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NISSAN
370Z
MODEL Z34 SERIES

QUICK REFERENCE INDEX

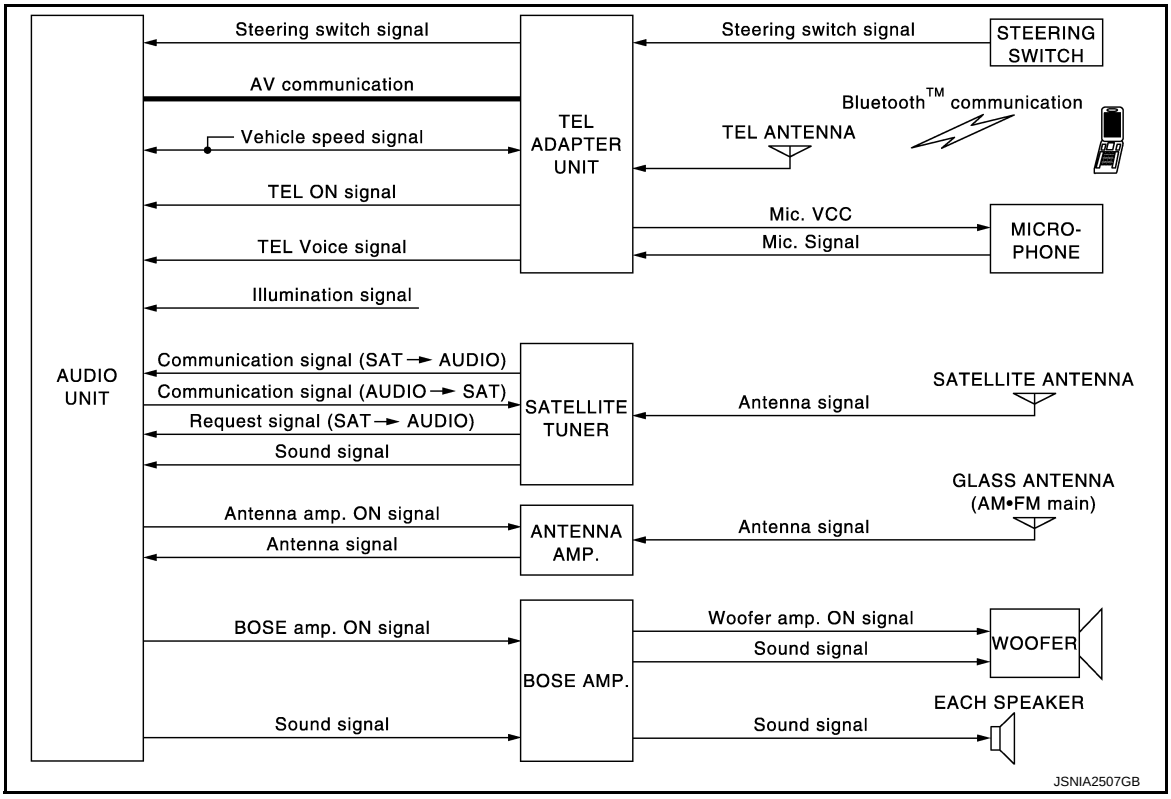
HANDS-FREE PHONE SYSTEM

System Diagram

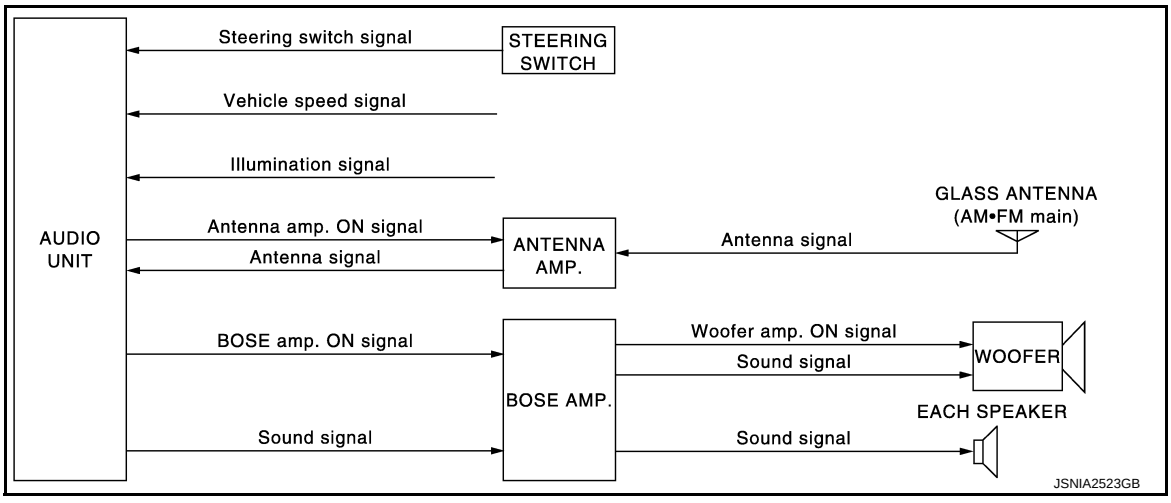
INFOID:0000000005511713

COUPE MODELS

Except For MEXICO Models



For MEXICO Models



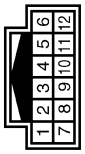
NOTE:
Woofer, illustrated in the above figure, integrates two woofers and a woofer amp.

BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	O	–
3	LG	–
4	O	–
6	V	–
7	LG	–
8	SB	–
9	GR	–
11	Y	–
12	V	–
13	BR	–
14	V	–
15	B	–
16	V	–
20	SB	–
21	G	–
22	GR	–
23	V	–
24	R	–
25	L	–
26	P	–
31	W	–
32	B	–
33	W	–
34	R	–
35	B	–
40	L	–
41	R	–
42	GR	–
43	R	– [Coupe models]
43	V	– [Roadster models]
44	R	–
45	O	–
46	G	– [With A/T]
46	SB	– [With M/T]
47	R	– [With A/T]
47	V	– [With M/T]
48	SHIELD	–
51	V	–
52	R	–
57	SHIELD	–
58	B	–
60	L	– [Coupe models]
60	V	– [Roadster models]
61	R	– [Coupe models]
61	SB	– [Roadster models]
62	SHIELD	–
63	R	– [Coupe models]
63	BR	– [Roadster models]
64	G	– [Coupe models]
64	Y	– [Roadster models]
65	SHIELD	–
66	LG	– [Coupe models]
66	P	– [Roadster models]
67	V	– [Coupe models]
67	L	– [Roadster models]
68	SHIELD	–
69	L	– [Coupe models]
69	R	– [Roadster models]
70	P	– [Coupe models]
70	G	– [Roadster models]
71	V	–
72	P	–
73	BR	–
74	GR	–
75	O	–
80	Y	–
81	W	–
82	BR	–
83	GR	–
84	L	–
85	LG	–
86	V	–
87	BR	–
88	SB	–
93	Y	–
94	SB	– [Coupe models]
94	L	– [Roadster models]
95	GR	– [Coupe models]
95	W	– [Roadster models]
96	L	–
97	LG	– [Coupe models]
97	Y	– [Roadster models]
98	BG	– [Coupe models]
98	Y/B	– [Roadster models]
99	W	–
100	B	–

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

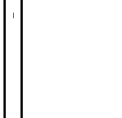


Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
2	B	–
3	R	–
4	B	–
5	V	–
6	R	–
7	SHIELD	–
8	R	–
9	G	–
10	B	–
11	G	–
12	Y	–

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
2	Y	–
3	LG	–
4	LG	–
5	V	–
6	V	–
7	L	–
11	LG	–
12	Y	–
13	W	–
14	L	–
15	W	–
16	L	–

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-1V



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	–
25	SB	–
26	W	– [Coupe models]
26	BR	– [Roadster models]
31	L	–
32	Y	–
33	B	–
34	LG	–

Connector No.	M41
Connector Name	TWEETER LH
Connector Type	TK02FBR

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	–
2	W	–

JCNWM3112GB

BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH

H.S.

8 7 6 5 4 3 2 1
16 15 14 13 12 11 10 9

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–
5	R	–
6	B	–
7	P	–
8	R	–
11	B	–
12	Y	–
13	G	–
14	SHIELD	–
15	R	–
16	G	–

Connector No.	R11
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

H.S.

6 5 4 3 2 1
12 11 10 9 8 7

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	B	–
3	R	–
4	B	–
5	V	–
6	R	–
7	SHIELD	–
8	R	–
9	G	–
10	B	–
11	G	–
12	Y	–

Connector No.	R5
Connector Name	MICROPHONE
Connector Type	TK04FW

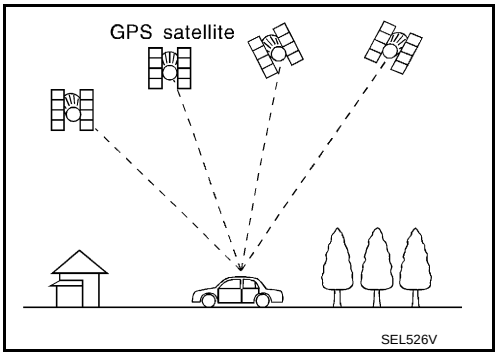
H.S.

1 2 3 4

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	MICROPHONE SIGNAL
2	SHIELD	SHIELD
4	L	MICROPHONE VCC

JCNWM3115GB

GPS (Global Positioning System) is developed for and is controlled by the US Department of Defense. The system utilizes GPS satellites (NAVSTAR), transmitting out radio waves while flying on an orbit around the earth at an altitude of approximately 21,000 km (13,049 mile).
The receiver calculates the travel position in three dimensions (latitude/longitude/altitude) according to the time lag of the radio waves that four or more GPS satellites transmit (three-dimensional positioning). The GPS receiver calculates the travel position in two dimensions (latitude/longitude) with the previous altitude data if the GPS receiver receives only three radio waves (two-dimensional positioning). GPS position correction is not performed while stopping the vehicle.



Accuracy of the GPS will deteriorate under the following conditions:
- In two-dimensional positioning, GPS accuracy will deteriorate when altitude of the vehicle position changes.
- The position of GPS satellite affects GPS detection precision. The position detection may not be precisely performed.
- The position detection is not performed if GPS receiver does not receive radio waves from GPS satellites. (Inside a tunnel, parking in a building, under an elevated highway etc.) GPS receiver may not receive radio waves from GPS satellites if any object is placed on the GPS antenna.

NOTE:
- The detection result has an error of approximately 10 m (32.81 ft) even with a high-precision three dimensional positioning.
- There may be cases when the accuracy is lowered and radio waves are stopped intentionally because the GPS satellite signal is controlled by the US trace control center.

AUDIO FUNCTION

The audio system is equipped with the following functions. Each function is operated with multifunction switch, preset switch, touch panel, steering switch or voice recognition. Operation status of audio is indicated at front display unit.

FUNCTION
AM/FM radio
Satellite radio
CD
Bluetooth™ audio
Music Box (Hard Disk Drive)
Sound equalizer automatic switching (Roadster models)

Operating Signal

Audio system operation can be performed with multifunction switch, preset switch, steering switch, touch panel function or voice recognition function.
- Operating signal is transmitted to AV control unit with AV communication when it is operated by multifunction switch or preset switch. The disk ejection operating signal is performed by wiring harness.
- Operating signal is transmitted to AV control unit with steering switch signal when it is operated by steering switch.
- Refer to the following system description (“VOICE RECOGNITION FUNCTION” and “TOUCH PANEL SYSTEM”)for explanation of voice recognition function and touch panel function.

Screen Display

Switching of display is performed with serial communication between display unit and AV control unit.

AM/FM Radio Mode

- AM/FM radio tuner is built into AV control unit.
- Audio signal is received by glass antenna, next it is amplified by antenna amp., and finally it is input to AV control unit. Audio signal is input to BOSE amp., and BOSE amp. outputs to woofer and each speaker. (coupe models)

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000005451334

CAN (Controller Area Network) is a serial communication line for real-time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independently). In CAN communication, control units are connected with 2 communication lines (CAN-H, CAN-L) 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-26, "CAN System Specification Chart".

DTC Logic

INFOID:0000000005451335

DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC detection condition	Probable malfunction location
U1000	CAN COMM CIRCUIT [U1000]	AV control unit is not transmitting or receiving CAN communication signal for 2 seconds or more.	CAN communication system.

Diagnosis Procedure

INFOID:0000000005451336

1. PERFORM SELF-DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check “Self Diagnostic Result” of “MULTI AV”.

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to “LAN system”. Refer to LAN-16, "Trouble Diagnosis Procedure".
NO >> Refer to GI section. Refer to GI-39, "Intermittent Incident".

Symptom	Solution
System fails to interpret the command correctly.	1. Ensure that the command is valid.
	2. Ensure that the command is spoken after the tone.
	3. Speak clearly without pausing between words and at level appropriate to the ambient noise level in the vehicle.
	4. Ensure that the ambient noise level is not excessive (for example, windows open or defroster on). **NOTE:** If it is too noisy to use the phone, it is likely that the voice commands will not be recognized.
	5. If more than one command was said at a time, try saying the commands separately.
	6. If the system consistently fails to recognize commands, the voice training procedure should be carried out to improve the recognition response for the speaker. See “Speaker adaptation (SA) mode” earlier in this section. Refer to “OWNER’S MANUAL”.
The system consistently selects the wrong voicetag	1. Ensure that the phone book entry name requested matches what was originally stored. This can be confirmed by using the “List Names” command.
	2. Replace one of the names being confused with a new name.

RELATED TO AUDIO

- The majority of the audio malfunctions are the result of outside causes (bad CD/cassette, electromagnetic interference, etc.). Check the symptoms below to diagnose the malfunction.
- The vehicle itself can be a source of noise if noise prevention parts or electrical equipment is malfunctioning. Check if noise is caused and/or changed by engine speed, ignition switch turned to each position, and operation of each piece of electrical equipment, and then determine the cause.

NOTE:

- CD-R is not guaranteed to play because they can contain compressed audio (MP3, WMA, AAC, M4A) or could be incorrectly mastered by the customer on a computer.
- Check if the CDs carry the Compact Disc Logo. If not, the disc is not mastered to the “red book” Compact Disc Standard and may not play.

Symptom	Cause and Counter measure
Cannot play	Check if the CD was inserted correctly.
	Check if the CD is scratched or dirty.
	Check if there is condensation inside the player, and if there is, wait until the condensation is gone (about 1 hour) before using the player.
	If there is a temperature increase error, the player will play correctly after it returns to the normal temperature.
	If there is a mixture of music CD files (CD-DA data) and MP3/WMA/AAC/M4A files on a CD, only the music CD files (CD-DA data) will be played.
	Files with extensions other than “.MP3”, “.WMA”, “.AAC”, “.M4A”, “.mp3”, “.wma”, “.aac” or “.m4a” cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.
	Check if the disc or the file is generated in an irregular format, This may occur depending on the variation or the setting of MP3/WMA/AAC/M4A writing applications or other text editing applications.
	Check if the finalization process, such as session close and disc close, is done for the disc.
	Check if the CD is protected by copyright.
Poor sound quality	Check if the CD is scratched or dirty.
It takes a relatively long time before the music starts playing.	If there are many folder or file levels on the MP3/WMA/AAC/M4A CD, or if it is a multisession disc, some time may be required before the music starts playing.
Music cuts off or skips	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width might not match the specifications. Try using the slowest writing speed.
Skipping with high bit rate files	Skipping may occur with large quantities if data such as for high bit rate data.

DATA MONITOR

Monitor Item [Unit]	Description
PUSH SW [Off/On]	The switch status input from push-button ignition switch.
VEH SPEED 1 [km/h]	The value of the vehicle speed signal received from combination meter with CAN communication.
FR WIPER HI [Off/On]	Each switch status that BCM judges from the combination switch reading function.
FR WIPER LOW [Off/On]	
FR WASHER SW [Off/On]	
FR WIPER INT [Off/On]	
FR WIPER STOP [Off/On]	Front wiper motor (stop position) status received from IPDM E/R with CAN communication.
INT VOLUME [1 – 7]	Each switch status that BCM judges from the combination switch reading function.

ACTIVE TEST

Test item	Operation	Description
FR WIPER	Hi	Transmits the front wiper request signal (HI) to IPDM E/R with CAN communication to operate the front wiper HI operation.
	Lo	Transmits the front wiper request signal (LO) to IPDM E/R with CAN communication to operate the front wiper LO operation.
	INT	Transmits the front wiper request signal (INT) to IPDM E/R with CAN communication to operate the front wiper INT operation.
	Off	Stops transmitting the front wiper request signal to stop the front wiper operation.

FLASHER

FLASHER : CONSULT-III Function (BCM - FLASHER)

INFOID:0000000005589226

WORK SUPPORT

Service item	Setting item	Setting	
HAZARD ANSWER BACK	Lock Only*	With locking only	Sets the hazard warning lamp answer back function when the door is lock/unlock with the request switch or the key fob.
	Unlk Only	With unlocking only	
	Lock/Unlk	With locking/unlocking	
	Off	Without the function	

*: Factory setting

DATA MONITOR

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from the request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from the request switch (passenger side)
PUSH SW [On/Off]	The switch status input from the push-button ignition switch

DTC Inspection Priority Chart

INFOID:0000000005238322

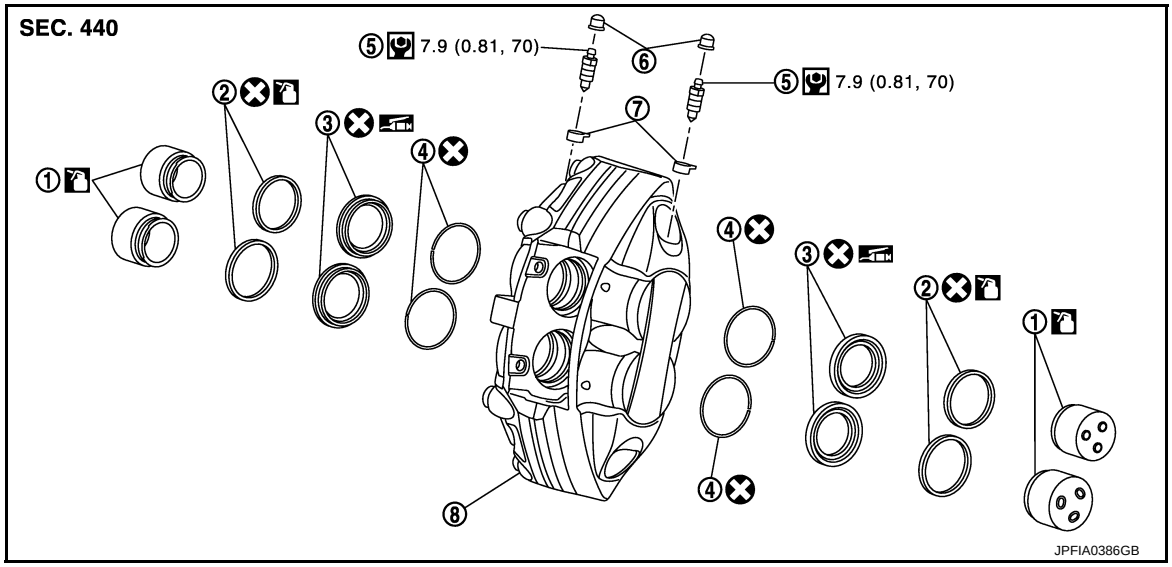
If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

Priority	DTC
1	B2562: LOW VOLTAGE
2	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
3	• B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING
4	• B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E8: CLUTCH SW • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG

1. Caliper

Refer to GI-4, "Components" for symbols in the figure.

DISASSEMBLY



1. Piston	2. Piston seal	3. Piston boot
4. Retaining ring	5. Bleeder Valve	6. Cap
7. Cap	8. Caliper	

: Apply rubber grease.

: Apply brake fluid.

Refer to GI-4, "Components" for symbols not described on the above.

BRAKE CALIPER ASSEMBLY (4 PISTON TYPE) : Removal and Installation

INFOID:0000000005243202

REMOVAL

WARNING:

Clean any dust from the brake caliper and brake pads with a vacuum dust collector. Never blow with compressed air.

CAUTION:

Never depress the brake pedal. Brake fluid may splash while removing the brake hose and brake tube.

1. Remove tires with power tool.
2. Fix the disc rotor using wheel nuts.
3. Drain brake fluid. Refer to BR-12, "Draining".
   CAUTION:
   Never spill or splash brake fluid on the disc rotor and caliper.
4. Loosen the flare nut with a flare nut wrench and separate the brake tube from caliper. Refer to BR-22, "FRONT : Exploded View".
   CAUTION:
   - **Cover flare nut wrench with a cloth as not to damage the caliper.**
   - **Never scratch the flare nut and the brake tube.**
   - **Never bend sharply, twist or strongly pull out the brake tube.**
   - **Cover open end of brake tube when disconnecting to prevent entrance of dirt.**
5. Remove caliper mounting bolts, and remove caliper.
   CAUTION:
   Never drop brake pad and caliper.
6. Remove disc rotor.

C1114 ACTUATOR RELAY SYSTEM

Description

INFOID:0000000005233880

Activates or deactivates each solenoid valve according to the signals transmitted by the ABS actuator and electric unit (control unit).

DTC Logic

INFOID:0000000005233881

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible cause
C1114	MAIN RELAY	During the actuator relay operating with OFF, when the actuator relay turns ON, or when the control line for the relay is shorted to the ground.	• Harness or connector • ABS actuator and electric unit (control unit)
		During the actuator relay operating with ON, when the actuator relay turns ON, or when the control line for the relay is open.	

DTC CONFIRMATION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

1. Turn the ignition switch ON.
2. Perform self-diagnosis for “ABS” with CONSULT-III.

Is DTC “C1114” detected?

YES >> Proceed to diagnosis procedure. Refer to BRC-38, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005233882

1.CHECK ACTUATOR RELAY POWER SUPPLY

1. Turn the ignition switch OFF.
2. Disconnect ABS actuator and electric unit (control unit) harness connector.
3. Check voltage between ABS actuator and electric unit (control unit) harness connector and ground.

ABS actuator and electric unit (control unit)		—	Voltage
Connector	Terminal		
E41	3	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace error-detected parts.

2.CHECK ACTUATOR RELAY GROUND

Check continuity between ABS actuator and electric unit (control unit) harness connector and ground.

ABS actuator and electric unit (control unit)		—	Continuity
Connector	Terminal		
E41	1	Ground	Existed
	4		

Is the inspection result normal?

YES >> Replace ABS actuator and electric unit (control unit). Refer to BRC-100, "Exploded View".
NO >> Repair or replace error-detected parts.

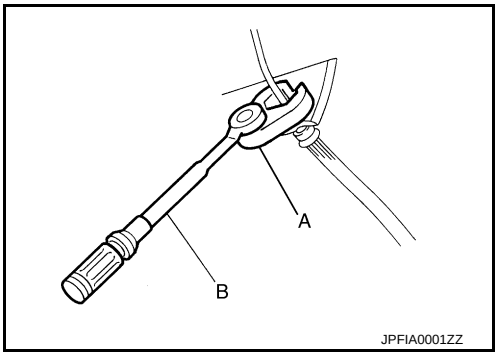
FOR MEXICO : Precaution for Brake System

INFOID:0000000005530440

WARNING:

Clean any dust from the front brake and rear brake with a vacuum dust collector. Never blow with compressed air.

- Only use “DOT 3” brake fluid. Refer to MA-15, "FOR MEXICO : Fluids and Lubricants".
- Never reuse drained brake fluid.
- Never spill or splash brake fluid on painted surfaces. Brake fluid may seriously damage paint. Wipe it off immediately and wash with water if it gets on a painted surface.
- Never use mineral oils such as gasoline or light oil. They may damage rubber parts and cause improper operation.
- Always loosen the brake tube flare nut with a flare nut wrench.
- Tighten the brake tube flare nut to the specified torque with a crowfoot (A) and torque wrench (B).
- Always conform the specified tightening torque when installing the brake pipes.
- Brake system is an important safety part. If a brake fluid leak is detected, always disassemble the affected part. If a malfunction is detected, replace part with a new one.
- Turn the ignition switch OFF and disconnect the ABS actuator and electric unit (control unit) harness connector or the battery negative terminal before performing the work.



FOR MEXICO : Precaution for Brake Control

INFOID:0000000005530441

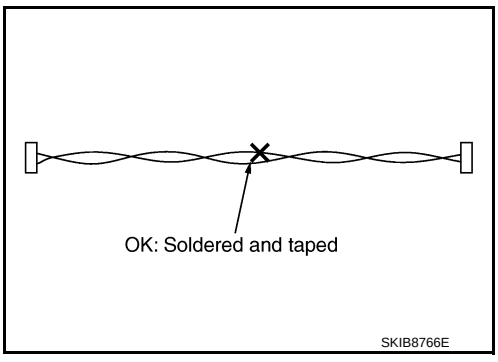
- When starting engine or when starting vehicle just after starting engine, brake pedal may vibrate or motor operating noise may be heard from engine compartment. This is normal condition.
- When an error is indicated by ABS or another warning lamp, collect all necessary information from customer (what symptoms are present under what conditions) and check for estimate causes before starting diagnostic servicing. Besides electrical system inspection, check brake booster operation, brake fluid level, and oil leaks.
- If tire size and type are used in an improper combination, or brake pads are not Genuine NISSAN parts, stopping distance or steering stability may deteriorate.
- ABS might be out of order or malfunctions by putting a radio (wiring inclusive), an antenna and a lead-in wire near the control unit.
- If aftermarket parts (car stereo, CD player, etc.) have been installed, check for incidents such as harness pinches, open circuits, and improper wiring.
- VDC system may not operate normally or a VDC OFF indicator lamp or SLIP indicator lamp may light.
- When replacing the following parts with parts other than genuine parts or making modifications: Suspension related parts (shock absorber, spring, bushing, etc.), tires, wheels (other than specified sizes), brake-related parts (pad, rotor, caliper, etc.), engine-related parts (muffler, ECM, etc.) and body reinforcement-related parts (roll bar, tower bar, etc.).
- When driving with worn or deteriorated suspension, tires and brake-related parts.

