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NISSAN
GT-R
MODEL R35 SERIES

QUICK REFERENCE INDEX

Error item	Description	Possible malfunction factor/Action to take
ST ANGLE SEN CALIB [U1232]	Predictive course line center position adjustment of the steering angle sensor is incomplete.	Adjust the predictive course line center position of the steering angle sensor.
FRONT DISP CONN [U1243]	When either one of the following items are detected: • display unit power supply and ground circuits malfunction is detected. • communication circuits between AV control unit and display unit.	• Display unit power supply and ground circuits. • Communication circuits between AV control unit and AV display unit.
GPS ANTENNA CONN [U1244]	GPS antenna connection malfunction is detected.	Check the connection of the GPS antenna connector.
XM ANTENNA CONN [U1258]	Satellite radio antenna connection malfunction is detected.	• Satellite radio antenna feeder. • Satellite radio antenna.
USB OVERCURRENT [U1263]	Detection of over current in USB connecter.	Check USB harness between the AV control unit and USB connector.
ANTENNA AMP TERMINAL [U1264]	Radio antenna amp. ON signal circuit malfunction is detected.	Radio antenna amp. ON signal circuit between AV control unit and radio antenna amp.
FL-DOOR WOOFER [OPEN, SHORT, GND-SHORT or VB-SHORT] [U1601]	Malfunction is detected audio signal circuits between BOSE amp. and front door speaker LH.	Audio signal circuits between BOSE amp. and front door speaker LH.
FL-DOOR SQUAWK [OPEN, SHORT, GND-SHORT or VB-SHORT] [U1602]	Malfunction is detected audio signal circuits between BOSE amp. and front door squawker LH or tweeter LH.	Audio signal circuits between BOSE amp. and front door squawker LH or tweeter LH.
FR-DOOR WOOFER [OPEN, SHORT, GND-SHORT or VB-SHORT] [U1609]	Malfunction is detected audio signal circuits between BOSE amp. and front door speaker RH.	Audio signal circuits between BOSE amp. and front door speaker RH.
FR-DOOR SQUAWK [OPEN, SHORT, GND-SHORT or VB-SHORT] [U160A]	Malfunction is detected audio signal circuits between BOSE amp. and front door squawker RH or tweeter RH.	Audio signal circuits between BOSE amp. and front door squawker RH or tweeter RH.
F-INST C-SQUAWK [OPEN, SHORT, GND-SHORT or VB-SHORT] [U162A]	Malfunction is detected audio signal circuits between BOSE amp. and center speaker.	Audio signal circuits between BOSE amp. and center speaker.
R-PSHELF L-SQUAWK [OPEN, SHORT, GND-SHORT or VB-SHORT] [U1722]	Malfunction is detected audio signal circuits between BOSE amp. and rear speaker LH.	Audio signal circuits between BOSE amp. and rear speaker LH.
R-PSHELF R-SQUAWK [OPEN, SHORT, GND-SHORT or VB-SHORT] [U172A]	Malfunction is detected audio signal circuits between BOSE amp. and rear speaker RH.	Audio signal circuits between BOSE amp. and rear speaker RH.
R-PSHELF C-WOOFER [OPEN, SHORT, GND-SHORT or VB-SHORT] [U1725]	Malfunction is detected audio signal circuits between BOSE amp. and woofer.	Audio signal circuits between BOSE amp. and woofer.
CORRECT MICROPHONE [U190C]	Malfunction is detected in audio signal circuits between BOSE amp. and either front or rear microphone.	Audio signal circuits between BOSE amp. and front or rear microphone.

BOSE AUDIO WITH NAVIGATION SYSTEM (NISMO)

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
11C	R	-
12C	W	-
6C	R	-
7C	B	-
9C	BR	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	G	-
3	L	-
4	W	-
6	Y	-
7	G	-
8	V	-
9	R	-
10	W	-
11	V	-
12	W	-
13	LG	-
14	SB	-
15	B	-
16	BR	-
17	Y	-
27	SHIELD	-
36	L	-
38	V	-
40	GR	-
41	P	-
42	BR	-
43	SB	-
44	L	-
45	Y	-
46	BG	-
47	V	-
48	LG	-
50	R	-
54	W	-
55	G	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
3	R	-
4	G	-
5	Y	-
6	P	-
7	W	-
8	V	-
9	L	-
10	Y	-
11	G	-
12	BG	-
13	R	-
14	L	-
15	BR	-
16	R	-
17	SHIELD	-
18	L	-
19	P	-
20	B	-
21	W	-
22	GR	-
23	L	-
24	V	-
25	BR	-
26	G	-
27	SHIELD	-
28	G	-
29	R	-
30	W	-
31	V	-
32	G	-
33	GR	-
34	LG	-
35	P	-
36	L	-
37	W	-
38	Y	-
39	GR	-
40	BG	-
41	W	-
42	R	-
43	Y	-
44	BR	-
45	G	-
46	LG	-
48	W	-
49	L	-
50	R	-
51	SHIELD	-
60	SB	-
61	V	-
71	W	-
72	LG	-
74	R	-
75	BR	-
76	LG	-
77	R	-
78	BR	-
79	W	-
80	Y	-
81	BG	-
82	SB	-
84	Y	-
85	P	-
86	GR	-
87	R	-
88	L	-
89	G	-
90	P	-
91	W	-
92	R	-
93	LG	-
94	W	-
95	SB	-
96	L	-
97	L	-
98	Y	-
99	BG	-
100	L	-

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	L	-
7	W	-
8	W	-
9	G	-
10	R	-
11	W	-
12	SB	-
13	G	-
14	W	-
15	BR	-
16	R	-
17	BG	-
18	SB	-
20	GR	-
21	L	-
22	R	-
23	G	-
24	BR	-
25	L	-
26	LG	-

JRNWE1232GB

U162A CENTER SPEAKER

DTC Logic

INFOID:0000000011490714

DTC DETECTION LOGIC

DTC	Display contents of CONSULT	DTC detection condition	Possible malfunction factor
U162A	F-INST C-SQUAWK [OPEN, SHORT, GND-SHORT, or VB-SHORT] [U162A]	Malfunction is detected sound signal circuits between BOSE amp. and center speaker.	Sound signal circuits between BOSE amp. and center speaker.

Diagnosis Procedure

INFOID:0000000011490715

1.PERFORM THE SELF-DIAGNOSIS

1. Delete the “self-diagnosis” results of “MULTI AV”. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

Is any DTC detected?

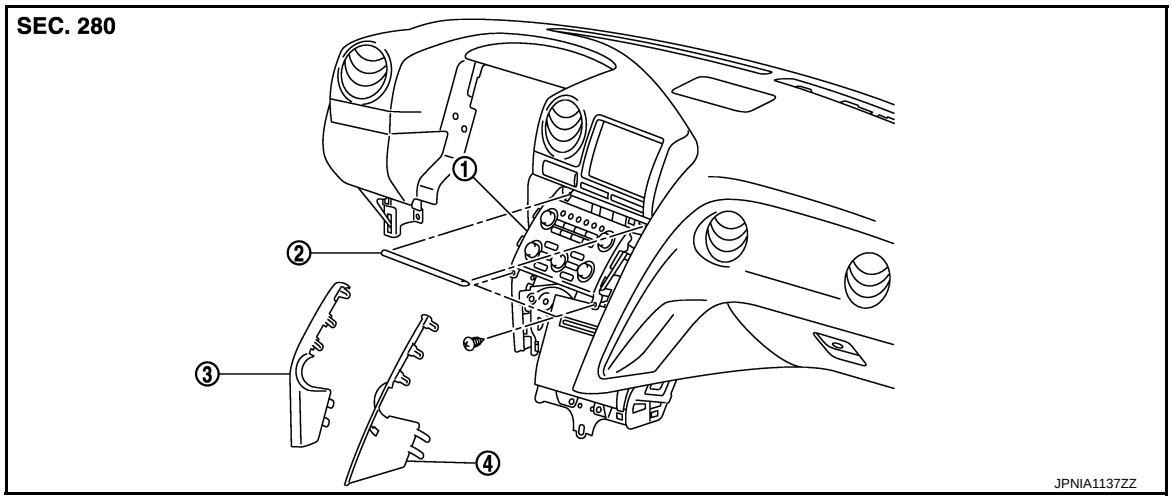
YES >> Check harnesses between BOSE amp. and center speaker.
NO >> Refer to GI-39, "Intermittent Incident"

PRESET SWITCH

Exploded View

INFOID:0000000011490770

REMOVAL
Refer to IP-12, "Exploded View".



1. Preset switch
2. Instrument panel garnish (upper)
3. Instrument panel garnish LH
4. Instrument panel garnish RH

Removal and Installation

INFOID:0000000011490771

REMOVAL

1. Remove the instrument panel garnish (upper) and the instrument panel garnish LH/RH. Refer to IP-13, "Removal and Installation".
2. Remove the screws and disconnect the connector, and then remove the preset switch.

INSTALLATION
Install in the reverse order of removal.

NORMAL OPERATING CONDITION

Description

INFOID:0000000011490835

Symptom	Cause	Action to take
GPS signal cannot be received.	GPS signal is obstructed due to the vehicle being inside a building, in the shadow of numerous tall buildings, etc.	Move the vehicle to an open space.
	There is an object placed on the GPS antenna.	Do not place objects on the GPS antenna.
	A sufficient number of GPS satellites are not available.	Wait for the satellites to change locations.
Bluetooth® connection is not possible.	The device being used is not supported.	Check that the device supports connectivity.
USB memory is not recognized, or it is not possible to write to USB memory.	A USB extension cable or USB hub is being used.	Do not use a USB extension cable or a USB hub.
	There is no empty storage space on the USB memory.	Perform formatting (of USB memory) to increase empty storage space. **NOTE:** Formatting USB memory may cause loss of data. To prevent this from occurring, copy data to another media before formatting.
	The USB memory used is of a standard lower than the supported standard.	Use a USB memory of USB 2.0 Hi-speed standard or higher.
	A USB memory formatted in a format other that FAT32 is being used.	Use a USB memory formatted in FAT32 format.
Writing stops in mid process.	Recording is performed continuously for an extended period of time (approximately 20 hours or more). (Data file size reaches 2GB.)	Format or replace the USB memory.

COMBINATION SWITCH OUTPUT CIRCUIT

Diagnosis Procedure

INFOID:0000000011485935

1.CHECK OUTPUT 1 - 5 SYSTEM CIRCUIT FOR OPEN

1. Turn the ignition switch OFF.
2. Disconnect the BCM and combination switch connectors.
   NOTE:
   BCM connector disconnects M123 only.
3. Check continuity between BCM harness connector and combination switch harness connector.

System	BCM		Combination switch		Continuity
	Connector	Terminal	Connector	Terminal	
OUTPUT 1	M123	143	M33	12	Existed
OUTPUT 2		144		14	
OUTPUT 3		145		5	
OUTPUT 4		146		2	
OUTPUT 5		142		8	

Does continuity exist?

YES >> GO TO 2.
NO >> Repair the harnesses or connectors.

2.CHECK OUTPUT 1 - 5 SYSTEM CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

System	BCM		Ground	Continuity
	Connector	Terminal		
OUTPUT 1	M123	143	Ground	Not existed
OUTPUT 2		144		
OUTPUT 3		145		
OUTPUT 4		146		
OUTPUT 5		142		

Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> GO TO 3.

3.CHECK COMBINATION SWITCH OUTPUT VOLTAGE

1. Connect the combination switch connector.
2. Turn ON any switch in the system that is malfunctioning.
3. Check voltage between combination switch harness connector and ground.

INSPECTION AFTER INSTALLATION

Check the rear disc brake for drag. Perform the following procedure if necessary.

1. Remove brake pad. Refer to BR-44, "BRAKE PAD : Exploded View (GT-R certified NISSAN dealer)".
2. Use a brake caliper wrench [SST: KV991112S0 (J-49023)] to return the piston.
   CAUTION:
   Check the fluid level in the reservoir tank. Because the brake fluid returns to the reservoir tank of master cylinder when pressing the piston.
3. Install brake pad. Refer to BR-44, "BRAKE PAD : Exploded View (GT-R certified NISSAN dealer)".
4. Depress the brake pedal several times, and check the rear disc brake for drag again. Replace the caliper if necessary. Refer to BR-46, "BRAKE CALIPER ASSEMBLY : Exploded View (GT-R certified NISSAN dealer)".

INSPECTION AFTER DISASSEMBLY

Check the following items and replace if necessary.

Caliper

Check the caliper for cracks or damage.

Pad Pin

- Check the piston pin for corrosion, wear, cracks or damage.
- Check the metal bushing of pad pin for settling and damage.

Cross Spring

Check the cross spring for wear, cracks or damage.

NOTE:
If the red SENSOR indicator illuminates but does not flash, reverse the polarity of the tester leads and retest.

Does the ABS active wheel sensor tester detect a signal?

YES >> GO TO 12.
NO >> GO TO 9.

9. REPLACE WHEEL SENSOR (1)

With CONSULT
1. Replace the wheel sensor.
- Front: Refer to BRC-147, "FRONT WHEEL SENSOR : Removal and Installation (GT-R certified NISSAN dealer)".
- Rear: Refer to BRC-148, "REAR WHEEL SENSOR : Removal and Installation (GT-R certified NISSAN dealer)".
2. Connect ABS actuator and electric unit (control unit) harness connector.
3. Erase self-diagnosis result for “ABS”.
4. Turn the ignition switch OFF → ON → OFF.
NOTE:
Wait at least 10 seconds after turning ignition switch OFF or ON.
5. Start the engine.
6. Select “ABS” and “DATA MONITOR”, check “FR LH SENSOR”, “FR RH SENSOR”, “RR LH SENSOR” and “RR RH SENSOR”.
NOTE:
Set the “DATA MONITOR” recording speed to “10 msec”.
7. Read a value (wheel speed) of both normal wheel sensors and error-detecting wheel sensor.
NOTE:
Vehicle must be driven after repair or replacement to erase the previous DTCs.

Note the difference at 50 km/h (31 MPH) between the wheel speed detected by the error detecting wheel sensor and the maximum/minimum wheel speed detected by the normal wheel sensors, is the difference within 5%, respectively?

YES >> GO TO 10.
NO >> GO TO 20.

10. PERFORM SELF-DIAGNOSIS (2)

With CONSULT
1. Stop the vehicle.
2. Turn the ignition switch OFF.
NOTE:
Wait at least 10 seconds after turning ignition switch OFF.
3. Start the engine.
NOTE:
Wait at least 10 seconds after start the engine.
4. Perform self-diagnosis for “ABS”.

Is DTC “C1105”, “C1106”, “C1107” or “C1108” detected?

YES >> GO TO 11.
NO >> INSPECTION END

11. CHECK CONNECTOR

1. Turn the ignition switch OFF.
2. Check the ABS actuator and electric unit (control unit) harness connector for disconnection or looseness.
3. Check the wheel sensor harness connector for disconnection or looseness.

Is the inspection result normal?

YES >> GO TO 14.
NO >> Repair / replace harness or connector, securely lock the connector, and GO TO 12.

12. CHECK DATA MONITOR (2)

With CONSULT
1. Erase self-diagnosis result for “ABS”.
2. Turn the ignition switch OFF → ON → OFF.

C1160 INCOMPLETE DECEL G SENSOR CALIBRATION

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011487522

DTC DETECTION LOGIC

DTC	Display Item (Trouble diagnosis content)	Malfunction detected condition
C1160	DECEL G SEN SET (Decel G sensor set)	When calibration of yaw rate/side/decel G sensor is not complete.

POSSIBLE CAUSE

NOTE:
Confirm if DTC is PAST or CRNT. If DTC is CRNT, proceed with Diagnosis Procedure. If DTC is PAST, clear DTC. Do not replace the ABS actuator and electric unit (control unit) for a PAST DTC.

PAST DTC	CRNT DTC
• Harness or connector • ABS actuator and electric unit (control unit) power supply system • Fuse • Fusible link • Battery	• Incomplete calibration of decel G sensor • ABS actuator and electric unit (control unit) • Yaw rate/side/decel G sensor • Harness or connector

DTC CONFIRMATION PROCEDURE

1.PRECONDITIONING

If “DTC CONFIRMATION PROCEDURE” has been previously conducted, always turn the ignition switch OFF and wait at least 10 seconds before conducting the next test.

>> GO TO 2.

2.CHECK DTC DETECTION

With CONSULT
1. Turn the ignition switch ON.
2. Perform decel G sensor calibration. Refer to BRC-10, "CALIBRATION OF DECEL G SENSOR : Description (GT-R certified NISSAN dealer)".
3. Turn the ignition switch OFF.
   NOTE:
   Wait at least 10 seconds after turning ignition switch OFF.
4. Start the engine.
   NOTE:
   Wait at least 10 seconds after start the engine.
5. Perform self-diagnosis for “ABS”.

Is DTC “C1160” detected?

YES-1 >> “CRNT” is displayed: Proceed to BRC-95, "Diagnosis Procedure (GT-R certified NISSAN dealer)".
YES-2 >> “PAST” is displayed: INSPECTION END (Erase the memory of self-diagnosis results.)
NO-1 >> To check malfunction symptom before repair: Refer to GI-39, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011487523

1.DECEL G SENSOR CALIBRATION

Perform decel G sensor calibration. Refer to BRC-10, "CALIBRATION OF DECEL G SENSOR : Description (GT-R certified NISSAN dealer)".

>> GO TO 2.

2.PERFORM SELF-DIAGNOSIS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000011487588

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see “SRS AIR BAG”.**
- **Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

Always observe the following items for preventing accidental activation.

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.**

Precaution for Battery Service

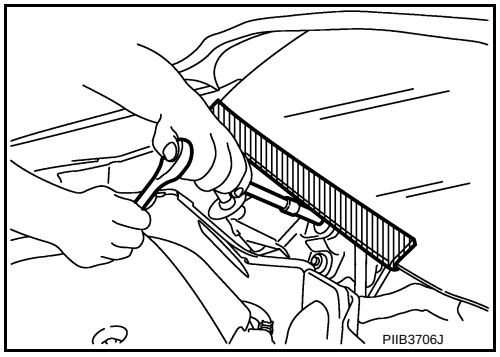
INFOID:0000000011487589

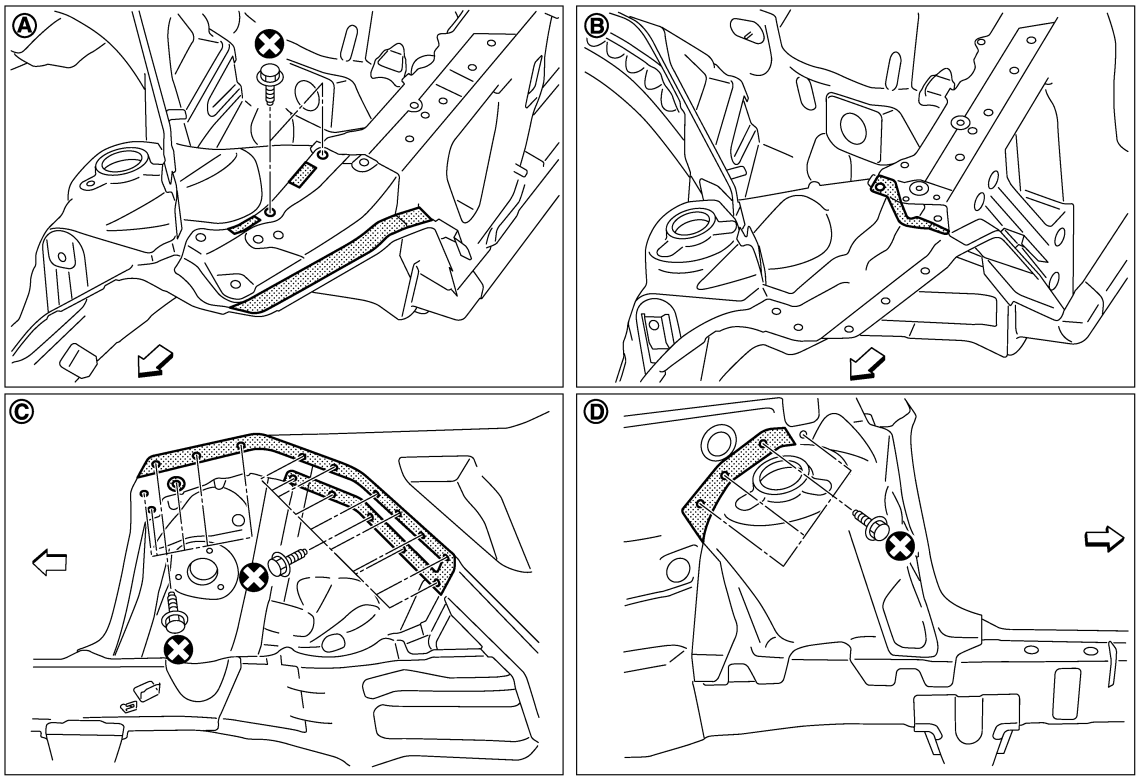
Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference.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

Precaution for Procedure without Cowl Top Cover

INFOID:0000000011487590

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





JSKIA0757ZZ

A. Hoodledge extension
B. Hoodledge reinforcement
C. Hoodledge extension, hoodledge reinforcement, and upper front hoodledge
D. Front cowl top assembly

⇦: Vehicle front

: Adhesive exfoliated position

Refer to ″How to use this manual″ GI-4, "Components" for the symbols shown in the figure.

1. Remove the mounting bolts and spot welding of the hoodledge extension.
2. Set the temperature gauge (the infrared non-contact temperature gauge is recommended for temperature management) to the strut housing, and then heat up to 110°C (230°F) using a halogen heater.
   CAUTION:
   The heating temperature should not exceed 110°C (230°F).
3. Use a chisel while heating the hoodledge extension, insert it between the hoodledge extension and the strut housing. Then slightly separate the hoodledge extension while ungluing the adhesive from the front.
   CAUTION:
   Never damage the strut housing and the portions where the strut housing is bonded.
4. Eliminate the adhesive that remains on the strut housing and the portions where the strut housing is bonded with a disc sander.
5. If the coating on the joint surface with the strut housing and the vehicle is peeled off, apply epoxy primer on the surface to prevent electric corrosion.
6. Remove the hoodledge reinforcement, upper front hoodledge, and front cowl top assembly while observing the procedure and precautions above.

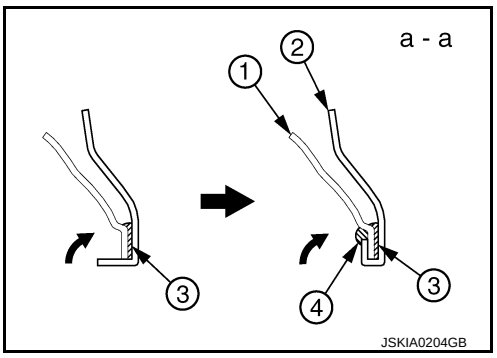
INSTALLATION PROCEDURE OF ALUMINUM STRUT HOUSING ADHESIVE JOINT

CAUTION:

- **Always use the specified bolt with its surface finished.**
  Never use bolts other than those that are specified, otherwise electric corrosion may occur.
- **Never reuse the removed specified bolts.**
- **Never use an impact wrench to remove or install the mounting bolt.**

- Apply the sealing to the flange end.
- Refer to BRM-29, "Rear Fender Hemming Process".

1. Outer rear wheelhouse
2. Rear fender
3. Adhesive
4. Sealing



LOCK PILLAR REINFORCEMENT

CAUTION:

Create the reinforcing sheet from the redundant area of service parts for butt welding area. Weld the reinforcing sheet on the back of butt welding area, and then perform butt welding. After welding, apply anti-corrosive wax on the reinforcing sheet-welded area.

Welding spots marked with ⚠ have adhesive agent applied on the welding surface for enhancing body rigidity.

CAUTION:

Even when adhesive agent is not used, performing welding based on the number of welding spots described in this manual brings the body rigidity equivalent to the case where an adhesive is applied. To secure the weld quality, always remove adhesive agent from the welding surface and its periphery, and perform welding according to the number of spots described in this manual without applying an adhesive.

>> GO TO 2.

2. STOP POWER GENERATION VOLTAGE VARIABLE CONTROL SYSTEM

Stop the operation of the power generation voltage variable control in either of the following procedures.

- After selecting “ENGINE” of “SELECT SYSTEM” using CONSULT, set the DUTY value of “ALTERNATOR DUTY” to 0 % by selecting “ALTERNATOR DUTY” of “Active Test”. Continue “Active Test” until the end of inspection. (When the DUTY value is 0 or 100 %, the normal power generation is performed according to the characteristic of the IC regulator of the alternator.)
- Turn the ignition switch OFF, and disconnect the battery current sensor connector. [However, DTC (P1550 - P1554) of the engine might remain. After finishing the inspection, connect the battery current sensor connector and erase the self-diagnostic results history of the engine using CONSULT.]

>> GO TO 3.

3. INSPECTION WITH CHARGE WARNING LAMP (IGNITION SWITCH IS TURNED ON)

When ignition switch is turned ON

Does the charge warning lamp illuminate?

YES >> GO TO 4.
NO >> GO TO 10.

4. INSPECTION WITH CHARGE WARNING LAMP (IDLING)

Start the engine and run it at idle.

Does the charge warning lamp turn OFF?

YES >> GO TO 5.
NO >> GO TO 6.

5. INSPECTION WITH CHARGE WARNING LAMP (ENGINE AT 2,500 RPM)

Increase and maintain the engine speed at 2,500 rpm.

Does the charge warning lamp illuminate?

YES >> GO TO 8.
NO >> INSPECTION END

6. “L” TERMINAL CIRCUIT (SHORT) INSPECTION

Check “L” terminal circuit (short). Refer to CHG-17, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair as needed.

