooth" key.

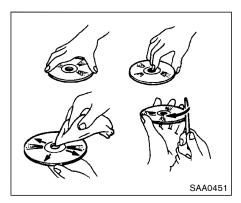


The controls for the Bluetooth® audio are displayed on the screen.

- 4. Touch 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, push the AUX button repeatedly until the Bluetooth® audio mode is displayed on the screen.



### CD/USB MEMORY CARE AND **CLEANING**

### CD

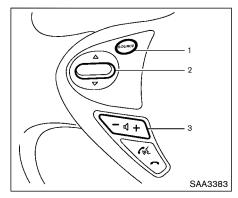
- Handle a CD by its edges. Never touch the surface of the disc. Do not bend the disc.
- Always place the discs in the storage case when they are not being used.
- To clean a disc, wipe the surface from the center to the outer edge using a clean, soft cloth. Do not wipe the disc using a circular motion.

Do not use a conventional record cleaner or alcohol intended for industrial use.

A new disc may be rough on the inner and outer edges. Remove the rough edges by rubbing the inner and outer edges with the side of a pen or pencil as illustrated.

### USB memory

- Do not touch the terminal portion of the USB memory.
- Do not place heavy objects on the USB memory.
- Do not store the USB memory in very humid locations.
- Do not expose the USB memory to direct sunlight.
- Do not spill any liquids on the USB memory. Refer to the USB memory Owner's Manual for the details.



- SOURCE select switch
- Tuning switch
- VOLUME control switch

### STEERING WHEEL SWITCH FOR AUDIO CONTROL

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

### SOURCE select switch

Push the SOURCE select switch to change the mode to available audio source.

### VOLUME control switch

Push up or down the VOLUME control switch to increase or decrease the volume.

#### AM and FM radio:

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

### SXM operation (if so equipped):

- Tilt up/down for less than 1.5 seconds to increase or decrease the preset station.
- Tilt up/down for more than 1.5 seconds to go to the next or previous category.

#### iPod®:

- Push the tuning switch for less than 1.5 seconds to return to the beginning of the present program or skip to the next program.
   Push several times to skip back or skip through programs.
- This system searches for the blank intervals between selections. If there is a blank interval within one program or there is no interval between programs, the system may

not stop in the desired or expected location.

#### CD:

- Push the tuning switch for less than 1.5 seconds to return to the beginning of the present program or skip to the next program.
   Push several times to skip back or skip through programs.
- This system searches for the blank intervals between selections. If there is a blank interval within one program or there is no interval between programs, the system may not stop in the desired or expected location.
- Push the tuning switch for more than 1.5 seconds to change the folders (if there are any folders).

#### USB:

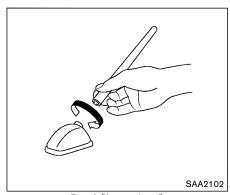
- Push the tuning switch for less than 1.5 seconds to return to the beginning of the present program or skip to the next program.
   Push several times to skip back or skip through programs.
- This system searches for the blank intervals between selections. If there is a blank interval within one program or there is no interval between programs, the system may not stop in the desired or expected location.
- If there are any folders, push the tuning switch for more than 1.5 seconds to change

the folders (if so equipped).

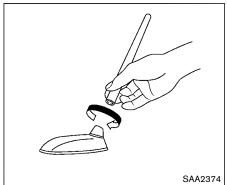
### Bluetooth® Audio operation:

- Tilt up/down for less than 1.5 seconds to skip ahead or back to the next song.
- Tilt up/down for more than 1.5 seconds to reverse or fast forward the current track.

### 4-74 Heater, air conditioner, audio and phone systems



Type A (if so equipped)



Type B (if so equipped)

#### **ANTENNA**

To remove the antenna, hold the bottom of the antenna and turn it counterclockwise.

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

### **CAUTION**

- To avoid damaging or deforming the antenna, be sure to fold down (if so equipped) or remove the antenna under the following conditions.
  - The vehicle enters a garage with a low ceiling.
  - The vehicle is covered with a car cover.
- Be sure that antenna is removed before the vehicle enters an automatic car wash.
- Always properly tighten the antenna rod during installation. Otherwise, the antenna rod may break during vehicle operation.

### NISSANCONNECT<sup>SM</sup> APP SMARTPHONE INTEGRATION

This vehicle is equipped with Smartphone Integration technology. This allows many compatible Smartphone applications to be displayed and easily controlled through the vehicle's touchscreen.

#### NOTE:

A compatible smartphone and registration is required to use mobile applications or to access connected features of certain vehicle applications.

### REGISTERING WITH NISSANCON-NECT<sup>SM</sup> APP

To use the Smartphone Integration feature, it is necessary for the user to register. In order to register, visit the NissanConnect<sup>SM</sup> website and sign up or create an account through the prompts on the NissanConnect<sup>SM</sup> App. Once registered, download the NissanConnect<sup>SM</sup> App from your compatible phone's application download source and then log into the application. If you already have an account created through the App, please log in.

### NissanConnect<sup>SM</sup> website:

For U.S.

www.nissanusa.com/connect/

For Canada

Canada.NissanConnect.com

#### CONNECT PHONE

To use this feature, a compatible smartphone must be connected via Bluetooth® or USB to the vehicle. For more information on connecting your phone, see "Bluetooth® Hands-Free Phone System (models without navigation system)" (P.4-80) or "Bluetooth® Hands-Free Phone System (models with navigation system)" (P.4-89).

#### NOTE:

- For Apple iPhones<sup>®</sup>, NissanConnect<sup>SM</sup>
   Apps REQUIRES the phone to be plugged in via USB.
- For Android phones, NissanConnect<sup>SM</sup>
   Apps REQUIRES the phone to be paired via Bluetooth<sup>®</sup>.

### APPLICATION DOWNLOAD

Once connected, the NissanConnect<sup>SM</sup> App will search your phone to determine which compatible applications are currently installed. The user will then choose which apps they want to bring into their vehicle from the list of apps within the "Manage My Apps" section of the NissanConnect<sup>SM</sup> App on their smartphone. The vehicle will then download the in-vehicle interface for each of these compatible applications. Once downloaded, the user can access their selected smartphone applications through the vehicle touchscreen. For more information on

application availability see NissanConnect<sup>SM</sup> website.

### NissanConnect<sup>SM</sup> website:

For U.S.

www.nissanusa.com/connect/

For Canada

 $www. Nissan. ca/NissanConnect \ (English)$ 

www.Nissan.ca/NissanConnect/fr (French)

### SIRI® EYES FREE

### GENERAL INFORMATION

Apple Siri® Eyes Free personal assistant can be accessed from the vehicle. Siri® Eyes Free can be accessed in Siri® Eyes Free mode to reduce user distraction. In this mode, Siri® Eyes Free is available for interaction by voice control. After connecting a compatible Apple device by using Bluetooth®, Siri® Eyes Free can be activated using the TALK switch on the steering wheel.

Siri® is a trademark of Apple Inc., registered in the U.S. and other countries.



### INFO:

- Some Siri<sup>®</sup> Eyes Free functions, such as opening apps, may not be available during driving.
- For best results, always update your device to the latest software version.
- 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.
- For functions that can be used in Siri<sup>®</sup> Eyes
   Free, please refer to the Apple website.

#### 4-76 Heater, air conditioner, audio and phone systems

### REQUIREMENTS

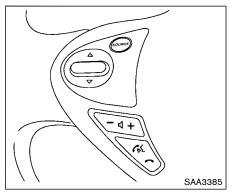
Siri<sup>®</sup> is available on the iPhone<sup>®</sup> 4S or later. Devices released before iPhone<sup>®</sup> 4S are not supported by the Siri<sup>®</sup> Eyes Free system.

Visit www.apple.com/ios/siri for details about device compatibility.

Siri® must be enabled on the phone. Please check phone settings.

If the device has a lock screen, Siri® must be accessible from the lock screen. Please check phone settings.

For best results, always update your device to the latest software version.



### SIRI® EYES FREE ACTIVATION

Siri® Eyes Free function can be activated by using the  $\nearrow$  TALK switch on the steering wheel.

#### Models with navigation system

- Connect a Siri<sup>®</sup> Eyes Free enabled iPhone<sup>®</sup> to the vehicle. (See "Connecting procedure" (P.4-92).)

### Models without navigation system

1. Connect a Siri<sup>®</sup> Eyes Free enabled iPhone<sup>®</sup> to the vehicle. (See "Initialization" (P.4-83).)

- After the Bluetooth<sup>®</sup> connection is established, the switch operation select screen is displayed.
- Select "Short Press" or "Long Press" for Siri<sup>®</sup> Eyes Free activation. Switch action can also be changed from the Bluetooth<sup>®</sup> settings menu. (See "Changing Siri<sup>®</sup> Eyes Free Settings (models without navigation system)" (P.4-78).)

### OPERATING SIRI® EYES FREE

- 1. Push or push and hold the ALK switch.
- Speak your command and then listen to the Siri<sup>®</sup> Eyes Free reply.

After starting Siri® Eyes Free, push the rTALK switch again within 5 seconds of the end of the Siri® Eyes Free announcement to extend the session.

### Example 1 - Playing music

- Push or push and hold the TK TALK switch.
- 2. Say "Play (artist name, song name, etc.)".
- Your vehicle will automatically change to Bluetooth<sup>®</sup> Audio or iPod<sup>®</sup> mode\* when the music starts playing. Mode selection is determined by the phone.
  - \*: If the iPhone® is also connected with the USB cable.
- If the audio track does not start playing

automatically after Siri® Eyes Free ends, try changing the track or audio source to resume playback.

### NOTE:

For best results, use the native music app. Performance of music control function while using Podcasts, Audiobook or other 3rd party music apps may vary and is controlled by the iPhone®.

### Example 2 - Replying to text messages

- 1. If a compatible iPhone® is connected and "Show Notifications" of the iPhone® settings is enabled, the vehicle will display a notification for new incoming text messages.
- 2. After reading the message, push or push and hold the As TALK switch to reply using Siri® Eyes Free.
- 3. After a beep sounds, say "Text message" or a similar command to reply using Siri® Eyes Free.

CHANGING SIRI® EYES FREE SET-TINGS (models without navigation system)

Settings for Siri® Eyes Free can be found in the Bluetooth® settings menu. (See "Bluetooth® settings" (P.4-88).)

- Push the ENTER/SETTING button.
- 2. Use the TUNE-FOLDER or TUNE-SCROLL knob to select "Bluetooth" and then push the ENTER/SETTING button.
- 3. Use the TUNE-FOLDER or TUNE-SCROLL knob to select "Siri" and then push the **FNTFR/SFTTING** button.
- 4. Select "Short Press" or "Long Press" using the TUNE-FOLDER or TUNE-SCROLL knob and then push the ENTER/SETTING button.

### TROUBLESHOOTING GUIDE

Symptom	Cause and Countermeasure
Cannot access Siri® Eyes Free from the switch on the steering wheel	Check if a Bluetooth® connection is established between the iPhone® and the system.
	Check if Siri® is enabled on the device. On your phone, go to Siri® setting.
	Check that Siri® can be accessed from the device lock screen. This can be set in the settings menu of your phone.
	Models without navigation system: Check the settings for Siri® Eyes Free activation on the vehicle audio system. If the setting is "Long Press", you must push and hold the  Talk switch on the steering wheel for more than 1.5 seconds to start Siri® Eyes Free. If the setting is "Short Press", a short push and release of the switch should start Siri® Eyes Free.
Audio source does not change automatically to iPod $^{\tiny{\textcircled{\$}}}$ or $\text{Bluetooth}^{\tiny{\textcircled{\$}}}$ Audio mode	For best results, use the native music app. Performance of music control function while using Podcasts, Audiobook or other 3rd party music apps may vary.
	For best results, play media already stored on your device. Streaming music or playback from cloud storage may degrade performance.
	Switch the source manually by pushing the AUX or MEDIA button on the vehicle audio system or the SOURCE select switch on the steering wheel.
Play, pause, next track, previous track or play timer does not work	For best results, use the native music app. Performance of music control function while using Podcasts, Audiobook or other 3rd party music apps may vary and is controlled by the device.
Cannot hear any music/audio being played back from a connected iPhone®	Check that the audio source is set to Bluetooth® Audio or iPod® mode. A USB connection is required for iPod® mode.
Cannot hear map turn-by-turn direction guidance from a connected $\mathrm{iPhone}^{\circledast}$	Check that the audio source is set to Bluetooth® Audio or iPod® mode. A USB connection is required for iPod® mode.
Cannot receive text message notifications on the vehicle audio system	Check if "Show Notifications" is enabled on your phone. On your phone, go to Bluetooth® settings. Find the device name, like "My Car". Tap ① on your phone. Turn on "Show Notifications".
Cannot reply to text message notifications using Siri <sup>®</sup> Eyes Free	After receiving an incoming text message, follow the on-screen guidance. Push or push and hold the TALK switch on the steering wheel for Siri® Eyes Free. After Siri® Eyes Free starts, say "Text Message".

### CAR PHONE OR CB RADIO

When installing a car phone or a CB radio in vour vehicle, be sure to observe the following precautions, otherwise the new equipment may adversely affect the electronic control modules and electronic control system harness.



### **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 a conversation in a moving vehicle requires you to take notes, pull off the road to a safe location and stop your vehicle before doing so.



### A CAUTION

- Keep the antenna as far away as possible from the electronic control modules.
- Keep the antenna wire more than 8 in (20 cm) away from the electronic control system harness. Do not route the antenna wire next to any harness.
- Adjust the antenna standing-wave ratio as recommended by the manufacturer.
- Connect the ground wire from the CB radio chassis to the body.
- For details, it is recommended you visit a NISSAN dealer.

### Bluetooth® HANDS-FREE PHONE SYSTEM (models without 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 draining the vehicle battery, use a phone after starting the engine.

Your vehicle 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 invehicle phone module, no other phone connecting procedure is required. Your phone is automatically connected with the in-vehicle phone module when the ignition switch is placed in the ACC or ON position with the previously connected cellular phone turned on and carried in the vehicle.

#### NOTE:

Some devices require the user to accept connections to other Bluetooth® devices. If vour phone does not connect automatic ally to the system, consult the phone's Owner's Manual for details on device operation.

You can connect up to 5 different Bluetooth® cellular phones to the in-vehicle phone module. However, you can talk on only one cellular phone at a time.

Before using the Bluetooth® Hands-Free Phone System, refer to the following notes.

- Set up the wireless connection between a compatible cellular phone and the in-vehicle phone module before using the Hands-Free Phone System.
- Some Bluetooth® enabled cellular phones may not be recognized by the in-vehicle phone module. Please visit www.nissanusa. com/bluetooth for a recommended phone

list.

- You will not be able to use a hands-free phone under the following conditions:
  - Your vehicle is outside of the cellular service area.
  - Your vehicle is in an area where it is difficult to receive a cellular signal; such as in a tunnel, in an underground parking garage, near a tall building or in a mountainous area.
- When the radio wave condition is not ideal or ambient sound is too loud, it may be difficult to hear the other person's voice during a call.
- Do not place the cellular phone in an area surrounded by metal or far away from the invehicle 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 trouble-

- shooting help.
- Some cellular phones or other devices may cause interference or a buzzing noise to come from the audio system speakers. Storing the device in a different location may reduce or eliminate the noise.
- Refer to the cellular phone Owner's Manual regarding the telephone charges, cellular phone antenna and body, etc.

### REGULATORY INFORMATION

### FCC Regulatory information

- CAUTION: To maintain compliance with FCC's RF exposure guidelines, use only the supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.
- Operation is subject to the following two conditions:
  - 1) this device may not cause interference and
  - this device must accept any interference, including interference that may cause undesired operation of the device

### IC Regulatory information

- Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

### Bluetooth® trademark

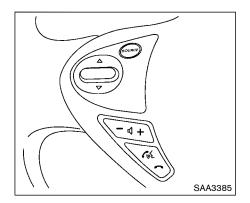


Bluetooth® is a trademark owned by Bluetooth SIG, Inc., and licensed to Visteon Corporation.

### USING THE SYSTEM

The voice recognition system allows hands-free operation of the Bluetooth® Phone System.

If the vehicle is in motion, some commands may not be available so full attention may be given to vehicle operation.



### Control buttons and microphone

The control buttons for the Bluetooth® Hands-Free Phone System are located on the steering wheel.

### PHONE SEND:

Push the button to initiate a VR session or answer an incoming call.



### INFO:

If the "Siri" on the Bluetooth® settings menu is set to "Short Press", pushing and holding the PHONE SEND button initiates a VR session for Hands-Free Phone operation. (See "Bluetooth® settings" (P.4-88).)

You can also use the fig. button to interrupt the system feedback and give a command at once. See "List of voice commands" and "During a call" in this section for more information.

### PHONE END:

While the voice recognition system is active, push and hold the mbutton to guit the voice recognition system at any time.

### Microphone:

Microphone is located near the map lights.

#### Manual control:

While using the Voice Recognition system, it is possible to select menu options by using the steering wheel controls instead of speaking voice commands. To activate manual control mode, push the risk button on the steering wheel to access the phone menu and then tilt the tuning switch ( ▲ or ▼ ) up or down.

The manual control mode does not allow dialing a phone number by digits. The user may select an entry from the Phonebook or Recent Calls lists. To reactivate Voice Recognition, exit the manual control mode by pushing and holding the button. At that time, pushing the button will start the Hands-Free Phone System.

### Choosing a language

You can interact with the Bluetooth® Hands-Free Phone System using several languages that are available. For operations to change the language, see "Audio main operation" (P.4-45) or "Audio main operation" (P.4-54).

### Changing voice feedback volume

If you want to adjust the volume of the voice feedback, push the volume control switch on the steering wheel while being provided with feedback. You can also use the VOL (volume) control knob on the audio unit.

#### Initialization

When the ignition switch is placed in the ACC or ON position, voice recognition is initialized, which takes a few seconds. If the the button is pushed before the initialization completes, the system will announce "Hands-free phone system not ready" and will not react to voice commands.

### 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.

You can register up to 5 different Bluetooth® cellular phones in the in-vehicle phone module. However, you can talk on only one cellular phone at a time.

To connect a phone to the Bluetooth® Hands-Free Phone System;

- Push the ENTER/SETTING button.
- 2. Use the TUNE-FOLDER or TUNE-SCROLL control knob to select "Bluetooth" and then push the ENTER/SETTING button.
- 3. Select "Add Phone" and then push the ENTER/SETTING button.
- 4. When a message with a PIN appears on the screen, operate the Bluetooth® phone to enter the PIN.

The connecting procedure varies according to each phone. See the phone's Owner's Manual for details.

### Giving voice commands

To operate voice recognition, push and release the fix button located on the steering wheel. After the tone sounds, speak a command.

The command given is picked up by the microphone, and voice feedback is given when the command is accepted.

- If you need to hear the available commands for the current menu again, say "Help" and the system will repeat them.
- If a command is not recognized, the system announces. "Command not recognized. Please try again." Make sure the command is said exactly as prompted by the system and repeat the command in a clear voice.
- If you want to go back to the previous command, you can say "Go back" any time the system is waiting for a response.
- You can cancel a command when the system is waiting for a response by saying, "Cancel" or "Quit." The system announces "Cancel" and ends the VR session. You can also push and hold the m button on the steering wheel at any time to end the VR session. Whenever the VR session is cancelled, a double beep is played to indicate you have exited the system.

 If you want to adjust the volume of the voice feedback, push the ( ☐ - or ☐ +) button on the steering wheel while being provided with feedback. You can also use the radio volume control knob.

### **Voice Prompt Interrupt:**

In most cases you can interrupt the voice feedback to speak the next command by pushing the received button on the steering wheel. After interrupting the system, wait for a beep before speaking your command.

### 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, push the fix button and after the tone say, "Call Redial".

### Operating tips:

To get the best performance out of the voice recognition system, observe the following:

- Keep the interior of the vehicle as quiet as possible. Close the windows to eliminate surrounding noises (traffic noises, vibration sounds, etc.), which may prevent the system from recognizing voice commands correctly.
- Wait until the tone sounds before speaking a command. Otherwise, the command will not be received properly.

- Start speaking a command within 5 seconds after the tone sounds.
- Speak in a natural voice without pausing between words.

#### Voice commands

Voice commands can be used to operate the Bluetooth® Hands-Free Phone System. Push the row button and say "Phone" to bring up the phone command menu. The available options are:

- Call
- Phonebook
- Recent Calls
- Show Applications
- Messaging
- Select Phone

### Call:

For more information on the "Call" command, see "Making a call" (P.4-85).

#### Phonebook:

The following commands are available under "Phonebook":

(A Name)

Say a name in the phonebook to bring up a list of options for that phonebook entry. The system will say the name it interpreted based on the voice command provided. If

the name is incorrect, say "Correction" to hear another name.

Once the correct phonebook entry is identified, say "Dial" to dial the number or "Send Text" to send a text message to that number. Say "Record Name" to record a name for the phonebook entry. Say "Delete Recording" to delete a recorded name for the phonebook entry.

#### List Names

Speak this command to have the system list the names in the phonebook one by one alphabetically. Say "Dial" to dial the number of the current name or "Send Text" to send a text message to that number. Say "Next Entry" or "Previous Entry" to move through the list alphabetically. Say "Record Name" to record a name for the current phonebook entry. Say "Delete Recording" to delete a recorded name for the current phonebook entry.

### Delete Entry

Speak this command to delete an entry in the phonebook. Choose an entry to delete by speaking the desired name or say "List Names".

#### 4-84 Heater, air conditioner, audio and phone systems

#### Recent Calls:

The following commands are available under "Recent Calls":

### Incoming (Calls)

Speak this command to list the last five incoming calls to the vehicle. If the call is from an entry in the phonebook, the name will be displayed. Otherwise, the phone number of the incoming call will be displayed.

Say "Dial" to call the number or "Send Text" to send a text message to that number. Say "Next Entry" or "Previous Entry" to move through the list of incoming calls.

### Missed (Calls)

Speak this command to list the last five missed calls to the vehicle. If the call is from an entry in the phonebook, the name will be displayed. Otherwise, the phone number of the missed call will be displayed.

Say "Dial" to call the number or "Send Text" to send a text message to that number. Say "Next Entry" or "Previous Entry" to move through the list of missed calls.

### Outgoing (Calls)

Speak this command to list the last five outgoing calls from the vehicle. If the call was to an entry in the phonebook, the name will be displayed. Otherwise, the phone

number of the outgoing call will be displayed.

Say "Dial" to call the number or "Send Text" to send a text message to that number. Say "Next Entry" or "Previous Entry" to move through the list of outgoing calls.

#### Redial

Speak this command to call the last number dialed.

#### Call Back

Speak this command to call the number of the last incoming call to the vehicle.

### **Show Applications:**

Select this command to display list of smartphone apps available.

### Messaging:

Speak this command to access text messaging functions. For more information on these commands, see "Text messaging" (P.4-86).

#### Select Phone:

Speak this command to select a phone to use from a list of those phones connected to the vehicle.

### Making a call

To make a call from a phone connected to the vehicle's Bluetooth® Hands-Free Phone System:

- 1. Push the Con button.
- The system will prompt you for a command. Say "Call".
- Select one of the available voice commands to continue:
  - (A Name)

Speak the name of a phonebook entry to place a call to that entry. The system will respond with the name it interpreted from your command and will prompt you to confirm that the name is correct. Say "Yes" to initiate the call or "No" to hear another name from the phonebook.

### • List Names

Select this command to call a phone number that is stored in the phonebook.

#### Phone Number

Speak this command to place a call by inputting numbers.

For 7- and 10-digit phone numbers, speak the numbers. When finished, say "Dial" to initiate the call. Say "Correction" at any time in the process to correct a misspoken or misinterpreted number.

For phone numbers with more digits or special characters, say "Special Num-

ber", then speak the digits. Up to 24 digits can be entered. Available special characters are "star", "pound", "plus" and "pause". When finished, say "Dial" to initiate the call. Say "Correction" at any time in the process to correct a misspoken or misinterpreted number or character.

#### Redial

Speak this command to dial the number of the last outgoing call. The system will display "Redialing (name/number)". The name of the phonebook entry will be displayed if it available, otherwise the number being redialed will be displayed.

#### Call Back

Speak this command to dial the number of the last incoming call. The system will display "Calling back (name/number)". The name of the phonebook entry will be displayed if it available, otherwise the number being called back will be displayed.

### Receiving a call

When a call is received by the phone connected to the vehicle's Bluetooth® Hands-Free Phone System, the call information is displayed on either the vehicle information display or both the vehicle information display and the control panel display.

Push the fix button to accept the call. Push the m button to reject the call.

### During a call

While a call is active, push the button to access additional options. Speak one of the following commands:

- Send
  - Speak this command followed by the digits to enter digits during the phone call.
- Mute On or Mute Off Speak the command to mute or unmute the system.
- Transfer Call

Speak this command to transfer the call to the handset. To transfer the call back from the handset to the Bluetooth® Hands-Free Phone System, push the button and confirm when prompted.

If supported by the phone, the Bluetooth® Hands-Free Phone System allows for call waiting functionality. If a call is received while another call is already active, a message will be displayed on the screen. Push the button to hold the active call and switch to the second call. Push the number button to reject the second call.

While the second call is active, pushing the button will allow the same commands that available during any call as well as two additional commands:

- Switch Call
  - Speak this command to hold the second call and switch back to the original call.
- Fnd Other Call

Speak this command to stay with the second call and end the original call.

Push the button to accept the call. Push the button to reject the call.

### Ending a call

To end an active call, push the mbutton.

Text messaging



### **WARNING**

- Laws in some jurisdictions may restrict the use of some of the applications and features, such as social networking and texting.
- Laws in some jurisdictions may restrict the use of "Text-to-Speech". Check local regulations before using this feature.

4-86 Heater, air conditioner, audio and phone systems

- 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.

#### NOTE:

- . This feature is automatically disabled if the connected device does not support the Message Access Profile (MAP). See the phone's Owner's Manual for details and instructions.
- Many phones may require special permission to enable text messaging. Check the phone's screen during Bluetooth® pairing. For some phones, you may need to enable "Notifications" in the phone's Bluetooth® menu for text messages to appear on the vehicle audio system. See the phone's Owner's Manual for details. Text message integration requires that the phone support

MAP (Message Access Profile) for both receiving and sending text messages. Some phones may not support all text messaging features. Refer to www. nissanusa.com/bluetooth or www. nissan.ca/bluetooth for compatibility information, as well as your device's Owner's Manual.

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

### Sending a text message:

- 1. Push the As button.
- Say "Messaging".
- 3. Say "Send Text".
- 4. The system will provide a list of available commands in order to determine the recipient of the text message. Choose from the following:
  - (A name)
  - Number
  - Incoming Calls
  - Outgoing Calls
  - Missed Calls

If "Incoming Calls", "Outgoing Calls", or "Missed Calls" is selected, the following additional commands will be displayed:

- Send Text
- Next Entry
- Previous Entry

For more information about these options. see "Voice commands" (P.4-84).

- Once a recipient is chosen, the system prompts for which message to send. Five predefined messages are available as well as three custom messages. To choose one of the predefined messages, speak one of the following:
  - "Driving, can't text"
  - "Call me"
  - "On my way"
  - "Running late"
  - "Okav"

To send one of the custom messages, say "Custom Message". 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" (P.4-88).

### Reading a received text message:

- 1. Push the Con button.
- 2. Say "Messaging".
- 3. Say "Read Text".

The text message, sender and delivery time are shown on the screen. Use the tuning switch on the steering wheel to scroll through all text messages if more than one are available. Push the button to exit the text message screen. Push 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).
- iPhones<sup>®</sup> can only send text messages via Siri<sup>®</sup> Eyes Free.

# Making custom messages with Siri<sup>®</sup> Eyes Free:

If a connected iPhone® is equipped with Sirl®, it can also be used to create custom messages. (See "Sirl® Eyes Free" (P.4-76).)

### Bluetooth® settings

To access and adjust the settings for the  ${\sf Bluetooth}^{@}$  Hands-Free Phone System:

- 1. Push the ENTER/SETTING button.
- Use the TUNE-FOLDER or TUNE-SCROLL knob to select "Bluetooth" and then push the ENTER/SETTING button:
  - Bluetooth

Select "ON" or "OFF" to turn the vehicle's Bluetooth® system on or off.

Add Phone

To connect a phone to the system, see "Initialization" (P.4-83).

