

SECTION **VTL** VENTILATION SYSTEM

CONTENTS

PRECAUTION	3	FRONT DEFROSTER GRILLE : Removal and Installation	10
PRECAUTIONS	3	UPPER VENTILATOR GRILLE	10
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	3	UPPER VENTILATOR GRILLE : Removal and Installation	10
Precaution Necessary for Steering Wheel Rotation after Battery Disconnect	3	SIDE VENTILATOR DUCT	10
PREPARATION	5	SIDE VENTILATOR DUCT : Removal and Installation	10
PREPARATION	5	UPPER VENTILATOR DUCT	10
Commercial Service Tool	5	UPPER VENTILATOR DUCT : Removal and Installation	10
SYSTEM DESCRIPTION	6	FRONT DEFROSTER NOZZLE	11
VENTILATION SYSTEM	6	FRONT DEFROSTER NOZZLE : Removal and Installation	11
VENTILATION SYSTEM (FRONT AIR CONDITIONING)	6	SIDE DEFROSTER NOZZLE	11
VENTILATION SYSTEM (FRONT AIR CONDITIONING) : System Description	6	SIDE DEFROSTER NOZZLE : Removal and Installation	11
VENTILATION SYSTEM (REAR AIR CONDITIONING)	7	FLOOR DUCT 1	11
VENTILATION SYSTEM (REAR AIR CONDITIONING) : System Description	7	FLOOR DUCT 1 : Removal and Installation	11
REMOVAL AND INSTALLATION	8	FLOOR DUCT 2	11
DUCT AND GRILLE	8	FLOOR DUCT 2 : Removal and Installation	11
Exploded View	8	FLOOR DUCT 3	11
CENTER VENTILATOR GRILLE	10	FLOOR DUCT 3 : Removal and Installation	11
CENTER VENTILATOR GRILLE : Removal and Installation	10	REAR FLOOR GRILLE	12
SIDE VENTILATOR GRILLE	10	REAR FLOOR GRILLE : Removal and Installation	12
SIDE VENTILATOR GRILLE : Removal and Installation	10	FOOT DUCT	12
FRONT DEFROSTER GRILLE	10	FOOT DUCT : Removal and Installation	12
		FOOT GRILLE	12
		FOOT GRILLE : Removal and Installation	12
		REAR VENTILATOR DUCT LOWER	12

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P

REAR VENTILATOR DUCT LOWER : Removal and Installation	12	FRONT A/C UNIT : Exploded View	16
REAR VENTILATOR DUCT UPPER	12	FRONT A/C UNIT : Removal and Installation	16
REAR VENTILATOR DUCT UPPER : Removal and Installation	12	REAR A/C UNIT ASSEMBLY	16
ROOF DUCT	13	REAR A/C UNIT ASSEMBLY : Exploded View	16
ROOF DUCT : Removal and Installation	13	REAR A/C UNIT ASSEMBLY : Removal and Installation	16
REAR VENTILATOR GRILLE	13	IN-CABIN MICROFILTER	17
REAR VENTILATOR GRILLE : Removal and Installation	13	Exploded View	17
BLOWER UNIT	14	Removal and Installation	17
Exploded View	14	Replacement	17
Removal and Installation	15	SERVICE DATA AND SPECIFICATIONS (SDS)	18
BLOWER MOTOR	16	SERVICE DATA AND SPECIFICATIONS (SDS)	18
FRONT A/C UNIT	16	In-cabin microfilter	18

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000006376373

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:

- 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 the "SRS AIR BAG".
- Do not 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:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT 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 Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:000000006376453

NOTE:

- Before removing and installing any control units, first turn the push-button 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-III 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 push-button 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.
4. Perform the necessary repair operation.

