

# ACCELERATOR CONTROL SYSTEM

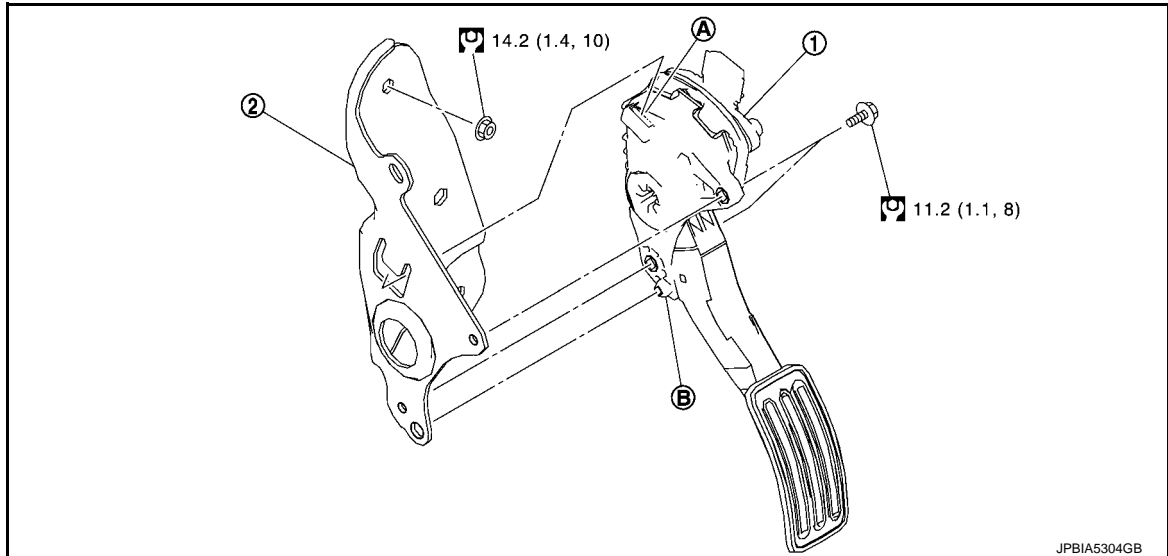
< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION


### ACCELERATOR CONTROL SYSTEM

Exploded View

INFOID:000000012405988



- |                               |                              |
|-------------------------------|------------------------------|
| 1. Accelerator pedal assembly | 2. Accelerator pedal bracket |
| A. Locating hole              | B. Locating pin              |

 : N·m (kg-m, ft-lb)

### Removal and Installation

INFOID:000000012405989

#### REMOVAL

1. Disconnect accelerator pedal position sensor harness connector.
2. Remove accelerator pedal assembly.

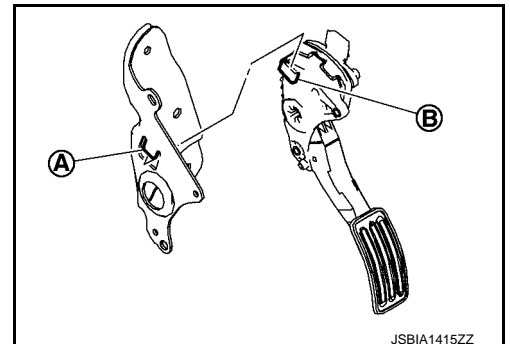
#### CAUTION:

- Never disengage accelerator pedal assembly and bracket.
- Never disassemble accelerator lever. Never remove accelerator pedal position sensor from accelerator lever.
- Avoid impact from dropping etc. during handling.
- Be careful to keep accelerator lever away from water.

#### INSTALLATION

Read the following instructions carefully, and install accelerator pedal assembly in the reverse order of removal.

- Insert pawl (A) of bracket into locating hole (B) of accelerator pedal assembly to tighten the mounting bolts.



# COMPONENT PARTS

[BASE AUDIO WITHOUT SEPARATE DISPLAY]

