

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

Precautions for Removing Battery Terminal

INFOID:0000000010994272

- 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.

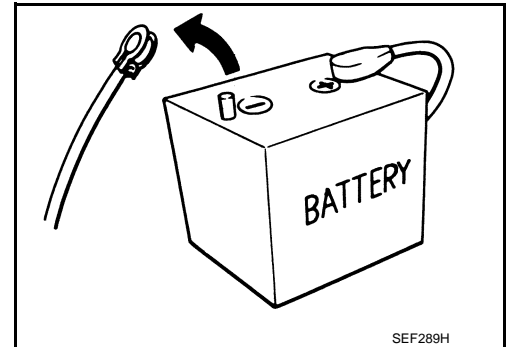
NOTE:

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.



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

INFOID:0000000010994273

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.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

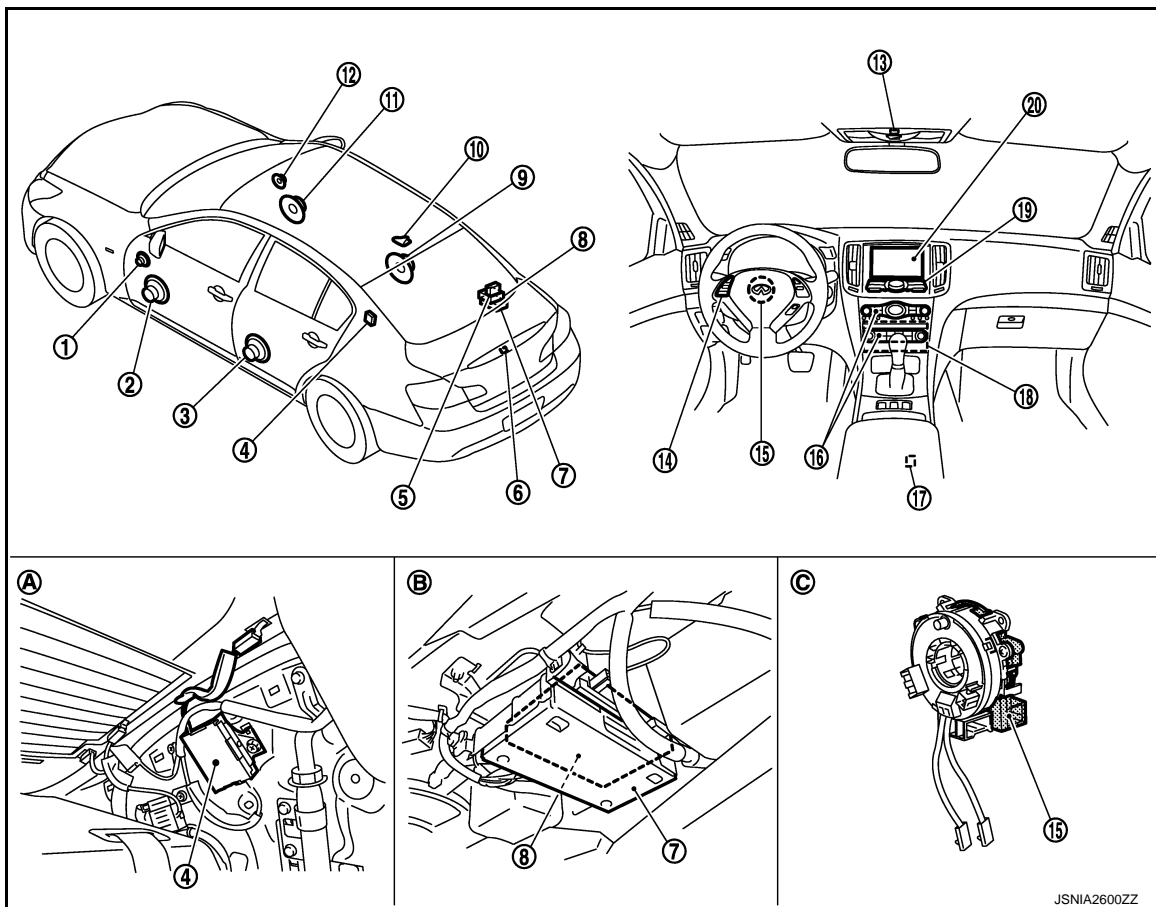
[BASE AUDIO WITH REAR VIEW CAMERA]

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000010990828



- | | | |
|-----------------------------------|--|-----------------------------------|
| 1. Tweeter LH | 2. Front door speaker LH | 3. Rear door speaker LH |
| 4. Antenna amp. | 5. TEL antenna | 6. Rear view camera |
| 7. TEL adapter unit | 8. Satellite radio tuner | 9. Rear door speaker RH |
| 10. Satellite radio antenna | 11. Front door speaker RH | 12. Tweeter RH |
| 13. Microphone | 14. Steering switch | 15. Steering angle sensor |
| 16. Preset switch | 17. USB connector | 18. AV control unit |
| 19. Multifunction switch | 20. Display unit | |
| A. Within rear pillar finisher LH | B. Lower part of rear parcel shelf (on the right side) | C. Spiral cable removed condition |

