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# **CONTENTS**

COUPE	POWER SUPPLY AND GROUND CIRCUIT17	<b>7</b> F
BASIC INSPECTION6	BCM17 BCM : Diagnosis Procedure	
DIAGNOSIS AND REPAIR WORK FLOW 6 Work Flow6	POWER WINDOW MAIN SWITCH17 POWER WINDOW MAIN SWITCH : Diagnosis	G
INSPECTION AND ADJUSTMENT7	Procedure17	<b>7</b> H
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL7 ADDITIONAL SERVICE WHEN REMOVING	POWER WINDOW SUB-SWITCH18 POWER WINDOW SUB-SWITCH : Diagnosis Procedure	
BATTERY NEGATIVE TERMINAL : Description7 ADDITIONAL SERVICE WHEN REMOVING	POWER WINDOW MOTOR20	)
BATTERY NEGATIVE TERMINAL : Special Repair Requirement	DRIVER SIDE20 DRIVER SIDE : Description	)
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT7 ADDITIONAL SERVICE WHEN REPLACING	DRIVER SIDE : Component Function Check20 DRIVER SIDE : Diagnosis Procedure	PWC
CONTROL UNIT : Description8 ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement8	PASSENGER SIDE21 PASSENGER SIDE : Description21 PASSENGER SIDE : Component Function Check	
SYSTEM DESCRIPTION9	PASSENGER SIDE : Diagnosis Procedure21	$\mathbb{N}$
POWER WINDOW SYSTEM	PASSENGER SIDE : Component Inspection22  ENCODER	
Component Parts Location	DRIVER SIDE24 DRIVER SIDE : Description22	l .
DIAGNOSIS SYSTEM (BCM)14	DRIVER SIDE : Component Function Check24 DRIVER SIDE : Diagnosis Procedure24	
COMMON ITEM	PASSENGER SIDE	5 _
RETAINED PWR15 RETAINED PWR : CONSULT Function (BCM -	PASSENGER SIDE : Diagnosis Procedure26	-
RETAINED PWR)	POWER WINDOW SERIAL LINK29	)
DTC/CIRCUIT DIAGNOSIS17	DOWED WINDOW MAIN OWITOU	

Revision: 2011 August

POWER WINDOW MAIN SWITCH: Description.	29	WHEN POWER WINDOW SUB-SWITCH IS OP-	
POWER WINDOW MAIN SWITCH : Component	00	ERATED : Diagnosis Procedure	76
Function Check	29	WITH BOTH POWER WINDOW MAIN SWITCH	
POWER WINDOW MAIN SWITCH : Diagnosis	00	AND POWER WINDOW SUB-SWITCH	76
Procedure	29	WITH BOTH POWER WINDOW MAIN SWITCH	
POWER WINDOW SUB-SWITCH	30	AND POWER WINDOW SUB-SWITCH : Descrip-	
POWER WINDOW SUB-SWITCH : Description		tion	
POWER WINDOW SUB-SWITCH : Component		WITH BOTH POWER WINDOW MAIN SWITCH	
Function Check	30	AND POWER WINDOW SUB-SWITCH : Diagno-	
POWER WINDOW SUB-SWITCH : Diagnosis	00	sis Procedure	
Procedure	31		
ECU DIAGNOSIS INFORMATION		ANTI-PINCH FUNCTION DOES NOT OPER-	78
BCM (BODY CONTROL MODULE)		DRIVER SIDE	
Reference Value		DRIVER SIDE : Description	
Wiring Diagram - BCM		DRIVER SIDE : Diagnosis Procedure	78
Fail-safe		PASSENGER SIDE	78
DTC Inspection Priority Chart		PASSENGER SIDE : Description	
DTC Index	63	PASSENGER SIDE : Diagnosis Procedure	
POWER WINDOW MAIN SWITCH	66	·	0
Reference Value		AUTO OPERATION DOES NOT OPERATE	
Wiring Diagram - POWER WINDOW CONTROL	00	BUT MANUAL OPERATES NORMALLY	79
SYSTEM	68		
Fail-Safe		DRIVER SIDE	
Tuli Gaio	00	DRIVER SIDE : Diagnosis Procedure	79
POWER WINDOW SUB-SWITCH	70	PASSENGER SIDE	79
Reference Value	70	PASSENGER SIDE : Diagnosis Procedure	
Wiring Diagram - POWER WINDOW CONTROL		•	
SYSTEM	72	POWER WINDOW RETAINED POWER	
Fail-Safe	72	<b>FUNCTION DOES NOT OPERATE NORMAL-</b>	
CYMPTOM DIA ONOCIO		LY	80
SYMPTOM DIAGNOSIS	74	Description	80
POWER WINDOWS DO NOT OPERATE		Diagnosis Procedure	80
WITH ANY POWER WINDOW SWITCHES	74	DOOD KEY OVENDED OWITCH DOES NOT	
Description		DOOR KEY CYLINDER SWITCH DOES NOT	
Diagnosis Procedure		OPERATE POWER WINDOWS	
Diagnosis i locedule	/ 4	Description	
DRIVER SIDE POWER WINDOW ALONE		Diagnosis Procedure	81
DOES NOT OPERATE	75	<b>KEYLESS POWER WINDOW DOWN DOES</b>	
Description	75	NOT OPERATE	92
Diagnosis Procedure		Description	
		Diagnosis Procedure	
PASSENGER SIDE POWER WINDOW		Diagnosis Flocedule	02
ALONE DOES NOT OPERATE	76	POWER WINDOW LOCK SWITCH DOES	00
WHEN POWER WINDOW MAIN SWITCH IS OP-		NOT FUNCTION	
ERATED		Diagnosis Procedure	83
WHEN POWER WINDOW MAIN SWITCH IS OP-		POWER WINDOW SWITCH ILLUMINATION	
ERATED : Description		DOES NOT ILLUMINATE	8/
WHEN POWER WINDOW MAIN SWITCH IS OP-			. 54
ERATED : Diagnosis Procedure	76	DRIVER SIDE	
WHEN POWER WINDOW SUB-SWITCH IS OP-		DRIVER SIDE : Diagnosis Procedure	84
	76	DAGOENOED OICE	
ERATEDWHEN POWER WINDOW SUB-SWITCH IS OP-		PASSENGER SIDE	
ERATED : Description		PASSENGER SIDE : Diagnosis Procedure	84
-: v :: -D : D00011P0011	, 0		

ETAINED DWD	
RETAINED PWR99 RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)99	С
TC/CIRCUIT DIAGNOSIS101	D
OWER SUPPLY AND GROUND CIRCUIT 101	
<b>CM</b>	Е
OWER WINDOW MAIN SWITCH101 POWER WINDOW MAIN SWITCH : Diagnosis Procedure101	F
OWER WINDOW SUB-SWITCH102 POWER WINDOW SUB-SWITCH : Diagnosis Procedure	G
OWER WINDOW MOTOR104	Н
PRIVER SIDE	I
DRIVER SIDE : Component Inspection105	J
ASSENGER SIDE	
	PWC
	PWC
	PWC L
PASSENGER SIDE : Diagnosis Procedure105 PASSENGER SIDE : Component Inspection106	PWC L M
PASSENGER SIDE : Diagnosis Procedure105 PASSENGER SIDE : Component Inspection106  NCODER	L M N
PASSENGER SIDE : Diagnosis Procedure	L
PASSENGER SIDE : Diagnosis Procedure105 PASSENGER SIDE : Component Inspection106  NCODER	L M N
PASSENGER SIDE : Diagnosis Procedure	L M N

В

AUTOMATIC WINDOW ADJUSTING FUNC-	Component Description96
TION DOES NOT OPERATE85	DIAGNOSIS SYSTEM (BCM)98
DRIVER SIDE85	
DRIVER SIDE : Diagnosis Procedure85	COMMON ITEM98
	COMMON ITEM : CONSULT Function (BCM -
PASSENGER SIDE85	COMMON ITEM)98
PASSENGER SIDE : Diagnosis Procedure85	RETAINED PWR99
PRESAUTION	RETAINED PWR : CONSULT Function (BCM -
PRECAUTION87	
DDECAUTIONS 07	RETAINED PWR)99
PRECAUTIONS87	DTC/CIRCUIT DIAGNOSIS101
FOR USA AND CANADA87	DIO/OH COIL DI/COROCIO IIIIIIIIIIIII IOI
FOR USA AND CANADA: Precaution for Supple-	<b>POWER SUPPLY AND GROUND CIRCUIT 101</b>
mental Restraint System (SRS) "AIR BAG" and	
"SEAT BELT PRE-TENSIONER"87	BCM101
FOR USA AND CANADA : Service87	BCM : Diagnosis Procedure101
FOR USA AND CANADA: Precaution for Battery	DOWED WINDOW MAIN OWITOU
Service	POWER WINDOW MAIN SWITCH101
COLVICE	POWER WINDOW MAIN SWITCH : Diagnosis
FOR MEXICO88	Procedure101
FOR MEXICO: Precaution for Supplemental Re-	POWER WINDOW SUB-SWITCH102
straint System (SRS) "AIR BAG" and "SEAT BELT	POWER WINDOW SUB-SWITCH : Diagnosis
PRE-TENSIONER"88	Procedure102
FOR MEXICO : Service88	1 10000010102
FOR MEXICO: Precaution for Battery Service88	POWER WINDOW MOTOR104
REMOVAL AND INSTALLATION89	DRIVER SIDE104
POWER WINDOW MAIN SWITCH89	DRIVER SIDE : Description104
	DRIVER SIDE : Component Function Check104
Removal and Installation89	DRIVER SIDE : Diagnosis Procedure104
ROADSTER	DRIVER SIDE : Component Inspection105
BASIC INSPECTION90	PASSENGER SIDE105
DIA CHICOIO AND DEDAID WORK ELOW	PASSENGER SIDE : Description105
DIAGNOSIS AND REPAIR WORK FLOW90	PASSENGER SIDE : Component Function Check
WorkFlow90	105
INSPECTION AND ADJUSTMENT91	PASSENGER SIDE : Diagnosis Procedure105
	PASSENGER SIDE : Component Inspection106
ADDITIONAL SERVICE WHEN REMOVING BAT-	ENCODER 108
TERY NEGATIVE TERMINAL91	
ADDITIONAL SERVICE WHEN REMOVING	DRIVER SIDE108
BATTERY NEGATIVE TERMINAL : Description 91	DRIVER SIDE : Description108
ADDITIONAL SERVICE WHEN REMOVING	DRIVER SIDE : Component Function Check108
BATTERY NEGATIVE TERMINAL : Special Re-	DRIVER SIDE : Diagnosis Procedure108
pair Requirement91	PASSENGER SIDE109
ADDITIONAL SERVICE WHEN REPLACING	PASSENGER SIDE : Description110
CONTROL UNIT91	PASSENGER SIDE : Component Function Check
ADDITIONAL SERVICE WHEN REPLACING	110
CONTROL UNIT : Description91	PASSENGER SIDE : Diagnosis Procedure110
ADDITIONAL SERVICE WHEN REPLACING	•
CONTROL UNIT: Special Repair Requirement92	DOOR SWITCH CIRCUIT112
SYSTEM DESCRIPTION93	DRIVER SIDE112
OTOTEWIDEOCINIF HON93	DRIVER SIDE : Description112
POWER WINDOW SYSTEM93	DRIVER SIDE : Component Function Check112
System Diagram93	DRIVER SIDE : Diagnosis Procedure112
System Description93	
Component Parts Location96	PASSENGER SIDE113
	PASSENGER SIDE : Description113

PASSENGER SIDE :		DRIVER SIDE	172
Component Function Check	113	DRIVER SIDE : Diagnosis Procedure	172
PASSENGER SIDE : Diagnosis Procedure	113		
		PASSENGER SIDE	
ECU DIAGNOSIS INFORMATION	115	PASSENGER SIDE : Diagnosis Procedure	1/2
BCM (BODY CONTROL MODULE)	115	POWER WINDOW RETAINED POWER	
Reference Value		FUNCTION DOES NOT OPERATE NORMAI	l <b>-</b>
Wiring Diagram - BCM		LY	
Fail-safe		Description	
DTC Inspection Priority Chart		Diagnosis Procedure	
DTC Index		Diagnosis Frocedure	173
DTC Index	143	DOOR KEY CYLINDER SWITCH DOES NO	Т
SOFT TOP CONTROL UNIT	148	OPERATE POWER WINDOWS	
Reference Value		Description	
Fail-safe		Diagnosis Procedure	
DTC Inspection Priority Chart		Diagnosis i recodare illiministri	, .
DTC Index		<b>KEYLESS POWER WINDOW DOWN DOES</b>	j
		NOT OPERATE	175
POWER WINDOW MAIN SWITCH	160	Description	175
Reference Value	160	Diagnosis Procedure	
Wiring Diagram - POWER WINDOW CONTR	OL		
SYSTEM		POWER WINDOW LOCK SWITCH DOES	
Fail-Safe	162	NOT FUNCTION	176
		Diagnosis Procedure	176
POWER WINDOW SUB-SWITCH		_	
Reference Value		POWER WINDOW SWITCH ILLUMINATION	
Wiring Diagram - POWER WINDOW CONTR	OL	DOES NOT ILLUMINATE	177
SYSTEM	166		
Fail-Safe	166	DRIVER SIDE	
CVMDTOM DIA CNOCIC		DRIVER SIDE : Diagnosis Procedure	177
SYMPTOM DIAGNOSIS	168	PASSENGER SIDE	177
POWER WINDOWS DO NOT OPERATE		PASSENGER SIDE : Diagnosis Procedure	
WITH ANY POWER WINDOW SWITCHES	400	•	
		<b>AUTOMATIC WINDOW ADJUSTING FUNC-</b>	-
Description		TION DOES NOT OPERATE	178
Diagnosis Procedure	168		
DRIVER SIDE POWER WINDOW ALONE		DRIVER SIDE	
DOES NOT OPERATE	160	DRIVER SIDE : Diagnosis Procedure	178
Description		PASSENGER SIDE	470
Diagnosis Procedure		PASSENGER SIDE : Diagnosis Procedure	
Diagnosis Flocedule	109	PASSENGER SIDE . Diagnosis Procedure	170
PASSENGER SIDE POWER WINDOW		PRECAUTION	179
ALONE DOES NOT OPERATE	170		
Description		PRECAUTIONS	179
Diagnosis Procedure			
Blagnoole i roccadio		FOR USA AND CANADA	
ANTI-PINCH FUNCTION DOES NOT OPE	R-	FOR USA AND CANADA: Precaution for Suppl	e-
ATE	171	mental Restraint System (SRS) "AIR BAG" and	
		"SEAT BELT PRE-TENSIONER"	
DRIVER SIDE		FOR USA AND CANADA: Precaution for Batter	У
DRIVER SIDE : Description	171	Service	179
DRIVER SIDE : Diagnosis Procedure	171	FOR MEVICO	
		FOR MEXICO	
PASSENGER SIDE		FOR MEXICO : Precaution for Supplemental Re	
PASSENGER SIDE : Description		straint System (SRS) "AIR BAG" and "SEAT BEL	
PASSENGER SIDE : Diagnosis Procedure	171	PRE-TENSIONER"	
AUTO OPERATION DOES NOT OPERAT	F	FOR MEXICO : Precaution for Battery Service	180
BUT MANUAL OPERATES NORMALLY.		REMOVAL AND INSTALLATION	101
DU I IVIAIVUAL UPERATES IVURIVIALLT.	1/2	KENIOYAE AND INGLALLATION	101

POWER WINDOW MAIN SWITCH181	Removal and Installation181	
		А
		В
		С
		D
		Е
		F
		G
		F
		I
		J

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< BASIC INSPECTION > [COUPE]

# **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 [COUPE] < BASIC INSPECTION > INSPECTION AND ADJUSTMENT Α ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: De-В scription INFOID:0000000007624984 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. D 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. Е 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 F 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:0000000007624985 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. Initializing procedure is completed. **PWC** 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. 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. Ν **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.

PWC-7

- 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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Revision: 2011 August

### INSPECTION AND ADJUSTMENT

< BASIC INSPECTION > [COUPE]

# ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

INFOID:0000000007624986

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 Requirement

#### INITIALIZATION PROCEDURE

- 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

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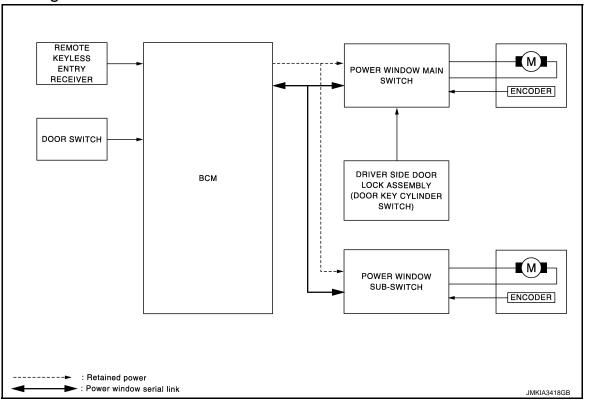
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# SYSTEM DESCRIPTION

### POWER WINDOW SYSTEM

System Diagram



# System Description

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#### POWER WINDOW SYSTEM

 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.
- When pressing power window lock switch, operation other than power window main switch becomes impos-
- 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.

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Auto function is inoperable if encoder is malfunctioning.

### **POWER WINDOW SYSTEM**

[COUPE]

#### < 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.

### **POWER WINDOW SYSTEM**

## < SYSTEM DESCRIPTION >

[COUPE]

 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.

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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 <a href="https://documeoccupic.com/DLK-42">DLK-42</a>, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)".

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#### NOTE:

Use CONSULT to change settings.

MODE 1 (3 sec) / MODE 2 (OFF) / MODE 3 (5 sec)

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#### 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.

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- 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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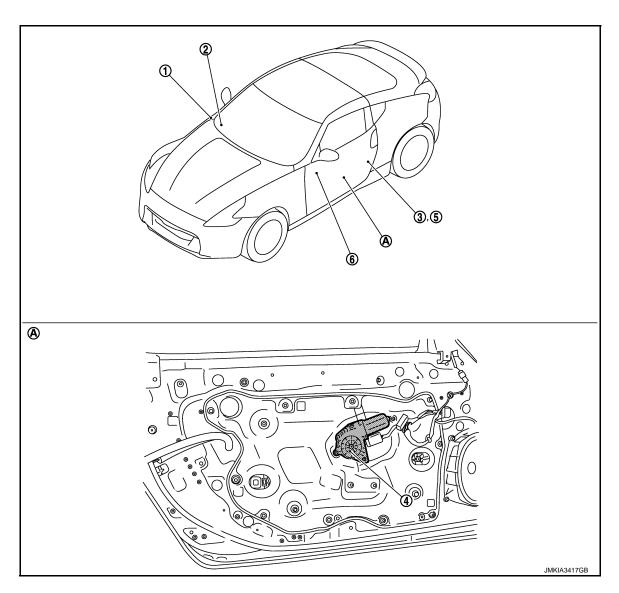
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Revision: 2011 August PWC-11 2012 370Z

# Component Parts Location

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- BCM M118, M119, M122, M123 BCS-9, "Component Parts Location"
- 4. Driver side power window motor D10 5.
- A. View with door finisher removed
- Remote keyless entry receiver M104 3.

  DLK-16, "INTELLIGENT KEY SYSTEM: Component Parts Location"
- Driver side door switch B16
- Driver side door lock assembly (door key cylinder switch) D15
- Power window main switch D8

6.

# **Component Description**

INFOID:0000000007624991

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

# **POWER WINDOW SYSTEM**

< SYSTEM DESCRIPTION >

Component	Function
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.

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# **DIAGNOSIS SYSTEM (BCM)**

**COMMON ITEM** 

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000007774249

#### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

#### SYSTEM APPLICATION

BCM can perform the following functions for each system.

