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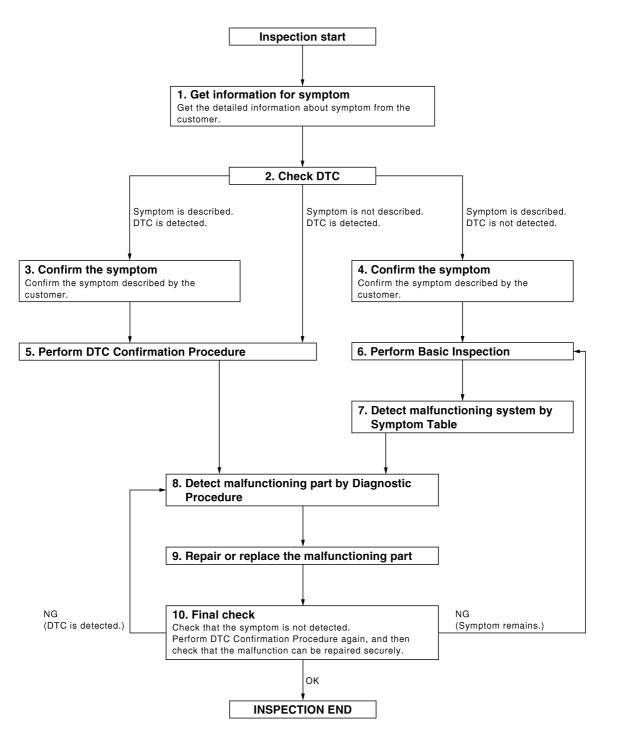
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

OVERALL SEQUENCE



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[LH ONLY ANTI-PINCH-COUPE]

${f 1}$. GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2

2. CHECK DTC

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

Is any symptom described and any DTC detected?

Symptom is described, DTC is displayed>>GO TO 3

Symptom is described, DTC is not displayed>>GO TO 4

Symptom is not described, DTC is displayed>>GO TO 5

3. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5

4. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6

${f 5.}$ PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again. At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time. If two or more DTCs are detected, refer to BCS-70, "DTC Index" and determine trouble diagnosis order. NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check. If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Confirmation Procedure.

Is DTC detected?

YES >> GO TO 8

>> Refer to GI-41. "Intermittent Incident". NO

6. PERFORM BASIC INSPECTION

Perform PWC-80, "Work Flow".

Inspection End>>GO TO 7

/. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

>> GO TO 8

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[LH ONLY ANTI-PINCH-COUPE]

8. Detect malfunctioning part by diagnostic procedure

Inspect according to Diagnostic Procedure of the system.

NOTE:

The Diagnostic Procedure described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

Is malfunctioning part detected?

YES >> GO TO 9

NO >> Check voltage of related BCM terminals using CONSULT-III.

9. REPAIR OR REPLACE THE MALFUNCTIONING PART

- 1. Repair or replace the malfunctioning part.
- Reconnect parts or connectors disconnected during Diagnostic Procedure again after repair and replacement.
- 3. Check DTC. If DTC is displayed, erase it.

>> GO TO 10

10. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.

When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8

YES (Symptom remains)>>GO TO 6

NO >> Inspection End.

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH ONLY ANTI-PINCH-COUPE]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

Initial setting is necessary when battery terminal is disconnected.

CAUTION:

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

- Auto-up operation
- Anti-pinch function
- Retained power operation

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INITIALIZATION PROCEDURE

- 1. Disconnect battery negative terminal or main power window and door lock/unlock switch. Reconnect it after a minute or more.
- 2. Turn ignition switch ON.
- 3. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open)
- 4. Continue pulling the power window switch UP (AUTO-UP operation). Even after glass stops at fully closed position, keep pulling the switch for 4 seconds or more.
- 5. Inspect anti-pinch function.

CHECK ANTI-PINCH FUNCTION

- 1. Fully open the door window.
- 2. Place a piece of wood near fully closed position.
- Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm or 2 seconds 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.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-35, "Fail Safe".
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Retained power operation when ignition switch is OFF.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

INFOID:0000000005434179

Initial setting is necessary when replacing main power window and door lock/unlock switch.

CAUTION:

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

- Auto-up operation
- Anti-pinch function
- Retained power operation

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement

INITIALIZATION PROCEDURE

1. Disconnect battery negative terminal or main power window and door lock/unlock switch. Reconnect it after a minute or more.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH ONLY ANTI-PINCH-COUPE]

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

CHECK ANTI-PINCH FUNCTION

- 1. Fully open the door window.
- 2. Place a piece of wood near fully closed position.
- Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm or 2 seconds without pinching piece of wood and stops.
- Check that glass does not rise when operating the main power window and door lock/unlock 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.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-35, "Fail Safe".
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Retained power operation when ignition switch is OFF.

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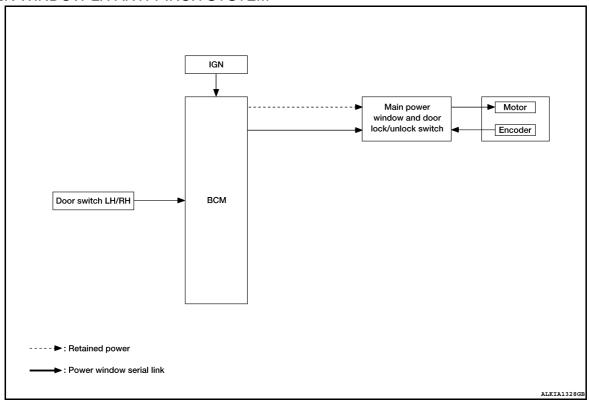
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FUNCTION DIAGNOSIS

POWER WINDOW SYSTEM

System Diagram

POWER WINDOW LH ANTI-PINCH SYSTEM



System Description

INFOID:0000000005434182

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH INPUT/OUTPUT SIGNAL CHART

Item	Input signal to main power window and door lock/unlock switch	Main power window and door lock/unlock switch function	Actuator
Encoder	Encoder pulse signal		
Main power window and door lock/unlock switch	Power window motor LH UP/DOWN signal	Power window control	Power window motor
Power window and door lock/unlock switch RH	Power window motor RH UP/DOWN signal		Fower window Hotol
BCM	RAP signal		

POWER WINDOW OPERATION

- Power window system is operable during the retained power operation timer after turning ignition switch ON and OFF.
- Main power window and door lock/unlock switch can open/close all windows.
- Power window switches can open/close the corresponding windows.

