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SECTION **VTL**

VENTILATION SYSTEM

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SWITCHES AND THEIR CONTROL FUNCTION

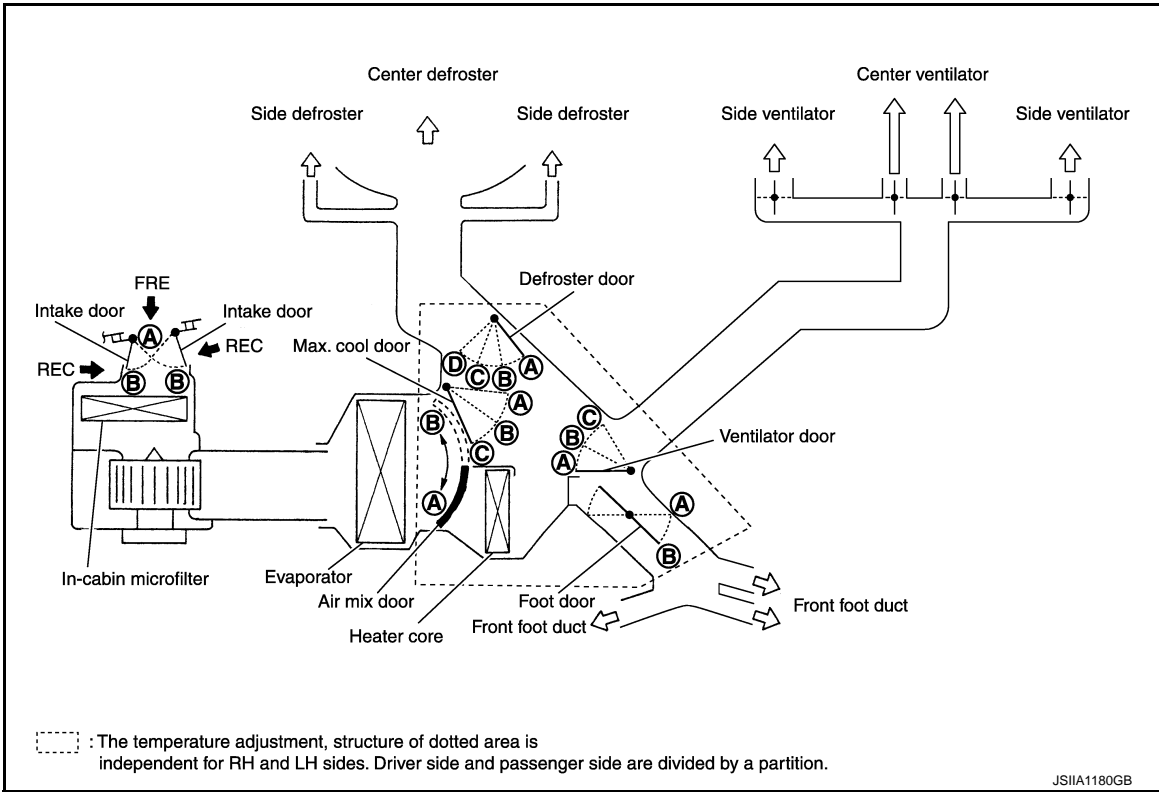
< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

SWITCHES AND THEIR CONTROL FUNCTION

System Description

INFOID:000000011485751



JSIIA1180GB

Position or switch	DUAL switch	MODE switch				DEF switch		AUTO switch	FRE switch	REC switch	Temperature control dial (Driver side)		Temperature control dial (Passenger side)		OFF switch
		VENT	B/L	FOOT	D/F	ON	OFF								
Door		MODE									18°C (60°F) ↔ 32°C (90°F)	18°C (60°F) ↔ 32°C (90°F)			
Ventilator door	—	(A)	(B)	(C)	(C)	(C)	—	—	—	—	—	—	—	(C)	
Max.cool door	—	(A)	(B)	(C)	(C)	(C)	—	—	—	—	—	—	—	(C)	
Defroster door	—	(D)	(D)	(C)	(B)	(A)	—	—	—	—	—	—	—	(C)	
Foot door	—	(B)	(B)	(B)	(B)	(A)	—	AUTO	—	—	—	—	—	(B)	
Intake door	—	—				(B)	(B)	—	(B)* AUTO	(A)* AUTO	—	—	—	—	(B)
Air mix door (Driver side)	—	—				—	—	—	—	—	(A)	AUTO	(B)	—	—
Air mix door (Passenger side)	ON	—				—	—	—	—	—	—	(A)	AUTO	(B)	—
	OFF	—				—	—	—	—	—	(A)	AUTO	(B)	—	—

*:Inlet status is displayed by LED when activating automatic control.

JSIIA1181GB






AIR DISTRIBUTION

< SYSTEM DESCRIPTION >

AIR DISTRIBUTION

System Description

INFOID:000000011485752

Discharge air flow				
Mode position indication	Condition	Air outlet/distribution		
		VENT	FOOT	DEF
	DUAL switch: OFF	100%	—	—
		63%	37%	—
		15%	57%	28%
		10%	43%	47%
		13%	—	87%

JSIIA1182GB

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000011485753

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.