PRECAUTIONS

< PRECAUTION >

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

PREPARATION

< PREPARATION >

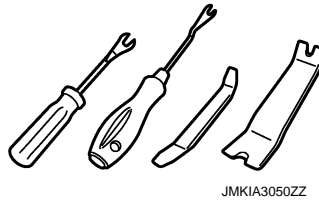
PREPARATION

PREPARATION

Commercial Service Tool

INFOID:0000000006276283

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



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VENTILATION SYSTEM

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

VENTILATION SYSTEM

VENTILATION SYSTEM (FRONT AIR CONDITIONING)

VENTILATION SYSTEM (FRONT AIR CONDITIONING) : System Description

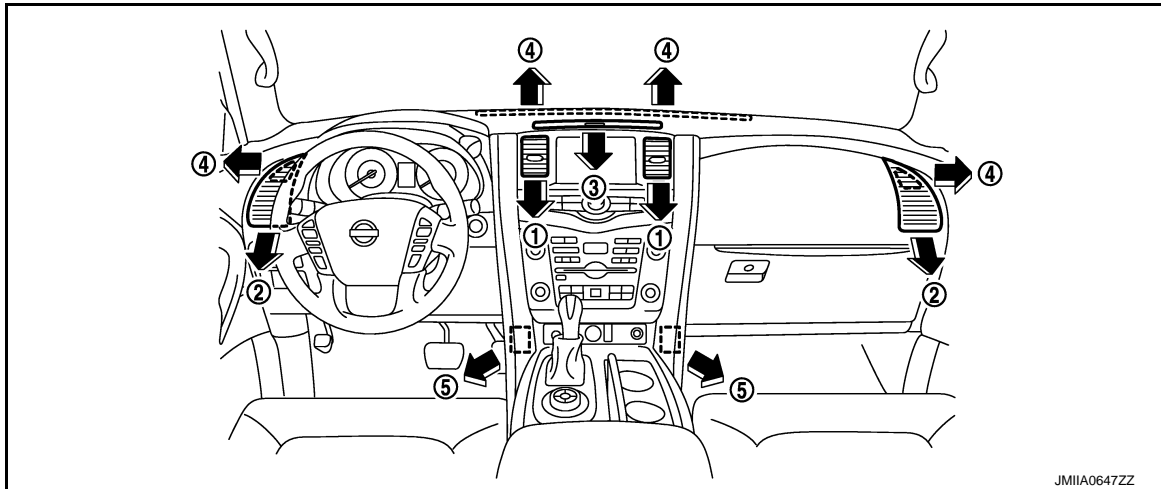
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OUTLINE

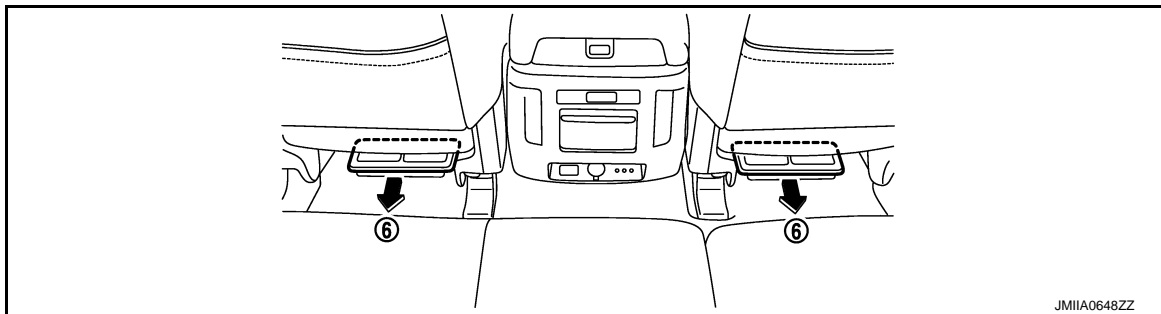
Ventilation system is controlled by A/C control. For details of air conditioner system, refer to [HAC-14. "FRONT AUTOMATIC AIR CONDITIONING SYSTEM : System Description"](#).