7. “S” TERMINAL CIRCUIT INSPECTION

Check “S” terminal circuit. Refer to CHG-18, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair as needed.

8. MEASURE “B” TERMINAL VOLTAGE

Start engine. With engine running at 2,500 rpm, measure “B” terminal voltage.

What voltage does the measurement result show?

Less than 13.0 V>>GO TO 9.
More than 16.0 V>>Replace alternator. Refer to CHG-31, "Removal and Installation (GT-R certified NISSAN dealer)".

9. “B” TERMINAL CIRCUIT INSPECTION

Check “B” terminal circuit. Refer to CHG-14, "Diagnosis Procedure".

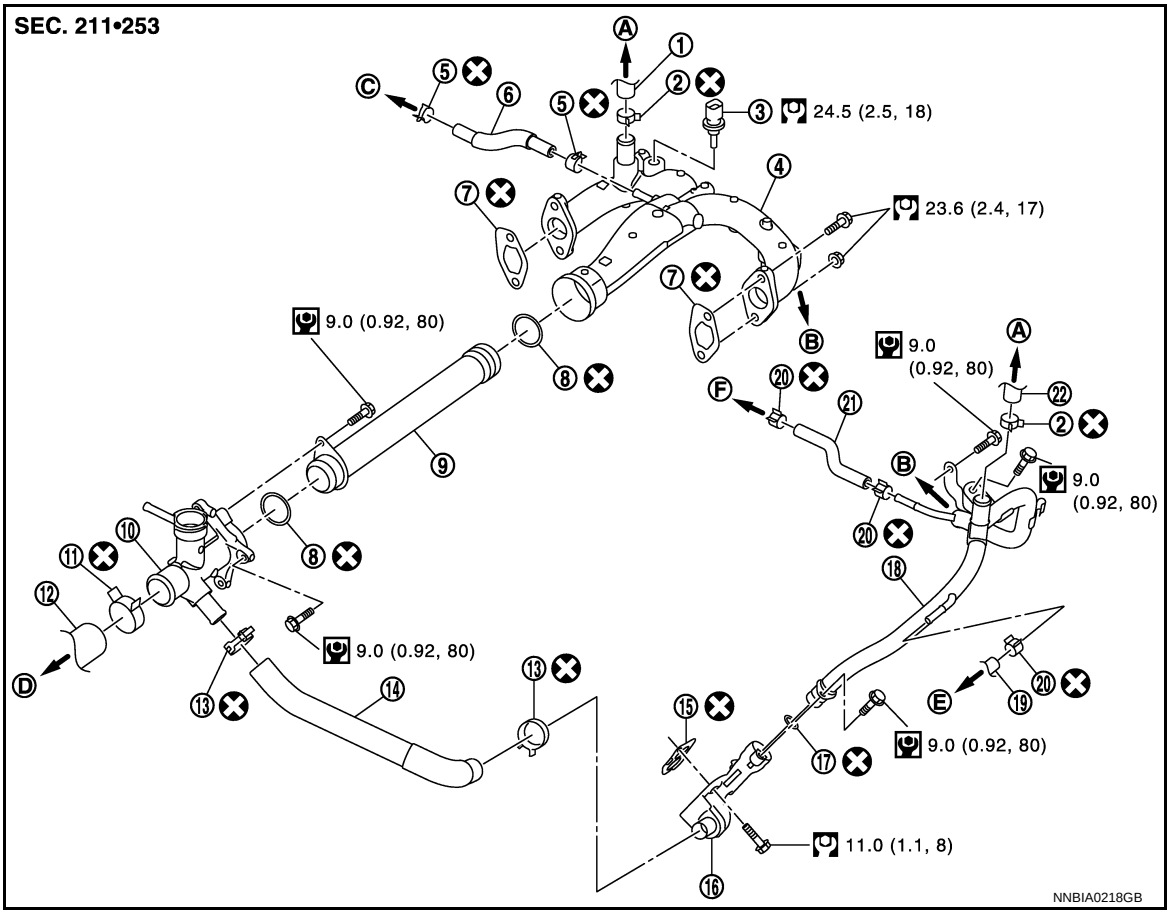
Is the inspection result normal?

YES >> Replace alternator. Refer to CHG-31, "Removal and Installation (GT-R certified NISSAN dealer)".
NO >> Repair as needed.

WATER OUTLET AND WATER PIPING

Exploded View (GT-R certified NISSAN dealer)

INFOID:0000000011486041



1.	Heater hose	2.	Clamp	3.	Engine coolant temperature sensor
4.	Water outlet (rear)	5.	Clamp	6.	Water hose
7.	Gasket	8.	O-ring	9.	Water outlet pipe
10.	Water outlet (front)	11.	Clamp	12.	Radiator hose (upper)
13.	Clamp	14.	Water bypass hose	15.	Gasket
16.	Water connector	17.	O-ring	18.	Heater pipe
19.	Water hose	20.	Clamp	21.	Water hose
22.	Heater hose				
A.	To heater core	B.	To heat exchanger	C.	To air cut solenoid valve (bank 1)
D.	To radiator	E.	To turbocharger (bank 2)	F.	To turbocharger (bank 1)

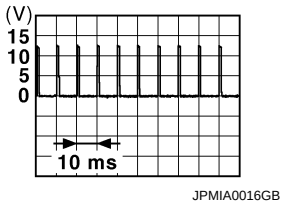
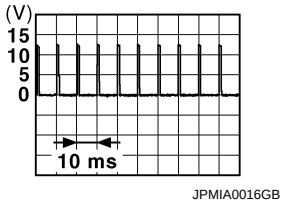
Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011486042

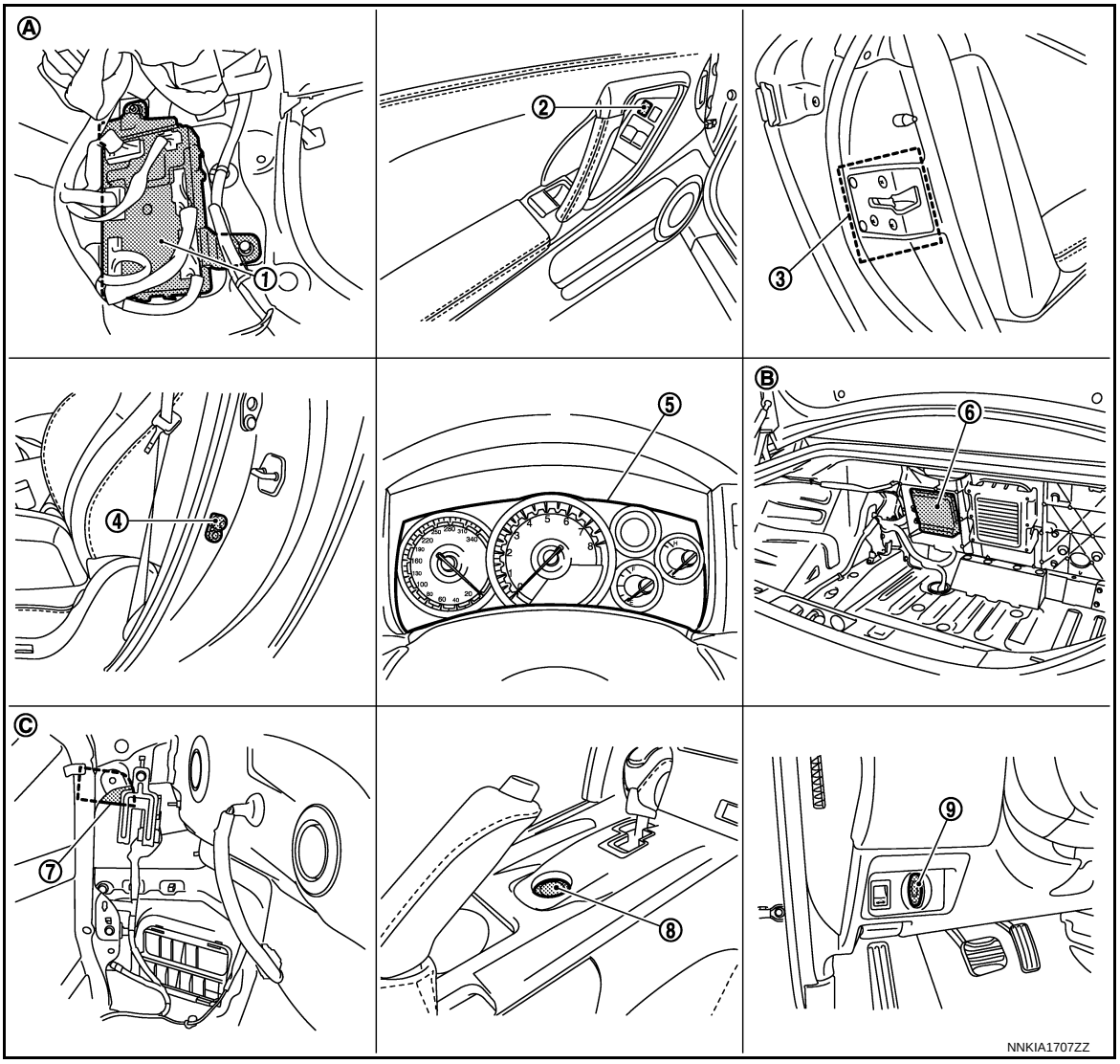
REMOVAL

1. Remove front undercover. Refer to EXT-40, "FRONT UNDER COVER : Exploded View".
2. Drain engine coolant. Refer to CO-10, "Draining".
   CAUTION:
   - **Perform this step when the engine is cold.**
   - **Never spill engine coolant on drive belt.**
3. Remove the following parts:
   - Engine cover: Refer to EM-26, "Exploded View".
   - Air duct and air cleaner case assembly (RH and LH): Refer to EM-28, "Exploded View".

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ON or ACC	0 V
95 (BG)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (SB)	Ground	A/T shift selector (detention switch) power supply	Output	—		Battery voltage
97 (L)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	Battery voltage
98 (R)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	Battery voltage
					UNLOCK status	0 V
99 (G)	Ground	Shift lever P position switch	Input	Shift lever	P position	0 V
					Any position other than P	Battery voltage
100 (W)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
101 (V)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
102 (BG)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage
106 (P)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V

Component Parts Location

INFOID:0000000011486899



1. BCM M118, M119, M122, M123
2. Power window main switch (door lock and unlock switch) D8
3. Driver side door lock actuator D15
4. Driver side door switch B21
5. Combination meter M53
6. TCM B45
7. Fuel lid lock actuator B244
8. Push-button ignition switch M131
9. Key slot M60

A. View with center console assembly removed
B. View with trunk front finisher removed
C. View with trunk side finisher removed

Component Description

INFOID:0000000011486900

Item	Function
BCM	Controls the door lock function.
Door lock and unlock switch	Inputs lock or unlock signal to BCM.
Door lock actuator	Inputs lock/unlock signal from BCM and locks/unlocks each door.
Door switch	Inputs door open/close condition to BCM.
Key slot	Inputs key insert/remove signal to BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication line.
TCM	Transmits shift position signal to BCM via CAN communication line.

2. Check continuity between BCM harness connector and inside key antenna (trunk room) harness connector.

BCM		Inside key antenna (trunk room)		Continuity
Connector	Terminal	Connector	Terminal	
M121	34	B41	2	Existed
	35		1	

3. Check continuity between BCM harness connector and ground.

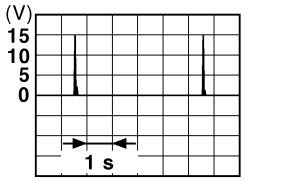
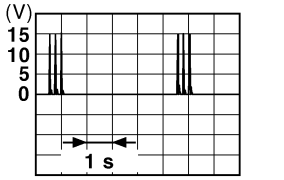
BCM		Ground	Continuity
Connector	Terminal		
M121	34		Not existed
	35		

Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna (trunk room). (New antenna or other antenna)
2. Connect BCM and inside key antenna (trunk room) connector.
3. Check signal between BCM harness connector and ground using oscilloscope.

(+)			(–)	Condition	Signal (Reference value)
BCM					
Connector		Terminal			
Trunk room	M121	34, 35	Ground	When Intelligent Key is in the passenger compartment.	 JMKIA0062GB
				When Intelligent Key is not in the passenger compartment.	 JMKIA0063GB

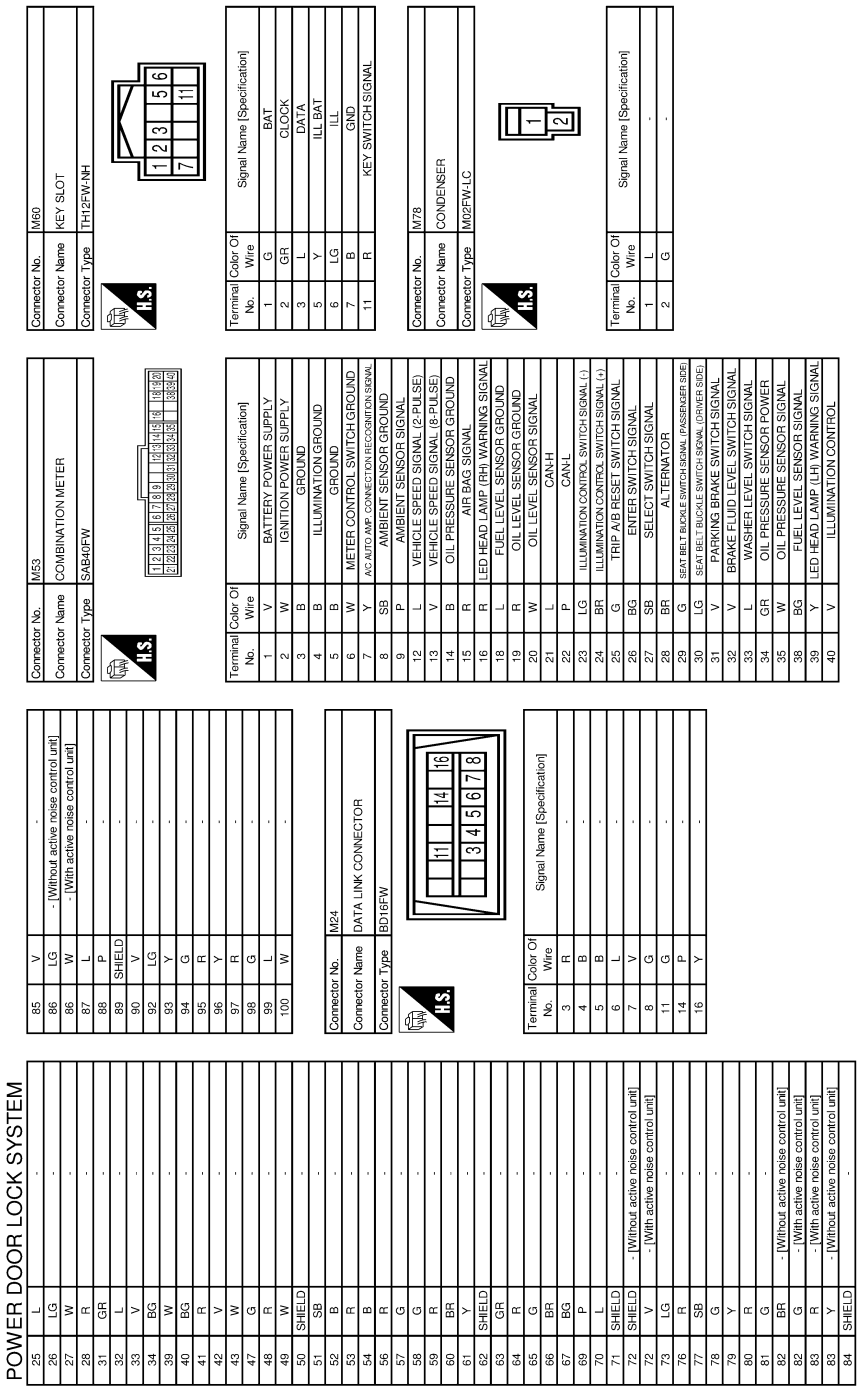
Is the inspection result normal?

YES >> Replace inside key antenna (trunk room). Refer to DLK-260, "TRUNK ROOM : Removal and Installation".
NO >> Replace BCM. Refer to BCS-89, "Removal and Installation".

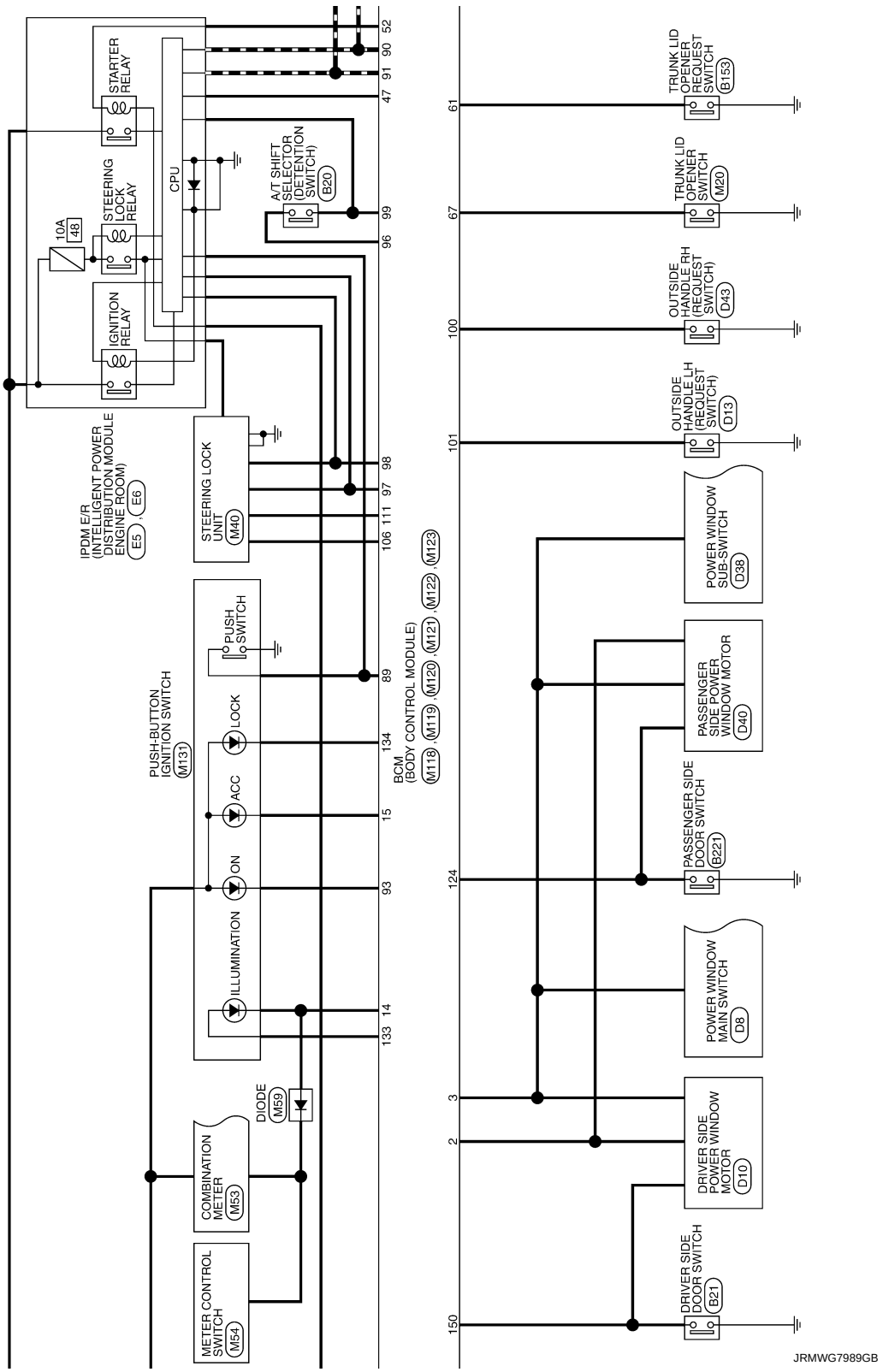
4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END



JRKWE4451GB


STARTER RELAY
CPU
STEERING LOCK RELAY
IGNITION RELAY
10A 48
A/T SHIFT SELECTOR (DETENTION SWITCH) B20
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E5, E6
STEERING LOCK UNIT M40
PUSH-BUTTON IGNITION SWITCH M131
PUSH SWITCH
LOCK
ACC
ON
ILLUMINATION
DIODE M59
COMBINATION METER M53
METER CONTROL SWITCH M54
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
TRUNK LID OPENER REQUEST SWITCH B153
TRUNK LID OPENER SWITCH M20
OUTSIDE HANDLE RH (REQUEST SWITCH) D43
OUTSIDE HANDLE LH (REQUEST SWITCH) D13
POWER WINDOW SUB SWITCH D38
PASSENGER SIDE POWER WINDOW MOTOR D40
PASSENGER SIDE DOOR SWITCH B221
POWER WINDOW MAIN SWITCH D8
DRIVER SIDE POWER WINDOW MOTOR D10
DRIVER SIDE DOOR SWITCH B21
JRMWG7989GB

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

1) Close a door.
2) Tap or push/pull around the area where the noise appears to be coming from.
3) Rev the engine.
4) Use a floor jack to recreate vehicle “twist”.
5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.
If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

- Removing the components in the area that is are suspected to be the cause of the noise.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of the noise.
  Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks.
  Refer to DLK-206, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- Separate components by repositioning or loosening and retightening the component, if possible.
- Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-50397) is available through the authorized Nissan Parts Department.

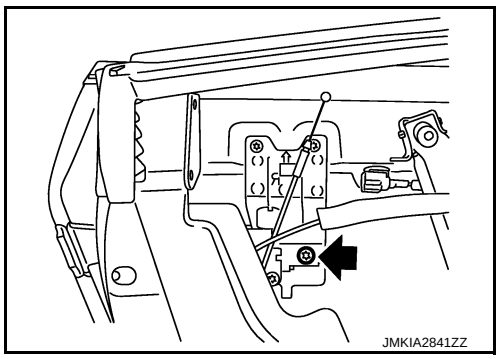
CAUTION:
Never use excessive force as many components are constructed of plastic and may be damaged.
NOTE:
Always check with the Parts Department for the latest parts information.
The following materials are contained in the Nissan Squeak and Rattle Kit (J-50397) are listed on the inside cover of the kit; and can each be ordered separately as needed.
URETHANE PADS [1.5 mm (0.059 in) thick]
Insulates connectors, harness, etc.
76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)
INSULATOR (Light foam block)
80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97in)
FELT CLOTHTAPE
Used to insulate where movement does not occur. Ideal for instrument panel applications.
68370-4B000: 15 × 25 mm (0.59 × 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll
The following materials, not found in the kit, can also be used to repair squeaks and rattles.
UHMW (TEFLON) TAPE

OUTSIDE HANDLE : Removal and Installation (GT-R certified NISSAN dealer)

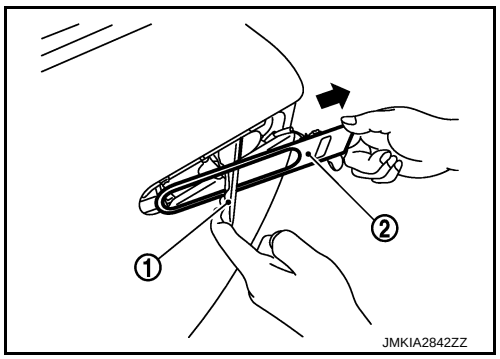
INFOID:0000000011487130

REMOVAL

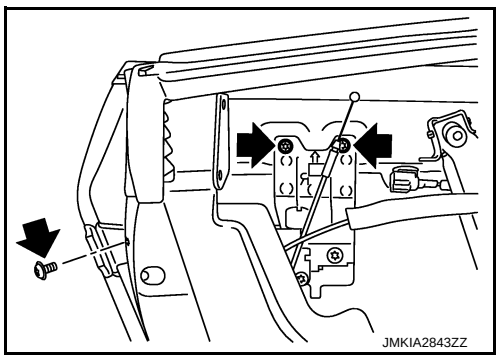
1. Remove the door finisher. Refer to INT-12, "Removal and Installation".
2. Remove the inside handle cable from the inside handle. Remove the door lock knob cable from the door lock knob.
   CAUTION:
   Never bend the cable end.
3. Remove the sealing screen and the door window. Refer to GW-23, "Removal and Installation".
4. Remove the door inner west reinforcement. Refer to DLK-227, "DOOR ASSEMBLY : Exploded View".
5. Disengage the joint of key cylinder rod (driver side) and outside handle rod at the outside handle side.
6. Disconnect the door request switch connector.
7. Remove the TORX bolt of outside handle escutcheon by the arrow in the figure.



8. Pull out and remove the outside handle escutcheon (2) toward vehicle rear while pulling the outside handle (1) forward.
   CAUTION:
   Never damage the vehicle.



9. Remove the TORX bolt by the arrows in the figure, and then remove the outside handle assembly.



10. Remove the TORX bolt and blind bolt, and then remove the key cylinder from the outside handle assembly. (Driver side)

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **When installing each rod, rotate rod holder until a click is felt.**
- **After installation, check door open/close, lock/unlock operation.**

DTC	Display Items	Reference
P1826	OIL TEMP SEN	DLN-17, "DTC Logic (GT-R certified NISSAN dealer)"
U1000	CAN COMM CIRCUIT	DLN-18, "DTC Logic (GT-R certified NISSAN dealer)"
U1010	CONTROL UNIT (CAN)	DLN-19, "DTC Logic (GT-R certified NISSAN dealer)"

31. Pinion mate shaft
32. Lock pin
33. Side bearing adjusting washer
34. O-ring
35. Side oil seal (left side)
36. O-ring
37. Side shaft bearing
38. Extension tube retainer
39. Side shaft oil seal
40. Dust seal
41. Side shaft
A: Oil seal lip
B: Screw hole

: Apply gear oil. Refer to MA-21, "Fluids and Lubricants".