• Delete Phone

Select to delete a phone from the displayed list. The system will ask to confirm before deleting the phone.

### · Replace Phone

Select to replace a phone from the displayed list. When a selection is made, the system will ask to confirm before proceeding. The recorded phonebook for the phone being deleted will be saved as long as the new phone's phonebook is the same as the old phone's phonebook.

Select Phone

Select to connect to a previously connected phone from the displayed list.

· Phonebook Download

Select to turn on or off the automatic download of a connected phone's phonebook.

• Siri

Select the RHONE SEND button operation for Siri® Eyes Free function from "Short Press" and "Long Press" (if available). (see "Siri® Eyes Free" (P.4-76).)

"Siri" is displayed only when a Siri<sup>®</sup> Eyes Free enabled iPhone<sup>®</sup> is connected to the vehicle.

Show Incoming Calls

Select "Driver Only" to have incoming call information displayed only in the vehicle information display. Select "Both" to have incoming call information displayed in both the vehicle information display and the center display screen

### Text Message

Select to turn on or off the vehicle's text messaging feature.

#### New Text Sound

Select to adjust the volume of the sound that plays when a new text is received by a phone connected to the Bluetooth® Hands-Free Phone System. The setting all the way to the left indicates that the new text sound will be muted.

### Show Incoming Text

Select "Driver Only" to have incoming text messages displayed only in the vehicle information display. Select "Both" to have incoming text messages displayed in both the vehicle information display and the center display screen. Select "None" to have no display of incoming text messages.

#### Edit Custom Messages

Select to set a custom message that will be available with the standard options when sending a text message. To set a custom message, send a text message to your own phone number while the phone is connected to the system. Three custom messages can be set. Custom messages can only be set while the vehicle is stationary.

#### Auto Reply

Select to turn on or off the Auto Reply function. When enabled, the vehicle will automatically send a predefined text message to the sender when a text message is received while driving.

### Auto Reply Message

Select to choose the message that is sent when the Auto Reply function is enabled. Choose from "I'm Driving" or one of the three custom messages stored in the system.

### Vehicle Signature On/Off

Select to choose whether or not the vehicle signature is added to outgoing text messages from the vehicle. This message cannot be changed or customized.

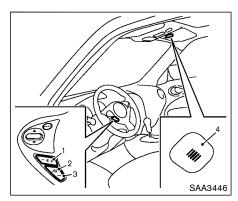
### Bluetooth® HANDS-FREE PHONE SYSTEM (models with navigation system)

# **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.



- Volume control switch -/+
- 2. PHONE SEND ( button
- 3. PHONE END \_ button
- Microphone

The phone **r** button is located on the control panel can also use to control the Bluetooth <sup>®</sup> Hands-Free Phone System. (See "Control buttons and functions (models with navigation system)" (P.4-3).)

Your vehicle is equipped with the Bluetooth<sup>®</sup> Hands-Free Phone System. If you have a compatible Bluetooth<sup>®</sup> enabled cellular phone, you can set up the wireless connection between your cellular phone and the in-vehicle phone module. With Bluetooth<sup>®</sup> 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 invehicle phone module, no other phone connecting procedure is required. Your phone is automatically connected with the in-vehicle phone module when the ignition switch is 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<sup>®</sup> 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 (models with navigation system)" (P.4-96).

Before using the Bluetooth<sup>®</sup> 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<sup>®</sup> 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 invehicle phone module to prevent tone quality degradation and wireless connection disruption.
- While a cellular phone is connected through the Bluetooth<sup>®</sup> wireless connection, the battery power of the cellular phone may discharge quicker than usual. The Blue-

tooth® Hands-Free Phone System cannot charge cellular phones.

- If the Hands-Free Phone System seems to be malfunctioning, 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 un-

desired operation of the device.

### IC Regulatory information

- Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.



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### VOICE COMMAND

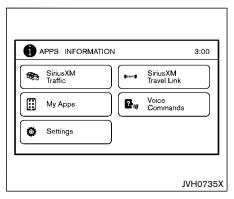
You can use voice commands to operate various Bluetooth® Hands-Free Phone System features using the NISSAN Voice Recognition system. For more details, see "NISSAN Voice Recognition System (models with navigation system)" (P.4-96).

### 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, push the risk 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, push the 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. Push the APPS: button on the control panel.
- 2. Touch the "Settings" key.
- 3. Touch the "Phone & Bluetooth" key.
- 4. Touch the "Connect New Device" key.
- 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. Push the rebutton on the control panel.
- 2. Touch the "Phonebook" key.
- Choose the desired entry from the displayed list.
- 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 knob to choose a letter or number and then push AUDIO button. 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:

Push the button on the control panel.
 The "Phone" screen will appear on the display.

- 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 touch-screen, see "Control buttons and functions (models with navigation system)" (P.4-3).

### RECEIVING A CALL

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

To accept the incoming call:

- Push the button on the steering wheel.
- Touch the green phone icon on the screen. To reject the incoming call:
- Push the button on the steering wheel.
- Touch the red phone icon on the screen.

4-92 Heater, air conditioner, audio and phone systems

#### 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 push the m 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.
- 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.

#### NOTE:

Many phones may require special permission to enable text messaging. Check the phone's screen during Bluetooth® pairing. For some phones, you may need to enable "Notifications" in the phone's Bluetooth® menu for text messages to appear on the vehicle audio system. See the phone's Owner's Manual for details, Text message integration requires that the phone support MAP (Message Access Profile) for both receiving and sending text messages. Some phones may not support all text messaging features. Refer to www.nissanusa.com/bluetooth or www.nissan.ca/ bluetooth for compatibility information,

### as well as your device's Owner's Manual.

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

### Sending a text message

- 1. Push the risk button on the steering wheel.
- 2. Say "Phone" after the tone.
- 3. Say "Send Text" after the tone.
- 4. 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 command" (P.4-91).

- Once a recipient is chosen, the system prompts for which message to send. Nine 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"
- "Where are you?"
- "When?"

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 "Phone settings" (P.4-96).

# Reading a received text message

- 1. Push the rule button on the steering wheel.
- 2. Say "Phone" after the tone.
- 3. 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. Push the button to exit the text message screen. Push 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<sup>®</sup> 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).

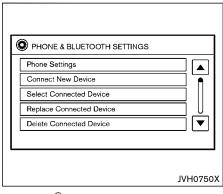
Next Text
 Speak this command to move to the next text message (if available).

#### NOTE:

- Text messages are only displayed if the vehicle speed is less than 5 MPH (8 km/h).
- iPhones<sup>®</sup> can only send text messages via Siri<sup>®</sup> Eyes Free.

Making custom messages with Siri® Eyes Free

If a connected iPhone<sup>®</sup> is equipped with Siri<sup>®</sup>, it can also be used to create custom messages. (See "Siri<sup>®</sup> Eyes Free" (P.4-76).)



# Bluetooth® SETTINGS

To access the phone settings:

- 1. Push the APPS-II button.
- 2. Touch the "Settings" key.
- 3. Touch the "Phone & Bluetooth" key.

#### 4-94 Heater, air conditioner, audio and phone systems

Menu Item	Result
Phone Settings	For detailed information, see "Phone settings" (P.4-96).
Connect New Device	Touch to connect a new Bluetooth® device to the Bluetooth® Hands-Free Phone System.
Select Connected Device	Touch to choose a Bluetooth® device from a list of those devices connected to the Bluetooth® Hands-Free Phone System.
Replace Connected Device	Touch to replace a Bluetooth® device from a list of those devices connected to the Bluetooth® Hands-Free Phone System.
Delete Connected Device	Touch to delete a Bluetooth® device from a list of those devices connected to the Bluetooth® Hands-Free Phone System.
Bluetooth	Touch to toggle Bluetooth® on and off.

#### PHONE SETTINGS

To access the phone settings:

- 1. Push the APPS button.
- 2. Touch the "Settings" key.
- 3. Touch the "Phone & Bluetooth" key.
- 4. Touch the "Phone Settings" key and adjust the following settings as desired:
- Sort Phonebook By:

Touch "First Name" or "Last Name" to choose how phonebook entries are alphabetically displayed on the screen.

• Use Phonebook From:

Touch "Handset" to use the phone's phonebook. Select "SIM" to use the phonebook on the SIM card. Touch "Both" to use both sources.

Download Phonebook Now:

Touch to download the phonebook to the vehicle from the chosen source.

• Record Name for Phonebook Entry:

Touch to record a name for a phonebook entry for use with the NISSAN Voice Recognition System.

• Phone Notifications for:

Touch "Driver" to have phone notifications shown in the vehicle information display. Touch "Both" to have phone notifications shown in both the vehicle information display and the center display screen.

Text Messaging:

Touch to toggle the text message functionality on or off.

Show Incoming Text for:

Touch "Driver" to have incoming text notifications shown in the vehicle information display. Touch "Both" to have text notifications shown in both the vehicle information display and the center display screen. Touch "Off" to turn off all text notifications.

Auto Reply:

Touch to toggle the auto reply functionality on or off.

Auto Reply Message:

Touch to indicate preferred message to be sent when "Auto Reply" function is activated.

• Use Vehicle's Signature:

Touch to toggle on or off the addition of the vehicle signature to outgoing messages

• Custom Text Messages:

Touch this option to select a custom message to edit. There are 4 customer message slots available.

# NISSAN VOICE RECOGNITION SYSTEM (models with navigation system)

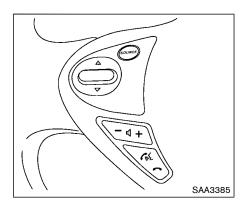
The NISSAN Voice Recognition system allows hands-free operation of the systems equipped on this vehicle, such as the phone and navigation systems.

To operate NISSAN Voice Recognition, push the two 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 recognition is pushed before the initialization completes, the system will announce: "Voice Recognition System not ready. Please wait."



# Giving voice commands

- 1. Push the Con button.
- The system announces: "Please say a category like phone or a command like points of interest followed by a brand name".
   A list of available commands is then spoken by the system.
- 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.

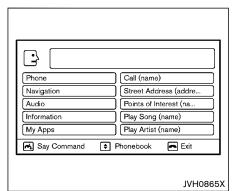
- If the command is not recognized, the system announces: "Command not recognized". Repeat the command in a clear voice.
- If you want to cancel the command or go back to the previous menu of commands, push the button. The system will announce: "Cancelling voice recognition" or "Go back" depending on the current menu level.
- Push 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. Push the APPS-II button.
- Touch 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
- My Apps

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. Push the Co. 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)

Speak the name of the contact in which you are trying to call. System will confirm correct contact. Say "Dial" to initiate dialing.

## 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 (models with navigation system)" (P.4-89).

## 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 (models with navigation system)" (P.4-89).

### 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 (models with navigation system)" (P.4-89).

# NAVIGATION SYSTEM VOICE COM-MANDS

The following voice commands are available for the Navigation System:

- Street Address (address)
- Points of Interest (name)
- POI by Category
- Home
- Address Book
- Previous Destinations
- Enter Address in Steps
- Cancel Route

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. Push the Con button.
- 2. Say "Audio".
- 3. Speak a command from the following available commands:
- Play (AM, FM, etc.)
   Allows user to select radio band
- Tune AM (number)
   Allows user to tune directly to a desired AM frequency
- Tune FM (number)
   Allows user to tune directly to a desired FM frequency
- SXM channel (number)
   Allows user to tune directly to a desired SXM station (if so equipped)
- CD Track (number)
   Allows user to select track to be played
- Play Song (name)
   Allows user to select song name to be played
- Play Artist (name)
   Allows user to select artist to be played
- Play Album (name)
   Allows user to select album name to be played

For more information about the audio system, see "FM-AM-SAT radio with Compact Disc (CD) player (Type B)" (P.4-62).

### INFORMATION VOICE COMMANDS

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

- Traffic
- Fuel Prices
- Stocks
- Movie Listings
- Current Weather
- Weather Map
- 5 day Forecast
- 6 hour Forecast

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

#### MY APPS VOICE COMMANDS

Many Apps can be accessed using this voice command. See "NissanConnect<sup>SM</sup> App smartphone integration" (P.4-75).

#### 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
to rootsy. Let the community con course	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.
	<ol> <li>Ensure that the ambient noise level is not excessive (for example, with the windows open or the defroster on).</li> <li>NOTE:</li> <li>If it is too noisy to use the phone, it is likely that voice commands will not be recognized.</li> </ol>
	4. If optional words of the command have been omitted, then the command should be tried with these in place.

# **MEMO**

# 5 Starting and driving

Precautions when starting and driving	. 5-2
Exhaust gas (carbon monoxide)	
Three-way catalyst	
Tire Pressure Monitoring System (TPMS)	. 5-3
Avoiding collision and rollover	
Off-road recovery	
Rapid air pressure loss	
Drinking alcohol/drugs and driving	
Driving safety precautions	
Push-button ignition switch	
Operating range for engine start function	5-10
Push-button ignition switch operation	5-10
Push-button ignition switch positions	5-11
Emergency engine shut off	5-11
Intelligent Key battery discharge	5-12
Before starting the engine	5-12
Starting the engine	5-13
Driving the vehicle	5-14
Continuously Variable Transmission (CVT)	5-14
Manual Transmission (MT)	5-19
Integrated control system (if so equipped)	5-21
Drive mode	5-22
Parking brake	5-25
Cruise control	5-26
Precautions on cruise control	5-26

Cruise control operations	5-26
Break-in schedule	
Fuel Efficient Driving Tips	
Increasing fuel economy	5-29
All-Wheel Drive (AWD) (if so equipped)	
All-Wheel Drive (AWD) mode	
switch operations	5-29
AWD warning light	5-31
Parking/parking on hills	5-33
Electric power steering	5-34
Brake system	5-35
Braking precautions	5-35
Brake assist	5-36
Brake assist	5-36
Anti-lock Braking System (ABS)	5-36
Vehicle Dynamic Control (VDC) system	5-37
Cold weather driving	
Freeing a frozen door lock	5-39
Anti-freeze	5-39
Battery	5-39
Draining of coolant water	5-39
Tire equipment	5-39
Special winter equipment	5-39
Driving on snow or ice	5-39
Engine block heater (if so equipped)	5-40

## PRECAUTIONS WHEN STARTING AND DRIVING



# **WARNING**

- Do not leave children or adults who would normally require the support of others alone in your vehicle. Pets should not be left alone either. They could accidentally injure themselves or others through inadvertent operation of the vehicle. Also, on hot, sunny days, temperatures in a closed vehicle could quickly become high enough to cause severe or possibly fatal injuries to people or animals.
- Properly secure all cargo with ropes or straps to help prevent it from sliding or shifting. Do not place cargo higher than the seatbacks. In a sudden stop or collision, unsecured cargo could cause personal injury.

EXHAUST GAS (carbon monoxide)



# WARNING

- Do not breathe exhaust gases; they contain colorless and odorless carbon monoxide. Carbon monoxide is dangerous. It can cause unconsciousness or death.
- If you suspect that exhaust fumes are entering the vehicle, drive with all windows fully open, and have the vehicle inspected immediately.
- Do not run the engine in closed spaces such as a garage.
- Do not park the vehicle with the engine running for any extended length of time.
- Keep the liftgate closed while driving, otherwise exhaust gases could be drawn into the passenger compartment. If you must drive with the liftgate open, follow these precautions:
  - 1. Open all the windows.
  - 2. Set the ( air recirculation to off and the fan control to high to

circulate the air.

- If electrical wiring or other cable connections must pass to a trailer through the seal on the liftgate or the body, follow the manufacturer's recommendation to prevent carbon monoxide entry into the vehicle.
- If a special body, camper or other equipment is added for recreational or other usage, follow the manufacturer's recommendation to prevent carbon monoxide entry into the vehicle. (Some recreational vehicle appliances such as stoves, refrigerators, heaters, etc. may also generate carbon monoxide.)
- The exhaust system and body should be inspected by a qualified mechanic whenever:
  - The vehicle is raised for service.
  - You suspect that exhaust fumes are entering into the passenger compartment.
  - You notice a change in the sound of the exhaust system.
  - You have had an accident involving damage to the exhaust

system, underbody, or rear of the vehicle.

### THREE-WAY CATALYST

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



# WARNING

- The exhaust gas and the exhaust system are very hot. Keep people, animals or flammable materials away from the exhaust system components.
- Do not stop or park the vehicle over flammable materials such as dry grass, waste paper or rags. They may ignite and cause a fire.



# A CAUTION

Do not use leaded gasoline. Deposits from leaded gasoline will seriously reduce the three-way catalyst's ability to help reduce exhaust pollutants.

- Keep your engine tuned up. Malfunctions in the ignition, fuel injection, or electrical systems can cause overrich fuel flow into the three-way catalyst, causing it to overheat. Do not keep driving if the engine misfires, or if noticeable loss of performance or other unusual operating conditions are detected. Have the vehicle inspected. It is recommended vou visit a NISSAN dealer for this service.
- 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 SYS-TEM (TPMS)

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a Tire Pressure Monitoring System (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

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

pressure telltale.

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

#### Additional information

- Since the spare tire is not equipped with the TPMS, 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 the tire is inflated to the recommended pressure, the vehicle must be driven at speeds above 16 MPH (25 km/h) to activate the TPMS and turn off the low tire pressure warning light. Use a tire pressure gauge to check the tire pressure.
- The CHECK TIRE PRES (pressure) warning message is displayed in the vehicle information display 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" (P.2-9).
- 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. Do not reduce the tire pressure after driving because the tire pressure rises after driving. Low outside temperature can lower the temperature of the air inside the tire which can cause a lower tire inflation pressure. This may cause the low tire pressure warning light to illuminate. If the warning light illuminates in low ambient temperature, check the tire pressure for all four tires.

For additional information, see "Low tire pressure warning light" (P.2-18) and "Tire Pressure Monitoring System (TPMS)" (P.6-3).

# **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" (P.6-3) for changing a flat tire.)

- Since the spare tire is not equipped with the TPMS, 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. Have your tires replaced and/or TPMS system reset as soon as possible. It is recommended you visit a NISSAN dealer for these services.
- 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

- The TPMS may not function properly when the wheels are equipped with tire chains or the wheels are buried in snow.
- 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.

Low tire pressure warning light may illuminate in the following cases.

- If the vehicle is equipped with a wheel and tire without TPMS.
- If the TPMS has been replaced and the ID has not been registered.
- If the wheel is not originally specified by NISSAN.

#### **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 Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interfer-

ence that may cause undesired operation of the device.

AVOIDING COLLISION AND ROLL-OVER



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, a loss of control could result in a collision with other vehicles or objects, or cause the vehicle to rollover, 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 "Seat belts" (P.1-10) of this manual, and also instruct your passengers to do so.

Seat belts help reduce the risk of injury in 5-6 **Starting and driving** 

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 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.
- 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.
- If there is nothing in the way, steer the vehicle to follow the road while the vehicle speed is reduced. Do not attempt to drive the vehicle back onto the road surface until vehicle speed is reduced.
- 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" (P.8-28) 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" (P.6-4) of this Owner's Manual.

DRINKING ALCOHOL/DRUGS AND DRIVING



# WARNING

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

NISSAN is committed to safe driving. However, you must choose not to drive under the influence of alcohol. Every year thousands of people are injured or killed in alcohol-related accidents. Although the local laws vary on what is considered to be legally intoxicated, the fact is that alcohol affects all people differently and most people underestimate the effects of alcohol.

Remember, drinking and driving don't mix! And that is true for drugs, too (over-the-counter, prescription, and illegal drugs). Don't drive if your ability to operate your vehicle is impaired by alcohol, drugs, or some other physical condition.

#### DRIVING SAFETY PRECAUTIONS

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

Remember that Two-Wheel Drive (2WD) models are less capable than All-Wheel Drive (AWD) models for rough road driving and extrication when stuck in deep snow, mud, or the like.

Please observe the following precautions:



# **WARNING**

Drive carefully when off the road and avoid dangerous areas. Every person who drives or rides in this vehicle should be seated with their seat belt fastened. This will keep you and your passengers in position when driving over rough terrain.

- Do not drive across steep slopes. Instead drive either straight up or straight down the slopes. Off-road vehicles can tip over sideways much more easily than they can forward or backward.
- Many hills are too steep for any vehicle. If you drive up them, you may stall. If you drive down them, you may not be able to control your speed. If you drive across them, you may roll over.
- Do not shift ranges while driving on downhill grades as this could cause loss of control of the vehicle.
- Stay alert when driving to the top of a hill. At the top there could be a drop-off or other hazard that could cause an accident.
- If your engine stalls or you cannot make it to the top of a steep hill, never attempt to turn around. Your vehicle could tip or roll over. Always back straight down in R (Reverse) range. Never back down in N (Neutral), using only the brake, as this could cause loss of control.

- Heavy braking going down a hill could cause your brakes to overheat and fade, resulting in loss of control and an accident. Apply brakes lightly and use a low range to control your speed.
- Unsecured cargo can be thrown around when driving over rough terrain. Properly secure all cargo so it will not be thrown forward and cause injury to you or your passengers.
- To avoid raising the center of gravity excessively, do not exceed the rated capacity of the roof rack (if so equipped) and evenly distribute the load. Secure heavy loads in the cargo area as far forward and as low as possible. Do not equip the vehicle with tires larger than specified in this manual. This could cause your vehicle to roll over.
- Do not grip the inside or spokes of the steering wheel when driving offroad. The steering wheel could move suddenly and injure your hands. Instead drive with your fingers and thumbs on the outside of the rim.

- Before operating the vehicle, ensure that the driver and all passengers have their seat belts fastened.
- Always drive with the floor mats in place as the floor may became hot.
- Lower your speed when encountering strong crosswinds. With a higher center of gravity, your vehicle is more affected by strong side winds. Slower speeds ensure better vehicle control.
- Do not drive beyond the performance capability of the tires, even with AWD engaged.
- For AWD equipped vehicles, do not attempt to raise two wheels off the ground and shift the transmission to any drive or reverse position with the engine running. Doing so may result in drivetrain damage or unexpected vehicle movement which could result in serious vehicle damage or personal injury.
- Do not attempt to test an AWD equipped vehicle on a 2-wheel dynamometer (such as the dynamometers used by some states for emissions testing), or similar equip-

### **PUSH-BUTTON IGNITION SWITCH**

ment even if the other two wheels are raised off the ground. Make sure you inform test facility personnel that your vehicle is equipped with AWD before it is placed on a dynamometer. Using the wrong test equipment may result in drivetrain damage or unexpected vehicle movement which could result in serious vehicle damage or personal injury.

- When a wheel is off the ground due to an unlevel surface, do not spin the wheel excessively (AWD model).
- Accelerating quickly, sharp steering maneuvers or sudden braking may cause loss of control.
- If at all possible, avoid sharp turning maneuvers, particularly at high speeds. Your vehicle has a higher center of gravity than a conventional passenger car. The vehicle is not designed for cornering at the same speeds as conventional passenger cars. Failure to operate this vehicle correctly could result in loss of control and/or a rollover accident.
- Always use tires of the same type, size, brand, construction (bias, bias-

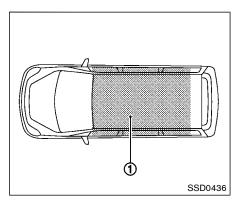
belted or radial), and tread pattern on all four wheels. Install traction devices on the front wheels when driving on slippery roads and drive carefully.

- Be sure to check the brakes immediately after driving in mud or water.
   See "Brake system" (P.5-35) for wet brakes.
- Avoid parking your vehicle on steep hills. If you get out of the vehicle and it rolls forward, backward or sideways, you could be injured.
- Whenever you drive off-road through sand, mud or water as deep as the wheel hub, more frequent maintenance may be required. See the maintenance schedule shown in the "9. Maintenance and schedules" section.
- Spinning the front wheels on slippery surfaces may cause the AWD warning light to flash and the AWD system to automatically switch from the AWD mode to the 2WD mode. This could reduce traction.

# **WARNING**

Do not operate the push-button ignition switch while driving the vehicle except in an emergency. (The engine will stop when the ignition switch is pushed 3 consecutive times or the ignition switch is pushed and held for more than 2 seconds.) If the engine stops while the vehicle is being driven, this could lead to a crash and serious injury.

Before operating the push-button ignition switch, be sure to move the shift lever to the P (Park) position (for Continuously Variable Transmission models) or the shift lever to the N (Neutral) position (for manual transmission models).



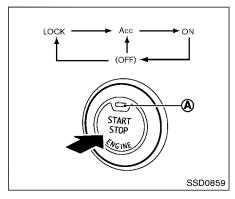
# OPERATING RANGE FOR ENGINE START FUNCTION

The Intelligent Key can only be used for starting the engine when the Intelligent Key is within the specified operating range (1).

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

If the Intelligent Key is within the operating range, it is possible for anyone, even someone who does not carry the Intelligent Key, to push the ignition switch to start the engine.

- The cargo room area is not included in the operating range but the Intelligent Key may function.
- If the Intelligent Key is placed on the instrument panel, inside the glove box or door pocket, the Intelligent Key may not function.
- If the Intelligent Key is placed near the door or window outside the vehicle, the Intelligent Key may function.



# PUSH-BUTTON IGNITION SWITCH OPERATION

When the ignition switch is pushed without depressing the brake pedal (Continuously Variable Transmission models) or the clutch pedal (manual transmission models), the ignition switch position will change as follows:

- Push once to change to ACC.
- Push two times to change to ON.
- Push three times to change to OFF.
- Push four times to return to ACC.
- Open or close any door to return to LOCK during the OFF position.

The indicator light (A) on the ignition switch

illuminates when the ignition switch is in the ACC or ON position.

Some indicators and warnings for operation are displayed on the meter. (See "Warning lights, indicator lights and audible reminders" (P.2-15).)

# Continuously Variable Transmission models

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

When the ignition switch cannot be pushed toward the LOCK position, proceed as follows:

- 1. Move the shift lever into the P (Park) position.
- 2. Push the ignition switch to the OFF position.
- 3. Open the door. The ignition switch will change to the LOCK position.

The shift lever can be moved from the P (Park) position if the ignition switch is in the ON position and the brake pedal is depressed.

# PUSH-BUTTON IGNITION SWITCH **POSITIONS**

# LOCK (Normal parking position)

The ignition switch can only be locked in this position.

The ignition switch will be unlocked when it is pushed to the ACC position while carrying the Intelligent Kev.

# ACC (Accessories)

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

# ON (Normal operating position)

This position turns on the ignition system and electrical accessories.

#### OFF

The engine can be turned off in this position.

Continuously Variable Transmission models: The ignition lock is designed so that the ignition switch cannot be switched to the LOCK position until the shift lever is moved to the P (Park) position.

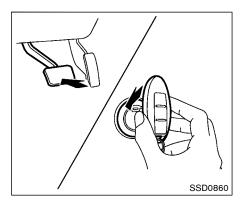


Do not leave the vehicle with the pushbutton ignition switch in ACC or ON position when the engine is not running for an extended period. This can discharge the battery.

#### EMERGENCY ENGINE SHUT OFF

To shut off the engine in an emergency situation while driving, perform the following procedure:

- Rapidly push the push-button ignition switch 3 consecutive times in less than 1.5 seconds, or
- Push and hold the push-button ignition switch for more than 2 seconds.



# INTELLIGENT KEY BATTERY DIS-CHARGE

If the battery of the Intelligent Key is discharged, or environmental conditions interfere with the Intelligent Key operation, start the engine according to the following procedure:

- Move the shift lever to the P (Park) position (for Continuously Variable Transmission models) or the shift lever to the N (Neutral) position (for manual transmission models).
- 2. Firmly apply the foot brake.
- 3. Touch the ignition switch with the Intelligent Key as illustrated. (A chime will sound.)

 Push the ignition switch while depressing the brake pedal within 10 seconds after the chime sounds. The engine will start.

After step 3 is performed, when the ignition switch is pushed without depressing the brake pedal, the ignition switch position will change to ACC.

#### NOTE:

- When the ignition switch is pushed to the ACC or ON position or the engine is started by the above procedures, the Intelligent Key system warning light may blink in yellow even if the Intelligent Key is inside the vehicle. This is not a malfunction. To stop the warning light from blinking, touch the ignition switch with the Intelligent Key again.
- If the Intelligent Key system warning light in the meter is blinking in green, replace the battery as soon as possible. (See "Intelligent Key battery replacement" (P.8-20).)

