

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:0000000010258802

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.

Precautions for Removing Battery Terminal

INFOID:0000000010258803

- 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.

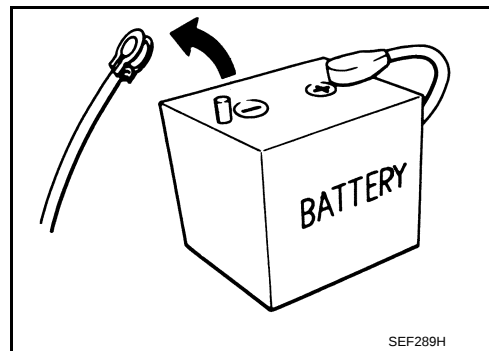
NOTE:

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.



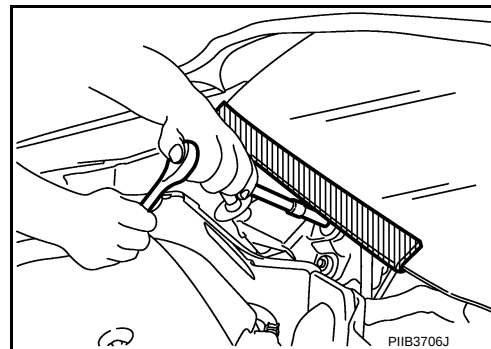
PRECAUTIONS

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Precaution for Procedure without Cowl Top Cover

INFOID:000000010258804

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



PREPARATION

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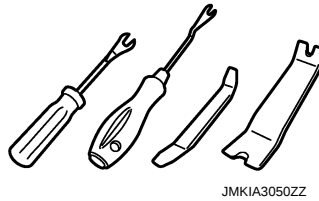
PREPARATION

PREPARATION

Commercial Service Tool

INFOID:0000000010258805

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

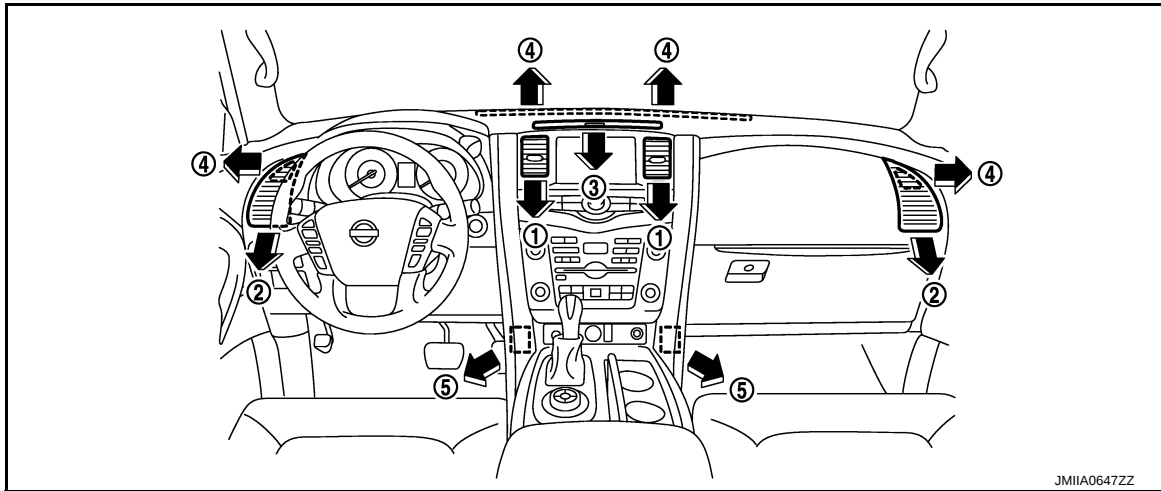
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OUTLINE