Precautions Necessary for Steering Wheel Rotation After Battery Disconnection

INFOID:000000011485754

CAUTION:

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

- Before removing and installing any control units, first turn the ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

2. Turn the ignition switch to ACC position.
(At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.

PRECAUTIONS

< PRECAUTION >

4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT.

Precaution for Battery Service

INFOID:000000011485755

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Precautions for Removing Battery Terminal

INFOID:000000011485756

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

NOTE:

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

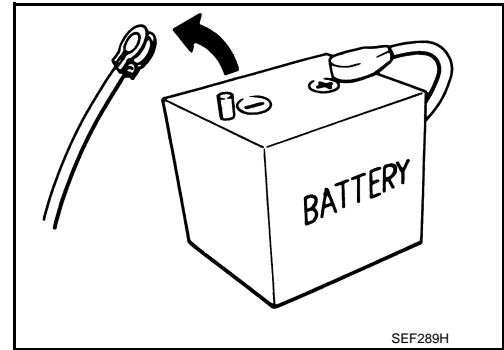
NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

NOTE:

The removal of 12V battery may cause a DTC detection error.



General Precautions

INFOID:000000011485757

CAUTION:

After finishing servicing, check that all the tools and waste are stored in a customary place.

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PREPARATION

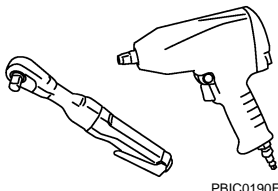
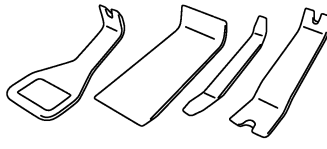
< PREPARATION >

PREPARATION

PREPARATION

Commercial Service Tool

INFOID:000000011485758

Tool name	Description
<p data-bbox="162 514 276 546">Power tool</p>  <p data-bbox="844 630 917 646">PBIC0190E</p>	<p data-bbox="1079 514 1372 546">For loosening bolts and nuts</p>
<p data-bbox="162 766 300 798">Remover tool</p>  <p data-bbox="844 882 917 898">PIIB7923J</p>	<p data-bbox="1079 766 1412 798">Remove clips, pawls, metal clips</p>

IN-CABIN MICROFILTER

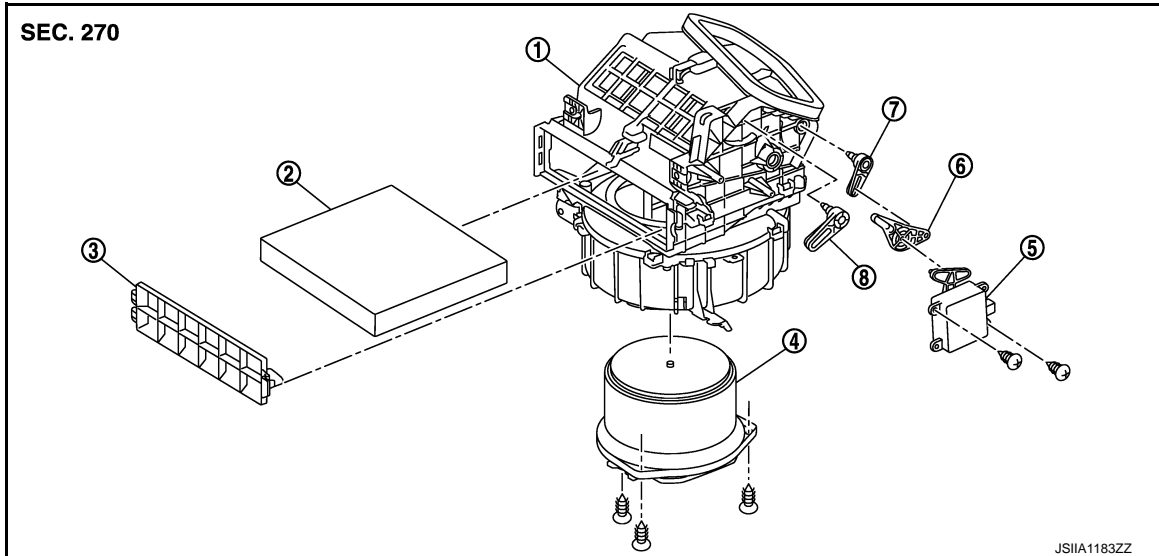
< PERIODIC MAINTENANCE >

PERIODIC MAINTENANCE

IN-CABIN MICROFILTER

Exploded View

INFOID:000000011485759



- | | | |
|--------------------------|-------------------------|---------------------|
| 1. Blower unit | 2. In-cabin microfilter | 3. Filter cover |
| 4. Blower motor assembly | 5. Intake door motor | 6. Intake door link |
| 7. Intake door lever 1 | 8. Intake door lever 2 | |

Removal and Installation

INFOID:000000011485760

REMOVAL

1. Remove instrument lower panel RH. Refer to [IP-12. "Exploded View"](#).
2. Remove filter cover, and then remove in-cabin microfilter.