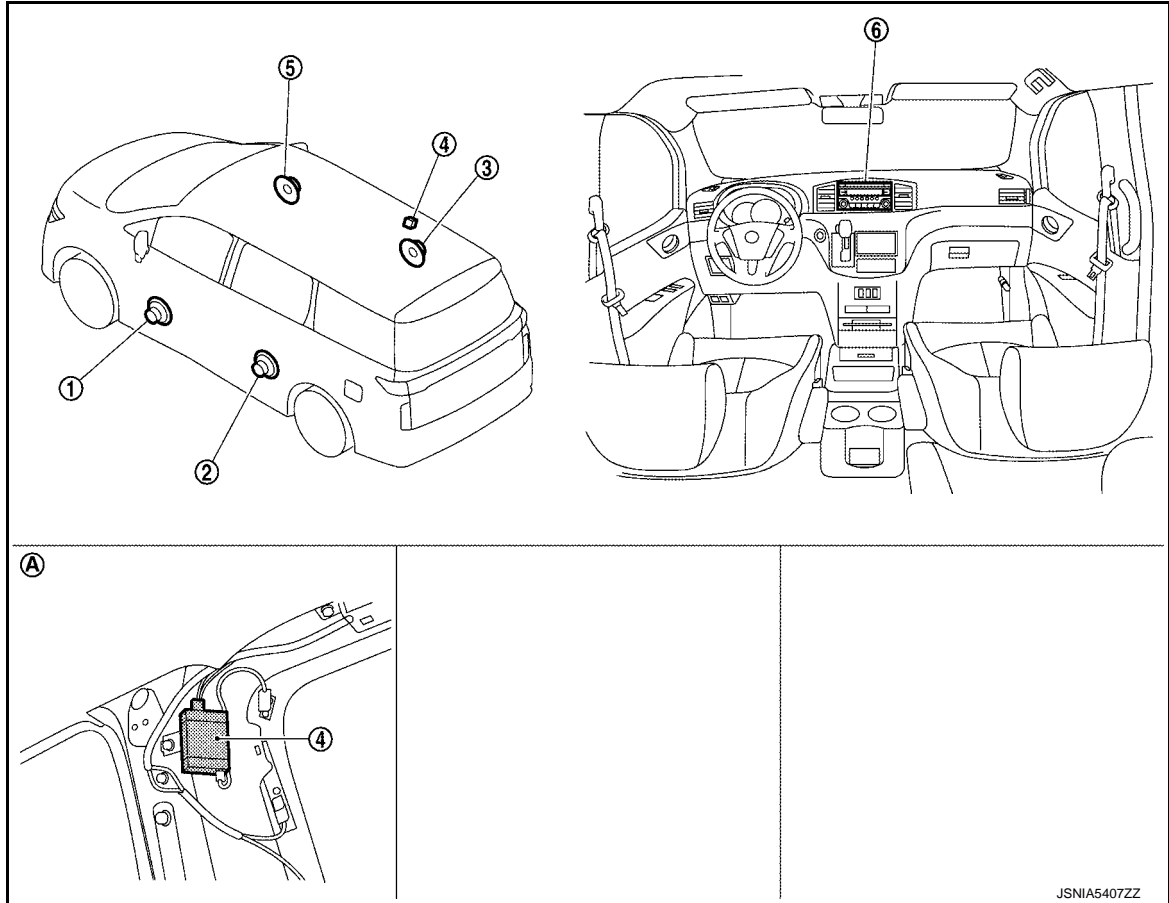
< SYSTEM DESCRIPTION >

## SYSTEM DESCRIPTION

### COMPONENT PARTS

#### Component Parts Location

INFOID:000000012407055



JSNIA5407ZZ

A. Rear pillar garnish (RH) is removed.

| No.   | Component          | Function  |
|-------|--------------------|---|
| 1, 5. | Front door speaker | Refer to <a href="#">AV-16. "Speaker"</a> .   |
| 2, 3. | Slide door speaker |   |
| 4.    | Antenna amp.       | Refer to <a href="#">AV-17. "Antenna amp., Radio Antenna, and Antenna Feeder"</a> . |
| 6.    | Audio unit         | Refer to <a href="#">AV-15. "Audio unit"</a> .                                      |

#### Audio unit

INFOID:000000012407056

#### DESCRIPTION

# BASE AUDIO WITH SEPARATE DISPLAY

< WIRING DIAGRAM >

[BASE AUDIO WITH SEPARATE DISPLAY]

## BASE AUDIO WITH SEPARATE DISPLAY

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 9            | SHIELD        | -                           |
| 10           | R             | -                           |
| 11           | W             | -                           |
| 12           | B             | -                           |
| 13           | SHIELD        | -                           |
| 14           | SHIELD        | -                           |
| 15           | R             | -                           |
| 16           | W             | -                           |
| 17           | B             | -                           |
| 18           | SHIELD        | -                           |
| 19           | G             | -                           |
| 20           | R             | -                           |
| 21           | W             | -                           |
| 22           | B             | -                           |
| 23           | G             | -                           |
| 24           | P             | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | B63          |
| Connector Name | WIRE TO WIRE |
| Connector Type | TPO8KAWAH    |



|                |                     |
|----------------|---------------------|
| Connector No.  | B68                 |
| Connector Name | JOINT CONNECTOR-B15 |
| Connector Type | TK04FWJ             |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | GR            | -                           |
| 2            | B             | -                           |
| 3            | B             | -                           |
| 4            | B             | -                           |

|                |                     |
|----------------|---------------------|
| Connector No.  | B621                |
| Connector Name | JOINT CONNECTOR-B20 |
| Connector Type | A32F2               |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | W             | -                           |
| 2            | W             | -                           |
| 3            | W             | -                           |
| 4            | B             | -                           |
| 5            | B             | -                           |
| 6            | B             | -                           |
| 7            | R             | -                           |
| 8            | R             | -                           |
| 9            | R             | -                           |
| 10           | SHIELD        | -                           |
| 11           | SHIELD        | -                           |
| 12           | SHIELD        | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | B214         |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12M98LCS   |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | SB            | -                           |
| 2            | L             | -                           |
| 4            | BR            | -                           |
| 5            | Y             | -                           |
| 6            | W             | -                           |
| 8            | LG            | -                           |
| 10           | Y             | -                           |
| 11           | G             | -                           |
| 12           | SB            | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | B239         |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MWC5     |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | BR            | - [Without BCS system]      |
| 2            | W             | - [With BCS system]         |
| 3            | Y             | - [Without BCS system]      |
| 5            | Y             | - [Without BCS system]      |
| 6            | O             | -                           |
| 7            | SB            | -                           |
| 8            | R             | -                           |
| 9            | G             | -                           |

|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 10           | O             | -                           |
| 11           | L             | -                           |
| 14           | P             | -                           |
| 15           | LG            | -                           |
| 16           | GR            | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | B257         |
| Connector Name | WIRE TO WIRE |
| Connector Type | CP08MGT-5    |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | W             | -                           |
| 2            | R             | -                           |
| 3            | W             | -                           |
| 4            | G             | -                           |
| 7            | SHIELD        | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | B258         |
| Connector Name | WIRE TO WIRE |
| Connector Type | CP08MGT-5    |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | B             | - [Without S-speakers]      |
| 2            | G             | - [With S-speaker]          |
| 2            | R             | - [Without S-speakers]      |
| 3            | R             | - [With S-speakers]         |
| 3            | W             | - [Without S-speakers]      |
| 4            | B             | - [With S-speakers]         |
| 4            | G             | - [Without S-speakers]      |

# ADDITIONAL SERVICE WHEN REPLACING (AV CONTROL UNIT)

< BASIC INSPECTION >

[BOSE AUDIO WITHOUT NAVIGATION]

## ADDITIONAL SERVICE WHEN REPLACING (AV CONTROL UNIT)

### Description

INFOID:000000012407293

#### BEFORE REPLACEMENT

When replacing AV control unit, save or print current vehicle specification with CONSULT configuration before replacement. Refer to [AV-347, "Work Procedure"](#).

