

D

Е

F

Н

K

L

M

Ν

0

Р

CONTENTS

WITHOUT 7 INCH DISPLAY	PERIODIC MAINTENANCE	21
SYSTEM DESCRIPTION5	IN-CABIN MICROFILTER	
SWITCHES AND THEIR CONTROL FUNC-	Exploded View	
TION5	Removal and Installation	
System Description5		
•	REMOVAL AND INSTALLATION	22
AIR DISTRIBUTION7	A/C CONTROL	
System Description7		
PRECAUTION 8	Exploded ViewRemoval and Installation	
PRECAUTIONS8	A/C DISPLAY	24
	Exploded View	
FOR USA AND CANADA8	Removal and Installation	
FOR USA AND CANADA : Precaution for Supple-	A (0 A LITO A LID	
mental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"8	A/C AUTO AMP.	
SEAT BELT FRE-TENSIONER	Exploded ViewRemoval and Installation	
FOR MEXICO8	Removal and installation	25
FOR MEXICO : Precaution for Supplemental Re-	AMBIENT SENSOR	26
straint System (SRS) "AIR BAG" and "SEAT BELT	Exploded View	
PRE-TENSIONER"	Removal and Installation	26
Precaution for Procedure without Cowl Top Cover9 Precautions For Xenon Headlamp Service9	IN-VEHICLE SENSOR	27
Working with HFC-134a (R-134a)9	Exploded View	
General Refrigerant Precaution10	Removal and Installation	
Refrigerant Connection10		
Service Equipment12	SUNLOAD SENSOR	
COMPRESSOR	Exploded View	
COMPRESSOR	Removal and Installation	28
General Precautions15	INTAKE SENSOR	29
FLUORESCENT LEAK DETECTOR16	Exploded View	29
General Precautions16	Removal and Installation	
PREPARATION17	BLOWER UNIT	
DDEDARATION	Exploded View	
PREPARATION17	Removal and Installation	31
Special Service Tool17 Commercial Service Tool19	BLOWER MOTOR	33
Sealant or/and Lubricant20	Exploded View	
Jealant Ol/and Eddingant20	Exploded view	00

Removal and Installation33	
INTAKE DOOR MOTOR34	REAR VENTILATOR DUCT 1 : Exploded View 56
Exploded View	NEAR VENTILATOR DOOT 1. Nothioval and in
Removal and Installation	
HEATER A GOOD IN CHINIT A COEMPLY	REAR VENTILATOR DUCT 257
HEATER & COOLING UNIT ASSEMBLY 36	TEXT VEITTE TO BOOT 2: Exploded View
Exploded View	
Removal and Installation	stallation57
UPPER VENTILATOR DOOR MOTOR41	REAR VENTILATOR DUCT 358
Exploded View41	
Removal and Installation41	
MODE DOOR MOTOR42	stallation58
Exploded View	
Removal and Installation	
	REAR VENTILATOR DUCT 4: Removal and In-
AIR MIX DOOR MOTOR43	Stallation
Exploded View	
Removal and Installation43	REAR FOOT DUCT 1 : Exploded View
HEATER CORE45	REAR FOOT DUCT 1 : Removal and Installation 61
Exploded View45	1127 II 1 001 D001 1 1 1 10 III 0 II and II otaliation III 0 I
Removal and Installation46	REAR FOOT DUCT 262
DUOT AND ODULE	REAR FOOT DUCT 2 : Exploded View62
DUCT AND GRILLE47	REAR FOOT DUCT 2 : Removal and Installation 63
CENTER VENTILATOR GRILLE47	REAR FOOT DUCT 363
CENTER VENTILATOR GRILLE: Exploded View 47	
CENTER VENTILATOR GRILLE: Removal and	REAR FOOT DUCT 3: Removal and Installation 64
Installation47	, UEATER DUOT
SIDE VENTILATOR GRILLE48	HEATER DUCT65 HEATER DUCT : Exploded View65
SIDE VENTILATOR GRILLE : Exploded View 48	
SIDE VENTILATOR GRILLE: Exploded view 40	TILATEN DOOT. Nemoval and installation
stallation	FOOT DUCT66
	FOOT DUCT : Exploded View67
SIDE DEFROSTER GRILLE	
SIDE DEFROSTER GRILLE: Exploded View 49 SIDE DEFROSTER GRILLE: Removal and In-	WITH 7 INCH DISPLAY
stallation	SYSTEM DESCRIPTION69
VENTILATOR DUCT50	
VENTILATOR DUCT : Exploded View	
VENTILATOR DUCT : Removal and Installation 51	System Description69
UPPER VENTILATOR DUCT51	AIR DISTRIBUTION71
UPPER VENTILATOR DUCT : Exploded View 52	System Description71
UPPER VENTILATOR DUCT : Removal and In-	
stallation 52	PRECAUTION72
DEFROSTER NOZZLE AND SIDE DEFROSTER	PRECAUTIONS72
NOZZLE53	
DEFROSTER NOZZLE AND SIDE DEFROSTER	FOR USA AND CANADA72
NOZZLE : Exploded View53	
DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE: Removal and Installation	mental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"72
NOZZEE . Nemovai and installation	JEAT BELLT RETENDIONER
REAR VENTILATOR GRILLE54	
REAR VENTILATOR GRILLE : Exploded View 54	
REAR VENTILATOR GRILLE : Removal and In-	straint System (SRS) "AIR BAG" and "SEAT BELT
stallation 55	PRE-TENSIONER"72

HEATER & COOLING UNIT ASSEMBLY98	
Exploded View98 Removal and Installation100	В
UPPER VENTILATOR DOOR MOTOR	С
MODE DOOR MOTOR104Exploded View104Removal and Installation104	D
AIR MIX DOOR MOTOR	Е
HEATER CORE	F
DUCT AND GRILLE109	G
CENTER VENTILATOR GRILLE	Н
SIDE VENTILATOR GRILLE110 SIDE VENTILATOR GRILLE : Exploded View110 SIDE VENTILATOR GRILLE : Removal and Installation	VTL J
SIDE DEFROSTER GRILLE111 SIDE DEFROSTER GRILLE : Exploded View111 SIDE DEFROSTER GRILLE : Removal and Installation	K
VENTILATOR DUCT112 VENTILATOR DUCT : Exploded View112 VENTILATOR DUCT : Removal and Installation113	L
UPPER VENTILATOR DUCT113 UPPER VENTILATOR DUCT : Exploded View114 UPPER VENTILATOR DUCT : Removal and Installation	M
DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE115	IN
DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE: Exploded View	O P
REAR VENTILATOR GRILLE116 REAR VENTILATOR GRILLE : Exploded View116 REAR VENTILATOR GRILLE : Removal and Installation	
REAR VENTILATOR DUCT 1117 REAR VENTILATOR DUCT 1 : Exploded View118	

Precaution for Procedure without Cowl Top Cover73	Exploded View96
Precautions For Xenon Headlamp Service73	Removal and Installation96
Working with HFC-134a (R-134a)73	HEATER & COOLING LINIT ASSEMBLY
General Refrigerant Precaution74	HEATER & COOLING UNIT ASSEMBLY98 Exploded View98
Refrigerant Connection74	Removal and Installation100
Service Equipment76	Nemoval and installation100
COMPRESSOR79	UPPER VENTILATOR DOOR MOTOR 103
General Precautions79	Exploded View103
	Removal and Installation103
FLUORESCENT LEAK DETECTOR80	MODE DOOR MOTOR104
General Precautions80	Exploded View104
PREPARATION81	Removal and Installation104
PREPARATION81	AIR MIX DOOR MOTOR105
Special Service Tool81	Exploded View105
Commercial Service Tool83	Removal and Installation105
Sealant or/and Lubricant84	HEATER CORE107
PERIODIC MAINTENANCE85	Exploded View107
1 ENOBIO MAINTENANOE IIIIIIIIIIII	Removal and Installation108
IN-CABIN MICROFILTER85	
Exploded View85	DUCT AND GRILLE109
Removal and Installation85	CENTER VENTILATOR GRILLE109
Replacement85	CENTER VENTILATOR GRILLE : Exploded View. 109
REMOVAL AND INSTALLATION86	CENTER VENTILATOR GRILLE : Removal and
REMOVAL AND INSTALLATION	Installation109
PRESET SWITCH86	
Exploded View86	SIDE VENTILATOR GRILLE110
Removal and Installation86	SIDE VENTILATOR GRILLE: Exploded View110 SIDE VENTILATOR GRILLE: Removal and In-
A/C AUTO AMP87	stallation110
Exploded View87	
Removal and Installation87	SIDE DEFROSTER GRILLE111
	SIDE DEFROSTER GRILLE : Exploded View111
AMBIENT SENSOR88	SIDE DEFROSTER GRILLE : Removal and In-
Exploded View88	stallation112
Removal and Installation88	VENTILATOR DUCT112
IN-VEHICLE SENSOR89	VENTILATOR DUCT : Exploded View112
Exploded View89	VENTILATOR DUCT: Removal and Installation113
Removal and Installation89	UPPER VENTILATOR DUCT113
	UPPER VENTILATOR DUCT : Exploded View114
SUNLOAD SENSOR90	UPPER VENTILATOR DUCT : Removal and In-
Exploded View	stallation114
Removal and Installation90	
INTAKE SENSOR91	DEFROSTER NOZZLE AND SIDE DEFROSTER
Exploded View91	NOZZLE115 DEFROSTER NOZZLE AND SIDE DEFROSTER
Removal and Installation91	
DI OWED LINIT	NOZZLE: Exploded View115 DEFROSTER NOZZLE AND SIDE DEFROSTER
BLOWER UNIT92	NOZZLE : Removal and Installation115
Exploded View92 Removal and Installation93	
Nomoval and installation93	REAR VENTILATOR GRILLE116
BLOWER MOTOR95	REAR VENTILATOR GRILLE: Exploded View116
Exploded View95	REAR VENTILATOR GRILLE : Removal and In-
Removal and Installation95	stallation117
INTAKE DOOR MOTOR96	REAR VENTILATOR DUCT 1117
1141717F DOON MOTON90	DEAD VENTUATOR DUCT 1 · Evoloded View 119

Α

REAR VENTILATOR DUCT 1 : Removal and In-	REAR FOOT DUCT 1 : Exploded View	123
stallation118	REAR FOOT DUCT 1 : Removal and Installation.	123
REAR VENTILATOR DUCT 2119	REAR FOOT DUCT 2	124
REAR VENTILATOR DUCT 2 : Exploded View119	REAR FOOT DUCT 2 : Exploded View	124
REAR VENTILATOR DUCT 2: Removal and In-	REAR FOOT DUCT 2: Removal and Installation.	125
stallation119	DEAD SOOT DUOT O	
	REAR FOOT DUCT 3	
REAR VENTILATOR DUCT 3120	REAR FOOT DUCT 3 : Exploded View	126
REAR VENTILATOR DUCT 3 : Exploded View120	REAR FOOT DUCT 3: Removal and Installation.	126
REAR VENTILATOR DUCT 3: Removal and In-		
stallation120	HEATER DUCT	127
Stallation120	HEATER DUCT : Exploded View	127
REAR VENTILATOR DUCT 4121	HEATER DUCT : Removal and Installation	128
REAR VENTILATOR DUCT 4: Exploded View122		
REAR VENTILATOR DUCT 4 : Removal and In-	FOOT DUCT	128
stallation122	FOOT DUCT : Exploded View	129
Stallation122	FOOT DUCT : Removal and Installation	129
REAR FOOT DUCT 1122		

Α

В

D

Е

Н

K

M

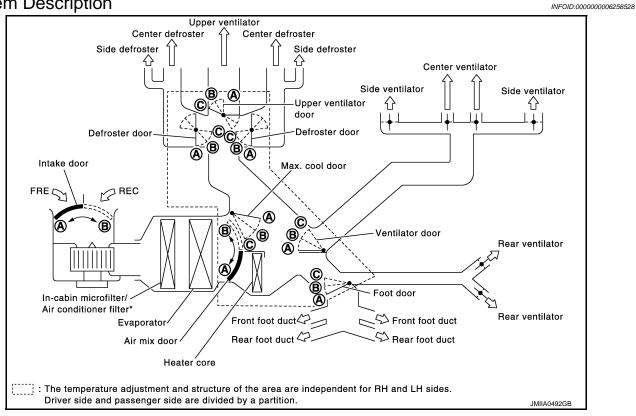
Ν

0

SYSTEM DESCRIPTION

SWITCHES AND THEIR CONTROL FUNCTION

System Description



* : Models for Mexico.

							Door p	oosition			
Switch position		Ventilator door	Max. cool door	Defroster door	Foot door	Upper ventila- tor door	Intake door	Air mix door (Driver side)	Air mix door (Pas- senger side)		
AUTO switch		*		AUTO					AUTO		
	VENT	-	· j	А	Α	Α	Α			_	_
MODE	B/L	;	j	В	В	Α	В		_		
switch	FOOT	•	ij	С	В	В	С	_	·		
·	D/F	**		С	В	В	В		В		
DEF switch	(4)	-	*	С	С	С	Α		В		
UPPER VENT	ON	â	*				I	A-B			
switch	OFF	<i>•</i>	0		_	-		С	_		

Revision: 2011 November VTL-5 2011 MURANO

SWITCHES AND THEIR CONTROL FUNCTION

< SYSTEM DESCRIPTION >

[WITHOUT 7 INCH DISPLAY]

							Door p	osition						
Switch position			Ventilator door	Max. cool door	Defroster door	Foot door	Upper ventila- tor door	Intake door	Air mix door (Driver side)	Air mix door (Pas- senger side)				
Intake	ON	-	*						Α*					
switch	OFF	ڪ	0						B [*]					
_	Temperature control switch (Driver side) DUAL $18.0^{\circ}C$ $(60^{\circ}F)$ $18.5^{\circ}C \Leftrightarrow 31.5^{\circ}C$ $(61^{\circ}F \Leftrightarrow 89^{\circ}F)$								A	Ą				
										AUTO				
(2			.0°C)°F)							E	3			
	18.0°C (60°F)		_	_	_	_	_		А					
Temperature control switch (Driver side)			⇒ 31.5°C ⇒ 89°F)						_	AUTO	_			
(2	DUAL		.0°C)°F)										В	
Temperature	ON ON	switch: 18.0°C (60°F)							А					
control switch (Passenger			⇒ 31.5°C ⇒ 89°F)							_	AUTO			
side)			.0°C)°F)								В			
	ON/OFF s	witch		С	С	В	С	_	В	_	_			

^{*:} Inlet status is displayed by indicator when activating automatic control.

AIR DISTRIBUTION

System Description

INFOID:0000000006258529

Discharge air flow								
Mode position indication		Air outlet/distribution						
	Condition		VENT		FO	OT	DEE	
		Front	Upper	Rear	Front	Rear	DEF	
ن ړ-		81%	8%	11%	_	_	_	
***	DUAL switch: OFF	41%	10%	17%	24%	8%	_	
	UPPER VENT - switch : ON	12%	12%	16%	27%	10%	23%	
,	SWILCH . ON	11%	11%	14%	25%	10%	29%	
*		11%	11%	12%	_	_	66%	

JPIIA0509GB

Discharge air flow									
Mode position indication			Air outlet/distribution						
	Condition		VENT		FO	OT	DEE		
		Front	Upper	Rear	Front	Rear	DEF		
- , i	DUAL switch: OFF	88%	_	12%	_	_	_		
<u>*;</u>		47%	_	18%	26%	9%			
ί.	UPPER VENT	13%	_	17%	33%	12%	25%		
)	SWILCH . OFF	12%	_	16%	28%	12%	32%		
*		11%	_	15%	_	_	74%		

JPIIA0510GB

В

Α

С

D

Е

F

G

Н

TL

. [

Κ

L

M

Ν

0

PRECAUTION

PRECAUTIONS FOR USA AND CANADA

FOR USA AND CANADA: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the
 ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with
 a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing
 serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

FOR MEXICO

FOR MEXICO: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

INFOID:0000000006258533

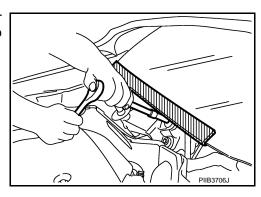
INFOID:0000000006258534

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the
 ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with
 a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing
 serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precaution for Procedure without Cowl Top Cover

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



Precautions For Xenon Headlamp Service

WARNING:

Comply with the following warnings to prevent any serious accident.

- Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.
- Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector. (Turning it ON outside the lamp case may cause fire or visual impairments.)
- Never touch the bulb glass immediately after turning it OFF. It is extremely hot.

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)
- Never perform HID circuit inspection with a tester.
- Never touch the xenon bulb glass with hands. Never put oil and grease on it.
- Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.
- Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).

Working with HFC-134a (R-134a)

CAUTION:

- CFC-12 (R-12) refrigerant and HFC-134a (R-134a) refrigerant are not compatible. Compressor malfunction is likely to occur if the refrigerants are mixed, refer to "CONTAMINATED REFRIGERANT" below. To determine the purity of HFC-134a (R-134a) in the vehicle and recovery tank, use Refrigerant Recovery/Recycling Recharging equipment and Refrigerant Identifier.
- Use only specified lubricant for the HFC-134a (R-134a) A/C system and HFC-134a (R-134a) components. Compressor malfunction is likely to occur if lubricant other than that specified is used.
- The specified HFC-134a (R-134a) lubricant rapidly absorbs moisture from the atmosphere. The following handling precautions must be observed:
- Immediately cap (seal) immediately the component to minimize the entry of moisture from the atmosphere when removing refrigerant components from a vehicle.
- Never remove the caps (unseal) until just before connecting the components when installing refrigerant components to a vehicle. Connect all refrigerant loop components as quickly as possible to minimize the entry of moisture into system.
- Use only the specified lubricant from a sealed container. Immediately reseal containers of lubricant. Lubricant becomes saturated with moisture and should not be used without proper sealing.

VTL

D

M

[\

INFOID:0000000006258535

1

0

0

< PRECAUTION >

Never allow lubricant (NISSAN A/C System Oil Type S) to come in to contact with styrene foam parts.
 Damage may result.

CONTAMINATED REFRIGERANT

Take the appropriate steps shown below if a refrigerant other than pure HFC-134a (R-134a) is identified in a vehicle:

- Explain to the customer that environmental regulations prohibit the release of contaminated refrigerant into the atmosphere.
- Explain that recovery of the contaminated refrigerant could damage service equipment and refrigerant supply.
- Suggest the customer return the vehicle to the location of previous service where the contamination may have occurred.
- If repairing, recover the refrigerant using only dedicated equipment and containers. Never reintroduce contaminated refrigerant into the existing service equipment. Contact a local refrigerant product retailer for available service if the facility does not have dedicated recovery equipment. This refrigerant must be disposed of in accordance with all federal and local regulations. In addition, replacement of all refrigerant system components on the vehicle is recommended.
- The air conditioner warranty is void if the vehicle is within the warranty period. Please contact Nissan Customer Affairs for further assistance.

General Refrigerant Precaution

INFOID:0000000006258536

WARNING:

- Never breathe A/C refrigerant and lubricant vapor or mist. Exposure may irritate eyes, nose or throat. Remove HFC-134a (R-134a) from the A/C system, using certified service equipment meeting requirements of SAE J-2210 [HFC-134a (R-134a) recycling equipment], or J-2209 [HFC-134a (R-134a) recovery equipment]. Ventilate the work area before resuming service if accidental system discharge occurs. Additional health and safety information may be obtained from refrigerant and lubricant manufacturers.
- Never release refrigerant into the air. Use approved recovery/recycling equipment to capture the refrigerant each time an air conditioning system is discharged.
- Always wear eye and hand protection (goggles and gloves) when working with any refrigerant or air conditioning system.
- Never store or heat refrigerant containers above 52°C (126°F).
- Never heat a refrigerant container with an open flame. Place the bottom of the container in a warm pail of water if container warming is required.
- Never intentionally drop, puncture, or incinerate refrigerant containers.
- Keep refrigerant away from open flames. Poisonous gas is produced if refrigerant burns.
- Refrigerant displaces oxygen, therefore be certain to work in well ventilated areas to prevent suffocation.
- Never pressure test or leakage test HFC-134a (R-134a) service equipment and/or vehicle air conditioning systems with compressed air during repair. Some mixtures of air and HFC-134a (R-134a) have proven to be combustible at elevated pressures. These mixtures, if ignited, may cause injury or property damage. Additional health and safety information may be obtained from refrigerant manufacturers.

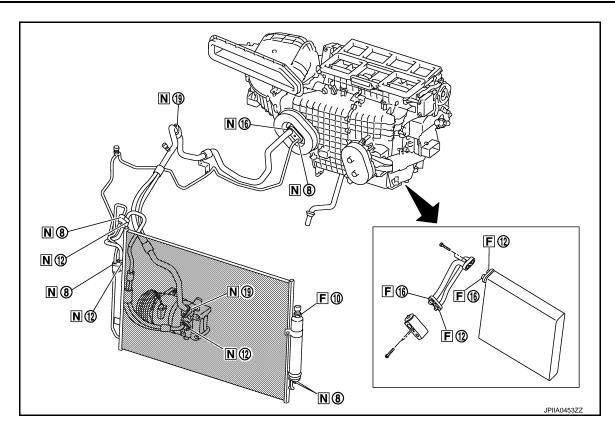
Refrigerant Connection

INFOID:0000000006258537

A new type refrigerant connection has been introduced to all refrigerant lines except the following locations.

- Expansion valve to evaporator
- · Refrigerant pressure sensor to liquid tank

O-RING AND REFRIGERANT CONNECTION



F. Former type refrigerant connection N. New type refrigerant connection

O: O-ring size

CAUTION:

The new and former refrigerant connections use different O-ring configurations. Never confuse O-rings since they are not interchangeable. Refrigerant may leak at the connection if an incorrect O-ring is installed.

O-Ring Part Numbers and Specifications

Connection type	Piping connection point	Part number	QTY	O-ring size	
	Low-pressure flexible hose to low-pressure pipe	Э	92474 N8210	1	φ19
	High-pressure pipe to condenser pipe assembly	92471 N8210	1	ф8	
	Condenser pipe assembly (Inlet) to high-pressult hose (One-touch joint)	92472 N8210	1	ф12	
	Condenser assembly to condenser pipe as-	Inlet	92472 N8210	1	φ12
	sembly	Outlet	92471 N8210	1	ф8
New	Low-pressure pipe to expansion valve	92473 N8210	1	φ16	
	High-pressure pipe to expansion valve	92471 N8210	1	ф8	
	Compressor to low-pressure flexible hose	92474 N8210	1	φ19	
	Compressor to high-pressure flexible hose	92472 N8210	1	φ12	
	Limited to a little and a littl	Inlet	00474 N0040	1	ф8
	Liquid tank to condenser assembly	Outlet	92471 N8210	1	
	Refrigerant pressure sensor to liquid tank		J2476 89956	1	φ10
Former		Inlet	92475 71L00	1	φ12
	Expansion valve to evaporator pipe assembly	Outlet	92475 72L00	1	φ16
	F	Inlet	92475 71L00	1	φ12
	Evaporator to evaporator pipe assembly	Outlet	92475 72L00	1	φ16

VTL

Н

Α

В

D

Е

F

J

Κ

L

M

Ν

0

WARNING:

Check that all refrigerant is discharged into the recycling equipment and the pressure in the system is less than the atmospheric pressure. Then gradually loosen the discharge side hose fitting and remove it.

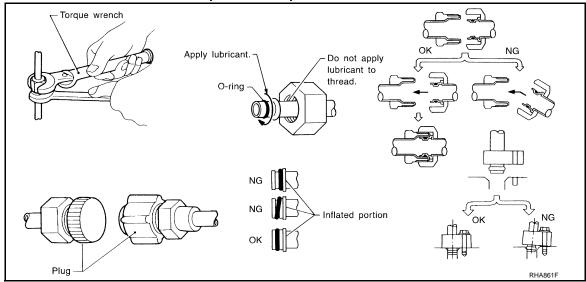
CAUTION:

Observe the following items when replacing or cleaning refrigerant cycle components.

- Store it in the same way as it is when mounted on the car when the compressor is removed. Failure
 to do so will cause lubricant to enter the low-pressure chamber.
- Always use a torque wrench and a back-up wrench when connecting tubes.
- Immediately plug all openings to prevent entry of dust and moisture after disconnecting tubes.
- Connect the pipes at the final stage of the operation when installing an air conditioner in the vehicle.
 Never remove the seal caps of pipes and other components until just before they are required for connection.
- Allow components stored in cool areas to warm to working area temperature before removing seal caps. This prevents condensation from forming inside A/C components.
- Thoroughly remove moisture from the refrigeration system before charging the refrigerant.
- Always replace used O-rings.
- Apply lubricant to the circle of the O-rings shown in illustration when a connecting tube. Never apply lubricant to threaded portion.

Name : NISSAN A/C System Oil Type S

- O-ring must be closely attached to the groove portion of tube.
- Never damage O-ring and tube when replacing the O-ring.
- Connect tube until a click can be heard. Then tighten the nut or bolt by hand. Check that the O-ring is
 installed to the tube correctly.
- Perform leakage test and check that there is no leakage from connections after connecting the line.
 Disconnect the line and replace the O-ring when the refrigerant leakage point is found. Then tighten the connections of seal seat to the specified torque.



Service Equipment

INFOID:0000000006258538

RECOVERY/RECYCLING EQUIPMENT

Be certain to follow the manufacturer instructions for machine operation and machine maintenance. Never introduce any refrigerant other than that specified into the machine.

ELECTRICAL LEAK DETECTOR

Be certain to follow the manufacturer instructions for tester operation and tester maintenance.