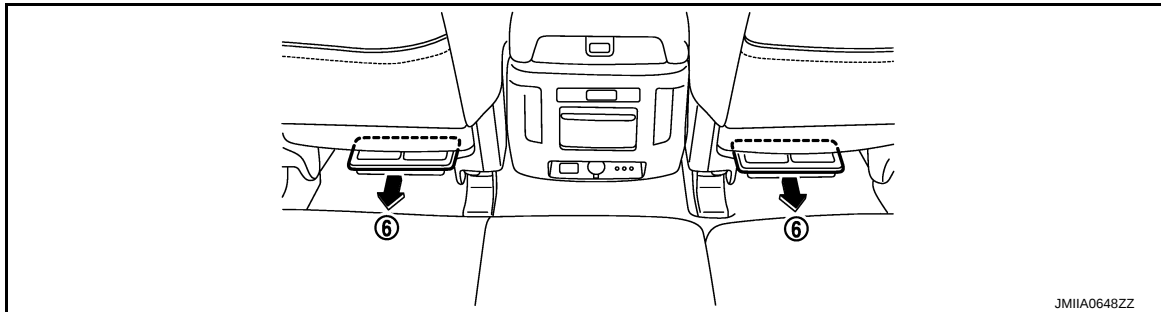
Ventilation system is controlled by A/C control. For details of air conditioner system, refer to [HAC-15. "FRONT AUTOMATIC AIR CONDITIONING SYSTEM : System Description"](#).

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

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VENTILATION SYSTEM (REAR AIR CONDITIONING)

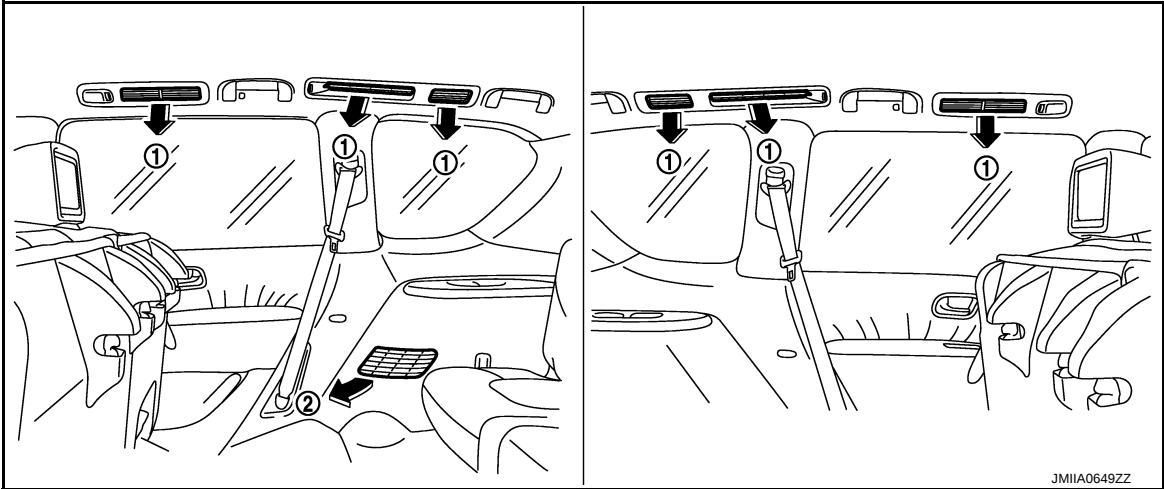
VENTILATION SYSTEM (REAR AIR CONDITIONING) : System Description

INFOID:000000010258807

OUTLINE

Rear cooling system is controlled by rear blower switch. Refer to [HAC-24, "REAR AUTOMATIC AIR CONDITIONING SYSTEM : System Description"](#).