POWER WINDOW AUTO-OPERATION (LH)

 AUTO UP/DOWN operation can be performed when main power window and door lock/unlock switch turns to AUTO.

POWER WINDOW SYSTEM

< FUNCTION DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

- Encoder continues detecting the movement of power window motor and transmits to main power window and door lock/unlock switch as the encoder pulse signal while power window motor is operating.
- Main power window and door lock/unlock switch reads the changes of encoder signal and stops AUTO operation when door glass is at fully opened/closed position.
- Power window motor is operable in case encoder is malfunctioning.

RETAINED POWER OPERATION

Retained power operation is an additional power supply function that enables power window system to operate during the 45 seconds even when ignition switch is turned OFF

Retained power function cancel conditions

- Door CLOSE (door switch OFF)→OPEN (door switch ON).
- When ignition switch is ON.
- When timer time passes (45 seconds).

POWER WINDOW LOCK

Ground circuit inside main power window and door lock/unlock switch shuts off when power window lock switch is ON. This inhibits power window switch operation except with the main power window and door lock/unlock switch.

ANTI-PINCH OPERATION (LH)

- Pinch foreign material in the door glass during AUTO-UP operation, and it is the anti-pinch function that lowers the door glass 150 mm or 2 seconds when detected.
- Encoder continues detecting the movement of power window motor and transmits to main power window and door lock/unlock 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 window glass for 150 mm or 2 seconds after it detects encoder pulse signal frequency change.

OPERATION CONDITION

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

NŎTE:

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

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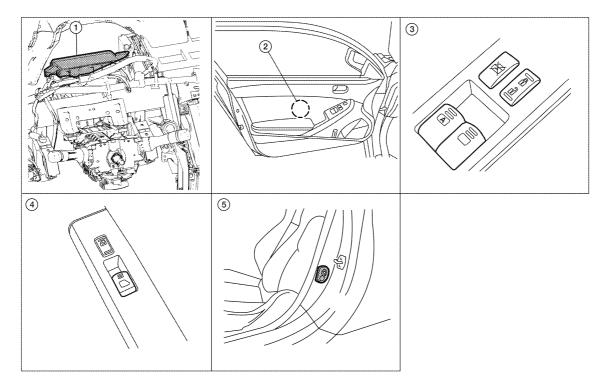
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Component Parts Location

INFOID:0000000005434183



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- BCM M16, M17, M18 (view with in- 2. Power window motor LH D18, RH strument panel removed)
- switch RH D110
- Power window and door lock/unlock 5. Door switch LH B68, RH B109
- Main power window and door lock/ unlock switch D27

Component Description

INFOID:0000000005434184

POWER WINDOW LH ANTI-PINCH SYSTEM

Component	Function
ВСМ	Supplies power to power window switches.Controls retained power.
Main power window and door lock/unlock switch	 Directly controls all power window motor of all doors. Controls anti-pinch operation of power window LH.
Power window and door lock/unlock switch RH	Controls power window motor RH.
Power window motor LH	Integrates the ENCODER POWER and WINDOW MOTOR. Starts operating with signals from main power window and door lock/unlock switch. Transmits power window motor rotation as a pulse signal to main power window and door lock/unlock switch.
Power window motor RH	Starts operating with signals from main power window and door lock/unlock switch & power window and door lock/unlock switch RH.
Door switch LH or RH	Detects door open/close condition and transmits to BCM.

[LH ONLY ANTI-PINCH-COUPE]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: Diagnosis Description

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BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF DIAGNOSTIC RESULT	Displays the diagnosis results judged by BCM.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	Read and save the vehicle specification. Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

System	Cub avatara aplactica itara	Diagnosis mode		
Gystelli	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	×	×	×
Remote keyless entry system1	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system2	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
BCM	BCM	×		
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

^{1:} With remote keyless entry system

COMMON ITEM: CONSULT-III Function

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ECU IDENTIFICATION

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^{2:} With intelligent Key system

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

Displays the BCM part No.

SELF-DIAG RESULT

Refer to BCS-70, "DTC Index".

RETAINED PWR

RETAINED PWR : CONSULT-III Function (BCM - RETAINED PWR)

INFOID:0000000005783539

Data monitor

Monitor Item [Unit]	Description
DOOR SW-DR [ON/OFF]	Indicates condition of front door switch LH.
DOOR SW-AS [ON/OFF]	Indicates condition of front door switch RH.

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH: Description

• BCM supplies power.

• It operates each power window motor via corresponding power window switch and makes window move up/ down when main power window and door lock/unlock switch is operated.

POWER WINDOW MAIN SWITCH: Component Function Check

Main Power Window And Door Lock/unlock Switch

${f 1}$. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH FUNCTION

Does power window motor operate with main power window and door lock/unlock switch operation? Is the inspection result normal?

YES >> Main power window and door lock/unlock switch power supply and ground circuit are OK.

>> Refer to PWC-19, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure". NO

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

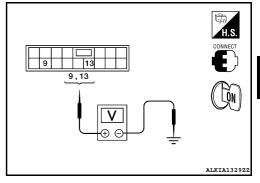
Regarding Wiring Diagram information, refer to PWC-64, "Wiring Diagram".

Main Power Window And Door Lock/unlock Switch Power Supply Circuit Check

1. CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch ON.
- Check voltage between main power window and door lock/ unlock switch connectors and ground.

Ter			
(+)		Voltage (V)	
Main power window and door lock/unlock switch connector		(–)	(Approx.)
D27	9	Ground	Battery voltage



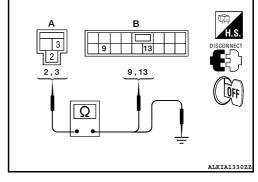
Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect BCM and main power window and door lock/unlock switch.
- Check continuity between BCM connector (A) and main power window and door lock/unlock switch connector (B).

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M16 (A)	3	D27 (B)	13	Yes
WITO (A)	2	D27 (B)	9	165



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POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M16 (A)	3	Ground	No
WITO (A)	2		INU

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

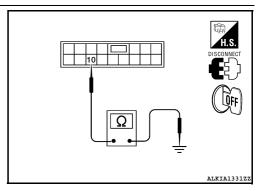
3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch.