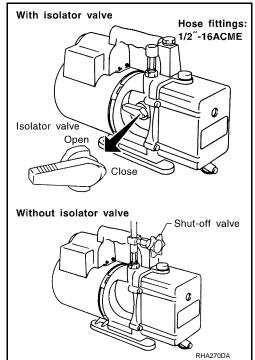
VACUUM PUMP

[WITHOUT 7 INCH DISPLAY]

The lubricant contained inside the vacuum pump is not compatible with the specified lubricant for HFC-134a (R-134a) A/C systems. The vent side of the vacuum pump is exposed to atmospheric pressure. So the vacuum pump lubricant may migrate out of the pump into the service hose. This is possible when the pump is switched OFF after evacuation (vacuuming) and the hose is connected to it. To prevent this migration, use a manual valve placed near the hose-to-pump connection, as per the following procedure.

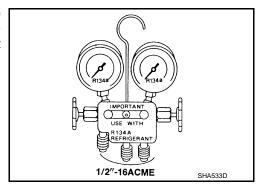
- Vacuum pumps usually have a manual isolator valve as part of the pump. Close this valve to isolate the service hose from the pump.
- Use a hose equipped with a manual shut-off valve near the pump end for pumps without an isolator. Close the valve to isolate the hose from the pump.
- Disconnect the hose from the pump if the hose has an automatic shut-off valve. As long as the hose is connected, the valve is open and lubricating oil may migrate.

Some one-way valves open when vacuum is applied and close under the no vacuum condition. Such valves may restrict the ability of the pump to create a deep vacuum and are not recommended.



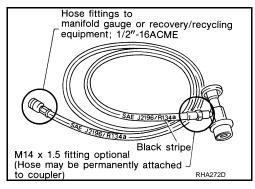
MANIFOLD GAUGE SET

Be certain that the gauge face indicates HFC-134a or R-134a. Be sure the gauge set has 1/2"-16 ACME threaded connections for service hoses. Confirm the set has been used only with refrigerant HFC-134a (R-134a) and specified lubricants.



SERVICE HOSES

Be certain that the service hoses display the markings described (colored hose with a black stripe). All hoses must equip positive shut-off devices (either manual or automatic) near the end of the hoses opposite to the manifold gauge.



SERVICE COUPLERS

Α

В

D

Е

F

G

Н

VTL

J

K

L

M

N

 \cap

Ρ

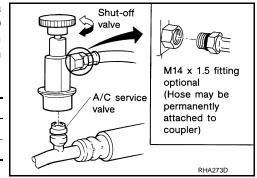
PRECAUTIONS

< PRECAUTION >

[WITHOUT 7 INCH DISPLAY]

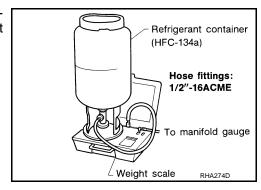
Never attempt to connect HFC-134a (R-134a) service couplers to a CFC-12 (R-12) A/C system. The HFC-134a (R-134a) couplers do not properly connect to the CFC-12 (R-12) system. However, if an improper connection is attempted, discharging and contamination may occur.

Shut-off valve rotation	A/C service valve
Clockwise	Open
Counterclockwise	Close



REFRIGERANT WEIGHT SCALE

Verify that no refrigerant other than HFC-134a (R-134a) and specified lubricants have been used with the scale. The hose fitting must be 1/2"-16 ACME if the scale controls refrigerant flow electronically.



CHARGING CYLINDER

Use of a charging cylinder is not recommended. Refrigerant may be vented into the air from the top valve of the cylinder when filling the cylinder with refrigerant. Also, the accuracy of the cylinder is generally less than that of an electronic scale or of quality recycle/recharge equipment.

COMPRESSOR

< PRECAUTION >

[WITHOUT 7 INCH DISPLAY]

COMPRESSOR

General Precautions

INFOID:0000000006258539

CAUTION:

- Plug all openings to prevent moisture and foreign material from entering.
- Store it in the same way as it is when mounted on the car when the compressor is removed.
- Follow "Maintenance of Lubricant Quantity in Compressor" exactly when replacing or repairing compressor. Refer to HA-25, "Maintenance of Lubricant Quantity".
- Keep friction surfaces between clutch and pulley clean. Wipe it off by using a waste moistened with thinner if the surface is contaminated with lubricant.
- Turn the compressor shaft by hand more than five turns in both directions after compressor service operation. This equally distributes lubricant inside the compressor. Let the engine idle and operate the compressor for one hour after the compressor is installed.
- Apply voltage to the new compressor and check for normal operation after replacing the compressor magnet clutch.

F

Α

В

D

Е

G

Н

VTL

K

L

M

Ν

0

INFOID:0000000006258540

< PRECAUTION >

FLUORESCENT LEAK DETECTOR

General Precautions

CAUTION:

- The A/C system contains a fluorescent leak detection dye used for locating refrigerant leakages. An ultraviolet (UV) lamp is required to illuminate the dye when inspecting for leakages.
- Always wear fluorescence enhancing UV safety goggles to protect eyes and enhance the visibility of the fluorescent dye.
- The fluorescent dye leak detector is not a replacement for an electrical leak detector (SST: J-41995).
 The fluorescent dye leak detector should be used in conjunction with an electrical leak detector (SST: J-41995) to pin-point refrigerant leakages.
- Read and follow all manufacturer operating instructions and precautions prior to performing work for safety and customer satisfaction.
- A compressor shaft seal should not necessarily be repaired because of dye seepage. The compressor shaft seal should only be repaired after confirming the leakage with an electrical leak detector (SST: J-41995).
- Always remove any remaining dye from the leakage area after repairs are completed to avoid a misdiagnosis during future service.
- Never allow dye to come into contact with painted body panels or interior components. Immediately clean with the approved dye cleaner if dye is spilled. Fluorescent dye left on a surface for an extended period of time cannot be removed.
- Never spray fluorescent dye cleaning agent on hot surfaces (engine exhaust manifold, etc.).
- Never use more than one refrigerant dye bottle [1/4 ounce (7.4 cc)] per A/C system.
- Leak detection dyes for HFC-134a (R-134a) and CFC-12 (R-12) A/C systems are different. Never use HFC-134a (R-134a) leak detection dye in CFC-12 (R-12) A/C system or CFC-12 (R-12) leak detection dye in HFC-134a (R-134a) A/C system, otherwise A/C system damage may result.
- The fluorescent properties of the dye remains for three or more years unless a compressor malfunction occurs.

IDENTIFICATION

NOTE:

Vehicles with factory installed fluorescent dye have a green label.

Vehicles without factory installed fluorescent dye have a blue label.

IDENTIFICATION LABEL FOR VEHICLE

Vehicles with factory installed fluorescent dye have an identification label on the front side of hood.

PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000006258541

Α

В

D

Е

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

HFC-134a (R-134a) Service Tool and Equipment

- Never mix HFĆ-134a (R-134a) refrigerant and/or its specified lubricant with CFC-12 (R-12) refrigerant and/or its lubricant.
- Separate and non-interchangeable service equipment must be used for handling each type of refrigerant/ lubricant.
- Refrigerant container fittings, service hose fittings and service equipment fittings (equipment that handles
 refrigerant and/or lubricant) are different between CFC-12 (R-12) and HFC-134a (R-134a). This is to avoid
 mixed use of the refrigerants/lubricant.
- Never use adapters that convert one size fitting to another. Refrigerant/lubricant contamination occurs and compressor malfunction may result.

	Tool number (Kent-Moore No.) Tool name	Description			
(ACR2005-NI) ACR5 A/C Service Center	WJIA0293E	Function: Refrigerant recovery, recycling and recharging	H VTL		
(J-41995) Electrical leak detector	AHA281A	Power supply: DC 12 V (Battery terminal)	J K L		
(J-43926) Refrigerant dye leak detection kit Kit includes:	UV lamp Carrying case		M		
(J-4220) UV lamp and UV safety goggles (J-41459) HFC-134a (R-134a) dye injector Use with J-41447, 1/4 ounce bottle	Refrigerant dye goggles Refrigerant dye Refrigerant dye Refrigerant dye	Power supply: DC 12 V (Battery terminal)	N O		
(J-41447) HFC-134a (R-134a) fluorescent leak detection dye (Box of 24, 1/4 ounce bottles) (J-43872) Refrigerant dye cleaner	(24 labels) (24 labels) (25 labels) (26 labels) (27 labels) (27 labels) (28 labels) (29 labels) (29 labels) (20 labels) (20 labels) (20 labels) (20 labels) (21 labels) (22 labels) (24 labels) (25 labels) (26 labels) (27 labels) (28 labels) (29 labels) (29 labels) (29 labels) (20 labels) (20 labels) (20 labels) (20 labels) (21 labels) (22 labels) (23 labels) (24 labels) (25 labels) (26 labels) (27 labels) (28 labels) (29 labels) (29 labels) (20 labels) (20 labels) (20 labels) (21 labels) (22 labels) (23 labels) (24 labels) (25 labels) (26 labels) (27 labels) (28 labels) (29 labels) (29 labels) (20 labels) (20 labels) (20 labels) (20 labels) (21 labels) (22 labels) (23 labels) (24 labels) (25 labels) (26 labels) (27 labels) (28 labels) (29 labels) (29 labels) (20 labels) (21 labels) (22 labels) (23 labels) (24 labels) (25 labels) (26 labels) (27 labels) (28 labels) (29 labels) (29 labels) (29 labels) (20 labels) (20 labels) (20 labels) (20 labels) (20 labels) (20 labels) (21 labels) (22 labels) (23 labels) (24 labels) (25 labels) (26 labels) (27 labels) (28 labels) (29 labels) (29 labels) (20 labels) (29 labels) (20 labels) (21 labels) (22 labels) (23 labels) (24 labels) (25 labels) (26 labels) (27 labels) (28 labels) (28 labels) (29 labels) (29 labels) (29 labels) (20 l		Ρ		

[WITHOUT 7 INCH DISPLAY]

Tool number (Kent-Moore No.) Tool name		Description	
(J-42220) UV lamp and UV safety goggles	SHA438F	Power supply: DC 12 V (Battery terminal) For checking refrigerant leakage when flu orescent dye is equipped in A/C system Includes: UV lamp and UV safety goggles	
(J-41447) HFC-134a (R-134a) fluorescent leak detection dye (Box of 24, 1/4 ounce bottles)	Refrigerant dye (24 bottles) SHA439F	Application: For HFC-134a (R-134a) PAG oil Container: 1/4 ounce (7.4 cc) bottle (Includes self-adhesive dye identification labels for affixing to vehicle after charging system with dye.)	
(J-41459) HFC-134a (R-134a) dye injector Use with J-41447, 1/4 ounce bottle	SHA440F	For injecting 1/4 ounce of fluorescent leak detection dye into A/C system	
(J-43872) Refrigerant dye cleaner	SHA441F	For cleaning dye spills	
(J-39183) Manifold gauge set (with hoses and couplers)	RJIA0196E	Identification: • The gauge face indicates HFC-134a (R 134a). Fitting size: Thread size • 1/2"-16 ACME	
Service hoses • High-pressure side hose (J-39501-72) • Low-pressure side hose (J-39502-72) • Utility hose (J-39476-72)	S-NT201	 Hose color: Low-pressure side hose: Blue with black stripe High-pressure side hose: Red with black stripe Utility hose: Yellow with black stripe or green with black stripe Hose fitting to gauge: 1/2 -16 ACME 	

PREPARATION

[WITHOUT 7 INCH DISPLAY]

Tool number (Kent-Moore No.) Tool name		Description
Service couplers • High-pressure side coupler (J-39500-20) • Low-pressure side coupler (J-39500-24)	S-NT202	Hose fitting to service hose: M14 x 1.5 fitting is optional or permanently attached.
(J-39650) Refrigerant weight scale	S-NT200	For measuring of refrigerant Fitting size: Thread size 1/2 ⁻¹⁶ ACME
(J-39649) Vacuum pump (Including the isolator valve)	o o o o o o o o o o o o o o o o o o o	Capacity: • Air displacement: 4 CFM • Micron rating: 20 microns • Oil capacity: 482 g (17 oz.) Fitting size: Thread size • 1/2″-16 ACME

Commercial Service Tool

INFOID:0000000006258542

Tool name		Description	-
Refrigerant identifier equipment	RJIA0197E	Checking for refrigerant purity and system contamination	
Power tools	PBICO190E	For loosening bolts and nuts	-
Remover tools	JMKIA3050ZZ	Remove clips, pawls, and metal clips	

Sealant or/and Lubricant

INFOID:0000000006258543

HFC-134a (R-134a) Service Tool and Equipment

- Never mix HFĆ-134a (R-134a) refrigerant and/or its specified lubricant with CFC-12 (R-12) refrigerant and/or its lubricant.
- Separate and non-interchangeable service equipment must be used for handling each type of refrigerant/ lubricant.
- Refrigerant container fittings, service hose fittings and service equipment fittings (equipment that handles refrigerant and/or lubricant) are different between CFC-12 (R-12) and HFC-134a (R-134a). This is to avoid mixed use of the refrigerants/lubricant.
- Never use adapters that convert one size fitting to another. Refrigerant/lubricant contamination occurs and compressor malfunction may result.

Tool name		Description	
HFC-134a (R-134a) refrigerant	S-NT196	Container color: Light blue Container marking: HFC-134a (R- 134a) Fitting size: Thread size • Large container 1/2 ⁿ -16 ACME	
NISSAN A/C System Oil Type S (DH-PS)	NISSAN S-NT197	Type: Polyalkylene glycol oil (PAG), type S (DH-PS) Application: HFC-134a (R-134a) swash plate compressors (NISSAN only) Capacity: 40 m ℓ (1.4 US fl oz., 1.4 Imp fl oz.)	

Α

В

D

Е

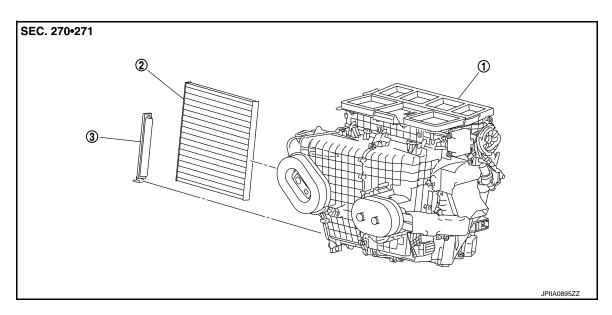
M

Ν

PERIODIC MAINTENANCE

IN-CABIN MICROFILTER

Exploded View



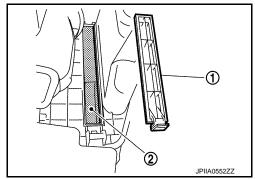
- Heater & cooling unit assembly
- In-cabin microfilter/Air conditioner fil- 3. Filter cover ter*
- : Models for Mexico.

Removal and Installation

INFOID:0000000006258545

REMOVAL

1. Remove the filter cover (1), and then remove the in-cabin micro-filter/air conditioner filter (2).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- If the filter is deformed/damaged when removing, replace it with a new one. Deformed/damaged filtermay deteriorate the dust collecting performance.
- When installing, handle the filter with extreme care to avoid deforming/damaging.

Replacement

Replace in-cabin microfilter/air conditioner filter.

For NORTH AMERICA: Refer to MA-8, "FOR NORTH AMERICA: Schedule 1" and MA-10, "FOR NORTH AMERICA: Schedule 2".

For MEXICO: Refer to MA-11, "FOR MEXICO: Periodic Maintenance".

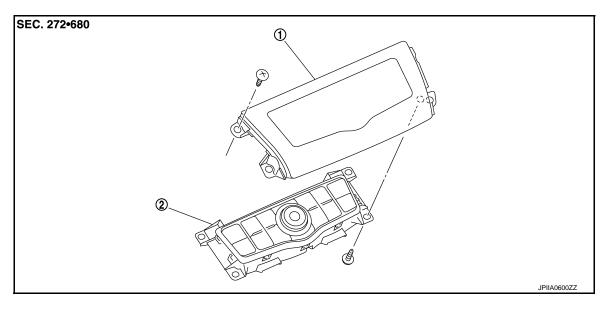
Affix a caution label inside the glove box when replacing filter.

REMOVAL AND INSTALLATION

A/C CONTROL

Exploded View

DISASSEMBLY



1. Cluster lid D

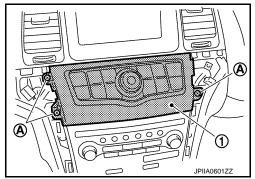
2. A/C control

Removal and Installation

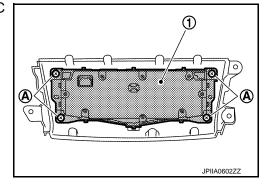
INFOID:0000000006258548

REMOVAL

- 1. Remove the instrument stay cover LH. Refer to IP-12, "Exploded View".
- 2. Remove the instrument stay cover RH. Refer to IP-12, "Exploded View".
- 3. Remove the mounting screws (A), and then remove the cluster lid D (1).



4. Remove the mounting screws (A), and then remove the A/C control (1).



A/C CONTROL

DE1401/41	AAID INIOTAI	
< RHMOVAL	AND INSTAL	I A H()N(>

[WITHOUT 7 INCH DISPLAY]

Install in the reverse order of removal.

Α

В

С

D

Е

F

G

Н

/TL

Κ

L

M

Ν

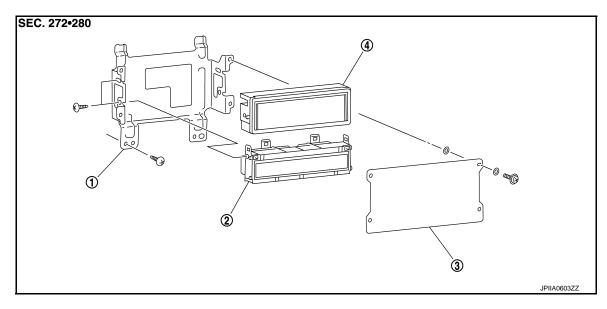
0

Ρ

A/C DISPLAY

Exploded View

DISASSEMBLY



- Bracket
- 4. AV display

2. A/C display

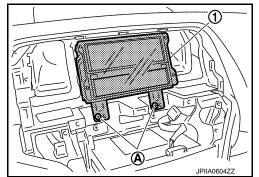
3. CRT filter

Removal and Installation

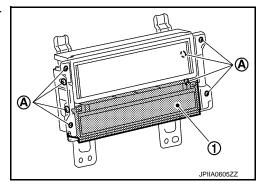
INFOID:0000000006258550

REMOVAL

- Remove the central ventilator assembly. Refer to <u>IP-12, "Exploded View"</u>.
- 2. Remove the mounting screws (A), and then remove the mounting bracket (1).



3. Remove the mounting screws (A), and then remove the A/C display (1).



INSTALLATION

Install in the reverse order of removal.

[WITHOUT 7 INCH DISPLAY]

A/C AUTO AMP.

Exploded View

INFOID:0000000006258551

Α

В

C

D

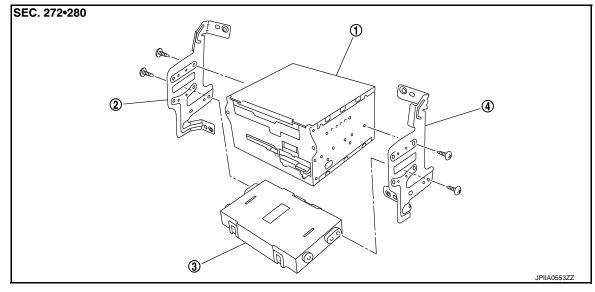
Е

F

Н

K

DISASSEMBLY



1. AV control unit

2. Bracket (LH)

3. A/C auto amp.

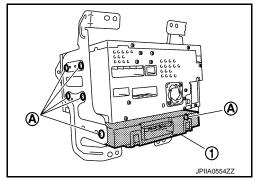
4. Bracket (RH)

Removal and Installation

INFOID:0000000006258552

REMOVAL

- 1. Remove the AV control unit. Refer to AV-145. "Exploded View".
- 2. Remove the mounting screws (A), and then remove the A/C auto amp. (1).



INSTALLATION

Install in the reverse order of removal.

Ν

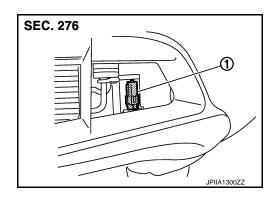
M

0

AMBIENT SENSOR

Exploded View

1. Ambient sensor



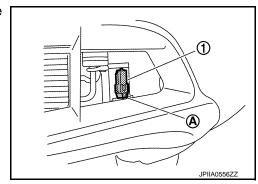
Removal and Installation

INFOID:0000000006258554

INFOID:0000000006258553

REMOVAL

1. Disconnect the ambient sensor connector (A), and then remove the ambient sensor (1).



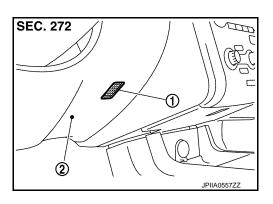
INSTALLATION

Install in the reverse order of removal.

IN-VEHICLE SENSOR

Exploded View

- 1. In-vehicle sensor
- 2. Instrument lower panel LH

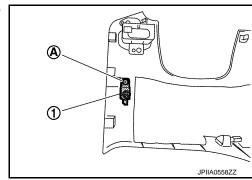


Removal and Installation

REMOVAL

1. Remove the instrument lower panel LH. Refer to IP-12, "Exploded View".

2. Remove the mounting screw (A), and then remove the in-vehicle sensor (1).



INSTALLATION

Install in the reverse order of removal.

VTL

Н

Α

В

C

D

Е

F

INFOID:0000000006258555

INFOID:0000000006258556

L

K

M

Ν

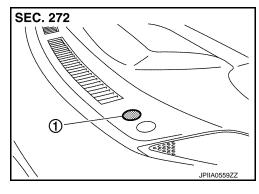
0

SUNLOAD SENSOR

Exploded View

INFOID:0000000006258557

1. Sunload sensor

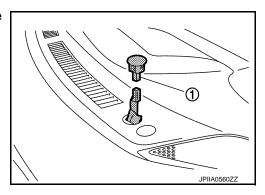


Removal and Installation

INFOID:0000000006258558

REMOVAL

1. Disconnect the sunload sensor connector, and then remove the sunload sensor (1).

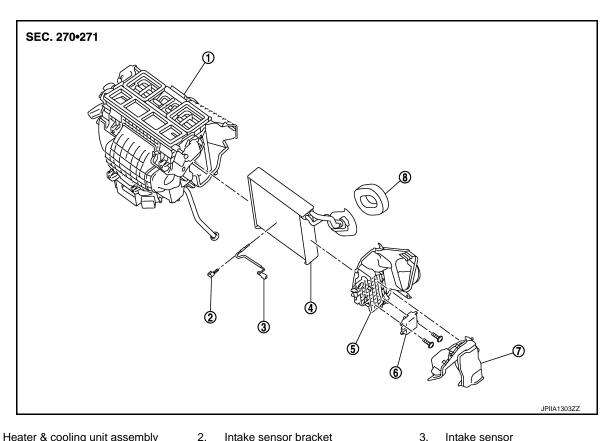


INSTALLATION

Install in the reverse order of removal.

INTAKE SENSOR

Exploded View INFOID:0000000006258559



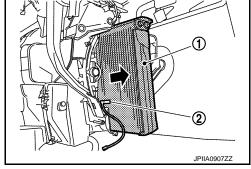
- Heater & cooling unit assembly
- Evaporator assembly
- Foot duct (right)

- 2. Intake sensor bracket
- 5. Evaporator cover
- Cooler pipe grommet
- Intake sensor
- 6. Air mix door motor (passenger side)

Removal and Installation

REMOVAL

- Remove the evaporator pipe assembly. Refer to VTL-36, "Exploded View".
- Slide the evaporator (1) toward the right side of the vehicle, and then remove the intake sensor (2).



INSTALLATION

Note the following, and install in the reverse order of removal.

CAUTION:

- Replace the O-ring with a new one. Apply a coat of compressor oil to the O-ring prior to installation.
- Install the intake sensor in the same position as the removed intake sensor when replacing the intake sensor.
- Do not rotate the bracket insertion part when removing and installing the intake sensor.
- · Check for refrigerant leakage when charging refrigerant.

VTL-29 Revision: 2011 November **2011 MURANO**

Α

В

D

Е

K

INFOID:0000000006258560

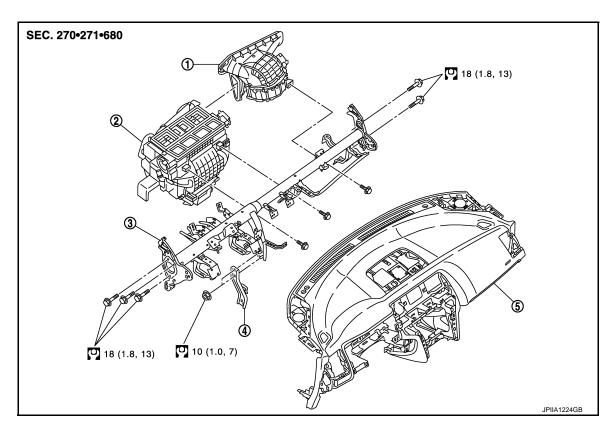
M

Ν

BLOWER UNIT

Exploded View

REMOVAL



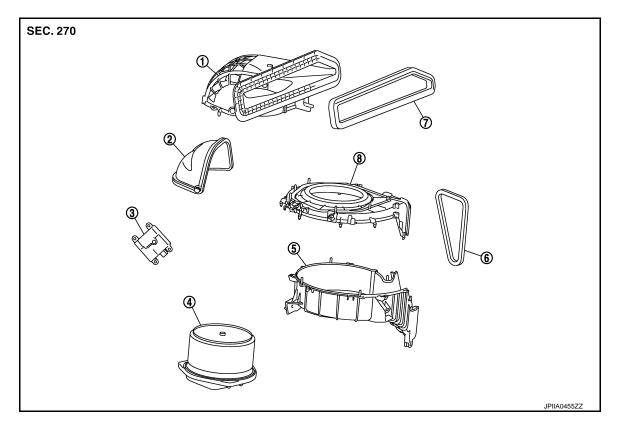
- 1. Blower unit assembly
- 2. Heater & cooling unit assembly
- 4. Instrument stay

5. Instrument panel assembly

3. Steering member

Refer to GI-4, "Components" for symbols in the figure.