### BEFORE STARTING THE ENGINE

- Make sure the area around the vehicle is clear.
- Check fluid levels such as engine oil, coolant, brake fluid, and window washer fluid as frequently as possible, or at least whenever you refuel.
- · Check that all windows and lights are clean.
- Visually inspect tires for their appearance and condition. Also check tires for proper inflation.
- Lock all doors.
- Position seat and adjust head restraints.
- · Adjust inside and outside mirrors.
- Fasten seat belts and ask all passengers to do likewise.
- Check the operation of warning lights when the ignition switch is placed in the ON position. (See "Warning lights, indicator lights and audible reminders" (P.2-15).)

### STARTING THE ENGINE

- 1. Apply the parking brake.
- Move the shift lever to the P (Park) or N (Neutral) position. (P is recommended.)

The starter is designed not to operate unless the shift lever is in either of the above positions.

### Manual Transmission (MT) models:

Move the shift lever to the N (Neutral) position. Depress the clutch pedal fully to the floor.

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

# The Intelligent Key must be carried when operating the ignition switch.

- Push the ignition switch to the ON position. Depress the brake pedal (CVT models) or the clutch pedal (MT models) and push the ignition switch to start the engine.
  - To start the engine immediately, push and release the ignition switch while depressing the brake pedal (CVT models) or the clutch pedal (MT models) with the ignition switch in any position.
  - 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 while holding, crank the engine. Release 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. Push the ignition switch to the ON position to start cranking the engine. After 5 or 6 seconds, stop cranking by pushing the ignition switch to OFF. After cranking the engine, release the accelerator pedal. Crank the engine with your foot off the accelerator pedal by depressing the brake pedal and pushing the push-button ignition switch to start the engine. If the engine starts, but fails to run, repeat the above procedure.



Do not operate the starter for more than 15 seconds at a time. If the engine does not start, push the ignition switch to OFF and wait 10 seconds before cranking again, otherwise the starter could be damaged.

# 4. Warm-up

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.

When racing the engine up to 4,000 rpm or more under no load condition, the engine will enter the fuel cut mode.

 To stop the engine, move the shift lever to the P (Park) position (CVT models) or move the shift lever to the N (Neutral) position (MT models), and push the ignition switch to the OFF position.

#### NOTE:

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

- Installation or extended use of electronic accessories that consume battery power when the engine is not running (Phone chargers, GPS, DVD players, etc.)
- Vehicle is not driven regularly and/or only driven short distances.

In these cases, the battery may need to be charged to maintain battery health.

### **DRIVING THE VEHICLE**

# CONTINUOUSLY VARIABLE TRANS-MISSION (CVT)

The Continuously Variable Transmission (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.

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

- After starting the engine, fully depress the foot brake pedal before moving the shift lever out of the P (Park) position.
  - This CVT is designed so that the foot brake pedal must be depressed before shifting from P (Park) to any driving position while the ignition switch is in the ON position.

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

- Keep the foot brake pedal depressed, push the shift lever button and move the shift lever to a driving position.
- Release the parking brake and foot brake pedal, and then gradually start the vehicle in motion.

# A

# WARNING

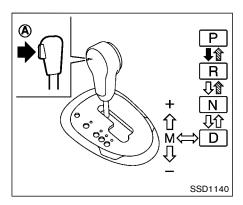
- Do not depress the accelerator pedal while shifting from P (Park) or N (Neutral) to R (Reverse), D (Drive), or manual shift mode (if so equipped). Always depress the brake pedal until shifting is completed. Failure to do so could cause you to lose control and have an accident.
- Cold engine idle speed is high, so use caution when shifting into a forward or reverse gear before the engine has warmed up.
- Never shift to either the P (Park) or R (Reverse) position while vehicle is moving forward and P (Park) or D (Drive) while the vehicle is reversing. This could cause an accident or damage the transmission.

 Do not downshift abruptly on slippery roads. This may cause a loss of control.



# **CAUTION**

- To avoid possible damage to your vehicle; 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.
- 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.



To move the shift lever.

Push the button (A) while depressing the brake pedal.

Push the button (A).

Just move the shift lever.

# Shifting

After starting the engine, fully depress the brake pedal, push the shift lever button and move the shift lever from the P (Park) position 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 shift lever is in any positions other than the P (Park), the ignition switch cannot be placed in the LOCK position.

If the ignition switch cannot be placed in the LOCK position, perform the following steps:

- 1. Apply the parking brake when the vehicle is stopped.
- 2. Place the ignition switch in the ON position while depressing the foot brake pedal.
- Move the shift lever to the P (Park) position.
- 4. Place the ignition switch in the OFF position.

# CAUTION

To prevent transmission damage, move the shift lever to the P (Park) or R (Reverse) position only when the vehicle is completely stopped.

## P (Park):

Use this 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 move the shift lever to the P (Park) position.

# R (Reverse):

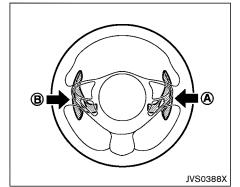
Use this position to back up. Make sure the vehicle is completely stopped before selecting the R (Reverse) position. The brake pedal must be depressed and the shift lever button pushed in to move the shift lever from P (Park), N (Neutral) or any driving position to R (Reverse).

## 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.



Paddle shifter (if so equipped)

# Manual shift mode (if so equipped)

When the shift lever is shifted from the D (Drive) position to the manual shift gate, the transmission enters the manual shift mode. Shift ranges can be selected manually by moving the shift lever up or down, or pulling the right-side or leftside paddle shifter (if so equipped).

In the manual shift mode, the shift range is displayed on the position indicator in the meter. Shift ranges up or down one by one as follows: Except for NISMO RS models:

$$M1 \ \stackrel{\rightarrow}{\leftarrow} \ M2 \ \stackrel{\rightarrow}{\leftarrow} \ M3 \ \stackrel{\rightarrow}{\leftarrow} \ M4 \ \stackrel{\rightarrow}{\leftarrow} \ M5 \ \stackrel{\rightarrow}{\leftarrow} \ M6 \ \stackrel{\rightarrow}{\leftarrow} \ M7$$

### NISMO RS models:

$$M1 \stackrel{\rightarrow}{\leftarrow} M2 \stackrel{\rightarrow}{\leftarrow} M3 \stackrel{\rightarrow}{\leftarrow} M4 \stackrel{\rightarrow}{\leftarrow} M5 \stackrel{\rightarrow}{\leftarrow} M6 \stackrel{\rightarrow}{\leftarrow} M7 \stackrel{\rightarrow}{\leftarrow} M8$$

- When shifting up, move the shift lever to the + (up) side or pull the right-side paddle shifter (+) (A) (if so equipped). The transmission shifts to a higher range.
- When shifting down, move the shift lever to the - (down) side or pull the left-side paddle shifter (-) (B) (if so equipped). The transmission shifts to a lower range.
- Moving the shift lever to the same side twice will shift the ranges in succession. However, if this motion is rapidly done, the second shifting may not be completed properly.
- When canceling the manual shift mode, return the shift lever to the D (Drive) position. The transmission returns to the normal driving mode.
- When you pull the paddle shifter (if so equipped) while in the D (Drive) position, the transmission will shift to the upper or lower range temporarily. The transmission will automatically return to the D (Drive) position

after a short period of time. If you want to return to the D (Drive) position manually, pull and hold the paddle shifter for about 1.5 seconds.

# M7 (7th) (except for NISMO RS models): M8 (8th) (NISMO RS models):

Use this position for all normal forward driving at highway speeds.

# M6 (6th) and M5 (5th) (except for NISMO RS models):

### M7 (7th) and M6 (6th) (NISMO RS models):

Use these positions when driving up long slopes, or for engine braking when driving down long slopes.

# M4 (4th), M3 (3rd) and M2 (2nd) (except for NISMO RS models):

# M5 (5th), M4 (4th), M3 (3rd) and M2 (2nd) (NISMO RS models):

Use these positions for hill climbing or engine braking on downhill grades.

### M1 (1st):

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

- Remember not to drive at high speeds for extended periods of time in lower than M7 (except for NISMO RS models) or M8 (NISMO RS models) range. This reduces fuel economy.
- In the manual shift mode, the transmission may not shift to the selected range. This helps maintain driving performance and reduces the chance of vehicle damage or loss of control. When this situation occurs, the Continuously Variable Transmission (CVT) position indicator light will blink and the chime will sound.
- In the manual shift mode, the transmission automatically shifts down to 1st gear before the vehicle comes to a stop. When accelerating again, it is necessary to shift up to the desired range.
- When the CVT fluid temperature is extremely low, the manual shift mode may not work and automatically shift as a drive mode. This is not a malfunction. In this case, return the shift lever to the D (Drive) position and drive for a while and then shift to the manual shift mode.
- When the CVT fluid temperature is high, the shift range may upshift at a lower engine speed than usual. This is not a malfunction.

Accelerator downshift — In D position —

For passing or hill climbing, fully depress the accelerator pedal to the floor. This shifts the transmission down into a lower gear, depending on the vehicle speed.

# High fluid temperature protection mode

This transmission has a high fluid temperature protection mode. If the fluid temperature becomes too high (for example, when climbing steep grades in high temperature with heavy loads), engine power and, under some conditions, vehicle speed will be decreased automatically to reduce the chance of transmission damage. Vehicle speed can be controlled with the accelerator pedal, but the engine and vehicle speed may be limited.

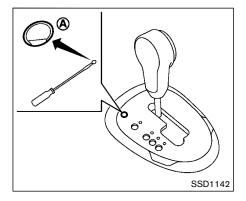
### Fail-safe

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 illuminate to indicate the fail-safe mode is activated. (See "Malfunction Indicator Light (MIL)" (P.2-22).) 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 turn the switch

back to the ON position. The vehicle should return to its normal operating condition. If it does not return to its normal operating condition, have the transmission checked and repaired, if necessary. It is recommended vou visit a NISSAN dealer for this service.



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. Beespecially 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.



#### Shift lock release

If the battery charge is low or discharged, the shift lever may not be moved from the P (Park) position even with the brake pedal depressed and the shift lever button pushed.

To move the shift lever, perform the following procedure:

- 1. Place the ignition switch in the OFF or LOCK position.
- 2. Apply the parking brake.
- 3. Remove the shift lock release cover (A) 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. The vehicle may be moved to the desired location.

Replace the removed shift lock release cover after the operation.

If the battery is discharged completely, the steering wheel cannot be unlocked. Do not move the vehicle with the steering wheel locked.

If the shift lever cannot be moved out of the P (Park) position, have the CVT system checked as soon as possible. It is recommended you visit a NISSAN dealer for this service.



If the shift lever cannot be moved from the P (Park) position while the engine is running and the brake pedal is depressed, the stop lights may not work. Malfunctioning stop lights could cause an accident injuring yourself and others.

# MANUAL TRANSMISSION (MT)

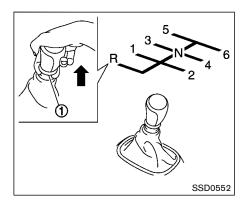


# WARNING

- Do not downshift abruptly on slippery roads. This may cause a loss of control.
- Do not over-rev the engine when shifting to a lower gear. This may cause a loss of control or engine damage.
- 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.

# **CAUTION**

- Do not rest your foot on the clutch pedal while driving. This may damage the clutch.
- Fully depress the clutch pedal before shifting to help prevent transmission damage.
- Stop your vehicle completely before shifting into R (Reverse).
- When the vehicle is stopped for a period of time, for example at a stop light, shift to N (Neutral) and release the clutch pedal with the foot brake applied.



# Shifting

To change gears, or when upshifting or downshifting, fully depress the clutch pedal, shift into the appropriate gear, then slowly and smoothly release the clutch pedal.

To ensure smooth gear changes, be sure to fully depress the clutch pedal before operating the shift lever. If the clutch pedal is not fully depressed before the transmission is shifted, a gear noise may be heard. Transmission damage could occur.

Start the vehicle in 1st gear and shift to 2nd, 3rd, 4th, 5th and 6th gear in sequence according to vehicle speed.

To back up, pull the shift lever ring (1) upward and then move it to the R (Reverse) gear after stopping the vehicle completely.

The shift lever ring returns to its original position when the shift lever is moved to the N (Neutral) position.

If it is difficult to move the shift lever into the R (Reverse) or 1st gear, shift to the N (Neutral) position, and then release the clutch pedal once. Fully depress the clutch pedal again and shift into the R (Reverse) or 1st gear.

# Suggested upshift speeds

The following are suggested vehicle speeds for shifting into a higher gear. These suggestions relate to fuel economy and vehicle performance. Actual upshift speeds will vary according to road conditions, the weather and individual driving habits.

Gear change	MPH (km/h)
1st to 2nd	13 (21)
2nd to 3rd	22 (35)
3rd to 4th	30 (48)
4th to 5th	35 (56)
5th to 6th	42 (68)

# Suggested maximum speed in each gear

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

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

# Except for NISMO RS models:

Gear	MPH (km/h)
1st	31 (50)
2nd	55 (88)
3rd	76 (122)
4th	_
5th	_
6th	_

## For NISMO RS models:

Gear	MPH (km/h)
1st	27 (44)
2nd	50 (80)
3rd	73 (118)
4th	_
5th	_
6th	_

# INTEGRATED CONTROL SYSTEM (if so equipped)

The Integrated Control System is located below the audio system or navigation system (if so equipped). Two Integrated Control System modes can be selected: Drive mode and Climate Control mode.

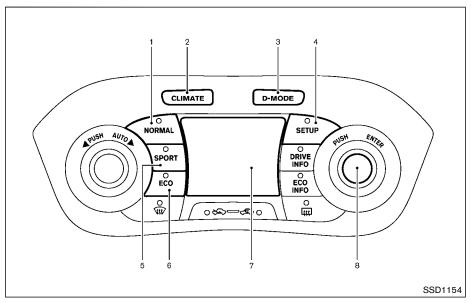
Depending on which Integrated Control System mode selected (Drive mode or Climate Control mode), the screen display and some button functions will change.

#### Drive mode

In the Drive mode, three types of driving modes can be selected: NORMAL. SPORT and ECO. See "Drive mode" (P.5-22). In addition, while in the Drive mode, SETUP. Drive information and ECO information can be displayed and adjusted. See "Integrated control system" (P.2-24).

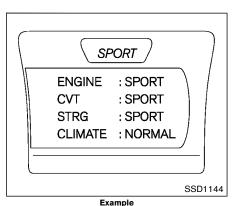
#### Climate Control mode

In the Climate Control mode, the climate control can be set and adjusted. See "Automatic air conditioner (with Integrated Control System)" (P.4-32).



- NORMAL drive mode button
- Climate control mode select button
- Drive mode select button
- SFTUP button
- SPORT drive mode button
- ECO drive mode button
- Display screen

Enter button/Selection dial



LAG

# DRIVE MODE

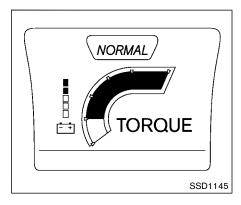
Three drive modes (NORMAL, SPORT and ECO) can be selected depending on the driving condition. When each mode is selected, the control state of the engine, CVT (if so equipped), steering and climate appears on the display briefly.

Each selected Drive mode (NORMAL, SPORT or ECO) is displayed at the top of the display screen.

#### NOTE:

 The display values of torque, boost and current fuel economy may differ depending on driving conditions. Use the

- display values as reference only.
- The vehicle will be set to the NORMAL drive mode when restarting the engine.



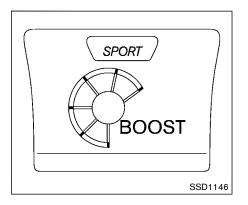
# NORMAL drive mode

The NORMAL drive mode is recommended for normal driving. To set the NORMAL drive mode, press the Drive mode select button and then press the NORMAL drive mode button. The control state of the engine, CVT (if so equipped) steering and climate is displayed briefly.

When the NORMAL drive mode is selected, a voltage meter and an engine torque meter appear on the display screen.

#### NOTE:

 The voltage meter may change according to the driving condition. This is not a malfunction. At start up, the vehicle is automatically set to the NORMAL drive mode.



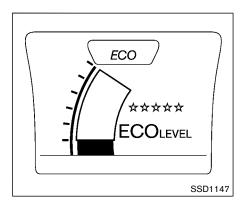
# SPORT drive mode

The SPORT drive mode is recommended for an enhanced performance feel. To set the SPORT drive mode, press the drive mode select button. The control state of the engine, CVT (if so equipped), steering and climate control is displayed briefly. In the SPORT mode, the engine, CVT (if so equipped) and steering are set to SPORT. Climate control is set to NORMAL.

When the SPORT drive mode is selected, a boost meter appears on the display screen.

#### NOTE:

In the SPORT mode, fuel economy may be reduced.



# ECO drive mode

The ECO drive mode is recommended for maximum fuel economy. In the ECO drive mode, the engine and CVT (if so equipped) are adjusted to enhance fuel economy.

To set the ECO drive mode, press the drive mode select button and then press the ECO drive mode button. The control state of the engine, CVT (if so equipped), steering and climate control is displayed briefly.

When the ECO drive mode is selected, the current fuel economy appears on the display screen.

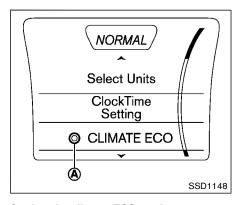
When the climate ECO mode is also switched

on, the climate control system is adjusted to further enhance fuel economy.

The climate ECO mode can be switched on or off in the SETUP mode. See "Setting the climate ECO mode" (P.5-24).

#### NOTE:

- Many driving factors influence fuel economy. Selecting the ECO drive mode may not improve fuel economy.
- In the ECO drive mode, performance may be reduced.



# Setting the climate ECO mode:

When the climate ECO mode is switched on, the climate control system operates to enhance fuel economy.

To turn the climate ECO mode on or off

- Press the drive mode select button to select the drive mode.
- 2. Press the SETUP button.
- Turn the selection dial until "CLIMATE ECO" is selected.
- Press the ENTER button to switch climate ECO on or off. When the CLIMATE ECO mode is turned on, the CLIMATE ECO indicator (A) turns red on the display

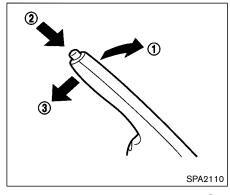
### 5-24 Starting and driving

#### **PARKING BRAKE**

screen.

# 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.
- To help avoid risk of injury or death through unintended operation of the vehicle and/or its systems, do not leave children, people who require the assistance of others or pets unattended in your vehicle. Additionally, the temperature inside a closed vehicle on a warm day can quickly become high enough to cause a significant risk of injury or death to people and pets.



To apply: Pull the parking brake lever up (1). To release:

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

## **CRUISE CONTROL**

# PRECAUTIONS ON CRUISE CONTROL

- If the cruise control system malfunctions, it will cancel automatically. The CRUISE indicator light on the meter panel will then blink to warn the driver.
- If the engine coolant temperature becomes excessively high, the cruise control system will cancel automatically.
- If the CRUISE indicator light blinks, turn the cruise control MAIN switch off and have the system checked. It is recommended you visit a NISSAN dealer for this service.
- The CRUISE indicator light may blink when the cruise control MAIN switch is turned ON while pushing the ACCEL/RES, COAST/ SET or CANCEL switch. To properly set the cruise control system, perform 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

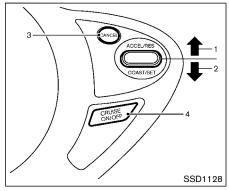
- on winding or hilly roads
- on slippery roads (rain, snow, ice, etc.)
- in very windy areas

Doing so could cause a loss of vehicle control and result in an accident.



# CAUTION

On Manual Transmission (MT) models, do not shift into N (Neutral) without depressing the clutch pedal when the cruise control is set. Should this occur, depress the clutch pedal and turn the MAIN switch off immediately. Failure to do so may cause engine damage.



- ACCEL/RES switch
- 2. COAST/SET switch
- CANCEL switch
- 4. MAIN (ON-OFF) switch

#### CRUISE CONTROL OPERATIONS

The cruise control allows driving at a speed between 25 to 89 MPH (40 to 144 km/h) without keeping your foot on the accelerator pedal.

**To turn on the cruise control,** push the MAIN switch on. The CRUISE indicator light will illuminate.

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 will maintain the set speed.

- To pass another vehicle, depress the accelerator pedal. When you release the pedal, the vehicle will return to the previously set speed.
- The vehicle may not maintain the set speed on winding or hilly roads. If this happens, drive without the cruise control.

To cancel the preset speed, use one of the following methods:

- Push the CANCEL switch.
- b) Tap the brake pedal.
- Turn the MAIN switch off. The CRUISE indicator light will turn off.
- If you depress the brake pedal while pushing the ACCEL/RES or COAST/SET switch and reset at the cruising speed, the cruise control will disengage. Turn the MAIN switch off once and then turn it on again.
- The cruise control will automatically cancel if the vehicle slows more than 8 MPH (13 km/h) below the set speed.
- If you move the shift lever to the N (Neutral) position (Continuously Variable Transmission models) or depressing the clutch pedal (Manual Transmission models), the cruise control will be canceled.

To reset at a faster cruising speed, use one of the following 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 desired speed, release the switch.
- Push, then quickly release the ACCEL/RES switch. Each time you do this, the set speed will increase by about 1 MPH (1.6 km/h).

To reset at a slower cruising speed, use one of the following 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 down to the desired speed.
- Push, then quickly release the COAST/SET switch. Each time you do this, the set speed will decrease by about 1 MPH (1.6 km/h).

To resume the preset speed, push and release the ACCEL/RES switch. The vehicle will resume the last set cruising speed when the vehicle speed is over 25 MPH (40 km/h).

### **BREAK-IN SCHEDULE**



# A CAUTION

During the first 1,200 miles (2,000 km), follow these recommendations to obtain maximum engine performance and ensure the future reliability and economy of your new vehicle. Failure to follow these recommendations may result in shortened engine life and reduced engine performance.

- Avoid driving for long periods at constant speed, either fast or slow. 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.

- 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.
- 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.

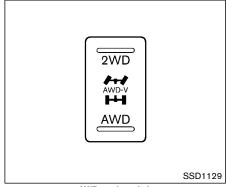
#### **INCREASING FUEL ECONOMY**

- 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 recommendation" (P.10-7).)

# ALL-WHEEL DRIVE (AWD) (if so equipped)



- For AWD equipped vehicles, do not attempt to raise two wheels off the ground and shift the transmission to any drive or reverse position with the engine running. Doing so may result in drivetrain damage or unexpected vehicle movement which could result in serious vehicle damage or personal injury.
- Do not attempt to test an AWD equipped vehicle on a 2-wheel dynamometer (such as the dynamometers used by some states for emissions testing) or similar equipment even if the other two wheels are raised off the ground. Make sure that you inform the test facility personnel that your vehicle is equipped with AWD before it is placed on a dynamometer. Using the wrong test equipment may result in drivetrain damage or unexpected vehicle movement which could result in serious vehicle damage or personal injury.



AWD mode switch

# ALL-WHEEL DRIVE (AWD) MODE SWITCH OPERATIONS

The All-Wheel Drive (AWD) system is used to select the 2WD (Two-Wheel Drive), AWD-V or AWD mode depending on the driving conditions.

The AWD mode indicator lights (AWD (green), (AWD) are located in the instrument panel.

The AWD mode indicator lights AWD (green) illuminate when the ignition switch is placed in the ON position. The indicator lights turn off within 1 second.

The AWD mode indicator lights will display the mode selected by the AWD mode switch while

engine is running.

If the AWD warning light AWD (yellow) illuminates, the AWD mode indicator lights will turn off.

Push the AWD mode switch, located on the instrument panel, to select 2WD, AWD-V or AWD.

AWD-V: Push the AWD mode switch to the neutral (AWD-V) position. The All-Wheel Drive (AWD) AWD-V indicator light 🥳 in the meter illuminates.

2WD: Push the AWD mode switch to the 2WD position.

AWD: Push the AWD mode switch to the AWD position. The AWD indicator light AWD (green) in the meter illuminates.

AWD mode	Wheels driven	AWD mode indicator light (AWD (green))	Use conditions
2WD	Front wheels: The wheel drive mode is in Two-Wheel Drive (2WD) when driving on a normal road.	Turns off	For driving on dry, paved roads
AWD-V	Distribution of torque to the front and rear wheels changes automatically [ratio; 100 : 0 (2WD) → 50 : 50 (AWD)] and distribution of torque between left and right wheel of rear wheels changes automatically depending on road conditions encountered [ratio; 100 : 0 (2WD) → 50 : 50 (AWD)].	Illuminates	For driving on paved or slippery roads
AWD	Distribution of torque to the front and rear wheels changes automatically [ratio; 100 : 0 (2WD) → 50 : 50 (AWD)] and the distribution of torque between the left and right rear wheels changes automatically depending on the slippery road conditions encountered.	Illuminates (green) AWD	For driving on slippery roads

#### AWD shift tips

- The oil temperature of power train parts will increase if the vehicle is continuously operated under conditions where the difference in rotation between the front and rear wheels is large (wheel slip), such as when driving the vehicle on rough roads through sand or mud or when freeing a stuck vehicle. In these cases, the AWD warning light blinks rapidly and the AWD mode changes to the 2WD mode to protect the power train parts. If you stop driving with the engine idling and wait until the warning light stops blinking, the AWD returns to the AWD-V or AWD mode.
- Brake distance in the AWD mode is the same as 2WD.

## **A** CAUTION

- Do not start the engine with the AWD mode switch in any mode in the following cases:
  - when the vehicle is placed on a free-roller or jacking up the vehicle with the front tires raised and the rear tires on the ground.

- when towing the vehicle with the rear tires raised from the ground.
- Operate the AWD mode switch only when driving straight. Do not operate the AWD mode switch when making a turn or backing up. If the AWD mode switch is operated while making a turn, accelerating or decelerating, or if the ignition switch is turned off while in the AWD-V or AWD mode, you may feel a jolt. This is not a malfunction.
- Do not operate the AWD mode switch with the front wheel spinning.
- Engine idling speed is high while warming up the engine. Be especially careful when starting or driving on slippery surfaces with the AWD mode switch set in the AWD-V or AWD mode.

Warning light (yellow)	Comes on or blinks when
— AWD— Comes on	There is a malfunction in the All-Wheel Drive (AWD) system.
(AWD)	The power-train oil temperature rises abnormally.
AWD	The difference in wheel rotation is large.
	SSD0336-D

#### AWD WARNING LIGHT

The AWD warning light located in the instrument panel illuminates when the ignition switch is placed in the ON position. It turns off soon after the engine is started.

If any malfunction occurs in the AWD system while the engine is running, or while driving, the

warning light will either remain illuminated or blink.

High-temperature power train oil due to continuous operation of the vehicle to free a stuck vehicle makes the warning light blink rapidly (about twice per second). The driving mode may change to the 2WD mode. If the warning light blinks rapidly during operation, stop the vehicle with the engine idling in a safe place immediately. Then if the light goes off after a while, you can continue driving.

A large difference between the diameters of front and rear wheels will make the warning light blink slowly (about once per 2 seconds). Pull off the road in a safe area, and idle the engine. Check that all tire sizes are the same, tire pressure is correct and tires are not worn. Change the AWD mode switch to the 2WD mode and do not drive fast.

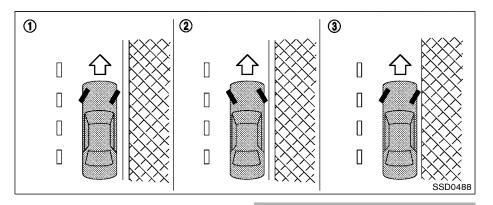
### **A** CAUTION

 If the warning light illuminates while driving, AWD mode will be changed to 2WD mode. Reduce the vehicle speed and have your vehicle checked as soon as possible. It is recommended you visit a NISSAN dealer for this service. Be especially

#### careful when driving.

 The power train may be damaged if you continue driving with the AWD warning light blinking rapidly.

#### 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.
- 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 acci-

#### dents.

- To help avoid risk of injury or death through unintended operation of the vehicle and/or its systems, do not leave children, people who require the assistance of others or pets unattended in your vehicle. Additionally, the temperature inside a closed vehicle on a warm day can quickly become high enough to cause a significant risk of injury or death to people and pets.
- Safe parking procedures require that both the parking brake be

applied and the transmission placed into P (Park) for Continuously Variable Transmission (CVT) model or in an appropriate gear for Manual Transmission (MT) model. Failure to do so could cause the vehicle to move unexpectedly or roll away and result in an accident.