FOR MEXICO : Precautions for Harness Repair

INFOID:0000000005530442

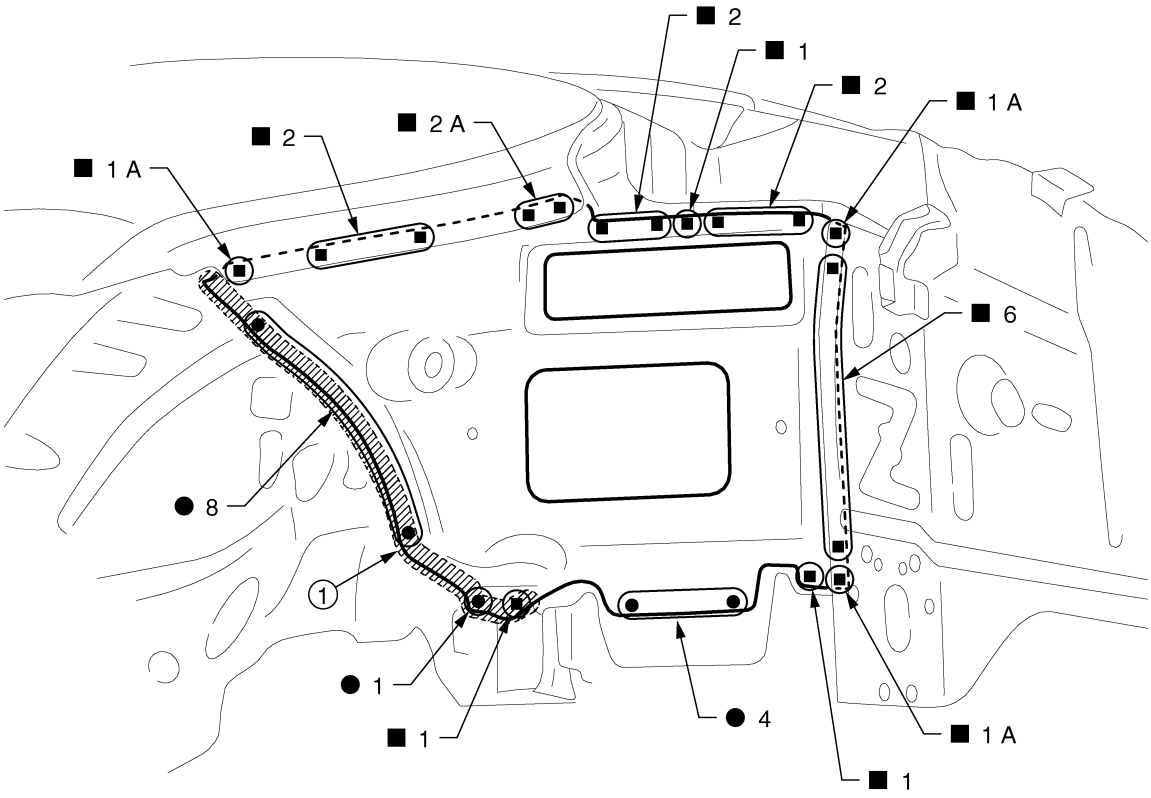
COMMUNICATION LINE

- Solder the repaired area and wrap tape around the soldered area.
  NOTE:
  A fray of twisted lines must be within 110 mm (4.33 in).



Rear Fender Extension

INFOID:0000000005597981



JSKIA1572ZZ

1. Body sealing

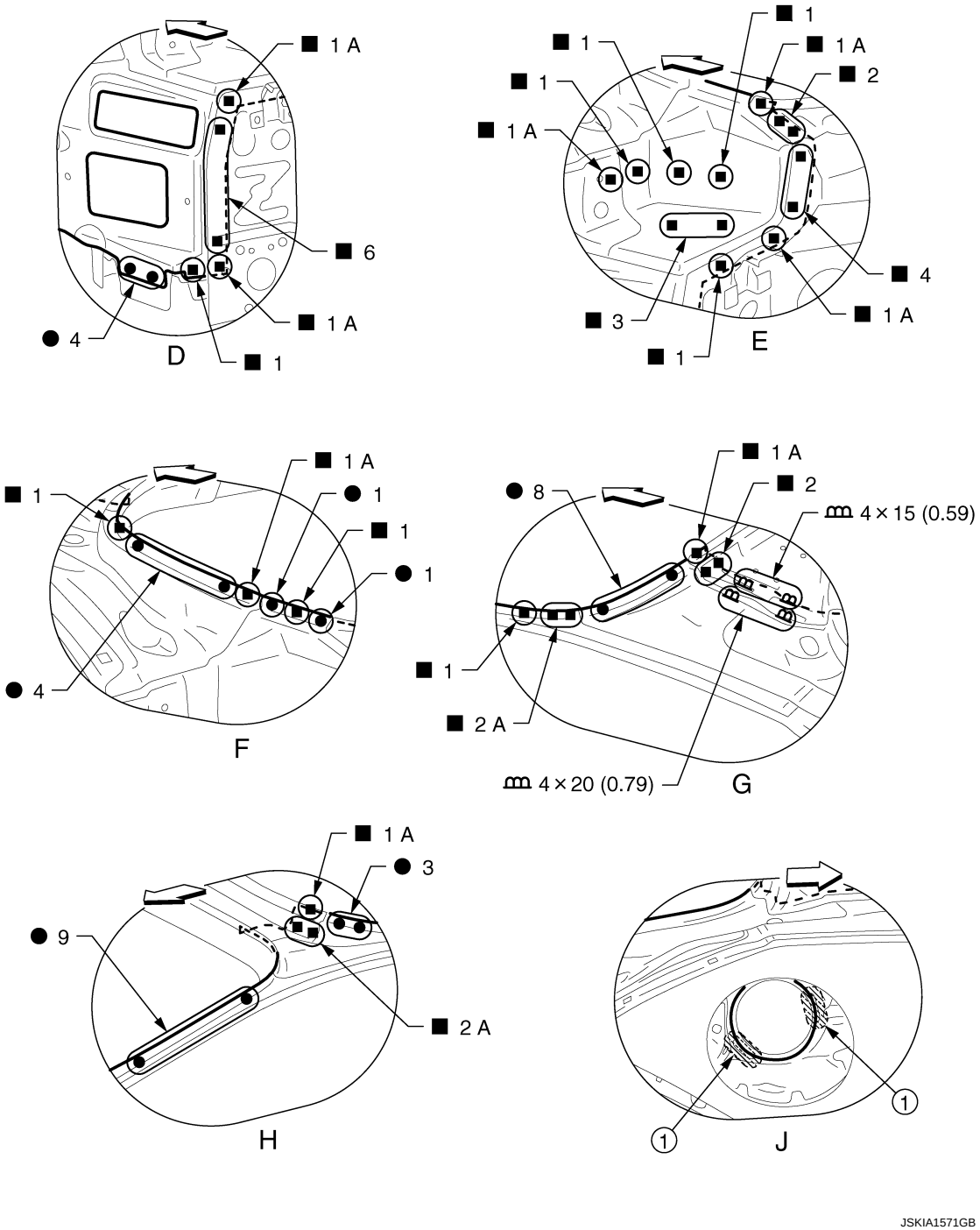
Replacement parts

- Rear fender extension (LH)

Lock Pillar Reinforcement

INFOID:0000000005574905

Work after rear fender is removed.



JSKIA1571GB

1. Adhesive

Unit: mm (in)

⇦: Vehicle front

View J: Right side rear fender

POINT

- **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.**

FOR MEXICO : Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:0000000005530443

NOTE:
- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.
If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Turn the push-button ignition switch to ACC position.
   (At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.

FOR MEXICO : Precaution for Battery Service

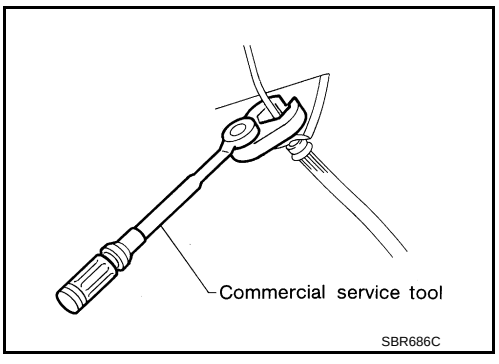
INFOID:0000000005530444

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

FOR MEXICO : Service Notice or Precautions for Clutch

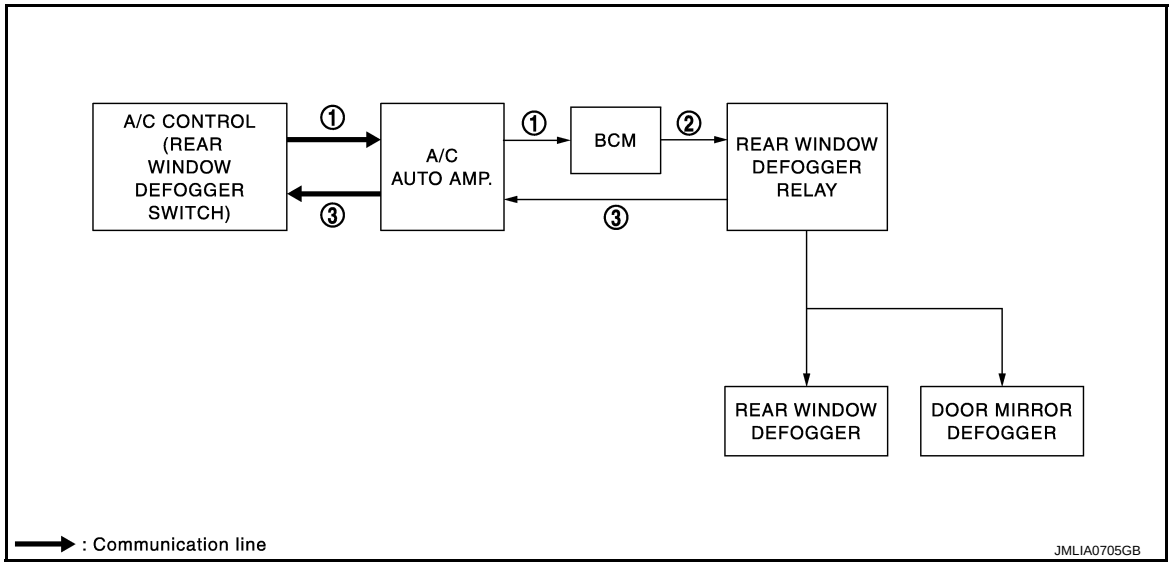
INFOID:0000000005530359

WARNING:
After cleaning clutch disc, wipe it with a dust collector. Never use compressed air.
CAUTION:
- **Clutch fluid use refer to MA-15, "FOR MEXICO : Fluids and Lubricants".**
- **Never reuse drained clutch fluid.**
- **Keep painted surface on the body or other parts free of clutch fluid. If it spills, wipe up immediately and wash the affected area with water.**
- **When removing clutch tube, use a flare nut wrench.**
- **When installing clutch tube, use a flare nut torque wrench [Commercial service tool].**
- **Use new clutch fluid to clean or wash all parts of master cylinder.**
- **Never use mineral oils such as gasoline or kerosene. It will ruin the rubber parts of the hydraulic system.**
- **Never reuse CSC (Concentric Slave Cylinder) body and CSC tube. Because CSC slides back to the original position every time when removing transmission assembly. At this timing,**



WITHOUT NAVIGATION : System Diagram

INFOID:0000000005569202



1. Rear window defogger switch signal
2. Rear window defogger relay ON signal
3. Rear window defogger ON signal

WITHOUT NAVIGATION : System Description

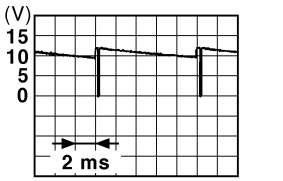
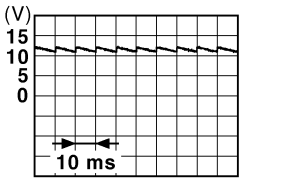
INFOID:0000000005569203

OPERATION DESCRIPTION

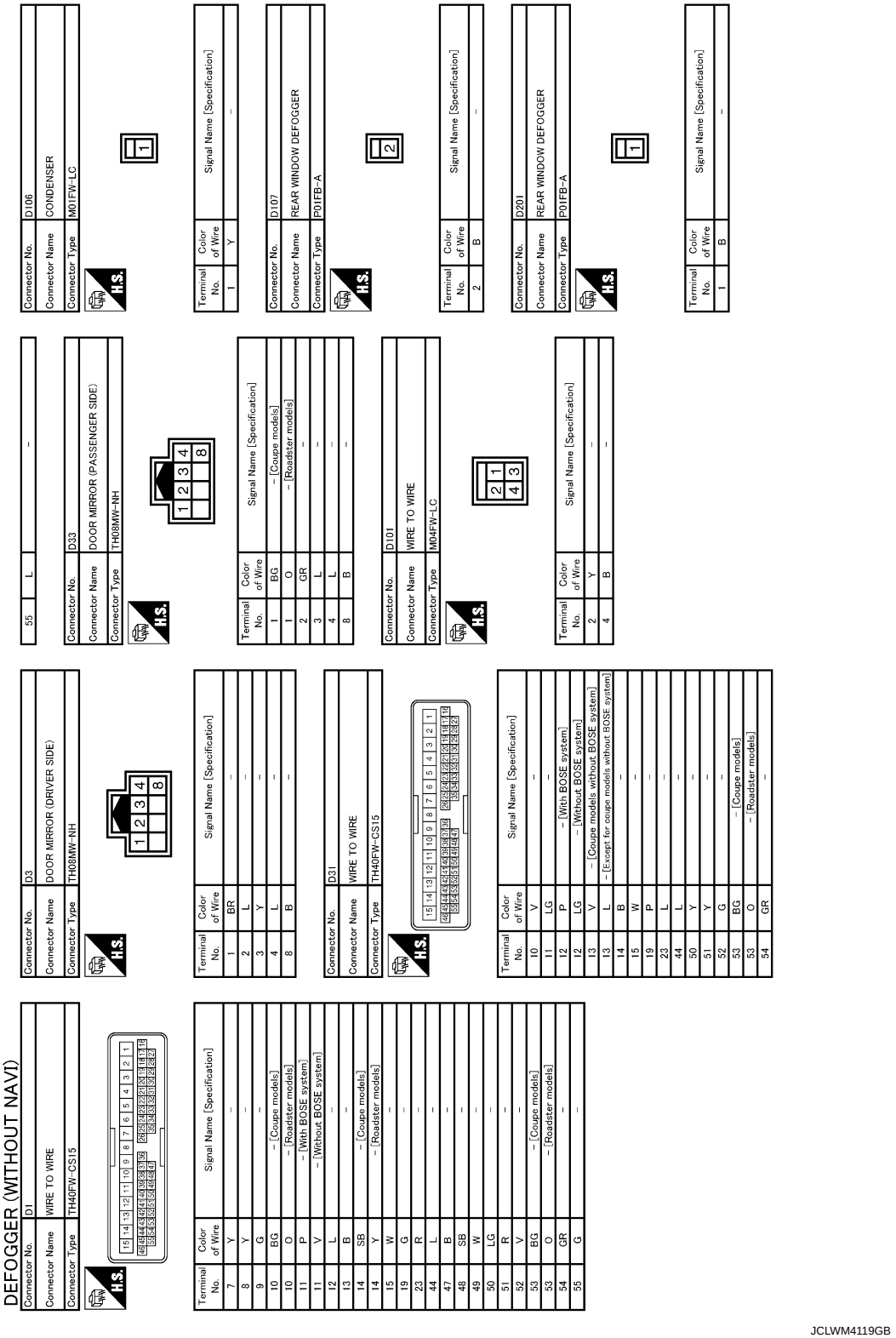
- Turn rear window defogger switch ON when the ignition switch is ON. Then A/C control (rear window defogger switch) transmits rear window defogger switch signal to A/C auto amp. and BCM.
- BCM turns rear window defogger relay ON when rear window defogger switch signal is received.
- Rear window defogger and door mirror defogger (with mirror defogger) are supplied with power and operates when rear window defogger relay turns ON.
- Rear window defogger relay transmits rear window defogger ON signal to A/C auto amp. when rear window defogger operates.
- At the same time, A/C auto amp. transmits rear defogger ON signal to A/C controller (rear window defogger switch) and illuminates rear window defogger switch indicator.

TIMER FUNCTION

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger and door mirror defoggers (with mirror defogger) operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The same operation also occurs during timer operation, if the ignition switch is turned OFF.

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 2ND	 JPMIA0035GB 10.7 V
					Lighting switch PASS	
					Turn signal switch LH	
149 (W)	Ground	Tire pressure warning check switch	Input	—		12 V
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active	0 V
					Not activated	Battery voltage

- *1: Coupe models
- *2: Roadster models
- *3: Except roadster M/T models
- *4: Roadster M/T models
- *5: A/T models
- *6: M/T models
- *7: Except M/T models with SynchroRev Match mode
- *8: Coupe M/T models
- *9: Except coupe models
- *10: Without NAVI
- *11: A/T models or coupe M/T models without SynchroRev Match mode



JCLWM4119GB

DOOR MIRROR DEFOGGER DOES NOT OPERATE BUT REAR WINDOW DEFOGGER OPERATE

BOTH SIDES

BOTH SIDES : Diagnosis Procedure

INFOID:0000000005569191

1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.
Refer to DEF-107, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000005569192

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.
Refer to DEF-108, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000005569193

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.
Refer to DEF-110, "Component Function Check".

Is the inspection result normal?

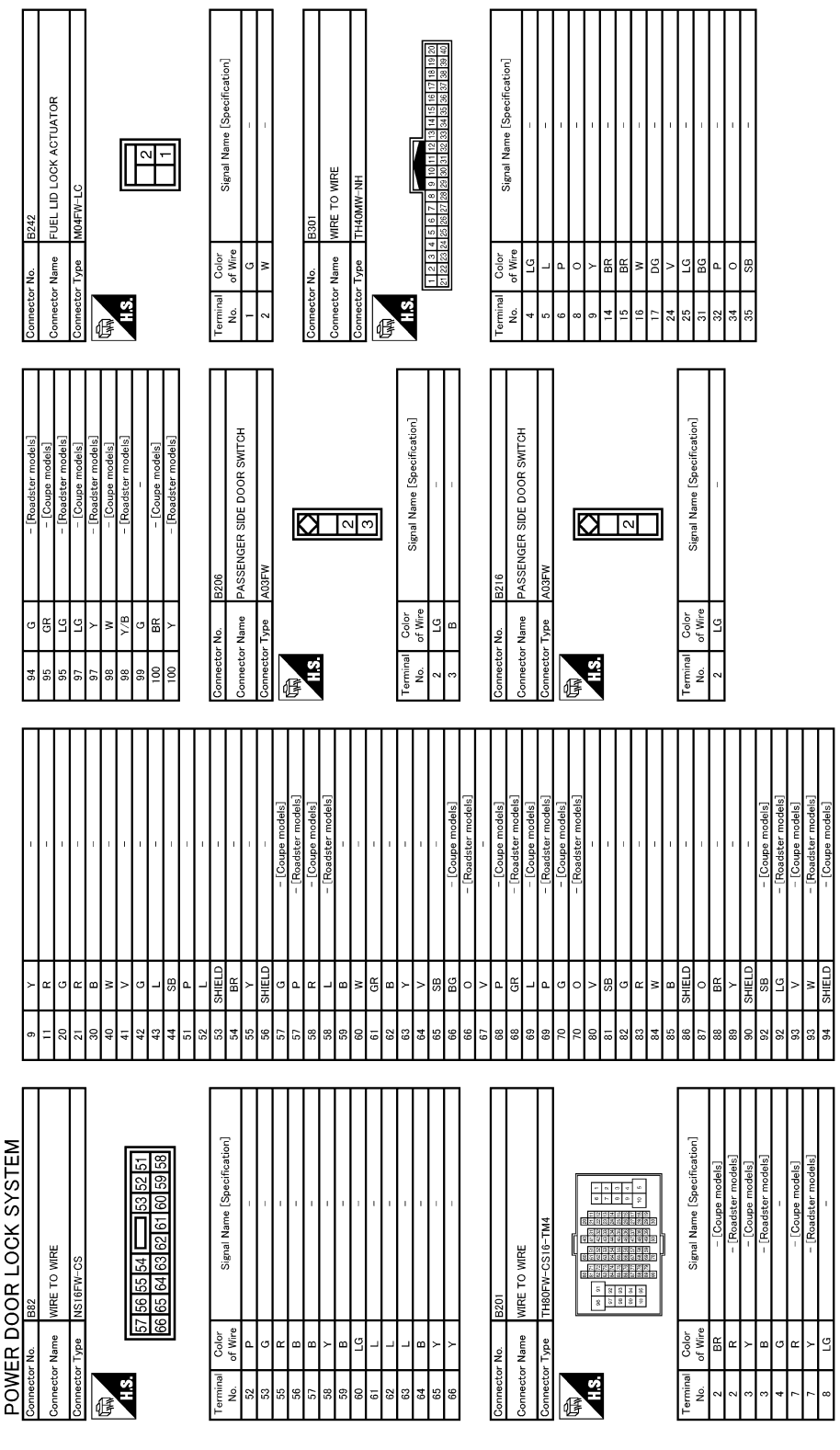
YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.



JCKWM3237GB

DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000005369937

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT-III.
2. Select “REQ SW -DR”,“REQ SW -AS” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
REQ SW -DR	Driver side door request switch	Pressed	On
		Released	Off
REQ SW -AS	Passenger side door request switch	Pressed	On
		Released	Off

Is the inspection result normal?

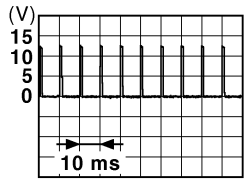
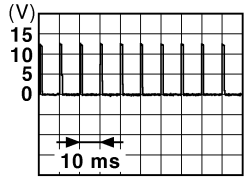
YES >> Door request switch is OK.
NO >> Refer to DLK-106, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005240123

1.CHECK DOOR REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning door request switch connector.
3. Check signal between malfunctioning door request switch harness connector and ground using oscilloscope.

(+)			(–)	Signal (Reference value)
Door request switch				
Connector		Terminal		
Driver side	D13	1	Ground	 JPMIA0016GB
Passenger side	D43	2		 JPMIA0016GB

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between malfunctioning door request switch harness connector and BCM harness connector.

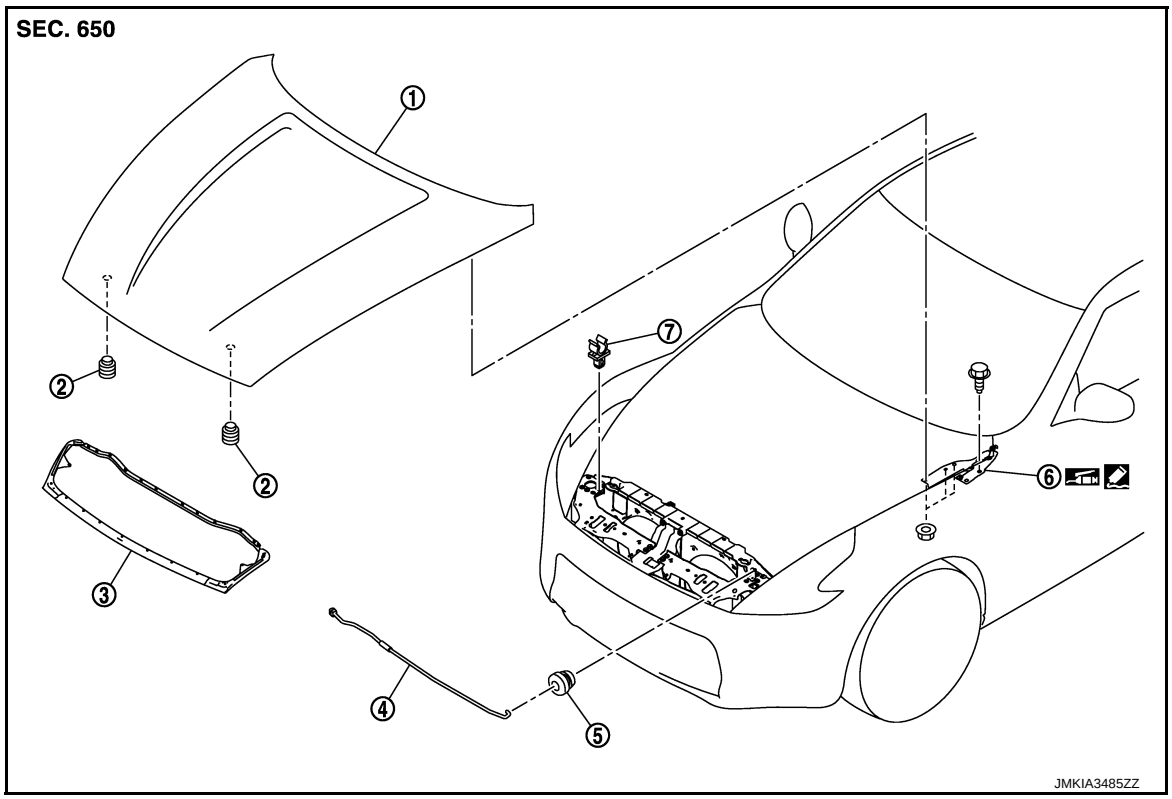
REMOVAL AND INSTALLATION

HOOD

HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View

INFOID:0000000005240255



1.	Hood assembly	2.	Hood bumper rubber	3.	Hood seal (front)
4.	Hood support rod	5.	Grommet	6.	Hood hinge
7.	Clamp				

Refer to GI-4, "Components" for symbols in the figure.

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000005240256

CAUTION:
- **Operate with 2 workers, because of its heavy weight.**
- **Use protective tape or shop cloth to protect from damage during removal and installation.**

REMOVAL

1. Remove washer nozzle (LH/RH) and washer tube. Refer to WW-94, "Removal and Installation".
2. Support hood assembly with a suitable material to prevent it from falling.

   WARNING:
   Bodily injury may occur if no supporting rod is holding the hood open when removing the hood stay.
3. Remove hood hinge mounting bolts on the hood to remove the hood assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check hood hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, check hood open/close, lock/unlock operation.**

- When an UNLOCK signal from trunk lid side door request switch is transmitted, trunk lid open permission is set. When another UNLOCK signal is transmitted within 60 seconds, all doors (except trunk lid) and fuel lid unlock.

Selective unlock operation mode can be changed using “DOOR LOCK-UNLOCK SET” mode in “WORK SUPPORT”. Refer to DLK-231, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

AUTO DOOR LOCK FUNCTION

After door is unlocked by door request switch operation and if 60 seconds or more passes without performing the following operation, all doors and fuel filler lid are automatically locked. However, operation check function does not activate.

Operating condition	• Door switch is ON (door is open) • Trunk room lamp switch is ON (trunk lid is open) • Door is locked • Push switch is pressed • Intelligent Key is inserted in key slot

Auto door lock mode can be changed by the “AUTO LOCK SET” mode in “WORK SUPPORT”. Refer to DLK-232, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

HAZARD AND BUZZER REMINDER FUNCTION

During lock or unlock operation by each door request switch, the hazard warning lamps blink and Intelligent Key warning buzzer or horn sounds as a reminder.
When doors are locked or unlocked by each door request switch, BCM sounds Intelligent Key warning buzzer or horn and blinks hazard warning lamps as a reminder.

