SECTION POWER WINDOW CONTROL SYSTEM

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< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much malfunction information (conditions and environment when the malfunction occurs) 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 conditions 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"

Diagnose 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 malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 2.

Are the malfunctions corrected?

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

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description INFOID:000000008194342

When the battery negative terminal is disconnected, the initialization is necessary. If any of the following operations are performed, the initialization is necessary as well as when the negative battery terminal is disconnected.

- Power supply to the power window switch or power window motor is cut off by removal of battery terminal or if the battery fuse is blown.
- Disconnection and connection of power window switch harness connector.
- Removal and installation of motor from regulator assembly.
- Operation of regulator assembly as an independent unit.
- Removal and installation of door glass or door glass run.
- The following specified operations cannot be performed under the non initialized condition.
- Auto-up operation
- Anti-pinch function
- Key cylinder switch power window function
- Automatic window adjusting function
- Auto-up, manual-up does not operate when door is open

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement INFOID:000000008194343 Н

INITIALIZATION PROCEDURE

1.	Disconnect battery negative terminal or power window switch connector. Reconnect it after a minute or
	more.
2	Door switch is OFF (close)

- 3. Turn ignition switch ON.
- 4. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open.)
- 5. Continue pulling the power window switch AUTO-UP. Even after glass stops at the fully closed position, keep pulling the switch for 3 seconds or more.
- 6. Initializing procedure is completed.
- 7. Inspect anti-pinch function.

CAUTION:

When initialization is not complete, power window UP does not operate while door is open.

- CHECK ANTI-PINCH FUNCTION
- 1. Fully open the door window.
- Place a piece of wood near the fully closed position.
- 3. Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm (5.9 in) without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window main switch while lowering.

CAUTION:

- Never check with hands and other part of body because they may be pinched. Never get pinched.
- Check that AUTO-UP operates before inspection when system initialization is performed.
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally. • Finish initial setting. Otherwise, next operation cannot be performed.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Key cylinder switch power window function
- 4. Automatic window adjusting function
- 5. Auto-up, manual-up does not operate when door is open

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

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[COUPE]

When the control unit is replaced, the initialization is necessary.

If any of the following operations are performed, the initialization is necessary and the control unit must be disconnected.

- Power supply to the power window switch or power window motor is cut off by removal of battery terminal or if the battery fuse is blown.
- Disconnection and connection of power window switch harness connector.
- Removal and installation of motor from regulator assembly.
- Operation of regulator assembly as an independent unit.

• Removal and installation of door glass or door glass run.

The following specified operations cannot be performed under the non initialized condition.

- Auto-up operation
- Anti-pinch function
- Key cylinder switch power window function
- Automatic window adjusting function
- · Auto-up, manual-up does not operate when door is open

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Re-

quirement

INFOID:000000008194345

INITIALIZATION PROCEDURE

- 1. Disconnect battery negative terminal or power window switch connector. Reconnect it after a minute or more.
- 2. Door switch is OFF (close).
- 3. Turn ignition switch ON.
- 4. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open.)
- 5. Continue pulling the power window switch AUTO-UP. Even after glass stops at the fully closed position, keep pulling the switch for 3 seconds or more.
- 6. Initializing procedure is completed.
- 7. Inspect anti-pinch function.

CAUTION:

When initialization is not complete, power window UP does not operate while door is open.

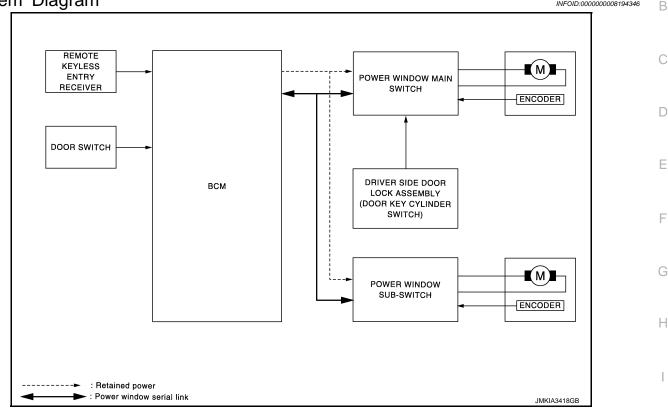
CHECK ANTI-PINCH FUNCTION

- 1. Fully open the door window.
- 2. Place a piece of wood near the fully closed position.
- 3. Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm (5.9 in) without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window switch while lowering.

CAUTION:

- Never check with hands and other part of body because they may be pinched. Never get pinched.
- Check that AUTO-UP operates before inspection when system initialization is performed.
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be performed.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Key cylinder switch power window function
- 4. Automatic window adjusting function
- 5. Auto-up, manual-up does not operate when door is open

< SYSTEM DESCRIPTION > SYSTEM DESCRIPTION POWER WINDOW SYSTEM



System Description

POWER WINDOW SYSTEM

- PWC Power window system is activated by power window switch operation when ignition switch is turned ON and during the retained power operation, after ignition switch turned OFF.
- Power window main switch can open/close all windows.
- Power window sub-switch can open/close the passenger side windows.
- AUTO operation can be activated by operating the power window switch once.
- It transmits and receives the signal between BCM and power window main switch or power window sub switch, via serial communication.
- Μ When pressing power window lock switch, operation other than power window main switch becomes impossible.
- When detecting the pinching resistance of foreign materials, etc. during power window AUTO UP operation, it lowers door glass to the specified value.
- When opening driver side or passenger side door while door glass is being fully closed, it lowers door glass of the door a little from the closed position. When closing the door, it return door glass to the fully closed position.
- All power windows open or close when Intelligent Key unlock button is pressed for 3seconds.
- Hold the door key cylinder to the UNLOCK direction for 1 second or more to OPEN all power windows when ignition switch OFF.

POWER WINDOW AUTO-OPERATION

- AUTO UP/DOWN operation can be performed when power window main switch turns to AUTO.
- Encoder continues detecting the movement of power window motor and transmits to power window switch as the encoder pulse signal while power window motor is operating.
- Power window switch reads the changes of encoder signal and stops AUTO operation when door glass is at the fully open/closed position.
- Auto function is inoperable if encoder is malfunctioning.

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< SYSTEM DESCRIPTION >

POWER WINDOW SERIAL LINK

Power window main switch, power window sub-switch and BCM transmit and receive the signal by power window serial link.

The under mentioned signal is transmitted from BCM to power window main switch.

- Driver side door switch signal.
- Keyless power window down signal.
- Retained power operation signal.

The under mentioned signal is transmitted from BCM to power window sub-switch.

- Passenger side door switch signal.
- Keyless power window down signal.
- Retained power operation signal.

The following signal is transmitted from power window main switch to power window sub-switch.

- Passenger side door window operation signal.
- Power window lock signal.
- Power window control by key cylinder switch signal.

RETAINED POWER OPERATION

Retained power operation is an additional power supply function that enables power window system to operate for 45 seconds after ignition switch turns OFF.

RETAINED POWER FUNCTION CANCEL CONDITIONS

- Front door CLOSED (door switch OFF) \rightarrow OPEN (door switch ON).
- When ignition switch turns ON again.
- When timer times out. (45 seconds)

POWER WINDOW LOCK FUNCTION

Switch operation other than power window main switch is prohibited when power window lock switch is ON. Power window main switch does not operate any power window other than driver power window.

ANTI-PINCH FUNCTION

- The anti-pinch function detects foreign matter being pinched in the door glass, during AUTO-UP operation, and lowers the door glass 150 mm (5.9in).
- Encoder continues detecting the movement of power window motor and transmits to power window switch as the encoder pulse signal while power window motor is operating.
- Resistance is applied to the power window motor rotation that changes the frequency of encoder pulse signal if foreign material is trapped in the door glass.
- Power window switch controls to lower the door glass for 150 mm (5.9in) after it detects encoder pulse signal frequency change.

OPERATION CONDITION

• When all door glass AUTO-UP operation is performed (anti-pinch function does not operate just before the door glass closes and is fully closed.)

NOTE:

Depending on environment and driving conditions, if a similar impact or load is applied to the door glass, it may lower.

AUTOMATIC WINDOW ADJUSTING FUNCTION

When the driver/passenger door(s) is open, the window of the opened door is lowered approximately 10 mm (0.39 in).

When the door is closed, the window is raised to the fully closed position.

Automatic window adjusting function system (opening operation) does not operate when the following item occurs.

• The window is 10 mm (0.39 in) or more open from the fully closed position.

Automatic window adjusting function system (closing operation) does not operate when the following item occurs.

• The automatic window adjusting function system (opening operation) operation.

DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Hold the door key cylinder to the LOCK or UNLOCK position for 1 second or more to OPEN or CLOSE all power windows when ignition switch is OFF. In addition, it stops when the key position is NEUTRAL when operating.

OPERATION CONDITION

• Ignition switch OFF.

 Hold door key cylinder to the LOCK position for 1 second or more to perform CLOSE operation of the door glass.

PWC-10

< SYSTEM DESCRIPTION >

Hold door key cylinder in the UNLOCK position for 1 second or more to perform OPEN operation of the door glass.
 KEYLESS POWER WINDOW DOWN FUNCTION
 All power windows open when the unlock button on Intelligent Key is activated and pressed and held for more than 3* seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed.

The power window opening function stops when the following operations are performed.

- When the unlock button is pressed and held for more than 15 seconds.
- When the ignition switch is turned ON while the power window opening is operated.
- When the unlock button is released.

While retained power operation activates, keyless power window down function cannot be operated. Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUP-PORT". Refer to <u>DLK-42</u>, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)".

NOTE:

Use CONSULT to change settings. MODE 1 (3 sec) / MODE 2 (OFF) / MODE 3 (5 sec)

POWER CONSUMPTION CONTROL SYSTEM

Power window switch incorporates a power consumption control function that reduces the power consumption according the vehicle status.

LOW POWER CONSUMPTION MODE

- Ignition switch OFF.
- Power window main switch and power window sub-switch do not receive a signal from serial link.
- Power window motor does not move.
- If any of the following conditions are satisfied, the low power consumption mode is released.
- Ignition switch ON.
- When door key cylinder switch signal is received.
- When the signal is received from serial link.
- When door open/close signal is received.
- When power window switch door lock is operated.

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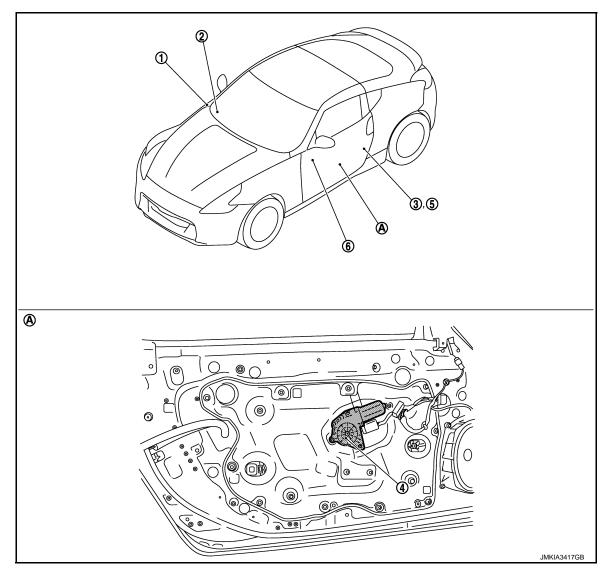
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< SYSTEM DESCRIPTION >

Component Parts Location

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[COUPE]



BCM M118, M119, M122, M123 1. BCS-10, "Component Parts Loca-

View with door finisher removed

Component Description

Remote keyless entry receiver M104 3. DLK-16, "INTELLIGENT KEY SYS-TEM : Component Parts Location"

Driver side door switch B16

Driver side door lock assembly (door key cylinder switch) D15

6. Power window main switch D8

INFOID:000000008194349

Component	Function
BCM	Supplies power to power window switches.Controls retained power function
Power window main switch	Directly controls all power window motors in all doors.Controls anti-pinch operation of power window.
Power window sub-switch	Controls anti-pinch operation of power window.Controls power window motor of passenger door.
Power window motor	 Integrates the encoder and window motor. Starts operating with signals from each power window switch. Transmits power window motor rotation as a pulse signal to power window switch.

2. tion"

Driver side power window motor D10 5.

Revision: 2012 August

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< SYSTEM DESCRIPTION >

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Component	Function	
Driver side door lock assembly (door key cylinder switch)	Transmits operation condition of key cylinder switch to power window main switch.	- F
Remote keyless entry receiver	Receives lock/unlock signal from intelligent key, and then transmits to BCM.	
Door switch	Detects door open/close condition and transmits to BCM.	В

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DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

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APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	Read and save the vehicle specification.Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system. **NOTE:**

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

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

NOTE:

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

FREEZE FRAME DATA (FFD)

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

PWC-14

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[COUPE]

CONSULT screen item	Indication/Unit	Description			
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected			
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected			
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)		
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)		
	LOCK>ACC		While turning power supply position from "LOCK"* to "ACC"		
	ACC>ON		While turning power supply position from "ACC" to "IGN"		
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Except emergency stop operation)		
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)		
	RUN>URGENT	Power supply position status of the moment a particular DTC is de- tected	. While turning power supply position from "R gency stop operation)	While turning power supply position from "RUN" to "ACC" (Emer- gency stop operation)	
	ACC>OFF		While turning power supply position from "ACC" to "OFF"		
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"*		
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"		
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"		
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode		
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode		
	LOCK		Power supply position is "LOCK"*		
	OFF		Power supply position is "OFF" (Ignition switch OFF)		
	ACC		Power supply position is "ACC" (Ignition switch ACC)		
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)		
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)		
	CRANKING		Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	 The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 			

*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position (A/T models), and any of the following conditions are met.

- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

RETAINED PWR

RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

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DATA MONITOR

NOTE:

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

PWC-15

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Monitor Item	Description
DOOR SW-DR	Indicates [ON/OFF] condition of driver side door switch.
DOOR SW-AS	Indicates [ON/OFF] condition of passenger side door switch.

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DTC/CIRCUIT DIA	GNOSIS		
POWER SUPPLY AND		СШТ	
BCM	GROUND CIR	CON	
-			
BCM : Diagnosis Procedure	e		INFOID:00000008194352
CHECK FUSE AND FUSIBLE L	INK		
Check that the following fuse and f	usible link are not bl	own.	
Terminal No.	Signa	Iname	Fuse and fusible link No.
1	Battery po	wer supply	K (40A)
11	Battery po		10 (10A)
 CHECK POWER SUPPLY CIRC Turn ignition switch OFF. Disconnect BCM connectors. Check voltage between BCM h 		nd ground.	
(+)			
BCM		(-)	Voltage (Approx.)
Connector	Terminal		(//pp/0x.)
M118	1	Ground	Battery voltage
M119	11		
s the measurement value normal? YES >> GO TO 3. NO >> Repair or replace harn 3. CHECK GROUND CIRCUIT			
Check continuity between BCM ha	rness connector and	l ground.	
BCM		-	
Connector	Terminal	Ground	Continuity
M119	13		Existed
Does continuity exist? YES >> INSPECTION END NO >> Repair harness or com POWER WINDOW MAIN POWER WINDOW MAIN S 1.CHECK POWER SUPPLY CIRC	SWITCH SWITCH : Diagn	osis Procedure	INFOID:00000008194353
 CHECK POWER SUPPLY CIRC Turn ignition switch OFF. Disconnect power window mai Turn ignition switch ON. Check voltage between power 	n switch connector.	n harness connector ar	nd ground.

POWER SUPPLY AND GROUND CIRCUIT

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

(+) Power window main switch		()	Voltage (V) (Approx.)	
Connector	Terminal			
D8	1 10	Ground	12	
Is the measurement value w	ithin the specification?			
YES >> GO TO 3. NO >> GO TO 2.				

2. CHECK POWER SUPPLY CIRCUIT 2

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector.
- 3. Check continuity between BCM harness connector and power window main switch harness connector.

E	BCM Power window main switch		w main switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M118	2	D8	1	Existed
WITO	3	0	10	LAISIEU

4. Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Terminal	Ground	Continuity	
M118	2	Ground	Not existed	
	3		NOT EXISTED	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-95, "Exploded View"</u>.

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between power window main switch harness connector and ground.

Power windo	Power window main switch		Continuity
Connector	Terminal	Ground	Continuity
D8	15		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

POWER WINDOW SUB-SWITCH

POWER WINDOW SUB-SWITCH : Diagnosis Procedure

INFOID:000000008194354

1.CHECK POWER SUPPLY CIRCUIT 1

1. Turn ignition switch OFF.

2. Disconnect power window sub-switch connector.

3. Check voltage between power window sub-switch harness connector and ground.

(+) Power window sub-switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
D38	10	Ground	12	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

Check continuity between po	wer window sub-switch h	arness connector and grou	ind.	
Power windo	w sub-switch		Continuity	
Connector Terminal		Ground	Continuity	
D38	11	7	Existed	

Is the inspection result normal? YES >> Replace BCM. Refer to BCS-95, "Exploded View".

NO >> Repair or replace harness.

B	BCM Power window sub-switch		Continuity	
Connector	Terminal	Connector Terminal		Continuity
M118	2	D38	10	Existed

Check continuity between BCM harness connector and power window sub-switch harness connector.

. 14

4.	Check continuity betwee	en BCM harness connecto	r and ground.	
_	B	CM		Continuity
_	Connector	Terminal	Ground	Continuity
_	M118	2		Not existed

>> GO TO 3.

YES

Turn ignition switch OFF.

Disconnect BCM connector.

1.

2.

3.

NO >> GO TO 2. 2. CHECK POWER SUPPLY CIRCUIT 2

Is the measurement value within the specification?

POWER SUPPLY AND GROUND CIRCUIT < DTC/CIRCUIT DIAGNOSIS >

[COUPE]

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< DTC/CIRCUIT DIAGNOSIS >

POWER WINDOW MOTOR DRIVER SIDE

DRIVER SIDE : Description

Door glass moves UP/DOWN by receiving the signal from power window main switch.

DRIVER SIDE : Component Function Check

1.CHECK POWER WINDOW MOTOR CIRCUIT

Check driver side power window motor operation with power window main switch.

Is the inspection result normal?

YES >> Driver side power window motor is OK.

NO >> Refer to <u>PWC-20, "DRIVER SIDE : Diagnosis Procedure"</u>.

DRIVER SIDE : Diagnosis Procedure

1.CHECK POWER WINDOW MAIN SWITCH OUTPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect driver side power window motor connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between driver side power window motor harness connector and ground.

-) Driver side powe		()	Con	dition	Voltage (V) (Approx.)
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	6			UP	12
D10	6	Cround	Power window	DOWN	0
DIO	3	Ground	main switch	UP	0
	3			DOWN	12

Is the measurement value within the specification?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK POWER WINDOW MOTOR

Check driver side power window motor.

Refer to <u>PWC-21</u>, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver side power window motor. Refer to <u>GW-23, "Removal and Installation"</u>.

3.CHECK POWER WINDOW MOTOR CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect power window main switch connector.
- 3. Check continuity between power window main switch harness connector and driver side power window motor harness connector.

Power windo	w main switch	Driver side pow	er window motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
 D8	8	D10	6	Existed
Do	11		3	LAISTER

4. Check continuity between power window main switch harness connector and ground.

INFOID:000000008194356

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< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

Power windo	w main switch		
Connector	Terminal	Ground	Continuity
D8 8 Ground Not existed the inspection result normal? (ES >> Replace power window main switch. Refer to PWC-89, "Removal and Installation". >> Repair or replace harness. .CHECK INTERMITTENT INCIDENT >> INSPECTION END	Not existed		
s the inspection result norm	al?		
YES >> Replace power v	window main switch. Refer	r to <u>PWC-89, "Removal an</u>	d Installation".
· · ·			
iteler to <u>or so, intermittent</u>	<u>incident</u> .		
>> INSPECTION E	ND		
DRIVER SIDE : Comp	onent Inspection		INFOID:0000000819435
		•	
		x	
		ector.	
3. Check motor operation I			de power window motor con-
nector.			
Driver side power window mo-	Terr	minal	Motor operation
tor connector	(+)	(-)	
D10			
	-	3	UP
YES >> Driver side powe NO >> Replace driver s PASSENGER SIDE	er window motor is OK. ide power window motor. I	Refer to <u>GW-23, "Remova</u>	l and Installation".
	·		INFOID:0000000819435
Door glass moves UP/DOW	N by receiving the signal p	ower window main switch	or power window sub-switch
PASSENGER SIDE : (Component Function	Check	INFOID:0000000819436
1. CHECK POWER WINDO	W MOTOR CIRCUIT		
		with power window main	switch or power window sub
switch.			·
Is the inspection result norm		/	
	power window motor is OF 1, "PASSENGER SIDE : D		
PASSENGER SIDE : I			INFOID:0000000819436
1.check power windo	-		
1. Turn ignition switch OFF	ide power window motor c		

4. Check voltage between passenger side power window motor harness connector and ground.

< DTC/CIRCUIT DIAGNOSIS >

(+ Passenger side pov	,	(-)	Con	dition	Voltage (V) (Approx.)
Connector	Terminal	-			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	6			UP	12
D40	0	Ground	Power window sub-	DOWN	0
D40	3	Ground	switch	UP	0
	3			DOWN	12

Is the measurement value within the specification?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK PASSENGER SIDE POWER WINDOW MOTOR

Check passenger side power window motor.

Refer to PWC-22, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace passenger side power window motor. Refer to <u>GW-23, "Removal and Installation"</u>.

 ${\it 3.}$ check power window motor circuit

- 1. Turn ignition switch OFF.
- 2. Disconnect power window sub-switch connector.
- 3. Check continuity between power window sub-switch harness connector and passenger side power window motor harness connector.

Power windo	ow sub-switch	Passenger side po	ower window motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D38	9	D40	3	Existed
	8	D40	6	Existed

4. Check continuity between power window sub-switch connector and ground.

Power windo	w sub-switch		Continuity
Connector	Terminal	Ground	Continuity
D38	8	Ground	Not existed
030	9	1	NUL EXISIEU

Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to PWC-89, "Removal and Installation".

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:000000008194362

COMPONENT INSPECTION

1.CHECK PASSENGER SIDE POWER WINDOW MOTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect passenger side power window motor connector.
- 3. Check motor operation by connecting the battery voltage directly to passenger side power window motor connector.

PWC-22

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

Passenger side power window	Terr	ninal	
motor connector	(+)	(-)	Motor condition
D40	3	6	DOWN
D40	6	3	UP
the inspection result normal?			
YES >> Passenger side powe	er window motor is Ol	ζ.	
NO >> Replace passenger s	ide power window mo	otor. Refer to <u>GW-23, "R</u>	emoval and Installation".

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< DTC/CIRCUIT DIAGNOSIS > ENCODER

DRIVER SIDE

DRIVER SIDE : Description

Detects condition of the driver side power window motor operation and transmits to power window main switch as the pulse signal.

DRIVER SIDE : Component Function Check

1.CHECK ENCODER OPERATION

Check that driver side door glass performs AUTO open/close operation normally with power window main switch.

Is the inspection result normal?

YES >> Encoder operation is OK.

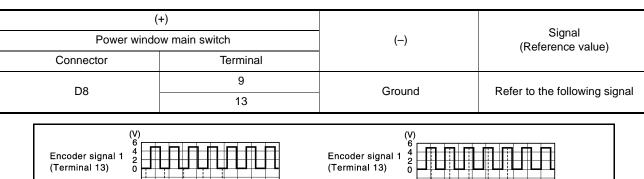
NO >> Refer to <u>PWC-24, "DRIVER SIDE : Diagnosis Procedure"</u>.

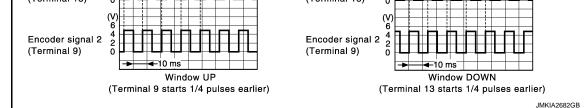
DRIVER SIDE : Diagnosis Procedure

INFOID:000000008194365

1.CHECK ENCODER OPERATION

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





Is the inspection result normal?

YES >> Replace power window main switch. Refer to <u>PWC-89, "Removal and Installation"</u>. NO >> GO TO 2.

2.check encoder signal circuit

- 1. Turn ignition switch OFF.
- 2. Disconnect power window main switch connector and driver side power window motor connector.
- 3. Check continuity between power window main switch harness connector and driver side power window motor harness connector.

Power wind	low main switch	Driver side pow	er window motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D8	9	D10	5	Existed
Do	13		2	Existed

4. Check continuity between power window main switch harness connector and ground.

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INFOID:00000008194364

< DTC/CIRCUIT DIAGNOSIS >

Powe	r window main switch			0
Connector	Termin		Crowned	Continuity
D8	9		Ground	Not ovisted
Do	13			Not existed
HECK ENCODER Connect power wi Turn ignition switc	replace harness. R POWER SUPPLY C ndow main switch cor	inector.	ess connector and	ground.
	(+)			Voltage (V)
	de power window motor		(-)	(Approx.)
Connector	Termina			
D10	4 alue within the specific	_	Bround	12
>> GO TO 4. HECK ENCODER Turn ignition switc				
D >> GO TO 4. CHECK ENCODER Turn ignition switc Disconnect power	h OFF. window main switch o between power windo	connector.	ss connector and	driver side power
 >> GO TO 4. CHECK ENCODER Turn ignition switc Disconnect power Check continuity b motor harness cor 	h OFF. window main switch o between power windo	connector. w main switch harnes	ss connector and o	
>> GO TO 4. HECK ENCODER Furn ignition switc Disconnect power Check continuity to notor harness cor	h OFF. window main switch o between power windo nnector.	connector. w main switch harnes		driver side power
>> GO TO 4. HECK ENCODER Jurn ignition switc Disconnect power Check continuity is notor harness cor Power wind Connector D8	h OFF. window main switch o between power windo nnector. bw main switch Terminal 5	Connector. w main switch harnes Driver side powe Connector D10	er window motor Terminal 4	Continuity
D >> GO TO 4. CHECK ENCODER Turn ignition switc Disconnect power Check continuity b motor harness cor Power wind Connector D8 Check continuity b Powe	h OFF. window main switch o between power windo nector. w main switch Terminal 5 between power window r window main switch	connector. w main switch harnes Driver side powe Connector D10 w main switch harness	er window motor Terminal 4 s connector and gr	Continuity
>> GO TO 4. HECK ENCODER Turn ignition switc Disconnect power Check continuity b motor harness cor Power wind Connector D8 Check continuity b Powe Connector	h OFF. window main switch o between power windo nector. w main switch Terminal 5 between power window r window main switch Termin	connector. w main switch harnes Driver side powe Connector D10 w main switch harness	er window motor Terminal 4	Continuity Existed ound. Continuity
>> GO TO 4. HECK ENCODER Furn ignition switc Disconnect power Check continuity b notor harness cor Power wind Connector D8 Check continuity b Powe	h OFF. window main switch o between power windo nector. w main switch Terminal 5 between power window r window main switch Termin 5	connector. w main switch harnes Driver side powe Connector D10 w main switch harness	er window motor Terminal 4 s connector and gr	Continuity Existed ound.

3. Check continuity between pow motor harness connector.

Power window main switch Driver side power window motor Ρ Continuity Connector Terminal Connector Terminal D8 14 D10 1 Existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK GROUND CIRCUIT 2

< DTC/CIRCUIT DIAGNOSIS >

- 1. Connect power window main switch connector.
- 2. Check continuity between power window main switch harness connector and ground.

Power windo	w main switch		Continuity
Connector	Terminal	Ground	Continuity
D8	14		Existed

Is the inspection result normal?

YES >> Replace driver side power window motor. Refer to <u>PWC-89, "Removal and Installation"</u>.

NO >> Replace power window main switch. Refer to PWC-89, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Description

Detects condition of the passenger side power window motor operation and transmits to power window subswitch as the pulse signal.

PASSENGER SIDE : Component Function Check

1.CHECK ENCODER OPERATION

Check that passenger side door glass performs AUTO open operation normally with power window main switch or power window sub-switch.

Is the inspection result normal?

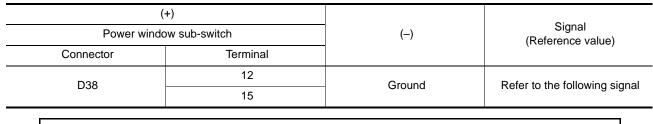
YES >> Encoder operation is OK.

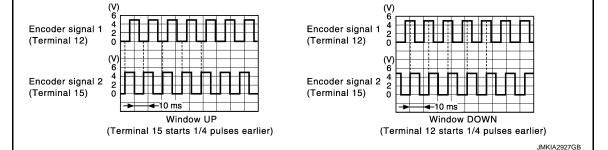
NO >> Refer to <u>PWC-26, "PASSENGER SIDE : Diagnosis Procedure"</u>.

PASSENGER SIDE : Diagnosis Procedure

1.CHECK ENCODER SIGNAL

- 1. Turn ignition switch ON.
- 2. Check signal between power window sub-switch harness connector and ground with oscilloscope.





Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to <u>PWC-89</u>, "<u>Removal and Installation</u>". NO >> GO TO 2.

2. CHECK ENCODER SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect power window sub-switch connector and passenger side power window motor connector.
- Check continuity between power window sub-switch harness connector and passenger side power window motor harness connector.

PWC-26

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INFOID:00000008194367

INFOID:00000008194368

< DTC/CIRCUIT DIAGNOSIS >

	ow sub-switch	Passe	enger side powe	r window motor		Continuity
Connector	Terminal	Conn	ector	Terminal		
D38	12	D4	40	2		Existed
200	15	D-	10	5		Existed
Check continuity be	etween power windo	w sub-switc	h connector a	and ground.		
Powe	r window sub-switch					Oractionsity
Connector	Termir	nal	Cro	und		Continuity
D38	12		Gro	unu		Not existed
D30	15					NOT EXISTED
CHECK ENCODER Connect power wir Turn ignition switch	eplace harness. POWER SUPPLY C ndow sub-switch con	nector.	how motor ba	rness conne	ctor and	
	(+)					ground.
Passenger	side power window motor		(-)			Voltage (V)
Connector	Termin		()			(Approx.)
D40	4		Grou	nd		12
O >> GO TO 4.						
CHECK ENCODER Turn ignition switch Disconnect power Check continuity b	window sub-switch c etween power windo	onnector.	ch harness c	onnector and	d passe	nger side power
CHECK ENCODER Turn ignition switch Disconnect power Check continuity b dow motor harness	n OFF. window sub-switch c etween power windo s connector.	onnector. ow sub-swite				nger side power
CHECK ENCODER Turn ignition switch Disconnect power Check continuity b dow motor harness Power windo	n OFF. window sub-switch c etween power windo s connector. pw sub-switch	onnector. ow sub-swite Passe	enger side powe	r window motor		nger side power Continuity
CHECK ENCODER Turn ignition switch Disconnect power Check continuity b dow motor harness Power windo Connector	n OFF. window sub-switch c etween power windo s connector. w sub-switch Terminal	onnector. ow sub-swite Passe Conn	enger side powe	r window motor Terminal		Continuity
CHECK ENCODER Turn ignition switch Disconnect power Check continuity b dow motor harness Power windo Connector D38	n OFF. window sub-switch c etween power windo s connector. pw sub-switch	onnector. ow sub-swite Passe Conn D4	enger side powe ector 40	r window motor Terminal 4		
CHECK ENCODER Turn ignition switch Disconnect power Check continuity b dow motor harness Power windo Connector D38 Check continuity be	n OFF. window sub-switch c etween power windo s connector. w sub-switch Terminal 4 etween power windo	onnector. ow sub-swite Passe Conn D4	enger side powe ector 40	r window motor Terminal 4		Continuity
CHECK ENCODER Turn ignition switch Disconnect power Check continuity b dow motor harness Power windo Connector D38 Check continuity be Powe	n OFF. window sub-switch c etween power windo s connector. w sub-switch Terminal 4 etween power windo r window sub-switch	onnector. ow sub-swite Passe Conn D4 w sub-switc	enger side powe ector 40 h harness co	r window motor Terminal 4 nnector and		Continuity
CHECK ENCODER Turn ignition switch Disconnect power Check continuity b dow motor harness Power windo Connector D38 Check continuity be	n OFF. window sub-switch c etween power windo s connector. w sub-switch Terminal 4 etween power windo	onnector. ow sub-swite Passe Conn D4 w sub-switc	enger side powe ector 40	r window motor Terminal 4 nnector and		Continuity Existed Continuity
CHECK ENCODER Turn ignition switch Disconnect power Check continuity b dow motor harness Power windo Connector D38 Check continuity b Powe Connector	n OFF. window sub-switch c etween power windo s connector. bw sub-switch Terminal 4 etween power windo r window sub-switch Termin 4	onnector. ow sub-swite Passe Conn D4 w sub-switc	enger side powe ector 40 h harness co	r window motor Terminal 4 nnector and		Continuity Existed

< DTC/CIRCUIT DIAGNOSIS >

Power windo	Power window sub-switch		Passenger side power window motor		
Connector	Terminal	Connector Terminal		Continuity	
D38	3	D40	1	Existed	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK GROUND CIRCUIT 2

1. Connect power window sub-switch connector.

2. Check continuity between power window sub-switch harness connector and ground.

Power windo	w sub-switch		Continuity	
Connector	Terminal	Ground	Continuity	
D38	3		Existed	

Is the inspection result normal?

