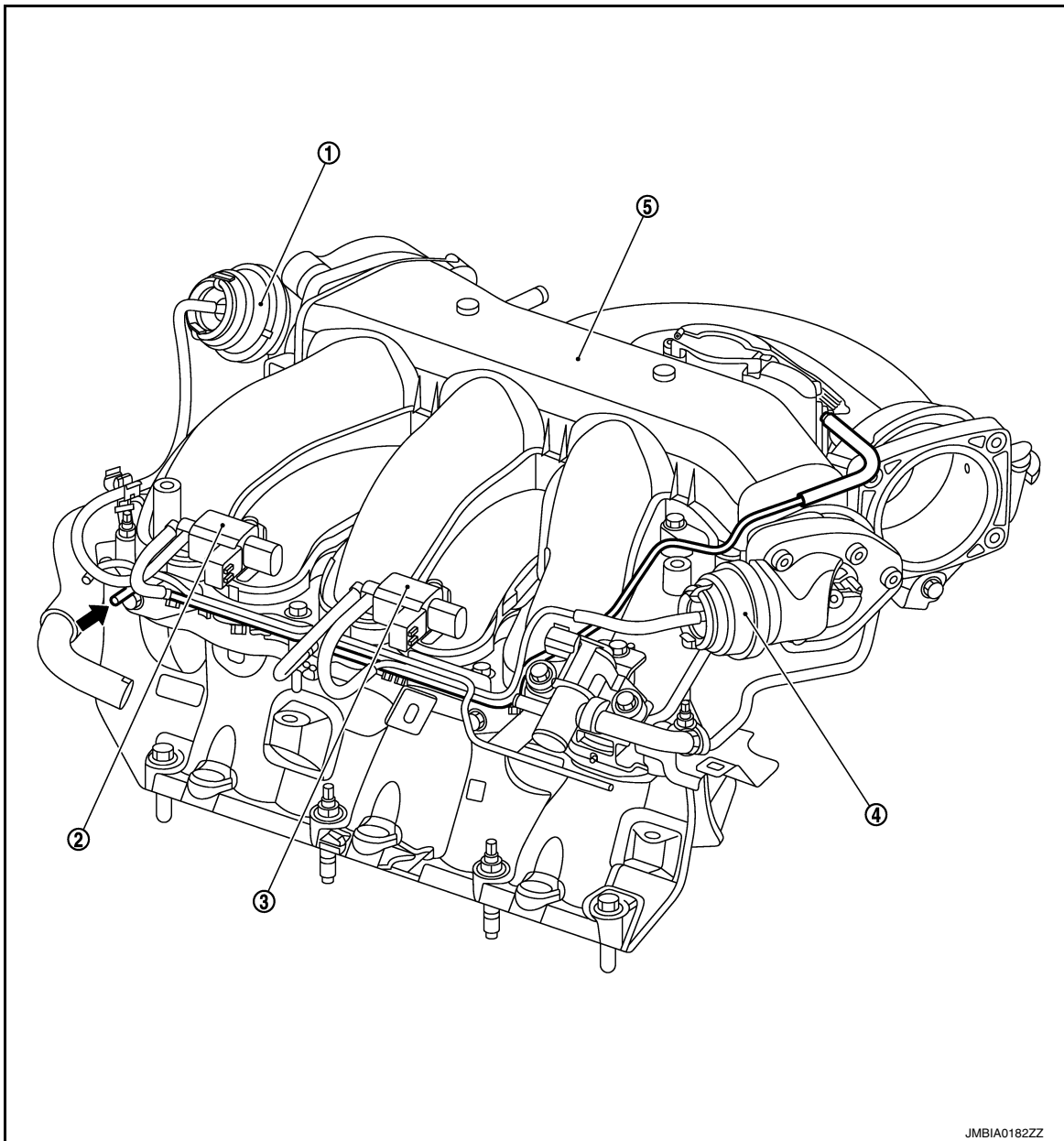


ELECTRONIC CONTROLLED ENGINE MOUNT

< SYSTEM DESCRIPTION >

[VQ35DE]



- | | | |
|---------------------------|----------------------------------|----------------------------------|
| 1. Power valve actuator 1 | 2. VIAS control solenoid valve 1 | 3. VIAS control solenoid valve 2 |
| 4. Power valve actuator 2 | 5. Intake manifold collector | |

← : From next figure

P2122, P2123 APP SENSOR

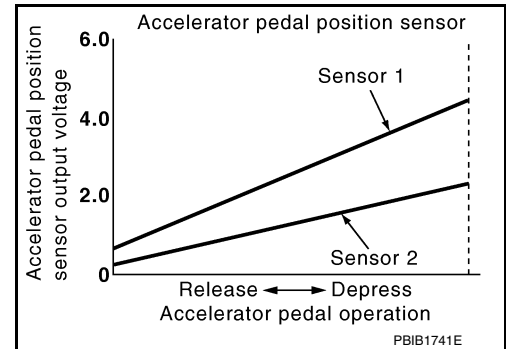
Description

INFOID:0000000010095174

The accelerator pedal position sensor is installed on the upper end of the accelerator pedal assembly. The sensor detects the accelerator position and sends a signal to the ECM.

Accelerator pedal position sensor has two sensors. These sensors are a kind of potentiometer which transform the accelerator pedal position into output voltage, and emit the voltage signal to the ECM. In addition, these sensors send opening and closing speed of the accelerator pedal and feed the voltage signals to the ECM. The ECM judges the current opening angle of the accelerator pedal from these signals and controls the throttle control motor based on these signals.

Idle position of the accelerator pedal is determined by the ECM receiving the signal from the accelerator pedal position sensor. The ECM uses this signal for engine operations such as fuel cut.