#### NOTE:

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

x: Applicable item

System	Sub system selection item	Diagnosis mode		
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 system     Engine 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

## FREEZE FRAME DATA (FFD)

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

<sup>\*:</sup> This item is displayed, but is not used.

[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 SLEEP>OFF		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		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)	
	ACC>OFF	Power supply position status of the moment a particular DTC is detected	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	<ul> <li>The number of times that ignition switch is turned ON after DTC is detected</li> <li>The number is 0 when a malfunction is detected now.</li> <li>The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON.</li> <li>The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.</li> </ul>		

#### 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)

INFOID:0000000007624993

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Data monitor

# **DIAGNOSIS SYSTEM (BCM)**

# < SYSTEM DESCRIPTION >

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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.

### POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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# DTC/CIRCUIT DIAGNOSIS

# POWER SUPPLY AND GROUND CIRCUIT

**BCM** 

**BCM**: Diagnosis Procedure

INFOID:0000000007624994

## 1. CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

Terminal No.	Signal name	Fuse and fusible link No.
1	Rattory power supply	K (40A)
11	Battery power supply	10 (10A)

### Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

# 2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect BCM connectors.

Check voltage between BCM harness connector and ground.

(+) BCM		(-)	Voltage (Approx.)	
Connector	Terminal		(* (* (* (* (* (* (* (* (* (* (* (* (* (	
M118	1	Ground	Pottory voltage	
M119	11	Ground	Battery voltage	

#### Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.check ground circuit

Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Connector Terminal		Continuity	
M119	13		Existed	

#### Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

### POWER WINDOW MAIN SWITCH

### POWER WINDOW MAIN SWITCH: Diagnosis Procedure

#### INFOID:0000000007624995

# 1. CHECK POWER SUPPLY CIRCUIT 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.

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### 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 within 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.

В	СМ	Power window main switch  Connector Terminal		Continuity
Connector	Terminal			Continuity
M118	2	D8	1	Existed
IVIT18	3	D6	10	Existed

4. Check continuity between BCM harness connector and ground.

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

### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Exploded View".

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:0000000007624996

# 1. CHECK POWER SUPPLY CIRCUIT 1

- Turn ignition switch OFF.
- 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	

### POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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Is the measurement value within 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 sub-switch harness connector.

BO	CM	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 Terminal		Ground	Continuity	
M118	2		Not existed	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Exploded View".

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	Connector Terminal		Continuity	
D38	11		Existed	

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

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### **POWER WINDOW MOTOR**

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

# POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000007624997

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

DRIVER SIDE : Component Function Check

INFOID:0000000007624998

# 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 PWC-20, "DRIVER SIDE : Diagnosis Procedure".

# DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007624999

# 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 power window motor		(–)	Con	Condition	
Connector	Terminal				(Approx.)
	6	- Ground	und Power window main switch	UP	12
D10				DOWN	0
טוט	3 Ground			UP	0
			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 PWC-21, "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</u>, "Removal and Installation".

# 3.check power window motor circuit

- 1. Turn ignition switch OFF.
- 2. Disconnect power window main switch connector.
- 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
	11	D10	3	LXISIEU

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

### **POWER WINDOW MOTOR**

Power window main s	switch		Oznationnik
Connector	Terminal	- Crown d	Continuity
D8	8	Ground	Not existed
D6	11		Not existed
the inspection result normal?			
		er to <u>PWC-89, "Removal and</u>	d Installation".
NO >> Repair or replace harne			
CHECK INTERMITTENT INCID			
efer to GI-44, "Intermittent Incider	<u>nt"</u> .		
INCRECTION FAIR			
>> INSPECTION END			
RIVER SIDE : Componen	t Inspection		INFOID:000000000762500
OMPONENT INSPECTION			
		_	
.CHECK DRIVER SIDE POWER	. WINDOW MOTO	R 	
. Turn ignition switch OFF.			
<ul><li>Disconnect driver side power w</li><li>Check motor operation by conr</li></ul>			le power window motor con
nector.			
	То	erminal	
Driver side power window mo- tor connector	(+)	(-)	Motor operation
	. ,	(-)	
	3	6	DOWN
D10	6	6 3	DOWN UP

# PASSENGER SIDE : Component Function Check

# 1. CHECK POWER WINDOW MOTOR CIRCUIT

Check passenger side power window motor operation with power window main switch or power window sub switch.

#### Is the inspection result normal?

YES >> Passenger side power window motor is OK.

>> Refer to PWC-21, "PASSENGER SIDE : Diagnosis Procedure".

# PASSENGER SIDE: Diagnosis Procedure

# 1. CHECK POWER WINDOW SUB-SWITCH OUTPUT SIGNAL

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

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INFOID:0000000007625003

**PWC-21** Revision: 2011 August 2012 370Z

#### < DTC/CIRCUIT DIAGNOSIS >

(+) Passenger side power window motor		(–)	Condition		Voltage (V) (Approx.)	
Connector	Terminal				(Approx.)	
				UP	12	
D40	6	Ground	Power window sub-	DOWN	0	
D40	3		Giodila	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</u>, "<u>Removal and Installation</u>".

# 3. CHECK POWER WINDOW MOTOR CIRCUIT

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

Power wind	ow sub-switch	Passenger side power window motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D38	9	D40	3	Existed
D30	8	D40	6	Existed

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

Power window sub-switch			Continuity
Connector	Terminal	Ground	Continuity
D38	8	Giodila	Not existed
D30	9		Not existed

#### 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-44, "Intermittent Incident".

#### >> INSPECTION END

### PASSENGER SIDE : Component Inspection

INFOID:0000000007625004

### **COMPONENT INSPECTION**

# 1. CHECK PASSENGER SIDE POWER WINDOW MOTOR

- 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.

## **POWER WINDOW MOTOR**

### < DTC/CIRCUIT DIAGNOSIS >

[COUPE]

Passenger side power window	Terr	minal	Motor condition
motor connector	(+)	(-)	Wotor Condition
D40	3	6	DOWN
	6	3	UP

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### Is the inspection result normal?

YES >> Passenger side power window motor is OK.

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

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## **ENCODER**

**DRIVER SIDE** 

# **DRIVER SIDE: Description**

INFOID:0000000007625005

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

INFOID:0000000007625006

### 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 PWC-24, "DRIVER SIDE : Diagnosis Procedure".

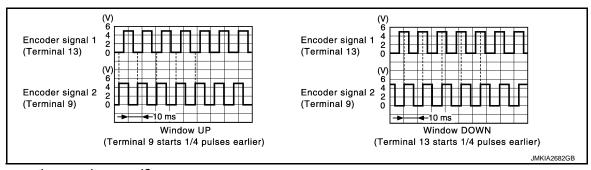
# DRIVER SIDE: Diagnosis Procedure

INFOID:0000000007625007

# 1. CHECK ENCODER OPERATION

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

(· Power windo	(+) Indow main switch  (-)  Signal (Reference value)		Signal (Reference value)
Connector	Terminal		(Italiana valua)
D0	9	Cround	Defer to the following signal
D8	13	Ground	Refer to the following signal



#### Is the inspection result normal?

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

NO >> GO TO 2.

# 2. CHECK ENCODER SIGNAL CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect power window main switch connector and driver side power window motor connector.
- 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
	9	D10	5	Existed
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4. Check continuity between power window main switch harness connector and ground.

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Power wind	Power window main switch		Continuity
Connector	Terminal	Ground	Continuity
	9	Ground	Not existed
Do	13		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

 ${f 3.}$ CHECK ENCODER POWER SUPPLY CIRCUIT 1

- Connect power window main switch connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between driver side power window motor harness connector and ground.

( Driver side pow	+) er window motor	(-)	Voltage (V) (Approx.)	
Connector	Terminal		(11 - 7	
D10	4	Ground	12	

#### Is the measurement value within the specification?

YES >> GO TO 5.

NO >> GO TO 4.

# 4. CHECK ENCODER POWER SUPPLY CIRCUIT 2

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	Power window main switch		Driver side power window motor	
Connector	Terminal	Connector	Terminal	Continuity
D8	5	D10	4	Existed

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D8	5		Not existed

#### Is the inspection result normal?

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

NO >> Repair or replace harness.

# 5.CHECK GROUND CIRCUIT $^{\scriptscriptstyle 1}$

- 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	14	D10	1	Existed

### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

### 6. CHECK GROUND CIRCUIT 2

**PWC-25** Revision: 2011 August 2012 370Z

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#### < DTC/CIRCUIT DIAGNOSIS >

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D8	14		Existed

#### Is the inspection result normal?

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

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

## PASSENGER SIDE

### PASSENGER SIDE: Description

INFOID:0000000007625008

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

INFOID:0000000007625009

### 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 <a href="PWC-26">PWC-26</a>, "PASSENGER SIDE : Diagnosis Procedure".

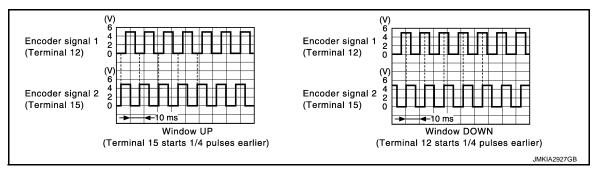
# PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000007625010

# 1. CHECK ENCODER SIGNAL

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

(+) Power window sub-switch		(-)	Signal (Reference value)
Connector	Terminal		(110.0.000 10.00)
D38	12	Ground	Refer to the following signal
D36	15	Giodila	Refer to the following signal



#### Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to <a href="PWC-89">PWC-89</a>, "Removal and Installation".

NO >> GO TO 2.

# 2. CHECK ENCODER SIGNAL CIRCUIT

- Turn ignition switch OFF.
- 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.

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Power wind	low sub-switch	Passenger side po	ower window motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D38	12	D40	2	Existed
D38	15	D40	5	LXISIGU

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

Power window sub-switch			Continuity
Connector	Terminal	Ground	Continuity
D38	12	Ground	Not existed
D30	15		Not existed

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK ENCODER POWER SUPPLY CIRCUIT 1

- 1. Connect power window sub-switch connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between passenger side power window motor harness connector and ground.

(+)			N 16 0 0	
Passenger side power window motor		(–)	Voltage (V) (Approx.)	
Connector	Terminal		(11 - )	
D40	4	Ground	12	

#### Is the measurement value within the specification?

YES >> GO TO 5.

NO >> GO TO 4.

# 4. CHECK ENCODER POWER SUPPLY CIRCUIT 2

- 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 power window motor		Continuity	
Connector	Terminal	Connector	Terminal	Continuity
D38	4	D40	4	Existed

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

Power window sub-switch			Continuity
Connector	Terminal	Ground	Continuity
D38	4		Not existed

#### Is the inspection result normal?

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

NO >> Repair or replace harness.

# 5. CHECK GROUND CIRCUIT 1

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

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### **ENCODER**

[COUPE]

Power windo	ow sub-switch	Passenger side po	ower window motor	Continuity
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

Connect power window sub-switch connector.

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

Power window 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

< DTC/CIRCUIT DIAGNOSIS >

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# POWER WINDOW SERIAL LINK POWER WINDOW MAIN SWITCH

# POWER WINDOW MAIN SWITCH: Description

INFOID:0000000007625011

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 subswitch.

Keyless power window down signal

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

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

# POWER WINDOW MAIN SWITCH: Component Function Check

INFOID:0000000007625012

# 1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

### (II) With CONSULT

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

Monitor item	(	Condition	
CDL LOCK SW	LOCK	: ON	
GDE EGGR GW	UNLOCK	: OFF	
CDL UNLOCK SW	LOCK	: OFF	
CDL UNLOCK SW	UNLOCK	: ON	

#### Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to PWC-29, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure".

# POWER WINDOW MAIN SWITCH: Diagnosis Procedure

INFOID:0000000007625013

# 1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.

Check signal between power window main switch harness connector and ground.

Power window Connector	main switch Terminal	(-)	Signal (Reference value)
D8	12	Ground	(V) 15 10 5 0 10 ms  JPMIA0013GB

#### Is the inspection result normal?

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

# 2. CHECK POWER WINDOW SERIAL LINK SIGNAL

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Revision: 2011 August **PWC-29** 2012 370Z

< DTC/CIRCUIT DIAGNOSIS > [COUPE]

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

	+) w main switch	(-)	Voltage (V) (Approx.)
Connector	Terminal		(, 44,,)
D8	12	Ground	12

#### Is the inspection result normal?

YES >> Replace power window main switch. Refer to <a href="PWC-89">PWC-89</a>, "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.

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

4. Check continuity between BCM connector and ground.

BCM Connector Terminal			Continuity
Connector	Terminal	Ground	Continuity
M123	132		Not existed

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Removal and Installation".

NO >> Repair or replace harness.

### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "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 subswitch.

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:0000000007625015

INFOID:0000000007625014

# 1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

(P) With CONSULT

### < DTC/CIRCUIT DIAGNOSIS >

[COUPE]

INFOID:0000000007625016

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

Monitor item	Condition		
CDL LOCK SW	LOCK	: ON	
CDL LOCK SW	UNLOCK	: OFF	
CDL UNLOCK SW	LOCK	: OFF	
CDL UNLOCK 3VV	UNLOCK	: ON	

#### Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to PWC-31, "POWER WINDOW SUB-SWITCH : Diagnosis Procedure".

# POWER WINDOW SUB-SWITCH: Diagnosis Procedure

# 1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

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

(+) Power window	sub-switch	(-)	Signal (Reference value)
Connector	Terminal		(itolololoo value)
D38	16	Ground	(V) 15 10 5 0 10 ms  JPMIA0013GB

#### Is the inspection result normal?

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

NO >> GO TO 2.

## 2.CHECK POWER WINDOW SERIAL LINK SIGNAL

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

Power windo	+) ow sub-switch	(-)	Voltage (V) (Approx.)
Connector	Terminal	-	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
D38	16	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 and power window sub-switch connector.
- Check continuity between BCM connector and power window sub-switch connector.

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< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

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

4. Check continuity between BCM connector and ground.

ВСМ			Continuity
Connector	Terminal	Ground	Continuity
M123	132		Not existed

# Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Removal and Installation".

NO >> Repair or replace harness.

< ECU DIAGNOSIS INFORMATION >

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# **ECU DIAGNOSIS INFORMATION**

# **BCM (BODY CONTROL MODULE)**

Reference Value INFOID:0000000007806687

### VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
FR WIPER TI	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
FR WIPER LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
FR WIPER INT	Front wiper switch INT	On
ED WIDER STOR	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TUDNI CIONAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI CIONIAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAMD CW	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
LILDEAM CVV	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
LIEAD LAMB CM/4	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
LIEAD LAMB CW O	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DA GOING OW	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LIQUIT OW	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
FR FOG SW	NOTE: The item is indicated, but not monitored.	Off
RR FOG SW	Rear fog lamp switch OFF	Off
RR FOG SW	Rear fog lamp switch ON	On
DOOD OW DD	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
DOOD SW AS	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off

**PWC-33** Revision: 2011 August 2012 370Z

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# < ECU DIAGNOSIS INFORMATION >

[COUPE]

Monitor Item	Condition	Value/Status
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
DOOK 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
ODE ONLOOK OW	Door lock and unlock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
KLI OIL LK-SW	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
KET CTL UN-3W	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
LIAZADD CM	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
<b>NOTE:</b> 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
TO CANOEL OW	Trunk lid opener cancel switch OFF	Off
TR CANCEL SW	Trunk lid opener cancel switch ON	On
TD/DD ODEN OW	Back door opener switch OFF (Coupe models)     Trunk lid opener switch OFF (Roadster models)	Off
TR/BD OPEN SW	<ul> <li>While the back door opener switch is turned ON (Coupe models)</li> <li>While the trunk lid opener switch is turned ON (Roadster models)</li> </ul>	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
DIVE I OOK	LOCK button of the Intelligent Key is not pressed	Off
RKE-LOCK	LOCK button of the Intelligent Key is pressed	On
DIVE LINII OOK	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
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
INNET / VV OF LIN	UNLOCK button of the Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off
INIC-WODE ONG	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On

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Monitor Item	Condition	Value/Status
Worldor item		
OPTICAL SENSOR	Bright outside of the vehicle  Dark outside of the vehicle	Close to 5 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
NEQ OW -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
0011000	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
<b>NOTE:</b> 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
BRAKE SW 2	The brake pedal is not depressed	Off
DRAKE SW Z	The brake pedal is depressed	On
DETE/CANCL SW NOTE:	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	<ul> <li>Selector lever in any position other than P and N (A/T models)</li> <li>Control lever in any position other than neutral position (Coupe M/T models with SynchroRev Match mode)</li> </ul>	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
UNLK SEN -DR	Driver door is unlocked	Off
OINLN OLIN FUN	Driver door is locked	On
DUCH CW IDDM	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On

Revision: 2011 August **PWC-35** 2012 370Z

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# < ECU DIAGNOSIS INFORMATION >

[COUPE]

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	<ul> <li>Selector lever in any position other than P and N (A/T models)</li> <li>The clutch pedal is not depressed (M/T models)</li> </ul>	Off
	<ul> <li>Selector lever in P or N position (A/T models)</li> <li>The clutch pedal is depressed (M/T models)</li> </ul>	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 >

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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
CONFRINI ID ALL	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
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered 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
CONFIRM ID3	The key ID that the key slot receives is recognized by the third key ID registered 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
CONFIRM ID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIDMIDA	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
CONFIRM ID1	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TD 4	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
TP 3	The ID of third Intelligent Key is registered to BCM	Done
TD 0	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
TD 4	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 REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGOTTET	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
ID REGOTT RT	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
	ID of rear RH tire transmitter is not registered	Yet
ID REGST RL1	ID of rear LH tire transmitter is registered	Done
ID REGOT KET	ID of rear LH tire transmitter is not registered	Yet
WARNING LAMP	Tire pressure indicator OFF	Off
VVAINING LAIVIE	Tire pressure indicator ON	On
DI 177ED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

Revision: 2011 August **PWC-37** 2012 370Z

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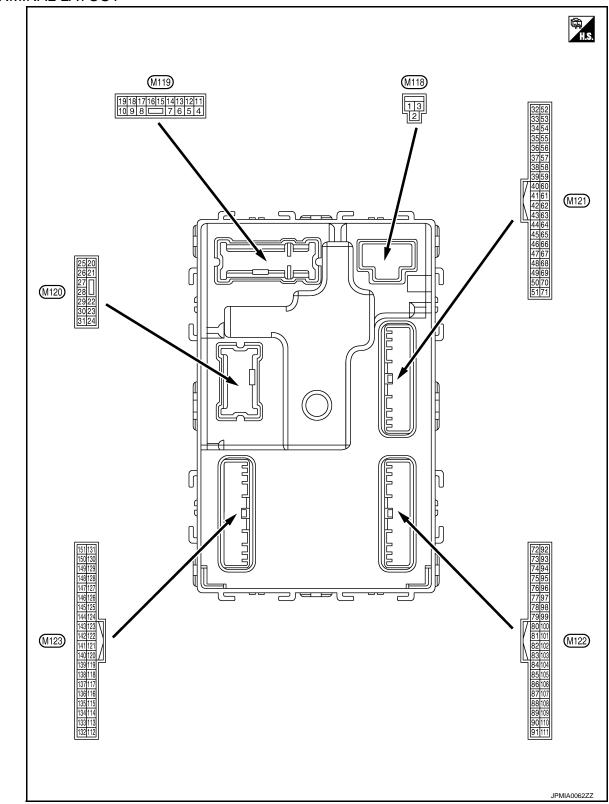
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### TERMINAL LAYOUT



PHYSICAL VALUES

### < ECU DIAGNOSIS INFORMATION >

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	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 (	ON	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	Output	door	Other than UNLOCK (Actuator is not activated)	0 V			
8	Ground All doors, fuel lid LOCK	All doors, fuel lid	All doors, fuel lid	All doors, fuel lid	All doors, fuel lid	Outrout	All doors, fuel	LOCK (Actuator is activated)	12 V
(V)		Output	lid	Other than LOCK (Actuator is not activated)	0 V				
9	0	Driver door, fuel lid	Driver door, fuel lid	Outrout	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 (	DFF	Battery voltage			
13 (B)	Ground	Ground		Ignition switch (	ON	0 V			
-					OFF	0 V			
		Push-button ignition				NOTE: When the illumination brightening/dimming level is in the neutral position.			
14 (R)	Ground	switch illumination ground	Output	Tail lamp	ON	10 0 2 ms			
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage			
(1)					ACC	0 V			