*: Apply anti-corrosion oil.

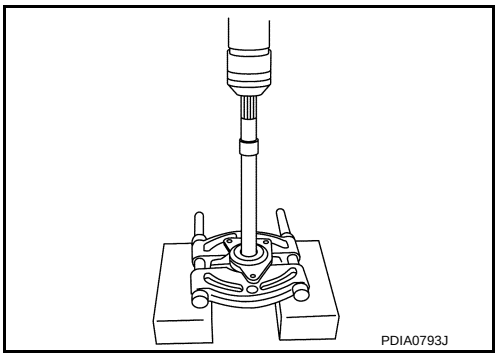
Ⓛ: Apply Genuine Medium Strength Thread Locking Sealant or equivalent. Refer to GI-18, "Recommended Chemical Products and Sealants".

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

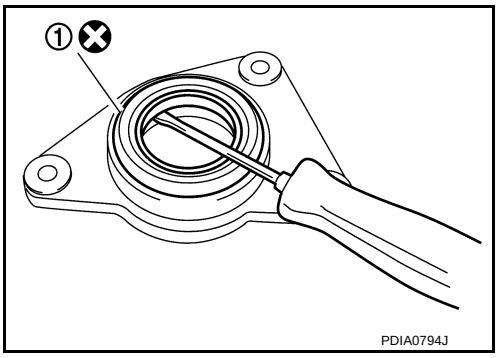
Disassembly (GT-R certified NISSAN dealer)

INFOID:0000000011490368

1. Hold extension tube retainer with puller, then press out side shaft using a press.



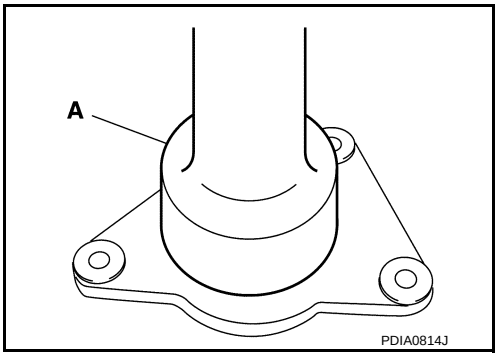
2. Remove side shaft oil seal (1) from extension tube retainer with a flat- blade screwdriver.
   CAUTION:
   Never damage extension tube retainer.
3. Remove side shaft bearing from extension tube retainer.
4. Remove O-ring from extension tube retainer.
5. Remove dust seal from side shaft.



Assembly (GT-R certified NISSAN dealer)

INFOID:0000000011490369

1. Using the drift (A) [SST: KV38100200 (—)], install side shaft oil seal.
   CAUTION:
   - **Never reuse oil seal.**
   - **When installing, never incline oil seal.**
   - **Apply multi-purpose grease onto oil seal lips, and gear oil onto the circumference of oil seal.**
2. Install dust seal.



SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

General Specifications

INFOID:0000000011490406

Applied model		AWD
		VR38DETT
		GR6Z30A
Final drive type		1.5 WAY mechanical LSD
Gear ratio		3.700
Number of teeth (Drive gear/Drive pinion)		37/10
Oil capacity (Approx.)	ℓ (US pt, Imp pt)	1.35 (2-7/8, 2-3/8)
Number of pinion gears		4

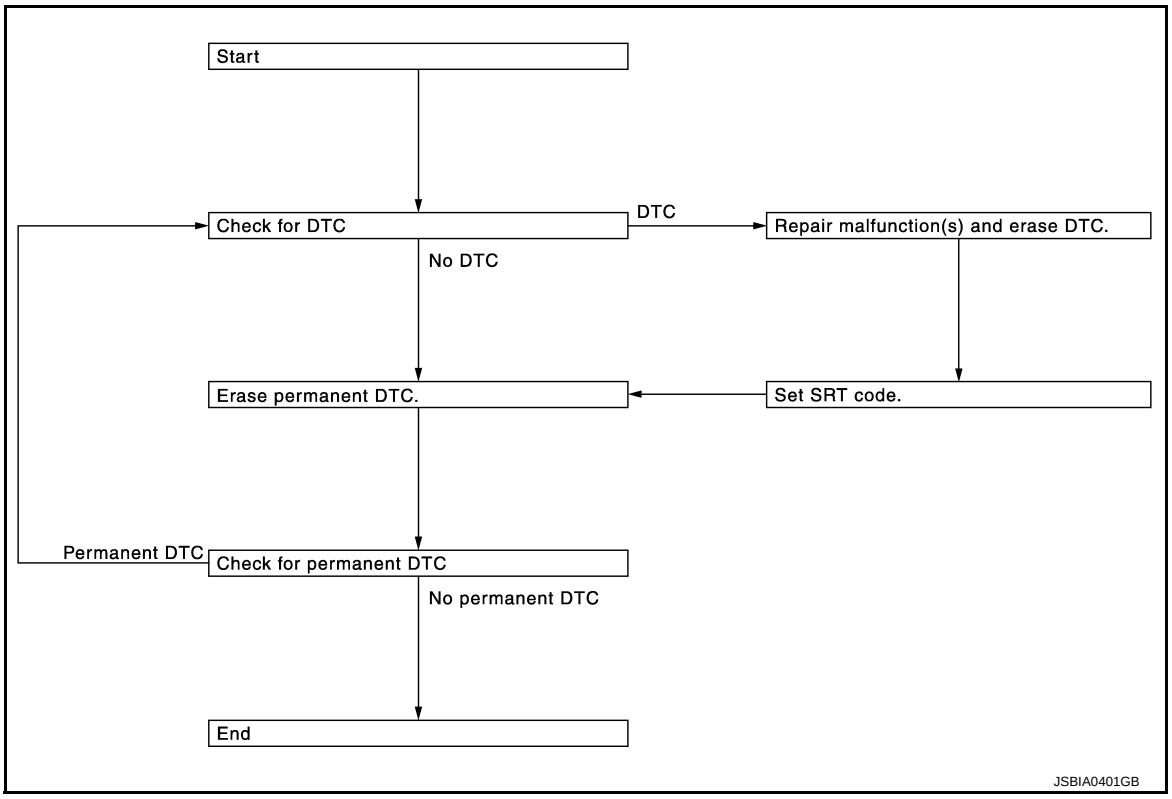
Backlash (GT-R certified NISSAN dealer)

INFOID:0000000011490407

Unit: mm (in)

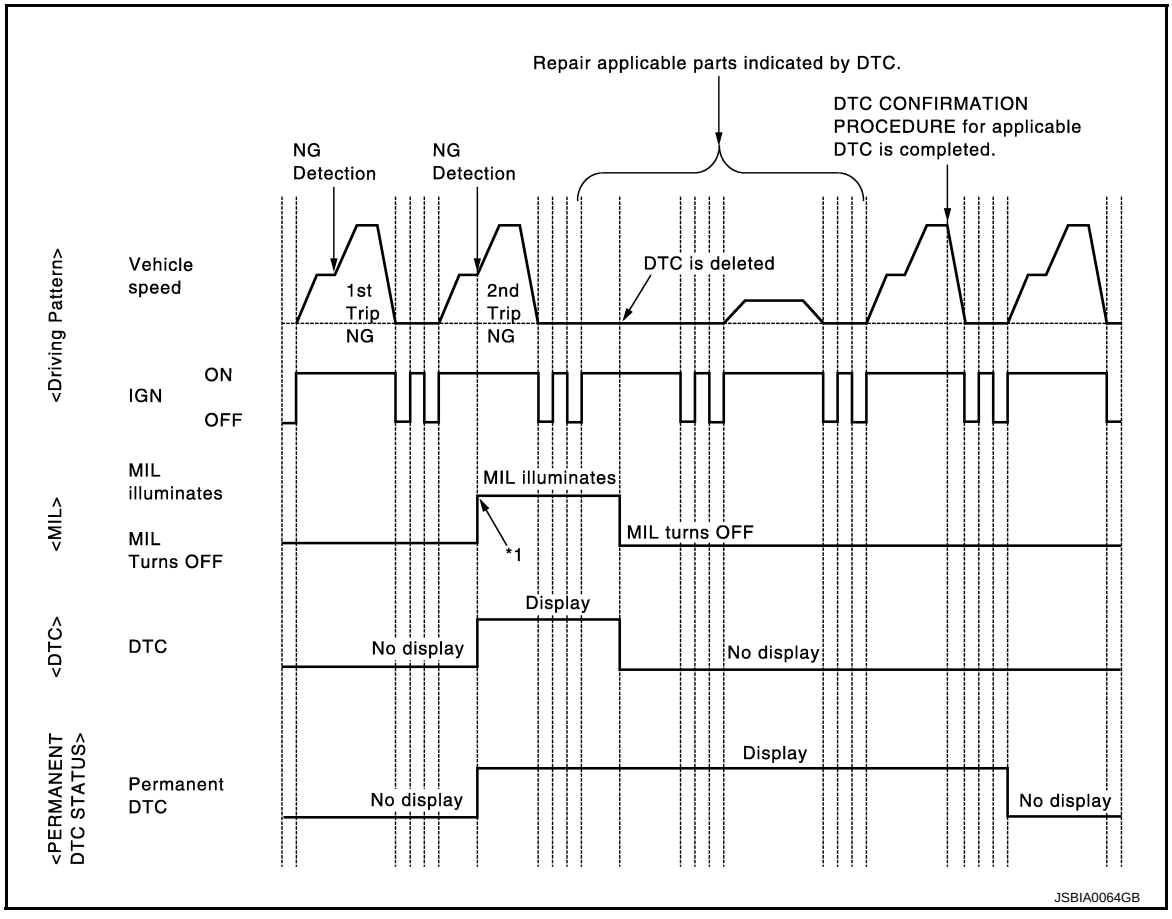
Item	Standard
Drive gear to drive pinion gear	0.15 – 0.20 (0.0059 – 0.0079)

PERMANENT DTC SERVICE PROCEDURE

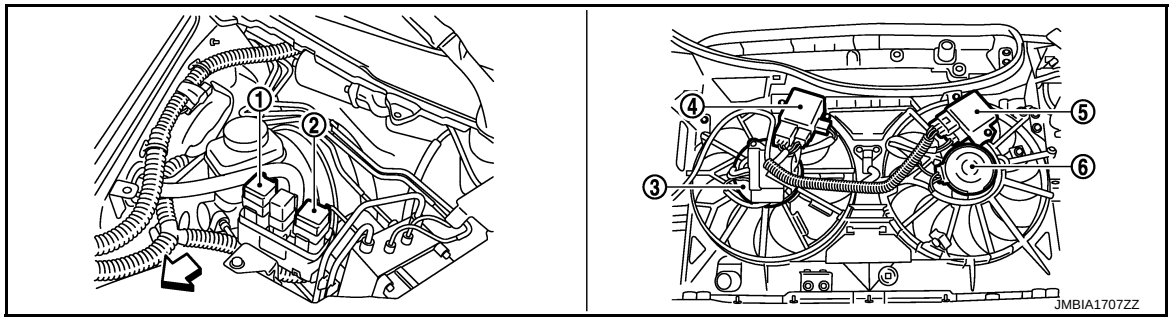


Work Procedure (Group A) (GT-R certified NISSAN dealer)

INFOID:0000000011486216

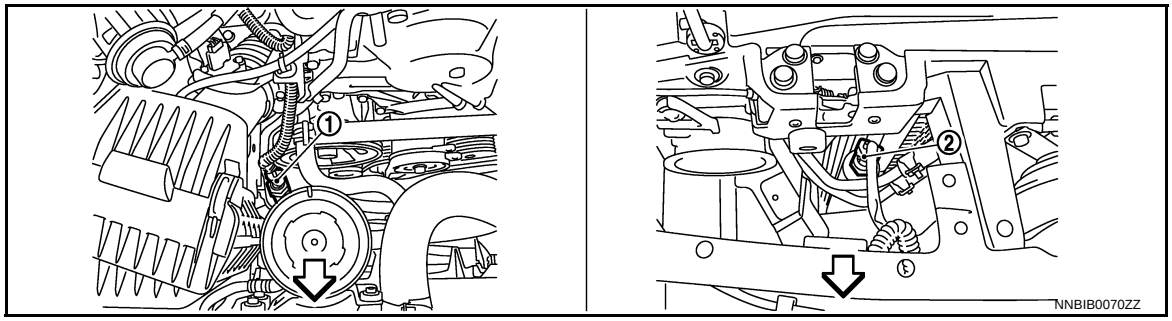


Component	Reference
Refrigerant pressure sensor	EC-560, "Description (GT-R certified NISSAN dealer)"
Secondary air injection system mass air flow sensor	EC-517, "Description (GT-R certified NISSAN dealer)"
Stop lamp switch	EC-494, "Description (GT-R certified NISSAN dealer)"
Sub fuel pump	EC-429, "Description (GT-R certified NISSAN dealer)"
Throttle control motor	EC-458, "Description (GT-R certified NISSAN dealer)"
Throttle control motor relay	EC-469, "Description (GT-R certified NISSAN dealer)"
Throttle position sensor	EC-237, "Description (GT-R certified NISSAN dealer)"
Turbocharger boost control solenoid valve	EC-206, "Description (GT-R certified NISSAN dealer)"
Turbocharger boost sensor	EC-314, "Description (GT-R certified NISSAN dealer)"



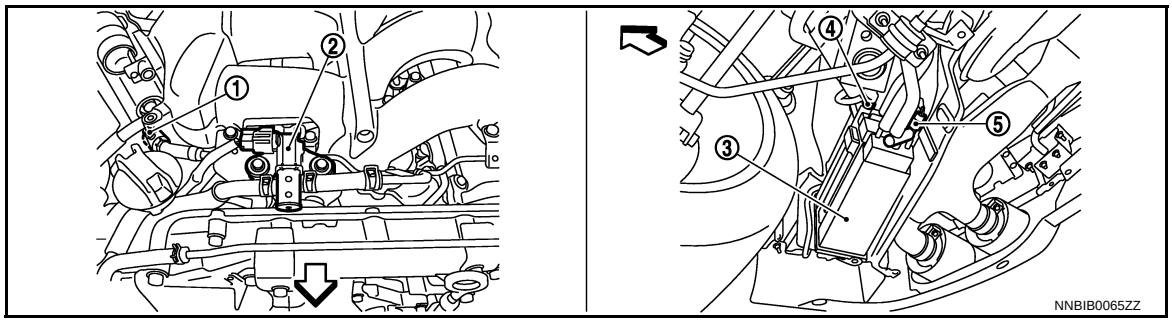
1. Cooling fan relay-2
2. Cooling fan relay-1
3. Cooling fan motor-1
4. Cooling fan control module-1
5. Cooling fan control module-2
6. Cooling fan motor-2

⇦ :Vehicle front



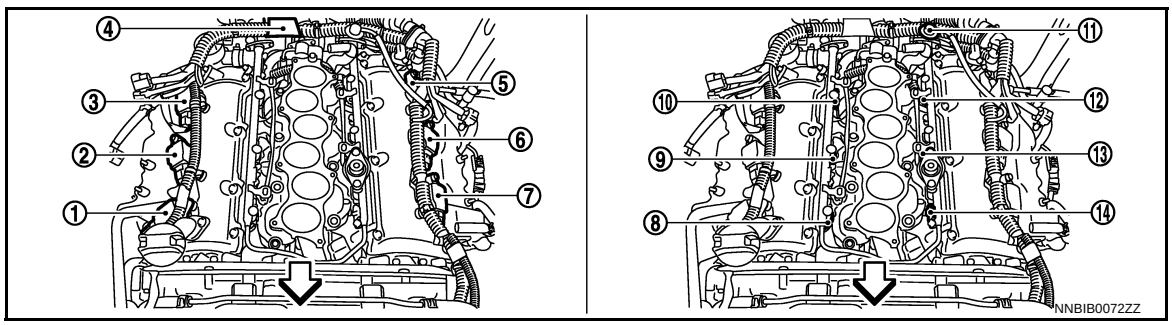
1. Power steering pressure sensor
2. Refrigerant pressure sensor

⇦ :Vehicle front



1. EVAP service port
2. EVAP canister purge volume control solenoid valve
3. EVAP canister
4. EVAP control system pressure sensor
5. EVAP canister vent control valve

⇦ :Vehicle front



Monitored item	Unit	Description	Remarks
A/F SEN1 DIAG1 (B1)	INCMP/CMPLT	• Indicates DTC P015A or P015B self-diagnosis condition. INCMP: Self-diagnosis is incomplete. CMPLT: Self-diagnosis is complete.	
A/F SEN1 DIAG1 (B2)	INCMP/CMPLT	• Indicates DTC P015C or P015D self-diagnosis condition. INCMP: Self-diagnosis is incomplete. CMPLT: Self-diagnosis is complete.	
A/F SEN1 DIAG2 (B1)	INCMP/CMPLT	• Indicates DTC P014C or P014D self-diagnosis condition. INCMP: Self-diagnosis is incomplete. CMPLT: Self-diagnosis is complete.	
A/F SEN1 DIAG2 (B2)	INCMP/CMPLT	• Indicates DTC P0114E or P014F self-diagnosis condition. INCMP: Self-diagnosis is incomplete. CMPLT: Self-diagnosis is complete.	
A/F SEN1 DIAG3 (B1)	ABSNT/PRSNT	• Indicates DTC P014C, P014D, P015A or P015B self-diagnosis condition. ABSNT: The vehicle condition is not within the diagnosis range. PRSNT: The vehicle condition is within the diagnosis range.	
A/F SEN1 DIAG3 (B1)	ABSNT/PRSNT	• Indicates DTC P014E, P014F, P015C or P015D self-diagnosis condition. ABSNT: The vehicle condition is not within the diagnosis range. PRSNT: The vehicle condition is within the diagnosis range.	
EVAP LEAK DIAG	YET/CMPLT	• Indicates the condition of EVAP leak diagnosis. YET: EVAP leak diagnosis has not been performed yet. CMPLT: EVAP leak diagnosis has been performed successfully.	
EVAP DIAG READY	ON/OFF	• Indicates the ready condition of EVAP leak diagnosis. ON: Diagnosis has been ready condition. OFF: Diagnosis has not been ready condition.	
SYSTEM 1 DIAGNOSIS A B1	INCMP/CMPLT	• Indicates DTC P219A self-diagnosis condition. INCMP: Self-diagnosis is incomplete. CMPLT: Self-diagnosis is complete.	
SYSTEM 1 DIAGNOSIS A B2	INCMP/CMPLT	• Indicates DTC P219B self-diagnosis condition. INCMP: Self-diagnosis is incomplete. CMPLT: Self-diagnosis is complete.	
SYSTEM 1 DIAGNOSIS B B1	ABSNT/PRSNT	• Indicates DTC P219A self-diagnosis condition. ABSNT: Self-diagnosis standby PRSNT: Under self-diagnosis	
SYSTEM 1 DIAGNOSIS B B2	ABSNT/PRSNT	• Indicates DTC P219B self-diagnosis condition. ABSNT: Self-diagnosis standby PRSNT: Under self-diagnosis	
A/F-S ATMSPHRC CRCT B1	—	Displays a determined value of atmospheric correction factor necessary for correcting an A/F sensor signal input to ECM. The signal used for the correction is an A/F sensor signal transmitted while driving under atmospheric pressure.	

3.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, do not add fuel.**
- **Before performing the following procedure, check that fuel level is between 1/4 and 4/4.**
- **Before performing the following procedure, confirm that battery voltage is 11 V or more at idle.**

>> GO TO 4.

4.PERFORM DTC CONFIRMATION PROCEDURE

1. Start engine and let it idle for 60 minutes.
2. Move the vehicle to a cool place.
   NOTE:
   Cool the vehicle in an environment of ambient air temperature between –10°C (14°F) and 35°C (95°F).
3. Turn ignition switch OFF and soak the vehicle for 12 hours.
   CAUTION:
   Never turn ignition switch ON during soaking.
   NOTE:
   The vehicle must be cooled with the hood open.
4. Start engine and let it idle for 5 minutes or more.
   CAUTION:
   Never turn ignition switch OFF during idling.
5. Check 1st trip DTC.

Is 1st trip DTC detected?

YES >> Proceed to EC-226, "Diagnosis Procedure (GT-R certified NISSAN dealer)".
NO >> INSPECTION END

Component Function Check (GT-R certified NISSAN dealer)

INFOID:0000000011486315

1.CHECK INTAKE AIR TEMPERATURE (IAT) SENSOR

1. Turn ignition switch OFF.
2. Disconnect mass air flow sensor harness connector.
3. Check resistance between mass air flow sensor terminals as follows.

Terminals	Condition		Resistance (kΩ)
1 and 2	Temperature [°C (°F)]	25 (77)	1.800 – 2.200

Is the inspection result normal?

YES >> GO TO 2.
NO >> Proceed to EC-226, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

2.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-39, "Intermittent Incident".

Is the inspection result normal?

YES >> INSPECTION END
NO >> Proceed to EC-226, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486316

1.CHECK INTAKE AIR TEMPERATURE (IAT) SENSOR

Check intake air temperature sensor. Refer to EC-230, "Component Inspection (GT-R certified NISSAN dealer)".

Is the inspection result normal?

7.PERFORM COMPONENT FUNCTION CHECK

Perform component function check. Refer to EC-274, "Component Function Check (GT-R certified NISSAN dealer)".

NOTE:
Use component function check to check the overall function of the heated oxygen sensor 2 circuit. During this check, a 1st trip DTC might not be confirmed.

Is the inspection result normal?

YES >> INSPECTION END
NO >> Proceed to EC-275, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

Component Function Check (GT-R certified NISSAN dealer)

INFOID:0000000011486369

1.PERFORM COMPONENT FUNCTION CHECK-I

Without CONSULT

1. Start engine and warm it up to the normal operating temperature.
2. Turn ignition switch OFF and wait at least 10 seconds.
3. Start engine and keep the engine speed between 3,500 and 4,000 rpm for at least 1 minute under no load.
4. Let engine idle for 1 minute.
5. Check the voltage between ECM harness connector terminals under the following condition.

DTC	ECM			Condition	Voltage
	Connector	+	–		
		Terminal	Terminal		
P0139	F102	73	70	Revving up to 4,000 rpm under no load at least 10 times	A change of voltage should be more than 0.96 V for 1 second during this procedure.
P0159		77			

Is the inspection result normal?

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

2.PERFORM COMPONENT FUNCTION CHECK-II

Check the voltage between ECM harness connector terminals under the following condition.

DTC	ECM			Condition	Voltage
	Connector	+	–		
		Terminal	Terminal		
P0139	F102	73	70	Keeping engine at idle for 10 minutes	A change of voltage should be more than 0.96 V for 1 second during this procedure.
P0159		77			

Is the inspection result normal?

YES >> INSPECTION END
NO >> GO TO 3.

3.PERFORM COMPONENT FUNCTION CHECK-III

Check the voltage between ECM harness connector terminals under the following condition.

DTC	ECM			Condition	Voltage
	Connector	+	–		
		Terminal	Terminal		
P0139	F102	73	70	Coasting from 80 km/h (50 MPH) in A position	A change of voltage should be more than 0.96 V for 1 second during this procedure.
P0159		77			

Is the inspection result normal?

YES >> INSPECTION END
NO >> Refer to EC-275, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

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

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486412

DTC DETECTION LOGIC

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

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

The misfire detection logic consists of the following two conditions.

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

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P0300	Multiple cylinder misfires detected	Multiple cylinder misfire.	• Improper spark plug • Insufficient compression • Incorrect fuel pressure • The fuel injector circuit is open or shorted • Fuel injector • Intake air leak • The ignition signal circuit is open or shorted • Lack of fuel • Signal plate • A/F sensor 1 • Incorrect PCV hose connection
P0301	No.1 cylinder misfire detected	No. 1 cylinder misfires.	
P0302	No. 2 cylinder misfire detected	No. 2 cylinder misfires.	
P0303	No. 3 cylinder misfire detected	No. 3 cylinder misfires.	
P0304	No. 4 cylinder misfire detected	No. 4 cylinder misfires.	
P0305	No. 5 cylinder misfire detected	No. 5 cylinder misfires.	
P0306	No. 6 cylinder misfire detected	No. 6 cylinder misfires.	

DTC CONFIRMATION PROCEDURE

1.PRECONDITIONING

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

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

>> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE-I

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

3. Touch “ON/OFF” on CONSULT screen.
4. Check for operating sound of the valve.

Clicking sound should be heard.

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 3.

3.CHECK EVAP CANISTER VENT CONTROL VALVE POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect EVAP canister vent control valve harness connector.
3. Turn ignition switch ON.
4. Check the voltage between EVAP canister vent control valve harness connector and ground.

EVAP canister vent control valve		Ground	Voltage
Connector	Terminal		
B250	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 4.

4.DETECT MALFUNCTIONING PART

Check the following.
- Harness connectors E3, F1
- Harness connectors F103, M116
- Harness connectors B201, M117
- Harness for open or short between EVAP canister vent control valve and IPDM E/R

>> Repair open circuit, short to ground or short to power in harness or connectors.

5.CHECK EVAP CANISTER VENT CONTROL VALVE OUTPUT SIGNAL CIRCUIT FOR OPEN AND SHORT

1. Turn ignition switch OFF.
2. Disconnect ECM harness connector.
3. Check the continuity between EVAP canister vent control valve harness connector and ECM harness connector.

EVAP canister vent control valve		ECM		Continuity
Connector	Terminal	Connector	Terminal	
B250	2	F101	7	Existed

4. Also check harness for short to ground and short to power.

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 6.

6.DETECT MALFUNCTIONING PART

Check the following.
- Harness connectors B201, M117
- Harness connectors F103, M116
- Harness for open or short between EVAP canister vent control valve and ECM

>> Repair open circuit, short to ground or short to power in harness or connectors.