DTC Logic

INFOID:0000000010095175

DTC DETECTION LOGIC

NOTE:

If DTC P2122 or P2123 is displayed with DTC P0643, first perform the trouble diagnosis for DTC P0643. Refer to [EC-394, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P2122	Accelerator pedal position sensor 1 circuit low input	An excessively low voltage from the APP sensor 1 is sent to ECM.	<ul style="list-style-type: none"> Harness or connectors [Accelerator pedal position (APP) sensor 1 circuit is open or shorted.] APP sensor 1
P2123	Accelerator pedal position sensor 1 circuit high input	An excessively high voltage from the APP sensor 1 is sent to ECM.	

DTC CONFIRMATION PROCEDURE

1. PRECONDITIONING

If DTC Confirmation Procedure has been previously conducted, always perform the following 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.

TESTING CONDITION:

Before performing the following procedure, confirm that battery voltage is more than 8 V at idle.

>> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

1. Start engine and let it idle for 1 second.
2. Check DTC.

Is DTC detected?

- YES >> Go to [EC-467, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010095176

Regarding Wiring Diagram information, refer to [EC-554, "Wiring Diagram"](#).

1. CHECK GROUND CONNECTION

DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

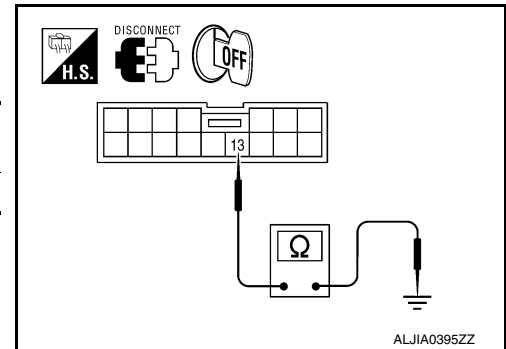
Check continuity between door mirror remote control switch connector and ground.

Door mirror remote control switch connector	Terminal	Ground	Continuity
M108	13		Yes

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.



4. CHECK MIRROR SWITCH

Check mirror switch.

Refer to [ADP-69, "MIRROR SWITCH : Component Inspection"](#).

Is the inspection result normal?

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

NO >> Replace door mirror remote control switch. Refer to [IP-10, "Exploded View"](#).

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-170, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

MIRROR SWITCH : Component Inspection

INFOID:0000000010051766

1. CHECK MIRROR SWITCH

Check door mirror remote control switch.

Terminal		Mirror switch condition	Continuity
Door mirror remote control switch			
4	13	RIGHT	Yes
		Other than above	No
5		LEFT	Yes
		Other than above	No
6		UP	Yes
		Other than above	No
14		DOWN	Yes
		Other than above	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror remote control switch. Refer to [IP-10, "Exploded View"](#).

B2602 SHIFT POSITION

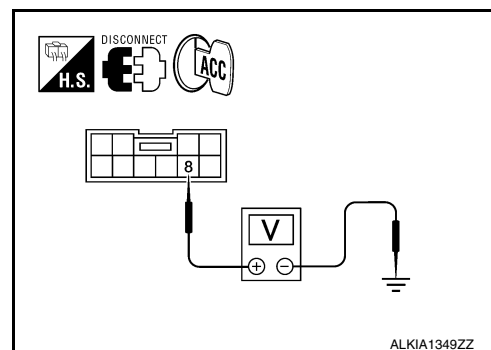
< DTC/CIRCUIT DIAGNOSIS >

- Check voltage between CVT shift selector harness connector M78 terminal 8 and ground.

CVT shift selector		Ground	Voltage [V]
Connector	Terminal		
M78	8	Ground	Battery voltage

Is the inspection result normal?

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



3. CHECK CVT SHIFT SELECTOR POWER SUPPLY CIRCUIT

- Disconnect BCM harness connector.
- Check continuity between BCM harness connector M19 (A) terminal 84 and CVT shift selector harness connector M78 (B) terminal 8.

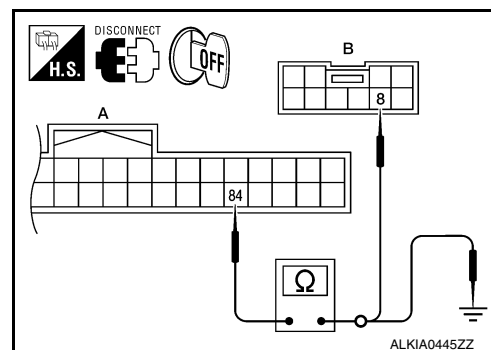
BCM		CVT shift selector		Continuity
Connector	Terminal	Connector	Terminal	
A: M19	84	B: M78	8	Yes

- Check continuity between BCM harness connector M19 (A) terminal 84 and ground.

BCM		Ground	Continuity
Connector	Terminal		
A: M19	84	Ground	No

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-79, "Removal and Installation"](#).
NO >> Repair harness or connector.



4. CHECK CVT SHIFT SELECTOR CIRCUIT

- Disconnect BCM harness connector.
- Check continuity between CVT shift selector harness connector M78 (B) terminal 9 and BCM harness connector M19 (A) terminal 87.

BCM		CVT shift selector		Continuity
Connector	Terminal	Connector	Terminal	
A: M19	87	B: M78	9	Yes

- Check continuity between BCM harness connector M19 (A) terminal 87 and ground.

BCM		Ground	Continuity
Connector	Terminal		
A: M19	87	Ground	No

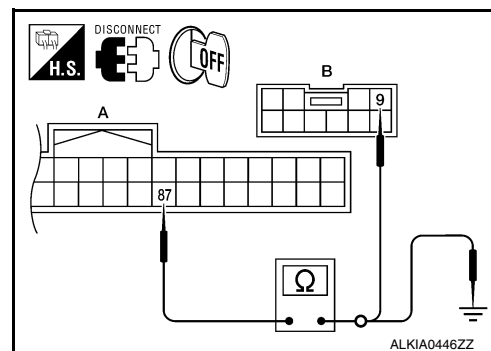
Is the inspection result normal?

