

SECTION **VTL** VENTILATION SYSTEM

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000007230834

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.

PREPARATION

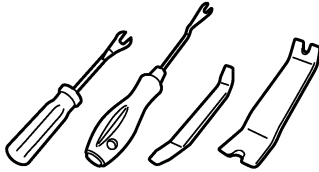
< PREPARATION >

PREPARATION

PREPARATION

Commercial Service Tool

INFOID:000000007230835

Tool name	Description
Remover tool  JMKIA3050ZZ	Removes clips, pawls and metal clips

VENTILATION SYSTEM

< SYSTEM DESCRIPTION >

Switch/Dial position			Door position																	
			Mode door				Intake door	Upper ventilator door	Air mix door											
			Ventilator door	Max. cool door	Defroster door	Foot door			(Driver side)	(Passenger side)										
AUTO switch				AUTO				—	—	—	—									
MODE switch				A	A	A	A													
				B	B	A	B													
				C	B	B	C													
				C	B	B	B													
DEF switch				C	C	C	A	A	—	—	—									
Intake switch*				—	—	—	—					B								
UPPER VENT switch								A – B												
									C											
Temperature control dial (Driver side)	DUAL switch: OFF	60°F						—	—	—	—	—	—	A	A					
		61°F – 89 °F												AUTO	AUTO					
		90°F												B	B					
	DUAL switch: ON	60°F												A	—					
		61°F – 89 °F												AUTO						
		90°F												B						
Temperature control dial (Passenger side)		60°F												C	B	B	C	—	—	A
		61°F – 89 °F																		AUTO
		90°F																		B
ON-OFF switch		OFF		—																

*: Inlet status is displayed by indicator during activating automatic control

AIR DISTRIBUTION

Discharge air flow								
MODE/DEF set position	Condition	Air outlet/distribution						
		Ventilator				Foot		Defroster
		Front		Upper	Rear	Front	Rear	
		Center	Side					
	• DUAL switch: OFF • UPPER VENT switch: ON	40%	41%	8%	11%	—	—	—
		18%	24%	10%	17%	23%	8%	—
		—	12%	12%	15.5%	27.5%	12%	21%
		—	11%	11%	14%	24%	11%	29%
		—	11%	10.5%	12.5%	—	—	66%