AIR FLOW



AIR DISTRIBUTION

Rear A/C Unit

VTL

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

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

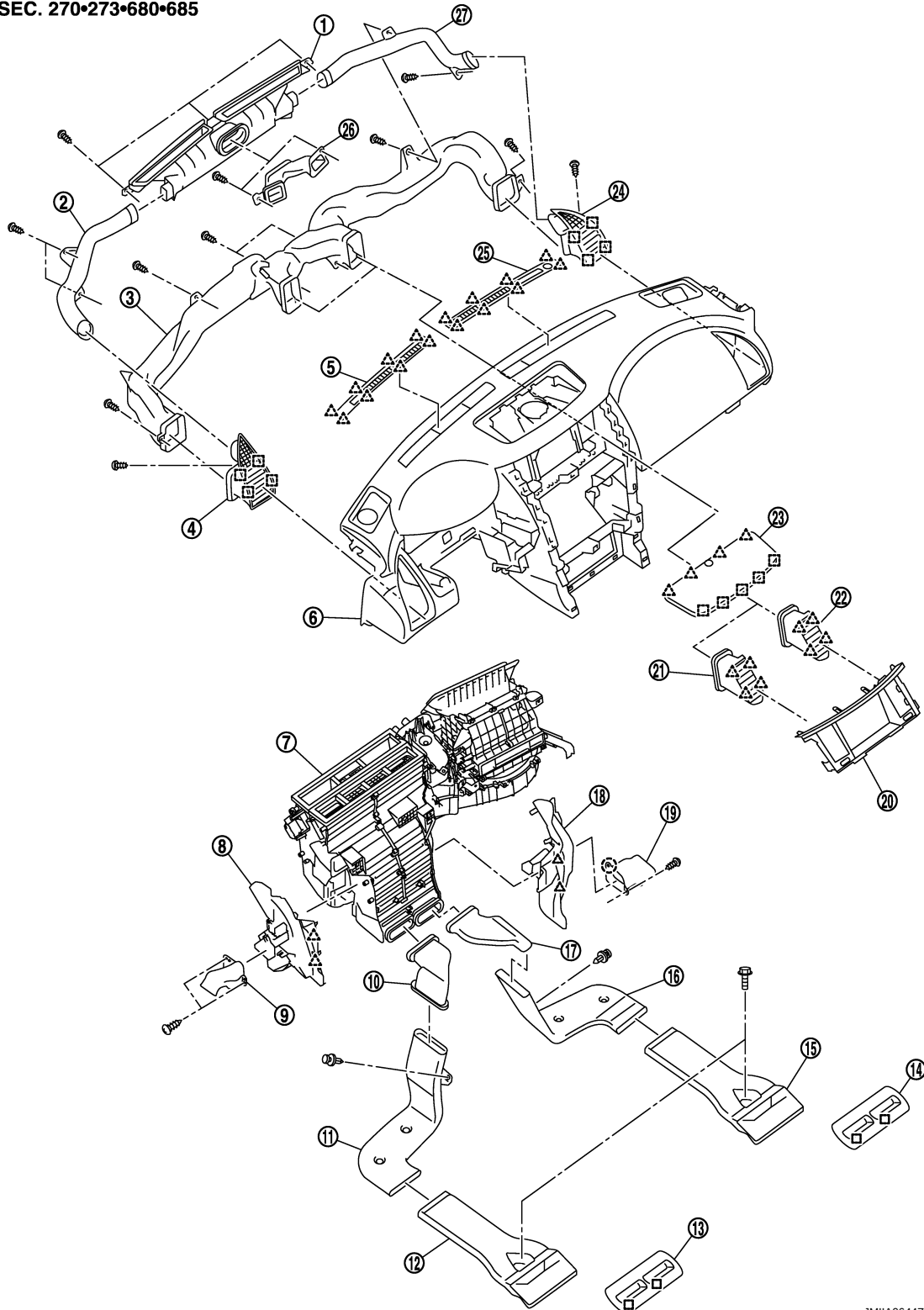
DUCT AND GRILLE

Exploded View

INFOID:000000010417554

FRONT

SEC. 270•273•680•685



JM1IA0644ZZ

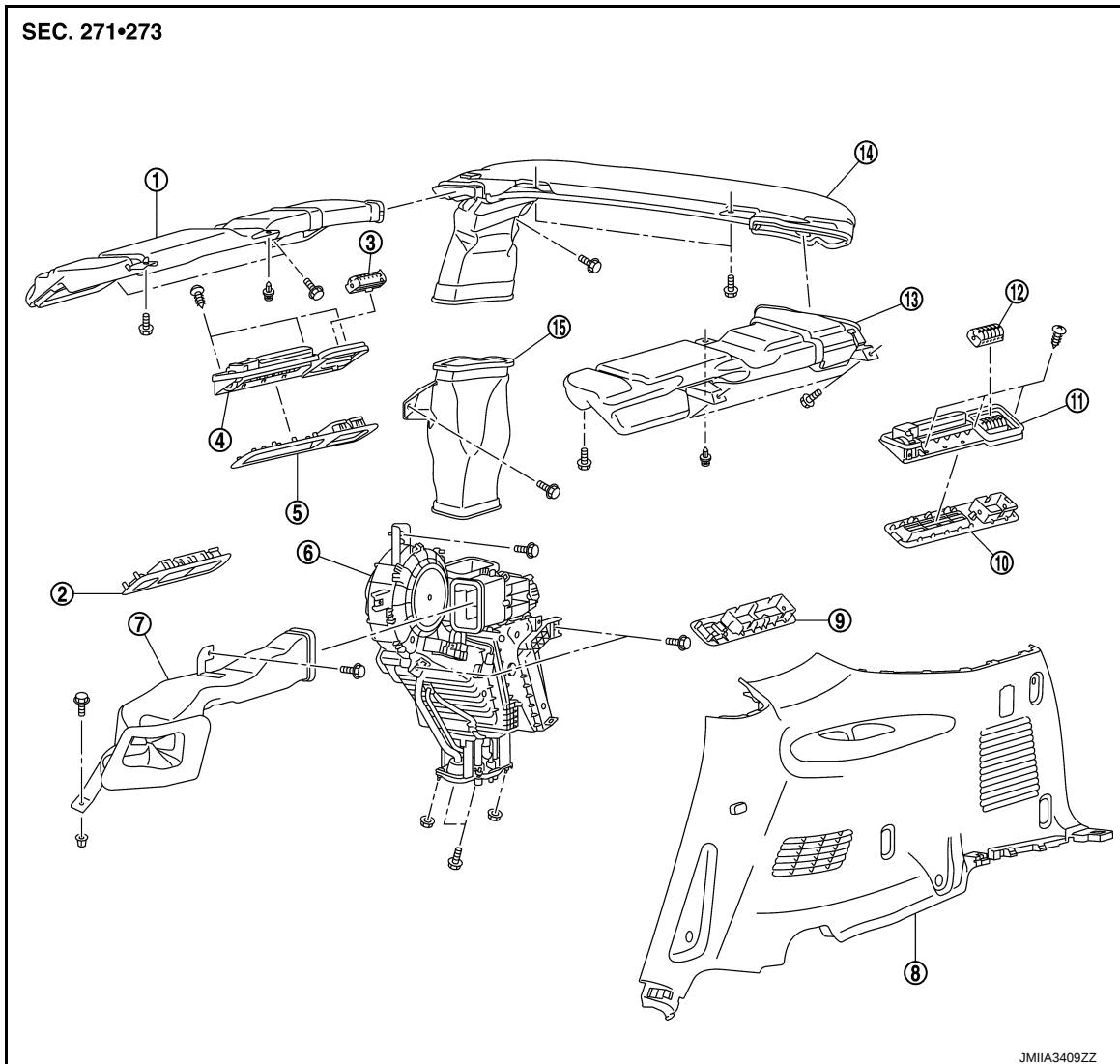
DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

- | | | |
|---------------------------------|------------------------------|---------------------------------|
| 1. Front defroster nozzle | 2. Side defroster nozzle LH | 3. Side ventilator duct |
| 4. Side ventilator grille LH | 5. Front defroster grille LH | 6. Instrument panel |
| 7. A/C unit assembly | 8. Foot duct LH | 9. Foot grille LH |
| 10. Floor duct 1 LH | 11. Floor duct 2 LH | 12. Floor duct 3 LH |
| 13. Floor grille LH | 14. Floor grille RH | 15. Floor duct 3 RH |
| 16. Floor duct 2 RH | 17. Floor duct 1 RH | 18. Foot duct RH |
| 19. Foot grill RH | 20. Cluster lid D | 21. Center ventilator grille RH |
| 22. Center ventilator grille RH | 23. Upper ventilator grille | 24. Side ventilator grille LH |
| 25. Front defroster grille RH | 26. Upper ventilator duct | 27. Side ventilator nozzle RH |

- : Clip
 △ : Pawl
 □ : Metal clip

REAR



- | | | |
|----------------------------------|---------------------------------|--|
| 1. Roof duct RH | 2. Rear ventilator garnish A RH | 3. Rear ventilator outlet grille B RH |
| 4. Rear ventilator grille RH | 5. Rear ventilator garnish B RH | 6. Rear A/C unit assembly |
| 7. Rear ventilator duct lower | 8. Luggage side finisher RH | 9. Rear ventilator garnish A LH |
| 10. Rear ventilator garnish B LH | 11. Rear ventilator grille LH | 12. Rear ventilator outlet grille B LH |
| 13. Roof duct LH | 14. Roof duct center | 15. Rear ventilator duct upper |

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

CENTER VENTILATOR GRILLE

CENTER VENTILATOR GRILLE : Removal and Installation

INFOID:0000000010258809

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:0000000010258810

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:0000000010258811

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:0000000010258812

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:0000000010258813

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:0000000010258814

REMOVAL

1. Remove instrument panel assembly. Refer to [IP-14, "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.

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

INSTALLATION

Install in the reverse order of removal.