- YES >> GO TO 5.
NO >> Repair harness or connector.

5. CHECK CVT SHIFT SELECTOR

Refer to [SEC-52, "Component Inspection"](#).

Is the inspection result normal?



POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

< ECU DIAGNOSIS INFORMATION >

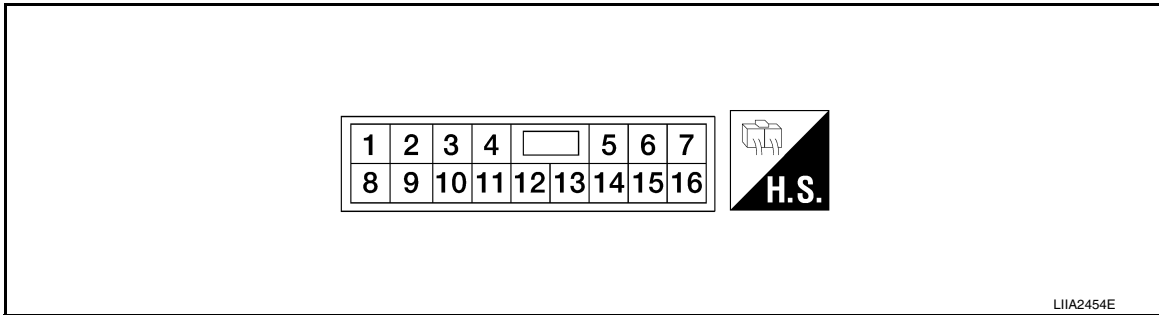
[LH&RH FRONT WINDOW ANTI-PINCH]

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Reference Value

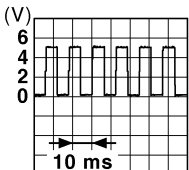
INFOID:000000010051256

TERMINAL LAYOUT



PHYSICAL VALUES

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Terminal No.		Description		Condition	Voltage [V] (Approx.)
+	-	Signal name	Input/ Output		
3 (W)	Ground	Encoder ground	—	—	0
4 (BR)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates.	10
8 (L)	9	Power window motor UP signal	Output	When power window motor is operated UP.	Battery voltage
9 (LG)	8	Power window motor DOWN signal	Output	When power window motor is operated DOWN.	Battery voltage
10 (P)	Ground	Battery power supply	Input	—	Battery voltage
11 (B)	Ground	Ground	—	—	0
12 (G)	3	Encoder pulse signal 1	Input	When power window motor operates.	

JMK1A0070GB

FRONT SUNROOF GLASS

< REMOVAL AND INSTALLATION >

[WITH DUAL PANEL SUNROOF]

FRONT SUNROOF GLASS

Removal and Installation

INFOID:000000009465752

REMOVAL

1. Remove the wind deflector. Refer to [RF-168, "Removal and Installation"](#).
2. Tape down the glass lid weatherstrip along the front sunroof glass with protective tape.
3. Apply protective tape around the front sunroof glass to protect the surface from damage.
4. Cut adhesive.
 - Pass piano wire through the adhesive with a wire pierce.
 - Tie piano wire on both ends to assist in wire grip.
 - Pull piano wire with a sawing motion to cut through the adhesive.
5. Remove the front sunroof glass.

INSTALLATION

WARNING:

- Keep heat and open flames away as primers and adhesive are flammable.
- The materials contained in the kit are harmful if swallowed, and may irritate skin and eyes. Never let them contact the skin or eyes.
- Use in an open, well ventilated location. Never breathe the vapors. They may be harmful if inhaled. Move immediately to an area with fresh air if affected by vapor inhalation.

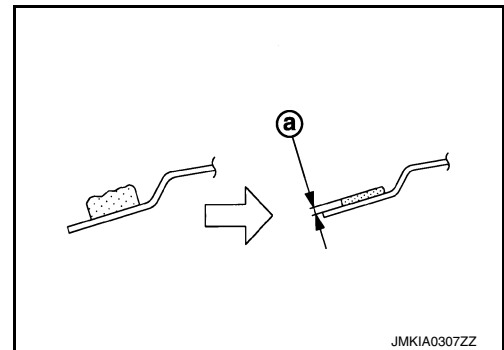
NOTE:

- Use a genuine Nissan Urethane Adhesive Kit (if available) or an equivalent and follow the instructions furnished with it.
- Inform the customer that the vehicle should remain stationary until the urethane adhesive has completely cured (approximately 24 hours). Curing time varies with temperature and humidity.

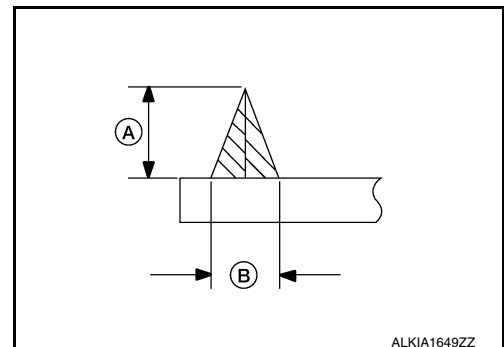
1. Using a knife or spatula, trim the adhesive (sealant) remaining on body down to approximately 2 mm thick (a) so that the contour becomes smooth.

CAUTION:

If bonded area on body is scratched, be sure to repair it with a 2-component urethane. Do not use lacquer.



2. When installing new front sunroof glass, position the front sunroof glass (no adhesive) first onto the vehicle and paint mating marks on the body and the front sunroof glass, then remove it again.
3. Thoroughly clean bonding area on the front sunroof glass and the body with isopropyl alcohol or equivalent.
4. Apply primer to the body and the front sunroof glass (lower) surfaces.
5. Apply adhesive to the contact areas of the body within the time specified in the instructions for the adhesive.
 - Open adhesive by cutting off the nozzle tip and set it in a sealant gun.
 - Form a continuous bead of adhesive resembling the measurements in applied thickness (A), and in applied width (B) on the body panel.