AIR FLOW

Front



Rear



AIR DISTRIBUTION

Front A/C Unit

Discharge air flow							
Mode position	Condition	Air outlet/distribution					
		VENT			FOOT		DEF (4)
		Center (1)	Side (2)	Upper (3)	Front (5)	Rear (6)	
	DUAL and Upper ventilator switch: ON	×	×	×	—	—	—
		×	×	×	×	×	—
		—	×	×	×	×	×
		—	×	×	×	×	×
		—	×	—	—	—	×

VENTILATION SYSTEM

< SYSTEM DESCRIPTION >

VENTILATION SYSTEM (REAR AIR CONDITIONING)

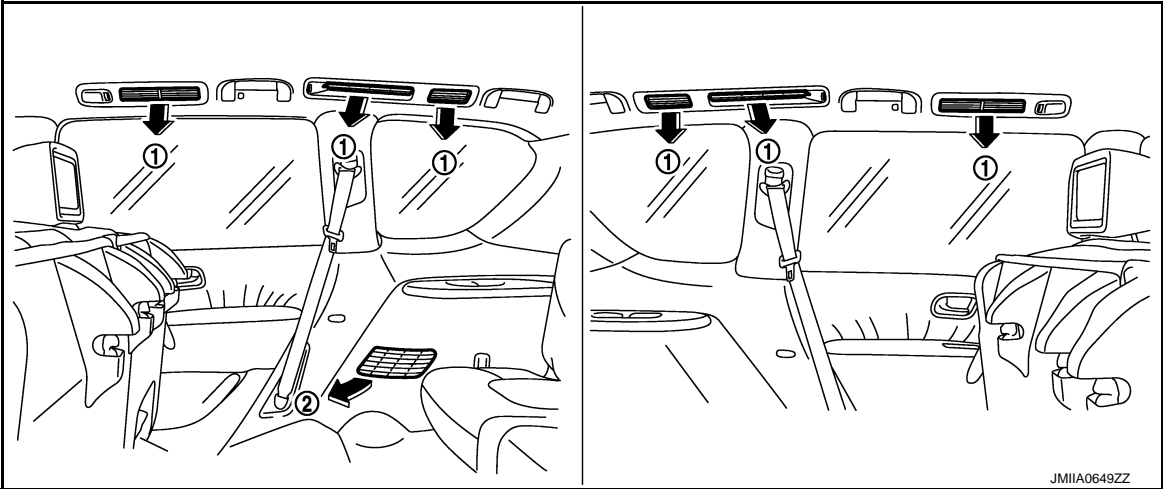
VENTILATION SYSTEM (REAR AIR CONDITIONING) : System Description

INFOID:000000006276285

OUTLINE

Rear cooling system is controlled by rear blower switch. Refer to [HAC-23, "REAR AUTOMATIC AIR CONDITIONING SYSTEM : System Description"](#).

AIR FLOW



AIR DISTRIBUTION

Rear A/C Unit

Discharge air flow		
Mode position	Air outlet/distribution	
	VENT (1)	FOOT (2)
	×	—
	×	×
	—	×