INSTALLATION

Installation is basically the reverse order of removal.

Replacement

INFOID:000000011485761

- Replace in-cabin microfilter.
Refer to [MA-11. "Schedule 1"](#) and [MA-12. "Schedule 2"](#).
Affix a caution label inside the glove box when replacing filter.

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DUCT AND GRILLE

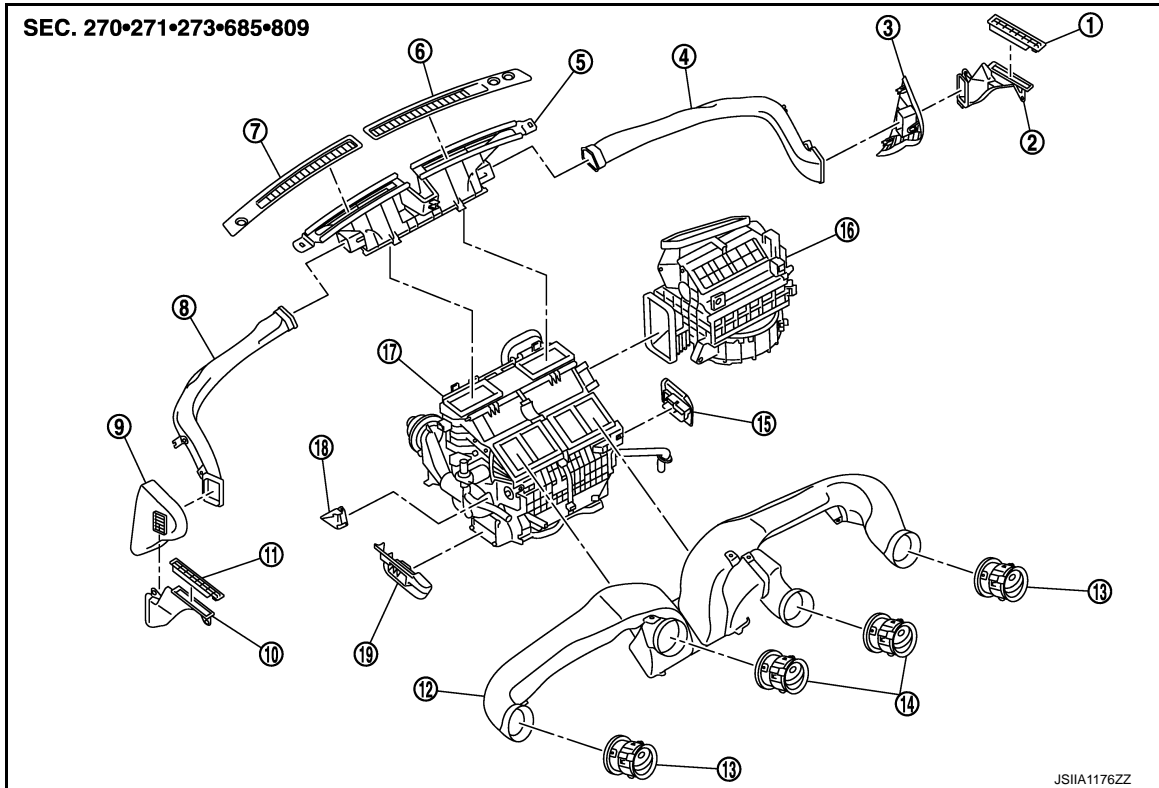
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

DUCT AND GRILLE

Exploded View

INFOID:000000011485762



- | | | |
|------------------------------|------------------------------------|--------------------------------------|
| 1. Side defroster grille RH | 2. Side defroster duct RH | 3. Instrument panel side finisher RH |
| 4. Side defroster nozzle RH | 5. Front defroster nozzle | 6. Front defroster grille RH |
| 7. Front defroster grille LH | 8. Side defroster nozzle LH | 9. Instrument panel side finisher LH |
| 10. Side defroster duct LH | 11. Side defroster grille LH | 12. Ventilator duct |
| 13. Side ventilator grille | 14. Center ventilator grille | 15. Foot grille RH |
| 16. Blower unit | 17. Heater & cooling unit assembly | 18. Heater duct |
| 19. Foot grille LH | | |

NOTE:

Foot duct is integrated in the heater & cooling unit assembly. Refer to [HA-49. "Exploded View \(GT-R certified NISSAN dealer\)".](#)