TURN SIGNAL AND HAZARD WARNING LAMPS

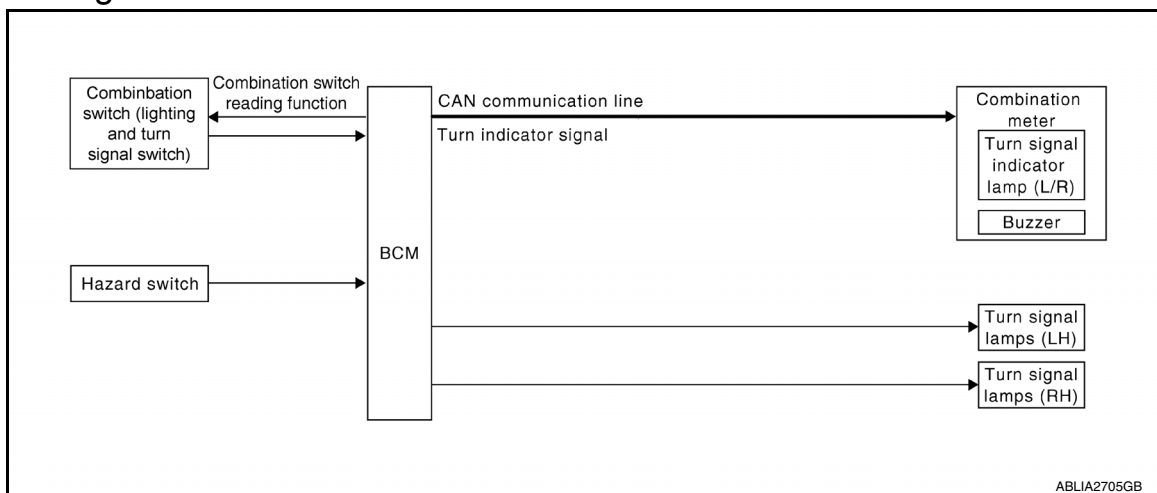
< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

System Diagram

INFOID:0000000010051037



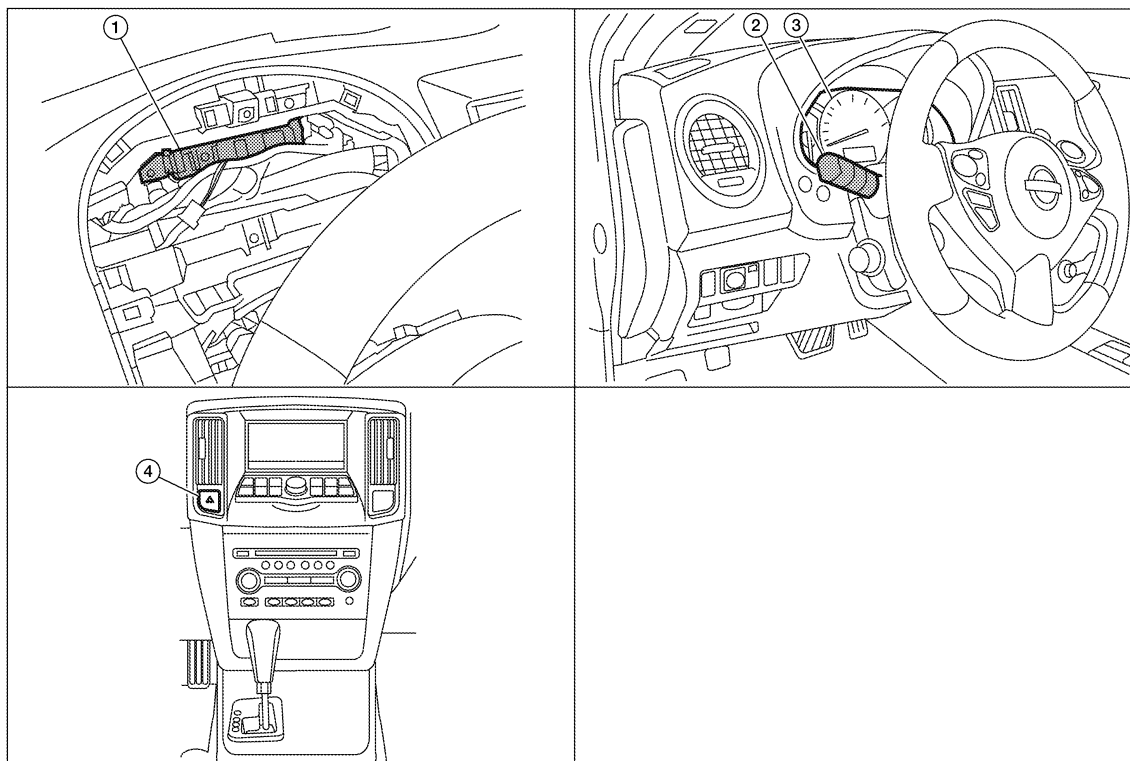
System Description

INFOID:0000000010051038

- BCM (Body Control Module) controls turn signal lamp (RH and LH) and hazard warning lamp operation.
- Combination meter operates turn signal indicator (RH and LH) according to CAN communication signals from BCM.