Operating Function of Hazard and Buzzer Reminder

Operation	Hazard warning lamp blinks	Intelligent Key warning buzzer sounds	Horn sounds
Unlock	Once	Once	—
Lock	Twice	Twice	Once

Hazard and buzzer reminder does not operate in the following conditions.
- Ignition switch position is ON
- Door is open (only lock operation)

How to Change Hazard and Buzzer Reminder Mode

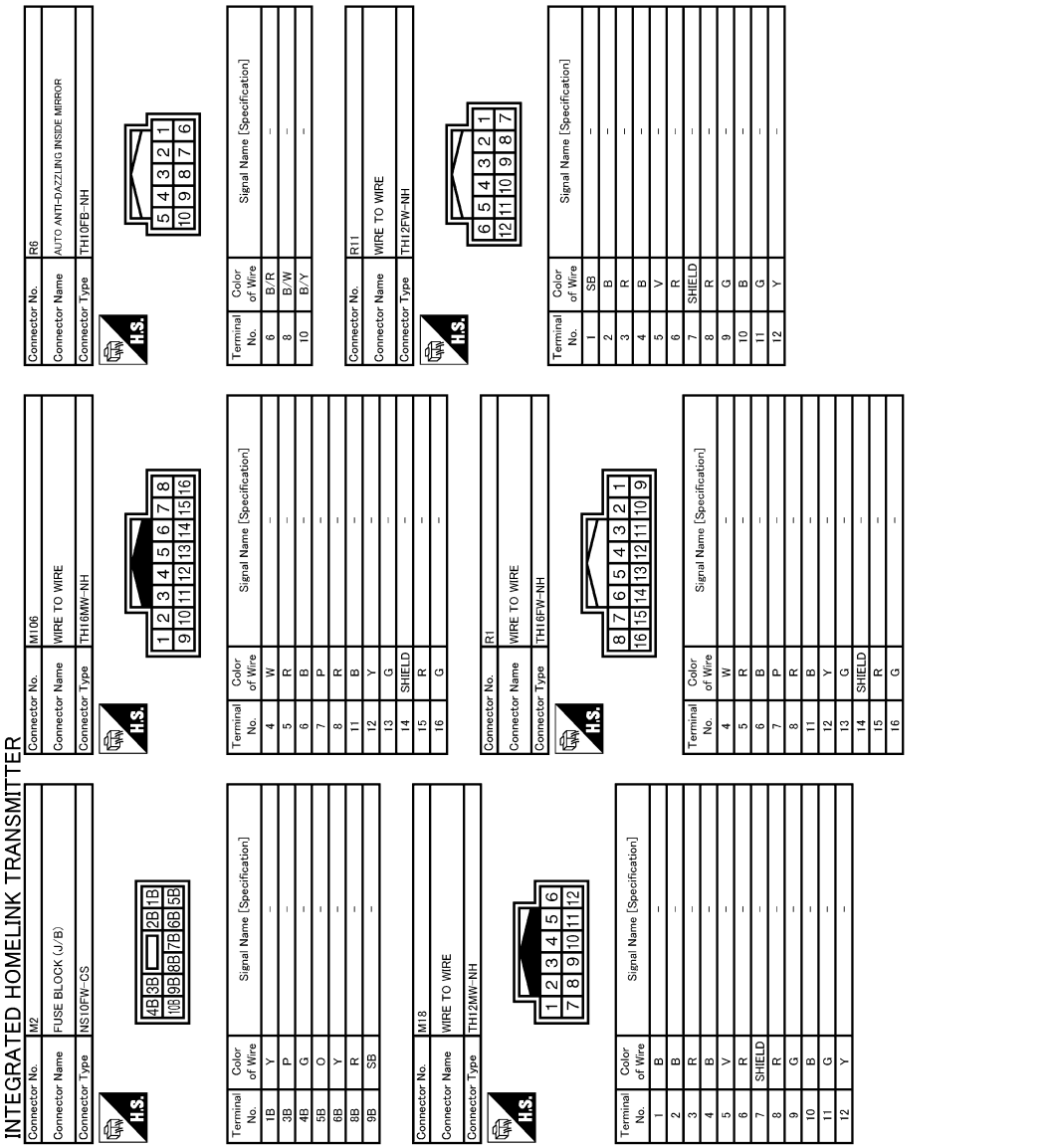
Refer to DLK-41, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

Function	Intelligent Key	Key slot	Remote keyless entry receiver	Door switch	Trunk room lamp switch	Door request switch	Door lock actuator and fuel lid lock actuator	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamp	Push-button ignition switch	Combination meter
Door lock/unlock function	×	×	×	×	×	×	×	×	×			×			
Hazard and buzzer reminder function				×	×					×	×	×	×		×
Selective unlock function	×					×	×	×	×			×			
Auto door lock function	×	×		×	×	×	×					×		×	

TRUNK OPEN FUNCTION



JCKWM3271GB

PASSENGER SIDE : Description

INFOID:0000000005396195

Passenger side door does not lock/unlock using door lock and unlock switch.

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000005396196

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (passenger side).
Refer to DLK-290, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

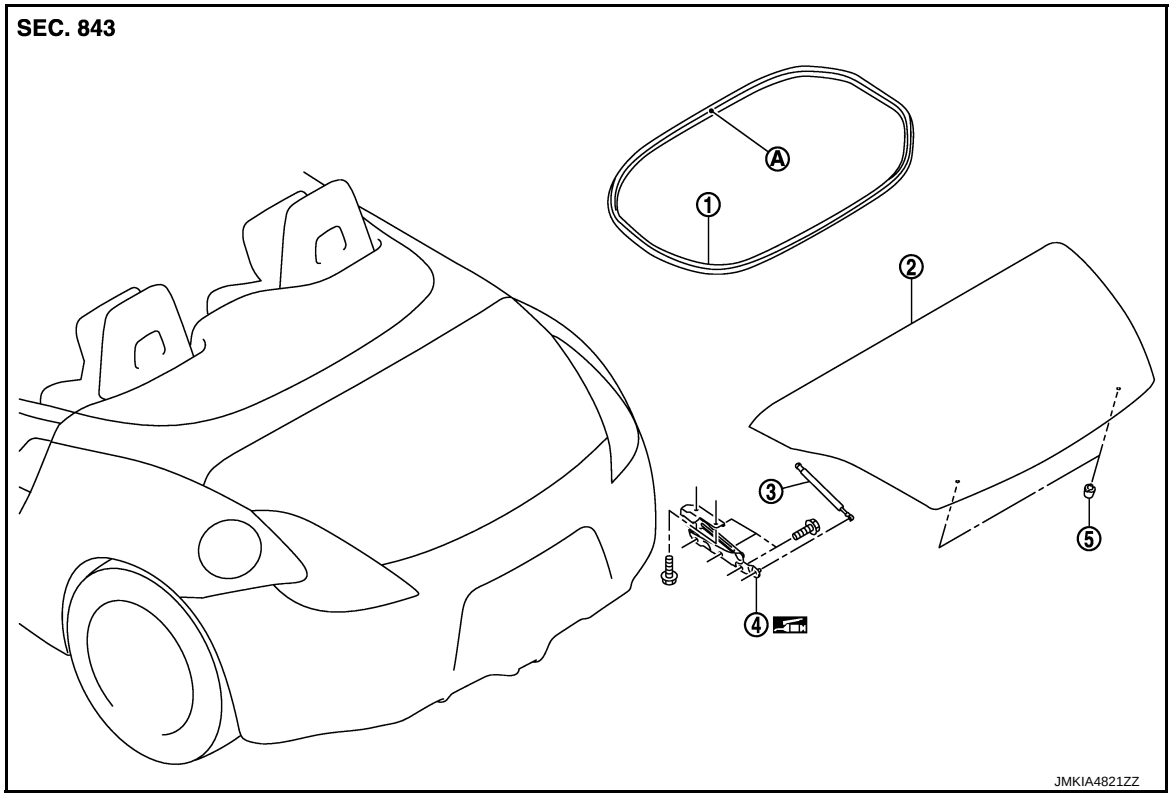
YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.



1. Trunk lid
2. Trunk lid weather-strip
3. Trunk lid stay
4. Trunk lid hinge
5. Bumper rubber

A : Center mark

Refer to GI-4, "Components" for symbols in the figure.

TRUNK LID WEATHER-STRIP : Removal and Installation

INFOID:0000000005554131

REMOVAL

Pull up and remove engagement with body from weather-strip joint.

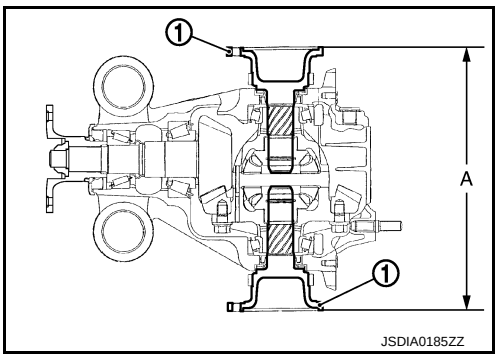
CAUTION:

Never pull strongly on weather-strip.

INSTALLATION

1. Working from the upper section, align weather-strip center mark (upper) with vehicle center position mark and install weather-strip onto the vehicle.
2. For the lower section, align weather-strip center mark (lower) with center of trunk lid striker.
3. Pull weather-strip gently to ensure that there is no loose section.
   NOTE:
   Check that weather-strip fits tightly in each corner.

d. Confirm that the dimension of the side flanges (1) installation measurement (A) in the figure comes into the following.



Standard

A : 326 – 328 mm (12.83 – 12.91 in)

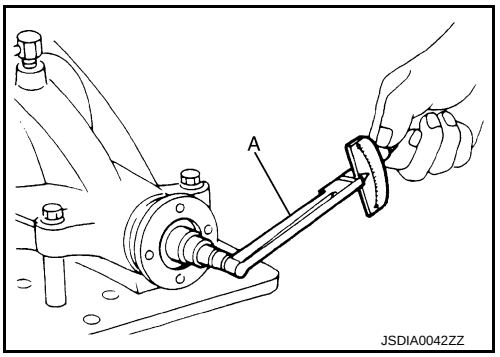
Adjustment

INFOID:0000000005234983

TOTAL PRELOAD TORQUE

Before inspection and adjustment, drain gear oil.

1. Secure final drive assembly onto an attachment [SST: KV38100800 (J-25604-01)].
2. Remove side flanges.
3. Rotate drive pinion back and forth 2 to 3 times to check for unusual noise and rotation malfunction.
4. Rotate drive pinion at least 20 times to check for smooth operation of the bearing.
5. Measure total preload with the preload gauge (A) [SST: ST3127S000 (J-25765-A)].



Standard

Total preload torque : Refer to DLN-51, "Preload Torque".

NOTE:
Total preload torque = Pinion bearing preload torque + Side bearing preload torque

- If measured value is out of the specification, disassemble it to check and adjust each part. Adjust the pinion bearing preload and side bearing preload.
  Adjust the pinion bearing preload first, then adjust the side bearing preload.

When the preload torque is large

On pinion bearings: Replace the collapsible spacer.

On side bearings: Use thinner side bearing adjusting washers by the same amount to each side.

When the preload is small

On pinion bearings: Tighten the drive pinion lock nut.

On side bearings: Use thicker side bearing adjusting washers by the same amount to each side.

SIDE BEARING PRELOAD

Before inspection and adjustment, drain gear oil.

1. Remove rear cover. Refer to DLN-29, "Disassembly".

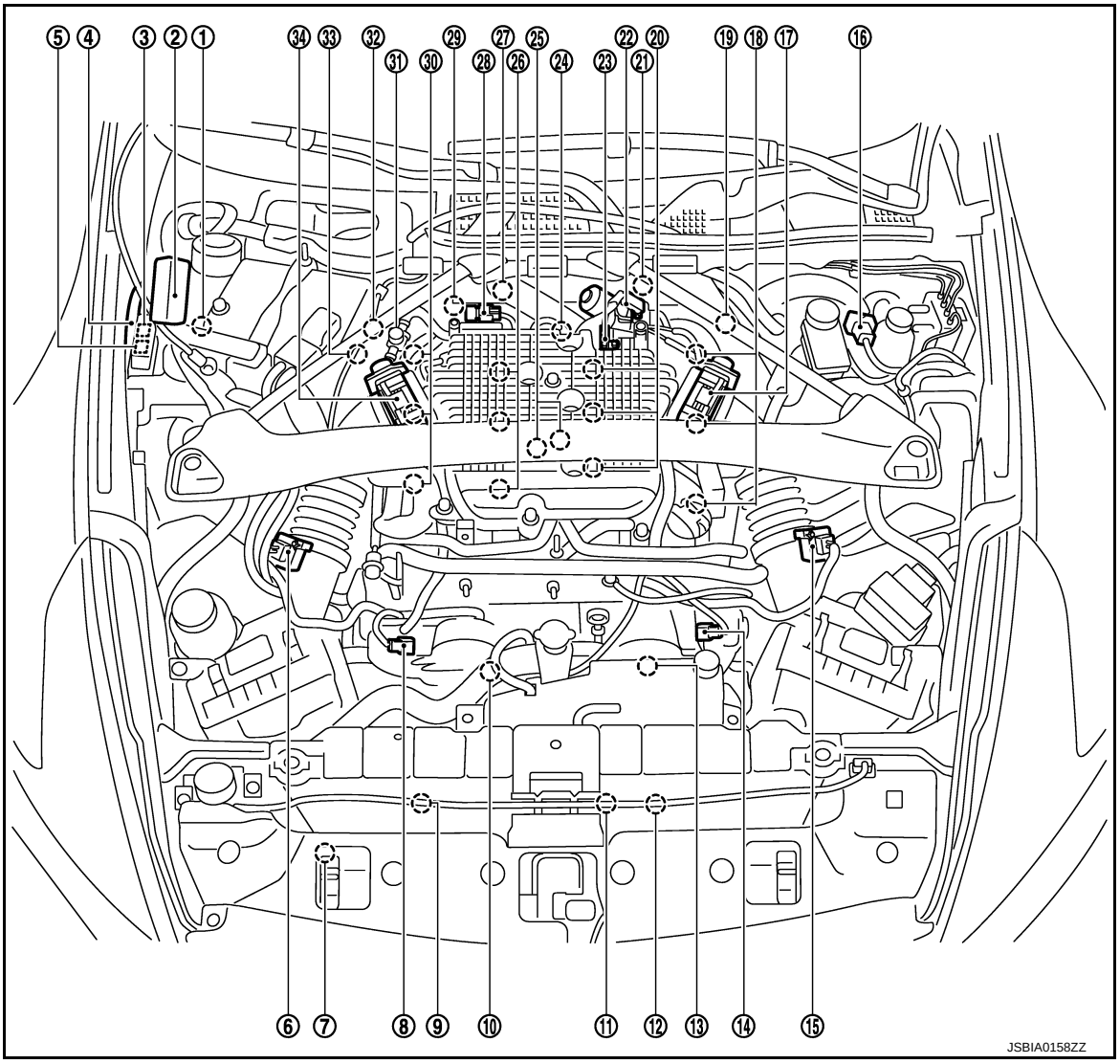
SECTION EC
ENGINE CONTROL SYSTEM

CONTENTS

VQ37VHR

Component Parts Location

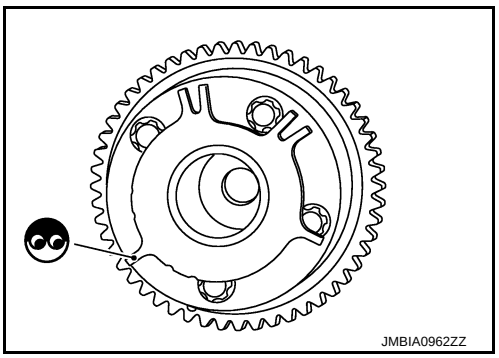
INFOID:0000000005569753



1. Battery current sensor
2. IPDM E/R
3. Cooling fan relay
4. VVEL control module
5. VVEL actuator motor relay
6. Mass air flow sensor (with intake air temperature sensor) (bank 1)
7. Refrigerant pressure sensor
8. Camshaft position sensor (PHASE) (bank 1)
9. Cooling fan motor-2
10. Intake valve timing control solenoid valve (bank 1)
11. Cooling fan control module
12. Cooling fan motor-1
13. Intake valve timing control solenoid valve (bank 2)
14. Camshaft position sensor (PHASE) (bank 2)
15. Mass air flow sensor (with intake air temperature sensor) (bank 2)
16. Brake booster pressure sensor
17. Electric throttle control actuator (bank 2)
18. Ignition coil (with power transistor) and spark plug (bank 2)
19. A/F sensor 1 (bank 2)
20. Fuel injector (bank 2)
21. VVEL control shaft position sensor (bank 2)
22. VVEL actuator motor (bank 2)
23. Manifold absolute pressure (MAP) sensor
24. Engine coolant temperature sensor
25. Knock sensor
26. Fuel injector (bank 1)
27. VVEL actuator motor (bank 1)
28. EVAP canister purge volume control solenoid valve
29. VVEL control shaft position sensor (bank 1)
30. Ignition coil (with power transistor) and spark plug (bank 1)

Component	Reference
Accelerator pedal position sensor	EC-459, "Description"
Crankshaft position sensor (POS)	EC-289, "Description"
VVEL actuator motor	EC-402, "Description"
VVEL actuator motor relay	EC-406, "Description"
VVEL control module	EC-449, "Description"
VVEL control shaft position sensor	EC-398, "Description"

- Accumulation of debris on the signal plate of camshaft front end
- Chipping signal plate of camshaft front end


JMBIA0962ZZ

Is the inspection result normal?

YES >> GO TO 6.
NO >> Remove debris and clean the signal plate of camshaft front end or replace camshaft.

6. CHECK TIMING CHAIN INSTALLATION

Check service records for any recent repairs that may cause timing chain misaligned.

Are there any service records that may cause timing chain misaligned?

YES >> Check timing chain installation. Refer to EM-55, "Removal and Installation".
NO >> GO TO 7.

7. CHECK LUBRICATION CIRCUIT

Perform “Inspection of Camshaft Sprocket (INT) Oil Groove”. Refer to EM-99, "Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Clean lubrication line.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005235697

1. CHECK INTAKE VALVE TIMING CONTROL SOLENOID VALVE-I

1. Turn ignition switch OFF.
2. Disconnect intake valve timing control solenoid valve harness connector.
3. Check resistance between intake valve timing control solenoid valve terminals as follows.

Terminals	Resistance (Ω)
1 and 2	7.0 - 7.7 [at 20°C (68°F)]
1 or 2 and ground	∞ (Continuity should not exist)

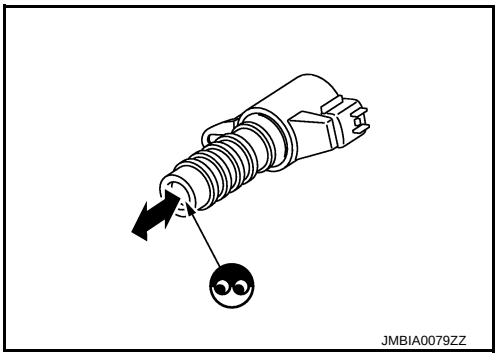
Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace malfunctioning intake valve timing control solenoid valve.

2. CHECK INTAKE VALVE TIMING CONTROL SOLENOID VALVE-II

1. Remove intake valve timing control solenoid valve.
2. Provide 12 V DC between intake valve timing control solenoid valve terminals 1 and 2, and then interrupt it. Make sure that the plunger moves as shown in the figure.

CAUTION:
Do not apply 12 V DC continuously for 5 seconds or more. Doing so may result in damage to the coil in intake valve timing control solenoid valve.
NOTE:
Always replace O-ring when intake valve timing control solenoid valve is removed.


JMBIA0079ZZ

Is the inspection result normal?

P0131, P0151 A/F SENSOR 1

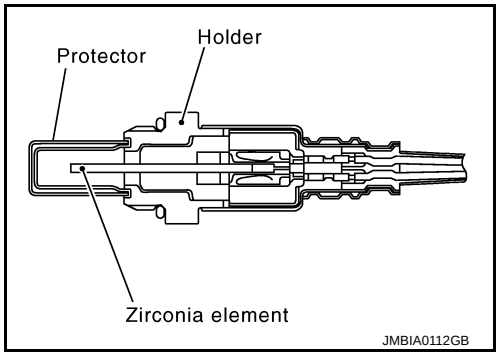
Description

INFOID:0000000005235755

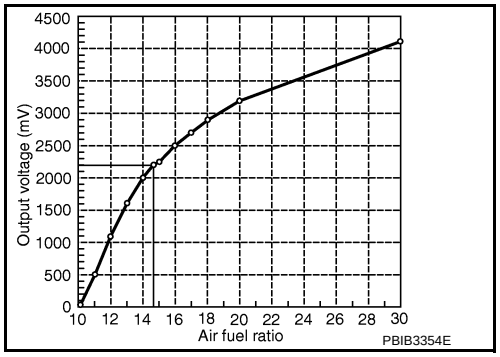
The air fuel ratio (A/F) sensor 1 is a planar one-cell limit current sensor. The sensor element of the A/F sensor 1 is composed an electrode layer, which transports ions. It has a heater in the element.

The sensor is capable of precise measurement $\lambda = 1$, but also in the lean and rich range. Together with its control electronics, the sensor outputs a clear, continuous signal throughout a wide λ range.

The exhaust gas components diffuse through the diffusion layer at the sensor cell. An electrode layer is applied voltage, and this current relative oxygen density in lean. Also this current relative hydrocarbon density in rich.



Therefore, the A/F sensor 1 is able to indicate air fuel ratio by this electrode layer of current. In addition, a heater is integrated in the sensor to ensure the required operating temperature of about 800°C (1,472°F).



DTC Logic

INFOID:0000000005235756

DTC DETECTION LOGIC

To judge malfunctions, the diagnosis checks that the A/F signal computed by ECM from the A/F sensor 1 signal is not inordinately low.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible Cause
P0131	Air fuel ratio (A/F) sensor 1 (bank 1) circuit low voltage	• The A/F signal computed by ECM from the A/F sensor 1 signal is constantly approx. 0 V.	• Harness or connectors (The A/F sensor 1 circuit is open or shorted.) • A/F sensor 1
P0151	Air fuel ratio (A/F) sensor 1 (bank 2) circuit low voltage		

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.

TESTING CONDITION:

Before performing the following procedure, confirm that battery voltage is more than 10.5 V at idle.

>> GO TO 2.

2.CHECK A/F SENSOR FUNCTION

1. Start engine and warm it up to normal operating temperature.
2. Select “A/F SEN1 (B1)” or “A/F SEN1 (B2)” in “DATA MONITOR” mode with CONSULT-III.
3. Check “A/F SEN1 (B1)” or “A/F SEN1 (B2)” indication.

Is the indication constantly approx. 0 V?

Is 1st trip DTC detected?

YES >> Go to EC-281, "Diagnosis Procedure".
NO >> GO TO 3.

3. PERFORM DTC CONFIRMATION PROCEDURE-II

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.
4. Start engine and drive the vehicle under similar conditions to (1st trip) Freeze Frame Data for a certain time. Refer to the table below.
   Hold the accelerator pedal as steady as possible.
   Similar conditions to (1st trip) Freeze Frame Data mean that the following conditions should be satisfied at the same time.
   CAUTION:
   Always drive vehicle in safe manner according to traffic conditions and obey all traffic laws when driving.

Engine speed	Engine speed in the freeze frame data ± 400 rpm
Vehicle speed	Vehicle speed in the freeze frame data ± 10 km/h (6MPH)
Base fuel schedule	Base fuel schedule in the freeze frame data × (1 ± 0.1)
Engine coolant temperature (T) condition	When the freeze frame data shows lower than 70 °C (158 °F), T should be lower than 70 °C (158 °F).
	When the freeze frame data shows higher than or equal to 70 °C (158 °F), T should be higher than or equal to 70 °C (158 °F).

Driving time varies according to the engine speed in the freeze frame data.

Engine speed	Time
Around 1,000 rpm	Approximately 10 minutes
Around 2,000 rpm	Approximately 5 minutes
More than 3,000 rpm	Approximately 3.5 minutes

5. Check 1st trip DTC.

Is 1st trip DTC detected?

YES >> Go to EC-281, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005235805

1. CHECK FOR INTAKE AIR LEAK AND PCV HOSE

1. Start engine and run it at idle speed.
2. Listen for the sound of the intake air leak.
3. Check PCV hose connection.

Is intake air leak detected?

YES >> Discover air leak location and repair.
NO >> GO TO 2.

2. CHECK FOR EXHAUST SYSTEM CLOGGING

Stop engine and visually check exhaust tube, three way catalyst and muffler for dents.

Is the inspection result normal?

YES-1 >> With CONSULT-III: GO TO 3.
YES-2 >> Without CONSULT-III: GO TO 4.
NO >> Repair or replace it.

3. PERFORM POWER BALANCE TEST

With CONSULT-III

1. Start engine.

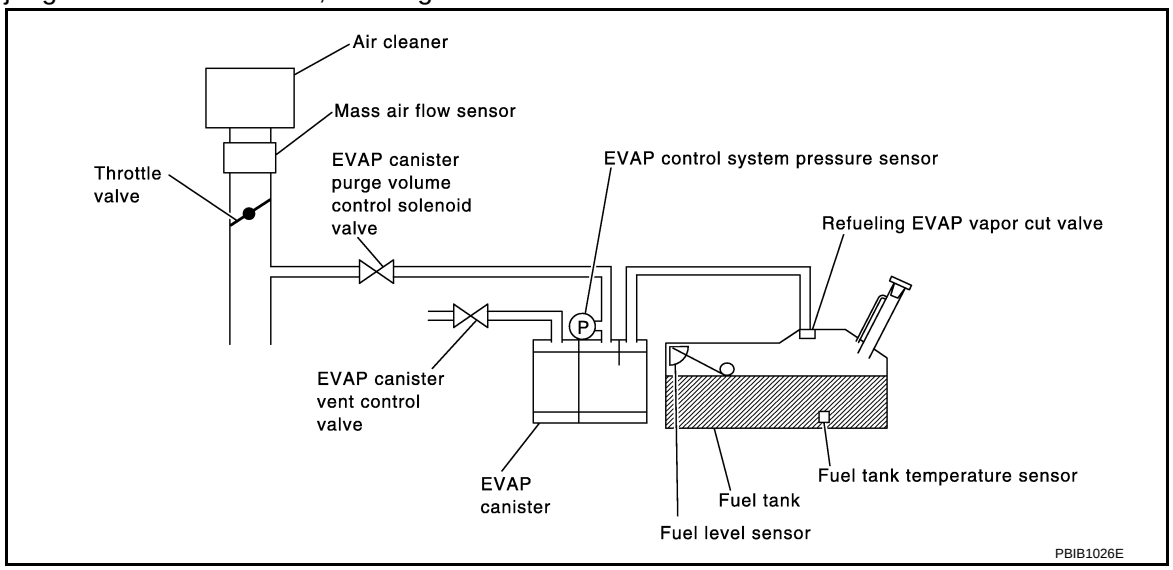
P0456 EVAP CONTROL SYSTEM

DTC Logic

INFOID:0000000005235858

DTC DETECTION LOGIC

This diagnosis detects leaks in the EVAP line between fuel tank and EVAP canister purge volume control solenoid valve, using the negative pressure caused by decrease of fuel temperature in the fuel tank after turning ignition switch OFF.
If ECM judges there are no leaks, the diagnosis will be OK.



DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P0456	Evaporative emission control system leak	• EVAP system has a leak. • EVAP system does not operate properly.	• Incorrect fuel tank vacuum relief valve • Incorrect fuel filler cap used • Fuel filler cap remains open or fails to close. • Foreign matter caught in fuel filler cap. • Leak is in line between intake manifold and EVAP canister purge volume control solenoid valve. • Foreign matter caught in EVAP canister vent control valve. • EVAP canister or fuel tank leaks • EVAP purge line (pipe and rubber tube) leaks • EVAP purge line rubber tube bent • Loose or disconnected rubber tube • EVAP canister vent control valve and the circuit • EVAP canister purge volume control solenoid valve and the circuit • Fuel tank temperature sensor • O-ring of EVAP canister vent control valve is missing or damaged • EVAP canister is saturated with water • EVAP control system pressure sensor • Refueling EVAP vapor cut valve • ORVR system leaks • Fuel level sensor and the circuit • Foreign matter caught in EVAP canister purge volume control solenoid valve

CAUTION:

- **Use only a genuine NISSAN fuel filler cap as a replacement. If an incorrect fuel filler cap is used, the MIL may come on.**
- **If the fuel filler cap is not tightened properly, the MIL may come on.**
- **Use only a genuine NISSAN rubber tube as a replacement.**

DTC CONFIRMATION PROCEDURE

P100A, P100B VVEL SYSTEM

DTC Logic

INFOID:0000000005235925

DTC DETECTION LOGIC

NOTE:
If DTC P100A or P100B is displayed with DTC P1090 or P1093, first perform the trouble diagnosis for DTC P1090 or P1093. Refer to EC-406, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P100A	VVEL response malfunction (bank 1)	Actual event response to target is poor.	• Harness or connectors (VVEL actuator motor circuit is open or shorted.) • VVEL actuator motor • VVEL actuator sub assembly • VVEL ladder assembly • VVEL control module
P100B	VVEL response malfunction (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.
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 10 V at idle.

>> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

1. Start engine.
2. Depress the accelerator pedal rapidly half or more under no load conditions, and then release it.
3. Wait at idle for 5 seconds or more.
4. Repeat steps 2 to 3 for three times.
5. Check 1st trip DTC.

Is DTC detected?

YES >> Go to EC-393, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005235926

1.CHECK GROUND CONNECTION

1. Turn ignition switch OFF.
2. Check ground connection M95. Refer to Ground Inspection in GI-42, "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

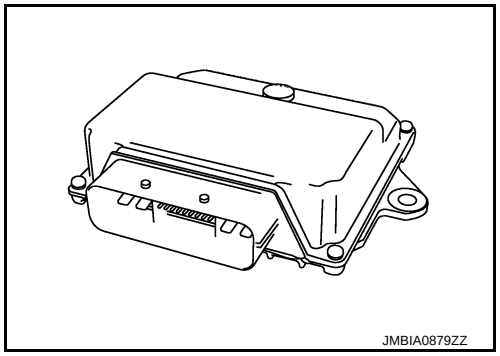
1. Disconnect VVEL control module harness connector.
2. Disconnect VVEL actuator motor harness connector.
3. Check the continuity between VVEL control module harness connector and VVEL actuator motor harness connector.

P1606 VVEL CONTROL MODULE

Description

INFOID:0000000005236001

The VVEL control module consists of a microcomputer and connectors for signal input and output and for power supply. The VVEL control module controls VVEL system.



DTC Logic

INFOID:0000000005236002

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1606	VVEL control module	• VVEL control module calculation function is malfunctioning. • VVEL EEP-ROM system is malfunctioning.	• VVEL control module

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.

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

1. Turn ignition switch ON and wait at least 1 second.
2. Check DTC.

Is DTC detected?

YES >> Go to EC-449, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005236003

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Erase DTC.
3. Perform DTC Confirmation Procedure.
   See EC-449, "DTC Logic".

Is the DTC P1606 displayed again?

YES >> GO TO 2.
NO >> INSPECTION END

2.REPLACE VVEL CONTROL MODULE

1. Replace VVEL control module.

B: Cannot refuel/Fuel odor from the fuel filler opening is strong while refueling.

Which symptom is present?

A >> GO TO 2.
B >> GO TO 7.

2. CHECK EVAP CANISTER

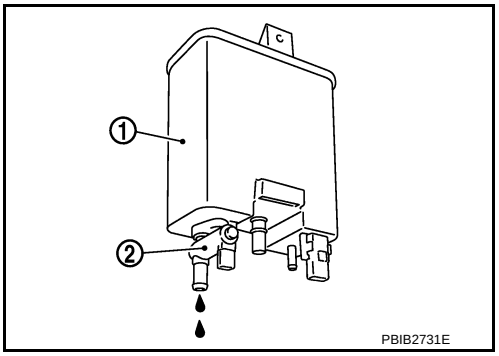
1. Remove EVAP canister with EVAP canister vent control valve and EVAP control system pressure sensor attached.
2. Weigh the EVAP canister with EVAP canister vent control valve and EVAP control system pressure sensor attached.
   The weight should be less than 2.2 kg (4.9 lb).

Is the inspection result normal?

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

3. CHECK IF EVAP CANISTER IS SATURATED WITH WATER

Check if water will drain from EVAP canister (1).
- 2 : EVAP canister vent control valve



Does water drain from the EVAP canister?

YES >> GO TO 4.
NO >> GO TO 6.

4. REPLACE EVAP CANISTER

Replace EVAP canister with a new one.

>> GO TO 5.

5. DETECT MALFUNCTIONING PART

Check the EVAP hose between EVAP canister and vehicle frame for clogging or poor connection.

>> Repair or replace EVAP hose.

6. CHECK REFUELING EVAP VAPOR CUT VALVE

Refer to EC-507, "Component Inspection".

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace refueling EVAP vapor cut valve with fuel tank.

7. CHECK EVAP CANISTER

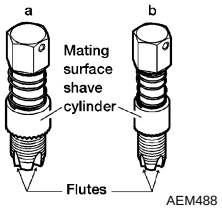
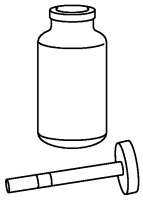
1. Remove EVAP canister with EVAP canister vent control valve and EVAP control system pressure sensor attached.
2. Weigh the EVAP canister with EVAP canister vent control valve and EVAP control system pressure sensor attached.
   The weight should be less than 2.2 kg (4.9 lb).

Is the inspection result normal?

YES >> GO TO 8.
NO >> GO TO 9.

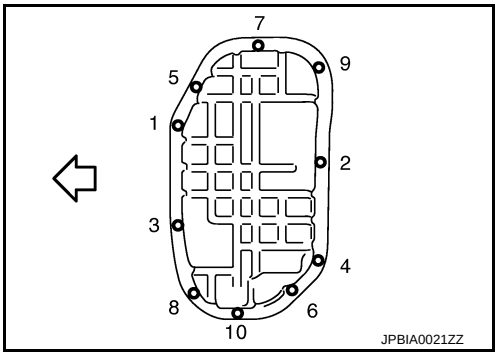
8. CHECK IF EVAP CANISTER IS SATURATED WITH WATER

DTC*1		Items (CONSULT-III screen terms)	SRT code	Trip	MIL	Permanent DTC group*4	Reference page
CONSULT-III GST*2	ECM*3						
P0000	**0000**	**NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.**	—	—	**Flashing***8	—	—
P0011	0011	INT/V TIM CONT-B1	—	2	×	B	EC-167
P0021	0021	INT/V TIM CONT-B2	—	2	×	B	EC-167
P0031	0031	A/F SEN1 HTR (B1)	—	2	×	B	EC-171
P0032	0032	A/F SEN1 HTR (B1)	—	2	×	B	EC-171
P0037	0037	HO2S2 HTR (B1)	—	2	×	B	EC-174
P0038	0038	HO2S2 HTR (B1)	—	2	×	B	EC-174
P0051	0051	A/F SEN1 HTR (B2)	—	2	×	B	EC-171
P0052	0052	A/F SEN1 HTR (B2)	—	2	×	B	EC-171
P0057	0057	HO2S2 HTR (B2)	—	2	×	B	EC-174
P0058	0058	HO2S2 HTR (B2)	—	2	×	B	EC-174
P006A	006A	MAP-MAF CORELTION-B1	—	2	×	B	EC-177
P0075	0075	INT/V TIM V/CIR-B1	—	2	×	B	EC-184
P0081	0081	INT/V TIM V/CIR-B2	—	2	×	B	EC-184
P0101	0101	MAF SEN/CIRCUIT-B1	—	2	×	B	EC-177
P0102	0102	MAF SEN/CIRCUIT-B1	—	1	×	B	EC-187
P0103	0103	MAF SEN/CIRCUIT-B1	—	1	×	B	EC-187
P0106	0106	ABSL PRES SEN/CIRC	—	2	×	B	EC-193
P010A	010A	ABSL PRES SEN/CIRC	—	2	×	B	EC-198
P010B	010B	MAF SEN/CIRCUIT-B2	—	2	×	B	EC-177
P010C	010C	MAF SEN/CIRCUIT-B2	—	1	×	B	EC-187
P010D	010D	MAF SEN/CIRCUIT-B2	—	1	×	B	EC-187
P0112	0112	IAT SEN/CIRCUIT-B1	—	2	×	B	EC-202
P0113	0113	IAT SEN/CIRCUIT-B1	—	2	×	B	EC-202
P0116	0116	ECT SEN/CIRC	—	2	×	B	EC-205
P0117	0117	ECT SEN/CIRC	—	1	×	B	EC-207
P0118	0118	ECT SEN/CIRC	—	1	×	B	EC-207
P0122	0122	TP SEN 2/CIRC-B1	—	1	×	B	EC-210
P0123	0123	TP SEN 2/CIRC-B1	—	1	×	B	EC-210
P0125	0125	ECT SENSOR	—	2	×	B	EC-214
P0127	0127	IAT SENSOR-B1	—	2	×	B	EC-217
P0128	0128	THERMSTAT FNCTN	—	2	×	B	EC-219
P0130	0130	A/F SENSOR1 (B1)	—	2	×	A	EC-221
P0131	0131	A/F SENSOR1 (B1)	—	2	×	B	EC-225
P0132	0132	A/F SENSOR1 (B1)	—	2	×	B	EC-228
P0133	0133	A/F SENSOR1 (B1)	×	2	×	A	EC-231
P0137	0137	HO2S2 (B1)	×	2	×	A	EC-236
P0138	0138	HO2S2 (B1)	×	2	×	A	EC-242
P0139	0139	HO2S2 (B1)	×	2	×	A	EC-250
P0150	0150	A/F SENSOR1 (B2)	—	2	×	A	EC-221
P0151	0151	A/F SENSOR1 (B2)	—	2	×	B	EC-225

Tool name (Kent-Moore No.)		Description
Oxygen sensor thread cleaner i.e.: (J-43897-18) (J-43897-12)	 AEM488	Reconditions the exhaust system threads before installing a new oxygen sensor. Use with anti-seize lubricant shown below. **a: 18 mm diameter with pitch 1.5 mm for Zirconia Oxygen Sensor** **b: 12 mm diameter with pitch 1.25 mm for Titania Oxygen Sensor**
Anti-seize lubricant i.e.: (Permatex™ 133AR or equivalent meeting MIL specification MIL-A-907)	 S-NT779	Lubricates oxygen sensor thread cleaning tool when reconditioning exhaust system threads.

- Tighten mounting bolts in numerical order as shown in the figure.

⇦ : Engine front



2. Install oil pan drain plug.
   - Refer to the figure of the components of on the prior page for installation direction of drain plug washer. Refer to EM-48, "Exploded View".
3. Install in the reverse order of removal after this step.
   NOTE:
   Wait at least 30 minutes after oil pan is installed before pouring engine oil.

Inspection

INFOID:0000000005238215

INSPECTION AFTER REMOVAL

Clean oil strainer if any object is attached.

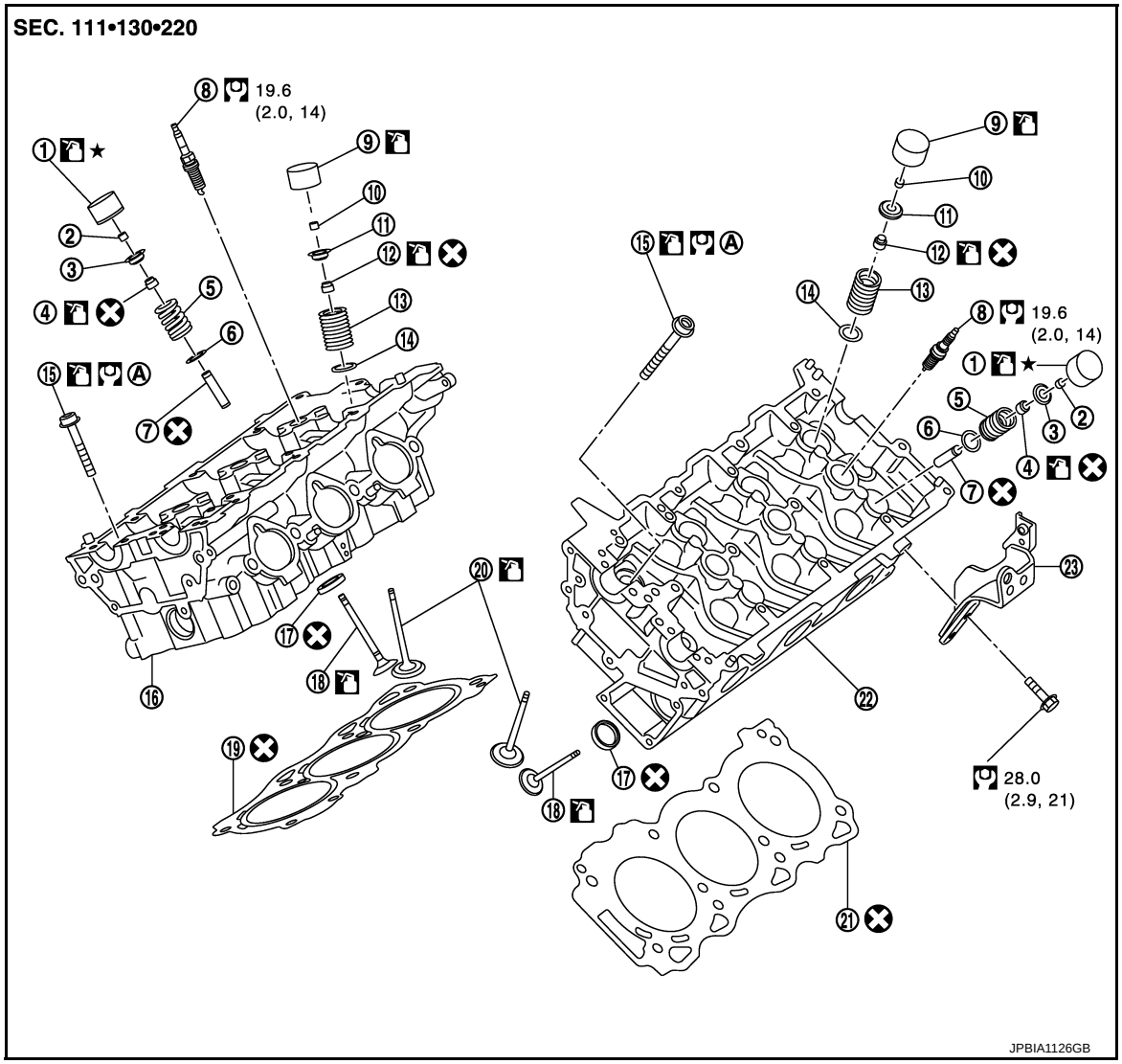
INSPECTION AFTER INSTALLATION

1. Check the engine oil level and adjust engine oil. Refer to LU-6, "Inspection".
2. Start engine, and check there is no leakage of engine oil.
3. Stop engine and wait for 10 minutes.
4. Check the engine oil level again. Refer to LU-6, "Inspection".

CYLINDER HEAD

Exploded View

INFOID:0000000005238237



1. Valve lifter (EXH)
2. Valve collet (EXH)
3. Valve spring retainer (EXH)
4. Valve oil seal (EXH)
5. Valve spring (EXH)
6. Valve spring seat (EXH)
7. Valve guide (EXH)
8. Spark plug
9. Valve lifter (INT)
10. Valve collet (INT)
11. Valve spring retainer (INT)
12. Valve oil seal (INT)
13. Valve spring (INT)
14. Valve spring seat (INT)
15. Cylinder head bolt
16. Cylinder head (bank 1)
17. Valve seat (EXH)
18. Valve (EXH)
19. Cylinder head gasket (bank 1)
20. Valve (INT)
21. Cylinder head gasket (bank 2)
22. Cylinder head (bank 2)
23. Engine rear lower slinger

A. Refer to EM-107

Refer to GI-4, "Components" for symbols in the figure.

CAUTION:

A high degree of precision is required for a valve on the intake side. Never remove the valve related parts unless necessary.

NOTE:

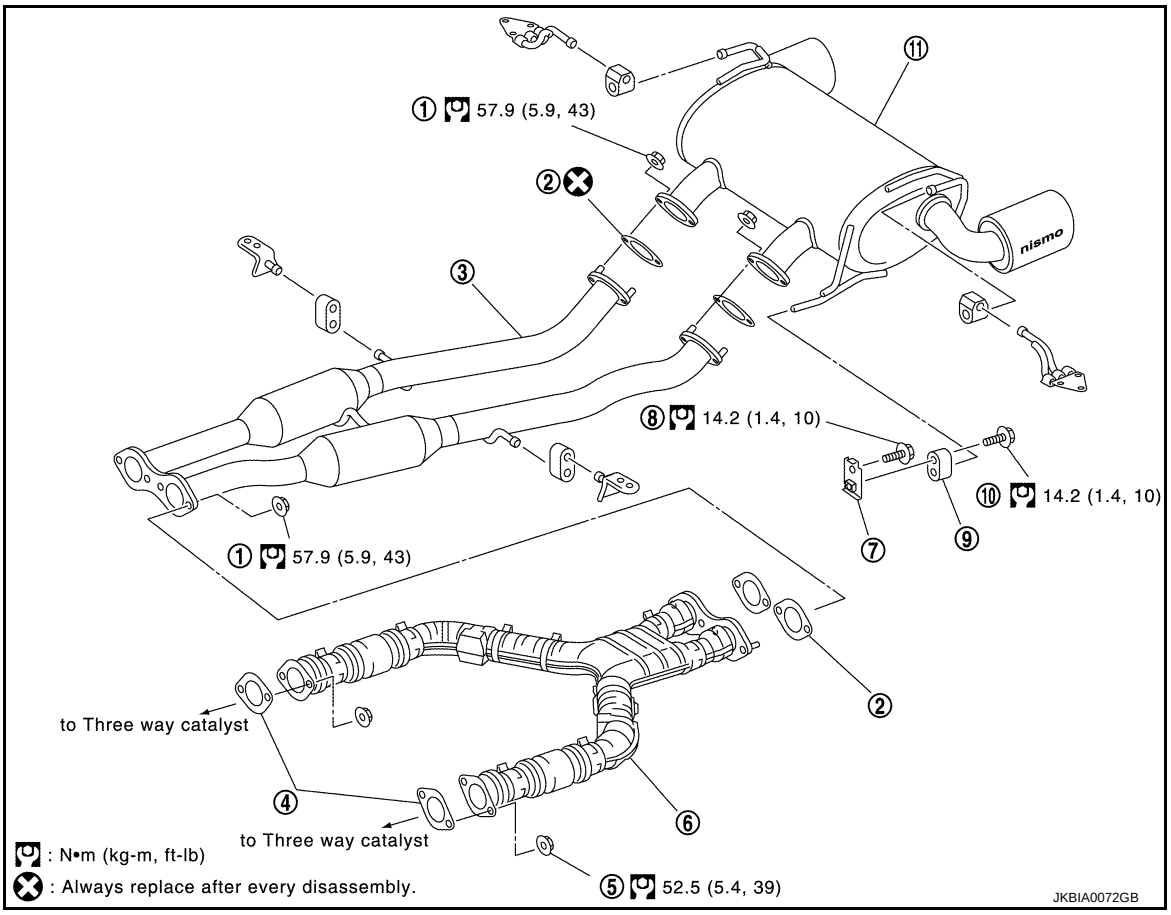
- As for replacement of parts on the intake side as shown in the exploded view, replace VVEL ladder assembly & cylinder head assembly. (Only valve oil seals are replaceable as a single part.)

REMOVAL AND INSTALLATION

EXHAUST SYSTEM

Exploded View

INFOID:0000000005643056



1. Nut (8)
2. Gasket (4)
3. Center muffler
4. Gasket
5. Nut (4)
6. Exhaust front tube
7. Exhaust mounting bracket
8. Bolt
9. Mounting rubber
10. Bolt
11. Main muffler

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	E55
Connector Name	SIDE TURN SIGNAL LAMP LH
Connector Type	RK02FGY

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	– [Coupe models]
1	G	– [Roadster models]
2	B	–

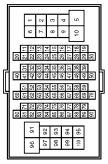
Connector No.	E58
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS06FGY-PR

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
3	B	–
4	B/W	–
5	P	–
6	GR	–
7	LG	–
8	BG	– [Coupe models]
8	O	– [Roadster models]

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	–
3	L	–
4	L	–
7	B	–
8	P	–
9	L	– [Coupe models]
9	B	– [Roadster models]
11	V	–
12	R	–
13	L	–
14	GR	–
15	P	–
16	W	–
17	SB	–
20	LG	–
21	BR	– [Coupe models]
21	G	– [Roadster models]
31	L	–
32	Y	–
33	P	–
34	L	–
35	BR	–
36	V	–
37	Y	–
38	R	–
39	B	–
40	W	–
41	LG	–
42	SB	–
43	G	–
44	R	– [Roadster models with M/T]
44	GR	– [Except for roadster models with M/T]
45	BG	– [Coupe models]
45	O	– [Roadster models]
46	W	–
47	P	–
58	SHIELD	–
59	L	–

70	P	–
80	W	–
81	P	–
82	G	–
83	V	–
84	L	–
85	BG	– [Coupe models]
85	O	– [Roadster models]
86	LG	–
87	R	–
89	P	–
91	W	–
92	L	–
93	G	–
94	Y	–
96	Y	–
97	BR	–
98	GR	–
99	LG	–
100	BG	– [Coupe models]
100	O	– [Roadster models]

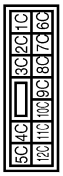
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1A	V	–
2A	G	–
3A	L	–
4A	P	–
5A	L	–
6A	Y	–
7A	BR	–
8A	L	–

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6C	R	–
7C	B	–
9C	R	– [Coupe models]
9C	O	– [Roadster models]
10C	L	–
11C	LG	–
12C	O	–

JCLWM4075GB

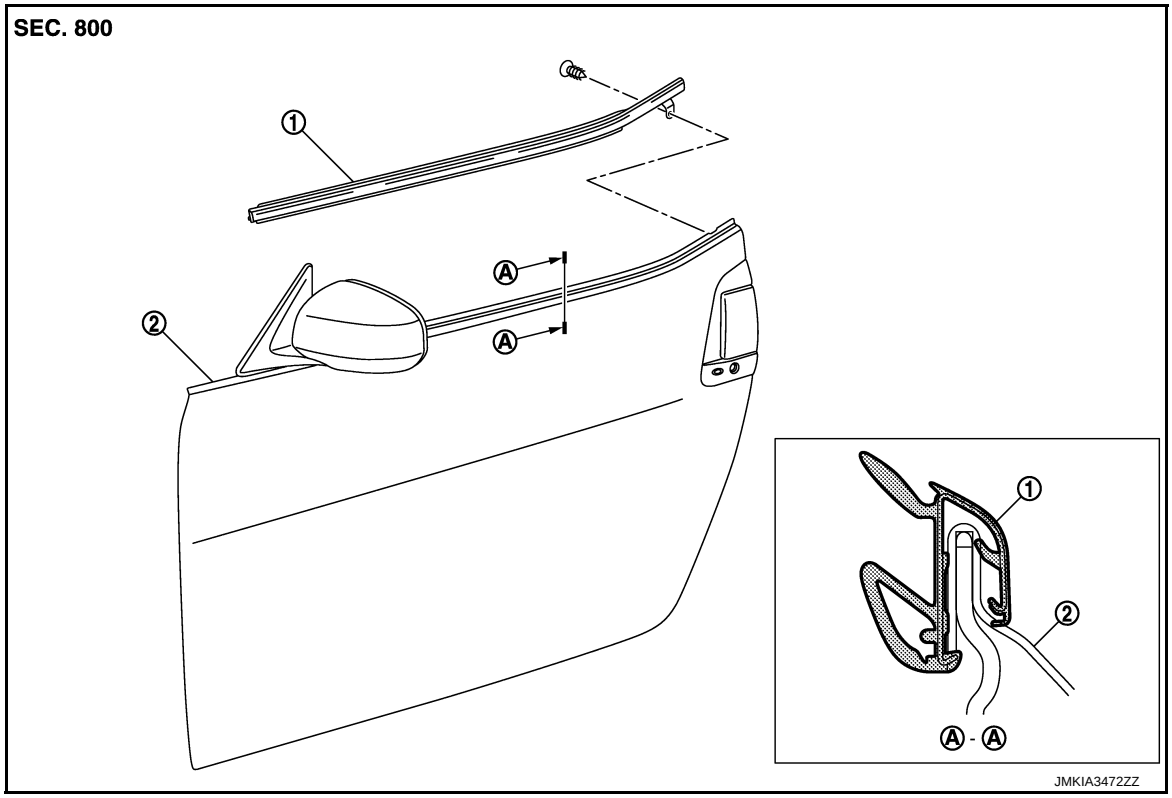
Perform the self-diagnosis with CONSULT-III before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

Symptom		Possible cause	Inspection item
Headlamp does not switch to the high beam.	One side	• Fuse • Harness between IPDM E/R and the front combination lamp • Front combination lamp (High beam solenoid) • IPDM E/R	Headlamp (HI) circuit Refer to EXL-81.
	Both sides	**Symptom diagnosis** "BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM" Refer to EXL-115.	
High beam indicator lamp is not turned ON. (The headlamp switches to the high beam.)		Combination meter	• Combination meter Data monitor "HI-BEAM IND" • BCM (HEAD LAMP) Active test "HEADLAMP"
Headlamp does not switch to the low beam.	One side	Front combination lamp (High beam solenoid)	—
	Both sides	• Combination switch • Harness between the combination switch and BCM • BCM	Combination switch Refer to BCS-89.
		High beam request signal • BCM • IPDM E/R	IPDM E/R Data monitor "HL HI REQ"
		IPDM E/R	—
Headlamp is not turned ON.	One side	• Fuse • Xenon bulb • Harness between IPDM E/R and the front combination lamp • Front combination lamp (xenon headlamp) • IPDM E/R	Headlamp (LO) circuit Refer to EXL-83.
	Both sides	**Symptom diagnosis** "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-116.	
Headlamp is not turned OFF.	When ignition switch is turned ON		
	Ignition switch is turned OFF.	IPDM E/R	—
Headlamp is not turned ON/OFF with the lighting switch AUTO.		• Combination switch • Harness between the combination switch and BCM • BCM	Combination switch Refer to BCS-89.
		• Optical sensor • Harness between the optical sensor and BCM • BCM	Optical sensor Refer to EXL-97.
Parking lamp is not turned ON.		• Parking lamp bulb • Harness between daytime running light relay and the front combination lamp • Front combination lamp	Parking lamp circuit Refer to EXL-91.
Tail lamp is not turned ON.		• Harness between daytime running light relay and the rear combination lamp • Rear combination lamp	Tail lamp circuit Refer to EXL-103.

