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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:000000012793678

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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, 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:

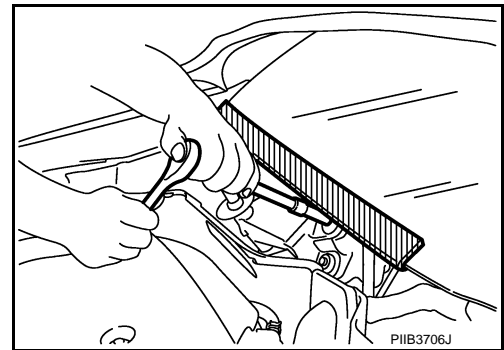
Always observe the following items for preventing accidental activation.

- 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 or batteries, and wait at least 3 minutes before performing any service.

Precaution for Procedure without Cowl Top Cover

INFOID:000000012793679

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



PRECAUTIONS

< PRECAUTION >

Precautions for Removing Battery Terminal

INFOID:000000012793680

- 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.

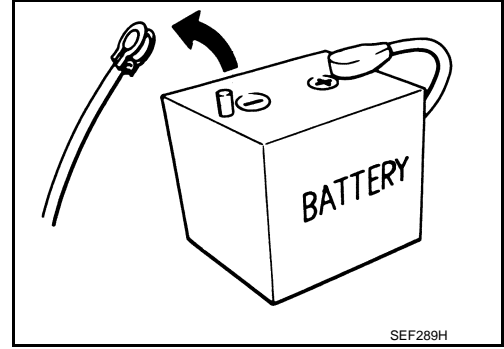
NOTE:

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.



VENTILATION SYSTEM

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

VENTILATION SYSTEM

System Description

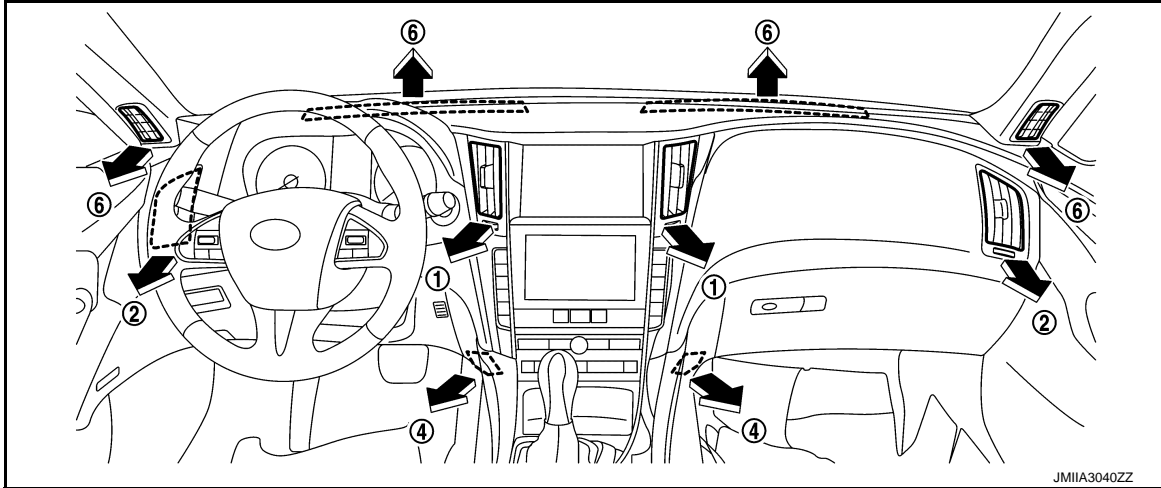
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OUTLINE

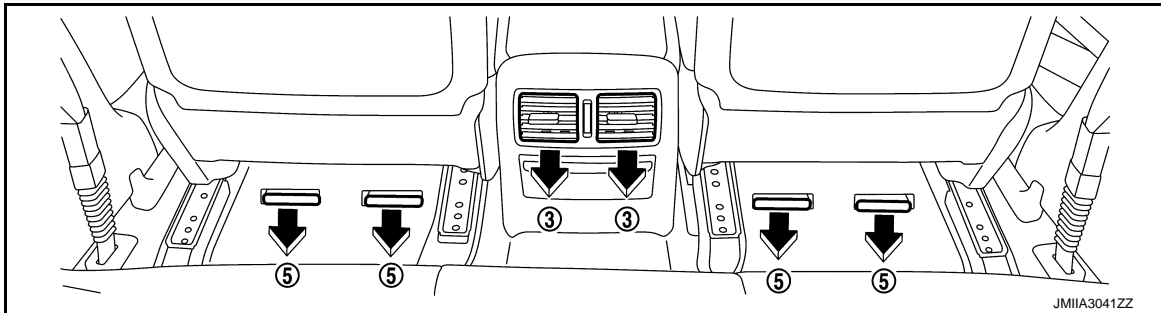
Ventilation system is controlled by A/C auto amp.. For details of automatic air conditioner system, refer to [HAC-18. "AUTOMATIC AIR CONDITIONING SYSTEM : System Description"](#).