Component Parts Location

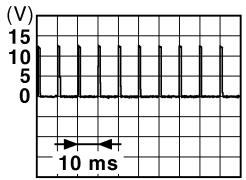
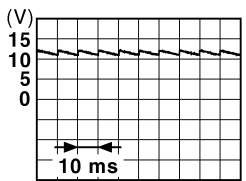
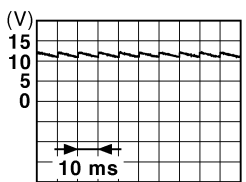
INFOID:0000000010051039



1. BCM M16, M17, M18, M19 (view with combination meter removed)
2. Combination switch (lighting and turn signal switch) M28
3. Combination meter M24
4. Hazard switch M54

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
140 (BR)	Ground	Engine switch (push switch)	Input	Engine switch (push switch)	Pressed	0V
					Not pressed	Battery voltage
141 (BR)	Ground	Trunk opener request switch	Input	Trunk opener request switch	ON (pressed)	0V
					OFF (not pressed)	
144 (GR)	Ground	Request switch buzzer	Output	Request switch buzzer	Sounding	0V
					Not sounding	Battery voltage
147 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0V
					Not pressed	Battery voltage
148 (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	
					ON (when rear door RH opens)	0V
149 (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	
					ON (when rear door LH opens)	0V

Fail Safe

INFOID:000000010054173

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Erase DTC
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent <ul style="list-style-type: none"> • Starter control relay signal • Starter relay status signal

BATTERY

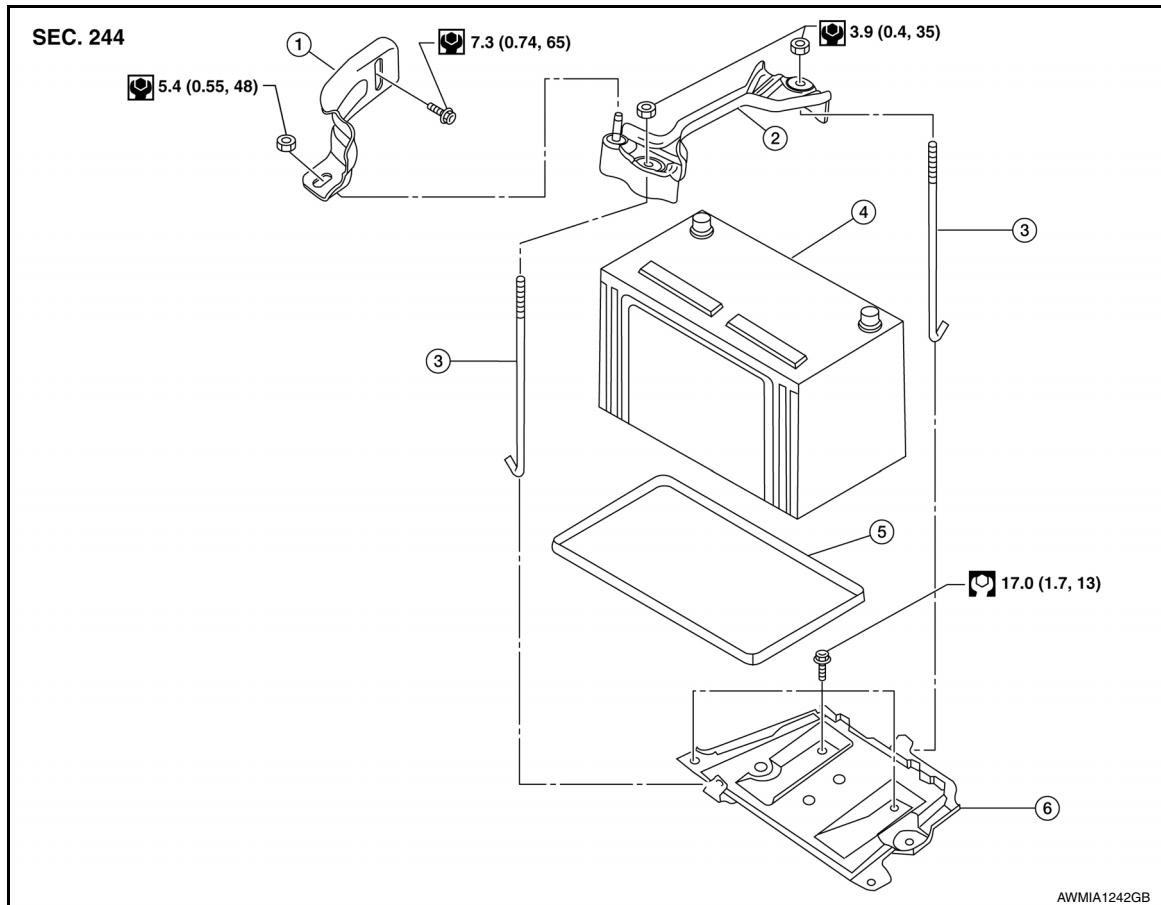
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

BATTERY

Exploded View

INFOID:000000009465156



- | | | |
|----------------------|-----------------------|-----------------|
| 1. Upper ECM bracket | 2. Battery frame | 3. Battery rods |
| 4. Battery | 5. Battery tray liner | 6. Battery tray |

Removal and Installation (Battery)

INFOID:000000009465157

REMOVAL

1. Loosen battery cable assembly nuts, and disconnect both battery terminals.

CAUTION:

When disconnecting, disconnect the negative terminal first.

2. Remove upper ECM bracket nut and bolt and ECM upper bracket.
3. Remove battery rod nuts and battery frame.
4. Remove battery.

INSTALLATION

Installation is in the reverse order of removal.

Battery cable assembly nut : 5.4 N·m (0.55 kg-m, 48 in-lb)

CAUTION:

When connecting, connect the positive terminal first.

Reset electronic systems as necessary. Refer to [PG-5, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement"](#).