7.CHECK RUBBER TUBE FOR CLOGGING

1. Disconnect rubber tube connected to EVAP canister vent control valve.

With GST
Follow the procedure “With CONSULT” above.

Is 1st trip DTC detected?

YES >> Go to EC-418, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011486497

1.PERFORM IDLE AIR VOLUME LEARNING

Perform EC-24, "IDLE AIR VOLUME LEARNING : Special Repair Requirement (GT-R certified NISSAN dealer)".

Is Idle Air Volume Learning carried out successfully?

YES >> GO TO 2.
NO >> Follow the instruction of Idle Air Volume Learning.

2.CHECK INTAKE SYSTEM

Check for the cause of intake air volume lacking. Refer to the following.
- Crushed intake air passage
- Intake air passage clogging
- Clogging of throttle body

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace malfunctioning part

3.CHECK FUEL INJECTION SYSTEM FUNCTION

Perform DTC Confirmation Procedure for DTC P0171, P0174. Refer to EC-285, "DTC Logic (GT-R certified NISSAN dealer)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Go to EC-286, "Diagnosis Procedure (GT-R certified NISSAN dealer)" for DTC P0171, P0174.

4.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Erase DTC.
3. Perform DTC Confirmation Procedure.
   See EC-417, "DTC Logic".

Is the 1st trip DTC P050A, P050B or P050E displayed again?

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

5.REPLACE ECM

1. Replace ECM.
2. Go to EC-20, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement (GT-R certified NISSAN dealer)".

>> INSPECTION END

P1263, P2263 TC SYSTEM

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486564

DTC DETECTION LOGIC

NOTE:
If DTC P1263 or P2263 is displayed with DTC P0237, P0238, P0241 or P0242, first perform the trouble diagnosis for DTC P0237, P0238, P0241 or P0242. Refer to EC-319, "DTC Logic (GT-R certified NISSAN dealer)".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P2263	Turbocharger boost system performance (bank 1)	In spite of the boosting area, the boost does not increase.	• Intake air leaks • Exhaust gas leaks • Turbocharger boost sensor • Turbocharger boost control solenoid valve • Recirculation valve • Exhaust manifold and turbocharger assembly
P1263	Turbocharger boost system performance (bank 2)		

DTC CONFIRMATION PROCEDURE

1.PERFORM COMPONENT FUNCTION CHECK

Perform component function check. Refer to EC-466, "Component Function Check (GT-R certified NISSAN dealer)".

NOTE:
Use component function check to check the overall function of the turbocharger system circuit. During this check, a 1st trip DTC might not be confirmed.

Is the inspection result normal?

YES >> INSPECTION END
NO >> Refer to EC-467, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

Component Function Check (GT-R certified NISSAN dealer)

INFOID:0000000011486565

1.CHECK BOOST CONTROL ACTUATOR HOSE

Check disconnection, looseness or improper connection of hose between turbocharger boost control solenoid valve and boost control actuator.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to EC-467, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

2.PERFORM COMPONENT FUNCTION CHECK

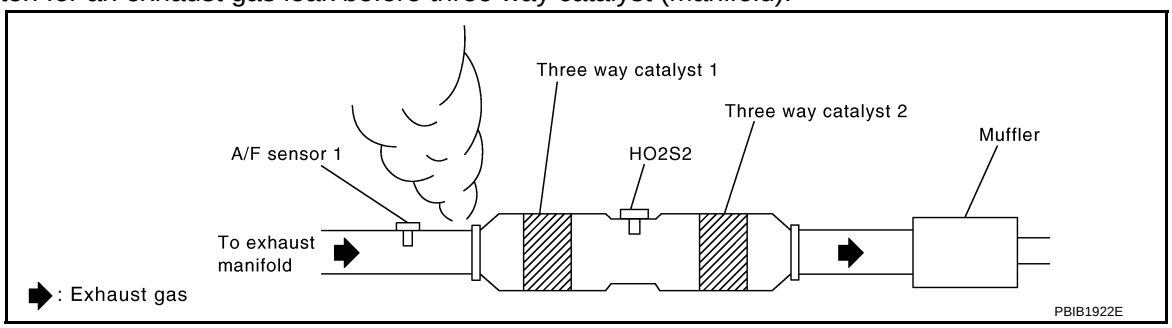
1. Turn ignition switch OFF.
2. Disconnect turbocharger boost control solenoid valve harness connector.
3. Disconnect of hose between turbocharger boost control solenoid valve and compressor wheel.
4. Install pressure pump to turbocharger boost control solenoid valve.
5. Check that the rod of the boost control actuator activates when supplying pressure and battery voltage to the turbocharger boost control solenoid valve as per the following conditions.

Condition		Operation
Turbocharger boost control solenoid valve	Supply pressure	
Battery voltage direct current supply between terminals 1 and 2	• Bank 1 [68.0 kPa (680mbar, 510 mmHg, 20.08 inHg)] • Bank 2 [63.1 kPa (631 mbar, 473 mmHg, 18.63 inHg)]	Boost control actuator rod operates
No current supply between terminals 1 and 2		Boost control actuator rod not operates

CAUTION:
Do not supply pressure over 75 kPa (750 mbar, 562 mmHg, 22.14 inHg)

2.CHECK EXHAUST GAS LEAK

1. Stop the engine and visually check exhaust tube, three way catalyst and muffler for dents connection.
2. Start the engine and let it idle.
3. Listen for an exhaust gas leak before three way catalyst (manifold).



Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace error-detected parts.

3.CHECK FUEL PRESSURE

1. Release fuel pressure to zero. Refer to EC-637, "Inspection (GT-R certified NISSAN dealer)".
2. Check fuel pressure. Refer to EC-637, "Inspection (GT-R certified NISSAN dealer)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 9.

4.CHECK MASS AIR FLOW SENSOR

With CONSULT
Check “MASS AIR FLOW” in “DATA MONITOR” mode of “ENGINE” using CONSULT.
For specification, refer to EC-640, "Mass Air Flow Sensor".

With GST
Check mass air flow sensor signal in Service $01 using GST.
For specification, refer to EC-640, "Mass Air Flow Sensor".

Is the inspection result normal?

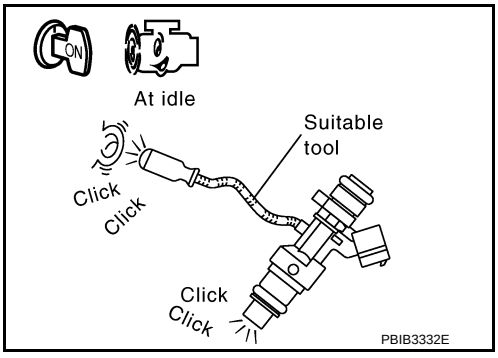
YES >> GO TO 5.
NO >> Check connectors for rusted terminals or loose connections in the mass air flow sensor circuit or grounds. Refer to EC-214, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

5.CHECK FUNCTION OF FUEL INJECTOR-1

With CONSULT
1. Start the engine.
2. Perform “POWER BALANCE” in “ACTIVE TEST” mode of “ENGINE” using CONSULT.
3. Check that each circuit produces a momentary engine speed drop.

Without CONSULT
1. Let the engine idle.
2. Listen to each fuel injector operating sound.

Clicking noise should be heard.



Is the inspection result normal?

YES >> GO TO 6.
NO >> Perform trouble diagnosis for fuel injector, refer to EC-538, "Component Function Check (GT-R certified NISSAN dealer)".

8.DETECT MALFUNCTIONING PART

Check the following.
- Harness connectors M6, E106
- Harness connectors F103, M116
- Harness for open or short between ECM and refrigerant pressure sensor

>> Repair open circuit, short to ground or short to power in harness or connectors.

9.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace refrigerant pressure sensor. Refer to HAC-102, "Removal and Installation (GT-R certified NISSAN dealer)".

NO >> Repair or replace malfunctioning part.

ENGINE CONTROL SYSTEM

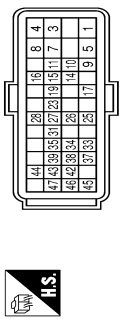
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	V	-
7	W	-
8	W	-
9	Y	-
10	R	-
11	Y	-
12	GR	-
13	BG	-
14	Y	-
15	BR	-
16	R	-
17	W	-
18	BR	-
20	GR	-
21	SB	-
22	W	-
23	G	-
24	BG	-
25	L	-
26	P	-
27	GR	-
28	BG	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	G	-
40	LG	-
41	Y	-
42	SB	-
43	P	-
47	R	-
48	B	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	LG	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	SB	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	SB	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	BR	-
93	SB	-
94	GR	-
95	BG	-
96	Y	-
97	Y	-
98	LG	-
99	R	-
100	G	-

Connector No.	B45
Connector Name	TCM
Connector Type	RH40FB-RZ8-LLH-Z

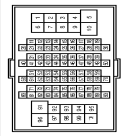
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	POWER SUPPLY (MEMORY BACK-UP)-2
3	B	GROUND
4	B	GROUND
5	W	POWER SUPPLY (MEMORY BACK-UP)-3
7	B	GROUND
8	B	GROUND
9	P	POWER SUPPLY (MEMORY BACK-UP)-1
10	LG	BACK-UP LAMP SIGNAL
11	L	CAN-H
14	V	POWER OFF
15	P	CAN-L
16	W	STOP LAMP SWITCH SIGNAL
17	Y	IGNITION SWITCH SIGNAL
19	GR	STARTER RELAY SIGNAL
23	BR	AUTO/MANUAL RANGE CHANGE SWITCH 1 SIGNAL
25	L	RANGE SENSOR POWER SOURCE 1
26	LG	RANGE SENSOR POWER SOURCE 2
27	G	RANGE SENSOR NO. - SIGNAL
28	V	AUTO/MANUAL RANGE CHANGE SWITCH 2 SIGNAL
31	SB	ENGINE SPEED SIGNAL
33	V	RANGE SENSOR NO.1 SIGNAL
34	BG	SAVE MODE SWITCH SIGNAL
35	G	RANGE SENSOR NO.3 SIGNAL
37	GR	R MODE SWITCH SIGNAL
38	R	RANGE SENSOR NO.2 SIGNAL
39	W	PADDLE SHIFTER (SHIFT-UP SWITCH) SIGNAL
42	L	PADDLE SHIFTER (SHIFT-DOWN SWITCH) SIGNAL
43	P	RANGE SENSOR NO.4 SIGNAL
44	GR	RANGE SENSOR NO.5 SIGNAL
45	BG	R MODE LAMP SIGNAL
46	W	SHIFT LOCK SOLENOID CONTROL SIGNAL
47	G	SAVE MODE LAMP SIGNAL

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	BG	-
9	W	-
10	R	-
31	V	-
32	LG	-
33	BR	-
34	L	-
40	P	-
41	GR	-
42	Y	-
43	Y	-
44	V	-
45	W	-
51	SB	-
52	G	-
53	BR	-
54	V	-
60	R	-
61	P	-
62	L	-
63	LG	-
64	GR	-
69	P	-
70	L	-
71	R	-
80	L	-
81	SB	-
82	V	-
83	B	-
84	Y	-

JRBWD1582GB

SPARK PLUG

Exploded View

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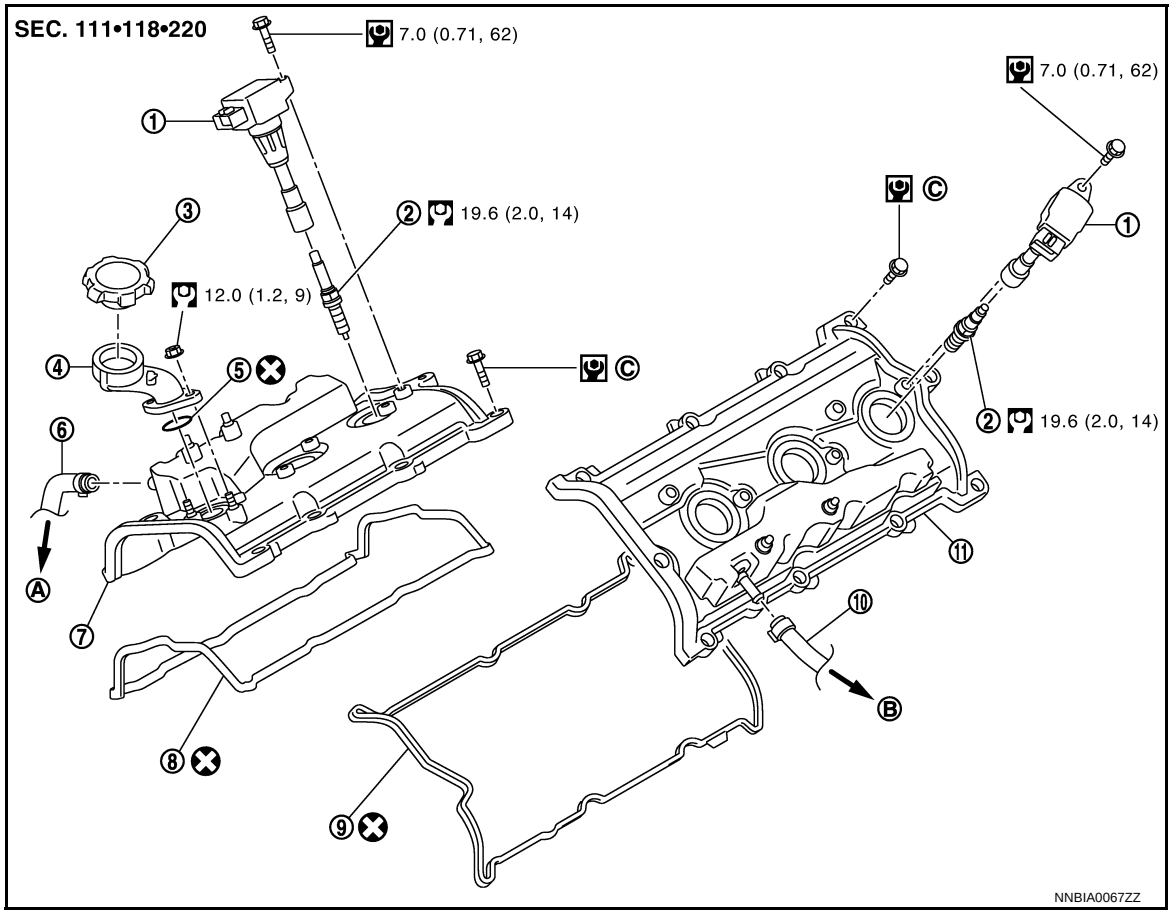


1.	Ignition coil	2.	Spark plug	3.	Oil filler cap
4.	Oil filler tube	5.	O-ring	6.	Fresh air hose
7.	Rocker cover (bank 1)	8.	Rocker cover gasket (bank 1)	9.	Rocker cover gasket (bank 2)
10.	Fresh air hose	11.	Rocker cover (bank 2)		
A.	To fresh air tube (bank 1)	B.	To fresh air tube (bank 2)	C.	Comply with the installation procedure when tightening. Refer to EM-47

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

Removal and Installation

INFOID:0000000011488037

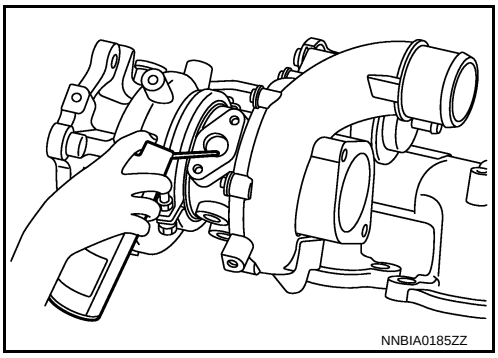
REMOVAL

1. Remove engine cover with power tool. Refer to EM-26, "Exploded View".
2. Remove intake manifold collector. Refer to EM-35, "Exploded View".
   CAUTION:
   Mark the parts with paint in advance of the reinstallation to prevent misalignment between the intake manifold collector and intake manifold.
3. Remove ignition coil.

- Refer to the figure for component names and visually check points.

Cleaning Procedure

- Clean the oil feed and the return port with engine conditioner.
- Clean the water inlet and the outlet port with radiator cleaner.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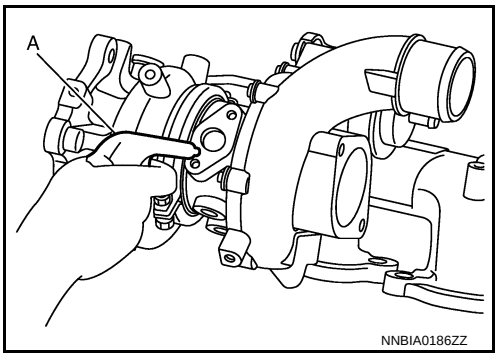
- Dry it using an air gun (A) after cleaning.
- Dry compressor wheel, turbine wheel, compressor housing, and turbine housing using an air gun.



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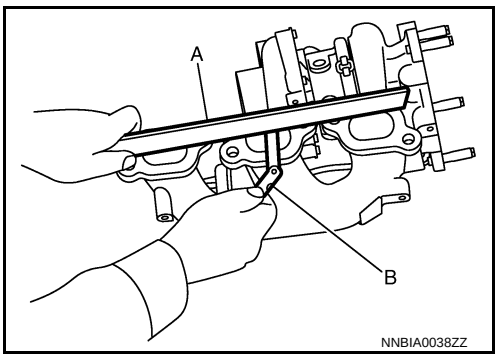
Surface Distortion

- Use a reliable straightedge (A) and feeler gauge (B) to check the flatness of exhaust manifold and turbocharger assembly fitting surface.

Limit:

Refer to EM-141, "Exhaust Manifold and Turbocharger (GT-R certified NISSAN dealer)".



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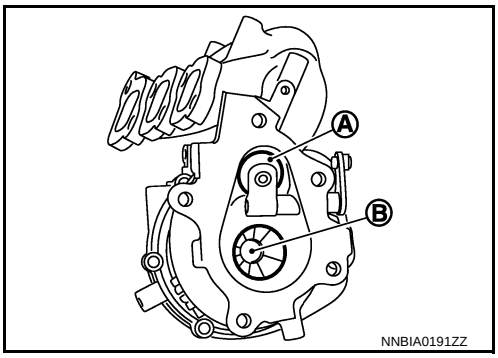
Turbine Wheel and Boost Control Valve

- Check that the boost control valve (A) has no deformation and cracks.
- Check for engine oil stains on turbine wheel (B).
- Check for carbon deposits.
- Check if turbine wheel vane is bent or broken.
- Check for interference with turbine housing.



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Compressor Wheel

10. Main bearing (lower)	11. O-ring	12. Lower cylinder block
13. Lower cylinder block bolt	14. Connecting rod bolt	15. Connecting rod bearing cap
16. Connecting rod bearing	17. Connecting rod	18. Snap ring
19. Piston pin	20. Piston	21. Oil ring
22. Second ring	23. Top ring	24. Flywheel
25. Reinforcement plate	26. Clamp	27. PCV hose
28. PCV valve	29. Cylinder block heater (for Canada)	
A. To intake manifold collector	B. Comply with the assembly procedure when tightening. Refer to EM-114	C. Apply neutral detergent on the outer edge.

⇦ : Engine front

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

Disassembly and Assembly (GT-R certified NISSAN dealer)

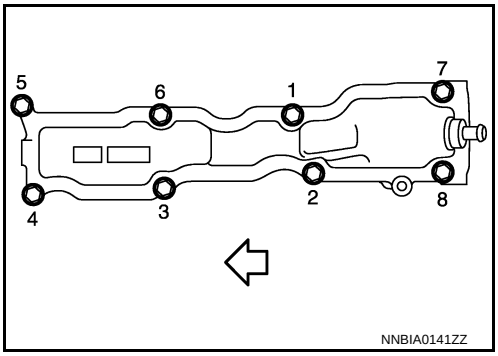
INFOID:0000000011488087

DISASSEMBLY

1. Remove the following parts:
   - Oil pans (lower and upper): Refer to EM-97, "Exploded View (GT-R certified NISSAN dealer)".
   - Front and rear timing chain case: Refer to EM-69, "Exploded View (GT-R certified NISSAN dealer)".
   - Cylinder head: Refer to EM-103, "Exploded View (GT-R certified NISSAN dealer)".
2. Remove knock sensor.
   CAUTION:
   Carefully handle knock sensor avoiding shocks.
3. Remove breather separator.

a. Loosen mounting bolts in reverse order as shown in the figure.

⇦ : Engine front



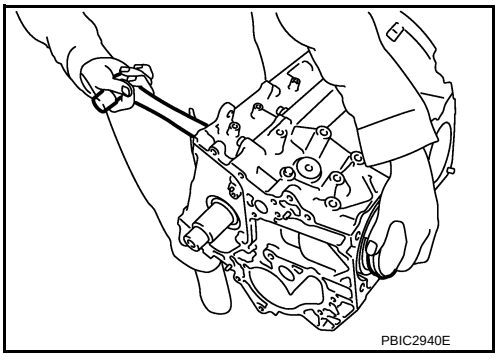
4. Remove piston and connecting rod assembly with the following procedure:
   - Before removing piston and connecting rod assembly, check the connecting rod side clearance. Refer to EM-124, "Inspection (GT-R certified NISSAN dealer)".

   CAUTION:
   Be careful not to drop connecting rod bearing, and to scratch the surface.

a. Position crankshaft pin corresponding to connecting rod to be removed onto the bottom dead center.

b. Remove connecting rod bearing cap.

c. Using a hammer handle or similar tool, push piston and connecting rod assembly out to the cylinder head side.
   CAUTION:
   Be careful not to damage the cylinder wall and crankshaft pin, resulting from an interference of the connecting rod big end.



5. Remove connecting rod bearings from connecting rod and connecting rod bearing cap.
   CAUTION:
   - **Be careful not to drop connecting rod bearing, and to scratch the surface.**

Never use a power tool to remove or tighten bolts for aluminum die-casting part to prevent damage to aluminum die-casting parts.

Titanium Muffler Handling

INFOID:0000000011485577

CAUTION:

- **Never touch the titanium muffler directly with bare hands or allow oils to adhere to it during inspection, removal, and installation.**
- **Always wear new thick cotton gloves or working gloves. (Never use oil-adhered gloves.)**
- **After oil adhesion, wait until the titanium muffler cools and immediately remove oil with parts cleaner.**
- **Always use genuine parts cleaner (dry type) or the equivalent.**
- **When cleaning oil in on-board condition, apply parts cleaner to a waste to wipe out oil. By doing so, peripheral parts can be protected from parts cleaner adhesion.**
- **Be careful not to cut fingers with the insulator edge or the main muffler cooling fin.**

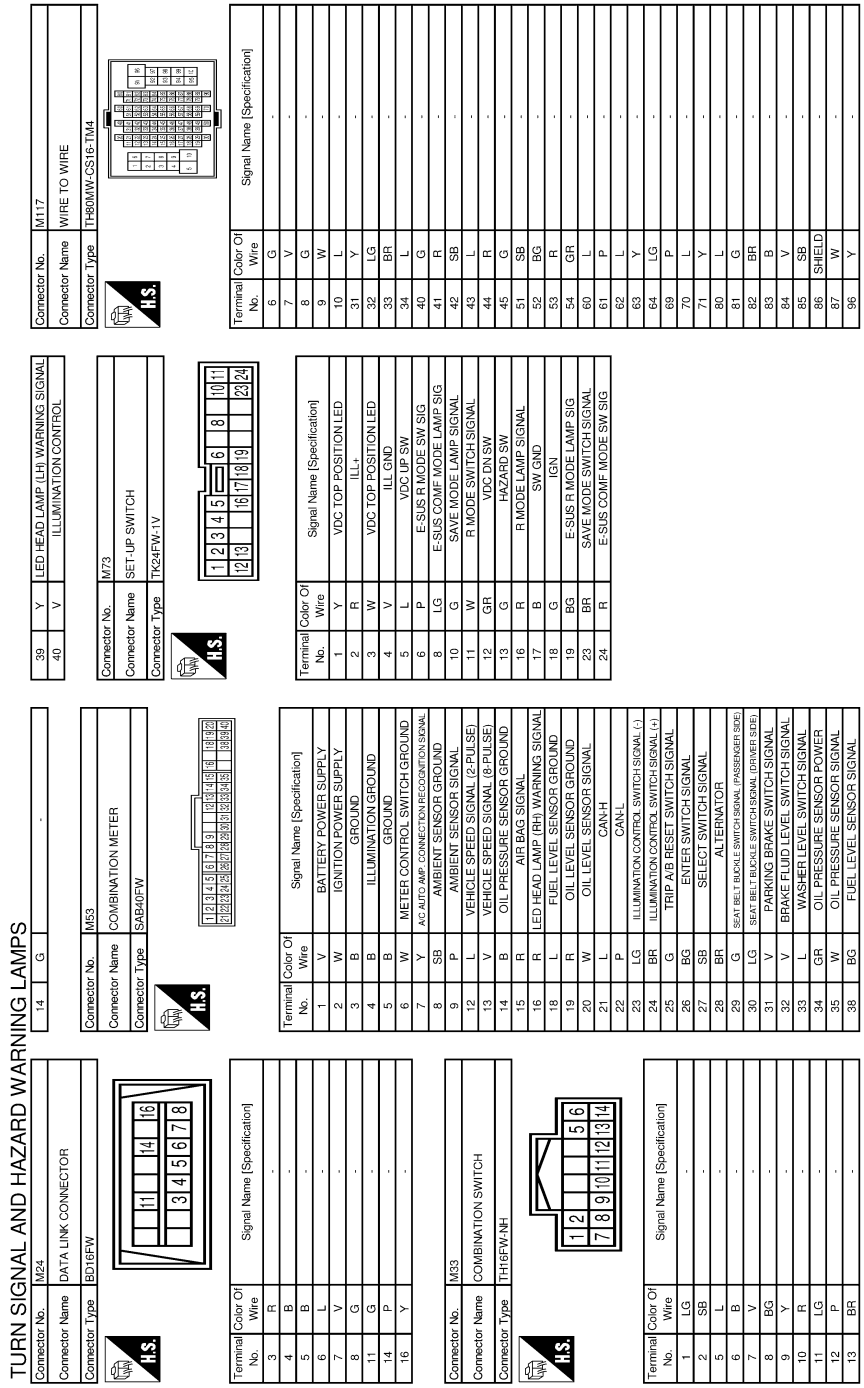
3.CHECK HEADLAMP (HI) POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check continuity between IPDM E/R harness connector and front combination lamp harness connector.