>> Replace passenger side power window motor. Refer to <u>PWC-89</u>, "<u>Removal and Installation</u>". >> Replace power window sub-switch. Refer to <u>PWC-89</u>, "<u>Removal and Installation</u>". YES

NO

	POWER		RIAL LINK
< DTC/CIRCUIT DIAGN	IOSIS >		[COUPE
POWER WINDO			
POWER WINDOW	MAIN SWITCH	4	
POWER WINDOW	MAIN SWITCH	: Description	INFOID:000000081943
Power window main swite dow serial link.	ch, power window su	Ib-switch and BCI	I transmit and receive the signal by power wir
The signal mentioned be switch. • Keyless power window		from BCM to por	wer window main switch, power window sub
	low is transmitted fro oor window operation by key cylinder switc tch signal	n signal	main switch to power window sub-switch.
	MAIN SWITCH	: Component	Function Check
		•	
1.CHECK POWER WIN	DOW SWITCH OUT	PUT SIGNAL	
			NITOR" mode for "POWER DOOR LOCK SYS NSULT Function (BCM - DOOR LOCK) (For
<u>Coupe)"</u> .	telei to <u>bert-40, bt</u>	<u> </u>	
	••		
Monitor item			Condition
CDL LOCK SW	CDL LOCK SW		CK : ON OCK : OFF
		LOCK : OFF	
CDL UNLOCK SW		UNLOCK : ON	
	w serial link is OK. <u>C-29, "POWER WIN</u> MAIN SWITCH	: Diagnosis P	FOCH : Diagnosis Procedure". rocedure INFOID:000000081943
1. Turn ignition switch	ON.		connector and ground
	in power window ma	In Switch Hamess	connector and ground.
(+))		Signal
POWEr WIDDOW IDDID SWITCD		(Reference value)	
Connector	Terminal		
D8	12	Ground	(V) 15 10 5
20		Crowing	0 1 1 1 1

Is the inspection result normal?

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

 $2. {\sf CHECK POWER WINDOW SERIAL LINK SIGNAL}$

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POWER WINDOW SERIAL LINK

< DTC/CIRCUIT DIAGNOSIS >

1. Turn ignition switch OFF.

- 2. Disconnect power window main switch connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between power window main switch harness connector and ground.

(+)		
Power windo	Power window main switch		Voltage (V) (Approx.)
Connector	Terminal		
D8	12	Ground	12

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-89. "Removal and Installation".

NO >> GO TO 3.

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect BCM connector.

3. Check continuity between BCM connector and power window main switch connector.

BCM		Power window main switch		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M123	132	D8	12	Existed	

4. Check continuity between BCM connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M123	132		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-95, "Removal and Installation"</u>.

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END POWER WINDOW SUB-SWITCH

POWER WINDOW SUB-SWITCH : Description

Power window main switch, power window sub-switch and BCM transmit and receive the signal by power window serial link.

The signal mentioned below is transmitted from BCM to power window main switch, power window sub-switch.

• Keyless power window down signal

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

POWER WINDOW SUB-SWITCH : Component Function Check

INFOID:000000008194373

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

With CONSULT

INFOID:000000008194372

POWER WINDOW SERIAL LINK

< DTC/CIRCUIT DIAGNOSIS >

Check ("CDL LOCK SW ", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYS-TEM" with CONSULT. Refer to <u>DLK-40, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK) (For</u> <u>Coupe)</u>".

Monitor iten	ı		Condition	1
CDL LOCK SW		LO	СК	: ON
CDL LOCK SVV		UNL	OCK	: OFF
CDL UNLOCK SW		LO	СК	: OFF
		UNL	OCK	: ON
the inspection result norm	<u>al?</u>			
YES >> Power window s				
NO >> Refer to $\underline{PWC-3}$			-	<u>roceaure</u> .
OWER WINDOW SU	JB-SWITCH :	Diagnosis Pr	ocedure	INFOID:00000008194374
.CHECK POWER WINDO	W SWITCH OUT	PUT SIGNAL		
. Turn ignition switch ON.				
. Check signal between p	ower window sub	o-switch harness of	connector and gro	ound.
(+)				
Power window sub	o-switch	()		Signal
Connector	Terminal		(R	eference value)
			(V)	
			15 10	
D38	16	Ground	ŏ –	
the inspection result norm	al?			
YES >> Replace power v		h. Refer to PWC-	89. "Removal and	d Installation".
NO >> GO TO 2.				
CHECK POWER WINDO	W SERIAL LINK	SIGNAL		
. Turn ignition switch OFF				
. Disconnect power windo	w sub-switch cor	nnector.		
	power window su	ub-switch harness	connector and d	round.
. Turn ignition switch ON. Check voltage between				
. Turn ignition switch ON. . Check voltage between				
. Check voltage between	+)			
. Check voltage between			()	Voltage (V) (Approx.)
. Check voltage between	+)		()	
. Check voltage between (- Power windo	+) w sub-switch		(–) Ground	
Check voltage between (- Power windo Connector	+) w sub-switch Terminal 16			(Approx.)
Check voltage between (- Power windo Connector D38 the inspection result norm YES >> Replace power v	+) w sub-switch Terminal 16 al?	tch. Refer to <u>PWC</u>	Ground	(Approx.) 12
Check voltage between	+) w sub-switch Terminal 16 al? window main swit		Ground	(Approx.) 12
Check voltage between (- Power windo Connector D38 the inspection result norm YES >> Replace power v	+) w sub-switch Terminal 16 al? window main swit		Ground	(Approx.) 12
Check voltage between	+) w sub-switch Terminal 16 al? window main swit W SERIAL LINK	CIRCUIT	Ground C-89, "Removal ar	(Approx.) 12

[COUPE]

А

POWER WINDOW SERIAL LINK

< DTC/CIRCUIT DIAGNOSIS >

В	BCM		Power window sub-switch		
Connector	Terminal	Connector Terminal		Continuity	
M123	132	D38	16	Existed	

4. Check continuity between BCM connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M123	132		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-95, "Removal and Installation"</u>.

NO >> Repair or replace harness.

ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status	D
FR WIPER HI	Other than front wiper switch HI	Off	
	Front wiper switch HI	On	E
FR WIPER LOW	Other than front wiper switch LO	Off	
	Front wiper switch LO	On	_
FR WASHER SW	Front washer switch OFF	Off	F
FR WASHER SW	Front washer switch ON	On	
FR WIPER INT	Other than front wiper switch INT	Off	G
	Front wiper switch INT	On	
FR WIPER STOP	Front wiper is not in STOP position	Off	
FR WIPER STOP	Front wiper is in STOP position	On	Н
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position	
TURN SIGNAL R	Other than turn signal switch RH	Off	
TURN SIGNAL R	Turn signal switch RH	On	
TURN SIGNAL L	Other than turn signal switch LH	Off	J
TURIN SIGNAL L	Turn signal switch LH	On	
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off	
TAIL LAIVIP SVV	Lighting switch 1ST or 2ND	On	PWC
HI BEAM SW	Other than lighting switch HI	Off	
	Lighting switch HI	On	L
HEAD LAMP SW 1	Other than lighting switch 2ND	Off	
HEAD LAIVIE SVV I	Lighting switch 2ND	On	
HEAD LAMP SW 2	Other than lighting switch 2ND	Off	M
HEAD LAWF SW 2	Lighting switch 2ND	On	
PASSING SW	Other than lighting switch PASS	Off	Ν
FASSING SW	Lighting switch PASS	On	IN
AUTO LIGHT SW	Other than lighting switch AUTO	Off	
AUTO LIGHT SW	Lighting switch AUTO	On	0
FR FOG SW	NOTE: The item is indicated, but not monitored.	Off	
RR FOG SW	Rear fog lamp switch OFF	Off	Ρ
	Rear fog lamp switch ON	On	
DOOR SW-DR	Driver door closed	Off	
	Driver door opened	On	
	Passenger door closed	Off	
DOOR SW-AS	Passenger door opened	On	

INFOID:000000008837050

А

В

D

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-RL	NOTE: The item is indicated, but not monitored.	Off
	Back door closed (Coupe models)Trunk lid closed (Roadster models)	Off
DOOR SW-BK	Back door opened (Coupe models)Trunk lid opened (Roadster models)	On
	Other than door lock and unlock switch LOCK	Off
CDL LOCK SW	Door lock and unlock switch LOCK	On
	Other than door lock and unlock switch UNLOCK	Off
CDL UNLOCK SW	Door lock and unlock switch UNLOCK	On
	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
NOTE: For models with NAVI this item is not monitored.	Rear window defogger switch ON	On
H/L WASH SW	NOTE: The item is indicated, but not monitored.	Off
	Trunk lid opener cancel switch OFF	Off
TR CANCEL SW	Trunk lid opener cancel switch ON	On
	Back door opener switch OFF (Coupe models)Trunk lid opener switch OFF (Roadster models)	Off
TR/BD OPEN SW	 While the back door opener switch is turned ON (Coupe models) While the trunk lid opener switch is turned ON (Roadster models) 	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
	LOCK button of the Intelligent Key is not pressed	Off
RKE-LOCK	LOCK button of the Intelligent Key is pressed	On
	UNLOCK button of the Intelligent Key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the Intelligent Key is pressed	On
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is not pressed	Off
NOTE: For Coupe models this item is not monitored.	TRUNK OPEN of the Intelligent Key is pressed	On
	PANIC button of the Intelligent Key is not pressed	Off
RKE-PANIC	PANIC button of the Intelligent Key is pressed	On
	UNLOCK button of the Intelligent Key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is pressed and held	On
	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simul- taneously	Off
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is pressed and held simulta- neously	On

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
UT TIONE SENSOR	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
REQ 3W -A3	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed (Coupe models)Trunk lid door request switch is not pressed (Roadster models)	Off
	Back door request switch is pressed (Coupe models)Trunk lid door request switch is pressed (Roadster models)	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	The clutch pedal is not depressed	Off
NOTE: For A/T models this item is not monitored.	The clutch pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
	The brake pedal is not depressed	Off
BRAKE SW 2	The brake pedal is depressed	On
DETE/CANCL SW	 Selector lever in P position (A/T models) The clutch pedal is depressed (M/T models without SynchroRev Match mode) 	Off
For M/T models with Synchro- Rev Match mode this item is not monitored.	 Selector lever in any position other than P (A/T models) The clutch pedal is not depressed (M/T models without SynchroRev Match mode) 	On
SFT PN/N SW NOTE: For roadster M/T models and	 Selector lever in any position other than P and N (A/T models) Control lever in any position other than neutral position (Coupe M/T models with SynchroRev Match mode) 	Off
coupe M/T models without SynchroRev Match mode this item is not monitored.	 Selector lever in P or N position (A/T models) Control lever in neutral position (Coupe M/T models with SynchroRev Match mode) 	On
S/L -LOCK	NOTE: The item is indicated but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated but not monitored.	Off
	Driver door is unlocked	Off
UNLK SEN -DR	Driver door is locked	On
	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	 Selector lever in any position other than P and N (A/T models) The clutch pedal is not depressed (M/T models) 	Off
	 Selector lever in P or N position (A/T models) The clutch pedal is depressed (M/T models) 	On
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speedom- eter reading
VEH SPEED 2	While driving	Equivalent to speedom- eter reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The Intelligent Key is not inserted into key slot	Off
	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key

< ECU DIAGNOSIS INFORMATION >

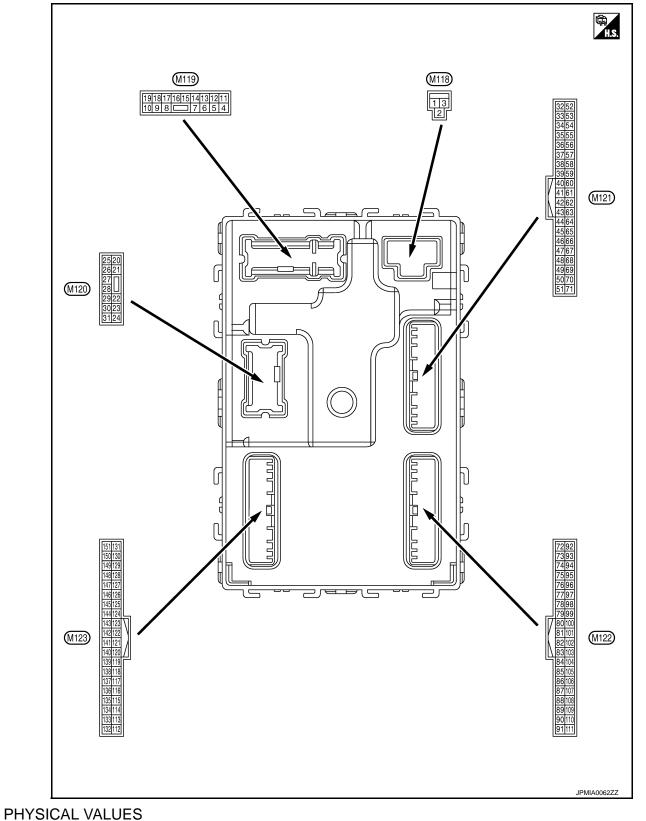
[COUPE]

Monitor Item	Condition	Value/Status
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID reg- istered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID reg- istered to BCM.	Done
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID reg- istered to BCM.	Done
	The key ID that the key slot receives is not recognized by the first key ID reg- istered to BCM.	Yet
CONFIRM ID1	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
	The ID of fourth Intelligent Key is not registered to BCM	Yet
TP 4	The ID of fourth Intelligent Key is registered to BCM	Done
	The ID of third Intelligent Key is not registered to BCM	Yet
⁻ P 3 ⁻ P 2	The ID of third Intelligent Key is registered to BCM	Done
	The ID of second Intelligent Key is not registered to BCM	Yet
1P 2	The ID of second Intelligent Key is registered to BCM	Done
TD /	The ID of first Intelligent Key is not registered to BCM	Yet
TP 1	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
	ID of front LH tire transmitter is registered	Done
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet
	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

С

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



< ECU DIAGNOSIS INFORMATION >

[COUPE]

	nal No.	Description		Condition		Value
(vvire +	e color)	Signal name	Input/ Output			(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch (OFF	Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch (OFF	12 V
3 (Y)	Ground	P/W power supply (IGN)	Output	Ignition switch (NC	12 V
					mp battery saver is activated. or room lamp power supply)	0 V
4 (R)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- erior room lamp power sup-	12 V
5	Ground	Passenger door UN-	Output	Passenger	UNLOCK (Actuator is activated)	12 V
(G)	Ground	LOCK		door	Other than UNLOCK (Ac- tuator is not activated)	0 V
8	Oneveral	All doors, fuel lid	Quitaut	All doors, fuel	LOCK (Actuator is activated)	12 V
(V)		Output	lid	Other than LOCK (Actuator is not activated)	0 V	
9	Onered	Driver door, fuel lid	Quitaut	, Driver door,	UNLOCK (Actuator is activated)	12 V
(G)	Ground	UNLOCK	Output	fuel lid	Other than UNLOCK (Actuator is not activated)	0 V
11 (BR)	Ground	Battery power supply	Input	Ignition switch (OFF	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch (NC	0 V
					OFF	0 V
14 (R)		Tail lamp	ON	NOTE: When the illumination brighten- ing/dimming level is in the neutral position.		
15	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	JSNIA0010GB Battery voltage
(Y)			-		ACC	0 V

Ρ

< ECU DIAGNOSIS INFORMATION >

Termin		Description				Value	
(Wire o	color) –	Signal name	Input/ Output		Condition	(Approx.)	
					Turn signal switch OFF	0 V	
17 (W)	Ground	Turn signal RH (Front and side)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s FKID0926E 6.5 V	
					Turn signal switch OFF	0 V	
18 (O)	Ground	Turn signal LH (Front and side)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s 1 s PKID0926E 6.5 V	
19	Ground	Interior room lamp	Output	Interior room	OFF	12 V	
(P)	Cround	control	Output	lamp	ON	0 V	
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V	
23		Back door/Trunk lid		Back door/	OPEN (Back door/Trunk lid open- er actuator is activated)	12 V	
(L)* ¹ (Y)* ²	Ground	open	Output	Trunk lid	Other than OPEN (Back door/Trunk lid open- er actuator is not activat- ed)	0 V	
24* ⁸	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V	
(O)			1	5 - F	ON	12 V	
					Turn signal switch OFF	0 V	
25 (LG)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 50 1 s PKID0926E 6.5 V	
30		Luggage room/Trunk		Luggage room/	ON	0 V	
(R)	Ground	room lamp	Output	Trunk room lamp	OFF	12 V	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description					
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)	A
34	Ground	Luggage room/Trunk	Output	Output Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(G)		room antenna (-)	Guipur		When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 15 0 15 0 15 0 15 0 15 0 15 0 1	E
35	Ground	Luggage room/Trunk	age room/Trunk antenna (+) Output	utput Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	G H
(R)	(R) Ground	room antenna (+)			When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	J PWC
38	Ground	Rear bumper anten-	Output	When the back door/trunk lid door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M
(B)		na (–)	Caput	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s JMKIA0063GB	O P

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	
(Wire +	color)	Signal name	Input/ Output	U	Condition	(Approx.)	
39	Ground	Rear bumper anten-	Output	When the back door/trunk lid door request switch is oper- ated with igni- tion switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 0 1 s JMKIA0062GB	
(W)	Giouna	na (+)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 0 15 10 0 15 10 0 15 10 0 15 10 10 10 10 10 10 10 10 10 10 10 10 10	
47	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	12 V	
(V)	Ground	E/R) control	Output	Ignition Switch	ON	0 V	
			Ignition switch ON (A/T mod-	When selector lever is in P or N position	12 V		
52				els)	When selector lever is not in P or N position	0 V	
(SB)		Starter relay control	Oel	Ignition switch ON (M/T mod-	When the clutch pedal is depressed	Battery voltage	
				els)	When the clutch pedal is not depressed	0 V	
60	Ground	Push-button ignition	Input	Push-button ig- nition switch	Pressed	0 V	
(BR)		switch (Push switch)		(push switch)	Not pressed	Battery voltage	
					ON (Pressed)	0 V	
61 (W)	Ground	Back door/Trunk Lid door request switch	Input	Back door/ Trunk lid door request switch	OFF (Not pressed)	(V) 15 10 5 10 10 ms JPMIA0016GB 1.0 V	
64	Ground	Intelligent Key warn-	Output	Intelligent Key	Sounding	0 V	
(G)	Ground	ing buzzer	Sulput	warning buzzer	Not sounding	12 V	
66 (R)	Ground	Back door/Trunk room lamp switch	Input	Back door/ Trunk room lamp switch	OFF (Door close)	(V) 15 0 10 10 10 10 10 10 10 10 10 10 10 10 1	
					ON (Door open)	0 V	
					· · /		

< ECU DIAGNOSIS INFORMATION >

[COUPE]

	nal No.	Description				Value	А
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)	A
					Pressed	0 V	В
67 (GR)	Ground	Back door/Trunk lid opener switch	Input	Back door/ Trunk lid open- er switch	Not pressed	(V) 15 10 5 10 10 10 10 11.8 V	C
							Е
				Output Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 •••••••••••••••••••••••••••••	F
72	72 Ground (L)	Room antenna 2 (–) (Center console)	Output			JMKIA0062GB	G
(L)					When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 •••••••••••••••••••••••••••••	H
						JMKIA0063GB	
					When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1	PWO
73 (P)	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF		JMKIA0062GB	
	(P)					(V) 15 10 5 0	Μ
					When Intelligent Key is not in the passenger compart- ment	5 0 	Ν
						JMKIA0063GB	0

Ρ

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output			(Approx.)
74	Ground	Passenger door an-	0.454	When the pas- senger door re- quest switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 1 s JMKIA0062GB
(SB)	Ground	tenna (-)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 5 1 5 0 1 5 10 5 0 1 5 10 5 0 1 5 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 10 5 0 10 10 10 10 10 10 10 10 10 10 10 10 1
75	Ground	Passenger door an-	Output	When the pas- senger door re- quest switch is - operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)		tenna (+)			When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s JMKIA0063GB
76	Ground	Driver door antenna	Output	When the driv- er door request switch is oper- ated with igni- tion switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 0 15 0 15 0 15 0 15 0 15 0 15 0 15
(V)	Ground	round (-) Ou	Cuput		When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s 0 JMKIA0063GB

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)	А
77	Ground	Driver door antenna	Output	When the driv- er door request switch is oper-	When Intelligent Key is in the antenna detection area	(V) 15 0 1 s JMKIA0062GB	B C D
(LG)	Ground	(+)	Output	ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E
78* ²	Ground	Room antenna 1 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 15 0 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 15 15 15 15 15 15 15 15	G H
(L)		Koom antenna 1 (–) (Instrument panel)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 10 10 10 10 10 10 10 10 10	J PWC
79* ²	Ground	Room antenna 1 (+)	Outout	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	M
(R)	Ground Room antenna 1 (+) (Instrument panel)	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 10 5 0 1 5 10 5 0 1 5 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 10 10 10 10 10 10 10 10 10 10 10 10	O P	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC ON	0 V 12 V
	Remote keyless entry	Input/	During waiting		(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
(GR)	(GR) Ground receiver (fr	receiver (front) com- munication	Output	When operating gent Key	either button on the Intelli-	(V) 15 10 5 0 1 ms JMKIA0065GB
		Ground Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V
87 (BR)	Ground				Rear fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0038GB 1.3 V
					Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 0 2 ms JPMIA0040GB 1.3 V

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	
(Wire +	e color) –	Signal name	Input/ Output		Condition	value (Approx.)	A
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V	B C D
88	Ground	Combination switch	Input	Input Combination switch	Lighting switch HI (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3 V	E
(V)		INPUT 3	mput		Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	G H
				Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 0 2 ms JPMIA0040GB 1.3 V	J PW0	
90 (P)	Ground	CAN-L	Input/ Output		_	_	
91 (L)	Ground	CAN-H	Input/ Output		_		M
92 (LG)	Ground	Key slot illumination	Output	Key slot illumi- nation	OFF Blinking	0 V (V) 15 10 5 0 1 s JPMIA0015GB 6.5 V	N O P
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	ON OFF (LOCK indicator is not illuminated) ON	12 V Battery voltage 0 V	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output	t OFF		(Approx.)
95	Ground	ACC relay control	Output	Ignition switch		0 V
(O)	0.00.00	-	o aip ai	-grimer e triteri	ACC or ON	12 V
96* ³ (Y)	Ground	A/T shift selector (De- tention switch) power supply	Output		_	12 V
		Selector lever P posi- tion switch (A/T mod-		Selector lever	P position	0 V
0		els)		Selector level	Any position other than P	12 V
99* ⁶ (R)	Ground	Clutch pedal position switch (M/T models	Input	Clutch pedal	OFF (Clutch pedal is de- pressed)	0 V
		without SynchroRev Match mode)		position switch	ON (Clutch pedal is not depressed)	Battery voltage
					ON (Pressed)	0 V
100 (GR)	Ground	Passenger door re- quest switch	Passenger	OFF (Not pressed)	(V) 15 10 10 ms JPMIA0016GB 1.0 V	
					ON (Pressed)	0 V
101 (Y) Ground	B Driver door request Inpu switch	Input	Input Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 10 10 10 10 10 10 10 10 10	
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(O)	Ground	lay control	Supur	ignition switch	ON	12 V
103 (LG)	Ground	Remote keyless entry receiver (front) power supply	Output	Ignition switch C	DFF	12 V

< ECU DIAGNOSIS INFORMATION >

[COUPE]

	Terminal No. Description (Wire color)					Value	
(Wire +	color) –	Signal name	Input/ Output		Condition	(Approx.)	ļ
					All switches OFF	(V) 15 0 2 ms JPMIA0041GB 1.4 V	C
					Turn signal switch LH	(V) 15 10 2 ms JPMIA0037GB 1.3 V	F
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 0 2 ms JPMIA0036GB 1.3 V	F
					Front wiper switch LO	(V) 15 0 2 ms JPMIA0038GB 1.3 V	P۱
					Front washer switch ON	(V) 15 0 2 ms JPMIA0039GB 1.3 V	N

Ρ

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description	I			Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)	
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V	
108	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 10 0 2 ms JPMIA0038GB 1.3 V	
(R)		INPUT 4		switch		Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0036GB 1.3 V
					Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 0 2 ms JPMIA0039GB 1.3 V	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description					
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)	A
					All switches OFF	(V) 15 10 5 0 2.ms JPMIA0041GB 1.4 V	B C D
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	E
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 0 2 ms 1.3 V	G H I
					Front wiper switch INT	(V) 15 0 2 ms JPMIA0038GB 1.3 V	J PWC L
					Front wiper switch HI	(V) 15 0 2 ms JPMIA0040GB 1.3 V	M
					ON	0 V	0
110 (P)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 10 10 10 10 10 10 10 10 10 10	Ρ

< ECU DIAGNOSIS INFORMATION >

Termin		Description				Value
(Wire) +	color) —	Signal name	Input/ Output		Condition	(Approx.)
113	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(O)	Cround		input	ON	When dark outside of the vehicle	Close to 0 V
114* ⁴	Ground	Clutch interlock	Input	Clutchinterlock	OFF (Clutch pedal is not depressed)	0 V
(R)		switch		switch	ON (Clutch pedal is de- pressed)	Battery voltage
115* ⁹ (O)	—	—	_		_	_
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
118	Ground	Stop lamp switch 2	Input	Stop lamp	OFF (Brake pedal is not depressed)	0 V
(P)	Cround		mpar	switch	ON (Brake pedal is de- pressed)	Battery voltage
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 10 10 ms JPMIA0012GB 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V
121	Ground	Key slot switch	Input	When the Intellig	gent Key is inserted into key	12 V
(R)	Ground	Ney Slot Switch	input	When the Intellig key slot	gent Key is not inserted into	0 V
123	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
(W)					ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 0 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V

< ECU DIAGNOSIS INFORMATION >

(\\/iro	nal No.	Description				Value	
+	color) –	Signal name	Input/ Output		Condition	Value (Approx.)	A
129* ² (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMA0012GB	B
						1.1 V 0 V	D
130* ⁷ (L)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	ON Rear window defogger switch OFF	(V) 15 10 5 0 	E
					Rear window defogger switch ON	JPMIA0012GB 1.1 V 0 V	G
132 (Y)*1 (V)* ²	Ground	Power window switch and soft top control unit communication	Input/ Output	Ignition switch C	DN	(V) 15 10 5 0 10 ms JPMIA0013GB	H I J
						10.2 V	
				Ignition switch C		12 V	PWC
					ON (Tail lamps OFF)	9.5 V NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.	L
133 (G)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps ON)		M
					OFF	JPMIA0159GB	
134	Ground	LOCK indicator lama	Output	LOCK indicator	OFF	Battery voltage	0
(GR)	Ground	LOCK indicator lamp	Output	lamp	ON	0 V	
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V	Ρ
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V	
(V)		power supply		3	ACC or ON	5.0 V	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
				Ignition switch OFF (Remote key- less entry re-	During waiting	(V) 15 10 5 1 1 1 1 1 1 1 1 1 1 1 1 1
139 (L)	Ground	Tire pressure receiv- er communication	Input/ Output	ceiver communica- tion)	When operating either button on the Intelligent Key	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1
			Ignition swi ON (Tire pressu	Ignition switch	Standby state	(V) 4 2 0 • • 0.2s OCC3881D
				receiver com- munication)	When receiving the signal from the transmitter	(V) 6 4 2 0 + 0.2s OCC3860D
		Selector lever P/N		Selector lever	P or N position	12 V
140* ⁵		position (A/T models)			Except P and N positions	0 V
(G)	Ground	Park/neutral position switch (Coupe M/T	Input	Ignition switch	Control lever in neutral po- sition	Battery voltage
		models with Synchro- Rev Match mode)		ON	Control lever in any posi- tion other than neutral	0 V
					ON	0 V
141 (Y)	Ground	Security indicator lamp	Output	Security indica- tor lamp	Blinking	(V) 15 0 1 s JPMIA0014GB 11.3 V
					OFF	12 V
	1					