AUDIO DISPLAY UNIT

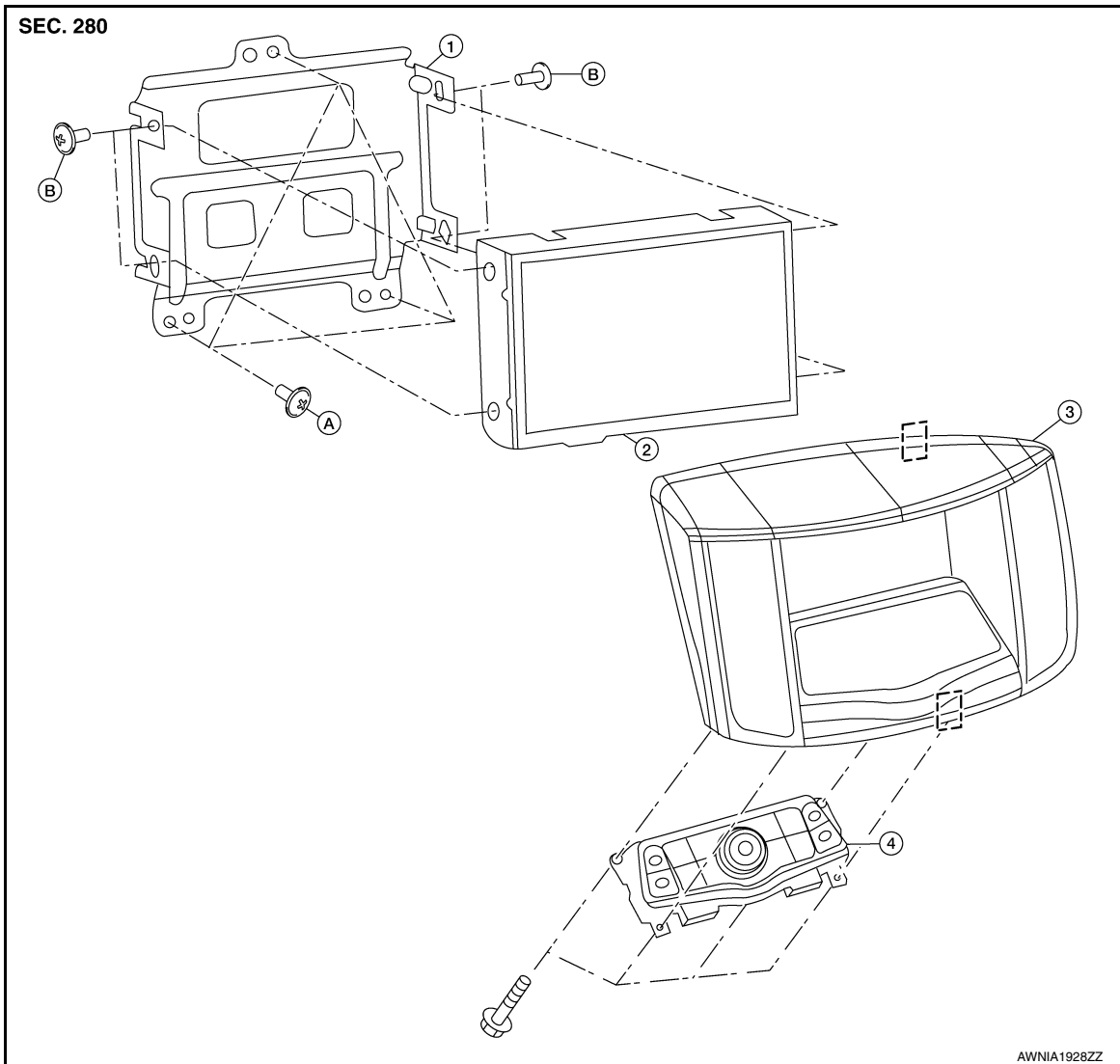
< REMOVAL AND INSTALLATION >

[COLOR DISPLAY - W/O BOSE]

AUDIO DISPLAY UNIT

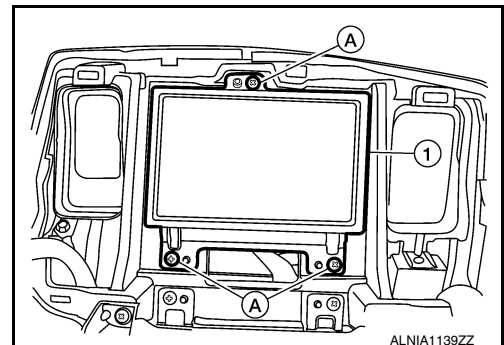
Removal and Installation

INFOID:000000010064930



REMOVAL

1. Remove the cluster lid D. Refer to [IP-11, "Removal and Installation"](#).
2. Remove the audio display unit bracket screws (A).
3. Pull out the audio display unit and bracket assembly (1).
4. Disconnect the harness connectors from the audio display unit and bracket assembly (1) and remove.