#### AFTER REPLACEMENT

##### **CAUTION:**

When replacing AV control unit, you must perform "After Replace ECU" or "Manual Configuration" with CONSULT.

- Complete the procedure of "After Replace ECU" or "Manual Configuration" in order.
- If you set incorrect "After Replace ECU" or "Manual Configuration", incidents might occur.
- Configuration is different for each vehicle model. Confirm configuration of each vehicle model.

### Work Procedure

INFOID:000000012407294

#### 1. SAVING VEHICLE SPECIFICATION

##### CONSULT Configuration

Perform "Before Replace ECU" to save or print current vehicle specification. Refer to [AV-348, "Description"](#).

##### **NOTE:**

If "Before Replace ECU" can not be used, use the "Manual Configuration".

>> GO TO 2.

#### 2. REPLACE AV CONTROL UNIT

Replace AV control unit. Refer to [AV-398, "Removal and Installation"](#).

>> GO TO 3.

#### 3. WRITING VEHICLE SPECIFICATION

##### CONSULT Configuration

Perform "After Replace ECU" or "Manual Configuration" to write vehicle specification. Refer to [AV-348, "Work Procedure"](#).

>> GO TO 4.

#### 4. OPERATION CHECK

Check that the operation of the AV control unit and camera images (fixed guide lines and predictive course lines) are normal.

>> WORK END

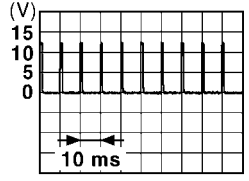
# COMPONENT PARTS

## < SYSTEM DESCRIPTION >

| No. | Component parts                               |                   | Description  |
|-----|---|-------------------|--|
| 2.  | ABS actuator and electric unit (control unit) |                   | Transmit the vehicle speed signal to driver seat control unit via CAN communication.<br>Refer to <a href="#">BRC-9, "Component Parts Location"</a> for detailed installation location.   |
| 3.  | Automatic drive positioner control unit       |                   | Refer to <a href="#">ADP-9, "Automatic Drive Positioner Control Unit"</a> .  |
| 4.  | CVT shift selector (Detention switch)         |                   | <ul style="list-style-type: none"> <li>• Detention switch is installed on CVT shift selector. It is turned OFF when CVT shift selector is in P position.</li> <li>• Driver seat control unit judges that CVT shift selector is in P position if continuity does not exist in this circuit.</li> </ul> Refer to <a href="#">TM-12, "CVT CONTROL SYSTEM : Component Parts Location"</a> for detailed installation location.  |
| 5.  | TCM   |                   | The following signals are transmitted to driver seat control unit via CAN communication. <ul style="list-style-type: none"> <li>• Shift position signal (P range)</li> <li>• Identification of transmission: CVT</li> </ul> Refer to <a href="#">TM-12, "CVT CONTROL SYSTEM : Component Parts Location"</a> for detailed installation location.  |
| 6.  | Combination meter                             |                   | Transmit the vehicle speed signal to driver seat control unit via CAN communication.<br>Refer to <a href="#">MWI-7, "METER SYSTEM : Component Parts Location"</a> for detailed installation location.  |
| 7.  | BCM   |                   | Recognizes the following status and transmits it to driver seat control unit via CAN communication. <ul style="list-style-type: none"> <li>• Handle position: LHD</li> <li>• Driver door: OPEN/CLOSE</li> <li>• Ignition switch position: ACC/ON</li> <li>• Door lock: UNLOCK (with Intelligent key or driver side door request switch operation)</li> <li>• Key ID</li> <li>• Starter: CRANKING/OTHER</li> </ul> Refer to <a href="#">BCS-5, "BODY CONTROL SYSTEM : Component Parts Location"</a> for detailed installation location. |
| 8.  | IPDM E/R                                      |                   | ON/OFF signal of CVT shift selector (detention switch) is transmitted to driver seat control unit via CAN communication.<br>Refer to <a href="#">PCS-4, "IPDM E/R : Component Parts Location"</a> for detailed installation location.  |
| 9.  | Door mirror remote control switch             | Mirror switch     | <ul style="list-style-type: none"> <li>• Mirror switch is integrated in door mirror remote control switch.</li> <li>• It operates angle of door mirror face.</li> <li>• It transmits mirror face adjust operation to automatic drive positioner control unit.</li> </ul> Refer to <a href="#">MIR-6, "Component Parts Location"</a> for detailed installation location.  |
|     |   | Changeover switch | <ul style="list-style-type: none"> <li>• Changeover switch is integrated in door mirror remote control switch.</li> <li>• Changeover switch has three positions (L, N and R).</li> <li>• It changes operating door mirror motor by transmitting control signal to automatic drive positioner control unit.</li> </ul> Refer to <a href="#">MIR-6, "Component Parts Location"</a> for detailed installation location.   |
| 10. | Seat memory switch                            | Set switch        | Refer to <a href="#">ADP-9, "Seat Memory Switch"</a> .   |

# REAR WINDOW DEFOGGER SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

| (+)       |          | (-)    | Voltage (Approx.)  |
|-----------|----------|--------|--|
| A/C amp.  |          |        |  |
| Connector | Terminal |        |  |
| M49       | 27       | Ground |  <p style="text-align: right; font-size: small;">JPMA0012GB</p> |

Is the inspection result normal?