< ECU DIAGNOSIS INFORMATION >

(Wire color) Signal name Input Output Condition A (Approx.) A 142 (0) Ground Combination switch OUTPUT 5 Output All switches OFF 0 V B 143 (P) Ground Combination switch OUTPUT 5 Output Combination (Wiper intermitted toti dial 4) All switches OFF 0 V B 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Output All switches OFF (Wiper intermittent dial 4) 0 V E 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch Combination switch All switches OFF (Wiper intermittent dial 4) 0 V F 144 (G) Ground Combination switch OUTPUT 2 Output Combination switch Combination switch Combination switch All switches OFF (Wiper intermittent dial 4) 0 V F 145 (G) Ground Combination switch OUTPUT 2 Output Combination switch Combination switch Combination switch All switches OFF (Wiper intermittent dial 4) 0 V F 146 (G) Ground Combination switch (U) PUT 2 Output Combination switch		nal No.	Description				Volue	0
142 (O) Ground Combination switch OUTPUT 5 Output Combination switch Work internit- tent dial 4) Lighting switch 1ST Ughting switch RH If the switch ST Ughting switch RH If the switch ST Ughting switch RH C 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch If witches OFF (Wiper intermitten dial 4) 0 V E 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination Switch If witches OFF (Wiper intermitten dial 4) 0 V E 144 (G) Ground Combination switch OUTPUT 2 Output Combination switch If witches OFF (Wiper intermitten dial 4) Viper intermitten dial 4) Viper intermitten dial 4) 144 (G) Ground Combination switch OUTPUT 2 Output Combination switch If combination switch All switches OFF (Wiper intermitten dial 4) Viper intermitten dial 4) 144 (G) Ground Combination switch OUTPUT 2 Output Combination switch All switches OFF (Wiper intermitten dial 6) Viper intermitten dial 6) 145 (B) Ground Combination switch OUTPUT 3 Output Combination switch If switches OFF (Wiper intermitten dial 6) Viper intermitten dial 6) 146 (B) Ground Combination switch OUTPUT 3 Output Combination switch I		1	Signal name			Condition	Value (Approx.)	A
142 (O) Ground Combination switch OUTPUT S Output Combination switch heri dial 4) Lighting switch 1ST Lighting switch 2ND View 10.7V C 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch All switches OFF (Wiper intermittent dial 4) 0 V E 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch All switches OFF (Wiper intermittent dial 4) 0 V E 144 (P) Ground Combination switch OUTPUT 2 Output Combination switch All switches OFF (Wiper intermittent dial 4) 0 V F 144 (C) Ground Combination switch OUTPUT 2 Output Combination switch Combination switch May of the conditons be- low with all switches OFF (Wiper intermittent dial 4) 0 V F 144 (C) Ground Combination switch OUTPUT 2 Output Combination switch May of the conditons be- low with all switches OFF (Wiper intermittent dial 4) 0 V F 145 (S) Ground Combination switch OUTPUT 3 Output Combination switch with all 4) All switches OFF (Wiper intermittent dial 5) 0 V 146 (S) Ground Combination switch OUTPUT 3 Output Combination switch with all 4) All switches OFF (Wiper intermittent dial 6) Viper intermittent dial 6)						All switches OFF	0 V	D
142 (O) Ground Combination switch OUTPUT 5 Combination Switch (Wper intermittent dial 4) Lighting switch 2ND Turn signal switch 2ND 10 0 Combination Switch (Wper intermittent dial 4) C 143 (P) Ground Combination switch OUTPUT 1 Combination Switch Combination Switch Combination Switch Combination (Wper intermittent dial 4) 0 V E 143 (P) Ground Combination Switch OUTPUT 1 Output Combination Switch						Lighting switch 1ST		В
142 (O) Ground Combination switch OUTPUT 5 Output witch Weight intermit- tion dial 4) Lighting switch 2ND 19 2 new construe 10.7 V C 143 (P) Ground Combination switch OUTPUT 1 All switches OFF (Mpor intermitten dial 4) 0 V E 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch Combination switch Combination Switch F OV E 144 (G) Ground Combination switch OUTPUT 2 Output Combination switch Combination switch Combination switch F OV F 144 (G) Ground Combination switch OUTPUT 2 Output Combination switch Combination switch Combination switch F OV F 144 (G) Ground Combination switch OUTPUT 2 Output Combination switch Combination switch Combination switch F OV F 145 (C) Ground Combination switch OUTPUT 3 Output Combination switch Combination switch Combination switch All switches OFF O V F 145 (C) Ground Combination switch OUTPUT 3					Combination	Lighting switch HI		
(O) 0.0000 CUTPUT 5 0.00000 (Wiper intermitter tield 4) Turn signal switch RH Turn signal switch RH 0.7V 0 14.3 Ground Combination switch OUTPUT 1 Output Combination switch OUTPUT 1 0.04put Combination Switch OUTPUT 2 0.04put Combination Switch OUTPUT 3 0.04put Combination Switch OUTPUT 4 0.04put Combination Switch OUTPUT 3 0.04put Combination Switch OUTPUT 3 0.04put Combination Switch OUTPUT 4 0.04put Combination Switch OUTPUT 4 0	142	Cround	Combination switch	Output		Lighting switch 2ND		С
143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch HI (P) Front wiper switch HI (P) (V) (P) Front wiper switch dial 4) (V) (P) Front wiper intermittent dial 4) (V) Front wiper intermittent dial 4) (V)	(O)	Ground	OUTPUT 5	Output		Turn signal switch RH	0 2 ms JPMIA0031GB	D
143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch Any of the conditions be- wither intermittent dial 2 . Wiper intermittent dial 3 . Wiper intermittent dial 4 . Wiper intermittent dial 4 V) Image: Combination Switch OUTPUT 2 F 144 (G) Ground Combination switch OUTPUT 2 Output Combination Switch Combination Switch OI (Wiper intermittent dial 4) 0 V H 144 (G) Ground Combination switch OUTPUT 2 Output Combination Switch Combination Switch OI (Wiper intermittent dial 4) 0 V H 145 (L) Ground Combination switch OUTPUT 3 Output Combination Switch Combination Switch Font washer switch OI (Wiper intermittent dial 5) Image: Switch SOFF 0 V PW 145 (L) Ground Combination switch OUTPUT 3 Output Combination Switch Combination Switch OI Image: Switch INT Image: Switch INT <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>0 V</td><td>E</td></t<>							0 V	E
143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Any of the conditions be- wither intermittent dial 2 · Wiper intermittent dial 3 · Wiper intermittent dial 4 Image: Combination output G 144 Ground Combination switch OUTPUT 2 Output Combination switch All switches OFF (Wiper intermittent dial 4) 0 V H 144 Ground Combination switch OUTPUT 2 Output Combination switch Combination sbe- low with all switches OFF · Wiper intermittent dial 4) 0 V Image: Combination she low with all switches OFF · Wiper intermittent dial 5 0 V Image: Combination she low with all switches OFF · Wiper intermittent dial 5 0 V Image: Combination she low with all switches OFF · Wiper intermittent dial 5 0 V Image: Combination she low with all switches OFF · Wiper intermittent dial 6 Image: Combination she low with all switches OFF · Wiper intermittent dial 6 Image: Combination she low with all switches OFF · Wiper intermittent dial 6 Image: Combination switch (Wiper intermittent dial 6 Image: Combination switch (Wiper intermittent dial 4) Image: Co							(<u>)</u> []	_
144 Ground Combination switch OUTPUT 2 Output Combination switch Combination Switch Front washer switch ON (Wiper intermittent dial 4) 0 V 144 (G) Ground Combination switch OUTPUT 2 Output Combination switch Any of the conditions be- low with all switches OFF 0 V 145 Ground Combination switch OUTPUT 3 Output Combination switch Combination switch Output All switches OFF 0 V 145 Ground Combination switch OUTPUT 3 Output Combination switch Combination switch Combination switch OUTPUT 3 Output Combination switch All switches OFF 0 V 146 Ground Combination switch OUTPUT 3 Output Combination switch Combination switch OUTPUT 3 Output All switches OFF 0 V 146 Ground Combination switch OUTPUT 4 Output Combination switch OUTPUT 4 Output All switches OFF 0 V 146 Ground Combination switch OUTPUT 4 Output Combination Switch OUTPUT 4 All switches OFF 0 V OUTPUT 4 146 Ground Combination switch OUTPUT 4 Output Combination Sw		Ground		Output		low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6	10 0 2 ms JPMIA0032GB	G
144 (G) Ground Combination switch OUTPUT 2 Output Combination switch (Wiper intermittent dial 4) (Wiper intermittent dial 4) 144 (G) Ground Combination switch OUTPUT 2 Output Combination switch Any of the conditions be- low with all switches OFF • Wiper intermittent dial 5 Umput Image: Combination switch OUTPUT 3 Image: Combination switch OUTPUT 4 Image: Combination switch Output Image: Combination switch ON							0 V	Η
144 (G) Ground Combination switch OUTPUT 2 Output Combination switch Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 10 Image: Combination switch 0 J 145 (L) Ground Combination switch OUTPUT 3 Output Combination switch Combination 0 Any of the conditions be- low with all switches OFF • Wiper intermittent dial 5 Image: Combination 0 J 145 (L) Ground Combination switch OUTPUT 3 Output Combination switch (Wiper intermit- tent dial 4) All switches OFF Fort wiper switch LO Image: Combination 10 Image: Combination 10 M 146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Combination switch (Wiper intermit- tent dial 4) All switches OFF Rear fog lamp switch ON OV M 146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Combination switch (Wiper intermit- tent dial 4) Turn signal switch LH Image: Combination switch LH <								
145 Ground Combination switch OUTPUT 3 Output Combination switch (Wiper intermit- tent dial 4) All switches OFF 0 V L 145 Ground Combination switch OUTPUT 3 Output Combination switch (Wiper intermit- tent dial 4) Front wiper switch LO Lighting switch AUTO Uput Image: Combination Switch (Wiper intermit- tent dial 4) Rear fog lamp switch ON Image: Combination Switch ON M 146 Ground Combination switch OUTPUT 4 Output Combination Switch (Wiper intermit- tent dial 4) All switches OFF 0 V Image: Combination Switch ON N 146 Ground Combination switch OUTPUT 4 Output Combination Switch (Wiper intermit- tent dial 4) Image: Combination Switch INT Image: Combination Switch INT Image: Combination Switch INT N 146 Ground Combination Switch OUTPUT 4 Output Combination Switch (Wiper intermit- tent dial 4) Image: Combination Switch LH Image: Combination Switc		Ground		Output		low with all switches OFFWiper intermittent dial 1Wiper intermittent dial 5	10 5 0 2 ms	J
145 (L) Ground Combination switch OUTPUT 3 Output Combination switch (Wiper intermit- tent dial 4) Front wiper switch INT Front wiper switch LO Lighting switch AUTO Image: Combination Switch (Wiper intermit- tent dial 4) M 146 (SB) Ground Combination switch OUTPUT 4 Output Combination Switch (Wiper intermit- tent dial 4) All switches OFF 0 V M 146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Combination Switch (Wiper intermit- tent dial 4) All switches OFF 0 V O 146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Turn signal switch LH Image: Combiner switch LH								PVVC
145 (L) Ground Combination switch OUTPUT 3 Output Combination switch (Wiper intermit- tent dial 4) Front wiper switch LO Lighting switch AUTO Image: Combination Lighting switch ON Image: Combination Lighting switch ON Image: Combination Lighting switch ON Image: Combination Lighting switch ON Image: Combination Lighting switch PASS Image: Combination Lighting switch LH Image: Combi						All switches OFF	0 V	
145 (L) Ground Combination switch OUTPUT 3 Output Combination switch (Wiper intermit- tent dial 4) Lighting switch AUTO 15 4 4 Image: Combination Switch (Wiper intermit- tent dial 4) M 146 (SB) Ground Combination switch OUTPUT 4 Output Combination Switch (Wiper intermit- tent dial 4) All switches OFF 0 V N 146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Combination switch (Wiper intermit- tent dial 4) All switches OFF 0 V O 146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Turn signal switch LH Image: Combination Super combination switch LH Image: Combination swi						-	(10)	L
(L) OUTPUT 3 Output (Wiper intermittent dial 4) Rear fog lamp switch ON Image: Combination switch (Wiper intermittent dial 4) M Rear fog lamp switch ON Image: Combination switch (Wiper intermittent dial 4) Rear fog lamp switch ON Image: Combination switch (Wiper intermittent dial 4) N 146 Ground Combination switch (Wiper intermittent dial 4) Output Combination switch (Wiper intermittent dial 4) Image: Combination switch (W							15	
146 (SB) Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Combination switch (Wiper intermit- tent dial 4) All switches OFF 0 V 0 146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Combination switch (Wiper intermit- tent dial 4) Turn signal switch LH Image: Combination switch (SB) Output Output Output Combination switch (Wiper intermit- tent dial 4) Turn signal switch LH Image: Combination switch (SB) Output Output Output Image: Combination switch (SB) Image:		Ground		Output		Lighting switch AUTO		в. Л
146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) All switches OFF 0 V 146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Lighting switch PASS 0 V	(=)					Rear fog lamp switch ON	2 ms	
146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Lighting switch 2ND Image: Combination Lighting switch PASS Image: Combination Subject tent dial 4) Image: Combination Switch (Wiper intermit- tent dial 4) Image: Combination Turn signal switch LH Image: Combination Subject tent dial 4) Image: Combi								IN
146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Lighting switch PASS (V) 15 10 5 0 Image: Combination 15 10 5 0 P							0 V	
146 (SB) Ground Combination switch OUTPUT 4 Output Combination switch (Wiper intermit- tent dial 4) Combination switch (Wiper intermit- tent dial 4) Turn signal switch LH 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 16 10 5 0 16 10 10 10 16 10 10 16 10 10 16 10 10 16 10 10 16 10 10 16 10 16							()/)	0
		Ground		Output	switch (Wiper intermit-		15 10 5 0 •••••• 2 ms	Ρ

< ECU DIAGNOSIS INFORMATION >

[COUPE]

	nal No.	Description				Value
(Wire +	color) –	Signal name	Input/ Output	Condition		(Approx.)
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 10 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151	Ground	Rear window defog-	Output	Rear window	Active	0 V
(G)	Giouna	ger relay control	Output	defogger	Not activated	Battery voltage

*1: Coupe models

*2: Roadster models

*3: A/T models

*4: M/T models

*5: With A/T or coupe models with M/T and SynchroRev Match mode

*6: With A/T or with M/T without SynchroRev Match mode

*7: Without NAVI

*8: With rear fog lamp

*9: BCM does not use this terminal for control.

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

INFOID:000000008837051

[COUPE]

А

В

С

D

Ε

F

Н

J

PWC

L

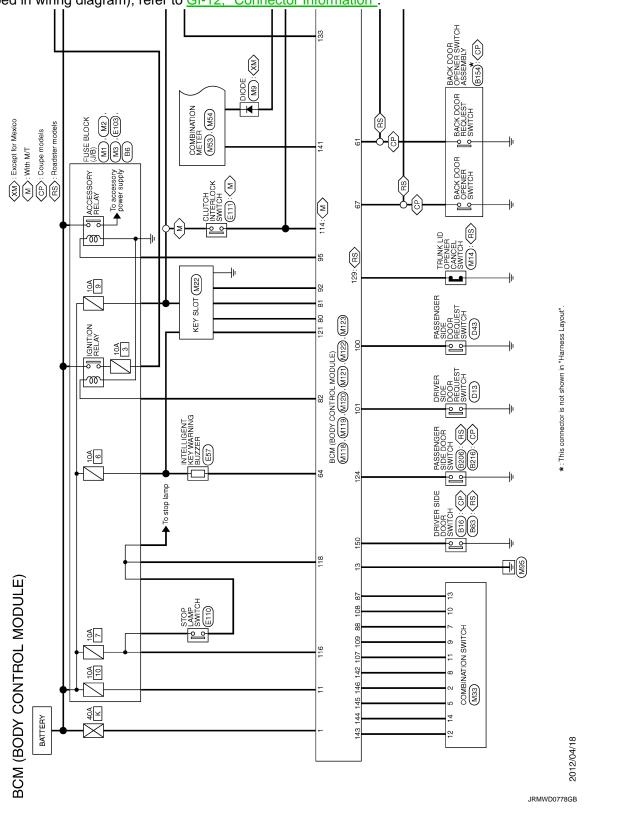
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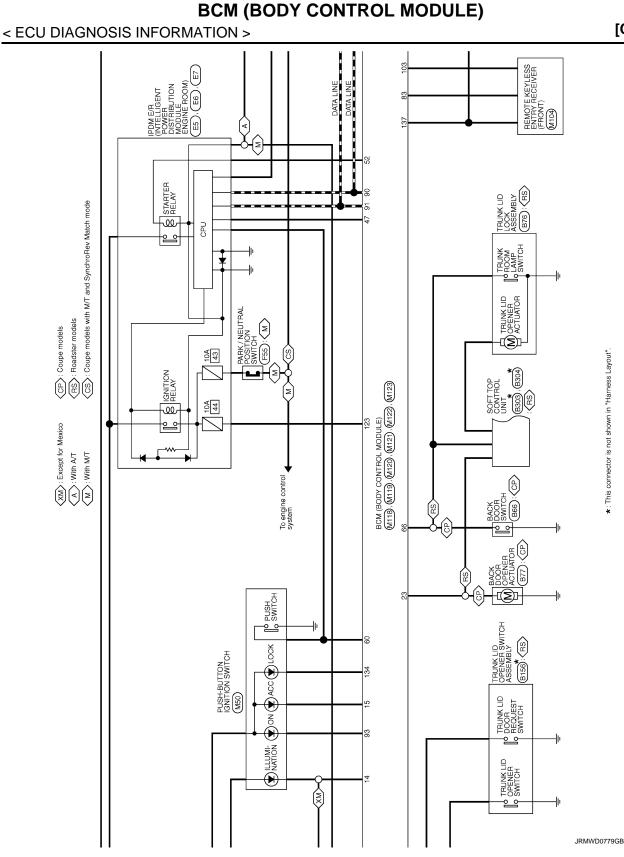
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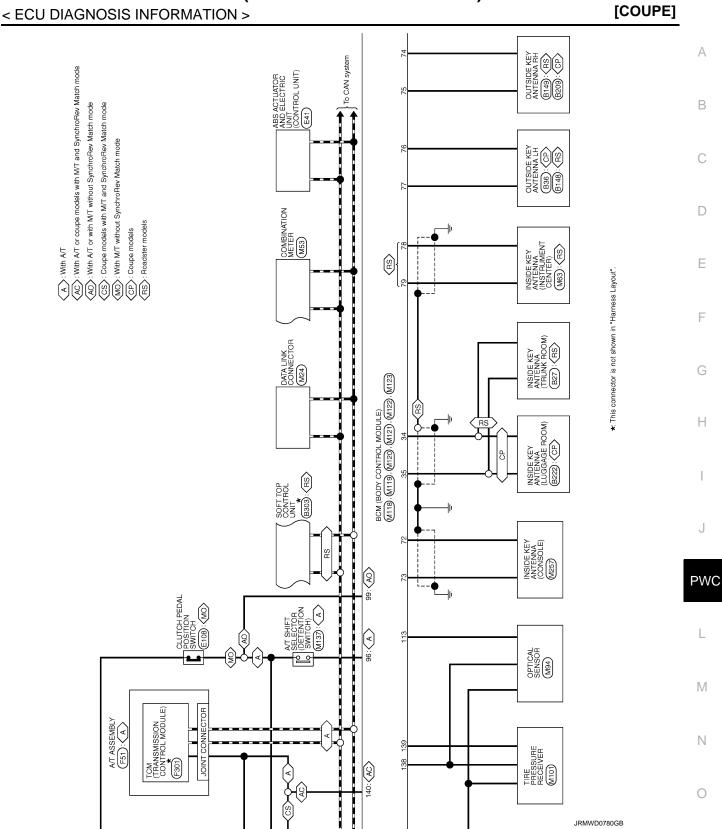
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For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (option abbreviation; if not described in wiring diagram), refer to <u>GI-12, "Connector Information"</u>.







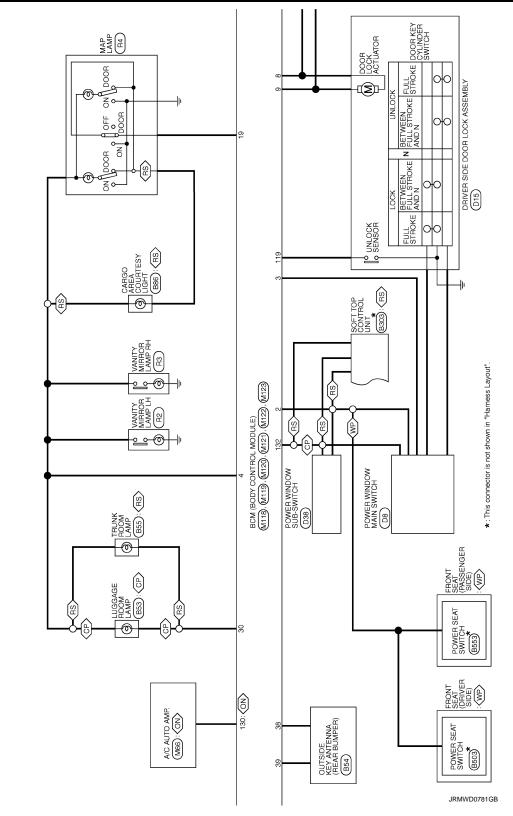
Р

< ECU DIAGNOSIS INFORMATION >

 CP
 : Coupe models

 (FS) : Roadster models
 (WP) : With power seat

 (WP) : With number of the context of t

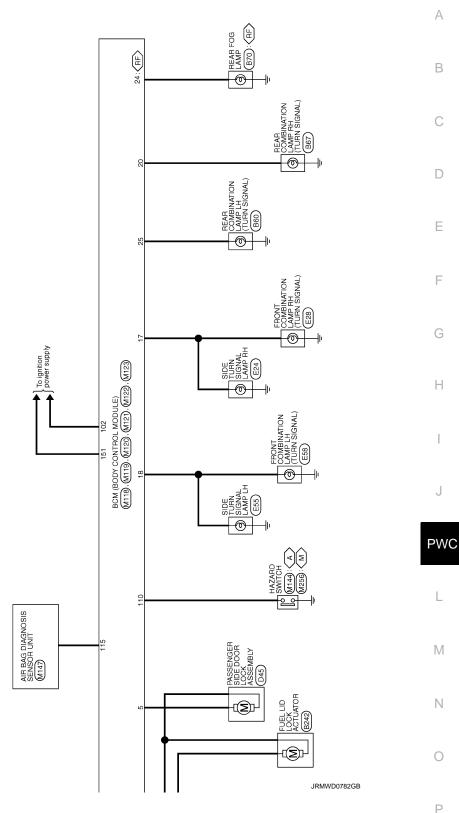


[COUPE]

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

▲ Swith AT
 M With MT
 M Swith MT
 AF
 Swith rear fog lamp



Fail-safe

INFOID:000000008837052

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistentStarter control relay signalStarter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilledPower position changes to ACCReceives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM be- comes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E8: CLUTCH SW	Inhibit engine cranking	 When any of the following BCM recognition conditions are fulfilled Status 1 Clutch switch signal (CAN from ECM): ON Clutch interlock switch signal: OFF (0 V) Status 2 Clutch switch signal (CAN from ECM): OFF Clutch interlock switch signal: ON (Battery voltage)

DTC Inspection Priority Chart

INFOID:000000008837053

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING

< ECU DIAGNOSIS INFORMATION >

[COUPE]

	NUSIS INFORMATION >	[000: 2]
Priority	DTC	
	B2553: IGNITION RELAY	
	B2555: STOP LAMP	
	B2556: PUSH-BTN IGN SW	
	B2557: VEHICLE SPEED	
	B2560: STARTER CONT RELAY	
	B2601: SHIFT POSITION	
	B2602: SHIFT POSITION B2602: SHIFT POSI STATUS	
	 B2603: SHIFT POSI STATUS B2604: PNP SW 	
	 B2605: PNP SW 	
	B2608: STARTER RELAY	
	B260A: IGNITION RELAY	
4	B260F: ENG STATE SIG LOST	
	• B2614: BCM	
	• B2615: BCM	
	• B2616: BCM	
	• B2617: BCM	
	• B2618: BCM	
	B261A: PUSH-BTN IGN SW	
	B261E: VEHICLE TYPE	
	B26E8: CLUTCH SW	
	B26EA: KEY REGISTRATION	
	C1729: VHCL SPEED SIG ERR	
	U0415: VEHICLE SPEED SIG	
	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR 	
	C1706: LOW PRESSURE RR	
	C1707: LOW PRESSURE RL	
	• C1708: [NO DATA] FL	
	• C1709: [NO DATA] FR	
5	• C1710: [NO DATA] RR	
	• C1711: [NO DATA] RL	
	C1716: [PRESSDATA ERR] FL	
	C1717: [PRESSDATA ERR] FR	
	C1718: [PRESSDATA ERR] RR	
	C1719: [PRESSDATA ERR] RL	
	C1734: CONTROL UNIT	
-	B2621: INSIDE ANTENNA	
6	B2622: INSIDE ANTENNA	
	B2623: INSIDE ANTENNA	

DTC Index

NOTE:

The details of time display are as follows.

• CRNT: A malfunction is detected now.

• PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>PWC-14, "COM-</u> N <u>MON ITEM : CONSULT Function (BCM - COMMON ITEM)"</u>.

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference	0 P
No DTC is detected. further testing may be required.	_	_	_	_	_	
U1000: CAN COMM CIRCUIT	—	—	—	—	<u>BCS-49</u>	
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-50	
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-51	

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< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference
B2190: NATS ANTENNA AMP	×	_			<u>SEC-46</u>
B2191: DIFFERENCE OF KEY	×	_			<u>SEC-49</u>
B2192: ID DISCORD BCM-ECM	×	_	_		<u>SEC-50</u>
B2193: CHAIN OF BCM-ECM	×	_	_	_	<u>SEC-52</u>
B2195: ANTI SCANNING	×	_	_	_	<u>SEC-53</u>
B2553: IGNITION RELAY		×	_	—	PCS-50
B2555: STOP LAMP		×		_	<u>SEC-54</u>
B2556: PUSH-BTN IGN SW		×	×	—	<u>SEC-56</u>
B2557: VEHICLE SPEED	×	×	×	—	<u>SEC-58</u>
B2560: STARTER CONT RELAY	×	×	×	—	<u>SEC-59</u>
B2562: LOW VOLTAGE	_	×	_	—	BCS-52
B2601: SHIFT POSITION	×	×	×	—	<u>SEC-60</u>
B2602: SHIFT POSITION	×	×	×	—	<u>SEC-63</u>
B2603: SHIFT POSI STATUS	×	×	×	—	<u>SEC-66</u>
B2604: PNP SW	×	×	×	—	<u>SEC-69</u>
B2605: PNP SW	×	×	×	—	<u>SEC-71</u>
B2608: STARTER RELAY	×	×	×	—	<u>SEC-73</u>
B260A: IGNITION RELAY	×	×	×	—	PCS-52
B260F: ENG STATE SIG LOST	×	×	×	—	<u>SEC-75</u>
B2614: BCM	—	×	×	—	PCS-54
B2615: BCM	—	×	×	—	PCS-57
B2616: BCM	—	×	×	_	PCS-60
B2617: BCM	×	×	×	—	<u>SEC-79</u>
B2618: BCM	×	×	×	—	PCS-63
B261A: PUSH-BTN IGN SW		×	×	—	PCS-64
B261E: VEHICLE TYPE	×	×	imes (Turn ON for 15 seconds)	_	<u>SEC-82</u>
B2621: INSIDE ANTENNA		×	_	—	DLK-228
B2622: INSIDE ANTENNA		×	_	_	• <u>DLK-59</u> (Coupe) • <u>DLK-230</u> (Road- ster)
B2623: INSIDE ANTENNA	_	×	_	_	• <u>DLK-61</u> (Coupe) • <u>DLK-232</u> (Road- ster)
B26E8: CLUTCH SW	×	×	×	_	<u>SEC-76</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-78</u>
C1704: LOW PRESSURE FL	—	_		×	
C1705: LOW PRESSURE FR	—	_		×	
C1706: LOW PRESSURE RR		—		×	<u>WT-20</u>
C1707: LOW PRESSURE RL		_		×	

< ECU DIAGNOSIS INFORMATION >

[COUPE]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference	A
C1708: [NO DATA] FL	—	—	—	×		D
C1709: [NO DATA] FR	_	_		×	<u>WT-22</u>	
C1710: [NO DATA] RR		_	_	×	<u>vv1-22</u>	С
C1711: [NO DATA] RL	—	_	_	×		
C1716: [PRESSDATA ERR] FL	_	_	_	×		
C1717: [PRESSDATA ERR] FR	_	_	_	×	<u>WT-25</u>	D
C1718: [PRESSDATA ERR] RR	—	_	_	×	<u></u>	
C1719: [PRESSDATA ERR] RL	_	_		×		Ε
C1729: VHCL SPEED SIG ERR	_	—	—	×	<u>WT-27</u>	
C1734: CONTROL UNIT				×	<u>WT-29</u>	_

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POWER WINDOW MAIN SWITCH

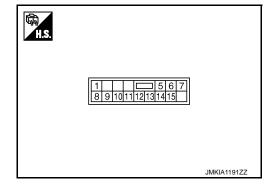
< ECU DIAGNOSIS INFORMATION >

POWER WINDOW MAIN SWITCH

Reference Value

TERMINAL LAYOUT

PHYSICAL VALUES



POWER WINDOW MAIN SWITCH

	inal No. e color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	_	12
5 (BG)	Ground	Encoder power supply	Output	When ignition switch ON or automatic window ad- justing operates	12
6 (GR)	Ground	Door key cylinder switch LOCK signal	Input	Key position (Neutral \rightarrow Locked)	$5 \rightarrow 0$
7 (V)	Ground	Door key cylinder switch UN- LOCK signal	Input	Key position (Neutral \rightarrow Unlocked)	$5 \rightarrow 0$
8 (L)	Ground	Driver side power window motor UP signal	Output	When power window main switch (Driver side) is op- erated UP	12
9 (LG)	Ground	Encoder pulse signal 2	Input	When power window mo- tor operates	(V) 6 4 2 0 10 ms JMKIA0070GB
10	Ground	Ignition switch power signal	Input –	IGN SW ON	12
(Y)	Giouna	Ignition switch power signal	mput	IGN SW OFF	0
11 (BR)	Ground	Driver side power window motor DOWN signal	Output	When power window main switch (Driver side) is op- erated DOWN	12
12 (SB)	Ground	Power window serial link	Input/ Output	Ignition switch ON	(V) 15 10 5 0 10 10 10 10 10 10 10 10 10

INFOID:000000008194380

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

Terminal No. Description А (Wire color) Voltage [V] Condition (Approx.) Input/ -Signal name + Output В (V) 6 13 When power window mo-С 2 Ground Encoder pulse signal 1 Input (R) tor operates 10 ms D JMKIA0070GB 14 0 Ground Encoder ground ____ ____ (G) Ε 15 Ground Ground ____ _ 0 (B)

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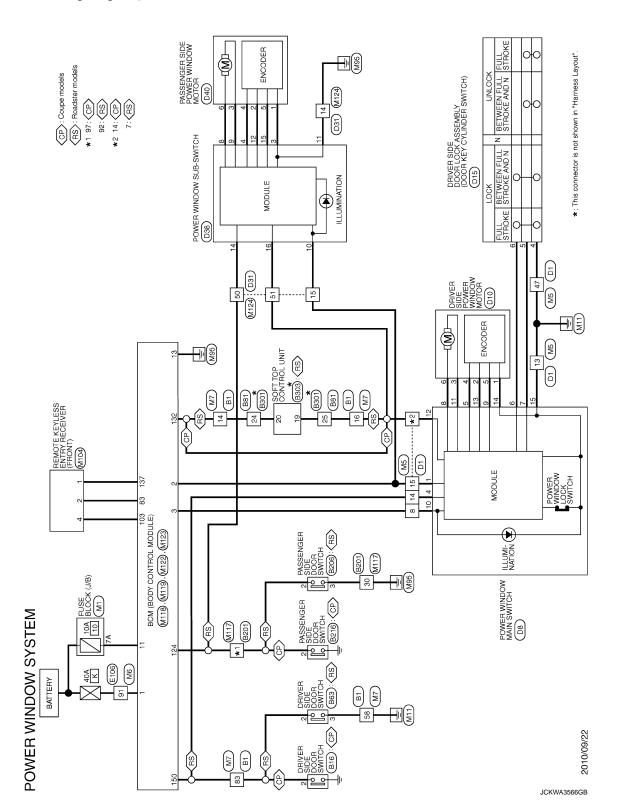
< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

INFOID:000000008194381

[COUPE]

For connector terminal arrangements, harness layouts, and alphabets in a 🔿 (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".



Fail-Safe

FAIL-SAFE CONTROL

Revision: 2012 August

INEOID:000000008194382

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

Switches to fail-safe control when malfunction is detected in encoder signal that detects up/down speed and direction of door glass. Switches to fail-safe control when a signal that is out of the specified value is detected between the fully closed position and the actual position of the glass.