AIR FLOW

Front



Rear



x: Applicable

Discharge air flow

MODE/DEF setting position	Air outlet/distribution					Defroster ⑥
	Ventilator		Rear ③	Foot		
	Front			Front ④	Rear ⑤	
	Center ①	Side ②				
	x	x	x	—	—	—
	x	x	x	x	x	—
	—	x	x	x	x	x
	—	x	x	x	x	x
	—	x	x	—	—	x

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

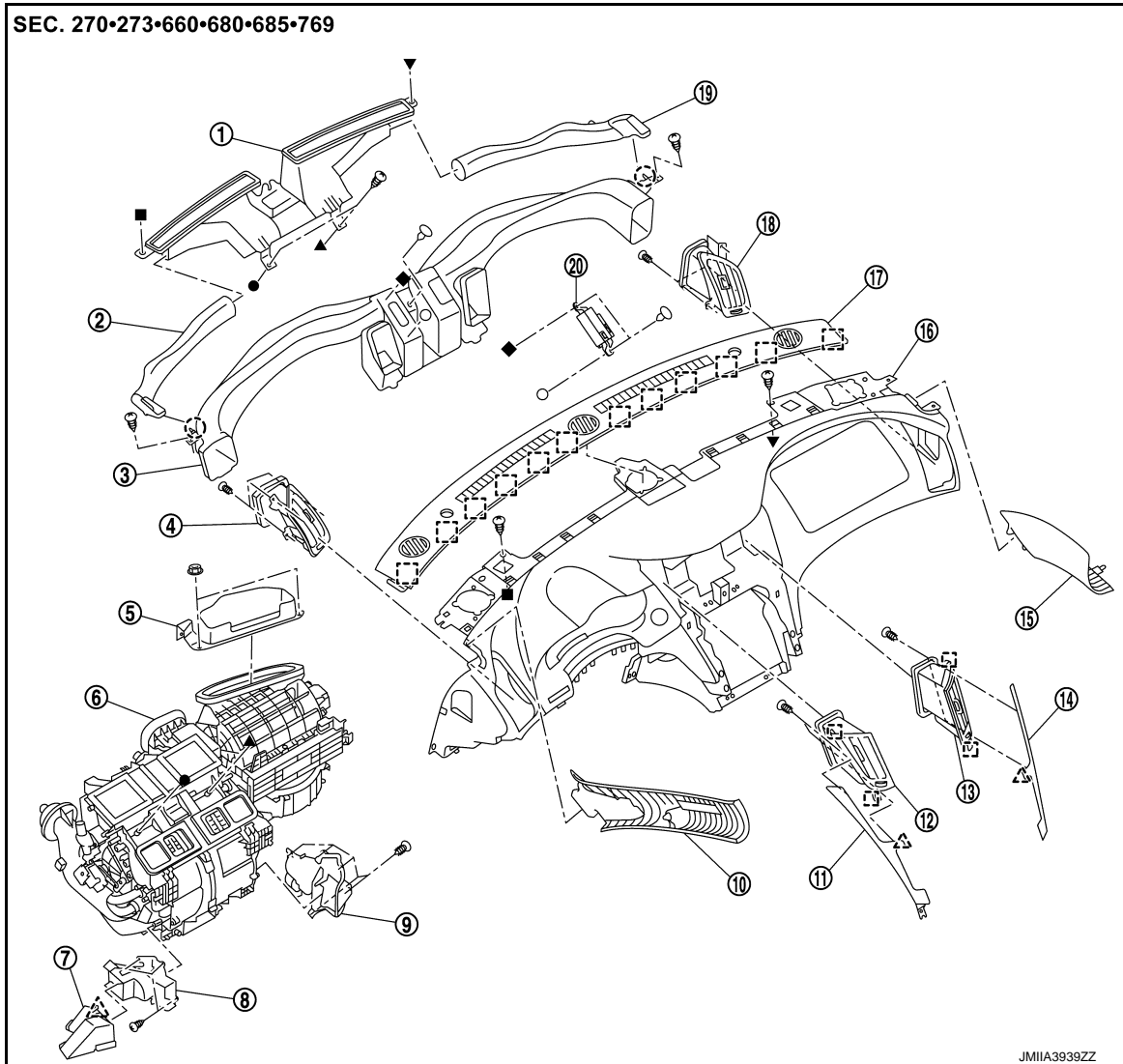
REMOVAL AND INSTALLATION

DUCT AND GRILLE

Exploded View

INFOID:000000012793682

FRONT



- | | | |
|---|----------------------------|---|
| ① Front defroster nozzle | ② Side defroster nozzle LH | ③ Ventilator duct |
| ④ Side ventilator grille LH | ⑤ Intake cover | ⑥ A/C unit assembly |
| ⑦ Heater duct | ⑧ Foot duct LH | ⑨ Foot duct RH |
| ⑩ Side defroster duct (front pillar garnish) LH | ⑪ Instrument finisher D | ⑫ Center ventilator grille LH |
| ⑬ Center ventilator grille RH | ⑭ Instrument finisher C | ⑮ Side defroster duct (front pillar garnish) RH |
| ⑯ Instrument panel assembly | ⑰ Front speaker grille | ⑱ Side ventilator grille RH |
| ⑲ Side defroster nozzle RH | ⑳ Ionizer | |