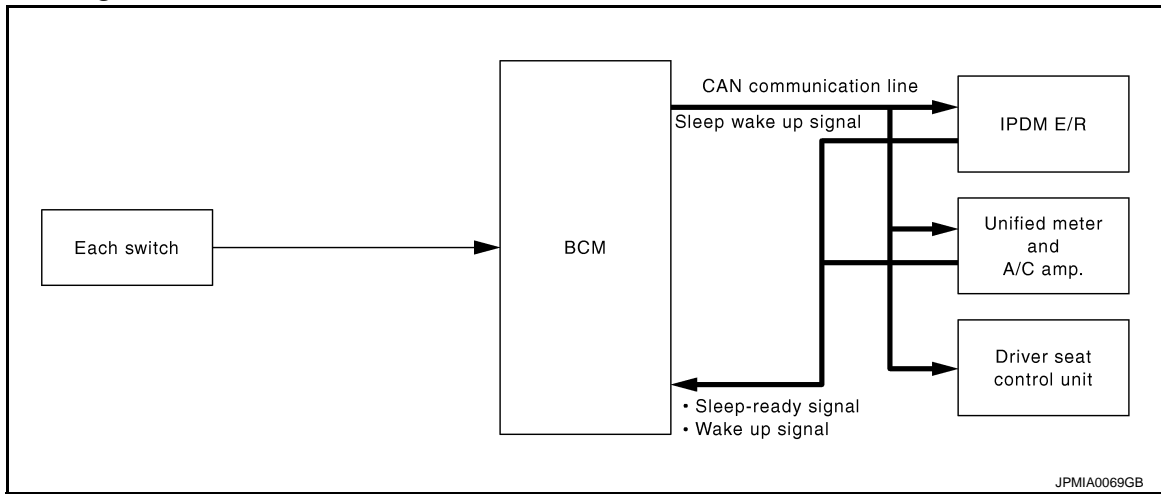
JSNIA2600ZZ

POWER CONSUMPTION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

POWER CONSUMPTION CONTROL SYSTEM

System Diagram



System Description

INFOID:000000010988508

OUTLINE

- BCM incorporates a power saving control function that reduces the power consumption according to the vehicle status.
- BCM switches the status (control mode) by itself with the power saving control function. It performs the sleep request to each unit [IPDM E/R, combination meter (unified meter and A/C amp.) and driver seat control unit] that operates with the ignition switch OFF.

Normal mode (wake-up)

- CAN communication is normally performed with other units
- Each control with BCM is operating properly

CAN communication sleep mode (CAN sleep)

- CAN transmission is stopped
- Control with BCM only is operating

Low power consumption mode (BCM sleep)

- Low power consumption control is active
- CAN transmission is stopped

LOW POWER CONSUMPTION CONTROL WITH BCM

BCM reduces the power consumption with the following operation in the low power consumption mode.

- The reading interval of the each switches changes from 10 ms interval to 60 ms interval.

Sleep mode activation

- BCM receives the sleep-ready signal (ready) from IPDM E/R and unified meter and A/C amp. via CAN communication.
- BCM transmits the sleep wake up signal (sleep) to each unit when all of the CAN sleep conditions are fulfilled.
- Each unit stops the transmission of CAN communication with the sleep wake up signal. BCM is in CAN communication sleep mode.
- BCM is in the low power consumption mode and perform the low power consumption control when all of the BCM sleep conditions are fulfilled with CAN sleep condition.