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

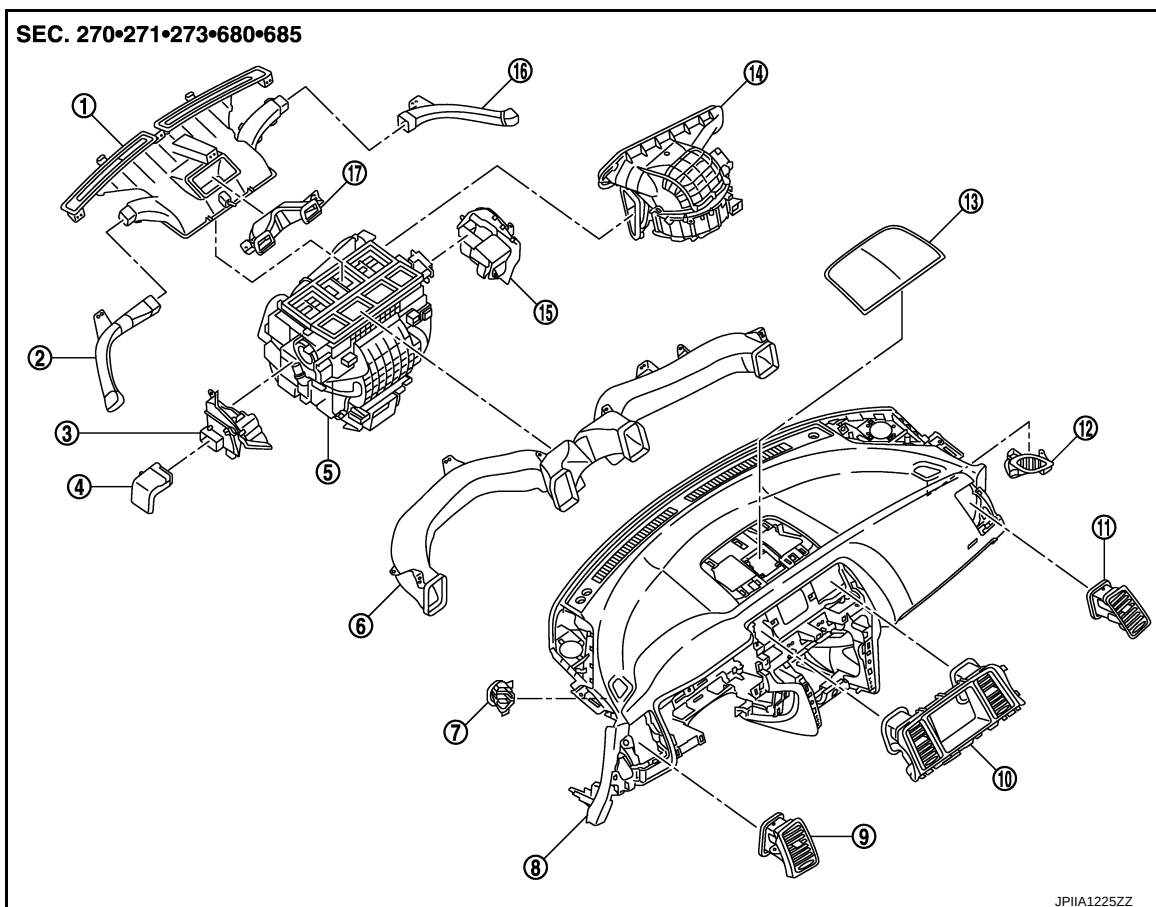
REMOVAL AND INSTALLATION

DUCT AND GRILLE

Exploded View

FRONT

INFOID:000000007230838



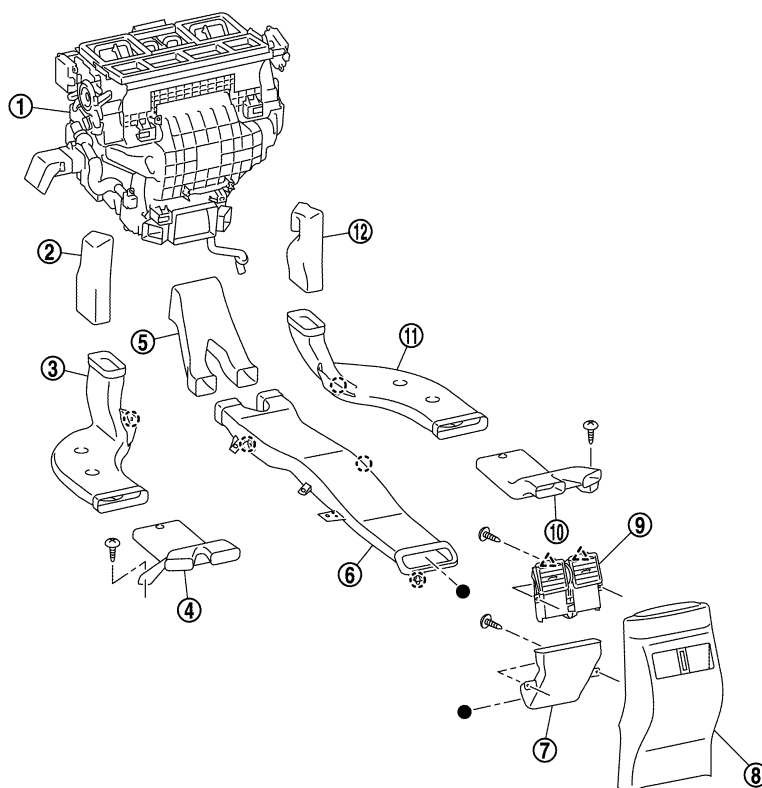
- | | | |
|---------------------------------------|-----------------------------------|------------------------------|
| 1. Defroster nozzle | 2. Side defroster nozzle LH | 3. Front foot duct LH |
| 4. Heater duct | 5. Heater & cooling unit assembly | 6. Ventilator duct |
| 7. Side defroster grille LH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

REAR

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

SEC. 270•271•273•969



JMIIA1899ZZ

- | | | |
|-----------------------------------|---------------------------|---------------------------|
| 1. Heater & cooling unit assembly | 2. Rear foot duct 1 LH | 3. Rear foot duct 2 LH |
| 4. Rear foot duct 3 LH | 5. Rear ventilator duct 1 | 6. Rear ventilator duct 2 |
| 7. Rear ventilator duct 3 | 8. Console rear finisher | 9. Rear ventilator grille |
| 10. Rear foot duct 3 RH | 11. Rear foot duct 2 RH | 12. Rear foot duct 1 RH |

○ : Clip
△ : Pawl

CENTER VENTILATOR GRILLE

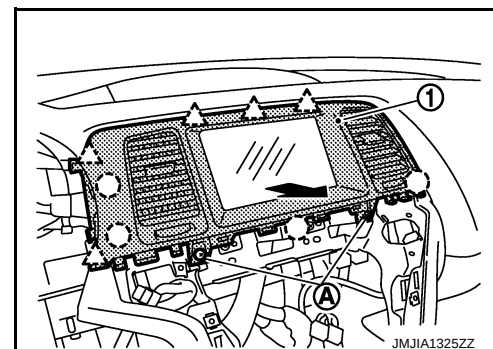
CENTER VENTILATOR GRILLE : Removal and Installation

INFOID:000000007230839

REMOVAL

1. Remove cluster lid A. Refer to [IP-12, "Exploded View"](#).
2. Remove cluster lid D. Refer to [IP-12, "Exploded View"](#).
3. Remove fixing screws (A).
4. Pull out center ventilator grille assembly (1) toward instrument panel assembly to remove.

○ : Clip
△ : Pawl



JMJIA1325ZZ

INSTALLATION

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

Install in the reverse order of removal.

SIDE VENTILATOR GRILLE

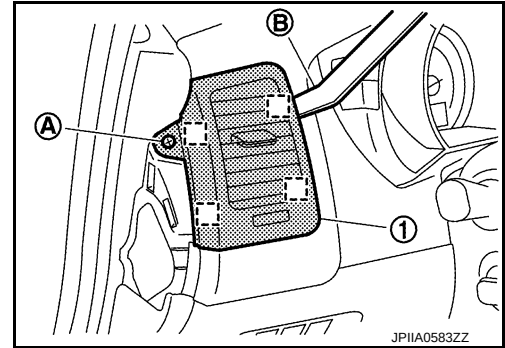
SIDE VENTILATOR GRILLE : Removal and Installation

INFOID:000000007230840

REMOVAL

1. Remove instrument side finisher. Refer to [JP-12, "Exploded View"](#).
2. Remove fixing screw (A).
3. Disengage fixing metal clips using a remover tool (B), and then remove side ventilator grille (1).

 : Metal clip



INSTALLATION

Install in the reverse order of removal.