DISASSEMBLY



- 1. Shutter box case
- 4. Blower motor assembly
- 7. Intake seal

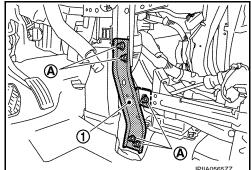
- Intake door
- 5. Intake lower case
- 8. Intake upper case
- Intake door motor
- 6. Outlet seal

INFOID:0000000006258562

Removal and Installation

REMOVAL

- 1. Remove the instrument panel assembly. Refer to IP-12, "Exploded View".
- 2. Remove the mounting nuts (A), and then remove the instrument panel stay (1).



3. Disconnect the intake door motor and blower motor connectors.

0

Р

Α

В

C

D

Е

F

G

Н

/TI

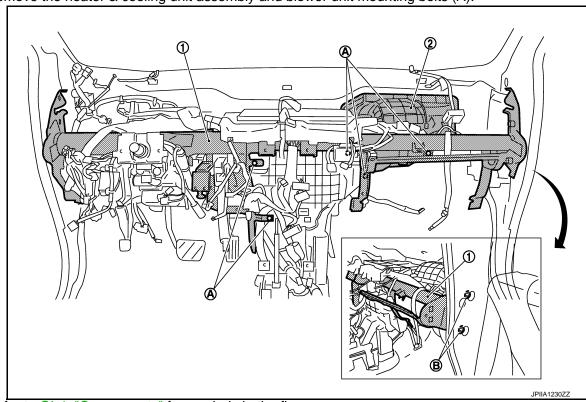
K

M

Ν

2011 MURANO

4. Remove the heater & cooling unit assembly and blower unit mounting bolts (A).



Refer to GI-4, "Components" for symbols in the figure.

- 5. Remove the steering member mounting bolts (B) (right).
- 6. And remove the blower unit (2) while pulling the steering member (1) to the front.

INSTALLATION

Install in the reverse order of removal.

Α

В

D

Е

Н

M

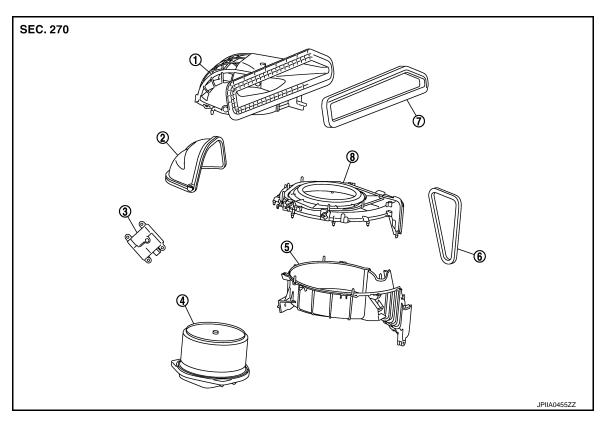
Ν

0

INFOID:0000000006258564

BLOWER MOTOR

Exploded View



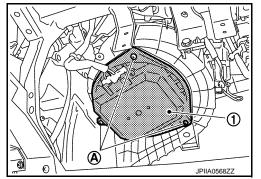
- 1. Shutter box case
- 4. Blower motor assembly
- 7. Intake seal

- 2. Intake door
- 5. Intake lower case
- 8. Intake upper case
- 3. Intake door motor
- 6. Outlet seal

Removal and Installation

REMOVAL

- 1. Remove instrument lower panel RH. Refer to IP-12, "Exploded View".
- 2. Disconnect the blower motor connector.
- 3. Remove the mounting screws (A), and then remove the blower motor (1).

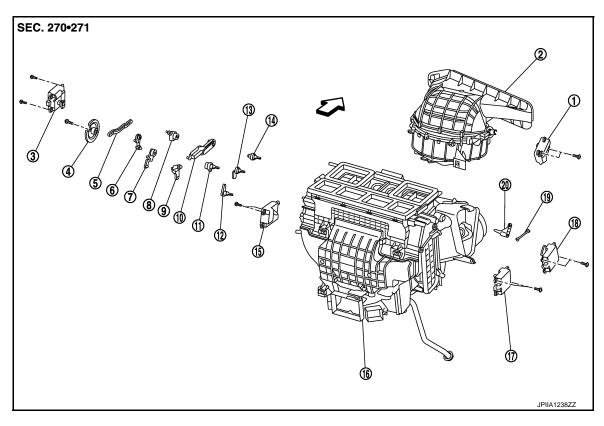


INSTALLATION

Install in the reverse order of removal.

INTAKE DOOR MOTOR

Exploded View INFOID:0000000006258565



- 1. Intake door motor
- 4. Main link
- Max. cool door link 7.
- 10. Defroster door link
- 13. Max. cool door lever
- 16. Heater & cooling unit assembly
- 19. Upper ventilator door rod
- : Vehicle front

- 2. Bower unit assembly
- 5. Rod link
- 8. Mode door lever
- 11. Ventilator door lever
- 14. Defroster door lever
- 17. Air mix door motor (passenger side) 18. Upper ventilator door motor
- Upper ventilator door lever

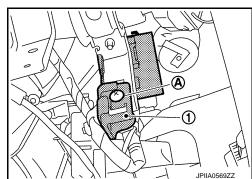
- 3. Mode door motor
- 6. Max. cool door link
- Ventilator door link
- 12. Foot door lever
- 15. Air mix door motor (driver side)

Removal and Installation

INFOID:0000000006258566

REMOVAL

- 1. Remove instrument lower panel RH. Refer to IP-12, "Exploded View".
- Remove the mounting screw (A), and then move the key less controller assembly bracket (1) to a position where it does not inhibit work.

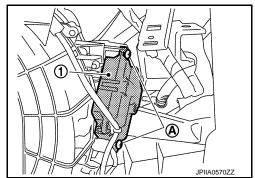


INTAKE DOOR MOTOR

< REMOVAL AND INSTALLATION >

[WITHOUT 7 INCH DISPLAY]

- 3. Remove the mounting screws (A), and then remove the intake door motor (1).
- 4. Disconnect the intake door motor connector.



INSTALLATION

Install in the reverse order of removal.

F

Е

D

Α

В

G

Н

/TL

Κ

L

M

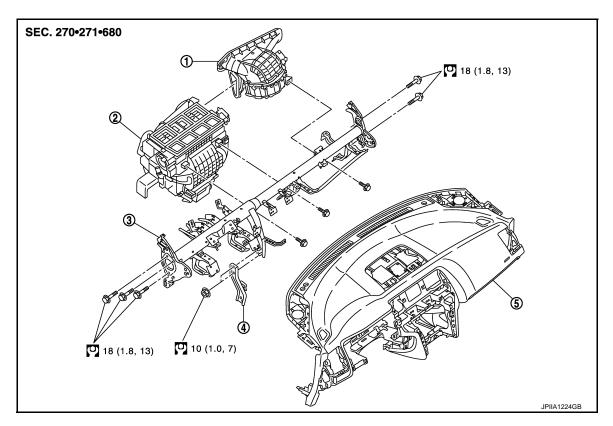
Ν

0

HEATER & COOLING UNIT ASSEMBLY

Exploded View

REMOVAL



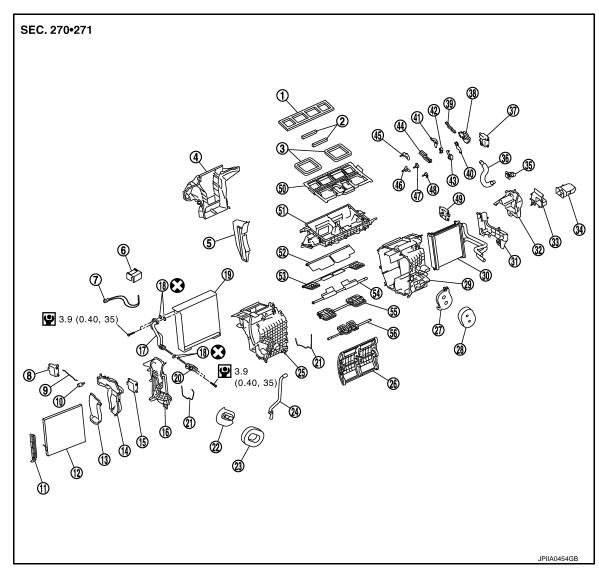
- 1. Blower unit assembly
- 2. Heater & cooling unit assembly

4. Instrument stay

- 5. Instrument panel assembly
- 3. Steering member

Refer to GI-4, "Components" for symbols in the figure.

DISASSEMBLY



seal

Adapter case 4.

Intake sensor 7.

Upper ventilator door lever 10.

13. Foot duct 1 (right)

16. Heater & cooling unit case cover

19. Evaporator

Grommet 22.

Heater & cooling unit case (right) 25.

28. Heater pipe grommet

31. Heater pipe cover

Heater duct 34.

37. Mode door motor

40. Max. cool door link

43. Mode door lever

Foot door lever

49. Air mix door motor (driver side)

52. Ventilator door

Defroster door

2. Upper ventilator seal

5. Center case

8. Upper ventilator door motor

Filter cover 11.

14. Foot duct 2 (right)

17. Evaporator pipe assembly

Expansion valve

23. Cooler pipe grommet

Air mix door (Slide door) 26.

29. Heater & cooling unit case (left)

32. Foot duct 2 (left)

Aspirator 35.

38. Main link

41. Ventilator door link

44. Defroster door link

47. Defroster door lever

50. Distributor upper case

53. Foot door

56. Upper ventilator door 3. Defroster seal

6. Intake sensor bracket

9. Upper ventilator door rod

12. In-cabin microfilter/Air conditioner fil-

15. Air mix door motor (passenger side)

O-ring 18.

21. Case packing

Drain hose 24.

27. Heater pipe support

30. Heater core

33. Foot duct 1 (left)

36. Aspirator hose

39. Rod link

42. Foot door link

45. Ventilator door lever

48. Max. cool door lever

Distributor lower case

54. Max. cool door Α

В

D

Е

F

Н

K

L

M

Ν

Ρ

* : Models for Mexico.

Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

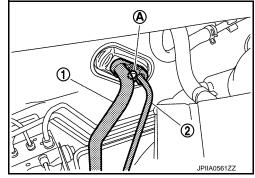
INFOID:0000000006258568

REMOVAL

- 1. Collect the refrigerant with refrigerant collecting equipment (for HFC134a).
- 2. Drain engine coolant. Refer to CO-11, "Draining".
- 3. Remove the mounting bolt (A), and then disconnect the low-pressure pipe (1) and high-pressure pipe (2) from the expansion valve.

CAUTION:

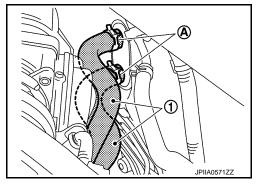
Cap or wrap the joint of the A/C piping and expansion valvewith suitable material such as vinyl tape to avoid the entry of air.



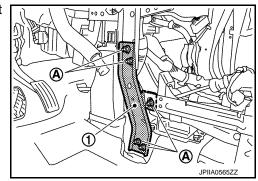
4. Remove the clamps (A), and then disconnect the heater hoses (1).

CAUTION:

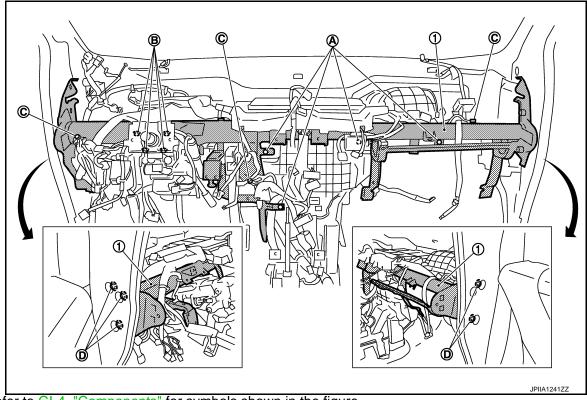
- Some coolant may spill when heater hoses are disconnected. Wipe them off with wastes.
- Close the coolant inlet/outlet on the heater core and heater hoses with wastes.



- 5. Remove the instrument panel assembly. Refer to IP-12, "Exploded View".
- 6. Remove the mounting nuts (A), and then remove the instrument stay (1).

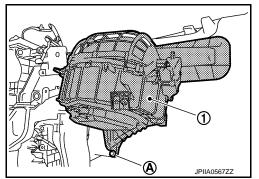


7. Remove the heater & cooling unit assembly and blower unit mounting bolts (A).

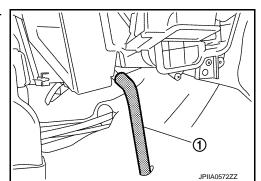


Refer to GI-4, "Components" for symbols shown in the figure.

- Remove the steering column mounting nuts (B). Refer to <u>ST-35, "WITHOUT ELECTRIC MOTOR: Exploded View"</u> (without electric motor) or <u>ST-38, "WITH ELECTRIC MOTOR: Exploded View"</u> (with electric motor).
- 9. Remove the ground bolts (C) from the steering member (1).
- 10. Remove the harness clip from the steering member.
- 11. Disconnect the intake door motor and blower motor connectors.
- 12. Remove the steering member mounting bolts (D), and then remove the steering member.
- 13. Remove the mounting screw (A), and then remove the blower unit (1).



14. Disconnect the drain hose (1) from heater & cooling unit assembly.



В

Α

С

D

Е

F

G

Н

J

VTL

Κ

L

M

Ν

Ρ

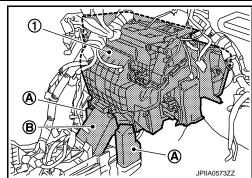
Revision: 2011 November VTL-39 2011 MURANO

HEATER & COOLING UNIT ASSEMBLY

< REMOVAL AND INSTALLATION >

[WITHOUT 7 INCH DISPLAY]

15. Remove the rear foot duct 1 (left/right) (A) and rear ventilator duct 1 (B), and then remove the heater & cooling unit assembly (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

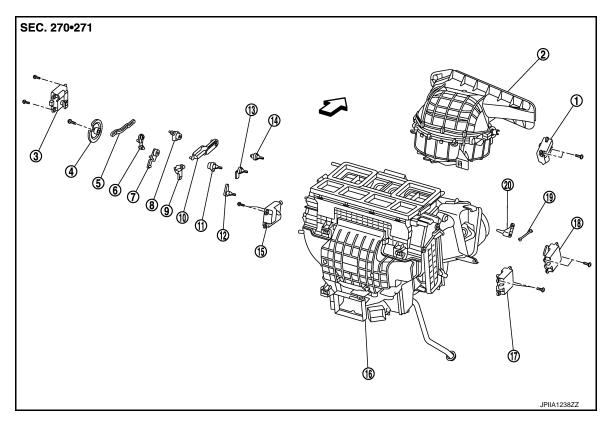
- Replace the O-ring with a new one. Apply a coat of compressor oil to the O-ring prior to installation.
- Check for refrigerant leakage when charging refrigerant.

NOTE:

- Refer to CO-12, "Refilling" when filling the radiator with engine coolant.
- Charge the refrigerant again.

UPPER VENTILATOR DOOR MOTOR

Exploded View



- 1. Intake door motor
- 4. Main link
- 7. Max. cool door link
- 10. Defroster door link
- 13. Max. cool door lever
- 16. Heater & cooling unit assembly
- 19. Upper ventilator door rod
- ⟨
 ⇒ : Vehicle front

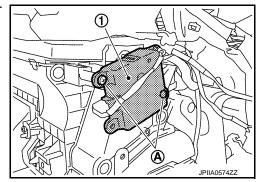
- 2. Bower unit assembly
- 5. Rod link
- 8. Mode door lever
- 11. Ventilator door lever
- 14. Defroster door lever
- 17. Air mix door motor (passenger side) 18.
- Upper ventilator door lever

- 3. Mode door motor
- 6. Max. cool door link
- 9. Ventilator door link
- 12. Foot door lever
- 15. Air mix door motor (driver side)
- Upper ventilator door motor

Removal and Installation

REMOVAL

- 1. Remove the blower unit. Refer to VTL-30, "Exploded View".
- 2. Remove the mounting screws (A), and then remove the upper ventilator door motor (1).
- 3. Disconnect the upper ventilator door motor connector.



INSTALLATION

Install in the reverse order of removal.

Revision: 2011 November VTL-41 2011 MURANO

В

Α

C

D

_

F

G

Н

√TL

J

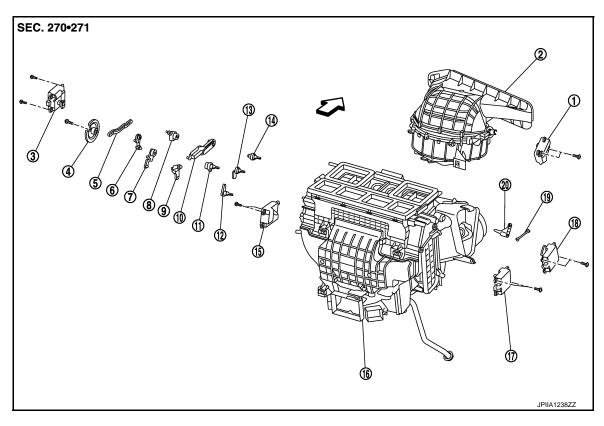
Κ

Ν

INFOID:0000000006258570

MODE DOOR MOTOR

Exploded View INFOID:0000000006258571



- Intake door motor 1.
- 4. Main link
- Max. cool door link 7.
- 10. Defroster door link
- 13. Max. cool door lever
- 16. Heater & cooling unit assembly
- 19. Upper ventilator door rod
- ⟨
 ⇒ : Vehicle front

- 2. Bower unit assembly
- 5. Rod link
- 8. Mode door lever
- 11. Ventilator door lever
- 14. Defroster door lever
- 17. Air mix door motor (passenger side) 18. Upper ventilator door motor
- 20. Upper ventilator door lever

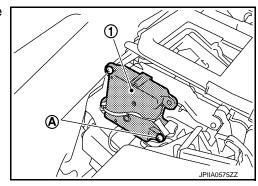
- 3. Mode door motor
- 6. Max. cool door link
- Ventilator door link
- 12. Foot door lever
- 15. Air mix door motor (driver side)

Removal and Installation

INFOID:0000000006258572

REMOVAL

- 1. Remove the instrument panel assembly. Refer to IP-12, "Exploded View".
- Remove the mounting screws (A), and then remove the mode door motor (1).
- 3. Disconnect the mode door motor connector.



INSTALLATION

Install in the reverse order of removal.

Α

В

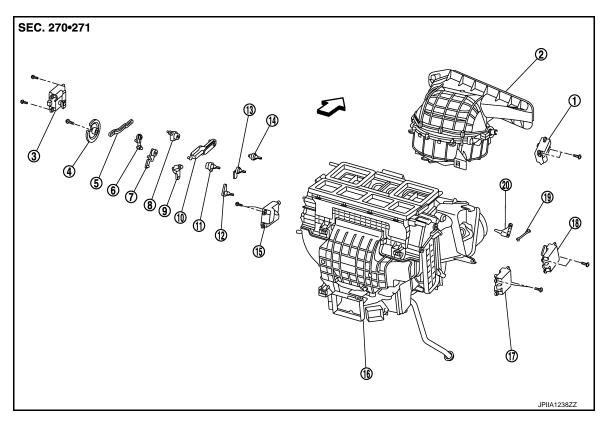
D

Н

K

AIR MIX DOOR MOTOR

Exploded View INFOID:0000000006258573



- Intake door motor 1.
- 4. Main link
- Max. cool door link 7.
- 10. Defroster door link
- 13. Max. cool door lever
- 16. Heater & cooling unit assembly
- 19. Upper ventilator door rod
- : Vehicle front

- 2. Bower unit assembly
- 5. Rod link
- 8. Mode door lever
- 11. Ventilator door lever
- 14. Defroster door lever
- 17. Air mix door motor (passenger side) 18.
- Upper ventilator door lever

- 3. Mode door motor
- 6. Max. cool door link
- 9. Ventilator door link
- 12. Foot door lever
- Air mix door motor (driver side)
- Upper ventilator door motor

Removal and Installation

REMOVAL

Driver side

- 1. Set the temperature (driver side) at 18°C (60°F). **CAUTION:**
 - The angle may be out, when installing the air mix door motor to the air mix door, unless the above procedure is performed.
- Disconnect the battery cable from the negative terminal.
- Remove the foot duct (left). Refer to VTL-67, "FOOT DUCT: Exploded View".

INFOID:0000000006258574

VTL-43 Revision: 2011 November **2011 MURANO**

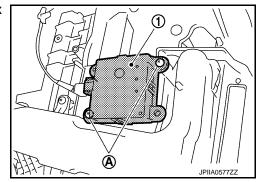
Ν

AIR MIX DOOR MOTOR

< REMOVAL AND INSTALLATION >

[WITHOUT 7 INCH DISPLAY]

- 4. Remove the mounting screws (A), and then remove the air mix door motor (1).
- 5. Disconnect the air mix door motor connector.



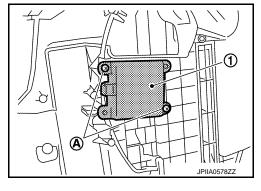
Passenger side

1. Set the temperature (passenger side) at 18°C (60°F).

CAUTION:

The angle may be out, when installing the air mix door motor to the air mix door, unless the above procedure is performed.

- 2. Disconnect the battery cable from the negative terminal.
- 3. Remove the foot duct (right). Refer to VTL-67, "FOOT DUCT: Exploded View".
- 4. Remove the mounting screws (A), and then remove the air mix door motor (1).
- 5. Disconnect the air mix door motor connector.



INSTALLATION

Install in the reverse order of removal.

Α

В

D

Е

F

Н

K

L

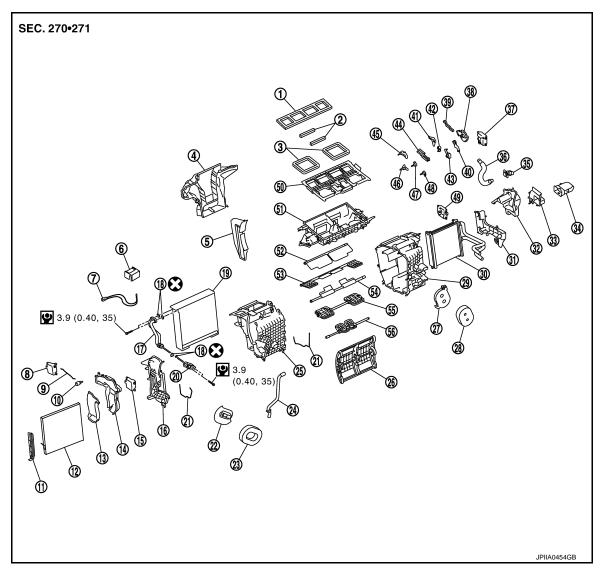
M

Ν

Р

HEATER CORE

Exploded View



- 1. Ventilator seal
- 4. Adapter case
- 7. Intake sensor
- Upper ventilator door lever
- 13. Foot duct 1 (right)
- 16. Heater & cooling unit case cover
- 19. Evaporator
- 22. Grommet
- 25. Heater & cooling unit case (right)
- 28. Heater pipe grommet
- 31. Heater pipe cover
- 34. Heater duct
- 37. Mode door motor
- 40. Max. cool door link
- 43. Mode door lever

- 2. Upper ventilator seal
- Center case
- 8. Upper ventilator door motor
- 11. Filter cover
- 14. Foot duct 2 (right)
- 17. Evaporator pipe assembly
- 20. Expansion valve
- 23. Cooler pipe grommet
- 26. Air mix door (Slide door)
- 29. Heater & cooling unit case (left)
- 32. Foot duct 2 (left)
- 35. Aspirator
- 38. Main link
- 41. Ventilator door link
- Defroster door link

- 3. Defroster seal
- 6. Intake sensor bracket
- 9. Upper ventilator door rod
- In-cabin microfilter/Air conditioner filter*
- 15. Air mix door motor (passenger side)
- 18. O-ring
- 21. Case packing
- 24. Drain hose
- 27. Heater pipe support
- 30. Heater core
- 33. Foot duct 1 (left)
- 36. Aspirator hose
- 39. Rod link
- 42. Foot door link
- 45. Ventilator door lever

HEATER CORE

< REMOVAL AND INSTALLATION >

[WITHOUT 7 INCH DISPLAY]

46. Foot door lever
47. Defroster door lever
48. Max. cool door lever
49. Air mix door motor (driver side)
50. Distributor upper case
51. Distributor lower case
52. Ventilator door
53. Foot door
54. Max. cool door

55. Defroster door 56. Upper ventilator door

* : Models for Mexico.

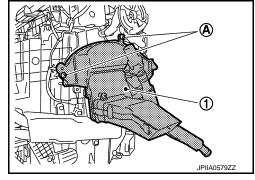
Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

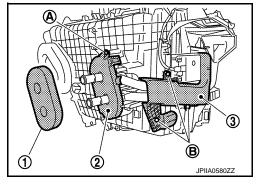
INFOID:0000000006258576

REMOVAL

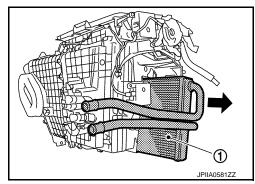
- 1. Remove the heater & cooling unit assembly. Refer to VTL-36, "Exploded View".
- 2. Remove the mounting screws (A), and then remove the foot duct (left) (1).



- 3. Remove the heater pipe grommet (1).
- 4. Remove the mounting screw (A), and then remove the heater pipe support (2).
- 5. Remove the mounting screws (B), and then remove the heater pipe cover (3).