Malfunction	Malfunction condition			
Pulse sensor malfunction	When one pulse signals that is the specified value or more is detected continuously for the specified time or more, while door glass is being operated UP or DOWN.			
Both pulse sensor mal- function	When both pulse signal are not detected continuously for the specified time or more, while door glass is being operated UP or DOWN.			
Pulse direction malfunc- tion	When a pulse indicating that the window is moving in the opposite direction against the power win- dow motor is detected for the specified value or more, while door glass is being operated UP or DOWN.			
Glass recognition position malfunction 1	When the actual door glass position that is out of the specified value is detected compared to the door glass fully closed position memorized in module, while door is being operated UP or DOWN.			
Glass recognition position malfunction 2	When pulse count that is out of door glass full stroke value or more is detected, while door glass is being operated UP or DOWN.			

In fail-safe control, the system changes to a non-initialized condition and the following functions do not oper-

AUTO UP operation

Anti-pinch function

Automatic window adjusting function

When fail-safe control is activated, perform initializing operation to recover. If a malfunction is detected in H power window switch, fail-safe control is activated again.

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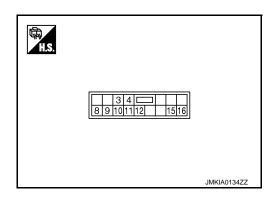
POWER WINDOW SUB-SWITCH

< ECU DIAGNOSIS INFORMATION >

POWER WINDOW SUB-SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

	inal No. e color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
3 (G)	Ground	Encoder ground	—	—	0
4 (BG)	Ground	Encoder power supply	Output	When ignition switch ON or automatic window operates adjusting	12
8 (L)	Ground	Power window motor UP signal	Output	When power window motor is operated UP	12
9 (BR)	Ground	Power window motor DOWN signal	Output	When power window motor is operated DOWN	12
10 (W)	Ground	Battery power supply	Input	_	12
11 (B)	Ground	Ground	_	_	0
12 (R)	Ground	Encoder pulse signal 1	Input	When power window motor operates	(V) 6 4 2 0 10 ms JMKIA0070GB

INFOID:000000008194383

POWER WINDOW SUB-SWITCH

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Voltage [V]	A
+	-	Signal name Input/ Output		Condition	(Approx.)	
15 (LG)	Ground	Encoder pulse signal 2	Input	When power window motor operates	(V) 6 4 2 0 10 ms JMKIA0070GB	B C D
16 (Y)	Ground	Power window serial link	Input/ Output	Ignition switch ON	(V) 15 10 5 0 10 ms JPMIA0013GB	E

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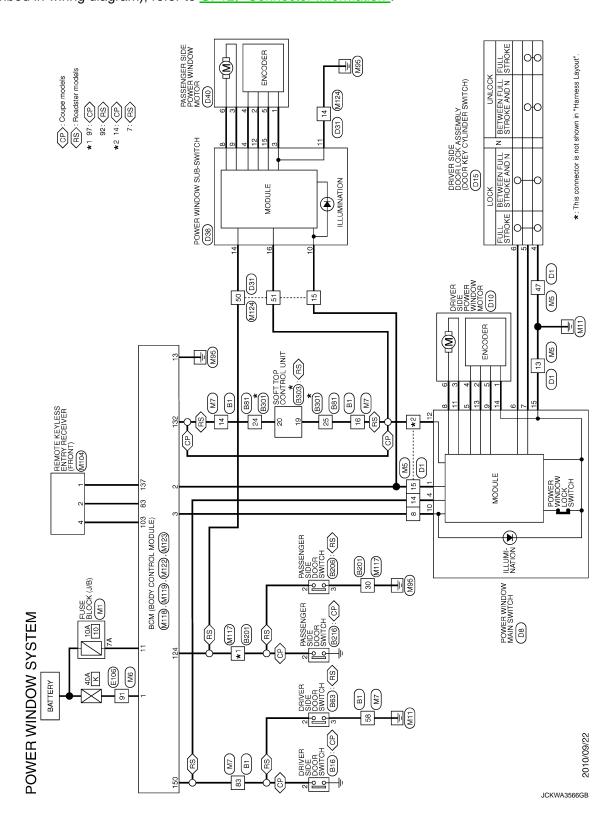
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< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

For connector terminal arrangements, harness layouts, and alphabets in a 🔿 (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".



FAIL-SAFE CONTROL

INFOID:000000008194385

POWER WINDOW SUB-SWITCH

< ECU DIAGNOSIS INFORMATION >

Switches to fail-safe control when malfunction is detected in encoder signal that detects up/down speed and direction of door glass. Switches to fail-safe control when a signal that is out of the specified value is detected between the fully closed position and the actual position of the glass.

Malfunction	Malfunction condition
Pulse sensor malfunction	When one pulse signals that is the specified value or more is detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Both pulse sensor mal- function	When both pulse signal are not detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Pulse direction malfunc- tion	When a pulse indicating that the window is moving in the opposite direction against the power win- dow motor is detected for the specified value or more, while door glass is being operated UP or DOWN.
Glass recognition position malfunction 1	When the actual door glass position that is out of the specified value is detected compared to the door glass fully closed position memorized in module, while door is being operated UP or DOWN.
Glass recognition position malfunction 2	When pulse count that is out of door glass full stroke value or more is detected, while door glass is being operated UP or DOWN.

In fail-safe control, the system changes to a non-initialized condition and the following functions do not oper-

- Automatic window adjusting function
- Anti-pinch function
- Automatic window adjusting function

When fail-safe control is activated, perform initializing operation to recover. If a malfunction is detected in H power window switch, fail-safe control is activated again.

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< SYMPTOM DIAGNOSIS > SYMPTOM DIAGNOSIS

POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCHES

Description

All power windows do not operate via power window main switch and power window sub-switch.

Diagnosis Procedure

1.CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit. Refer to <u>PWC-17, "BCM : Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

NO >> GO TO 1.

[COUPE]

INFOID:00000008194387

INFOID:000000008194386

POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCH-ES

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE OM DIAGNOSIS > [COUPE]

< SYMPTOM DIAGNOSIS >
DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE		А
Description	INFOID:000000008194388	~
Driver side power window does not operate using power window main switch.		В
Diagnosis Procedure	INFOID:000000008194389	
1. CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY AND GROUND CIRCUIT		С
Check power window main switch power supply and ground circuit. Refer to <u>PWC-17, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2.		D
NO >> Repair or replace the malfunctioning parts. 2.CHECK DRIVER SIDE POWER WINDOW MOTOR		E
Check driver side power window motor. Refer to <u>PWC-20, "DRIVER SIDE : Component Function Check"</u> . <u>Is the measurement value within the specification?</u> YES >> GO TO 3.		F
NO >> Repair or replace the malfunctioning parts.		G
3.CONFIRM THE OPERATION		
Confirm the operation again. <u>Is the result normal?</u>		Η
 YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>. NO >> GO TO 1. 		I

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PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [COUPE]

PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE WHEN POWER WINDOW MAIN SWITCH IS OPERATED

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Description

Passenger side power window operates using power window sub-switch but does not operate using power window main switch.

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000008194391

1.CHECK POWER WINDOW SUB-SWITCH POWER SUPPLY AND GROUND CIRCUIT

Check power window sub-switch power supply and ground circuit. Refer to <u>PWC-18. "POWER WINDOW SUB-SWITCH : Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK POWER WINDOW SUB-SWITCH SERIAL LINK CIRCUIT

Check power window sub-switch serial link circuit. Refer to PWC-30, "POWER WINDOW SUB-SWITCH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 ${\it 3.}$ confirm the operation

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.

NO >> GO TO 1.

WHEN POWER WINDOW SUB-SWITCH IS OPERATED

WHEN POWER WINDOW SUB-SWITCH IS OPERATED : Description

Passenger side power window operates using power window main switch but not using power window subswitch.

WHEN POWER WINDOW SUB-SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000008194393

1. CHECK POWER WINDOW SUB-SWITCH POWER SUPPLY AND GROUND CIRCUIT

Check power window sub-switch power supply and ground circuit. Refer to PWC-18. "POWER WINDOW SUB-SWITCH : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.confirm the operation

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-45. "Intermittent Incident"</u>.

NO >> GO TO 1.

WITH BOTH POWER WINDOW MAIN SWITCH AND POWER WINDOW SUB-SWITCH

WITH BOTH POWER WINDOW MAIN SWITCH AND POWER WINDOW SUB-

PWC-76

PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

SYMPTOM DIAGNOSIS > [CC]	DUPE]
SWITCH : Description	000008194394
Passenger side power window operates using power window main switch and power window sub-switc WITH BOTH POWER WINDOW MAIN SWITCH AND POWER WINDOW SUB-	жh.
SWITCH : Diagnosis Procedure	000008194395
1. CHECK PASSENGER SIDE POWER WINDOW MOTOR	
Check passenger side power window motor. Refer to <u>PWC-21, "PASSENGER SIDE : Component Function Check"</u> .	
Is the measurement value within the specification?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2.CONFIRM THE OPERATION	
Confirm the operation again. Is the result normal?	
 YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>. NO >> GO TO 1. 	

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ANTI-PINCH FUNCTION DOES NOT OPERATE	0011051
	COUPE]
ANTI-PINCH FUNCTION DOES NOT OPERATE	
DRIVER SIDE	
DRIVER SIDE : Description	000000008194396
Anti-pinch function does not operate when power window up operated.	
DRIVER SIDE : Diagnosis Procedure	000000008194397
1. CHECK AUTO UP OPERATION	
Check AUTO UP operation.	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Refer to <u>PWC-79, "DRIVER SIDE : Diagnosis Procedure"</u> .	
2.CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u> . NO >> GO TO 1.	
PASSENGER SIDE	
PASSENGER SIDE : Description	000000008194398
Anti-pinch function does not operate when power window up operated.	
PASSENGER SIDE : Diagnosis Procedure	000000008194399
1. CHECK AUTO UP OPERATION	
Check AUTO UP operation.	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Refer to <u>PWC-79, "PASSENGER SIDE : Diagnosis Procedure"</u> .	
2.CONFIRM THE OPERATION	<u> </u>

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-45. "Intermittent Incident"</u>. NO >> GO TO 1.

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMAL- LY	
< SYMPTOM DIAGNOSIS > [COUPE]	
AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY DRIVER SIDE	A
DRIVER SIDE : Diagnosis Procedure	В
1.PERFORM INITIALIZATION PROCEDURE	С
Initialization procedure is performed and operation is confirmed. Refer to <u>PWC-7</u> , "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special <u>Repair Requirement"</u> . <u>Is the inspection result normal?</u> YES >> INSPECTION END NO >> GO TO 2.	D
2.CHECK ENCODER (DRIVER SIDE) CIRCUIT	
Check encoder (driver side) circuit. Refer to <u>PWC-24, "DRIVER SIDE : Component Function Check"</u> . <u>Is the inspection result normal?</u>	F
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CONFIRM THE OPERATION	G
Confirm the operation again.	Н
Is the result normal? YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u> . NO >> GO TO 1. PASSENGER SIDE	I
PASSENGER SIDE : Diagnosis Procedure	J
1.PERFORM INITIALIZATION PROCEDURE	
Initialization procedure is performed and operation is confirmed. Refer to <u>PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special</u> <u>Repair Requirement</u> ".	PWC
Is the inspection result normal? YES >> INSPECTION END NO >> GO TO 2.	L
2.CHECK ENCODER (PASSENGER SIDE) CIRCUIT	M
Check encoder (passenger side) circuit. Refer to <u>PWC-26, "PASSENGER SIDE : Component Function Check"</u> .	
<u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	Ν
3.CONFIRM THE OPERATION	0
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u> . NO >> GO TO 1.	Ρ

POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NOR-MALLY

< SYMPTOM DIAGNOSIS >

[COUPE]

POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMALLY

Description

Retained power function does not operate after ignition switch turns OFF.

Diagnosis Procedure

1.CHECK DOOR SWITCH

Check door switch. Refer to <u>DLK-63</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.

NO >> GO TO 1.

INFOID:000000008194403

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS [COUPE] < SYMPTOM DIAGNOSIS > DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WIN-А DOWS Description INFOID:000000008194404 В Power window does not operate when locking or unlocking a door using door key cylinder. **Diagnosis** Procedure INFOID:000000008194405 **1.**PERFORM INITIALIZATION PROCEDURE Initialization procedure is executed and operation is confirmed. D Refer to PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement". Is the inspection result normal? Е YES >> INSPECTION END NO >> GO TO 2. 2. CHECK DRIVER SIDE DOOR LOCK ASSEMBLY (DOOR KEY CYLINDER SWITCH)F Check driver side door lock assembly (door key cylinder switch). Refer to DLK-74, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. Н 3.CONFIRM THE OPERATION Confirm the operation again. Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.
- NO >> GO TO 1.

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KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

Description

Power window down does not operate when pressing unlock button on Intelligent Key.

Diagnosis Procedure

1.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 2.

NO >> Refer to <u>DLK-107</u>, "Diagnosis Procedure".

2.CHECK POWER WINDOW OPERATION

Check power window operation.

Does power window operate up/down using power window main switch?

YES >> GO TO 3.

NO >> Refer to <u>DLK-107</u>, "Diagnosis Procedure".

3.CHECK "PW DOWN SET" SETTING IN "WORK SUPPORT"

Check "PW DOWN SET" setting in "WORK SUPPORT". Refer to DLK-42, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "PW DOWN SET" setting in "WORK SUPPORT".

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.

NO >> GO TO 1.

[COUPE]

INFOID:000000008194406

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POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE DRIVER SIDE

1.REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

>> Refer to <u>PWC-89, "Removal and Installation"</u>. PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

1.REPLACE POWER WINDOW SUB-SWITCH

Replace power window sub-switch.

>> Refer to <u>PWC-89</u>, "Removal and Installation".

INFOID:000000008194409

[COUPE]

AUTOMATIC WINDOW ADJUSTING FUNCTION DOES NC DRIVER SIDE	
DRIVER SIDE : Diagnosis Procedure	INFOID:00000008194411
1. CHECK AUTO UP OPERATION	
Check AUTO UP operation. Is the inspection result normal? YES >> GO TO 2.	
NO >> Refer to <u>PWC-79, "DRIVER SIDE : Diagnosis Procedure"</u> . 2.CHECK DOOR SWITCH	
Check door switch. Refer to <u>DLK-63, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CHECK POWER WINDOW SERIAL LINK (POWER WINDOW MAIN SWITCH)	
Check power window serial link (power window main switch) Refer to <u>PWC-29</u> , "POWER WINDOW MAIN SWITCH : Component Function Check"	
Is the result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts	
4.CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal? YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u> . NO >> GO TO 1. PASSENGER SIDE	
PASSENGER SIDE : Diagnosis Procedure	INFOID:00000008194412
1. PERFORM INITIALIZATION PROCEDURE	
Initialization procedure is performed and operation is confirmed. Refer to <u>PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIV</u>	E TERMINAL : Special
Repair Requirement". Is the inspection result normal? YES >> INSPECTION END NO >> CO TO 2	
NO >> GO TO 2. 2.CHECK DOOR SWITCH	
Check door switch.	
Refer to <u>DLK-63, "Component Function Check"</u> . Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CHECK POWER WINDOW SERIAL LINK (POWER WINDOW SUB-SWITCH)	
Check power window serial link (power window sub-switch) Refer to <u>PWC-30</u> , "POWER WINDOW SUB-SWITCH : Component Function Check"	
Is the result normal?	
YES >> GO TO 4.	

AUTOMATIC WINDOW ADJUSTING FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[COUPE]

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.

NO >> GO TO 1.

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< PRECAUTION > PRECAUTION PRECAUTIONS FOR USA AND CANADA

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

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
 H 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 pwc battery, and wait at least 3 minutes before performing any service.

FOR USA AND CANADA : Service

- Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more.

For approximately 3 minutes after the battery negative terminal is removed, it is still possible for the air bag and seat belt pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until 3 minutes or more elapse.

- Diagnosis sensor unit must always be installed with their arrow marks "←" pointing towards the front of the vehicle for normal operation. Also check diagnosis sensor unit for cracks, deformities, or rust before installation and replace if necessary.
- The spiral cable must be aligned in the neutral position since its rotations are limited. Do not turn steering wheel and column after removal of steering gear.
- Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and seat mounted front side air bag module standing with the stud bolt side facing down.
- Perform self-diagnosis to check entire SRS for normal function after replacing any components.
- After air bag inflates, the front instrument panel assembly must be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

FOR USA AND CANADA : Precaution for Battery Service

INFOID:000000008194415

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

PRECAUTIONS

< PRECAUTION >

window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

FOR MEXICO

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

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

WARNING:

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.

FOR MEXICO : Service

INFOID:000000008194417

- Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3
 minutes or more.

For approximately 3 minutes after the battery negative terminal is removed, it is still possible for the air bag and seat belt pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until 3 minutes or more elapse.

- Diagnosis sensor unit must always be installed with their arrow marks " " pointing towards the front of the vehicle for normal operation. Also check diagnosis sensor unit for cracks, deformities, or rust before installation and replace if necessary.
- The spiral cable must be aligned in the neutral position since its rotations are limited. Do not turn steering wheel and column after removal of steering gear.
- Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and seat mounted front side air bag module standing with the stud bolt side facing down.
- Perform self-diagnosis to check entire SRS for normal function after replacing any components.
- After air bag inflates, the front instrument panel assembly must be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

FOR MEXICO : Precaution for Battery Service

INFOID:000000008194418

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.

REMOVAL AND INSTALLATION POWER WINDOW MAIN SWITCH

Removal and Installation

REMOVAL

- Remove the power window main switch finisher (2). Refer to <u>INT-15, "Removal and Installation"</u>.
- 2. Power window main switch (1) is removed from power window main switch finisher (2) using flat-bladed screw driver (A) etc.

2 : Pawl

CAUTION:

Never fold the pawl of power window main switch finisher. NOTE:

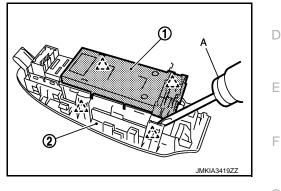
The same procedure is also performed for power window subswitch.

INSTALLATION

Install in the reverse order of removal.

NOTE:

Power window main switch is replaced or is removed it is necessary to do the initialization procedure. Refer to <u>PWC-8</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".



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[COUPE]

INFOID:000000008194419

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В

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

WorkFlow

INFOID:000000008194420

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.CHECK FOR DTC

- 1. Check DTC for BCM.
- 2. Perform the following procedure if DTC is displayed.
- Record DTC and freeze frame data (Print them out with CONSULT.)
- Erase DTC.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.
- 3. Check related service bulletins for information.

Is any symptom described and any DTC detected?

Symptom is described, DTC is displayed>>SRC-348. "DTC Index".

Symptom is described, DTC is not displayed>>GO TO 3.

3.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 4.

4. 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 5.

5. IDENTIFY THE MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

Perform the diagnosis with "Component diagnosis" of the applicable system.

>> GO TO 6.

6.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 7.

7.FINAL CHECK

Check that malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 2.

Are the malfunctions corrected?

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

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION > [ROAD	STER]
INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMIN	IAL A
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL	
Initial setting is necessary when battery terminal is removed. CAUTION: The following specified operations are not performed under the non-initialized condition. • Auto-up operation	С
 Anti-pinch function Automatic window adjusting function Key cylinder switch power window function Power window UP operation while door is open 	D
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL	•
INITIALIZATION PROCEDURE	0000008194422 F
 Disconnect battery negative terminal or power window switch connector. Reconnect it after a more. Close door (door switch OFF). Turn ignition switch ON. 	inute or G
 Close roof. Operate power window switch to fully open the window. (This operation is unnecessary if the window fully open.) 	ndow is H
 Pull up and hold power window switch. Even after glass stops at the fully closed position, keep pu switch for 3 seconds or more. Inspect anti-pinch function. CAUTION: 	lling the
When initialization is not complete, power window UP does not operate while door is open.	J
 CHECK ANTI-PINCH FUNCTION Fully open the door window. Place a piece of wood near fully closed position. Close door glass completely with AUTO-UP. 	PW
 Check that glass lowers for approximately 150 mm (5.9in) without pinching piece of wood and stops Check that glass does not rise when operating the power window main switch while lowering. CAUTION: 	L
 Do not check with hands and other part of body because they may be pinched. Do not get pine Check that AUTO-UP operates before inspection when system initialization is performed. Perform initial setting when auto-up operation or anti-pinch function does not operate norma Finish initial setting. Otherwise, next operation cannot be performed. Auto-up operation 	
 Anti-pinch function Automatic window adjusting function Key cylinder switch power window function Power window UP operation while door is open 	Ν
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT	0
	0000008194423 P
Initial setting is necessary when replacing power window main switch.	

The following specified operations are not performed under the non-initialized condition.

- Auto-up operation
- Anti-pinch function
- Automatic window adjusting function
- Key cylinder switch power window function

· Power window UP operation while door is open

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement INFOID:000000008194424

INITIALIZATION PROCEDURE

- 1. Disconnect battery negative terminal or power window switch connector. Reconnect it after a minute or more.
- 2. Close door (door switch OFF).
- Turn ignition switch ON. 3.
- 4. Close roof.
- 5. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open.)
- 6. Pull up and hold power window switch. Even after glass stops at the fully closed position, keep pulling the switch for 3 seconds or more.
- Inspect anti-pinch function. 7.

CAUTION:

When initialization is not complete, power window UP does not operate while door is open.

CHECK ANTI-PINCH FUNCTION

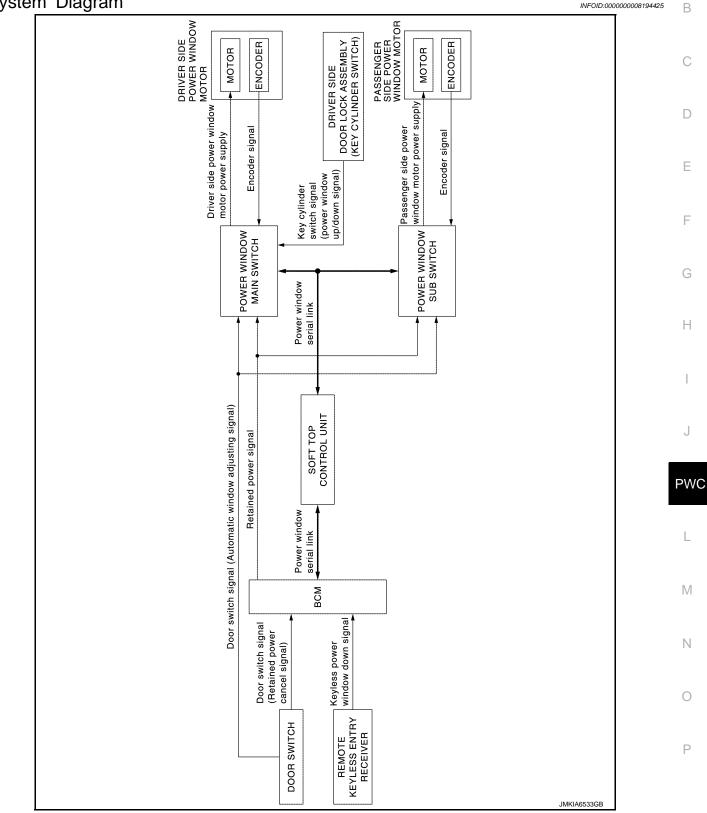
- 1. Fully open the door window.
- 2. Place a piece of wood near fully closed position.
- 3. Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm (5.9in) without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window main switch while lowering.

CAUTION:

- Do not check with hands and other part of body because they may be pinched. Do not get pinched.
- Check that AUTO-UP operates before inspection when system initialization is performed.
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be performed.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Automatic window adjusting function
- 4. Key cylinder switch power window function
- 5. Power window UP operation while door is open

SYSTEM DESCRIPTION POWER WINDOW SYSTEM

System Diagram



System Description

INFOID:000000008194426

POWER WINDOW SYSTEM

INFOID:000000008194425

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< SYSTEM DESCRIPTION >

- Power window system is activated by power window switch operation when ignition switch is turned ON and during the retained power operation, after ignition switch turned OFF.
- Power window main switch can open/close all windows.
- Power window sub-switch can open/close the passenger side window.
- AUTO operation can be activated by operating the power window switch once.
- It transmits and receives the signal between soft top control unit and power window main switch or power window sub switch, via serial communication.
- When pressing power window lock switch, operation other than power window main switch becomes impossible.
- When detecting the pinching resistance of foreign materials, etc. during power window AUTO UP operation, it lowers door glass to the specified value.
- When opening driver side or passenger side door while door glass is being fully closed, it lowers door glass of the door a little from the closed position. When closing the door, it return door glass to the fully closed position.
- All power windows open or close when Intelligent Key unlock button is pressed for 3seconds.
- Hold the door key cylinder to the UNLOCK direction for 1 second or more to OPEN all power windows when ignition switch OFF.
- Power window system operation links with soft top system to <u>RF-16</u>, "SOFT TOP SYSTEM : System <u>Description</u>".

POWER WINDOW AUTO-OPERATION

- AUTO UP/DOWN operation can be performed when power window switch turns to AUTO.
- Encoder continues detecting the movement of power window motor and transmits to power window switch as the encoder pulse signal while power window motor is operating.
- Power window switch reads the changes of encoder signal and stops AUTO operation when door glass is at the fully open/closed position.
- Auto function is inoperable if encoder is malfunctioning.

POWER WINDOW SERIAL LINK

Power window main switch, power window sub-switch, soft top control unit, and BCM transmit and receive the signal by power window serial link.

The under mentioned signal is transmitted from BCM to soft top control unit.

- Keyless power window down signal
- The under mentioned signal is transmitted from soft top control unit to power window switch.
- Soft top operation signal (front power window down signal, front power window up operation prohibition signal)
- Keyless power window down signal

The under mentioned signal is transmitted from power window main switch to power window sub-switch.

- Passenger side door window operation signal
- Power window control by key cylinder switch signal
- Retained power operation signal
- Power window lock signal

The under mentioned signal is transmitted from power window main switch to BCM via soft top control unit.

- Power window control by key cylinder switch signal
- Power window lock signal
- Door lock/unlock switch signal

RETAINED POWER OPERATION

Retained power operation is an additional power supply function that enables power window system to operate for 45 seconds after ignition switch turns OFF.

RETAINED POWER FUNCTION CANCEL CONDITIONS

- Front door CLOSED (door switch OFF) \rightarrow OPEN (door switch ON).
- When ignition switch turns ON again.
- When timer times out. (45 seconds)

POWER WINDOW LOCK FUNCTION

Switch operation other than power window main switch is prohibited when power window lock switch is ON. Power window main switch does not operate any power window other than driver power window.

ANTI-PINCH FUNCTION

• The anti-pinch function detects foreign matter being pinched in the door glass, during AUTO-UP operation, and lowers the door glass 150 mm (5.9in).

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< SYSTEM DESCRIPTION >

[ROADSTER]

 Encoder continues detecting the movement of power window motor and transmits to power window switch as the encoder pulse signal while power window motor is operating. Resistance is applied to the power window motor rotation that changes the frequency of encoder pulse sig- 	А
 nal if foreign material is trapped in the door glass. Power window switch controls to lower the door glass for 150 mm (5.9in) after it detects encoder pulse signal frequency change. 	В
 OPERATION CONDITION When all door glass AUTO-UP operation is performed (anti-pinch function does not operate just before the door glass closes and is fully closed.) NOTE: 	С
Depending on environment and driving conditions, if a similar impact or load is applied to the door glass, it may lower.	D
AUTOMATIC WINDOW ADJUSTING FUNCTION When the driver/passenger door(s) is open, the window of the opened door is lowered approximately 10 mm	
(0.39 in). When the door is closed, the window is raised to the fully closed position. Automatic window adjusting function system (opening operation) does not operate when the following item	Е
occurs. The window is 10 mm (0.39 in) or more open from the fully closed position.	F
DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION	
Hold the door key cylinder to the LOCK or UNLOCK position for 1 second or more to OPEN or CLOSE all power windows when ignition switch is OFF. In addition, the windows stop the operation when the key position is NEUTRAL when operating.	G
 OPERATION CONDITION Ignition switch OFF. Hold door key cylinder to the LOCK position for 1 second or more to perform CLOSE operation of the door 	Н
glass.	
• Hold door key cylinder to the UNLOCK position for 1 second or more to perform OPEN operation of the door glass.	I
KEYLESS POWER WINDOW DOWN FUNCTION	
All power windows open when the unlock button on Intelligent Key is activated and pressed and held for more than 3* seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed.	J
 The power window opening function stops when the following operations are performed. When the ignition switch is turned ON while the power window opening is operated. 	PWC
 When the unlock button is released. While retained power operation activates, keyless power window down function cannot be operated. Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUP-PORT". Refer to <u>DLK-208, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Roadster)</u>". 	L
NOTE:	M
Use CONSULT to change settings. MODE 1 (3 sec) / MODE 2 (OFF) / MODE 3 (5 sec)	IVI
POWER CONSUMPTION CONTROL SYSTEM	Ν
Power window switch incorporates a power consumption control function that reduces the power consumption according to the vehicle status.	
LOW POWER CONSUMPTION MODE • Ignition switch OFF.	0
 Power window main switch and power window sub-switch do not receive a signal from serial link. 	
 Power window motor does not move. If any of the following conditions are satisfied, the low power consumption mode is released. Ignition switch ON 	Ρ
 Ignition switch ON. When door key cylinder switch signal is received. When the signal is received from serial link. 	

- When door open/close signal is received.
 When power window switch door lock is operated.

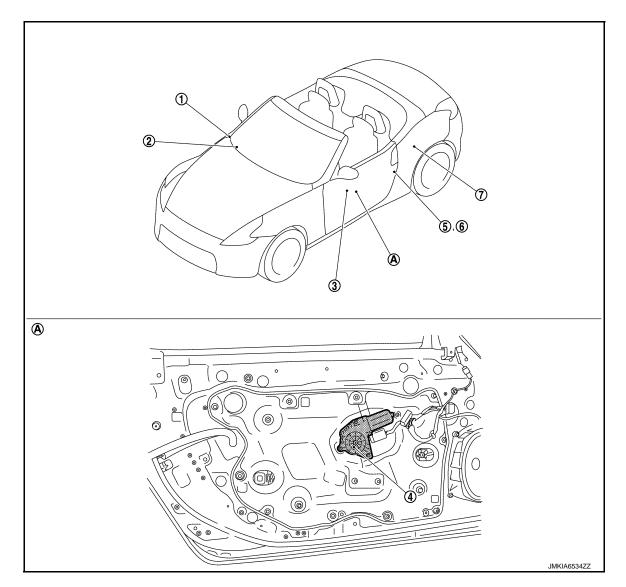
PWC-95

< SYSTEM DESCRIPTION >

Component Parts Location

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[ROADSTER]



- 1. BCM BCS-10. "Component Parts Location"
- 4. Driver side power window motor
- 7. Soft top control unit BCS-10. "Component Parts Location"
- A. View with door finisher removed

Component Description

- Remote keyless entry receiver <u>DLK-182, "DOOR LOCK :</u> <u>Component Parts Location"</u>
- 5. Driver side door lock assembly (door key cylinder switch)

2.

3. Power window main switch

6. Driver side door switch

Component	Function
BCM	Supplies power to power window switches.Controls retained power function
Power window main switch	Directly controls all power window motors in all doors.Controls anti-pinch operation of power window.
Power window sub-switch	Controls anti-pinch operation of power window.Controls power window motor of passenger door.