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

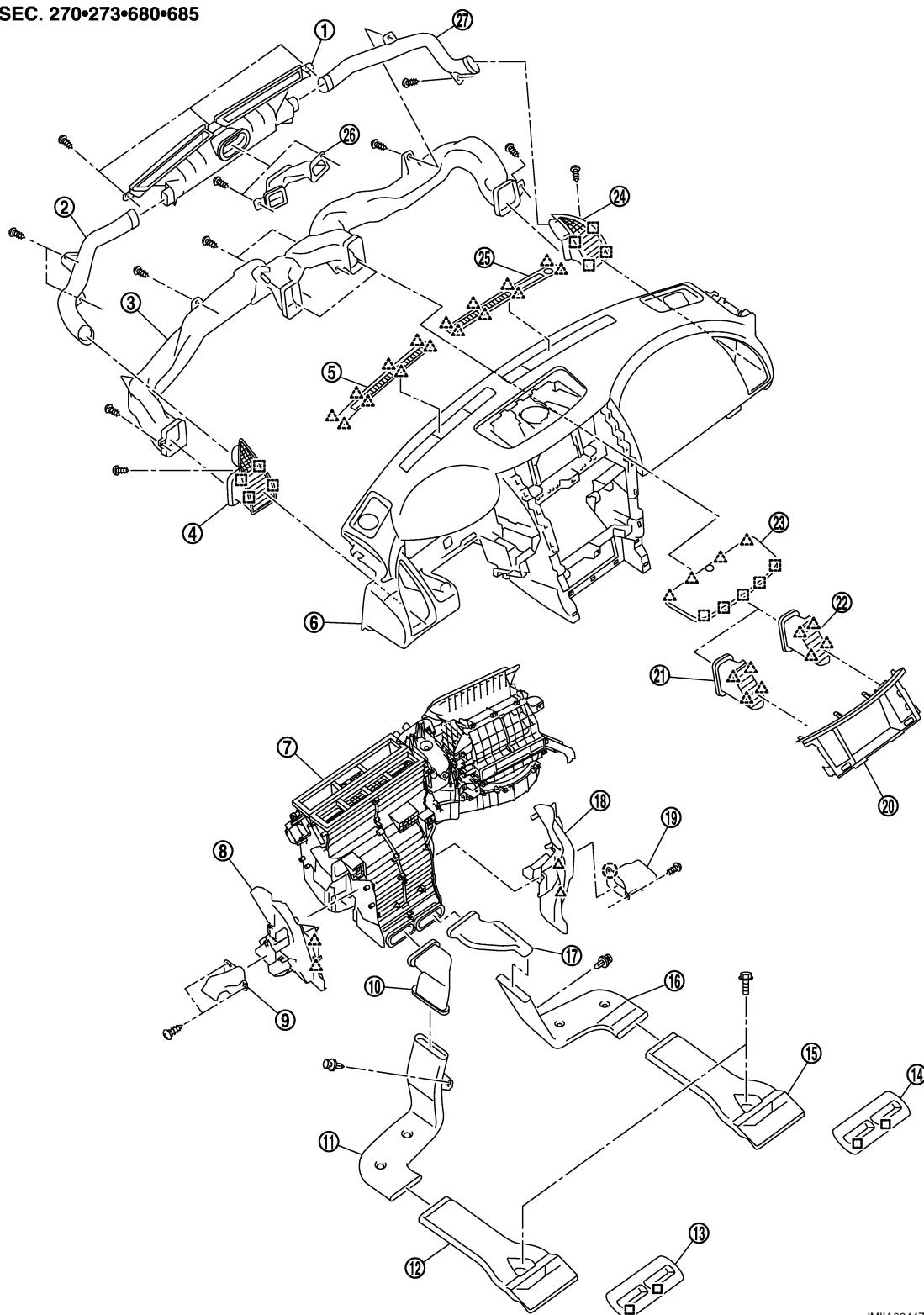
DUCT AND GRILLE

Exploded View

INFOID:000000006276286

FRONT

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REAR

- : Clip
△ : Pawl
□ : Metal clip



- 2011 QX56

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

16. Rear ventilator outlet grille B LH

17. Roof duct LH

Roof duct center

19. Rear ventilator duct upper

CENTER VENTILATOR GRILLE

CENTER VENTILATOR GRILLE : Removal and Installation

INFOID:000000006276287

REMOVAL

1. Remove cluster lid D. Refer to [IP-14, "Removal and Installation"](#).
2. Remove center ventilator grille from cluster lid D.

INSTALLATION

Install in the reverse order of removal.

SIDE VENTILATOR GRILLE

SIDE VENTILATOR GRILLE : Removal and Installation

INFOID:000000006276288

REMOVAL

1. Remove instrument panel assembly. Refer to [IP-14, "Removal and Installation"](#).
2. Remove fixing screw, and then remove side ventilator grille from instrument panel.

INSTALLATION

Install in the reverse order of removal.