6. Slide the heater core (1) in the direction shown by the arrow, and then remove it.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Replace the O-ring with a new one. Apply a coat of compressor oil to the O-ring prior to installation.
- Check for refrigerant leakage when charging refrigerant.
- Refer to CO-12, "Refilling" when filling the radiator with engine coolant.
- Charge the refrigerant again.

DUCT AND GRILLE CENTER VENTILATOR GRILLE

CENTER VENTILATOR GRILLE: Exploded View



Α

В

D

Е

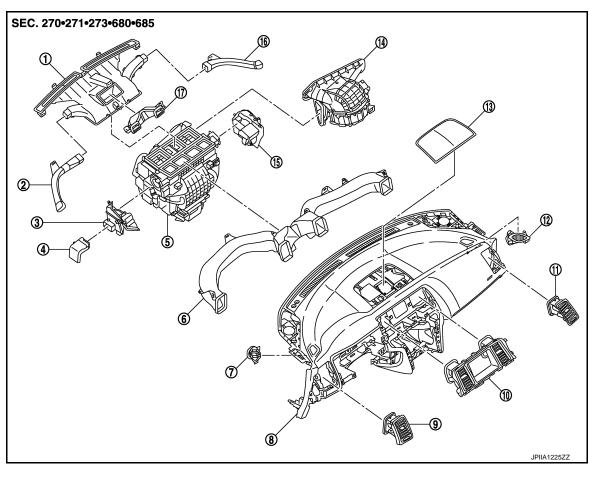
Н

L

M

Ν

Р



- Defroster nozzle
- Heater duct
- Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille

Revision: 2011 November

- 16. Side defroster nozzle (right)
- Side defroster nozzle (left) 2.
- 5. Heater & cooling unit assembly
- Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

- Foot duct (left) 3.
- 6. Ventilator duct
- 9. Side ventilator grille (left)
- 12. Side defroster grille (right)
- 15. Foot duct (right)

CENTER VENTILATOR GRILLE: Removal and Installation

REMOVAL

- Remove the cluster lid A. Refer to IP-12, "Exploded View".
- Remove the cluster lid D. Refer to IP-12, "Exploded View".

INFOID:0000000006258578

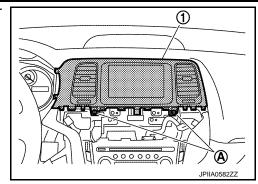
2011 MURANO

VTL-47

INFOID:0000000006258579

< REMOVAL AND INSTALLATION >

3. Remove the mounting screws (A), and then remove the center ventilator grille assembly (1).

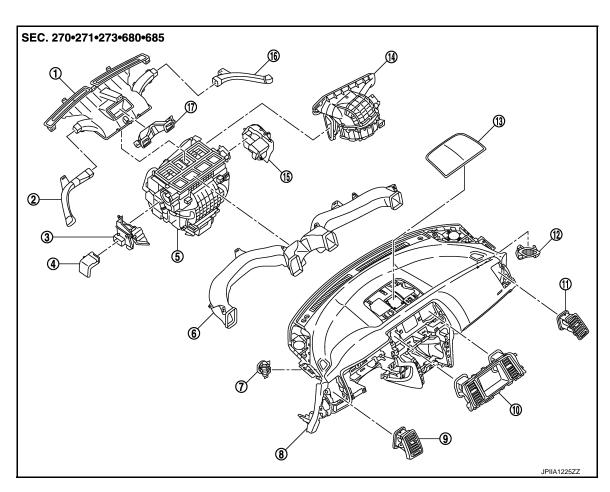


INSTALLATION

Install in the reverse order of removal.

SIDE VENTILATOR GRILLE

SIDE VENTILATOR GRILLE: Exploded View



- 1. Defroster nozzle
- 4. Heater duct
- 7. Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- 2. Side defroster nozzle (left)
- 5. Heater & cooling unit assembly
- 8. Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

- 3. Foot duct (left)
- Ventilator duct
- 9. Side ventilator grille (left)
- 12. Side defroster grille (right)
- 15. Foot duct (right)

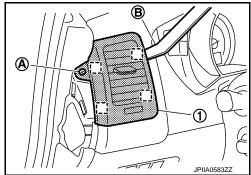
SIDE VENTILATOR GRILLE: Removal and Installation

INFOID:0000000006258580

< REMOVAL AND INSTALLATION >

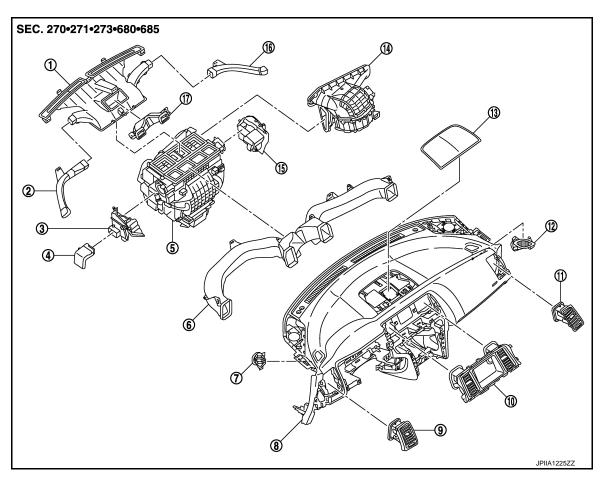
- Remove the instrument side finisher (LH/RH). Refer to IP-12, "Exploded View".
- 2. Remove the mounting screw (A).
- Remove side ventilator grille metal clip using remover tool (B), and then remove side ventilator grille (1).

: Metal clip



INSTALLATION Install in the reverse order of removal. SIDE DEFROSTER GRILLE

SIDE DEFROSTER GRILLE: Exploded View



- Defroster nozzle
- Heater duct
- Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- Side defroster nozzle (left)
- Heater & cooling unit assembly
- Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

- Foot duct (left)
- Ventilator duct
- Side ventilator grille (left)
- Side defroster grille (right)
- 15. Foot duct (right)

Н

Α

В

D

Е

INFOID:0000000006258581

M

Ν

Ρ

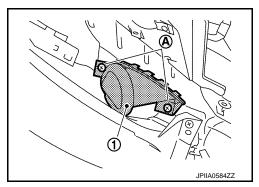
SIDE DEFROSTER GRILLE: Removal and Installation

INFOID:0000000006258582

INFOID:0000000006258583

REMOVAL

- 1. Remove the defroster nozzle and side defroster nozzle. Refer to VTL-53, "DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE: Exploded View".
- 2. Remove the mounting screws (A), and then remove the side defroster grilles (left/right) (1).



INSTALLATION Install in the reverse order of removal.

VENTILATOR DUCT

VENTILATOR DUCT: Exploded View

SEC. 270•271•273•680•685

- 1. Defroster nozzle
- Heater duct
- 7. Side defroster grille (left)
- 10. Center ventilator grille assembly
- 2. Side defroster nozzle (left)
- 5. Heater & cooling unit assembly
- 8. Instrument panel assembly
- 11. Side ventilator grille (right)
- Foot duct (left)
- Ventilator duct
- 9. Side ventilator grille (left)
- 12. Side defroster grille (right)

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

[WITHOUT 7 INCH DISPLAY]

- 13. Center speaker grille
- 14. Blower unit assembly
- 15. Foot duct (right)

- 16. Side defroster nozzle (right)
- 17. Upper ventilator duct

INFOID:0000000006258584

Α

В

D

Е

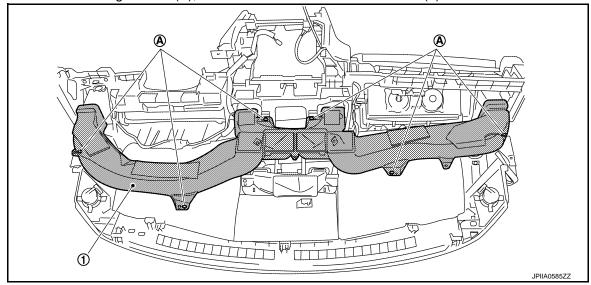
F

VENTILATOR DUCT : Removal and Installation

REMOVAL

1. Remove the defroster nozzle and side defroster nozzle. Refer to VTL-53, "DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE: Exploded View".

2. Remove the mounting screws (A), and then remove the ventilator duct (1).



INSTALLATION

Install in the reverse order of removal.

UPPER VENTILATOR DUCT

/TL

Н

K

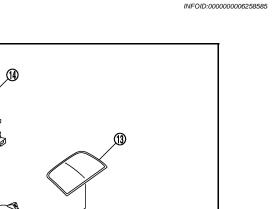
L

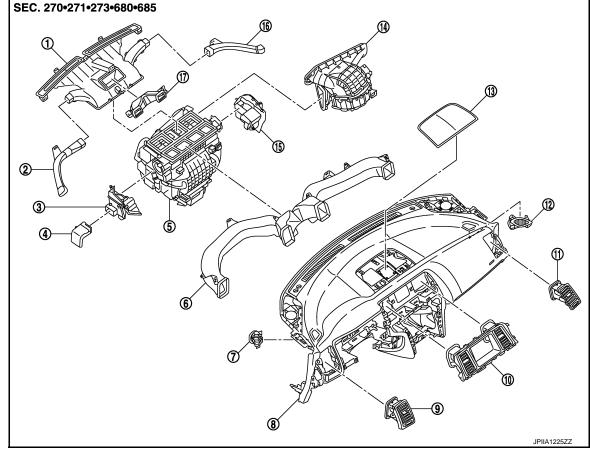
M

Ν

0

UPPER VENTILATOR DUCT: Exploded View





- Defroster nozzle
- 4. Heater duct
- Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- 2. Side defroster nozzle (left)
- Heater & cooling unit assembly
- Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

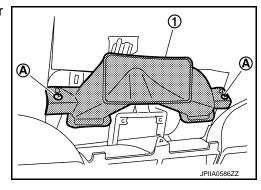
- Foot duct (left)
- Ventilator duct
- Side ventilator grille (left)
- 12. Side defroster grille (right)
- 15. Foot duct (right)

UPPER VENTILATOR DUCT: Removal and Installation

INFOID:0000000006258586

REMOVAL

- Remove the defroster nozzle and side defroster nozzle. Refer to VTL-53, "DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE: Exploded View".
- Remove the mounting screws (A), and then remove the upper ventilator duct (1).



INSTALLATION

Install in the reverse order of removal.

DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE

DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE : Exploded View

INFOID:0000000006258587

Α

В

D

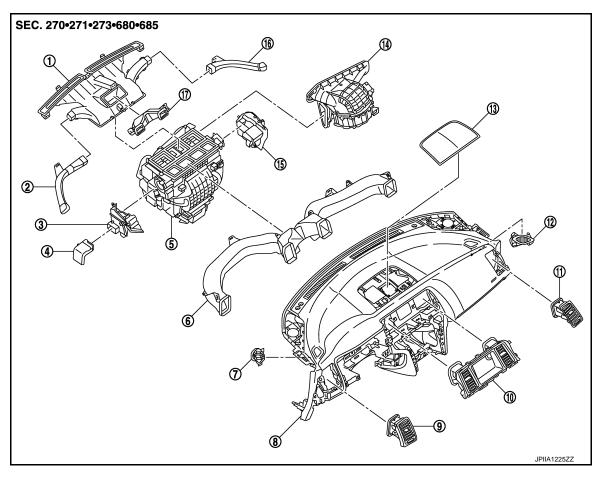
Е

Н

L

M

Ν



- 1. Defroster nozzle
- 4. Heater duct
- 7. Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- 2. Side defroster nozzle (left)
- 5. Heater & cooling unit assembly
- 8. Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

- 3. Foot duct (left)
- 6. Ventilator duct
- 9. Side ventilator grille (left)
- 12. Side defroster grille (right)
- 15. Foot duct (right)

DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE: Removal and Installation

INFOID:0000000006258588

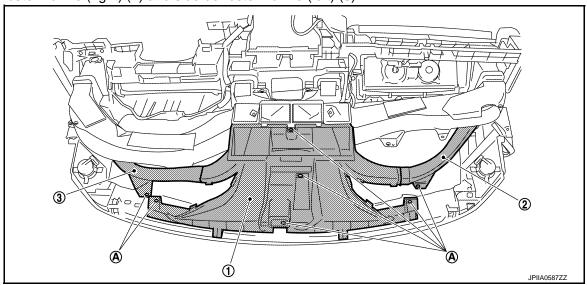
REMOVAL

Remove the instrument panel assembly. Refer to <u>IP-12, "Exploded View"</u>.

Р

Revision: 2011 November VTL-53 2011 MURANO

2. Remove the mounting screws (A), and then remove the defroster nozzle (1) together with the side defroster nozzle (right) (2) and side defroster nozzle (left) (3).



3. Remove the side defroster nozzle (right) and side defroster nozzle (left) from the defroster nozzle.

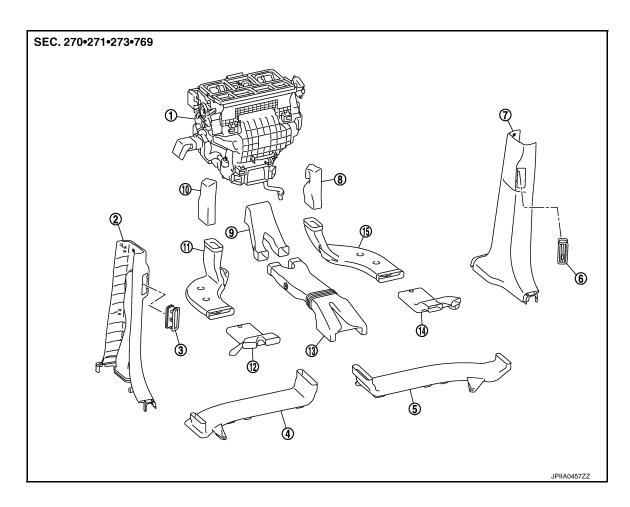
INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR GRILLE

REAR VENTILATOR GRILLE: Exploded View

INFOID:0000000006258589



DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

[WITHOUT 7 INCH DISPLAY]

- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

INFOID:0000000006258590

Α

В

D

Е

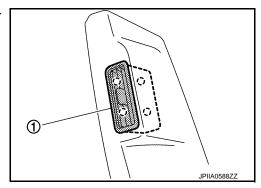
F

REAR VENTILATOR GRILLE: Removal and Installation

REMOVAL

- 1. Remove the center pillar lower garnish (left/right). Refer to INT-20, "Exploded View".
- Disengage the joints of the tabs, and then remove the rear ventilator grilles (left/right) (1).





INSTALLATION
Install in the reverse order of removal.
REAR VENTILATOR DUCT 1

/TL

Н

K

L

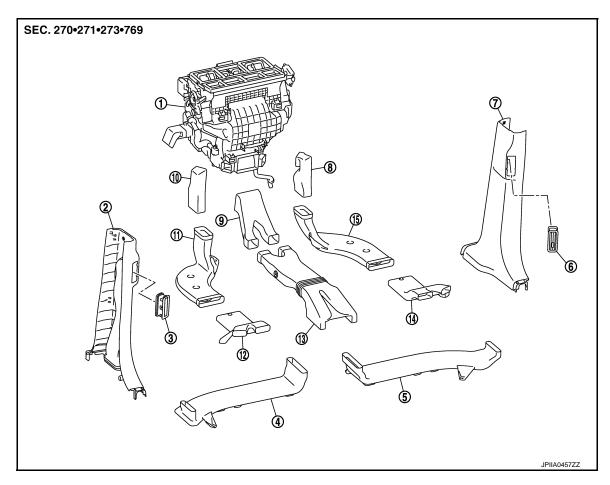
M

Ν

С

REAR VENTILATOR DUCT 1: Exploded View

INFOID:0000000006258591



- Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- Rear ventilator duct 4 (center pillar lower 7. garnish right)
- 10. Rear foot duct 1 (left)
- Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. Rear ventilator grille (left) garnish left)
- 5. Rear ventilator duct 3 (right)
- Rear foot duct 1 (right)
- Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

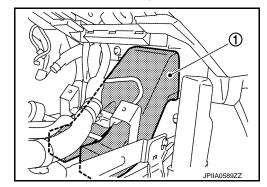
- Rear ventilator grille (right)
- Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

REAR VENTILATOR DUCT 1: Removal and Installation

INFOID:0000000006258592

REMOVAL

- 1. Remove the rear ventilator duct 2. Refer to VTL-57, "REAR VENTILATOR DUCT 2: Exploded View".
- Remove the rear ventilator duct 1 (1).



INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR DUCT 2

REAR VENTILATOR DUCT 2: Exploded View

INFOID:00000000006258593

Α

D

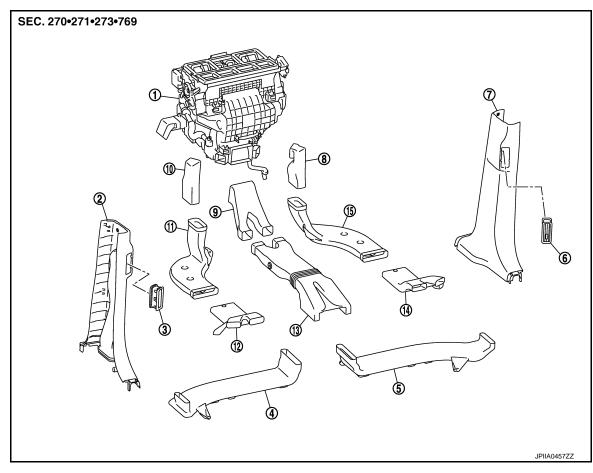
Е

Н

K

L

Ν



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

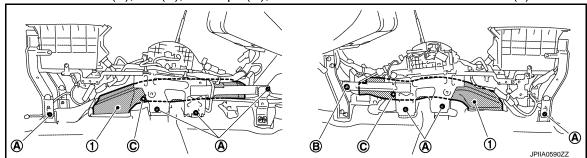
- . Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

INFOID:0000000006258594

REAR VENTILATOR DUCT 2: Removal and Installation

REMOVAL

- 1. Remove the front seat assembly (left/right). Refer to SE-90, "Exploded View".
- Remove the lower console finisher (left/right). Refer to IP-20, "Exploded View".
- 3. Remove the screws (A), nut (B), and clips (C), and then remove rear ventilator duct 2 (1).



Revision: 2011 November VTL-57 2011 MURANO

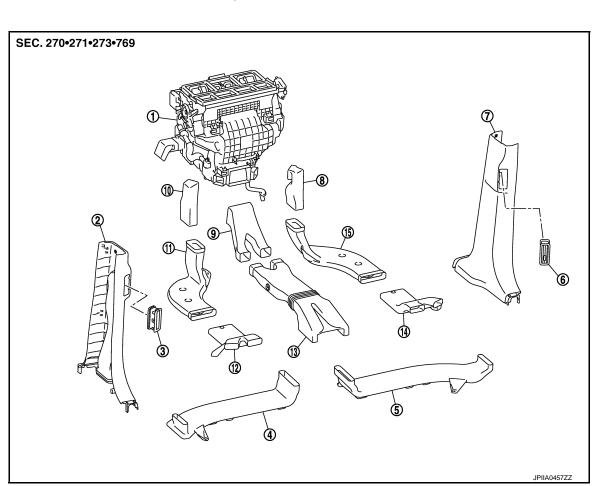
INFOID:0000000006258595

INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR DUCT 3

REAR VENTILATOR DUCT 3: Exploded View



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

REAR VENTILATOR DUCT 3: Removal and Installation

REMOVAL

Driver side

- 1. Remove the front seat assembly (left). Refer to SE-90, "Exploded View".
- Pull up the driver side floor carpet. Refer to <u>INT-24, "Exploded View"</u>.

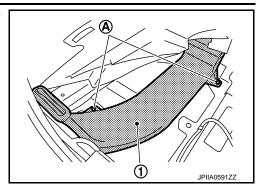
INFOID:0000000006258596

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

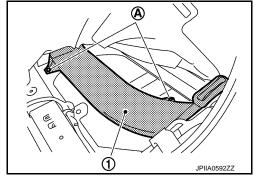
[WITHOUT 7 INCH DISPLAY]

3. Remove the mounting screws (A), and then remove rear ventilator duct 3 (left) (1).



Passenger side

- Remove the front seat assembly (right). Refer to <u>SE-90, "Exploded View"</u>.
- 2. Pull up the passenger side floor carpet. Refer to INT-24, "Exploded View".
- 3. Remove the mounting screws (A), and then remove rear ventilator duct 3 (right) (1).



INSTALLATION
Install in the reverse order of removal.
REAR VENTILATOR DUCT 4

/TL

Н

Α

В

C

D

Е

F

K

J

L

M

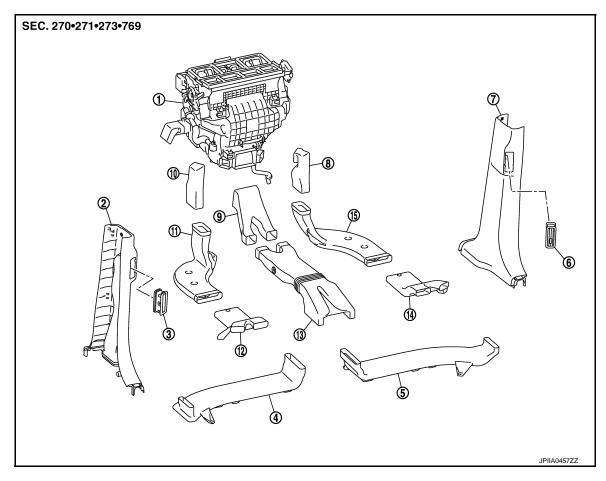
Ν

0

Ρ

REAR VENTILATOR DUCT 4: Exploded View

INFOID:0000000006258597



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- B. Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

INFOID:0000000006258598

REAR VENTILATOR DUCT 4: Removal and Installation

REMOVAL

1. Remove the center pillar lower garnish (left/right). Refer to INT-20, "Exploded View".

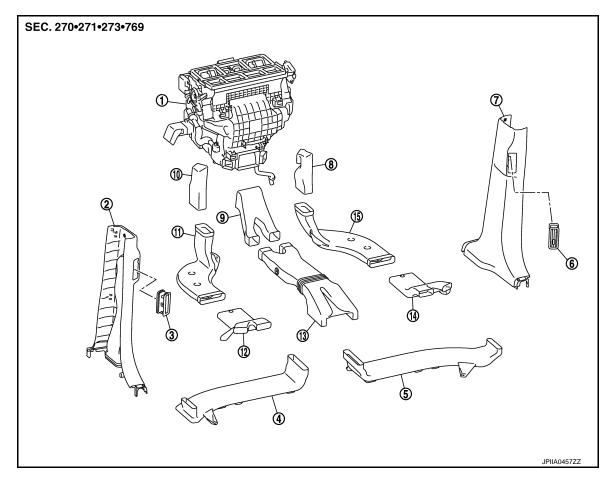
INSTALLATION

Install in the reverse order of removal.

REAR FOOT DUCT 1

REAR FOOT DUCT 1: Exploded View

INFOID:0000000006258599



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- . Rear ventilator grille (left)
- 6. Rear ventilator grille (right)

INFOID:0000000006258600

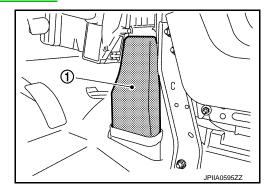
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

REAR FOOT DUCT 1: Removal and Installation

REMOVAL

Driver side

- Remove the instrument lower cover LH. Refer to <u>IP-12, "Exploded View"</u>.
- 2. Remove the rear foot duct 1 (left) (1).



Passenger side

В

Α

С

D

Е

F

G

Н

/TL

K

L

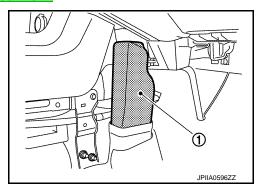
M

Ν

INFOID:0000000006258601

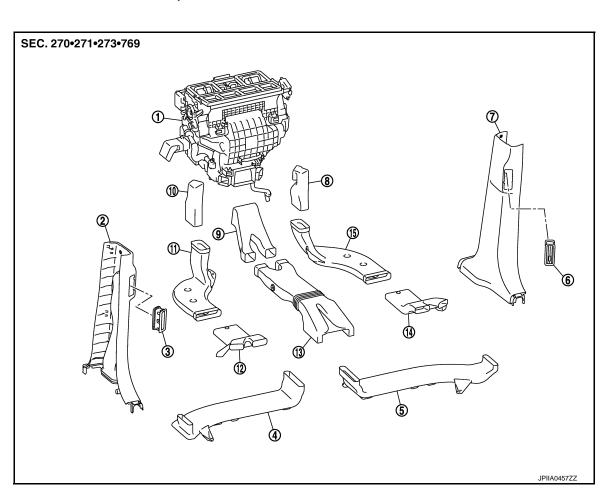
< REMOVAL AND INSTALLATION >

- 1. Remove the instrument lower cover RH. Refer to IP-12, "Exploded View".
- 2. Remove the rear foot duct 1 (right) (1).



INSTALLATION
Install in the reverse order of removal.
REAR FOOT DUCT 2

REAR FOOT DUCT 2: Exploded View



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

[WITHOUT 7 INCH DISPLAY]

REAR FOOT DUCT 2: Removal and Installation

INFOID:0000000006258602

Α

В

C

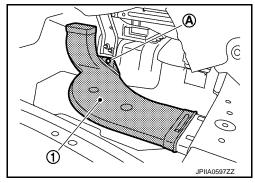
D

Е

REMOVAL

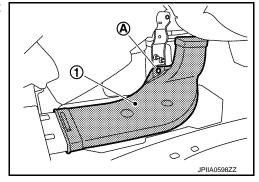
Driver side

- 1. Remove the rear foot duct 1 (left). Refer to VTL-61, "REAR FOOT DUCT 1: Exploded View".
- 2. Pull up the driver side floor carpet. Refer to INT-24, "Exploded View".
- 3. Remove the mounting clip (A), and then remove the rear foot duct 2 (left) (1).