< SYSTEM DESCRIPTION >

[ROADSTER]

Component	Function
Driver side power window motor	 Integrates the encoder and window motor. Starts operating with signals from power window main switch. Transmits power window motor rotation as a pulse signal to power window switch.
Passenger side power window motor	 Integrates the encoder and window motor. Starts operating with signals from power window main switch & power window subswitch. Transmits power window motor rotation as a pulse signal to power window switch.
Driver side door lock assembly (door key cylinder switch)	Transmits operation condition of key cylinder switch to power window main switch.
Remote keyless entry receiver	Receives lock/unlock signal from intelligent key and then transmits to BCM.
Door switch	 Detects door open/close condition and transmits to BCM. Door switch signal is directly received by power window switch and is used for the automatic window adjusting function.
Soft top control unit	Controls power window when opening/closing soft top.
Door key cylinder switch	Power window main switch detects condition of the door key cylinder switch and trans- mits to BCM as the LOCK or UNLOCK signals.

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DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000008837059

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description			
Work Support	Changes the setting for each system function.			
Self Diagnostic Result	Displays the diagnosis results judged by BCM.			
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.			
Data Monitor	The BCM input/output signals are displayed.			
Active Test	The signals used to activate each device are forcibly supplied from BCM.			
Ecu Identification	The BCM part number is displayed.			
Configuration	Read and save the vehicle specification.Write the vehicle specification when replacing BCM.			

SYSTEM APPLICATION

BCM can perform the following functions for each system. **NOTE:**

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

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

NOTE:

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

FREEZE FRAME DATA (FFD)

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

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[ROADSTER]

CONSULT screen item	Indication/Unit	Description			
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected			
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected			
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)	В	
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)	С	
	LOCK>ACC		While turning power supply position from "LOCK"* to "ACC"		
	ACC>ON		While turning power supply position from "ACC" to "IGN"	D	
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Except emergency stop operation)	D	
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)	E	
Vehicle Condition	RUN>URGENT	Power supply position status of the moment a particular DTC is de- tected	While turning power supply position from "RUN" to "ACC" (Emer- gency stop operation)		
	ACC>OFF		While turning power supply position from "ACC" to "OFF"	F	
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"*		
	OFF>ACC		While turning power supply position from "OFF" to "ACC"	G	
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"		
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode	F	
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply posi- tion is "LOCK"*.) to low power consumption mode		
	LOCK		Power supply position is "LOCK"*		
	OFF		Power supply position is "OFF" (Ignition switch OFF)		
	ACC		Power supply position is "ACC" (Ignition switch ACC)		
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)	0	
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	P٧	
	CRANKING		Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	 The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 			

NOTE:

*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position (A/T models), and any of the following conditions are met.

- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

RETAINED PWR

RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

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DATA MONITOR

NOTE:

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

PWC-99

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Monitor Item	Description		
DOOR SW-DR	Indicates [ON/OFF] condition of driver side door switch.		
DOOR SW-AS	Indicates [ON/OFF] condition of passenger side door switch.		

< DTC/CIRCUIT DIAGNOS	IS >		[ROADSTER]
DTC/CIRCUIT [DIAGNOSIS		
POWER SUPPLY A		CUIT	
BCM			
BCM : Diagnosis Proc	oduro		
BCM : Diagnosis Proce			INFOID:00000008194431
1.CHECK FUSE AND FUSI	BLE LINK		
Check that the following fuse	and fusible link are not bl	own.	
Terminal No.	Signa	Iname	Fuse and fusible link No.
1	Battery po	ower supply	K (40A)
11	Battery po		10 (10A)
blown. NO >> GO TO 2.		r repairing the affected	circuit if a fuse or fusible link is
 Turn ignition switch OFF. Disconnect BCM connect Check voltage between I 		nd ground.	
(-	+)		
BC		(-)	Voltage (Approx.)
Connector	Terminal		
M118 M119	1 11	Ground	Battery voltage
s the measurement value no YES >> GO TO 3. NO >> Repair or replace CHECK GROUND CIRCL Check continuity between BC	e harness. JIT	l ground.	
ВС	CM		
Connector	Terminal	Ground	Continuity
M119	13		Existed
Does continuity exist? YES >> INSPECTION EI NO >> Repair harness of POWER WINDOW MA POWER WINDOW MA 1.CHECK POWER SUPPLY 1. Turn ignition switch OFF.	or connector. AIN SWITCH AIN SWITCH : Diagn (CIRCUIT	osis Procedure	INFOID:00000008194432
3. Turn ignition switch ON.	w main switch connector. power window main switch	n harness connector and	l ground.

POWER SUPPLY AND GROUND CIRCUIT

[ROADSTER]

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[ROADSTER]

(+) Power window main switch		()	Voltage (V) (Approx.)	
Connector	Terminal		(Approx.)	
D8	1 10	Ground	12	

Is the measurement value within the specification?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK HARNESS CONTINUTY

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector.
- 3. Check continuity between BCM harness connector and power window main switch harness connector.

E	BCM	Power window main switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M118	2	D8	1	Existed
WIT TO	3	00	10	LXISIEU

4. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M118	2	Ground	Not existed
INITIO	3		NUL EXISIEU

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-95, "Exploded View"</u>.

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between power window main switch harness connector and ground.

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D8	15		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

POWER WINDOW SUB-SWITCH

POWER WINDOW SUB-SWITCH : Diagnosis Procedure

INFOID:000000008194433

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect power window sub-switch connector.

3. Check voltage between power window sub-switch harness connector and ground.

(+)				
Power window	sub-switch	(-)	Voltage (V) (Approx.)	
Connector	Terminal			
D38	10	Ground	12	

3. Check continuity between BCM harness connector and power window sub-switch harness connector.

BCM		Power window sub-switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M118	2	D38	10	Existed	

4. Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Connector Terminal		Continuity	
M118	2		Not existed	

Is the inspection result normal?

>> GO TO 3.

>> GO TO 2.

2. CHECK HARNESS CONTINUTY

Disconnect BCM connector.

Turn ignition switch OFF.

YES

NO

1.

2.

YES >> Replace BCM. Refer to <u>BCS-95, "Exploded View"</u>.

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

Check continuity between power window sub-switch harness connector and ground.

Power window sub-switch			Continuity
Connector	Terminal	Ground	Continuity
D38	11		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

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Is the measurement value within the specification?

Revision: 2012 August

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< DTC/CIRCUIT DIAGNOSIS >

POWER WINDOW MOTOR DRIVER SIDE

DRIVER SIDE : Description

Door glass moves UP/DOWN by receiving the signal from power window main switch.

DRIVER SIDE : Component Function Check

1.CHECK POWER WINDOW MOTOR CIRCUIT

Check driver side power window motor operation with power window main switch.

Is the inspection result normal?

YES >> Driver side power window motor is OK.

NO >> Refer to <u>PWC-104</u>, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:000000008194436

1. CHECK DRIVER SIDE POWER WINDOW MOTOR INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect driver side power window motor connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between driver side power window motor harness connector and ground.

(+) Driver side power window motor		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
6	Ground	Power window main switch	UP	12	
			DOWN	0	
D10			UP	0	
	3			DOWN	12

Is the measurement value within the specification?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK POWER WINDOW MOTOR

Check driver side power window motor.

Refer to <u>PWC-105</u>, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver side power window motor. Refer to <u>GW-23, "Removal and Installation"</u>.

$\mathbf{3.}$ CHECK HARNESS CONTINUTY

1. Turn ignition switch OFF.

- 2. Disconnect power window main switch connector.
- 3. Check continuity between power window main switch harness connector and driver side power window motor harness connector.

Power windo	w main switch	Driver side power window motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D8	8	D10	6	Existed
Do	11	010	3	EXISIEU

4. Check continuity between power window main switch harness connector and ground.

INFOID-000000008194434

< DTC/CIRCUIT DIAGNOSIS >

[ROADSTER]

Power windo	w main switch		Continuity
Connector	Terminal	Ground	Continuity
D8	8	Ground	Not existed
the inspection result norm			
YES >> Replace power v NO >> Repair or replac	window main switch. Refer e harness.	r to <u>PWC-181, "Removal a</u>	nd Installation".
1. CHECK INTERMITTENT	INCIDENT		
Refer to GI-45, "Intermittent	Incident".		
>> INSPECTION E	ND		
DRIVER SIDE : Comp	onent Inspection		INFOID:00000008194437
	ON		
CHECK DRIVER SIDE P			
5	ower window motor conne	ector.	
			de power window motor con-
nector.	, ,	je s s s s s s s s s s s s s s s s s s s	• • • • • • • • • • • • • • • • • • • •
	Teri	minal	
Driver side power window mo- tor connector	(+)	(-)	Motor operation
D10	3	6	DOWN
	6	3	UP
s the inspection result norm	al?		
	er window motor is OK.		
	ide power window motor.	Refer to <u>GW-23, "Removal</u>	and Installation".
PASSENGER SIDE			
PASSENGER SIDE : [Description		INFOID:00000008194438
Door glass moves UP/DOWI	N by receiving the signal p	ower window main switch	or power window sub-switch.
PASSENGER SIDE : (Component Function	Check	- INFOID:00000008194439
1. CHECK POWER WINDO	•		
		with power window main	switch or power window sub
switch.		with power window main	switch of power window sub
s the inspection result norm			
	power window motor is Oł 05, "PASSENGER SIDE :		
		-	
PASSENGER SIDE : [-		INFOID:00000008194440
CHECK PASSENGER SI		DTOR INPUT SIGNAL	
 Turn ignition switch OFF Disconnect passenger s 	: ide power window motor c	onnector.	
B. Turn ignition switch ON.			

4. Check voltage between passenger side power window motor harness connector and ground.

PWC-105

< DTC/CIRCUIT DIAGNOSIS >

(+) Passenger side power window motor		()	Condition		Voltage (V) (Approx.)
Connector Terminal		-			(//pp/ox.)
	<u> </u>			UP	12
D40	6	Ground	Ground Power window sub- switch	DOWN	0
D40	2			UP	0
	3			DOWN	12

Is the measurement value within the specification?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK PASSENGER SIDE POWER WINDOW MOTOR

Check passenger side power window motor.

Refer to PWC-106, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace passenger side power window motor. Refer to <u>GW-23, "Removal and Installation"</u>.

3.CHECK HARNESS CONTINUTY

- 1. Turn ignition switch OFF.
- 2. Disconnect power window sub-switch connector.
- 3. Check continuity between power window sub-switch harness connector and passenger side power window motor harness connector.

Power wind	indow sub-switch Passenger side power window motor		Continuity		
Connector	Terminal	Connector Terminal		Continuity	
D38	9		3	Existed	
030	8	D40	6	LXISIEU	

4. Check continuity between power window sub-switch connector and ground.

Power windo	ow sub-switch		Continuity	
Connector	Terminal	Ground	Continuity	
D38	8	Ground	Not existed	
030	9		NUL EXISIEU	

Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to PWC-181, "Removal and Installation".

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:000000008194441

COMPONENT INSPECTION

1.CHECK PASSENGER SIDE POWER WINDOW MOTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect passenger side power window motor connector.
- 3. Check motor operation by connecting the battery voltage directly to passenger side power window motor connector.

< DTC/CIRCUIT DIAGNOSIS >

[ROADSTER]

Passenger side power window	Те	rminal	Motor condition	
motor connector	(+) (-)			
D40	3	6	DOWN	
	6	3	UP	
he inspection result normal?				
ES >> Passenger side pov O >> Replace passenger	ver window motor is C side power window m	9K. notor. Refer to <u>GW-23, "R</u>	emoval and Installation".	

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ENCODER

< DTC/CIRCUIT DIAGNOSIS > ENCODER

DRIVER SIDE

DRIVER SIDE : Description

Detects condition of the driver side power window motor operation and transmits to power window main switch as the pulse signal.

DRIVER SIDE : Component Function Check

1.CHECK ENCODER OPERATION

Check that driver side door glass performs AUTO open/close operation normally with power window main switch.

Is the inspection result normal?

YES >> Encoder operation is OK.

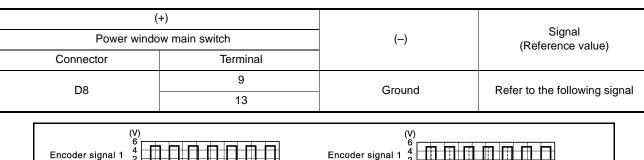
NO >> Refer to <u>PWC-108</u>, "DRIVER SIDE : Diagnosis Procedure".

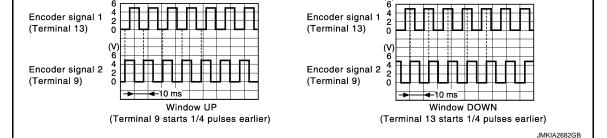
DRIVER SIDE : Diagnosis Procedure

INFOID:000000008194444

1.CHECK ENCODER OPERATION

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





Is the inspection result normal?

YES >> Replace power window main switch. Refer to <u>PWC-181, "Removal and Installation"</u>. NO >> GO TO 2.

2.check encoder signal circuit

- 1. Turn ignition switch OFF.
- 2. Disconnect power window main switch connector and driver side power window motor connector.
- 3. Check continuity between power window main switch harness connector and driver side power window motor harness connector.

Power wind	low main switch	Driver side power window motor Connector Terminal		Continuity
Connector	Terminal			Continuity
D8	9	D10	5	Existed
Do	13		2	LVISIGO

4. Check continuity between power window main switch harness connector and ground.

INFOID-00000008194442

ENCODER

< DTC/CIRCUIT DIAGNOSIS >

[ROADSTER]

Power	window main switch				Continuity
Connector	Termina	al		round	Continuity
D8	9		Ground		Not existed
	13				Not existed
•	eplace harness.				
CHECK ENCODER	POWER SUPPLY CI	RCUIT			
. Turn ignition switch	dow main switch con o ON. veen driver side powe		motor harne	ss connector a	nd ground.
	(+)				Voltage (V)
Driver sid	e power window motor		((-)	(Approx.)
Connector	Termina	l			
D10 s the measurement val	4		Gro	ound	12
YES >> GO TO 5. NO >> GO TO 4.					
CHECK HARNESS Turn ignition switch Disconnect power Check continuity b	o OFF. window main switch c etween power window		vitch harness	s connector an	d driver side power wind
CHECK HARNESS Turn ignition switch Disconnect power Check continuity be motor harness continuity	NOFF. window main switch c etween power window nector.	w main sw			d driver side power wind
CHECK HARNESS	n OFF. window main switch c etween power window nector. w main switch	w main sw Dri	iver side power	window motor	d driver side power wind
CHECK HARNESS Turn ignition switch Disconnect power Check continuity be motor harness cont Power window Connector	o OFF. window main switch c etween power window nector. w main switch Terminal	w main sw Dri Conr	iver side power	window motor Terminal	Continuity
CHECK HARNESS Turn ignition switch Disconnect power v Check continuity by motor harness cont Power window Connector D8	o OFF. window main switch c etween power window nector. w main switch Terminal 5	w main sw Dri Conr D	iver side power nector	r window motor Terminal 4	Continuity Existed
CHECK HARNESS Turn ignition switch Disconnect power v Check continuity by motor harness cont Power windo Connector D8	o OFF. window main switch c etween power window nector. w main switch Terminal	w main sw Dri Conr D	iver side power nector	r window motor Terminal 4	Continuity Existed
CHECK HARNESS Turn ignition switch Disconnect power v Check continuity be motor harness cont Power windo Connector D8 Check continuity be Check continuity be	o OFF. window main switch c etween power window nector. w main switch Terminal 5	w main sw Dri Conr D	iver side power nector	r window motor Terminal 4	Continuity Existed ground.
CHECK HARNESS Turn ignition switch Disconnect power v Check continuity be motor harness cont Power windo Connector D8 Check continuity be Check continuity be	o OFF. window main switch c etween power window nector. w main switch Terminal 5 etween power window	w main sw Dri Conr D v main swit	iver side power nector 10 tch harness	r window motor Terminal 4	Continuity Existed ground. Continuity
CHECK HARNESS	o OFF. window main switch c etween power window nector. w main switch Terminal 5 etween power window window main switch Termina 5	w main sw Dri Conr D v main swit	iver side power nector 10 tch harness	window motor Terminal 4 connector and	Continuity Existed ground.
CHECK HARNESS Turn ignition switch Disconnect power vide Check continuity by motor harness cont Power windo Connector D8 Check continuity by Power Connector D8 Check continuity by Sthe inspection result YES >> Replace po NO >> Repair or re Check GROUND C Turn ignition switch Disconnect power vide	o OFF. window main switch c etween power window nector. w main switch Terminal 5 etween power window window main switch Termina 5 normal? ower window main sw eplace harness. CIRCUIT	w main sw Dri Conr D v main swit	iver side power nector 10 tch harness Gi	window motor Terminal 4 connector and round 1. "Removal ar	Continuity Existed ground. Continuity Not existed
CHECK HARNESS Turn ignition switch Disconnect power view Check continuity be motor harness cont Power windo Connector D8 Check continuity be Power Connector D8 the inspection result YES >> Replace po NO >> Repair or result Disconnect power view Check continuity be motor harness contents Disconnect power view Check continuity be motor harness contents	OFF. window main switch c etween power window nector. w main switch Terminal 5 etween power window window main switch Termina 5 normal? ower window main sw eplace harness. CIRCUIT OFF. window main switch c etween power window nector.	w main sw Dri Conr D v main swit	iver side power nector 110 tch harness G • to <u>PWC-18</u>	window motor Terminal 4 connector and round 1. "Removal ar s connector an	Continuity Existed ground. Continuity Not existed
CHECK HARNESS Turn ignition switch Disconnect power vindor Connector D8 Check continuity be Connector D8 Check continuity be Power Connector D8 Sthe inspection result YES >> Replace po NO >> Repair or re Check GROUND C Turn ignition switch Disconnect power vindor Check continuity be motor harness cont Power vindor Disconnect power vindor D	OFF. window main switch c etween power window main switch Terminal 5 etween power window window main switch Termina 5 normal? ower window main switch clinculT o OFF. window main switch c etween power window main switch window main switch c etween power window window main switch	w main sw Dri Conr D v main swit al itch. Refer connector. w main sw Dri	iver side power nector 10 tch harness 6 to <u>PWC-18</u> vitch harness vitch harness	window motor Terminal 4 connector and round 1. "Removal ar s connector an	Continuity Existed ground. Continuity Not existed
CHECK HARNESS Turn ignition switch Disconnect power view Check continuity be motor harness cont Power windo Connector D8 Check continuity be Power Connector D8 the inspection result YES >> Replace po NO >> Repair or result Disconnect power view Check continuity be motor harness contents Disconnect power view Check continuity be motor harness contents	OFF. window main switch c etween power window nector. w main switch Terminal 5 etween power window window main switch Termina 5 normal? ower window main sw eplace harness. CIRCUIT OFF. window main switch c etween power window nector.	w main sw Dri Conr D v main swit al itch. Refer connector. w main sw Dri Conr	iver side power nector 110 tch harness G • to <u>PWC-18</u>	window motor Terminal 4 connector and round 1. "Removal ar s connector an	Continuity Existed ground. Continuity Not existed ad Installation".

PWC-109

ENCODER

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE : Description

Detects condition of the passenger side power window motor operation and transmits to power window subswitch as the pulse signal.

PASSENGER SIDE : Component Function Check

1.CHECK ENCODER OPERATION

Check that passenger side door glass performs AUTO open operation normally with power window main switch or power window sub-switch.

Is the inspection result normal?

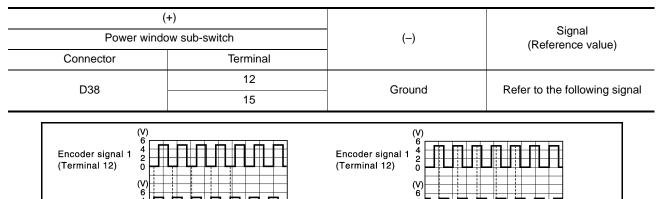
- YES >> Encoder operation is OK.
- NO >> Refer to <u>PWC-110, "PASSENGER SIDE : Diagnosis Procedure"</u>.

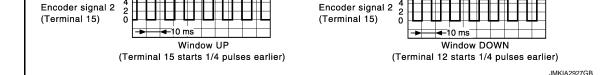
PASSENGER SIDE : Diagnosis Procedure

1.CHECK ENCODER SIGNAL

1. Turn ignition switch ON.

2. Check signal between power window sub-switch harness connector and ground with oscilloscope.





Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to <u>PWC-181, "Removal and Installation"</u>. NO >> GO TO 2.

2.check encoder signal circuit

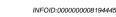
1. Turn ignition switch OFF.

2. Disconnect power window sub-switch connector and passenger side power window motor connector.

3. Check continuity between power window sub-switch harness connector and passenger side power window motor harness connector.

Power winde	ow sub-switch	Passenger side po	ower window motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D38	12	D40	2	Existed
036	15	D40	5	Existed

4. Check continuity between power window sub-switch connector and ground.



[ROADSTER]

INFOID:00000008194446

INFOID-00000008194447

ENCODER

< DTC/CIRCUIT DIAGNOSIS >

[ROADSTER]

Powe	er window sub-switch				Continuity
Connector	Termina	al	Ground		Continuity
D38	12				Not existed
	15				Not existed
•	replace harness.				
CHECK ENCODER	R POWER SUPPLY CI	RCUIT			
Turn ignition switc	ndow sub-switch conn h ON. ween passenger side		dow motor harness	s connector	and ground.
	(+)				
Passenger	side power window motor		()		Voltage (V) (Approx.)
Connector	Termina	al			, , ,
D40	4		Ground		12
YES >> GO TO 5. NO >> GO TO 4.	alue within the specific	ation?			
Check continuity b	h OFF. window sub-switch co between power windov		ch harness conne	ctor and pa	ssenger side powe
Turn ignition switc Disconnect power Check continuity b dow motor harnes Power wind	h OFF. window sub-switch co between power window s connector.	w sub-swit Pass	enger side power wind	ow motor	ssenger side powe
Turn ignition switc Disconnect power Check continuity b dow motor harnes Power wind Connector	h OFF. window sub-switch co between power window s connector. low sub-switch Terminal	w sub-swit Pass Conr	enger side power windenector	ow motor Ferminal	- Continuity
Turn ignition switc Disconnect power Check continuity k dow motor harnes Power wind Connector D38	h OFF. window sub-switch co between power window s connector. low sub-switch Terminal 4	w sub-swit Pass Conr D	enger side power wind nector 7 40	ow motor Ferminal	Continuity Existed
Turn ignition switc Disconnect power Check continuity k dow motor harnes Power wind Connector D38	h OFF. window sub-switch co between power window s connector. low sub-switch Terminal	w sub-swit Pass Conr D	enger side power wind nector 7 40	ow motor Ferminal	Continuity Existed
Turn ignition switc Disconnect power Check continuity b dow motor harnes Power wind Connector D38 Check continuity b Powe	h OFF. window sub-switch co between power window s connector. low sub-switch Terminal 4 between power window er window sub-switch	w sub-swit Passe Conr D v sub-switc	enger side power wind hector 1 40 h harness connec	ow motor Ferminal	Continuity Existed
Turn ignition switc Disconnect power Check continuity b dow motor harnes Power wind Connector D38 Check continuity b Powe Connector	h OFF. window sub-switch co between power window s connector. low sub-switch Terminal 4 between power window er window sub-switch Termina	w sub-swit Passe Conr D v sub-switc	enger side power wind nector 7 40	ow motor Ferminal	Continuity Existed Und. Continuity
Turn ignition switc Disconnect power Check continuity b dow motor harnes Power wind Connector D38 Check continuity b Powe Connector D38	h OFF. window sub-switch co between power window s connector. low sub-switch Terminal 4 between power window er window sub-switch Termina 4	w sub-swit Passe Conr D v sub-switc	enger side power wind hector 1 40 h harness connec	ow motor Ferminal	Continuity Existed
Turn ignition switc Disconnect power Check continuity b dow motor harnes Power wind Connector D38 Check continuity b Powe Connector D38 the inspection result (ES >> Replace p	h OFF. window sub-switch co between power window s connector. low sub-switch Terminal 4 between power window er window sub-switch <u>termina</u> 4 <u>c normal?</u> ower window sub-swit replace harness.	w sub-swit	enger side power wind hector 1 40 ch harness connect Ground	ow motor Terminal 4 tor and grou	Continuity Existed Und. Continuity Not existed
Turn ignition switc Disconnect power Check continuity b dow motor harnes Power wind Connector D38 Check continuity b Connector D38 the inspection result (ES >> Replace p NO >> Repair or p CHECK GROUND of Turn ignition switc Disconnect power	h OFF. window sub-switch co between power window s connector. low sub-switch d d d d d d d d d d d d d d d d d d d	w sub-swit	enger side power wind hector 1 40 ch harness connect Ground 0 <u>PWC-181. "Rem</u>	ow motor Terminal 4 tor and grou	Continuity Existed Und. Continuity Not existed Stallation".
Turn ignition switc Disconnect power Check continuity k dow motor harnes Power wind Connector D38 Check continuity k Check continuity k Connector D38 the inspection result (ES >> Replace p NO >> Repair or n CHECK GROUND (Turn ignition switc Disconnect power Check continuity k dow motor harnes	h OFF. window sub-switch co between power window s connector. low sub-switch d d d d d d d d d d d d d d d d d d d	w sub-swit	enger side power wind hector 1 40 ch harness connect Ground 0 <u>PWC-181. "Rem</u>	ow motor erminal 4 tor and grou oval and In ctor and pa	Continuity Existed Und. Continuity Not existed Stallation".
Turn ignition switc Disconnect power Check continuity k dow motor harnes Power wind Connector D38 Check continuity k Check continuity k Connector D38 the inspection result (ES >> Replace p NO >> Repair or n CHECK GROUND (Turn ignition switc Disconnect power Check continuity k dow motor harnes	h OFF. window sub-switch co between power window s connector. low sub-switch Terminal 4 between power window er window sub-switch cer window sub-switch replace harness. CIRCUIT h OFF. window sub-switch co between power window s connector.	w sub-swit	enger side power wind hector 1 40 ch harness connect Ground 0 <u>PWC-181. "Rem</u> ch harness connect ch harness connect	ow motor erminal 4 tor and grou oval and In ctor and pa	Continuity Existed Und. Continuity Not existed Stallation".

PWC-111

DOOR SWITCH CIRCUIT

Power window m	ain switch		Continuity
 Connector	Terminal	Ground	Continuity
D8	4		Not existed

< DTC/CIRCUIT DIAGNOSIS > DOOR SWITCH CIRCUIT **DRIVER SIDE**

DRIVER SIDE : Description

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

1.CHECK FUNCTION

Check automatic window adjusting function.

Is the inspection result normal?

YES >> Door switch is OK.

>> Refer to PWC-112, "DRIVER SIDE : Diagnosis Procedure". NO

DRIVER SIDE : Diagnosis Procedure

1. CHECK DOOR SWITCH

Check door switch. Refer to DLK-234, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK DOOR SWITCH INPUT SIGNAL

Check voltage between driver side power window main switch harness connector and ground.

(+ Driver side power w Connector		()	Voltage (V) (Approx.)
D8	4	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-181, "Removal and Installation". NO >> GO TO 3.

3.check door switch circuit

1. Turn ignition switch OFF.

2. Disconnect power window main switch connector and driver side power window motor connector.

3. Check continuity between power window main switch harness connector and driver side door switch harness connector.

-	Power windo	w main switch	Driver side door switch		Continuity
-	Connector	Terminal	Connector	Terminal	Continuity
-	D8	4	B63	2	Existed
، "				a connector and gray	un al

4. Check continuity between power window main switch harness connector and ground. [ROADSTER]

INFOID-000000008194448

INFOID:000000008194449

INFOID:000000008194450

DOOR SWITCH CIRCUIT

DOOR SWITCH CIRCUIT		
< DTC/CIRCUIT DIAGNOSIS >	[ROADSTER]	
Is the inspection result normal?		
YES >> GO TO 4.		А
NO >> Repair or replace harness. 4.CHECK INTERMITTENT INCIDENT		
Refer to GI-45, "Intermittent Incident".		B
>> INSPECTION END PASSENGER SIDE		С
PASSENGER SIDE : Description	INFOID:00000008194451	С
Detects door open/closed condition.		
PASSENGER SIDE : Component Function Check	INFOID:00000008194452	E
1.CHECK FUNCTION		
Check automatic window adjusting function.		F
<u>Is the inspection result normal?</u> YES >> Door switch is OK.		
NO >> Refer to <u>PWC-113</u> , "PASSENGER SIDE : Diagnosis Procedure".		G
PASSENGER SIDE : Diagnosis Procedure	INFOID:00000008194453	
1.CHECK DOOR SWITCH		⊢
Check door switch. Refer to DLK-234, "Component Function Check".		
Is the inspection result normal?		
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.		

2. CHECK DOOR SWITCH INPUT SIGNAL

Check voltage between power window sub-switch harness connector and ground.

(+)				P١
Power window	sub-switch	()	Voltage (V) (Approx.)	
Connector	Terminal		(hpprox.)	L
D38	14	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB	Ν

Is the inspection result normal?

YES	>> Replace power window sub-switch. Refer to <u>PWC-181, "Removal and Installation"</u> .
NO	>> GO TO 3.

3.CHECK DOOR SWITCH CIRCUIT

- 1. Disconnect passenger side door switch connector.
- 2. Check continuity between passenger side door switch harness connector and power window sub-switch harness connector.

Power windo	ow sub-switch	Passenger si	de door switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D38	14	B206	2	Existed

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Ρ

DOOR SWITCH CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between power window sub-switch harness connector and ground.