IPDM E/R			Front combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	E8	89	E59	7	Existed
LH		90	E40		

Is the inspection result normal?

YES >> Perform the LED headlamp diagnosis. Refer to EXL-43, "Diagnosis Procedure".
NO >> Repair or replace harness.



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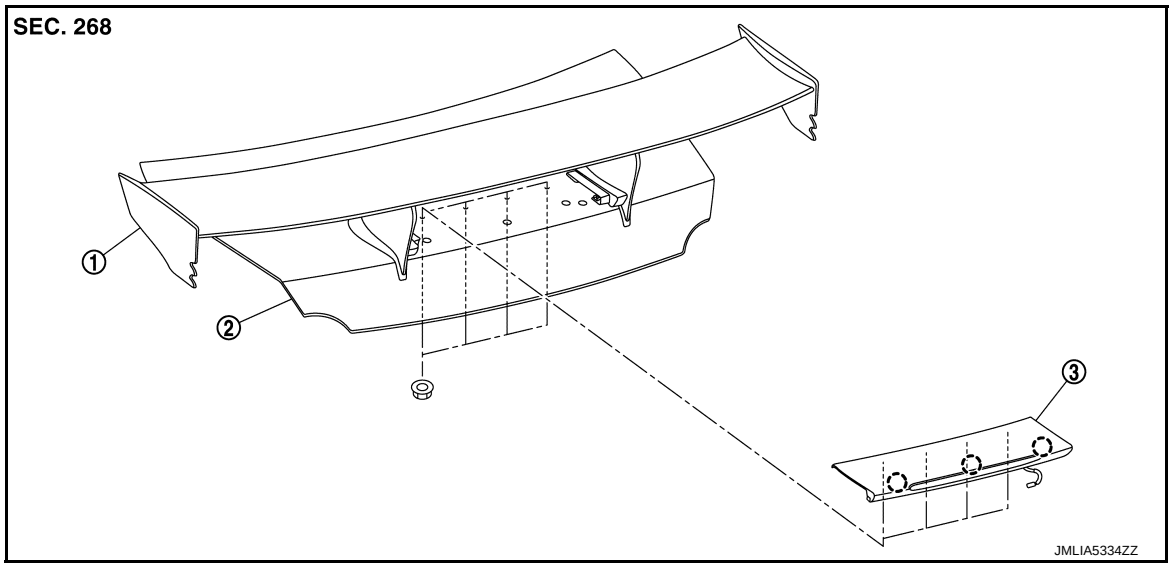
JRMWG7995GB

HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:0000000011489973

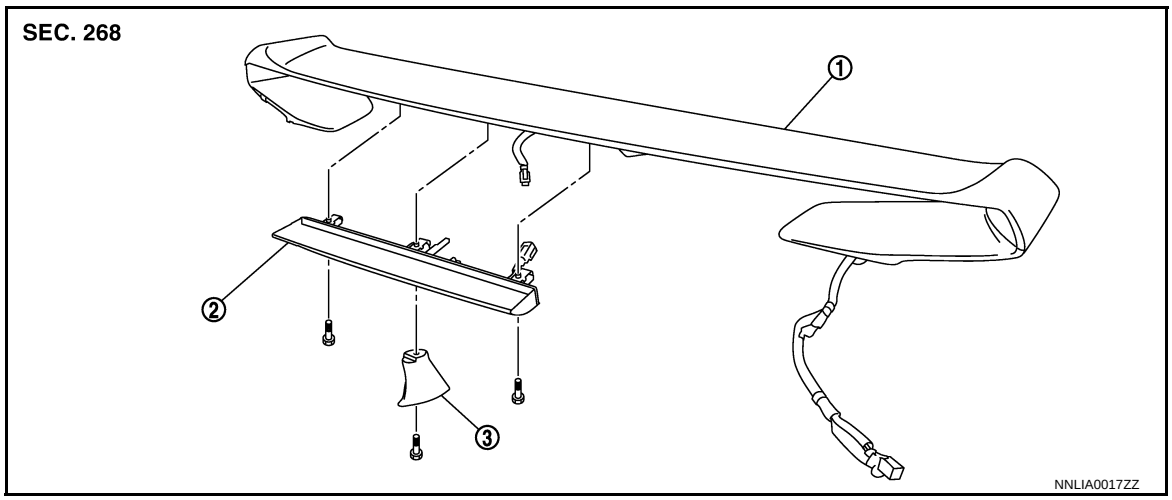
GT-R NISMO



1. Rear wing
2. Trunk lid panel
3. Rear wing cover (with high-mounted stop lamp)

: Clip

EXCEPT FOR GT-R NISMO



1. Rear wing
2. High-mounted stop lamp
3. Center leg bracket

Removal and Installation

INFOID:0000000011489974

REMOVAL

CAUTION:

Disconnect the battery negative terminal or the remove the fuse.

GT-R NISMO

Remove rear wing cover. Refer to EXT-56, "Removal and Installation".

NOTE:

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

CAUTION:

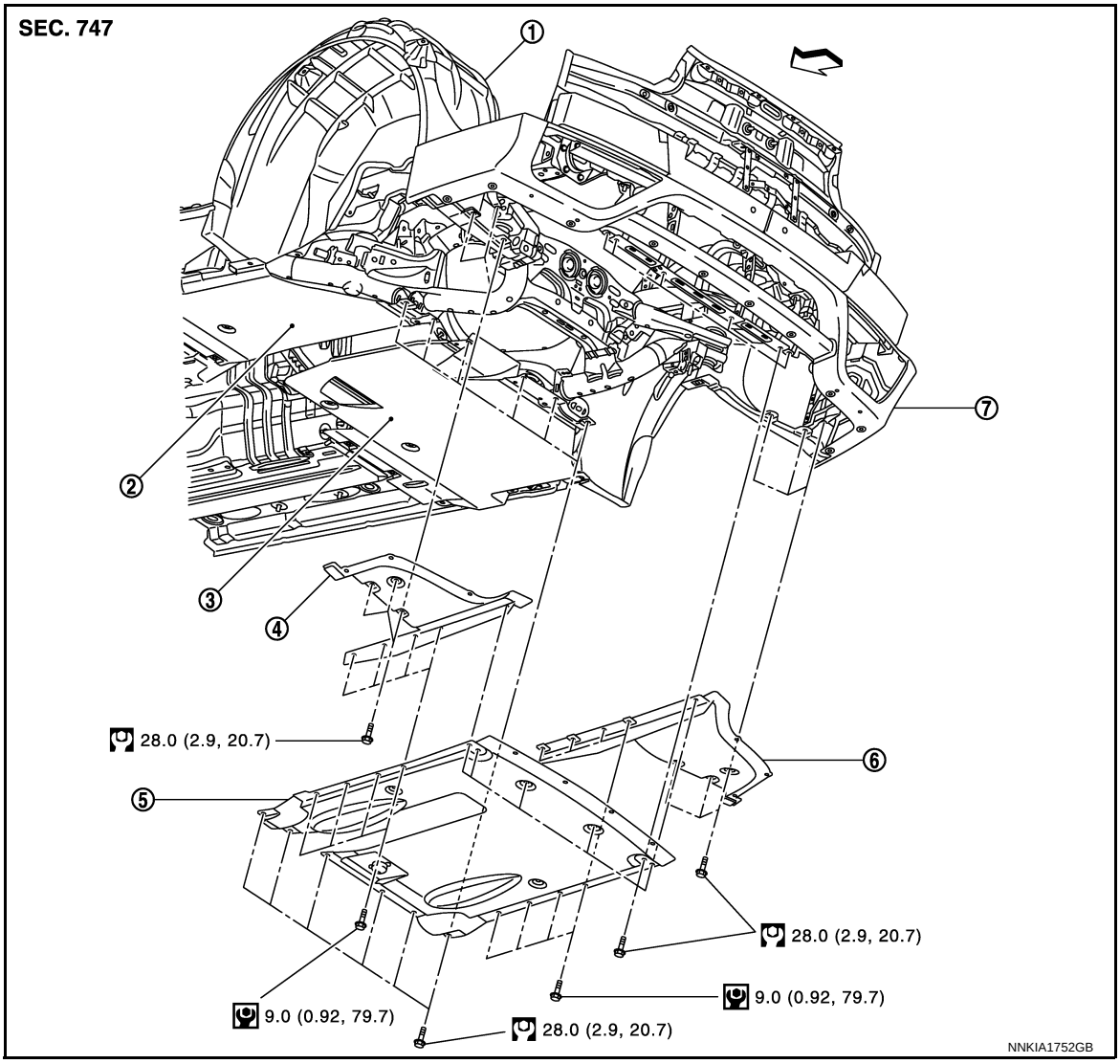
- **When front diffuser mounting bolt is removed, check for surface treatment peel off and oxidation of mounting bolt and washer so that electric corrosion is prevented.**
- **Regarding mounting bolt and washer with surface treatment peel off, paint contact surface of washer and carbon using touch pen or others. By doing so, mounting bolt and washer are reusable. However, regarding oxidation, never reuse.**
- **For mounting portion of transmission mounting stay, always replace mounting bolts to new ones in order to prevent electric corrosion.**
- **Always tighten the mounting bolts to the specified torque.**

REAR DIFFUSER

REAR DIFFUSER : Exploded View

INFOID:0000000011485420

Rear diffuser construction

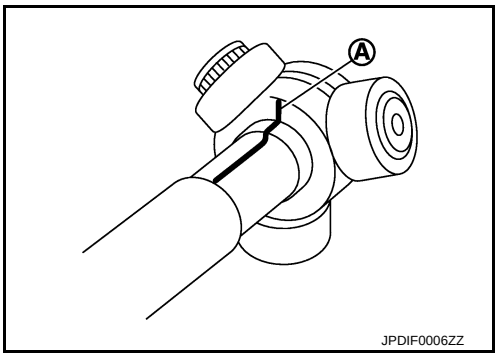


1. Rear wheel house protector LH
2. Front diffuser LH
3. Front diffuser RH
4. Rear diffuser LH
5. Rear diffuser (center)
6. Rear diffuser RH
7. Rear bumper fascia (lower)

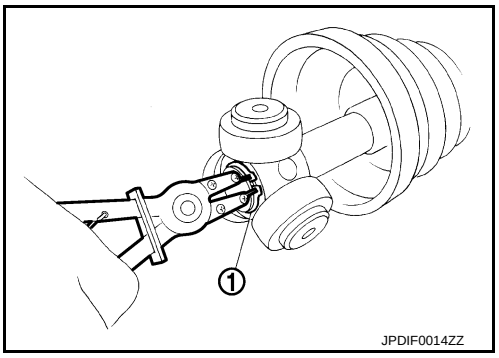
⇦ : Vehicle front

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

1. Fix shaft with a vise.
   CAUTION:
   Protect shaft when fixing with a vise using aluminum or copper plates.
2. Remove boot bands, and then remove boot from housing.
3. If plug needs to be removed, remove with a screw. (Left side)
4. Remove dust shield. (Right side)
5. Put matching marks on housing and shaft, and then pull out housing from shaft.
   CAUTION:
   Use paint or similar substance for matching marks. Never scratch the surfaces.
6. Put matching marks (A) on the spider assembly and shaft.
   CAUTION:
   Use paint or similar substance for matching marks. Never scratch the surfaces.

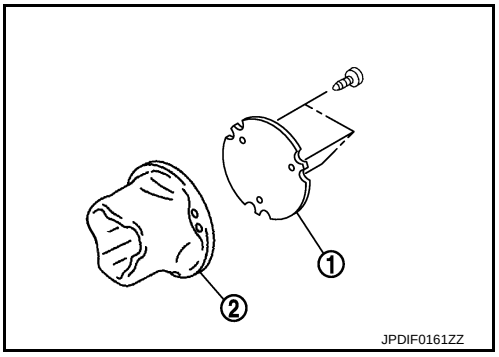


7. Remove snap ring (1), and then remove spider assembly from the shaft.
8. Remove boot from the shaft.

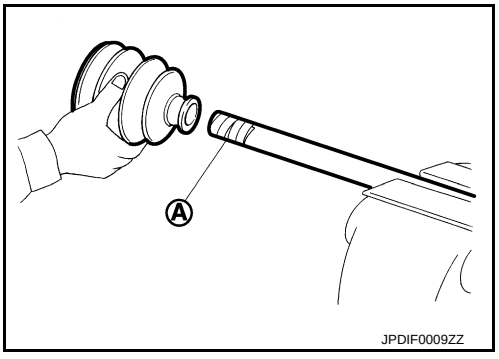


ASSEMBLY

1. Clean old grease on housing with paper waste.
2. Plug (1) has been removed, install a plug to housing (2) with a screw. (Left side)
3. Install dust shield to housing. (Right side)
   CAUTION:
   Never reuse dust shield.

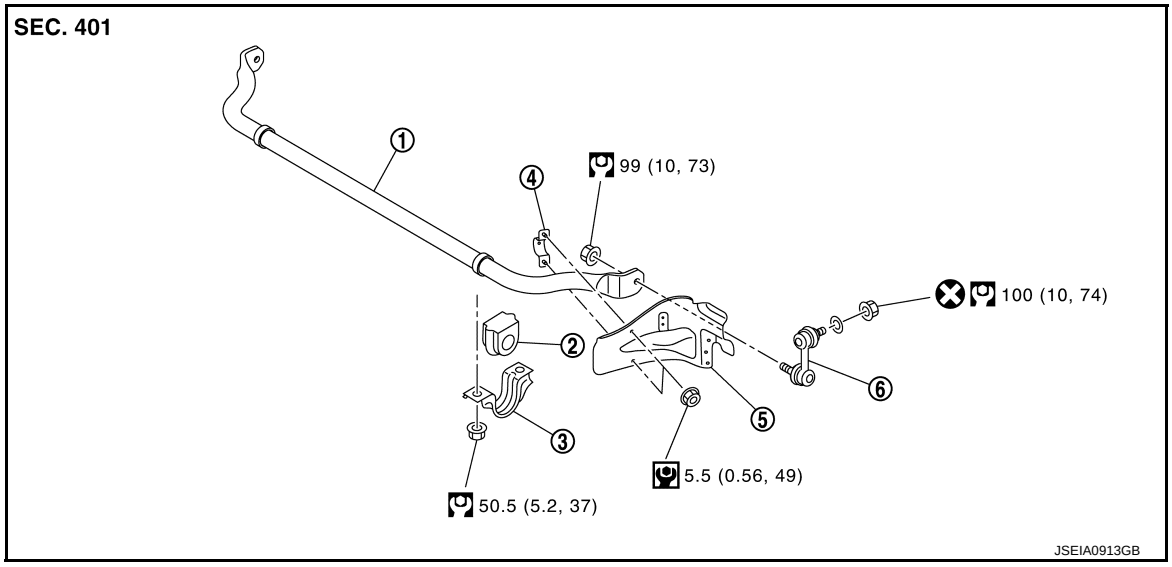


4. Install boot and boot bands to shaft.
   CAUTION:
   - **Wrap serration on shaft with tape (A) to protect boot from damage.**
   - **Never reuse boot and boot band.**
5. Remove the tape wrapped around the serration on shaft.



TYPE 2 : Exploded View

INFOID:0000000011490193



1. Stabilizer bar
2. Stabilizer bushing
3. Stabilizer clamp
4. Brake air guide clamp*
5. Brake air guide*
6. Stabilizer connecting rod

*: With brake air guide

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

TYPE 2 : Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490194

REMOVAL

1. Remove tires with power tool. Refer to WT-74, "NISMO : Exploded View".
2. Remove under cover. Refer to EXT-40, "FRONT UNDER COVER : Exploded View".
3. Remove stabilizer connecting rod.
   CAUTION:
   Apply a matching mark to identify the installation position.
4. Remove stabilizer clamp and stabilizer bushing.
5. Remove stabilizer bar.
6. Remove brake air guide and brake air guide clamp from stabilizer bar. (With brake air guide)

INSTALLATION

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

- Check the matching mark when installing.
- Never tap on the ball joint cap of the stabilizer connecting rod with a hammer or a similar item when inserting the stabilizer connecting rod into the transverse link.
- Tighten the mounting nut to the specified torque while holding a hexagonal part of stabilizer connecting rod side.
- Install brake air guide in following procedure (With brake air guide):

- Temporarily tighten brake air guide mounting nuts, and then tighten stabilizer connecting rod mounting nuts.
- And then tighten brake air guide mounting nuts.

TYPE 2 : Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490195

INSPECTION AFTER REMOVAL

Check stabilizer bar, stabilizer connecting rod, stabilizer bushing and stabilizer clamp for deformation, cracks or damage. Replace it if necessary.

PRECAUTION

PRECAUTIONS

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

INFOID:0000000011485838

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted.
Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see “SRS AIR BAG”.**
- **Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

Always observe the following items for preventing accidental activation.

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.**

Precautions Necessary for Steering Wheel Rotation After Battery Disconnection

INFOID:0000000011485839

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- **Before removing and installing any control units, first turn the 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 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 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.

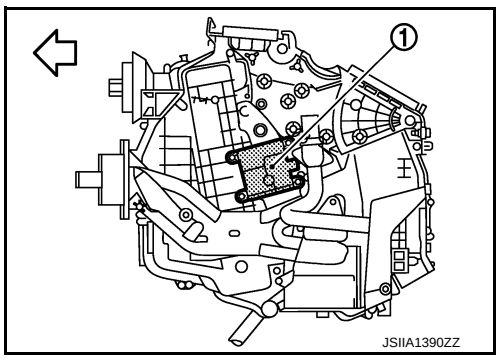
B2632, B2633 AIR MIX DOOR MOTOR PBR (DRIVER SIDE)

Description

INFOID:0000000011488882

AIR MIX DOOR MOTOR (DRIVER SIDE)

- The air mix door motor (driver side) (1) is installed to the heater & cooling unit assembly.



⇦: **Vehicle front**

- The LCU (Local Control Unit) is installed to each door motor so as to perform the multiplex communication control (LAN) between each door motor of the mode door motor, air mix door motor and intake door motor in one communication line.
- When each LCU receives the control signal (combination of the pulse wave with two types of amplitude) from the A/C auto amp., it moves each door to the appropriate position based on the door position detection signal of each PBR (Potentio Balance Resistor). When the movement was completed, each LCU transmits the signal that reports the movement completion to the A/C auto amp.

DTC Logic

INFOID:0000000011488883

DTC DETECTION LOGIC

DTC	Items (CONSULT screen terms)	Diagnostic item is detected when...	Possible causes
B2632	DR AIR MIX DOOR MOT	Air mix door PBR (driver side) position 95% or less	• Air mix door motor (driver side) (PBR internal circuit is shorted) • A/C auto amp. • Harness and connector (LAN communication line is open or shorted)
B2633		Air mix door PBR (driver side) position 5% or more	• Air mix door motor (driver side) (PBR internal circuit is open) • A/C auto amp. • Harness and connector (LAN communication line is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

With CONSULT
1. Perform the “SELF-DIAGNOSIS”.
2. Check if any DTC is detected in the self-diagnostic results.

NOTE:
If DTC is displayed along with DTC U1000 or U1010, first diagnose the DTC U1000 or U1010. Refer to HAC-37, "DTC Logic" or HAC-38, "DTC Logic".

Is DTC “B2632” or “B2633” displayed?

YES >> Perform the diagnosis of air mix door motor system (driver side). Refer to HAC-52, "Diagnosis Procedure".
NO >> GO TO 2.

2.FUNCTION INSPECTION

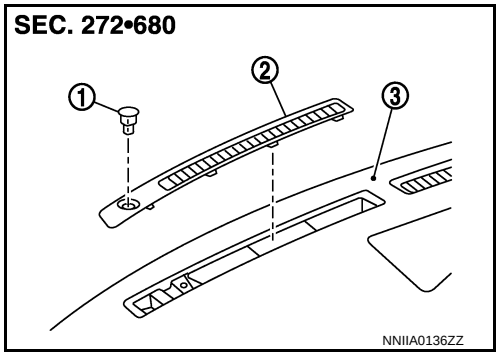
1. Turn temperature dial (driver side) and raise temperature setting to 32.0°C (90°F) after warming up the engine.
2. Check that warm air blows from outlets.
3. Operate the compressor.
4. Operate the temperature control dial (driver side) and lower the set temperature to 18.0°C (60°F).

SUNLOAD SENSOR

Exploded View

INFOID:0000000011488935

1. Sunload sensor
2. Front defroster grille (left)
3. Instrument panel assembly

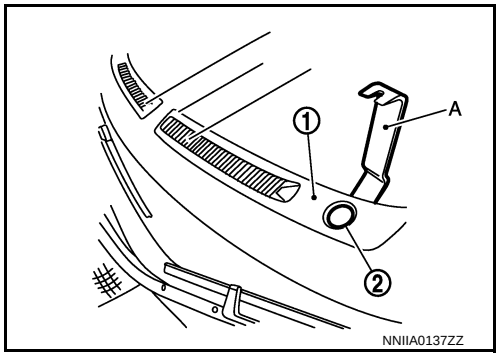


Removal and Installation

INFOID:0000000011488936

REMOVAL

1. Remove front defroster grille (left) (1), using remover tools (A). Refer to VTL-8, "Exploded View".
2. Disconnect sunload sensor connector, and then remove sunload sensor (2).



INSTALLATION

Installation is basically the reverse order of removal.

INTERIOR ROOM LAMP CONTROL

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	V	-
7	W	-
8	W	-
9	Y	-
10	R	-
11	Y	-
12	GR	-
13	BG	-
14	Y	-
15	BR	-
16	R	-
17	W	-
18	BR	-
20	GR	-
21	SB	-
22	W	-
23	G	-
24	BG	-
25	L	-
26	P	-
27	GR	-
28	BG	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	G	-
40	LG	-
41	Y	-
42	SB	-
43	P	-
47	R	-
48	B	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	LG	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	SB	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	SB	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	BR	-
93	SB	-
94	GR	-
95	BG	-
96	Y	-
97	Y	-
98	LG	-
99	R	-
100	G	-

Connector No.	B21
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	-

Connector No.	B42
Connector Name	TRUNK ROOM LAMP
Connector Type	S02FW

H.S.