3. Check continuity between main power window and door lock/ unlock switch connector and ground.

Main power window and door lock/un- lock switch connector	Terminal	Ground	Continuity
D27	10		Yes



Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-78, "Removal and Installation".

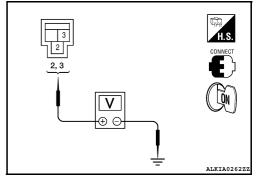
After that, refer to PWC-21, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

- 1. Connect BCM.
- 2. Turn ignition switch ON.
- 3. Check voltage between BCM connector and ground.

Term	V 1 00			
(+)	(-)	Voltage (V) (Approx.)		
BCM connector	Terminal	(-)		
M16	3	Ground	Battery voltage	
IVITO	2	Giodila	Ballery Vollage	



Is the measurement value within the specification?

YES >> GO TO 5

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

5. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Check main power window and door lock/unlock switch.

Refer to PWC-20, "POWER WINDOW MAIN SWITCH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace main power window and door lock/unlock switch. Refer to PWC-78, "Removal and Installation". After that, refer to PWC-21, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

POWER WINDOW MAIN SWITCH: Component Inspection

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1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

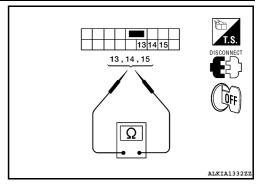
POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

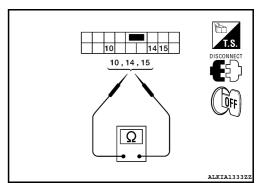
Check main power window and door lock/unlock switch.

Terr	minal	Main power window and door lock/unlock switch condition		Continuity
13	15	RH	UP	
14	15	RH	NEUTRAL	Yes
13	14	RH	DOWN	



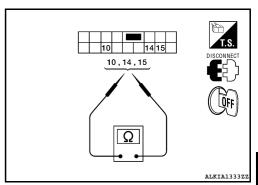
Check continuity between main power window and door lock/ unlock switch (power window lock switch) (Lock operation).

Terr	minal	Main power window and door lock/unlock switch condition		Continuity
14		RH	UP	
14	10	RH	NEUTRAL	No
15	10	KII	NEOTIVAL	INO
15		RH	DOWN	



Check continuity between main power window and door lock/ unlock switch (power window lock switch) (Unlock operation).

Terr	ninal	Main power window and door lock/un- lock switch condition		Continuity
14		RH	UP	
14	10	RH	NEUTRAL	Yes
15	10	КП	NEOTRAL	165
15		RH	DOWN	



Is the inspection result normal?

YES >> Main power window and door lock/unlock switch is OK.

>> Replace main power window and door lock/unlock switch. Refer to PWC-78, "Removal and Instal-NO lation". After that, refer to PWC-12, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

POWER WINDOW MAIN SWITCH: Special Repair Requirement

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-12, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

>> GO TO 2 YES

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to PWC-12, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

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NO >> Refer to PWC-28, "DRIVER SIDE: Component Function Check".

> **PWC-21** 2010 Altima

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PASSENGER SIDE

PASSENGER SIDE: Description

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- BCM supplies power.
- Power window motor RH will be operated if power window and door lock/unlock switch RH is operated.

PASSENGER SIDE: Component Function Check

INFOID:000000005434194

Power Window And Door Lock/unlock Switch RH

1. CHECK POWER WINDOW MOTOR RH FUNCTION

Does power window motor RH operate with power window and door lock/unlock switch RH operation? <u>Is the inspection result normal?</u>

YES >> Power window and door lock/unlock switch RH power supply and ground circuit are OK.

NO >> Refer to PWC-22, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE: Diagnosis Procedure

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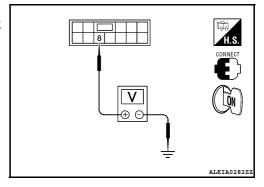
Regarding Wiring Diagram information, refer to PWC-64, "Wiring Diagram".

Power Window And Door Lock/Unlock Switch RH Power Supply Circuit Check

1. CHECK POWER SUPPLY CIRCUIT (POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH)

- 1. Turn ignition switch ON.
- 2. Check voltage between power window and door lock/unlock switch RH connector and ground.

Т			
(+)		Voltage (V)	
Power window and door lock/unlock switch RH connector	lock/unlock Terminal		(Approx.)
D110	8	Ground	Battery voltage



Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect BCM and power window and door lock/unlock switch RH.
- 3. Check continuity between BCM connector (A) and power window and door lock/unlock switch RH connector (B).

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M16 (A)	3	D110 (B)	8	Yes

A B B DISCONNECT CFF

4. Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Ground	Continuity
M16 (A)	3	Ground	No

Is the inspection result normal?

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

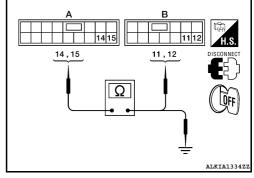
YES >> Refer to PWC-19, "POWER WINDOW MAIN SWITCH: Component Function Check".

NO >> Repair or replace harness.

${f 3.}$ CHECK HARNESS CONTINUITY (POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH)

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch and power window and door lock/unlock switch RH.
- 3. Check continuity between main power window and door lock/ unlock switch connector (A) and power window and door lock/ unlock switch RH connector (B).

Main power win- dow and door lock/unlock switch connector	Terminal	Power window and door lock/un- lock switch RH connector	Terminal	Continuity
D27 (A)	15	D110 (B)	11	Yes
D21 (A)	14	D110 (B)	12	163



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/ unlock switch connector	Terminal		Continuity
D27 (A)	14	Ground	No
D27 (A)	15		INO

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Check power window and door lock/unlock switch RH.

Refer to PWC-23, "PASSENGER SIDE: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace power window and door lock/unlock switch RH. Refer to PWC-79, "Removal and Installation".

PASSENGER SIDE: Component Inspection

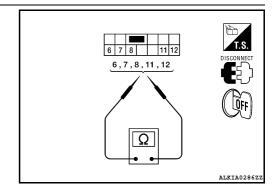
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COMPONENT INSPECTION

1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Check power window and door lock/unlock switch RH.