FRONT DEFROSTER NOZZLE

FRONT DEFROSTER NOZZLE : Removal and Installation

INFOID:0000000010258815

REMOVAL

1. Remove instrument panel assembly. Refer to [IP-13, "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:0000000010258816

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:0000000010258817

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:0000000010258818

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:0000000010258819

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

Install in the reverse order of removal.

REAR FLOOR GRILLE

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DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

REAR FLOOR GRILLE : Removal and Installation

INFOID:0000000010258820

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:0000000010258821

REMOVAL

1. Remove steering member. Refer to [HA-44. "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:0000000010258822

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:0000000010258823

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:0000000010258824

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.

ROOF DUCT

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

ROOF DUCT : Removal and Installation

INFOID:000000010258825

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:000000010258826

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

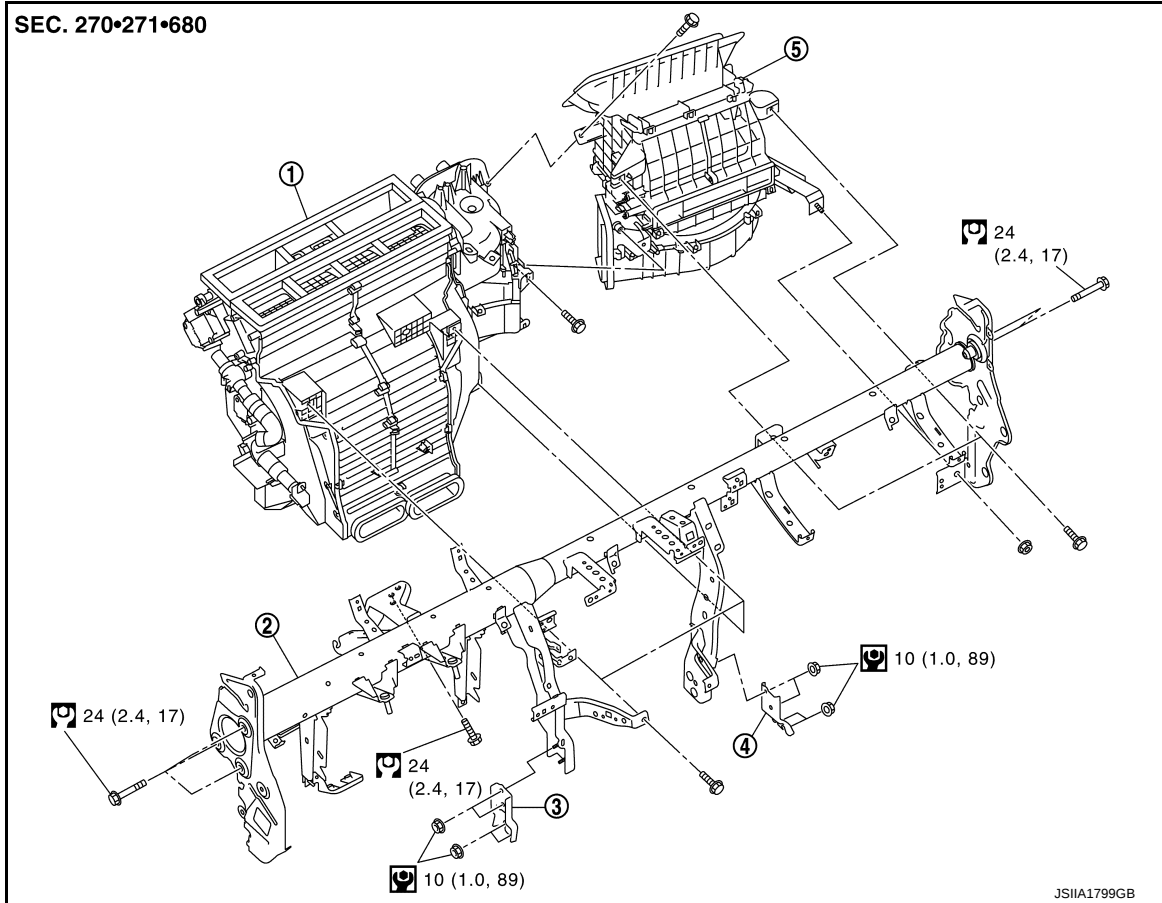