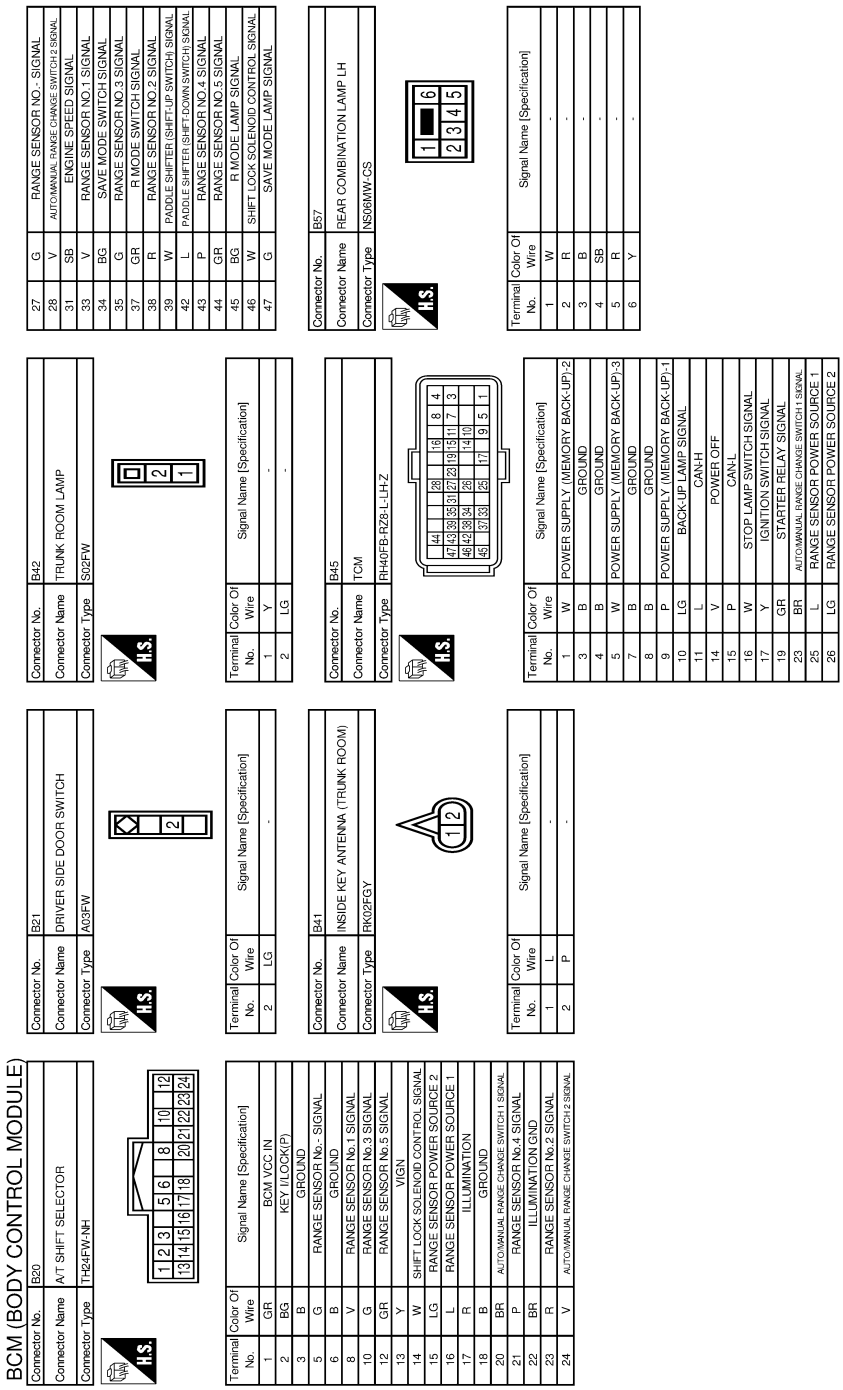
Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	LG	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	BG	-
9	W	-
10	R	-
31	V	-
32	LG	-
33	BR	-
34	L	-
40	P	-
41	GR	-
42	Y	-
43	Y	-
44	V	-
45	W	-
51	SB	-
52	G	-
53	BR	-
54	V	-
60	R	-
61	P	-
62	L	-
63	LG	-
64	GR	-
69	P	-
70	L	-
71	R	-
80	L	-
81	SB	-
82	V	-
83	B	-
84	Y	-
85	BR	-
86	SHIELD	-
87	W	-

JRLWE4750GB



JRMWG7992GB

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

II. WHEN DOES IT OCCUR? (please check the boxes that apply)

- ☐ anytime
- ☐ 1st time in the morning
- ☐ only when it is cold outside
- ☐ only when it is hot outside
- ☐ after sitting out in the rain
- ☐ when it is raining or wet
- ☐ dry or dusty conditions
- ☐ other:

III. WHEN DRIVING:

- ☐ through driveways
- ☐ over rough roads
- ☐ over speed bumps
- ☐ only about ____ mph
- ☐ on acceleration
- ☐ coming to a stop
- ☐ on turns: left, right or either (circle)
- ☐ with passengers or cargo
- ☐ other: _____
- ☐ after driving _____ miles or _____ minutes

IV. WHAT TYPE OF NOISE

- ☐ squeak (like tennis shoes on a clean floor)
- ☐ creak (like walking on an old wooden floor)
- ☐ rattle (like shaking a baby rattle)
- ☐ knock (like a knock at the door)
- ☐ tick (like a clock second hand)
- ☐ thump (heavy, muffled knock noise)
- ☐ buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

	YES	NO	Initials of person performing
Vehicle test driven with customer	☐	☐	_____
- Noise verified on test drive	☐	☐	_____
- Noise source located and repaired	☐	☐	_____
- Follow up test drive performed to confirm repair	☐	☐	_____

VIN: _____ Customer Name: _____

W.O.# _____ Date: _____

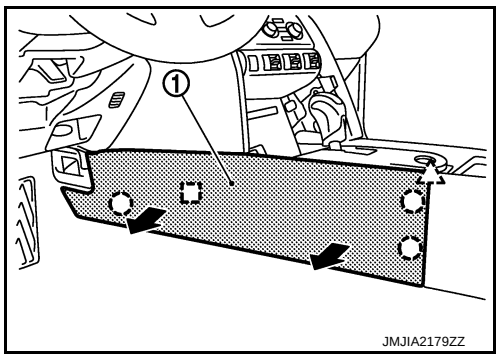
This form must be attached to Work Order

PIIB8742E

- Pull instrument side panel LH (1) from vehicle front in lateral direction, then disengage clips, pawl and metal clips.

CAUTION:
Never the pawl when disengaging clips.

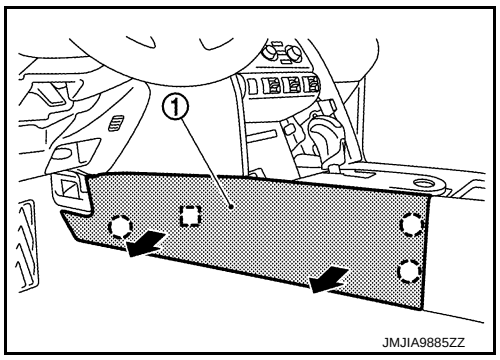
: Clip
: Pawl
: Metal clip



Fashionable interior models

- Pull instrument side panel LH (1) from vehicle front in lateral direction, then disengage clips and metal clips.

: Clip
: Metal clip



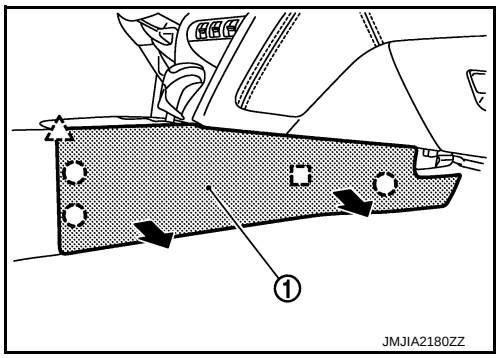
6. Remove instrument side panel RH.

Standard models

- Pull instrument side panel RH (1) from vehicle front in lateral direction, then disengage clips, pawl and metal clips.

CAUTION:
Never the pawl when disengaging clips.

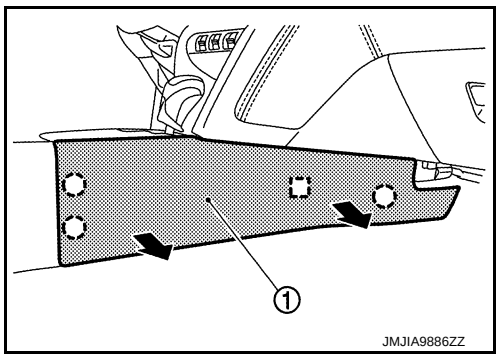
: Clip
: Pawl
: Metal clip



Fashionable interior models

- Pull instrument side panel RH (1) from vehicle front in lateral direction, then disengage clips and metal clips.

: Clip
: Metal clip



MAIN LINE BETWEEN 4WD AND BCM CIRCUIT

Diagnosis Procedure

INFOID:0000000011490068

1.CHECK CONNECTOR

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

- Harness connector B201
- Harness connector M117

Is the inspection result normal?

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

2.CHECK HARNESS CONTINUITY (OPEN CIRCUIT)

1. Disconnect the harness connectors B201 and M117.
2. Check the continuity between the harness connector terminals.

Connector No.	Terminal No.		Continuity
B201	62	70	Existed
	61	69	Existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair the main line between the AWD control unit and the harness connector B201.

3.CHECK HARNESS CONTINUITY (OPEN CIRCUIT)

1. Disconnect the connector of BCM.
2. Check the continuity between the harness connector and the BCM harness connector.

Harness connector		BCM harness connector		Continuity
Connector No.	Terminal No.	Connector No.	Terminal No.	
M117	70	M122	91	Existed
	69		90	Existed

Is the inspection result normal?

YES (Present error)>>Check CAN system type decision again.
YES (Past error)>>Error was detected in the main line between the AWD control unit and the BCM.
NO >> Repair the main line between the harness connector M117 and the BCM.

MAIN LINE BETWEEN TCM AND ABS CIRCUIT

Diagnosis Procedure

INFOID:0000000011490123

1.CHECK CONNECTOR

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

- Harness connector B3
- Harness connector E104

Is the inspection result normal?

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

2.CHECK HARNESS CONTINUITY (OPEN CIRCUIT)

1. Disconnect the following harness connectors.

- TCM
- Harness connectors B3 and E104

2. Check the continuity between the TCM harness connector and the harness connector.

TCM harness connector		Harness connector		Continuity
Connector No.	Terminal No.	Connector No.	Terminal No.	
B45	11	B3	1	Existed
	15		6	Existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair the main line between the TCM and the harness connector B3.

3.CHECK HARNESS CONTINUITY (OPEN CIRCUIT)

1. Disconnect the connector of ABS actuator and electric unit (control unit).
2. Check the continuity between the harness connector and the ABS actuator and electric unit (control unit) harness connector.

Harness connector		ABS actuator and electric unit (control unit) harness connector		Continuity
Connector No.	Terminal No.	Connector No.	Terminal No.	
E104	1	E41	30	Existed
	6		15	Existed

Is the inspection result normal?

YES (Present error)>>Connect all the connectors and diagnose again. Refer to LAN-15, "Trouble Diagnosis Flow Chart".
YES (Past error)>>Error was detected in the main line between the TCM and the ABS actuator and electric unit (control unit).
NO >> Repair the main line between the harness connector E104 and the ABS actuator and electric unit (control unit).

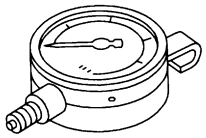
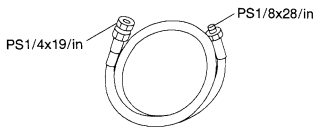
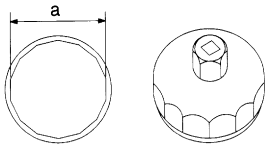
PREPARATION

PREPARATION

Special Service Tools

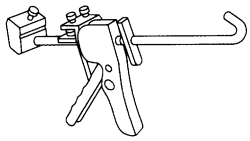
INFOID:0000000011487203

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

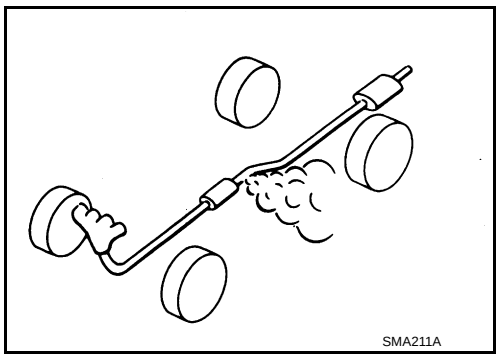
Tool number (Kent-Moore No.) Tool name	Description
ST25051001 (J-25695-1) Oil pressure gauge  NT050	Measuring oil pressure **Maximum measuring range: 2,452 kPa (25 kg/cm^2, 356 psi)**
ST25052000 (J-25695-2) Hose  S-NT559	Adapting oil pressure gauge to oil pan (upper)
KV10115801 (J-38956) Oil filter wrench  S-NT375	Removing and installing oil filter **a: 64.3 mm (2.531 in)**

Commercial Service Tools

INFOID:0000000011487204

Tool name	Description
Tube presser  NT052	Pressing tube of liquid gasket

- Check exhaust pipes, muffler, and mounting for improper attachment, leakage, cracks, damage or deterioration.
  CAUTION:
  Carefully check each weld.
- If anything is found, repair or replace damaged parts.


SMA211A

ADDITIONAL INSPECTION

Perform this additional inspection after driving under conditions listed below:

- Higher-RPM (approaching redline) operation
- Frequent high pedal force braking from moderate and higher speeds
- Frequent throttle activation
- Fast revving throughout the RPM range

- After a high performance driving, check the rear lower link bush and pillow ball for backlash. Refer to RSU-33, "TYPE 2 : Inspection (GT-R certified NISSAN dealer)".
  NOTE:
  Perform this to check impact of muffler heat on rear lower link.
- After a high performance driving, check the main muffler assembly. Refer to EX-15, "Inspection (GT-R certified NISSAN dealer)".

SUB MUFFLER (TITANIUM MUFFLER)

SUB MUFFLER (TITANIUM MUFFLER) : Inspection (GT-R certified NISSAN dealer)

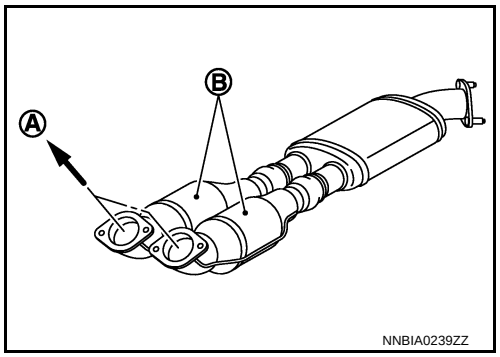
INFOID:0000000011487262

NOTE:
This inspection is for the following countries:

- Algeria
- Lebanon
- South Africa
- Russia

1. Remove the sub muffler from the vehicle. Refer to EX-14, "Exploded View".
2. View the sub muffler catalyst from the three way catalyst side to visually check the honeycomb structural body in the catalyst for clogging, crud, and elution. Replace the sub muffler if necessary.

   A. To three way catalyst
   B. Catalyst



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3. After inspection is completed, install removed parts.

TRANSMISSION OIL

TRANSMISSION OIL : Inspection

INFOID:0000000011487263

LEAKAGE CHECK

- Visually check transmission assembly surrounding area (oil seal, drain plug, filler plug, transmission case, etc.) for smears and leakage of transmission oil.

System		Description	Signal source
Information display	Door open warning display	Based on the received door switch signal, displays a warning that a door is ajar.	BCM
	Trunk open warning display	Based on the received trunk switch signal, displays a warning that the trunk is ajar.	BCM
	Parking brake release warning display	Based on the received parking brake switch signal and vehicle speed signal, displays a warning that the parking brake is not released.	Parking brake switch ABS actuator and electric unit (control unit)
	Low fuel warning display	Receives the fuel level sensor signal, and displays a warning if the fuel level decreases to approximately 13.5 ℓ (3-5/8 US gal, 3 Imp gal) or less [1.0 ℓ (1/4 US gal, 1/4 Imp gal) fuel residues included].	Fuel level sensor unit
	Low washer fluid warning display	Based on the received washer level switch signal, displays a warning for washer level.	Washer level switch
	Engine oil level sensor abnormality warning display	Based on the received oil level sensor signal, displays the engine oil level sensor malfunction warning.	Oil level sensor
	Shift lever position warning display	Based on the received shift lever position warning display signal, displays the shift lever position warning.	TCM
	Shift " P " warning display	Based on the received shift lever position check display signal, issues a warning to change the shift position to P range.	TCM
	Transmission system check display	Based on the received transmission system check display signal, displays that the transmission system check is in progress.	TCM
	Run-flat tire warning display	Based on the received run-flat tire warning display signal, displays a warning that the tire is punctured.	Low tire pressure warning control unit
	Transmission clutch high temperature warning display	Based on the received transmission clutch high temperature warning display signal, displays a warning that the transmission clutch temperature is high.	TCM
	Transmission oil high temperature warning display	Based on the received transmission oil high temperature warning display signal, displays a warning that the transmission oil temperature is high.	TCM
	Low tire pressure warning display	Based on the received low tire pressure warning display signal, displays a warning that the tire internal pressure is low.	Low tire pressure warning control unit
	AWD clutch high temperature warning display	Based on the received AWD clutch high temperature warning display signal, displays a warning that the AWD clutch temperature is high.	AWD control unit
	Front/rear tire size discrepancy warning display	Based on the received front/rear tire size discrepancy warning display signal, displays a warning that there is a difference between front and rear tire speed.	AWD control unit
	Transmission system warning display	Based on the received transmission system warning display signal, displays a warning that a malfunction is present in the transmission system.	TCM
	Tire pressure monitoring system warning display	Based on the received tire pressure monitoring system warning display signal, displays a warning that an abnormality is present in the tire pressure warning system.	Low tire pressure warning control unit
	AWD system warning display	Based on the received AWD system warning display signal, displays a warning that a malfunction is present in the AWD system.	AWD control unit

Monitor item	MAIN ITEMS	Description
ENG OIL PRESS [MPa]		Engine oil pressure value judged by the oil pressure sensor signal received from oil pressure sensor.
TM OIL TMP [°C]		Transmission oil temperature value judged by the transmission oil temperature signal received from TCM via CAN communication.
TM OIL PRESS [MPa]		Transmission oil pressure value judged by the transmission oil pressure signal received from TCM via CAN communication.
A/F RATIO		Air-fuel ratio value judged by the air-fuel ratio signal received from ECM via CAN communication.
BOOST PRESS [kPa]		Boost pressure value judged by the boost pressure signal received from ECM via CAN communication.
THRTL POSI [%]		Throttle position value judged by the throttle position signal received from ECM via CAN communication.
TRQ DSTRBT [%]		Front torque distribution rate value judged by the front torque distribution rate signal received from AWD control unit via CAN communication.
AMT P SFT [On/Off]		P engagement warning display status judged by the shift lever position check display signal received from TCM via CAN communication.
AMT SYS CHCK		Transmission system check display status judged by the transmission system check display signal received from TCM via CAN communication.
AMT SFT POSI [On/Off]		Shift lever position warning display status judged by the shift lever position warning display signal received from TCM via CAN communication.
AMT OIL TMP H [On/Off]		Transmission oil high temperature warning display status judged by the transmission oil high temperature warning display signal received from TCM via CAN communication.
AMT CL TMP H [On/Off]		Transmission clutch high temperature warning display status judged by the transmission clutch high temperature warning display signal received from TCM via CAN communication.
AMT CHCK [Off]		**NOTE:** This Item is displayed, but cannot be monitored.
AMT MALF [On/Off]		Transmission system warning display status judged by the transmission system warning display signal received from TCM via CAN communication.
TPMS FLT TIRE [On/Off]		Run-flat tire warning display status judged by the run-flat tire warning display signal received from low tire pressure warning control unit via CAN communication.
TPMS PRESS L [On/Off]		Low tire pressure warning display status judged by the low tire pressure warning display signal received from low tire pressure warning control unit via CAN communication.
TPMS MALF [On/Off]		Tire pressure monitoring system warning display status judged by the tire pressure monitoring system warning display signal received from low tire pressure warning control unit via CAN communication.
4WD CL TMP H [On/Off]		Display status of AWD clutch high temperature warning display signal judged by the AWD clutch high temperature warning display signal received from AWD control unit via CAN communication.
4WD TIRE CHCK [On/Off]		Display status of front/rear tire size discrepancy warning display judged by the front/rear tire size discrepancy warning display signal received from AWD control unit via CAN communication.
4WD SYS MALF [On/Off]		Display status of AWD system warning display signal judged by the AWD system warning display signal received from AWD control unit via CAN communication.
ABS MALF [On/Off]		Display status of anti-lock braking system (ABS) warning display judged by the ABS warning display signal received from ABS actuator and electric unit (control unit) via CAN communication.
VDC MALF [On/Off]		Display status of vehicle dynamic control (VDC) system warning display judged by the VDC system warning display signal received from ABS actuator and electric unit (control unit) via CAN communication.
ENG SYS CHCK [On/Off]		Display status of engine system warning display judged by the engine status signal received from ECM via CAN communication.

THE DOOR OPEN WARNING CONTINUES DISPLAYING, OR DOES NOT DISPLAY

Description

INFOID:0000000011488331

- The door open warning is displayed while all doors are fully closed.
- The door open warning is not displayed while a door is not fully closed.

Diagnosis Procedure

INFOID:0000000011488332

1.CHECK BCM INPUT SIGNAL

Connect CONSULT and inspect the BCM input signals. Refer to DLK-63, "Component Function Check".

Is the inspection result normal?

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

2.CHECK COMBINATION METER INPUT SIGNAL

1. Connect CONSULT.
2. Select “DATA MONITOR” for the “METER/M&A”, and then check the “DOOR W/L” monitor value.

DOOR W/L	
Door open	: On
Door closed	: Off

Is the inspection result normal?

YES >> Replace the combination meter.
NO >> Replace BCM. Refer to BCS-89, "Removal and Installation".

3.CHECK DOOR SWITCH SIGNAL CIRCUIT

Perform the door switch signal circuit inspection. Refer to DLK-63, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair the harnesses or connectors.

4.CHECK DOOR SWITCH

Perform the unit inspection of door switch. Refer to DLK-64, "Component Inspection".

Is the inspection result normal?

YES >> Replace the combination meter.
NO >> Replace the malfunctioning door switch. Refer to DLK-258, "Removal and Installation".

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
97 (Y)	Ground	Cooling fan control	Output	Engine idling		0 - 5 V
104 (LG)	Ground	Hood switch	Input	Close the hood		Battery voltage
				Open the hood		0 V
105 (GR)	Ground	Daytime running light relay control	Input	Ignition switch ON	Lighting switch OFF	Battery voltage
					Lighting switch 1ST	0 V

PDS (POWER DISTRIBUTION SYSTEM)

24	BR	-
25	L	-
26	LG	-
27	W	-
28	R	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	W	-
40	BG	-
41	R	-
42	V	-
43	W	-
47	G	-
48	R	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	GR	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit] - [With active noise control unit]
72	V	
73	LG	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	LG	- [Without active noise control unit] - [With active noise control unit]
86	W	
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	LG	-
93	Y	-
94	G	-
95	R	-
96	Y	-
97	R	-
98	G	-
99	L	-
100	W	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
4	B	-
5	B	-
6	L	-
7	V	-
8	G	-
11	G	-
14	P	-
16	Y	-

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	BATTERY POWER SUPPLY
2	W	IGNITION POWER SUPPLY
3	B	GROUND
4	B	ILLUMINATION GROUND
5	B	GROUND
6	W	METER CONTROL SWITCH GROUND
7	Y	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
8	SB	AMBIENT SENSOR GROUND
9	P	AMBIENT SENSOR SIGNAL
12	L	VEHICLE SPEED SIGNAL (2-PULSE)
13	V	VEHICLE SPEED SIGNAL (8-PULSE)
14	B	OIL PRESSURE SENSOR GROUND
15	R	AIR BAG SIGNAL
16	R	LED HEAD LAMP (RH) WARNING SIGNAL
18	L	FUEL LEVEL SENSOR GROUND
19	R	OIL LEVEL SENSOR GROUND
20	W	OIL LEVEL SENSOR SIGNAL
21	L	CAN-H
22	P	CAN-L
23	LG	ILLUMINATION CONTROL SWITCH SIGNAL (-)
24	BR	ILLUMINATION CONTROL SWITCH SIGNAL (+)
25	G	TRIP A/B RESET SWITCH SIGNAL
26	BG	ENTER SWITCH SIGNAL
27	SB	SELECT SWITCH SIGNAL
28	BR	ALTERNATOR
29	G	CAN-L
30	LG	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
31	V	PARKING BRAKE SWITCH SIGNAL
32	V	BRAKE FLUID LEVEL SWITCH SIGNAL
33	L	WASHER LEVEL SWITCH SIGNAL
34	GR	OIL PRESSURE SENSOR POWER
35	W	OIL PRESSURE SENSOR SIGNAL
38	BG	FUEL LEVEL SENSOR SIGNAL
39	Y	LED HEAD LAMP (LH) WARNING SIGNAL
40	V	ILLUMINATION CONTROL

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	R	POWER WINDOW POWER SUPPLY(BAT)
3	W	POWER WINDOW POWER SUPPLY(RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GND
14	P	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT) OUTPUT
18	BG	TURN SIGNAL LH (FRONT) OUTPUT
19	V	ROOM LAMP TIMER CONTROL

JRMWG8019GB

IGNITION POWER SUPPLY

Connector No.	M110
Connector Name	E-SUS CONTROL UNIT
Connector Type	FEC21FB-FHC2

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	CAN-L
2	P	R MODE SW SIG
3	L	CAN-H
4	W	FRONT G SENSOR SIG
5	BG	R MODE LAMP SIG
6	BR	REAR G SENSOR SIG
7	R	COMF MODE SW SIG
8	G	FRONT G SENSOR-
9	LG	COMF MODE LAMP SIG
10	R	FR SHOCK ABSORBER ACTUATOR LOW SIG
11	G	FR SHOCK ABSORBER ACTUATOR HI SIG
12	L	FL SHOCK ABSORBER ACTUATOR LOW SIG
13	G	REAR G SENSOR-
14	SB	RR SHOCK ABSORBER ACTUATOR LOW SIG
15	R	FRONT G SENSOR+
16	BR	RL SHOCK ABSORBER ACTUATOR HI SIG
17	P	FL SHOCK ABSORBER ACTUATOR HI SIG
18	Y	RL SHOCK ABSORBER ACTUATOR LOW SIG
19	R	IGN
20	V	RR SHOCK ABSORBER ACTUATOR HI SIG
21	R	REAR G SENSOR+
22	B	GND
23	L	BAT

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK36MW-NS10

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	-
3	W	-
6	P	-
7	B	-
8	B	-
9	W	-
11	B	-
12	LG	-
13	B	-
14	BR	-
15	G	-
16	W	-
19	W	-
20	R	-
21	BG	-
26	L	-
27	Y	-
28	LG	-
29	BR	-
30	Y	-
31	R	-
32	LG	-
33	LG	-
34	Y	-
39	V	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	G	-
9	W	-
10	L	-
31	Y	-
32	LG	-
33	BR	-
34	L	-
40	G	-
41	R	-
42	SB	-
43	L	-
44	R	-
45	G	-
51	SB	-
52	BG	-
53	R	-
54	GR	-
60	L	-
61	P	-
62	L	-
63	Y	-
64	LG	-
69	P	-
70	L	-
71	Y	-
80	L	-
81	G	-
82	BR	-
83	B	-
84	V	-
85	SB	-
86	SHIELD	-
87	W	-
96	Y	-

98	G	-
99	V	-
100	W	-

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	R	POWER WINDOW POWER SUPPLY(BAT)
3	W	POWER WINDOW POWER SUPPLY(RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GND
14	P	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT) OUTPUT
18	BG	TURN SIGNAL LH (FRONT) OUTPUT
19	V	ROOM LAMP TIMER CONTROL

JRMWG8066GB

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000011488763

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much malfunction information (conditions and environment when the malfunction occurred) as possible when the customer brings the vehicle in.

>> GO TO 2.

2.REPRODUCE THE MALFUNCTION INFORMATION

Check the malfunction on the vehicle that the customer describes.
Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 3.

3.IDENTIFY THE MALFUNCTIONING SYSTEM WITH “SYMPTOM DIAGNOSIS”

Use “Symptom diagnosis” from the symptom inspection result in step 2 and then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 4.