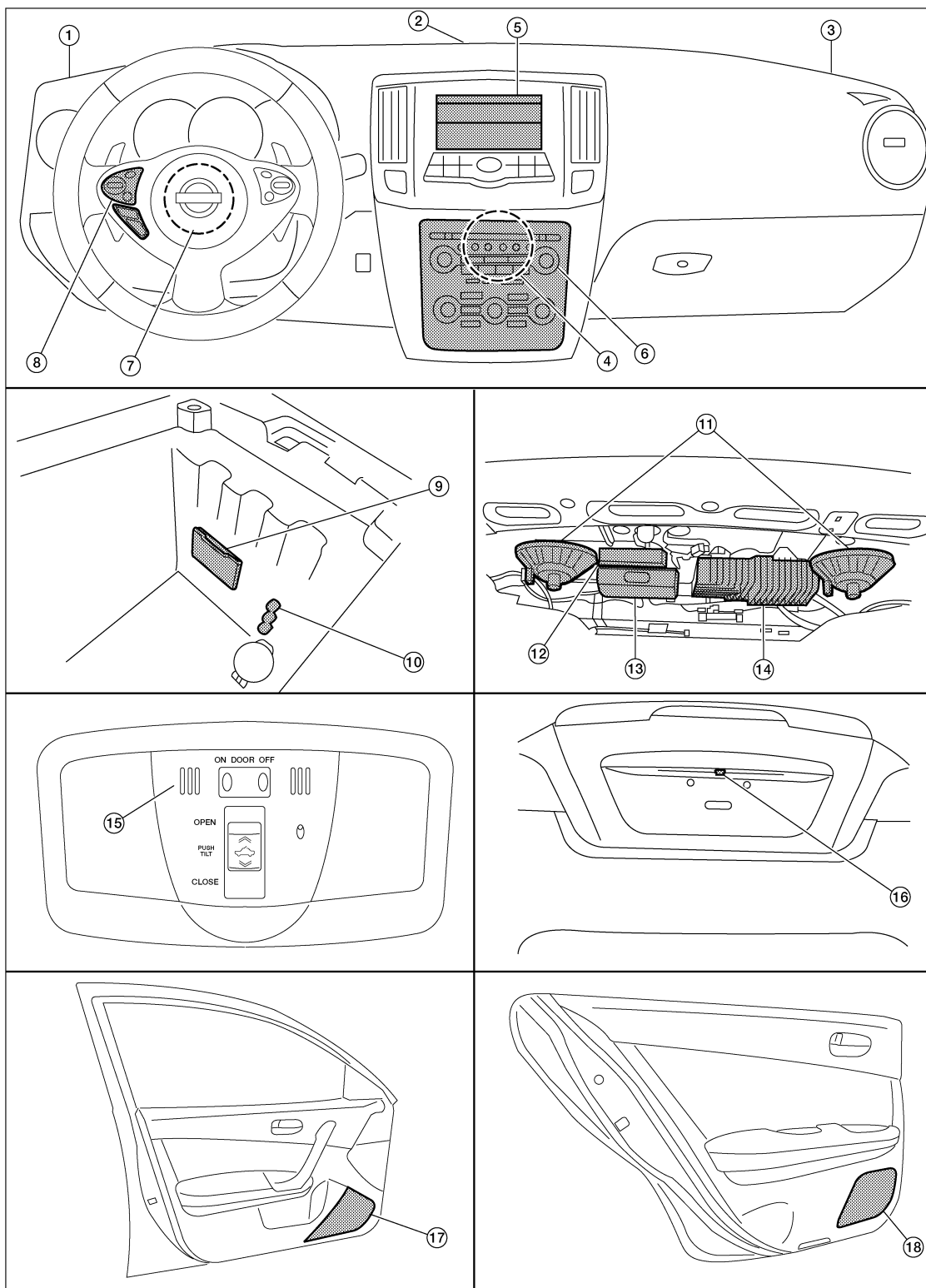
AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[COLOR DISPLAY - W/ BOSE]

Component Parts Location

INFOID:000000009471288



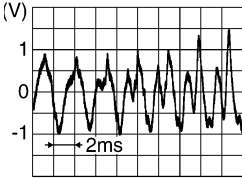
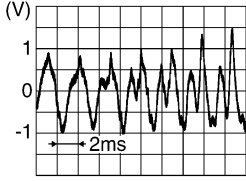
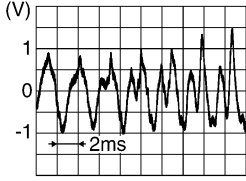
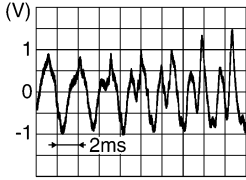
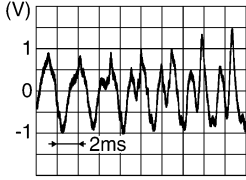
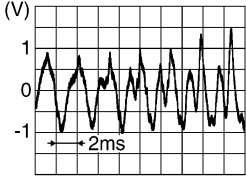
AWNIA3231ZZ

- | | | |
|---|------------------------|-----------------------------------|
| 1. Tweeter LH M51 | 2. Center speaker M130 | 3. Tweeter RH M52 |
| 4. AV control unit M152, M153, M154, M155, M156, M157, M158, M159 (located behind A/C and AV switch assembly) | 5. Display unit M141 | 6. A/C and AV switch assembly M98 |

BOSE SPEAKER AMP

< ECU DIAGNOSIS INFORMATION >

[COLOR DISPLAY - W/ BOSE]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
13 (L)	8 (P)	Audio signal subwoofer LH	Output	Ignition switch ON	Audio output	 SKIB3609E
14 (LG)	9 (O)	Audio signal rear door RH	Output	Ignition switch ON	Audio input	 SKIB3609E
18 (W)	19 (B)	Audio signal rear door RH	Output	Ignition switch ON	Audio input	 SKIB3609E
20 (SB)	Ground	Amp. ON signal	Input	Ignition switch ACC	—	Battery voltage
24 (GR)	23 (L)	Audio signal rear LH	Input	Ignition switch ON	Audio input	 SKIB3609E
26 (BR)	25 (L)	Audio signal rear RH	Input	Ignition switch ON	Audio input	 SKIB3609E
28 (G)	15 (L)	Audio signal rear door LH	Output	Ignition switch ON	Audio output	 SKIB3609E