CENTER VENTILATOR GRILLE AND SIDE VENTILATOR GRILLE

CENTER VENTILATOR GRILLE AND SIDE VENTILATOR GRILLE : Removal and Installation

INFOID:000000011485763

REMOVAL


Driver Side

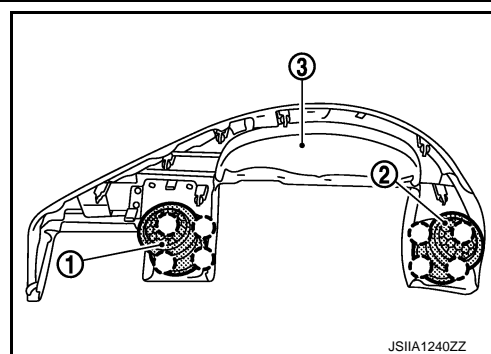
1. Remove instrument panel pad A. Refer to [IP-12. "Exploded View".](#)

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >


2. Pull to remove center ventilator grille (1) and side ventilator grille (2) from instrument panel pad A (3), using flat screwdriver to push the pawls.

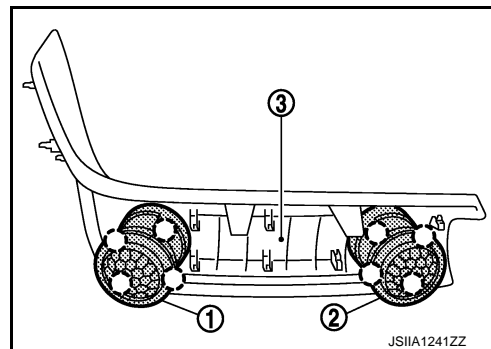
 : Pawl



Passenger Side

1. Remove instrument panel pad C. Refer to [IP-12, "Exploded View"](#).
2. Pull to remove center ventilator grille (1) and side ventilator grille (2) from instrument panel pad C (3), using flat screwdriver to push the pawls.

 : Pawl



INSTALLATION

Installation is basically the reverse order of removal.

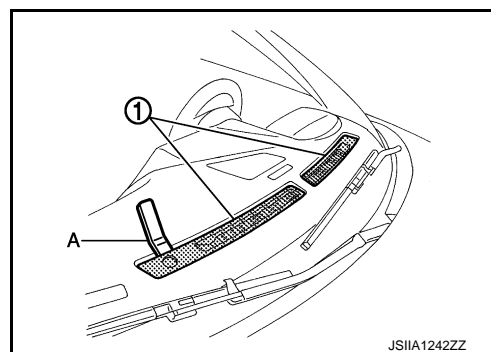
FRONT DEFROSTER GRILLE

FRONT DEFROSTER GRILLE : Removal and Installation

INFOID:000000011485764

REMOVAL

1. Remove front defroster grilles (1), using remover tools (A).
2. Remove sensors from front defroster grilles.



INSTALLATION

Installation is basically the reverse order of removal.

SIDE DEFROSTER GRILLE

SIDE DEFROSTER GRILLE : Removal and Installation

INFOID:000000011485765

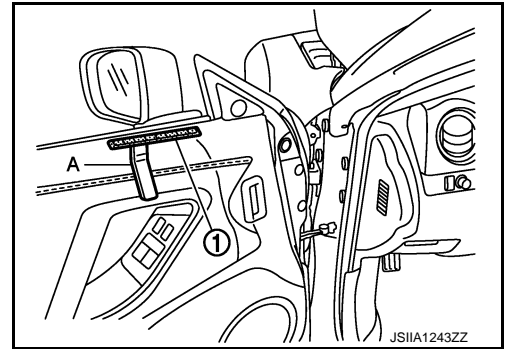
REMOVAL

Driver Side

DUCT AND GRILLE

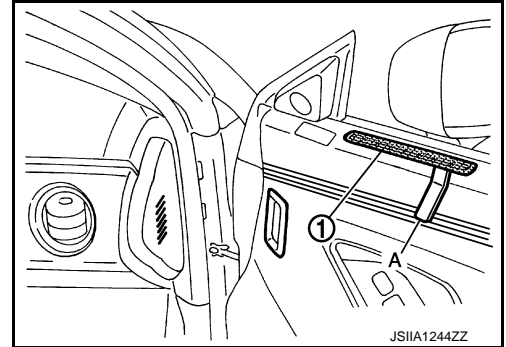
< REMOVAL AND INSTALLATION >

Remove side defroster grille LH (1), using remover tools (A).



Passenger Side

Remove side defroster grille RH (1), using remover tools (A).



INSTALLATION

Installation is basically the reverse order of removal.

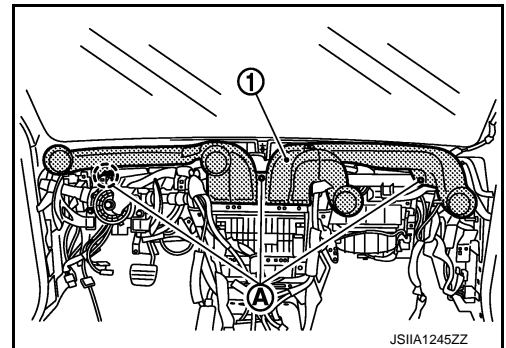
VENTILATOR DUCT

VENTILATOR DUCT : Removal and Installation

INFOID:000000011485766

REMOVAL

1. Remove instrument panel assembly. Refer to [IP-12, "Exploded View"](#).
2. Remove mounting screws (A), and then remove ventilator duct (1).