- Make sure the continuously variable transmission shift lever has been pushed as far forward as it can go and cannot be moved without depressing the foot brake pedal.
- Firmly apply the parking brake.
- 2. Continuously Variable Transmission (CVT) models:

Move the shift lever to the P (Park) position.

### Manual Transmission (MT) models:

Move the shift lever to the R (Reverse) gear. When parking on an uphill grade, place the shift lever in the 1st gear.

- To help prevent the vehicle from rolling into the street when parked on a sloping drive way, it is a good practice to turn the wheels as illustrated.
  - HEADED DOWNHILL WITH CURB: 1
     Turn the wheels into the curb and move

#### **ELECTRIC POWER STEERING**

the vehicle forward until the curb side wheel gently touches the curb.

- HEADED UPHILL WITH CURB: (2) 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: (3)

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

4. Place the ignition switch in the OFF position.

### 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 electric power steering warning light illuminates with the engine running, the power assist for the steering will cease operation. You will still have control of the vehicle but the steering will be harder to operate.

The electric power steering 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 electric power steering and protect it from getting damaged. While the power assist is reduced, steering wheel operation will become heavy. When the temperature of the electric power steering goes down, the power assist level will return to normal. Avoid repeating such steering wheel operations that

could cause the electric power steering 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 electric power steering is not functioning properly and may need servicing. It is recommended you have the electric power steering checked by a NISSAN dealer. (See "Electric power steering warning light" (P.2-17).)

When the electric power steering warning light illuminates with the engine running, the power assist for the steering will cease operation. You will still have control of the vehicle. However, greater steering effort is needed, especially in sharp turns and at low speeds.

#### **BRAKE SYSTEM**

#### BRAKING PRECAUTIONS

The brake system has two separate hydraulic circuits. If one circuit malfunctions, you will still have braking at two wheels.

You may feel a small click and hear a sound when the brake pedal is fully depressed slowly. This is not a malfunction and indicates that the brake assist mechanism is operating properly.

#### 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 the stopping distance will be longer.

When the brake pedal is depressed slowly and firmly, you may hear a clicking noise and feel a slight pulsation. This is normal and indicates that the Brake Assist System is operating.

#### Using the brakes

Avoid resting your foot on the brake pedal while driving. This will cause overheating of the brakes, wearing out the brake pads and shoes 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 brakes, drive the vehicle at a safe speed while lightly tapping the brake pedal to heat-up the brakes. Do this until the brakes return to normal. Avoid driving the vehicle at high speeds until the brakes function correctly.

#### Parking brake break-in

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

This procedure is described in the vehicle service manual. It is recommended you visit a NISSAN dealer for this service.

#### **BRAKE ASSIST**

#### **BRAKE ASSIST**

When the force applied to the brake pedal exceeds a certain level, the Brake Assist is activated generating greater braking force than a conventional brake booster even with light pedal force.



#### WARNING

The Brake Assist is only an aid to assist braking operation and is not a collision warning or avoidance device. It is the driver's responsibility to stay alert, drive safely and be in control of the vehicle at all times.

ANTI-LOCK BRAKING SYSTEM (ABS)



### **WARNING**

The Anti-lock Braking System (ABS) is a sophisticated device, but it cannot prevent accidents resulting from careless or dangerous driving techniques. It can help maintain vehicle control during braking on slippery surfaces. Remember that stopping distances on slippery surfaces will be longer than on normal

surfaces even with ABS. Stopping distances may also be longer on rough, gravel or snow covered roads, or if you are using tire chains. Always maintain a safe distance from the vehicle in front of you. Ultimately, the driver is responsible for safety.

- Tire type and condition may also affect braking effectiveness.
  - When replacing tires, install the specified size of tires on all four wheels.
  - When installing a spare tire, make sure that it is the proper size and type as specified on the Tire and Loading Information label. See "Tire and Loading Information label" (P.10-12) of this manual.
  - For detailed information, see "Wheels and tires" (P.8-28) 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

5-36 Starting and driving

# VEHICLE DYNAMIC CONTROL (VDC) SYSTEM

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. It is recommended you visit a NISSAN dealer for this service.

#### Normal operation

The ABS operates at speeds above 3 to 6 MPH (5 to 10 km/h). The speed varies according to road conditions.

When the ABS senses that one or more wheels are close to locking up, the actuator rapidly applies and releases hydraulic pressure. This action is similar to pumping the brakes very quickly. You may feel a pulsation in the brake pedal and hear a noise from under the hood or feel a vibration from the actuator when it is operating. This is normal and indicates that the ABS is operating properly. However, the pulsation may indicate that road conditions are hazardous and extra care is required while driving.

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 VDC warning light \( \mathbb{F} \) in the instrument panel flashes so note the following:

- The road may be slippery or the system may determine some action is required to help keep the vehicle on the steered path.
- You may feel a pulsation in the brake pedal and hear a noise or vibration from under the hood. This is normal and indicates that the VDC system is working properly.
- Adjust your speed and driving to the road conditions.

If a malfunction occurs in the system, the VDC warning light \$\mathfrak{Z}\$ illuminates in the instrument panel. The VDC system automatically turns off.

The VDC OFF switch is used to turn off the VDC system. The VDC off indicator  $\begin{tabular}{l}{l}{\ensuremath{\mathsf{PVDC}}}$  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 VDC warning light  $\begin{tabular}{l}{\ensuremath{\mathsf{PVDC}}}$  flashes if this occurs. All other VDC functions are off, and the VDC warning light  $\begin{tabular}{l}{\ensuremath{\mathsf{PVDC}}}$  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.

See "Vehicle Dynamic Control (VDC) warning light" (P.2-21) and "Vehicle Dynamic Control

(VDC) off indicator light" (P.2-23).

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 improve driving 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 VDC warning 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 VDC warning light \$\mathcal{P}\$ may illuminate.
- If engine control related parts are not NISSAN recommended or are extremely deteriorated, the VDC warning light \$\mathcal{B}\$ may illuminate.
- When driving on extremely inclined surfaces such as higher banked corners, the VDC system may not operate properly and the VDC warning light \$\mathfrak{C}\$ may illuminate. Do not drive on these types of roads.
- When driving on an unstable surface such as a turntable, ferry, elevator or ramp, the VDC warning light \$\mathfrak{D}\$ 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 VDC warning light 🕏 may illuminate.
- The VDC system is not a substitute for winter tires or tire chains on a snow covered road.

#### **COLD WEATHER DRIVING**

#### FREEING A FROZEN DOOR LOCK

To prevent a door lock from freezing, apply deicer through the key hole. If the lock becomes frozen, heat the key before inserting it into the key hole or use the Intelligent Key system.

#### **ANTI-FREEZE**

In the winter when it is anticipated that the outside temperature will drop below 32°F (0°C), check the anti-freeze to assure proper winter protection. For additional information, see "Engine cooling system" (P.8-4).

#### **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 additional information, see "Battery" (P.8-10).

#### DRAINING OF COOLANT WATER

If the vehicle is to be left outside without antifreeze, drain the cooling system, including the engine block. Refill before operating the vehicle. For details, see "Engine cooling system" (P.8-4).

#### TIRE EQUIPMENT

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. It is recommended you consult a NISSAN dealer for the tire type, size, speed rating and availability information.

For additional traction on icy roads, studded tires may be used. However, some U.S. states and Canadian provinces prohibit their use. Check local, state and provincial laws before installing studded tires.

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

Tire chains may be used. For details, see "Tire chains" (P.8-37) of this manual.

#### All-Wheel Drive (AWD) model

If you install snow tires, they must also be the same size, brand, construction and tread pattern on all four wheels.

#### SPECIAL WINTER EQUIPMENT

It is recommended that the following items be carried in the vehicle during winter:

- A scraper and stiff-bristled brush to remove ice and snow from the windows and wiper blades.
- A sturdy, flat board to be placed under the jack to give it firm support.
- A shovel to dig the vehicle out of snowdrifts.
- Extra window washer fluid to refill the reservoir tank.

#### DRIVING ON SNOW OR ICE

### **WARNING**

- Wet ice (32°F, 0°C and freezing rain), very cold snow or ice can be slick and very hard to drive on. The vehicle will have much less traction or "grip" under these conditions. Try to avoid driving on wet ice until the road is salted or sanded.
- Whatever the condition, drive with caution. Accelerate and slow down with care. If accelerating or downshifting too fast, the drive wheels will lose even more traction.

- Allow more stopping distance under these conditions. Braking should be started sooner than on dry pavement.
- Allow greater following distances on slippery roads.
- Watch for slippery spots (glare ice). These may appear on an otherwise clear road in shaded areas. If a patch of ice is seen ahead, brake before reaching it. Try not to brake while on the ice, and avoid any sudden steering maneuvers.
- Do not use cruise control on slipperv roads.
- Snow can trap dangerous exhaust gases under your vehicle. Keep snow clear of the exhaust pipe and from around vour vehicle.

#### ENGINE BLOCK HEATER (if so equipped)

Engine block heaters are used to assist in cold temperature starting.

The engine block heater should be used when the outside temperature is  $20^{\circ}F(-7^{\circ}C)$  or lower. To use the engine block heater

- 1. Turn the engine off.
- 2. Open the hood and unwrap the engine block heater cord.
- 3. Plug the engine block heater cord into a grounded 3-wire, 3-pronged extension cord.
- 4. Plug the extension cord into a Ground Fault Interrupt (GFI) protected, grounded 110volt AC (VAC) outlet.
- 5. The engine block heater must be plugged in for at least 2 - 4 hours, depending on outside temperatures, to properly warm the engine coolant. Use an appropriate timer to turn the engine block heater on.
- 6. Before starting the engine, unplug and properly store the cord to keep it away from moving parts.

### **WARNING**

Do not use your engine block heater with an ungrounded electrical system or a 2-pronged adapter. You can be seriously injured by an electrical shock if you use an ungrounded connection.

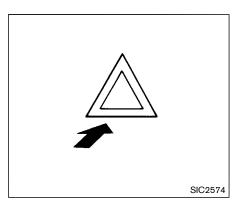
- Disconnect and properly store the engine block heater cord before starting the engine. Damage to the cord could result in an electrical shock and can cause serious injury.
- Use a heavy-duty 3-wire, 3-pronged extension cord rated for at least 10A. Plug the extension cord into a Ground Fault Interrupt (GFI) protected, grounded 110-VAC outlet. Failure to use the proper extension cord or a grounded outlet can result in a fire or electrical shock and cause serious personal injury.

# **6 In case of emergency**

Hazard warning flasher switch	6-2
Roadside assistance program	6-2
Emergency engine shut off	6-3
Flat tire	6-3
Tire Pressure Monitoring System (TPMS)	6-3
Changing a flat tire	6-4

Jump starting	6-9
Push starting	6-1
If your vehicle overheats	6-1
Towing your vehicle	6-1
Towing recommended by NISSAN	6-1
Vehicle recovery (freeing a stuck vehicle)	6-1

#### 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 will 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.

The flasher can be actuated with the ignition switch in any position.

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

#### ROADSIDE ASSISTANCE **PROGRAM**

In the event of a roadside emergency, Roadside Assistance Service is available to you. Please refer to your Warranty Information Booklet (U.S.) or Warranty & Roadside Assistance Information Booklet (Canada) for details.

#### **EMERGENCY ENGINE SHUT OFF**

To shut off the engine in an emergency situation while driving, perform the following procedure:

- Rapidly push the push-button ignition switch 3 consecutive times in less than 1.5 seconds, or
- Push and hold the push-button ignition switch for more than 2 seconds.

#### **FLAT TIRE**

#### TIRE PRESSURE MONITORING SYS-TEM (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 message is displayed in the vehicle information display, 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, see "Warning lights. indicator lights and audible reminders" (P.2-15) and "Tire Pressure Monitoring System (TPMS)" (P.5-3).

#### **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.

- Since the spare tire is not equipped with the TPMS, 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. Have your tires replaced and/or TPMS system reset as soon as possible. It is recommended vou visit a NISSAN dealer for these services.
- 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

- 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.
- 4. Continuously Variable Transmission (CVT) models:

Move the shift lever to the P (Park) position.

#### Manual Transmission (MT) models:

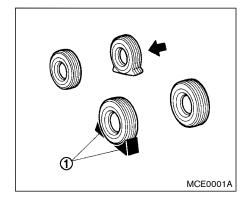
Move the shift lever to the R (Reverse) position.

- 5. Turn off the engine.
- Raise the hood to warn other traffic, and to signal professional road assistance personnel that you need assistance.
- Have all passengers get out of the vehicle and stand in a safe place, away from traffic

and clear of the vehicle.



- Make sure the parking brake is securely applied and the Manual Transmission is shifted into R (Reverse), or the Continuously Variable Transmission into P (Park).
- Never change tires when the vehicle is on a slope, ice or slippery areas. This is hazardous.
- Never change tires if oncoming traffic is close to your vehicle. Wait for professional road assistance.



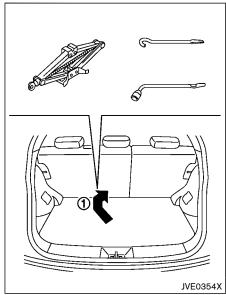
#### Blocking wheels

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



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

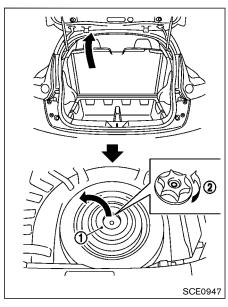
#### 6-4 In case of emergency



Jacking tools

Getting the spare tire and tools

Open the liftgate. Raise the cargo floor board (1). Remove jacking tools located behind the spare tire.



The spare tire is located under the cargo floor board.

Loosen the clamp (2) and remove the spacer (1) and take out the spare tire.

Jacking up the vehicle and removing the damaged tire

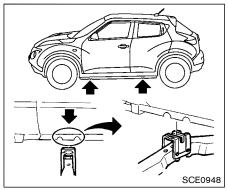


### **WARNING**

- Never get under the vehicle while it is supported only by the jack. If it is necessary to work under the vehicle, support it with safety stands.
- Use only the jack provided with your vehicle to lift the vehicle. Do not use the jack provided with your vehicle on other vehicles. The jack is designed for lifting only your vehicle during a tire change.
- Use the correct jack-up points. Never use any other part of the vehicle for jack support.
- Never jack up the vehicle more than necessary.
- Never use blocks on or under the jack.
- Do not start or run the engine while vehicle is on the lack, as it may cause the vehicle to move. This is especially true for vehicles with limited slip differentials.

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

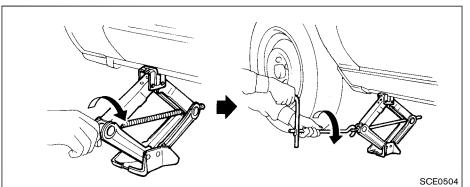
Carefully read the caution label attached to the jack body and the following instructions.

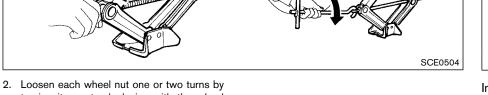


Jack-up point

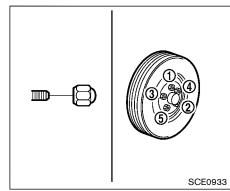
1. Place the jack directly under the jack-up point as illustrated so the top of the jack contacts the vehicle at the jack-up point. Align the jack head between the two notches in the front or the rear as shown. Also fit the groove of the jack head between the notches as shown.

The jack should be used on level firm ground.





- turning it counterclockwise with the wheel nut wrench. Do not remove the wheel nuts until the tire is off the ground.
- 3. To lift the vehicle, securely hold the jack lever and rod with both hands as shown above. Carefully raise the vehicle until the tire clears the ground. Remove the wheel nuts, and then remove the tire.



#### Installing the spare tire

#### The spare tire is designed for emergency use. (See specific instructions under the heading "Wheels and tires" (P.8-28).)

- 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. Check that all the wheel nuts contact the wheel surface horizontally.
- 3. With the wheel nut wrench, tighten wheel nuts alternately and evenly in the sequence illustrated (1), (2), (3), (4), (5), more than 2 times, until they are tight.

 Lower the vehicle slowly until the tire touches the ground. Then, with the wheel nut wrench, tighten the wheel nuts securely in the sequence illustrated. 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: 80 ft-lb (108 N·m)

The wheel nuts must be kept tightened to specifications at all times. It is recommended that the wheel nuts be

tightened to specifications at each lubrication interval.

Adjust tire pressure to the COLD pressure.

#### **COLD** pressure:

After the vehicle has been parked for 3 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.

Stowing the damaged tire and the tools

- Securely store the jack, tools and the damaged tire in the storage area.
- 2. Replace the cargo floor box and board.
- 3. Close the liftgate.

### **A** 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 and small size spare tire are designed for emergency use.
   See specific instructions under the

heading "Wheels and tires" (P.8-28).

#### **JUMP STARTING**

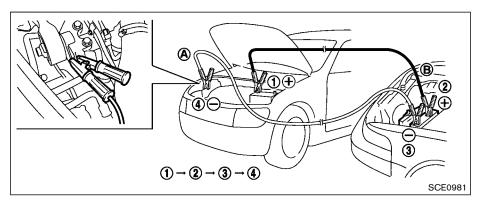
To start your engine with a booster battery, the instructions and precautions below must be followed.



### 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 the battery out of the reach of children.
- The booster battery must be rated at 12 volts. Use of an improperly rated battery can damage your vehicle.

- Whenever working on or near a battery, always wear suitable eye protectors (for example, goggles or industrial safety spectacles) and remove rings, metal bands, or any other jewelry. Do not lean over the battery when jump starting.
- Do not attempt to jump start a frozen battery. It could explode and cause serious injury.
- Your vehicle has an automatic engine cooling fan. It could come on at any time. Keep hands and other objects away from it.





Always follow the instructions below. Failure to do so could result in damage to the charging system and cause personal injury.

If the booster battery is in another vehicle

 (a) and
 (b) to bring their batteries into close proximity to each other.

Do not allow the two vehicles to touch.

- 2. Apply the parking brake.
- 3. Continuously Variable Transmission (CVT) models:

Move the shift lever to the P (Park) position.

Manual Transmission (MT) models:

Move the shift lever to the N (Neutral)

- position.4. Switch off all unnecessary electrical systems (headlights, heater, air conditioner, etc.).
- Remove the vent caps on the battery (if so equipped). Cover the battery with a firmly wrung out moist cloth to reduce explosion hazard.

6. Connect jumper cables in the sequence as illustrated  $(1) \rightarrow (2) \rightarrow (3) \rightarrow (4)$ .

If the battery is discharged, the ignition switch cannot be moved from the OFF position. Connect the jumper cables to the booster vehicle (B) before pushing the ignition switch.



- Always connect positive (+) to positive (+) and negative (-) to body ground (for example, as illustrated), 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.
- 7. Start the engine of the booster vehicle (B) and let it run for a few minutes.
- 8. Keep the engine speed of the booster vehicle (B) at about 2,000 rpm, and start the engine of the vehicle (A) being jump started.

#### **PUSH STARTING**

Do not attempt to start the engine by pushing.

## **CAUTION**

Do not keep the starter motor engaged for more than 10 seconds. If the engine does not start right away, place the ignition switch in the OFF position and wait 10 seconds before trying again.

- 9. After starting your engine, carefully disconnect the negative cable and then the positive cable  $(\widehat{\mathbf{4}}) \to (\widehat{\mathbf{3}}) \to (\widehat{\mathbf{2}}) \to (\widehat{\mathbf{1}})$ .
- 10. 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.

### **CAUTION**

- **Continuously Variable Transmission** (CVT) models cannot be pushstarted or tow-started. Attempting to do so may cause transmission damage.
- Three-way catalyst equipped models should not be started by pushing since the three way catalyst may be damaged.
- Never try to start the vehicle by towing it; when the engine starts, the forward surge could cause the vehicle to collide with the tow vehicle.

#### IF YOUR VEHICLE OVERHEATS



### A CAUTION

- Do not continue to drive if your vehicle overheats. Doing so could cause engine damage or a vehicle fire.
- To avoid the danger of being scalded, never remove the radiator cap while the engine is still hot. When the radiator cap is removed, pressurized hot water will spurt out, possibly causing serious injury.
- Do not open the hood if steam is coming out.

If your vehicle is overheating (indicated by the high temperature warning light (if so equipped) or an extremely high temperature gauge reading (if so equipped)), 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 and apply the parking brake.
- 2. Continuously Variable Transmission (CVT) models:

Move the shift lever to the P (Park) position.

#### Manual Transmission (MT) models:

Move the shift lever to the N (Neutral) position.

#### Do not stop the engine.

- Turn off the air conditioner (if so equipped).
   Open all the windows, move the heater or air conditioner temperature control to maximum hot and fan control to high speed.
- 4. 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.
- 5. Open the engine hood.



If steam or water is coming from the engine, stand clear to prevent getting burned.

6. Visually check the drive belt 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 or the cooling fan does not run, stop the engine.

#### 6-12 In case of emergency



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.

 After the engine cools down, check the coolant level in the reservoir with the engine running. Add coolant to the reservoir if necessary. Have your vehicle repaired. It is recommended you visit a NISSAN dealer for this service.

#### **TOWING YOUR VEHICLE**

When towing your vehicle, all State (Provincial in Canada) and local regulations for towing must be followed. Incorrect towing equipment could damage your vehicle. Towing instructions are available from a NISSAN dealer. Local service operators are familiar with the applicable laws and procedures for towing. To assure proper towing and to prevent accidental damage to your vehicle, NISSAN recommends that you have a service operator tow your vehicle. It is advisable to have the service operator carefully read the following precautions.



### WARNING

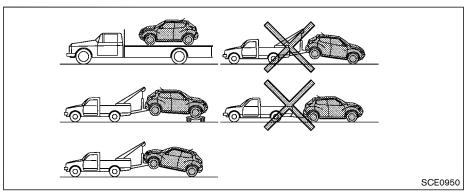
- Never ride in a vehicle that is being towed.
- Never get under vour vehicle after it has been lifted by a tow truck.

### CAUTION

When towing, make sure that the transmission, axles, steering system and powertrain are in working condition. If any unit is damaged, dollies must be used.

 Always attach safety chains before towing.

For information about towing your vehicle behind a recreational vehicle (RV), see "Flat towing" (P.10-18) of this manual.



Two-wheel drive models

#### TOWING RECOMMENDED BY NISSAN

#### Two-Wheel Drive (2WD) models

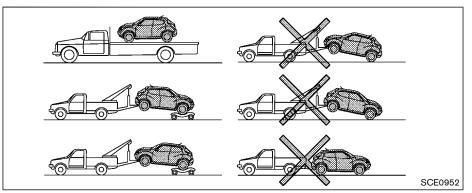
NISSAN recommends that your vehicle be towed with the driving (front) wheels off the ground or place the vehicle on a flat bed truck as illustrated.

### **A** CAUTION

 Never tow 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 CVT models with the front wheels on towing dollies: Push the ignition switch to the ACC or ON position, and secure the steering wheel in a straightahead position with a rope or similar device. Move the shift lever to the N (Neutral) position.  When towing a CVT model with the rear wheels on the ground (if you do not use towing dollies): Always release the parking brake.

#### 6-14 In case of emergency



All-wheel drive models

#### All-Wheel Drive (AWD) models

NISSAN recommends that towing dollies be used when towing your vehicle or the vehicle be placed on a flat bed truck as illustrated.



### CAUTION

Never tow AWD models with any of the wheels on the ground as this may cause serious and expensive damage to the powertrain.

VEHICLE RECOVERY (freeing 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.
- Tow chains or cables must be attached only to main structural mem-

bers of the vehicle.

- 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.

#### Rocking a stuck vehicle

If your vehicle is stuck in sand, snow, mud, etc., use the following procedure:

- 1. Turn off the Vehicle Dynamic Control (VDC) system.
- 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) (Continuously Variable Transmission models) or 1st and R (Reverse) (Manual Transmission models).
  - Apply the accelerator as little as possible to maintain the rocking motion.
  - · Release the accelerator pedal before shifting between R and D (Continuously Variable Transmission models) or 1st and R (Manual Transmission models).
  - 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	7-3
Removing spots	7-3
Underbody	7-3
Glass	7-3
Wheels	7-4
Aluminum alloy wheels	7-4
Chrome parts	7-4
Tire dressing	7-4

Cleaning interior	7-
Air fresheners	7-5
Floor mats	7-5
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	

#### 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, 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 the vehicle 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.



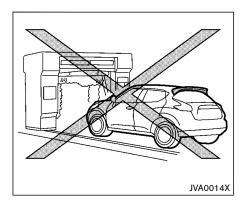
### **CAUTION**

- 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 vour 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 regularly cleaned. Make sure 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.

Avoid leaving water spots on the paint surface by using a damp chamois to dry the vehicle.



Model with rear spoiler



Do not use an automatic car wash for model with rear spoiler. The rear spoiler may be damaged.

#### 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 reapplying 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 compound 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 paint surface to avoid lasting damage or staining. Special cleaning products are available at a NISSAN dealer or any automotive accessory stores.

#### UNDERBODY

In areas where road salt is used in winter, the underbody must be cleaned regularly. This will 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, re-treated.

#### GLASS

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



When cleaning the inside of the 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.

#### 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.
- Inspect wheel rims regularly for dents or corrosion. Such damage may cause loss of pressure or poor seal at the tire bead.
- NISSAN recommends that the road wheels be waxed to protect against road salt in areas where it is used during winter.



Do not use abrasive cleaners when washing the wheels.

#### ALUMINUM ALLOY WHEELS

Wash regularly with a sponge dampened in a mild soap solution, especially during winter months in areas where road salt is used. Salt could discolor the wheels if not removed.

### **A** CAUTION

Follow the directions below to avoid staining or discoloring the wheels:

- Do not use a cleaner that uses strong acid or alkali contents to clean the wheels.
- Do not apply wheel cleaners to the wheels when they are hot. The wheel temperature should be the same as ambient temperature.
- Rinse the wheel to completely remove the cleaner within 15 minutes after the cleaner is applied.

#### CHROME PARTS

Clean chrome parts regularly with a non-abrasive chrome polish to maintain the finish.

#### TIRE DRESSING

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 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 tire dressing manufacturer.

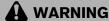
#### **CLEANING INTERIOR**

Occasionally remove loose dust from the interior trim, plastic parts and seats using a vacuum cleaner or soft bristled brush. Wipe the vinyl and leather surfaces with a clean, soft cloth dampened in mild soap solution, then wipe clean with a dry soft cloth.

Regular care and cleaning is required in order to maintain the appearance of the leather.

Before using any fabric protector, read the manufacturer's recommendations. Some fabric protectors contain chemicals that may stain or bleach the seat material.

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



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.

### **A** CAUTION

- Never use benzine, thinner, or any similar material.
- For cleaning, use a soft cloth, dampened with water. 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 cause discoloration to the lens.
- Do not spray any liquid such as water on the meter lens. Spraying liquid may cause the system to malfunction.
- Small dirt particles can be abrasive and damaging to the leather surfaces and should be removed promptly. Do not use saddle soap, car waxes, polishes, oils, cleaning fluids, solvents, detergents or ammonia-based cleaners as they may damage the leather's natural finish.
- Never use fabric protectors unless recommended by the manufacturer.
- Do not use glass or plastic cleaner on meter or gauge lens covers. It

may damage the lens cover.

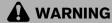
#### AIR FRESHENERS

Most air fresheners use a solvent that could affect the vehicle interior. If you use an air freshener, take the following precautions:

- Hanging-type air fresheners can cause permanent discoloration when they contact vehicle interior surfaces. Place the air freshener in a location that allows it to hang free and not contact an interior surface.
- Liquid-type air fresheners typically clip on the vents. These products can cause immediate damage and discoloration when spilled on interior surfaces.

Carefully read and follow the manufacturer's instructions before using air fresheners.

#### FLOOR MATS

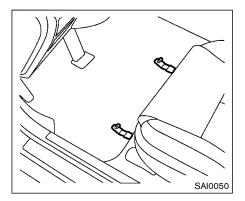


To avoid potential pedal interference that may result in a collision, injury or death:

 NEVER place a floor mat on top of another floor mat in the driver front position or install them upside down or backwards.

- It is recommended that you use only genuine NISSAN floor mats specifically designed for use in your vehicle model and model year.
- Properly position the mats in the floorwell using the floor mat positioning hooks. See "Floor mat installation" (P.7-6).
- Make sure the floor mat does not interfere with pedal operation.
- Periodically check the floor mats to make sure they are properly installed.
- After cleaning the vehicle interior, check the floor mats to make sure they are properly installed.