DOOR OUTSIDE MOLDING

Exploded View

INFOID:0000000005242275



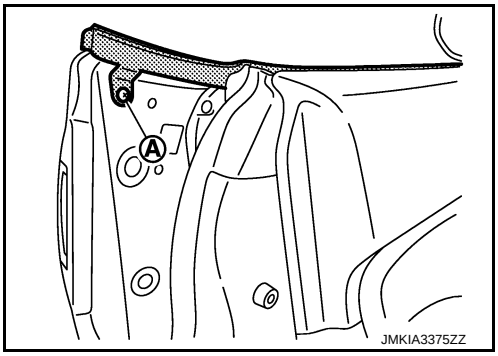
1. Front door outside molding
2. Front door panel

Removal and Installation

INFOID:0000000005242276

REMOVAL

1. Fully open door window.
2. Remove door outside molding fixing screw (A).



SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Fuel Tank

INFOID:0000000005234241

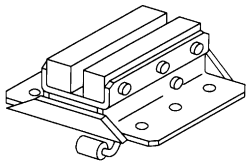
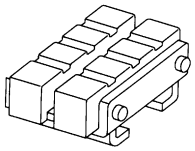
Standard and Limit

Fuel tank capacity	Approx. 71.9 ℓ (19 US gal, 15-7/8 Imp gal)
Fuel recommendation	Refer to GI-30

LIFTING POINT

Commercial Service Tools

INFOID:0000000005238451

Tool name	Description
Board on attachment	 S-NT001
Safety stand attachment	 S-NT002

CAUTION:

- **Every time the vehicle is lifted up, maintain the complete vehicle curb condition.**
- **Since the vehicle's center of gravity changes when removing main parts on the front side (engine, transmission, suspension etc.), support a jack up point on the rear side garage jack with a mission jack or equivalent.**
- **Since the vehicle's center of gravity changes when removing main parts on the rear side (rear axle, suspension, etc.), support a jack up point on the front side garage jack with a mission jack or equivalent.**
- **Be careful not to smash or never do anything that would affect piping parts.**

Garage Jack and Safety Stand and 2-Pole Lift

INFOID:0000000005238452

WARNING:

- **Park the vehicle on a level surface when using the jack. Check to avoid damaging pipes, tubes, etc. under the vehicle.**
- **Never get under the vehicle while it is supported only by the jack. Always use safety stands when you have to get under the vehicle.**
- **Place wheel chocks at both front and back of the wheels on the ground.**
- **When lifting the vehicle, open the lift arms as wide as possible and ensure that the front and rear of the vehicle are well balanced.**
- **When setting the lift arm, never allow the arm to contact the brake tubes, brake cable, fuel lines and sill spoiler.**

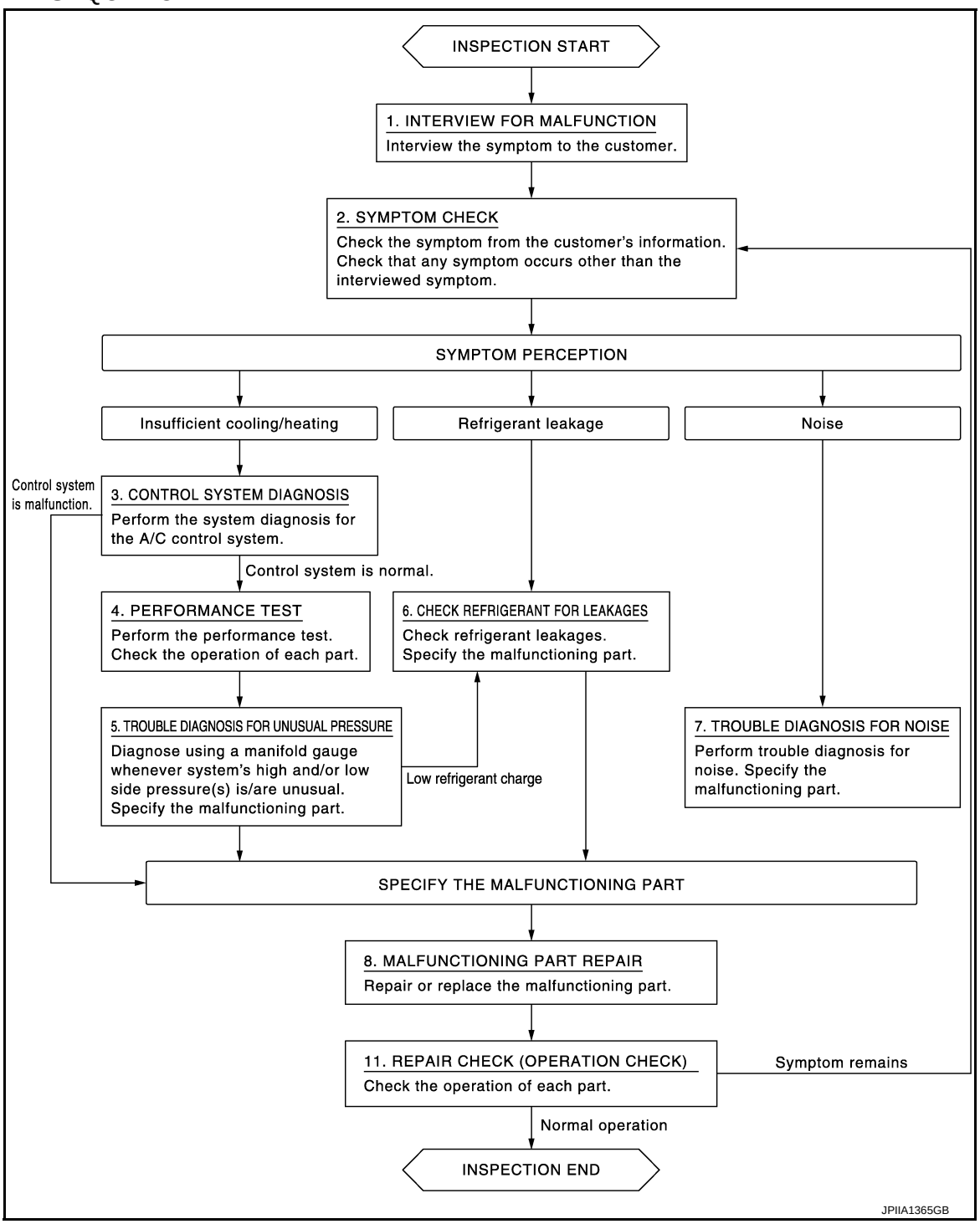
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000005233584

OVERALL SEQUENCE



DETAILED FLOW

1.INTERVIEW FOR MALFUNCTION

Interview the symptom to the customer.

ECU DIAGNOSIS INFORMATION

A/C AUTO AMP.

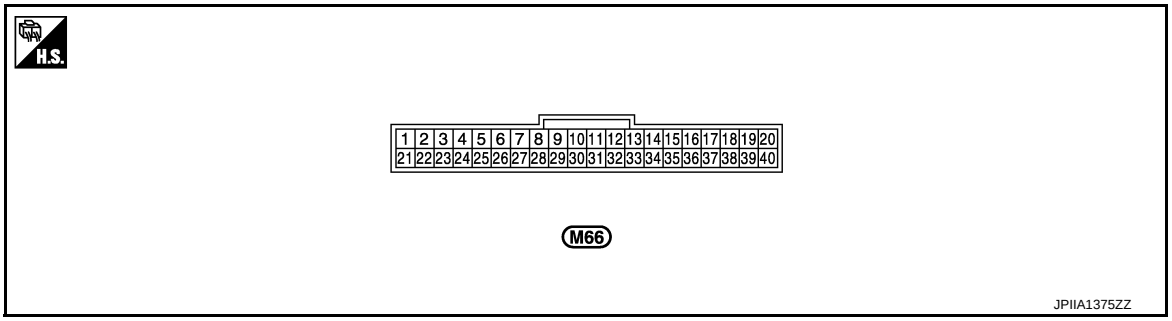
Reference Value

INFOID:0000000005239183

CONSULT-III DATA MONITOR REFERENCE VALUES

Monitor item	Condition		Value/Status
COMP REQ SIG	Engine: Run at idle after warming up	A/C switch: ON (Compressor operation status)	On
		A/C switch: OFF	Off
FAN REQ SIG	Engine: Run at idle after warming up	Blower motor: ON	On
		Blower motor: OFF	Off
AMB TEMP SEN	Ignition switch ON	—	–22 – 131°F (–30 – 55°C)
IN-VEH TEMP	Ignition switch ON	—	–22 – 131°F (–30 – 55°C)
INT TEMP SEN	Ignition switch ON	—	–22 – 131°F (–30 – 55°C)
SUNLOAD SEN	Ignition switch ON	—	0 – 1045 w/m^2 (0 – 900 kcal/m^2·h)
AMB SEN CAL	Ignition switch ON	—	–22 – 131°F (–30 – 55°C)
IN-VEH CAL	Ignition switch ON	—	–22 – 131°F (–30 – 55°C)
INT TEMP CAL	Ignition switch ON	—	–22 – 131°F (–30 – 55°C)
SUNL SEN CAL	Ignition switch ON	—	0 – 1045 w/m^2 (0 – 900 kcal/m^2·h)
FAN DUTY	Engine: Run at idle after warming up	Blower motor: ON	25 – 81
		Blower motor: OFF	0
XM	Ignition switch ON	—	–100 – 155
ENG COOL TEMP	Ignition switch ON	—	Values depending on coolant temperature
VEHICLE SPEED	Driving	—	Equivalent to speedometer reading

TERMINAL LAYOUT



PHYSICAL VALUES

DIAGNOSIS SYSTEM (HVAC)

CONSULT-III Function

INFOID:0000000005239234

CONSULT-III performs the following functions via CAN communication with A/C auto amp.

Diagnostic mode	Description
Self diagnostic result	Displays the diagnosis results judged by A/C auto amp.
Data monitor	Displays the input/output signal of A/C auto amp.
Active test	The signals used to activate each device are forcibly supplied from A/C auto amp.
Work support	Changes the setting for each setting function.
ECU identification	Displays the part number of A/C auto amp.

NOTE:
Diagnosis should be performed with engine running. Door motor operation speeds become slower and NO results may be returned even for normal operation if battery voltage drops below 12 V during self-diagnosis.

SELF-DIAGNOSIS RESULTS

Refer to HAC-161, "DTC Index".

DATA MONITOR

Display item list

Monitor item [Unit]		Description
COMP REQ SIG	[On/Off]	Displays A/C switch ON/OFF status transmitted to other units via CAN communication
FAN REQ SIG	[On/Off]	Displays fan switch ON/OFF status transmitted to other units via CAN communication
AMB TEMP SEN	[°C]	Ambient sensor value converted from ambient sensor signal received from ambient sensor
IN-VEH TEMP	[°C]	In-vehicle sensor value converted from in-vehicle sensor signal received from in-vehicle sensor
INT TEMP SEN	[°C]	Intake sensor value converted from intake sensor signal received from intake sensor
SUNLOAD SEN	[w/m^2]	Sunload sensor value converted from sunload sensor signal received from sunload sensor
AMB SEN CAL	[°C]	Ambient sensor value calculated by A/C auto amp.
IN-VEH CAL	[°C]	In-vehicle sensor value calculated by A/C auto amp.
INT TEMP CAL	[°C]	Intake sensor value calculated by A/C auto amp.
SUNL SEN CAL	[w/m^2]	Sunload sensor value calculated by A/C auto amp.
FAN DUTY		Duty ratio of blower motor judged by A/C auto amp.
XM		Target discharge air temperature judged by A/C auto amp. depending on the temperature setting and the value from each sensor
ENG COOL TEMP	[°C]	Water temperature signal value received from ECM via CAN communication
VEHICLE SPEED	[Mph (km/h)]	Vehicle speed signal value received from meter via CAN communication

ACTIVE TEST

Test item	Description
HVAC TEST	The operation check of air conditioner system can be performed by selecting the mode. Refer to the following table for the conditions of each mode.

Check each output device

PRECAUTION

PRECAUTIONS

EXCEPT FOR MEXICO

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

INFOID:0000000005653822

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:

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which 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 the “SRS AIR BAG”.**
- **Do not 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:

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT 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.**

EXCEPT FOR MEXICO : Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:0000000005655065

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.
If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Turn the push-button ignition switch to ACC position.
   (At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.

ILLUMINATION

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	O	–
3	LG	–
4	O	–
6	V	–
7	LG	–
8	SB	–
9	GR	–
11	Y	–
12	V	–
13	BR	–
14	V	–
15	B	–
16	V	–
20	SB	–
21	G	–
22	GR	–
23	V	–
24	R	–
25	L	–
26	P	–
31	W	–
32	B	–
33	W	–
34	R	–
35	B	–
40	L	–
41	R	–
42	GR	–
43	R	– [Coupe models]
43	V	– [Roadster models]
44	R	–
45	O	–
46	G	– [With A/T]
46	SB	– [With M/T]
47	R	– [With A/T]
47	V	– [With M/T]
48	SHIELD	–

51	V	–
52	R	–
57	SHIELD	–
58	B	–
60	L	– [Coupe models]
60	V	– [Roadster models]
61	R	– [Coupe models]
61	SB	– [Roadster models]
62	SHIELD	–
63	R	– [Coupe models]
63	BR	– [Roadster models]
64	G	– [Coupe models]
64	Y	– [Roadster models]
65	SHIELD	–
66	LG	– [Coupe models]
66	P	– [Roadster models]
67	V	– [Coupe models]
67	L	– [Roadster models]
68	SHIELD	–
69	L	– [Coupe models]
69	R	– [Roadster models]
70	P	– [Coupe models]
70	G	– [Roadster models]
71	V	–
72	P	–
73	BR	–
74	GR	–
75	O	–
80	Y	–
81	W	–
82	BR	–
83	GR	–
84	L	–
85	LG	–
86	V	–
87	BR	–
88	SB	–
93	Y	–
94	SB	– [Coupe models]
94	L	– [Roadster models]
95	GR	– [Coupe models]
95	W	– [Roadster models]
96	L	–
97	LG	– [Coupe models]
97	Y	– [Roadster models]
98	BG	– [Coupe models]
98	Y/B	– [Roadster models]
99	W	–
100	B	–

Connector No.	M9
Connector Name	DIODE
Connector Type	24335 C9900

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
2	B	–
3	R	–
4	B	–
5	V	–
6	R	–
7	SHIELD	–
8	R	–
9	G	–
10	B	–
11	G	–
12	Y	–

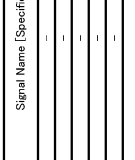
Connector No.	M15
Connector Name	ROOF OPEN / CLOSE SWITCH
Connector Type	TK06FW-1V

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	–
2	R	–

Connector No.	M19
Connector Name	VDC OFF SWITCH
Connector Type	TK04FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	–
2	B	–
3	R	–
4	W	–

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
3	V	–
4	BR	–
5	R	–
6	R	–

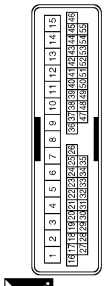
JCLWM4107GB

INTERIOR ROOM LAMP

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH

Terminal No.	Color of Wire	Signal Name [Specification]
113	O	OPTICAL SENSOR
114	R	CLUTCH INTERLOCK SW
115	O	SHOCK SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	R	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
129	O	TRUNK LID OPENER CANCEL SW
130	L	REAR DEFOGGER SW
132	Y	POWER WINDOW SW COMM [Coupe models]
132	V	P/ W SW & SOFT TOP C/U COMM [Roadster models]
133	R	PUSH BUTTON IGNITION SW (LL POWER) [Roadster models with M/T]
133	G	PUSH BUTTON IGNITION SW (ALL POWER)[Except for roadster models with M/T]
134	GR	LOCK IND
137	O	RECEIVER/SENSOR GND [Roadster models with M/T]
137	P	RECEIVER/SENSOR GND [Except for roadster models with M/T]
138	V	RECEIVER / SENSOR POWER SUPPLY
139	L	TIRE PRESS/KYLS ENT [REAR] RECEIV COMM
140	G	SHIFT N/P [With A/T]
140	G	P/N POSITION SW [With M/T]
141	Y	SECURITY INDICATOR
142	O	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
149	W	TIRE PRESSURE WARN CHECK SW
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
10	G	– [Coupe models]
10	V	– [Roadster models]
11	V	– [Coupe models]
11	LG	– [Roadster models]
12	LG	–
13	V	–
14	B	–
15	W	–
19	Y	–
23	Y/B	–
44	R	– [Coupe models]
44	O	– [Roadster models]
50	Y	–
51	Y	–
52	G	– [Roadster models with M/T]
52	GR	– [Except for roadster models with M/T]
53	W	–
54	G	–
55	R	–

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–
5	R	–
6	B	–
7	P	–
8	R	–
11	B	–
12	Y	–
13	G	–
14	SHIELD	–
15	R	–
16	G	–

Connector No.	R2
Connector Name	VANITY MIRROR LAMP LH
Connector Type	MCA02FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
2	R	–

Connector No.	R3
Connector Name	VANITY MIRROR LAMP RH
Connector Type	MCA02FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
2	R	–

Connector No.	R4
Connector Name	MAP LAMP
Connector Type	TK06FGY

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	–
2	V	–
3	B	–
4	SB	–
5	Y	–
6	GR	–

Connector No.	R11
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	B	–
3	R	–
4	B	–
5	V	–
6	R	–
7	SHIELD	–
8	R	–
9	G	–
10	B	–
11	G	–
12	Y	–

JCLWM4099GB

11. Remove the following parts after removing headlining.
    - Map lamp assembly. Refer to INT-25, "Exploded View".
    - Roof harness assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Install headlining assembly after inserting clips to clip holder of headlining rear end.**
- **Never bend headlining when installing.**

FLOOR TRIM

Exploded View

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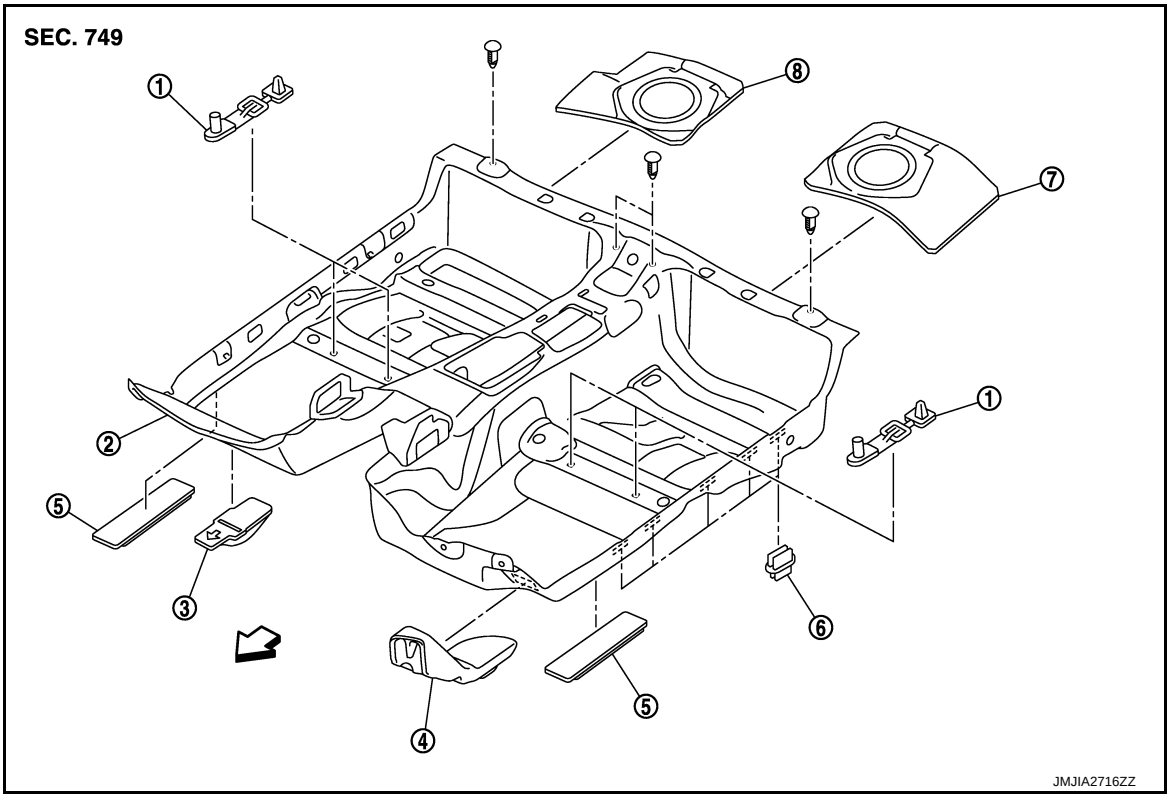


1. Floor hook
2. Floor trim
3. Front floor spacer center
4. Footrest
5. Front floor spacer (LH/RH)
6. Fixing clip
7. Rear floor felt LH
8. Rear floor felt RH

⇦ : Vehicle front

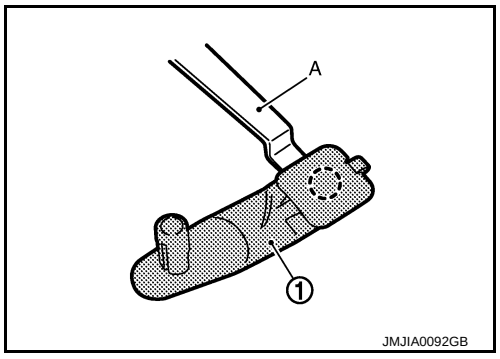
Removal and Installation

INFOID:0000000005502766

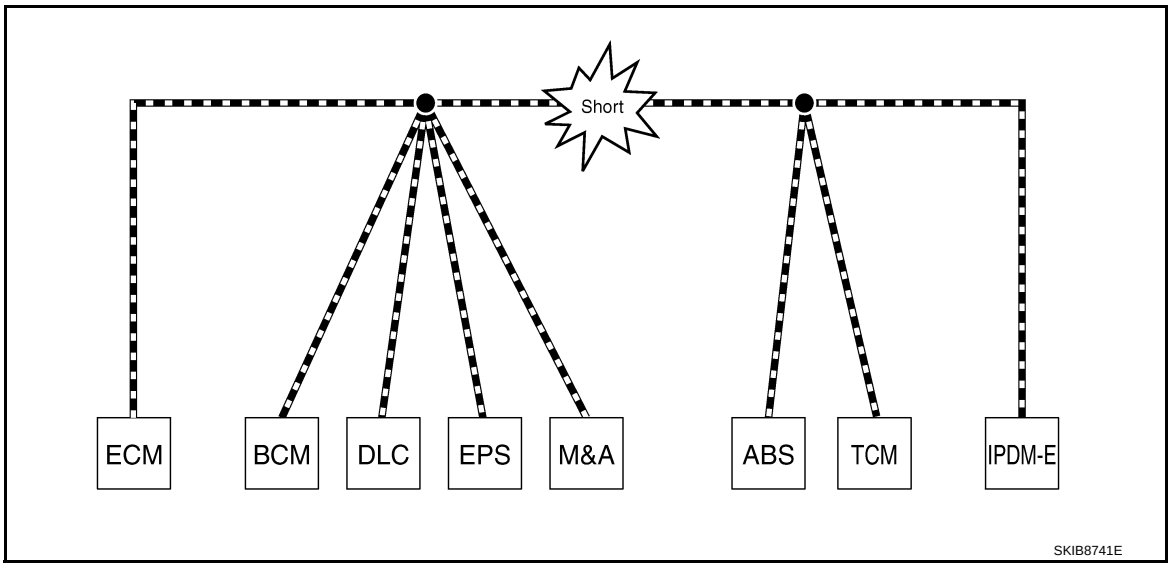
REMOVAL

1. Remove both seat assembly. Refer to SE-88, "Removal and Installation".
2. Remove accelerator pedal assembly. Refer to ACC-4, "Removal and Installation".
3. Remove foot grille (LH/RH). Refer to VTL-11, "FOOT GRILLE : Removal and Installation".
4. Remove console panel (LH/RH). Refer to IP-24, "Removal and Installation".
5. Remove center console assembly. Refer to IP-24, "Removal and Installation".
6. Disengage clip of floor hook (1) with remover tool (A).

◌ : Clip



Example: CAN-H, CAN-L Harness Short Circuit



Unit name	Symptom
ECM	• Engine torque limiting is affected, and shift harshness increases. • Engine speed drops.
BCM	• Reverse warning chime does not sound. • The front wiper moves under continuous operation mode even though the front wiper switch being in the intermittent position. • The room lamp does not turn ON. • The engine does not start (if an error or malfunction occurs while turning the ignition switch OFF.) • The steering lock does not release (if an error or malfunction occurs while turning the ignition switch OFF.)
EPS control unit	The steering effort increases.
Combination meter	• The tachometer and the speedometer do not move. • Warning lamps turn ON. • Indicator lamps do not turn ON.
ABS actuator and electric unit (control unit)	Normal operation.
TCM	No impact on operation.
IPDM E/R	When the ignition switch is ON, • The headlamps (Lo) turn ON. • The cooling fan continues to rotate.

CAN Diagnosis with CONSULT-III

INFOID:0000000005525386

CAN diagnosis on CONSULT-III extracts the root cause by receiving the following information.
- Response to the system call
- Control unit diagnosis information
- Self-diagnosis
- CAN diagnostic support monitor

A-BAG BRANCH LINE CIRCUIT

Diagnosis Procedure

INFOID:0000000005530677

WARNING:

- **Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait 3 minutes or more. (To discharge backup capacitor.)**
- **Never use unspecified tester or other measuring device.**

1.CHECK CONNECTOR

Check the terminals and connectors of the air bag diagnosis sensor unit for damage, bend and loose connection (unit side and connector side).

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the terminal and connector.

2.CHECK AIR BAG DIAGNOSIS SENSOR UNIT

Check the air bag diagnosis sensor unit. Refer to the following.

- Coupe models: SRC-9, "Work Flow"
- Roadster models: SRC-172, "Work Flow"

Is the inspection result normal?

YES >> Replace the main harness.
NO >> Replace parts whose air bag system has a malfunction.

AV BRANCH LINE CIRCUIT

Diagnosis Procedure

INFOID:0000000005530762

1.CHECK CONNECTOR

1. Turn the ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check the terminals and connectors of the AV control unit for damage, bend and loose connection (unit side and connector side).

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair the terminal and connector.

2.CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect the connector of AV control unit.
2. Check the resistance between the AV control unit harness connector terminals.

AV control unit harness connector			Resistance (Ω)
Connector No.	Terminal No.		
M86	90	74	Approx. 54 – 66

Is the measurement value within the specification?

YES >> GO TO 3.
NO >> Repair the AV control unit branch line.

3.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check the power supply and the ground circuit of the AV control unit. Refer to AV-307, "AV CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES (Present error)>>Replace the AV control unit. Refer to AV-333, "Exploded View".
YES (Past error)>>Error was detected in the AV control unit branch line.
NO >> Repair the power supply and the ground circuit.

FOR MEXICO : General Maintenance

INFOID:0000000005239060

General maintenance includes those items which should be checked during the normal day-to-day operation of the vehicle. They are essential if the vehicle is to continue operating properly. The owners can perform the checks and inspections themselves or they can have their NISSAN dealers do them for a normal charge.

OUTSIDE THE VEHICLE

The maintenance items listed here should be performed from time to time, unless otherwise specified.

Item		Reference page
Tires	Check the pressure with a gauge often and always prior to long distance trips. Adjust the pressure in all tires, including the spare, to the pressure specified. Check carefully for damage, cuts or excessive wear.	WT-61
Windshield wiper blades	Check for cracks or wear if not functioning correctly.	—
Doors and engine hood	Check that all doors and the engine hood operate properly. Also make sure that all latches lock securely. Lubricate if necessary. Make sure that the secondary latch keeps the hood from opening when the primary latch is released. When driving in areas using road salt or other corrosive materials, check for lubrication frequently.	MA-41
Tire rotation	Tires cannot be rotated, as front tires are different size from rear tires and the direction of wheel rotation is fixed in each tire.	MA-34
Tire Pressure Monitoring System (TPMS) transmitter components	Replace the TPMS transmitter grommet seal, valve core and cap when the tires are replaced due to wear or age.	WT-58

INSIDE THE VEHICLE

The maintenance items listed here should be checked on a regular basis, such as when performing periodic maintenance, cleaning the vehicle, etc.