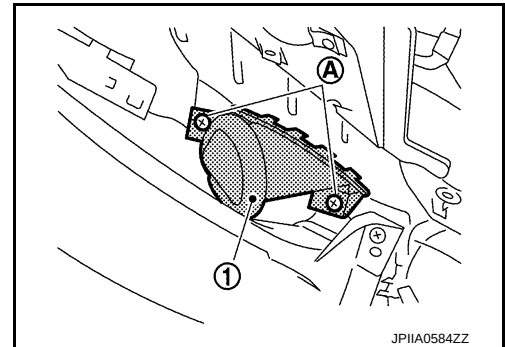
SIDE DEFROSTER GRILLE

SIDE DEFROSTER GRILLE : Removal and Installation

INFOID:0000000007230841

REMOVAL

1. Remove instrument panel assembly. Refer to [JP-13, "Removal and Installation"](#).
2. Remove defroster nozzle and side defroster nozzle. Refer to [VTL-10, "DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE : Removal and Installation"](#).
3. Remove fixing screws (A), and then remove side defroster grille (1).



INSTALLATION

Install in the reverse order of removal.

VENTILATOR DUCT

VENTILATOR DUCT : Removal and Installation

INFOID:0000000007230842

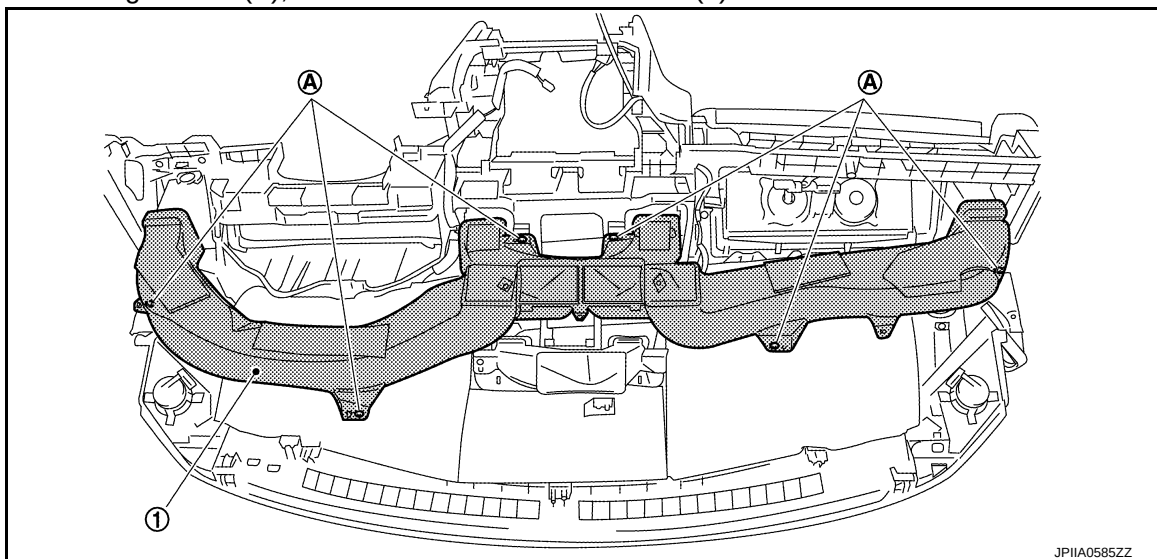
REMOVAL

1. Remove instrument panel assembly. Refer to [JP-13, "Removal and Installation"](#).
2. Remove defroster nozzle and side defroster nozzle. Refer to [VTL-10, "DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE : Removal and Installation"](#).

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

3. Remove fixing screws (A), and then remove ventilator duct (1).



INSTALLATION

Install in the reverse order of removal.

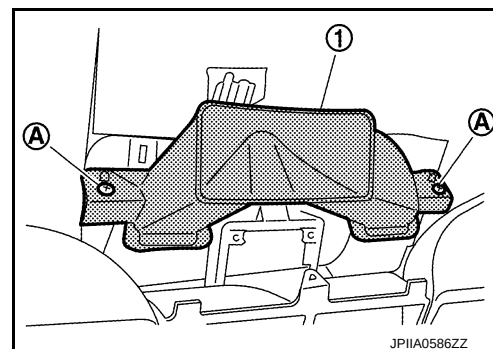
UPPER VENTILATOR DUCT

UPPER VENTILATOR DUCT : Removal and Installation

INFOID:000000007233014

REMOVAL

1. Remove instrument panel assembly. Refer to [IP-13, "Removal and Installation"](#).
2. Remove defroster nozzle and side defroster nozzle. Refer to [VTL-10, "DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE : Removal and Installation"](#).
3. Remove fixing screws (A), and then remove upper ventilator duct (1).



INSTALLATION

Install in the reverse order of removal.

DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE

DEFROSTER NOZZLE AND SIDE DEFROSTER NOZZLE : Removal and Installation

INFOID:000000007230843

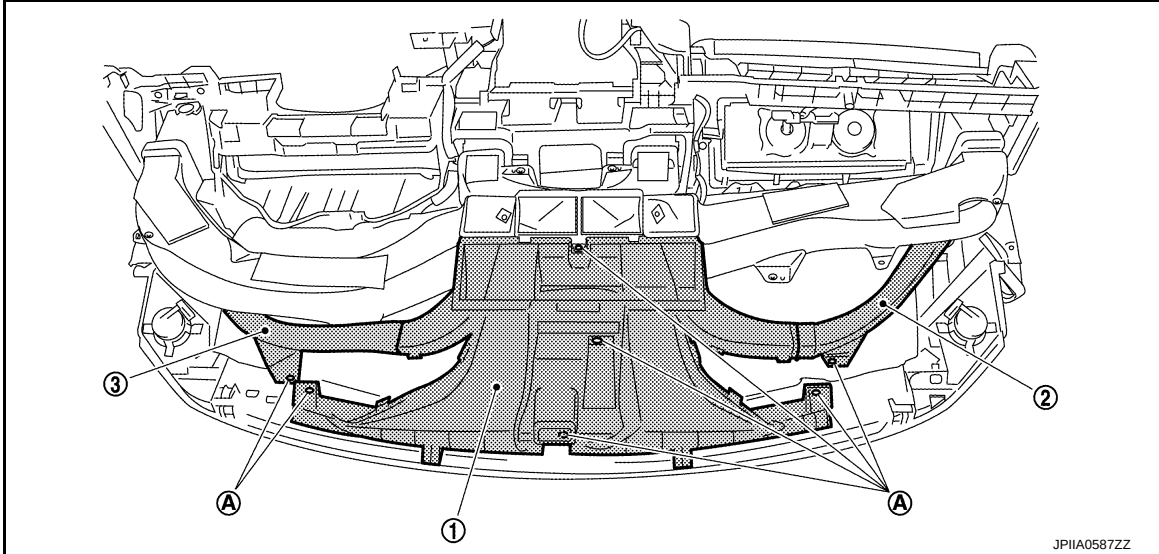
REMOVAL

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

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

2. Remove mounting screws (A), and then remove defroster nozzle (1), side defroster nozzle RH (2) and side defroster nozzle LH (3) from instrument panel assembly as a set.



3. Remove side defroster nozzle (LH and RH) from defroster nozzle.

INSTALLATION

Install in the reverse order of removal.

FRONT FOOT DUCT

FRONT FOOT DUCT : Removal and Installation

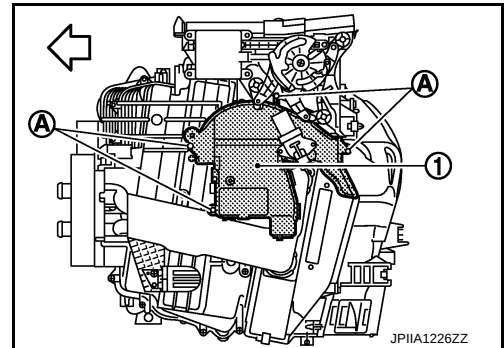
INFOID:000000007230947

REMOVAL

Driver Side

1. Remove instrument lower panel LH. Refer to [IP-13, "Removal and Installation"](#).
2. Remove fixing screws (A), and then remove front foot duct LH (1).

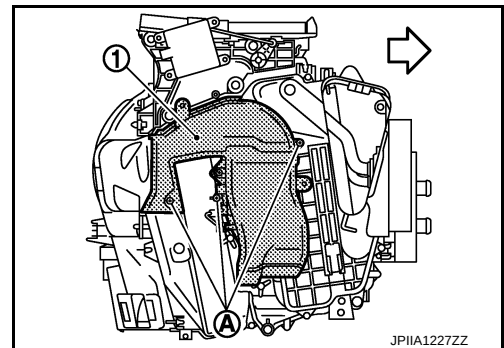
← : Vehicle front



Passenger Side

1. Remove blower unit assembly. Refer to [VTL-18, "Removal and Installation"](#).
2. Remove fixing screws (A), and harness clip, and then remove front foot duct RH (1).

← : Vehicle front



INSTALLATION

Install in the reverse order of removal.

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

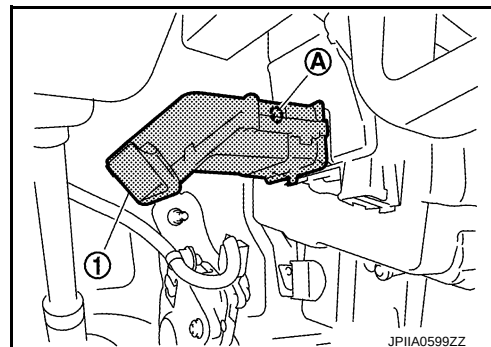
HEATER DUCT

HEATER DUCT : Removal and Installation

INFOID:000000007257126

REMOVAL

1. Remove instrument lower panel LH. Refer to [IP-13. "Removal and Installation"](#).
2. Remove fixing screw (A), and then remove heater duct (1).



INSTALLATION

Install in the reverse order of removal.

REAR FOOT DUCT 1

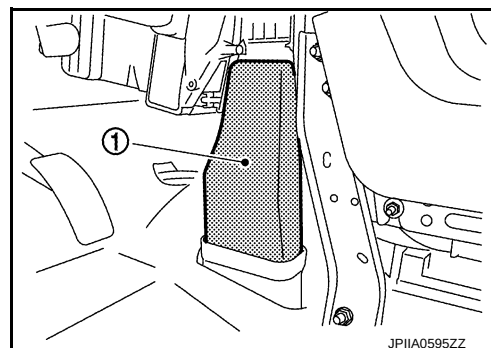
REAR FOOT DUCT 1 : Removal and Installation

INFOID:000000007230845

REMOVAL

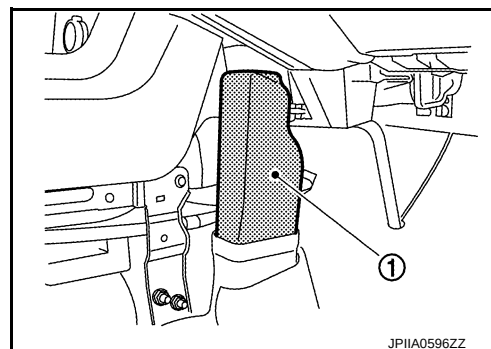
Driver Side

1. Remove instrument lower cover LH. Refer to [IP-21. "Removal and Installation"](#).
2. Remove rear foot duct 1 LH (1).



Passenger Side

1. Remove instrument lower cover RH. Refer to [IP-21. "Removal and Installation"](#).
2. Remove rear foot duct 1 RH (1).



INSTALLATION

Install in the reverse order of removal.