4.IDENTIFY THE MALFUNCTIONING PARTS WITH “COMPONENT DIAGNOSIS”

Perform the diagnosis with “Component diagnosis” of the applicable system.

>> GO TO 5.

5.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

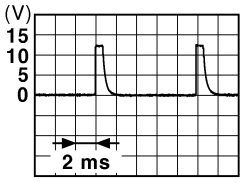
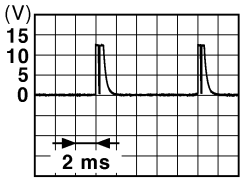
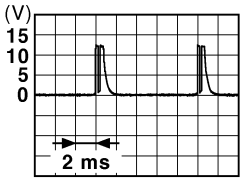
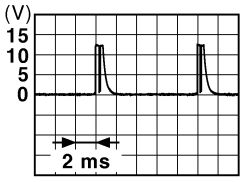
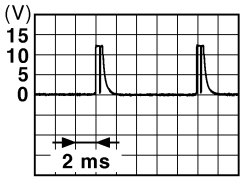
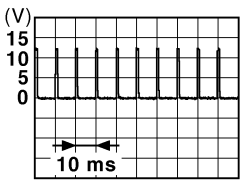
>> GO TO 6.

6.FINAL CHECK

Check that the malfunction is not reproduced, referring to the symptom inspection result in step 2.

Are the malfunctions corrected?

YES >> INSPECTION END
NO >> GO TO 3.

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Lighting switch PASS	 JPMIA0037GB 1.3 V
					Lighting switch 2ND	 JPMIA0036GB 1.3 V
					Front wiper switch INT	 JPMIA0038GB 1.3 V
					Front wiper switch HI	 JPMIA0040GB 1.3 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	Pressed	0 V
					Not pressed	 JPMIA0012GB 1.1 V

PRECAUTION

PRECAUTIONS

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

INFOID:0000000011488179

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see “SRS AIR BAG”.**
- **Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

Always observe the following items for preventing accidental activation.

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.**

Precaution for Battery Service

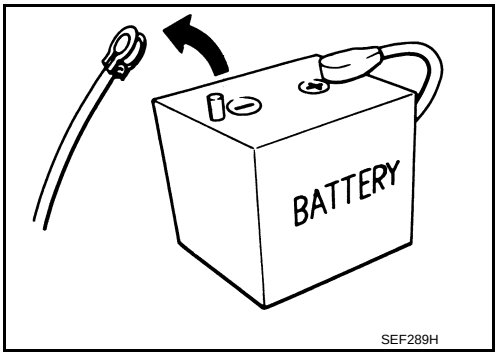
INFOID:0000000011488180

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.

Precautions for Removing Battery Terminal

INFOID:0000000011488181

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
  NOTE:
  ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
  NOTE:
  If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.



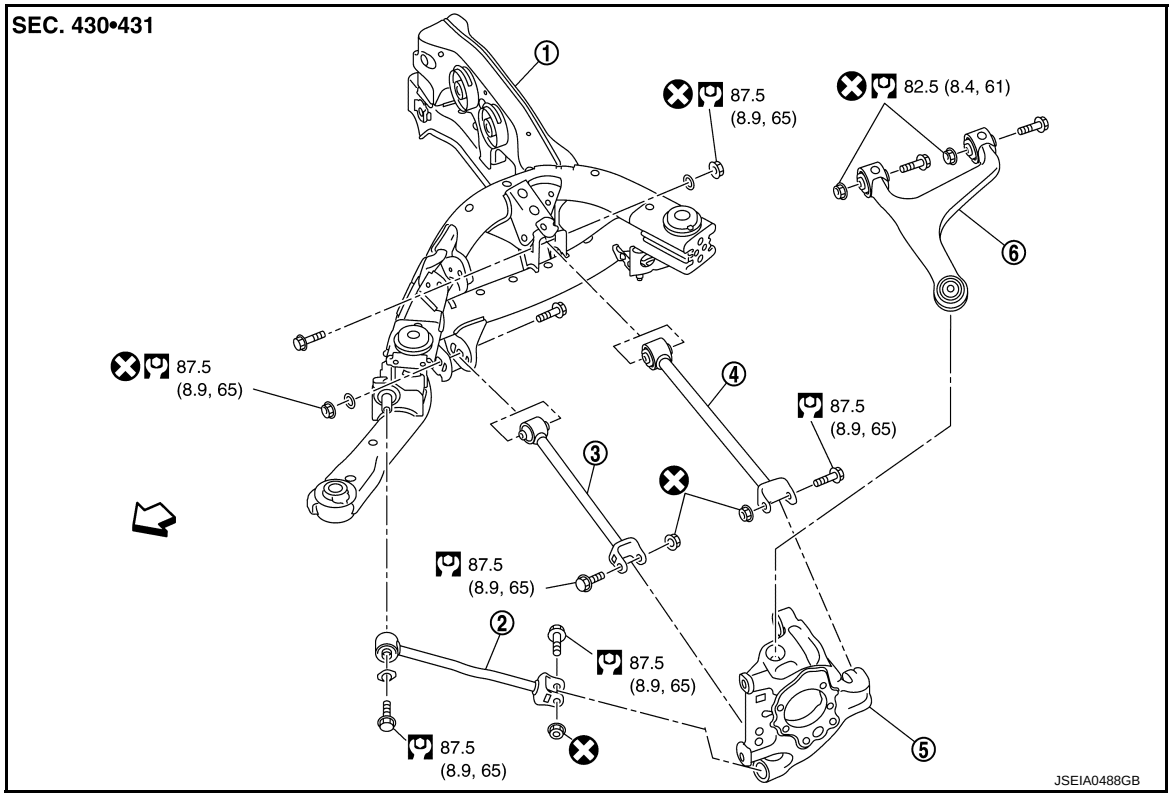
- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
  NOTE:
  The removal of 12V battery may cause a DTC detection error.

RADIUS ROD

TYPE 1

TYPE 1 : Exploded View

INFOID:0000000011490227



1. Rear suspension member
2. Radius rod
3. Front lower link
4. Rear lower link
5. Axle housing
6. Suspension arm

⇦: Vehicle front

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

TYPE 1 : Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490228

REMOVAL

1. Remove tire with power tool. Refer to WT-74, "EXCEPT NISMO : Exploded View".
2. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".
3. Set suitable jack under rear suspension member.
4. Loosen rear suspension member mounting nuts, and gradually lower jack to rear suspension member.
   CAUTION:
   Never remove rear suspension member mounting bolts and nuts.
5. Remove radius rod.

INSTALLATION

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

CAUTION:

Leave approximately 1 mm (0.04 in) of allowance on the bearing surface of mounting nuts and bolts to release bush tension.

- Perform final tightening of bolts and nuts at the vehicle installation position (rubber bushing), under unladen-conditions with tires on level ground.

Diagnostic item	Explanation	Reference page
CURTAIN MODULE RH [SHORT] [B1148]	RH side curtain air bag module circuits are shorted to each other	SRC-115, "DTC Logic"
CURTAIN MODULE LH [OPEN] [B1150]	LH side curtain air bag module circuit is open	SRC-117, "DTC Logic"
CURTAIN MODULE LH [VB-SHORT] [B1151]	LH side curtain air bag module circuit is shorted to some power supply circuits	SRC-119, "DTC Logic"
CURTAIN MODULE LH [GND-SHORT] [B1152]	LH side curtain air bag module circuit is shorted to ground	SRC-121, "DTC Logic"
CURTAIN MODULE LH [SHORT] [B1153]	LH side curtain air bag module circuits are shorted to each other	SRC-123, "DTC Logic"
CONTROL UNIT [B1154-B1157]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-125, "DTC Logic"
CONTROL UNIT [B1202-B1207]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-127, "DTC Logic"
FRONTAL COLLISION DETECTION [B1209]	Front seat belt pre-tensioner and front air bag is deployed	SRC-129, "DTC Logic"
SIDE COLLISION DETECTION [B1210]	Front side air bag and side curtain air bag are deployed	SRC-131, "DTC Logic"
FR-RH DOOR SATEL SENS [SENSOR MALFUNCTION] [B1336] [B1337]	RH door satellite sensor is malfunctioning	SRC-132, "DTC Logic"
FR-RH DOOR SATEL SENS [COMM MALFUNCTION] [B1338] [B1340-B1342]	RH door satellite sensor is malfunctioning	SRC-134, "DTC Logic"
FR-RH DOOR SATEL SENS [MIS-INSTALLATION] [B1339]	RH door satellite sensor is out of the specified specification	SRC-136, "DTC Logic"
FR-LH DOOR SATEL SENS [SENSOR MALFUNCTION] [B1343] [B1344]	LH door satellite sensor is malfunctioning	SRC-137, "DTC Logic"
FR-LH DOOR SATEL SENS [COMM MALFUNCTION] [B1345] [B1347-B1349]	LH door satellite sensor is malfunctioning	SRC-139, "DTC Logic"

C1D17 BATTERY POWER SUPPLY

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486107

Power supply for E-SUS control unit.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486108

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D17	BATTERY VOLT	A malfunction is detected in the battery supply voltage to E-SUS control unit.	• Harness or connector • E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

With CONSULT

1. Turn the ignition switch OFF to ON.
2. Perform “E-SUS” self-diagnosis.

Is DTC “C1D17” detected?

YES >> Proceed to diagnosis procedure. Refer to SCS-35, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486109

1.CHECK E-SUS CONTROL UNIT GROUND

1. Turn the ignition switch OFF.
2. Disconnect the E-SUS control unit harness connector.
3. Check the continuity between the E-SUS control unit harness connector and ground.

E-SUS control unit		—	Continuity
Connector	Terminal		
M110	22	Ground	Existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace an applicable harness or connector.

2.CHECK E-SUS CONTROL UNIT POWER SUPPLY

1. Start the engine.
   CAUTION:
   Always hold the vehicle stopped.
2. Check the voltage between the E-SUS control unit harness connector terminals.

E-SUS control unit		Voltage
Connector	Between terminals	
M110	23 – 22	Battery voltage
	19 – 22	

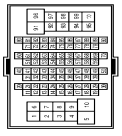
Is the measured value “9.5 V” or less?

YES >> Check the following items, and repair or replace the malfunctioning parts.
- Open circuit in 15 A fuse (#37)
- Short circuit between the 15 A fuse (#37) connector and E-SUS control unit harness connector terminal 23
- Open circuit between the battery and E-SUS control unit harness connector terminal 23

POWER SEAT FOR PASSENGER SIDE

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
3	R	-
4	G	-
5	Y	-
6	P	-
7	W	-
8	V	-
9	L	-
10	Y	-
11	G	-
12	BG	-
13	R	-
14	L	-
15	BR	-
16	R	-
17	SHIELD	-
18	L	-
19	P	-
20	B	-
21	W	-
22	GR	-
23	L	-
24	V	-
25	BR	-
26	G	-
27	SHIELD	-
28	G	-
29	R	-
30	W	-
31	V	-
32	G	-
33	GR	-
34	LG	-
35	P	-
36	L	-
37	W	-
38	Y	-
39	GR	-
40	BG	-
41	W	-
42	R	-
43	Y	-
44	BR	-
45	G	-
46	LG	-
48	W	-
49	L	-
50	R	-
51	SHIELD	-
60	SB	-
61	V	-
71	W	-
72	LG	-
74	R	-
75	BR	-
76	LG	-
77	R	-
78	BR	-
79	W	-
80	Y	-
81	BG	-
82	SB	-
84	Y	-
85	P	-
86	GR	-
87	R	-
88	L	-
89	G	-
90	P	-
91	W	-
92	R	-
93	LG	-
94	W	-
95	SB	-
96	L	-
97	L	-
98	Y	-
99	BG	-
100	L	-

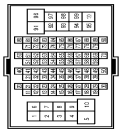
Connector No.	M62
Connector Name	CIRCUIT BREAKER
Connector Type	M02FW-P-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	W	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

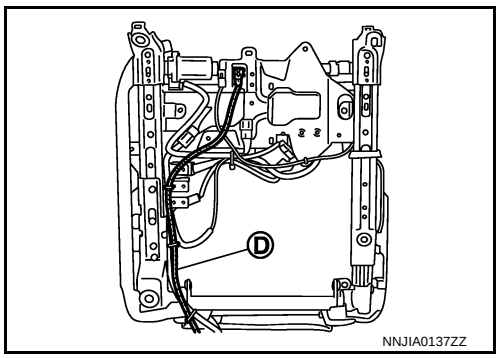
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	G	-
9	W	-
10	L	-
31	Y	-
32	LG	-
33	BR	-
34	L	-
40	G	-
41	R	-
42	SB	-
43	L	-
44	R	-
45	G	-
51	SB	-
52	BG	-
53	R	-
54	GR	-
60	L	-
61	P	-
62	L	-
63	Y	-
64	LG	-
69	P	-
70	L	-
71	Y	-
80	L	-
81	G	-
82	BR	-
83	B	-
84	V	-
85	SB	-
86	SHIELD	-
87	W	-
96	Y	-
98	G	-
99	V	-
100	W	-

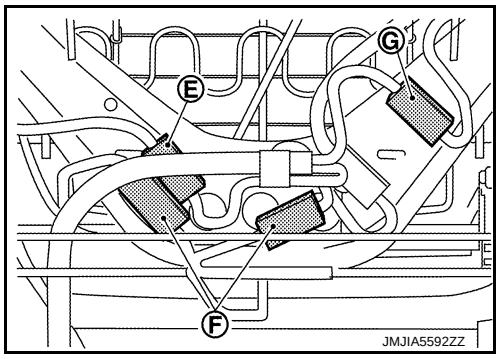
JRJWC9296GB

2. Remove the side air bag harness (D).

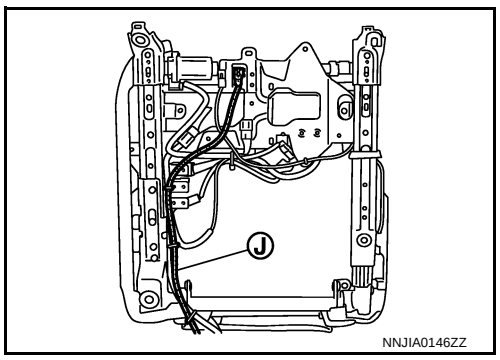


Passenger side

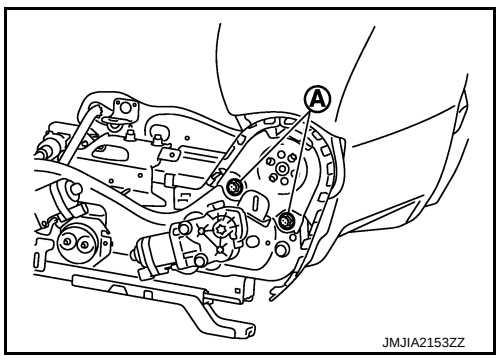
1. Disconnect the reclining motor harness connector (E), the heater unit harness connectors (F), and the reclining limit switch harness connector (G).



2. Remove the side air bag harness (J).



8. Remove the seatback assembly.
Remove the seatback mounting bolts (A), and then remove the seatback assembly.



9. Remove the seat belt buckle. Refer to SB-9, "SEAT BELT BUCKLE : Removal and Installation".

Assembly

Assemble in the reverse order of disassembly.

CAUTION:

Install the hog rings of seat cushion trim in position, and then securely connect the trim or trim cord with the pad side wire.

B2191 DIFFERENCE OF KEY

Description

INFOID:0000000011489179

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed.
Prohibits the release of steering lock or start of engine when an unregistered ID of Intelligent Key is used.

DTC Logic

INFOID:0000000011489180

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2191	DIFFERENCE OF KEY	The ID verification result between BCM and Intelligent Key is NG. The registration is necessary.	Intelligent Key

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch
2. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-43, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489181

1.PERFORM INITIALIZATION

Perform initialization with CONSULT. Reregister all Intelligent Keys.
For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

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

2.REPLACE INTELLIGENT KEY

1. Replace Intelligent Key.
2. Perform initialization with CONSULT.
   For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

YES >> INSPECTION END
NO >> GO TO 3.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B261A PUSH-BUTTON IGNITION SWITCH

Description

INFOID:0000000011489266

BCM transmits the change in the power supply position with the push-button ignition switch to IPDM E/R via the CAN communication. IPDM E/R transmits the power supply position status via CAN communication to BCM.

DTC Logic

INFOID:0000000011489267

DTC DETECTION LOGIC

NOTE:

- If DTC B261A is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B261A is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B261A	PUSH-BTN IGN SW	BCM detects the difference between the following for 1 second or more • Power supply position with push-button ignition switch • Power supply position from IPDM E/R (CAN)	• Harness or connectors (Push-button ignition switch circuit is open or shorted) • BCM • IPDM E/R

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
- Shift lever is in the P or N position.
- Do not depress brake pedal.
2. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-91, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489268

1.CHECK BCM OUTPUT

1. Turn ignition switch OFF.
2. Disconnect push-button ignition switch connector and IPDM E/R connector.
3. Check voltage between IPDM E/R harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
IPDM E/R			
Connector	Terminal		
E5	28	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> GO TO 2.

2.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT

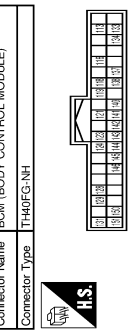
1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and IPDM E/R harness connector.

NISSAN VEHICLE IMMOBILIZER SYSTEM

110	G	HAZARD SW
111	Y	S/L UNIT COMM

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

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL 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	BR	IGN F/B
124	LG	PASSENGER DOOR SW
128	P	DOOR LOCK/UNLOCK SW LOCK
129	BG	TRUNK CANCEL SW
131	BR	DOOR LOCK/UNLOCK SW UNLOCK
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	L	RECEIVER GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
140	BR	SHIFT NP
141	G	SECURITY INDICATOR
142	BG	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
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M131
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	P	-
3	W	-
4	BR	-
5	GR	-
6	Y	-
7	V	-
8	G	-

JRKWE4493GB

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

Reference Value

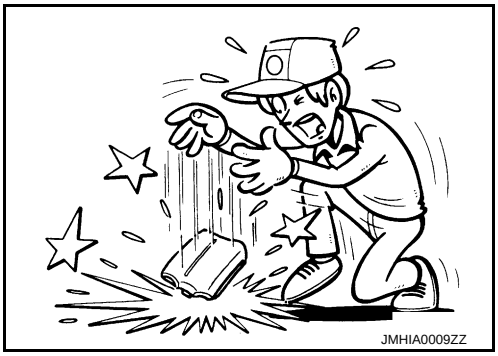
INFOID:0000000011867270

VALUES ON THE DIAGNOSIS TOOL

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Condition		Value/Status
RAD FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	0 - 100 %
AC COMP REQ	Engine running	A/C switch OFF	Off
		A/C switch ON (Compressor is operating)	On
TAIL&CLR REQ	Lighting switch OFF		Off
	Lighting switch 1ST, 2ND or HI		On
HL LO REQ	Lighting switch OFF		Off
	Lighting switch 2ND or HI		On
HL HI REQ	Lighting switch OFF		Off
	Lighting switch HI		On
FR FOG REQ	Daytime running light system is not operated		Off
	Daytime running light system is operated		On
FR WIP REQ	Ignition switch ON	Front wiper switch OFF	Stop
		Front wiper switch INT	1LOW
		Front wiper switch LO	Low
		Front wiper switch HI	Hi
WIP AUTO STOP	Ignition switch ON	Front wiper stop position	STOP P
		Any position other than front wiper stop position	ACT P
WIP PROT	Ignition switch ON	Front wiper operates normally	Off
		Front wiper stops at fail-safe operation	BLOCK
IGN RLY1 -REQ	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
IGN RLY	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
PUSH SW	Release the push-button ignition switch		Off
	Press the push-button ignition switch		On
INTER/NP SW	Ignition switch ON	Shift lever in any position other than P or N	Off
	Ignition switch ON	Shift lever in P or N position	On
ST RLY CONT	Ignition switch ON		Off
	At engine cranking		On
IHBT RLY -REQ	Ignition switch ON		Off
	At engine cranking		On

- **Never impact the diagnosis sensor unit.**
- **Replace the diagnosis sensor unit if it is dropped or sustains an impact.**



- **Replace the diagnosis sensor unit of deployed driver air bag module, deployed passenger air bag module, deployed side air bag module, deployed curtain air bag module, or deployed seat belt pretensioner.**

INSTALLATION

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

CAUTION:

- **Never use the old TORX bolts after removal, replace with the new TORX bolts.**
- **If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT. Refer to SRC-18, "CONSULT Function".**
- **After the work is completed, check that no system malfunction is detected by air bag warning lamp.**
- **After replacing the air bag diagnosis sensor unit, confirm using CONSULT that the ECU discriminated number (identification number) of the new replacement air bag sensor unit matches the ECU discriminated number (identification number) of the replaced (old) air bag diagnosis sensor unit.**

NOTE:

If the ECU discriminated number of the new replacement air bag diagnosis sensor unit differs from the ECU discriminated number of the replaced air bag diagnosis sensor unit, reconfirm the parts information and verify that the correct air bag diagnosis sensor unit was installed.

B1052, B1057 DRIVER AIRBAG MODULE

Description

INFOID:0000000011488611

For driver air bag module, crash is judged by main “G” sensor output signal and safing algorithm in front direction.

OPERATION

In case of frontal collision whose acceleration exceeds 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.

STRUCTURE

Driver air bag module mainly consists of air bag and inflator that inflates air bag.

INSTALLATION

Driver air bag module is installed on the center of steering wheel with fixed bolts.

DTC Logic

INFOID:0000000011488612

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1052 B1057	DRIVER AIRBAG MODULE [SHORT]	Driver air bag module circuit are shorted to each other (including the spiral cable)	• Disconnection of wiring harness and short • Malfunction in driver air bag module • Malfunction in spiral cable • Malfunction in air bag diagnosis sensor unit

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

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

Without CONSULT
1. Turn ignition switch ON.
2. Check the air bag warning lamp status. Refer to SRC-13, "Air Bag Warning Lamp Diagnosis".

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

Is malfunctioning part detected?

YES >> Refer to SRC-47, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011488613

WARNING:
- **Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (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.

B1131 SIDE MODULE RH

Description

INFOID:0000000011488683

For front RH side air bag module, crash is judged by main “G” sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

OPERATION

In case of side collision whose acceleration exceeds 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.

STRUCTURE

Front RH side air bag module mainly consists of air bag and inflator that inflates air bag.

INSTALLATION

Front RH side air bag module is installed on the side of front seatback with fixed nuts.

DTC Logic

INFOID:0000000011488684

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1131	SIDE MODULE RH [GND-SHORT]	Front RH side air bag module circuit is shorted to ground	• Disconnection of wiring harness and short • Malfunction in front RH side air bag module • Malfunction in air bag diagnosis sensor unit

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

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

Without CONSULT
1. Turn ignition switch ON.
2. Check the air bag warning lamp status. Refer to SRC-13, "Air Bag Warning Lamp Diagnosis".

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

Is malfunctioning part detected?

YES >> Refer to SRC-95, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011488685

WARNING:
- **Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (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.

ECU DIAGNOSIS INFORMATION

DIAGNOSIS SENSOR UNIT

DTC Index

INFOID:0000000011488754

Diagnostic item	Explanation		Reference page
NO DTC IS DETECTED	When malfunction is indicated by the “AIR BAG” warning lamp in User mode	Low battery voltage (Less than 9 V)	
		• Self-diagnosis result “SELF-DIAG [PAST]” (previously stored in the memory) might not be erased after repair • Intermittent malfunction has been detected in the past	SRC-13, "Diagnosis Description"
	No malfunction is detected		—
CONTROL UNIT [B1001-B1015]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification		• SRC-19, "DTC Logic" • SRC-21, "DTC Logic" • SRC-23, "DTC Logic"
OCCUPANT SENS C/U [UNIT FAIL] [B1017] [B1020] [B1021]	Trouble occurs in occupant classification system control unit		SRC-25, "DTC Logic"
OCCUPANT SENS [UNIT FAIL] [B1018]	Trouble occurs in occupant classification system sensor		SRC-27, "DTC Logic"
OCCUPANT SENS C/U [COMM FAIL] [B1022]	Trouble occurs in occupant classification system control unit, circuit of occupant classification system control unit air bag diagnosis sensor unit, or air bag diagnosis sensor unit		SRC-29, "DTC Logic"
PASS A/B INDCTR CKT [B1023]	Front passenger air bag OFF indicator circuit is open or shorted to ground or the circuits are shorted each other		SRC-31, "DTC Logic"
CONTROL UNIT [B1026-B1031]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification		SRC-33, "DTC Logic"
CRASH ZONE SEN [UNIT FAIL] [B1033] [B1034]	Crash zone sensor is malfunctioning		SRC-35, "DTC Logic"
CRASH ZONE SEN [COMM FAIL] [B1035] [UNMATCH] [B1036]	Crash zone sensor is malfunctioning or out of the specified specification		SRC-37, "DTC Logic"
CONTROL UNIT [B1042-B1047]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification		SRC-39, "DTC Logic"
DRIVER AIRBAG MODULE [OPEN] [B1049] [B1054]	Driver air bag module circuit is open (including the spiral cable)		SRC-41, "DTC Logic"
DRIVER AIRBAG MODULE [VB-SHORT] [B1050] [B1055]	Driver air bag module circuit is shorted to some power supply circuit (including the spiral cable)		SRC-43, "DTC Logic"

Cartridge Assembly Inspection

Check cam ring, rotor and vane for damage. Replace cartridge assembly if necessary.

Side Plate Inspection

Check side plate for damage. Replace side plate if there are.

Flow Control Valve Inspection

Check flow control valve and spring for damage. Replace if necessary.