Item		Reference page
Lamps	Make sure that the headlamps, stop lamps, tail lamps, turn signal lamps, and other lamps are all operating properly and installed securely. Also check headlamp aim.	—
Warning lamps and chimes	Make sure that all warning lamps and chimes are operating properly.	—
Steering wheel	Check that it has the specified play. Check for changes in the steering conditions, such as excessive free play, hard steering or strange noises. **Free play: Less than 35 mm (1.38 in)**	—
Seat belts	Check that all parts of the seat belt system (e.g. buckles, anchors, adjusters and retractors) operate properly and smoothly, and are installed securely. Check the belt webbing for cuts, fraying, wear or damage.	MA-41

UNDER THE HOOD AND VEHICLE

The maintenance items listed here should be checked periodically (e.g. each time you check the engine oil or refuel).

Item		Reference page
Windshield washer fluid	Check that there is adequate fluid in the tank.	—
Engine coolant level	Check the coolant level when the engine is cold.	MA-18
Engine oil level	Check the level after parking the vehicle (on a level ground) and turning off the engine.	LU-6
Brake and clutch fluid levels	Make sure that the brake and clutch fluid levels are between the “MAX” and “MIN” lines on the reservoirs.	MA-36 MA-30
Battery	Check the fluid level in each cell. It should be between the “MAX” and “MIN” lines.	—

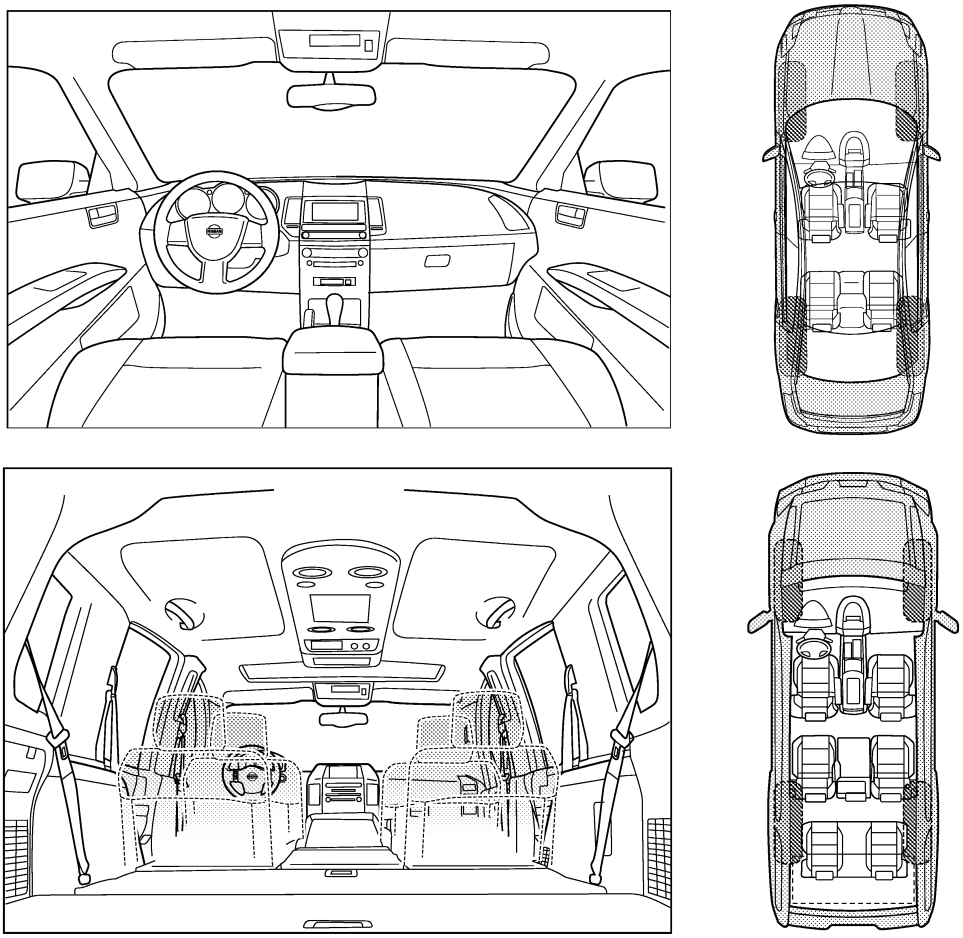
Diagnostic Worksheet

INFOID:0000000005234695

SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

Dear Nissan Customer:
We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service advisor or technician to ensure we confirm the noise you are hearing.

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

PIIB8740E

4. Check continuity between combination meter harness connector and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M54	34		Not existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair harness or connector.

3.CHECK FUEL LEVEL SENSOR UNIT (MAIN-SUB) CIRCUIT

1. Disconnect fuel level sensor unit (main) connector.
2. Check for continuity between the fuel level sensor unit (sub) harness connector and the fuel level sensor unit (main) harness connector.

Fuel level sensor unit (sub)		Fuel level sensor unit (main)		Continuity
Connector	Terminal	Connector	Terminal	
B21	2	B22	2	Existed

3. Check for continuity between the fuel level sensor unit (sub) harness connector and the ground.

Combination meter		Ground	Continuity
Connector	Terminal		
B21	2		Not existed

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair harness or connector.

4.CHECK FUEL LEVEL SENSOR GROUND CIRCUIT

Check continuity between fuel level sensor unit (main) harness connector and combination meter harness connector.

Fuel level sensor unit (main)		Combination meter		Continuity
Connector	Terminal	Connector	Terminal	
B22	5	M53	24	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair harness or connector.

Component Inspection

INFOID:0000000005485594

1.REMOVE FUEL LEVEL SENSOR UNIT

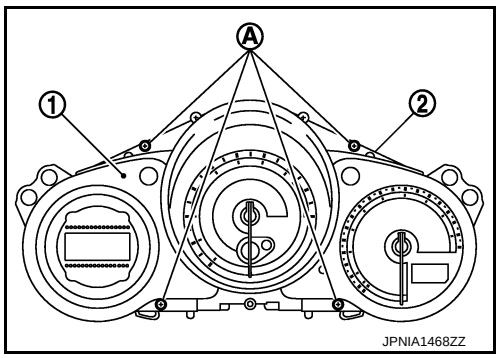
Remove the fuel level sensor unit. Refer to FL-5, "Removal and Installation".

>> GO TO 2.

2.CHECK FUEL LEVEL SENSOR UNIT AND FUEL PUMP (MAIN)

Check the resistance between fuel level sensor unit and fuel pump (main).

5. Remove screws (A) and remove front cover (1).
6. Disengage the tabs and then remove meter housing (2).



ASSEMBLY

Assemble in the reverse order of disassembly.

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:0000000005589166

APPLICATION ITEM

CONSULT-III 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. Refer to CONSULT-III operation manual.
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	• Read and save the vehicle specification. • Write the vehicle specification when replacing BCM.

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.

×: Applicable item

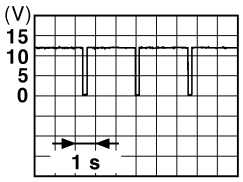
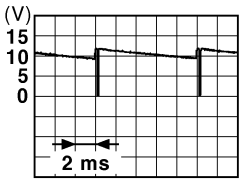
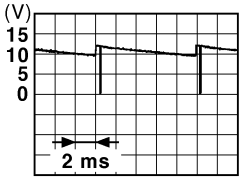
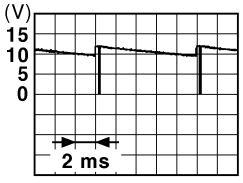
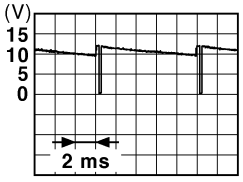
System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*			
• Intelligent Key system • Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door/Trunk lid open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

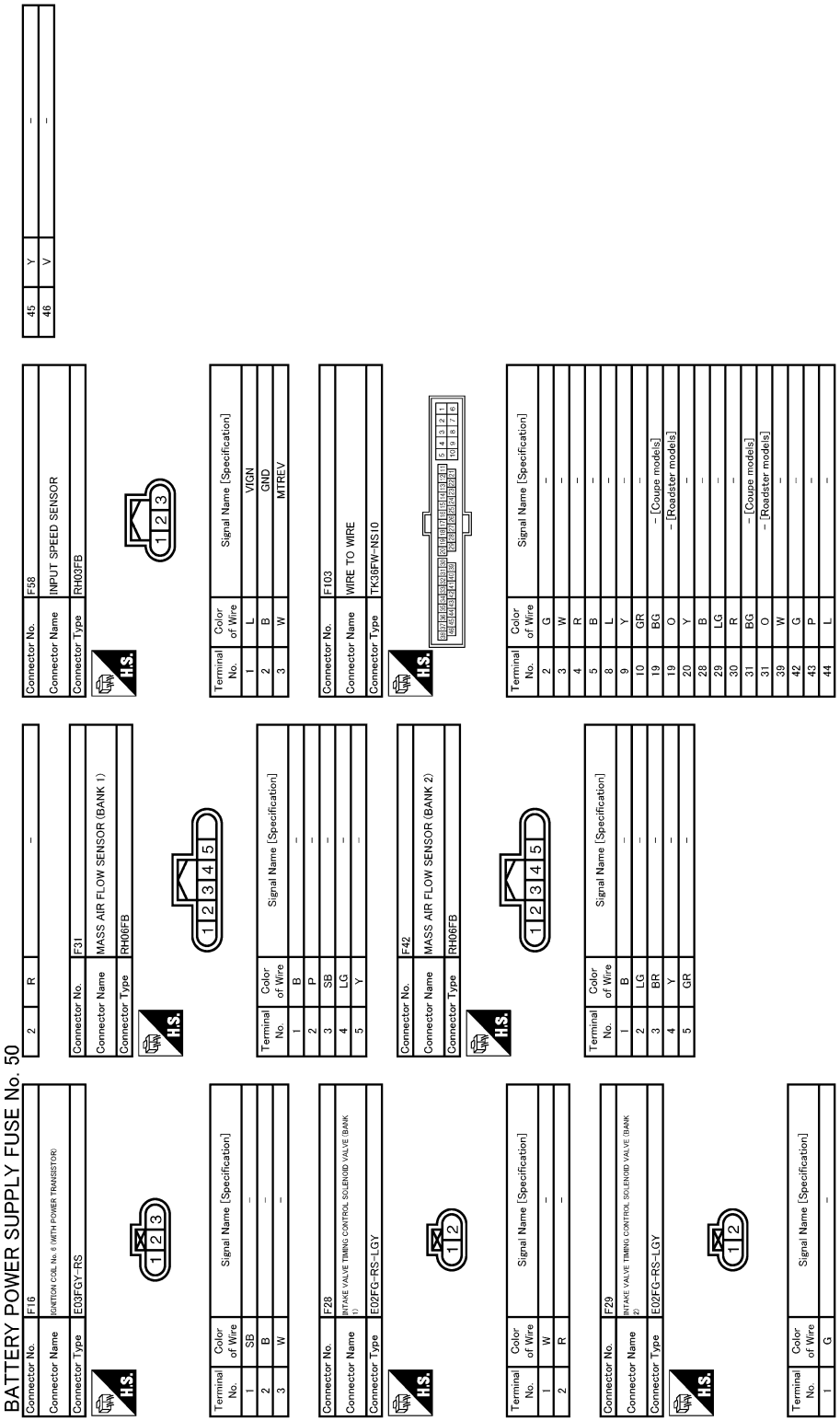
NOTE:

*: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

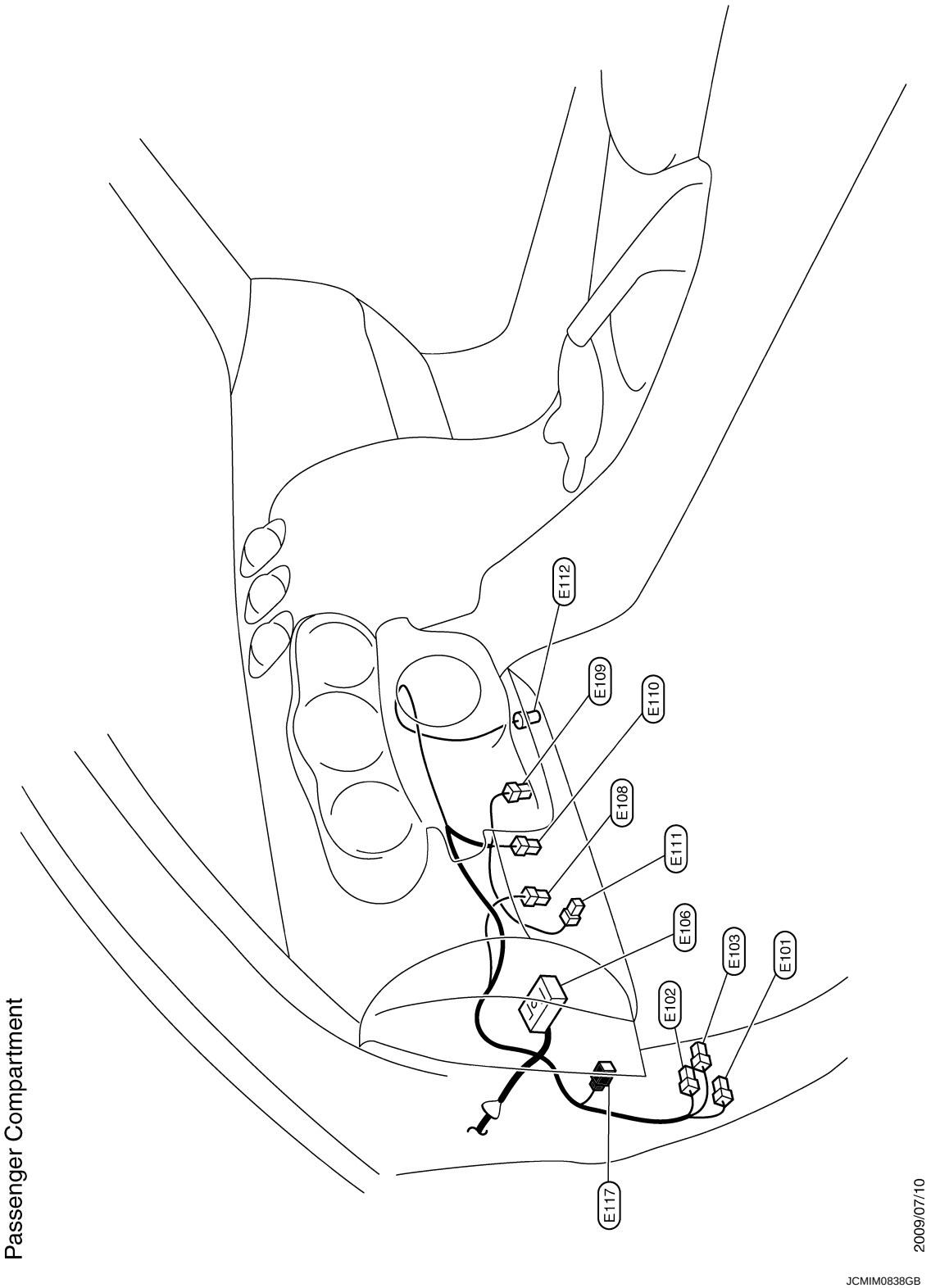
The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT-III.

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
141 (Y)	Ground	Security indicator lamp	Output	Security indicator lamp	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	12 V
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	 JPMIA0031GB 10.7 V
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front wiper switch INT	 JPMIA0034GB 10.7 V
					Front wiper switch LO	
					Lighting switch AUTO	
					Rear fog lamp switch ON	



JCMWM4808GB

PASSENGER COMPARTMENT



POWER WINDOW SERIAL LINK
POWER WINDOW MAIN SWITCH
POWER WINDOW MAIN SWITCH : Description

INFOID:0000000005241820

Power window main switch, power window sub-switch and BCM transmit and receive the signal by power window serial link.
The signal mentioned below is transmitted from BCM to power window main switch, power window sub-switch.
- Keyless power window down signal

The signal mentioned below is transmitted from power window main switch to power window sub-switch.
- Front passenger side door window operation signal
- Power window control by key cylinder switch signal
- Power window lock switch signal
- Retained power operation signal

POWER WINDOW MAIN SWITCH : Component Function Check

INFOID:0000000005241821

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

With CONSULT-III

Check (“CDL LOCK SW ”, “CDL UNLOCK SW”) in “DATA MONITOR” mode for “POWER DOOR LOCK SYSTEM” with CONSULT-III. Refer toDLK-40, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
CDL LOCK SW	LOCK	: ON
	UNLOCK	: OFF
CDL UNLOCK SW	LOCK	: OFF
	UNLOCK	: ON

Is the inspection result normal?

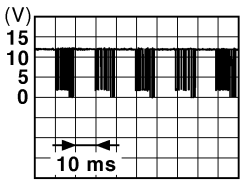
YES >> Power window serial link is OK.
NO >> Refer to PWC-28, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:0000000005241822

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check signal between power window main switch harness connector and ground.

(+)		(–)	Signal (Reference value)
Power window main switch			
Connector	Terminal		
D8	12	Ground	

JPMIA0013GB

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK POWER WINDOW SERIAL LINK SIGNAL

1. Turn ignition switch OFF.

POWER WINDOW SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	BG	– [Coupe models]
2	O	– [Roadster models]
3	Y	–
4	W	–
6	V	–
7	LG	–
8	GR	–
9	SB	–
11	Y	–
12	W	–
13	BR	–
14	LG	–
15	B	–
16	V	–
20	SB	–
21	G	–
22	GR	–
23	V	–
24	O	–
25	L	–
26	P	–
31	W	–
32	B	–
33	P	– [Coupe models]
33	W	– [Roadster models]
34	R	–
35	B	–
40	Y	–
41	L	–
42	GR	–
43	BR	–
44	R	–
45	BG	– [Coupe models]
45	O	– [Roadster models]
46	SB	–
47	V	–
48	SHIELD	–
51	W	–
52	R	–
57	SHIELD	–
58	B	–
60	V	–
61	SB	–
62	SHIELD	–
63	BR	–
64	Y	–
65	SHIELD	–
66	P	–
67	L	–
68	SHIELD	–
69	R	–
70	G	–
71	V	–
72	P	–
73	BR	–
74	GR	–
75	O	–
80	Y	–
81	R	–
82	B	–
83	GR	–
84	G	– [Coupe models]
84	L	– [Roadster models]
85	LG	–
86	V	–
87	BR	–
88	GR	–
93	Y	–
94	L	– [Coupe models]
94	G	– [Roadster models]
95	GR	– [Coupe models]
95	LG	– [Roadster models]
96	L	–
97	Y	–
98	W	– [Coupe models]
98	Y/B	– [Roadster models]
99	LG	–
100	B	–

Connector No.	B16
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–

Connector No.	B63
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

H.S.

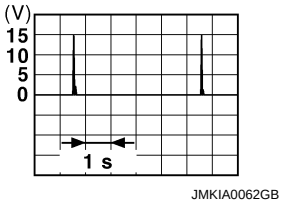
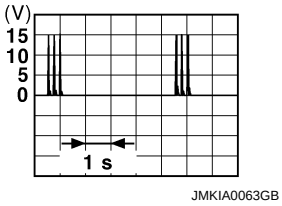
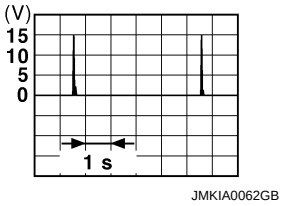
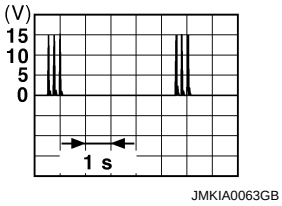
Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–
3	B	–

Connector No.	B81
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–
5	BR	–
6	B	–
8	Y	–
9	O	–
14	GR	–
15	SB	–
16	V	–
17	G	–
24	LG	–
25	V	–
31	L	–
32	P	–
34	O	–
35	R	–

JCKWM3306GB

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
30 (R)	Ground	Luggage room/Trunk room lamp	Output	Luggage room/ Trunk room lamp	ON	0 V
					OFF	12 V
34 (G)*3 (SB)*4	Ground	Luggage room/Trunk room antenna (–)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
35 (R)*3 (V)*4	Ground	Luggage room/Trunk room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

POWER WINDOW SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	BG	– [Coupe models]
2	O	– [Roadster models]
3	Y	–
4	W	–
6	V	–
7	LG	–
8	GR	–
9	SB	–
11	Y	–
12	W	–
13	BR	–
14	LG	–
15	B	–
16	V	–
20	SB	–
21	G	–
22	GR	–
23	V	–
24	O	–
25	L	–
26	P	–
31	W	–
32	B	–
33	P	– [Coupe models]
33	W	– [Roadster models]
34	R	–
35	B	–
40	Y	–
41	L	–
42	GR	–
43	BR	–
44	R	–
45	BG	– [Coupe models]
45	O	– [Roadster models]
46	SB	–
47	V	–
48	SHIELD	–
51	W	–
52	R	–
57	SHIELD	–
58	B	–
60	V	–
61	SB	–
62	SHIELD	–
63	BR	–
64	Y	–
65	SHIELD	–
66	P	–
67	L	–
68	SHIELD	–
69	R	–
70	G	–
71	V	–
72	P	–
73	BR	–
74	GR	–
75	O	–
80	Y	–
81	R	–
82	B	–
83	GR	–
84	G	– [Coupe models]
84	L	– [Roadster models]
85	LG	–
86	V	–
87	BR	–
88	GR	–
93	Y	–
94	L	– [Coupe models]
94	G	– [Roadster models]
95	GR	– [Coupe models]
95	LG	– [Roadster models]
96	L	–
97	Y	–
98	W	– [Coupe models]
98	Y/B	– [Roadster models]
99	LG	–
100	B	–

Connector No.	B16
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–

Connector No.	B63
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–
3	B	–

Connector No.	B81
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–
5	BR	–
6	B	–
8	Y	–
9	O	–
14	GR	–
15	SB	–
16	V	–
17	G	–
24	LG	–
25	V	–
31	L	–
32	P	–
34	O	–
35	R	–

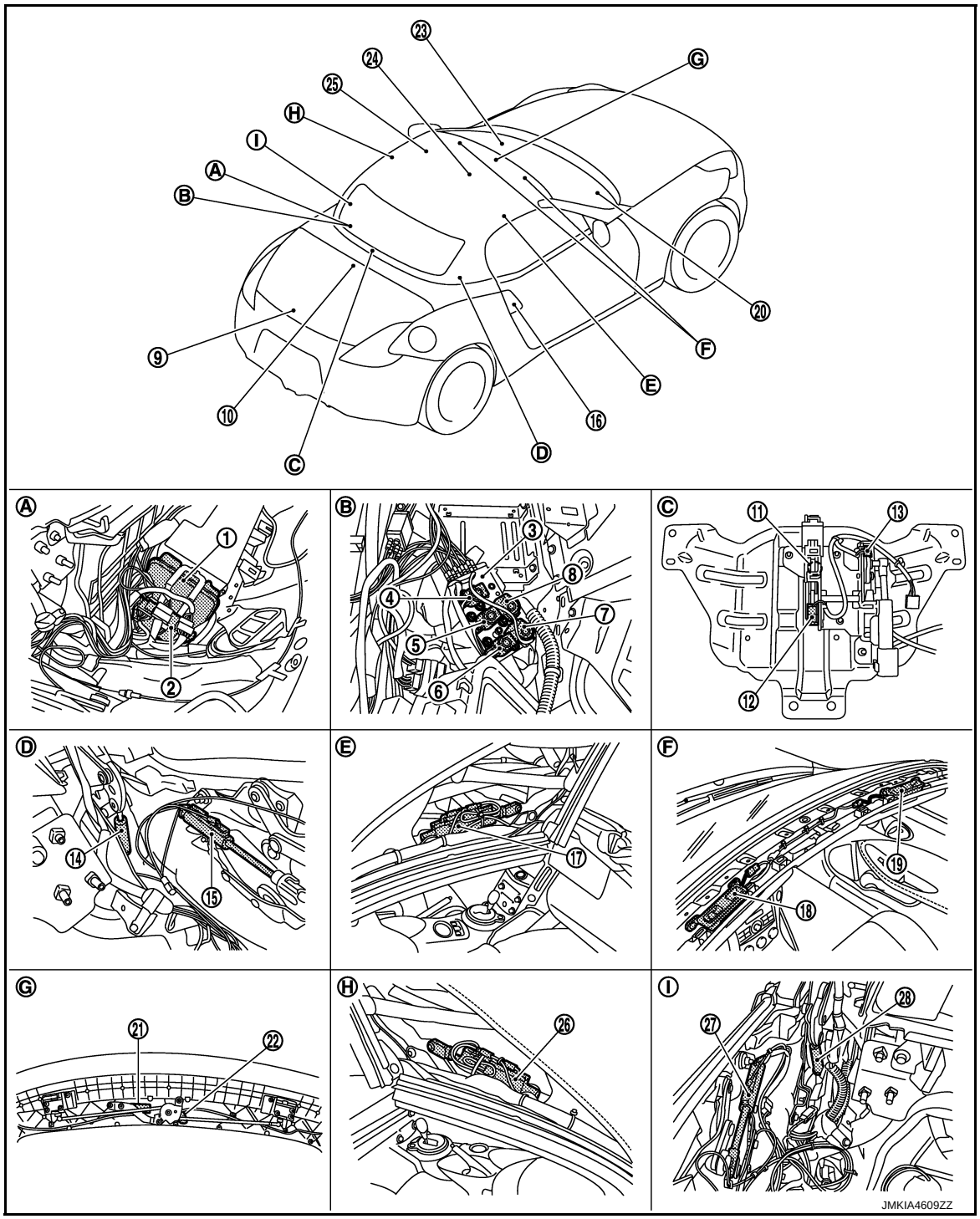
JCKWM3306GB

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

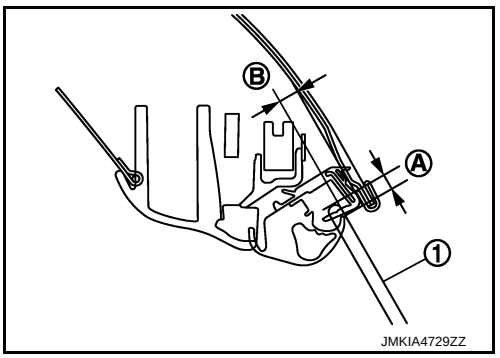
INFOID:0000000005390046



1. Hydraulic unit
2. Soft top control unit
3. Hydraulic unit
4. Switching valve 2
5. Switching valve 5
6. Switching valve 3
7. Switching valve 1
8. Switching valve 4
9. Trunk closure
10. Trunk room lamp switch
11. 5th bow striker sensor
12. 5th bow latch open sensor

- Adjust door glass (1) position frontward/backward or upward/ downward against soft top assembly.