Terr	ninal	Power window switch condition	Continuity
8	6	UP	
12	7	UF	
12	7	NEUTRAL	Yes
6	11	NEOTIVAL	163
8	7	DOWN	
6	11	DOWN	



Is the inspection result normal?

YES >> Power window and door lock/unlock switch RH is OK.

NO >> Replace power window and door lock/unlock switch RH. Refer to PWC-79, "Removal and Installation".

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POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE : Description

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

DRIVER SIDE: Component Function Check

INFOID:0000000005434198

1. CHECK POWER WINDOW MOTOR LH CIRCUIT

Does power window motor LH operate with the main power window and door lock/unlock switch? Is the inspection result normal?

YES >> Power window motor LH is OK.

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

DRIVER SIDE: Diagnosis Procedure

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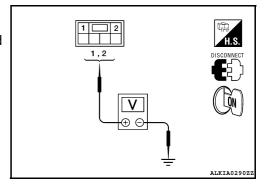
Regarding Wiring Diagram information, refer to PWC-64, "Wiring Diagram".

Power Window Motor LH Circuit Check

1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

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

-	Terminal			
(+)			Main power win- dow and door	Voltage (V)
Power window motor LH con- nector	Terminal	(–)	lock/unlock switch condition	(Approx.)
	2		UP	Battery voltage
D18		Ground	DOWN	0
510	1	Ground	UP	0
	l		DOWN	Battery voltage



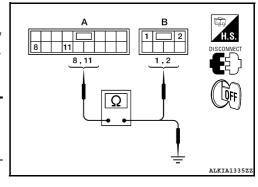
Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector (A) and power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Power window mo- tor LH connector	Terminal	Continuity
D27 (A)	8	D18 (B)	2	Yes
DZT (A)	11	D18 (B)	1	163



POWER WINDOW MOTOR

< COMPONENT DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D27 (A)	8		No
D21 (A)	11		INO

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-78, "Removal and Installation". After that, refer to PWC-12, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

NO >> Repair or replace harness.

3. CHECK POWER WINDOW MOTOR LH

Check power window motor LH.

Refer to PWC-182, "DRIVER SIDE: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace power window motor LH. Refer to GW-19, "Removal and Installation". After that, refer to PWC-12, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

DRIVER SIDE : Component Inspection

COMPONENT INSPECTION

${f 1}$. CHECK POWER WINDOW MOTOR LH

Does motor operate by connecting the battery voltage directly to power window motor?

Terr	ninal	Motor condition
(+)	(–)	Wotor conducti
1	2	DOWN
2	1	UP

Is the inspection result normal?

NO

YES >> Power window motor LH is OK.

> >> Replace power window motor LH. Refer to GW-19, "Removal and Installation". After that, refer to PWC-12, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

DRIVER SIDE: Special Repair Requirement

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-12, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to PWC-12, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

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NO >> Refer to PWC-28, "DRIVER SIDE : Component Function Check".

PASSENGER SIDE

PASSENGER SIDE: Description

Door glass moves UP/DOWN by receiving the signal from main power window and door lock/unlock switch or power window and door lock/unlock switch RH.

PASSENGER SIDE : Component Function Check

1. CHECK FRONT POWER WINDOW MOTOR RH CIRCIUT

Does power window motor RH operate with main power window and door lock/unlock switch or power window and door lock/unlock switch?

Is the inspection result normal?

YES >> Power window motor RH is OK.

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

PASSENGER SIDE: Diagnosis Procedure

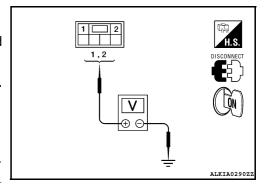
Regarding Wiring Diagram information, refer to PWC-64, "Wiring Diagram".

Power Window Motor RH Circuit Check

1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH OUTPUT SIGNAL

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

Terminal					
(+)			Power window motor RH con-	Voltage (V)	
Power window mo- tor RH connector	Terminal	(–)	dition	(Approx.)	
	1 2		UP	Battery voltage	
D111		Ground	DOWN	0	
ОП			Giodila	UP	0
	2		DOWN	Battery voltage	



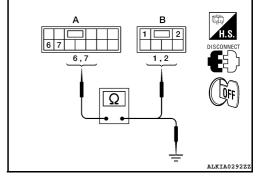
Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect power window and door lock/unlock switch RH.
- Check continuity between power window and door lock/unlock switch RH connector (A) and power window motor RH connector (B).

Power window and door lock/unlock switch RH connector	Terminal	Power window motor RH connector	Terminal	Continuity
D110 (A)	6	D111 (B)	1	Yes
D110 (A)	7	DIII (B)	2	165



POWER WINDOW MOTOR

< COMPONENT DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

Check continuity between power window and door lock/unlock switch connector (A) and ground.

Power window and door lock/ unlock switch RH connector	Terminal		Continuity	
D110 (A)	6	Ground	No	
D110 (A)	7	1	INO	

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-79, "Removal and Installation".

NO >> Repair or replace harness.

3. CHECK POWER WINDOW MOTOR RH

Check power window motor RH.

Refer to PWC-27, "PASSENGER SIDE: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace power window motor RH. Refer to GW-19, "Removal and Installation".

PASSENGER SIDE : Component Inspection

INFOID:0000000005434205

COMPONENT INSPECTION

COMPONENT INSPECTION

1. CHECK POWER WINDOW MOTOR RH

Does motor operate by connecting the battery voltage directly to power window motor RH?

Terminal		Motor condition
(+)	(–)	Wotor condition
1	2	DOWN
2	1	UP

Is the inspection result normal?

YES >> Power window motor is OK.

NO >> Replace power window motor RH. Refer to GW-19, "Removal and Installation". **PWC**

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PWC-27 2010 Altima Revision: September 2009

ENCODER DRIVER SIDE

DRIVER SIDE: Description

INFOID:0000000005434206

Detects condition of the power window motor LH operation and transmits to main power window and door lock/unlock switch as pulse signal.

DRIVER SIDE: Component Function Check

INFOID:0000000005434207

1. CHECK ENCODER OPERATION

Does door glass LH perform AUTO open/close operation normally with main power window and door lock/unlock switch?

Is the inspection result normal?