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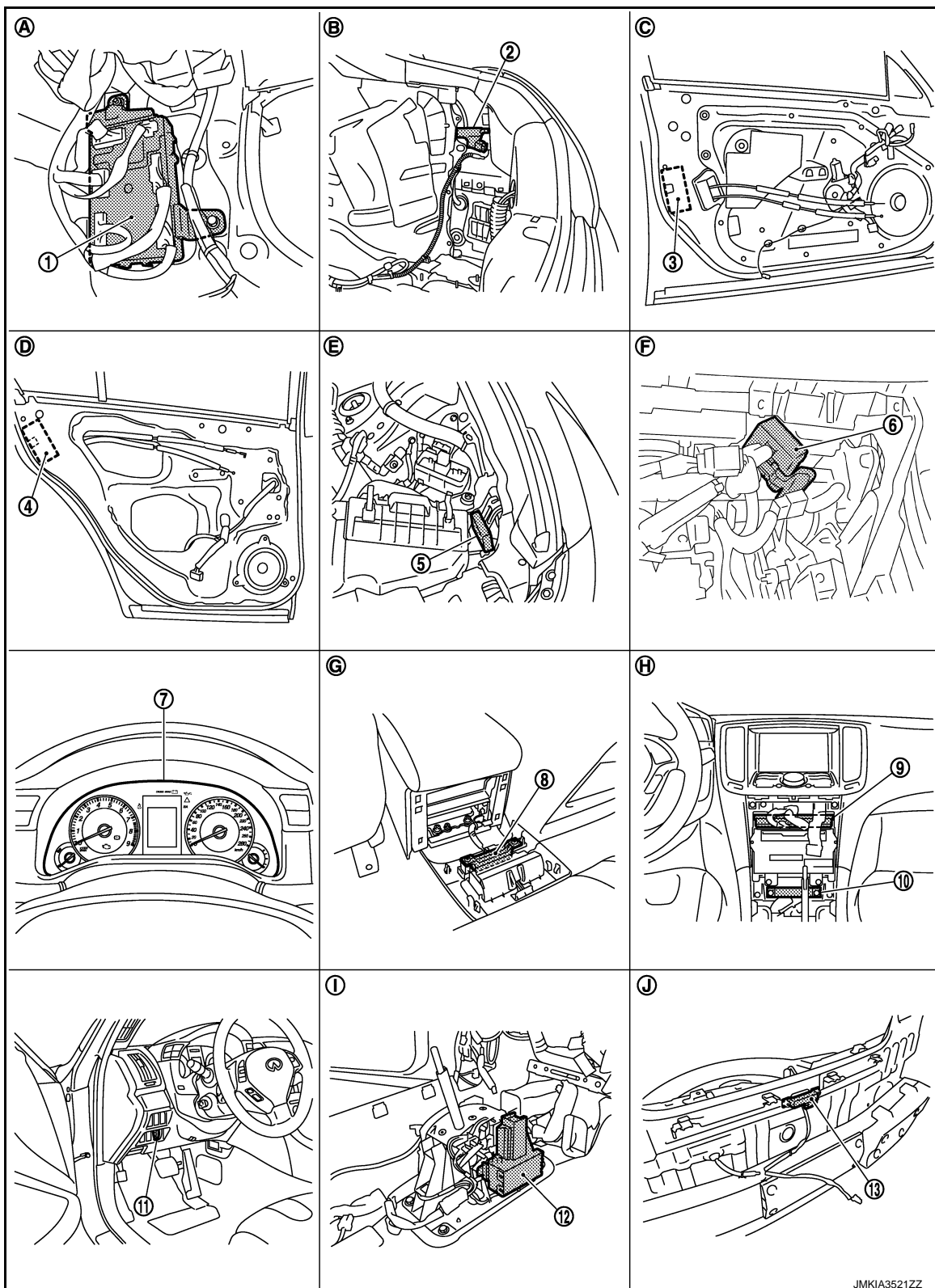
BCS

INTELLIGENT KEY SYSTEM

< SYSTEM DESCRIPTION >

WARNING FUNCTION : Component Parts Location

INFOID:0000000010991631



- | | | |
|---|---------------------------------------|---|
| 1. BCM M118, M119, M120, M121, M122, M123 | 2. Fuel lid lock actuator B242 | 3. Front door lock assembly (driver side) D15 |
| 4. Rear door lock assembly LH D55 | 5. Intelligent Key warning buzzer E57 | 6. Remote keyless entry receiver M104 |
| 7. Combination meter M53 | 8. Inside key antenna (console) M146 | 9. Unified meter and A/C amp. M66, M67 |

AWD WARNING LAMP

Description

INFOID:0000000010991276

- Turns ON when there is a malfunction in AWD system. AWD warning lamp indicates the vehicle is in fail-safe mode and shifting to rear-wheel drive or 4-wheel drive (front-wheels still have some driving torque).
- Also turns ON when ignition switch is turned ON, for the purpose of lamp check. Turns OFF approximately for 1 second after the engine starts if system is normal.

AWD WARNING LAMP INDICATION

| Condition | AWD warning lamp |
|--|--|
| Lamp check | Turns ON when ignition switch is turned ON. Turns OFF approx. 1 second after the engine start. |
| AWD system malfunction | ON |
| Protection function is activated due to heavy load to electric controlled coupling. (AWD system is not malfunctioning and AWD system changes to rear wheel drive.) | Quick blinking: 2 times/second (Blinking in approx. 1 minute and then turning OFF) |
| Large difference in diameter of front/rear tires | Slow blinking: 1 time/2 seconds (Continuing to blink until turning ignition switch OFF) |
| Other than above (system normal) | OFF |

CAUTION:

- AWD warning lamp also turns ON due to data reception error, CAN communication error etc.

Component Function Check

INFOID:0000000010991277

1. CHECK AWD WARNING LAMP FUNCTION

1. Turn the ignition switch ON.
2. Check that AWD warning lamp lights up.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Proceed to diagnosis procedure. Refer to [DLN-30, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000010991278

1. CHECK POWER SUPPLY AND GROUND CIRCUIT

Perform the trouble diagnosis for power supply and ground circuit. Refer to [DLN-27, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the error-detected parts.