- YES >> GO TO 4.  
 NO >> GO TO 3.

### 3.CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and A/C amp. harness connector.

| BCM       |          | A/C amp.  |          | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal |            |
| M121      | 15       | M49       | 27       | Existed    |

3. Check continuity between BCM harness connector and ground.

| BCM       |          | Ground | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal |        |             |
| M121      | 15       |        | Not existed |

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-99, "Removal and Installation"](#).  
 NO >> Repair or replace harness.

### 4.REPLACE A/C AMP.

1. Turn ignition switch OFF.
2. Replace A/C amp.
3. Turn ignition switch ON.
4. Operate rear window defogger switch and check the operating condition.

Is the inspection result normal?

- YES >> INSPECTION END.  
 NO >> GO TO 5.

### 5.CHECK INTERMITTENT INCIDENT

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

Is the inspection result normal?

- >> INSPECTION END

# U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## SLIDING DOOR LH : Diagnosis Procedure

INFOID:000000012408558

### 1. PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check "Self Diagnostic Result" mode of "AUTO SLIDE DOOR" using CONSULT.

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to [LAN-17, "Trouble Diagnosis Flow Chart"](#).  
NO >> Refer to [GI-41, "Intermittent Incident"](#).

## SLIDING DOOR RH

### SLIDING DOOR RH : Description

INFOID:000000012408559

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Signal Chart. Refer to [LAN-32, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart"](#).

### SLIDING DOOR RH : DTC Logic

INFOID:000000012408560

#### DTC DETECTION LOGIC

| DTC   | CONSULT display description | DTC detecting condition  | Possible cause           |
|-------|-----------------------------|--|--------------------------|
| U1000 | CAN COMM                    | When sliding door control unit cannot communicate CAN communication signal continuously for 2 seconds or more. | CAN communication system |

## SLIDING DOOR RH : Diagnosis Procedure

INFOID:000000012408561

### 1. PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check "Self Diagnostic Result" mode of "AUTO SLIDE DOOR RIGHT" using CONSULT.

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to [LAN-17, "Trouble Diagnosis Flow Chart"](#).  
NO >> Refer to [GI-41, "Intermittent Incident"](#).

# P0300, P0301, P0302, P0303, P0304, P0305, P0306 MISFIRE

[VQ35DE]

< DTC/CIRCUIT DIAGNOSIS >

## P0300, P0301, P0302, P0303, P0304, P0305, P0306 MISFIRE

### DTC Logic

INFOID:000000012406448

#### DTC DETECTION LOGIC

When a misfire occurs, engine speed will fluctuate. If the engine speed fluctuates enough to cause the crankshaft position (CKP) sensor (POS) signal to vary, ECM can determine that a misfire is occurring.

| Sensor                           | Input signal to ECM | ECM function                  |
|----------------------------------|---------------------|-------------------------------|
| Crankshaft position sensor (POS) | Engine speed        | On board diagnosis of misfire |

The misfire detection logic consists of the following two conditions.

- One Trip Detection Logic (Three Way Catalyst Damage)**  
On the 1st trip, when a misfire condition occurs that can damage the three way catalyst (TWC) due to overheating, the MIL will blink.  
When a misfire condition occurs, the ECM monitors the CKP sensor signal every 200 engine revolutions for a change.  
When the misfire condition decreases to a level that will not damage the TWC, the MIL will turn off.  
If another misfire condition occurs that can damage the TWC on a second trip, the MIL will blink.  
When the misfire condition decreases to a level that will not damage the TWC, the MIL will remain on.  
If another misfire condition occurs that can damage the TWC, the MIL will begin to blink again.
- Two Trip Detection Logic (Exhaust quality deterioration)**  
For misfire conditions that will not damage the TWC (but will affect vehicle emissions), the MIL will only illuminate when the misfire is detected on a second trip. During this condition, the ECM monitors the CKP sensor signal every 1,000 engine revolutions.  
A misfire malfunction can be detected in any one cylinder or in multiple cylinders.

| DTC No. | Trouble diagnosis name              | DTC detecting condition     | Possible cause   |
|---------|-------------------------------------|-----------------------------|--|
| P0300   | Multiple cylinder misfires detected | Multiple cylinders misfire. | <ul style="list-style-type: none"><li>• Improper spark plug</li><li>• Insufficient compression</li><li>• Incorrect fuel pressure</li><li>• The fuel injector circuit is open or shorted</li><li>• Fuel injector</li><li>• Intake air leakage</li><li>• The ignition signal circuit is open or shorted</li><li>• Lack of fuel</li><li>• Signal plate</li><li>• A/F sensor 1</li><li>• Incorrect PCV hose connection</li></ul> |
| P0301   | No. 1 cylinder misfire detected     | No. 1 cylinder misfires.    |  |
| P0302   | No. 2 cylinder misfire detected     | No. 2 cylinder misfires.    |  |
| P0303   | No. 3 cylinder misfire detected     | No. 3 cylinder misfires.    |  |
| P0304   | No. 4 cylinder misfire detected     | No. 4 cylinder misfires.    |  |
| P0305   | No. 5 cylinder misfire detected     | No. 5 cylinder misfires.    |  |
| P0306   | No. 6 cylinder misfire detected     | No. 6 cylinder misfires.    |  |

#### DTC CONFIRMATION PROCEDURE

##### 1. PRECONDITIONING

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

1. Turn ignition switch OFF and wait at least 10 seconds.
2. Turn ignition switch ON.
3. Turn ignition switch OFF and wait at least 10 seconds.

>> GO TO 2.