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### < ECU DIAGNOSIS INFORMATION >

Condition   Cond		nal No.	Description				Value
17   17   17   18   18   19   19   19   19   19   19		-	Signal name			Condition	
Turn signal RH (Front and side)  Turn signal RH (Front and side)  Turn signal Switch RH  Turn signal Switch OFF  Turn signal Switch OFF  Turn signal Switch OFF  Turn signal Switch OFF  Turn signal Switch DFF  Turn Switch DFF  Turn signal Switch DFF  Turn Switch DFF  Turn Switch DFF  Turn signal Switch DFF  Turn Switch DFF  T						Turn signal switch OFF	
Turn signal switch OFF 0 V    Second   Turn signal LH (Front and side)   Turn signal LH (Front and side)   Turn signal switch LH		Ground		Output		Turn signal switch RH	15 10 5 0 1 s
Turn signal LH (Front and side)  Turn signal LH (Front and side)  Turn signal Switch LH  Turn signal switch CFF  Turn signal switch CF						Turn signal switch OFF	
Control   Cont		Ground		Output		Turn signal switch LH	15 10 5 0 1 s
Turn signal switch OFF  OV  Ground  Turn signal RH (Rear)  Output  Back door/ Trunk lid  OPEN (Back door/Trunk lid opener actuator is activated)  Other than OPEN (Back door/Trunk lid opener actuator is not activated)  Other than OPEN (Back door/Trunk lid opener actuator is not activated)  OFF  OV  ON  Turn signal switch OFF  OV  ON  ON  ON  ON  ON  ON  ON  ON  ON		Ground		Output			
20 (V) Ground Turn signal RH (Rear) Output Ignition switch ON Turn signal switch RH  23 (L)*1 (Y)*2 Ground (Y)*2 Ground (Y)*2  24*8 (O) Ground Turn signal LH (Rear) Output (S)*  25 (LG) Ground Turn signal LH (Rear) Output (S)*  26 Ground (S)*  27 Turn signal switch RH  28 Ground (S)*  29 Turn signal switch RH  20 OPEN (Back door/Trunk lid opener actuator is activated)  Other than OPEN (Back door/Trunk lid opener actuator is not activated)  OV  ON  12 V  Turn signal switch OFF  OV  ON  12 V  Turn signal switch OFF  OV  Turn signal switch OFF  OV  ON  12 V  Turn signal switch OFF  OV  ON  12 V  Turn signal switch OFF  OV  ON  12 V  Turn signal switch OFF  OV  ON  OV  ON  OV  ON  OV  ON  OV  ON  OV  ON  ON					-		
Company   Comp		Ground	Turn signal RH (Rear)	Output		Turn signal switch RH	15 10 5 0 1 s
Cl)** Ground open open open open open open open open			Pook door/Trunk lid		Pack door/	(Back door/Trunk lid open-	12 V
Ground Rear fog lamp Output Rear fog lamp ON 12 V  Turn signal switch OFF  OV  Ignition switch ON  Turn signal switch LH  ON  ON  OV  PKID0926E 6.5 V  ON  OV  Trunk room  ON  OV  Trunk room		Ground		Output		(Back door/Trunk lid opener actuator is not activat-	0 V
Turn signal switch OFF  O V  Ignition switch ON  Turn signal switch LH  ON  Turn signal switch LH  ON  Turn signal switch LH  ON  ON  ON  ON  OV  ON  ON  OV  ON  OV  ON  ON		Ground	Rear fog lamp	Output	Rear fog lamp		
Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch LH  Usual State of the Company of the	(0)						
25 (LG) Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch LH  30 Ground Luggage room/Trunk room Ignition switch ON Turnk room Ignition switch ON ON OV ON ON ON ON ON ON Ignition switch Inches Ignition Inches Ignition Ignition switch Inches Ignition Inches Ignition Igniti						Tutti signal switch OFF	U V
30 Ground Luggage room/Trunk Output Trunk room Trunk room		Ground	Turn signal LH (Rear)	Output		Turn signal switch LH	15 10 5 0 1 s
Ground Complant Output Trunk room					Luggogo room/	ON	
		Ground		Output	Trunk room		

### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description			Condition	Value
+	- COIOI)	Signal name	Input/ Output		Condition	(Approx.)
34	Ground	Luggage room/Trunk	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(G)	Glound	room antenna (-)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
35		Luggage room/Trunk		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1
(R)	Ground	room antenna (+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
38		Rear bumper anten-		When the back door/trunk lid door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1
38 (B)	Ground	na (-)	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 1 s JMKIA0063GB

### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
39	One we de	Cround Rear bumper anten-	0.4-4	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)	Ground	na (+)	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 1 s JMKIA0063GB
47	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	12 V
(V)	0.00	E/R) control	- Carpar	.9	ON	0 V
		round Starter relay control	Output	Ignition switch ON (A/T mod- els)	When selector lever is in P or N position	12 V
52	Ground				When selector lever is not in P or N position	0 V
(SB)	Giodila		Output	Ignition switch	When the clutch pedal is depressed	Battery voltage
				ON (M/T mod- els)	When the clutch pedal is not depressed	0 V
60	Cround	Push-button ignition	Innut	Push-button ig- nition switch (push switch)	Pressed	0 V
(BR)	Ground	switch (Push switch)	Input		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 0 10 ms JPMIA0016GB 1.0 V
64	Ground	Intelligent Key warn-	Output	Intelligent Key	Sounding	0 V
(G)	Giouna	ing buzzer	Output	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 10 5 0 10 ms 10 ms JPMIA0011GB
					ON (Door open)	11.8 V 0 V
					ON (DOOR OPER)	U V

### < ECU DIAGNOSIS INFORMATION >

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	nal No.	Description				Value	А		
+	color)	Signal name	Input/ Output		Condition	(Approx.)	$\wedge$		
					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		
						(V)	Е		
			Output	Output	Ignition switch		When Intelligent Key is in the passenger compart- ment	15 10 5 0	F
72	Ground	Room antenna 2 (–)				Ignition switch	JMKIA0062GB	G	
(L)	Ground	(Center console)	Output	OFF	When Intelligent Key is not in the passenger compartment	15 10 5 0	Н		
						JMKIA0063GB			
							J		
					When Intelligent Key is in the passenger compart-	(V) 15 10 5 0	PWC		
73	73 (P) Ground Room antenna 2 (+) (Center console) Outp	Outrot	Ignition switch	ment	1 S JMKIA0062GB	L			
(P)		Output	OFF		(V)	M			
					When Intelligent Key is not in the passenger compartment	15 10 5 0	Ν		
						JMKIA0063GB	0		

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### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description			O a malitia m	Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)	
74	Ground	Cround Passenger door an-	Output	When the passenger door request switch is	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
(SB)	Cround	tenna (–)	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB		
75	congor door r	When the passenger door request switch is	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1   S   S   S   S   S   S   S   S   S			
(BR)	Ground	tenna (+)	Output	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	
76	Ground	Driver door antenna	Output	When the driver door request switch is oper-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
(V)	Giouria	(-)	Output	ated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	

### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description			0 100	Value
+ (vvire	- COIOF)	Signal name	Input/ Output		Condition	(Approx.)
77		Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(LG)	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 JMKIA0063GB
78* <sup>2</sup>	0	Room antenna 1 (–)	0.1	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(L)	Ground	(Instrument panel)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
79* <sup>2</sup>	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(R)	Giodila	(Instrument panel)	Culput	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB

#### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description			Constituio o	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent 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 Intelligent 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	0 V 12 V
Remote keyless entry receiver (front) com-	Input/	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB		
(GR)	(GR) Ground receiver (nont) communication		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 10 5 0 2 ms JPMIA0041GB
87 (BR)		Combination switch INPUT 5	Input	Combination switch	Rear fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Any of the conditions below with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 2  Wiper intermittent dial 6  Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB

### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description				Value
+	- COIOF)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
00		Combination quitab		Combination	Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2_ms JPMIA0036GB 1.3 V
88 (V) Ground Combination switch INPUT 3	Input	Combination switch				
				Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0	
					Any of the conditions below with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 2  Wiper intermittent dial 3	1.3 V  (V) 15 10 5 0  JPMIA0037GB
90			Input/			1.3 V
(P)	Ground	CAN-L	Output		_	_
91 (L)	Ground	CAN-H	Input/ Output		_	_
92 (LG)	Ground	Key slot illumination	Output	Key slot illumi- nation	OFF	0 V  (V) 15 10 1
					ON	12 V
		İ		1	OFF (LOCK indicator is	Dottomicualtoma
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	not illuminated)	Battery voltage

### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+	color)	Signal name	Input/ Output		Condition	(Approx.)
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(O)	Oround	Noo relay control	Output	ignition switch	ACC or ON	12 V
96* <sup>3</sup> (Y)	Ground	A/T shift selector (Detention switch) power supply	Output		_	12 V
		Selector lever P posi-		Colootorilovor	P position	0 V
6		tion switch (A/T mod- els)		Selector lever	Any position other than P	12 V
99* <sup>6</sup> (R)	99* <sup>6</sup> (R) Ground	Clutch pedal position switch (M/T models	Input	Clutch pedal	OFF (Clutch pedal is depressed)	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 request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (Y)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(O)	Ground	lay control	Output	ignition switch	ON	12 V
103 (LG)	Ground	Remote keyless entry receiver (front) power supply	Output	Ignition switch (	DFF	12 V

### < ECU DIAGNOSIS INFORMATION >

[COUPE]

	nal No.	Description				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB

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### < 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	
108	Ground	Combination switch Input 4	Input	Combination switch		Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
(R)						Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
					Any of the conditions below 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 >

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

#### < ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
113	Cround	Ontinal concer	lanut	Ignition switch	When bright outside of the vehicle	Close to 5 V
(O)	Ground	Optical sensor	Input	ON	When dark outside of the vehicle	Close to 0 V
114* <sup>4</sup>	Cround	Clutch interlock	lanut	Clutchinterlock	OFF (Clutch pedal is not depressed)	0 V
(R)	Ground	switch	Input	switch	ON (Clutch pedal is depressed)	Battery voltage
115* <sup>9</sup> (O)	_	_	_		_	_
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
118	0	Oten leave suitely 0		Stop lamp	OFF (Brake pedal is not depressed)	0 V
(P)	Ground	Stop lamp switch 2	Input	switch	ON (Brake pedal is depressed)	Battery voltage
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012G
					UNLOCK status (Unlock switch sensor ON)	0 V
121	Crownd	Kay alat awitah	lan. it	When the Intellig	gent Key is inserted into key	12 V
(R)	Ground	Key slot switch	Input	When the Intellig	gent Key is not inserted into	0 V
123	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
(W)	Ground	1014 ICCUDACK	прис	igilidori switcili	ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011Gi
						11.8 V
					ON (Door open)	0 V

# < ECU DIAGNOSIS INFORMATION >

Terminal No. [ (Wire color)		Description	I			Value	/
+	color)	Signal name	Input/ Output		Condition	(Approx.)	/
129* <sup>2</sup> (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V	E (
					ON	0 V	
130* <sup>7</sup> (L)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 10 5 0 10 ms JPMIA0012GB	
					Rear window defogger switch ON	0 V	ŀ
132 (Y)* <sup>1</sup> (V)* <sup>2</sup>	Ground	Power window switch and soft top control unit communication	Input/ Output	Ignition switch C	NO	(V) 15 10 5 0 10 ms JPMIA0013GB	,
				Ignition switch C	OFF or ACC	12 V	Б
					ON (Tail lamps OFF)	9.5 V  NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.	P
133 (G)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps ON)	(V) 15 10 5 0	
					OFF	JPMIA0159GB	
134	_		_	LOCKindicator	OFF OFF	0 V  Battery voltage	
(GR)	Ground	LOCK indicator lamp	Output	lamp	ON	0 V	
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch C	DN	0 V	
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V	
(V)	Giound	power supply	Output	ignition Switch	ACC or ON	5.0 V	

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value						
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)						
				Ignition switch OFF (Remote key- less entry re-	During waiting	(V) 15 10 5 0 1 ms JMKIA0064GB						
139 (L)	Ground	Tire pressure receiver communication	Input/ Output							ceiver communica- tion)	When operating either button on the Intelligent Key	(V) 15 10 5 0 1 ms  JMKIA0065GB
				Ignition switch ON (Tire pressure receiver com- munication)	Standby state	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						
					When receiving the signal from the transmitter	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						
		Selector lever P/N position (A/T models)		Selector lever	P or N position	12 V						
140* <sup>5</sup>	Ground	Park/neutral position	Input		Except P and N positions  Control lever in neutral po-	0 V						
(G)	Ground	switch (Coupe M/T models with Synchro- Rev Match mode)	mput	Ignition switch ON	sition  Control lever in any position other than neutral	Battery voltage  0 V						
					ON	0 V						
141 (Y)	Ground	Security indicator lamp	Output	Security indicator lamp	Blinking	(V) 15 10 5 0 JPMIA0014GB						
					OFF	11.3 V 12 V						
					J	1						

#### < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description			0 100	Value				
+ (vvire	–	Signal name	Input/ Output		Condition	(Approx.)				
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit-	All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND	0 V				
` '		-		tent dial 4)	Turn signal switch RH	2 ms JPMIA0031GB				
					All switches OFF (Wiper intermittent dial 4)	0 V				
143		Combination switch		Combination	Front wiper switch HI (Wiper intermittent dial 4)  Any of the conditions be-	(V)				
(P)	Ground	OUTPUT 1	switch low with all switches C  Wiper intermittent d   SUTPUT 1 switch low with all switches OFF  • Wiper intermittent dial  • Wiper intermittent dial  • Wiper intermittent dial  • Wiper intermittent dial	Switch all switches OFF Wiper intermittent dial switches OFF Wiper intermitte		Switch s Ol Wiper intermittent dia Wiper intermittent dia Wiper intermittent dia Wiper intermittent dia		low with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 2  Wiper intermittent dial 3  Wiper intermittent dial 6  Wiper intermittent dial 7	10 5 0 2 ms JPMIA0032GB 10.7 V	
					All switches OFF (Wiper intermittent dial 4)	0 V				
					Front washer switch ON (Wiper intermittent dial 4)	(V)				
144 (G)		Output	Output	Output	thiit	Any of the conditions below with all switches OFF  • Wiper intermittent dial 1  • Wiper intermittent dial 5  • Wiper intermittent dial 6	15 10 5 0 2 ms JPMIA0033GB 10.7 V			
					All switches OFF	0 V				
					Front wiper switch INT	(V)				
145		Combination switch		Combination switch	Front wiper switch LO  Lighting switch AUTO	15				
(L)	Ground	OUTPUT 3	Output	(Wiper intermittent dial 4)	Rear fog lamp switch ON	2 ms JPMIA0034GB				
						10.7 V				
					All switches OFF Lighting switch 2ND	0 V				
					Lighting switch PASS	(V)				
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	Turn signal switch LH	15 10 5 0 2 ms JPMIA0035GB 10.7 V				

#### < ECU DIAGNOSIS INFORMATION >

	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	
					ON (Door open)	0 V	
151	Ground	Rear window defog-	Output	Rear window	Active	0 V	
(G)	Giodila	ger relay control	Output	defogger	Not activated	Battery voltage	

<sup>\*1:</sup> Coupe models

<sup>\*2:</sup> Roadster models

<sup>\*3:</sup> A/T models

<sup>\*4:</sup> M/T models

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

<sup>\*6:</sup> With A/T or with M/T without SynchroRev Match mode

<sup>\*7:</sup> Without NAVI

<sup>\*8:</sup> With rear fog lamp

<sup>\*9:</sup> BCM does not use this terminal for control.

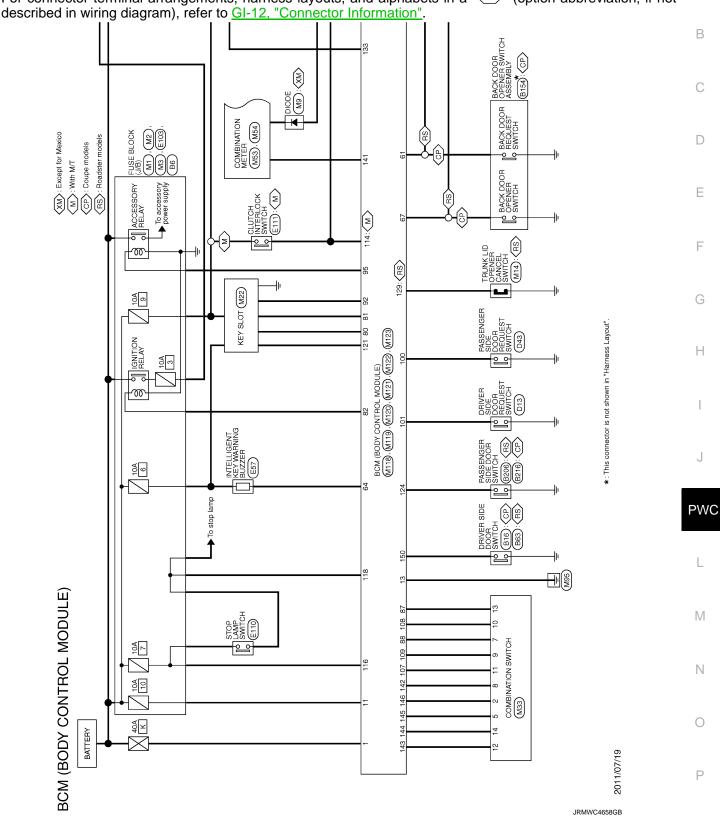
[COUPE]