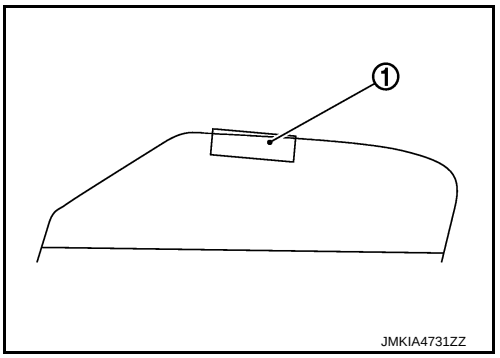
(A): 5.4 mm (0.21 in)
(B): 7.6 mm (0.3 in)



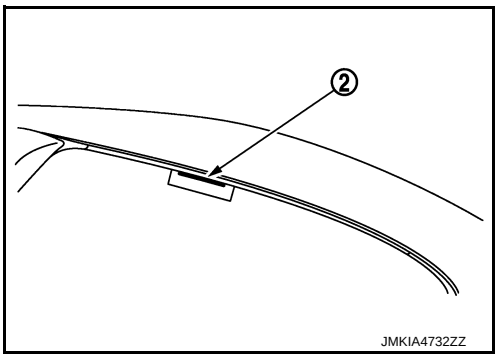
- Adjust door glass tilt contact by rotating adjusting bolt on regulator lower edge.Refer toGW-24, "Inspection and Adjustment"

Adjust door glass tilt contact by rotating adjusting bolt on regulator lower edge.
Checking procedure for overlap value of weather-strip and door glass

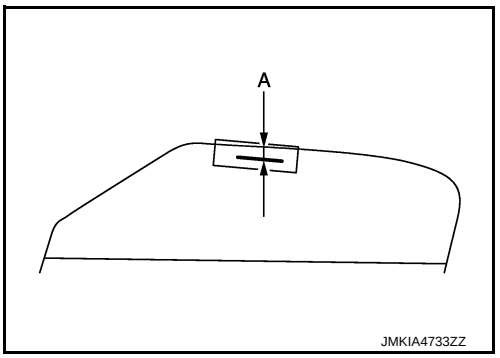
- Apply tape (1) to door glass upper end.



- Fully close glass. Put a mark (2) on tape that shows the weather-strip lower end position.



- Open door glass and measure (A).

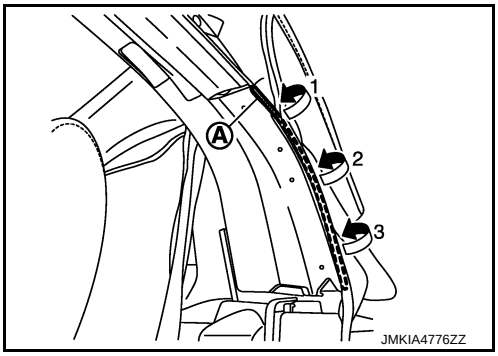


CAUTION:
- **Visually check that weather-strip is not twisted by door glass (1) upper end.**

Refer to GI-39, "Intermittent Incident".

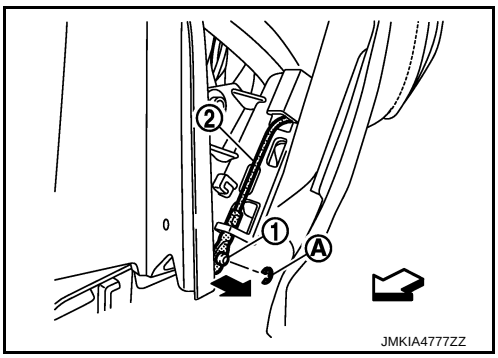
>> INSPECTION END

21. Pull up soft top cover outer lateral side to outside from upper to lower. Remove double-sided tape (A) (LH/RH).

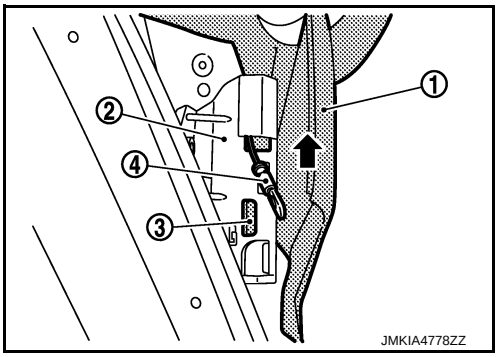


22. Remove E-clips (A). Disengage connection of soft top cover outer wire (2) from soft top linkage assembly pin (1) (LH/RH).

⇦ : Vehicle front

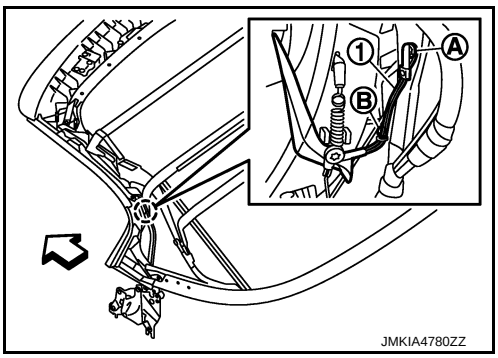


23. Slide soft top cover outer (1) in the direction shown by the arrow. Simultaneously pull out retainer (3) and wire (4) from soft top linkage assembly (2) (LH/RH).
CAUTION:
Write a short note to describe the wire locations and the retainer mounting positions.



24. Manually operate soft top linkage assembly to the open position.
25. Pull up soft top cover outer lateral side to outside. Remove rivet (A) and screw (B) that secure soft top cover outer bungee cord (1) (LH/RH).
CAUTION:
Cover the surrounding area because iron powder is spread when using a drill.

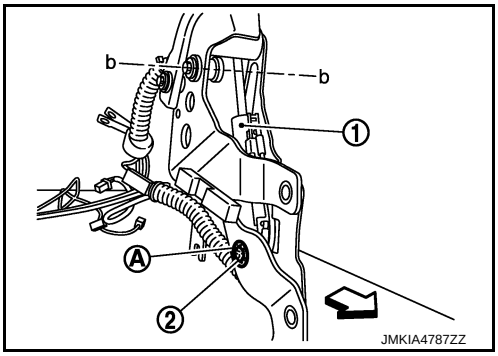
⇦ : Vehicle front



NOTE:
Removal and Installation of Rivet

36. Remove push on nut (A). Remove mounting pin (2) of roof drive cylinder (1) (LH/RH).
CAUTION:
Be careful not to allow excessive twisting of rotating axis portion (b).

⇦ : Vehicle front



37. Remove hydraulic unit assembly from soft top linkage assembly.
CAUTION:
Never sharply bend, twist or strongly pull oil pressure hose.

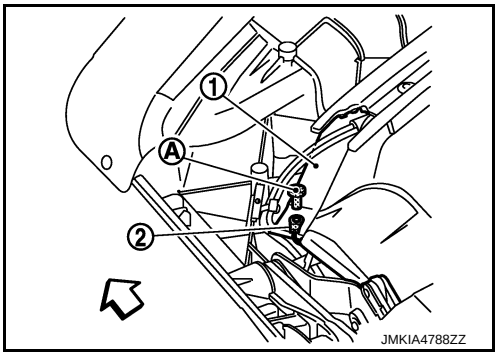
INSTALLATION

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

CAUTION:

- **Tighten soft top cover inner front end and bungee cord (2) together to soft top linkage assembly using screw (A), when installing soft top cover inner (1).**

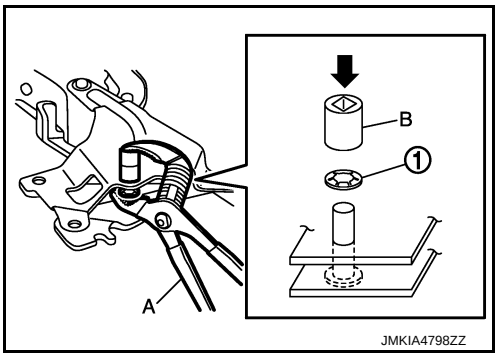
⇦ : Vehicle front



- **After installing hydraulic unit assembly, manually operate soft top linkage assembly and check that oil pressure hose is not pinched.**
- **Manually operate and check that soft top assembly operates without interfering with other portions of the vehicle body.**
- **Before manually operating each cylinder of the hydraulic system, turn ignition switch OFF or disconnect battery cable from the negative terminal, then wait for 4 minutes or more. (Each cylinder maintains oil pressure and therefore it takes a period of time to lower oil pressure.)**
- **Perform fitting adjustment after installing soft top assembly. Refer to RF-169, "SOFT TOP ASSEMBLY : Adjustment".**
- **Perform door glass fitting adjustment after soft top assembly fitting adjustment. Refer to GW-21, "Inspection and Adjustment".**
- **Perform leakage test.**

NOTE:

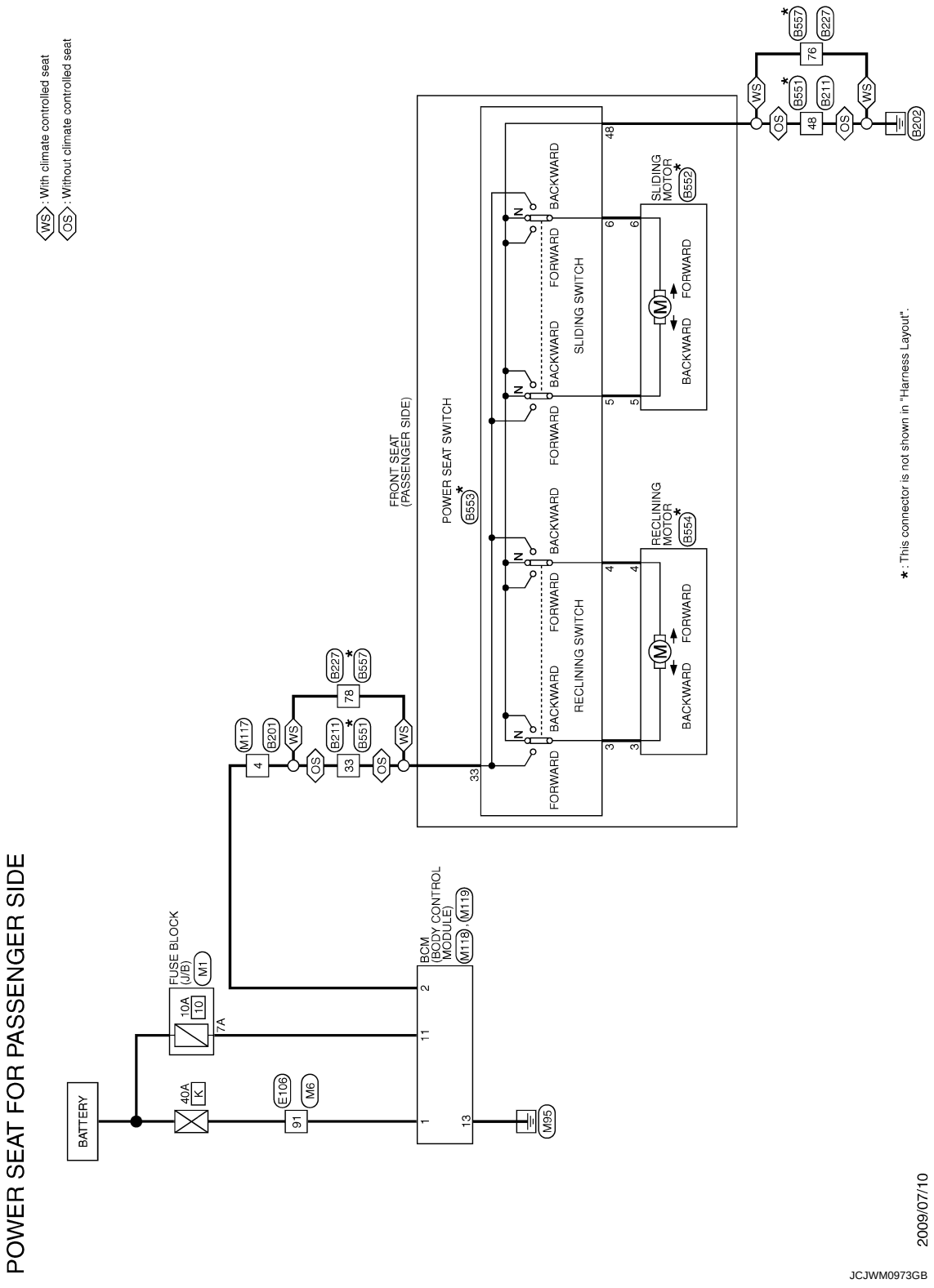
- When installing push on nut (1), crimp it using water pump pliers (A) and socket (B).



DTC	Diagnostic item	Explanation	Reference page
B1131	SIDE MODULE RH [GND-SHORT]	Side air bag module RH circuit is shorted to ground	SRC-107, "DTC Logic".
B1132	SIDE MODULE RH [SHORT]	Seat belt pre-tensioner RH circuits are shorted to each other	SRC-109, "DTC Logic".
B1134	SIDE MODULE LH [OPEN]	Side air bag module LH circuit is open	SRC-111, "DTC Logic".
B1135	SIDE MODULE LH [VB-SHORT]	Side air bag module LH circuit is shorted to power supply circuit	SRC-113, "DTC Logic".
B1136	SIDE MODULE LH [GND-SHORT]	Side air bag module LH circuit is shorted to ground	SRC-115, "DTC Logic".
B1137	SIDE MODULE LH [SHORT]	Side air bag module LH circuits are shorted to each other	SRC-117, "DTC Logic".
B1138-B1143	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	SRC-119, "DTC Logic"
B1144	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-121, "DTC Logic".
B1145	CURTAIN MODULE RH [OPEN]	Curtain air bag module RH circuit is open	SRC-122, "DTC Logic".
B1146	CURTAIN MODULE RH [VB-SHORT]	Curtain air bag module RH circuit is shorted to power supply circuit	SRC-124, "DTC Logic".
B1147	CURTAIN MODULE RH [GND-SHORT]	Curtain air bag module RH circuit is shorted to ground	SRC-126, "DTC Logic".
B1148	CURTAIN MODULE RH [SHORT]	Curtain air bag module RH circuits are shorted to each other	SRC-128, "DTC Logic".
B1150	CURTAIN MODULE LH [OPEN]	Curtain air bag module LH circuit is open	SRC-130, "DTC Logic".
B1151	CURTAIN MODULE LH [VB-SHORT]	Curtain air bag module LH circuit is shorted to power supply circuits	SRC-132, "DTC Logic".
B1152	CURTAIN MODULE LH [GND-SHORT]	Curtain air bag module LH circuit is shorted to ground	SRC-134, "DTC Logic".
B1153	CURTAIN MODULE LH [SHORT]	Curtain air bag module LH circuits are shorted to each other	SRC-136, "DTC Logic".
B1154-B1159	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	SRC-138, "DTC Logic".
B1170-B1175	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	SRC-140, "DTC Logic".
B1186-B1191	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	SRC-142, "DTC Logic".
B1202-B1207	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	SRC-144, "DTC Logic".
B1209	FRONTAL COLLISION DETECTION	Seat belt pre-tensioner, driver side air bag and passenger air bag are deployed	SRC-146, "DTC Logic".
B1210	SIDE COLLISION DETECTION	Side air bag and curtain air bag are deployed	SRC-147, "DTC Logic".
B1211	ROLLOVER DETECTION	Seat belt pre-tensioner side curtain air bag module are deployed because of rollover detection	SRC-148, "DTC Logic".
B1212-B1214	RH1 SAT-SENS	Satellite sensor RH is malfunctioning	SRC-149, "DTC Logic".
B1215-B1217	LH1 SAT-SENS	Satellite sensor LH is malfunctioning	SRC-151, "DTC Logic".
B1218-B1223	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	SRC-153, "DTC Logic".

Wiring Diagram - POWER SEAT FOR PASSENGER SIDE -

INFOID:0000000005240020



CLIMATE CONTROLLED SEAT BLOWER FILTER

SEAT CUSHION

SEAT CUSHION : Exploded View

INFOID:0000000005473939

Refer to SE-84, "Exploded View".

SEAT CUSHION : Removal and Installation

INFOID:0000000005473940

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove the seat.
2. Turn blower filter counter clockwise and remove it from climate controlled seat cushion blower motor.

INSTALLATION

Install in the reverse order of removal.

Replacement interval

Blower filter replacement interval : Every 24 months or 20,000km

SEATBACK

SEATBACK : Exploded View

INFOID:0000000005473941

Refer to SE-84, "Exploded View".

SEATBACK : Removal and Installation

INFOID:0000000005473942

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove the seatback board.
2. Turn blower filter counter clockwise and remove it from climate controlled seat blower motor.

INSTALLATION

Install in the reverse order of removal.

Replacement interval

Blower filter replacement interval : Every 24 months or 20,000km

B2555 STOP LAMP

Description

INFOID:0000000005240871

BCM detects the stop lamp status and confirms the stop lamp switch ON/OFF status. BCM confirms the engine start condition according to the stop lamp switch ON/OFF status.

DTC Logic

INFOID:0000000005240872

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2555	STOP LAMP	BCM makes a comparison between the upper voltage and lower voltage of stop lamp switch. It judges from their values to detect the malfunctioning circuit.	• Harness or connectors (stop lamp switch circuit is open or shorted) • Stop lamp switch • Fuse

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Depress the brake pedal and wait 1 second or more.
2. Check “Self-diagnostic result” using CONSULT-III.

Is DTC detected?

YES >> Go to SEC-55, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005240873

1.CHECK STOP LAMP SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
BCM			
Connector	Terminal		
M123	116	Ground	Battery voltage

Is the inspection normal?

YES >> GO TO 2.
NO-1 >> Check 10 A fuse [No. 7, located in the fuse block (J/B)].
NO-2 >> Check harness for open or short between BCM and fuse.

2.CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

1. Disconnect stop lamp switch connector.
2. Check voltage between stop lamp harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Stop lamp switch			
Connector	Terminal		
E110	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Check harness for open or short to stop lamp switch.

3.CHECK STOP LAMP SWITCH CIRCUIT

B210E STARTER RELAY

Description

INFOID:0000000005240970

Located in IPDM E/R, the starter relay runs the starter motor. The starter relay is turned ON by the BCM when the ignition switch is in the START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic

INFOID:0000000005240971

DTC DETECTION LOGIC

NOTE:

- If DTC B210E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-32, "IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) : DTC Logic".
- If DTC B210E is displayed with DTC B2110 for IPDM E/R, first perform the trouble diagnosis for DTC B2110. Refer to SEC-115, "DTC Logic".
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210F may be detected.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210E	STARTER RELAY OFF	IPDM E/R detects that the relay is stuck in the OFF position even if the following conditions are met for about 1 second. • Starter control relay ON/OFF signal from BCM • Transmission range switch input	• IPDM E/R • Battery

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait 1 second or more.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT-III.

Is DTC detected?

YES >> Go to SEC-111, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005240972

1. CHECK STARTER RELAY OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

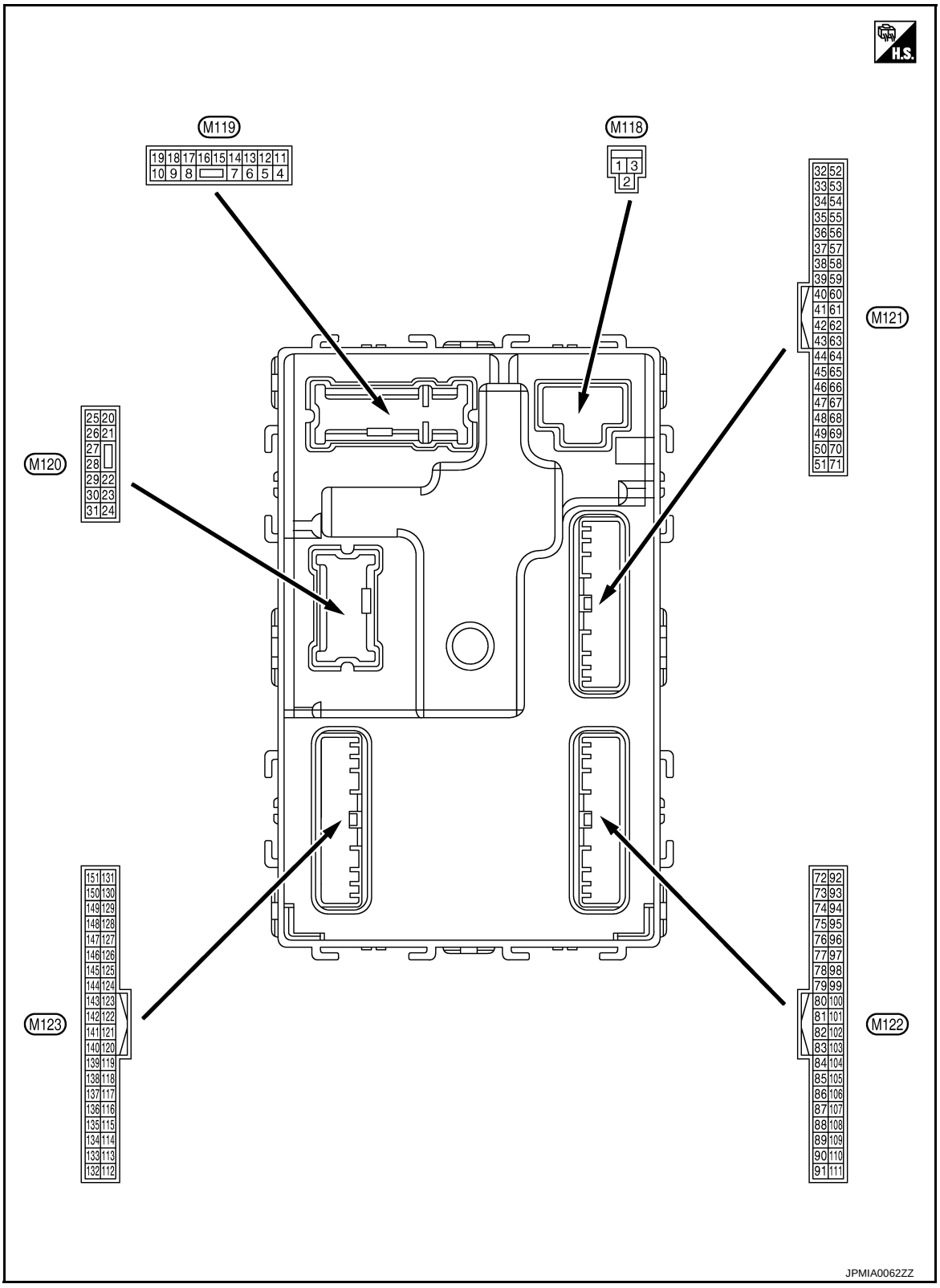
(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Voltage (V) (Approx.)
M121	52	Ground	Selector lever (A/T models)	P or N position	12
				Other than above	0
			Clutch pedal (M/T models)	Depressed	Battery voltage
				Not depressed	0

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

Monitor Item	Condition	Value/Status
BUZZER	Tire pressure warning alarm is not sounding	Off
	Tire pressure warning alarm is sounding	On

TERMINAL LAYOUT



PHYSICAL VALUES

5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.

FOR USA AND CANADA : Precaution for Battery Service

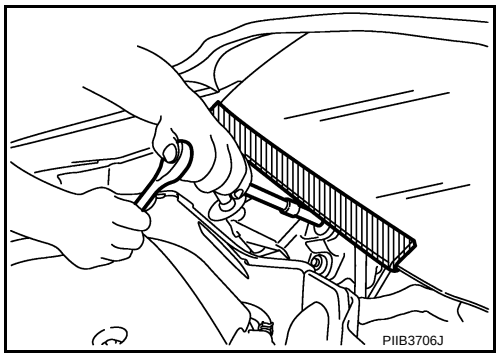
INFOID:0000000005653408

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

FOR USA AND CANADA : Precaution for Procedure without Cowl Top Cover

INFOID:0000000005653409

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



FOR MEXICO

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

INFOID:0000000005683408

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

WARNING:

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which 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 the “SRS AIR BAG”.**
- **Do not 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:

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT 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.**

FOR MEXICO : Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:0000000005653412

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.

DIAGNOSIS SYSTEM (AIR BAG)

Diagnosis Description

INFOID:0000000005234251

CAUTION:

- **Never use electrical test equipment on any circuit related to the SRS unless instructed in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**
- **Never repair, splice or modify the SRS wiring harness. If the harness is damaged, replace it with a new one.**
- **Keep ground portion clean.**

DIAGNOSIS FUNCTION

- The SRS self-diagnosis results can be read with air bag warning lamp and/or CONSULT-III.
- The user mode is exclusively prepared for the customer (driver). This mode warns the driver of a system malfunction through the operation of the air bag warning lamp.
- The diagnosis mode allows the technician to locate and inspect the malfunctioning part.
- The mode applications for the air bag warning lamp and CONSULT-III are as per the following items.

×: Application, —: Not application

Diagnosis tool	User mode	Diagnosis mode
Air bag warning lamp	×	×
CONSULT-III	–	×

Diagnosis with Air Bag Warning Lamp

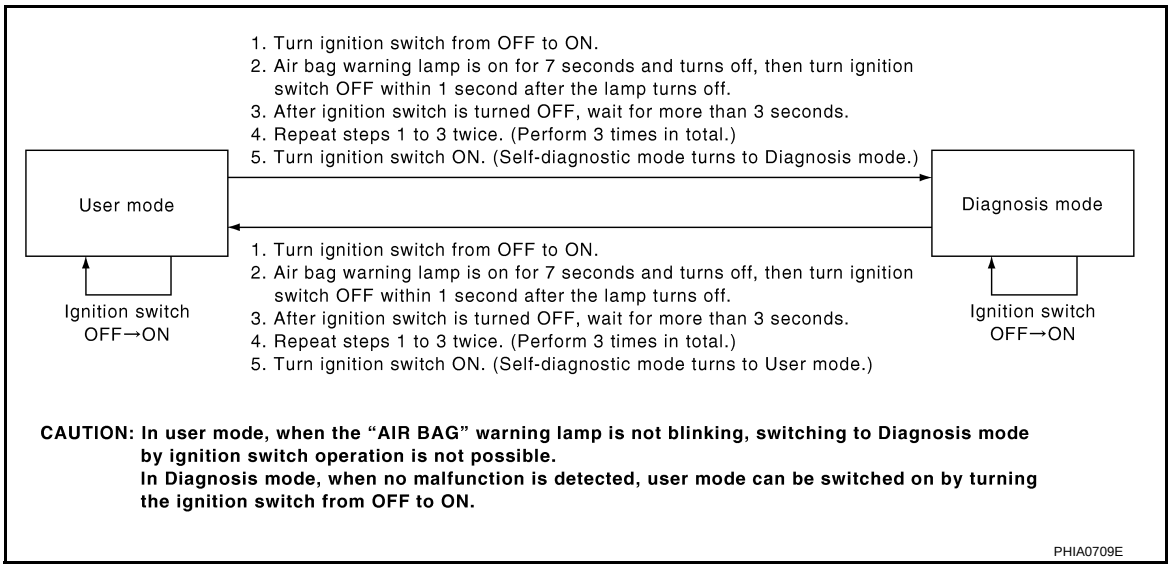
INFOID:0000000005234252

SELF DIAGNOSIS FUNCTION

There are two self diagnosis functions with air bag warning lamp per the following items.