##### 2. PERFORM DTC CONFIRMATION PROCEDURE-I

1. Start engine and warm it up to normal operating temperature.
2. Turn ignition switch OFF and wait at least 10 seconds.
3. Turn ignition switch ON.
4. Turn ignition switch OFF and wait at least 10 seconds.
5. Restart engine and let it idle for approximately 15 minutes.
6. Check 1st trip DTC.

Is 1st trip DTC detected?



# CYLINDER BLOCK

[VQ35DE]

## < UNIT DISASSEMBLY AND ASSEMBLY >

- Piston pin (piston pin hole) grade is provided only for the parts installed at the plant. For service parts, no piston pin grades can be selected. (Only "0" grade is available.)

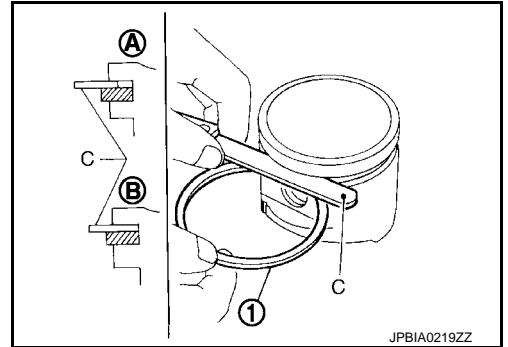
### PISTON RING SIDE CLEARANCE

- Measure the side clearance of piston ring (1) and piston ring groove with a feeler gauge (C).

A : NG  
B : OK

**Standard and limit** : Refer to [EM-138, "Cylinder Block"](#).

- If the measured value exceeds the limit, replace piston ring, and measure again. If it still exceeds the limit, replace piston also.



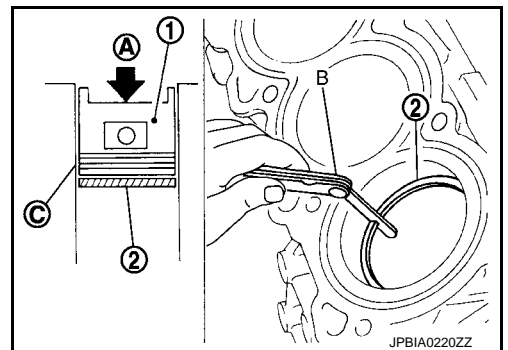
### PISTON RING END GAP

- Check that the cylinder bore inner diameter is within the specification. Refer to [EM-138, "Cylinder Block"](#).
- Lubricate with new engine oil to piston (1) and piston ring (2), and then insert piston ring until middle of cylinder with piston, and measure the piston ring end gap with a feeler gauge (B).

A : Press-fit  
C : Measuring point

**Standard and limit** : Refer to [EM-138, "Cylinder Block"](#).

- If the measured value exceeds the limit, replace piston ring, and measure again. If it still exceeds the limit, rebore cylinder and use oversize piston and piston rings.



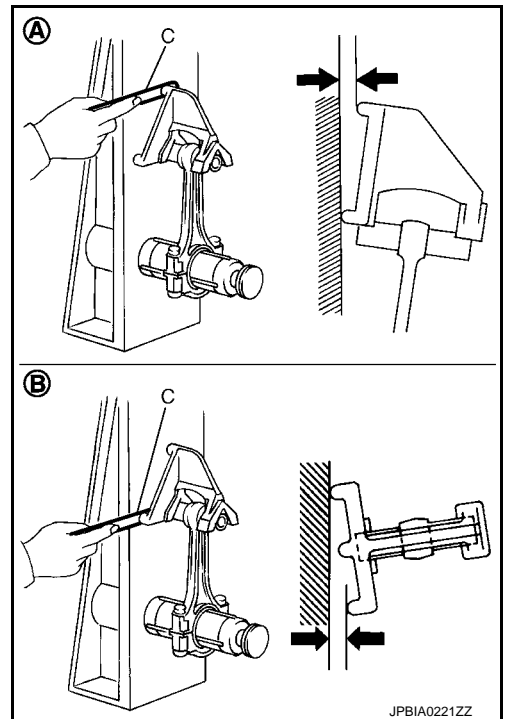
### CONNECTING ROD BEND AND TORSION

- Check with a connecting rod aligner.

A : Bend  
B : Torsion  
C : Feeler gauge

**Bend limit**  
**Torsion limit** : Refer to [EM-138, "Cylinder Block"](#).

- If it exceeds the limit, replace connecting rod assembly.



### CONNECTING ROD BIG END DIAMETER

- Install connecting rod bearing cap without installing connecting rod bearing, and tightening connecting rod bolts to the specified torque. Refer to [EM-109, "Disassembly and Assembly"](#) for the tightening procedure.

# TIGHTENING TORQUE OF STANDARD BOLTS

< HOW TO USE THIS MANUAL >

## DISCRIMINATION OF BOLTS AND NUTS

### BOLTS

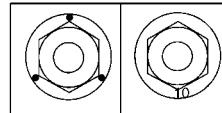
|                      | Grade<br>(Strength)              | Discrimination |                            |
|----------------------|----------------------------------|----------------|----------------------------|
| Previous<br>standard | 4T<br>(392N/mm <sup>2</sup> )    |                | <br>(No number/<br>symbol) |
|                      | 7T<br>(686N/mm <sup>2</sup> )    |                |                            |
|                      | 9T<br>(883N/mm <sup>2</sup> )    |                |                            |
| New<br>Standard      | 4.8<br>(420N/mm <sup>2</sup> )   |                | <br>(No number/<br>symbol) |
|                      | 8.8<br>(800N/mm <sup>2</sup> )   |                |                            |
|                      | 10.9<br>(1040N/mm <sup>2</sup> ) |                |                            |

### NUTS

|                      | Grade<br>(Proof load<br>stress) | Discrimination             |  |                            |
|----------------------|---------------------------------|----------------------------|--|----------------------------|
| Previous<br>standard | 7N<br>(686N/mm <sup>2</sup> )   | <br>(No number/<br>symbol) |  |                            |
|                      | 9N<br>(883N/mm <sup>2</sup> )   |                            |  |                            |
| New<br>Standard      | 8<br>(800N/mm <sup>2</sup> )    |                            |  | <br>(No number/<br>symbol) |
|                      | 10<br>(1040N/mm <sup>2</sup> )  |                            |  |                            |

#### NOTICE:

- A number is assigned on the side of the nuts in some cases.
- A number or symbol is assigned on the upper surface of the flange for the nut with flange.