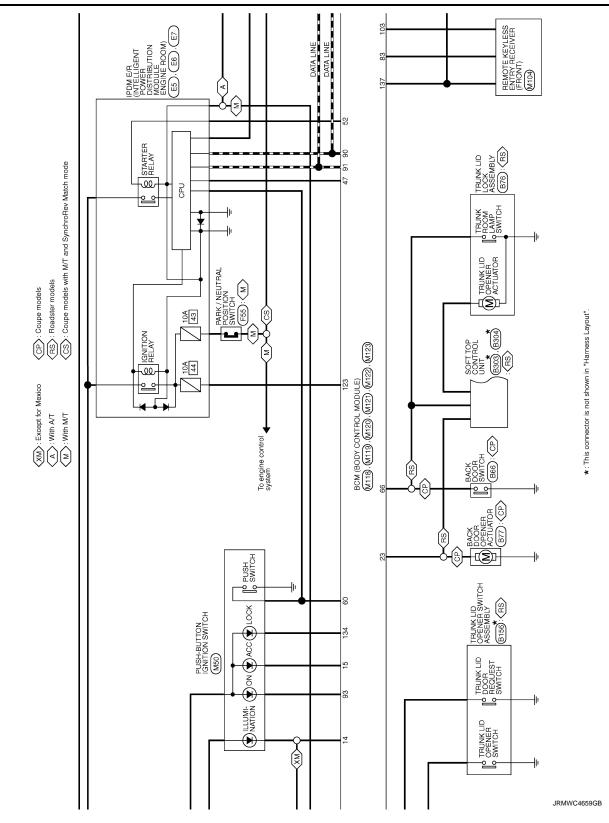
Α

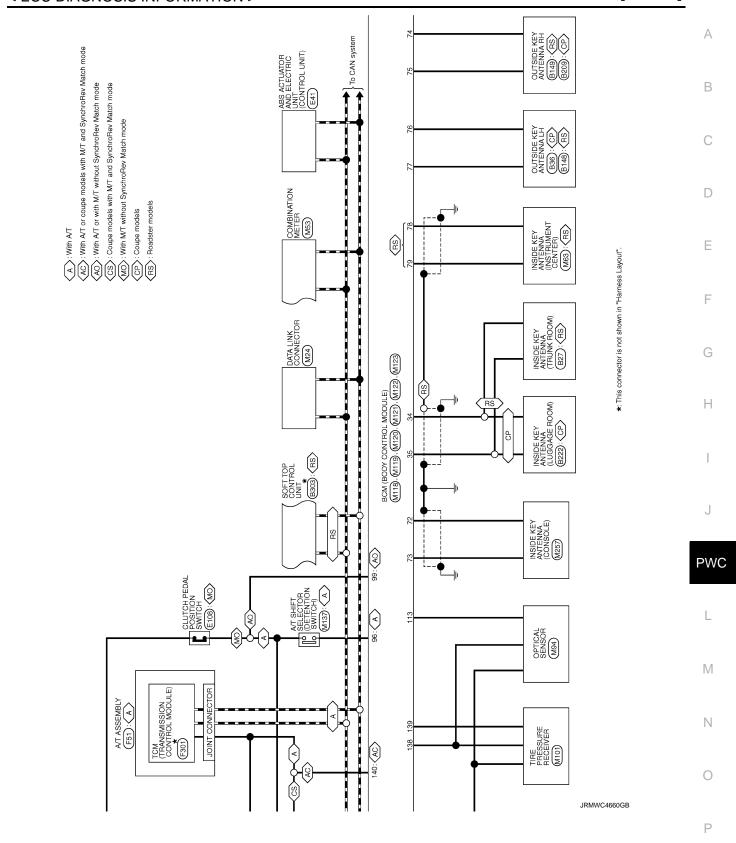
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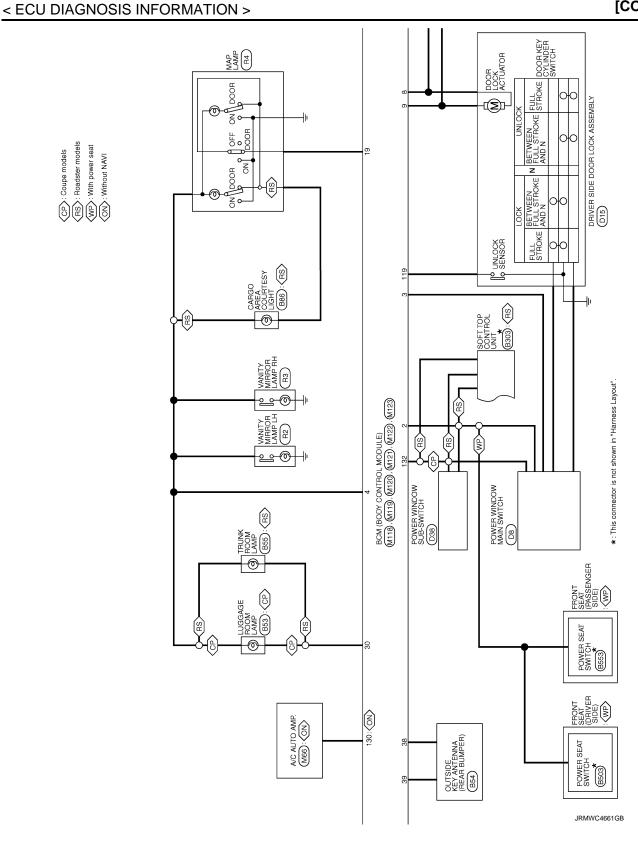
### Wiring Diagram - BCM -

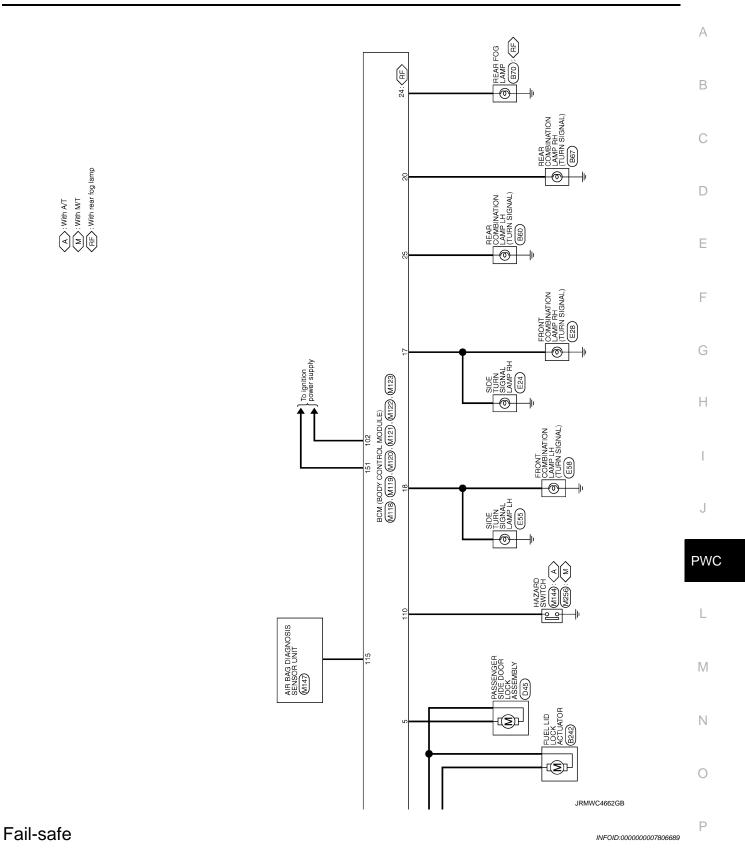
For connector terminal arrangements, harness layouts, and alphabets in a (option abbreviation; if not











FAIL-SAFE CONTROL BY DTC

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

### < ECU DIAGNOSIS INFORMATION >

[COUPE]

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 → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent  Starter control relay signal  Starter 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	<ul> <li>500 ms after the following conditions are fulfilled</li> <li>IGN relay (IPDM E/R) control signal: OFF (Battery voltage)</li> <li>Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)</li> <li>Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)</li> </ul>
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled  • Power position changes to ACC  • Receives 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 becomes 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:0000000007806690

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

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Priority	DTC	_
	B2553: IGNITION RELAY     B2555: STOP LAMP     B2556: PUSH-BTN IGN SW     B2557: VEHICLE SPEED     B2560: STARTER CONT RELAY     B2601: SHIFT POSITION	В
	<ul> <li>B2602: SHIFT POSITION</li> <li>B2603: SHIFT POSI STATUS</li> <li>B2604: PNP SW</li> <li>B2605: PNP SW</li> </ul>	С
4	<ul> <li>B2608: STARTER RELAY</li> <li>B260A: IGNITION RELAY</li> <li>B260F: ENG STATE SIG LOST</li> <li>B2614: BCM</li> </ul>	D
	<ul> <li>B2615: BCM</li> <li>B2616: BCM</li> <li>B2617: BCM</li> <li>B2618: BCM</li> </ul>	Е
	B261A: PUSH-BTN IGN SW     B261E: VEHICLE TYPE     B26E8: CLUTCH SW     B26EA: KEY REGISTRATION	F
	C1729: VHCL SPEED SIG ERR     U0415: VEHICLE SPEED SIG	G
	<ul> <li>C1704: LOW PRESSURE FL</li> <li>C1705: LOW PRESSURE FR</li> <li>C1706: LOW PRESSURE RR</li> <li>C1707: LOW PRESSURE RL</li> <li>C1708: [NO DATA] FL</li> </ul>	Н
5	<ul> <li>C1700: [NO DATA] TE</li> <li>C1709: [NO DATA] FR</li> <li>C1710: [NO DATA] RR</li> <li>C1711: [NO DATA] RL</li> <li>C1716: [PRESSDATA ERR] FL</li> </ul>	I
	C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1734: CONTROL UNIT	J
6	B2621: INSIDE ANTENNA     B2622: INSIDE ANTENNA     B2623: INSIDE ANTENNA	PWC

DTC Index INFOID:0000000007806691

#### 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 BCS-19, "COM-MON ITEM: CONSULT Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	_	BCS-46
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-47
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-48

### < ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference	
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-42	
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-45	
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-46	
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-48	
B2195: ANTI SCANNING	×	_	_	_	SEC-49	
B2553: IGNITION RELAY	_	×	_	_	PCS-48	
B2555: STOP LAMP	_	×	_	_	SEC-50	
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-52	
B2557: VEHICLE SPEED	×	×	×	_	SEC-54	
B2560: STARTER CONT RELAY	×	×	×	_	SEC-55	
B2562: LOW VOLTAGE	_	×	_	_	BCS-49	
B2601: SHIFT POSITION	×	×	×	_	SEC-56	
B2602: SHIFT POSITION	×	×	×	_	SEC-59	
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-62	
B2604: PNP SW	×	×	×	_	SEC-65	
B2605: PNP SW	×	×	×	_	SEC-67	
B2608: STARTER RELAY	×	×	×	_	SEC-69	
B260A: IGNITION RELAY	×	×	×	_	PCS-50	
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-71	
B2614: BCM	_	×	×	_	PCS-52	
B2615: BCM	_	×	×	_	PCS-55	
B2616: BCM	_	×	×	_	PCS-58	
B2617: BCM	×	×	×	_	SEC-75	
B2618: BCM	×	×	×	_	PCS-61	
B261A: PUSH-BTN IGN SW	_	×	×	_	PCS-62	
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-78</u>	
B2621: INSIDE ANTENNA	_	×	_	_	<u>DLK-228</u>	
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	×	×	×	_	SEC-72	
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-74</u>	
C1704: LOW PRESSURE FL	_	_	_	×		
C1705: LOW PRESSURE FR	_	_	_	×	MEGO	
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-20</u>	
C1707: LOW PRESSURE RL	_	_		×		

### < ECU DIAGNOSIS INFORMATION >

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CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	WT-22
C1710: [NO DATA] RR	_	_	_	×	<u>VV 1-22</u>
C1711: [NO DATA] RL	_	_	_	×	
C1716: [PRESSDATA ERR] FL	_	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	_	×	WT-25
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>W1-25</u>
C1719: [PRESSDATA ERR] RL	_	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-27</u>
C1734: CONTROL UNIT	_	_	_	×	<u>WT-29</u>

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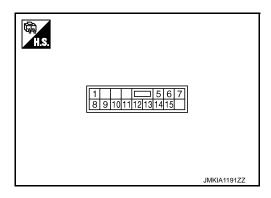
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### POWER WINDOW MAIN SWITCH

Reference Value

**TERMINAL LAYOUT** 

PHYSICAL VALUES



#### POWER WINDOW MAIN SWITCH

Terminal No. (Wire 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 adjusting operates	12
6 (GR)	Ground	Door key cylinder switch LOCK signal	Input	Key position (Neutral → Locked)	5 → 0
7 (V)	Ground	Door key cylinder switch UN- LOCK signal	Input	Key position (Neutral → Unlocked)	5 → 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 motor operates	(V) 6 4 2 0 10 ms JMKIA0070GB
10	Ground	Ignition switch power signal	Input	IGN SW ON	12
(Y)	Cround	ignition owiton power signal	трис	IGN SW OFF	0
11 (BR)	Ground	Driver side power window motor DOWN signal	Output	When power window main switch (Driver side) is operated DOWN	12
12 (SB)	Ground	Power window serial link	Input/ Output	Ignition switch ON	(V) 15 10 5 0 10 ms JPMIA0013GB

#### **POWER WINDOW MAIN SWITCH**

#### < ECU DIAGNOSIS INFORMATION >

[COUPE]

Terminal No. (Wire color)		Description		Condition	Voltage [V]	
+	-	Signal name	Input/ Output		(Approx.)	
13 (R)	Ground	Encoder pulse signal 1	Input	When power window motor operates	(V) 6 4 2 0 10 ms JMKIA0070GB	
14 (G)	Ground	Encoder ground	_	_	0	
15 (B)	Ground	Ground	_	_	0	

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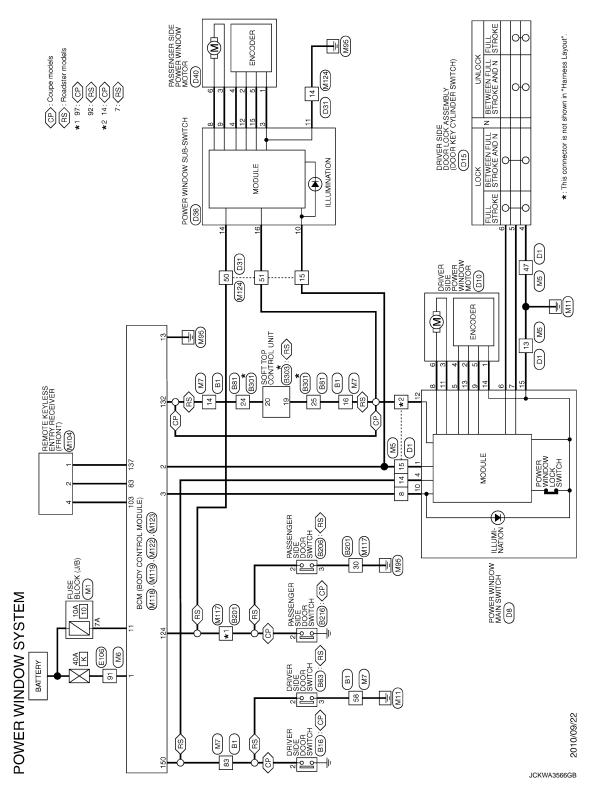
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### Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

INFOID:0000000007625023

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** 

#### **POWER WINDOW MAIN SWITCH**

#### < ECU DIAGNOSIS INFORMATION >

[COUPE]

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 malfunction	When a pulse indicating that the window is moving in the opposite direction against the power window 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 power window switch, fail-safe control is activated again.

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**PWC-69** Revision: 2011 August 2012 370Z

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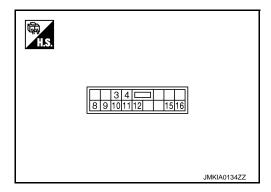
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[COUPE]

### **POWER WINDOW SUB-SWITCH**

Reference Value

**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	

#### **POWER WINDOW SUB-SWITCH**

#### < ECU DIAGNOSIS INFORMATION >

[COUPE]

Terminal No. (Wire color)		Description		Condition	Voltage [V]	
+	-	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	
16 (Y)	Ground	Power window serial link	Input/ Output	Ignition switch ON	(V) 15 10 5 0 JPMIA0013GB	

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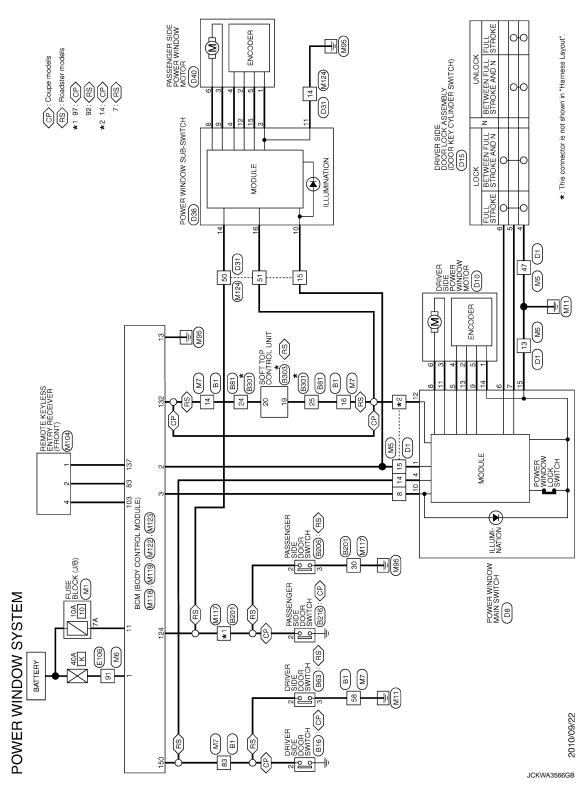
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### Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

INFOID:0000000007806693

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** 

#### POWER WINDOW SUB-SWITCH

#### < ECU DIAGNOSIS INFORMATION >

[COUPE]

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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 malfunction	When a pulse indicating that the window is moving in the opposite direction against the power window 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 operate.

- 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 power window switch, fail-safe control is activated again.

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# POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCHES

< SYMPTOM DIAGNOSIS >

[COUPE]

# 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

INFOID:0000000007625029

## 1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to PWC-17, "BCM: 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 GI-44, "Intermittent Incident".

NO >> GO TO 1.

#### DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

[COUPE] < SYMPTOM DIAGNOSIS > DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE Α Description INFOID:0000000007625030 Driver side power window does not operate using power window main switch. В Diagnosis Procedure INFOID:0000000007625031 1. CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY AND GROUND CIRCUIT C Check power window main switch power supply and ground circuit. Refer to PWC-17, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure". D Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. Е 2.CHECK DRIVER SIDE POWER WINDOW MOTOR Check driver side power window motor. Refer to PWC-20, "DRIVER SIDE: Component Function Check". F 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. Н Is the result normal? YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident". >> GO TO 1. NO

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**PWC-75** Revision: 2011 August 2012 370Z

#### 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

INFOID:0000000007625032

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:0000000007625033

# 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.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.

## 3. CONFIRM THE OPERATION

Confirm the operation again.

#### Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

#### WHEN POWER WINDOW SUB-SWITCH IS OPERATED

#### WHEN POWER WINDOW SUB-SWITCH IS OPERATED: Description

INFOID:0000000007625034

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:0000000007625035

## 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 GI-44, "Intermittent Incident".

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-

PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE [COUPE] < SYMPTOM DIAGNOSIS > **SWITCH**: Description INFOID:0000000007625036 Α Passenger side power window operates using power window main switch and power window sub-switch. WITH BOTH POWER WINDOW MAIN SWITCH AND POWER WINDOW SUB-В SWITCH: Diagnosis Procedure INFOID:0000000007625037 1. CHECK PASSENGER SIDE POWER WINDOW MOTOR Check passenger side power window motor. Refer to PWC-21, "PASSENGER SIDE: Component Function Check". Is the measurement value within the specification? D YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION Е Confirm the operation again. Is the result normal? F YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident". NO >> GO TO 1. Н **PWC** M Ν

Revision: 2011 August **PWC-77** 2012 370Z

#### ANTI-PINCH FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > [COUPE]

## ANTI-PINCH FUNCTION DOES NOT OPERATE

**DRIVER SIDE** 

DRIVER SIDE : Description

INFOID:0000000007625038

Anti-pinch function does not operate when power window up operated.

**DRIVER SIDE**: Diagnosis Procedure

INFOID:0000000007625039

### 1. CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to PWC-79, "DRIVER SIDE : Diagnosis Procedure".

## 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000007625040

Anit-pinch function does not operate when power window up operated.

PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000007625041

## 1. CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to PWC-79, "PASSENGER SIDE : Diagnosis Procedure".

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

#### **AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMAL-**[COUPE] < SYMPTOM DIAGNOSIS > AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES Α NORMALLY DRIVER SIDE В DRIVER SIDE: Diagnosis Procedure INFOID:0000000007625042 1.PERFORM INITIALIZATION PROCEDURE Initialization procedure is performed and operation is confirmed. Refer to PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement". D Is the inspection result normal? >> INSPECTION END YES NO >> GO TO 2. Е 2.CHECK ENCODER (DRIVER SIDE) CIRCUIT Check encoder (driver side) circuit. Refer to PWC-24, "DRIVER SIDE: Component Function Check". F Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CONFIRM THE OPERATION Confirm the operation again. Н Is the result normal? YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident". NO >> GO TO 1. PASSENGER SIDE PASSENGER SIDE : Diagnosis Procedure INFOID:0000000007625043 1. PERFORM INITIALIZATION PROCEDURE Initialization procedure is performed and operation is confirmed. **PWC** NO >> GO TO 2.