REAR FOOT DUCT 2

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

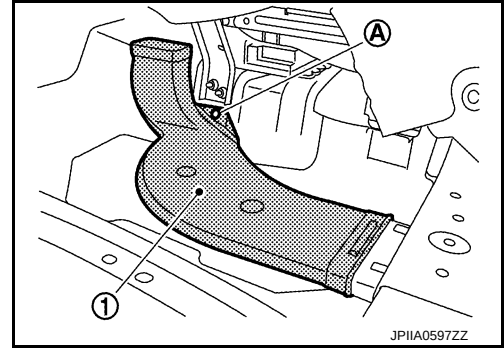
REAR FOOT DUCT 2 : Removal and Installation

INFOID:000000007256339

REMOVAL

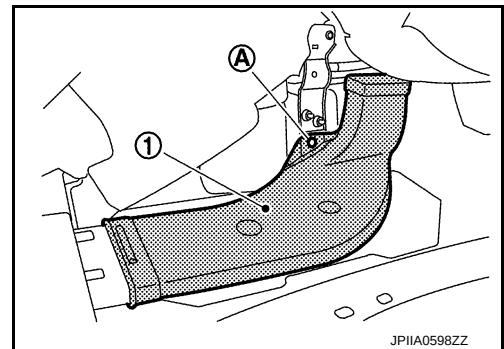
Driver Side

1. Remove rear foot duct 1 LH. Refer to [VTL-12, "REAR FOOT DUCT 1 : Removal and Installation"](#).
2. Pull up driver side floor carpet of secure work space. Refer to [INT-24, "Exploded View"](#).
3. Remove fixing clip (A), and then remove rear foot duct 2 LH (1).



Passenger Side

1. Remove rear foot duct 1 RH. Refer to [VTL-12, "REAR FOOT DUCT 1 : Removal and Installation"](#).
2. Pull up passenger side floor carpet of secure work space. Refer to [INT-24, "Exploded View"](#).
3. Remove fixing clip (A), and then remove rear foot duct 2 RH (1).



INSTALLATION

Install in the reverse order of removal.

REAR FOOT DUCT 3

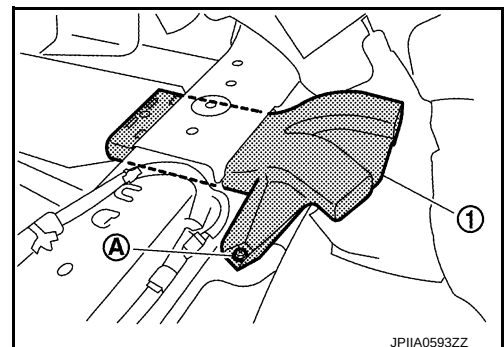
REAR FOOT DUCT 3 : Removal and Installation

INFOID:000000007256340

REMOVAL

Driver Side

1. Remove rear foot duct 2 LH. Refer to [VTL-13, "REAR FOOT DUCT 2 : Removal and Installation"](#).
2. Remove fixing screw (A), and then remove rear foot duct 3 LH (1).



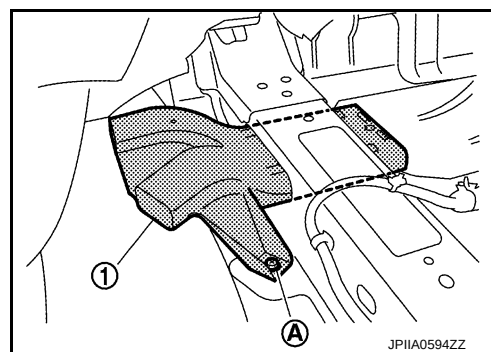
Passenger Side

1. Remove rear foot duct 2 LH. Refer to [VTL-13, "REAR FOOT DUCT 2 : Removal and Installation"](#).

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

2. Remove fixing screw (A), and then remove rear foot duct 3 RH (1).



INSTALLATION

Install in the reverse order of removal.

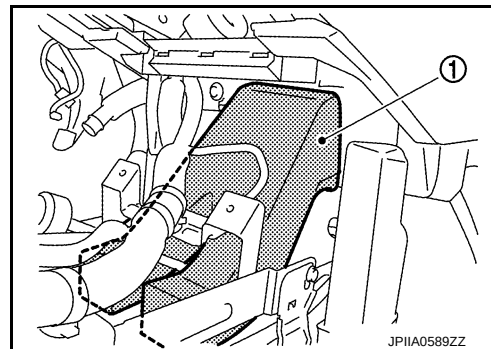
REAR VENTILATOR DUCT 1

REAR VENTILATOR DUCT 1 : Removal and Installation

INFOID:000000007230850

REMOVAL

1. Remove rear ventilator duct 2. Refer to [VTL-14, "REAR VENTILATOR DUCT 2 : Removal and Installation"](#).
2. Remove rear ventilator duct 1 (1).



INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR DUCT 2

REAR VENTILATOR DUCT 2 : Removal and Installation

INFOID:000000007256343

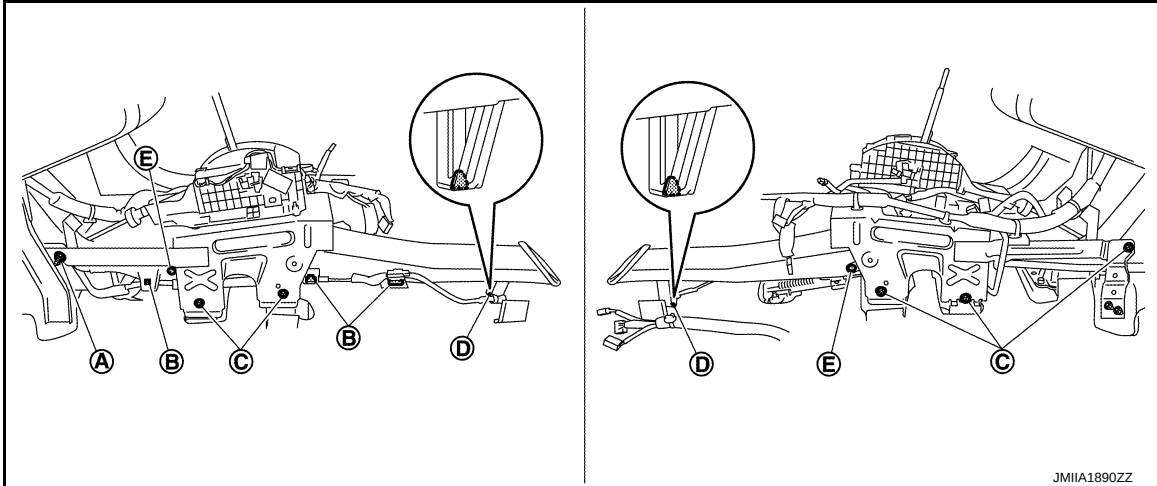
REMOVAL

1. Remove front seat assembly.
 - Refer to [SE-36, "Removal and Installation"](#). (Driver side)
 - Refer to [SE-47, "Removal and Installation"](#). (Passenger side)
2. Remove lower console assembly. Refer to [IP-21, "Removal and Installation"](#).
3. Remove console reinforcement mounting nut (A) and bolts (C).
4. Remove harness fixing clips (B).

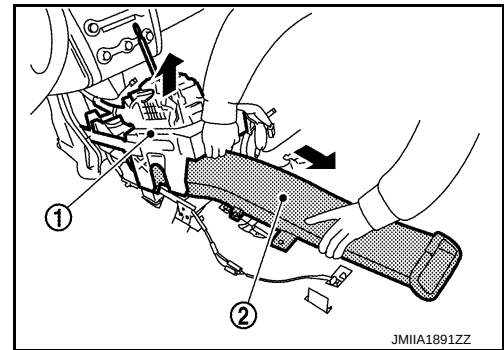
DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

5. Remove rear ventilator duct 2 fixing clips (D) and (E).



6. Remove rear ventilator duct 2 (2) by pulling it out toward vehicle rear while lifting up console reinforcement (1).



INSTALLATION

Install in the reverse order of removal.

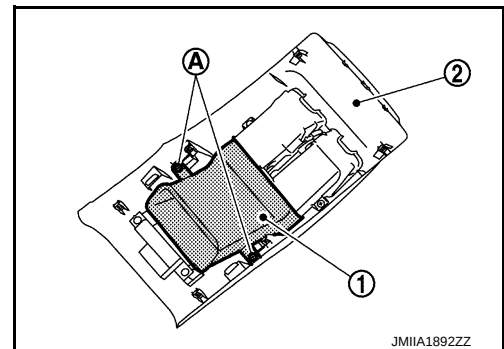
REAR VENTILATOR DUCT 3

REAR VENTILATOR DUCT 3 : Removal and Installation

INFOID:000000007256457

REMOVAL

1. Remove console rear finisher (2). Refer to [IP-21, "Removal and Installation"](#).
2. Remove fixing screws (A), and then remove rear ventilator duct 3 (1).



INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR GRILLE

REAR VENTILATOR GRILLE : Removal and Installation

INFOID:000000007230848

REMOVAL

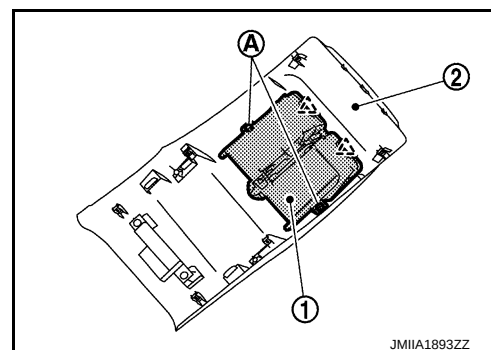
1. Remove rear ventilator duct 3. Refer to [VTL-15, "REAR VENTILATOR DUCT 3 : Removal and Installation"](#).

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

2. Remove fixing screws (A).
3. Disengage fixing pawls, and then remove rear ventilator grille (1) from console rear finisher (2).

 : Pawl



INSTALLATION

Install in reverse order of removal.