2. PERFORM SELF-DIAGNOSIS

With CONSULT

Perform self-diagnosis for "ALL MODE AWD/4WD".

Is any DTC detected?

YES >> Check the DTC.

NO >> GO TO 3.

3. CHECK AWD WARNING LAMP SIGNAL

With CONSULT

1. Turn the ignition switch ON.

CAUTION:

Never start the engine.

2. Check "4WD WARN LAMP" of CONSULT "DATA MONITOR" for "ALL MODE AWD/4WD".

Does the item on "DATA MONITOR" indicate "On"?

YES >> GO TO 4.

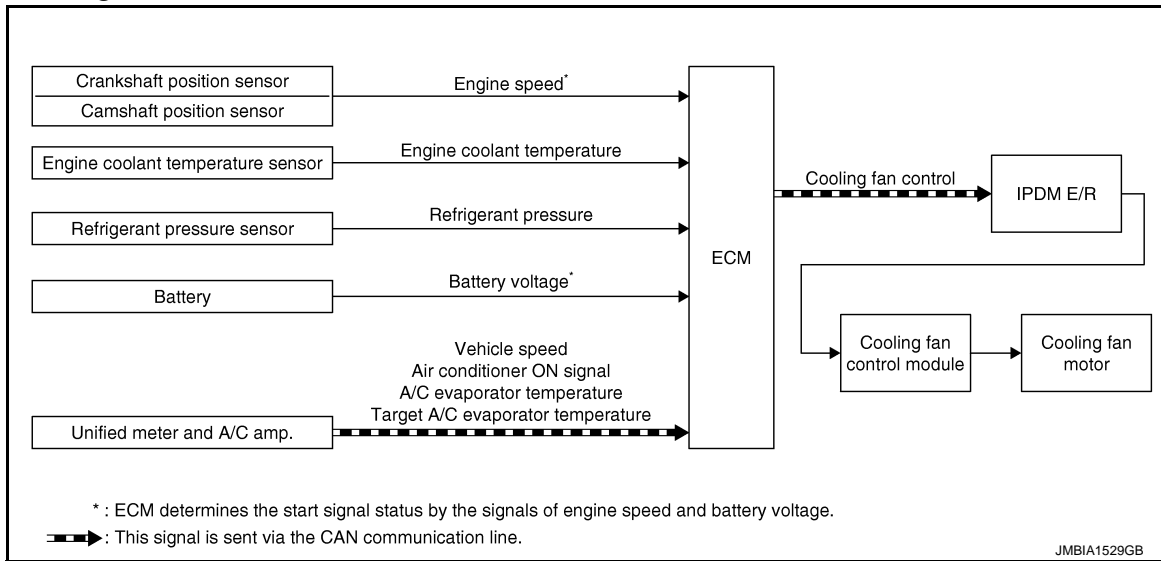
COOLING FAN CONTROL

< SYSTEM DESCRIPTION >

[VQ37VHR]

COOLING FAN CONTROL

System Diagram



System Description

INFOID:0000000010992763

INPUT/OUTPUT SIGNAL CHART

| Sensor | Input signal to ECM | ECM function | Actuator |
|--|---|---------------------|---|
| Crankshaft position sensor (POS) Camshaft position sensor (PHASE) | Engine speed* ¹ | Cooling fan control | IPDM E/R ↓ Cooling fan control module ↓ Cooling fan motor |
| Engine coolant temperature sensor | Engine coolant temperature | | |
| Refrigerant pressure sensor | Refrigerant pressure | | |
| Battery | Battery voltage* ¹ | | |
| Unified meter and A/C amp. | Vehicle speed* ² | | |
| | Air conditioner ON signal* ² | | |
| | A/C evaporator temperature* ² | | |
| | Target A/C evaporator temperature* ² | | |

*1: The ECM determines the start signal status by the signals of engine speed and battery voltage.

*2: This signal is sent to ECM via the CAN communication line.

SYSTEM DESCRIPTION

ECM controls cooling fan speed corresponding to vehicle speed, engine coolant temperature, air conditioner ON signal, refrigerant pressure, target A/C evaporator temperature and A/C evaporator temperature.

Cooling fan control signal is sent to IPDM E/R from ECM by CAN communication line. Then, IPDM E/R sends ON/OFF pulse duty signal to cooling fan control module. Corresponding to this ON/OFF pulse duty signal, cooling fan control module gives cooling fan motor operating voltage to cooling fan motors. Cooling fan speed is controlled by duty cycle of cooling fan motor operating voltage sent from cooling fan control module.

P1090, P1093 VVEL ACTUATOR MOTOR

[VQ37VHR]

< DTC/CIRCUIT DIAGNOSIS >

P1090, P1093 VVEL ACTUATOR MOTOR

Description

INFOID:0000000010993038

The VVEL actuator motor rotates the control shaft according to the control signal from the VVEL control module. The VVEL control module judges whether the VVEL actuator motor controls the angle properly by the VVEL control shaft position sensor signal.