YES >> Encoder operation is OK.

NO >> Refer to PWC-28, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000005434208

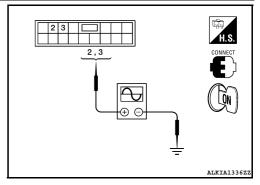
Regarding Wiring Diagram information, refer to PWC-64, "Wiring Diagram".

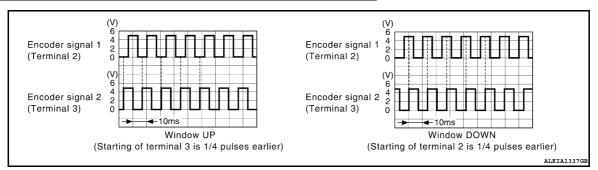
Encoder Circuit Check

1. CHECK ENCODER OPERATION

- 1. Connect power window motor LH.
- 2. Turn ignition switch ON.
- 3. Check signal between main power window and door lock/unlock switch connector and ground with oscilloscope.

(+)				
Main power window and door lock/unlock switch connector	Terminal	(–)	Signal (Reference value)	
D27	3	Ground	Refer to following signal	





Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

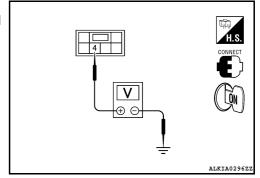
NO >> GO TO 2

2. CHECK POWER WINDOW MOTOR LH POWER SUPPLY

[LH ONLY ANTI-PINCH-COUPE]

- 1. Turn ignition switch ON.
- Check voltage between power window motor LH connector and ground.

Termi			
(+)	Voltage (V)		
Power window motor LH con- nector	Terminal	(–)	(Approx.)
D18	4	Ground	10



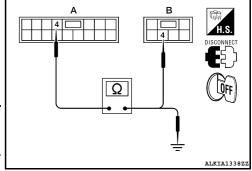
Is the measurement value within the specification?

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

3. CHECK HARNESS CONTINUITY 1

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch and power window motor LH.
- Check continuity between main power window and door lock/ unlock switch connector (A) and power window motor connector (B).

Main power window and door lock/unlock switch connector	Terminal	Power window motor LH connector	Terminal	Continuity
D27 (A)	4	D18 (B)	4	Yes



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D27 (A)	4		No

Is the inspection result normal?

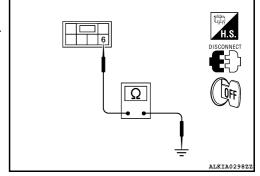
YES >> Replace main power window and door lock/unlock switch. Refer to PWC-78, "Removal and Installation". After that, refer to PWC-30, "DRIVER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

4. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect power window motor LH.
- 3. Check continuity between power window motor LH connector and ground.

Power window motor LH connector	Terminal	Ground	Continuity
D18	6		Yes



Is the inspection result normal?

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

5. CHECK HARNESS CONTINUITY 2

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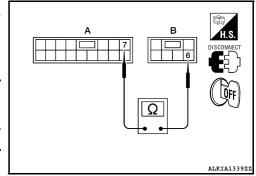
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[LH ONLY ANTI-PINCH-COUPE]

- 1. Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector (A) and power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Power window mo- tor LH connector	Terminal	Continuity
D27 (A)	7	D18 (B)	6	Yes



Is the inspection result normal?

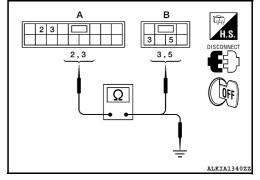
YES >> Replace main power window and door lock/unlock switch. Refer to PWC-78, "Removal and Installation". After that, refer to PWC-30, "DRIVER SIDE : Special Repair Requirement".

NO >> Repair or replace harness.

6. CHECK HARNESS CONTINUITY 3

- 1. Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector (A) and power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Power window motor LH con- nector	Terminal	Continuity
D27 (A)	3	D18 (B)	3	Yes
D21 (A)	2	D 10 (B)	5	163



Check continuity between main power window and door lock/ unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D27 (A)	2		No
D21 (A)	3		140

Is the inspection result normal?

YES >> Replace power window motor LH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>". After that, refer to <u>PWC-25</u>, "<u>DRIVER SIDE</u>: <u>Special Repair Requirement</u>".

NO >> Repair or replace harness.

DRIVER SIDE: Special Repair Requirement

INFOID:0000000005434209

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-12</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

DOOR SWITCH

Description INFOID:000000005434210

Detects door open/close condition and transmits the signal to BCM.

Component Function Check

1. CHECK DOOR SWITCH INPUT SIGNAL

Check ("DOOR SW-DR" and "DOOR SW-AS") in "DATA MONITOR" mode with CONSULT-III. Refer to <u>BCS-34, "RETAINED PWR: CONSULT-III Function (BCM - RETAINED PWR)"</u>.

Monitor item	С	ondition
DOOR SW-DR	OPEN	: ON
DOOR SW-DR	CLOSE	: OFF
DOOR SW AS	OPEN	: ON
DOOR SW-AS	CLOSE	: OFF

Is the inspection result normal?

YES >> Door switch circuit is OK.

NO >> Refer to PWC-31, "Diagnosis Procedure".

Diagnosis Procedure

Regarding Wiring Diagram information, refer to $\underline{PWC\text{-}64.~"Wiring~Diagram"}.$

1. CHECK HARNESS CONTINUITY

Check voltage between BCM connector and ground.

Terminals					
(+)			Door condition		Voltage (V)
BCM connector	Terminal	(–)	200.00		(Approx.)
	32		RH		0
M18	Ground		CLOSE	Battery voltage	
IVITO	58	Giodila	LH	OPEN	0
	36		LII	CLOSE	Battery voltage

Is the measurement value within the specification?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

NO >> GO TO 2

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect BCM and door switch.
- 3. Check continuity between BCM connector and door switch connector.

BCM connector	Terminal	Door switch connector	Terminal	Continuity
M18	32	RH: B109	2	Yes
	58	LH: B68	2	res

Check continuity between BCM connector and ground.

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< COMPONENT DIAGNOSIS >

BCM connector	Terminal		Continuity	
M18	32	Ground	No	
IVI I O	58		INO	

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK BCM OUTPUT SIGNAL

- Connect BCM connector.
- 2. Check voltage between BCM connector and ground.