Power window s	ub-switch		Continuity
Connector	Terminal	Ground	Continuity
D38	14	_	Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
R WASHER SW	Front washer switch OFF	Off
R WASHER SW	Front washer switch ON	On
	Other than front wiper switch INT	Off
	Front wiper switch INT	On
R WIPER STOP	Front wiper is not in STOP position	Off
R WIFER STOP	Front wiper is in STOP position	On
NT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
URN SIGNAL R	Other than turn signal switch RH	Off
UKN SIGNAL K	Turn signal switch RH	On
URN SIGNAL L	Other than turn signal switch LH	Off
URN SIGNAL L	Turn signal switch LH	On
AIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
AIL LAIVIP SVV	Lighting switch 1ST or 2ND	On
II BEAM SW	Other than lighting switch HI	Off
II DEANI SW	Lighting switch HI	On
IEAD LAMP SW 1	Other than lighting switch 2ND	Off
IEAD LAWF SW T	Lighting switch 2ND	On
	Other than lighting switch 2ND	Off
IEAD LAMP SW 2	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
UTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On
FR FOG SW	NOTE: The item is indicated, but not monitored.	Off
R FOG SW	Rear fog lamp switch OFF	Off
	Rear fog lamp switch ON	On
	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On

[ROADSTER]

А

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-RL	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-BK	Back door closed (Coupe models)Trunk lid closed (Roadster models)	Off
DOOR SW-BR	Back door opened (Coupe models)Trunk lid opened (Roadster models)	On
CDL LOCK SW	Other than door lock and unlock switch LOCK	Off
ODE LOOK SW	Door lock and unlock switch LOCK	On
CDL UNLOCK SW	Other than door lock and unlock switch UNLOCK	Off
CDE UNECCR SW	Door lock and unlock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
RET CTL LR-SVV	Driver door key cylinder LOCK position	On
	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
NOTE: For models with NAVI this item s not monitored.	Rear window defogger switch ON	On
H/L WASH SW	NOTE: The item is indicated, but not monitored.	Off
	Trunk lid opener cancel switch OFF	Off
TR CANCEL SW	Trunk lid opener cancel switch ON	On
	Back door opener switch OFF (Coupe models)Trunk lid opener switch OFF (Roadster models)	Off
TR/BD OPEN SW	 While the back door opener switch is turned ON (Coupe models) While the trunk lid opener switch is turned ON (Roadster models) 	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
RKE-I OCK	LOCK button of the Intelligent Key is not pressed	Off
RKE-LOCK	LOCK button of the Intelligent Key is pressed	On
	UNLOCK button of the Intelligent Key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the Intelligent Key is pressed	On
RKE-TR/BD NOTE:	TRUNK OPEN button of the Intelligent Key is not pressed	Off
For Coupe models this item is not monitored.	TRUNK OPEN of the Intelligent Key is pressed	On
	PANIC button of the Intelligent Key is not pressed	Off
RKE-PANIC	PANIC button of the Intelligent Key is pressed	On
	UNLOCK button of the Intelligent Key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is pressed and held	On
	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simul- taneously	Off
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is pressed and held simulta- neously	On

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
	Bright outside of the vehicle	Close to 5 V
OPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V
	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	On
	Passenger door request switch is not pressed	Off
REQ SW -AS	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed (Coupe models)Trunk lid door request switch is not pressed (Roadster models)	Off
KEQ SW -DD/TK	Back door request switch is pressed (Coupe models)Trunk lid door request switch is pressed (Roadster models)	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
-031300	Push-button ignition switch (push switch) is pressed	On
GN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	The clutch pedal is not depressed	Off
NOTE: For A/T models this item is not monitored.	The clutch pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
	The brake pedal is not depressed	Off
BRAKE SW 2	The brake pedal is depressed	On
DETE/CANCL SW	 Selector lever in P position (A/T models) The clutch pedal is depressed (M/T models without SynchroRev Match mode) 	Off
For M/T models with Synchro- Rev Match mode this item is not monitored.	 Selector lever in any position other than P (A/T models) The clutch pedal is not depressed (M/T models without SynchroRev Match mode) 	On
SFT PN/N SW NOTE: For roadster M/T models and	 Selector lever in any position other than P and N (A/T models) Control lever in any position other than neutral position (Coupe M/T models with SynchroRev Match mode) 	Off
coupe M/T models without SynchroRev Match mode this tem is not monitored.	 Selector lever in P or N position (A/T models) Control lever in neutral position (Coupe M/T models with SynchroRev Match mode) 	On
S/L -LOCK	NOTE: The item is indicated but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated but not monitored.	Off
	Driver door is unlocked	Off
JNLK SEN -DR	Driver door is locked	On
	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On

< ECU DIAGNOSIS INFORMATION >

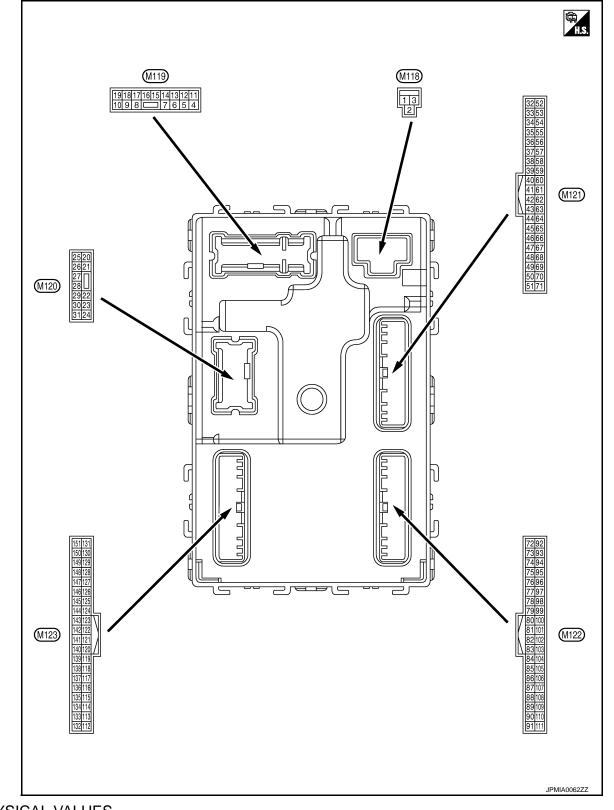
Monitor Item	Condition	Value/Status
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	 Selector lever in any position other than P and N (A/T models) The clutch pedal is not depressed (M/T models) 	Off
	 Selector lever in P or N position (A/T models) The clutch pedal is depressed (M/T models) 	On
	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On
	Engine stopped	Stop
	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speedom- eter reading
VEH SPEED 2	While driving	Equivalent to speedom- eter reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
	The Intelligent Key is not inserted into key slot	Off
KEY SW -SLOT	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	-
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet	-
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done	-
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet	-
	The key ID that the key slot receives is recognized by the fourth key ID reg- istered to BCM.	Done	-
	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet	-
CONFIRM ID3	The key ID that the key slot receives is recognized by the third key ID reg- istered to BCM.	Done	-
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet	-
	The key ID that the key slot receives is recognized by the second key ID reg- istered to BCM.	Done	-
	The key ID that the key slot receives is not recognized by the first key ID reg- istered to BCM.	Yet	-
CONFIRM ID1	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done	_
	The ID of fourth Intelligent Key is not registered to BCM	Yet	-
ГР 4	The ID of fourth Intelligent Key is registered to BCM	Done	-
	The ID of third Intelligent Key is not registered to BCM	Yet	-
TP 3	The ID of third Intelligent Key is registered to BCM	Done	-
	The ID of second Intelligent Key is not registered to BCM	Yet	-
TP 2	The ID of second Intelligent Key is registered to BCM	Done	-
	The ID of first Intelligent Key is not registered to BCM	Yet	-
TP 1	The ID of first Intelligent Key is registered to BCM	Done	-
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire	- [
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	-
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	-
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire	-
	ID of front LH tire transmitter is registered	Done	-
D REGST FL1	ID of front LH tire transmitter is not registered	Yet	-
	ID of front RH tire transmitter is registered	Done	-
D REGST FR1	ID of front RH tire transmitter is not registered	Yet	-
	ID of rear RH tire transmitter is registered	Done	-
D REGST RR1	ID of rear RH tire transmitter is not registered	Yet	-
	ID of rear LH tire transmitter is registered	Done	-
D REGST RL1	ID of rear LH tire transmitter is not registered	Yet	-
	Tire pressure indicator OFF	Off	-
WARNING LAMP	Tire pressure indicator ON	On	-
	Tire pressure warning alarm is not sounding	Off	-
BUZZER			-

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

	nal No. color)	Description				Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)	
1 (W)	Ground	Battery power supply	Input	Ignition switch (OFF	Battery voltage	
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch (OFF	12 V	
3 (Y)	Ground	P/W power supply (IGN)	Output	Ignition switch (NC	12 V	
					mp battery saver is activated. or room lamp power supply)	0 V	
4 (R)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- terior room lamp power sup-	12 V	
5	Ground	Passenger door UN-	Output	Passenger	UNLOCK (Actuator is activated)	12 V	
(G) Groun	Ground	LOCK	Output	door	Other than UNLOCK (Ac- tuator is not activated)	0 V	
8	Crownd	All doors, fuel lid	Output	All doors, fuel	LOCK (Actuator is activated)	12 V	
(V)	Ground	LOCK		lid	Other than LOCK (Actuator is not activated)	0 V	
9	Crownd	Driver door, fuel lid	Outrut	Driver door,	UNLOCK (Actuator is activated)	12 V	
(G)	Ground	UNLOCK	Output	fuel lid	fuel lid	Other than UNLOCK (Actuator is not activated)	0 V
11 (BR)	Ground	Battery power supply	Input	Ignition switch (OFF	Battery voltage	
13 (B)	Ground	Ground		Ignition switch (ON	0 V	
					OFF	0 V	
14 (R)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brighten- ing/dimming level is in the neutral position.	
15					OFF (LOCK indicator is	0 2 ms JSNIA0010GB Battery voltage	
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	not illuminated)		
				ACC		0 V	

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< ECU DIAGNOSIS INFORMATION >

(Wire color) Signal name Input/ Output Condition (Condition (Approx) 17 Ground Turn signal RH (Front and side) Output Ignition switch In Turn signal switch OFF 0 V 18 Ground Turn signal LH (Front and side) Output Ignition switch Interior room lamp Turn signal switch OFF 0 V 18 Ground Turn signal LH (Front and side) Output Ignition switch Interior room lamp Turn signal switch OFF 0 V 19 Ground Interior room lamp control Output Interior room lamp OFF 12 V 20 Ground Turn signal RH (Rear) Output Ignition switch ON OFF 12 V 20 Ground Turn signal RH (Rear) Output Ignition switch ON OFF 12 V 20 Ground Turn signal RH (Rear) Output Ignition switch ON Turn signal switch OFF 0 V 21 Ground Turn signal RH (Rear) Output Ignition switch ON OFF 12 V 22 Ground Back door/Turnk lid open Output Back door/Turnk lid open- er actuator is activatedo)		Terminal No. Desc					Value	
17 (W) Ground Turn signal RH (Front and side) Output Ignition switch ON Turn signal switch RH Image: Comparison of the system S S V 18 (O) Ground Turn signal LH (Front and side) Output Ignition switch ON Turn signal switch OFF 0 V 18 (O) Ground Turn signal LH (Front and side) Output Ignition switch ON Turn signal switch OFF 0 V 19 (P) Ground Interior room lamp control Output Interior room Iamp OFF 12 V 20 (V) Ground Interior room lamp control Output Interior room Iamp OfF 12 V 20 (V) Ground Turn signal RH (Rear) Output Ignition switch IN Turn signal switch OFF 0 V 20 (V) Ground Back door/Trunk lid open Output Ignition switch IN Turn signal switch RH Image: Control 23 (U) ¹ Ground Back door/Trunk lid open Output Back door/Trunk lid open OPEN (Back door/Trunk lid open- er actuator is not activate- ier actuator is not activate- er actu			Signal name			Condition		
18 (O) Ground Turn signal LH (Front and side) Output Ignition switch ON Turn signal switch LH Image: Construct of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the		Ground		Output			(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1	
(P) Ground Control Output Iamp ON 0 V 20 Ground Turn signal RH (Rear) Output Ignition switch Turn signal switch OFF 0 V 20 (V) Ground Turn signal RH (Rear) Output Ignition switch Turn signal switch OFF 0 V 23 (L)*1 Ground Back door/Trunk lid open Output Back door/Trunk lid open-er actuator is activated) 12 V 23 (L)*1 Ground Back door/Trunk lid open 0 Uput Back door/Trunk lid open-er actuator is not activated) 12 V 24*8 Ground Rear fog lamp Output Rear fog lamp OFF 0 V 25 Ground Turn signal LH (Rear) Output Ignition switch ON 12 V 0 V 25 Ground Turn signal LH (Rear) Output Ignition switch ON 0 V 0 V 0 V 25 Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch OFF 0 V 0 V 26 Ground Turn signal LH (Rear) Output Ignition switch ON 0 V 0 V		Ground		Output			(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1	
20 (V) Ground Turn signal RH (Rear) Output Ignition switch ON Turn signal switch OFF 0 V 20 (V) Ground Turn signal RH (Rear) Output Ignition switch ON Turn signal switch OFF 0 V 23 (L)*1 (Y)*2 Ground Back door/Trunk lid open Output Back door/Trunk lid open OPEN (Back door/Trunk lid open- er actuator is activated) 12 V 24*8 (O) Ground Rear fog lamp Output Rear fog lamp Output OFF 0 V 25 (LG) Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch OFF 0 V 25 (LG) Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch LH Ignition switch ON Ignition switch ON Ignition switch ON Ignition switch ON Ignition switch OFF 0 V 26 (LG) Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch LH Ignition switch ON Ignif Switch LH Ignition Switc		Ground		Output				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	(P)		control		lamp			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	20 (V)	Ground	Turn signal RH (Rear)	Output		Turn signal switch RH	(V) 15 10 50 1 s PKID0926E	
24 (0) Ground Rear fog lamp Output Rear fog lamp 0N 12 V 25 (LG) Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch OFF 0 V 25 (LG) Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch LH Ignition switch ON 30 (R) Ground Luggage room/Trunk room lamp Output Luggage room/ Trunk room ON 0 V	(L)* ¹	Ground		Output		(Back door/Trunk lid open- er actuator is activated) Other than OPEN (Back door/Trunk lid open- er actuator is not activat-		
25 (LG) Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch LH Ignition switch Ignition switch ON 30 (R) Ground Luggage room/Trunk room lamp Output Luggage room/ Trunk room ON OV		Ground	Rear fog lamp	Output	Rear fog lamp			
(B) Ground Luggage room/Trunk Output Trunk room		Ground	Turn signal LH (Rear)	Output			(V) 15 10 50 1 s PKID0926E	
(R) Ground room lamp Output Trunk room	30	Crownel	Luggage room/Trunk	0		ON	0 V	
		Ground		Output		OFF	12 V	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)	A
34	34 Crowned Luggage room/Trunk Output Ignit	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 10 10 10 10 10 10 10 10 10	B C D		
(G)	Ground	room antenna (–)	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	E
35	Ground	Luggage room/Trunk	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 1 5 0 1 5 1 5 JMKIA0062GB	G H I
(R)	Ground	room antenna (+)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	J PWC
38	Ground	round Rear bumper anten- na (-)		When the back door/trunk lid door request	When Intelligent Key is in the antenna detection area	(V) 15 0 0 1 s JMKIA0062GB	M
(B)			switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s JMKIA0063GB	P	

< ECU DIAGNOSIS INFORMATION >

	No.	Description				Value	
(Wire col +	olor) –	Signal name	Input/ Output		Condition	(Approx.)	
39	Ground	Rear bumper anten-	Output	When the back door/trunk lid door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(W) G	3100110	na (+)	Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB	
47 0	Cround	Ignition relay (IPDM	Quitout	Ignition switch	OFF or ACC	12 V	
(V) G	Ground	E/R) control	Output	Ignition Switch	ON	0 V	
					Ignition switch ON (A/T mod-	When selector lever is in P or N position	12 V
52	Ground	Starter relay control	Outrut	els) tput Ignition switch ON (M/T mod-	When selector lever is not in P or N position	0 V	
(SB)	Jiounu	Starter relay control	Ouipui		When the clutch pedal is depressed	Battery voltage	
				els)	When the clutch pedal is not depressed	0 V	
⁶⁰ G	Ground	Push-button ignition	Input	Push-button ig- nition switch	Pressed	0 V	
(BR)	oround	switch (Push switch)	mput	(push switch)	Not pressed	Battery voltage	
					ON (Pressed)	0 V	
61 (W) G	Ground	Back door/Trunk Lid door request switch	Input	Back door/ Trunk lid door request switch	OFF (Not pressed)	(V) 15 10 10 ms JPMIA0016GB 1.0 V	
64	- ·	Intelligent Key warn-		Intelligent Key	Sounding	0 V	
(G) G	Ground	ing buzzer	Output	warning buzzer	Not sounding	12 V	
66 (R) G	Ground	Back door/Trunk room lamp switch	Input	Back door/ Trunk room lamp switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	
					ON (Door open)	0 V	

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

	nal No.	Description				Value	А				
+	color)	Signal name	Input/ Output		Condition	(Approx.)	Λ				
					Pressed	0 V	В				
67 (GR)	Ground	Back door/Trunk lid opener switch	Input	Back door/ Trunk lid open- er switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	C				
							E				
					When Intelligent Key is in the passenger compart- ment		F				
72	Ground	Room antenna 2 (–)	Output	Output	Ignition switch		Ignition switch	JMKIA0062GB	G		
(L)		(Center console)			When Intelligent Key is not in the passenger compart- ment		H				
						JMKIA0063GB	J				
									When Intelligent Key is in the passenger compart-	(V) 15 10 5 0	PW
73		Room antenna 2 (+)		Ignition switch	ment	1 s JMKIA0062GB	L				
(P)	73 (P) Ground	Ground Room antenna 2 (+) (Center console)	Output	OFF	When Intelligent Key is not in the passenger compart- ment		M				
							Ν				
							JMKIA0063GB	0			

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< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value				
+	color)	Signal name	Input/ Output		Condition	(Approx.)				
74	Ground	Passenger door an-	Output	When the pas- senger door re- quest switch is	When Intelligent Key is in the antenna detection area	(V) 15 0 1 1 1 1 5 0 1 1 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1				
(SB)		tenna (-)	Cutput	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB				
75	Ground	Passenger door an-			When the pas- senger door re- t quest switch is	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1			
(BR)		tenna (+)	Output	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 10 10 10 10 10 10 10 10 10				
76	Ground	Driver door antenna						When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 1 1 5 JMKIA0062GB
(V)	Ground		Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 15 15 15 15 15 15 15 15 15 15				

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value		
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)	A	
77	Ground	Driver door antenna	Output	When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 0 15 15 15 15 15 15 15 15 15 15	B C D	
(LG)	Ground	(+)	Jouput	ated with igni- tion switch OFF	ated with igni- tion switch	When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5	E
78* ²	Ground	Room antenna 1 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	G H I	
(L)		(Instrument panel)			When Intelligent Key is not in the passenger compart- ment	(V) 15 0 5 0 1 s JMKIA0063GB	J PWC	
79* ²	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	M	
(R)	Ground	(Instrument panel)	Juput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	P	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Velue
(Wire +	color) –	Signal name	Input/ Output		Condition	Value (Approx.)
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC ON	0 V 12 V
83	0	Remote keyless entry	Input/	During waiting		(V) 15 10 5 0 1 ms 1 ms JMKIA0064GB
(GR)	Ground	receiver (front) com- munication	Output	When operating gent Key	either button on the Intelli-	(V) 15 10 5 0 1 ms JMKIA0065GB
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V
87 (BR)	Ground	Fround Combination switch INPUT 5	Input	Combination switch	Rear fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 0 0 2 ms JPMIA0038GB 1.3 V
					Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 0 0 2 ms JPMIA0040GB 1.3 V

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)	A
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V	B C D
88	Ground	Combination switch	laput	Combination	Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0036GB 1.3 V	E
(V)	Ground	INPUT 3	Input	switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	G H I
					Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 0 2 ms JPMIA0040GB 1.3 V	J PWC
90 (P)	Ground	CAN-L	Input/ Output		<u> </u>	_	
91 (L)	Ground	CAN-H	Input/ Output		_		M
92 (LG)	Ground	Key slot illumination	Output	Key slot illumi- nation	OFF Blinking ON	0 V (V) 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 15 15 15 15 15 15 15 15	N O P
93	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage	
(V)		•		-	ON	0 V	

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description				Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(O)		-		-g	ACC or ON	12 V
96* ³ (Y)	Ground	A/T shift selector (De- tention switch) power supply	Output		_	12 V
		Selector lever P posi- tion switch (A/T mod-		Selector lever	P position	0 V
0		els)		A	Any position other than P	12 V
99* ⁶ (R)	Ground	Clutch pedal position switch (M/T models	Input	Clutch pedal	OFF (Clutch pedal is de- pressed)	0 V
	without SynchroRev Match mode)		position switch	ON (Clutch pedal is not depressed)	Battery voltage	
					ON (Pressed)	0 V
100 (GR)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 10 10 10 10 10 10 10 10 10 10
					ON (Pressed)	0 V
101 (Y)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 10 10 10 10 10 10 10 10 10
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(O)	Croand	lay control	Juput	iginion ownor	ON	12 V
103 (LG)	Ground	Remote keyless entry receiver (front) power supply	Output	Ignition switch C	DFF	12 V

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

(Wire c	color)					Value	Α
	_	Signal name	Input/ Output		Condition	(Approx.)	A
					All switches OFF	(V) 15 0 2 ms JPMIA0041GB 1.4 V	B C D
					Turn signal switch LH	(V) 15 0 2 ms JPMIA0037GB 1.3 V	E
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 0 2 ms JPMIA0036GB 1.3 V	G H I
					Front wiper switch LO	(V) 15 0 2 ms JPMIA0038GB 1.3 V	J PW
					Front washer switch ON	(V) 15 0 2 ms JPMIA0039GB 1.3 V	M

Ρ

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(VVire	color) -	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
108	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 0 0 2 ms JPMIA0038GB 1.3 V
(R)		INPUT 4		switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0036GB 1.3 V
					Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description					
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)	A
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C D
					Lighting switch PASS	(V) 15 10 2 ms JPMIA0037GB 1.3 V	E
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 0 2 ms JPMIA0036GB 1.3 V	G H I
					Front wiper switch INT	(V) 15 0 2 ms JPMIA0038GB 1.3 V	J PWC
					Front wiper switch HI	(V) 15 10 2 ms JPMIA0040GB 1.3 V	M
					ON	0 V	0
110 (P)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 0 10 ms JPMIA0012GB 1.1 V	Ρ

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
113	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(O)	Cround		mput	ON	When dark outside of the vehicle	Close to 0 V
114* ⁴	Ground	Clutch interlock	Input	Clutchinterlock	OFF (Clutch pedal is not depressed)	0 V
(R)		switch		switch	ON (Clutch pedal is de- pressed)	Battery voltage
115* ⁹ (O)	—	—	—		_	_
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
118	Ground	Stop lamp switch 2	Input	Stop lamp	OFF (Brake pedal is not depressed)	0 V
(P)	Croana		mpor	switch	ON (Brake pedal is de- pressed)	Battery voltage
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 0 10 10 ms JPMIA0012GB 1.1 V
				UNLOCK status (Unlock switch sensor ON)	0 V	
121	Ground	Key slot switch	Input	When the Intellig	gent Key is inserted into key	12 V
(R)	Cround	Ney slot switch	mput	When the Intellig key slot	gent Key is not inserted into	0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
(00)					ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 0 10 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)	А
129* ² (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 0 5 0 10 ms JPMIA0012GB 1.1 V	B C D
					ON	0 V	
130* ⁷ (L)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 10 5 0 10 10 10 10 10 10 10 10 10 10 10 10 1	E F G
					Rear window defogger switch ON	1.1 V 0 V	H
132 (Y)* ¹ (V)* ²	Ground	Power window switch and soft top control unit communication	Input/ Output	Ignition switch C	DN	(V) 15 10 5 0 10 10 10 10 10 10 10 10 10 10 10 10 1	l
						10.2 V	
				Ignition switch C		12 V	PW
133	Ground	Push-button ignition	Output	Push-button ig- nition switch il-	ON (Tail lamps OFF)	9.5 V NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level. (V) 15	L
(G)	Clouid	switch illumination	Output	lumination		10 5 6 10 10 10 10 10 10 10 10 10 10 10 10 10	N
					OFF	0 V	0
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF ON	Battery voltage	
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch C		0 V	Ρ
138 (V)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF ACC or ON	0 V 5.0 V	

< ECU DIAGNOSIS INFORMATION >

Imput Condition Condition (Approx.) + - Signal name Input/ Output Condition (Approx.) - - - Signal name Input/ Output During waiting Imput/ During waiting Imput/ Imput/ During waiting Imput/ Imput/ During waiting Imput/ Imput/ Imput/ During waiting Imput/ Imput/ Imput/ During waiting Imput/ Imput/ Imput/ During waiting Imput/ Imput/ Imput/ During waiting Imput/ Imput/ Imput/ Imput/ During waiting Imput/	Termir		Description				Value
139 (L) Ground Tire pressure receiv- er communication Input/ Output Input/ Output Uring waiting Input/ When operating either button on the Intelligent Key Input/ Vhen operating either button on the Intelligent Key Input/ Inguition switch ON 139 (L) Ground Tire pressure receiv- er communication Input/ Output Input/ Inguition switch ON Standby state Input/ Inguition switch ON 14075 Selector lever P/N position (A/T models) Selector lever P/N position (A/T models) Selector lever P or N position 12 V Except P and N positions 14075 Ground Park/neutral position Input Selector lever in neutral po- Battery voltage		-	Signal name			Condition	
139 (L) Ground Tire pressure receiv- er communication Input/ Output When operating either button on the Intelligent Key Imput/ Standby state Imput/ Standby state 139 (L) Ground Tire pressure receiv- er communication Input/ Output Imput/ Standby state Imput/ Standby state Imput/ Standby state 140°-5 (m) Selector lever P/N position (A/T models) Selector lever P/N position (A/T models) Selector lever Imput/ Selector lever in neutral po- Battery voltage P or N position Scource P or N position Scource 12 V Except P and N positions OV					OFF (Remote key-	During waiting	
140*5 Ground Selector lever P/N position (A/T models) Selector lever P or N position 12 V 140*5 Ground Park/neutral position Input Selector lever in neutral po- 0 V		Ground			ceiver communica-	button on the Intelligent	
140*5 Ground Park/neutral position Input Selector lever in neutral po- P or N positions 0 V 140*5 Ground Park/neutral position Input Control lever in neutral po- Battery voltage					ON	Standby state	
140*5 Ground Park/neutral position Input Selector lever Except P and N positions 0 V 140*5 Ground Park/neutral position Input Control lever in neutral po- Battery voltage							
140*5 Ground Park/neutral position Input Control lever in neutral po-					Selector lever		
Switch (Coupe M/L Ignition switch SILULI		Ground	Park/neutral position	Input		Control lever in neutral po-	
witch (coupe in/r models with Synchro- Rev Match mode) ON Control lever in any posi- tion other than neutral 0 V	(0)				Ignition switch ON	Control lever in any posi-	0 V
ON 0 V						ON	0 V
141 (Y) Ground Security indicator lamp Output Security indica- tor lamp Blinking Image: Constraint of the security indica- tor lamp Blinking		Ground		Output		Blinking	10 5 0 1 s JPMIA0014GB
OFF 12 V						OFF	12 V

< ECU DIAGNOSIS INFORMATION >

Imput/ Output Imput/ Output Condition Condition (Approx.) 142 (O) Ground Combination switch OUTPUT 5 Output Combination switch (Mper intermit- tent dial 4) All switches OFF 0 V 142 (O) Ground Combination switch OUTPUT 5 Output Combination switch (Mper intermit- tent dial 4) Combination (Wiper intermitent dial 4) Mission Switch (Miper intermitent dial 4) 10.7 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination Switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Font washer Switch ON (Wiper intermittent dial 4) 0 V Impulation Switch Impulation Switch Impulation Switch Impulation Switch Impulation Switch <th></th> <th></th> <th></th> <th></th> <th></th> <th>Description</th> <th>nal No.</th> <th></th>						Description	nal No.	
142 (O) Ground Combination switch OUTPUT 5 Output Combination switch Output Combination switch tent dial 4) Lighting switch 1ST Lighting switch 2ND If 1ghting switch 2ND 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Any of the conditions be- low with all switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Any of the conditions be- low with all switches OFF (Wiper intermittent dial 2) 0 V 143 (P) K Combination switch OUTPUT 1 Output Combination switch Any of the conditions be- low with all switches OFF (Wiper intermittent dial 2) 0 V 143 (P) K All switches OFF (Wiper intermittent dial 4) 0 V	A	Value (Approx.)	Condition			Signal name	,	
142 (C) Ground Combination switch OUTPUT 5 Output Combination switch (Wiper intermittent dial 4) Lighting switch HI Lighting switch 2ND Image: Combination Switch RH 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination Switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Any of the conditions be- low with all switches OFF · Wiper intermittent dial 2 · Wiper intermittent dial 3 · Wiper intermittent dial 3 · Wiper intermittent dial 4 Image: Combination Switch Image: Combination Switch Image: Combination Switch (P) Image: Combination Switch Combination Switch Any of the conditions be- low with all switches OFF · Wiper intermittent dial 3 · Wiper intermittent dial 4 Image: Combination Switch Image: Combination Switch Image: Combination Switch (P) Image: Combination Switch Any of the conditions be- low with all switches OFF · Wiper intermittent dial 4 Image: Combination Switch Image: Combination Switch Image: Combination Switch Image: Combination Switch (P) Image: Combination Switch Combination Switch <		0 V	All switches OFF					
142 (O) Ground Combination switch OUTPUT 5 Output Combination switch (Wiper intermit- tent dial 4) Lighting switch 2ND 15 10 10 10 10 10 10 10 10 10 10 10 10 10	В		Lighting switch 1ST					
142 (O) Ground Combination switch OUTPUT 5 Output switch (Wiper intermit- tent dial 4) Lighting switch 2ND 10 Turn signal switch RH 143 (P) Ground Combination switch OUTPUT 1 Output Switch (Wiper intermit- tent dial 4) Turn signal switch RH 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch Combination switch Output Combination Switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch All switches OFF (Wiper intermittent dial 2) 0 V 143 (P) Image: Subscript of the conditions be- low with all switches OFF (Wiper intermittent dial 2) Image: Subscript of the conditions be- low with all switches OFF (Wiper intermittent dial 3) Image: Subscript of the condition subscrip of the condition subscript of the condition subscrip			Lighting switch HI	Ormhination				
(O) OUTPUT 5 Output (Wiper intermit- tent dial 4) Turn signal switch RH 0 Image: Combination switch operation opere	С		Lighting switch 2ND		0.10.1	Combination switch		142
143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination Switch Combination Switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination Switch Any of the conditions be- low with all switches OFF • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 6 • Wiper intermittent dial 6 • Wiper intermittent dial 7 • Wiper intermittent dial 7 • Wiper intermittent dial 4) Journal of the conditions be- low with all switches OFF • Wiper intermittent dial 3 • Wiper intermittent dial 4 • Wiper i		0			Output	OUTPUT 5	Ground	(O)
143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch Combination Switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination OUTPUT 1 Output Combination switch Combination Switch Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 3 • Wiper intermittent dial 4 (V) 15 10 10 10 10 10 10 10 10 10 10 10 10 10			Turn signal switch DU	tent dial 4)				
143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch Combination Switch All switches OFF (Wiper intermittent dial 4) 0 V 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination Switch Any of the conditions be- low with all switches OFF • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7 10.7 V All switches OFF • Wiper intermittent dial 4) 0 V Mil switches OFF • Wiper intermittent dial 4) 0 V	D		Turn signal switch KH					
143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination Switch Combination Switch Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 3 • Wiper intermittent dial 4 (V) • • • • • • • • • • • • • • • • • • •		10.7 V						
143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch Any of the conditions be- low with all switches OFF Image: Combination switch (Wiper intermittent dial 4) 143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Any of the conditions be- low with all switches OFF Image: Combination switch Super intermittent dial 2 Wiper intermittent dial 3 Wiper intermittent dial 4 Image: Combination switch OUTPUT 1 Image: Combination switch Super intermittent dial 3 Image: Combination switch Super intermittent dial 4 Image: Combination switch Super intermittent di	Е	0 V						
143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Combination switch Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 3 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7 Image: Combination switch 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,								
143 (P) Ground Combination switch OUTPUT 1 Output Combination switch Any of the conditions be- low with all switches OFF 15 Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 3 Viper intermittent dial 3 Wiper intermittent dial 3 Wiper intermittent dial 4 Viper intermittent dial 4 JPMIA0032GB JPMIA0032GB V All switches OFF (Wiper intermittent dial 4) 0 V Front washer switch ON (Wiper intermittent dial 4) (V)		(V)						
(P) OUTPOT T Switch Swi	F			Combination	Output	Combination switch	Ground	143
 Wiper intermittent dial 2 Wiper intermittent dial 3 Wiper intermittent dial 6 Wiper intermittent dial 7 JPMIA0032GB JPMIA0032GB JPMIA0032GB JOU All switches OFF (Wiper intermittent dial 4) Front washer switch ON (Wiper intermittent dial 4) (V)		5		switch	Output	OUTPUT 1	Ground	(P)
Wiper intermittent dial 6 Wiper intermittent dial 7 JPMIA0032GB U U Wiper intermittent dial 7 U V All switches OFF (Wiper intermittent dial 4) V Front washer switch ON (Wiper intermittent dial 4) (V)	G		• Wiper intermittent dial 2					
(Wiper intermittent dial 4) 0 V Front washer switch ON (Wiper intermittent dial 4) (V)								
(Wiper intermittent dial 4) Front washer switch ON (Wiper intermittent dial 4)	Η	0.V						
(Wiper intermittent dial 4) (V)			· · · /					
		(V)						
1// Combination switch Combination			()	Combination		Combination switch		144
(G) Ground OUTPUT 2 Output switch Any of the conditions be-		5			Output	OUTPUT 2	Ground	
Iow with all switches OFF • • Wiper intermittent dial 1	J							
Wiper intermittent dial 5		2 ms						
Wiper intermittent dial 6 JPMIA0033GB 10.7 V	PWC		• wiper intermittent dial 6					_
All switches OFF 0 V		0 V						
Front wiper switch INT	L		Front wiper switch INT					
Combination Front wiper switch LO		15	-	Combination				
145 (L) Combination switch OUTPUT 3 Output Switch (Wiper intermit- Lighting switch AUTO 10 5 0			Lighting switch AUTO		Output		Ground	
(L) OUTPUT 3 (Wiper intermit- tent dial 4)	M					0019013		(L)
Rear fog lamp switch ON			Rear fog lamp switch ON					
JPMIA0034GB 10.7 V	Ν							
All switches OFF 0 V			All switches OFF					
Lighting switch 2ND	0		Lighting switch 2ND					
Combination	0	(V)	Lighting switch PASS	Combination				
146 (CP) Ground Combination switch Output Output (Wiggs integrait					Output	Combination switch	Ground	146
(SB) OUTPUT 4 (Wiper intermit- tent dial 4)	Ρ	Ŏ			Output	OUTPUT 4	Ground	(SB)
Turn signal switch LH			Turn signal switch LH					
JPMIA0035GB		JPMIA0035GB						
10.7 V		10.7 V						

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

	nal No.	Description				Value
(Wire +	color) –	Signal name	Input/ Output		Condition	(Approx.)
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151	Ground	Rear window defog-	Output	Rear window	Active	0 V
(G)	Giounu	ger relay control	Output	defogger	Not activated	Battery voltage

*1: Coupe models

*2: Roadster models

*3: A/T models

*4: M/T models

*5: With A/T or coupe models with M/T and SynchroRev Match mode

*6: With A/T or with M/T without SynchroRev Match mode

*7: Without NAVI

*8: With rear fog lamp

*9: BCM does not use this terminal for control.