Refer	10 PVVC-7,	ADDITIONAL	SERVICE	WHEN	REMOVING	<u>BALI</u>	ERY	NEGATIVE	TERMINAL:	Special	
Repair	Requireme	<u>ent"</u> .								_	
<u>Is the i</u>	nspection r	esult normal?									ı
YES	>> INSP	ECTION END									

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2.CHECK ENCODER (PASSENGER SIDE) CIRCUIT

Check encoder (passenger side) circuit. Refer to PWC-26, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 ${f 3.}$ CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

**PWC-79** Revision: 2011 August 2012 370Z

# POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NOR-MALLY

< SYMPTOM DIAGNOSIS >

[COUPE]

# POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMALLY

Description INFOID:000000007625044

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

Diagnosis Procedure

INFOID:0000000007625045

# 1. CHECK DOOR SWITCH

Check door switch.

Refer to DLK-63, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

## 2. CONFIRM THE OPERATION

Confirm the operation again.

#### Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

## DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

< SYMPTOM DIAGNOSIS > [COUPE]

## DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WIN-DOWS

Description INFOID:000000007625046

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

Diagnosis Procedure

# 1. PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.

Refer to PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement".

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 DLK-74, "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-44, "Intermittent Incident".

NO >> GO TO 1.

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Revision: 2011 August **PWC-81** 2012 370Z

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INFOID:0000000007625047

#### **KEYLESS POWER WINDOW DOWN DOES NOT OPERATE**

< SYMPTOM DIAGNOSIS >

[COUPE]

## KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

Description INFOID:000000007625048

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

### Diagnosis Procedure

INFOID:0000000007625049

## 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-107, "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>, "<u>Diagnosis Procedure</u>".

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 GI-44, "Intermittent Incident".

NO >> GO TO 1.

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION [COUPE] < SYMPTOM DIAGNOSIS > POWER WINDOW LOCK SWITCH DOES NOT FUNCTION Α Diagnosis Procedure INFOID:0000000007625050 1. REPLACE POWER WINDOW MAIN SWITCH В Replace power window main switch. С >> Refer to PWC-89, "Removal and Installation". D Е F G Н J **PWC** L M Ν 0

Revision: 2011 August **PWC-83** 2012 370Z

### POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

[COUPE]

# POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE DRIVER SIDE

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000007625051

1. REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

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

PASSENGER SIDE

PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000007625052

1. REPLACE POWER WINDOW SUB-SWITCH

Replace power window sub-switch.

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

AUTOMATIC WINDOW ADJUSTING FUNCTION DOES NOT ( SYMPTOM DIAGNOSIS >	[COUPE]
AUTOMATIC WINDOW ADJUSTING FUNCTION DOES NOT DRIVER SIDE	OPERATE
DRIVER SIDE : Diagnosis Procedure	INFOID:000000007625053
1. CHECK AUTO UP OPERATION	
Check AUTO UP operation.  s the inspection result normal?  YES >> GO TO 2.  NO >> Refer to PWC-79, "DRIVER SIDE : Diagnosis Procedure".	
2.check door switch	
Check door switch. Refer to DLK-63, "Component Function Check".	
s 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 PWC-29, "POWER WINDOW MAIN SWITCH: Component Function Check"	
s the result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts	
1.CONFIRM THE OPERATION	
Confirm the operation again.	
s the result normal?  YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".  NO >> GO TO 1.  PASSENGER SIDE	
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000007625054
PERFORM INITIALIZATION PROCEDURE	IIVI GID.000000007023034
nitialization procedure is performed and operation is confirmed.  Refer to PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TO PROCEED TO SERVICE TO PROCEED TO SERVICE TO PROCEED TO SERVICE	ΓERMINAL : Special
Repair Requirement". s the inspection result normal? YES >> INSPECTION END NO >> GO TO 2.	
2.CHECK DOOR SWITCH	
Check door switch. Refer to DLK-63, "Component Function Check".	
s the inspection result normal? YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	
CHECK POWER WINDOW SERIAL LINK (POWER WINDOW SUB-SWITCH)	
Check power window serial link (power window sub-switch) Refer to PWC-30, "POWER WINDOW SUB-SWITCH: Component Function Check"	<u></u>
s the result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts	

## **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 GI-44, "Intermittent Incident".

NO >> GO TO 1.

#### **PRECAUTIONS**

< PRECAUTION > [COUPE]

## **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 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 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

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

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#### **PRECAUTIONS**

< PRECAUTION > [COUPE]

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:0000000007625059

- 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

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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.

#### **POWER WINDOW MAIN SWITCH**

< REMOVAL AND INSTALLATION >

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# REMOVAL AND INSTALLATION

## POWER WINDOW MAIN SWITCH

#### Removal and Installation

#### INFOID:0000000007625061

#### **REMOVAL**

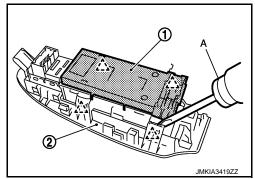
- 1. Remove the power window main switch finisher (2). Refer to <a href="INT-15">INT-15</a>, "Removal and Installation".
- 2. Power window main switch (1) is removed from power window main switch finisher (2) using flat-bladed screw driver (A) etc.





# Never fold the pawl of power window main switch finisher.

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 <a href="PWC-8">PWC-8</a>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

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< BASIC INSPECTION > [ROADSTER]

## **BASIC INSPECTION**

## DIAGNOSIS AND REPAIR WORK FLOW

WorkFlow INFOID:0000000007625062

#### **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-332, "DTC Index".

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

## $oldsymbol{3}$ . 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

[ROADSTER] < BASIC INSPECTION > INSPECTION AND ADJUSTMENT Α ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description INFOID:0000000007625063 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 Anti-pinch function D Automatic window adjusting function Key cylinder switch power window function Power window UP operation while door is open Е ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement INFOID:0000000007625064 F INITIALIZATION PROCEDURE 1. Disconnect battery negative terminal or power window switch connector. Reconnect it after a minute or Close door (door switch OFF). Turn ignition switch ON. 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. **CAUTION:** When initialization is not complete, power window UP does not operate while door is open. 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. 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 Anti-pinch function N Automatic window adjusting function 4. Key cylinder switch power window function 5. Power window UP operation while door is open ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description INFOID:0000000007625065

Initial setting is necessary when replacing power window main switch.

#### **CAUTION:**

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

**PWC-91** Revision: 2011 August 2012 370Z

**PWC** 

#### **INSPECTION AND ADJUSTMENT**

< BASIC INSPECTION > [ROADSTER]

Power window UP operation while door is open

# ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement

#### INITIALIZATION PROCEDURE

- Disconnect battery negative terminal or power window switch connector. Reconnect it after a minute or more.
- 2. Close door (door switch OFF).
- 3. Turn ignition switch ON.
- 4. Close roof.
- 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.
- 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 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

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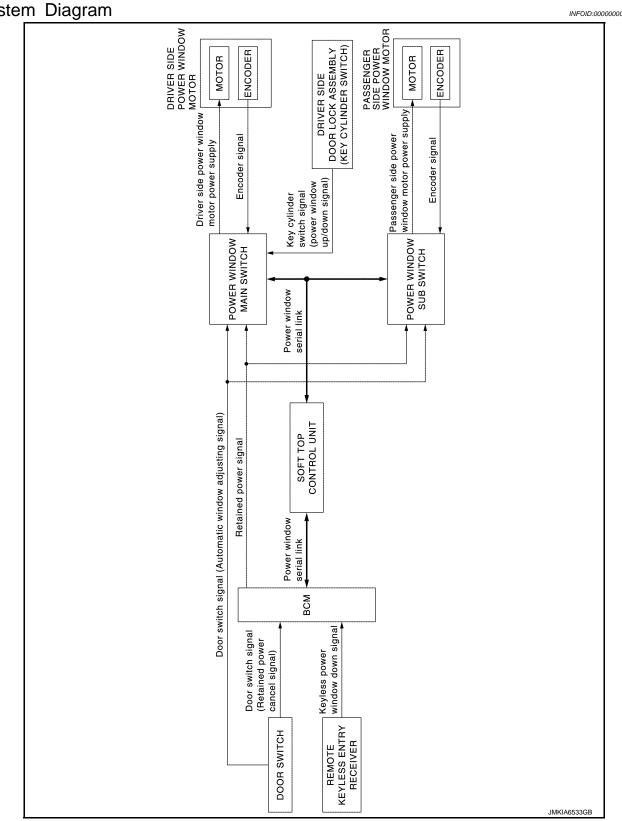
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# SYSTEM DESCRIPTION

## POWER WINDOW SYSTEM

System Diagram INFOID:0000000007625067



System Description

INFOID:0000000007625068

POWER WINDOW SYSTEM

#### **POWER WINDOW SYSTEM**

#### < SYSTEM DESCRIPTION >

[ROADSTER]

- 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, "SOFT TOP SYSTEM: System 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) → 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).

#### POWER WINDOW SYSTEM

## < 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 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.

#### 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.

#### **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.
- Hold door key cylinder to 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 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-208</u>, "INTELLIGENT KEY: <u>CONSULT Function (BCM - INTELLIGENT KEY)</u> (For Road-ster)".

#### 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 to 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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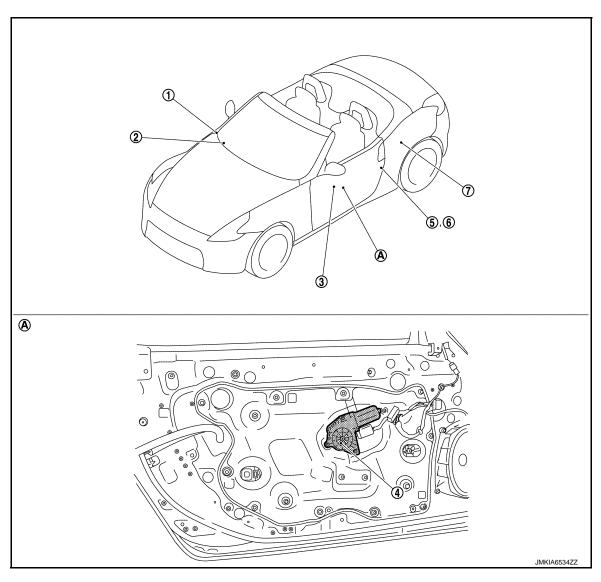
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Revision: 2011 August **PWC-95** 2012 370Z

## Component Parts Location

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- 1. BCM
  BCS-9, "Component Parts Location"
- 4. Driver side power window motor
- 7. Soft top control unit BCS-9, "Component Parts Location"
- A. View with door finisher removed
- 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)
- 3. Power window main switch
- 6. Driver side door switch

## **Component Description**

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

## **POWER WINDOW SYSTEM**

## < SYSTEM DESCRIPTION >

[ROADSTER]

Component	Function
Driver side power window motor	<ul> <li>Integrates the encoder and window motor.</li> <li>Starts operating with signals from power window main switch.</li> <li>Transmits power window motor rotation as a pulse signal to power window switch.</li> </ul>
Passenger side power window motor	<ul> <li>Integrates the encoder and window motor.</li> <li>Starts operating with signals from power window main switch &amp; power window subswitch.</li> <li>Transmits power window motor rotation as a pulse signal to power window switch.</li> </ul>
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	<ul> <li>Detects door open/close condition and transmits to BCM.</li> <li>Door switch signal is directly received by power window switch and is used for the automatic window adjusting function.</li> </ul>
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 transmits to BCM as the LOCK or UNLOCK signals.

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[ROADSTER]

## **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	<ul> <li>Read and save the vehicle specification.</li> <li>Write the vehicle specification when replacing BCM.</li> </ul>

#### SYSTEM APPLICATION

BCM can perform the following functions for each system.

#### NOTE:

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

x: Applicable item

System	Sub system selection item	Diagnosis mode			
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 system     Engine 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)	×	×	X	

#### NOTE

## FREEZE FRAME DATA (FFD)

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

<sup>\*:</sup> This item is displayed, but is not used.

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"*)	Е		
	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"	CC"		
	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)	L		
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)			
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)			
	ACC>OFF	Power supply position status of the moment a particular DTC is detected	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"	NG"		
	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)	F		
	CRANKING		Power supply position is "CRANKING" (At engine cranking)			
IGN Counter	0 - 39	The number is 0 where     The number increases whenever ignition switches.	at ignition switch is turned ON after DTC is detected in a malfunction is detected now. If the sum of the sum			

#### 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

# **DIAGNOSIS SYSTEM (BCM)**

## < SYSTEM DESCRIPTION >

[ROADSTER]

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.

#### POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[ROADSTER]

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## DTC/CIRCUIT DIAGNOSIS

# POWER SUPPLY AND GROUND CIRCUIT

**BCM** 

**BCM**: Diagnosis Procedure

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## 1. CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

Terminal No.	Signal name	Fuse and fusible link No.	
1	Battery power supply	K (40A)	
11	Battery power suppry	10 (10A)	

#### Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is

NO >> GO TO 2.

# 2.CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- Disconnect BCM connectors. 2.
- Check voltage between BCM harness connector and ground.

	+) CM	(–)	Voltage (Approx.)	
Connector	Terminal			
M118	1	Ground	Pottony voltago	
M119	11	Ground	Battery voltage	

#### Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Connector Terminal		Continuity
M119	13		Existed

#### Does continuity exist?

YES >> INSPECTION END

>> Repair harness or connector. NO

POWER WINDOW MAIN SWITCH

### POWER WINDOW MAIN SWITCH: Diagnosis Procedure

## 1. CHECK POWER SUPPLY CIRCUIT

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

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#### POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[ROADSTER]

(+) Power window main switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(	
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.

В	СМ	Power window main switch  Connector Terminal		Continuity
Connector	Terminal			Continuity
M118	2	D8	1	Existed
IVITIO	3	D6	10	Existed

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 BCS-92, "Exploded View".

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	w 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:0000000007625075

## 1. CHECK POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 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	nector Terminal		(,-ріюл.)	
D38	10	Ground	12	

#### POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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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 sub-switch harness connector.

В	ВСМ		Power window sub-switch		
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?

YES >> Replace BCM. Refer to BCS-92, "Exploded View".

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	Connector Terminal		Continuity	
D38	11		Existed	

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

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#### **POWER WINDOW MOTOR**

< DTC/CIRCUIT DIAGNOSIS >

[ROADSTER]

## POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000007625076

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

DRIVER SIDE : Component Function Check

INFOID:0000000007625077

## 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 PWC-104, "DRIVER SIDE : Diagnosis Procedure".

## DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625078

## 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	
Connector	Terminal				(Approx.)
	6	Ground Power window main switch		UP	12
D10	6		Power window	DOWN	0
טוט	3		main switch	UP	0
				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 PWC-105, "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</u>, "Removal and Installation".

# 3.check harness continuty

- 1. Turn ignition switch OFF.
- 2. Disconnect power window main switch connector.
- 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
	11	010	3	LXISIEU

<sup>4.</sup> Check continuity between power window main switch harness connector and ground.

#### **POWER WINDOW MOTOR**

< DTC/CIRCUIT DIAGNOSIS >

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< DTC/CIRCUIT DIAGNOS	10 7		-
Power windo	w main switch		Continuity
Connector	Terminal	Ground	
D8	8		Not existed
	11		
Is the inspection result norm YES >> Replace power on the NO >> Repair or replace 4.CHECK INTERMITTENT	window main switch. Refer e harness.	r to <u>PWC-181, "Removal a</u>	nd Installation".
Refer to GI-44, "Intermittent	Incident".		
>> INSPECTION ENDEDED STORE SIDE : COMPONENT INSPECTION 1. CHECK DRIVER SIDE PORTION ENDERSIDE ENDERSIDE PORTION ENDERSIDE END	onent Inspection		INFOID:00000000762507
Turn ignition switch OFF			
Check motor operation be nector.  Driver side power window mo-		minal	de power window motor con  Motor operation
tor connector	(+)	(-)	Wotor operation
D10	3	6	DOWN
	6	3	UP
	er window motor is OK. ide power window motor.	Refer to <u>GW-23, "Removal</u>	and Installation".
Door glass moves UP/DOWI	N by receiving the signal p	ower window main switch o	or power window sub-switch
PASSENGER SIDE : (	, , , , , , , , , , , , , , , , , , , ,		INFOID:00000000076250
1. CHECK POWER WINDO	•		
Check passenger side powe switch.	r window motor operation	with power window main	switch or power window sul
Is the inspection result norm			
	power window motor is Ol 05, "PASSENGER SIDE :		

- PASSENGER SIDE : Diagnosis Procedure
- ${\bf 1.} {\sf check\ passenger\ side\ power\ window\ motor\ input\ signal}$

- 3. Turn ignition switch ON.
- Check voltage between passenger side power window motor harness connector and ground.

2012 370Z

**PWC-105** Revision: 2011 August

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INFOID:0000000007625082

1. Turn ignition switch OFF.

2. Disconnect passenger side power window motor connector.

#### < DTC/CIRCUIT DIAGNOSIS >

(+)		(-)			Voltage (V)	
Passenger side power window motor		( )	Condition		(Approx.)	
Connector	Terminal				, , ,	
	6	6 Ground	Cround Power window sul		UP	12
D40				Ground	Power window sub-	DOWN
D40	3		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-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.
- Disconnect power window sub-switch connector.
- Check continuity between power window sub-switch harness connector and passenger side power window motor harness connector.

Power window sub-switch		Passenger side power window motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D38	9	D40	3	Existed
	8		6	LAISIEU

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

Power window sub-switch			Continuity	
Connector	Terminal	Ground	Continuity	
D38	8	Ground	Not existed	
	9			

#### 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-44, "Intermittent Incident".

#### >> INSPECTION END

## PASSENGER SIDE : Component Inspection

INFOID:0000000007625083

#### **COMPONENT INSPECTION**

# 1. CHECK PASSENGER SIDE POWER WINDOW MOTOR

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

## **POWER WINDOW MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

[ROADSTER]

Passenger side power window motor connector	Terr	Motor condition	
	(+)	(-)	Wotor condition
D40	3	6	DOWN
	6	3	UP

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#### Is the inspection result normal?

YES >> Passenger side power window motor is OK.

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

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[ROADSTER]

### **ENCODER**

**DRIVER SIDE** 

## **DRIVER SIDE**: Description

INFOID:0000000007625084

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

INFOID:0000000007625085

#### 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 PWC-108, "DRIVER SIDE : Diagnosis Procedure".

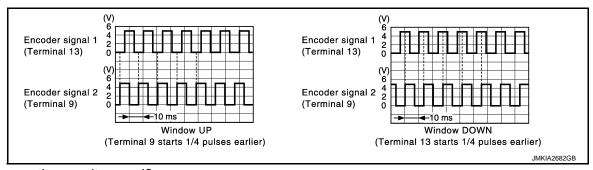
### DRIVER SIDE: Diagnosis Procedure

INFOID:0000000007625086

## 1. CHECK ENCODER OPERATION

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

(+) Power window main switch		(-)	Signal (Reference value)
Connector	Terminal		(1.6.6.6.00 16.40)
D8	9	Ground Refer to the follow	Defer to the following signal
	13		Refer to the following signal



#### Is the inspection result normal?

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

NO >> GO TO 2.

## 2.CHECK ENCODER SIGNAL CIRCUIT

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

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

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

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Power wind	Power window main switch		Continuity
Connector	Terminal	Ground	Continuity
	9		Not existed
Do	13		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.check encoder power supply circuit

- Connect power window main switch connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between driver side power window motor harness connector and ground.

(+)			Voltage (V) (Approx.)	
Driver side power window motor		(–)		
Connector	Terminal		(11 - 7	
D10	4	Ground	12	

#### Is the measurement value within the specification?

YES >> GO TO 5.

NO >> GO TO 4.

#### 4. CHECK HARNESS CONTINUTY

Turn ignition switch OFF.