○ : Clip
 ▲ : Pawl

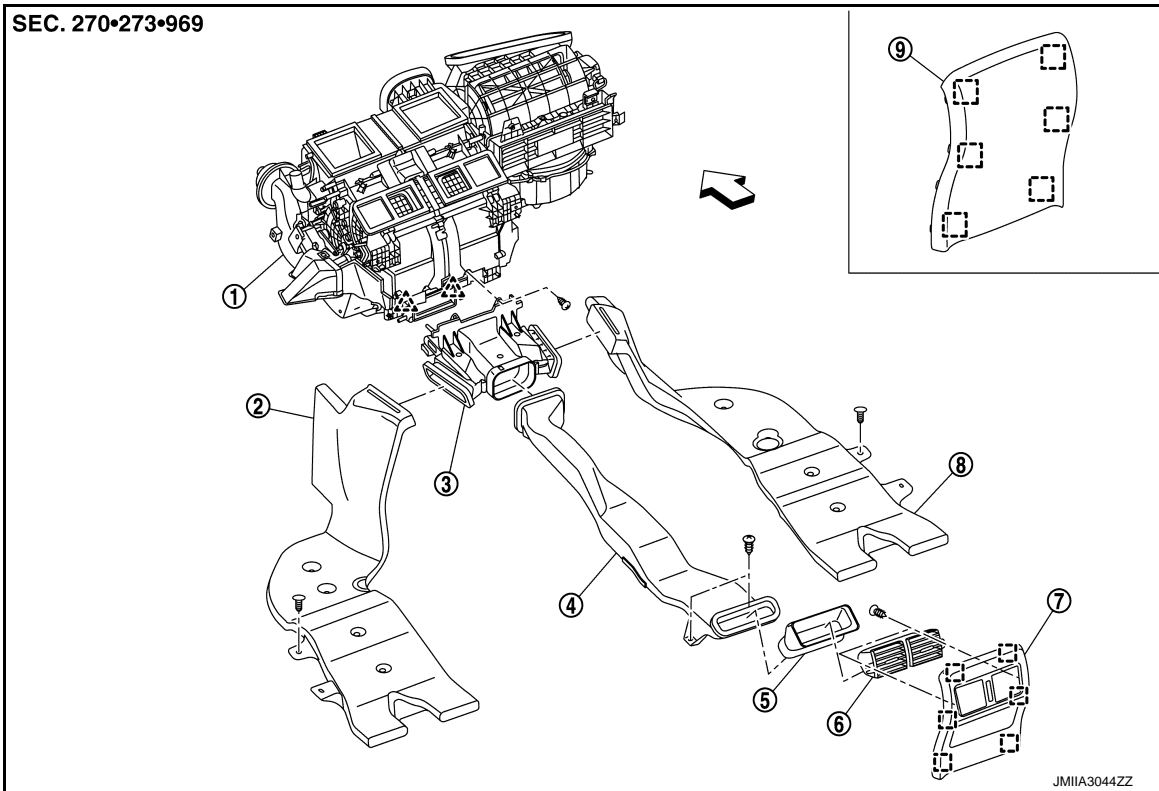
DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

☐ : Metal clip

●, ▲, ■, ▼, ◆, ○: Indicates that the part is connected at points with same symbol in actual vehicle.

REAR



① A/C unit assembly

④ Rear floor duct 2

⑦ Console rear finisher

△ : Pawl

☐ : Metal clip

↔ : Vehicle front

② Front floor duct LH

⑤ Rear floor duct 3

⑧ Front floor duct RH

③ Rear floor duct 1

⑥ Rear ventilator grille

⑨ Console rear finisher*

*: Not applicable

CENTER VENTILATOR GRILLE

CENTER VENTILATOR GRILLE : Removal and Installation

INFOID:000000012793683

REMOVAL

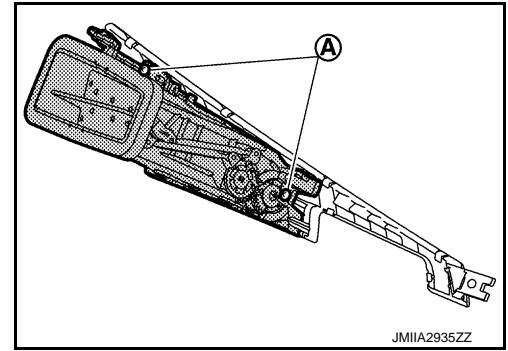
1. Remove instrument finisher. Refer to [IP-13, "Removal and Installation"](#).

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DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

2. Remove fixing screws (A), and then remove center ventilator grille.



INSTALLATION

Install in the reverse order of removal.

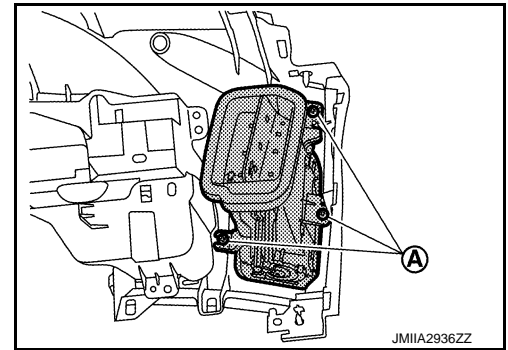
SIDE VENTILATOR GRILLE

SIDE VENTILATOR GRILLE : Removal and Installation

INFOID:000000012793684

REMOVAL

1. Remove instrument panel assembly. Refer to [IP-13. "Removal and Installation"](#).
2. Remove fixing screws (A), and then remove side ventilator grille.



INSTALLATION

Install in the reverse order of removal.

FRONT SPEAKER GRILLE

FRONT SPEAKER GRILLE : Removal and Installation

INFOID:000000012793685

REMOVAL

Refer to [IP-13. "Removal and Installation"](#).

INSTALLATION

Install in the reverse order of removal.