INSTALLATION

Installation is basically the reverse order of removal.

FRONT DEFROSTER NOZZLE

FRONT DEFROSTER NOZZLE : Removal and Installation

INFOID:000000011485767

REMOVAL

1. Remove side defroster nozzles. Refer to [VTL-8, "Exploded View"](#).
2. Remove front defroster nozzle.

INSTALLATION

Installation is basically the reverse order of removal.

SIDE DEFROSTER NOZZLE

DUCT AND GRILLE

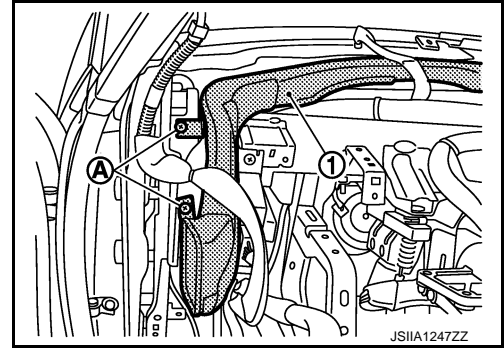
< REMOVAL AND INSTALLATION >

SIDE DEFROSTER NOZZLE : Removal and Installation

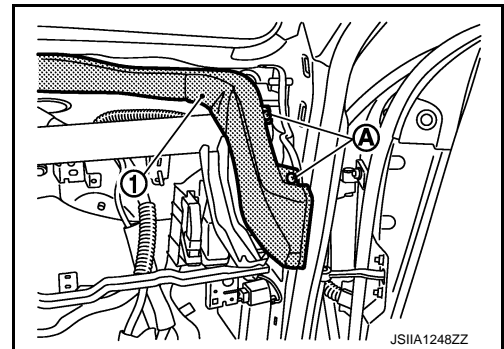
INFOID:000000011485768

REMOVAL

1. Remove ventilator duct. Refer to [VTL-8, "Exploded View"](#).
2. Remove mounting screws (A), and then remove side defroster nozzle LH (1).



3. Remove mounting screws (A), and then remove side defroster nozzle RH (1).



INSTALLATION

Installation is basically the reverse order of removal.

SIDE DEFROSTER DUCT

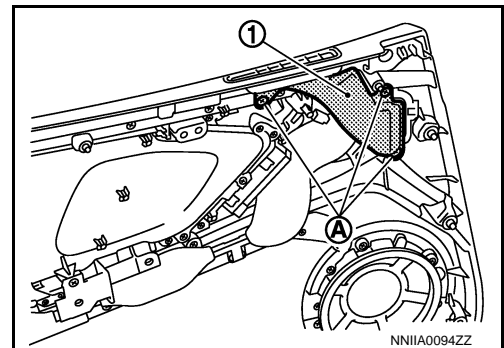
SIDE DEFROSTER DUCT : Removal and Installation

INFOID:000000011485769

REMOVAL

Driver Side

1. Remove door finisher LH. Refer to [INT-12, "Exploded View"](#).
2. Remove mounting screws (A), and then remove side defroster duct LH (1).



Passenger Side

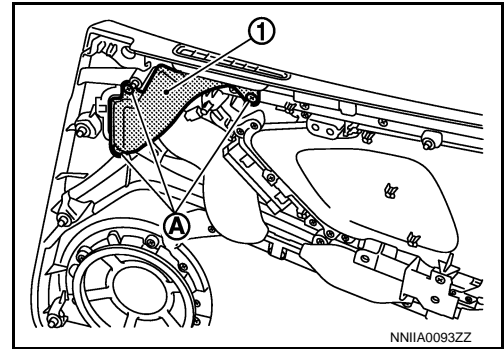
1. Remove door finisher RH. Refer to [INT-12, "Exploded View"](#).

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DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

2. Remove mounting screws (A), and then remove side defroster duct RH (1).



INSTALLATION

Installation is basically the reverse order of removal.


FOOT GRILLE

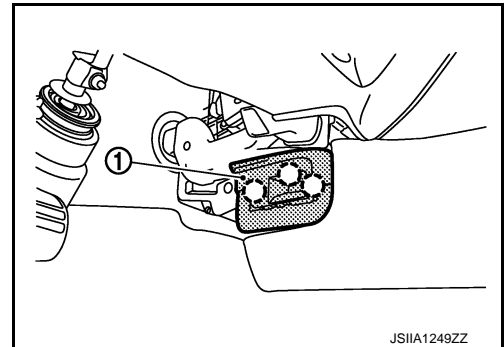
FOOT GRILLE : Removal and Installation

INFOID:000000011485770


REMOVAL

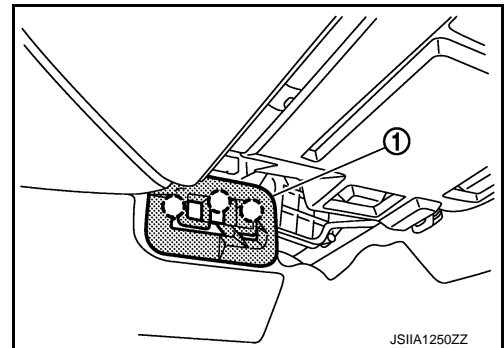
1. Remove foot grille LH (1).