- 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 window main switch		Driver side power window motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D8	5	D10	4	Existed

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D8	5		Not existed

#### Is the inspection result normal?

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

NO >> Repair or replace harness.

### 5.CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect power window main switch connector. 2.
- 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	14	D10	1	Existed

#### Is the inspection result normal?

YES >> Replace driver side power window motor. Refer to PWC-181, "Removal and Installation".

NO >> Repair or replace harness.

#### PASSENGER SIDE

**PWC-109** Revision: 2011 August 2012 370Z

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#### PASSENGER SIDE : Description

INFOID:0000000007625087

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

INFOID:0000000007625088

#### 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 PWC-110, "PASSENGER SIDE : Diagnosis Procedure".

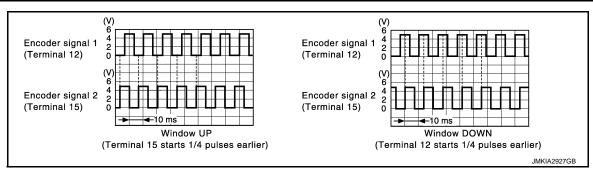
### PASSENGER SIDE: Diagnosis Procedure

INFOID:000000007625089

### 1. CHECK ENCODER SIGNAL

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

	+) ow sub-switch	(–)	Signal (Reference value)	
Connector	Terminal	(resis)	(**************************************	
D38	12	Cround	Defer to the following signal	
Doo	15	Ground	Refer to the following signal	



#### Is the inspection result normal?

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

NO >> GO TO 2.

### 2.check encoder signal circuit

- 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.

Power windo	ow sub-switch	Passenger side power window motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D38	12	D40	2	Existed
	15	D40	5	Existed

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

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Power window sub-switch			Continuity
Connector	Terminal	Ground	Continuity
D38	12	Ground	Not existed
	15	Not exis	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.check encoder power supply circuit

- 1. Connect power window sub-switch connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between passenger side power window motor harness connector and ground.

(+) Passenger side power window motor		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(11 - 7	
D40	4	Ground	12	

#### Is the measurement value within the specification?

YES >> GO TO 5.

NO >> GO TO 4.

#### 4. CHECK HARNESS CONTINUTY

Turn ignition switch OFF.

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

Power windo	Power window sub-switch		Passenger side power window motor	
Connector	Terminal	Connector	Terminal	Continuity
D38	4	D40	4	Existed

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

Power window sub-switch			Continuity
Connector	Terminal	Ground	Continuity
D38	4		Not existed

#### Is the inspection result normal?

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

NO >> Repair or replace harness.

### 5. CHECK GROUND CIRCUIT

- 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	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 >> Replace passenger side power window motor. Refer to <a href="PWC-181">PWC-181</a>, "Removal and Installation".

NO >> Repair or replace harness.

#### [ROADSTER]

#### < DTC/CIRCUIT DIAGNOSIS >

DOOR SWITCH CIRCUIT

**DRIVER SIDE** 

**DRIVER SIDE**: Description

INFOID:0000000007625090

Detects door open/closed condition.

DRIVER SIDE: Component Function Check

INFOID:0000000007625091

### 1. CHECK FUNCTION

Check automatic window adjusting function.

Is the inspection result normal?

YES >> Door switch is OK.

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

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625092

#### 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 window main switch  Connector Terminal	(–)	Voltage (V) (Approx.)
D8 4	Ground	(V) 15 10 5 0

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

Power window main switch		Driver side door switch		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
D8	4	B63	2	Existed	

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

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

DOOR SWITCH CIRCUIT [ROADSTER] < DTC/CIRCUIT DIAGNOSIS > Is the inspection result normal? Α YES >> GO TO 4. NO >> Repair or replace harness. 4. CHECK INTERMITTENT INCIDENT Refer to GI-44, "Intermittent Incident". >> INSPECTION END PASSENGER SIDE PASSENGER SIDE: Description INFOID:0000000007625093 Detects door open/closed condition. PASSENGER SIDE: Component Function Check INFOID:0000000007625094 Е 1. CHECK FUNCTION Check automatic window adjusting function. F Is the inspection result normal? YES >> Door switch is OK.

INFOID:0000000007625095

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NO >> Refer to PWC-113, "PASSENGER SIDE : Diagnosis Procedure".

### PASSENGER 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 power window sub-switch harness connector and ground.

(+) Power windows	(+) Power window sub-switch		Voltage (V) (Approx.)
Connector	Terminal	(-)	(Αρριοχ.)
D38	14	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB

#### Is the inspection result normal?

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

NO >> GO TO 3.

# 3.check door switch circuit

Disconnect passenger side door switch connector.

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

Power window sub-switch		Passenger side door switch		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
D38	14	B206	2	Existed	

#### **DOOR SWITCH CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

[ROADSTER]

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

Power window sub-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-44, "Intermittent Incident".

>> INSPECTION END

< ECU DIAGNOSIS INFORMATION >

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# **ECU DIAGNOSIS INFORMATION**

# **BCM (BODY CONTROL MODULE)**

Reference Value INFOID:0000000007774234

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT I	MONITOR	<b>ITFM</b>
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Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
I IX WIII LIX I III	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
I K WIF LK LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
I K WASHEK SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
I IX WIF LIX IIVI	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIFER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TUDNI CIONIAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI CICNIAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
TAIL LAWIP SW	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
UI PEAINI 200	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
HEAD LAWP SW 1	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
HEAD LAWF 3W 2	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
FASSING SW	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
AUTO LIGITI 3W	Lighting switch AUTO	On
FR FOG SW	NOTE: The item is indicated, but not monitored.	Off
RR FOG SW	Rear fog lamp switch OFF	Off
XIX I OG SVV	Rear fog lamp switch ON	On
DOOR SW-DR	Driver door closed	Off
DOOK GVV-DK	Driver door opened	On
DOOD SW-AS	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off

#### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
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
DOOK SW-BK	Back door opened (Coupe models)     Trunk lid opened (Roadster models)	On
CDL LOCK CW	Other than door lock and unlock switch LOCK	Off
CDL LOCK SW	Door lock and unlock switch LOCK	On
CDI TINII OCK SW	Other than door lock and unlock switch UNLOCK	Off
CDL UNLOCK SW	Door lock and unlock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SVV	Driver door key cylinder LOCK position	On
KEN ON THE OW	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
LIAZADD CM	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
<b>NOTE:</b> 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
TD OANIOEL OW	Trunk lid opener cancel switch OFF	Off
TR CANCEL SW	Trunk lid opener cancel switch ON	On
TD/DD ODEN OW	Back door opener switch OFF (Coupe models)     Trunk lid opener switch OFF (Roadster models)	Off
TR/BD OPEN SW	<ul> <li>While the back door opener switch is turned ON (Coupe models)</li> <li>While the trunk lid opener switch is turned ON (Roadster models)</li> </ul>	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
D./T.   D.D./	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
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
INNL-FAINIO	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
IXIXE-1 /VV OF LIN	UNLOCK button of the Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off
INIC-WODE ONG	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On

#### < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

ECO DIAGNOSIS INFO	51(W// 1101( )	[KOADOTEK]	
Monitor Item	Condition	Value/Status	ı
ODTICAL CENCOR	Bright outside of the vehicle	Close to 5 V	
OPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V	
DEO SW. DD	Driver door request switch is not pressed	Off	
REQ SW -DR	Driver door request switch is pressed	On	
DEO CIM. A C	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	
KLQ 3W -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	
OGI I GVV	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	
<b>NOTE:</b> 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	
BRAKE SW 2	The brake pedal is not depressed	Off	
DRANE SW Z	The brake pedal is depressed	On	P
DETE/CANCL SW NOTE:	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	
JNLK SEN -DR	Driver door is unlocked	Off	
JINLIN JEIN -DIN	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	

**PWC-117** Revision: 2011 August 2012 370Z

#### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
ION DIVA E/D	Ignition switch in OFF or ACC position	Off
IGN RLY1 -F/B	Ignition switch in ON position	On
DETE CW IDDM	Selector lever in any position other than P	Off
DETE SW -IPDM	Selector lever in P position	On
SFT PN -IPDM	<ul> <li>Selector lever in any position other than P and N (A/T models)</li> <li>The clutch pedal is not depressed (M/T models)</li> </ul>	Off
SI I FIN -IF DIVI	<ul> <li>Selector lever in P or N position (A/T models)</li> <li>The clutch pedal is depressed (M/T models)</li> </ul>	On
SFT P -MET	Selector lever in any position other than P	Off
OI II -WLI	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
SI I IN -IVIL I	Selector lever in N position	On
	Engine stopped	Stop
ENGINE STATE	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
PRMT ENG STRT	The engine start is prohibited	Reset
PRIVIT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
VEV SW SLOT	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 >

[ROADSTER]

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
CONFRINI ID ALL	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
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered 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
CONFIRM IDS	The key ID that the key slot receives is recognized by the third key ID registered 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
CONFIRM ID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIDMIDA	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
CONFIRM ID1	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TD 4	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
TD 0	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
TD 0	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
TD 4	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 REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGST FLT	ID of front LH tire transmitter is not registered	Yet
ID DECCT ED4	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
ID DECST DD1	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
ID REGST RL1	ID of rear LH tire transmitter is registered	Done
ID VEGOL KEL	ID of rear LH tire transmitter is not registered	Yet
MADNING LAMP	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
DII77ED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

Revision: 2011 August **PWC-119** 2012 370Z

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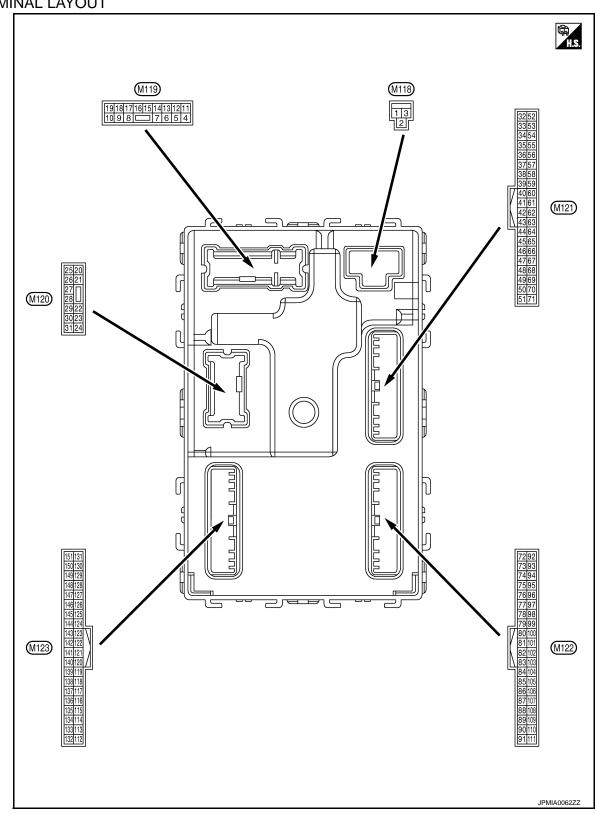
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TERMINAL LAYOUT



PHYSICAL VALUES

### < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

	inal No. e color)	Description			Condition	Value	Α
+	-	Signal name	Input/ Output		Condition	(Approx.)	
1 (W)	Ground	Battery power supply	Input	Ignition switch (	OFF	Battery voltage	В
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch (	OFF	12 V	С
3 (Y)	Ground	P/W power supply (IGN)	Output	Ignition switch (	ON	12 V	
					mp battery saver is activated. or room lamp power supply)	0 V	D
4 (R)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- erior room lamp power sup-	12 V	Е
5	Ground	Passenger door UN-	Output	Passenger	UNLOCK (Actuator is activated)	12 V	F
(G)	(G) Ground LOCK	Output	door	Other than UNLOCK (Actuator is not activated)	0 V		
8	(=round)	Cutout	All doors, fuel	LOCK (Actuator is activated)	12 V	G	
(V)		Output	lid	Other than LOCK (Actuator is not activated)	0 V	Н	
9		Driver door, fuel lid	lid Driver	UNLOCK (Actuator is	UNLOCK (Actuator is activated)	12 V	
(G)	Ground	UNLOCK	Output	fuel lid	Other than UNLOCK (Actuator is not activated)	0 V	I
11 (BR)	Ground	Battery power supply	Input	Ignition switch (	OFF	Battery voltage	J
13 (B)	Ground	Ground	_	Ignition switch (	ON	0 V	
					OFF	0 V	PW
4.		Push-button ignition				NOTE: When the illumination brightening/dimming level is in the neutral position.	L
14 (R)	(R) Ground s	switch illumination ground	Output	Tail lamp	ON	10 0	M
						JSNIA0010GB	Ν
15	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage	0
(Y)	7)			•	ACC	0 V	

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### < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

2012 370Z

	nal No.	Description				.,,
(Wire	color)	Signal name	Input/ Output		Condition	Value (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
					Turn signal switch OFF	6.5 V 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 PKID0926E 6.5 V
19 (P)	Ground	Interior room lamp control	Output	Interior room lamp	OFF ON	12 V 0 V
					Turn signal switch OFF	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
23					OPEN (Back door/Trunk lid opener actuator is activated)	12 V
(L)* <sup>1</sup> (Y)* <sup>2</sup>	Ground	Back door/Trunk lid open	Output	Back door/ Trunk lid	Other than OPEN (Back door/Trunk lid opener actuator is not activated)	0 V
24* <sup>8</sup>	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
(O)					ON Turn signal switch OFF	12 V 0 V
					Tam Signal Switch Of I	U V
25 (LG)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
				Luggage room/	ON	0.5 V
30 (R)	Ground	Luggage room/Trunk room lamp	Output	Trunk room lamp	OFF	12 V

## < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description			Condition	Value
+	- COIOI)	Signal name	Input/ Output		Condition	(Approx.)
34		Luggage room/Trunk		Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB
(G)	Ground	room antenna (-)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
35		Luggage room/Trunk		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
35 (R)	Ground	room antenna (+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
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
(B) Gro	Giound	na (–)	, ,	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

## < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
39	Ground	When the back door/trunk lid door request		When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
(W)	Glound	na (+)	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 1 s JMKIA0063GB
47 (V)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	12 V
		,	Output	Ignition switch ON (A/T mod- els)	ON When selector lever is in P or N position	0 V 12 V
52	Ground				When selector lever is not in P or N position	0 V
(SB)		Starter relay control		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)	Giodila	switch (Push switch)	IIIput	(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 0 10 ms JPMIA0016GB 1.0 V
64	Ground	Intelligent Key warn-	Output	Intelligent Key	Sounding	0 V
(G)	Ground	ing buzzer	Output	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 10 5 0 10 ms JPMIA0011GB
					ON (Door open)	0 V
	<u> </u>	l			. , ,	

# < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

Terminal No. Description (Wire color)		T	Condition		Value	
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
					Pressed	0 V
67 (GR)	Ground	Back door/Trunk lid opener switch	Input	Back door/ Trunk lid open- er switch	Not pressed	15 10 5 0 10 ms JPMIA0011GB
		When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB			
72 (L) Gr	Ground	Room antenna 2 (–) (Center console)	Output	Ignition switch OFF		
					When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0
73	Ground	Room antenna 2 (+)	Outros	Ignition switch		JMKIA0062GB
(P)	Ground	(Center console)	Output	OFF		(V)
					When Intelligent Key is not in the passenger compartment	15 10 0
						1 s

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## < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
74	Ground	Passenger door an-		When the passenger door request switch is	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(SB)	Glodina	tenna (–)	Output	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
75	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 11 1 s  JMKIA0062GB
(BR)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
76	Ground	Driver door antenna (−)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(V)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

## < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description				Value
+	- COIOF)	Signal name	Input/ Output		Condition	(Approx.)
77		Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(LG)	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 JMKIA0063GB
78* <sup>2</sup>	0	Room antenna 1 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB
78* <sup>2</sup> (L)	Ground	(Instrument panel)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
79* <sup>2</sup>	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(R)	Giodila	(Instrument panel)	·	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s

#### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent 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 Intelligent 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	0 V 12 V
83 Craund		Remote keyless entry receiver (front) com-	Input/	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB
(GR)	Ground	munication	Output	When operating gent Key	either button on the Intelli-	(V) 15 10 5 0 1 ms JMKIA0065GB
		Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0  JPMIA0041GB 1.4 V
87 (BR)	Ground				Rear fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Any of the conditions below with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 2  Wiper intermittent dial 6  Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V

### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description	1		O a little a	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms
					Lighting switch HI (Wiper intermittent dial 4)	1.4 V
88 (V) Gro	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	1.3 V
						2 ms  JPMIA0037GB  1.3 V
					Any of the conditions below with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 2  Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V
90 (P)	Ground	CAN-L	Input/ Output		_	_
91 (L)	Ground	CAN-H	Input/ Output		_	_
92 (LG)	Ground	Key slot illumination	Output	Key slot illumi- nation	OFF  Blinking  ON	0 V (V) 15 10 1 s JPMIA0015GB 6.5 V 12 V
93	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
(V)	Ground	ON INDICATOR IMP	Output	igililion switch	ON	0 V

### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(O)	Oround	ACC relay control	Output	ignition switch	ACC or ON	12 V
96* <sup>3</sup> (Y)	Ground	A/T shift selector (Detention switch) power supply	Output		_	12 V
		Selector lever P posi-		0-1	P position	0 V
2046	6	tion switch (A/T models)		Selector lever	Any position other than P	12 V
99* <sup>6</sup> (R)	Ground	Clutch pedal position switch (M/T models without SynchroRev Match mode)	Input	Clutch pedal	OFF (Clutch pedal is depressed)	0 V
				position switch	ON (Clutch pedal is not depressed)	Battery voltage
					ON (Pressed)	0 V
100 (GR)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 10 10 ms  JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (Y)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(O)	Ground	lay control	Output	ignition switch	ON	12 V
103 (LG)	Ground	Remote keyless entry receiver (front) power supply	Output	Ignition switch (	DFF	12 V

### < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

Terminal No. (Wire color)		Description				Value
+ (Wire co	olor) –	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
					Front wiper switch LO	(V) 15 10 5 0  JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 10 5 0  JPMIA0039GB

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### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description		Condition		Value	
+	color)	Signal name	Input/ Output	Condition		(Approx.)	
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 JPMIA0041GB 1.4 V	
108	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	
(R)		INPUT 4		switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB	
					Any of the conditions below 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				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND  (V) 15 10 5 0 2 ms	10 5 0 2 ms JPMIA0036GB
	Front wip	Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V			
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V
					ON	0 V
110 (P)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB

## < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	Value (Approx.)
113	Ground	d Optical sensor	lanut	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
(O)	Ground	Optical Serisor	Input		When dark outside of the vehicle	Close to 0 V
114* <sup>4</sup>	Ground	Clutch interlock	Input	Clutchinterlock	OFF (Clutch pedal is not depressed)	0 V
(R)	Ground	switch	трис	switch	ON (Clutch pedal is depressed)	Battery voltage
115* <sup>9</sup> (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)	Ground Stop lamp switch 2 Inp		трис	switch	ON (Brake pedal is depressed)	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 ms JPMIA0012GB
					UNLOCK status (Unlock switch sensor ON)	0 V
121	Ground	Key slot switch	lanut	When the Intelligent Key is inserted into key slot		12 V
(R)	Ground	Ney Slot Switch	Input	When the Intelligent Key is not inserted into key slot		0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
(VV)					ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 JPMIA0011GB 11.8 V
					ON (Door open)	0 V

### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description			0 199	Value	A
+	- color)	Signal name	Input/ Output		Condition	(Approx.)	/
129* <sup>2</sup> (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB	
					ON	0 V	
130* <sup>7</sup> (L)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V	F
					Rear window defogger switch ON	0 V	ŀ
132 (Y)* <sup>1</sup> (V)* <sup>2</sup>	Ground	Power window switch and soft top control unit communication	Input/ Output			(V) 15 10 5 0 10 ms JPMIA0013GB	
				Ignition switch C	OFF or ACC	12 V	
				3	ON (Tail lamps OFF)	9.5 V	P'
						NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.	
133 (G)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps ON)	(V) 15 10 5 0 JPMIA0159GB	N
					OFF	0 V	
134	Ground	LOCK indicator lamp	Output	LOCKindicator	OFF	Battery voltage	(
(GR)	Ciodila	-	Caipat	lamp	ON	0 V	
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch C	ON	0 V	
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V	
(V)	Ciodila	power supply	Juiput	-gindon switch	ACC or ON	5.0 V	