The use of genuine NISSAN floor mats can extend the life of your vehicle carpet and make it easier to clean the interior. Mats should be maintained with regular cleaning and replaced if they become excessively worn.



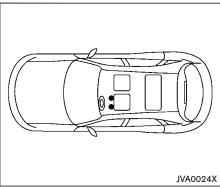
#### Floor mat installation

Your vehicle is equipped with floor mat positioning hook(s). The number and shape of the floor mat positioning hook(s) for each seating position varies depending on the vehicle.

When installing genuine NISSAN floor mats, follow the installation instructions provided with the floor mat and the following:

- Position the floor mat in the floorwell so that the floor mat grommet holes are aligned with the hook(s).
- Secure the grommet holes into the hook(s) and ensure that the floor mat is properly positioned.

3. Make sure the floor mat does not interfere with pedal operation. With the ignition in the OFF position and the shift lever in the P (Park) position (Continuously Variable Transmission (CVT) models) or the shift lever in the N (Neutral) position (Manual Transmission (MT) models), fully apply and release all pedals. The floor mat must not interfere with pedal operation or prevent the pedal from returning to its normal position. It is recommended you see a NISSAN dealer for details about installing the floor mats in your vehicle.



Positioning hook(s)

The illustration shows the location of the floor mat positioning hook(s).

#### 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 belts" (P.1-10).



#### **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 CONTRI-BUTING 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 INFLU-ENCE 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 where atmospheric pollution exists, or where road salt is used.

#### Temperature

A temperature increase will accelerate the rate of corrosion to those parts which are not well ventilated.

#### Air pollution

Industrial pollution, the presence of salt in the air in coastal areas, or heavy road salt use will accelerate the corrosion process. Road salt will also accelerate the disintegration of paint surfaces.

## TO PROTECT YOUR VEHICLE FROM CORROSION

- Wash and wax your vehicle often to keep the vehicle clean.
- Always check for minor damage to the paint and repair it as soon as possible.
- Keep drain holes at the bottom of the doors open to avoid water accumulation.
- Check the underbody for accumulation of sand, dirt or salt. If present, wash with water as soon as possible.

## **A** CAUTION

 NEVER remove dirt, sand or other debris from the passenger compartment by washing it out with a hose.

#### Remove dirt with a vacuum cleaner.

 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 deicing 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, it is recommended you consult a NISSAN dealer.

#### 7-8 Appearance and care

# 8 Do-it-yourself

Maintenance precautions	. 8-2
Engine compartment check locations	. 8-3
MR16DDT engine	. 8-3
Engine cooling system	. 8-4
Checking engine coolant level	. 8-5
Changing engine coolant	. 8-5
Engine oil	. 8-5
Checking engine oil level	. 8-5
Changing engine oil and filter	. 8-6
Continuously Variable Transmission (CVT) fluid	
For NISMO RS models	. 8-8
Except for NISMO RS models	. 8-8
Brake and clutch (if so equipped) fluid	. 8-9
Window washer fluid	. 8-9
Battery	8-10
Jump starting	8-12
Variable voltage control system	8-12
Drive belt	8-12
Spark plugs	8-13
Replacing spark plugs	8-13
Air cleaner	8-14

Windshield wiper blades	8-15
Cleaning	8-15
Replacing	8-15
Rear window wiper blade	8-16
Brakes	8-16
Self-adjusting brakes	8-16
Brake pad wear warning	8-16
Fuses	8-17
Engine compartment	8-17
Passenger compartment	8-19
Intelligent Key battery replacement	8-20
Lights	8-23
Headlights	8-23
Exterior and interior lights	8-26
Wheels and tires	8-28
Tire pressure	8-28
Tire labeling	8-34
Types of tires	8-36
Tire chains	8-37
Changing wheels and tires	

#### 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 the P (Park) position (CVT model) or the shift lever to the N (Neutral) position (MT model).
- . 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 eve protection whenever vou work on vour 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 fuel tank and the batterv.
- Because the fuel lines are under high pressure even when the engine is off, it is recommended you visit a NISSAN dealer for service of the fuel filter or fuel lines.

## **CAUTION**

- Do not work under the hood while the engine is hot. Turn the engine off and wait until it cools down.
- Avoid direct contact with used engine oil and coolant. Improperly disposed engine oil, and 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 the CVT 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.
- Your vehicle is equipped with an automatic engine cooling fan. It may come on at any time without warning, even if the ignition key is in the OFF position and the engine is not running. To avoid injury, always disconnect the negative battery cable before working near the fan.

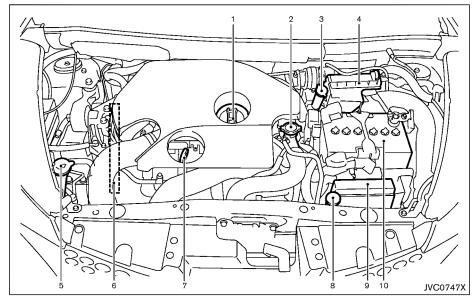
This "8. Do-it-yourself" section gives instructions regarding only those items which are relatively easy for an owner to perform.

A genuine NISSAN Service Manual is also available. (See "Owner's manual/service manual order information" (P.10-22).)

You should be aware that incomplete or

#### **ENGINE COMPARTMENT CHECK LOCATIONS**

improper servicing may result in operating difficulties or excessive emissions, and could affect your warranty coverage. If in doubt about any servicing, it is recommended you have it done by a NISSAN dealer.



#### MR16DDT ENGINE

- Engine oil filler cap
- Radiator filler cap
- Brake and clutch\* fluid reservoir
- Air cleaner
- Window washer fluid reservoir
- Engine drive belt location

- Engine oil dipstick
- Engine coolant reservoir
- Fuse/fusible link holder
- Battery
- for Manual Transmission (MT) models

#### **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 anti-freeze solution contains rust and corrosion inhibitors. Additional engine cooling system additives are not necessary.



- 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" (P.6-11) of this manual.
- The radiator is equipped with a pressure type radiator cap. To prevent engine damage, use only a genuine NISSAN radiator cap.
- If the engine was stopped soon when the engine is hot, the cooling fan may operate for approximately 10 minutes after the engine was stopped to cool the components in the engine compartment. When the

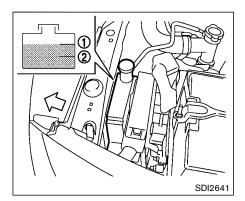
cooling fan is operating, be sure that hands or other items do not get caught in it.



#### 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 vou 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, fol-

- low the coolant manufacture'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 "9. Maintenance and schedules" section of this manual 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 ②, open the reservoir cap and add coolant up to the MAX level ①. 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 ①.

Tighten the cap securely after adding engine coolant.

If the cooling system frequently requires coolant, have it checked. It is recommended you visit a NISSAN dealer for this

#### service.

#### CHANGING ENGINE COOLANT

It is recommended that major cooling system repairs be performed by a NISSAN dealer. The service procedures can be found in the appropriate NISSAN Service Manual.

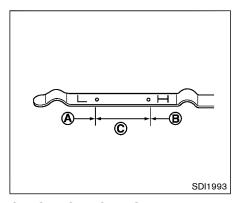
Improper servicing can result in reduced heater performance and engine overheating.

## **A** WARNING

- To avoid the danger of being scalded, never change the coolant when the engine is hot.
- Never remove the radiator cap when the engine is hot. Serious burns could be caused by high pressure fluid escaping from the radiator.
- Avoid direct skin contact with used coolant. If skin contact is made, wash thoroughly with soap or hand cleaner as soon as possible.
- Keep coolant out of reach of children and pets.

Engine coolant must be disposed of properly. Check your local regulations.

#### **ENGINE OIL**



#### CHECKING ENGINE OIL LEVEL

- 1. Park the vehicle on a level surface and apply the parking brake.
- 2. Run the engine until it reaches operating temperature.
- 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.
- Remove the dipstick again and check the oil level. It should be within the range ©. If the oil level is below (A), remove the oil filler cap and pour recommended oil through the

opening. Do not overfill (B).

6. Recheck oil level with the dipstick.

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



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 the warranty.

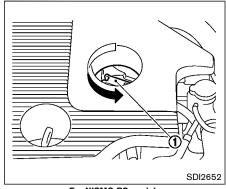
#### CHANGING ENGINE OIL AND FILTER

#### Vehicle set-up

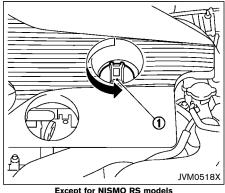
- 1. Park the vehicle on a level surface and apply the parking brake.
- 2. Run the engine until it reaches the operating temperature.
- 3. Turn the engine off and wait more than 10 minutes.
- 4. Raise and support the vehicle using a suitable floor jack and safety jack stands.
  - Place the safety jack stands under the vehicle jack-up points.
  - · A suitable adapter should be attached to the jack stand saddle.

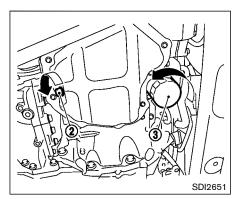


Make sure the correct lifting and support points are used to avoid vehicle damage.



For NISMO RS models





- Oil filler cap
- Oil drain plug
- Oil filter

#### Engine oil and filter

- 1. Place a large drain pan under the drain plug.
- Remove the oil filler cap.
- Remove the drain plug with a wrench and completely drain the oil.



Be careful not to burn yourself, as the engine oil is hot.

- · Waste oil must be disposed of properly.
- · Check your local regulations.

(Perform steps 4 to 7 only when the engine oil filter change is needed.)

- 4. Loosen the oil filter with an oil filter wrench. Remove the oil filter by turning it by hand.
- Wipe the engine oil filter mounting surface with a clean rag.

#### CAUTION

Be sure to remove any old gasket material remaining on the mounting surface of the engine. Failure to do so could lead to engine damage.

- Coat the gasket on the new filter with clean engine oil.
- 7. Screw in the oil filter clockwise until a slight resistance is felt, then tighten additionally more than 2/3 turn.

#### Oil filter tightening torque: 11 to 15 ft-lb (14.7 to 20.5 N·m)

8. Clean and re-install the drain plug with a new washer. Securely tighten the drain plug with a wrench.

#### Drain plug tightening torque: 22 to 29 ft-lb (29 to 39 N·m)

Do not use excessive force.

- Refill the engine with the recommended oil through the oil filler opening, and install the oil filler cap securely.
  - See "Capacities and recommended fluids/ lubricants" (P.10-2) 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 the proper amount of oil in the engine.
- 10. Start the engine and check for leakage around the drain plug and the oil filter. Correct as required.
- 11. Turn the engine off and wait more than 10 minutes. Check the oil level with the dipstick. Add engine oil if necessary.

#### After the operation

- 1. Lower the vehicle carefully to the ground.
- 2. Dispose of waste oil and filter properly.

#### **CONTINUOUSLY VARIABLE** TRANSMISSION (CVT) FLUID

## 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.

When checking or replacement is required, we recommend a NISSAN dealer for servicing.

FOR NISMO RS MODELS



## CAUTION

- NISSAN recommends using Genuine NISSAN CVT Fluid NS-2 (or equivalent) ONLY in NISSAN CVTs. Do not mix with other fluids.
- Do not use Automatic transmission fluid (ATF) or Manual transmission fluid in a NISSAN CVT, as it may damage the CVT. Damage caused by the use of fluids other than as recommended is not covered by the NISSAN's New Vehicle Limited Warrantv.
- Using fluids that are not equivalent to Genuine NISSAN CVT Fluid NS-2 may also damage the CVT. Damage caused by the use of fluids other than as recommended is not covered by the NISSAN's New Vehicle Limited Warranty.

EXCEPT FOR NISMO RS MODELS



## **CAUTION**

- NISSAN recommends using Genuine NISSAN CVT Fluid NS-3 (or equivalent) ONLY in NISSAN CVTs. Do not mix with other fluids.
- Do not use Automatic transmission fluid (ATF) or Manual transmission fluid in a NISSAN CVT, as it may damage the CVT. Damage caused by the use of fluids other than as recommended is not covered by the NISSAN's New Vehicle Limited Warrantv.
- Using fluids that are not equivalent to Genuine NISSAN CVT Fluid NS-3 may also damage the CVT. Damage caused by the use of fluids other than as recommended is not covered by the NISSAN's New Vehicle Limited Warranty.

#### **BRAKE AND CLUTCH (if so** equipped) FLUID

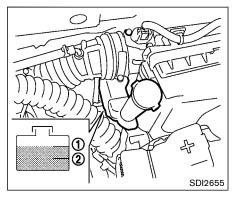
For additional brake and clutch fluid information. see "Capacities and recommended fluids/lubricants" (P.10-2) of this manual.

## WARNING

- Use only new fluid from a sealed container. Old, inferior or contaminated fluid may damage the brake and clutch systems. The use of improper fluids can damage the brake and clutch systems, and affect the vehicle's stopping ability.
- Clean the filler cap before removing.
- Brake and clutch fluid is poisonous and should be stored carefully in marked containers out of the reach of children.

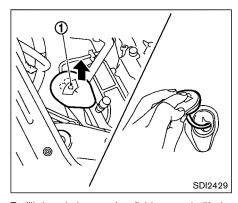
## **CAUTION**

Do not spill the fluid on any painted surfaces. This will damage the paint. If fluid is spilled, immediately wash the surface with water.



Check the fluid level in the reservoir. If the fluid is below the MIN line (2) or the brake warning light comes on, add Genuine NISSAN Super Heavy Duty Brake Fluid or equivalent DOT 3 fluid up to the MAX line (1). If fluid must be added frequently, the system should be checked. It is recommended you visit a NISSAN dealer for this service.

#### WINDOW WASHER FLUID



To fill the window washer fluid reservoir, lift the cap and pour the window 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.

Fill the window washer fluid reservoir periodically.

Add fluid when the low washer fluid warning light illuminates (if so equipped).

To check the fluid level, use your finger to plug the center hole ① of the cap/tube assembly, then remove it from the reservoir. If there is no fluid in the tube, add fluid.

Refill the reservoir more frequently when driving conditions require an increased amount of window washer fluid.

Recommended fluid:

Genuine NISSAN Windshield Washer Concentrate Cleaner & Antifreeze or equivalent



- Do not substitute engine anti-freeze coolant for window washer solution.
   This may result in damage to the paint.
- Do not fill the window washer reservoir tank with washer fluid concentrates at full strength. Some methyl alcohol based washer fluid concentrates may permanently stain the grille if spilled while filling the window washer reservoir tank.
- Pre-mix washer fluid concentrates with water to the manufacturer's recommended levels before pouring the fluid into the window washer

reservoir tank. Do not use the window washer reservoir tank to mix the washer fluid concentrate and water.

#### **BATTERY**

- Keep the battery surface clean and dry.
   Clean the battery with a solution of baking soda and water.
- Make certain the terminal connections are clean and securely tightened.

#### NOTE:

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

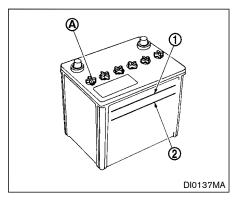
- Installation or extended use of electronic accessories that consume battery power when the engine is not running (Phone chargers, GPS, DVD players, etc.)
- Vehicle is not driven regularly and/or only driven short distances.

In these cases, the battery may need to be charged to maintain battery health.



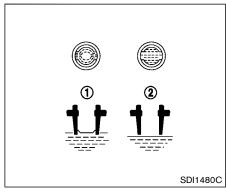
 Do not expose the battery to flames or electrical sparks. Hydrogen gas generated by the battery is explosive. Do not allow battery fluid to contact your skin, eyes, fabrics or painted surfaces. After touching a battery or battery cap, do not touch or rub your eyes. Thoroughly wash your hands. If the acid contacts your eyes, skin or clothing, immediately flush with water for at least 15 minutes and seek medical attention.

- 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 the battery out of the reach of children.



Check the fluid level in each cell. It should be between the UPPER LEVEL ① and LOWER LEVEL ② lines.

If it is necessary to add fluid, add only distilled water to bring the level to the indicator in each filler opening. **Do not overfill.** 



- 1. Remove the cell plugs (A) .
- Add distilled water up to the UPPER LEVEL
   line.

If the side of the battery is not clear, check the distilled water level by looking directly above the cell; the condition ① indicates OK and the condition ② needs more to be added.

3. Tighten cell plugs (A).

Vehicles operated in high temperatures or under severe conditions require frequent checks of the battery fluid level.

#### VARIABLE VOLTAGE CONTROL SYSTEM

#### JUMP STARTING

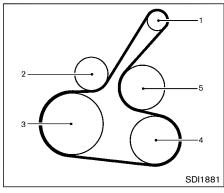
If jump starting is necessary, see "Jump starting" (P.6-9). If the engine does not start by jump starting, the battery may have to be replaced. It is recommended you visit a NISSAN dealer for this service.

## A 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.

The variable voltage control system measures the amount of electrical discharge from the battery and controls voltage generated by the generator.

#### **DRIVE BELT**



- Alternator
- Drive belt auto-tensioner
- Crankshaft pulley
- Air conditioner compressor 4
- Water pump



#### **WARNING**

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

1. Visually inspect the belt for signs of unusual wear, cuts, fraying or looseness. If the belt is

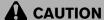
#### **SPARK PLUGS**

in poor condition or loose, have it replaced or adjusted. It is recommended you visit a NISSAN dealer for this service.

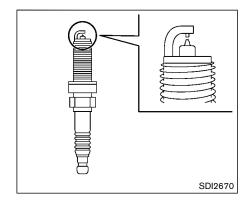
2. Have the belt condition checked regularly.

## **WARNING**

Be sure the engine and ignition switch are off and that the parking brake is engaged securely.



Be sure to use the correct socket to remove the spark plugs. An incorrect socket can damage the spark plugs.



#### REPLACING SPARK PLUGS

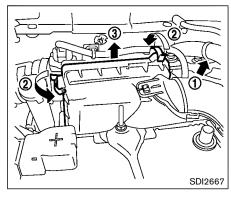
If replacement is required, it is recommended you visit a NISSAN dealer for this service.

#### Iridium platinum-tipped spark plugs

It is not necessary to replace the iridium platinum-tipped spark plugs as frequently as the conventional type spark plugs since they will last much longer. Follow the maintenance schedule shown in the "9. Maintenance and schedules" section. Do not reuse the iridium platinum-tipped spark plugs by cleaning or regapping.

Always replace spark plugs with recommended or equivalent ones.

#### **AIR CLEANER**



To remove the filter, pull the air duct ① upward to remove it. Pull the tabs ②, then pull the cover ③ upward.

The air cleaner filter should not be cleaned and reused. Replace it according to the maintenance schedule shown in the "9. Maintenance and schedules" section. When replacing the filter, wipe the inside of the air cleaner housing and the cover with a damp cloth.

## **WARNING**

 Operating the engine with the air cleaner removed can cause you or others to be burned. The air cleaner not only cleans the air, it stops flame if the engine backfires. If it is not 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.

#### 8-14 Do-it-yourself

#### WINDSHIELD WIPER BLADES

#### **CLEANING**

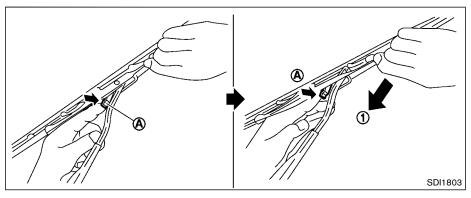
If your windshield is not clear after using the windshield washer or if a wiper blade chatters when running, wax or other material may be on the blade or windshield.

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 blade with clear water. If your windshield is still not clear after cleaning the blades and using the wiper, replace the blades.



Worn windshield wiper blades can damage the windshield and impair driver vision.



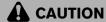
#### REPLACING

Replace the wiper blades if they are worn.

Before replacing the wiper blades, the wiper should be in the fully up position to avoid scratching the engine hood or damaging the wiper arm. To pull up the wiper arm, see "Wiper and washer switch" (P.2-36).

- 1. Lift the wiper arm away from the windshield.
- Push and hold the release tab (A), and move the wiper blade down the wiper arm (1).
- Insert the new wiper blade onto the wiper arm until a click sounds.

4. Rotate the wiper blade so that the dimple is in the groove.



- 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 arm may be damaged from wind pressure.

# **B** SDI2693

Be careful not to clog the washer nozzle (A) . This may cause improper windshield washer operation. If the nozzle is clogged, remove any objects with a needle or small pin (B). Be careful not to damage the nozzle.

#### **REAR WINDOW WIPER BLADE**

It is recommended you contact a NISSAN dealer if checking or replacement is required.

#### **BRAKES**

If the brakes do not operate properly, it is recommended you have the brakes checked by a NISSAN dealer.

#### SELF-ADJUSTING BRAKES

Your vehicle is equipped with self-adjusting brakes.

The disc-type brakes self-adjust every time the brake pedal is applied.



#### **WARNING**

Have your brake system checked if the brake pedal height does not return to normal. It is recommended you visit a NISSAN dealer for this service.

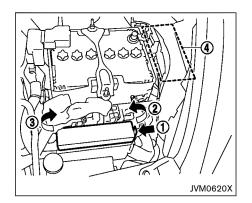
#### BRAKE PAD WEAR WARNING

The disc brake pads have audible wear warnings. When a brake pad requires replacement, it will make a high pitched scraping sound when the vehicle is in motion. This scraping sound will first occur only when the brake pedal is depressed. After more wear of the brake pad, the sound will always be heard even if the brake pedal is not depressed. Have the brakes checked as soon as possible if the wear warning 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 additional information, see the maintenance schedule shown in the "9. Maintenance and schedules" section.



ENGINE COMPARTMENT



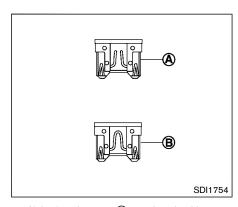
**WARNING** 

Never use a fuse of a higher or lower amperage rating than that specified on the fuse box cover. This could damage the electrical system or electronic control units or cause a fire.

If any electrical equipment does not operate, check for an open fuse.

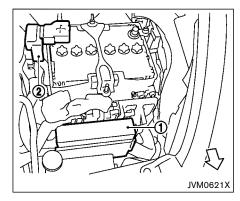
1. Be sure the ignition switch and the headlight switch are turned off.

- 2. Open the engine hood.
- 3. Remove the fuse/fusible link holder cover by pushing the tab (1) and lifting the cover from the right side (2), then the left side **(3)**.
- 4. Locate the fuse that needs to be replaced.
- 5. Remove the fuse using the fuse puller located in the passenger compartment fuse box.



- If the fuse is open (A), replace it with a new fuse (B).
- 7. If a new fuse also opens, have the electrical system checked and repaired. It is recommended you visit a NISSAN dealer for this service.

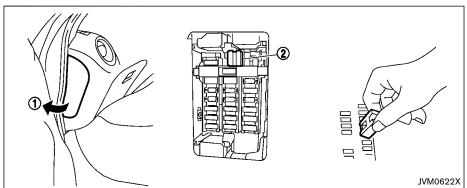
The holder (4) also contains the fuses. It is recommended you visit a NISSAN dealer for checking and/or replacing.



#### Fusible links

If any electrical equipment does not operate and the fuses are in good condition, check the fusible links in the holders (1) and (2). If any of these fusible links are melted, replace only with genuine NISSAN parts.

For checking and replacing the fusible links in the holders (2), it is recommended you visit a NISSAN dealer.



PASSENGER COMPARTMENT

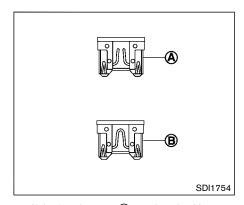
WARNING

Never use a fuse of a higher or lower amperage rating than that specified on the fuse box cover. This could damage the electrical system or electronic control units or cause a fire.

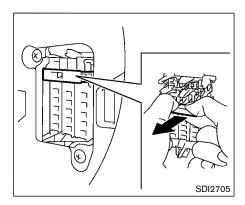
If any electrical equipment does not operate, check for an open fuse.

1. Be sure the ignition switch and the headlight switch are turned off.

- 2. Remove the fuse box cover (1).
- 3. Remove the fuse with the fuse puller (2).



- 4. If the fuse is open (A), replace it with a new fuse (B).
- 5. If a new fuse also opens, have the electrical system checked and repaired. It is recommended you visit a NISSAN dealer for this service.



# Extended storage fuse switch (if so equipped)

To reduce battery drain, the extended storage fuse switch comes from the factory switched off. Prior to delivery of your vehicle, the switch is pushed in (switched on) and should always remain on.

If the extended storage fuse switch is not pushed in (switched on), the meter may display a warning message. See "Extended storage fuse warning message" (P.2-9).

If any electrical equipment does not operate, remove the extended storage fuse switch and check for an open fuse.

#### NOTE:

If the extended storage fuse switch malfunctions or if the fuse is open, it is not necessary to replace the switch. In this case, remove the extended storage fuse switch and replace it with a new fuse of the same rating.

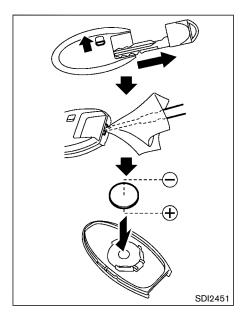
## How to remove the extended storage fuse switch:

- To remove the extended storage fuse 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.
- Pinch the storage fuse switch and pull it in the direction illustrated.

## INTELLIGENT KEY BATTERY REPLACEMENT



Be careful not to allow children to swallow the battery and removed parts.



Replace the battery in the Intelligent Key as follows:

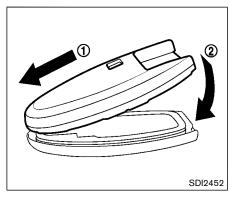
- Remove the mechanical key from the Intelligent Key.
- Insert a small screwdriver into the slit of the corner and twist it to separate the upper part from the lower part. Use a cloth to protect

the casing.

3. Replace the battery with a new one.

## Recommended battery:

- CR2025 or equivalent
- Do not touch the internal circuit and electric terminals as doing so could cause a malfunction.
- Hold the battery by the edges. Holding the battery across the contact points will seriously deplete the storage capacity.
- Make sure that the 
   ⊕ side faces the bottom of the case.



- Align the tips of the upper and lower parts

   and then push them together until it is securely closed.
- 5. Operate the buttons to check its operation.

If you need any assistance for replacement, it is recommended you visit a NISSAN dealer for this service.

#### **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 interfer-

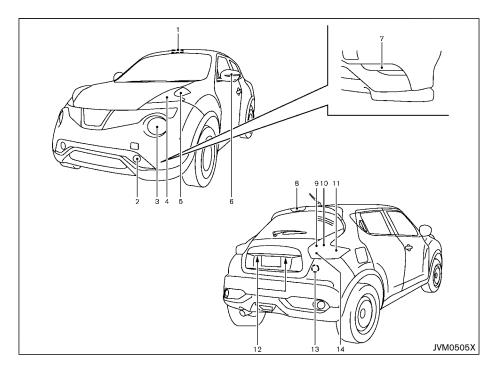
ence received, including interference that may cause undesired operation.

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 Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

#### **LIGHTS**



- 1. Map light
- 2. Front fog light (if so equipped)
- B. Headlight (high-beam/low-beam)
- Front parking light
- 5. Front turn signal light/Front side marker light
- 6. Side turn signal light
- 7. Daytime running light (NISMO models)
- 8. High-mounted stop light
- 9. Reverse light
- 10. Rear turn signal light
- 11. Stop/tail light
- 12. License plate light
- 13. Cargo light
- 14. Tail light (LED)

#### **HEADLIGHTS**

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, it is recommended you visit a NISSAN dealer for servicing.

#### Replacing

#### Xenon headlight model:

If replacement is required, it is recommended you visit a NISSAN dealer for this service.



## WARNING



#### **HIGH VOLTAGE**

When xenon headlights are on, they produce a high voltage. To prevent an electric shock, never attempt to modify or disassemble. It is recommended to have your xenon headlights replaced at a NISSAN dealer. For additional information, see "Headlight and turn signal switch" (P.2-39).

#### Halogen headlight model:

The headlight is a semi-sealed beam type which uses a replaceable headlight (halogen) bulb.