VENTILATOR DUCT

VENTILATOR DUCT : Removal and Installation

INFOID:000000012793686

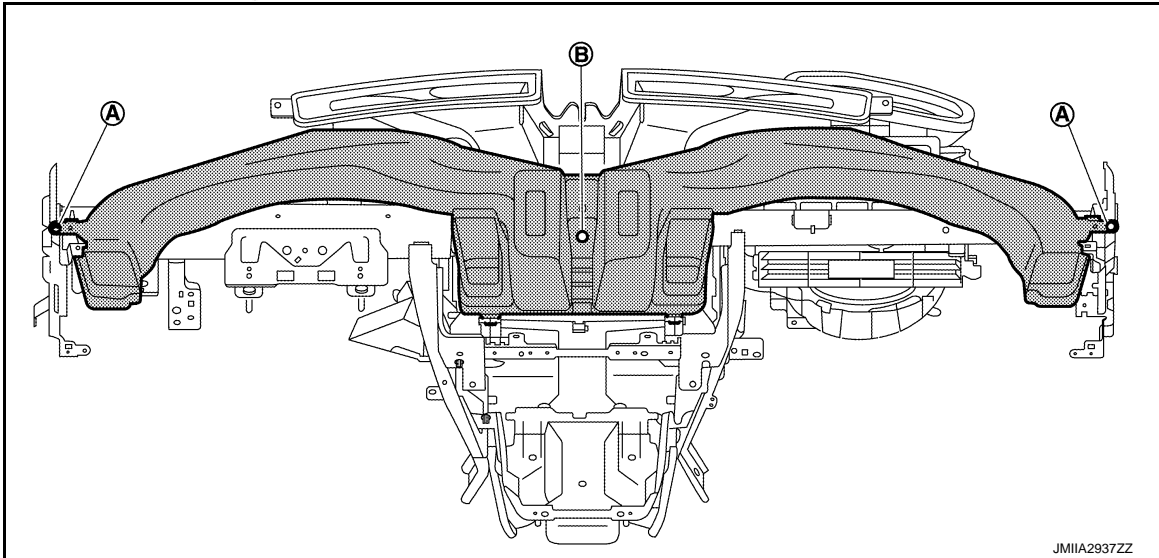
REMOVAL

1. Remove instrument panel assembly. Refer to [IP-13. "Removal and Installation"](#).
2. Remove side defroster nozzle (LH and RH). Refer to [VTL-9. "SIDE DEFROSTER NOZZLE : Removal and Installation"](#).
3. Disconnect ionizer harness connector. Refer to [HAC-148. "Removal and Installation"](#).

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

4. Remove fixing screws (A) and fixing clip (B), and then remove ventilator duct.

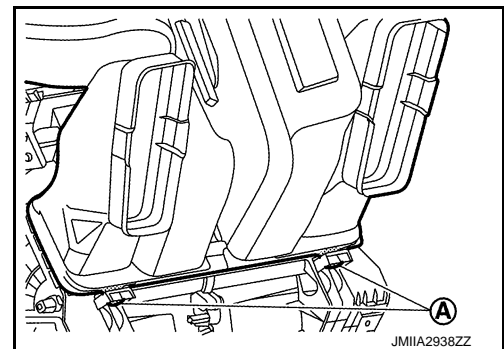


INSTALLATION

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

CAUTION:

When installing, check locating portions (A) and joint portions on heater & cooling unit assembly are fitted completely.



SIDE DEFROSTER DUCT

SIDE DEFROSTER DUCT : Removal and Installation

INFOID:000000012793687

REMOVAL

Remove front pillar garnish. Refer to [INT-25, "FRONT PILLAR GARNISH : Removal and Installation"](#).

INSTALLATION

Install in the reverse order of removal.

SIDE DEFROSTER NOZZLE

SIDE DEFROSTER NOZZLE : Removal and Installation

INFOID:000000012793688

REMOVAL


1. Remove instrument panel assembly. Refer to [IP-13, "Removal and Installation"](#).

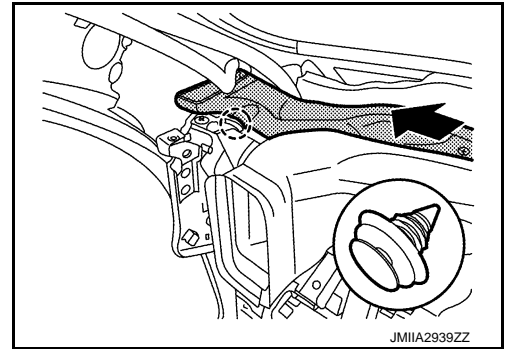
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DUCT AND GRILLE


< REMOVAL AND INSTALLATION >

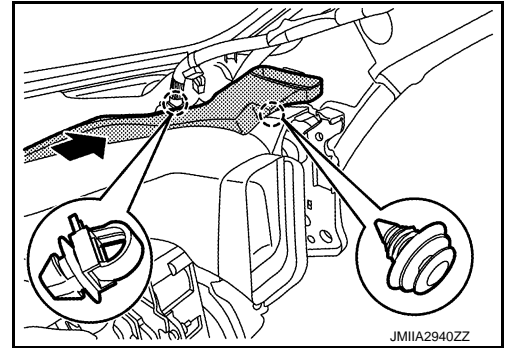
2. Disengage fixing clip, and then remove side defroster nozzle LH.

 : Clip



3. Disengage fixing clip and harness clip, and then remove side defroster nozzle RH.

 : Clip



INSTALLATION

Install in the reverse order of removal.

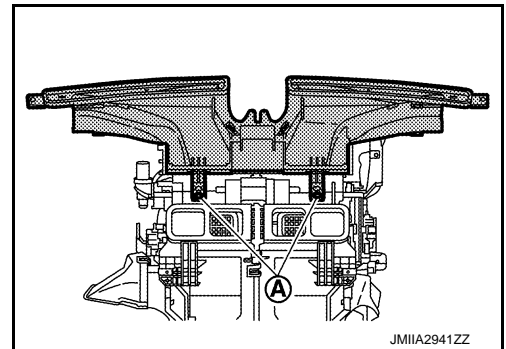
FRONT DEFROSTER NOZZLE

FRONT DEFROSTER NOZZLE : Removal and Installation

INFOID:000000012793689

REMOVAL

1. Remove steering member assembly. Refer to the following.
 - 2.0L turbo gasoline engine: Refer to [HA-44. "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
 - VR30DDTT: Refer to [HA-94. "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
2. Remove fixing screws (A), and then remove front defroster nozzle.



INSTALLATION

Install in the reverse order of removal.