Passenger side

- 1. Remove the rear foot duct 1 (right). Refer to VTL-61, "REAR FOOT DUCT 1 : Exploded View".
- 2. Pull up the passenger side floor carpet. Refer to INT-24, "Exploded View".
- 3. Remove the mounting clip (A), and then remove the rear foot duct 2 (right) (1).



INSTALLATION

Install in the reverse order of removal.

REAR FOOT DUCT 3

VTL

Н

Κ

J

M

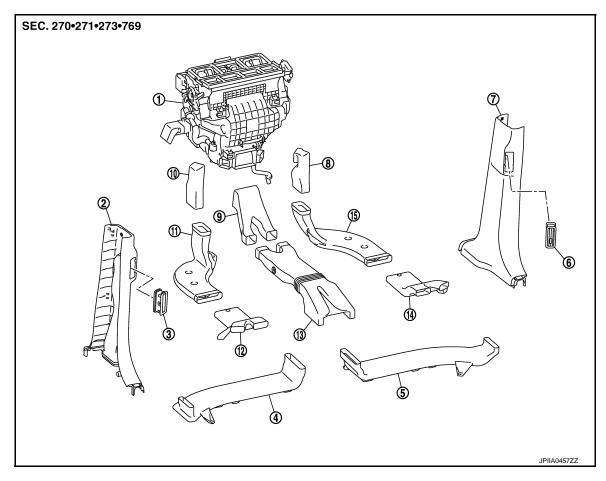
L

Ν

0

REAR FOOT DUCT 3: Exploded View

INFOID:0000000006258603



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- B. Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

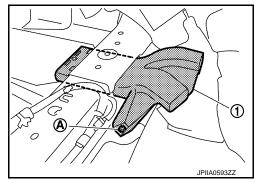
INFOID:0000000006258604

REAR FOOT DUCT 3: Removal and Installation

REMOVAL

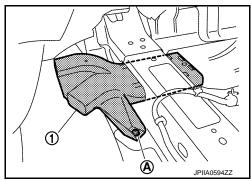
Driver side

- Remove the rear foot duct 2 (left). Refer to <u>VTL-62, "REAR FOOT DUCT 2: Exploded View"</u>.
- 2. Remove the mounting screw (A), and then remove the rear foot duct 3 (left) (1).



[WITHOUT 7 INCH DISPLAY]

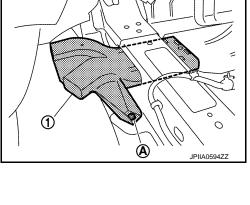
- Remove the rear foot duct 2 (right). Refer to VTL-62, "REAR FOOT DUCT 2: Exploded View".
- 2. Remove the mounting screw (A), and then remove the rear foot duct 3 (right) (1).



INSTALLATION Install in the reverse order of removal.

HEATER DUCT

HEATER DUCT: Exploded View



SEC. 270-271 3.9 (0.40, 35) **®** 3.9 (0.40, 35)JPIIA0454GB

- 1. Ventilator seal
- 4. Adapter case
- 7. Intake sensor

- 2. Upper ventilator seal
- 5. Center case
- Upper ventilator door motor 8.
- 3. Defroster seal
- 6. Intake sensor bracket
- 9. Upper ventilator door rod

Α

В

C

D

Е

F

INFOID:0000000006258605

Н

K

M

Ν

0

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

[WITHOUT 7 INCH DISPLAY]

10.	Upper ventilator door lever	11.	Filter cover	12.	In-cabin microfilter/Air conditioner filter*
13.	Foot duct 1 (right)	14.	Foot duct 2 (right)	15.	Air mix door motor (passenger side)
16.	Heater & cooling unit case cover	17.	Evaporator pipe assembly	18.	O-ring
19.	Evaporator	20.	Expansion valve	21.	Case packing
22.	Grommet	23.	Cooler pipe grommet	24.	Drain hose
25.	Heater & cooling unit case (right)	26.	Air mix door (Slide door)	27.	Heater pipe support
28.	Heater pipe grommet	29.	Heater & cooling unit case (left)	30.	Heater core
31.	Heater pipe cover	32.	Foot duct 2 (left)	33.	Foot duct 1 (left)
34.	Heater duct	35.	Aspirator	36.	Aspirator hose
37.	Mode door motor	38.	Main link	39.	Rod link
40.	Max. cool door link	41.	Ventilator door link	42.	Foot door link
43.	Mode door lever	44.	Defroster door link	45.	Ventilator door lever
46.	Foot door lever	47.	Defroster door lever	48.	Max. cool door lever
49.	Air mix door motor (driver side)	50.	Distributor upper case	51.	Distributor lower case
52.	Ventilator door	53.	Foot door	54.	Max. cool door
55.	Defroster door	56.	Upper ventilator door		
*	: Models for Mexico.				

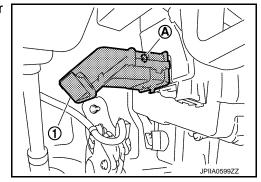
Refer to $\underline{\text{GI-4, "Components"}}$ for symbols in the figure.

HEATER DUCT: Removal and Installation

INFOID:0000000006258606

REMOVAL

- 1. Remove the instrument lower panel LH. Refer to IP-12, "Exploded View".
- 2. Remove the mounting screw (A), and then remove the heater duct (1).



INSTALLATION

Install in the reverse order of removal.

FOOT DUCT

FOOT DUCT : Exploded View

INFOID:0000000006258607

Α

В

D

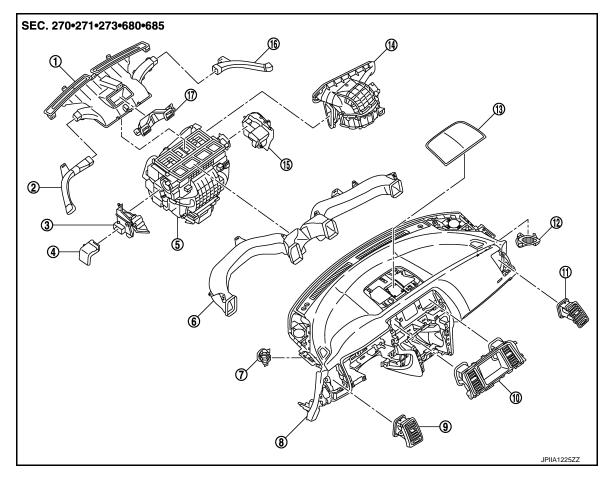
Е

Н

L

M

Ν



- 1. Defroster nozzle
- 4. Heater duct
- 7. Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- 2. Side defroster nozzle (left)
- 5. Heater & cooling unit assembly
- 8. Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

- 3. Foot duct (left)
- Ventilator duct
- 9. Side ventilator grille (left)
- 12. Side defroster grille (right)
- 15. Foot duct (right)

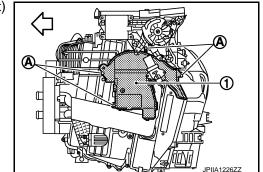
FOOT DUCT: Removal and Installation

INFOID:0000000006258608

REMOVAL

Driver side

- Remove instrument lower panel LH. Refer to <u>IP-12, "Exploded View"</u>.
- 2. Remove mounting screws (A), and then remove foot duct (left) (1).



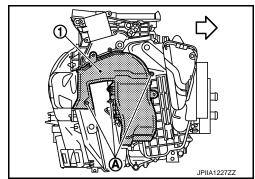
Passenger side

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

[WITHOUT 7 INCH DISPLAY]

- 1. Remove blower unit assembly. Refer to VTL-30, "Exploded View".
- 2. Remove mounting screws (A) and harness clip, and then remove foot duct (right) (1).



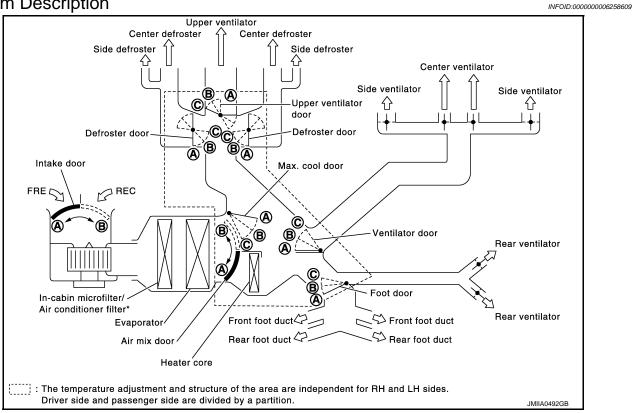
INSTALLATION

Installation is basically the reverse order of removal.

SYSTEM DESCRIPTION

SWITCHES AND THEIR CONTROL FUNCTION

System Description



* : Models for Mexico.

VTL

Н

Α

В

D

Е

J

Κ

ı

M

Ν

C

Switch position				Door position															
				Ventilator door	Max. cool door	Defroster door	Foot door	Upper ventila- tor door	Intake door	Air mix door (Driver side)	Air mix door (Pas- senger side)								
AUTO switch	AUTO switch				AUT	0	'			AU	ТО								
	VENT	•	·j	А	Α	Α	Α												
MODE	B/L	₩		В	В	А	В	_	_										
switch	FOOT	ن		С	В	В	С												
	D/F	2	P;	С	В	В	В		В	_	_								
DEF switch	(4)	=	*	С	С	С	Α		В										
UPPER VENT	ON	Î	*					A-B	A-B C										
switch	OFF	~	0																
Intake	ON	ڪ	*					-	A^*										
switch	OFF	تعا	0						B [*]										
_			0°C 0°F)							А									
Temperature control dial (Driver side)	DUAL switch: OFF	18.5°C ⇔ (61°F ⇔								AU	то								
(2	32		.0°C 0°F)													<u> </u>		В	
			.0°C 0°F)	_	_	_	_	_		А									
Temperature control dial (Driver side)	trol dial		⇒ 31.5°C ⇒ 89°F)						_	AUTO	_								
(2			.0°C 0°F)							В									
Temperature	ON ON		.0°C 0°F)								А								
control dial (Passenger side)	ol dial enger		⇒ 31.5°C ⇒ 89°F)							_	AUTO								
			.0°C D°F)								В								
ON/OFF switch				С	С	В	С	_	В	_	_								

^{*:} Inlet status is displayed by indicator when activating automatic control.

AIR DISTRIBUTION

System Description

INFOID:0000000006258610

Discharge air flow								
Mode position indication	Condition	Air outlet/distribution						
			VENT		FO	DEE		
		Front	Upper	Rear	Front	Rear	DEF	
ن ړ-	DUAL switch: OFF LUPPER VENT switch : ON	81%	8%	11%	_	_	_	
***		41%	10%	17%	24%	8%	_	
		12%	12%	16%	27%	10%	23%	
,		11%	11%	14%	25%	10%	29%	
*		11%	11%	12%	_	_	66%	

JPIIA0509GB

Discharge air flow									
Mode position indication	Condition	Air outlet/distribution							
			VENT		FO	DEE			
		Front	Upper	Rear	Front	Rear	DEF		
~;i	DUAL switch: OFF UPPER VENT switch : OFF	88%	_	12%	_	_	_		
**		47%	_	18%	26%	9%	_		
نه،		13%	_	17%	33%	12%	25%		
Ţ;		12%	_	16%	28%	12%	32%		
*		11%	_	15%	_	_	74%		

JPIIA0510GB

В

Α

С

D

Е

F

G

Н

Κ

L

M

Ν

0

PRECAUTION

PRECAUTIONS FOR USA AND CANADA

FOR USA AND CANADA: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the
 ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with
 a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing
 serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

FOR MEXICO

FOR MEXICO: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

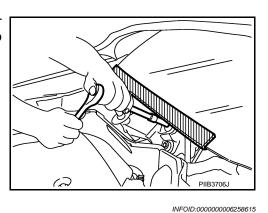
WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the
 ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with
 a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing
 serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precaution for Procedure without Cowl Top Cover

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



INFOID:0000000006258614

Precautions For Xenon Headlamp Service

WARNING:

Comply with the following warnings to prevent any serious accident.

- Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.
- Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector. (Turning it ON outside the lamp case may cause fire or visual impairments.)
- Never touch the bulb glass immediately after turning it OFF. It is extremely hot.

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)
- Never perform HID circuit inspection with a tester.
- Never touch the xenon bulb glass with hands. Never put oil and grease on it.
- Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.
- Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).

Working with HFC-134a (R-134a)

CAUTION:

- CFC-12 (R-12) refrigerant and HFC-134a (R-134a) refrigerant are not compatible. Compressor malfunction is likely to occur if the refrigerants are mixed, refer to "CONTAMINATED REFRIGERANT" below. To determine the purity of HFC-134a (R-134a) in the vehicle and recovery tank, use Refrigerant Recovery/Recycling Recharging equipment and Refrigerant Identifier.
- Use only specified lubricant for the HFC-134a (R-134a) A/C system and HFC-134a (R-134a) components. Compressor malfunction is likely to occur if lubricant other than that specified is used.
- The specified HFC-134a (R-134a) lubricant rapidly absorbs moisture from the atmosphere. The following handling precautions must be observed:
- Immediately cap (seal) immediately the component to minimize the entry of moisture from the atmosphere when removing refrigerant components from a vehicle.
- Never remove the caps (unseal) until just before connecting the components when installing refrigerant components to a vehicle. Connect all refrigerant loop components as quickly as possible to minimize the entry of moisture into system.
- Use only the specified lubricant from a sealed container. Immediately reseal containers of lubricant. Lubricant becomes saturated with moisture and should not be used without proper sealing.

VTL

D

M

INFOID:00000000006258616

O

Ρ

Revision: 2011 November VTL-73 2011 MURANO

- Never allow lubricant (NISSAN A/C System Oil Type S) to come in to contact with styrene foam parts. Damage may result.

CONTAMINATED REFRIGERANT

Take the appropriate steps shown below if a refrigerant other than pure HFC-134a (R-134a) is identified in a vehicle:

- Explain to the customer that environmental regulations prohibit the release of contaminated refrigerant into the atmosphere.
- Explain that recovery of the contaminated refrigerant could damage service equipment and refrigerant supply.
- Suggest the customer return the vehicle to the location of previous service where the contamination may have occurred.
- If repairing, recover the refrigerant using only dedicated equipment and containers. Never reintroduce contaminated refrigerant into the existing service equipment. Contact a local refrigerant product retailer for available service if the facility does not have dedicated recovery equipment. This refrigerant must be disposed of in accordance with all federal and local regulations. In addition, replacement of all refrigerant system components on the vehicle is recommended.
- The air conditioner warranty is void if the vehicle is within the warranty period. Please contact Nissan Customer Affairs for further assistance.

General Refrigerant Precaution

INFOID:0000000006258617

WARNING:

- Never breathe A/C refrigerant and lubricant vapor or mist. Exposure may irritate eyes, nose or throat. Remove HFC-134a (R-134a) from the A/C system, using certified service equipment meeting requirements of SAE J-2210 [HFC-134a (R-134a) recycling equipment], or J-2209 [HFC-134a (R-134a) recovery equipment]. Ventilate the work area before resuming service if accidental system discharge occurs. Additional health and safety information may be obtained from refrigerant and lubricant manufacturers.
- Never release refrigerant into the air. Use approved recovery/recycling equipment to capture the refrigerant each time an air conditioning system is discharged.
- Always wear eye and hand protection (goggles and gloves) when working with any refrigerant or air conditioning system.
- Never store or heat refrigerant containers above 52°C (126°F).
- Never heat a refrigerant container with an open flame. Place the bottom of the container in a warm pail of water if container warming is required.
- Never intentionally drop, puncture, or incinerate refrigerant containers.
- Keep refrigerant away from open flames. Poisonous gas is produced if refrigerant burns.
- Refrigerant displaces oxygen, therefore be certain to work in well ventilated areas to prevent suffocation.
- Never pressure test or leakage test HFC-134a (R-134a) service equipment and/or vehicle air conditioning systems with compressed air during repair. Some mixtures of air and HFC-134a (R-134a) have proven to be combustible at elevated pressures. These mixtures, if ignited, may cause injury or property damage. Additional health and safety information may be obtained from refrigerant manufacturers.

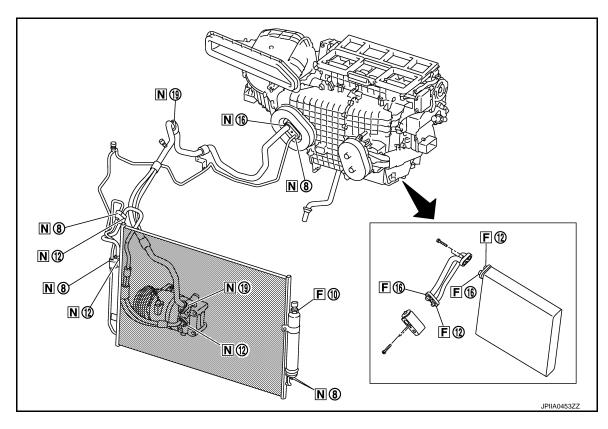
Refrigerant Connection

INFOID:0000000006258618

A new type refrigerant connection has been introduced to all refrigerant lines except the following locations.

- Expansion valve to evaporator
- · Refrigerant pressure sensor to liquid tank

O-RING AND REFRIGERANT CONNECTION



Former type refrigerant connection N. New type refrigerant connection

O: O-ring size

CAUTION:

The new and former refrigerant connections use different O-ring configurations. Never confuse O-rings since they are not interchangeable. Refrigerant may leak at the connection if an incorrect O-ring is installed.

O-Ring Part Numbers and Specifications

Connection type	ection type Piping connection point		Part number	QTY	O-ring size
	Low-pressure flexible hose to low-pressure pipe		92474 N8210	1	φ19
	High-pressure pipe to condenser pipe assembly (Outlet)		92471 N8210	1	ф8
	Condenser pipe assembly (Inlet) to high-pressure flexible hose (One-touch joint)		92472 N8210	1	ф12
	Condenser assembly to condenser pipe as-	Inlet	92472 N8210	1	φ12
	sembly	Outlet	92471 N8210	1	ф8
New	Low-pressure pipe to expansion valve	92473 N8210	1	φ16	
	High-pressure pipe to expansion valve	92471 N8210	1	ф8	
	Compressor to low-pressure flexible hose	92474 N8210	1	φ19	
	Compressor to high-pressure flexible hose	92472 N8210	1	φ12	
	Limited to a little and a littl	Inlet	00474 N0040	1	- ф8
	Liquid tank to condenser assembly	Outlet	92471 N8210	1	
	Refrigerant pressure sensor to liquid tank	J2476 89956	1	φ10	
		Inlet	92475 71L00	1	φ12
Former	Expansion valve to evaporator pipe assembly	Outlet	92475 72L00	1	φ16
	-	Inlet	92475 71L00	1	φ12
	Evaporator to evaporator pipe assembly	Outlet	92475 72L00	1	φ16

VTL

Н

Α

В

D

Е

Κ

M

Ν

0

WARNING:

Check that all refrigerant is discharged into the recycling equipment and the pressure in the system is less than the atmospheric pressure. Then gradually loosen the discharge side hose fitting and remove it.

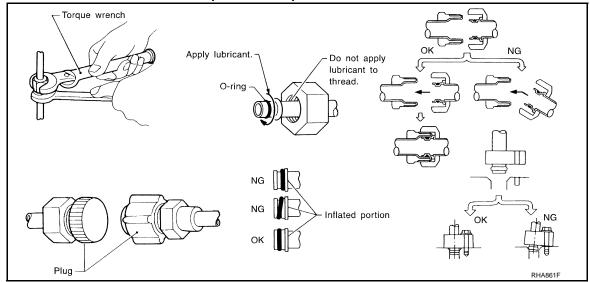
CAUTION:

Observe the following items when replacing or cleaning refrigerant cycle components.

- Store it in the same way as it is when mounted on the car when the compressor is removed. Failure to do so will cause lubricant to enter the low-pressure chamber.
- Always use a torque wrench and a back-up wrench when connecting tubes.
- Immediately plug all openings to prevent entry of dust and moisture after disconnecting tubes.
- Connect the pipes at the final stage of the operation when installing an air conditioner in the vehicle.
 Never remove the seal caps of pipes and other components until just before they are required for connection.
- Allow components stored in cool areas to warm to working area temperature before removing seal caps. This prevents condensation from forming inside A/C components.
- Thoroughly remove moisture from the refrigeration system before charging the refrigerant.
- Always replace used O-rings.
- Apply lubricant to the circle of the O-rings shown in illustration when a connecting tube. Never apply lubricant to threaded portion.

Name : NISSAN A/C System Oil Type S

- O-ring must be closely attached to the groove portion of tube.
- Never damage O-ring and tube when replacing the O-ring.
- Connect tube until a click can be heard. Then tighten the nut or bolt by hand. Check that the O-ring is
 installed to the tube correctly.
- Perform leakage test and check that there is no leakage from connections after connecting the line.
 Disconnect the line and replace the O-ring when the refrigerant leakage point is found. Then tighten the connections of seal seat to the specified torque.



Service Equipment

INFOID:0000000006258619

RECOVERY/RECYCLING EQUIPMENT

Be certain to follow the manufacturer instructions for machine operation and machine maintenance. Never introduce any refrigerant other than that specified into the machine.

ELECTRICAL LEAK DETECTOR

Be certain to follow the manufacturer instructions for tester operation and tester maintenance.

VACUUM PUMP

[WITH 7 INCH DISPLAY]

Α

В

D

F

Н

VTL

K

M

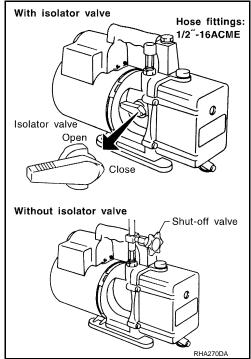
N

The lubricant contained inside the vacuum pump is not compatible with the specified lubricant for HFC-134a (R-134a) A/C systems. The vent side of the vacuum pump is exposed to atmospheric pressure. So the vacuum pump lubricant may migrate out of the pump into the service hose. This is possible when the pump is switched OFF after evacuation (vacuuming) and the hose is connected to it. To prevent this migration, use a manual valve placed near the hose-to-pump connection, as per the following procedure.

 Vacuum pumps usually have a manual isolator valve as part of the pump. Close this valve to isolate the service hose from the pump.

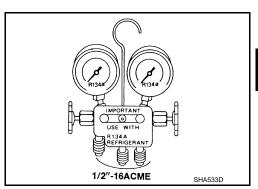
- Use a hose equipped with a manual shut-off valve near the pump end for pumps without an isolator. Close the valve to isolate the hose from the pump.
- Disconnect the hose from the pump if the hose has an automatic shut-off valve. As long as the hose is connected, the valve is open and lubricating oil may migrate.

Some one-way valves open when vacuum is applied and close under the no vacuum condition. Such valves may restrict the ability of the pump to create a deep vacuum and are not recommended.



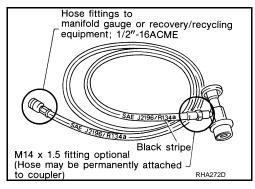
MANIFOLD GAUGE SET

Be certain that the gauge face indicates HFC-134a or R-134a. Be sure the gauge set has 1/2"-16 ACME threaded connections for service hoses. Confirm the set has been used only with refrigerant HFC-134a (R-134a) and specified lubricants.



SERVICE HOSES

Be certain that the service hoses display the markings described (colored hose with a black stripe). All hoses must equip positive shut-off devices (either manual or automatic) near the end of the hoses opposite to the manifold gauge.



SERVICE COUPLERS

Ρ

Revision: 2011 November VTL-77 2011 MURANO

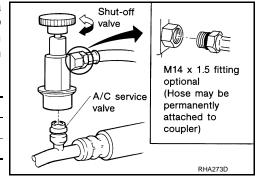
PRECAUTIONS

< PRECAUTION >

[WITH 7 INCH DISPLAY]

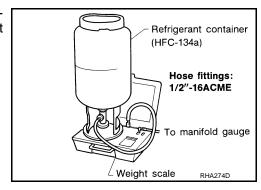
Never attempt to connect HFC-134a (R-134a) service couplers to a CFC-12 (R-12) A/C system. The HFC-134a (R-134a) couplers do not properly connect to the CFC-12 (R-12) system. However, if an improper connection is attempted, discharging and contamination may occur.

Shut-off valve rotation	A/C service valve	
Clockwise	Open	
Counterclockwise	Close	



REFRIGERANT WEIGHT SCALE

Verify that no refrigerant other than HFC-134a (R-134a) and specified lubricants have been used with the scale. The hose fitting must be 1/2"-16 ACME if the scale controls refrigerant flow electronically.



CHARGING CYLINDER

Use of a charging cylinder is not recommended. Refrigerant may be vented into the air from the top valve of the cylinder when filling the cylinder with refrigerant. Also, the accuracy of the cylinder is generally less than that of an electronic scale or of quality recycle/recharge equipment.

COMPRESSOR

< PRECAUTION > [WITH 7 INCH DISPLAY]

COMPRESSOR

General Precautions

CAUTION:

- Plug all openings to prevent moisture and foreign material from entering.
- Store it in the same way as it is when mounted on the car when the compressor is removed.
- Follow "Maintenance of Lubricant Quantity in Compressor" exactly when replacing or repairing compressor. Refer to HA-25, "Maintenance of Lubricant Quantity".
- Keep friction surfaces between clutch and pulley clean. Wipe it off by using a waste moistened with thinner if the surface is contaminated with lubricant.
- Turn the compressor shaft by hand more than five turns in both directions after compressor service operation. This equally distributes lubricant inside the compressor. Let the engine idle and operate the compressor for one hour after the compressor is installed.
- Apply voltage to the new compressor and check for normal operation after replacing the compressor magnet clutch.