### MACHINE SCREWS AND TAPPING SCREWS

Shape of the head :

Cross recess for the previous standard

Torx recess for the new standard

| Screw size | Screw diameter | Torx size |
|------------|----------------|-----------|
| M4         | 4.0            | T20       |
| M5         | 5.0            | T20       |
| M6         | 6.0            | T30       |

#### NOTICE:

Use torx size T20 (united with M4 screw) for M5 screw although ISO standard specifies T25.

SAlA0453E

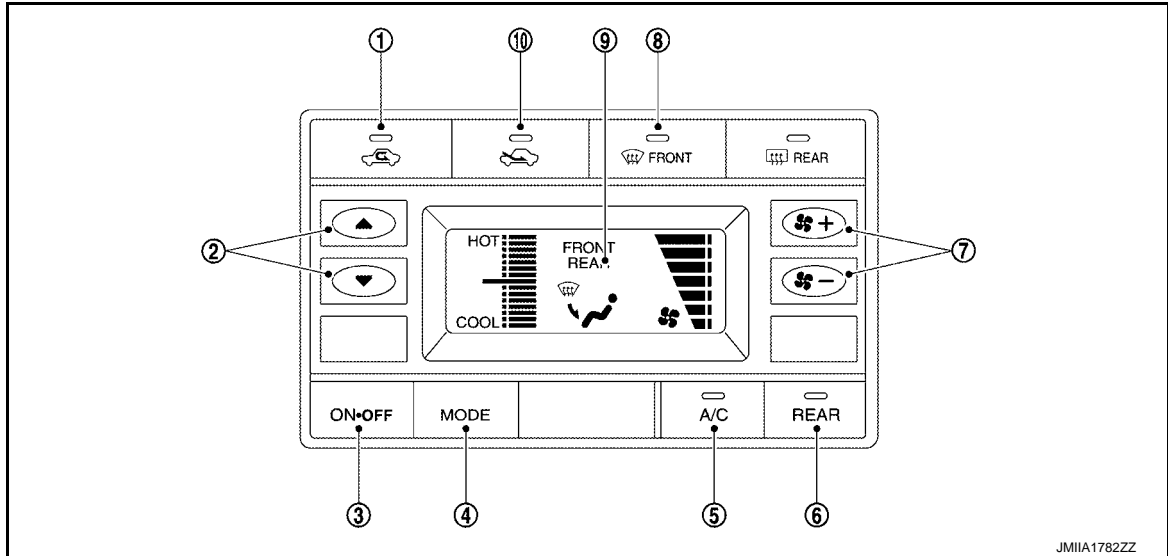
# OPERATION

## < SYSTEM DESCRIPTION >

## [MANUAL AIR CONDITIONING]

- Front A/C control changes to rear air conditioning operation screen when REAR switch is pressed while front air conditioning is ON. "REAR" is indicated on display in front A/C control display. The status continues for 10 seconds, and during this period of time, rear air conditioning setting can be set using front A/C control.
- When 10 seconds are passed, front A/C control returns to front air conditioning operation screen and "REAR" on front A/C control display turns OFF and "FRONT" is indicated. In this case, rear air conditioning setting can be set using rear A/C control.

Operation: Front A/C control



- |                |                               |                  |
|----------------|-------------------------------|------------------|
| 1. REC switch  | 2. Temperature control switch | 3. ON-OFF switch |
| 4. MODE switch | 5. A/C switch                 | 6. REAR switch   |
| 7. Fan switch  | 8. DEF switch                 | 9. Display       |
| 10. FRE switch |                               |                  |


| Switch name                | Function  |
|----------------------------|---|
| Temperature control switch | <p>Air flow temperature can be adjusted according to switch operation.</p> <ul style="list-style-type: none"> <li>• Press ▲: Air flow temperature increases</li> <li>• Press ▼: Air flow temperature decreases</li> </ul>   |
| ON-OFF switch              | <ul style="list-style-type: none"> <li>• Front air conditioning operation screen ("FRONT" is indicated)</li> <li>- Rear air conditioning turns OFF simultaneously with front air conditioning, when this switch is pressed while rear air conditioning is ON.</li> <li>- Rear air conditioning turns ON simultaneously with front air conditioning, and operates according to the previous setting before rear air conditioning is turned OFF, when this switch is pressed again.</li> <li>• Rear air conditioning operation screen ("REAR" is indicated)</li> <li>- Rear air conditioning turns OFF and front A/C control returns to front air conditioning operation screen ("FRONT" is indicated) after 0.5 seconds, when this switch is pressed while rear air conditioning is ON.</li> <li>- Rear air conditioning operates according to the previous setting before rear air conditioning is turned OFF, when this switch is pressed again. A/C switch simultaneously turns ON when A/C switch is OFF.</li> </ul> |
| MODE switch                | <p>Air outlet changes from VENT ⇒ B/L ⇒ FOOT ⇒ VENT each time this switch is pressed.</p>   |
| A/C switch                 | <p>When this switch is pressed, rear air conditioning becomes the following status according to the setting status of air outlet.</p> <ul style="list-style-type: none"> <li>• Rear air conditioning turns OFF simultaneously with compressor control (A/C switch indicator), when this switch is pressed while the setting of air outlet is VENT or B/L.</li> <li>• Compressor control (A/C switch indicator) turns OFF but rear air conditioning remains ON, when this switch is pressed while the setting of air outlet is FOOT.</li> </ul>  |