DTC Logic

INFOID:0000000010993039

DTC DETECTION LOGIC

NOTE:

If DTC P1090 or P1093 is displayed with DTC P1091, first perform the trouble diagnosis for DTC P1091. Refer to [EC-389, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|----------------------------------|--|---|
| P1090 | VVEL system performance (bank 1) | <ul style="list-style-type: none">Event angle difference between the actual and the target is detected.Abnormal current is sent to VVEL actuator motor. | <ul style="list-style-type: none">Harness or connectors (VVEL actuator motor circuit is open or shorted.)VVEL actuator motorVVEL actuator sub assemblyVVEL ladder assemblyVVEL control module |
| P1093 | VVEL system performance (bank 2) | | |

DTC CONFIRMATION PROCEDURE

1. PRECONDITIONING

If DTC Confirmation Procedure has been previously conducted, always perform the following procedure before conducting the next test.

- Turn ignition switch OFF and wait at least 10 seconds.
- Turn ignition switch ON.
- Turn ignition switch OFF and wait at least 10 seconds.

TESTING CONDITION:

Before performing the following procedure, confirm that battery voltage is more than 10 V at idle.

>> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

- Start engine and let it idle for 10 second.
- Keep the engine speed at about 3,500 rpm for at least 10 seconds under no load.
- Check DTC.

Is DTC detected?

YES >> Go to [EC-385, "Diagnosis Procedure"](#).

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010993040

1. CHECK GROUND CONNECTION

- Turn ignition switch OFF.
- Check ground connection M95. Refer to Ground Inspection in [GI-44, "Circuit Inspection"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace ground connection.

2. VVEL ACTUATOR MOTOR OUTPUT SIGNAL CIRCUIT FOR OPEN AND SHORT

- Disconnect VVEL control module harness connector.
- Disconnect VVEL actuator motor harness connector.
- Check the continuity between VVEL control module harness connector and VVEL actuator motor harness connector.

WHEEL ALIGNMENT

Inspection

INFOID:0000000010990196

DESCRIPTION

CAUTION:

- **Camber, caster, kingpin inclination angles cannot be adjusted.**
- **If camber, caster, or kingpin inclination angle is outside the standard, check front suspension parts for wear and damage. Replace suspect parts if a malfunction is detected.**
- **Kingpin inclination angle is reference value, no inspection is required.**
- **Measure wheel alignment under unladen conditions.**

NOTE:

“Unladen conditions” means that fuel, engine coolant, and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

PRELIMINARY CHECK

Check the following:

- Tires for improper air pressure and wear. Refer to [WT-52, "Tire Air Pressure"](#).
- Road wheels for runout.
- Wheel bearing axial end play. Refer to [FAX-6, "Inspection"](#).
- Transverse link or upper link ball joint axial end play. Refer to [FSU-7, "Inspection"](#).
- Shock absorber operation.
- Each mounting part of axle and suspension for looseness and deformation.
- Each of suspension member, shock absorber, upper link and transverse link for cracks, deformation and other damage.
- Vehicle height (posture).

GENERAL INFORMATION AND RECOMMENDATIONS

- A four-wheel thrust alignment should be performed.
- This type of alignment is recommended for any NISSAN/INFINITI vehicle.
- The four-wheel “thrust” process helps ensure that the vehicle is properly aligned and the steering wheel is centered.
- The alignment rack itself should be capable of accepting any NISSAN/INFINITI vehicle.
- The rack should be checked to ensure that it is level.
- Make sure the machine is properly calibrated.
- Your alignment equipment should be regularly calibrated in order to give correct information.
- Check with the manufacturer of your specific equipment for their recommended Service/Calibration Schedule.

ALIGNMENT PROCESS

IMPORTANT:

Use only the alignment specifications listed in this Service Manual.

- When displaying the alignment settings, many alignment machines use “indicators”: (Green/red, plus or minus, Go/No Go). **Never use these indicators.**
- The alignment specifications programmed into your machine that operate these indicators may not be correct.
- This may result in an ERROR.
- Most camera-type alignment machines are equipped with both “Rolling Compensation” method and optional “Jacking Compensation” method to “compensate” the alignment targets or head units. “Rolling Compensation” is the preferred method.
- If using the “Rolling Compensation” method, after installing the alignment targets or head units, push or pull on the rear wheel to move the vehicle. **Do not push or pull on the vehicle body.**
- If using the “Jacking Compensation” method, after installing the alignment targets or head units, raise the vehicle and rotate the wheels 1/2 turn both ways.

NOTE:

- Do not use the “Rolling Compensation” method if you are using sensor-type alignment equipment.
- Follow all instructions for the alignment machine you're using for more information.