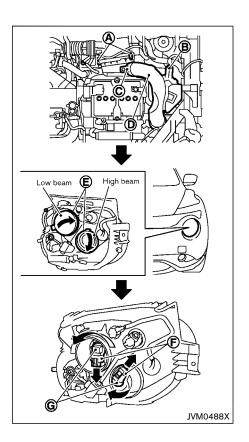


## CAUTION

Do not leave the bulb out of the headlight reflector for a long period of time. Dust, moisture, smoke, etc. entering the headlight body may affect bulb 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.
- Only touch the base when handling the bulb. Never touch the glass envelope. Touching the glass envelope could significantly affect bulb life and/or headlight performance.
- Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, it is recommended vou visit a NISSAN dealer for this service.

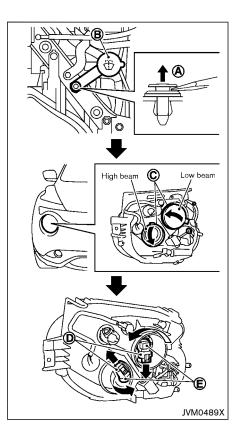
Use the same number and wattage as originally installed as shown in the chart.



#### Left side of the vehicle

Disconnect the battery negative cable before replacing bulbs.

- 1. Remove clip (A).
- 2. Pull up part (B) of the air duct, and then move part (C) sideways.
- 3. Remove the air duct (D).
- 4. Remove back cover (E).
- 5. Disconnect connector (F).
- 6. Turn and pull out socket (a), and then remove the bulb.



#### Right side of the vehicle

Disconnect the battery negative cable before replacing bulbs.

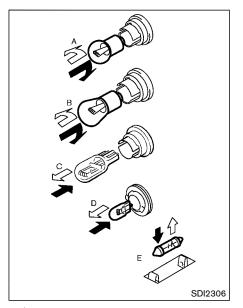
- 1. Remove clip (A).
- 2. Remove washer inlet (B).
- B. Remove back cover ©.
- 4. Disconnect connector (D).
- 5. Turn and pull out socket (E), and then remove the bulb.

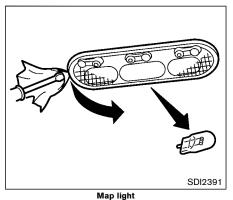
#### **EXTERIOR AND INTERIOR LIGHTS**

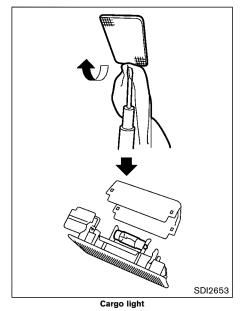
Item	Wattage (W)	Bulb No.
Headlight high/low beams (Xenon)*	60/35	HB3/D2S
Headlight high/low beams (Halogen)	60/55	HB3/H11
Front turn signal light*	21	WY21W
Front parking light*	LED	-
Front side marker light*	5	W5W
Front fog light (if so equipped)*	55	H11
Side turn signal light*	LED	-
Daytime running light (for NISMO models)*	LED	-
Rear combination light*		
turn signal light	21	WY21W
stop/tail light	21/5	W21/5W
tail light (LED)	LED	_
back-up	16	W16W
License plate light*	5	W5W
Map light	5	_
High-mounted stop light*	LED	_
Cargo light	5	_
Glove box light*	1.4	_

It is recommended you visit a NISSAN dealer for replacement.

NOTE: Always check with the Parts Department at a NISSAN dealer for the latest information about parts.









#### Replacement procedures

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

Do-it-yourself 8-27

#### WHEELS AND TIRES

## If you have a flat tire, see "Flat tire" (P.6-3). TIRE PRESSURE

Tire Pressure Monitoring System (TPMS)

This vehicle is equipped with the Tire Pressure Monitoring System (TPMS). It monitors tire pressure of all tires except the spare. When the low tire pressure warning light is lit, and the CHECK TIRE PRES (pressure) warning message is displayed in the vehicle information display, 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, see "Low tire pressure warning light" (P.2-18), "Tire Pressure Monitoring System (TPMS)" (P.5-3) and "Tire Pressure Monitoring System (TPMS)" (P.6-3).

#### Tire inflation pressure

Check the pressure of the tires (including the spare) often and always prior to long distance trips. The recommended tire pressure specifications are shown on 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.

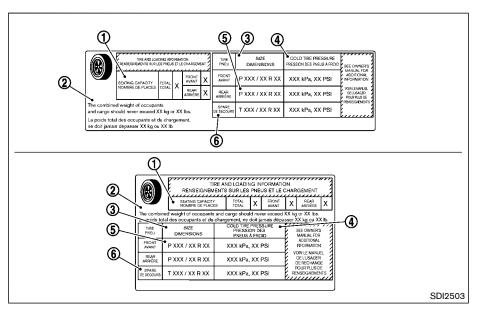
Incorrect tire pressure, including under inflation, may adversely affect tire life and vehicle handling.

## **A** WARNING

 Improperly inflated tires can fail suddenly and cause an accident.

- The Gross Vehicle Weight rating (GVWR) is located on the F. M.V.S.S./C.M.V.S.S. certification label. The vehicle weight capacity is indicated on the Tire and Loading Information label. Do not load vour 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 bevond the specified capacity may also result in failure of other vehicle components.
- Before taking a long trip, or whenever you heavily load your vehicle, use a tire pressure gauge to ensure that the tire pressures are at the specified level.

For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the Warranty Information Booklet.

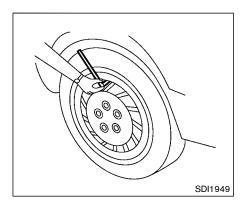


Tire and Loading Information label

- Seating capacity: The maximum number of occupants that can be seated in the vehicle.
- 2 Vehicle load limit: See "Vehicle loading information" (P.10-15).
- ③ Original 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 see "Tire labeling" (P.8-34).
- Spare tire size or compact spare tire size (if so equipped)



#### Checking the tire pressure

- Remove the valve stem cap from the tire.
- 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.

- Read the tire pressure on the gauge stem and compare it 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.

#### **Except for NISMO and NISMO RS models:**

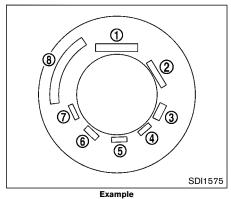
	SIZE	COLD TIRE INFLATION PRESSURE
FRONT ORIGINAL TIRE	P215/55R17 93V	230 kPa, 33 PSI (2WD MT models) 250 kPa, 36 PSI (2WD CVT models) 240 kPa, 35 PSI (AWD models)
REAR ORIGINAL TIRE	P215/55R17 93V	230 kPa, 33 PSI (2WD MT models) 250 kPa, 36 PSI (2WD CVT models) 240 kPa, 35 PSI (AWD models)
SPARE TIRE	T135/80D16 101M (2WD models) T135/90D16 102M (AWD models)	420 kPa, 60 PSI

#### For NISMO models:

	SIZE	COLD TIRE INFLATION PRESSURE
FRONT ORIGINAL TIRE	225/45R18 95Y	230 kPa, 33 PSI (2WD MT models) 240 kPa, 35 PSI (AWD models)
REAR ORIGINAL TIRE	225/45R18 95Y	230 kPa, 33 PSI (2WD MT models) 240 kPa, 35 PSI (AWD models)
SPARE TIRE	T135/80D16 101M (2WD models) T135/90D16 102M (AWD models)	420 kPa, 60 PSI

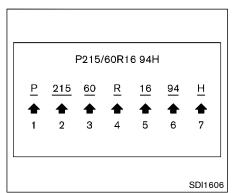
#### For NISMO RS models:

	SIZE	COLD TIRE INFLATION PRESSURE
FRONT ORIGINAL TIRE	225/45R18 95Y	230 kPa, 33 PSI (2WD MT models) 240 kPa, 35 PSI (AWD models)
REAR ORIGINAL TIRE	225/45R18 95Y	230 kPa, 33 PSI (2WD MT models) 240 kPa, 35 PSI (AWD models)
SPARE TIRE	T135/70D17 92M	420 kPa, 60 PSI



TIRE LABELING

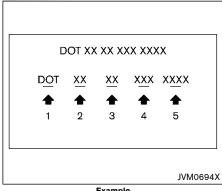
Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides the tire identification number (TIN) for safety standard certification. The TIN can be used to identify the tire in case of a recall.



Example

- Tire size (example: P215/60R16 94H)
- 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 (60): 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 (16): This number is the wheel or rim diameter in inches.
- 6. Two- or three-digit number (94): 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 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)
- Four numbers represent the week and year the tire was built. For example, the numbers 3103 means the 31st week of 2003. If these numbers are missing, then look on the other sidewall of the tire.
- 3 Tire ply composition and material

The number of layers or plies of rubbercoated fabric in the tire.

Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others.

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.

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 asymme-

trical 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 (Example: Summer, All Season or Snow) and construction. A NISSAN dealer may be able to help you with information about tire type, size, speed rating and availability.
- Replacement tires may have a lower speed rating than the factory equipped tires, and may not match the potential maximum vehicle speed. Never exceed the maximum speed rating of the tire.
- Replacing tires with those not originally specified by NISSAN could affect the proper operation of the TPMS.
- For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the

8-36 Do-it-yourself

### **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 (Mud and Snow) 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 will have lower speed ratings than factory equipped tires and may not match the potential maximum vehicle speed. Never exceed the maximum speed rating of the tire.

If you install snow tires, they must be the same size, brand, construction and tread pattern on all four wheels.

For additional traction on icy roads, studded tires may be used. However, some U.S. states and Canadian provinces prohibit their use. Check local, state and provincial laws before installing studded tires. Skid and traction capabilities of studded snow tires, on wet or dry surfaces, may be poorer than that of non-studded snow tires.

## TIRE CHAINS

Use of tire chains may be prohibited according to location. Check the local laws before installing tire chains. When installing tire chains, make sure they are the proper size for the tires on your vehicle and are installed according to the chain

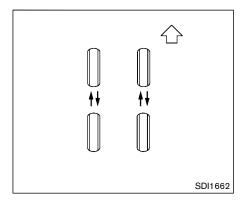
manufacturer's suggestions. Use only SAE Class S chains. Class "S" chains are used on vehicles with restricted tire to vehicle clearance. Vehicles that can use Class "S" chains are designed to meet the SAE standard minimum clearances between the tire and the closest vehicle suspension or body component required to accommodate the use of a winter traction device (tire chains or cables). The minimum clearances are determined using the factory equipped tire size. Other types may damage vour vehicle. Use chain tensioners when recommended by the tire chain manufacturer to ensure a tight fit. Loose end links of the tire chain must be secured or removed to prevent the possibility of whipping action damage to the fenders or underbody. If possible, avoid fully loading your vehicle when using tire chains. In addition, drive at a reduced speed. Otherwise, your vehicle may be damaged and/or vehicle handling and performance may be adversely affected.

# Tire chains must be installed only on the front wheels and not on the rear wheels.

Never install tire chains on a TEMPORARY USE ONLY spare tire.

Do not use tire chains on dry roads. Driving with tire chains in such conditions can cause damage to the various mechanisms of the vehicle due to some overstress.

#### CHANGING WHEELS AND TIRES



Tire rotation

NISSAN recommends rotating the tires every 5,000 miles (8,000 km). (See "Flat tire" (P.6-3) for tire replacing procedures.)

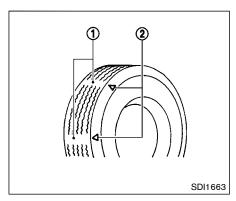
As soon as possible, tighten the wheel nuts to the specified torque with a torque wrench.

Wheel nut tightening torque: 80 ft-lb (108 N·m)

The wheel nuts must be kept tightened to the specification at all times. It is recommended that wheel nuts be tightened to the specification at each tire rotation interval.

# **WARNING**

- After rotating the tires, check and adjust the tire pressure.
- Retighten the wheel nuts when the vehicle has been driven for 600 miles (1,000 km) (also in cases of a flat tire, etc.).
- Do not include the spare tire or any other small size spare tire in the tire rotation.
- For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the Warrantv Information Booklet.



- 1. Wear indicator
- 2. Wear indicator 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 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, it is recommended you visit a NISSAN dealer for this service.
- For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the Warranty Information Booklet.

## Replacing wheels and tires

When replacing a tire, use the same size, tread design, speed rating and load carrying capacity as originally equipped. (See "Specifications" (P.10-9) for recommended types and sizes of tires and wheels.)



# **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, 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.
- For Two-Wheel Drive (2WD) models, 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 and/or interference with the brake discs/drums. Such interference can lead to decreased braking efficiency and/or early brake pad/ shoe wear. See "Wheels and tires" (P.10-9) of this manual for wheel offset dimensions.
- Since the spare tire is not equipped with the TPMS, 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. Have your tires replaced and/or TPMS system reset as soon as possible. It is recommended vou visit a NISSAN dealer for these services.
- Replacing tires with those not originally specified by NISSAN could

- affect the proper operation of the TPMS.
- The TPMS sensor may be damaged if it is not handled correctly. Be careful when handling the TPMS sensor.
- When replacing the TPMS sensor, the ID registration may be required. It is recommended you visit a NISSAN dealer for ID registration.
- Do not use a valve stem cap that is not specified by NISSAN. The valve stem cap may become stuck.
- Be sure that the valve stem caps are correctly fitted. Otherwise the valve may be clogged up with dirt and cause a malfunction or loss of pressure.
- 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 tire is not recommended.
- For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire

Safety Information" (Canada) in the Warranty Information Booklet.

All-Wheel Drive (AWD) models



## CAUTION

- Always use tires of the same size. brand, construction (bias, biasbelted or radial), and tread pattern on all four wheels. Failure to do so may result in a circumference difference between tires on the front and rear axles which will cause excessive tire wear and may damage the transmission, transfer case and rear differential gears.
- Only use spare tires specified for each AWD model.

If excessive tire wear is found, it is recommended that all four tires be replaced with tires of the same size, brand, construction and tread pattern. The tire pressure and wheel alignment should also be checked and corrected as necessary. It is recommended you visit a NISSAN dealer for this service.

#### Wheel balance

Unbalanced wheels may affect vehicle handling and tire life. Even with regular use, wheels can get out of balance. Therefore, they should be balanced as required.

Wheel balance service should be performed with the wheels off the vehicle. Spin balancing the wheels on the vehicle could lead to mechanical damage.

For additional information regarding tires, refer to "Important Tire Safety Information" (US) or "Tire Safety Information" (Canada) in the Warranty Information Booklet.

#### Care of wheels

See "Cleaning exterior" (P.7-2) for details about care of the wheels.

### Spare tire

Since the spare tire is not equipped with the TPMS, when a spare tire is mounted (TEMPOR-ARY USE ONLY), the TPMS will not function.

Observe the following precautions if the TEM-PORARY USE ONLY spare tire must be used, otherwise your vehicle could be damaged or involved in an accident.

# **WARNING**

- The TEMPORARY USE ONLY spare tire should be used for emergency use. It should be replaced with the standard tire at the first opportunity to avoid possible tire or differential damage.
- Drive carefully while the TEMPOR-ARY USE ONLY spare tire is installed. Avoid sharp turns and abrupt braking while driving.
- Periodically check spare tire inflation pressure. Always keep the pressure of the TEMPORARY USE ONLY spare tire at 60 psi (420 kPa, 4.2 bar).
- With the TEMPORARY USE ONLY spare tire installed do not drive your vehicle at speeds faster than 50 MPH (80 km/h).
- When driving on roads covered with snow or ice, the TEMPORARY USE ONLY spare tire should be used on the rear wheels and original tire used on the front wheels (drive wheels). Use tire chains only on the front (original) tires.

- Tire tread of the TEMPORARY USE ONLY spare tire will wear at a faster rate than the standard tire. Replace the spare tire as soon as the tread wear indicators appear.
- Do not use the spare tire on other vehicles.
- Do not use more than one spare tire at the same time.

# **A** CAUTION

- Do not use tire chains on a TEM-PORARY USE ONLY spare tire. Tire chains will not fit properly and may cause damage to the vehicle.
- Because the TEMPORARY USE ONLY spare tire is smaller than the original tire, ground clearance is reduced. To avoid damage to the vehicle, do not drive over obstacles. Also do not drive the vehicle through an automatic car wash since it may get caught.

## **MEMO**

# 9 Maintenance and schedules

Maintenance requirement	9-2
General maintenance	9-2
Scheduled maintenance	9-2
Where to go for service	9-2
General maintenance	9-2
Explanation of general maintenance items	9-2
Explanation of scheduled maintenance items	9-5
Emission control system maintenance	9-5
Chassis and body maintenance	9-6

Maintenance schedules	9-7
Additional maintenance items for severe	
operating conditions	9-7
Standard maintenance	9-7
Emission control system maintenance	9-8
Chassis and body maintenance	<del>)</del> -11
Maintenance under severe driving conditions 9	9-14
Maintenance log 9	)-15

## **MAINTENANCE REQUIREMENT**

Some day-to-day and regular maintenance is essential to maintain your vehicle good mechanical condition, as well as its emission and engine performance.

It is the owner's responsibility to make sure that the scheduled maintenance, as well as general maintenance, is performed.

As the vehicle owner, you are the only one who can ensure that your vehicle receives the proper maintenance care. You are a vital link in the maintenance chain.

#### 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 procedures regularly as prescribed.

Performing general maintenance checks requires minimal mechanical skill and only a few general automotive tools.

These checks or inspections can be done by yourself, a qualified technician or, if you prefer, a NISSAN dealer.

## SCHEDULED MAINTENANCE

The maintenance items listed in this section are required to be serviced at regular intervals. However, under severe driving conditions, additional or more frequent maintenance will be required.

## WHERE TO GO FOR SERVICE

If maintenance service is required or your vehicle appears to malfunction, have the systems checked and serviced. It is recommended you visit a NISSAN dealer for this service.

NISSAN technicians are well-trained specialists and are kept up-to-date with the latest service information through technical bulletins, service tips, and training programs. They are completely qualified to work on NISSAN vehicles **before** work begins.

You can be confident that a NISSAN dealer's service department performs the best job to meet the maintenance requirements on your vehicle.

### **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 smell, be sure to check for the cause or it is recommended to have a NISSAN dealer do it promptly. In addition, it is recommended you visit a NISSAN dealer if you think that repairs are required.

When performing any checks or maintenance work, see "Maintenance precautions" (P.8-2).

EXPLANATION OF GENERAL MAINTENANCE ITEMS

Additional information on the following items with "\*" is found in the "8. Do-it yourself" section of this manual.

#### Outside the vehicle

The maintenance items listed here should be performed from time to time, unless otherwise specified.

**Doors and engine hood:** Check that all doors and the engine hood operate properly. Also ensure that all latches lock securely. Lubricate hinges, latches, latch pins, rollers and links if 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" (US) or "Tire Safety Information" (Canada) in the NISSAN 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 scheduled maintenance, cleaning the vehicle, etc.

**Accelerator pedal:** Check the pedal for smooth operation and make sure the pedal does not catch 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, have your vehicle checked immediately. It is recommended you visit a NISSAN dealer for

this service. 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) 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 adjusted, it is recommended you visit a NISSAN dealer for this service.

**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.

**Seats:** Check seat position controls such as seat adjusters, seatback recliners, etc. to ensure they operate smoothly and that all latches lock securely in every position. Check that the head restraints move up and down smoothly and that the locks (if so equipped) hold securely in all latched positions.

**Steering wheel:** Check for changes in the steering conditions, such as excessive free play,

hard steering or strange noises.

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

**Windshield defroster:** Check that the air comes out of the defroster outlets properly and in sufficient quantity when operating the heater or air conditioner.

**Windshield wiper and washer\*:** Check that the wipers and washers operate properly and that the wipers do not streak.

### 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 condition require frequent checks of the battery fluid level.

#### NOTE:

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

 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 and clutch fluid level\*:** Make sure that the brake and clutch fluid level is between the MAX and MIN lines on the reservoir.

**Engine coolant level\*:** Check the coolant level when the engine is cold.

**Engine drive belt\*:** Make sure that the drive belt is not frayed, worn, cracked or oily.

**Engine oil level\*:** Check the level after parking the vehicle on a level surface and turning off the engine. 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. It is recommended you visit a NISSAN dealer for this service. (See "Precautions when starting and driving" (P.5-2) for exhaust gas (carbon monoxide).)

**Fluid leaks:** Check under the vehicle for fuel, oil, water or other fluid leaks after the vehicle has been parked for a while. Water dripping from the

air conditioner after use is normal. If you should notice any leaks or if gasoline fumes are evident, check for the cause and have it corrected immediately.

**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, otherwise rust will form on the floor pan, frame, fuel lines and around the exhaust system. At the end of winter, the underbody should be thoroughly flushed with plain water, being careful to clean those areas where mud and dirt may accumulate. For additional information, see "Cleaning exterior" (P.7-2).

**Windshield washer fluid\*:** Check that there is adequate fluid in the reservoir.

## **EXPLANATION OF SCHEDULED** MAINTENANCE ITEMS

The following descriptions are provided to give you a better understanding of the scheduled maintenance items that should be regularly checked or replaced. The maintenance schedule indicates at which mileage/time intervals each item requires service.

In addition to scheduled maintenance, your vehicle requires that some items be checked during normal day-to-day operation. Refer to "General maintenance" (P.9-2).

Items marked with "\*" are recommended by NISSAN for reliable vehicle operation. You are not required to perform maintenance on these items in order to maintain the warranties which come with your vehicle. Other maintenance items and intervals are required.

When applicable, additional information can be found in the "8. Do-it yourself" section of this manual.

### NOTE:

NISSAN does not advocate the use of non-**OEM** approved aftermarket flushing systems and strongly advises against performing these services on a NISSAN product. Many of the aftermarket flushing systems use non-OEM approved chemicals or solvents, the use of which has not been validated by NISSAN.

For recommended fuel, lubricants, fluids, grease, and refrigerant, refer to "Capacities and recommended fluids/lubricants" (P.10-2) of this manual.

EMISSION CONTROL SYSTEM MAIN-TENANCE

#### Drive belts\*:

Check engine drive belts for wear, fraying or cracking and for proper tension. Replace any damaged drive belts.

## **Engine air filter:**

Replace at specified intervals. When driving for prolonged periods in dusty conditions, check/ replace the filter more frequently.

## Engine coolant\*:

Replace coolant at the specified interval. When adding or replacing coolant, be sure to use only Genuine NISSAN Long Life Antifreeze/Coolant (blue) or equivalent with the proper mixture. (Refer to "Engine cooling system" (P.8-4) to determine the proper mixture for your area.)

## NOTE:

Mixing any other type of coolant or the use of non-distilled water may reduce the recommended service interval of the coolant.

## Engine oil and oil filter:

Replace engine oil and oil filter at the specified intervals. For recommended oil grade and viscosity refer to "Capacities and recommended fluids/lubricants" (P.10-2).

## Engine valve clearance\*:

Inspect only if valve noise increases.

Adjust valve clearance if necessary.

## Evaporative emissions control vapor lines\*:

Check vapor lines for leaks or looseness. Tighten connections or replace parts as necessary.

## **Fuel filter**

Periodic maintenance is not required (in-tank type filter).

#### Fuel lines\*:

Check the fuel hoses, piping and connections for leaks, looseness, or deterioration. Tighten connections or replace parts as necessary.

### Spark plugs:

Replace at specified intervals. Install new plugs of the type as originally equipped.

## CHASSIS AND BODY MAINTENANCE

#### Brake lines and cables:

Visually inspect for proper installation. Check for chafing, cracks, deterioration, and signs of leaking. Replace any deteriorated or damaged parts immediately.

## Brake pads and rotors:

Check for wear, deterioration and fluid leaks. Replace any deteriorated or damaged parts immediately.

#### **Exhaust system:**

Visually inspect the exhaust pipes, muffler and hangers for leaks, cracks, deterioration, and damage. Tighten connections or replace parts as necessary.

### In-cabin microfilter:

Replace at specified intervals. When driving for prolonged periods in dusty conditions, replace the filter more frequently.

#### Propeller shaft(s):

Check for damage, looseness, and grease leakage. (AWD)

# Steering gear and linkage, axle and suspension parts, drive shaft boots:

Check for damage, looseness, and leakage of oil or grease. Under severe driving conditions, inspect more frequently.

#### Tire rotation:

Tires should be rotated every 5,000 miles (8,000 km) according to the instructions under "Explanation of general maintenance items" (P.9-2). When rotating tires, check for damage and uneven wear. Replace if necessary.

# Transmission fluid/oil, differential oil and transfer case oil:

Visually inspect for signs of leakage at specified intervals.

If using a car-top carrier, or driving on rough or muddy roads:

- Replace the manual transmission gear oil every 20,000 miles (32,000 km) or 24 months.
- Replace the CVT fluid every 60,000 miles (96,000 km) or request the dealer to inspect the fluid deterioration data using a CON-SULT. If the deterioration data is more than 210,000, replace the CVT fluid.

#### Off-road maintenance:

Check the following items frequently whenever you drive off-road through deep sand, mud or water:

- Brake pads and rotors
- Brake linings and drums

- Brake lines and hoses
- Differential, transmission and transfer case oil
- Steering linkage
- Propeller shaft(s) and front drive shafts
- Engine air filter
- Clutch housing drain (AWD only)

#### 9-6 Maintenance and schedules

#### MAINTENANCE SCHEDULES

To help ensure smooth, safe and economical driving, NISSAN provides two maintenance schedules that may be used, depending upon the conditions in which you usually drive. These schedules contain both distance and time intervals, up to 120,000 miles (192,000 km)/ 144 months. For most people, the odometer reading will indicate when service is needed. However, if you drive very little, your vehicle should be serviced at the regular time intervals shown in the schedule.

After 120,000 miles (192,000 km)/144 months, continue maintenance at the same mileage/time intervals.

ADDITIONAL MAINTENANCE ITEMS FOR SEVERE OPERATING CONDI-**TIONS** 

Additional maintenance items for severe operating conditions; should be performed on vehicles that are driven under especially demanding conditions. Additional maintenance items should be performed if you primarily operate your vehicle under the following conditions:

- Repeated short trips of less than 5 miles (8 km).
- Repeated short trips of less than 10 miles (16 km) with outside temperatures remaining below freezing.

- Operating in hot weather in stop-and-go "rush hour" traffic.
- Extensive idling and/or low speed driving for long distances, such as police, taxi or doorto-door delivery use.
- Driving in dusty conditions.
- Driving on rough, muddy or salt spread roads.
- Using a car-top carrier.

#### NOTE:

For vehicles operated in Canada, both standard and severe maintenance items should be performed at every interval.

## STANDARD MAINTENANCE

The following tables show the standard maintenance schedule. Depending upon weather and atmospheric conditions, varying road surfaces, individual driving habits and vehicle usage, additional or more frequent maintenance may be required.

After 120,000 miles (192,000 km)/144 months, continue maintenance at the same mileage/time intervals.