	V 14 0 0			
(+)		- (-)	Voltage (V) (Approx.)	
BCM connector	BCM connector Terminal		(11 -)	
M18	32	Ground	Battery voltage	
IVITO	58	Glound	Battery voltage	

Is the measurement value within the specification?

YES >> GO TO 4

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

4. CHECK DOOR SWITCH

Check front door switch.

Refer to PWC-32, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace door switch.

Component Inspection

INFOID:0000000005434213

1. CHECK DOOR SWITCH

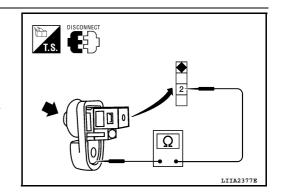
Check front door switches.

Te	erminal	Door switch	Continuity
Door	switches		
2	Ground part of door		No
	switch	Released	Yes

Is the inspection result normal?

YES >> Door switch is OK. NO

>> Replace door switch.



POWER WINDOW LOCK SWITCH

< COMPONENT DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

POWER WINDOW LOCK SWITCH

Description INFOID:0000000005434214

Ground circuit of main power window and door lock/unlock switch shuts off if power window lock switch of main power window and door lock/unlock switch is operated. This inhibits all operation, except for the main switch.

Component Function Check

1. CHECK POWER WINDOW LOCK SIGNAL

Exchanges for a normal main power window and door lock/unlock switch, and operation is checked. Does power window lock operate?

YES >> Replace main power window and door lock/unlock switch. Refer to <u>PWC-78</u>, "Removal and Installation". After that, <u>PWC-12</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

NO >> Check condition of harness and connector.

Special Repair Requirement

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-12</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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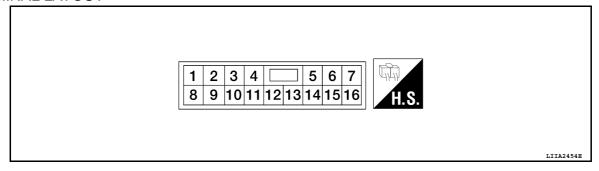
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ECU DIAGNOSIS

POWER WINDOW MAIN SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Terminal No. (Wire color)		Description		Condition	Voltage [V]	
+	_	Signal name	Input/ Output	Condition	(Approx.)	
2 (SB)	7	Encoder pulse signal 1	Input	When power window motor operates.	(V) 6 4 2 0 10 ms	
3 (W)	7	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0 10 ms JMKIA0070GB	
4 (GR)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates.	10	
7 (G)	Ground	Encoder ground	_	_	0	
8 (R)	11	Power window motor LH UP signal	Output	When LH switch in power window main switch is operated UP.	Battery voltage	
9 (W)	Ground	Battery power supply	Input	_	Battery voltage	
10 (B)	Ground	Ground	_	_	0	

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

Terminal No. (Wire color)		Description		Condition	Voltage [V]
+	_	Signal name	Input/ Output		(Approx.)
11 (LG)	8	Power window motor LH DOWN signal	Output	When LH switch in power window main switch is operated DOWN.	Battery voltage
		nd RAP signal	Input	IGN SW ON	Battery voltage
13	(Fround			Within 45 second after ignition switch is turned to OFF.	Battery voltage
(V) Clound IVII signal	·	When driver side or passenger side door is opened during retained power operation.	0		
14 (BR)	15	Power window motor RH UP signal	Output	When RH switch in power window main switch is operated UP.	Battery voltage
15 (L)	14	Power window motor RH DOWN signal	Output	When RH switch in power window main switch is operated DOWN.	Battery voltage

Fail Safe

FAIL-SAFE CONTROL

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 error beyond regulation value is detected between the fully closed position and the actual position of the glass.

Error	Error condition
Pulse sensor malfunction	When only one side of pulse signal is being detected for more than the specified value.
Both pulse sensors mal- function	When both pulse signals have not been detected for more than the specified value during glass open/close operation.
Pulse direction malfunction	When the pulse signal that is detected during glass open/close operation detects the opposite condition of power window motor operating direction.
Glass recognition position malfunction 1	When it detects the error between glass fully closed position in power window switch memory and actual fully closed position during glass open/close operation is more than the specified value.
Glass recognition position malfunction 2	When it detects pulse count more than the value of glass full stroke during glass open/close operation.
Malfunction of not yet up- dated closed position of glass	When glass open/close operation is continuously performed without fully closing more than the specified value (approximately 10 strokes).

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
- · Retained power function