VTL

Н

Α

В

Е

F

K

L

M

Ν

0

FLUORESCENT LEAK DETECTOR

< PRECAUTION > [WITH 7 INCH DISPLAY]

INFOID:0000000006258621

FLUORESCENT LEAK DETECTOR

General Precautions

CAUTION:

- The A/C system contains a fluorescent leak detection dye used for locating refrigerant leakages. An ultraviolet (UV) lamp is required to illuminate the dye when inspecting for leakages.
- Always wear fluorescence enhancing UV safety goggles to protect eyes and enhance the visibility of the fluorescent dye.
- The fluorescent dye leak detector is not a replacement for an electrical leak detector (SST: J-41995).
 The fluorescent dye leak detector should be used in conjunction with an electrical leak detector (SST: J-41995) to pin-point refrigerant leakages.
- Read and follow all manufacturer operating instructions and precautions prior to performing work for safety and customer satisfaction.
- A compressor shaft seal should not necessarily be repaired because of dye seepage. The compressor shaft seal should only be repaired after confirming the leakage with an electrical leak detector (SST: J-41995).
- Always remove any remaining dye from the leakage area after repairs are completed to avoid a misdiagnosis during future service.
- Never allow dye to come into contact with painted body panels or interior components. Immediately clean with the approved dye cleaner if dye is spilled. Fluorescent dye left on a surface for an extended period of time cannot be removed.
- Never spray fluorescent dye cleaning agent on hot surfaces (engine exhaust manifold, etc.).
- Never use more than one refrigerant dye bottle [1/4 ounce (7.4 cc)] per A/C system.
- Leak detection dyes for HFC-134a (R-134a) and CFC-12 (R-12) A/C systems are different. Never use HFC-134a (R-134a) leak detection dye in CFC-12 (R-12) A/C system or CFC-12 (R-12) leak detection dye in HFC-134a (R-134a) A/C system, otherwise A/C system damage may result.
- The fluorescent properties of the dye remains for three or more years unless a compressor malfunction occurs.

IDENTIFICATION

NOTE:

Vehicles with factory installed fluorescent dye have a green label.

Vehicles without factory installed fluorescent dye have a blue label.

IDENTIFICATION LABEL FOR VEHICLE

Vehicles with factory installed fluorescent dye have an identification label on the front side of hood.

INFOID:0000000006258622

Α

В

D

Е

PREPARATION

PREPARATION

Special Service Tool

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

HFC-134a (R-134a) Service Tool and Equipment

- Never mix HFC-134a (R-134a) refrigerant and/or its specified lubricant with CFC-12 (R-12) refrigerant and/or its lubricant.
- Separate and non-interchangeable service equipment must be used for handling each type of refrigerant/ lubricant.
- Refrigerant container fittings, service hose fittings and service equipment fittings (equipment that handles
 refrigerant and/or lubricant) are different between CFC-12 (R-12) and HFC-134a (R-134a). This is to avoid
 mixed use of the refrigerants/lubricant.
- Never use adapters that convert one size fitting to another. Refrigerant/lubricant contamination occurs and compressor malfunction may result.

Tool number (Kent-Moore No.) Tool name		Description	
(ACR2005-NI) ACR5 A/C Service Center	WJIA0293E	Function: Refrigerant recovery, recycling and recharging	H
(J-41995) Electrical leak detector	AHA281A	Power supply: DC 12 V (Battery terminal)	J K
(J-43926) Refrigerant dye leak detection kit Kit includes: (J-42220) UV lamp and UV safety goggles (J-41459) HFC-134a (R-134a) dye injector Use with J-41447, 1/4 ounce bottle (J-41447) HFC-134a (R-134a) fluorescent leak detection dye (Box of 24, 1/4 ounce bottles) (J-43872) Refrigerant dye cleaner	W/shield Refrigerant dye cleaner gogggles Refrigerant dye identification label (24 labels) NOTICE NOTICE Name of the following	Power supply: DC 12 V (Battery terminal)	M N O

(Ker	ool number nt-Moore No.) Tool name	Description
(J-42220) UV lamp and UV safety goggles	SHA438F	Power supply: DC 12 V (Battery terminal) For checking refrigerant leakage when fluorescent dye is equipped in A/C system Includes: UV lamp and UV safety goggles
(J-41447) HFC-134a (R-134a) fluorescent leak detection dye (Box of 24, 1/4 ounce bottles)	Refrigerant dye (24 bottles) SHA439F	Application: For HFC-134a (R-134a) PAG oil Container: 1/4 ounce (7.4 cc) bottle (Includes self-adhesive dye identification labels for affixing to vehicle after charging system with dye.)
(J-41459) HFC-134a (R-134a) dye injector Use with J-41447, 1/4 ounce bottle	SHA440F	For injecting 1/4 ounce of fluorescent leak detection dye into A/C system
(J-43872) Refrigerant dye cleaner	SHA441F	For cleaning dye spills
(J-39183) Manifold gauge set (with hoses and couplers)	RJIA0196E	Identification: • The gauge face indicates HFC-134a (R-134a). Fitting size: Thread size • 1/2″-16 ACME
Service hoses • High-pressure side hose (J-39501-72) • Low-pressure side hose (J-39502-72) • Utility hose (J-39476-72)	S-NT201	 Hose color: Low-pressure side hose: Blue with black stripe High-pressure side hose: Red with black stripe Utility hose: Yellow with black stripe or green with black stripe Hose fitting to gauge: 1/2"-16 ACME

PREPARATION

(Ke	Description	
 Service couplers High-pressure side coupler (J-39500-20) Low-pressure side coupler (J-39500-24) 	S-NT202	Hose fitting to service hose: M14 x 1.5 fitting is optional or permanently attached.
(J-39650) Refrigerant weight scale	S-NT200	For measuring of refrigerant Fitting size: Thread size 1/2 ⁻¹⁶ ACME
(J-39649) Vacuum pump (Including the isolator valve)	0 0 NT203	Capacity: • Air displacement: 4 CFM • Micron rating: 20 microns • Oil capacity: 482 g (17 oz.) Fitting size: Thread size • 1/2 -16 ACME

Commercial Service Tool

INFOID:0000000006258623

	Description		
Refrigerant identifier equipment	RJIA0197E	Checking for refrigerant purity and system contamination	K
Power tools	PBIC0190E	For loosening bolts and nuts	N 0
Remover tools	JMKIA3050ZZ	Remove clips, pawls, and metal clips	Р

Sealant or/and Lubricant

INFOID:0000000006258624

HFC-134a (R-134a) Service Tool and Equipment

- Never mix HFĆ-134a (R-134a) refrigerant and/or its specified lubricant with CFC-12 (R-12) refrigerant and/or its lubricant.
- Separate and non-interchangeable service equipment must be used for handling each type of refrigerant/ lubricant.
- Refrigerant container fittings, service hose fittings and service equipment fittings (equipment that handles refrigerant and/or lubricant) are different between CFC-12 (R-12) and HFC-134a (R-134a). This is to avoid mixed use of the refrigerants/lubricant.
- Never use adapters that convert one size fitting to another. Refrigerant/lubricant contamination occurs and compressor malfunction may result.

Tool r	Description		
HFC-134a (R-134a) refrigerant	S-NT196	Container color: Light blue Container marking: HFC-134a (R- 134a) Fitting size: Thread size • Large container 1/2"-16 ACME	
NISSAN A/C System Oil Type S (DH-PS)	NISSAN S-NT197	Type: Polyalkylene glycol oil (PAG), type S (DH-PS) Application: HFC-134a (R-134a) swash plate compressors (NISSAN only) Capacity: 40 m ℓ (1.4 US fl oz., 1.4 Imp fl oz.)	

Α

В

D

Е

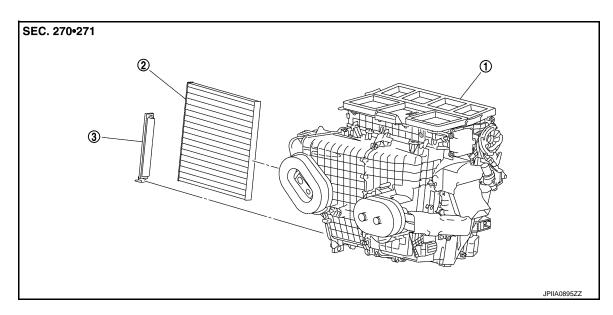
M

Ν

PERIODIC MAINTENANCE

IN-CABIN MICROFILTER

Exploded View



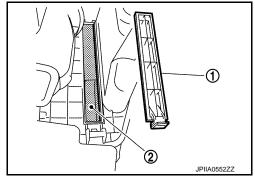
- Heater & cooling unit assembly
- In-cabin microfilter/Air conditioner fil- 3. Filter cover ter*
- * : Models for Mexico.

Removal and Installation

INFOID:0000000006258626

REMOVAL

 Remove the filter cover (1), and then remove the in-cabin microfilter/air conditioner filter (2).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- If the filter is deformed/damaged when removing, replace it with a new one. Deformed/damaged filtermay deteriorate the dust collecting performance.
- When installing, handle the filter with extreme care to avoid deforming/damaging.

Replacement

Replace in-cabin microfilter/air conditioner filter.

For NORTH AMERICA: Refer to MA-8, "FOR NORTH AMERICA: Schedule 1" and MA-10, "FOR NORTH AMERICA: Schedule 2".

For MEXICO: Refer to MA-11, "FOR MEXICO: Periodic Maintenance".

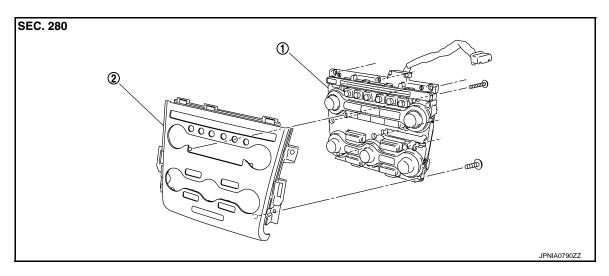
Affix a caution label inside the glove box when replacing filter.

REMOVAL AND INSTALLATION

PRESET SWITCH

Exploded View

DISASSEMBLY



1. Preset switch

2. Cluster lid C

Removal and Installation

INFOID:0000000006258629

REMOVAL

Remove the preset switch. Refer to <u>AV-283, "Exploded View"</u> (Bose audio without navigation) or <u>AV-428, "Exploded View"</u> (Bose audio with navigation).

INSTALLATION

Install in the reverse order of removal.

[WITH 7 INCH DISPLAY]

A/C AUTO AMP.

Exploded View

INFOID:0000000006258630

Α

В

C

D

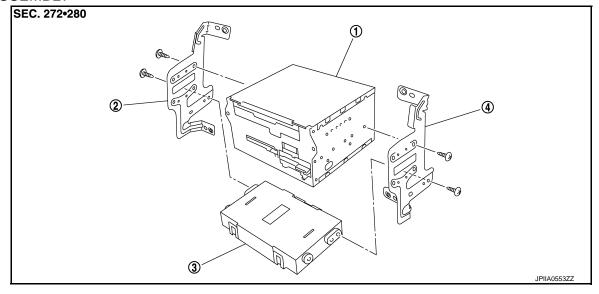
Е

F

Н

K

DISASSEMBLY



1. AV control unit

2. Bracket (LH)

3. A/C auto amp.

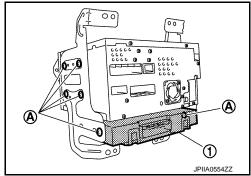
4. Bracket (RH)

Removal and Installation

INFOID:0000000006258631

REMOVAL

- 1. Remove the AV control unit. Refer to AV-145, "Exploded View".
- 2. Remove the mounting screws (A), and then remove the A/C auto amp. (1).



INSTALLATION

Install in the reverse order of removal.

Ν

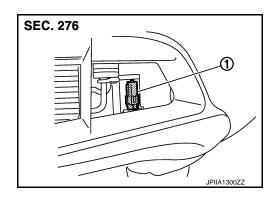
M

0

AMBIENT SENSOR

Exploded View

1. Ambient sensor



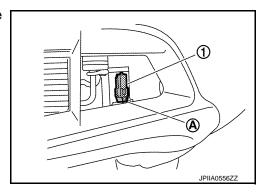
Removal and Installation

INFOID:0000000006258633

INFOID:0000000006258632

REMOVAL

1. Disconnect the ambient sensor connector (A), and then remove the ambient sensor (1).



INSTALLATION

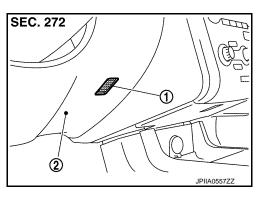
Install in the reverse order of removal.

[WITH 7 INCH DISPLAY]

IN-VEHICLE SENSOR

Exploded View

- 1. In-vehicle sensor
- 2. Instrument lower panel LH



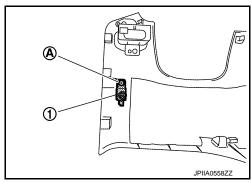
Removal and Installation

INFOID:0000000006258635

INFOID:0000000006258634

REMOVAL

- 1. Remove the instrument lower panel LH. Refer to IP-12, "Exploded View".
- 2. Remove the mounting screw (A), and then remove the in-vehicle sensor (1).



INSTALLATION

Install in the reverse order of removal.

K

Α

В

C

D

Е

F

Н

VTL

L

M

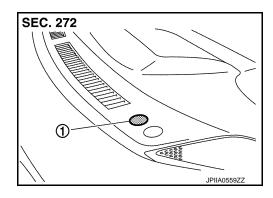
Ν

0

SUNLOAD SENSOR

Exploded View

1. Sunload sensor



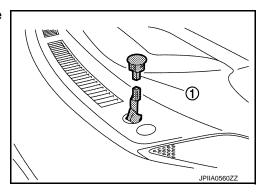
Removal and Installation

INFOID:0000000006258637

INFOID:0000000006258636

REMOVAL

1. Disconnect the sunload sensor connector, and then remove the sunload sensor (1).

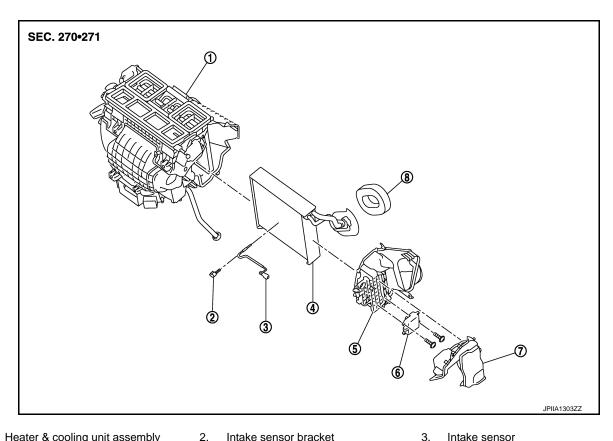


INSTALLATION

Install in the reverse order of removal.

INTAKE SENSOR

Exploded View INFOID:0000000006258638



- Heater & cooling unit assembly
- Evaporator assembly
- Foot duct (right)

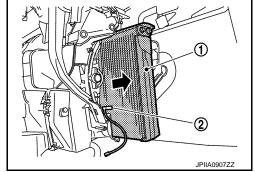
REMOVAL

- 2. Intake sensor bracket
- 5. Evaporator cover
- Cooler pipe grommet
- Intake sensor
- 6. Air mix door motor (passenger side)

Removal and Installation

Remove the evaporator pipe assembly. Refer to VTL-98, "Exploded View".

Slide the evaporator (1) toward the right side of the vehicle, and then remove the intake sensor (2).



INSTALLATION

Note the following, and install in the reverse order of removal.

CAUTION:

- Replace the O-ring with a new one. Apply a coat of compressor oil to the O-ring prior to installation.
- Install the intake sensor in the same position as the removed intake sensor when replacing the intake sensor.
- Do not rotate the bracket insertion part when removing and installing the intake sensor.
- · Check for refrigerant leakage when charging refrigerant.

Α

В

D

Е

K INFOID:0000000006258639

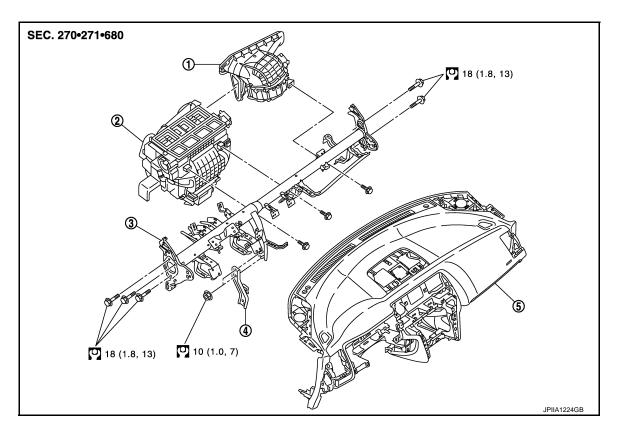
M

Ν

BLOWER UNIT

Exploded View

REMOVAL



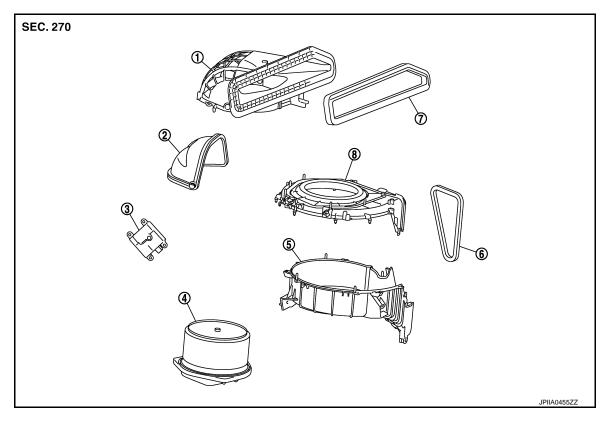
- 1. Blower unit assembly
- 2. Heater & cooling unit assembly

4. Instrument stay

- 5. Instrument panel assembly
- 3. Steering member

Refer to GI-4, "Components" for symbols in the figure.

DISASSEMBLY



- 1. Shutter box case
- 4. Blower motor assembly
- 7. Intake seal

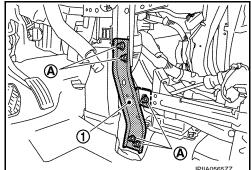
- 2. Intake door
- 5. Intake lower case
- 8. Intake upper case
- Intake door motor
- 6. Outlet seal

INFOID:0000000006258641

Removal and Installation

REMOVAL

- 1. Remove the instrument panel assembly. Refer to IP-12, "Exploded View".
- 2. Remove the mounting nuts (A), and then remove the instrument panel stay (1).



3. Disconnect the intake door motor and blower motor connectors.

K

Н

Α

В

D

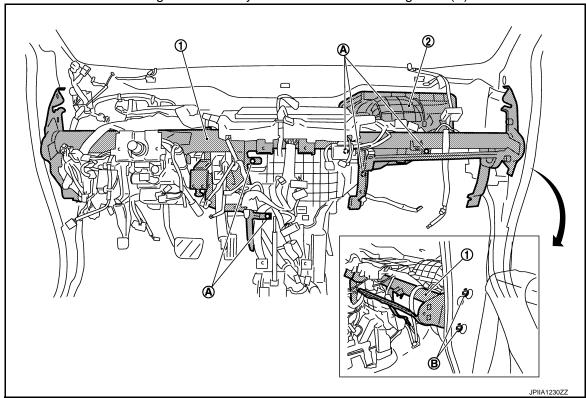
Е

M

0

Ν

4. Remove the heater & cooling unit assembly and blower unit mounting bolts (A).



Refer to GI-4, "Components" for symbols in the figure.

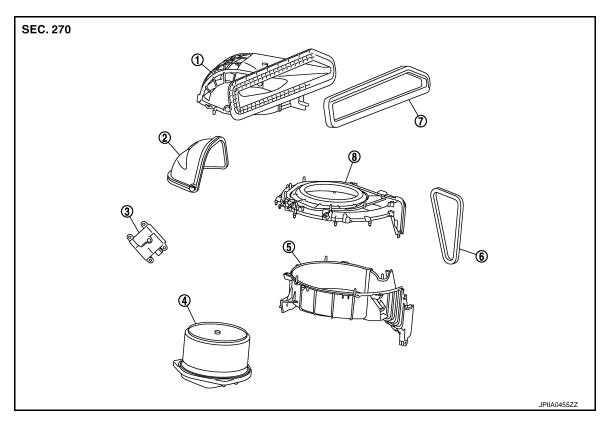
- 5. Remove the steering member mounting bolts (B) (right).
- 6. And remove the blower unit (2) while pulling the steering member (1) to the front.

INSTALLATION

Install in the reverse order of removal.

BLOWER MOTOR

Exploded View INFOID:0000000006258642



- Shutter box case
- Blower motor assembly
- Intake seal

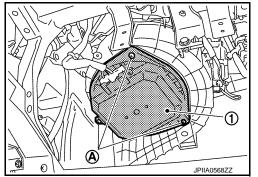
- Intake door 2.
- 5. Intake lower case
- 8. Intake upper case
- Intake door motor 3.
- 6. Outlet seal

Removal and Installation

REMOVAL

- 2. Disconnect the blower motor connector.
- 3. Remove the mounting screws (A), and then remove the blower motor (1).

1. Remove instrument lower panel RH. Refer to IP-12, "Exploded View".



INSTALLATION

Install in the reverse order of removal.

VTL-95 Revision: 2011 November **2011 MURANO**

Α

В

D

Е

Н

INFOID:0000000006258643

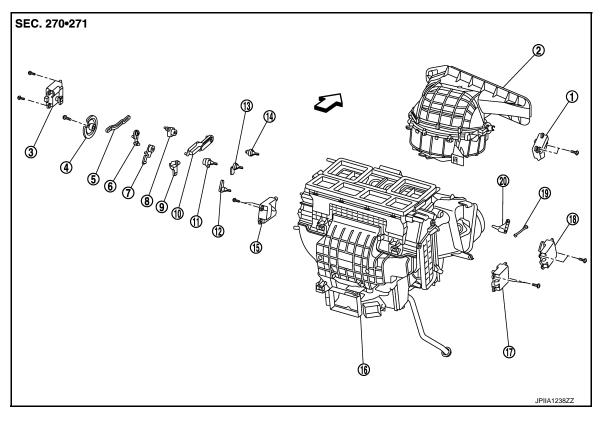
M

Ν

0

INTAKE DOOR MOTOR

Exploded View INFOID:0000000006258644



- 1. Intake door motor
- 4. Main link
- Max. cool door link 7.
- 10. Defroster door link
- 13. Max. cool door lever
- 16. Heater & cooling unit assembly
- 19. Upper ventilator door rod
- ⟨
 ⇒ : Vehicle front

- 2. Bower unit assembly
- 5. Rod link
- 8. Mode door lever
- 11. Ventilator door lever
- 14. Defroster door lever
- 17. Air mix door motor (passenger side) 18. Upper ventilator door motor
- Upper ventilator door lever

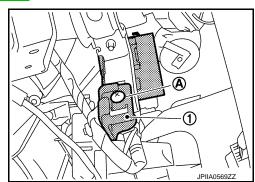
- 3. Mode door motor
- 6. Max. cool door link
- Ventilator door link
- 12. Foot door lever
- 15. Air mix door motor (driver side)

Removal and Installation

INFOID:0000000006258645

REMOVAL

- 1. Remove instrument lower panel RH. Refer to IP-12, "Exploded View".
- Remove the mounting screw (A), and then move the key less controller assembly bracket (1) to a position where it does not inhibit work.

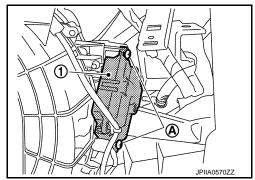


INTAKE DOOR MOTOR

< REMOVAL AND INSTALLATION >

[WITH 7 INCH DISPLAY]

- 3. Remove the mounting screws (A), and then remove the intake door motor (1).
- 4. Disconnect the intake door motor connector.



INSTALLATION

Install in the reverse order of removal.

Е

D

Α

В

G

F

Н

/TL

K

L

M

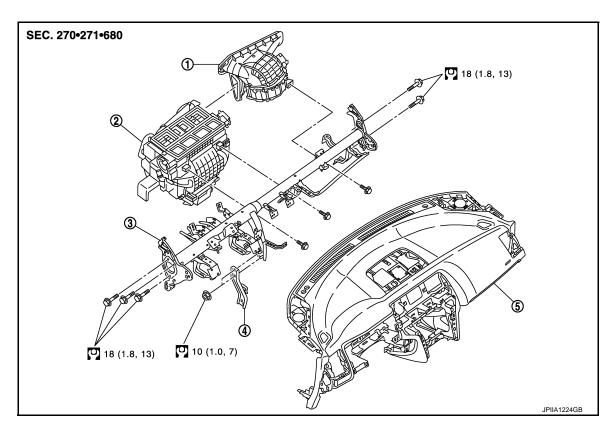
Ν

0

HEATER & COOLING UNIT ASSEMBLY

Exploded View

REMOVAL



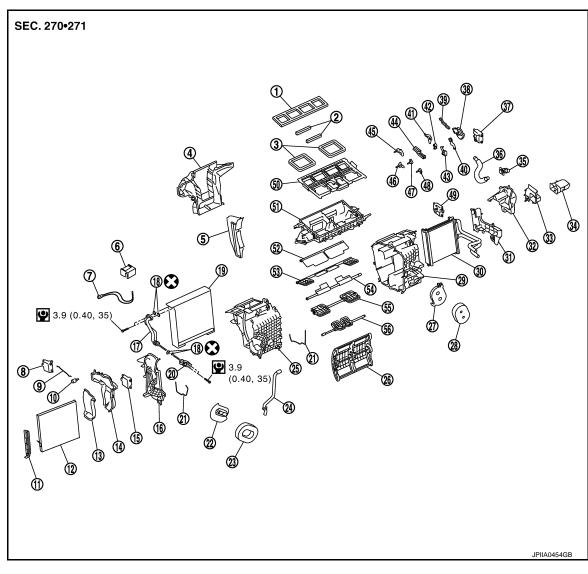
- 1. Blower unit assembly
- 2. Heater & cooling unit assembly
- 4. Instrument stay

5. Instrument panel assembly

3. Steering member

Refer to GI-4, "Components" for symbols in the figure.