BLOWER UNIT

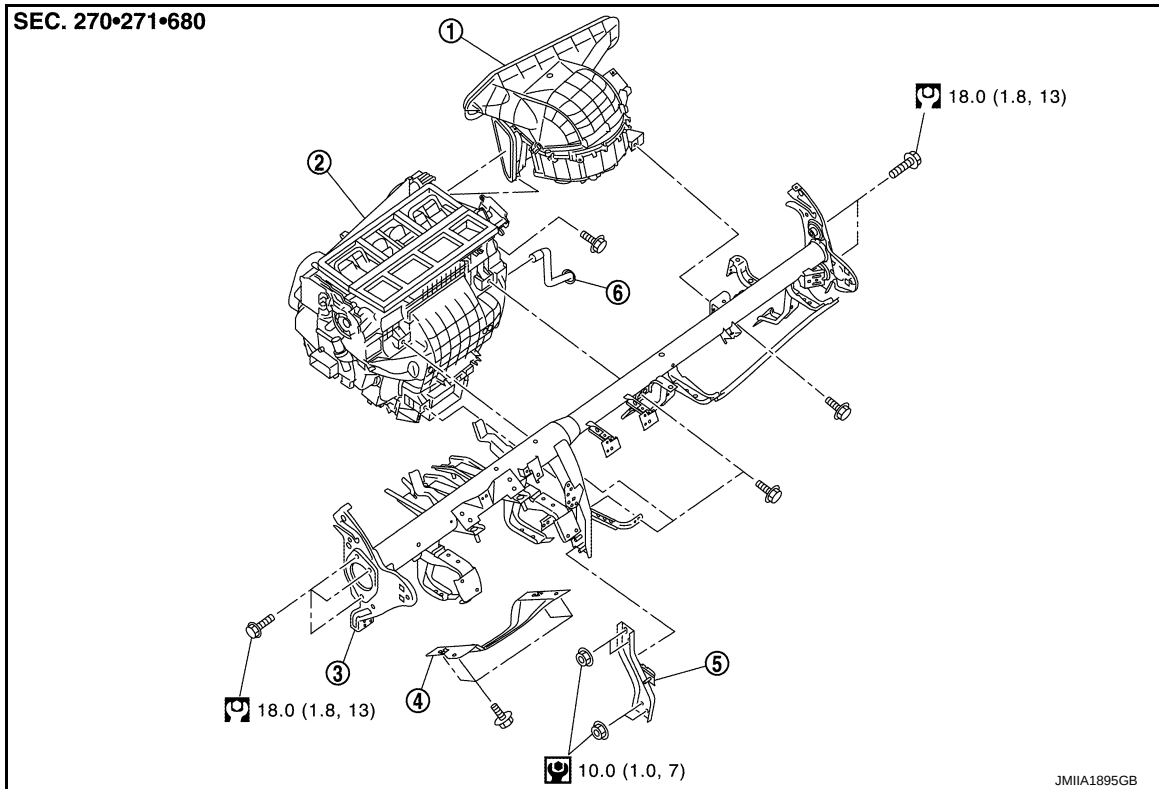
< REMOVAL AND INSTALLATION >

BLOWER UNIT

Exploded View

INFOID:000000007230851

REMOVAL



1. Blower unit assembly

4. Knee protector

: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

2. Heater & cooling unit assembly

5. Instrument stay

3. Steering member

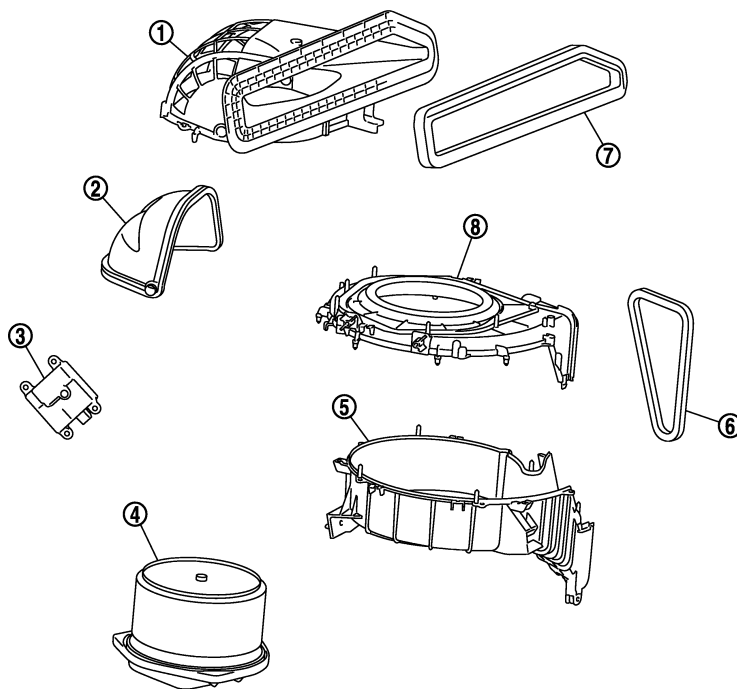
6. Drain hose

DISASSEMBLY

BLOWER UNIT

< REMOVAL AND INSTALLATION >

SEC. 270



JPIIA0455ZZ

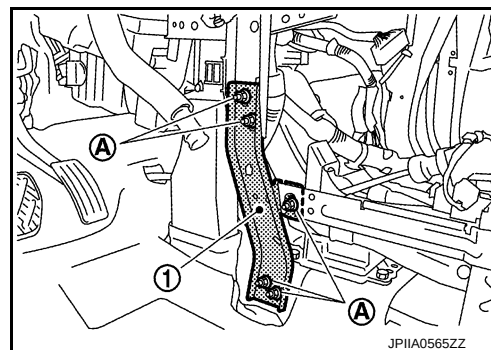
- | | | |
|---------------------|----------------------|----------------------|
| 1. Shutter box case | 2. Intake door | 3. Intake door motor |
| 4. Blower motor | 5. Intake lower case | 6. Outlet seal |
| 7. Intake seal | 8. Intake upper case | |

Removal and Installation

INFOID:000000007230852

REMOVAL

1. Remove instrument panel assembly. Refer to [IP-13, "Removal and Installation"](#).
2. Remove mounting nuts (A), and then remove instrument stay (1).