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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BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Provided Color Prov	Monitor Item	Condition	Value/Status
Front wiper switch HI	ER WIDER HI	Other than front wiper switch HI	OFF
Fr N	TIX WIF LIX III	Front wiper switch HI	ON
Front wiper switch LO	FR WIPER LOW	Other than front wiper switch LO	OFF
FR WASHER SW Front washer switch ON ON FR WIPER INT Other than front wiper switch INT OFF Front wiper switch INT ON FR WIPER STOP Front wiper is not in STOP position ON INT VOLUME Wiper intermittent dial is in a dial position 1 - 7 Wiper intermittent dial position TURN SIGNAL R Other than turn signal switch RH OFF TURN SIGNAL L Other than turn signal switch LH OFF TURN SIGNAL L Other than turn signal switch LH ON TURN SIGNAL L Other than lighting switch LH ON TURN SIGNAL L Other than lighting switch LH ON TURN SIGNAL L Other than lighting switch LH ON TURN SIGNAL L Other than lighting switch LH ON TURN SIGNAL L Other than lighting switch LH ON TURN SIGNAL L Other than lighting switch LH ON TURN SIGNAL L Other than lighting switch LT ST OND ON HEAD LAMP SW 2 Other than lighting switch 2ND OFF Lighting switch 2ND ON OFF Lighting switch 2ND<		Front wiper switch LO	ON
Front washer switch ON	ED WACHED CW	Front washer switch OFF	OFF
FR WIPER INT Front wiper switch INT ON FR WIPER STOP Front wiper is not in STOP position OFF INT VOLUME Wiper intermittent dial is in a dial position ON TURN SIGNAL R Other than turn signal switch RH OFF TURN SIGNAL L Other than turn signal switch LH OFF TURN SIGNAL L Other than turn signal switch LH ON TAIL LAMP SW Other than lighting switch 1ST and 2ND OFF Lighting switch 1ST or 2ND ON ON HI BEAM SW Uighting switch 1ST or 2ND ON HEAD LAMP SW 1 Other than lighting switch PI OFF Lighting switch 1I ON OFF HEAD LAMP SW 2 Other than lighting switch 2ND OFF Lighting switch 2ND ON OFF Lighting switch 2ND ON ON PASSING SW Other than lighting switch PASS OFF Lighting switch PASS ON ON AUTO LIGHT SW Other than lighting switch AUTO OFF Front fog lamp switch OFF OFF Front fog lam	TIX WASHER SW	Front washer switch ON	ON
Front wiper is not in STOP position	ED WIDED INT	Other than front wiper switch INT	OFF
Front wiper is in STOP position	FR WIFER IIVI	Front wiper switch INT	ON
Front wiper is in STOP position	ED WIDED STOD	Front wiper is not in STOP position	OFF
TURN SIGNAL R Other than turn signal switch RH OFF TURN SIGNAL L Other than turn signal switch LH OFF TURN SIGNAL L Other than turn signal switch LH ON TAIL LAMP SW Other than lighting switch 1ST and 2ND OFF Lighting switch 1ST or 2ND ON ON HI BEAM SW Lighting switch 1ST or 2ND ON HEAD LAMP SW 1 Uther than lighting switch PI ON Lighting switch 2ND OFF Lighting switch 2ND ON HEAD LAMP SW 2 Uther than lighting switch PAS OFF Lighting switch 2ND ON PASSING SW Other than lighting switch PASS OFF Lighting switch PASS OFF Lighting switch AUTO OFF Lighting switch AUTO OFF Lighting switch AUTO ON Front fog lamp switch OFF OFF Front fog lamp switch ON ON DOOR SW-DR Driver door closed OFF Driver door closed OFF DOOR SW-RR Passenger door closed OFF </td <td>TR WIFER STOP</td> <td>Front wiper is in STOP position</td> <td>ON</td>	TR WIFER STOP	Front wiper is in STOP position	ON
TURN SIGNAL R Turn signal switch RH ON TURN SIGNAL L Other than turn signal switch LH OFF TURN SIGNAL L Other than lighting switch LH ON TAIL LAMP SW Other than lighting switch 1ST and 2ND OFF HI BEAM SW Lighting switch 1ST or 2ND ON HEAD LAMP SW 1 Uighting switch HI OFF HEAD LAMP SW 2 Other than lighting switch 2ND OFF Lighting switch 2ND ON ON HEAD LAMP SW 2 Uighting switch 2ND OFF Lighting switch 2ND ON ON PASSING SW Other than lighting switch PASS OFF Lighting switch PASS OFF Lighting switch PASS ON AUTO LIGHT SW Other than lighting switch AUTO OFF Lighting switch AUTO OFF Front fog lamp switch OFF OFF Front fog lamp switch OFF OFF Front fog lamp switch ON ON DOOR SW-DR Driver door closed OFF Driver door closed OFF DOOR SW-RR <td>INT VOLUME</td> <td>Wiper intermittent dial is in a dial position 1 - 7</td> <td>Wiper intermittent dial position</td>	INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
Turn signal switch RH	TUDNI SIGNAL D	Other than turn signal switch RH	OFF
TURN SIGNAL L Turm signal switch LH ON TAIL LAMP SW Other than lighting switch 1ST and 2ND OFF Lighting switch 1ST or 2ND ON ON HI BEAM SW Other than lighting switch HI OFF Lighting switch HI ON OFF HEAD LAMP SW 1 Other than lighting switch 2ND OFF Lighting switch 2ND ON ON HEAD LAMP SW 2 Other than lighting switch 2ND OFF Lighting switch 2ND ON ON PASSING SW Other than lighting switch PASS OFF Lighting switch PASS ON ON AUTO LIGHT SW Other than lighting switch AUTO OFF Lighting switch AUTO OFF ON FR FOG SW Front fog lamp switch OFF OFF Front fog lamp switch ON ON ON DOOR SW-DR Driver door closed OFF Driver door closed OFF OFF DOOR SW-AS Passenger door closed OFF Passenger door opened ON DOOR SW-RL <td>TORN SIGNAL IX</td> <td>Turn signal switch RH</td> <td>ON</td>	TORN SIGNAL IX	Turn signal switch RH	ON
Turn signal switch LH	TUDNI SIGNAL I	Other than turn signal switch LH	OFF
Lighting switch 1ST or 2ND	TORN SIGNAL L	Turn signal switch LH	ON
Lighting switch 1ST or 2ND	TAIL LAMP SW	Other than lighting switch 1ST and 2ND	OFF
Lighting switch HI	TAIL LAWF SW	Lighting switch 1ST or 2ND	ON
Lighting switch HI	HI BEAM SW	Other than lighting switch HI	OFF
Lighting switch 2ND	TII BEAIN SW	Lighting switch HI	ON
Lighting switch 2ND	HEAD LAMP SW/1	Other than lighting switch 2ND	OFF
HEAD LAMP SW 2 Lighting switch 2ND ON PASSING SW Other than lighting switch PASS OFF Lighting switch PASS ON AUTO LIGHT SW Other than lighting switch AUTO OFF Lighting switch AUTO ON FR FOG SW Front fog lamp switch OFF OFF Front fog lamp switch ON ON DOOR SW-DR Driver door closed OFF Driver door opened ON Passenger door closed OFF Passenger door opened ON DOOR SW-AS Rear door RH closed OFF DOOR SW-RR Rear door RH closed OFF DOOR SW-RL Rear door LH closed OFF Rear door LH closed OFF Rear door LH opened ON Other than power door lock switch LOCK OFF	HEAD LAWIF SW 1	Lighting switch 2ND	ON
Lighting switch 2ND	HEAD LAMP SW 2	Other than lighting switch 2ND	OFF
Lighting switch PASS	TILAD LAWI OW Z	Lighting switch 2ND	ON
Lighting switch PASS ON	DV SSING SW	Other than lighting switch PASS	OFF
AUTO LIGHT SW Lighting switch AUTO ON FR FOG SW Front fog lamp switch OFF OFF Front fog lamp switch ON ON DOOR SW-DR Driver door closed OFF DOOR SW-AS Passenger door closed OFF DOOR SW-RS Rear door RH closed OFF DOOR SW-RR Rear door RH closed OFF DOOR SW-RL Rear door LH closed OFF CDL LOCK SW Other than power door lock switch LOCK OFF	1 AGGING GW	Lighting switch PASS	ON
Lighting switch AUTO	ALITO LIGHT SW	Other than lighting switch AUTO	OFF
FR FOG SW Front fog lamp switch ON ON DOOR SW-DR Driver door closed OFF DOOR SW-AS Passenger door closed OFF Passenger door opened ON DOOR SW-RR Rear door RH closed OFF Rear door RH opened ON DOOR SW-RL Rear door LH closed OFF Rear door LH opened ON Other than power door lock switch LOCK OFF	AOTO LIOTTI SW	Lighting switch AUTO	ON
Front fog lamp switch ON	FR FOG SW	Front fog lamp switch OFF	OFF
DOOR SW-DR Driver door opened ON DOOR SW-AS Passenger door closed OFF Passenger door opened ON DOOR SW-RR Rear door RH closed OFF Rear door RH opened ON DOOR SW-RL Rear door LH closed OFF Rear door LH opened ON Other than power door lock switch LOCK OFF	1 K 1 00 5W	Front fog lamp switch ON	ON
Driver door opened ON	DOOR SW-DR	Driver door closed	OFF
DOOR SW-AS Passenger door opened ON DOOR SW-RR Rear door RH closed OFF Rear door RH opened ON DOOR SW-RL Rear door LH closed OFF Rear door LH opened ON Other than power door lock switch LOCK OFF	DOOK OW-DIK	Driver door opened	ON
Passenger door opened ON	DOOR SW-AS	Passenger door closed	OFF
DOOR SW-RR Rear door RH opened ON DOOR SW-RL Rear door LH closed OFF Rear door LH opened ON CDL LOCK SW Other than power door lock switch LOCK OFF	DOOK 244-42	Passenger door opened	ON
Rear door RH opened	DOOR SW-RR	Rear door RH closed	OFF
DOOR SW-RL Rear door LH opened ON Other than power door lock switch LOCK OFF		Rear door RH opened	ON
Rear door LH opened ON Other than power door lock switch LOCK OFF CDL LOCK SW	DOOR SW-PI	Rear door LH closed	OFF
CDL LOCK SW	DOOK OW-IXL	Rear door LH opened	ON
Power door lock switch LOCK ON	CDL LOCK SW	Other than power door lock switch LOCK	OFF
	ODE FOCK 200	Power door lock switch LOCK	ON