Adjustment

INFOID:0000000010990197

TOE-IN

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:0000000010988556

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:

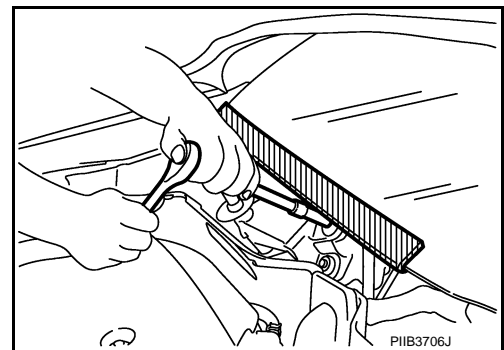
Always observe the following items for preventing accidental activation.

- 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.

Precaution for Procedure without Cowl Top Cover

INFOID:0000000010988557

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



Handling for Adhesive and Primer

INFOID:0000000010988558

- Do not use an adhesive which is past its usable date. Shelf life of this product is limited to six months after the date of manufacture. Carefully adhere to the expiration or manufacture date printed on the box.
- Keep primers and adhesive in a cool, dry place. Ideally, they should be stored in a refrigerator.
- Open the seal of the primer and adhesive just before application. Discard the remainder.
- Before application, be sure to shake the primer container to stir the contents. If any floating material is found, do not use it.
- If any primer or adhesive contacts the skin, wipe it off with gasoline or equivalent and wash the skin with soap.
- When using primer and adhesive, always observe the precautions in the instruction manual.

AIR MIX DOOR MOTOR

Description

INFOID:0000000010989143

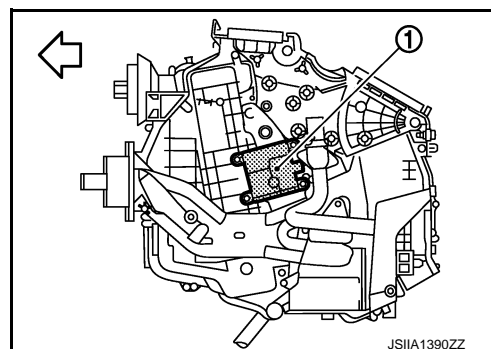
COMPONENT DESCRIPTION

Air Mix Door Motor

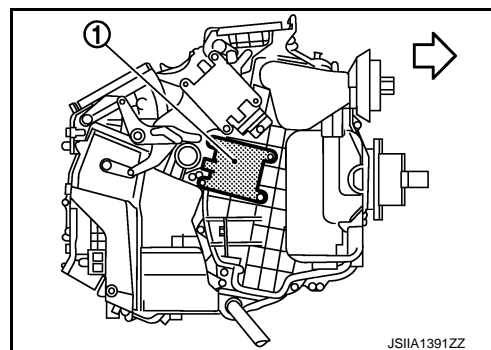
The air mix door motor (1) is attached to the heater & cooling unit assembly. It rotates so that the air mix door is opened or closed to a position set by the unified meter and A/C amp. Motor rotation is then conveyed through a shaft and the air mix door position feedback is then sent to the unified meter and A/C amp. by PBR built-in air mix door motors.

← Vehicle front

Driver side (LH)



Passenger side (RH)



Component Function Check

INFOID:0000000010989144

DRIVER SIDE

1. CONFIRM SYMPTOM BY PERFORMING THE FOLLOWING OPERATIONAL CHECK

1. Turn temperature control dial (driver side) clockwise until 32°C (90°F) is displayed.
2. Check for warm air at discharge air outlets.
3. Turn temperature control dial (driver side) counterclockwise until 18°C (64°F) is displayed.
4. Check for cool air at discharge air outlets.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Go to diagnosis procedure. Refer to [HAC-47, "Diagnosis Procedure"](#).

PASSENGER SIDE

1. CONFIRM SYMPTOM BY PERFORMING THE FOLLOWING OPERATIONAL CHECK

1. Turn temperature control dial (passenger side) clockwise until 32°C (90°F) is displayed.
2. Check for warm air at discharge air outlets.
3. Turn temperature control dial (passenger side) counterclockwise until 18°C (64°F) is displayed.
4. Check for cool air at discharge air outlets.