 : Pawl



2. Remove foot grille RH (1).

 : Pawl



INSTALLATION

Installation is basically the reverse order of removal.

HEATER DUCT

HEATER DUCT : Removal and Installation

INFOID:000000011485771

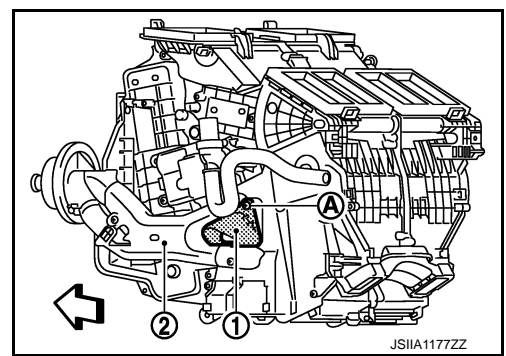
REMOVAL

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

Remove mounting screw (A), and then remove heater duct (1) from heater & cooling unit assembly (2).

↶ : Vehicle front



INSTALLATION

Installation is basically the reverse order of removal.

FOOT DUCT

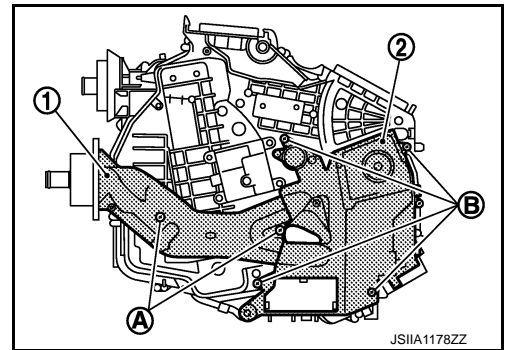
FOOT DUCT : Removal and Installation

INFOID:000000011485772

REMOVAL

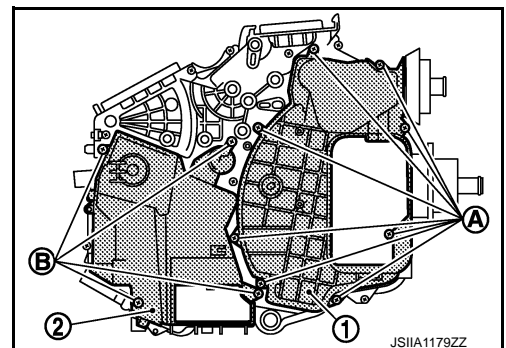
Driver Side

1. Remove heater & cooling unit assembly. Refer to [HA-49, "Exploded View \(GT-R certified NISSAN dealer\)"](#).
2. Remove aspirator.
3. Remove mounting screws (A), and then remove heater pipe cover (1).
4. Remove mounting screws (B), and then remove foot duct LH (2).



Passenger Side

1. Set the temperature (passenger side) at 18.0°C (60°F).
2. Disconnect the battery cable from negative terminal.
CAUTION:
The angle may be out, when installing the air mix door motor to the air mix door, unless the above 2 procedures are performed.
3. Remove heater & cooling unit assembly. Refer to [HA-49, "Exploded View \(GT-R certified NISSAN dealer\)"](#).
4. Remove air mix door motor (passenger side). Refer to [HAC-103, "Exploded View"](#).
5. Remove mode door motor and links. Refer to [HAC-103, "Exploded View"](#).
6. Remove mounting screws (A), and then remove evaporator cover (1).
7. Remove mounting screws (B), and then remove foot duct RH (2).



DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

INSTALLATION

Installation is basically the reverse order of removal.