FRONT DEFROSTER GRILLE

FRONT DEFROSTER GRILLE : Removal and Installation

INFOID:000000006276289

REMOVAL

Remove front defroster grilles, using remover tools.

INSTALLATION

Install in the reverse order of removal.

UPPER VENTILATOR GRILLE

UPPER VENTILATOR GRILLE : Removal and Installation

INFOID:000000006276290

REMOVAL

Remove upper ventilator grille, using remover tools.

INSTALLATION

Install in the reverse order of removal.

SIDE VENTILATOR DUCT

SIDE VENTILATOR DUCT : Removal and Installation

INFOID:000000006276291

REMOVAL

1. Remove instrument panel assembly. Refer to [IP-14, "Removal and Installation"](#).
2. Remove fixing screws, and then remove side ventilator duct from instrument panel.

INSTALLATION

Install in the reverse order of removal.

UPPER VENTILATOR DUCT

UPPER VENTILATOR DUCT : Removal and Installation

INFOID:000000006276292

REMOVAL

1. Remove instrument panel assembly. Refer to [IP-14, "Removal and Installation"](#).

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

2. Remove front defroster nozzle. Refer to [VTL-11, "FRONT DEFROSTER NOZZLE : Removal and Installation"](#).
3. Remove fixing screws, and then remove upper ventilator duct.

INSTALLATION

Install in the reverse order of removal.

FRONT DEFROSTER NOZZLE

FRONT DEFROSTER NOZZLE : Removal and Installation

INFOID:0000000006276293

REMOVAL

1. Remove instrument panel assembly. Refer to [VTL-8, "Exploded View"](#).
2. Remove fixing screws, and then remove front defroster nozzle.

INSTALLATION

Install in the reverse order of removal.

SIDE DEFROSTER NOZZLE

SIDE DEFROSTER NOZZLE : Removal and Installation

INFOID:0000000006276294

REMOVAL

1. Remove instrument panel assembly. Refer to [IP-14, "Removal and Installation"](#).
2. Remove fixing screw, and then remove side defroster nozzle.

INSTALLATION

Install in the reverse order of removal.

FLOOR DUCT 1

FLOOR DUCT 1 : Removal and Installation

INFOID:0000000006276295

REMOVAL

1. Remove center console assembly. Refer to [IP-25, "Removal and Installation"](#).
2. Remove floor duct 1.

INSTALLATION

Install in the reverse order of removal.

FLOOR DUCT 2

FLOOR DUCT 2 : Removal and Installation

INFOID:0000000006276296

REMOVAL

1. Pull up front of front floor carpet of securing work space. Refer to [INT-25, "FRONT FLOOR CARPET : Removal and Installation"](#).
2. Remove fixing clip, and then remove floor duct 2.

INSTALLATION

Install in the reverse order of removal.

FLOOR DUCT 3

FLOOR DUCT 3 : Removal and Installation

INFOID:0000000006276297

REMOVAL

1. Pull up front of front floor carpet of securing work space. Refer to [INT-25, "FRONT FLOOR CARPET : Removal and Installation"](#).
2. Remove mounting bolt, and then remove floor duct 1.

INSTALLATION

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DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

Install in the reverse order of removal.

REAR FLOOR GRILLE

REAR FLOOR GRILLE : Removal and Installation

INFOID:000000006276298

REMOVAL

Disengage fixing metal clips, and then remove rear floor grille.

INSTALLATION

Install in the reverse order of removal.

FOOT DUCT

FOOT DUCT : Removal and Installation

INFOID:000000006276299

REMOVAL

1. Remove steering member. Refer to [HA-42. "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
2. Remove fixing screws, and then remove foot duct.

INSTALLATION

Install in the reverse order of removal.

FOOT GRILLE

FOOT GRILLE : Removal and Installation

INFOID:000000006276300

REMOVAL

Driver side

1. Remove instrument lower panel RH. Refer to [IP-14. "Removal and Installation"](#).
2. Remove fixing screws, and then remove foot grille.