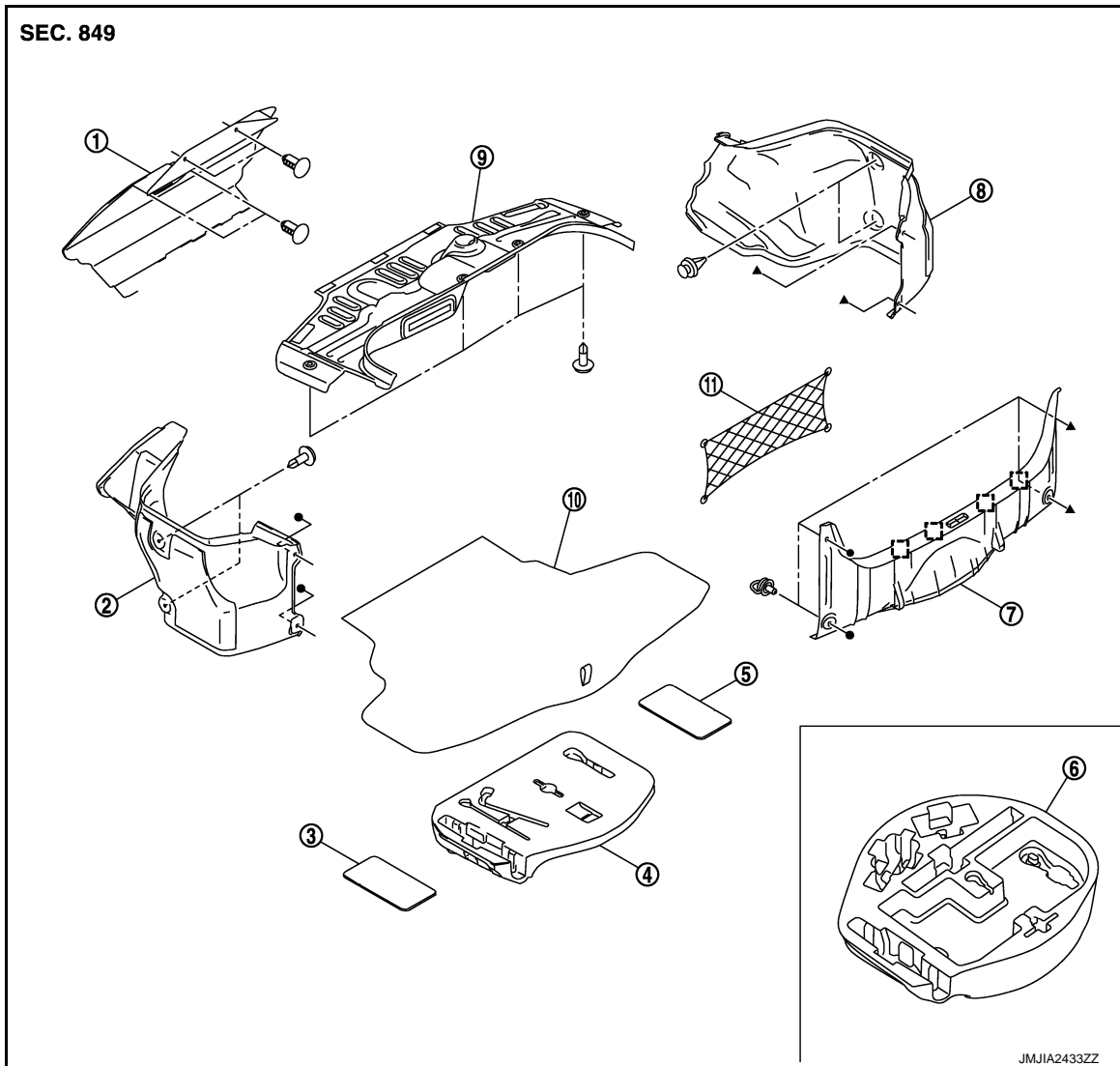
TRUNK ROOM TRIM

< REMOVAL AND INSTALLATION >

TRUNK ROOM TRIM

Exploded View

INFOID:000000010989284



- | | | |
|-------------------------|---------------------------------|--|
| 1. Trunk front finisher | 2. Rear wheel house finisher LH | 3. Trunk floor felt LH |
| 4. Trunk center box | 5. Trunk floor felt RH | 6. Trunk center box (For temporary spire tire) |
| 7. Trunk rear plate | 8. Rear wheel house finisher RH | 9. Trunk front finisher upper |
| 10. Trunk floor carpet | 11. Trunk net | |

□ : Metal clip

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

Removal and Installation

INFOID:000000010989285

REMOVAL

1. Fully open trunk lid assembly.
2. Remove trunk floor carpet.
3. Remove trunk center box and trunk floor felt (LH/RH).
4. Remove trunk rear plate fixing clips, disengage the metal clips, and then remove trunk rear plate.
5. Remove trunk weather-strip. Refer to [DLK-255, "TRUNK LID WEATHERSTRIP : Exploded View"](#).

PUSH-BUTTON IGNITION SWITCH

[POWER DISTRIBUTION SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

4.CHECK IGNITION SWITCH OUTPUT SIGNAL (BCM)

1. Disconnect push-button ignition switch connector.
2. Check voltage between BCM harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| BCM | | | |
| Connector | Terminal | | |
| M122 | 89 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace BCM. Refer to [BCS-90. "Removal and Installation"](#).