BLOWER UNIT

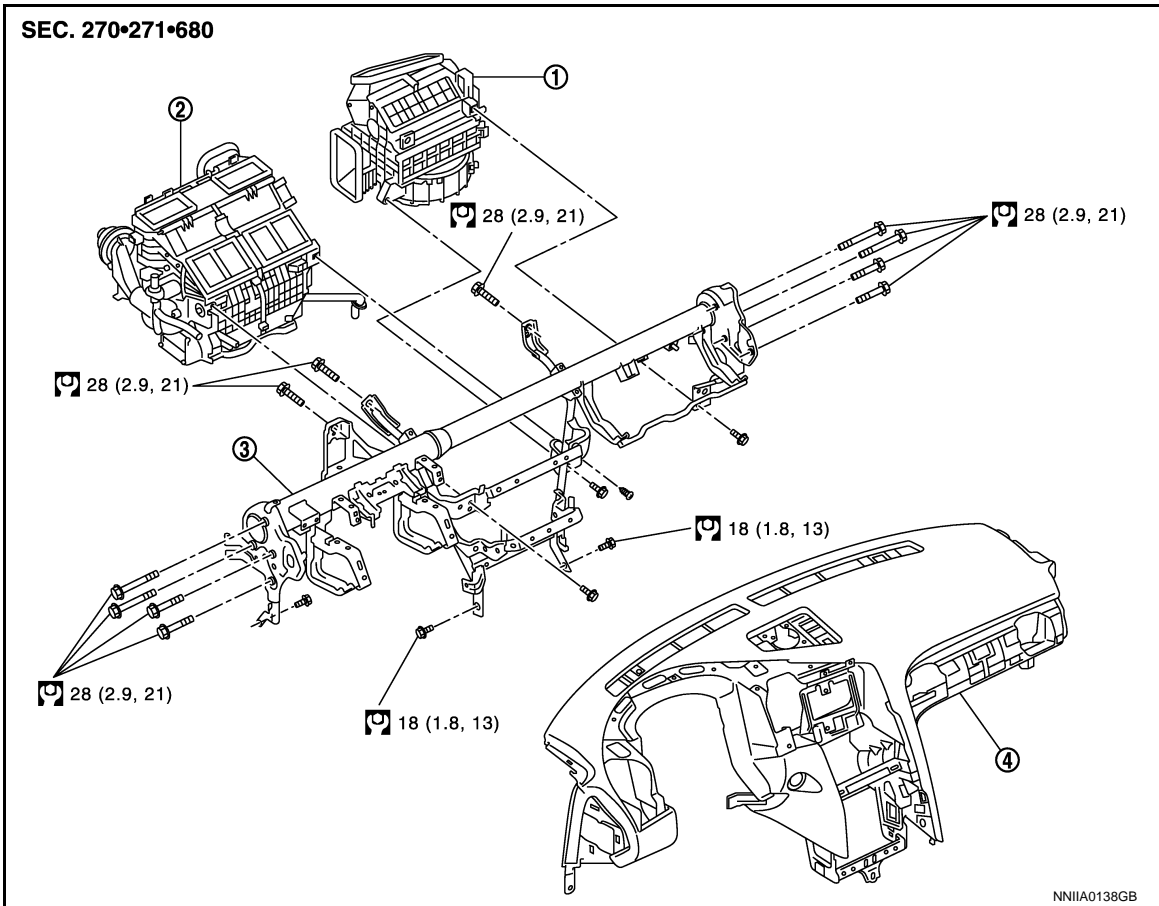
< REMOVAL AND INSTALLATION >

BLOWER UNIT

Exploded View

INFOID:000000011485773

REMOVAL



1. Blower unit
2. Heater & cooling unit assembly
3. Steering member
4. Instrument panel assembly

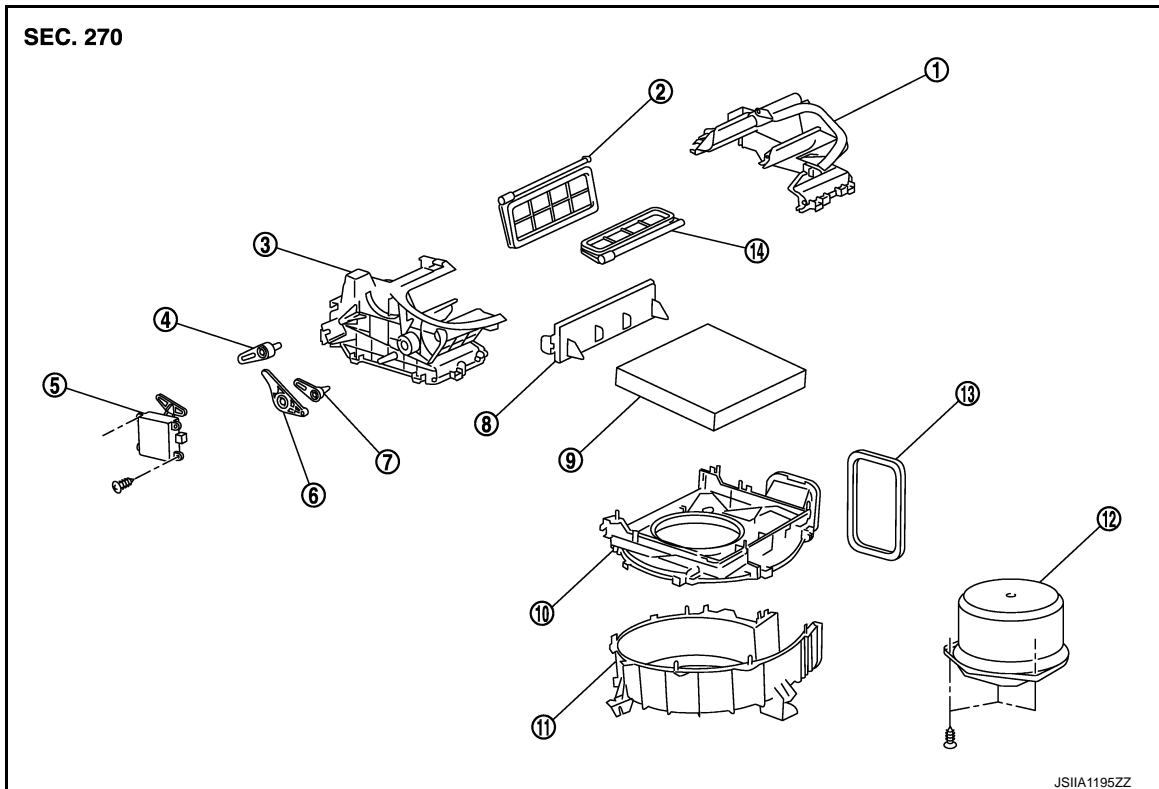
Refer to [GI-4, "Components"](#) for symbols in the figure.