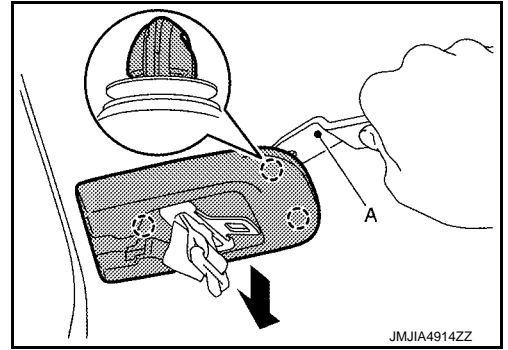
# HEADLINING

## < REMOVAL AND INSTALLATION >

### 12. Remove seat belt finisher.

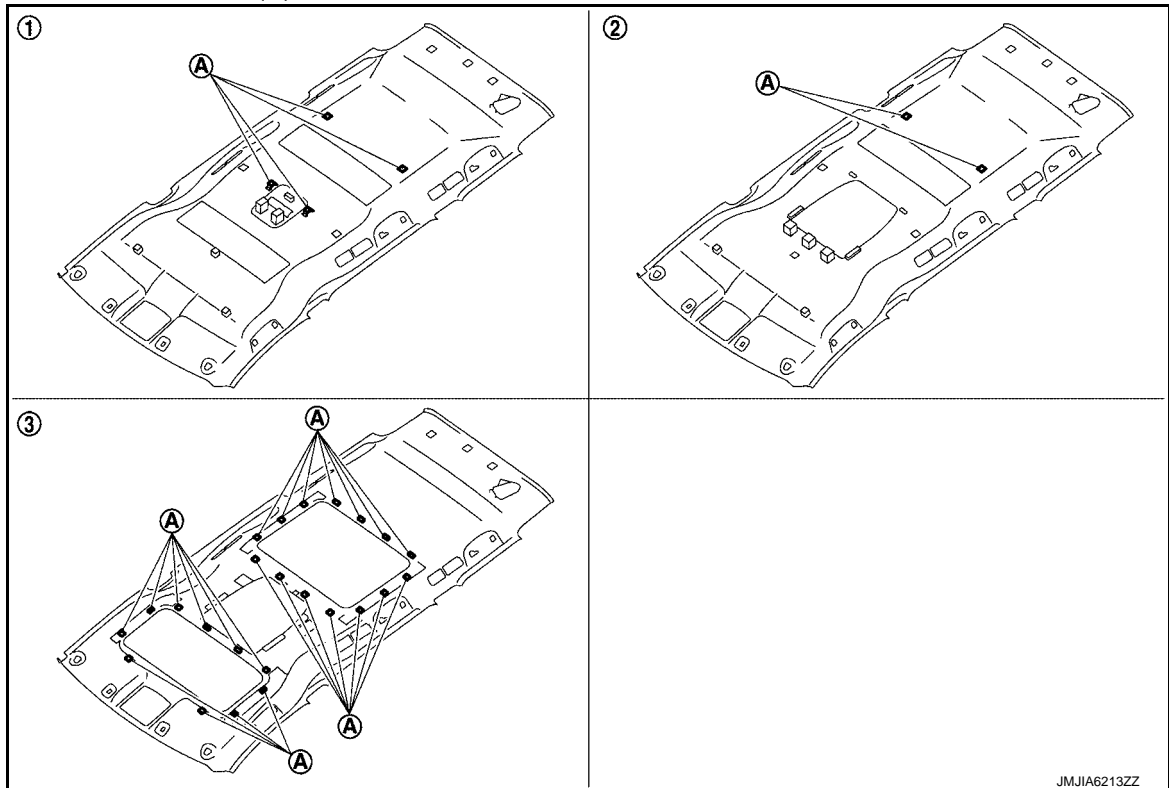
Disengage seat belt finisher fixing clips using a remover tool (A), and then remove seat belt finisher.

 : Clip



### 13. Disengage clips on the rear end of headlining.

### 14. Peel dual lock fastener (A).



1. Normal roof

2. Normal roof with rear display

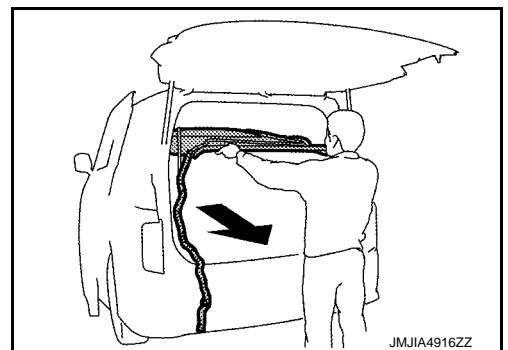
3. Sunroof with rear display

A. Dual lock fastener

### 15. Remove headlining assembly through the back door.

#### **CAUTION:**

- Two workers are required for removal in order to prevent damage.
- Apply protective tape to the portion where contact may occur during work.
- ever bend headlining when removing.



### 16. Remove the following parts after removing headlining assembly.

- Personal lamp assembly: Refer to [INL-81, "Removal and Installation"](#).
- Rear A/C control (without rear display)  
Automatic air conditioning: Refer to [HAC-147, "Removal and Installation"](#).