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
				Ignition switch OFF (Remote key- less entry re- ceiver communica- tion)  When operatir button on the key-	During waiting	(V) 15 10 5 0 1 ms JMKIA0064GB
139 (L)	Ground	Tire pressure receiver communication	Input/ Output		When operating either button on the Intelligent Key	(V) 15 10 5 0 1 ms  JMKIA0065GB
				Ignition switch ON (Tire pressure receiver com- munication)	Standby state	(V) 6 4 2 0 ••• 0.2s OCC3881D
					When receiving the signal from the transmitter	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		Selector lever P/N		Selector lever	P or N position	12 V
140* <sup>5</sup>	Ground	position (A/T models)  Park/neutral position switch (Coupe M/T models with Synchro-Rev Match mode)	Input	Ignition switch	Except P and N positions  Control lever in neutral po-	0 V
(G)	Ground				sition  Control lever in any position other than neutral	Battery voltage 0 V
					ON	0 V
141 (Y)	Ground	Security indicator lamp	Output	Security indicator lamp	Blinking	(V) 15 10 5 0 JPMIA0014GB
					OFF	11.3 V 12 V
					<b>U</b> 11	1

# < ECU DIAGNOSIS INFORMATION >

Terminal No. Description (Wire color)			0.01		Value	
+ (vvire		Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF Lighting switch 1ST	0 V
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit-	Lighting switch HI Lighting switch 2ND	(V) 15 10 5
(0)				tent dial 4)	Turn signal switch RH	2 ms JPMIA0031GB
					All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	(V)
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Any of the conditions below with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 2  Wiper intermittent dial 3  Wiper intermittent dial 6  Wiper intermittent dial 7	15 10 5 0 2 ms JPMIA0032GB 10.7 V
					All switches OFF (Wiper intermittent dial 4) Front washer switch ON (Wiper intermittent dial 4)	0 V
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions below with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 5  Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0033GB 10.7 V
					All switches OFF	0 V
					Front wiper switch INT	
				Combination	Front wiper switch LO	(V) 15 10
145 (L)	Ground	Combination switch OUTPUT 3	Output	switch (Wiper intermit- tent dial 4)	Rear fog lamp switch ON	2 ms
						10.7 V
					All switches OFF	0 V
					Lighting switch 2ND	(V)
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	Lighting switch PASS  Turn signal switch LH	15 10 5 0 2 ms JPMIA0035GB

#### < ECU DIAGNOSIS INFORMATION >

	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	
					ON (Door open)	0 V	
151	Ground	Rear window defog-	Output	Rear window	Active	0 V	
(G)	Giodila	ger relay control	Output de	Output	defogger	Not activated	Battery voltage

<sup>\*1:</sup> Coupe models

<sup>\*2:</sup> Roadster models

<sup>\*3:</sup> A/T models

<sup>\*4:</sup> M/T models

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

<sup>\*6:</sup> With A/T or with M/T without SynchroRev Match mode

<sup>\*7:</sup> Without NAVI

<sup>\*8:</sup> With rear fog lamp

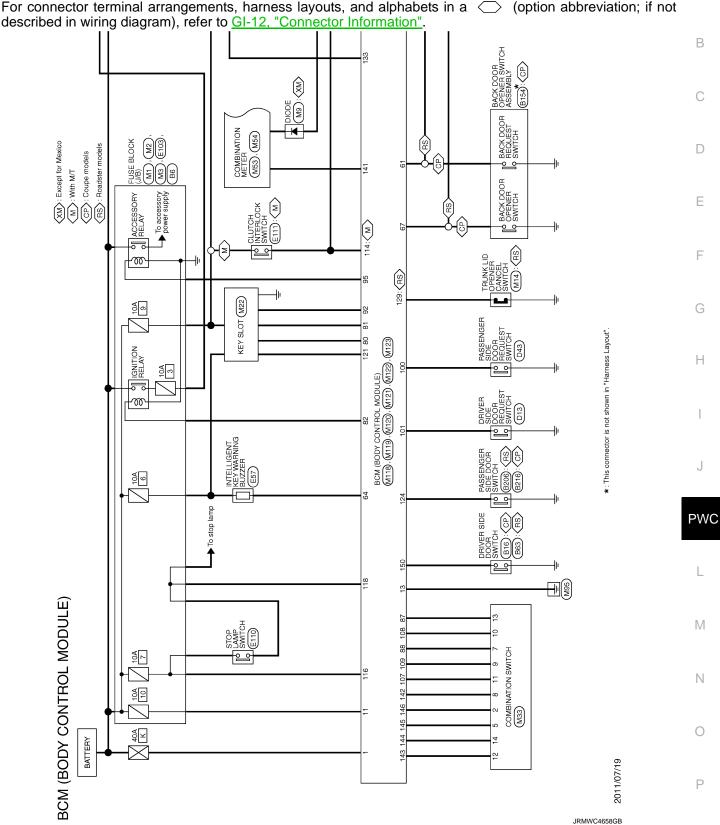
<sup>\*9:</sup> BCM does not use this terminal for control.

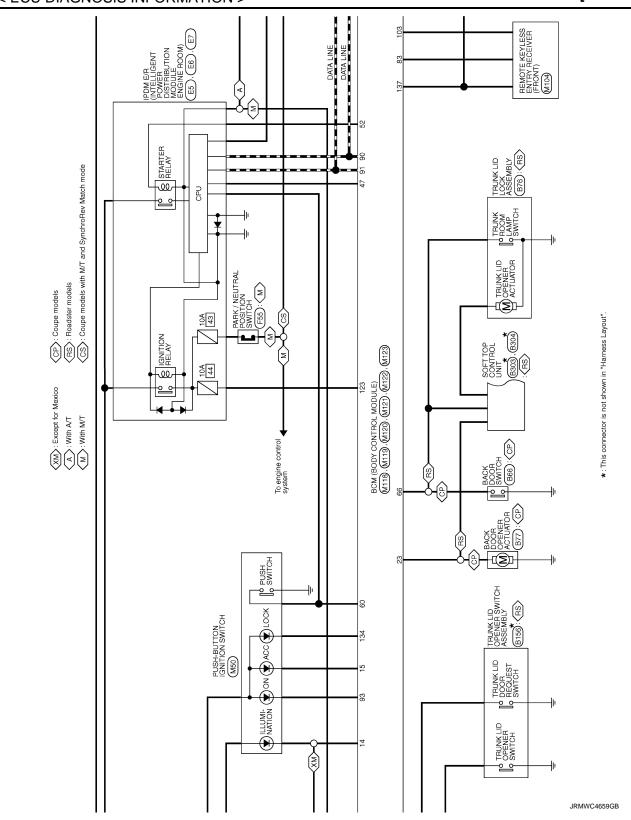
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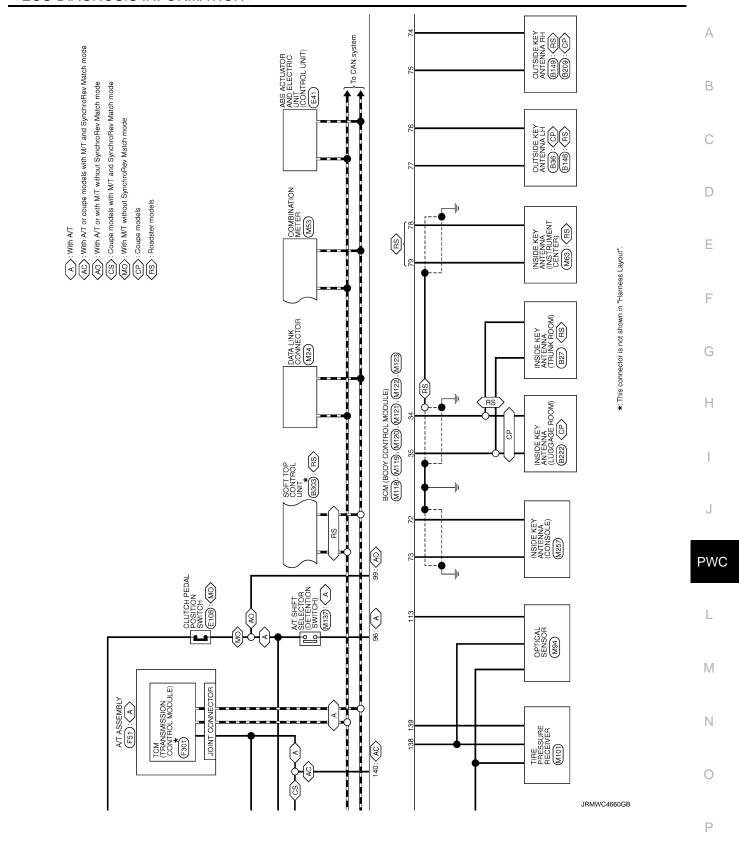
Α

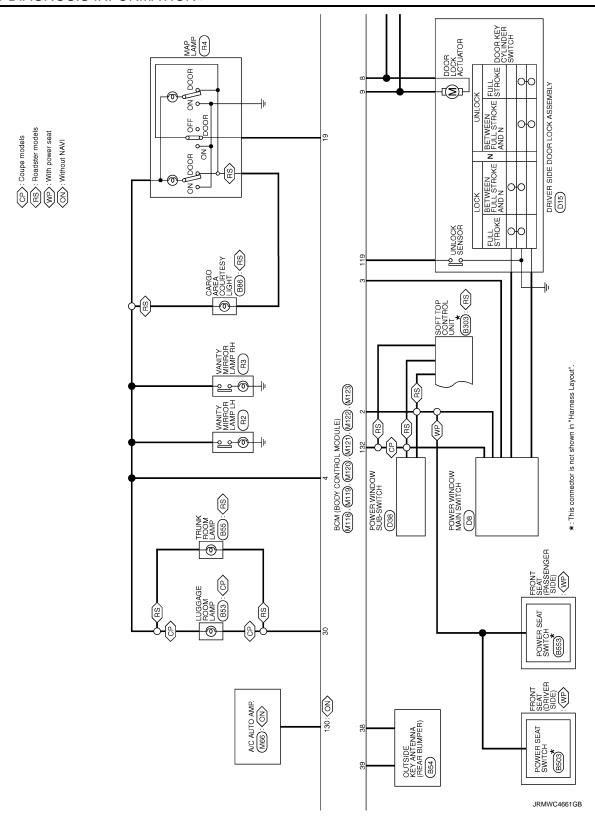
### Wiring Diagram - BCM -

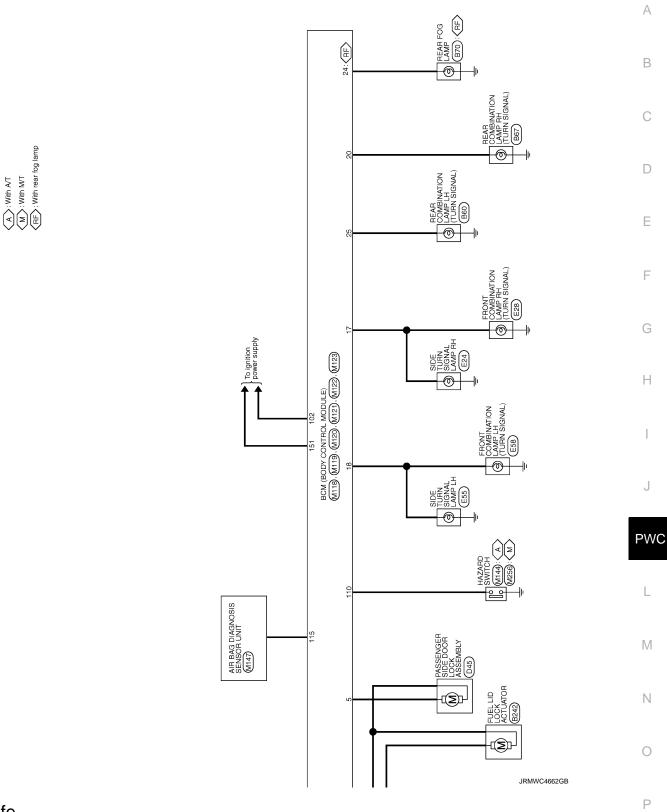
For connector terminal arrangements, harness layouts, and alphabets in a (option abbreviation; if not











Fail-safe INFOID:0000000007774236

#### FAIL-SAFE CONTROL BY DTC

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

#### < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

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 consistent  Starter control relay signal  Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following signal communication status becomes consistent</li> <li>Starter motor relay control signal</li> <li>Starter relay status signal (CAN)</li> </ul>
B260A: IGNITION RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following conditions are fulfilled</li> <li>IGN relay (IPDM E/R) control signal: OFF (Battery voltage)</li> <li>Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)</li> <li>Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)</li> </ul>
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled  • Power position changes to ACC  • Receives 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 becomes 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:0000000007774237

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]

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

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 <a href="BCS-19">BCS-19</a>, "COM-MON ITEM: CONSULT Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	_	BCS-46
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-47
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-48

## **BCM (BODY CONTROL MODULE)**

## < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference
B2190: NATS ANTENNA AMP	×	_	_	_	<u>SEC-42</u>
B2191: DIFFERENCE OF KEY	×	_	_	_	<u>SEC-45</u>
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-46
B2193: CHAIN OF BCM-ECM	×	_	_	_	<u>SEC-48</u>
B2195: ANTI SCANNING	×	_	_	_	<u>SEC-49</u>
B2553: IGNITION RELAY	_	×	_	_	PCS-48
B2555: STOP LAMP	_	×	_	_	SEC-50
B2556: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-52</u>
B2557: VEHICLE SPEED	×	×	×	_	SEC-54
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-55</u>
B2562: LOW VOLTAGE	_	×	_	_	BCS-49
B2601: SHIFT POSITION	×	×	×	_	<u>SEC-56</u>
B2602: SHIFT POSITION	×	×	×	_	SEC-59
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-62
B2604: PNP SW	×	×	×	_	<u>SEC-65</u>
B2605: PNP SW	×	×	×	_	SEC-67
B2608: STARTER RELAY	×	×	×	_	SEC-69
B260A: IGNITION RELAY	×	×	×	_	PCS-50
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-71</u>
B2614: BCM	_	×	×	_	PCS-52
B2615: BCM	_	×	×	_	PCS-55
B2616: BCM	_	×	×	_	PCS-58
B2617: BCM	×	×	×	_	<u>SEC-75</u>
B2618: BCM	×	×	×	_	PCS-61
B261A: PUSH-BTN IGN SW	_	×	×	_	PCS-62
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-78</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-72</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-74
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	MIT OO
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-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 condition	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	WT-22
C1710: [NO DATA] RR	_	_	_	×	<u> </u>
C1711: [NO DATA] RL	_	_	_	×	
C1716: [PRESSDATA ERR] FL	_	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	_	×	WT-25
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>W1-23</u>
C1719: [PRESSDATA ERR] RL	_	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-27</u>
C1734: CONTROL UNIT	_	_	_	×	<u>WT-29</u>

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Reference Value

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

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
	LH	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
TOTO TO TOTO ED TOT	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 >

[ROADSTER]

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
5TH 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
SWITCHING VALVE 2	Operation of switching valve 2	Stop	OFF
		Switching valve 2 circuit is short	NG
		Operate	ON
SWITCHING VALVE 3	Operation of switching valve 3	Stop	OFF
	valvo	Switching valve 3 circuit is short	NG
		Operate	ON
SWITCHING VALVE 4	Operation of switching valve 4	Stop	OFF
	valvo i	Switching valve 4 circuit is short	NG
SWITCHING VALVE 5		Operate	ON
	Operation of switching valve 5	Stop	OFF
	Valve o	Switching valve 5 circuit is short	NG
		Turning clockwise	ON
PUMP OUT (RH)	Operation of hydraulic pump motor	Other than above	OFF
	pump motor	Hydraulic pump motor (RH) circuit is short	NG
		Turning counterclockwise	ON
PUMP OUT (LH)	Operation of hydraulic pump motor	Other than above	OFF
	pamp motor	Hydraulic pump motor (LH) circuit is short	NG
		Lock	ON
5TH BOW LATCH CL	State of 5th bow latch cylin-	Other than above	OFF
556.11 2.1.16.11 62	der	5th bow latch close sensor circuit is open or short	NG
POOE SW (OBEN)	State of roof open/close	OPEN operation is in operation	ON
ROOF SW (OPEN)	switch	Other than above	OFF
DOOE ()W (OLOGE)	State of roof open/close	CLOSE operation is in operation	ON
ROOF SW (CLOSE)	switch	Other than above	OFF
CLUET D CICNAL	Ohite a saiti au	R position	ON
SHIFT R SIGNAL	Shift position	Other than R position	OFF
TOUNIN OPEN OUT	Operation of trunk lid open-	OPEN operation is in operation	ON
TRUNK OPEN OUT	er actuator	Other than above	OFF
THE DOOTED BUILD	Thermo protection hydraulic	In non-operation	ОК
THER PROTEC PUMP	pump	In operation	NG
THE DOOTES SOL	Thermo protection soft top	In non-operation	OK
THER PROTEC RCU	control unit	In operation	NG

Revision: 2011 August **PWC-149** 2012 370Z

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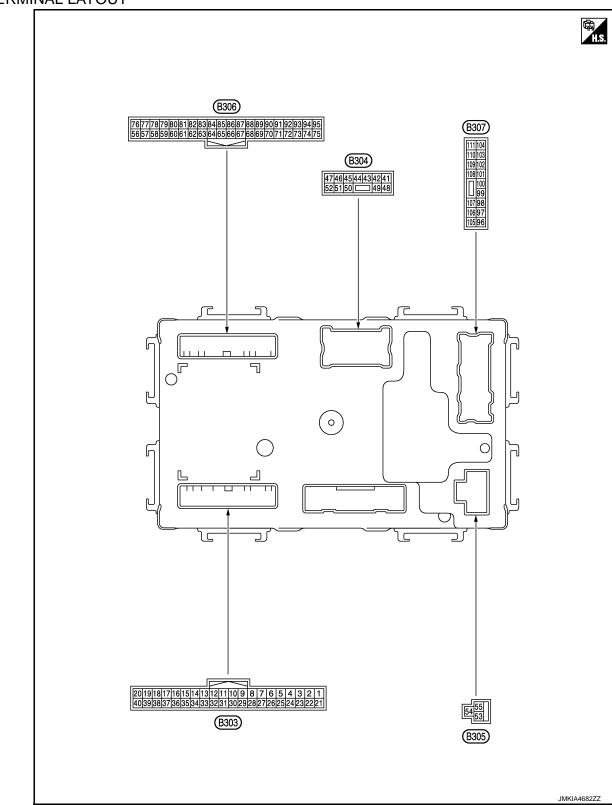
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## < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

Monitor Item		Condition				
PWR COND RCU	Power supply voltage state	Normal	OK			
PWK COND RCU	of soft top control unit	Malfunction	NG			
PWR COND P/W	Power supply voltage state	Normal	OK			
FWK COND F/W	of power window	Malfunction	NG			
		Normal	OK			
LOCAL COMM 1	State of local communication 1	It is in sleep mode	SLEEP			
		Communication error	NG			
		Normal	OK			
LOCAL COMM 2	State of local communication 2	It is in sleep mode	SLEEP			
		Communication error	NG			
REAR DEF OUT	Operation of rear window	Roof position is full close	OK			
	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 SW SIG	nal	Stop	OFF			
PROHIBIT P/W UP	Prohibit of power window up	In operation	ON			
I KOHIDH F/W OF	1 Totilbit of power willdow up	In non-operation	OFF			
IGN ON SIG(BCM)	Power position signal	Ignition switch ON	ON			
ION ON SIG(DOM)	1 Ower position signal	Other than above	OFF			
RF OP REQ SW SIG	State of request switch sig-	OPEN operation is in operation	ON			
INI OI NEW SW SIG	nal	Stop	OFF			