DISASSEMBLY

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BLOWER UNIT

< REMOVAL AND INSTALLATION >



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|------------------------|-----------------------|---------------------------|
| 1. Intake box RH | 2. Intake door 2 | 3. Intake box LH |
| 4. Intake door lever 2 | 5. Intake door motor | 6. Intake door link |
| 7. Intake door lever 1 | 8. Filter cover | 9. In-cabin microfilter |
| 10. Intake upper case | 11. Intake lower case | 12. Blower motor assembly |
| 13. Seal | 14. Intake door 1 | |

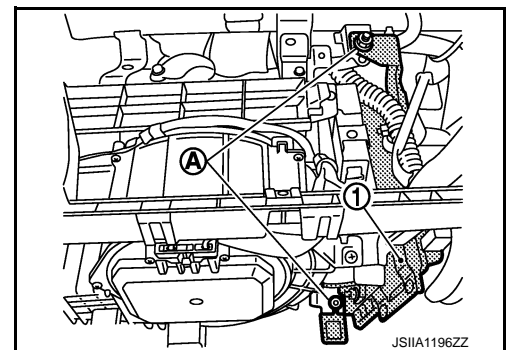
BLOWER UNIT

BLOWER UNIT : Removal and Installation

INFOID:000000011485774

REMOVAL

1. Remove instrument lower panel RH. Refer to [IP-12, "Exploded View"](#).
2. Remove front floor spacer RH. Refer to [INT-22, "Exploded View"](#).
3. Disconnect E-SUS control unit connector. Refer to [SCS-61, "Exploded View \(GT-R certified NISSAN dealer\)"](#).
4. Remove mounting nuts (A).
5. Disconnect connectors, and then remove ECM (1) with bracket attached.



6. Remove power steering control unit. Refer to [STC-22, "Exploded View \(GT-R certified NISSAN dealer\)"](#).

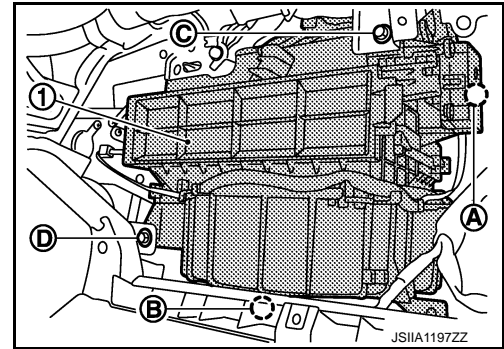
BLOWER UNIT

< REMOVAL AND INSTALLATION >

7. Disconnect intake door motor connector (A).
8. Disconnect the blower motor connector (B).
9. Remove mounting bolt (C) and screw (D), from blower unit (1).
10. Remove blower unit.

CAUTION:

Move blower unit rightward, and remove locating pin (1 part) and joint. Then remove blower unit downward.



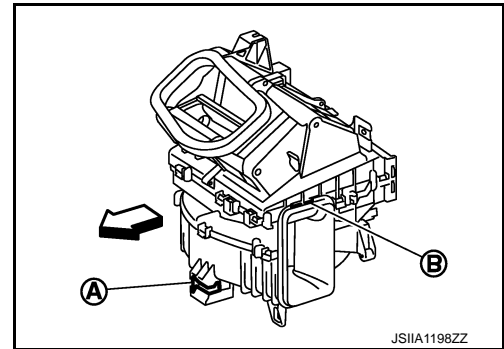
INSTALLATION

Installation is basically the reverse order of removal.

CAUTION:

Make sure locating pin (A) and joint (B) are securely inserted.

← : Vehicle front



BLOWER MOTOR

BLOWER MOTOR : Removal and Installation

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VTL

REMOVAL

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

INSTALLATION

Installation is basically the reverse order of removal.