DISASSEMBLY



Adapter case 4.

Intake sensor 7.

Upper ventilator door lever 10.

13. Foot duct 1 (right)

16. Heater & cooling unit case cover

19. Evaporator

Grommet 22.

Heater & cooling unit case (right) 25.

28. Heater pipe grommet

31. Heater pipe cover

Heater duct 34.

37. Mode door motor

40. Max. cool door link

43. Mode door lever

46. Foot door lever

49. Air mix door motor (driver side)

52. Ventilator door

Defroster door

2. Upper ventilator seal

5. Center case

8. Upper ventilator door motor

Filter cover 11.

14. Foot duct 2 (right)

17. Evaporator pipe assembly

Expansion valve

23. Cooler pipe grommet

Air mix door (Slide door) 26.

29. Heater & cooling unit case (left)

32. Foot duct 2 (left)

Aspirator 35.

38. Main link

41. Ventilator door link

44. Defroster door link

47. Defroster door lever

50. Distributor upper case

53. Foot door

56. Upper ventilator door 3. Defroster seal

6. Intake sensor bracket

9. Upper ventilator door rod

12. In-cabin microfilter/Air conditioner fil-

15. Air mix door motor (passenger side)

O-ring 18.

21. Case packing

Drain hose 24.

27. Heater pipe support

30. Heater core

33. Foot duct 1 (left)

36. Aspirator hose

39. Rod link

42. Foot door link

45. Ventilator door lever

48. Max. cool door lever

Distributor lower case

54. Max. cool door Α

В

D

Е

F

Н

K

L

M

Ν

Ρ

* : Models for Mexico.

Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

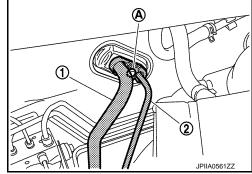
INFOID:0000000006258647

REMOVAL

- 1. Collect the refrigerant with refrigerant collecting equipment (for HFC134a).
- 2. Drain engine coolant. Refer to CO-11, "Draining".
- 3. Remove the mounting bolt (A), and then disconnect the low-pressure pipe (1) and high-pressure pipe (2) from the expansion valve.

CAUTION:

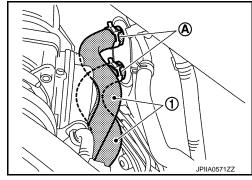
Cap or wrap the joint of the A/C piping and expansion valvewith suitable material such as vinyl tape to avoid the entry of air.



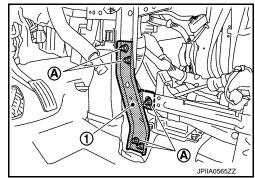
4. Remove the clamps (A), and then disconnect the heater hoses (1).

CAUTION:

- Some coolant may spill when heater hoses are disconnected. Wipe them off with wastes.
- Close the coolant inlet/outlet on the heater core and heater hoses with wastes.

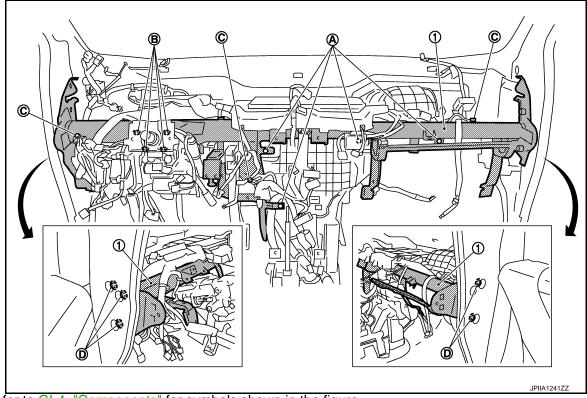


- 5. Remove the instrument panel assembly. Refer to IP-12, "Exploded View".
- 6. Remove the mounting nuts (A), and then remove the instrument stay (1).



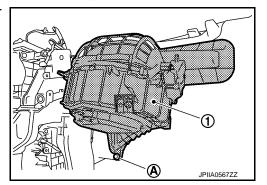
2011 MURANO

7. Remove the heater & cooling unit assembly and blower unit mounting bolts (A).

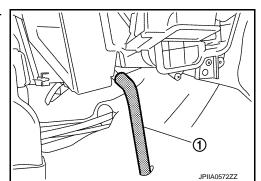


Refer to GI-4, "Components" for symbols shown in the figure.

- Remove the steering column mounting nuts (B). Refer to <u>ST-35, "WITHOUT ELECTRIC MOTOR: Exploded View"</u> (without electric motor) or <u>ST-38, "WITH ELECTRIC MOTOR: Exploded View"</u> (with electric motor).
- 9. Remove the ground bolts (C) from the steering member (1).
- 10. Remove the harness clip from the steering member.
- 11. Disconnect the intake door motor and blower motor connectors.
- 12. Remove the steering member mounting bolts (D), and then remove the steering member.
- 13. Remove the mounting screw (A), and then remove the blower unit (1).



14. Disconnect the drain hose (1) from heater & cooling unit assembly.



Α

В

C

D

Е

F

G

Н

J

K

L

M

Ν

0

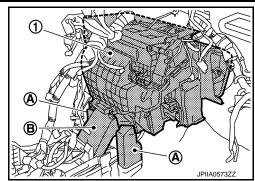
Ρ

HEATER & COOLING UNIT ASSEMBLY

< REMOVAL AND INSTALLATION >

[WITH 7 INCH DISPLAY]

15. Remove the rear foot duct 1 (left/right) (A) and rear ventilator duct 1 (B), and then remove the heater & cooling unit assembly (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

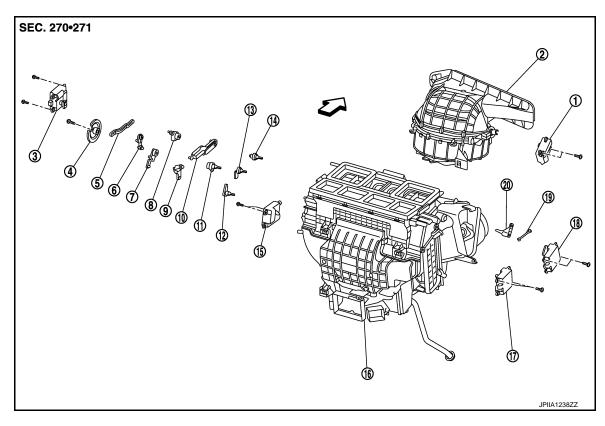
- Replace the O-ring with a new one. Apply a coat of compressor oil to the O-ring prior to installation.
- Check for refrigerant leakage when charging refrigerant.

NOTE:

- Refer to CO-12, "Refilling" when filling the radiator with engine coolant.
- Charge the refrigerant again.

UPPER VENTILATOR DOOR MOTOR

Exploded View



- 1. Intake door motor
- 4. Main link
- 7. Max. cool door link
- 10. Defroster door link
- 13. Max. cool door lever
- 16. Heater & cooling unit assembly
- 19. Upper ventilator door rod
- ⟨
 ⇒ : Vehicle front

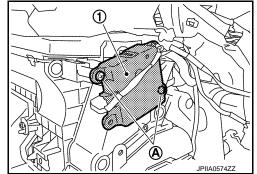
- 2. Bower unit assembly
- 5. Rod link
- 8. Mode door lever
- 11. Ventilator door lever
- 14. Defroster door lever
- 17. Air mix door motor (passenger side) 18.
- 20. Upper ventilator door lever

- 3. Mode door motor
- 6. Max. cool door link
- 9. Ventilator door link
- 12. Foot door lever
- 15. Air mix door motor (driver side)
- 18. Upper ventilator door motor

Removal and Installation

REMOVAL

- 1. Remove the blower unit. Refer to VTL-92, "Exploded View".
- 2. Remove the mounting screws (A), and then remove the upper ventilator door motor (1).
- 3. Disconnect the upper ventilator door motor connector.



INSTALLATION

Install in the reverse order of removal.

Revision: 2011 November VTL-103 2011 MURANO

В

Α

С

D

F

G

Н

√TL

J

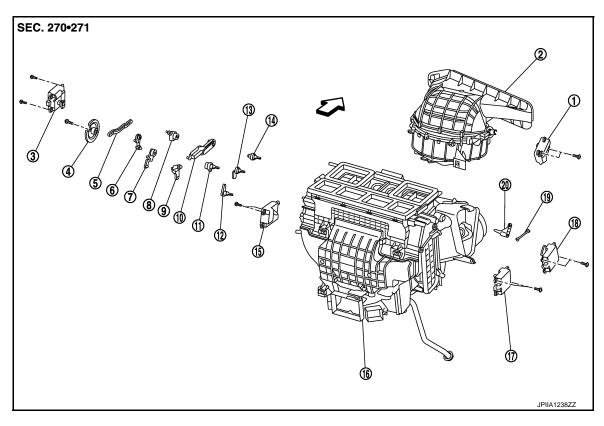
Κ

INFOID:0000000006258649

Ν

MODE DOOR MOTOR

Exploded View INFOID:0000000006258650



- Intake door motor 1.
- 4. Main link
- Max. cool door link 7.
- 10. Defroster door link
- 13. Max. cool door lever
- 16. Heater & cooling unit assembly
- 19. Upper ventilator door rod
- ⟨
 ⇒ : Vehicle front

- 2. Bower unit assembly
- 5. Rod link
- 8. Mode door lever
- 11. Ventilator door lever
- 14. Defroster door lever
- 17. Air mix door motor (passenger side) 18. Upper ventilator door motor
- 20. Upper ventilator door lever

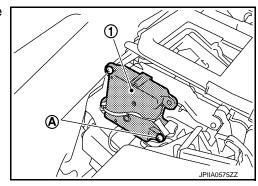
- 3. Mode door motor
- 6. Max. cool door link
- Ventilator door link
- 12. Foot door lever
- 15. Air mix door motor (driver side)

INFOID:0000000006258651

Removal and Installation

REMOVAL

- 1. Remove the instrument panel assembly. Refer to IP-12, "Exploded View".
- Remove the mounting screws (A), and then remove the mode door motor (1).
- 3. Disconnect the mode door motor connector.



INSTALLATION

Install in the reverse order of removal.

Α

В

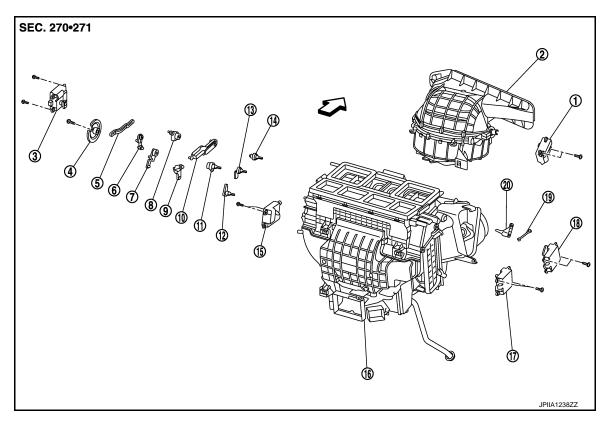
D

Н

K

AIR MIX DOOR MOTOR

Exploded View INFOID:0000000006258652



- Intake door motor 1.
- 4. Main link
- Max. cool door link 7.
- 10. Defroster door link
- 13. Max. cool door lever
- 16. Heater & cooling unit assembly
- 19. Upper ventilator door rod
- : Vehicle front

- 2. Bower unit assembly
- 5. Rod link
- Mode door lever 8.
- 11. Ventilator door lever
- 14. Defroster door lever
- 17. Air mix door motor (passenger side) 18.
- Upper ventilator door lever

- 3. Mode door motor
- 6. Max. cool door link
- 9. Ventilator door link
- 12. Foot door lever
- Air mix door motor (driver side)
- Upper ventilator door motor

Removal and Installation

REMOVAL

Driver side

- 1. Set the temperature (driver side) at 18°C (60°F). **CAUTION:**
 - The angle may be out, when installing the air mix door motor to the air mix door, unless the above procedure is performed.
- Disconnect the battery cable from the negative terminal.
- Remove the foot duct (left). Refer to VTL-129, "FOOT DUCT: Exploded View".

INFOID:0000000006258653

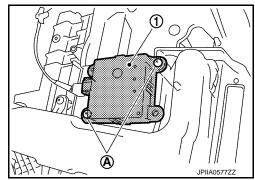
VTL-105 Revision: 2011 November **2011 MURANO**

AIR MIX DOOR MOTOR

< REMOVAL AND INSTALLATION >

[WITH 7 INCH DISPLAY]

- 4. Remove the mounting screws (A), and then remove the air mix door motor (1).
- 5. Disconnect the air mix door motor connector.



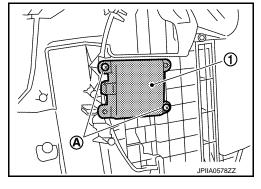
Passenger side

1. Set the temperature (passenger side) at 18°C (60°F).

CAUTION:

The angle may be out, when installing the air mix door motor to the air mix door, unless the above procedure is performed.

- 2. Disconnect the battery cable from the negative terminal.
- 3. Remove the foot duct (right). Refer to VTL-129, "FOOT DUCT: Exploded View".
- 4. Remove the mounting screws (A), and then remove the air mix door motor (1).
- Disconnect the air mix door motor connector.



INSTALLATION

Install in the reverse order of removal.

Α

В

D

Е

F

Н

K

L

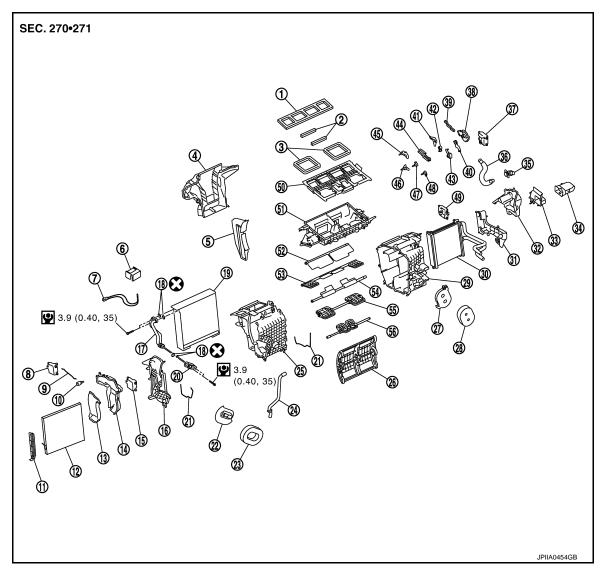
M

Ν

Р

HEATER CORE

Exploded View



- Ventilator seal
- 4. Adapter case
- 7. Intake sensor
- 10. Upper ventilator door lever
- 13. Foot duct 1 (right)
- 16. Heater & cooling unit case cover
- 19. Evaporator
- 22. Grommet
- 25. Heater & cooling unit case (right)
- 28. Heater pipe grommet
- 31. Heater pipe cover
- 34. Heater duct
- 37. Mode door motor
- 40. Max. cool door link
- 43. Mode door lever

- 2. Upper ventilator seal
- Center case
- 8. Upper ventilator door motor
- 11. Filter cover
- 14. Foot duct 2 (right)
- 17. Evaporator pipe assembly
- 20. Expansion valve
- 23. Cooler pipe grommet
- 26. Air mix door (Slide door)
- 29. Heater & cooling unit case (left)

VTL-107

- 32. Foot duct 2 (left)
- 35. Aspirator
- 38. Main link
- 41. Ventilator door link
- Defroster door link

- 3. Defroster seal
- 6. Intake sensor bracket
- 9. Upper ventilator door rod
- In-cabin microfilter/Air conditioner filter*
- 15. Air mix door motor (passenger side)
- 18. O-ring
- 21. Case packing
- 24. Drain hose
- 27. Heater pipe support
- 30. Heater core
- 33. Foot duct 1 (left)
- 36. Aspirator hose
- 39. Rod link
- 42. Foot door link
- 45. Ventilator door lever

2011 MURANO

< REMOVAL AND INSTALLATION >

46.	Foot door lever	47.	Defroster door lever	48.	Max. cool door lever
49.	Air mix door motor (driver side)	50.	Distributor upper case	51.	Distributor lower case
52.	Ventilator door	53.	Foot door	54.	Max. cool door

56. Upper ventilator door

* : Models for Mexico.

Refer to GI-4, "Components" for symbols in the figure.

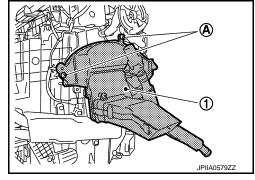
Removal and Installation

INFOID:0000000006258655

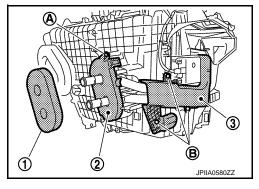
REMOVAL

55. Defroster door

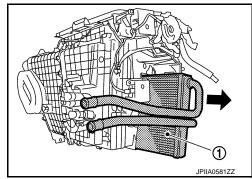
- 1. Remove the heater & cooling unit assembly. Refer to VTL-98, "Exploded View".
- 2. Remove the mounting screws (A), and then remove the foot duct (left) (1).



- 3. Remove the heater pipe grommet (1).
- 4. Remove the mounting screw (A), and then remove the heater pipe support (2).
- 5. Remove the mounting screws (B), and then remove the heater pipe cover (3).



Slide the heater core (1) in the direction shown by the arrow, and then remove it.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Replace the O-ring with a new one. Apply a coat of compressor oil to the O-ring prior to installation.
- Check for refrigerant leakage when charging refrigerant.
- Refer to CO-12, "Refilling" when filling the radiator with engine coolant.
- Charge the refrigerant again.

DUCT AND GRILLE CENTER VENTILATOR GRILLE

CENTER VENTILATOR GRILLE: Exploded View

INFOID:0000000006258656

Α

В

D

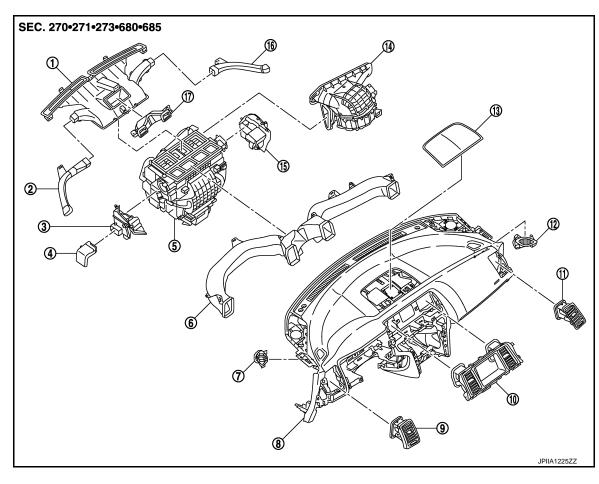
Е

Н

L

M

Ν



- 1. Defroster nozzle
- 4. Heater duct
- 7. Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- 2. Side defroster nozzle (left)
- 5. Heater & cooling unit assembly
- 8. Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

- 3. Foot duct (left)
- 6. Ventilator duct
- 9. Side ventilator grille (left)
- 12. Side defroster grille (right)
- 15. Foot duct (right)

CENTER VENTILATOR GRILLE: Removal and Installation

REMOVAL

- Remove the cluster lid A. Refer to <u>IP-12, "Exploded View"</u>.
- Remove the cluster lid D. Refer to <u>IP-12, "Exploded View"</u>.

,

INFOID:0000000006258657

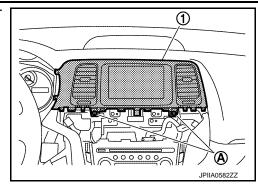
0

Ρ

INFOID:0000000006258658

< REMOVAL AND INSTALLATION >

3. Remove the mounting screws (A), and then remove the center ventilator grille assembly (1).

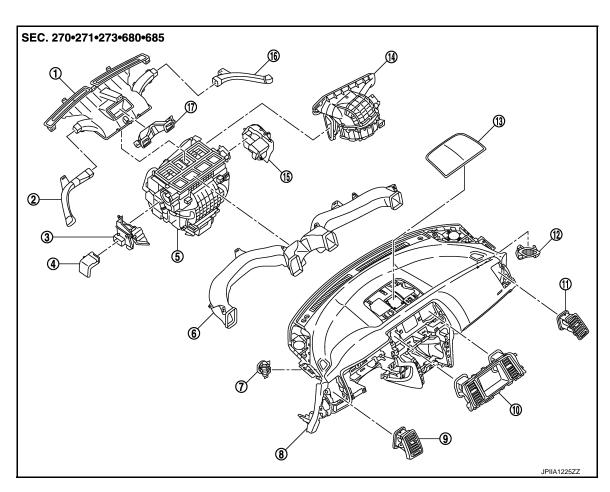


INSTALLATION

Install in the reverse order of removal.

SIDE VENTILATOR GRILLE

SIDE VENTILATOR GRILLE: Exploded View



- 1. Defroster nozzle
- 4. Heater duct
- 7. Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- 2. Side defroster nozzle (left)
- 5. Heater & cooling unit assembly
- 8. Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

- 3. Foot duct (left)
- 6. Ventilator duct
- 9. Side ventilator grille (left)
- 12. Side defroster grille (right)
- 15. Foot duct (right)

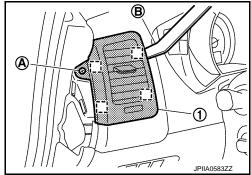
SIDE VENTILATOR GRILLE: Removal and Installation

INFOID:0000000006258659

< REMOVAL AND INSTALLATION >

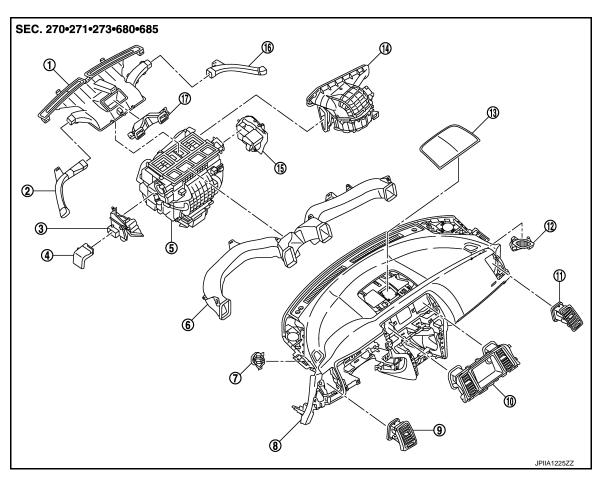
- Remove the instrument side finisher (LH/RH). Refer to IP-12, "Exploded View".
- 2. Remove the mounting screw (A).
- Remove side ventilator grille metal clip using remover tool (B), and then remove side ventilator grille (1).

: Metal clip



INSTALLATION Install in the reverse order of removal. SIDE DEFROSTER GRILLE

SIDE DEFROSTER GRILLE: Exploded View



- Defroster nozzle
- Heater duct
- Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- Side defroster nozzle (left)
- Heater & cooling unit assembly
- Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

- Foot duct (left)
- Ventilator duct
- Side ventilator grille (left)
- Side defroster grille (right)
- 15. Foot duct (right)

Н

Α

В

D

Е

INFOID:0000000006258660

M

Ν

Ρ

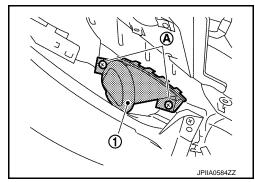
SIDE DEFROSTER GRILLE: Removal and Installation

INFOID:0000000006258661

INFOID:0000000006258662

REMOVAL

- 1. Remove the defroster nozzle and side defroster nozzle. Refer to VTL-115, "DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE: Exploded View".
- 2. Remove the mounting screws (A), and then remove the side defroster grilles (left/right) (1).



INSTALLATION
Install in the reverse order of removal.

VENTILATOR DUCT

VENTILATOR DUCT: Exploded View

SEC. 270-271-273-680-685

- Defroster nozzle
- Heater duct
- 7. Side defroster grille (left)
- 10. Center ventilator grille assembly
- 2. Side defroster nozzle (left)
- 5. Heater & cooling unit assembly
- 8. Instrument panel assembly
- 11. Side ventilator grille (right)
- Foot duct (left)
- Ventilator duct
- 9. Side ventilator grille (left)
- 12. Side defroster grille (right)

< REMOVAL AND INSTALLATION >

[WITH 7 INCH DISPLAY]

- 13. Center speaker grille
- 14. Blower unit assembly
- 15. Foot duct (right)

- 16. Side defroster nozzle (right)
- 17. Upper ventilator duct

VENTILATOR DUCT: Removal and Installation

INFOID:0000000006258663

Α

В

D

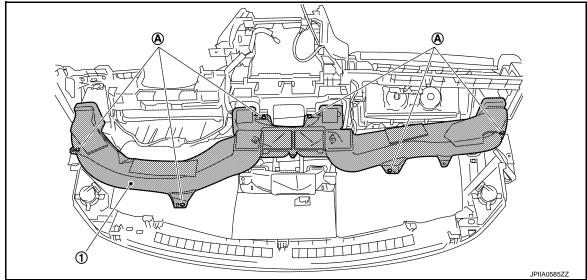
Е

F

REMOVAL

1. Remove the defroster nozzle and side defroster nozzle. Refer to <u>VTL-115</u>, "<u>DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE</u>: <u>Exploded View</u>".

2. Remove the mounting screws (A), and then remove the ventilator duct (1).



INSTALLATION

Install in the reverse order of removal.