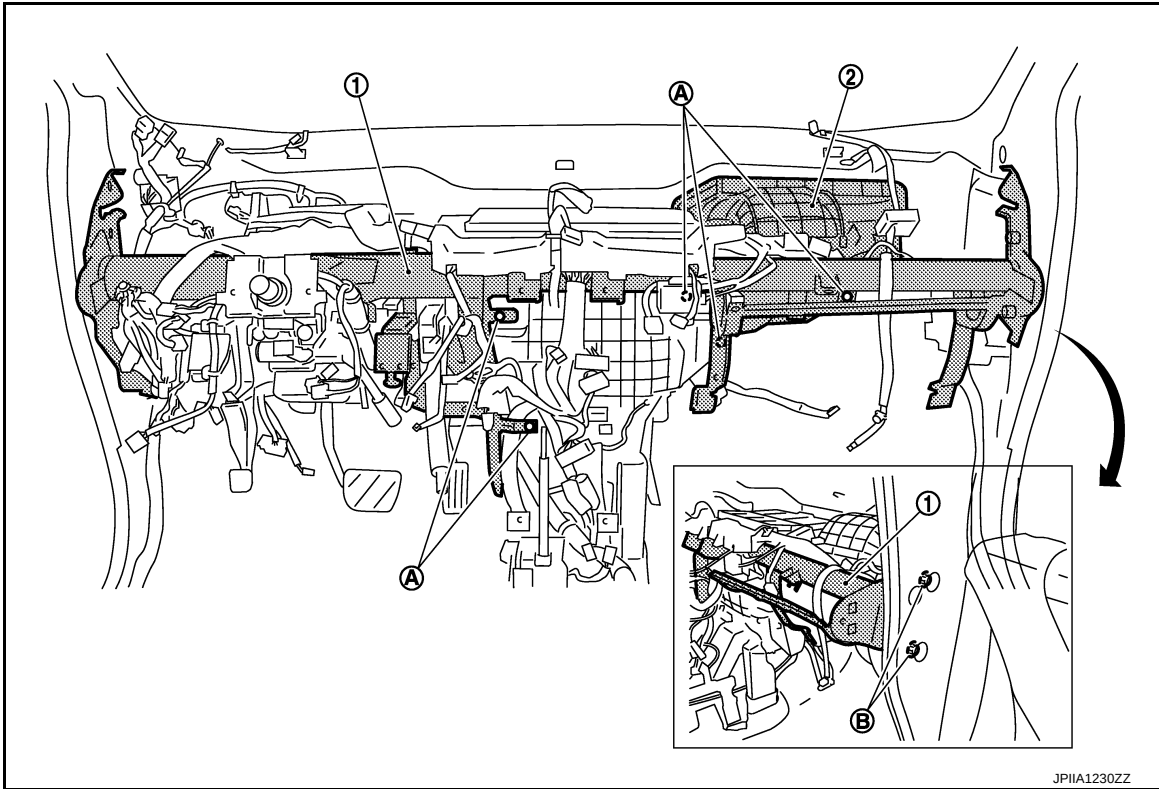
JPIIA0565ZZ

3. Disconnect intake door motor and blower motor harness connectors.
4. Remove heater & cooling unit assembly and blower unit assembly mounting bolts (A).
5. Remove steering member mounting bolts (B). (Passenger side)

BLOWER UNIT

< REMOVAL AND INSTALLATION >

6. Pull steering member (1) forward to secure work space, and then remove blower unit assembly (2) in the direction.



INSTALLATION

Install in the reverse order of removal.

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BLOWER MOTOR

< REMOVAL AND INSTALLATION >

BLOWER MOTOR

Exploded View

INFOID:000000007230853

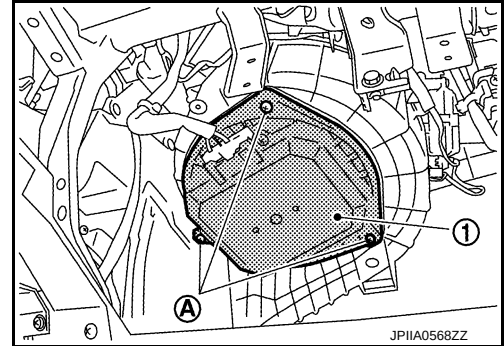
Refer to [VTL-17, "Exploded View"](#).

Removal and Installation

INFOID:000000007230854

REMOVAL

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



INSTALLATION

Install in the reverse order of removal.

IN-CABIN MICROFILTER

< REMOVAL AND INSTALLATION >

IN-CABIN MICROFILTER

Exploded View

INFOID:0000000007230856

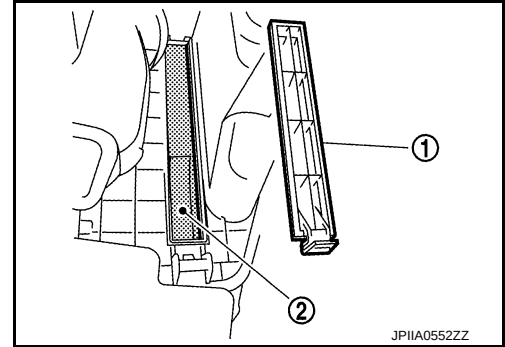
Refer to [HA-42. "Exploded View"](#).

Removal and Installation

INFOID:0000000007230857

REMOVAL

1. Remove filter cover (1).
2. Compress in-cabin microfilter (2), and then slide it toward the right side of vehicle.



3. Remove in-cabin microfilter from heater & cooling unit assembly.

CAUTION:

If the filter is deformed/damaged when removing, replace it with a new one. Deformed/damaged filter may deteriorate the dust collecting performance.

INSTALLATION

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

CAUTION:

When installing, handle the filter with extreme care to avoid deforming/damaging.

Replacement

INFOID:0000000007230858

Replace in-cabin microfilter.

Refer to [VTL-22. "In-cabin microfilter"](#).

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SERVICE DATA AND SPECIFICATIONS (SDS)

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In-cabin microfilter

INFOID:000000007230859

Replacement interval	MA-6. "Schedule 1" and MA-8. "Schedule 2" .
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