## EMISSION CONTROL SYSTEM MAINTENANCE

Abbreviations: I = Inspect and correct or replace as necessary, R = Replace

MAINTENANCE OPERATION	Miles × 1,000					MA	INTENAN	ICE INTE	RVAL				
Perform at number of miles, kilo- meters or months, whichever comes first.	(km × 1,000) Months	5 (8) 6	10 (16) 12	15 (24) 18	20 (32) 24	25 (40) 30	30 (48) 36	35 (56) 42	40 (64) 48	45 (72) 54	50 (80) 60	55 (88) 66	60 (96) 72
Drive belts	See NOTE (1)								l*		l*		l*
Air cleaner filter	See NOTE (2)						R						R
EVAP vapor lines					l*				l*				l*
Fuel lines					l*				l*				l*
Fuel filter	See NOTE (3)												
Engine coolant*	See NOTE (4)(5)												
Engine oil		R	R	R	R	R	R	R	R	R	R	R	R
Engine oil filter		R	R	R	R	R	R	R	R	R	R	R	R
Spark plugs	See NOTE (6)		1	1	F	Replace ev	ery 105,0	00 miles	(168,000	km)	I	I	<u> </u>
Intake and exhaust valve clear- ance*	See NOTE (7)												

MAINTENANCE OPERATION	Miles × 1,000					MAI	INTENAN	CE INTER	RVAL				
Perform at number of miles, kilometers or months, whichever comes first.	(km × 1,000) Months	65 (104) 78	70 (112) 84	75 (120) 90	80 (128) 96	85 (136) 102	90 (144) 108	95 (152) 114	100 (160) 120	105 (168) 126	110 (176) 132	115 (184) 138	120 (192) 144
Drive belts	See NOTE (1)		l*		l*		l*		l*		l*		l*
Air cleaner filter	See NOTE (2)						R						R
EVAP vapor lines					l*				l*				l*
Fuel lines					l*				l*				l*
Fuel filter	See NOTE (3)												
Engine coolant*	See NOTE (4)(5)												
Engine oil		R	R	R	R	R	R	R	R	R	R	R	R
Engine oil filter		R	R	R	R	R	R	R	R	R	R	R	R
Spark plugs	See NOTE (6)		l	ı	Re	eplace eve	ry 105,00	00 miles (	168,000	km)	ı	ı	I
Intake and exhaust valve clear- ance*	See NOTE (7)												

#### NOTE:

- (1) After 40,000 miles (64,000 km) or 48 months, inspect every 10,000 miles (16,000 km) or 12 months. Replace the drive belts if found damaged.
- (2) If operating mainly in dusty conditions, more frequent maintenance may be required.
- (3) Periodic maintenance is not required.
- (4) First replacement interval is 105,000 miles (168,000 km) or 84 months. After first replacement, replace every 75,000 miles (120,000 km) or 60 months.
- (5) Use only Genuine NISSAN Long Life Antifreeze/Coolant (blue) or equivalent with proper mixture ratio of 50% antifreeze and 50% demineralized or distilled water. Mixing any other type of coolant or the use of non-distilled water may reduce the life expectancy of the factory fill coolant.
- (6) Replace spark plug when the plug gap exceeds 0.043 in (1.1 mm) even if within specified replacement mileage.
- (7) Periodic maintenance is not required. However, if valve noise increases, inspect valve clearance.
- \*: Maintenance items and intervals with "\*"

are recommended by NISSAN for reliable vehicle operation. The owner does not need to perform such maintenance in order to maintain the emission warranty or manufacturer recall liability. Other maintenance items and intervals are required.

## CHASSIS AND BODY MAINTENANCE

Abbreviations: I = Inspect and correct or replace as necessary, R = Replace

MAINTENANCE OPERATION	Miles × 1,000					MA	INTENAN	ICE INTE	RVAL				
Perform at of miles, kilometers or months, whichever comes first.	(km × 1,000) Months	5 (8) 6	10 (16) 12	15 (24) 18	20 (32) 24	25 (40) 30	30 (48) 36	35 (56) 42	40 (64) 48	45 (72) 54	50 (80) 60	55 (88) 66	60 (96) 72
Brake lines and cables			I		I		I		I		I		I
Brake pads and rotors★			I		I		I		I		I		I
Brake fluid★					R				R				R
CVT fluid	See NOTE (1)		ı		I		I		1		I		I
Manual transmission gear oil	See NOTE (2)		I		I		I		1		I		I
Transfer fluid and differential gear oil	See NOTE (2)		I		I		I		I		I		I
Steering gear and linkage, axle and suspension parts★					I				I				I
Tire rotation	See NOTE (3)												
Propeller shaft (AWD) and drive shaft boots★			I		I		I		I		I		I
Exhaust system★					I				Į				I
In-cabin microfilter				R			R			R			R
Intelligent Key battery				R			R			R			R

MAINTENANCE OPERATION	Miles × 1,000					MAI	NTENAN	CE INTER	RVAL				
Perform at of miles, kilometers or months, whichever comes first.	(km × 1,000) Months	65 (104) 78	70 (112) 84	75 (120) 90	80 (128) 96	85 (136) 102	90 (144) 108	95 (152) 114	100 (160) 120	105 (168) 126	110 (176) 132	115 (184) 138	120 (192) 144
Brake lines and cables			ı		I		I		ı		I		I
Brake pads and rotors★			I		I		I		ı		l		I
Brake fluid★					R				R				R
CVT fluid	See NOTE (1)		I		ı		I		ı		1		I
Manual transmission gear oil	See NOTE (2)		I		I		I		ı		I		I
Transfer fluid and differential gear oil	See NOTE (2)		I		I		I		I		I		I
Steering gear and linkage, axle and suspension parts★					I				I				I
Tire rotation	See NOTE (3)												
Propeller shaft (AWD) and drive shaft boots★			I		I		I		I		I		I
Exhaust system★					I				I				1
In-cabin microfilter				R			R			R			R
Intelligent Key battery				R			R			R			R

### NOTE:

Maintenance items with "★" should be performed more frequently according to "Maintenance under severe driving conditions" (P.9-14).

- (1) If using a car-top carrier, or driving on rough or muddy roads, inspect CVT fluid deterioration at NISSAN dealer every 60,000 miles (96,000 km), then change CVT fluid if necessary. And if the inspection is not performed, change (not just inspect) CVT fluid every 60,000 miles (96.000 km).
- (2) If using a car-top carrier, or driving on rough or muddy roads, change (not just inspect) oil at every 20,000 miles (32,000 km) or 24 months.
- (3) Refer to "Tire rotation" under "General maintenance" (P.9-2).

# MAINTENANCE UNDER SEVERE DRIVING CONDITIONS

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

## Severe driving conditions

- Repeated short trips of less than 5 miles (8 km).
- Repeated short trips of less than 10 miles (16 km) with outside temperatures remaining below freezing.
- Operating in hot weather in stop-and-go "rush hour" traffic.
- Extensive idling and/or low speed driving for long distances, such as police, taxi or doorto-door delivery use.
- · Driving in dusty conditions.
- Driving on rough, muddy, or salt spread roads.
- Using a car-top carrier.

Maintenance operation: Inspect = Inspect and correct or replace as necessary.

Maintenance item	Maintenance operation	Maintenance interval
Brake fluid	Replace	Every 10,000 miles (16,000 km) or 12 months
Brake pads & rotors	Inspect	Every 5,000 miles (8,000 km) or 6 months
Steering gear & linkage, axle & suspension parts	Inspect	Every 5,000 miles (8,000 km) or 6 months
Propeller shaft (AWD) and drive shaft boots	Inspect	Every 5,000 miles (8,000 km) or 6 months
Exhaust system	Inspect	Every 5,000 miles (8,000 km) or 6 months

## **MAINTENANCE LOG**

5,000 Miles (8,000 km) or 6 Months	10,000 Miles (16,000 km) or 12 Months	15,000 Miles (24,000 km) or 18 Months
Dealer Name:	Dealer Name:	Dealer Name:
Date:	Date:	Date:
Mileage:	Mileage:	Mileage:
Dealer Stamp:	Dealer Stamp:	Dealer Stamp:
20,000 Miles (32,000 km) or 24 Months	25,000 Miles (40,000 km) or 30 Months	30,000 Miles (48,000 km) or 36 Months
Dealer Name:	Dealer Name:	Dealer Name:
Date:	Date:	Date:
Mileage:	Mileage:	Mileage:
Dealer Stamp:	Dealer Stamp:	Dealer Stamp:
35,000 Miles (56,000 km) or 42 Months	40,000 Miles (64,000 km) or 48 Months	45,000 Miles (72,000 km) or 54 Months
Dealer Name:	Dealer Name:	Dealer Name:
Date:	Date:	Date:
Mileage:	Mileage:	Mileage:
Dealer Stamp:	Dealer Stamp:	Dealer Stamp:

50,000 Miles (80,000 km) or 60 Months	55,000 Miles (88,000 km) or 66 Months	60,000 Miles (96,000 km) or 72 Months
Dealer Name:	Dealer Name:	Dealer Name:
Date:	Date:	Date:
Mileage:	Mileage:	Mileage:
Dealer Stamp:	Dealer Stamp:	Dealer Stamp:
65,000 Miles (104,000 km) or 78 Months	70,000 Miles (112,000 km) or 84 Months	75,000 Miles (120,000 km) or 90 Months
Dealer Name:	Dealer Name:	Dealer Name:
Date:	Date:	Date:
Mileage:	Mileage:	Mileage:
Dealer Stamp:	Dealer Stamp:	Dealer Stamp:
80,000 Miles (128,000 km) or 96 Months	85,000 Miles (136,000 km) or 102 Months	90,000 Miles (144,000 km) or 108 Months
Dealer Name:	Dealer Name:	Dealer Name:
Date:	Date:	Date:
Mileage:	Mileage:	Mileage:
Dealer Stamp:	Dealer Stamp:	Dealer Stamp:

95,000 Miles (152,000 km) or 114 Months	100,000 Miles (160,000 km) or 120 Months	105,000 Miles (168,000 km) or 126 Months
Dealer Name:	Dealer Name:	Dealer Name:
Date:	Date:	Date:
Mileage:	Mileage:	Mileage:
Dealer Stamp:	Dealer Stamp:	Dealer Stamp:
110,000 Miles (176,000 km) or 132 Months	115,000 Miles (184,000 km) or 138 Months	120,000 Miles (192,000 km) or 144 Months
Dealer Name:	Dealer Name:	Dealer Name:
Date:	Date:	Date:
Mileage:	Mileage:	Mileage:
Dealer Stamp:	Dealer Stamp:	Dealer Stamp:

## **MEMO**

# 10 Technical and consumer information

Capacities and recommended fluids/lubricants	10-2
Fuel information	10-4
Engine oil and oil filter recommendation	10-7
Air conditioning system refrigerant and	
lubricant recommendations	10-8
Specifications	10-9
Engine	10-9
Wheels and tires	10-9
Dimensions and weights	10-10
When traveling or registering in another country	10-10
Vehicle identification	10-11
Vehicle Identification Number (VIN) plate	10-11
Vehicle identification number (chassis number)	10-11
Engine serial number	10-11
F.M.V.S.S./C.M.V.S.S. certification label	10-12
Emission control information label	10-12
Tire and Loading Information label	10-12
Air conditioner specification label	10-13
Installing front license plate	10-13

Vehicle loading information	10-15
Terms	10-15
Vehicle load capacity	10-15
Loading tips	10-17
Measurement of weights	10-17
Towing a trailer	10-18
Flat towing	10-18
Continuously Variable Transmission (CVT)	10-18
Manual Transmission	10-18
Uniform tire quality grading	10-19
Treadwear	10-19
Traction AA, A, B and C	10-19
Temperature A, B and C	10-19
Emission control system warranty	10-20
Reporting safety defects	10-20
Readiness for Inspection/Maintenance (I/M) test	10-21
Event Data Recorders (EDR)	10-22
Owner's manual/service manual order information	10-22

## **CAPACITIES AND RECOMMENDED** FLUIDS/LUBRICANTS

The following are approximate capacities. The actual refill capacities may be a little different. When refilling, follow the procedure instructed in the "8. Do-it-yourself" section to determine the proper refill capacity.

Fluid type				Capacity (Approximate)			
				Metric Measure	US Measure	Imperial Measure	Recommended Fluids/Lubricants
Fuel         2WD model           AWD model         AWD model			50	13-1/4 gal	11 gal	· See "Fuel information" (P.10-4).	
			45	11-7/8 gal	9-7/8 gal		
Engine oil*1  Drain and refill *1: For additional in-	With oil filter change For NISM		iSMO RS model		4-1/2 qt	3-3/4 qt	For NISMO RS models Genuine "Nissan Motor Oil 5W-30 SN" is recommended. If the above motor oil is not available, use an equivalent motor oil that matches the above
: For additional information, see "Changing engine oil and filter" (P.8-6).		Except for NISMO RS model		4.5	4-3/4 qt	4 qt	grade and viscosity. For additional information, see "Engine oil and oil filter recommendation" (P.10-7).  Except for NISMO RS models
	Without oil filter change	For NISMO RS model		4.1	4-3/8 qt	3-5/8 qt	<ul> <li>Genuine "Nissan Motor Oil 0W-20 SN" is recommended.</li> <li>If the above motor oil is not available, use an equivalent motor oil that matches the above grade and viscosity. For additional information, see "Engine oil and oil filter recommendation" (P.10-7).</li> </ul>
		Except for NISMO RS model		4.3	4-1/2 qt	3-3/4 qt	
Engine coolant	With reservoir	For NISMO RS model	CVT model	8.1	8-5/8 qt	7-1/8 qt	· Pre-diluted Genuine NISSAN Long Life Antifreeze/Coolant (blue) or equivalent
			MT model	7.9	8-3/8 qt	7 qt	
		Except for NISMO RS model	CVT model	8.7	9-1/4 qt	7-5/8 qt	
			MT model	8.5	8-3/8 qt	7 qt	
	Reservoir		0.6	5/8 qt	1/2 qt		
Continuously Variable Ti	ransmission (CVT) fluid	d		-	_	-	For NISMO RS models Genuine NISSAN CVT Fluid NS-2 NISSAN recommends using Genuine NISSAN CVT Fluid NS-2 (or equivalent) ONLY in NISSAN CVTs. Do not mix with other fluids. Using fluids that are not equivalent to Genuine NISSAN CVT Fluid NS-2 may damage the CVT. Damage caused by the use of fluids other than as recommended is not covered under NISSAN's New Vehicle Limited Warranty.  Except for NISMO RS models Genuine NISSAN CVT Fluid NS-3 NISSAN CVTS Models NISSAN CVTS. Do not mix with other fluids. Using fluids that are not equivalent to Genuine NISSAN CVT Fluid NS-3 may damage the CVT. Damage caused by the use of fluids other than as recommended is not covered under NISSAN's New Vehicle Limited Warranty.

		city (Approxi	mate)		
Fluid type	Metric Measure	US Measure	Imperial Measure	Recommended Fluids/Lubricants	
Manual Transmission (MT) gear oil	_	_	_	For NISMO RS models Genuine NISSAN Manual Transmission Fluid (MTF) HQ Multi 75W-85 or equivalent If Genuine NISSAN Manual Transmission Fluid (MTF) HQ Multi is not available, API GL-4, Viscosity SAE 75W-85 may be used as a temporary replacement. However, use Genuine NISSAN Manual Transmission Fluid (MTF) HQ Multi as soon as it is available. Except for NISMO RS models Genuine NISSAN Manual Transmission Fluid (MTF) TL/JR Type 75W-80 or equivalent If Genuine NISSAN Manual Transmission Fluid (MTF) TL/JR Type is not available, API GL-4+, Viscosity SAE 75W-80 may be used as a temporary replacement. However, use Genuine NISSAN Manual Transmission Fluid (MTF) TL/JR Type as soon as it is available.	
Differential gear oil				Genuine NISSAN Differential Oil Hypoid Super GL-5 80W-90 or equivalent convention	
Transfer fluid			_	(non-synthetic) oil	
Brake and clutch fluid	Refill to the proper oil level according to the instructions in the "8. Do-it-yourself" section.		*8. Do-it-	· Genuine NISSAN Super Heavy Duty Brake Fluid <sup>16</sup> or equivalent DOT 3 <sup>16</sup> : Available in mainland U.S.A. through a NISSAN dealer.	
Multi-purpose grease	_	_	_	· NLGI No. 2 (Lithium soap base)	
Air conditioning system refrigerant	_	_	_	For additional information, see "Vehicle identification" (P.10-11) for air conditioner specification label.     HFC-134a (R-134a)	
Air conditioning system lubricants	_	_	_	· NISSAN A/C System Oil Type R or exact equivalent	
Window washer fluid	4.5	1-1/4 gal	1 gal	· Genuine NISSAN Windshield Washer Concentrate Cleaner & Antifreeze or equivalent	

#### FUEL INFORMATION

### **Except for NISMO RS models:**

NISSAN recommends the use of unleaded premium gasoline with an octane rating of at least 91 AKI (Anti-Knock Index) number (Research octane number 96).

If unleaded premium gasoline is not available, you may use unleaded regular gasoline with an octane rating of at least 87 AKI number (Research octane number 91), but you may notice a decrease in performance.

#### For NISMO RS models:

Use unleaded premium gasoline with an octane rating of at least 91 AKI (Anti-Knock Index) number (Research octane number 96).

If unleaded premium gasoline is not available, unleaded regular gasoline with an octane rating of at least 87 AKI number (Research octane number 91) may be temporarily used, but only under the following precautions:

- Have the fuel tank filled only partially with unleaded regular gasoline, and fill up with unleaded premium gasoline as soon as possible.
- Avoid full throttle driving and abrupt acceleration.

Use unleaded premium gasoline for maximum vehicle performance.

# **A** CAUTION

- Using a fuel other than that specified could adversely affect the emission control system, and may also affect 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.
- Do not use fuel that contains the octane booster methylcyclopentadienyl manganese tricarbonyl (MMT). Using fuel containing MMT may adversely affect vehicle performance and vehicle emissions. Not all fuel dispensers are labeled to

indicate MMT content, so you may have to consult your gasoline retailer for more details. Note that Federal and California laws prohibit the use of MMT in reformulated gasoline.

 U.S. government regulations require ethanol dispensing pumps to be identified by a small, square, orange and black label with the common abbreviation or the appropriate percentage for that region.

## 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.

#### 10-4 Technical and consumer information

## Reformulated gasoline

Some fuel suppliers are now producing reformulated gasolines. These gasolines are specially designed to reduce vehicle emissions. NISSAN supports efforts towards cleaner air and suggests that you use reformulated gasoline when available.

## Gasoline containing oxygenates

Some fuel suppliers sell gasoline containing oxygenates such as ethanol, MTBE and methanol with or without advertising their presence. NISSAN does not recommend the use of fuels of which the oxygenate content and the fuel compatibility for your vehicle 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 fuel 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.

## Fuel containing MMT

MMT, or methylcyclopentadienyl manganese tricarbonyl, is an octane boosting additive. NISSAN does not recommend the use of fuel containing MMT. Such fuel may adversely affect vehicle performance, including the emissions control system. Note that while some fuel pumps label MMT content, not all do, so you may have to consult your gasoline retailer for more details.

#### Aftermarket fuel additives

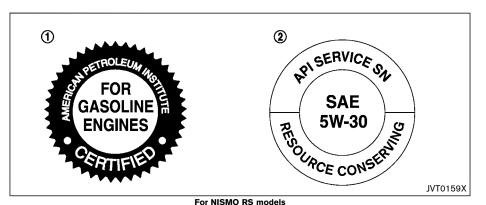
NISSAN does not recommend the use of any aftermarket fuel additives (for example, fuel injector cleaner, octane booster, intake valve deposit removers, etc.) which are sold commercially. Many of these additives intended for gum, varnish or deposit removal may contain active solvent or similar ingredients that can be harmful to the fuel system and engine.

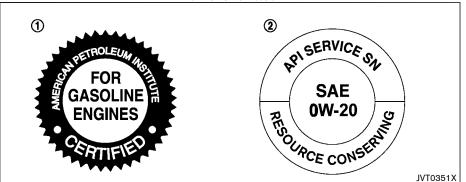
## Octane rating tips

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, it is recommended you 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 will 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. It is recommended you visit a NISSAN dealer for servicing.

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.





**Except for NISMO RS models** 

- API certification mark
- 2 API service symbol

## ENGINE OIL AND OIL FILTER RE-COMMENDATION

## Selecting the correct oil

It is essential to choose the correct grade, quality, and viscosity engine oil to ensure satisfactory engine life and performance, see "Capacities and recommended fluids/lubricants" (P.10-2). 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 an engine oil and filter other than 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.

## AIR CONDITIONING SYSTEM RE-FRIGERANT AND LUBRICANT RE-COMMENDATIONS

The air conditioning system in your NISSAN vehicle must be charged with the refrigerant HFC-134a (R-134a) and the oil, NISSAN A/C system oil Type R or the exact equivalents.



The use of any other refrigerant or oil may cause severe damage to the air conditioning system and may require the replacement of all air conditioner system components.

The refrigerant HFC-134a (R-134a) in your NISSAN vehicle will not harm the earth's ozone layer. Although this refrigerant does not affect the earth's atmosphere, certain governmental regulations require the recovery and recycling of any refrigerant during automotive air conditioning system service. A NISSAN dealer has the trained technicians and equipment needed to recover and recycle your air conditioning system refrigerant.

It is recommended you visit a NISSAN dealer when servicing your air conditioning system.

#### 10-8 Technical and consumer information

## **SPECIFICATIONS**

## **ENGINE**

Model		MR16DDT	
Туре		Gasoline, 4-cycle, DOHC	
Cylinder arrangement		4-cylinder, in-line	
Bore × Stroke	in (mm)	3.138 × 3.193 (79.7 × 81.1)	
Displacement	cu in (cm <sup>3</sup> )	98.78 (1,618)	
Firing order		1-3-4-2	
Idle speed rpm		Maradi atau at in a a a a a a	
Ignition timing (B.T.D.C.)	degree/rpm	No adjustment is necessary.	
Spark plug	Standard	DILKAR7C9H (for NISMO RS models) DILKAR7E9HS (except for NISMO RS models)	
Spark plug gap (Normal)	in (mm)	0.035 (0.9)	
Camshaft operation		Timing chain	

This spark ignition system complies with the Canadian standard ICES-002.

## WHEELS AND TIRES

## Road wheel

Туре		Size	Offset in (mm)	
Conven- tional		17 × 7J	1.85 (47)	
	NISMO models	18 × 7J	1.85 (47)	
Spare		16 × 4T	1.18 (30)	
	NISMO RS models	17 × 4T	1.18 (30)	

#### Tire

Туре		Size	Pressure PSI (kPa) [Cold]	
Conventional		P215/55- R17 93V	33 (230)*1 36 (250)*2 35 (240)*3	
	NISMO models	225/45R18 95Y	33 (230)*1 35 (240)*3	
		T135/80- D16 101M*1*2		
Spare		T135/90- D16 102M*3	60 (420)	
	NISMO RS models	T135/70- D17 92M		

2WD MT model 2WD CVT model

\*3: AWD model

### DIMENSIONS AND WEIGHTS

Overall length	in (mm)	162.8 (4,135)*1 162.4 (4,125)*2 164.0 (4,165)*3 163.8 (4,160)*4
Overall width	in (mm)	69.5 (1,765) 69.7(1,770)*5
Overall height	in (mm)	61.8 (1,570)
Front tread	in (mm)	60.0 (1,525)
Rear tread	in (mm)	60.0 (1,525)*6 59.3 (1,505)*7
Wheelbase	in (mm)	99.6 (2,530)
Gross Vehicle Weight Rating (GVWR)	lb (kg)	See the F.M.V.S.S. or
Gross Axle Weight Rating (GAWR)		C.M.V.S.S. certification label on the driver's side center pillar.
Front	lb (kg)	,
Rear	lb (kg)	

With front license plate bracket

Without front license plate bracket

With front license plate bracket (NISMO models)

Without front license plate bracket (NISMO models)

NISMO models for 2WD model

for AWD model

## WHEN TRAVELING OR **REGISTERING IN ANOTHER** COUNTRY

When planning to travel in another country, you should first find out if the fuel available is suitable for your vehicle's engine.

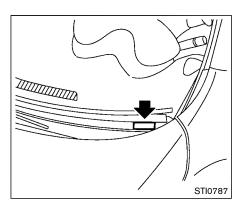
Using fuel with an octane rating that is too low may cause engine damage. All gasoline vehicles must be operated with unleaded gasoline. Therefore, avoid taking your vehicle to areas where appropriate fuel is not available.

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.

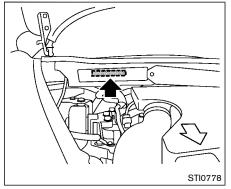
When any vehicle is to be taken into another country, state, province or district and registered, its modifications, transportation, and registration are the responsibility of the user, NISSAN is not responsible for any inconvenience that may result.

## **VEHICLE IDENTIFICATION**



VEHICLE IDENTIFICATION NUMBER (VIN) PLATE

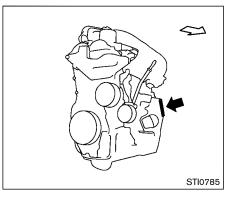
The vehicle identification number plate is attached as shown. This number is the identification for your vehicle and is used in the vehicle registration.



VEHICLE IDENTIFICATION NUMBER (chassis number)

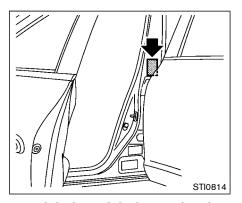
The vehicle identification number is located as shown.

Remove the cover to access the number.



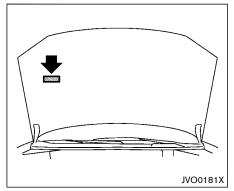
**ENGINE SERIAL NUMBER** 

The number is stamped on the engine as shown.



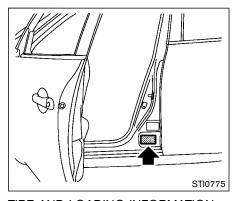
F.M.V.S.S./C.M.V.S.S. CERTIFICATION LABEL

The Federal/Canadian Motor Vehicle Safety Standards (F.M.V.S.S./C.M.V.S.S.) certification label is affixed as shown. This label contains valuable vehicle information, such as: Gross Vehicle Weight Ratings (GVWR), Gross Axle Weight Rating (GAWR), month and year of manufacture, Vehicle Identification Number (VIN), etc. Review it carefully.



**EMISSION CONTROL INFORMATION** LABEL

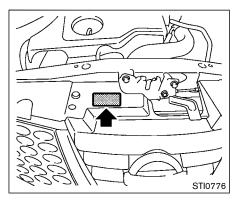
The emission control information label is attached to the underside of the hood as shown.



TIRE AND LOADING INFORMATION LABEL

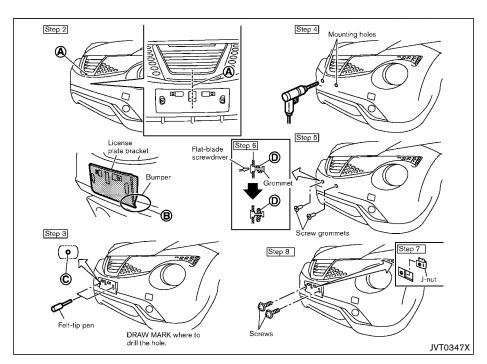
The cold tire pressure is shown on the Tire and Loading Information label affixed to the pillar as shown.

### **INSTALLING FRONT LICENSE PLATE**



AIR CONDITIONER SPECIFICATION LABEL

The air conditioner specification label is attached to the engine compartment as shown.



Use the following steps to mount the license plate:

Before mounting the license plate, confirm that the following parts are enclosed in the plastic bag.

- License plate bracket
- J-nut × 2
- Screw × 2
- Screw grommet × 2
- 1. Park the vehicle on flat, level ground.
- Locate the center position (A) as illustrated.
   Make sure the side end surface of the license plate bracket is aligned with the bumper (B).
- 3. Mark the center of the holes © with a felt-tip pen.
- Carefully drill the two pilot holes using a 0.39 in (10 mm) drill bit at the marked locations. (Be sure that the drill only goes through the bumper fascia.)
- 5. Insert grommets into the hole on the fascia.
- Insert a flat-blade screwdriver into the grommet hole to add a 90° turn onto the part (D).
- Insert a J-nut into the license plate bracket before placing the license plate bracket on the fascia.

- 8. Install the license plate bracket with the screws.
- Install the license plate with bolts that are not longer than 0.55 in (14 mm).

#### 10-14 Technical and consumer information

#### VEHICLE LOADING INFORMATION

# WARNING

- It is extremely dangerous to ride in a cargo area inside the vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

### **TERMS**

It is important to familiarize yourself with the following terms before loading your vehicle:

 Curb Weight (actual weight of your vehicle) - vehicle weight including: standard and optional equipment, fluids, emergency tools, and spare

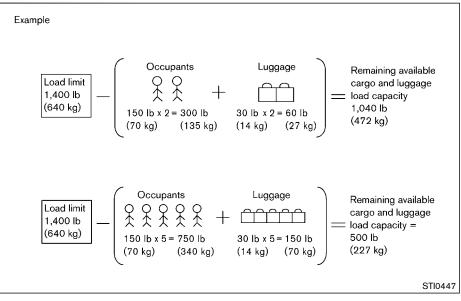
- tire assembly. This weight does not include passengers and cargo.
- GVW (Gross Vehicle Weight) curb weight plus the combined weight of passengers and cargo.
- GVWR (Gross Vehicle Weight Rating) - maximum total combined weight of the unloaded vehicle, passengers, luggage, hitch, trailer tongue load and any other optional equipment. This information is located on the F.M.V.S.S./C.M.V.S.S. label.
- GAWR (Gross Axle Weight Rating) maximum weight (load) limit specified for the front or rear axle. This information is located on the F.M.V.S.S./C.M. V.S.S. label.
- GCWR (Gross Combined Weight Rating) - The maximum total weight rating of the vehicle, passengers, cargo, and trailer.
- Vehicle Capacity Weight, Load limit, Total load capacity - maximum total weight limit specified of the load (passengers and cargo) for the vehicle. This is the maximum combined

- weight of occupants and cargo that can be loaded into the vehicle. If the vehicle is used to tow a trailer, the trailer tongue weight must be included as part of the cargo load. This information is located on the Tire and Loading Information label.
- Cargo capacity permissible weight of cargo, the subtracted weight of occupants from the load limit.