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

INFOID:000000008837061

А

В

С

D

Е

F

Н

J

PWC

L

Μ

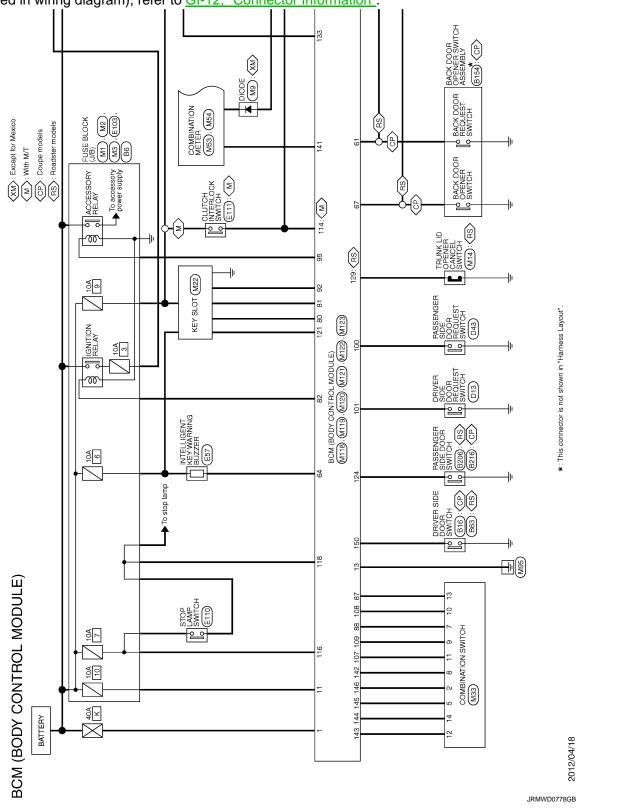
Ν

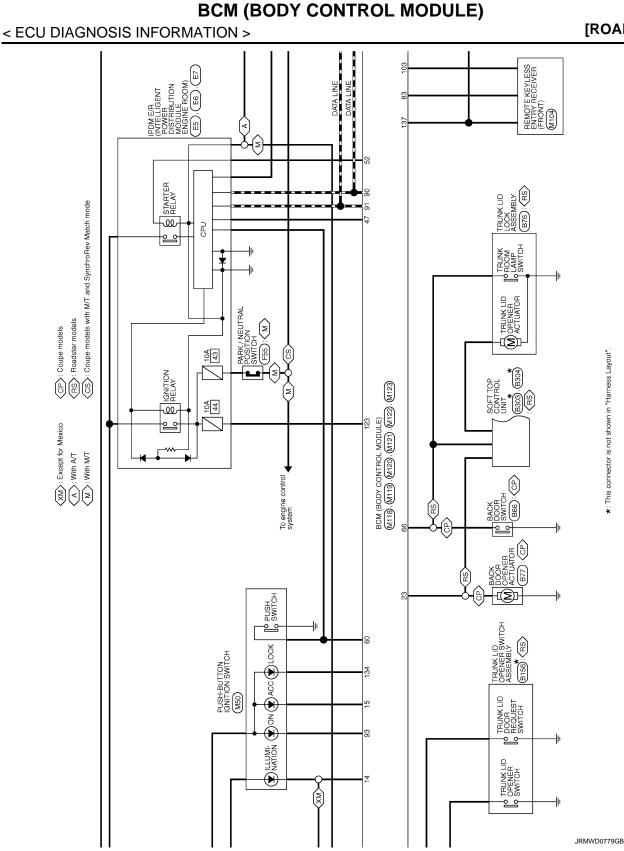
Ο

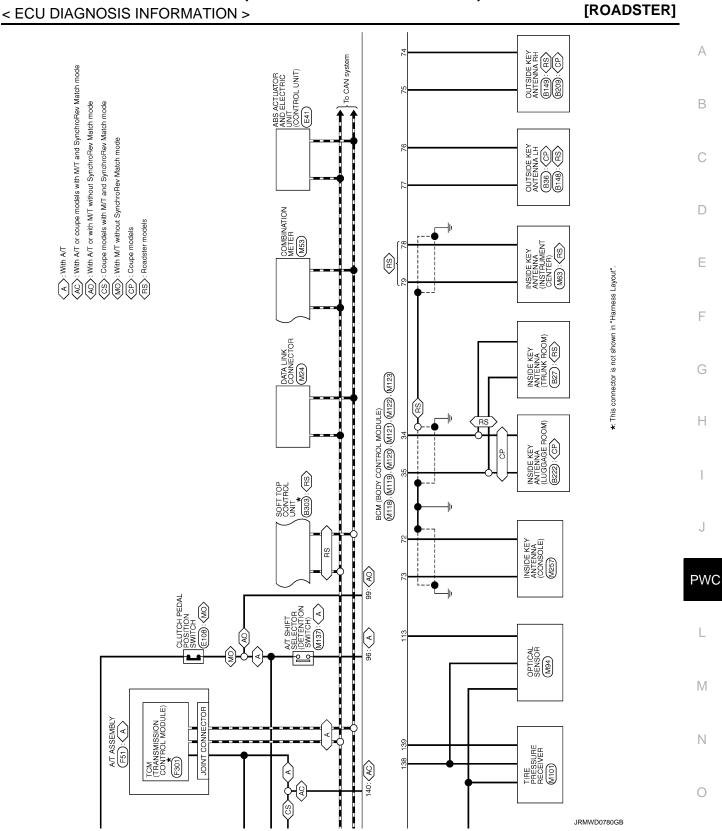
Ρ

[ROADSTER]

For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (option abbreviation; if not described in wiring diagram), refer to <u>GI-12, "Connector Information"</u>.







Ρ

PWC-141

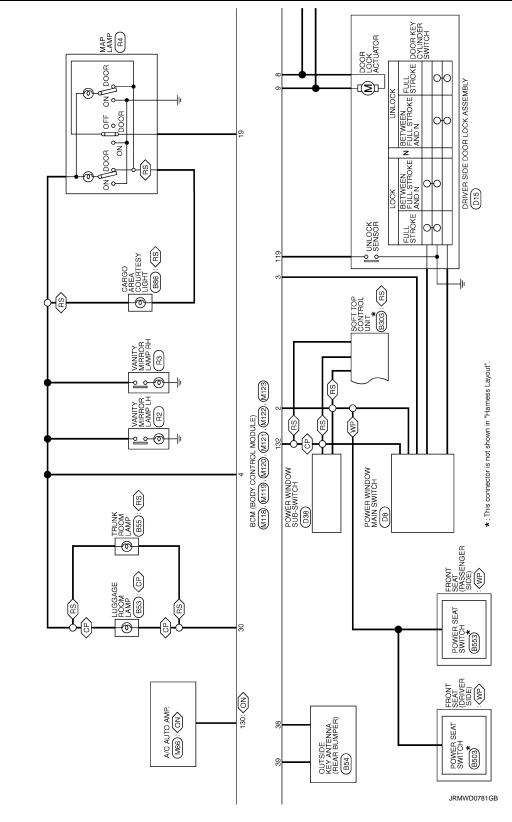
2013 370Z

< ECU DIAGNOSIS INFORMATION >

 CP
 : Coupe models

 (FS) : Roadster models
 (WP) : With power seat

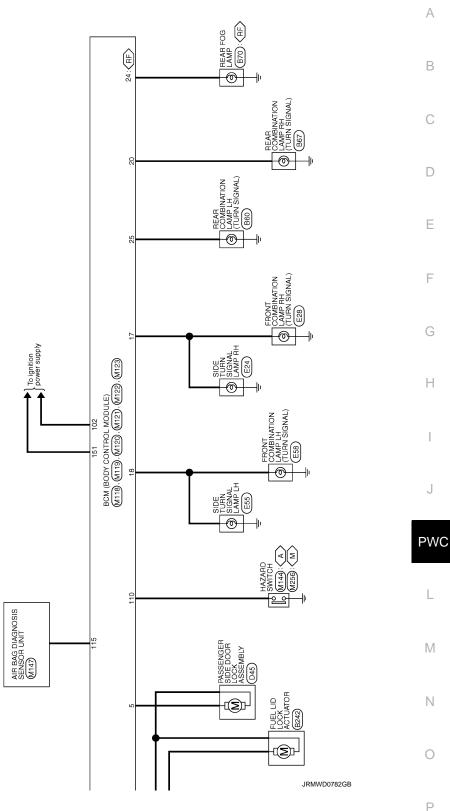
 (WP) : With number of the context of t



[ROADSTER]

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



 $\begin{array}{c} \overbrace{A} : \text{With AT} \\ \overbrace{M} : \text{With MT} \\ \overbrace{RF} : \text{With rear fog lamp} \end{array}$

Fail-safe

INFOID:000000008837062

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation	
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC	
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC	
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC	
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC	
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$	
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistentStarter control relay signalStarter relay status signal	
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN) 	
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal) 	
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilledPower position changes to ACCReceives engine status signal (CAN)	
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal	
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM be- comes normal	
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization	
B26E8: CLUTCH SW	Inhibit engine cranking	 When any of the following BCM recognition conditions are fulfilled Status 1 Clutch switch signal (CAN from ECM): ON Clutch interlock switch signal: OFF (0 V) Status 2 Clutch switch signal (CAN from ECM): OFF Clutch interlock switch signal: ON (Battery voltage) 	

DTC Inspection Priority Chart

INFOID:000000008837063

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

Priority	DTC	
	B2553: IGNITION RELAY	
	B2555: STOP LAMP	
	B2556: PUSH-BTN IGN SW	
	B2557: VEHICLE SPEED	
	B2560: STARTER CONT RELAY	
	B2601: SHIFT POSITION	
	B2602: SHIFT POSITION	
	B2603: SHIFT POSI STATUS	
	• B2604: PNP SW	
	• B2605: PNP SW	
	B2608: STARTER RELAY	
4	B260A: IGNITION RELAY	
·	B260F: ENG STATE SIG LOST	
	• B2614: BCM	
	• B2615: BCM	
	• B2616: BCM	
	• B2617: BCM	
	 B2618: BCM B261A: PUSH-BTN IGN SW 	
	B261E: VEHICLE TYPE	
	B26E8: CLUTCH SW	
	B26EA: KEY REGISTRATION	
	C1729: VHCL SPEED SIG ERR	
	U0415: VEHICLE SPEED SIG	
	C1704: LOW PRESSURE FL	
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR	
	C1707: LOW PRESSURE RL	
	C1708: [NO DATA] FL	
5	C1709: [NO DATA] FR C1710: [NO DATA] FR	
Э	 C1710: [NO DATA] RR C1711: [NO DATA] RL 	
	C1711: [NO DATA] RE C1716: [PRESSDATA ERR] FL	
	C1717: [PRESSDATA ERR] FR	
	C1718: [PRESSDATA ERR] RR	
	C1719: [PRESSDATA ERR] RL	
	C1734: CONTROL UNIT	
	B2621: INSIDE ANTENNA	
6	B2622: INSIDE ANTENNA	
	B2623: INSIDE ANTENNA	

DTC Index

NOTE:

The details of time display are as follows.

• CRNT: A malfunction is detected now.

• PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>PWC-98, "COM-</u> N <u>MON ITEM : CONSULT Function (BCM - COMMON ITEM)"</u>.

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference	O
No DTC is detected. further testing may be required.	_	_	_	_	_	
U1000: CAN COMM CIRCUIT	—	—	—	—	<u>BCS-49</u>	
U1010: CONTROL UNIT (CAN)	—	—	_		BCS-50	
U0415: VEHICLE SPEED SIG	_	—	—	—	BCS-51	

M

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference
B2190: NATS ANTENNA AMP	×	_		_	<u>SEC-46</u>
B2191: DIFFERENCE OF KEY	×	_			<u>SEC-49</u>
B2192: ID DISCORD BCM-ECM	×	_			<u>SEC-50</u>
B2193: CHAIN OF BCM-ECM	×				<u>SEC-52</u>
B2195: ANTI SCANNING	×	_			<u>SEC-53</u>
B2553: IGNITION RELAY	_	×			PCS-50
B2555: STOP LAMP	_	×			<u>SEC-54</u>
B2556: PUSH-BTN IGN SW		×	×	—	<u>SEC-56</u>
B2557: VEHICLE SPEED	×	×	×		<u>SEC-58</u>
B2560: STARTER CONT RELAY	×	×	×		<u>SEC-59</u>
B2562: LOW VOLTAGE		×	_	—	BCS-52
B2601: SHIFT POSITION	×	×	×		<u>SEC-60</u>
B2602: SHIFT POSITION	×	×	×		<u>SEC-63</u>
B2603: SHIFT POSI STATUS	×	×	×		<u>SEC-66</u>
B2604: PNP SW	×	×	×		<u>SEC-69</u>
B2605: PNP SW	×	×	×		<u>SEC-71</u>
B2608: STARTER RELAY	×	×	×		<u>SEC-73</u>
B260A: IGNITION RELAY	×	×	×		PCS-52
B260F: ENG STATE SIG LOST	×	×	×		<u>SEC-75</u>
B2614: BCM	_	×	×		PCS-54
B2615: BCM	_	×	×		PCS-57
B2616: BCM	_	×	×		PCS-60
B2617: BCM	×	×	×	—	<u>SEC-79</u>
B2618: BCM	×	×	×	—	PCS-63
B261A: PUSH-BTN IGN SW	_	×	×		PCS-64
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	<u>SEC-82</u>
B2621: INSIDE ANTENNA		×	_	—	DLK-228
B2622: INSIDE ANTENNA		×	_	_	• <u>DLK-59</u> (Coupe) • <u>DLK-230</u> (Road- ster)
B2623: INSIDE ANTENNA	_	×		_	• <u>DLK-61</u> (Coupe) • <u>DLK-232</u> (Road- ster)
B26E8: CLUTCH SW	×	×	×		<u>SEC-76</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)		<u>SEC-78</u>
C1704: LOW PRESSURE FL		—		×	
C1705: LOW PRESSURE FR	_	_		×	<u>WT-20</u>
C1706: LOW PRESSURE RR	_	—	_	×	<u>vv1-20</u>
C1707: LOW PRESSURE RL	_	—	—	×	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference	A
C1708: [NO DATA] FL	—	—		×		D
C1709: [NO DATA] FR	—	—	—	×	WT-22	
C1710: [NO DATA] RR	_	_		×	<u>vv1-22</u>	С
C1711: [NO DATA] RL	—	—	_	×		
C1716: [PRESSDATA ERR] FL	_	_		×		
C1717: [PRESSDATA ERR] FR	_	—		×	WT-25	D
C1718: [PRESSDATA ERR] RR	—			×	<u>W1-25</u>	
C1719: [PRESSDATA ERR] RL	_	_		×		Е
C1729: VHCL SPEED SIG ERR	—	—	_	×	<u>WT-27</u>	
C1734: CONTROL UNIT	_	—	_	×	<u>WT-29</u>	_
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< ECU DIAGNOSIS INFORMATION >

SOFT TOP CONTROL UNIT

Reference Value

[ROADSTER]

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.

CONSULT MONITOR ITEM

Monitor Item		Condition	Status/Value
		Lock position	ON
ROOF LATCHED RH	State of roof lock is in roof	Other than above	OFF
	latch RH	Roof striker sensor RH circuit is open or short	NG
		Lock position	ON
ROOF LATCHED LH	State of roof lock is in roof	Other than above	OFF
	latch LH	Roof striker sensor LH circuit is open or short	NG
		Lock	ON
F/CENTER LOCK	State of roof latch cylinder	Other than above	OFF
		Roof latch lock sensor circuit is open or short	NG
		Soft top is close	ON
R/RAIL RAISED LH	State of roof drive cylinder	Other than above	OFF
		Roof status sensor LH circuit is open or short	NG
		Soft top is close	ON
R/RAIL RAISED RH	State of roof drive cylinder	Other than above	OFF
	RH	Roof status sensor RH circuit is open or short	NG
		Soft top is open	ON
R/RAIL LOWERED	State of roof drive cylinder	Other than above	OFF
	LH	Roof status sensor LH circuit is open or short	NG
		5th bow is close	ON
5TH BOW LOWERED	State of 5th bow drive cylin-	Other than above	OFF
	der LH	5th bow status sensor LH circuit is open or short	NG
		5th bow is open	ON
5TH BOW RAISED	State of 5th bow drive cylin-	Other than above	OFF
	der RH	5th bow status sensor RH circuit is open or short	NG
		Storage lid is open	ON
S/LID OPEN LH	State of storage lid drive cyl-	Other than above	OFF
	inder LH	Storage lid status sensor LH circuit is open or short	NG
		Storage lid is open	ON
S/LID OPEN RH	State of storage lid drive cyl-	Other than above	OFF
	inder RH	Storage lid status sensor RH circuit is open or short	NG

< ECU DIAGNOSIS INFORMATION >

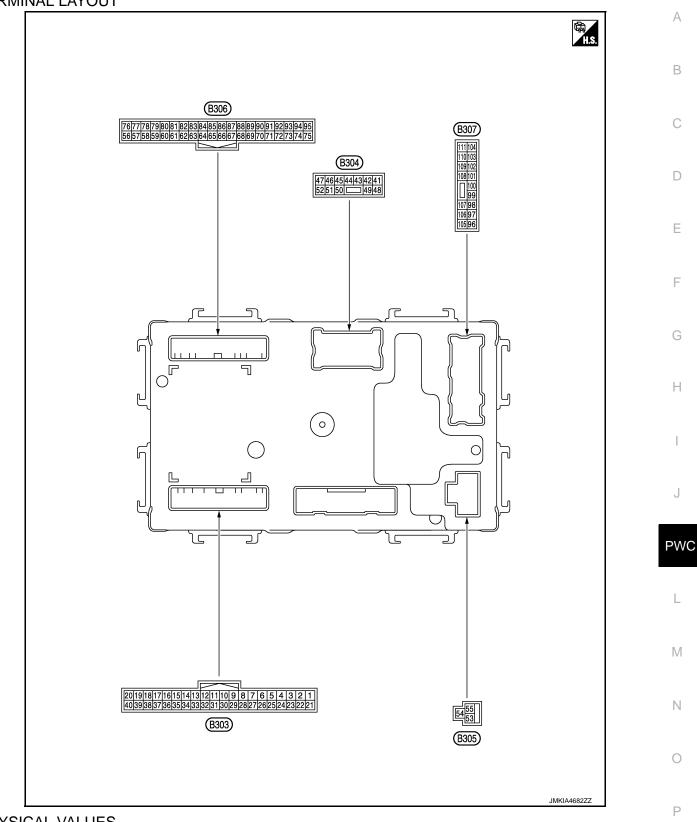
Monitor Item		Condition	Status/Value
		Storage lid is close	ON
S/LID CLOSE RH	State of storage lid drive cyl-	Other than above	OFF
	inder RH	Storage lid status sensor RH circuit is open or short	NG
		Unlock	ON
TH BOW LATCH OP	State of 5th bow latch cylin-	Other than above	OFF
	der	5th bow latch open sensor circuit is open or short	NG
		Operate	ON
SWITCHING VALVE 1	Operation of switching valve 1	Stop	OFF
		Switching valve 1 circuit is short	NG
		Operate	ON
WITCHING VALVE 2	Operation of switching valve 2	Stop	OFF
		Switching valve 2 circuit is short	NG
		Operate	ON
WITCHING VALVE 3	Operation of switching valve 3	Stop	OFF
	valve J	Switching valve 3 circuit is short	NG
		Operate	ON
SWITCHING VALVE 4	Operation of switching valve 4	Stop	OFF
	valve 4	Switching valve 4 circuit is short	NG
		Operate	ON
SWITCHING VALVE 5	Operation of switching valve 5	Stop	OFF
	valve 5	Switching valve 5 circuit is short	NG
		Turning clockwise	ON
PUMP OUT (RH)	Operation of hydraulic	Other than above	OFF
	pump motor	Hydraulic pump motor (RH) circuit is short	NG
		Turning counterclockwise	ON
PUMP OUT (LH)	Operation of hydraulic	Other than above	OFF
	pump motor	Hydraulic pump motor (LH) circuit is short	NG
		Lock	ON
	State of 5th bow latch cylin-	Other than above	OFF
5TH BOW LATCH CL	der	5th bow latch close sensor circuit is open or short	NG
	State of roof open/close	OPEN operation is in operation	ON
ROOF SW (OPEN)	switch	Other than above	OFF
	State of roof open/close	CLOSE operation is in operation	ON
ROOF SW (CLOSE)	switch	Other than above	OFF
	0.1%	R position	ON
SHIFT R SIGNAL	Shift position	Other than R position	OFF
	Operation of trunk lid open-	OPEN operation is in operation	ON
FRUNK OPEN OUT	er actuator	Other than above	OFF
	Thermo protection hydraulic	In non-operation	ОК
THER PROTEC PUMP	pump	In operation	NG
	Thermo protection soft top	In non-operation	OK
THER PROTEC RCU	control unit	In operation	NG

< ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Status/Value
PWR COND RCU	Power supply voltage state	Normal	ОК
FWIR CONDINCO	of soft top control unit	Malfunction	NG
PWR COND P/W	Power supply voltage state	Normal	ОК
	of power window	Malfunction	NG
		Normal	ОК
LOCAL COMM 1	State of local communica- tion 1	It is in sleep mode	SLEEP
		Communication error	NG
		Normal	ОК
LOCAL COMM 2	State of local communica- tion 2	It is in sleep mode	SLEEP
		Communication error	NG
REAR DEF OUT	Operation of rear window	Roof position is full close	ОК
REAR DEF OUT	defogger	Other than above	NG
		5th bow striker is in 5th bow latch	ON
5BOW STRIK LATCH	State of 5th bow latch	Other than above	OFF
		5th bow striker sensor circuit is open or short	NG
P/W OP REQ SW SIG	State of request switch sig-	OPEN operation is in operation	ON
P/W OP REQ 3W 31G	nal	Stop	OFF
PROHIBIT P/W UP	Prohibit of power window up	In operation	ON
		In non-operation	OFF
IGN ON SIG(BCM)	Power position signal	Ignition switch ON	ON
		Other than above	OFF
RF OP REQ SW SIG	State of request switch sig-	OPEN operation is in operation	ON
RE OF REQ OW OIG	nal	Stop	OFF

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



PHYSICAL VALUES

< ECU DIAGNOSIS INFORMATION >

	nal No. e color)	Description		- Condition		Value	
+	_	Signal name	Input/ Output			(Approx.)	
1 (BR)	Ground	Sensor power supply (Roof striker sensor LH)	Output	[Engine is running]		12 V	
3 (DG)	Ground	Roof striker sensor RH	Input	[Engine is running] • Roof lock assembly	Hooked Released	0.8 V 3.0 V	
4 (W)	Ground	Roof striker sensor LH	Input	[Engine is running] Roof lock assembly 	Hooked	0.8 V 3.0 V	
					R position	Battery voltage	
8 (Y)	Ground	Back up lamp signal	Input	[Ignition switch: ON]Shift position	Other than above	0 V	
9 (SB)	Ground	Power source (Power window)	Input	[Ignition switch: OFF]		Battery voltage	
10		Trunk lid open re-		[Ignition switch: ON]	Operate	0 V \rightarrow Battery voltage \rightarrow 0 V	
(O)	Ground	quest signal (BCM)	Input	Trunk opener	Other than above	0 V	
11	Ground	Roof status signal	Output	[Engine is running]	Illuminate	0 V	
(O)	0.001.0	(Indicator lamp)	o alp al	Soft top indicator lamp	Not illuminate	Battery voltage	
12		Roof status signal		[Engine is running]	Fully open	9.5 V	
(SB)	Ground	(Audio)	Output	Soft top system	Other than above	0 V	
14 (L)	Ground	Roof open/close switch (Close)	Input	[Engine is running] • Close switch	Pressed Released	0 V Battery voltage	
		Roof open/close			Pressed	0 V	
15 (LG)	Ground	switch (Open)	Input	[Engine is running]Open switch	Released	Battery voltage	
16		Trunk room lamp		[Ignition switch: ON]	Open	0 V	
(V)	Ground	switch	Input	Trunk lid	Other than above	Battery voltage	
17 (BG)	Ground	CAN-H	Input/ Output	_		_	
18 (P)	Ground	CAN-L	Input/ Output			_	
19 (LG)	Ground	Local communication (Power window)	Input/ Output	_		(V) 15 10 5 0 + 10ms JMKIA4024GB	
20 (V)	Ground	Local communication (BCM)	Input/ Output	_		(V) 15 0 0 0 0 0 0 0 0 0 0 0 0 0	

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description	Condition Value		Condition		Condition		Condition		A
+	-	Signal name	Input/ Output	Condition		(Approx.)					
21 (BR)	Ground	Sensor power supply (Roof striker sensor RH)	Output	[Engine is running]		12 V	В				
29 (DG)	Ground	Ground	_	_		_	С				
35 (P)	Ground	Ground (Roof open/close switch)		_		_	D				
41 (DG)	Ground	Trunk lid opener ac- tuator	Output	Trunk lid opener	Operate Stop	$0 V \rightarrow Battery voltage \rightarrow 0 V$ 0 V	_ E				
48		Power source			Active	Battery voltage					
40 (R)	Ground	(Rear window defog- ger)	Input	[Engine is running] • Rear window defogger	Not active	0 V	F				
49		Power source		[Engine is running]	Active	Battery voltage					
(R)	Ground	(Rear window defog- ger)	Input	 Rear window defogger 	Not active	0 V	_				
53 (R)	Ground	Power source (Roof)	Input	[Engine is running]		Battery voltage	— G				
54 (B)	Ground	Ground (Roof)	_	_		_	Н				
56		5th bow latch close		[Engine is running]	Lock	0.8 V					
(W)	Ground	sensor	Input	5th bow latch	Other than above	3.0 V					
57		5th bow latch open		[Engine is running]	Unlock	0.8 V					
(G)	Ground	sensor	Input	 5th bow latch 	Other than above	3.0 V	J				
E 9		Storage lid status			Full open	0.8 V	_				
58 (LG)	Ground	sensor RH (Open)	Input	[Engine is running] Storage lid 	Other than above	3.0 V	PWC				
59		Storage lid status			Full close	0.8 V					
(W)	Ground	sensor RH (Close)	Input	[Engine is running] Storage lid 	Other than above	3.0 V	L				
60		Storage lid status		[Engine is running]	Full open	0.8 V					
(DG)	Ground	sensor LH (Open)	Input	Storage lid	Other than above	3.0 V	Μ				
61		Roof status sensor		[Engine is running]	Raised	0.8 V					
(Y)	Ground	RH (Close)	Input	Soft top	Other than above	3.0 V	N				
66		Roof status sensor		[Engine is running]	Lowered	0.8 V	_				
(L)	Ground	LH (Open)	Input	Soft top	Other than above	3.0 V	0				
68		5th bow status sen-		[Engine is running]	Raised	0.8 V	– – P				
(P)	Ground	sor RH	Input	• 5th bow	Other than above	3.0 V	Г				
69		Roof status sensor		[Engine is running]	Raised	0.8 V	_				
(V)	Ground	LH (Close)	Input	Soft top	Other than above	3.0 V					

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition		Value
+	_	Signal name	Input/ Output			(Approx.)
70	_	5th bow status sen-		[Engine is running]	Lowered	0.8 V
(O)	Ground	sor LH	Input	• 5th bow	Other than above	3.0 V
71	_	Roof latch lock sen-		[Engine is running]	Lock	0.8 V
(SB)	Ground	sor	Input	Roof lock assembly	Other than above	3.0 V
72 (W/R)	Ground	Hydraulic pump tem- perature sensor	Input	[Engine is running]		0 - 4.8 V Output voltage varies with hy- draulic pump temperature.
73	Ground	Hydraulic pump relay	Input	[Engine is running]Hydraulic pump motor	Active	12 V
(R)	Ground	2 ON signal	input	(Right rotation)	Inactive	0 V
74	Ground	Hydraulic pump relay	Input	[Engine is running]Hydraulic pump motor	Active	12 V
(R/B)	Giodila	1 ON signal	input	(Left rotation)	Inactive	0 V
75 (BR)	Ground	Sensor power supply (Roof status sensor LH//5th bow latch open sensor/5th bow latch close sensor/ 5th bow striker sen- sor)	Output	[Engine is running]		12 V
76	Ground	5th bow striker sen-	Input	[Engine is running]	Hooked	0.8 V
(L)		sor		5th bow striker	Released	3.0 V
92 (BG)	Ground	Sensor ground (Hydraulic pump tem- perature sensor)	_	_		_
93 (BR)	Ground	Sensor power supply (Roof status sensor RH/Storage lid status sensor RH)	Output	[Engine is running]		12 V
94 (BR)	Ground	Sensor power supply (Roof latch lock sen- sor/5th bow status sensor LH)	Output	[Engine is running]		12 V
95 (BR)	Ground	Sensor power supply (Storage lid status sensor/5th bow sta- tus sensor RH)	Output	[Engine is running]		12 V
96	Ground	Switching valve 4	Output	[Engine is running]	Active	12 V
(W)	2.54114		- stpat	Switching valve 4	Inactive	0 V
97 (LG)	Ground	Switching valve 3	Output	[Engine is running]Switching valve 3	Active	12 V
					Inactive Active	0 V
98 (L)	Ground	Switching valve 2	Output	[Engine is running]Switching valve 2	Active Inactive	12 V 0 V
99	_			[Engine is running]	Active	12 V
(O)	Ground	Switching valve 1	Output	 Switching valve 1 	Inactive	0 V
100	. .	Hydraulic pump relay	0 / · ·	[Engine is running]	Active	12 V
(BR)	Ground	2	Output	 Hydraulic pump motor (Right rotation) 	Inactive	0 V

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

	nal No. color)	Description		Condition		Value	А
+	_	Signal name	Input/ Output	Condition		(Approx.)	
101	Orregard	Hydraulic pump relay	Quitaut	[Engine is running]	Active	12 V	В
(SB)	Ground	1	Output	 Hydraulic pump motor (Left rotation) 	Inactive	0 V	
102	Ground	Switching valve 5	Output	[Engine is running]	Active	12 V	С
(P)	Giouna	Switching valve 5	Output	 Switching valve 5 	Inactive	0 V	
103 (B)	Ground	Hydraulic unit ground		_		_	D
				[Engine is running]	Active	Battery voltage	
104 (R)	Ground	Rear window defog- ger power supply	Output	Rear window defogger NOTE: Roof is fully closed.	Not active	0 V	E
		6 · · · · · · · ·		[Engine is running]	Active	Battery voltage	
111 (R)	Ground	Rear window defog- ger power supply	Output	Rear window defogger NOTE: Roof is fully closed.	Not active	0 V	F

Fail-safe

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FAIL-SAFE CONTROL BY DTC

Soft top control unit performs fail-safe control when any of the following DTCs is detected.