- USER MODE
- DIAGNOSIS MODE

HOW TO CHANGE SELF DIAGNOSIS MODE WITHOUT CONSULT-III



USER MODE

In USER MODE, air bag warning lamp on combination meter blinks when a malfunction is detected and warns the customer (driver).

How to Read Air Bag Warning Lamp

1. Turn the ignition switch from OFF to ON, and check that the air bag warning lamp blinks.
2. Compare the air bag warning lamp blinking pattern with the examples.

Air Bag Warning Lamp Examples

4. REPLACE SEAT BELT PRE-TENSIONER

1. Replace seat belt pre-tensioner RH. Refer to SB-9, "SEAT BELT RETRACTOR : Exploded View".
2. Perform DTC confirmation procedure. Refer to SRC-73, "DTC Logic".

Is DTC detected?

YES >> GO TO 1.
NO >> INSPECTION END

B1150 CURTAIN AIR BAG MODULE LH

Description

INFOID:0000000005473933

In case of side collision where acceleration is more than the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

DTC Logic

INFOID:0000000005234414

DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC detecting condition	Possible cause
B1150	CURTAIN MODULE LH [OPEN]	Curtain air bag module LH circuit is open	• Disconnection of wiring harness and open • Malfunction in curtain air bag module LH • Malfunction in air bag diagnosis sensor unit

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

With CONSULT-III
1. Turn ignition switch ON.
2. Perform “AIR BAG” Self Diagnostic Result.

Without CONSULT-III
1. Turn ignition switch ON.
2. Check the air bag warning lamp status. Refer to SRC-18, "Diagnosis with Air Bag Warning Lamp".

NOTE:
SRS does not enter the diagnosis mode if no malfunction is detected in the user mode.

Is malfunctioning part detected?

YES >> Refer to SRC-130, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005234415

WARNING:
- **Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more. (To discharge backup capacitor.)**
- **Never use unspecified tester or other measuring device.**

1.CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace harness connector.

2.CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace wiring harness.

3.REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to SR-30, "COUPE : Exploded View".
2. Perform DTC confirmation procedure. Refer to SRC-130, "DTC Logic".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

DIAGNOSIS SYSTEM (AIR BAG)

CONSULT-III Function

INFOID:0000000005455955

APPLICATION ITEM

CONSULT-III performs the following functions.

Diagnosis mode		Description
Ecu Identification		Air bag diagnosis sensor unit ECU discriminated number (identification number) is displayed. Air bag diagnosis sensor unit has individual ECU discriminated number (identification number) based on model and equipment.
Self Diagnostic Result		The current self diagnosis results (also indicated with the number of air bag warning lamp blinks in the diagnosis mode) are displayed on CONSULT-III screen in real time. This refers to a malfunctioning part requiring repairs. Refer to SRC-340, "DTC Index".
Function Test	CAR COMPUTER DIAG.	Test result is indicated using “OK” or “NG” so that the customer recognizes easily.
Special function	SELF-DIAG [PAST]	Diagnosis results previously stored in the memory are displayed on CONSULT-III screen. The stored results are not erased until memory erasing is executed.
	TROUBLE DIAG RECORD	With TROUBLE DIAG RECORD, diagnosis results previously erased by a reset operation can be displayed on CONSULT-III screen.
	SELF-DIAG RESULT [CAN]	CAN diagnosis result is displayed.
	CAUSE OF WARNING	It displays the cause of warning lamp illumination that is not recorded in memory.

HOW TO ERASE SELF DIAGNOSTIC RESULTS

- “Self Diagnostic Result”
  A current self-diagnostic result is displayed on CONSULT-III screen in real time.
  After the malfunction is repaired completely, no malfunction is detected on “Self Diagnostic Result”.
- “SELF-DIAG [PAST]”
  Return to “Self Diagnostic Result” CONSULT-III screen by touching the “BACK” key of CONSULT-III and select “Self Diagnostic Result” in SELECT DIAG MODE. Touch “Erase” in “Self Diagnostic Result” mode.
  NOTE:
  If the memory of the malfunction in “SELF-DIAG [PAST]” is not erased, the user mode shows the system malfunction by the illumination of the warning lamp even if the malfunction is repaired completely.
- “TROUBLE DIAG RECORD”
  The memory of “TROUBLE DIAG RECORD” cannot be erased.
- “SELF-DIAG RESULT [CAN]”
  Self-diagnosis result can be erased when touching “Erase”.
  Self-diagnosis result other than “SELF-DIAG RESULT [CAN]” is erased.

SPECIAL FUNCTION

CAUSE OF WARNING

This item indicates IGN low voltage condition.
The air bag warning lamp blink in user mode when the battery voltage is lowered to the voltage value (less than 9 V) at which the SRS cannot be operated normally. The air bag warning lamp turns OFF after the battery voltage returns to normal status after blinking.
In such a case, the DTC memory is not performed and changing to the self-diagnostic mode by IGN operation cannot be performed while the air bag warning lamp illuminates. “NO DTC” is displayed even if the malfunctioning parts are checked by CONSULT-III.
This function records the following items.

Display contents of CONSULT-III		Description
Air bag	IGN VOLT COND	“LOW” is displayed when IGN low voltage is detected. If not, “OK” is displayed.
	IGN VOLT TIME	Times of IGN low voltage is detected.
	LOW V RECORED	Times of IGN ON after IGN low voltage is detected.

4. REPLACE SEAT BELT PRE-TENSIONER

1. Replace seat belt pre-tensioner RH. Refer to SR-34, "Removal and Installation".
2. Perform DTC confirmation procedure. Refer to SRC-241, "DTC Logic".

Is DTC detected?

YES >> GO TO 1.
NO >> INSPECTION END

B1150 CURTAIN AIR BAG MODULE LH

Description

INFOID:0000000005456129

In case of side collision where acceleration is more than the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

DTC Logic

INFOID:0000000005456130

DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC detecting condition	Possible cause
B1150	CURTAIN MODULE LH [OPEN]	Curtain air bag module LH circuit is open	• Disconnection of wiring harness and open • Malfunction in curtain air bag module LH • Malfunction in air bag diagnosis sensor unit

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

With CONSULT-III
1. Turn ignition switch ON.
2. Perform “AIR BAG” Self Diagnostic Result.

Without CONSULT-III
1. Turn ignition switch ON.
2. Check the air bag warning lamp status. Refer to SRC-181, "Diagnosis with Air Bag Warning Lamp".

NOTE:
SRS does not enter the diagnosis mode if no malfunction is detected in the user mode.

Is malfunctioning part detected?

YES >> Refer to SRC-298, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005456131

WARNING:
- **Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more. (To discharge backup capacitor.)**
- **Never use unspecified tester or other measuring device.**

1.CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace harness connector.

2.CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace wiring harness.

3.REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to SR-30, "COUPE : Exploded View".
2. Perform DTC confirmation procedure. Refer to SRC-298, "DTC Logic".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

SYMPTOM DIAGNOSIS

SRS AIR BAG WARNING LAMP DOES NOT TURN OFF

Diagnosis Procedure

INFOID:0000000005456227

1.CHECK AIR BAG MODULE AND SEAT BELT PRE-TENSIONER

Check the deployment of air bag module and seat belt pre-tensioner.

Is air bag module deployed?

YES >> Replace the malfunctioning parts.
NO >> GO TO 2.

2.CHECK AIR BAG FUSE

Check 10A fuse [No.2, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace the fuse.

3.CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace harness connectors.

4.CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace wiring harness.

5.REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to SR-30, "COUPE : Exploded View".
2. Check air bag warning lamp operation.

Is the inspection result normal?

YES >> INSPECTION END
NO >> GO TO 6.

6.REPLACE COMBINATION METER

1. Replace combination meter. Refer to MWI-103, "Exploded View".
2. Check air bag warning lamp operation.

Is the inspection result normal?

YES >> INSPECTION END
NO >> GO TO 1.

ELECTRONICALLY CONTROLLED POWER STEERING SYSTEM

Connector No.	E5
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20FW-CS12-M4-1V

H.S.

9	10	11	12	13	14	25	26	27	28	29	30	31	32	33	34	37	38
3	4	5	6	7	8	15	16	17	18	19	20	21	22	23	24	35	36

Terminal No.	Color of Wire	Signal Name [Specification]
4	V	–
5	L	–
6	R	–
7	R	–
11	BR	–
12	B/W	–
13	Y	–
16	LG	–
19	W	–
25	G	–
27	Y	–
28	L	–
30	GR	–
32	L	–
33	P	–
36	G	–

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	–
3	L	–
4	L	–
7	B	–
8	P	–
9	L	– [Coupe models]
9	B	– [Roadster models]
11	V	–
12	R	–
13	L	–
14	GR	–
15	P	–
16	W	–
17	SB	–
20	LG	– [Coupe models]
21	BR	– [Roadster models]
21	G	–
31	L	–
32	Y	–
33	P	–
34	L	–
35	BR	–
36	V	–
37	Y	–
38	R	–
39	B	–
40	W	–
41	LG	–
42	SB	–
43	G	–
44	R	– [Roadster models with M/T]
44	GR	– [Except for roadster models with M/T]
45	BG	– [Coupe models]
45	O	– [Roadster models]
46	W	–
47	P	–
58	SHIELD	–
59	L	–
70	P	–
80	W	–
81	P	–
82	G	–
83	V	–
84	L	–
85	BG	– [Coupe models]
85	O	– [Roadster models]
86	LG	–
87	R	–
89	P	–
91	W	–
92	L	–
93	G	–
94	Y	–
96	Y	–
97	BR	–
98	GR	–
99	LG	–
100	BG	– [Coupe models]
100	O	– [Roadster models]

Connector No.	F45
Connector Name	POWER STEERING SOLENOID VALVE
Connector Type	RS02FBR-DGY

H.S.

1	2

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	EPS SOL+
2	B	EPS SOL–

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK36FW-NS10

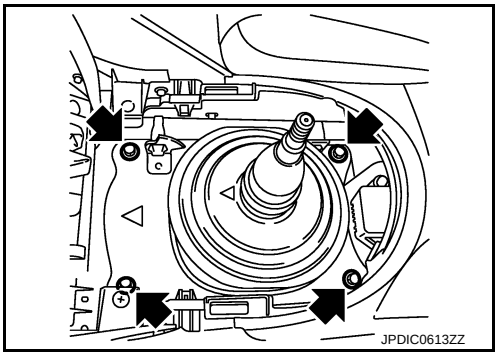
H.S.

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
5	4	3	2	1																										

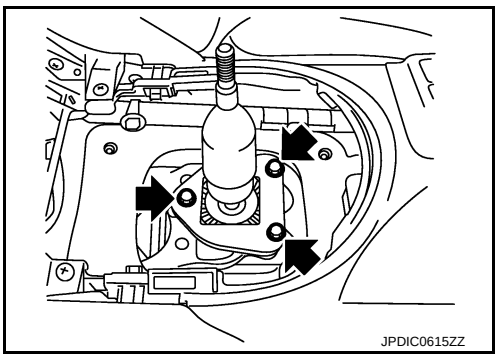
Terminal No.	Color of Wire	Signal Name [Specification]
2	G	–
3	W	–
4	R	–
5	B	–
8	L	–
9	Y	–
10	GR	–
19	BG	– [Coupe models]
19	O	– [Roadster models]
20	Y	–
28	B	–
29	LG	–
30	R	–
31	BG	– [Coupe models]
31	O	– [Roadster models]
39	W	–
42	G	–
43	P	–
44	L	–
45	Y	–
46	V	–

JCGWM0263GB

7. Remove mounting bolts (⬅) and then remove hole cover.
CAUTION:
Never damage center console assembly.
8. Remove control lever boot B, hole insulator, and control lever boot A.

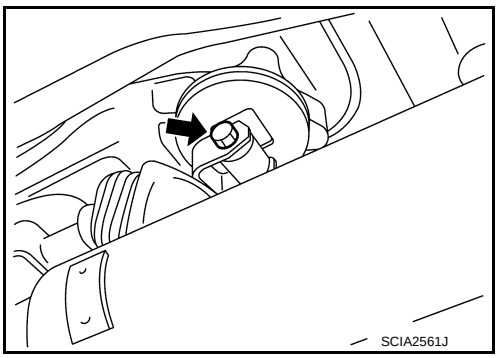


9. Remove mounting bolts (⬅) while holding guide plate.
10. Remove guide plate, control lever, and control lever spring from control lever housing.



INSTALLATION

1. Apply multi-purpose grease to sliding surface of control lever.
2. Install control lever spring, control lever, and guide plate to control lever housing.
3. Temporarily tighten guide plate mounting bolts while holding guide plate.
4. Install control lever to control rod and then tighten mounting bolt (⬅) to the specified torque.
5. Install control rod boot to control lever housing.
CAUTION:
Fit control rod boot to the groove on control lever housing.



6. Install guide plate with the following procedure.

WITHOUT S-MODE : Inspection

INFOID:0000000005233360

INSPECTION BEFORE DISASSEMBLY

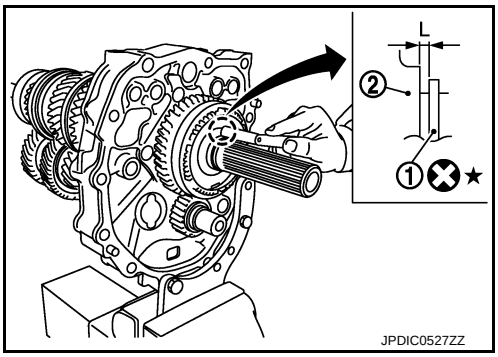
Shaft

Before disassembly, measure the end play “L” for each position. If the end play is outside the standard value, disassemble and inspect.

- Mainshaft

1 : Snap ring
2 : Reverse synchronizer hub

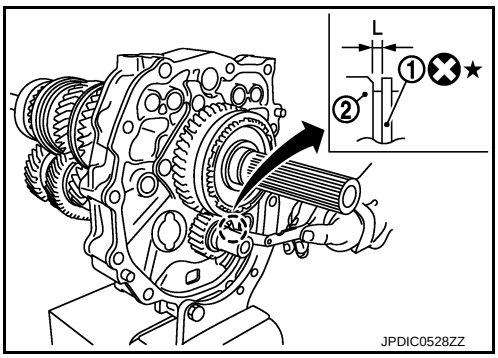
End play “L” : Refer to TM-148, "End Play".



- Counter shaft

1 : Snap ring
2 : Reverse counter gear

End play “L” : Refer to TM-148, "End Play".



INSPECTION AFTER DISASSEMBLY

Case and Plate

- Check the bearing mounting surface for wear, cracks, and damages. Replace if necessary.
- Check the mating surface for wear, cracks, and damages. Replace if necessary.

Extension and Cover

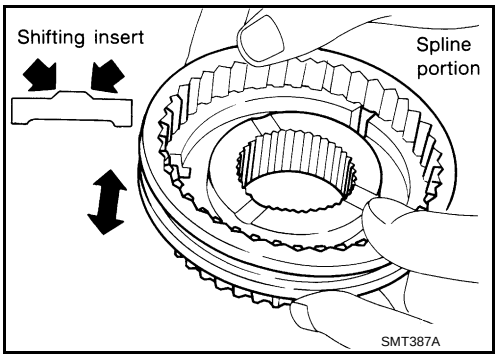
- Check the oil seal mounting surface for wear, cracks, and damages. Replace if necessary.
- Check the mating surface for wear, cracks, and damages. Replace if necessary.

Gear

Check the gears for any damage, scaling, or uneven wear. Replace if necessary.

Synchronizer Hub and Coupling Sleeve

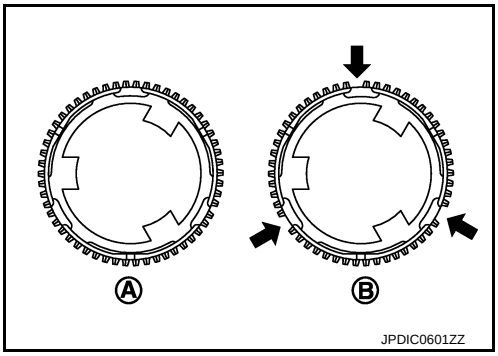
- Check the contact surface of the coupling sleeve, synchronizer hub, and shifting inserts for damage and uneven wear. Replace if necessary.
- The coupling sleeve and synchronizer hub moves smoothly.



Baulk Ring and Spread Spring

4th outer baulk ring has three spaces that one gear tooth is missing but 3rd outer baulk ring doesn't.

A : 3rd outer baulk ring
B : 4th outer baulk ring

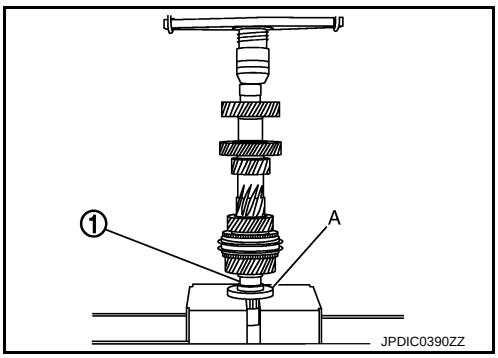


d. Install 4th gear bushing, 4th needle bearing, and 4th counter gear together with 4th counter gear thrust washer to counter shaft with a pressing machine.

6. Install counter rear bearing inner race (1) to counter shaft with a pressing machine, using the inserter (A) [SST: ST30032000 (J-26010-01)].

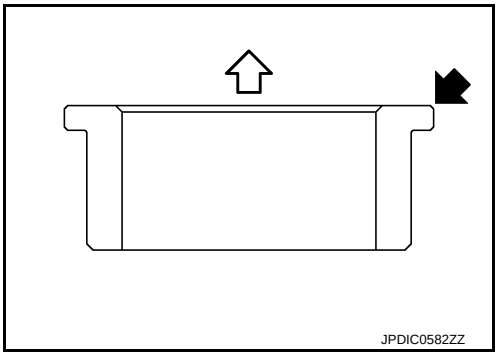
CAUTION:

- **Replace counter rear bearing inner race, counter rear bearing, and counter rear bearing spacer as a set.**



- **Be careful with the orientation of counter rear bearing inner race.**

⇦ : 4th counter gear side



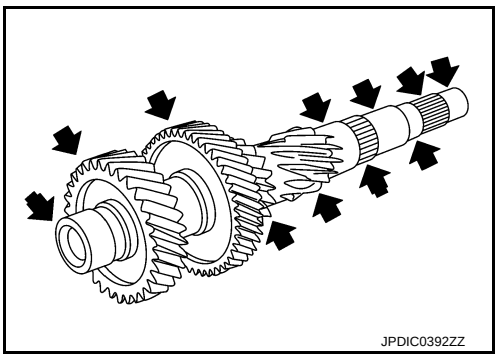
Inspection

INFOID:0000000005233376

INSPECTION AFTER DISASSEMBLY

Shaft and Gear

- Check the shaft for damage or bend. Replace if necessary.
- Check the gears for any damage, scaling, or uneven wear. Replace if necessary.



Synchronizer Hub and Coupling Sleeve

Rear planetary gear

Name	Rear sun gear	Rear carrier	Rear internal gear
Condition	—	input/Output	—
Direction of rotation	Clockwise revolution	Clockwise revolution	Clockwise revolution
Number of revolutions	Same number of revolution as the rear carrier	Same number of revolution as the input shaft	Same number of revolution as the rear carrier

Mid planetary gear

Name	Mid sun gear	Mid carrier	Mid internal gear
Condition	—	Output	Input
Direction of rotation	Clockwise revolution	Clockwise revolution	Clockwise revolution
Number of revolutions	Same number of revolution as the mid internal gear	Same number of revolution as the mid internal gear	Same number of revolution as the input shaft

“D6”, “DS6” and “M6” Positions

Diagnosis Procedure

INFOID:0000000005233497

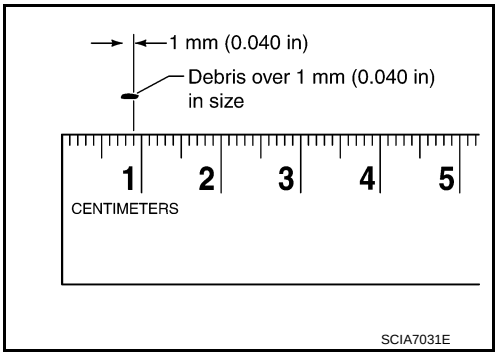
1. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace A/T assembly. Refer to TM-318, "Exploded View".
NO >> Repair or replace damaged parts.

b. If one or more pieces of debris are found that are over 1 mm (0.040 in) in size and/or peeled clutch facing material is found in the coffee filter, the A/T fluid cooler is not serviceable. The A/T fluid cooler/radiator must be replaced and the inspection procedure is ended. Refer to CO-14, "Exploded View".



Inspection

INFOID:0000000005233545

After performing all procedures, ensure that all remaining oil is cleaned from all components.

METER BUZZER CIRCUIT

Description

INFOID:0000000005485663

- The buzzer for warning chime system is installed in the combination meter.
- The combination meter sounds the alarm buzzer based on the signals transmitted from various units.

Component Function Check

INFOID:0000000005485664

1.CHECK OPERATION OF METER BUZZER

1. Select “BUZZER” of “BCM” on CONSULT-III.
2. Perform “LIGHT WARN ALM” of “Active Test”.

Does meter buzzer beep?

YES >> INSPECTION END
NO >> GO TO 2.

2.CHECK COMBINATION METER INPUT SIGNAL

Select the “Data Monitor” for the “METER/M&A” and check the “BUZZER” monitor value.

BUZZER	
Under the condition of buzzer input	: On
Except above	: Off

Is the inspection result normal?

YES >> Replace combination meter.
NO >> Replace BCM. Refer to BCS-92, "Removal and Installation".

Diagnosis Procedure

INFOID:0000000005485665

1.CHECK POWER SUPPLY OF COMBINATION METER

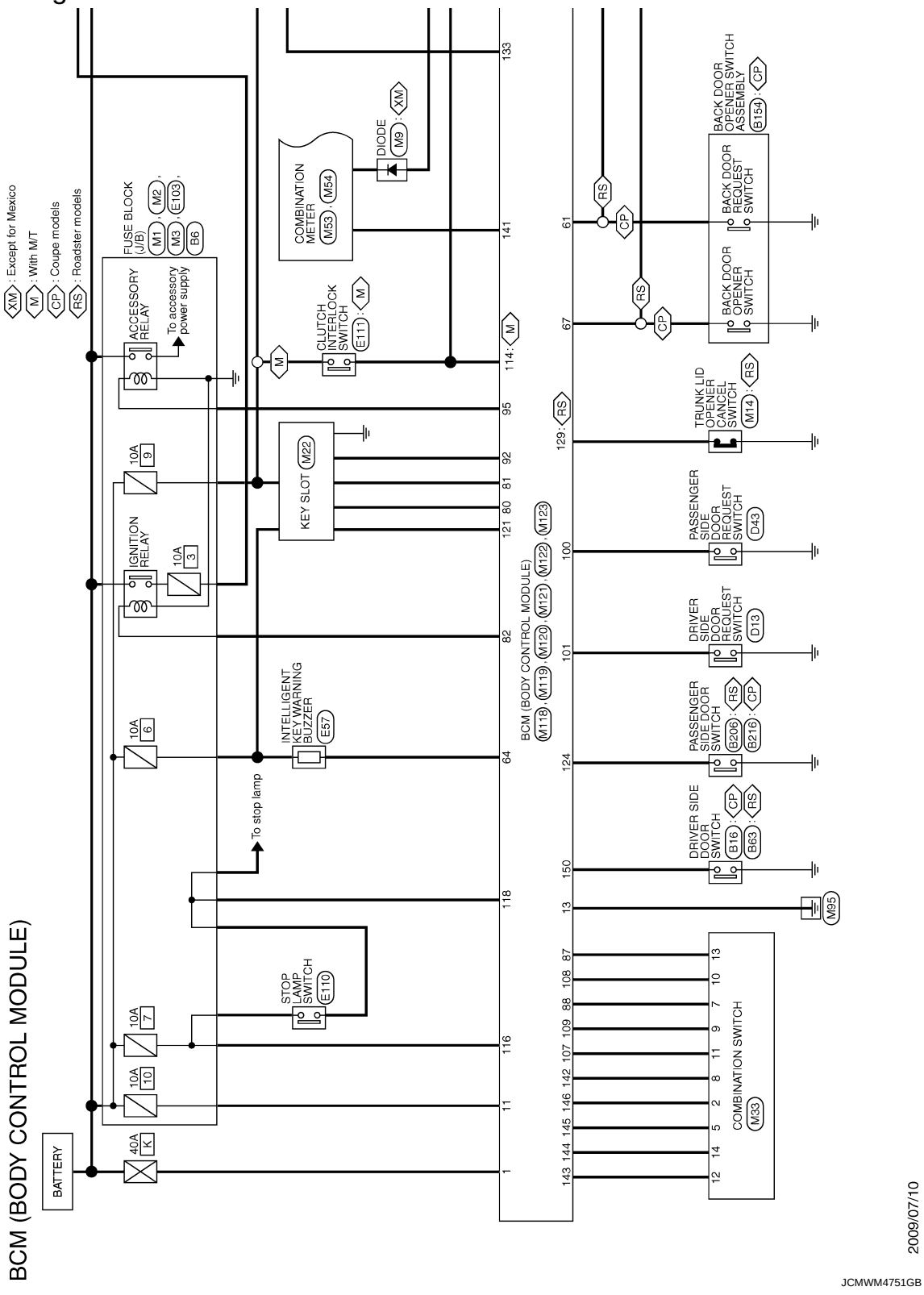
Check power supply of combination meter. Refer to WCS-19, "COMBINATION METER : Diagnosis Procedure".

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair power supply circuit of combination meter. Refer to WCS-19, "COMBINATION METER : Diagnosis Procedure".

Wiring Diagram - BCM -

INFOID:0000000005568909



TIRE PRESSURE WARNING CHECK SWITCH

Component Function Check

INFOID:0000000005239881

1.CHECK THE ILLUMINATION OF THE LOW TIRE PRESSURE WARNING LAMP

1. Turn the ignition switch ON.
   CAUTION:
   Never start the engine.
2. Short-circuit the tire pressure warning check switch connector terminal to the ground.
3. Check that the low tire pressure warning lamp blinking.

Is inspection result normal?

YES >> INSPECTION END
NO >> Perform diagnosis. Refer to WT-39, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005239882

1.CHECK TIRE PRESSURE WARNING CHECK SWITCH SIGNAL

1. Turn the ignition switch ON.
   CAUTION:
   Never start the engine.
2. Check the voltage between tire pressure warning check switch connector and ground.

Tire pressure warning check switch		—	Voltage (Approx.)
Connector	Terminal		
M23	1	Ground	12 V

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Exploded View".
NO >> GO TO 2.

2.CHECK TIRE PRESSURE WARNING CHECK SWITCH CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM harness connector
3. Check the continuity between BCM harness connector and tire pressure warning check switch connector.

BCM		Tire pressure warning check switch		Continuity
Connector	Terminal	Connector	Terminal	
M123	149	M23	1	Existed

4. Check the continuity between BCM harness connector and ground.

BCM		—	Continuity
Connector	Terminal		
M123	149	Ground	Not existed

Is the inspection result normal?

YES >> Check BCM pin terminals for damage or loose connection with harness connector. If any items are damaged, repair or replace damaged parts. Replace BCM. Refer to BCS-92, "Exploded View".
NO >> Repair or replace damaged parts.