SECTION TM
TRANSAXLE & TRANSMISSION

CONTENTS

TRANSMISSION: GR6Z30A

Item name (Unit)	Remarks
COMM SHIFT S/V 2	Displays the command value from TCM to the shift solenoid valve 2.
COMM SHIFT S/V 3	Displays the command value from TCM to the shift solenoid valve 3.
COMM SHIFT S/V 4	Displays the command value from TCM to the shift solenoid valve 4.
GR POSITION	Displays the transmission gear positions recognized by TCM.
RANGE	Displays the shift lever positions recognized by TCM.
MODE	Displays the set-up switch (transmission) and driving range statuses.
TR SENSOR No.0	Displays the operation status of the range sensor No.0 in the A/T shift selector.
TR SENSOR No.1	Displays the operation status of the range sensor No.1 in the A/T shift selector.
TR SENSOR No.2	Displays the operation status of the range sensor No.2 in the A/T shift selector.
TR SENSOR No.3	Displays the operation status of the range sensor No.3 in the A/T shift selector.
TR SENSOR No.4	Displays the operation status of the range sensor No.4 in the A/T shift selector.
TR SENSOR No.5	Displays the operation status of the range sensor No.5 in the A/T shift selector.
AM RANGE CHG SW 1	Displays the operation status of the Auto/Manual range change switch 1.
AM RANGE CHG SW 2	Displays the operation status of the Auto/Manual range change switch 2.
R MODE SW	Displays the operation status of the R mode switch on the set-up switch (transmission).
SAVE MODE SW	Displays the operation status of the SAVE mode switch on the set-up switch (transmission).
PADDLE SFT (UP)	Displays the operation status of the paddle shifter (shift-up switch).
PADDLE SFT (DOWN)	Displays the operation status of the paddle shifter (shift-down switch).
PARK POSITION SW	Displays the operation status of the park position switch.
IGN SW	Displays the operation status of the ignition switch.
COM BACK LMP RLY	Displays the command value from TCM to the back-up lamp relay.
MON BACK LMP RLY	Monitors the command value from TCM to the back-up lamp relay, and displays the monitor value.
COM STARTER RLY	Displays the command value from TCM to the starter relay.
MON STARTER RLY	Monitors the command value from TCM to the starter relay, and displays the monitor value.
COM NEUTRAL SIG	Displays the neutral status judged by TCM from the range sensor and park position switch in the A/T shift selector.
LOCK-UP REQ	Displays a lock-up request state received from ECM by CAN signal.
TRQ DOWN REQ	Displays an ECM permission state of a torque down request received from ECM by CAN signal.
KICK DWN OPRT	Displays an ECM kick-down operational state received from ECM by CAN signal.
FUEL CUT STATE	Displays an ECM fuel cut state received from ECM by CAN signal.
IDLE SW	Displays an ECM idle state received from ECM by CAN signal.
HIGH GR INHT REQ	Displays a high gear inhibit request state received from ECM by CAN signal.
SFT SCHDL REQ	Displays an ECM shift schedule switching request state received from ECM by CAN signal.
GR POSI HOLD REQ	Displays an ECM gear position hold request state received from the ABS actuator and electric unit (control unit) by CAN signal.
STOP LAMP SW	Displays the operation status of the stop lamp switch.
STRT RLY DIAG INHB	Displays a starter relay diagnosis inhibit request state transmitted from TCM by CAN signal.
4WD RCPT ERROR	Displays the presence or absence of a CAN signal reception error transmitted from AWD control unit.
BCM RCPT ERROR	Displays the presence or absence of a CAN signal reception error transmitted from BCM.

P0715 INPUT SPEED SENSOR A

Description (GT-R certified NISSAN dealer)

INFOID:0000000011487720

- The clutch A speed sensor detects the 2nd counter gear speed. The clutch A speed sensor converts the 2nd counter gear speed into pulse signal and transmits the signal to TCM.
- TCM calculates the revolution speed or the clutch A (even gear) based on the signal from the clutch A speed sensor.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011487721

DTC DETECTION LOGIC

DTC	Self-diagnosis name	DTC detection condition	Possible cause
P0715	Input/turbine speed sensor "A" circuit	A DTC is set if the status 1 or 2 below is detected with sleeve A1 or A2 engaged in an even gear. 1. The difference between the actual output shaft speed and the output shaft speed converted from the clutch A speed is 1,000 rpm or more. 2. The difference between the vehicle speed signal (meter) (CAN signal) and the output shaft speed converted from the clutch A speed is 1,000 rpm or more.	• Clutch A speed sensor • Sleeve A1 related part • Sleeve A2 related part • Harness or connector (Open or short in the clutch A speed sensor circuit)

DTC CONFIRMATION PROCEDURE

CAUTION:

Be careful of the driving speed.

1.PREPARATION BEFORE OPERATION

If another “DTC CONFIRMATION PROCEDURE” is performed just before the next test, turn the ignition switch OFF and wait for 10 seconds or more, then perform the next test.

>> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE (PART 1)

With CONSULT

1. Start the engine.
2. Select “RANGE”, “GEAR” and “ENGINE SPEED” in “Data Monitor”.
3. Run the vehicle and maintain the following conditions for 5 seconds or more.

RANGE	: M
GEAR	: 4
ENGINE SPEED	: 1,500 rpm or more

4. Check “Self Diagnostic Result” of “TRANSMISSION”.

Without CONSULT

1. Start the engine.
2. Run the vehicle and maintain the following conditions for 5 seconds or more.

Shift lever	: M range
Gear	: 4
Engine speed	: 1,500 rpm or more

3. Check self-diagnosis.

Is DTC P0715 detected?

YES >> Go to TM-98, "Diagnosis Procedure (GT-R certified NISSAN dealer)".
NO >> GO TO 3.

TCM vehicle side harness connector		Transmission unit vehicle side harness connector		Continuity
Connector	Terminal	Connector	Terminal	
B47	102	B50	51	Existed
	103		52	
	104		53	

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace damaged parts.

7. CHECK HARNESS BETWEEN TCM AND TRANSMISSION (CLUTCH B PRESSURE SENSOR) (PART 2)

Check continuity between TCM vehicle side harness connector terminals and ground.

TCM vehicle side harness connector		Ground	Continuity
Connector	Terminal		
B47	102	Ground	Not existed
	103		
	104		

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace damaged parts.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace transmission assembly. Refer to TM-403, "Exploded View (GT-R certified NISSAN dealer)".
NO >> Repair or replace damaged parts.

TCM vehicle side harness connector				Condition	Voltage (Approx.)
Connector	Terminal	Connector	Terminal		
B46	71	B45	4	Ignition switch ON	5 V
				Ignition switch OFF	0 V
	75			Ignition switch ON	5 V
				Ignition switch OFF	0 V

Is the inspection result normal?

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

3.CHECK TCM POWER SUPPLY

Refer to TM-310, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

Is the inspection result normal?

YES >> Replace TCM. Refer to TM-373, "Exploded View (GT-R certified NISSAN dealer)".
NO >> Repair or replace damaged parts.

4.CHECK TCM INPUT SIGNAL CIRCUIT (1ST-REVERSE POSITION SENSOR 1)

1. Start engine.
2. Check voltage between TCM vehicle side harness connector terminals.

TCM vehicle side harness connector				Condition		Voltage (Approx.)
Connector	Terminal	Connector	Terminal			
B46	67	B45	4	Engine running	Shift lever: P, N position	2.19 – 2.88 V
					Shift lever: R position	0.68 – 1.76 V
				While driving	1st gear	3.34 – 4.41 V
					2nd gear, 3rd gear, 4th gear, 5th gear, 6th gear (Other than M range, R mode)	2.19 – 2.88 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 6.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

6.CHECK HARNESS BETWEEN TCM AND TRANSMISSION (1ST-REVERSE POSITION SENSOR 1) (PART 1)

1. Turn ignition switch OFF.
2. Disconnect TCM harness connectors and transmission unit harness connectors.
3. Check continuity between TCM vehicle side harness connector terminals and transmission unit vehicle side harness connector terminals.

TCM vehicle side harness connector		Transmission unit vehicle side harness connector		Continuity
Connector	Terminal	Connector	Terminal	
B46	67	B49	4	Existed
	71		3	
	94		5	

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace damaged parts.

Refer to TM-179, "Diagnosis Procedure (GT-R certified NISSAN dealer)" and TM-182, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace damaged parts.

4. CHECK AXIS A FEED PRESSURE SOLENOID VALVE CIRCUIT

Refer to TM-125, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace damaged parts.

5. CHECK CLUTCH A SPEED SENSOR CIRCUIT

Refer to TM-98, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace damaged parts.

6. CHECK GROUND CONNECTION

1. Turn ignition switch OFF.
2. Check ground connections B31 and ground cable connections. Refer to “Ground Inspection” in GI-42, "Circuit Inspection".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace damaged parts.

7. CHECK TCM OUTPUT SIGNAL CIRCUIT

Check voltage between TCM vehicle side harness connector terminals.

TCM vehicle side harness connector				Condition	Voltage (Approx.)
Connector	Terminal	Connector	Terminal		
B46	81	B45	4	Ignition switch ON	5 V
				Ignition switch OFF	0 V

Is the inspection result normal?

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

8. CHECK TCM POWER SUPPLY

Refer to TM-310, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

Is the inspection result normal?

YES >> Replace TCM. Refer to TM-373, "Exploded View (GT-R certified NISSAN dealer)".
NO >> Repair or replace damaged parts.

9. CHECK TCM INPUT SIGNAL CIRCUIT

1. Start engine.
2. Check voltage between TCM vehicle side harness connector terminals.

P2848 SHIFT FORK D POSITION SENSOR

Description (GT-R certified NISSAN dealer)

INFOID:0000000011487928

- The 3rd-5th position sensor is installed on the actuator control valve and detects the sleeve B2 position.
- The 3rd-5th position sensor converts the sleeve B2 position into output voltage and transmits the signal to TCM.
- The sleeve B2 has its oil passage secured by the shift solenoid valve 3 and shift solenoid valve 2 when the sequence solenoid valve is ON and is driven by the axis B feed pressure solenoid valve. The 3rd gear and 5th gear are selected or deselected depending on the operation of the sleeve B2.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011487929

DTC DETECTION LOGIC

DTC	Self-diagnosis name	DTC detection condition	Possible cause
P2848	Shift fork "D" position sensor incorrect neutral position indicated	A DTC is set if the status of the sleeve B2 position of more than 1.9 mm (0.075 in) or less than –1.9 mm (–0.075 in) is detected for a certain period of time when the sleeve B2 position target is neutral with the sleeve B1 engaged in the 1st or reverse gear.	• 3rd-5th position sensor • Shift solenoid valve 3 • Shift solenoid valve 4 • Sequence solenoid valve • Harness or connector (Open or short in the 3rd-5th position sensor circuit) (Open or short in the shift solenoid valve 3 circuit) (Open or short in the shift solenoid valve 4 circuit) (Open or short in the sequence solenoid valve circuit)

DTC CONFIRMATION PROCEDURE

CAUTION:

- **If CONSULT is not available, "TM-290, "Diagnosis Procedure (GT-R certified NISSAN dealer)" must be performed before starting "DTC CONFIRMATION PROCEDURE".**
- **If CONSULT is not available, never perform "DTC CONFIRMATION PROCEDURE" before completing the repair, which may cause secondary malfunction.**
- **Be careful of the driving speed.**

1. PREPARATION BEFORE OPERATION (PART 1)

If another "DTC CONFIRMATION PROCEDURE" is performed just before the next test, turn the ignition switch OFF and wait for 10 seconds or more, then perform the next test.

>> GO TO 2.

2. PREPARATION BEFORE OPERATION (PART 2)

With CONSULT
1. Turn the ignition switch ON.
2. Select "FLUID TEMP" in "Data Monitor".

Is the oil temperature –20°C (–4°F) or more?

YES >> GO TO 3.
NO >> Warm up the transmission.

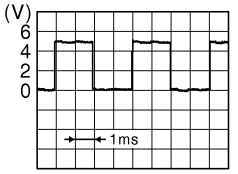
3. PREPARATION BEFORE OPERATION (PART 3)

With CONSULT
Select "READ CLUTCH GEAR LEARNING DATA" in "Work support".

Is the "3-5 learning experienced" YES?

YES >> GO TO 4.
NO >> Perform "CLUTCH GEAR LEARNING".

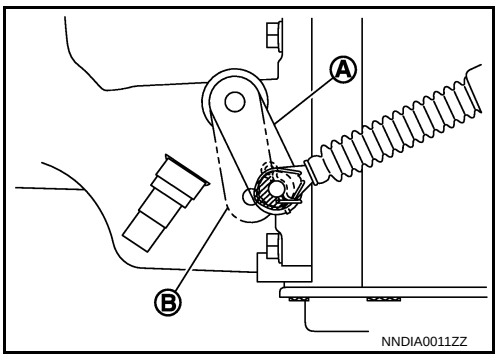
4. CONFIRMATION BEFORE OPERATION (PART 1)

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
87 (L)	4	Fluid temperature sensor (+)	Output	Ignition switch ON	Transmission fluid temperature: 20°C (68°F)	1.80 – 1.86 V
					Transmission fluid temperature: 50°C (122°F)	1.10 – 1.15 V
					Transmission fluid temperature: 80°C (176°F)	0.58 – 0.61 V
88 (W)	4	3rd-5th position sensor (+)	Output	Ignition switch ON		5 V
				Ignition switch OFF		0 V
89 (BG)	4	Park position switch signal	Input	Ignition switch ON	Shift lever: P position	0 V
					Other than the above	5 V
91 (SB)	4	Fluid temperature sensor (–)	Input	Always		0 V
92 (R)	4	3rd-5th position sensor signal	Input	Engine running	Shift lever: P, R, N position	2.19 – 2.88 V
				While driving	1st gear	
					2nd gear, 3rd gear (Other than M range, R mode)	0.68 – 1.76 V
					4th gear, 5th gear, 6th gear (Other than M range, R mode)	3.34 – 4.41 V
94 (G)	4	1st-Reverse position sensor 1 (–)	Input	Always		0 V
97 (BR)	4	Clutch A pressure sensor (+)	Output	Ignition switch ON		5 V
				Ignition switch OFF		0 V
98 (R)	4	Clutch A pressure sensor signal	Input	Engine running	Shift lever: P, R, N position	0.38 – 0.64 V
				While driving	1st gear, 3rd gear, 5th gear	
99 (W)	4	Clutch A pressure sensor (–)	Input	Always		0 V
102 (Y)	4	Clutch B pressure sensor (+)	Output	Ignition switch ON		5 V
				Ignition switch OFF		0 V
103 (L)	4	Clutch B pressure sensor signal	Input	Engine running	Shift lever: P, R, N position	0.38 – 0.64 V
				While driving	2nd gear, 4th gear, 6th gear	
104 (G)	4	Clutch B pressure sensor (–)	Input	Always		0 V
105 (L)	4	Output shaft speed sensor (+)	Output	Ignition switch ON		5 V
				Ignition switch OFF		0 V
106 (G)	4	Output shaft speed sensor signal	Input	• M range, 1st gear • Engine speed: 2,000 rpm		 NNDIA0055ZZ

- Install the park position switch with the parking lever in the P range (A).

  B : Other than the P position

- Fill with the transmission oil to the transmission assembly after installation. Refer to TM-368, "Filling".



Inspection (GT-R certified NISSAN dealer)

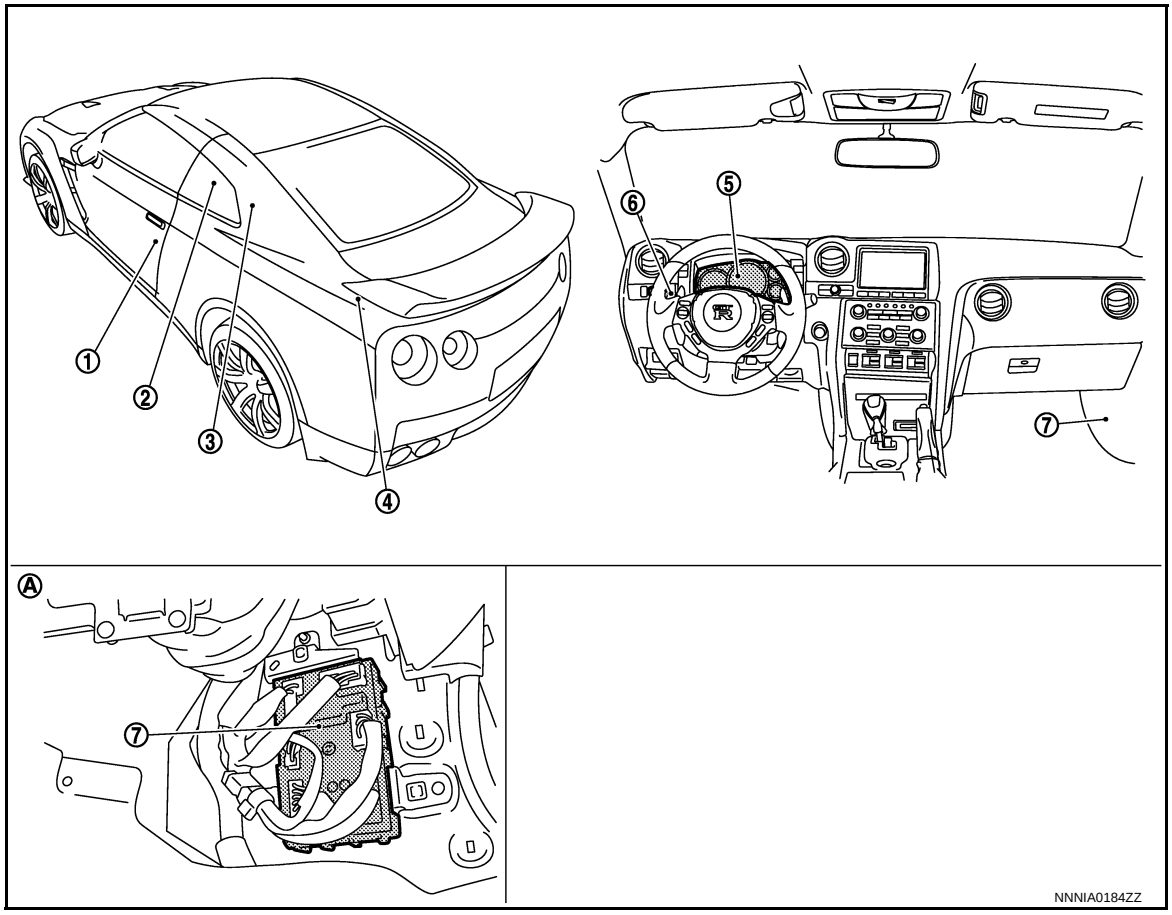
INFOID:0000000011487991

INSPECTION AFTER INSTALLATION

- Check the transmission oil for leakage. Refer to TM-365, "Inspection".
- Check for continuity of park position switch. Refer to TM-82, "Component Inspection (Park Position Switch) (GT-R certified NISSAN dealer)".

WARNING CHIME SYSTEM : Component Parts Location

INFOID:0000000011488354



1. Door switch (driver side)
2. Seat belt buckle switch (driver side)
3. Parking brake switch
4. TCM
5. Combination meter
6. Combination switch (lighting switch)
7. BCM
A. Lower part of passenger side dashboard

WARNING CHIME SYSTEM : Component Description

INFOID:0000000011488355

Unit	Description
Combination meter	• Receives the buzzer output signal from BCM via the CAN communication and sounds the buzzer. • Judges that the parking brake is still applied according to the vehicle speed signal received from the ABS actuator and electric unit (control unit) via CAN communication and the parking brake switch signal from the parking brake switch and sounds the warning buzzer. • Receives the vehicle speed signal from the ABS actuator and electric unit (control unit) and the seat belt buckle switch signal (driver side) from the seat belt buckle switch (driver side) and transmits them to BCM via CAN communication.
BCM	Based on the signals received from various units and switches, transmits the buzzer output signal to the combination meter via CAN communication.
TCM	Transmits the shift position signal to the BCM via CAN communication.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to the combination meter via CAN communication.
Seat belt buckle switch (driver side)	Transmits the seat belt buckle switch signal (driver side) to the combination meter.
Combination switch (lighting switch)	Transmits the position light request signal to BCM.

Display contents of CONSULT	Diagnostic item is detected if ...	Refer to
WATER TEMP [B2268]	ECM continuously transmits abnormal coolant temperature signal for 60 seconds or more	MWI-65, "Diagnosis Procedure"
OIL LEV SEN OPEN [B2321]	Signal from oil level sensor is open (resistance value of oil level sensor is larger than 20 Ω).	MWI-66, "Diagnosis Procedure"
OIL LEV SEN SHORT [B2322]	Signal from oil level sensor is shorted (resistance value of oil level sensor is smaller than 3 Ω).	MWI-66, "Diagnosis Procedure"

HOW TO USE THIS MANUAL

APPLICATION NOTICE

How to Check Vehicle Type

INFOID:0000000011734838

Check the vehicle type to confirm the service information.

Service information	Grade
EXCEPT NISMO	• GTR Black edition • GTR Premium edition • GTR Track edition
NISMO	• GTR N-Package • GTR NISMO

TIRE PRESSURE MONITORING SYSTEM

Connector No.	M14
Connector Name	LOW TIRE PRESSURE WARNING CONTROL UNIT
Connector Type	TH32FW-NH

H.S.

1	2	3	4	5	6	7	8	9	10		12			15
	19	20	21	22	23	24	25	26					30	32

Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	CAN-L
2	L	CAN-H
3	BG	RR TUNER (SIG)
4	L	RL TUNER (SIG)
5	R	FR TUNER (SIG)
6	W	FL TUNER (SIG)
7	SB	RR TUNER (PWR)
8	GR	RL TUNER (PWR)
9	R	FR TUNER (PWR)
10	LG	FL TUNER (PWR)
12	W	SW SIG
15	G	IGN
19	R	RR TUNER (RSSI)
20	BG	RL TUNER (RSSI)
21	P	FR TUNER (RSSI)
22	G	FL TUNER (RSSI)
23	GR	RR TUNER (GND)
24	V	RL TUNER (GND)
25	L	FR TUNER (GND)
26	BR	FL TUNER (GND)
30	G	FLASHER SIG
32	B	GROUND

Connector No.	M23
Connector Name	TIRE PRESSURE WARNING CHECK SWITCH
Connector Type	TK02FW

H.S.

1

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

1	2	3	4	5	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			38	39	40

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	BATTERY POWER SUPPLY
2	W	IGNITION POWER SUPPLY
3	B	GROUND
4	B	ILLUMINATION GROUND
5	B	GROUND
6	W	METER CONTROL SWITCH GROUND
7	Y	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
8	SB	AMBIENT SENSOR GROUND
9	P	AMBIENT SENSOR SIGNAL
12	L	VEHICLE SPEED SIGNAL (2-PULSE)
13	V	VEHICLE SPEED SIGNAL (8-PULSE)
14	B	OIL PRESSURE SENSOR GROUND
15	R	AIR BAG SIGNAL
16	R	LED HEAD LAMP (RH) WARNING SIGNAL
18	L	FUEL LEVEL SENSOR GROUND
19	R	OIL LEVEL SENSOR GROUND
20	W	OIL LEVEL SENSOR SIGNAL
21	L	CAN-H
22	P	CAN-L
23	LG	ILLUMINATION CONTROL SWITCH SIGNAL (-)
24	BR	ILLUMINATION CONTROL SWITCH SIGNAL (+)
25	G	TRIP A/B RESET SWITCH SIGNAL
26	BG	ENTER SWITCH SIGNAL
27	SB	SELECT SWITCH SIGNAL
28	BR	ALTERNATOR
29	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
30	LG	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
31	V	PARKING BRAKE SWITCH SIGNAL
32	V	BRAKE FLUID LEVEL SWITCH SIGNAL
33	L	WASHER LEVEL SWITCH SIGNAL
34	GR	OIL PRESSURE SENSOR POWER
35	W	OIL PRESSURE SENSOR SIGNAL
38	BG	FUEL LEVEL SENSOR SIGNAL
39	Y	LED HEAD LAMP (LH) WARNING SIGNAL
40	V	ILLUMINATION CONTROL

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	G	-
9	W	-
10	L	-
31	Y	-
32	LG	-
33	BR	-
34	L	-
40	G	-
41	R	-
42	SB	-
43	L	-
44	R	-
45	G	-
51	SB	-
52	BG	-
53	R	-
54	GR	-
60	L	-
61	P	-
62	L	-
63	Y	-
64	LG	-
69	P	-
70	L	-
71	Y	-
80	L	-
81	G	-
82	BR	-
83	B	-
84	V	-
85	SB	-
86	SHIELD	-
87	W	-
96	Y	-
98	G	-
99	V	-
100	W	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

H.S.

81	90	89	88	87			83	82	81	80	79	78	77	76	75	74	73	72
11	10	9	8	7	6	5	4	3	2	1	100	99	98	97	96	95	94	93	92

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2-
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	IMMOBI ANTENNA CONTROL
81	L	IMMOBI ANTENNA SIGNAL
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5

JREWC1604GB

DTC/CIRCUIT DIAGNOSIS

WIPER AND WASHER FUSE

Description

INFOID:0000000011487315

Fuse list

Unit	Location	No.	Capacity
Front wiper motor	IPDM E/R	60	30 A
Washer pump	IPDM E/R	47	10 A

Diagnosis Procedure

INFOID:0000000011487316

1.CHECK FUSES

Check that the following fuses are not fusing.

Unit	Location	No.	Capacity
Front wiper motor	IPDM E/R	60	30 A
Washer pump	IPDM E/R	47	10 A

Is the fuse fusing?

YES >> Replace the fuse with a new one after repairing the applicable circuit.
NO >> The fuse is normal.