	Display contents of CONSULT	Fail-safe	Cancellation
U1000	CAN COMM CIRCUIT	Inhibit soft top operation.	Communication is normal.
U1010	CONTROL UNIT (CAN)	Inhibit soft top operation.	Communication is normal.
U0140	LOCAL COMM-1	Inhibit soft top operation.	Communication is normal.
U0215	LOCAL COMM-2	Inhibit soft top operation.	Communication is normal.
B1701	ROOF CONTROL UNIT	Inhibit soft top operation.	Replace soft top control unit.
B1702	ROOF CONTROL UNIT	Inhibit soft top operation.	Replace soft top control unit.
B1709	ROOF SWITCH(OPEN)	Inhibit soft top operation.	Detects roof open/close switch (OPEN) is OFF.
B170A	ROOF SWITCH(CLOSE)	Inhibit soft top operation.	Detects roof open/close switch (CLOSE) is OFF.
B170F	SENSOR POWER SUPPLY	Inhibit soft top operation.	Detects normal value.
B171A	HYDRAULIC PMP(LH)	Inhibit soft top operation.	Detects normal value.
B171B	HYDRAULIC PMP(RH)	Inhibit soft top operation.	Detects normal value.
B171C	SWITCHING VALVE 1	Inhibit soft top operation.	Detects normal value.
B171D	SWITCHING VALVE 2	Inhibit soft top operation.	Detects normal value.
B172C	ROOF STATE SIG(TRUNK)*	Inhibit soft top operation.	Detects normal value.
B1731	HYDRAULIC STATE 1	Inhibit soft top operation.	Turn ignition switch OFF.
B1758	THERMO PROTECTION	Inhibit soft top operation.	Turn ignition switch OFF and wait at least 5 minutes
B175C	PWR SOURCE(ROOF)	Inhibit soft top operation.	Power source is 11.4 (V) or more for 0.5 second.
B175D	PWR SOURCE(ROOF)	Inhibit soft top operation.	Power source is14.5 (V) or more for 4 seconds.
B175E	PWR SOURCE(WINDOW)	Inhibit soft top operation and rear power window operation.	Power source (power window) is 9.5 (V) or more.
B175F	PWR SOURCE(WINDOW)	Inhibit soft top operation and rear power window operation.	Power source (power window) is 15.5 (V) or more.
B1766	SWITCHING VALVE 3	Inhibit soft top operation.	Detects normal value.
B1767	SWITCHING VALVE 4	Inhibit soft top operation.	Detects normal value.

< ECU DIAGNOSIS INFORMATION >

	Display contents of CONSULT	Fail-safe	Cancellation
B1768	SWITCHING VALVE 5	Inhibit soft top operation.	Detects normal value.
B176A	THERMO PROTECTION	Inhibit soft top operation.	Turn ignition switch OFF and wait at least 5 minutes.
B176B	ROOF WARNING LAMP	Inhibit soft top operation.	Detects normal value.
B176C	STRIKER SENSOR RH	Inhibit soft top operation.	Detects normal value.
B176D	STRIKER SENSOR LH	Inhibit soft top operation.	Detects normal value.
B176E	ROOF LATCH LOCK SEN- SOR	Inhibit soft top operation.	Detects normal value.
B176F	ROOF STATUS SEN LH	Inhibit soft top operation.	Detects normal value.
B1770	ROOF STATUS SEN RH	Inhibit soft top operation.	Detects normal value.
B1771	ROOF STATUS SEN LH	Inhibit soft top operation.	Detects normal value.
B1772	5BOW STATUS SEN LH	Inhibit soft top operation.	Detects normal value.
B1773	5BOW STATUS SEN RH	Inhibit soft top operation.	Detects normal value.
B1774	S/LID STATUS SEN LH	Inhibit soft top operation.	Detects normal value.
B1775	S/LID STATUS SEN RH	Inhibit soft top operation.	Detects normal value.
B1776	S/LID STATUS SEN RH	Inhibit soft top operation.	Detects normal value.
B1777	REAR DEF OUT SIG	Inhibit soft top and rear win- dow defogger operation.	Detects normal value.
B1778	TRUNK OPEN OUT SIG	Inhibit soft top and trunk lid opener actuator operation.	Detects normal value.
B1779	THERMO PROTECTION	Inhibit soft top operation.	Detects normal value.
B177A	ROOF STATE INCORRECT	Inhibit soft top operation.	Detects normal value.
B177B	ROOF STATE INCORRECT	Inhibit soft top operation.	Detects normal value.
B177C	THERMO PROTECTION	Inhibit soft top operation.	Detects normal value.
B177D	5BOW LATCH OPEN SEN	Inhibit soft top operation.	Detects normal value.
B177E	5BOW LATCH CLOSE SEN	Inhibit soft top operation.	Detects normal value.
B177F	5BOW STRIKER SENSOR	Inhibit soft top operation.	Detects normal value.

*: This item indicates the roof status signal (Audio).

DTC Inspection Priority Chart

INFOID:000000008837067

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

Priority		Display contents of CONSULT		
	U1000	CAN COMM CIRCUIT		
	U1010	CONTROL UNIT (CAN)		
	B170F	SENSOR POWER SUPPLY		
	B175C	PWR SOURCE(ROOF)		
1	B175D	PWR SOURCE(ROOF)		
	B175E	PWR SOURCE(WINDOW)		
	B175F	PWR SOURCE(WINDOW)		
	B1701	ROOF CONTROL UNIT		
	B1702	ROOF CONTROL UNIT		

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

	Display contents of CONSULT
B1709	ROOF SWITCH(OPEN)
B170A	ROOF SWITCH(CLOSE)
B176B	ROOF WARNING LAMP
B176C	STRIKER SENSOR RH
B176D	STRIKER SENSOR LH
B176E	ROOF LATCH LOCK SEN
B176F	ROOF STATUS SEN LH
B1770	ROOF STATUS SEN RH
B1771	ROOF STATUS SEN LH
B1772	5BOW STATUS SEN LH
B1773	5BOW STATUS SEN RH
B1774	S/LID STATUS SEN LH
B1775	S/LID STATUS SEN RH
B1776	S/LID STATUS SEN RH
B177D	5BOW LATCH OPEN SEN
B177E	5BOW LATCH CLOSE SEN
B177F	5BOW STRIKER SENSOR
U0140	LOCAL COMM-1
U0215	LOCAL COMM-2
B171A	HYDRAULIC PMP(LH)
B171B	HYDRAULIC PMP(RH)
B171C	SWITCHING VALVE 1
B171D	SWITCHING VALVE 2
B172C	ROOF STATE SIG(TRUNK)*
B1731	HYDRAULIC STATE 1
B1758	THERMO PROTECTION
B1766	SWITCHING VALVE 3
B1767	SWITCHING VALVE 4
B1768	SWITCHING VALVE 5
B176A	THERMO PROTECTION
B1777	REAR DEF OUT SIG
B1778	TRUNK OPEN OUT SIG
B1779	THERMO PROTECTION
B177A	ROOF STATE INCORRECT
B177B	ROOF STATE INCORRECT
	B170A B176B B176C B176D B176E B176F B1770 B1771 B1772 B1773 B1774 B1775 B1776 B1777 B1776 B1777 B1777 B1777 B1778 B1710 B1710 B1710 B1710 B17110 B1712C B1731 B1758 B1766 B1767 B1768 B1767 B1768 B1769 B1778 B1779 B1779 B177A

*: This item indicates the roof status signal (Audio).

DTC Index

NOTE:

For details of Freeze Frame Data, refer to <u>RF-28, "CONSULT Function"</u>.

	Display contents of CONSULT	Fail-safe	Freeze Frame Data	Reference page
No DTC is o	No DTC is detected. Further testing may be required.		_	_
U1000	CAN COMM CIRCUIT	×	×	<u>RF-59</u>

INFOID:000000008837068

< ECU DIAGNOSIS INFORMATION >

	Display contents of CONSULT	Fail-safe	Freeze Frame Data	Reference page
U1010	CONTROL UNIT (CAN)	×	×	<u>RF-60</u>
U0140	LOCAL COMM-1	×	×	<u>RF-61</u>
U0215	LOCAL COMM-2	×	×	<u>RF-62</u>
B1701	ROOF CONTROL UNIT	×	×	<u>RF-64</u>
B1702	ROOF CONTROL UNIT	×	×	<u>RF-65</u>
B1709	ROOF SWITCH-OPEN	×	×	<u>RF-66</u>
B170A	ROOF SWITCH-CLOSE	×	×	<u>RF-68</u>
B170F	SENSOR POWER SUPPLY	×	×	<u>RF-70</u>
B171A	HYDRAULIC PMP(LH)	×	×	<u>RF-73</u>
B171B	HYDRAULIC PMP(RH)	×	×	<u>RF-76</u>
B171C	SWITCHING VALVE 1	×	×	<u>RF-79</u>
B171D	SWITCHING VALVE 2	×	×	<u>RF-81</u>
B172C	ROOF STATE SIG(TRUNK)*	×	×	<u>RF-83</u>
B1731	HYDRAULIC STATE 1	×	×	<u>RF-85</u>
B1758	THERMO PROTECTION	×	×	<u>RF-86</u>
B175C	PWR SOURCE(ROOF)	×	×	<u>RF-87</u>
B175D	PWR SOURCE(ROOF)	×	×	<u>RF-88</u>
B175E	PWR SOURCE(WINDOW)	×	×	<u>RF-89</u>
B175F	PWR SOURCE(WINDOW)	×	×	<u>RF-91</u>
B1766	SWITCHING VALVE 3	×	×	<u>RF-93</u>
B1767	SWITCHING VALVE 4	×	×	<u>RF-95</u>
B1768	SWITCHING VALVE 5	×	×	<u>RF-97</u>
B176A	THERMO PROTECTION	×	×	<u>RF-99</u>
B176B	ROOF WARNING LAMP	×	×	<u>RF-100</u>
B176C	STRIKER SENSOR RH	×	×	<u>RF-102</u>
B176D	STRIKER SENSOR LH	×	×	<u>RF-104</u>
B176E	ROOF LATCH LOCK SEN	×	×	<u>RF-106</u>
B176F	ROOF STATUS SEN LH	×	×	<u>RF-108</u>
B1770	ROOF STATUS SEN RH	×	×	<u>RF-110</u>
B1771	ROOF STATUS SEN LH	×	×	<u>RF-112</u>
B1772	5BOW STATUS SEN LH	×	×	<u>RF-114</u>
B1773	5BOW STATUS SEN RH	×	×	<u>RF-116</u>
B1774	S/LID STATUS SEN LH	×	×	<u>RF-118</u>
B1775	S/LID STATUS SEN RH	×	×	<u>RF-120</u>
B1776	S/LID STATUS SEN RH	×	×	<u>RF-122</u>
B1777	REAR DEF OUT SIG	×	×	<u>RF-124</u>
B1778	TRUNK OPEN OUT SIG	×	×	<u>RF-125</u>
B1779	THERMO PROTECTION	×	×	<u>RF-127</u>
B177A	ROOF STATE INCORRECT	×	×	<u>RF-129</u>
B177B	ROOF STATE INCORRECT	×	×	<u>RF-130</u>
B177C	THERMO PROTECTION	×	×	<u>RF-131</u>
B177D	5BOW LATCH OPEN SEN	×	×	<u>RF-132</u>
B177E	5BOW LATCH CLOSE SEN	×	×	<u>RF-134</u>
B177F	5BOW STRIKER SENSOR	×	×	<u>RF-136</u>

< ECU DIAGNOSIS INFORMATION >

*: This item indicates the roof status signal (Audio).

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POWER WINDOW MAIN SWITCH

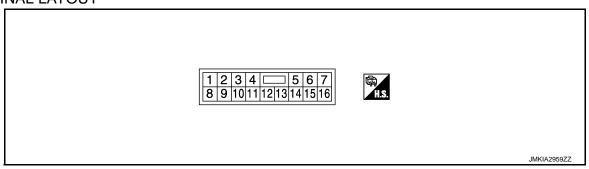
< ECU DIAGNOSIS INFORMATION >

POWER WINDOW MAIN SWITCH

Reference Value

[ROADSTER]

INFOID:000000008194463



PHYSICAL VALUES

POWER WINDOW MAIN SWITCH

	nal No. e color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	_	12
4 (Y)	Ground	Driver side door switch	Input	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB
				ON (Door open)	0
5 (BG)	Ground	Encoder power supply	Output	When ignition switch ON or automatic window ad- justing operates	12
6 (GR)	Ground	Door key cylinder switch LOCK signal	Input	Key position (Neutral \rightarrow Locked)	$5 \rightarrow 0$
7 (V)	Ground	Door key cylinder switch UN- LOCK signal	Input	Key position (Neutral \rightarrow Unlocked)	$5 \rightarrow 0$
8 (L)	Ground	Driver side power window motor UP signal	Output	When power window main switch (Driver side) is op- erated UP	12
9 (LG)	Ground	Encoder pulse signal 2	Input	When power window mo- tor operates	(V) 6 4 2 0 10 ms JMKIA0070GB
10	Ground	Ignition switch power signal	Input	IGN SW ON	12
(Y)	Ground		Input	IGN SW OFF	0

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

	inal No. e color)	Description		Condition	Voltage [V]	
+	-	Signal name	Input/ Output	Condition	(Approx.)	
11 (BR)	Ground	Driver side power window motor DOWN signal	Output	When power window main switch (Driver side) is op- erated DOWN	12	
12 (Y)	Ground	Power window serial link	Input/ Output	Ignition switch ON	(V) 10 50 10 ms JPMA0013GB	
13 (R)	Ground	Encoder pulse signal 1	Input	When power window mo- tor operates	(V) 6 4 2 0 10 ms JMKIA0070GB	
14 (G)	Ground	Encoder ground	_	_	0	
15 (B)	Ground	Ground	_	_	0	

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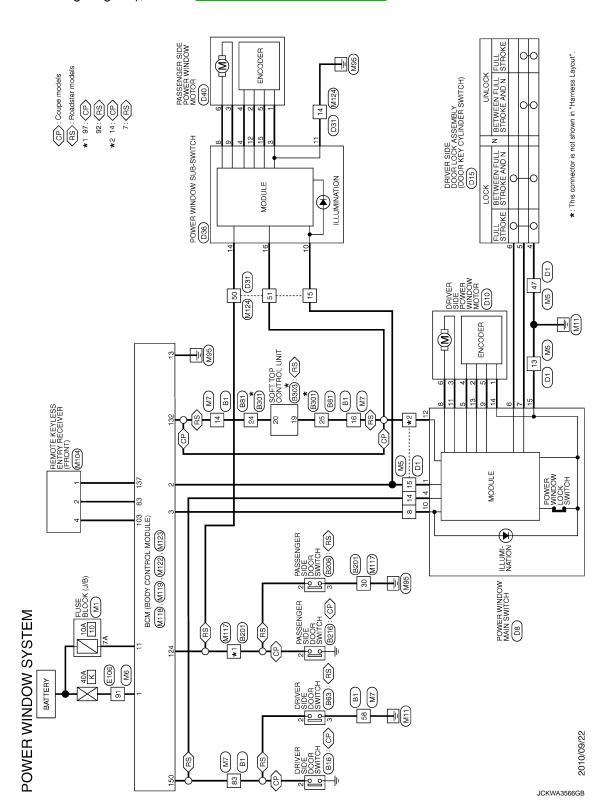
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< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

For connector terminal arrangements, harness layouts, and alphabets in a 🔿 (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".



Fail-Safe

FAIL-SAFE CONTROL

INFOID:000000008194465

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

А

Switches to fail-safe control when malfunction is detected in encoder signal that detects up/down speed and direction of door glass. Switches to fail-safe control when a signal that is out of the specified value is detected between the fully closed position and the actual position of the glass.

Malfunction	Malfunction condition
Pulse sensor malfunction	When one pulse signals that is the specified value or more is detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Both pulse sensor mal- function	When both pulse signal are not detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Pulse direction malfunc- tion	When a pulse indicating that the window is moving in the opposite direction against the power win- dow motor is detected for the specified value or more, while door glass is being operated UP or DOWN.
Glass recognition position malfunction 1	When the actual door glass position that is out of the specified value is detected compared to the door glass fully closed position memorized in module, while door is being operated UP or DOWN.
Glass recognition position malfunction 2	When pulse count that is out of door glass full stroke value or more is detected, while door glass is being operated UP or DOWN.

It changes to condition before initialization and the following functions do not operate when switched to fail-

- Auto-up operation
- Anti-pinch function
- Automatic window adjusting function
- Retained power operation

Perform initial operation to recover when switched to fail-safe mode. However, it switches back to fail-safe control when malfunction is found in power window switch or in motor.

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POWER WINDOW SUB-SWITCH

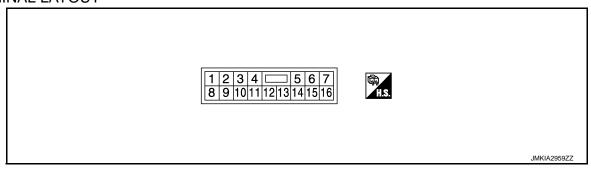
< ECU DIAGNOSIS INFORMATION >

POWER WINDOW SUB-SWITCH

Reference Value

INFOID:000000008194466

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Voltage [V]	
+	-	Signal name	Input/ Output	Condition	(Approx.)	
3 (G)	Ground	Encoder ground			0	
4 (BG)	Ground	Encoder power supply	Output	When ignition switch ON or automatic window operates adjusting	12	
8 (L)	Ground	Power window motor UP signal	Output	When power window motor is operated UP	12	
9 (BR)	Ground	Power window motor DOWN signal	Output	When power window motor is operated DOWN	12	
10 (W)	Ground	Battery power supply	Input	_	12	
11 (B)	Ground	Ground	_	_	0	
12 (R)	Ground	Encoder pulse signal 1	Input	When power window motor operates	(V) 6 4 2 0 10 ms JMKIA0070GB	
14 (Y)	Ground	Passenger side door switch	Input	OFF (Door close)	(V) 15 10 5 0 JPMIA0011GB	
				ON (Door open)	0	

POWER WINDOW SUB-SWITCH

< ECU DIAGNOSIS INFORMATION >

Terminal No. Description А (Wire color) Voltage [V] Condition (Approx.) Input/ Signal name + -Output В (V 6 15 When power window motor С 20 Ground Encoder pulse signal 2 Input (LG) operates 10 ms D JMKIA0070GB (V) 15 10 5 0 Ε 16 Input/ Ignition switch ON Power window serial link Ground (Y) Output F 10 ms

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[ROADSTER]

JPMIA0013GB

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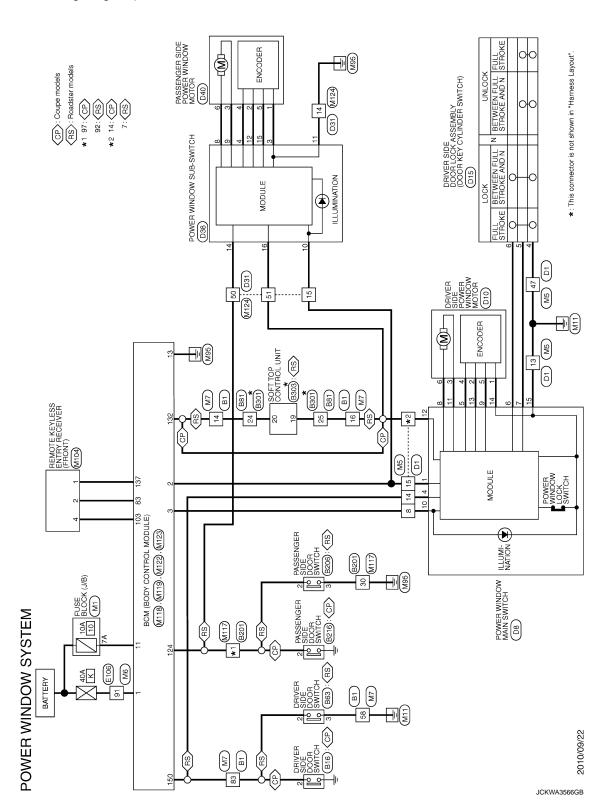
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< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

For connector terminal arrangements, harness layouts, and alphabets in a 🔿 (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".



Fail-Safe

FAIL-SAFE CONTROL

INFOID:00000008194468

POWER WINDOW SUB-SWITCH

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

А

Switches to fail-safe control when malfunction is detected in encoder signal that detects up/down speed and direction of door glass. Switches to fail-safe control when a signal that is out of the specified value is detected between the fully closed position and the actual position of the glass.

Malfunction	Malfunction condition
Pulse sensor malfunction	When one pulse signals that is the specified value or more is detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Both pulse sensor mal- function	When both pulse signal are not detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Pulse direction malfunc- tion	When a pulse indicating that the window is moving in the opposite direction against the power win- dow motor is detected for the specified value or more, while door glass is being operated UP or DOWN.
Glass recognition position malfunction 1	When the actual door glass position that is out of the specified value is detected compared to the door glass fully closed position memorized in module, while door is being operated UP or DOWN.
Glass recognition position malfunction 2	When pulse count that is out of door glass full stroke value or more is detected, while door glass is being operated UP or DOWN.

It changes to condition before initialization and the following functions do not operate when switched to fail-

- Auto-up operation
- Anti-pinch function
- Automatic window adjusting function
- Retained power operation

Perform initial operation to recover when switched to fail-safe mode. However, it switches back to fail-safe control when malfunction is found in power window switch or in motor.

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POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCH-ES

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCHES

Description

All power windows do not operate via power window main switch and power window sub-switch.

Diagnosis Procedure

1.CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit. Refer to <u>PWC-101, "BCM : Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.

NO >> GO TO 1.

[ROADSTER]

INEO/D:000000008194470

INFOID:000000008194469

1. CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY AND GROUND CIRCUIT	С
Check power window main switch power supply and ground circuit. Refer to PWC-101, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".	
Is the inspection result normal?	D
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2. CHECK DRIVER SIDE POWER WINDOW MOTOR	Е
Check driver side power window motor. Refer to <u>PWC-104, "DRIVER SIDE : Component Function Check"</u> .	F
Is the measurement value within the specification?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	G
3. CONFIRM THE OPERATION	
Confirm the operation again.	Н
Is the result normal?	11
YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u> .	
NO >> GO TO 1.	

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PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [ROADSTER]

PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Description

INFOID:000000008194473

Passenger side power window operates using power window main switch and power window sub-switch.

Diagnosis Procedure

INFOID:000000008194474

1. CHECK POWER WINDOW SUB-SWITCH POWER SUPPLY AND GROUND CIRCUIT

Check power window sub-switch power supply and ground circuit. Refer to <u>PWC-102, "POWER WINDOW SUB-SWITCH : Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK PASSENGER SIDE POWER WINDOW MOTOR

Check passenger side power window motor. Refer to PWC-105, "PASSENGER SIDE : Component Function Check".

Is the measurement value within the specification?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.
- NO >> GO TO 1.

ANTI-PINCH FUNCTION DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS >	[ROADSTER]
ANTI-PINCH FUNCTION DOES NOT OPERATE DRIVER SIDE	
DRIVER SIDE : Description	INFOID:000000008194475
Anti-pinch function does not operate when power window up operated. DRIVER SIDE : Diagnosis Procedure	INFOID:00000008194476
1.CHECK AUTO UP OPERATION	
Check AUTO UP operation. <u>Is the inspection result normal?</u> YES >> GO TO 2.	
NO >> Refer to <u>PWC-172, "DRIVER SIDE : Diagnosis Procedure"</u> . 2.CONFIRM THE OPERATION	
Confirm the operation again. Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u> . NO >> GO TO 1. PASSENGER SIDE	
PASSENGER SIDE : Description	INFOID:000000008194477
Anti-pinch function does not operate when power window up operated.	
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000008194478
1.CHECK AUTO UP OPERATION	
Check AUTO UP operation. <u>Is the inspection result normal?</u> YES >> GO TO 2.	
NO >> Refer to <u>PWC-172, "PASSENGER SIDE : Diagnosis Procedure"</u> . 2.CONFIRM THE OPERATION	
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u> .	
NO >> GO TO 1.	

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AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMAL-LY

< SYMPTOM DIAGNOSIS >

[ROADSTER]

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:000000008194479

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.

Refer to <u>PWC-91</u>, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special <u>Repair Requirement"</u>.

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK ENCODER (DRIVER SIDE) CIRCUIT

Check encoder (driver side) circuit. Refer to <u>PWC-108, "DRIVER SIDE : Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 ${\it 3.}$ confirm the operation

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000008194480

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed. Refer to <u>PWC-91</u>, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK ENCODER (PASSENGER SIDE) CIRCUIT

Check encoder (passenger side) circuit.

Refer to PWC-110, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45. "Intermittent Incident".

NO >> GO TO 1.

POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NOR-

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< SYMPTOM DIAGNOSIS >	[ROADSTER]	
POWER WINDOW RETAINED POWER FUNCTION DOES NOT NORMALLY	OPERATE	A
Description	INFOID:000000008194481	В
Retained power function does not operate after ignition switch turns OFF.		
Diagnosis Procedure	INFOID:000000008194482	С
1.CHECK DOOR SWITCH		
Check door switch. Refer to <u>DLK-63, "Component Function Check"</u> .		D
Is the inspection result normal?		
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.		Ε
2.CONFIRM THE OPERATION		
Confirm the operation again.		F
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u> . NO >> GO TO 1.		G

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DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS < SYMPTOM DIAGNOSIS > [ROADSTER]

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WIN-DOWS

Description

INFOID:000000008194483

Power window does not operate when locking or unlocking a door using door key cylinder.

Diagnosis Procedure

INFOID:000000008194484

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed. Refer to <u>PWC-91, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special</u> <u>Repair Requirement"</u>.

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

 $2. {\sf CHECK \ DRIVER \ SIDE \ DOOR \ LOCK \ ASSEMBLY \ (DOOR \ KEY \ CYLINDER \ SWITCH)}$

Check driver side door lock assembly (door key cylinder switch). Refer to <u>DLK-74, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.
- NO >> GO TO 1.

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [ROADSTER]
KEYLESS POWER WINDOW DOWN DOES NOT OPERATE
Description
Power window down does not operate when pressing unlock button on Intelligent Key.
Diagnosis Procedure
1. CHECK REMOTE KEYLESS ENTRY FUNCTION
Check remote keyless entry function.
Does door lock/unlock with Intelligent Key button? YES >> GO TO 2. NO >> Refer to DLK-281, "Diagnosis Procedure".
2. CHECK POWER WINDOW OPERATION
Check power window operation.
Does power window operate up/down using power window main switch?YES>> GO TO 3.NO>> Refer to PWC-168, "Diagnosis Procedure".
3. CHECK "PW DOWN SET" SETTING IN "WORK SUPPORT"
Check "PW DOWN SET" setting in "WORK SUPPORT". Refer to <u>DLK-42, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)"</u> .
<u>Is the inspection result normal?</u> YES >> GO TO 4. NO >> Set "PW DOWN SET" setting in "WORK SUPPORT".
4.CONFIRM THE OPERATION
Confirm the operation again.
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u> . NO >> GO TO 1.

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POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:000000008194487

[ROADSTER]

1.REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

>> Refer to <u>PWC-181, "Removal and Installation"</u>.

POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE < SYMPTOM DIAGNOSIS > [ROADSTER]	
POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE DRIVER SIDE	А
DRIVER SIDE : Diagnosis Procedure	В
1.REPLACE POWER WINDOW MAIN SWITCH	
Replace power window main switch.	С
>> Refer to <u>PWC-181, "Removal and Installation"</u> . PASSENGER SIDE	D
PASSENGER SIDE : Diagnosis Procedure	
1.REPLACE POWER WINDOW SUB-SWITCH	Е
Replace power window sub-switch.	
>> Refer to PWC-181, "Removal and Installation".	F
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AUTOMATIC WINDOW ADJUSTING FUNCTION DOES NOT OPERATE [ROADSTER] AUTOMATIC WINDOW ADJUSTING FUNCTION DOES NOT OPERATE DRIVER SIDE DRIVER SIDE : Diagnosis Procedure 1. CHECK AUTO UP OPERATION Check AUTO UP OPERATION Check AUTO UP operation. Is the inspection result normal? YES >> GO TO 2. NO >> Refer to PWC-172. "DRIVER SIDE : Diagnosis Procedure". 2. CHECK DOOR SWITCH

Check door switch.

Refer to PWC-112, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.

NO >> GO TO 1. PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

1.CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to <u>PWC-172</u>, "PASSENGER SIDE : Diagnosis Procedure".

2. CHECK DOOR SWITCH

Check door switch. Refer to <u>PWC-113, "PASSENGER SIDE : Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-45, "Intermittent Incident"</u>.

NO >> GO TO 1.

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< PRECAUTION > PRECAUTION PRECAUTIONS FOR USA AND CANADA

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

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
 H 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 pwc battery, and wait at least 3 minutes before performing any service.

FOR USA AND CANADA : Precaution for Battery Service

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

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

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

WARNING:

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.

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PRECAUTIONS

< PRECAUTION >

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- 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.
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- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

FOR MEXICO : Precaution for Battery Service

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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.

REMOVAL AND INSTALLATION POWER WINDOW MAIN SWITCH

Removal and Installation

REMOVAL

- Remove the power window main switch finisher (2). Refer to <u>INT-15, "Removal and Installation"</u>.
- 2. Power window main switch (1) is removed from power window main switch finisher (2) using flat-bladed screw driver (A) etc.

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CAUTION:

Never fold the pawl of power window main switch finisher. NOTE:

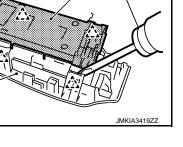
The same procedure is also performed for power window sub-switch.

INSTALLATION

Install in the reverse order of removal.

NOTE:

Power window main switch is replaced or is removed it is necessary to do the initialization procedure. Refer to <u>PWC-92</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".



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