Passenger side

1. Remove instrument lower cover. Refer to [IP-14. "Removal and Installation"](#).
2. Remove fixing screws and clip, and then remove foot grille.

INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR DUCT LOWER

REAR VENTILATOR DUCT LOWER : Removal and Installation

INFOID:000000006276301

REMOVAL

1. Remove luggage side lower finisher RH. Refer to [INT-36. "LUGGAGE SIDE LOWER FINISHER : Removal and Installation"](#).
2. Remove mounting bolts, and then remove rear ventilator duct lower.

INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR DUCT UPPER

REAR VENTILATOR DUCT UPPER : Removal and Installation

INFOID:000000006276302

REMOVAL

1. Remove back pillar garnish RH. Refer to [INT-37. "BACK PILLAR GARNISH : Removal and Installation"](#).
2. Remove mounting bolt, and then remove rear ventilator grille upper.

INSTALLATION

Install in the reverse order of removal.

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

ROOF DUCT

ROOF DUCT : Removal and Installation

INFOID:000000006276303

REMOVAL

1. Remove headlining. Refer to [INT-29, "Removal and Installation"](#).
2. Remove mounting bolts and clip, and then remove roof duct (LH/RH).
3. Remove rear ventilator duct upper.
4. Remove roof duct (center).

INSTALLATION

Install in the reverse order of removal.

REAR VENTILATOR GRILLE

REAR VENTILATOR GRILLE : Removal and Installation

INFOID:000000006276304

REMOVAL

1. Remove headlining. Refer to [INT-29, "Removal and Installation"](#).
2. Remove fixing screws, and then remove rear ventilator grille A and B from headlining.

INSTALLATION

Install in reverse order of removal.