HEATER DUCT

HEATER DUCT : Removal and Installation

INFOID:000000012793690

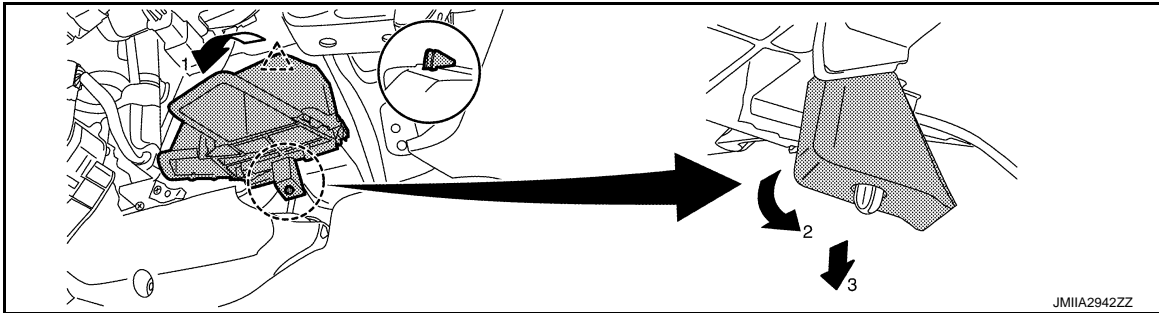
REMOVAL


1. Remove instrument lower panel. Refer to [IP-13. "Removal and Installation"](#).
2. Remove heater duct.
 - a. Disengage fixing pawl of upper side.

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

- b. Disengage joint portion from locating pin of foot duct according to numerical order 1→3 indicated by arrow as shown in the figure, and then remove heater duct.



 : Pawl

INSTALLATION

Install in the reverse order of removal.

FOOT DUCT

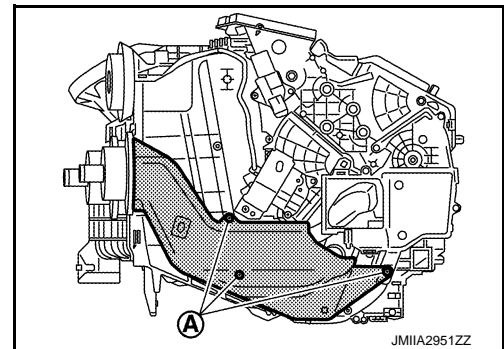
FOOT DUCT : Removal and Installation

INFOID:000000012793691

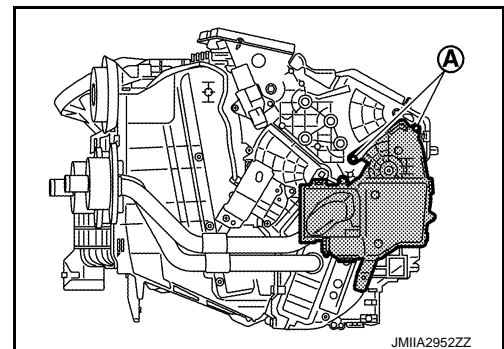
REMOVAL

Driver Side

1. Remove A/C unit assembly. Refer to the following.
 - 2.0L turbo gasoline engine: Refer to [HA-44. "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
 - VR30DDTT: Refer to [HA-94. "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
2. Remove heater duct. Refer to [VTL-10. "HEATER DUCT : Removal and Installation"](#).
3. Remove fixing screws (A), and then remove heater pipe cover.



4. Remove fixing screws (A), and then remove foot duct LH.



Passenger Side

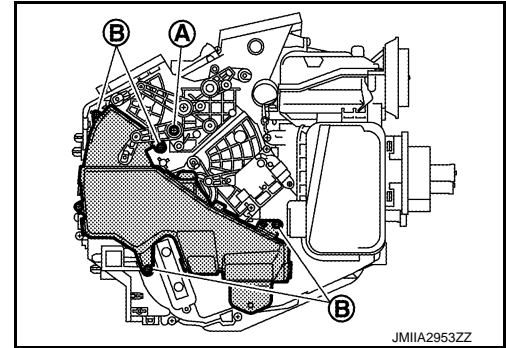
1. Remove A/C unit assembly. Refer to the following.
 - 2.0L turbo gasoline engine: Refer to [HA-44. "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
 - VR30DDTT: Refer to [HA-94. "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).

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DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

2. Remove mode door motor. Refer to [HAC-147, "MODE DOOR MOTOR : Removal and Installation"](#).
3. Disengage harness clip from foot duct RH.
4. Remove fixing screw (A) and fixing screws (B), and then remove foot duct RH.



INSTALLATION

Install in the reverse order of removal.


REAR VENTILATOR GRILLE

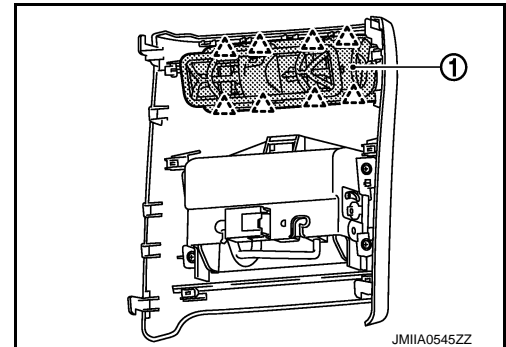
REAR VENTILATOR GRILLE : Removal and Installation

INFOID:000000012793692

REMOVAL

1. Remove console rear finisher assembly. Refer to [IP-24, "Removal and Installation"](#).
2. Disengage fixing pawls, and then remove rear ventilator grille ①.

 : Pawl



INSTALLATION

Install in the reverse order of removal.