UPPER VENTILATOR DUCT

/TL

Н

K

L

M

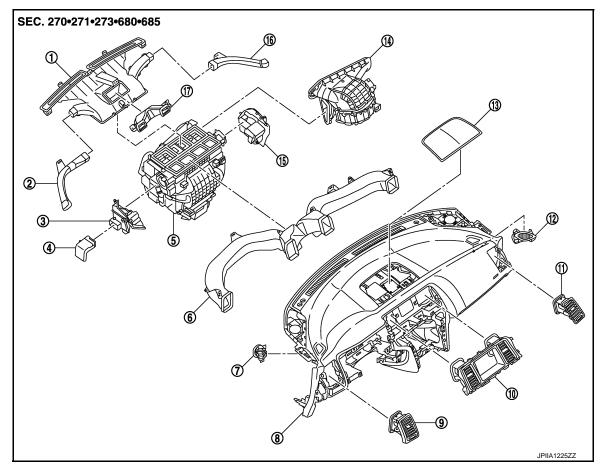
Ν

0

Р

UPPER VENTILATOR DUCT: Exploded View

INFOID:0000000006258664



- 1. Defroster nozzle
- 4. Heater duct
- 7. Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- 2. Side defroster nozzle (left)
- 5. Heater & cooling unit assembly
- 8. Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

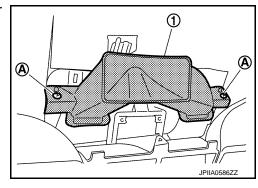
- 3. Foot duct (left)
- 6. Ventilator duct
- 9. Side ventilator grille (left)
- 12. Side defroster grille (right)
- 15. Foot duct (right)

UPPER VENTILATOR DUCT: Removal and Installation

INFOID:0000000006258665

REMOVAL

- Remove the defroster nozzle and side defroster nozzle. Refer to <u>VTL-115</u>, "<u>DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE</u>: <u>Exploded View</u>".
- 2. Remove the mounting screws (A), and then remove the upper ventilator duct (1).



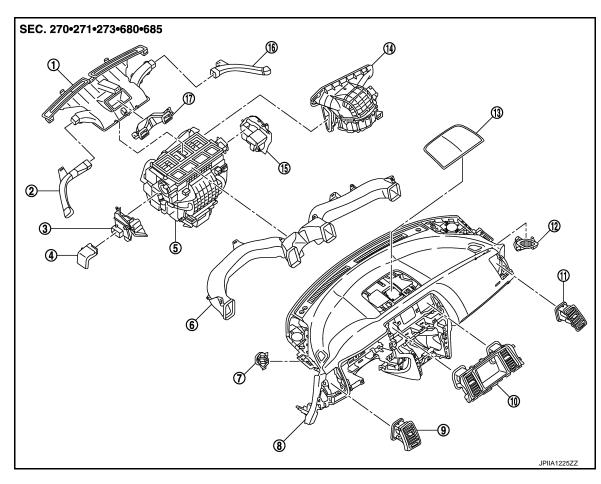
INSTALLATION

Install in the reverse order of removal.

DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE

DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE: Exploded View

INFOID:0000000006258666



- Defroster nozzle
- 4. Heater duct
- Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- Side defroster nozzle (left)
- 5. Heater & cooling unit assembly
- Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

- Foot duct (left) 3.
- 6. Ventilator duct
- Side ventilator grille (left) 9.
- 12. Side defroster grille (right)
- 15. Foot duct (right)

DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE: Removal and Installation

INFOID:0000000006258667

REMOVAL

Remove the instrument panel assembly. Refer to IP-12, "Exploded View".

Ρ

VTL-115 Revision: 2011 November **2011 MURANO**

В

Α

D

Е

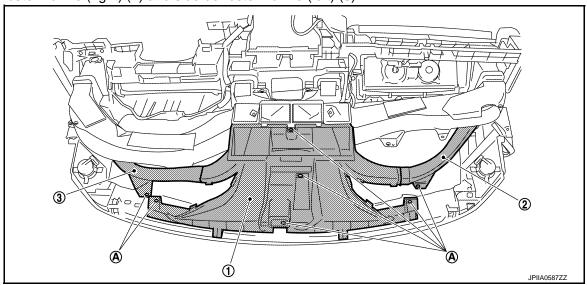
Н

L

M

Ν

2. Remove the mounting screws (A), and then remove the defroster nozzle (1) together with the side defroster nozzle (right) (2) and side defroster nozzle (left) (3).



3. Remove the side defroster nozzle (right) and side defroster nozzle (left) from the defroster nozzle.

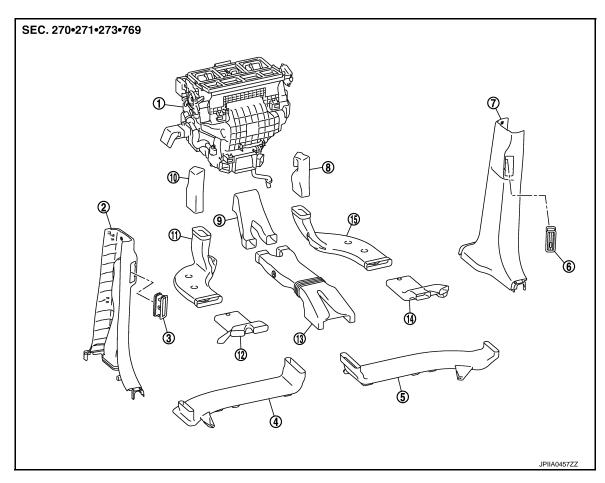
INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR GRILLE

REAR VENTILATOR GRILLE: Exploded View

INFOID:0000000006258668



< REMOVAL AND INSTALLATION >

[WITH 7 INCH DISPLAY]

- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- 2. Rear ventilator duct 4 (center pillar lower garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- 3. Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

INFOID:0000000006258669

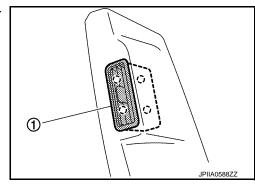
REAR VENTILATOR GRILLE: Removal and Installation

REMOVAL

1. Remove the center pillar lower garnish (left/right). Refer to INT-20, "Exploded View".

Disengage the joints of the tabs, and then remove the rear ventilator grilles (left/right) (1).

() :Clip



INSTALLATION
Install in the reverse order of removal.
REAR VENTILATOR DUCT 1

/TL

Н

Α

В

D

Е

F

K

L

M

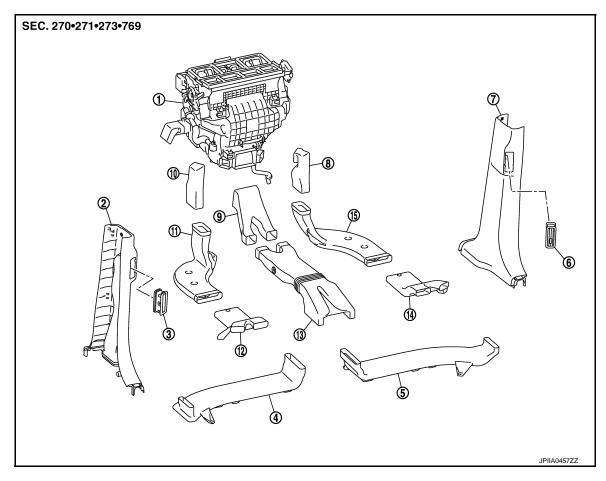
Ν

C

Р

REAR VENTILATOR DUCT 1: Exploded View

INFOID:0000000006258670



- Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- Rear ventilator duct 4 (center pillar lower 7. garnish right)
- 10. Rear foot duct 1 (left)
- Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. Rear ventilator grille (left) garnish left)
- 5. Rear ventilator duct 3 (right)
- Rear foot duct 1 (right)
- Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

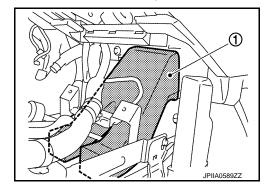
- Rear ventilator grille (right)
- Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

REAR VENTILATOR DUCT 1: Removal and Installation

INFOID:0000000006258671

REMOVAL

- 1. Remove the rear ventilator duct 2. Refer to VTL-119, "REAR VENTILATOR DUCT 2: Exploded View".
- Remove the rear ventilator duct 1 (1).



INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR DUCT 2

REAR VENTILATOR DUCT 2: Exploded View

INFOID:0000000006258672

Α

В

D

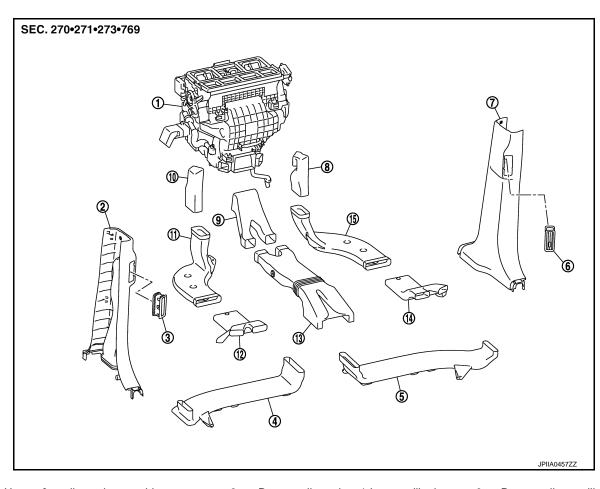
Е

Н

K

L

Ν



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

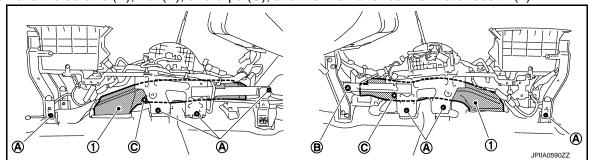
- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- . Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

REAR VENTILATOR DUCT 2: Removal and Installation INFOID.0000000000558673

REMOVAL

- Remove the front seat assembly (left/right). Refer to <u>SE-90, "Exploded View"</u>.
- Remove the lower console finisher (left/right). Refer to IP-20, "Exploded View".
- 3. Remove the screws (A), nut (B), and clips (C), and then remove rear ventilator duct 2 (1).



Revision: 2011 November VTL-119 2011 MURANO

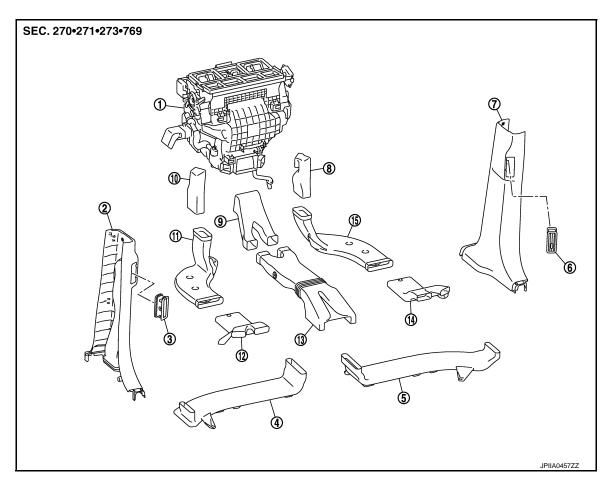
INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR DUCT 3

REAR VENTILATOR DUCT 3: Exploded View

INFOID:0000000006258674



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

REAR VENTILATOR DUCT 3: Removal and Installation

INFOID:0000000006258675

REMOVAL

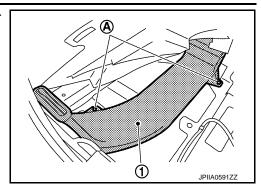
Driver side

- 1. Remove the front seat assembly (left). Refer to SE-90, "Exploded View".
- Pull up the driver side floor carpet. Refer to <u>INT-24, "Exploded View"</u>.

< REMOVAL AND INSTALLATION >

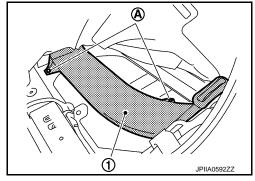
[WITH 7 INCH DISPLAY]

3. Remove the mounting screws (A), and then remove rear ventilator duct 3 (left) (1).



Passenger side

- Remove the front seat assembly (right). Refer to <u>SE-90, "Exploded View"</u>.
- 2. Pull up the passenger side floor carpet. Refer to INT-24, "Exploded View".
- 3. Remove the mounting screws (A), and then remove rear ventilator duct 3 (right) (1).



INSTALLATION
Install in the reverse order of removal.
REAR VENTILATOR DUCT 4

VTL

Н

Α

В

C

D

Е

F

/ I L

K

J

L

M

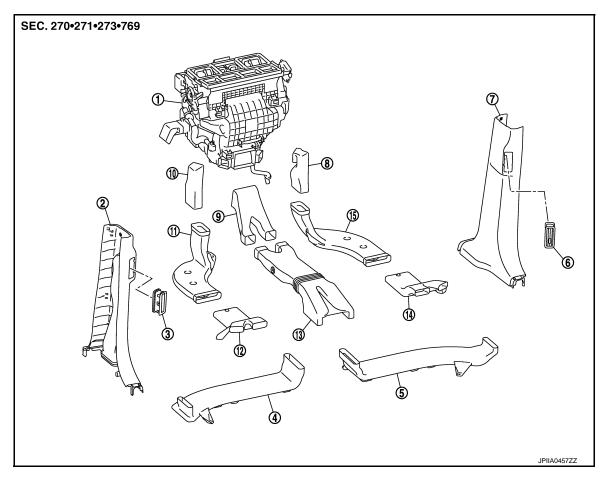
Ν

0

Ρ

REAR VENTILATOR DUCT 4: Exploded View

INFOID:0000000006258676



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- B. Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

REAR VENTILATOR DUCT 4: Removal and Installation

INFOID:0000000006258677

REMOVAL

1. Remove the center pillar lower garnish (left/right). Refer to INT-20, "Exploded View".

INSTALLATION

Install in the reverse order of removal.

REAR FOOT DUCT 1

REAR FOOT DUCT 1: Exploded View

INFOID:0000000006258678

Α

В

D

Е

F

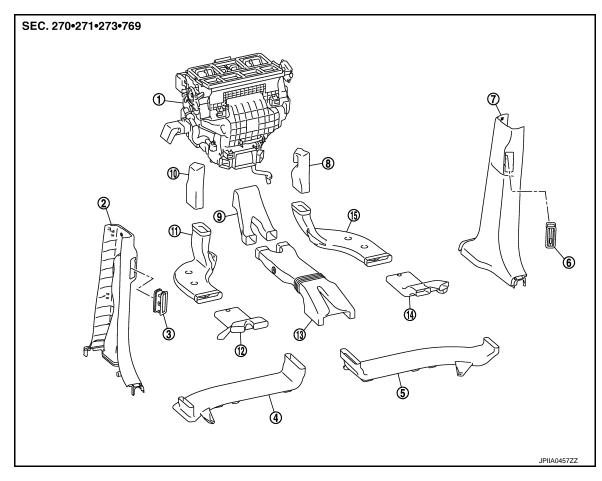
Н

K

L

Ν

Р



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- . Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

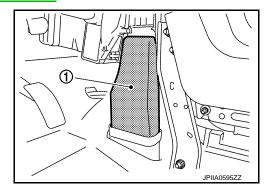
INFOID:0000000006258679

REAR FOOT DUCT 1: Removal and Installation

REMOVAL

Driver side

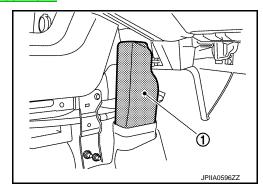
- Remove the instrument lower cover LH. Refer to <u>IP-12, "Exploded View"</u>.
- 2. Remove the rear foot duct 1 (left) (1).



Passenger side

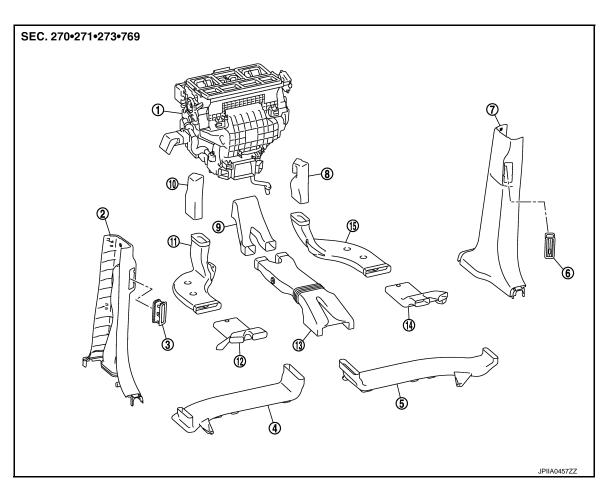
INFOID:0000000006258680

- 1. Remove the instrument lower cover RH. Refer to IP-12, "Exploded View".
- 2. Remove the rear foot duct 1 (right) (1).



INSTALLATION
Install in the reverse order of removal.
REAR FOOT DUCT 2

REAR FOOT DUCT 2: Exploded View



1. Heater & cooling unit assembly

Rear ventilator duct 3 (left)

- 7. Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)

4.

13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

[WITH 7 INCH DISPLAY]

REAR FOOT DUCT 2: Removal and Installation

INFOID:0000000006258681

Α

В

C

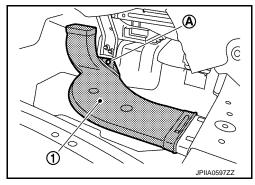
D

Е

REMOVAL

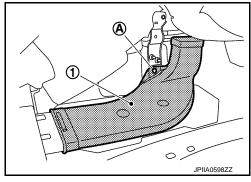
Driver side

- 1. Remove the rear foot duct 1 (left). Refer to VTL-123, "REAR FOOT DUCT 1 : Exploded View".
- 2. Pull up the driver side floor carpet. Refer to INT-24, "Exploded View".
- 3. Remove the mounting clip (A), and then remove the rear foot duct 2 (left) (1).



Passenger side

- 1. Remove the rear foot duct 1 (right). Refer to VTL-123, "REAR FOOT DUCT 1 : Exploded View".
- 2. Pull up the passenger side floor carpet. Refer to INT-24, "Exploded View".
- 3. Remove the mounting clip (A), and then remove the rear foot duct 2 (right) (1).



INSTALLATION

Install in the reverse order of removal.

REAR FOOT DUCT 3

Н

VTL

J

Κ

M

L

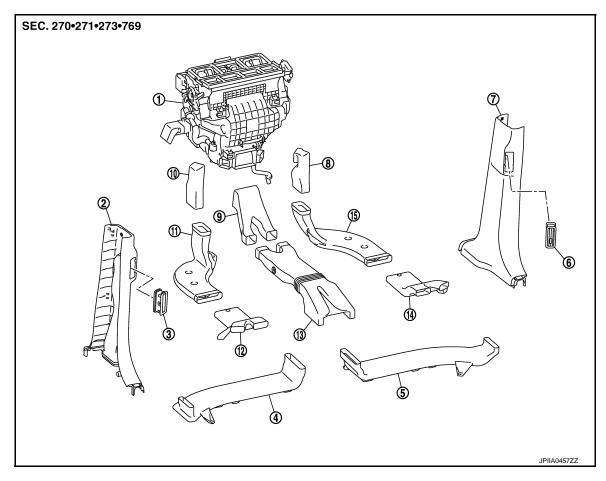
Ν

0

Р

REAR FOOT DUCT 3: Exploded View

INFOID:0000000006258682



- 1. Heater & cooling unit assembly
- 4. Rear ventilator duct 3 (left)
- Rear ventilator duct 4 (center pillar lower garnish right)
- 10. Rear foot duct 1 (left)
- 13. Rear ventilator duct 2

- Rear ventilator duct 4 (center pillar lower 3. garnish left)
- 5. Rear ventilator duct 3 (right)
- 8. Rear foot duct 1 (right)
- 11. Rear foot duct 2 (left)
- 14. Rear foot duct 3 (right)

- B. Rear ventilator grille (left)
- 6. Rear ventilator grille (right)
- 9. Rear ventilator duct 1
- 12. Rear foot duct 3 (left)
- 15. Rear foot duct 2 (right)

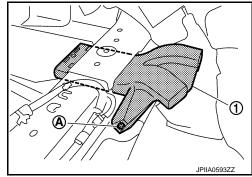
REAR FOOT DUCT 3: Removal and Installation

INFOID:0000000006258683

REMOVAL

Driver side

- 1. Remove the rear foot duct 2 (left). Refer to VTL-124, "REAR FOOT DUCT 2 : Exploded View".
- 2. Remove the mounting screw (A), and then remove the rear foot duct 3 (left) (1).



Passenger side

Α

В

C

D

Е

F

Н

K

M

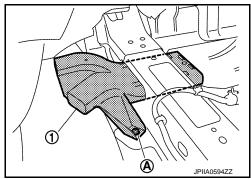
Ν

0

Р

INFOID:0000000006258684

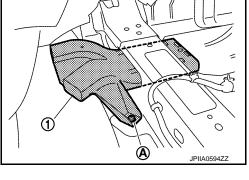
- Remove the rear foot duct 2 (right). Refer to VTL-124, "REAR FOOT DUCT 2: Exploded View".
- 2. Remove the mounting screw (A), and then remove the rear foot duct 3 (right) (1).



INSTALLATION Install in the reverse order of removal.

HEATER DUCT

HEATER DUCT: Exploded View



SEC. 270-271 3.9 (0.40, 35) **®** 3.9 (0.40, 35)JPIIA0454GB

- 1. Ventilator seal
- 4. Adapter case
- 7. Intake sensor

- 2. Upper ventilator seal
- 5. Center case
- Upper ventilator door motor 8.
- 3. Defroster seal
- 6. Intake sensor bracket
- 9. Upper ventilator door rod

< REMOVAL AND INSTALLATION >

[WITH 7 INCH DISPLAY]

10.	Upper ventilator door lever	11.	Filter cover	12.	In-cabin microfilter/Air conditioner filter*
13.	Foot duct 1 (right)	14.	Foot duct 2 (right)	15.	Air mix door motor (passenger side)
16.	Heater & cooling unit case cover	17.	Evaporator pipe assembly	18.	O-ring
19.	Evaporator	20.	Expansion valve	21.	Case packing
22.	Grommet	23.	Cooler pipe grommet	24.	Drain hose
25.	Heater & cooling unit case (right)	26.	Air mix door (Slide door)	27.	Heater pipe support
28.	Heater pipe grommet	29.	Heater & cooling unit case (left)	30.	Heater core
31.	Heater pipe cover	32.	Foot duct 2 (left)	33.	Foot duct 1 (left)
34.	Heater duct	35.	Aspirator	36.	Aspirator hose
37.	Mode door motor	38.	Main link	39.	Rod link
40.	Max. cool door link	41.	Ventilator door link	42.	Foot door link
43.	Mode door lever	44.	Defroster door link	45.	Ventilator door lever
46.	Foot door lever	47.	Defroster door lever	48.	Max. cool door lever
49.	Air mix door motor (driver side)	50.	Distributor upper case	51.	Distributor lower case
52.	Ventilator door	53.	Foot door	54.	Max. cool door
55.	Defroster door	56.	Upper ventilator door		
*	: Models for Mexico.				

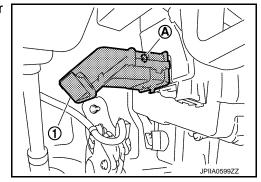
HEATER DUCT: Removal and Installation

Refer to $\underline{\text{GI-4, "Components"}}$ for symbols in the figure.

INFOID:0000000006258685

REMOVAL

- 1. Remove the instrument lower panel LH. Refer to IP-12, "Exploded View".
- 2. Remove the mounting screw (A), and then remove the heater duct (1).



INSTALLATION

Install in the reverse order of removal.

FOOT DUCT

FOOT DUCT: Exploded View

INFOID:0000000006258686

Α

В

D

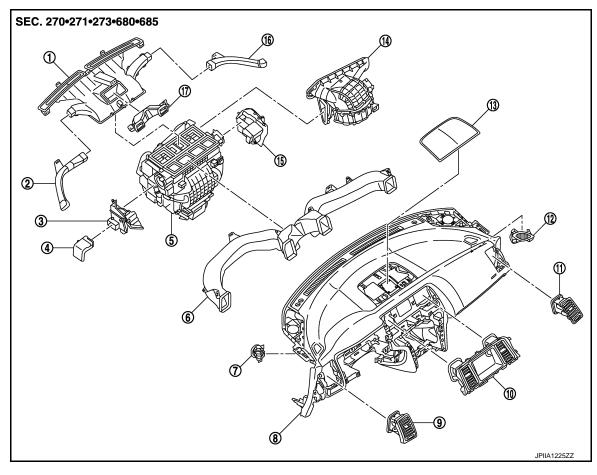
Е

Н

L

M

Ν



- 1. Defroster nozzle
- 4. Heater duct
- 7. Side defroster grille (left)
- 10. Center ventilator grille assembly
- 13. Center speaker grille
- 16. Side defroster nozzle (right)
- 2. Side defroster nozzle (left)
- 5. Heater & cooling unit assembly
- 8. Instrument panel assembly
- 11. Side ventilator grille (right)
- 14. Blower unit assembly
- 17. Upper ventilator duct

- 3. Foot duct (left)
- 6. Ventilator duct
- 9. Side ventilator grille (left)
- 12. Side defroster grille (right)
- 15. Foot duct (right)

FOOT DUCT: Removal and Installation

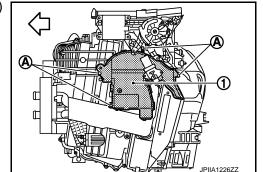
INFOID:0000000006258687

REMOVAL

Driver side

- Remove instrument lower panel LH. Refer to <u>IP-12, "Exploded View"</u>.
- 2. Remove mounting screws (A), and then remove foot duct (left) (1).

⟨⇒ : Vehicle front

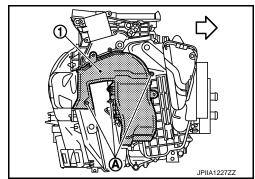


Passenger side

< REMOVAL AND INSTALLATION >

[WITH 7 INCH DISPLAY]

- 1. Remove blower unit assembly. Refer to VTL-92, "Exploded View".
- 2. Remove mounting screws (A) and harness clip, and then remove foot duct (right) (1).



INSTALLATION

Installation is basically the reverse order of removal.