## TERMINAL LAYOUT



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	nal No. 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 Released	0.8 V 3.0 V	
8 (Y)	Ground	Back up lamp signal	Input	[Ignition switch: ON] • Shift position	R position Other than above	Battery voltage 0 V	
9 (SB)	Ground	Power source (Power window)	Input	[Ignition switch: OFF]		Battery voltage	
10		Trunk lid open re-		[Ignition switch: ON]	Operate	$0 \text{ V} \rightarrow \text{Battery voltage} \rightarrow 0 \text{ V}$	
(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)	Ground	(Indicator lamp)	Output	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	Ground	Roof open/close switch	Innut	Input	[Engine is running]	Pressed	0 V
(L)	Giouna	(Close)	input	Close switch	Released	Battery voltage	
15 (LG)	Ground	Roof open/close switch (Open)	Input	<ul><li>[Engine is running]</li><li>Open switch</li></ul>	Pressed Released	0 V  Battery voltage	
		(-1)			Open	0 V	
16 (V)	Ground	Trunk room lamp switch	Input	[Ignition switch: ON] • Trunk lid	Other than above	Battery voltage	
17 (BG)	Ground	CAN-H	Input/ Output	_	I	_	
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 10 5 0 ++10ms JMKIA4024GB	

## < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

	Terminal No. (Wire color) Description			0		Value	
+	_	Signal name	Input/ Output	Condition		(Approx.)	
21 (BR)	Ground	Sensor power supply (Roof striker sensor RH)	Output	[Engine is running]		12 V	
29 (DG)	Ground	Ground	_	_		_	
35 (P)	Ground	Ground (Roof open/close switch)	_	_		_	
41 (DG)	Ground	Trunk lid opener actuator	Output	Trunk lid opener	Operate Stop	0 V → Battery voltage → 0 V	
48 (R)	Ground	Power source (Rear window defog- ger)	Input	[Engine is running]  Rear window defogger	Active  Not active	Battery voltage 0 V	
49 (R)	Ground	Power source (Rear window defog-	Input	[Engine is running]  Rear window defogger	Active  Not active	Battery voltage 0 V	
53 (R)	Ground	ger) Power source (Roof)	Input	[Engine is running]		Battery voltage	
54 (B)	Ground	Ground (Roof)	_	_		_	
56 (W)	Ground	5th bow latch close sensor	Input	[Engine is running] • 5th bow latch	Lock Other than above	0.8 V 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	
58	Ground	Storage lid status sensor RH	Input	[Engine is running]	Full open Other than	0.8 V	
(LG)		(Open)		Storage lid	above	3.0 V	
59	Ground	Storage lid status sensor RH	Input	[Engine is running]	Full close	0.8 V	
(W)	Ciodila	(Close)	put	Storage lid	Other than above	3.0 V	
60	Ground	Storage lid status sensor LH	Input	[Engine is running]	Full open	0.8 V	
(DG)	Signia	(Open)		Storage lid	Other than above	3.0 V	
61	0	Roof status sensor	le	[Engine is running]	Raised	0.8 V	
(Y)	Ground	RH (Close)	Input	Soft top	Other than above	3.0 V	
66		Roof status sensor		[Engine is running]	Lowered	0.8 V	
(L)	Ground	LH (Open)	Input	• Soft top	Other than above	3.0 V	
68	Ground	5th bow status sen-	Input	[Engine is running]	Raised	0.8 V	
(P)	Ground	sor RH	Input	• 5th bow	Other than above	3.0 V	
69		Roof status sensor		[Engine is running]	Raised	0.8 V	
(V)	Ground	LH (Close)	Input	• Soft top	Other than above	3.0 V	

Revision: 2011 August **PWC-153** 2012 370Z

[ROADSTER]

Terminal No. (Wire color)		Description		0 . 10		Value
+	_	Signal name	Input/ Output	Condition		(Approx.)
					Lowered	0.8 V
70 (O)	Ground	5th bow status sen- sor LH	Input	[Engine is running] • 5th bow	Other than above	3.0 V
74		Doof letab leads and		[Fasing is associated	Lock	0.8 V
71 (SB)	Ground	Roof latch lock sen- sor	Input	<ul><li>[Engine is running]</li><li>Roof lock assembly</li></ul>	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 hydraulic pump temperature.
73	0	Hydraulic pump relay	1	[Engine is running]	Active	12 V
(R)	Ground	2 ON signal	Input	<ul> <li>Hydraulic pump motor (Right rotation)</li> </ul>	Inactive	0 V
74		Hydraulic pump relay		[Engine is running]	Active	12 V
(R/B)	Ground	1 ON signal	Input	Hydraulic pump motor (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)		5	- 11 71	Switching valve 4	Inactive	0 V
97 (LG)	Ground	Switching valve 3	Output	<ul><li>[Engine is running]</li><li>Switching valve 3</li></ul>	Active	12 V
(LG)					Inactive	0 V
98 (L)	Ground	Switching valve 2	Output	<ul><li>[Engine is running]</li><li>Switching valve 2</li></ul>	Active	12 V 0 V
					Inactive Active	12 V
99 (O)	Ground	Switching valve 1	Output	<ul><li>[Engine is running]</li><li>Switching valve 1</li></ul>	Inactive	12 V
				[Engine is running]	Active	12 V
100	Ground	Hydraulic pump relay 2	Output	Hydraulic pump motor		

#### < ECU DIAGNOSIS INFORMATION >

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

Fail-safe

#### 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.

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## < 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 window 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.

<sup>\*:</sup> This item indicates the roof status signal (Audio).

## DTC Inspection Priority Chart

INFOID:0000000007806696

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

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Priority		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
2	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
3	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
	B177C	THERMO PROTECTION

<sup>\*:</sup> This item indicates the roof status signal (Audio).

DTC Index

#### NOTE:

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

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

[ROADSTER]

	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	×	×	RF-99
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	×	×	RF-132
B177E	5BOW LATCH CLOSE SEN	×	×	<u>RF-134</u>
B177F	5BOW STRIKER SENSOR	×	×	<u>RF-136</u>

< ECU DIAGNOSIS INFORMATION >

[ROADSTER]

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

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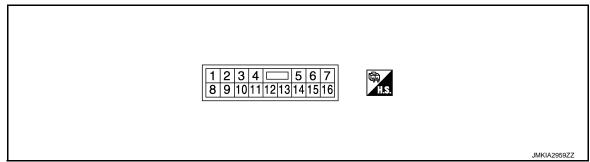
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[ROADSTER]

## **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	Containon	(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 JPMIA0011GB
				ON (Door open)	0
5 (BG)	Ground	Encoder power supply	Output	When ignition switch ON or automatic window adjusting operates	12
6 (GR)	Ground	Door key cylinder switch LOCK signal	Input	Key position (Neutral → Locked)	5 → 0
7 (V)	Ground	Door key cylinder switch UN- LOCK signal	Input	Key position (Neutral → Unlocked)	5 → 0
8 (L)	Ground	Driver side power window motor UP signal	Output	When power window main switch (Driver side) is operated UP	12
9 (LG)	Ground	Encoder pulse signal 2	Input	When power window motor operates	(V) 6 4 2 0 10 ms
10	0	Lauditan andrah anna alimit	lan	IGN SW ON	12
(Y)	Ground	Ignition switch power signal	Input	IGN SW OFF	0

#### **POWER WINDOW MAIN SWITCH**

## < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

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Terminal No. (Wire 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) 15 10 5 0 10 ms  JPMIA0013GB	
13 (R)	Ground	Encoder pulse signal 1	Input	When power window motor operates	(V) 6 4 2 0 10 ms	
14 (G)	Ground	Encoder ground	_	_	0	
15 (B)	Ground	Ground	_	_	0	

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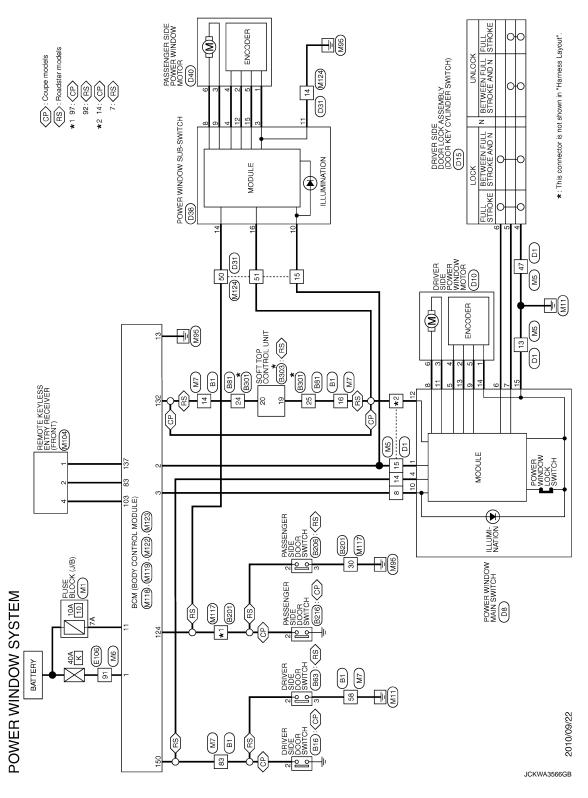
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## Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

INFOID:0000000007806698

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** 

#### **POWER WINDOW MAIN SWITCH**

#### < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

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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 malfunction	When a pulse indicating that the window is moving in the opposite direction against the power window 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-safe control.

- 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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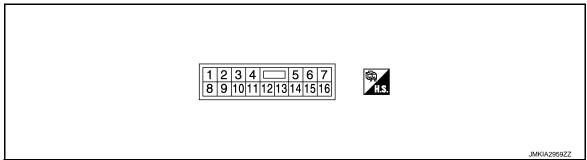
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## **POWER WINDOW SUB-SWITCH**

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	1	_	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) 64 2 0 10 ms
14 (Y)	Ground	Passenger side door switch	Input	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB
				ON (Door open)	0

## **POWER WINDOW SUB-SWITCH**

## < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

	inal No. e color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
15 (LG)	Ground	Encoder pulse signal 2	Input	When power window motor operates	(V) 64 2 0 10 ms
16 (Y)	Ground	Power window serial link	Input/ Output	Ignition switch ON	(V) 15 10 5 10 10 ms  JPMIA0013GB

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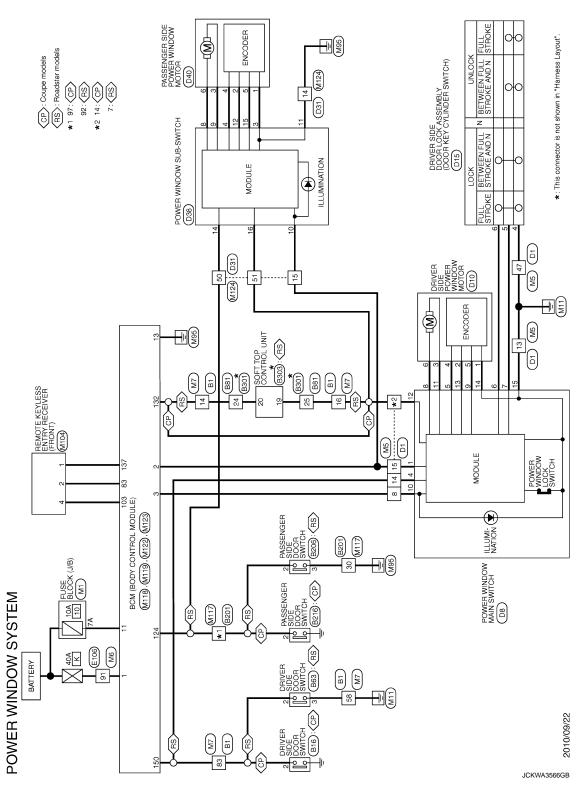
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## Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

INFOID:0000000007806699

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** 

#### **POWER WINDOW SUB-SWITCH**

#### < ECU DIAGNOSIS INFORMATION >

[ROADSTER]

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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 malfunction	When a pulse indicating that the window is moving in the opposite direction against the power window 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-safe control.

- 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 SWITCHES

< SYMPTOM DIAGNOSIS >

[ROADSTER]

## SYMPTOM DIAGNOSIS

# POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCHES

Description INFOID:000000007625111

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

Diagnosis Procedure

INFOID:0000000007625112

## 1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to PWC-101, "BCM: 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 GI-44, "Intermittent Incident".

NO >> GO TO 1.

#### DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

[ROADSTER] < SYMPTOM DIAGNOSIS >

#### DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE Α Description INFOID:0000000007625113 Driver side power window does not operate using power window main switch. В Diagnosis Procedure INFOID:0000000007625114 1. CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY AND GROUND CIRCUIT Check power window main switch power supply and ground circuit. Refer to PWC-101, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure". D Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. Е 2.CHECK DRIVER SIDE POWER WINDOW MOTOR Check driver side power window motor. Refer to PWC-104, "DRIVER SIDE: Component Function Check". F 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. Н Is the result normal? YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident". >> GO TO 1. NO

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**PWC-169** Revision: 2011 August 2012 370Z Ν

### PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[ROADSTER]

## PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Description INFOID:000000007625115

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

#### **Diagnosis Procedure**

INFOID:0000000007625116

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

Check power window sub-switch power supply and ground circuit.

Refer to PWC-102, "POWER WINDOW SUB-SWITCH: Diagnosis Procedure".

#### 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 GI-44, "Intermittent Incident".

NO >> GO TO 1.

## **ANTI-PINCH FUNCTION DOES NOT OPERATE**

ANTI-PINCH FUNCTION DOES NOT OPERATE	ID CADOTED!	
< SYMPTOM DIAGNOSIS >	[ROADSTER]	
ANTI-PINCH FUNCTION DOES NOT OPERATE		А
DRIVER SIDE		
DRIVER SIDE : Description	INFOID:0000000007625117	В
Anti-pinch function does not operate when power window up operated.		
DRIVER SIDE : Diagnosis Procedure	INFOID:0000000007625118	0
1. CHECK AUTO UP OPERATION		C
Check AUTO UP operation.		D
Is the inspection result normal?		D
YES >> GO TO 2. NO >> Refer to PWC-172, "DRIVER SIDE : Diagnosis Procedure".		_
2.CONFIRM THE OPERATION		Е
Confirm the operation again.		
Is the result normal?		F
YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".  NO >> GO TO 1.		
PASSENGER SIDE		G
PASSENGER SIDE : Description	INFOID:000000007625119	
·	INFOID.000000001023119	Н
Anit-pinch function does not operate when power window up operated.		
PASSENGER SIDE : Diagnosis Procedure	INFOID:0000000007625120	I
1. CHECK AUTO UP OPERATION		
Check AUTO UP operation.		J
Is the inspection result normal? YES >> GO TO 2.		
NO >> Refer to PWC-172, "PASSENGER SIDE : Diagnosis Procedure".		PWC
2.confirm the operation		
Confirm the operation again.		ı
Is the result normal?  YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".		_
YES >> Check intermittent incident. Refer to <u>GI-44, "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:0000000007625121

## 1. PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.

Refer to PWC-91, "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 (DRIVER SIDE) CIRCUIT

Check encoder (driver side) circuit.

Refer to PWC-108, "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 GI-44, "Intermittent Incident".

NO >> GO TO 1.

#### PASSENGER SIDE

### PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000007625122

## 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-44, "Intermittent Incident".

NO >> GO TO 1.

## POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NOR-

MALLY		
< SYMPTOM DIAGNOSIS >	[ROADSTER]	
POWER WINDOW RETAINED POWER FUNCTION DOES N	OT OPERATE	
NORMALLY		

Description

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

Diagnosis Procedure

#### Is the inspection result normal?

YES >> GO TO 2.

NO

#### Is the result normal?

NO >> GO TO 1.

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**PWC-173** Revision: 2011 August 2012 370Z

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INFOID:0000000007625123

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INFOID:0000000007625124

1. CHECK DOOR SWITCH

Check door switch.

Refer to DLK-63, "Component Function Check".

>> Repair or replace the malfunctioning parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

>> Check intermittent incident. Refer to GI-44, "Intermittent Incident". YES

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## DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

< SYMPTOM DIAGNOSIS >

[ROADSTER]

# DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

Description INFOID:000000007625125

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

#### Diagnosis Procedure

INFOID:0000000007625126

## 1. PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed 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.

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

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.

## 3.CONFIRM THE OPERATION

Confirm the operation again.

#### Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

KEYLESS POWER WINDOW DOWN DOES NOT OPER	
< SYMPTOM DIAGNOSIS >	[ROADSTER]
KEYLESS POWER WINDOW DOWN DOES NOT OPERATE	
Description	INFOID:0000000007625127
Power window down does not operate when pressing unlock button on Intelligent Key.	
Diagnosis Procedure	INFOID:0000000007625128
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-281, "Diagnosis Procedure"</u> .	
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".	D (= 0 )
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 GI-44, "Intermittent Incident".  NO >> GO TO 1.	
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## POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS > [ROADSTER]

## POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000007625129

1. REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

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

## POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE

[ROADSTER] < SYMPTOM DIAGNOSIS > POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE Α **DRIVER SIDE** DRIVER SIDE: Diagnosis Procedure INFOID:0000000007625130 В 1. REPLACE POWER WINDOW MAIN SWITCH Replace power window main switch. C >> Refer to PWC-181, "Removal and Installation". PASSENGER SIDE D PASSENGER SIDE: Diagnosis Procedure INFOID:0000000007625131 Е 1. REPLACE POWER WINDOW SUB-SWITCH Replace power window sub-switch. F >> Refer to PWC-181, "Removal and Installation". Н J **PWC** M Ν

**PWC-177** Revision: 2011 August 2012 370Z

## **AUTOMATIC WINDOW ADJUSTING FUNCTION DOES NOT OPERATE**

< SYMPTOM DIAGNOSIS >

[ROADSTER]

# AUTOMATIC WINDOW ADJUSTING FUNCTION DOES NOT OPERATE DRIVER SIDE

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000007625132

## 1. 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 GI-44, "Intermittent Incident".

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625133

## 1. CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK DOOR SWITCH

Check door switch.

Refer to PWC-113, "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-44, "Intermittent Incident".

NO >> GO TO 1.

#### **PRECAUTIONS**

[ROADSTER] < PRECAUTION >

## **PRECAUTION**

## **PRECAUTIONS** FOR USA AND CANADA

FOR USA AND CANADA: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" INFOID:0000000007625134

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

#### **WARNING:**

Always observe the following items for preventing accidental activation.

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

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

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 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

FOR MEXICO: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" INFOID:0000000007625136

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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**PWC-179** Revision: 2011 August 2012 370Z

#### **PRECAUTIONS**

< PRECAUTION > [ROADSTER]

• 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: Precaution for Battery Service

INFOID:0000000007625137

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.

#### **POWER WINDOW MAIN SWITCH**

< REMOVAL AND INSTALLATION >

[ROADSTER]

## REMOVAL AND INSTALLATION

## POWER WINDOW MAIN SWITCH

#### Removal and Installation

#### INFOID:0000000007625138

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#### **REMOVAL**

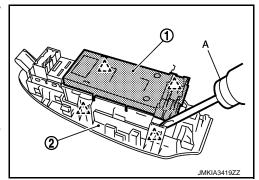
- 1. Remove the power window main switch finisher (2). Refer to <a href="INT-15">INT-15</a>, "Removal and Installation".
- 2. Power window main switch (1) is removed from power window main switch finisher (2) using flat-bladed screw driver (A) etc.





## Never fold the pawl of power window main switch finisher.

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 <a href="PWC-92">PWC-92</a>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

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