FRONT FLOOR DUCT

FRONT FLOOR DUCT : Removal and Installation

INFOID:000000012793693


REMOVAL

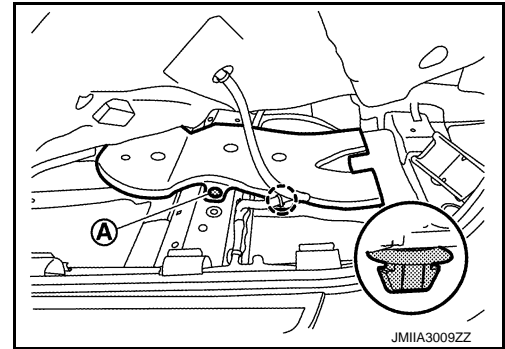
1. Remove front seat. Refer to [SE-83, "Removal and Installation"](#).
2. Remove center console assembly. Refer to [IP-24, "Removal and Installation"](#).
3. Remove dash side finisher. Refer to [INT-31, "DASH SIDE FINISHER : Removal and Installation"](#).
4. Remove center pillar lower garnish. Refer to [INT-32, "CENTER PILLAR LOWER GARNISH : Removal and Installation"](#).
5. Remove rear seat cushion. Refer to the following.
 - Bench seat models: Refer to [SE-101, "SEAT CUSHION : Removal and Installation"](#).
 - 6 : 4 separate seat models: Refer to [SE-110, "SEAT CUSHION : Removal and Installation"](#).
6. Remove floor carpet fixing clip of the rear. Refer to [INT-41, "Removal and Installation"](#).

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

7. Lift up floor trim and remove fixing clip (A) and disengage harness clip, and then remove front floor duct.

 : Clip



INSTALLATION

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

CAUTION:

- Visually check clips for deformation and damage during installation. Replace with new ones if necessary.
- When installing, check in advance that clips are accurately aligned with the portions on body panel, and then install by pressing in.


REAR FLOOR DUCT 1

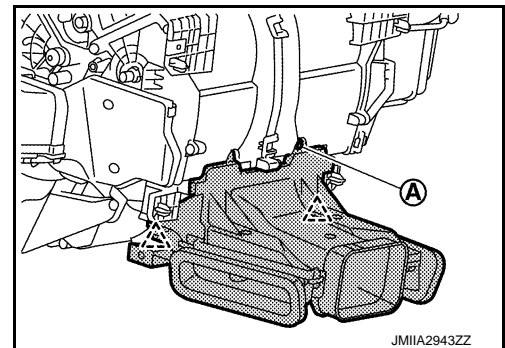
REAR FLOOR DUCT 1 : Removal and Installation

INFOID:0000000012793694

REMOVAL

1. Remove steering member assembly. Refer to the following.
 - 2.0L turbo gasoline engine: Refer to [HA-44, "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
 - VR30DDTT: Refer to [HA-94, "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
2. Remove rear floor duct 2. Refer to [VTL-13, "REAR FLOOR DUCT 2 : Removal and Installation"](#) (with rear ventilator grille).
3. Remove front floor duct (LH and RH). Refer to [VTL-12, "FRONT FLOOR DUCT : Removal and Installation"](#).
4. Remove fixing screw (A) and disengage fixing pawls, and then remove rear floor duct 1.

 : Pawl



INSTALLATION

Install in the reverse order of removal.

REAR FLOOR DUCT 2

REAR FLOOR DUCT 2 : Removal and Installation

INFOID:0000000012793695

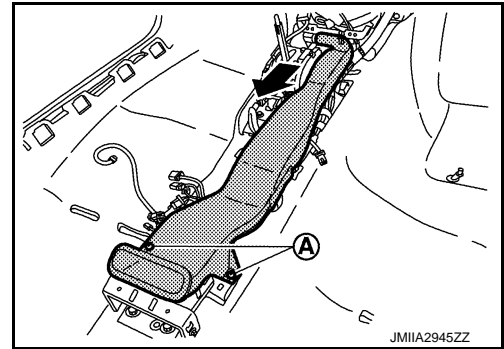
REMOVAL

1. Remove center console assembly. Refer to [IP-24, "Removal and Installation"](#).

DUCT AND GRILLE

< REMOVAL AND INSTALLATION >

2. Remove fixing screws (A), and then remove rear floor duct 2.



INSTALLATION

Install in the reverse order of removal.

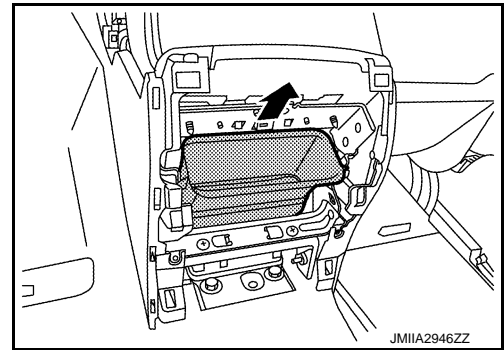
REAR FLOOR DUCT 3

REAR FLOOR DUCT 3 : Removal and Installation

INFOID:000000012793696

Removal

1. Remove console rear finisher assembly. Refer to [IP-24, "Removal and Installation"](#).
2. Remove rear floor duct 3.



Installation

Install in the reverse order of removal.