### VEHICLE LOAD CAPACITY

Do not exceed the load limit of your vehicle shown as "The combined weight of occupants and cargo" on the Tire and Loading Information label. Do not exceed the number of occupants shown as "Seating Capacity" on the Tire and Loading Information label.

To get "the combined weight of occupants and cargo", add the weight of all occupants, then add the total luggage weight. Examples are shown in the following illustration.



Steps for determining correct load limit

- Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs" on your vehicle's placard.
- 2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.

- 4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the XXX amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400 750 (5 x 150) = 650 lbs) or (640 340 (5 x 70) = 300 kg.)
- 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.

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" (P.10-17).)

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/CMVSS 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 seatbacks. In a sudden stop or collision, unsecured cargo could cause personal injury.
- Do not load your vehicle any heavier than the GVWR or the maximum front and rear GAWRs. If you do, parts of vour vehicle can break, tire damage could occur, or it can change the way your vehicle handles. This could result in

- loss of control and cause personal injury.
- Overloading not only can shorten the life of your vehicle and the tire, but can 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 (CVT) vehicle with all four wheels on the ground (flat towing). Doing so WILL DA-MAGE internal transmission parts due to lack of transmission lubrication.
- DO NOT tow an All-Wheel Drive (AWD) vehicle with any of the wheels on the ground. Doing so may cause serious and expensive damage to the powertrain.
- For emergency towing procedures refer to "Towing your vehicle" (P.6-

13).

## CONTINUOUSLY VARIABLE TRANS-MISSION (CVT)

## All-Wheel Drive (AWD) models:

Do not tow an AWD vehicle with any of the wheels on the ground.

## Two-Wheel Drive (2WD) models:

To tow a vehicle equipped with a Continuously Variable Transmission (CVT), an appropriate vehicle dolly **MUST** be placed under the towed vehicle's driving wheels. Always follow the dolly manufacturer's recommendations when using their product.

#### MANUAL TRANSMISSION

- Always tow with the manual transmission in Neutral.
- Your vehicle speed should never exceed 70 MPH (112 km/h) when flat towing your vehicle.
- After towing 500 miles (805 km), start and idle the engine with the transmission in Neutral for two minutes. Failure to idle the engine after every 500 miles (805 km) of towing may cause damage to the transmission's internal parts.

### 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 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 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 Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.



# **WARNING**

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure.

# EMISSION CONTROL SYSTEM WARRANTY

Your vehicle is covered by the following emission warranties.

#### For USA:

- Emission Defects Warranty
- Emissions Performance Warranty

Details of these warranties may be found with other vehicle warranties in your Warranty Information Booklet which comes with your vehicle. If you did not receive a Warranty Information Booklet, or it has become lost, you may obtain a replacement by writing to:

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

#### For Canada:

Emission Control System Warranty

Details of this warranty may be found with other vehicle warranties in your Warranty Information Booklet which comes with your vehicle. If you did not receive a Warranty Information Booklet, or it has become lost, you may obtain a replacement by writing to:

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

#### REPORTING SAFETY DEFECTS

For USA

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying NISSAN.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or NISSAN.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to http://www.safercar.gov; or write to: Administrator, NHTSA, 400 Seventh Street, SW., Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

You may notify NISSAN by contacting our Consumer Affairs Department, toll-

free, at 1-800-NISSAN-1.

For Canada

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada in addition to notifying NISSAN.

If Transport Canada receives complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may request that NISSAN conduct a recall campaign. However, Transport Canada cannot become involved in individual problems between you, your dealer, or NISSAN.

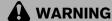
You may contact Transport Canada's Defect Investigations and Recalls Division toll free at 1-800-333-0510. You may also report safety defects online at: https://wwwapps.tc.gc.ca/Saf-Sec-Sur/7/ PCDB-BDPP/Index.aspx.

Additional information concerning motor vehicle safety may be obtained from Transport Canada's Road Safety Infor-

## **READINESS FOR INSPECTION/** MAINTENANCE (I/M) TEST

mation Centre at 1-800-333-0371 or online at www.tc.gc.ca/roadsafety (English speakers) or www.tc.gc.ca/securiteroutiere (French speakers).

To notify NISSAN of any safety concerns please contact our Consumer Information Centre toll free at 1-800-387-0122



A vehicle equipped with All-Wheel Drive (AWD) should never be tested using a two wheel dynamometer (such as the dynamometers used by some states for emissions testing), or similar equipment. Make sure you inform test facility personnel that your vehicle is equipped with AWD before it is placed on a dynamometer. Using the wrong test equipment may result in transmission damage or unexpected vehicle movement which could result in serious vehicle damage or personal injury.

Due to legal requirements in some states/areas or 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".

It is recommended you visit a NISSAN dealer to set "ready condition" or to prepare the vehicle for testing.

## **EVENT DATA RECORDERS (EDR)**

This vehicle is equipped with an Event Data Recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.
- · Sounds are not recorded.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

NOTE: EDR data are recorded by your vehicle only if a nontrivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g. name, gender, age and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type

of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer and NISSAN dealer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR. EDR data will only be accessed with the consent of the vehicle owner or lessee or as otherwise required or permitted by law.

# OWNER'S MANUAL/SERVICE MANUAL ORDER INFORMATION

Genuine NISSAN Service Manuals for this model year and prior can be purchased. A genuine NISSAN Service Manual is the best source of service and repair information for your vehicle. This manual is the same one used by the factory trained technicians working at a NISSAN dealer. Genuine NISSAN Owner's Manuals can also be purchased.

#### In the USA:

For current pricing and availability of genuine NISSAN Service Manuals contact:

www.nissan-techinfo.com

For current pricing and availability of genuine NISSAN Owner's Manuals contact:

1-800-247-5321

#### In Canada:

To purchase a copy of a genuine NISSAN Service Manual or Owner's Manual for this model year and prior please contact a NISSAN dealer. For the phone number and location of a NISSAN dealer in your area call the NISSAN Information Center at 1-800-387-0122 and a bilingual NISSAN representative will assist you.

# 11 Index

A	
ABS (Anti-lock Braking System)	5-36
Adjusting the screen	4-11
Advanced air bag system	1-44
Air bag system	
Advanced air bag system	1-44
Front passenger air bag and status light	1-46
Front-seat mounted side-impact	
supplemental air bag system	1-51
Roof-mounted curtain side-impact	
supplemental air bag system	
	1-54
Air bag warning light 1-54, 5	
	8-14
Air conditioner	
Air conditioner operation	4-28
Air conditioner service	
Air conditioner specification label 10	0-13
Air conditioning system refrigerant and	
lubricant recommendations 4-35,	
	4-35
	4-31
Alarm, How to stop alarm (see vehicle	0 0 4
security system)	
Alcohol, drugs and driving	5-7 5-29
	5-36 2-16
Anti-lock braking system (ABS) warning light 2 Appearance care	2-10
Exterior appearance care	7-0
Interior appearance care	
Application download	
Around View® Monitor	

Audible reminders	. 3-5 2-13
В	
Back door (See liftgate)	3-16 8-10 8-20 2-41 8-12 5-12 4-89 4-94 4-71 1-34
Brake Anti-lock Braking System (ABS) Brake and clutch fluid Brake system Parking brake operation Warning light Break-in schedule Brightness control Instrument panel Bulb check/instrument panel Bulb replacement	5-35 5-25 2-16 5-27

Cabin air filter         4-38           Capacities and recommended fluids/lubricants         10-2           Car phone or CB radio         4-80           Cargo cover         2-48           Cargo floor box         2-48           Catalytic converter, Three way catalyst         5-3           CD/USB memory care and cleaning         4-73           Chassis and body maintenance         9-11           Check tire pressure warning         2-9           Child restraints         1-18           Booster seats         1-34           LATCH system         1-20           Precautions on child restraints         1-19           Child safety         1-16           Child safety rear door lock         3-6           Chimes, Audible reminders         2-23           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-5           Coat hook         2-48           Cockpit         2-5           Cold weather driving         5-36           Compact Disc (CD) player (See audio system)         4-65           Continuously Variable Transmission (CVT) fluid         8-6
recommended fluids/lubricants
Car phone or CB radio         4-86           Cargo cover         2-48           Cargo floor box         2-48           Catalytic converter, Three way catalyst         5-5           CD/USB memory care and cleaning         4-73           Chassis and body maintenance         9-11           Child restraints         1-16           Booster seats         1-32           LATCH system         1-20           Precautions on child restraints         1-16           Child safety         1-16           Child safety rear door lock         3-6           Chimes, Audible reminders         2-23           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-6           Cockpit         2-36           Cold weather driving         5-36           Compact Disc (CD) player (See         4-65
Cargo floor box         2-44           Catalytic converter, Three way catalyst         5-3           CD/USB memory care and cleaning         4-73           Chassis and body maintenance         9-11           Check tire pressure warning         2-6           Child restraints         1-18           Booster seats         1-20           Precautions on child restraints         1-15           Child safety         1-16           Child safety rear door lock         3-6           Chimes, Audible reminders         2-25           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-5           Coat hook         2-44           Cockpit         2-5           Cold weather driving         5-35           Compact Disc (CD) player (See         4-65
Cargo floor box         2-44           Catalytic converter, Three way catalyst         5-3           CD/USB memory care and cleaning         4-73           Chassis and body maintenance         9-11           Check tire pressure warning         2-6           Child restraints         1-18           Booster seats         1-20           Precautions on child restraints         1-15           Child safety         1-16           Child safety rear door lock         3-6           Chimes, Audible reminders         2-25           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-5           Coat hook         2-44           Cockpit         2-5           Cold weather driving         5-35           Compact Disc (CD) player (See         4-65
CD/USB memory care and cleaning
Chassis and body maintenance         9-11           Check tire pressure warning         2-5           Child restraints         1-18           Booster seats         1-3           LATCH system         1-20           Precautions on child restraints         1-16           Child safety         1-16           Child safety rear door lock         3-6           Chimes, Audible reminders         2-23           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-6           Cockpit         2-4           Cockpit         2-5           Cold weather driving         5-36           Compact Disc (CD) player (See audio system)         4-65
Check tire pressure warning         2-5           Child restraints         1-18           Booster seats         1-34           LATCH system         1-20           Precautions on child restraints         1-11           Child safety         1-16           Child safety rear door lock         3-6           Chimes, Audible reminders         2-23           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-5           Coat hook         2-48           Cockpit         2-5           Cold weather driving         5-38           Compact Disc (CD) player (See audio system)         4-65
Child restraints         1-18           Booster seats         1-34           LATCH system         1-20           Precautions on child restraints         1-11           Child safety         1-16           Child safety rear door lock         3-6           Chimes, Audible reminders         2-23           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-8           Clutch fluid         8-6           Cockpit         2-3           Cold weather driving         5-36           Compact Disc (CD) player (See audio system)         4-68
Booster seats
LATCH system         1-20           Precautions on child restraints         1-18           Child safety         1-16           Child safety rear door lock         3-6           Chimes, Audible reminders         2-23           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-6           Coat hook         2-4           Cockpit         2-5           Cold weather driving         5-36           Compact Disc (CD) player (See audio system)         4-65
Precautions on child restraints         1-16           Child safety         1-16           Child safety rear door lock         3-6           Chimes, Audible reminders         2-25           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-5           Coat hook         2-48           Cockpit         2-5           Cold weather driving         5-39           Compact Disc (CD) player (See audio system)         4-65
Child safety         1-16           Child safety rear door lock         3-6           Chimes, Audible reminders         2-23           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-6           Coat hook         2-48           Cockpit         2-5           Cold weather driving         5-39           Compact Disc (CD) player (See audio system)         4-65
Child safety rear door lock         3-6           Chimes, Audible reminders         2-23           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-6           Coat hook         2-48           Cockpit         2-5           Cold weather driving         5-36           Compact Disc (CD) player (See audio system)         4-65
Chimes, Audible reminders         2-23           Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-5           Coat hook         2-48           Cockpit         2-5           Cold weather driving         5-36           Compact Disc (CD) player (See audio system)         4-65
Circuit breaker, Fusible link         8-18           Cleaning exterior and interior         7-2, 7-5           Clutch fluid         8-5           Coat hook         2-48           Cockpit         2-5           Cold weather driving         5-39           Compact Disc (CD) player (See audio system)         4-65
Cleaning exterior and interior       7-2, 7-5         Clutch fluid       8-5         Coat hook       2-45         Cockpit       2-3         Cold weather driving       5-39         Compact Disc (CD) player (See audio system)       4-65
Clutch fluid         8-5           Coat hook         2-48           Cockpit         2-5           Cold weather driving         5-39           Compact Disc (CD) player (See audio system)         4-65
Coat hook         2-48           Cockpit         2-5           Cold weather driving         5-38           Compact Disc (CD) player (See audio system)         4-68
Cockpit 2-5 Cold weather driving 5-39 Compact Disc (CD) player (See audio system) 4-65
Cold weather driving
Compact Disc (CD) player (See audio system)
audio system) 4-65
Continuously Variable Transmission (CVT) fluid
Control buttons and function
Controls, Steering wheel audio controls
Coolant Wheel audio controls 4-73
Capacities and
recommended fluids/lubricants
Changing engine coolant 8-5
Checking engine coolant level
High temperature warning light 2-18

Corrosion protection	7 Capacities and	Capacities and
Cover, Cargo cover 2-4	recommended fluids/lubricants	recommended fluids/lubricants
Cruise control		Continuously Variable Transmission
Cup holders 2-4		(CVT) fluid 8-8
CVT, Driving with CVT (Continuously	Checking engine coolant level 8-5	Engine coolant 8-4
Variable Transmission)		Engine oil 8-5
,	Coolant temperature gauge 2-10	Window washer fluid 8-9
D	Emergency engine shut off 5-11, 6-3	FM-AM radio with Compact Disc (CD) player 4-45
	Engine block heater 5-40	FM-AM-SAT radio with Compact Disc (CD)
Daytime running light system 2-4	2 Engine compartment check locations 8-3	player (Type A) 4-53
Defroster switch, Rear window and outside	Engine cooling system 8-4	FM-AM-SAT radio with Compact Disc (CD)
mirror defroster switch 2-3	B Engine oil 8-5	player (Type B)
Dimensions and weights 10-1	Engine oil and oil filter recommendation 10-7	Fog light switch 2-44
Displaying Climate control 4-3	4 Engine oil viscosity 10-8	Front manual seat adjustment 1-3
Door open warning light 2-1	7 Engine serial number 10-11	Front passenger air bag and status light 1-46
Drive belt 8-1	2 Engine specifications 10-9	Front seat, Front seat adjustment 1-3
Driving	High temperature warning light 2-18	Front-seat active head restraints 1-9
All-wheel drive (AWD) 5-2	If your vehicle overheats 6-11	Fuel
Cold weather driving 5-3	Starting the engine 5-13	Capacities and
Driving with CVT (Continuously	Event Data Recorders (EDR) 10-22	recommended fluids/lubricants 10-2
Variable Transmission) 5-1	Exhaust gas (carbon monoxide) 5-2	Distance to empty 2-13
Driving with manual transmission 5-1		Fuel economy 5-29
Precautions when starting and driving 5-	2 Extended storage fuse warning 2-9	Fuel information 10-4
Safety precautions 5-		Fuel octane rating 10-4
	F	Fuel-filler cap
E		Fuel-filler door 3-18
	F.M.V.S.S./C.M.V.S.S. certification label 10-12	Gauge 2-11
Economy, Fuel 5-2	9 Filter	Fuel Efficient Driving Tips 5-28
Elapsed time 2-13, 2-3		Fuses 8-17
Electric power steering 5-3		Fusible links 8-18
Electric power steering warning light 2-1		
Emission control information label 10-1		G
Emission control system maintenance 9-	B Flat towing 10-18	
Emission control system warranty 10-2	Floor mat cleaning	Gas cap 3-18
Engine	Fluid	Gauge 2-5
Before starting the engine 5-1	Brake and clutch fluid 8-9	Engine coolant temperature gauge 2-10
Break-in schedule 5-2		Fuel gauge 2-11

Odometer 2-7
Speedometer 2-7
Tachometer2-9
Trip computer 2-13
General maintenance
Giving voice commands
Glove box
2 40
Н
He and a solve fleebook like
Hazard warning flasher switch
Head restraints/headrests
Bulb replacement
=
Xenon headlights
Heated seats 2-45
Heater
Engine block heater 5-40
Heater and air conditioner operation 4-28
Help voice commands 4-100
High temperature warning light 2-18
Hood release 3-15
Horn 2-44
How to say numbers 4-98
How to use brightness control button 4-8
How to use the APPS-i button 4-5
How to use the back button 4-5
How to use the CAMERA button 4-8
How to use the ON-OFF button/Volume
control knob 4-8
Ignition switch 5-9
Immobilizer system
In-cabin microfilter

Indicator lights
J
Jump starting 6-9
K
Keyless entry With Intelligent Key system (See Intelligent Key system)
L
Labels       1-54         Air bag warning labels       10-13         Air conditioner specification label       10-12         Emission control information label       10-12         Engine serial number       10-11         F.M.V.S.S./C.M.V.S.S. certification label       10-12

Tire and Loading information label 8-30, 10-12 Vehicle identification number (VIN) 10-11 LATCH system 1-20 License plate, Installing front license plate 3-16 Light 3-16 Light Air bag warning light 1-54 Bulb replacement 8-23 Fog light switch 2-44 Headlight switch 2-44 Headlights bulb replacement 8-23 Indicator lights 2-21 Interior lights 2-54 Map lights 2-54 Map lights 2-54 Replacement 8-23 Warning/indicator lights and audible reminders 2-16 Xenon headlights 2-39 Lights, Exterior and interior light replacement 8-26 Loading information (See vehicle
Automatic door locks
Liftgate lock 3-16
Power door lock 3-4
_oose fuel cap warning 2-8, 3-19
_ow fuel warning light 2-18
Low tire pressure warning light
pressure monitoring system (TPMS)) 5-3
M
Maintenance Battery

Inside the vehicle	9-3
Maintenance log	9-15
Maintenance precautions	
Maintenance requirements	
Maintenance schedules	
Maintenance under severe	
driving conditions	9-14
Outside the vehicle	
Seat belt maintenance	1-15
Standard maintenance	9-7
Maintenance schedules	. 9-7
Making a call	4-92
Malfunction indicator light (MIL)	2-22
Manual air conditioner	4-29
Manual front seat adjustment	. 1-3
Map lights	
Mechanical key (Intelligent Key system)	. 3-3
Meter	
Trip computer	2-13
Meters and gauges	. 2-5
Instrument brightness control	2-43
Mirror	
Inside mirror	3-21
Outside mirrors	3-22
Vanity mirror	3-23
Monitor, RearView Monitor	
Moonroof	2-52
Moving Object Detection (MOD)	4-24
••	
N	
Navigation system voice commands	4-99
New vehicle break-in	5-27
NISSAN Vehicle Immobilizer System	
NISSAN Voice Recognition System	4-96
NissanConnect App smartphone integration	4-75
cacoioot /ipp omarphone integration	

0	
Odometer	2-7
Off-road recovery	
Oil	
Capacities and	
recommended fluids/lubricants	10-2
Changing engine oil and filter	8-6
Checking engine oil level	8-5
Engine oil	
Engine oil viscosity	10-8
	4-91
	2-12
	3-22
- · · · · · · · · · · · · · · · · · · ·	6-11
Owner's Manual/Service Manual	
order information 1	0-22
_	
Р	
Panic alarm	3-13
Parking	
Brake break-in	5-35
Parking brake operation	5-25
Parking on hills	5-33
Phone	
Car phone or CB radio	4-80
Phone settings	4-96
Power	
	5-34
	2-52
Power door lock	3-4
	2-46
Power windows	2-50
Precautions	
Audio operation	
Braking precautions	5-35

Child restraints Cruise control Driving safety Maintenance Seat belt usage Supplemental restraint system When starting and driving Push starting Push-button ignition switch  5-9	5-26 5-7 8-2 1-10 1-38 5-2
R	
Radio	4-35
Car phone or CB radio	4-80
Steering wheel audio controls	4-73
Rapid air pressure loss	
Readiness for inspection/maintenance	
(I/M) test	10-21
Rear door lock, Child safety rear door lock	3-6
Rear seats	
Rear window and outside mirror	
defroster switch	2-38
Rear window wiper and washer switch	
RearView Monitor	
Recorders, Event data	
Registering in another country	
Registering with NissanConnect App	
Remote keyless entry function, For Intelligent	7 / (
Key system	3-10
Reporting safety defects	
Roadside assistance program	
Rollover	
Roof, Moonroof	
1 XOO1, 1810 OT11 OOT	2-00

3	
Safety	
Child seat belts	1-16
Reporting safety defects	
Seat adjustment	
Front manual seat adjustment	1-3
Front seats	
Seat belt(s)	
Child safety	1-16
Infants	1-17
Injured persons	1-12
Larger children	1-17
Precautions on seat belt usage	1-10
Pregnant women	1-12
Seat belt cleaning	
Seat belt extenders	1-15
Seat belt hooks	1-15
Seat belt maintenance	1-15
Seat belt warning light	2-20
Seat belts	1-10
Seat belts with pretensioners	1-52
Shoulder belt height adjustment	1-14
Small children	1-17
Three-point type	1-12
Seat(s) Heated seats	2-45
Seats	
Security system (NISSAN Vehicle Immobilizer	1-2
System), Engine start	2-34
Security system, Vehicle security system	2-34
Servicing air conditioner	4-35
Setting climate eco	
Shift lever	+ 54
Shift lock release	5-18
Shift lock release	5 10
Transmission	5-18
	- 10

Shifting	
CVT (Continuously Variable Transmission)	5-14
Manual transmission	
Shoulder belt height adjustment, For	
front seats	1-14
Siri® Eyes Free	4-76
SOURCE select switch	4-73
Spare tire 8-41,	10-9
Spark plugs	8-13
Speedometer	. 2-7
Standard maintenance	. 9-7
Starting	
Before starting the engine	5-12
Jump starting	. 6-9
Precautions when starting and driving	. 5-2
Push starting	
Starting the engine	
Status light, Front passenger air bag	1-46
Steering	
Electric power steering	
Steering wheel switch for audio controls	4-73
Tilting steering column	3-20
Storage	2-47
Sun visors	3-21
Supplemental air bag warning labels	1-54
Supplemental air bag warning light 1-54,	
Supplemental restraint system	1-38
Precautions on supplemental	
restraint system	1-38
Switch	
Audio control steering wheel switch	
Autolight switch	
Fog light switch	
Hazard warning flasher switch	
Headlight switch	
Power door lock switch	. 3-5

Rear window and outside mirror defroster switch  Turn signal switch  Vehicle dynamic control (VDC) off switch	2-38 2-43 2-44
Т	
Tachometer	2-9
Temperature display	2-12
Temperature gauge, Engine coolant temperature gauge	2-10
Text messaging	4-93
Theft (NISSAN Vehicle Immobilizer System),	
Engine start	2-34
Three-way catalyst	5-3
Tilt steering column	3-20
Tire pressure, Low tire pressure warning light	2-18
Tires	
Flat tire	
Low tire pressure warning system Tire and Loading information label 8-30, 1	
Tire chains	
Tire dressing	
Tire pressure	
Tire pressure monitoring	
system (TPMS) 5-3	
Tire rotation	8-38
Types of tires	8-36
Uniform tire quality grading1	0-19
Wheel/tire size	10-9
Wheels and tires	8-28
Tonneau cover (see cargo cover)	
Towing	4-4
	0-18
Tow truck towing	
Towing a trailer 1	

TPMS, Tire pressure monitoring system 5-3
TPMS, Tire pressure warning system 6-3
Trailer towing 10-18
Transmission
Continuously Variable Transmission
(CVT) fluid 8-8
Driving with CVT (Continuously
Variable Transmission) 5-14
Driving with manual transmission 5-19
Transmission shift lever lock release 5-18
Transmitter, With Intelligent Key system
(See Intelligent Key system)
Traveling or registering in another country 10-10
Trip computer 2-13
Turn signal switch 2-43
U
Underbody cleaning
Uniform tire quality grading

Voice CommandVoice Prompt Interrupt	
w	
Warning	
Hazard warning flasher switch	
Lights	2-16
Tire pressure monitoring	
system (TPMS) 5-3	3, 6-3
Warning lights, indicator lights and audible reminders	0-15
Warning labels, Air bag warning labels	
Warning light	1 04
Air bag warning light 1-54,	2-20
Anti-lock braking system (ABS)	
warning light	2-16
AWD warning light	5-31
Brake warning light	2-16
Door open warning light	2-17
Electric power steering warning light	2-17
Intelligent Key system warning light Low fuel warning light	2-18 2-18
Low tire pressure warning light	2-18
Seat belt warning light	2-20
Warranty, Emission control system warranty	
Washer switch	
Rear window wiper and washer switch	2-37
Wiper and washer switch	
Washing	
Waxing	. 7-3
Weights (See dimensions and weights)	
Wheel/tire size	
Care of wheels	
Cleaning aluminum alloy wheels	
Window washer fluid	

Window(s)	
Cleaning	. 7-3
Power windows	
Wiper	
Rear window wiper and washer switch	2-3
Rear window wiper blade	8-16
Wiper and washer switch	2-36
Wiper blades	8-1
Wiper and washer switch	2-36
<u> </u>	
X	
Xenon headlights	2-39

# **MEMO**

# **MEMO**

# **MEMO**

#### GAS STATION INFORMATION

#### **FUEL INFORMATION:**

#### **Except for NISMO RS models:**

NISSAN recommends the use of unleaded premium gasoline with an octane rating of at least 91 AKI (Anti-Knock Index) number (Research octane number 96).

If unleaded premium gasoline is not available, you may use unleaded regular gasoline with an octane rating of at least 87 AKI number (Research octane number 91), but you may notice a decrease in performance.

#### For NISMO RS models:

Use unleaded premium gasoline with an octane rating of at least 91 AKI (Anti-Knock Index) number (Research octane number 96).

If unleaded premium gasoline is not available, unleaded regular gasoline with an octane rating of at least 87 AKI number (Research octane number 91) may be temporarily used, but only under the following precautions:

- Have the fuel tank filled only partially with unleaded regular gasoline, and fill up with unleaded premium gasoline as soon as possible.
- Avoid full throttle driving and abrupt acceleration.

Use unleaded premium gasoline for maximum vehicle performance.



- Using a fuel other than that specified could adversely affect the emission control system, and may also affect warranty coverage.
- Under no circumstances should a leaded gasoline be used, because this will damage the three-way catalyst.
- Do not use E-15 or E-85 fuel in your vehicle. Your vehicle is not designed to run on E-15 or E-85 fuel. Using E-15 or E-85 fuel in a vehicle not specifically designed for E-15 or E-85 fuel can adversely affect the emission control devices and systems of the vehicle. Damage caused by such fuel is not covered by the NISSAN new vehicle limited warranty.
- U.S. government regulations require ethanol dispensing pumps to be identified by a small, square, orange

and black label with the common abbreviation or the appropriate percentage for that region.

For additional information, see "Capacities and recommended fluids/lubricants" (P.10-2).

# ENGINE OIL RECOMMENDATION:

#### For NISMO RS models:

- Genuine "Nissan Motor Oil 5W-30 SN"
   Except for NISMO RS models:
- Genuine "Nissan Motor Oil 0W-20 SN"

See "Capacities and recommended fluids/lubricants" (P.10-2) for engine oil and oil filter recommendation.

#### COLD TIRE PRESSURES:

The label is typically located on the driver side center pillar. For additional information, see "Wheels and tires" (P.8-28).

## NEW VEHICLE BREAK-IN PROCE-DURES RECOMMENDATION:

During the first 1,200 miles (2,000 km) of vehicle use, follow the recommendations outlined in the "Break-in schedule" (P.5-27) of this Owner's Manual. Follow these recommendations for the future reliability and economy of your new vehicle.



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