5.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT (BCM)

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between BCM harness connector and push-button ignition switch harness connector.

| BCM | | Push-button ignition switch | | Continuity |
|-----------|----------|-----------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M122 | 89 | M50 | 4 | Existed |

3. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M122 | 89 | | Not existed |

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-41. "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:0000000010992372

1.CHECK PUSH-BUTTON IGNITION SWITCH

1. Turn ignition switch OFF.
2. Disconnect push-button ignition switch connector.
3. Check continuity between push-button ignition switch terminals.

| Push-button ignition switch | | Condition | | Continuity |
|-----------------------------|---|-----------------------------|-------------|-------------|
| Terminal | | | | |
| 1 | 4 | Push-button ignition switch | Pressed | Existed |
| | | | Not pressed | Not existed |

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace push-button ignition switch. Refer to [PCS-119. "Removal and Installation"](#).

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY

< SYMPTOM DIAGNOSIS >

[FRONT & REAR WINDOW ANTI-PINCH]

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY

Diagnosis Procedure

INFOID:0000000010988922

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.

Refer to [PWC-5, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK ENCODER CIRCUIT

Check encoder circuit. Refer to the following.

- Driver side: Refer to [PWC-25, "DRIVER SIDE : Component Function Check"](#).
- Passenger side: Refer to [PWC-27, "PASSENGER SIDE : Component Function Check"](#).
- Rear LH side: Refer to [PWC-29, "REAR LH : Component Function Check"](#).
- Rear RH side: Refer to [PWC-31, "REAR RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-41, "Intermittent Incident"](#).

NO >> GO TO 1.

B2602 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS >

NO >> GO TO 3.

3.CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

| A/T shift selector (detention switch) | | BCM | | Continuity |
|---------------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M137 | 10 | M122 | 96 | Existed |

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

| A/T shift selector (detention switch) | | Ground | Continuity |
|---------------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M137 | 10 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-90. "Removal and Installation"](#).

NO >> Repair or replace harness.

4.CHECK A/T SHIFT SELECTOR CIRCUIT

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

| A/T shift selector (detention switch) | | BCM | | Continuity |
|---------------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M137 | 11 | M122 | 99 | Existed |

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

| A/T shift selector (detention switch) | | Ground | Continuity |
|---------------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M137 | 11 | | Not existed |

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

Refer to [SEC-61. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace A/T shift selector (detention switch). Refer to [TM-179. "2WD : Removal and Installation"](#) (2WD) or [TM-181. "AWD : Removal and Installation"](#) (AWD).

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-41. "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000010993845

1.CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

1. Turn ignition switch OFF.
2. Disconnect A/T shift selector (detention switch) connector.
3. Check continuity between A/T shift selector (detention switch) terminals.

IN-CABIN MICROFILTER

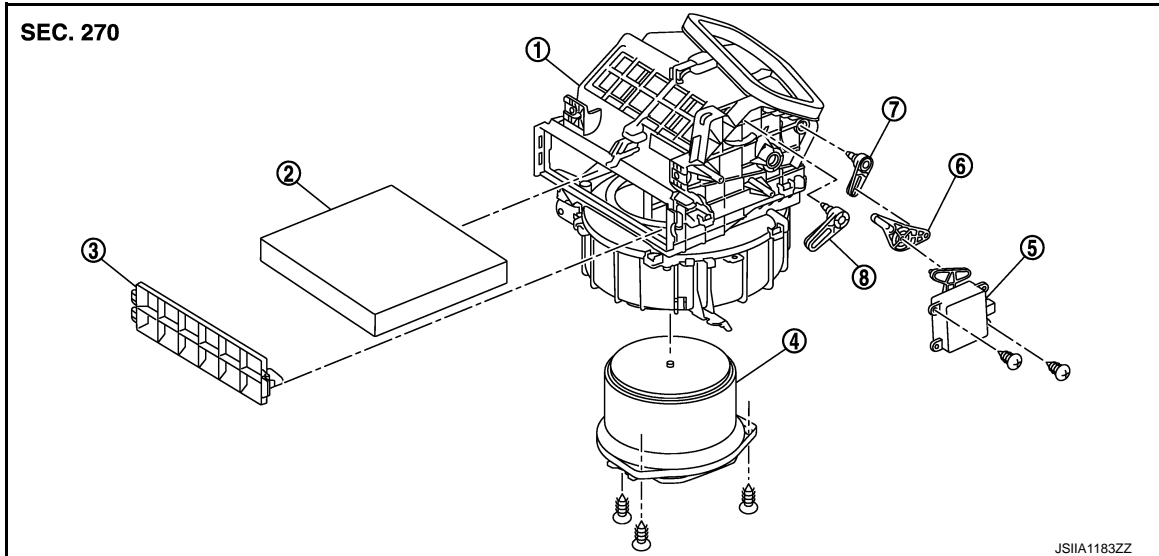
< PERIODIC MAINTENANCE >

PERIODIC MAINTENANCE

IN-CABIN MICROFILTER

Exploded View

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- | | | |
|--------------------------|-------------------------|---------------------|
| 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

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REMOVAL

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

INSTALLATION

Note the following items, and then 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 duct 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 [MA-6. "Introduction of Periodic Maintenance"](#).

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