BLOWER UNIT

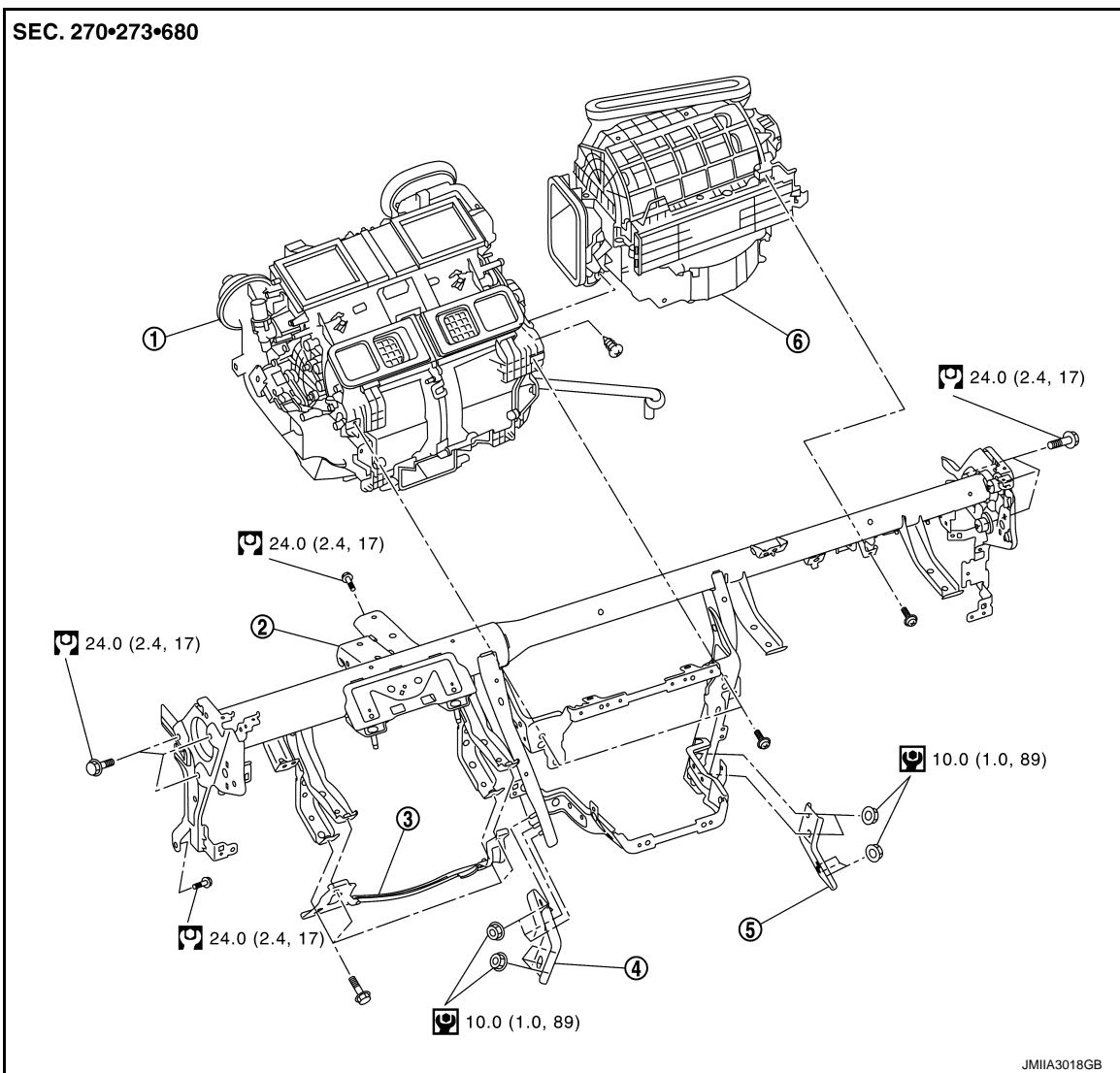
< REMOVAL AND INSTALLATION >

BLOWER UNIT

Exploded View

INFOID:000000012793697

REMOVAL



① Heater & cooling unit assembly

② Steering member

③ Knee protector

④ Instrument stay LH

⑤ Instrument stay RH

⑥ Blower unit assembly

: N·m (kg·m, ft·lb)

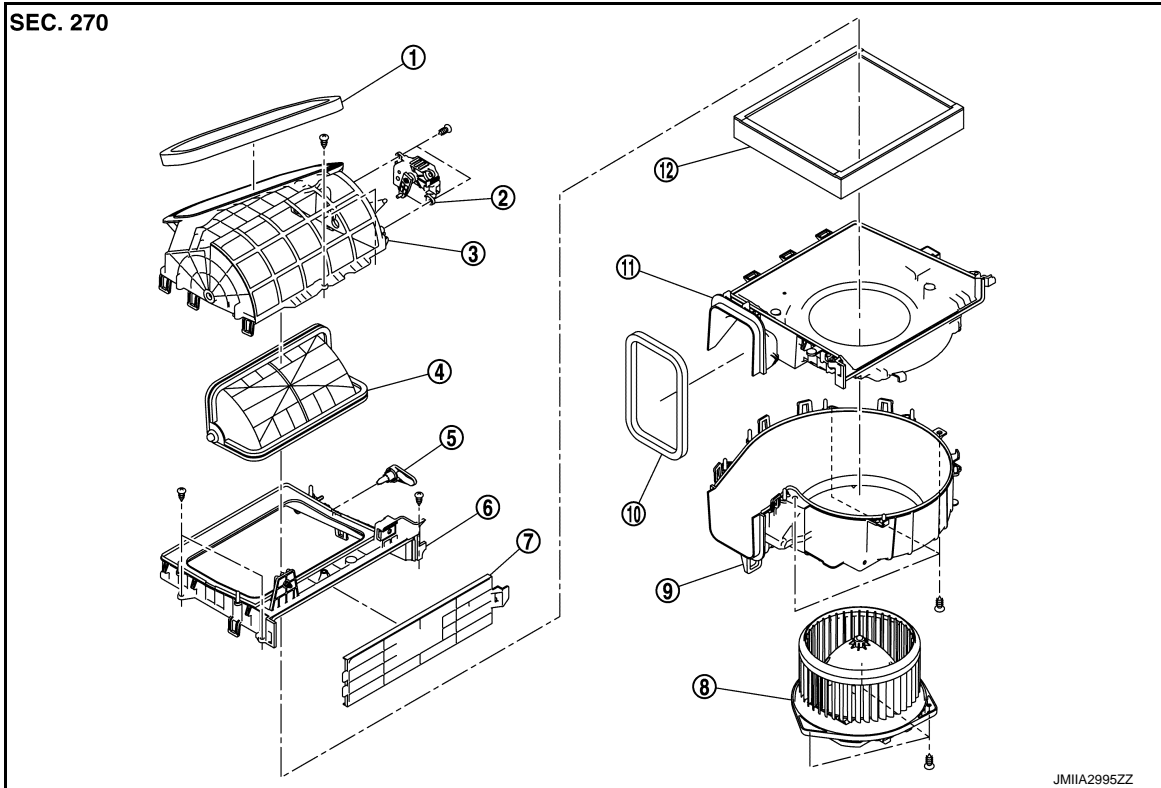
: N·m (kg·m, in·lb)