< REMOVAL AND INSTALLATION >

BLOWER UNIT

Exploded View

INFOID:000000010258827

REMOVAL



1. Heater & cooling unit assembly

2. Steering member

3. Instrument stay LH

4. Instrument stay RH

5. Blower unit assembly

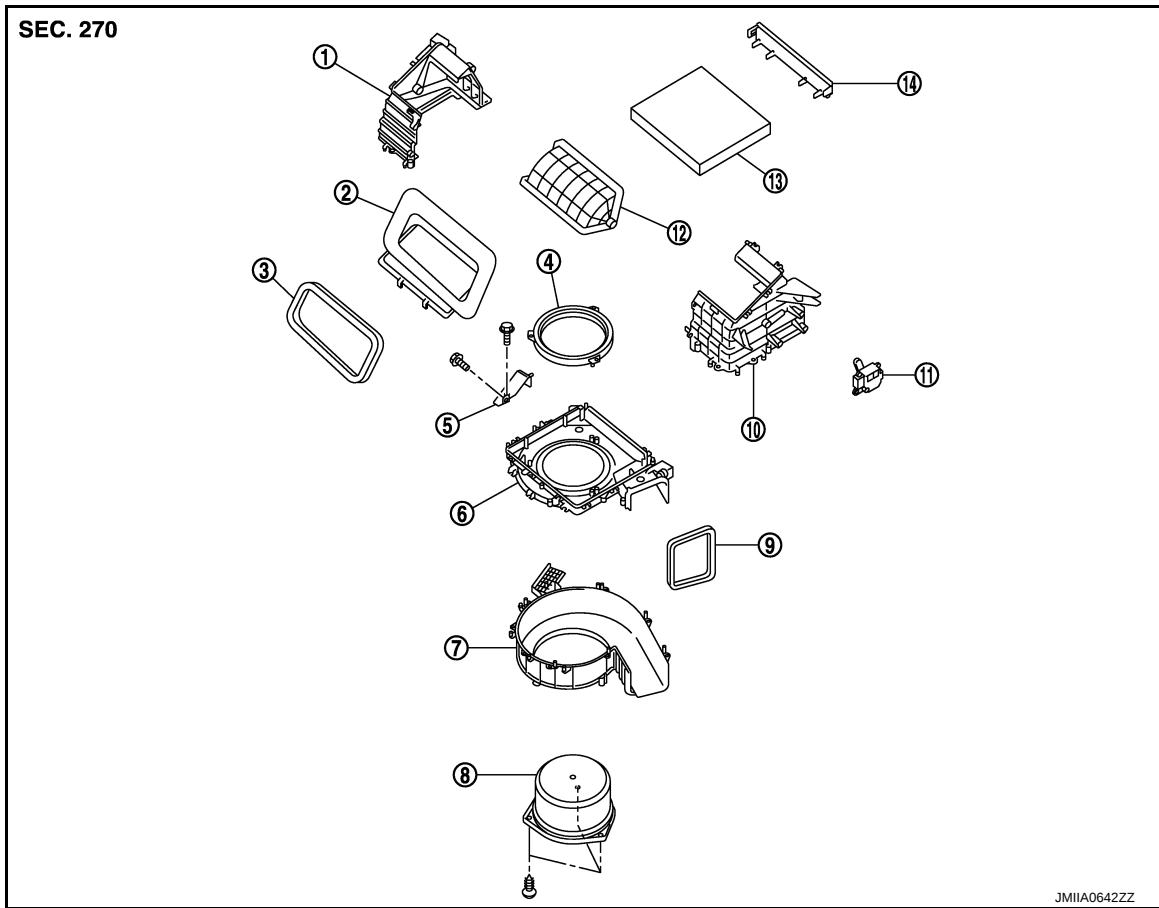
 : N·m (kg-m, ft-lb)

 : N·m (kg-m, in-lb)

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:0000000010258828

REMOVAL

1. Remove A/C unit assembly. Refer to [HA-44, "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:0000000010258829

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

FRONT A/C UNIT : Removal and Installation

INFOID:0000000010258830

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:0000000010258831

Refer to [HA-47, "Exploded View"](#).

REAR A/C UNIT ASSEMBLY : Removal and Installation

INFOID:0000000010258832

REMOVAL

1. Removal rear A/C unit assembly. Refer to [HA-48, "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:0000000010258833

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

Removal and Installation

INFOID:0000000010258834

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:0000000010258835

Replace in-cabin microfilter.

Refer to [MA-8. "FOR NORTH AMERICA : Introduction of Periodic Maintenance"](#).

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:0000000010258836

Replacement interval	MA-8. "FOR NORTH AMERICA : Introduction of Periodic Maintenance"
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