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BLOWER UNIT

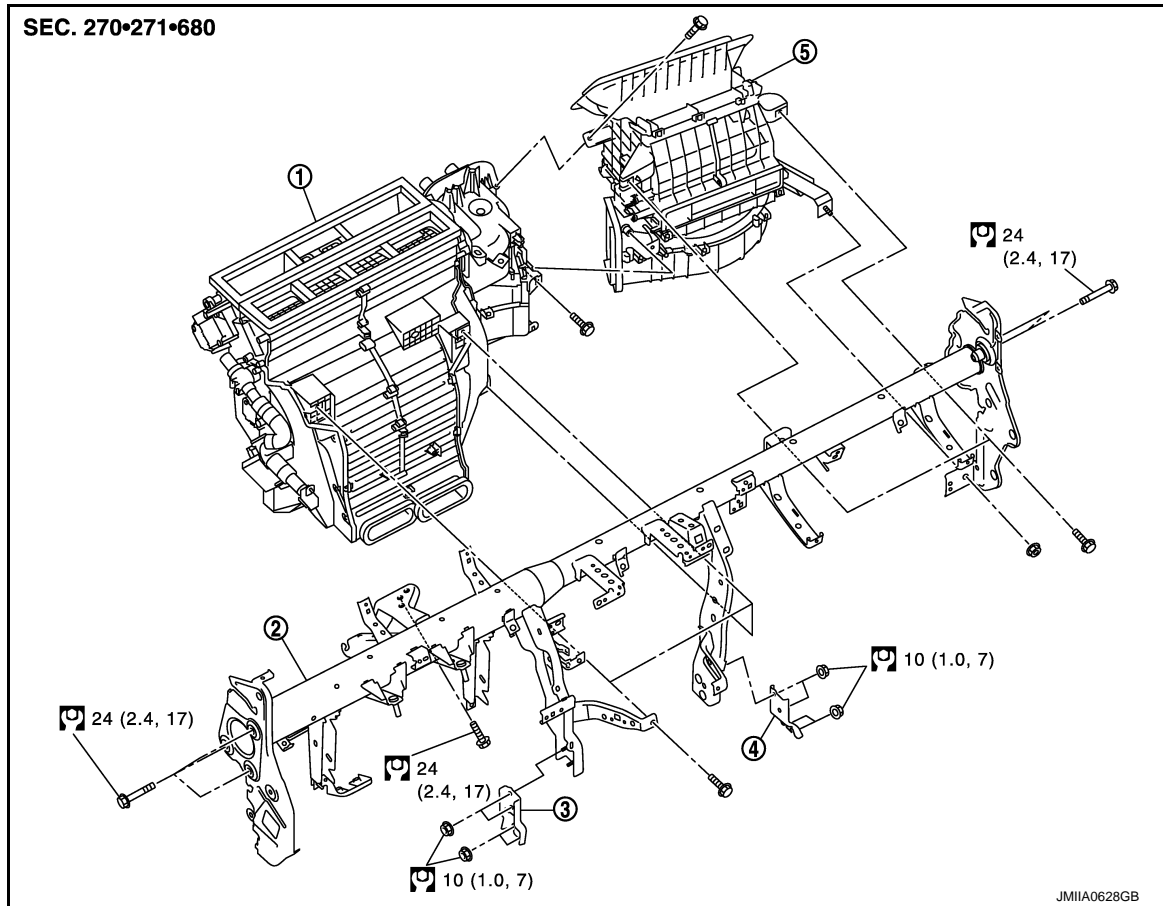
< REMOVAL AND INSTALLATION >

BLOWER UNIT

Exploded View

INFOID:000000006276305

REMOVAL



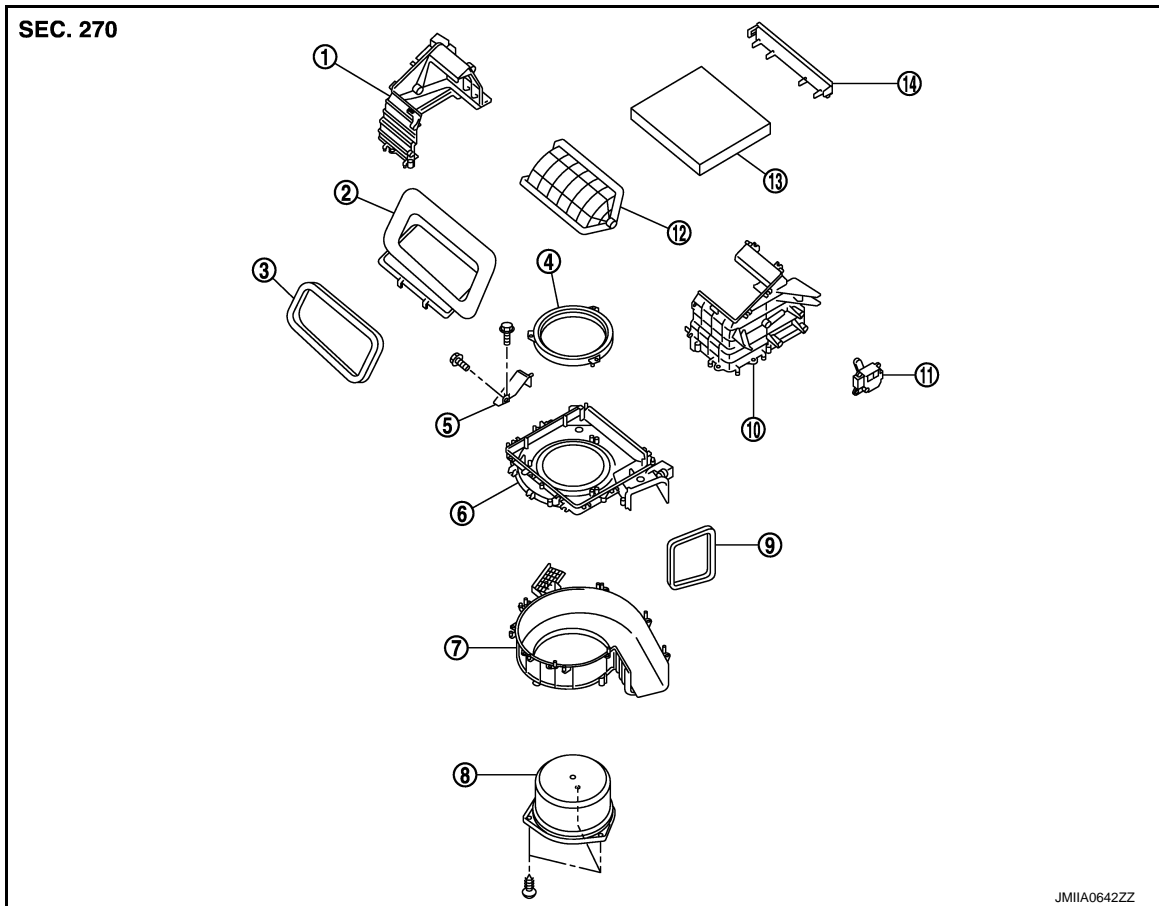
- | | | |
|-----------------------------------|-------------------------|-----------------------|
| 1. Heater & cooling unit assembly | 2. Steering member | 3. Instrument stay LH |
| 4. Instrument stay RH | 5. Blower unit assembly | |