A
B
C
D
E
F
G
H
I
J
K
L
M
O
P

AV

BOSE SPEAKER AMP

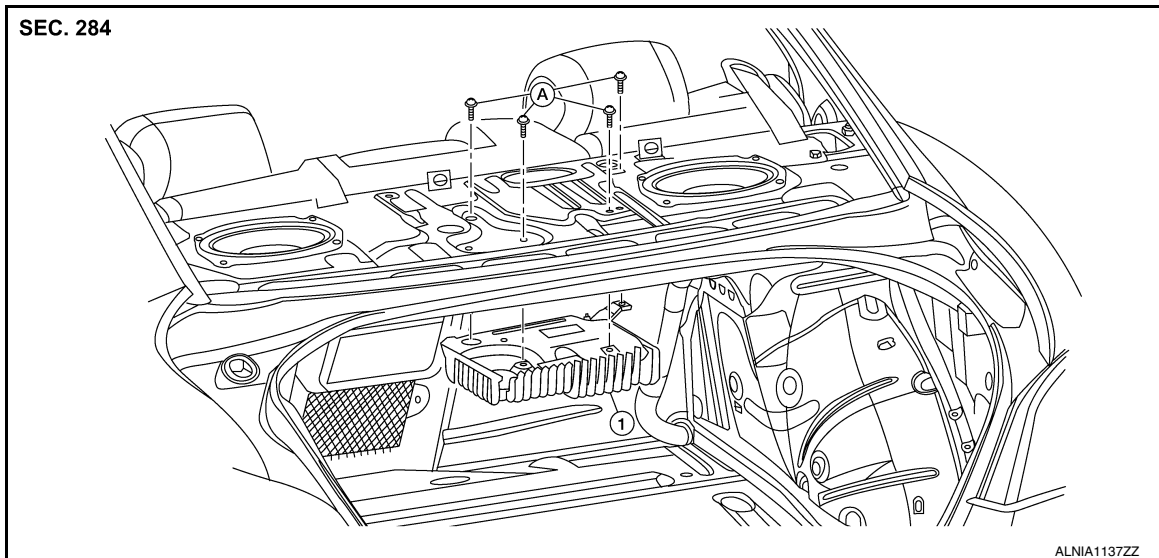
< REMOVAL AND INSTALLATION >

[COLOR DISPLAY - W/ BOSE]

BOSE SPEAKER AMP

Removal and Installation

INFOID:000000009471407



1. Bose speaker amp.

A. Screws

REMOVAL

NOTE:

If removing the BOSE speaker amp. bracket, it is necessary to remove the parcel shelf finisher. The BOSE speaker amp. can be removed without removing the BOSE speaker amp. bracket.

1. Disconnect the battery negative terminal. Refer to [PG-67, "Removal and Installation \(Battery\)"](#).
2. Remove the trunk upper finisher. Refer to [INT-23, "Exploded View"](#).
3. Remove the Bose speaker amp. screws.
4. Disconnect the harness connector from the BOSE speaker amp. and remove.

INSTALLATION

Installation is in the reverse order of removal.

A
B
C
D
E
F
G
H
I
J
K
L
M
O
P

AV

CHASSIS AND BODY MAINTENANCE

< PERIODIC MAINTENANCE >

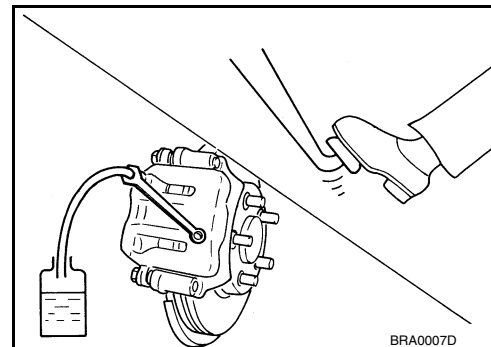
BRAKE FLUID : Drain and Refill

INFOID:000000009471130

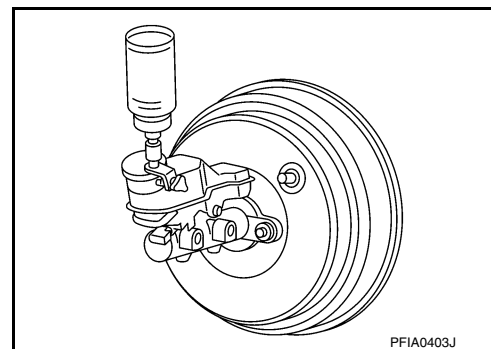
CAUTION:

- Refill with new brake fluid. Refer to [MA-15, "FOR USA AND CANADA : Fluids and Lubricants"](#) (for United States and Canada) or [MA-16, "FOR MEXICO : Fluids and Lubricants"](#) (for Mexico).
- Do not reuse drained brake fluid.
- Do not let brake fluid splash on the painted surfaces of the body. This might damage the paint. If brake fluid is splashed on painted areas, wash it away with water immediately.
- Before working, disconnect ABS actuator and electric unit (control unit) connector or battery negative terminal.

1. Turn ignition switch OFF and disconnect ABS actuator and electric unit (control unit) connector or battery negative terminal.
2. Connect a vinyl tube to bleed valve.
3. Depress brake pedal, loosen bleed valve, and gradually remove brake fluid.



4. Make sure there is no foreign material in the reservoir tank, and refill with new brake fluid.
5. Rest foot on brake pedal. Loosen bleed valve. Slowly depress brake pedal until it stops. Tighten bleed valve. Release brake pedal. Repeat the process a few times, then pause to add new brake fluid to master cylinder. Continue until the new brake fluid flows out of bleed valve. Bleed the air out of the brake hydraulic system. Refer to [BR-16, "Bleeding Brake System"](#).



FRONT BRAKE

FRONT BRAKE : Inspection of Pad

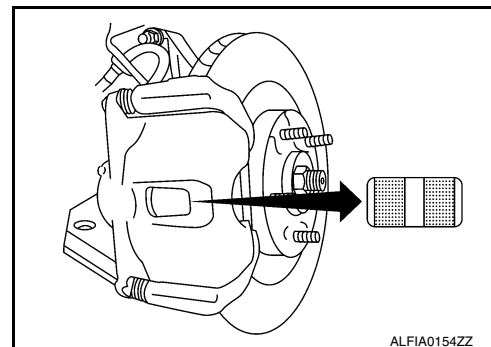
INFOID:000000009471131

PAD WEAR

- Check pad thickness from the inspection hole on cylinder body. Check using a scale if necessary.

Standard thickness : Refer to [BR-46, "Front Disc Brake"](#).

Minimum thickness : Refer to [BR-46, "Front Disc Brake"](#).



FRONT BRAKE : Inspection of Rotor

INFOID:000000009471132

VISUAL

Check surface of disc rotor for uneven wear, cracks, and serious damage. Replace as necessary.

RUNOUT