# ZONE VARIATION SETTING (COMPASS)

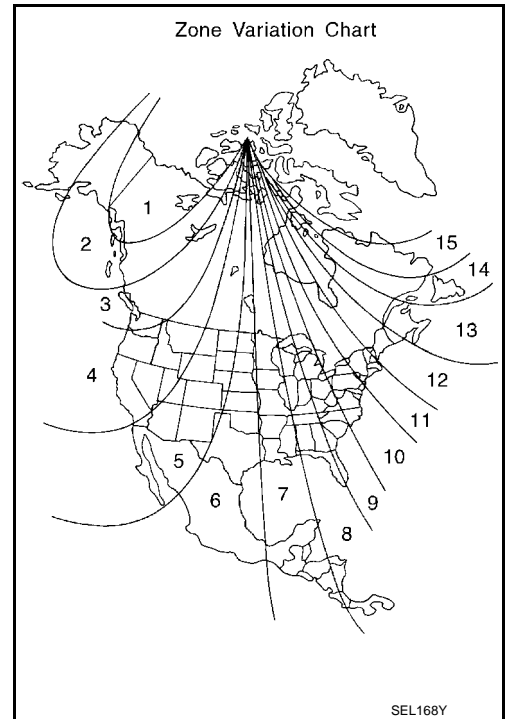
< BASIC INSPECTION >

## ZONE VARIATION SETTING (COMPASS)

### Work Procedure

INFOID:000000012406873

1. Press and hold the compass switch for 3 – 9 seconds.
2. The current zone setting appears on the compass display.
3. Find the current geographical location number in the zone variation chart.
4. Select the new zone number. (Press the compass switch until the new zone number appears on the compass display.)
5. After select the new zone number, the compass display will automatically shows a direction within a few seconds.
6. Perform the following calibration procedure for more accurate indications.



# DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

## DIAGNOSIS SYSTEM (BCM)

### COMMON ITEM

### COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000012409673

### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

| Diagnosis mode           | Function Description  |
|--------------------------|---|
| Work Support             | Changes the setting for each system function.   |
| Self Diagnostic Result   | Displays the diagnosis results judged by BCM.   |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM.   |
| Data Monitor             | The BCM input/output signals are displayed.   |
| Active Test              | The signals used to activate each device are forcibly supplied from BCM.  |
| Ecu Identification       | The BCM part number is displayed.   |
| Configuration            | <ul style="list-style-type: none"> <li>• Read and save the vehicle specification.</li> <li>• Write the vehicle specification when replacing BCM.</li> </ul> |

### SYSTEM APPLICATION

BCM can perform the following functions for each system.

#### NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

x: Applicable item

| System  | Sub system selection item | Diagnosis mode |              |             |
|---|---------------------------|----------------|--------------|-------------|
|   |                           | Work Support   | Data Monitor | Active Test |
| Door lock   | DOOR LOCK                 | x              | x            | x           |
| Rear window defogger  | REAR DEFOGGER             |                | x            | x           |
| Warning chime   | BUZZER                    |                | x            | x           |
| Interior room lamp control system   | INT LAMP                  | x              | x            | x           |
| Exterior lamp   | HEAD LAMP                 | x              | x            | x           |
| Wiper and washer  | WIPER                     | x              | x            | x           |
| Turn signal and hazard warning lamps  | FLASHER                   | x              | x            | x           |
| Air conditioning control system   | AIR CONDITONER            |                | x            | x*          |
| <ul style="list-style-type: none"> <li>• Intelligent Key system</li> <li>• Engine start system</li> </ul> | INTELLIGENT KEY           | x              | x            | x           |
| Combination switch  | COMB SW                   |                | x            |             |
| Body control system   | BCM                       | x              |              |             |
| NVIS  | IMMU                      | x              | x            | x           |
| Interior room lamp battery saver  | BATTERY SAVER             | x              | x            | x           |
| Back door open  | TRUNK                     |                | x            |             |
| Vehicle security system   | THEFT ALM                 | x              | x            | x           |
| RAP system  | RETAINED PWR              |                | x            |             |
| Signal buffer system  | SIGNAL BUFFER             |                | x            | x           |
| TPMS  | AIR PRESSURE MONITOR      | x              | x            | x           |

#### NOTE:

\*: For models with automatic air conditioning control system, this diagnosis mode is not used.

### FREEZE FRAME DATA (FFD)

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

# CLIP LIST

< PREPARATION >

## CLIP LIST

### Clip List

INFOID:000000012409573

| Shapes | Removal & Installation   | Shapes | Removal & Installation   |
|--------|--|--------|--|
|        | <p><b>Removal:</b><br/>Remove by bending up with flat-bladed screwdrivers or clip remover.</p>   |        | <p><b>Removal:</b></p>   |
|        | <p><b>Removal:</b><br/>Remove with a clip remover.</p>   |        | <p><b>Removal:</b></p>   |
|        | <p><b>Removal:</b><br/>Push center pin to catching position. (Do not remove center pin by hitting it.)</p> <p><b>Installation:</b></p> |        | <p><b>Removal:</b><br/>Holder portion of clip must be spread out to remove rod.</p>  |
|        | <p><b>Removal:</b><br/>Remove by bending up with flat-bladed screwdrivers or clip remover.</p>   |        | <p><b>Removal:</b></p> <ol style="list-style-type: none"> <li>Screw out with a Phillips screwdriver.</li> <li>Remove female portion with flat-bladed screwdriver.</li> </ol> |
|        | <p><b>Removal:</b></p>   |        | <p><b>Removal:</b></p> <p>Rotate 45° to remove.</p> <p><b>Installation:</b></p>  |
|        | <p><b>Removal:</b></p>   |        | <p><b>Removal:</b></p>   |

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