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

DISASSEMBLY

BLOWER UNIT

< REMOVAL AND INSTALLATION >



- | | | |
|--------------------------|---------------------------|----------------------|
| 1. Shutter box case RH | 2. Shutter box upper case | 3. Packing |
| 4. Bellmouth ring | 5. Blower unit bracket | 6. Intake upper case |
| 7. Intake lower case | 8. Blower motor assembly | 9. Packing |
| 10. Shutter box case LH | 11. Intake door motor | 12. Intake door |
| 13. In-cabin microfilter | 14. Filter cover | |

Removal and Installation

INFOID:000000006276306

REMOVAL

1. Remove A/C unit assembly. Refer to [HA-42, "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
2. Remove mounting bolts, and then disconnect heater & cooling unit assembly and blower unit assembly.

INSTALLATION

Install in the reverse order of removal.

BLOWER MOTOR

< REMOVAL AND INSTALLATION >

BLOWER MOTOR

FRONT A/C UNIT

FRONT A/C UNIT : Exploded View

INFOID:000000006276307

Refer to [VTL-14, "Exploded View"](#).

FRONT A/C UNIT : Removal and Installation

INFOID:000000006276308

REMOVAL

1. Remove instrument lower cover. Refer to [IP-14, "Removal and Installation"](#).
2. Disconnect blower motor connector.
3. Remove fixing screws, and then remove blower motor.

INSTALLATION

Install in the reverse order of removal.

REAR A/C UNIT ASSEMBLY

REAR A/C UNIT ASSEMBLY : Exploded View

INFOID:000000006276309

Refer to [HA-46, "Exploded View"](#)

REAR A/C UNIT ASSEMBLY : Removal and Installation

INFOID:000000006276310

REMOVAL

1. Removal rear A/C unit assembly. Refer to [HA-47, "REAR A/C UNIT ASSEMBLY : Removal and Installation"](#).
2. Disconnect blower motor connector.
3. Remove fixing screws, and then remove blower motor.

IN-CABIN MICROFILTER

< REMOVAL AND INSTALLATION >

IN-CABIN MICROFILTER

Exploded View

INFOID:000000006276313

Refer to [VTL-14. "Exploded View"](#).

Removal and Installation

INFOID:000000006276314

REMOVAL

1. Remove glove box assembly. Refer to [IP-14. "Removal and Installation"](#).
2. Remove filter cover, and then remove air conditioner filter.

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 install in the reverse order of removal.

CAUTION:

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

Replacement

INFOID:000000006276315

Replace in-cabin microfilter.

Refer to [MA-6. "Schedule 1"](#) and [MA-8. "Schedule 2"](#).

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

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SERVICE DATA AND SPECIFICATIONS (SDS)

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SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

In-cabin microfilter

INFOID:0000000006276316

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