DISASSEMBLY

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BLOWER UNIT

< REMOVAL AND INSTALLATION >



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|----------------|---------------------|--|
| ① Intake seal | ② Intake door motor | ③ Shutter box upper case |
| ④ Intake door | ⑤ Intake door lever | ⑥ Shutter box lower case |
| ⑦ Filter cover | ⑧ Blower motor | ⑨ Intake lower case |
| ⑩ Outlet seal | ⑪ Intake upper case | ⑫ In-cabin microfilter ^{*1}
Air conditioner filter ^{*2} |

*1: For North America

*2: For Mexico

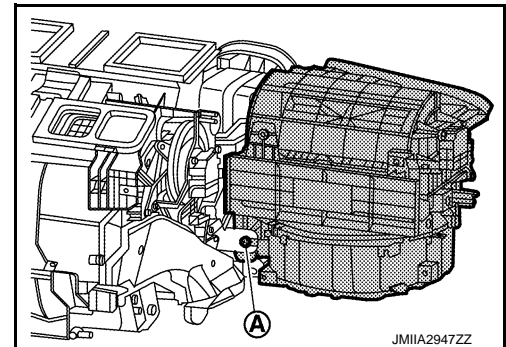
BLOWER UNIT

BLOWER UNIT : Removal and Installation

INFOID:000000012793698

REMOVAL

- Remove steering member assembly. Refer to the following.
 - 2.0L turbo gasoline engine: Refer to [HA-44, "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
 - VR30DDTT: Refer to [HA-94, "HEATER & COOLING UNIT ASSEMBLY : Removal and Installation"](#).
- Remove fixing screw (A), and then separate blower unit and heater & cooling unit assembly.



JMIIA2947ZZ

INSTALLATION

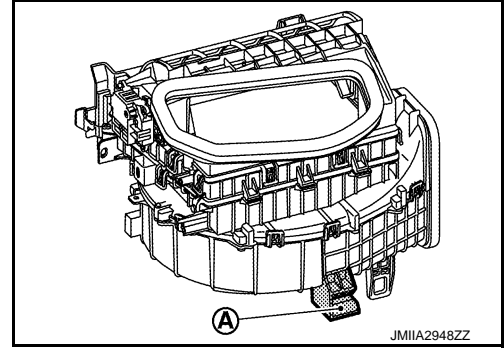
BLOWER UNIT

< REMOVAL AND INSTALLATION >

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

CAUTION:

Check locating pin on body panel and joint portion (A) are fitted completely.



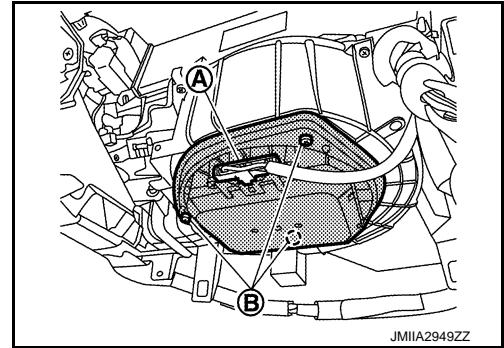
BLOWER MOTOR

BLOWER MOTOR : Removal and Installation

INFOID:0000000012793699

REMOVAL

1. Remove instrument lower cover. Refer to [IP-13. "Removal and Installation"](#).
2. Disconnect blower motor harness connector (A) and remove fixing screws (B), and then remove blower motor.



INSTALLATION

Install in the reverse order of removal.

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IN-CABIN MICROFILTER

< REMOVAL AND INSTALLATION >

IN-CABIN MICROFILTER

Exploded View

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Refer to [VTL-15. "Exploded View"](#).

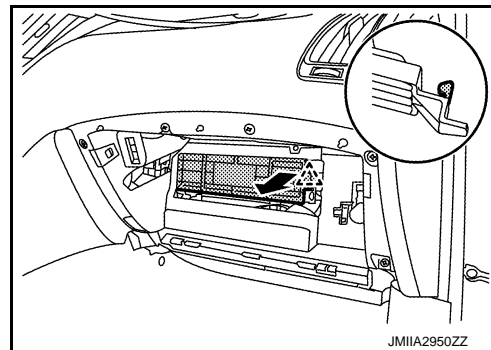
Removal and Installation

INFOID:000000012793701

REMOVAL

1. Remove grove box assembly. Refer to [IP-13. "Removal and Installation"](#).
2. Disengage fixing pawl, and then remove filter cover.

 : Pawl



3. Remove in-cabin microfilter (for North America) or air conditioner filter (for Mexico).

INSTALLATION

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

CAUTION:

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

Replacement

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Replace in-cabin microfilter.

Refer to [VTL-19. "In-cabin microfilter"](#).

SERVICE DATA AND SPECIFICATIONS (SDS)

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SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

In-cabin microfilter

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Replacement interval	MA-10. "FOR NORTH AMERICA : Introduction of Periodic Maintenance"
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