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

Monitor Item	Condition	Value/Status	^
CDL TINI OCK 6/M	Other than power door lock switch UNLOCK	OFF	A
CDL UNLOCK SW	Power door lock switch UNLOCK	ON	
KEN UNITRESIM	Other than driver door key cylinder LOCK position	OFF	В
RET CTL LK-SW	Driver door key cylinder LOCK position	ON	
KEN CAL TINI 6/1/	Other than driver door key cylinder UNLOCK position	OFF	
KET CTL UN-SW	Driver door key cylinder UNLOCK position	ON	С
HAZARD CW	When hazard switch is not pressed	OFF	
HAZARD SW	When hazard switch is pressed	ON	
REAR DEF SW	When rear window defogger switch is pressed	ON	
TD CANCEL OW	Trunk lid opener cancel switch OFF	OFF	
IR CANCEL SW	Trunk lid opener cancel switch ON	ON	Е
EY CYL LK-SW EY CYL UN-SW AZARD SW EAR DEF SW R CANCEL SW R/BD OPEN SW RNK/HAT MNTR KE-LOCK KE-UNLOCK KE-PANIC KE-PANIC KE-P/W OPEN KE-MODE CHG PTICAL SENSOR EQ SW-DR EQ SW-AS EQ SW-BD/TR USH SW GN RLY2-F/B	Trunk lid opener switch OFF	OFF	
I R/BD OPEN SW	While the trunk lid opener switch is turned ON	ON	
CDL UNLOCK SW CEY CYL LK-SW CEY CYL UN-SW CEAR DEF SW CR CANCEL SW CR/BD OPEN SW CRNK/HAT MNTR CRKE-LOCK CRKE-UNLOCK CRKE-PANIC	Trunk lid closed	OFF	— г
EDL UNLOCK SW EEY CYL LK-SW EEY CYL UN-SW IAZARD SW EEAR DEF SW ER CANCEL SW ER/BD OPEN SW	Trunk lid opened	ON	
DIVE I OOK	When LOCK button of Intelligent Key is not pressed	OFF	G
RKE-LOCK	When LOCK button of Intelligent Key is pressed	ON	
21/5 1 1 1 2 2 1 /	When UNLOCK button of Intelligent Key is not pressed	OFF	_
KE-LOCK KE-UNLOCK KE-TR/BD KE-PANIC KE-P/W OPEN	When UNLOCK button of Intelligent Key is pressed	ON	— Н
R CANCEL SW R/BD OPEN SW RNK/HAT MNTR KE-LOCK KE-UNLOCK KE-TR/BD KE-PANIC KE-P/W OPEN KE-MODE CHG PTICAL SENSOR EQ SW-DR EQ SW-AS	When TRUNK OPEN button of Intelligent Key is not pressed	OFF	
	When TRUNK OPEN button of Intelligent Key is pressed	ON	
DICE DANIO	When PANIC button of Intelligent Key is not pressed	OFF	_
RKE-PANIC	When PANIC button of Intelligent Key is pressed	ON	
DIVE DAM ODEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF	J
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is pressed and held	ON	
DIVE MODE CHO	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF	PW
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON	
EY CYL LK-SW EY CYL UN-SW AZARD SW EAR DEF SW R CANCEL SW R/BD OPEN SW RNK/HAT MNTR KE-LOCK KE-UNLOCK KE-PANIC KE-PANIC KE-P/W OPEN KE-MODE CHG PTICAL SENSOR EQ SW-DR EQ SW-DR EQ SW-BD/TR USH SW GN RLY2-F/B	When outside of the vehicle is bright	Close to 5 V	
	When outside of the vehicle is dark	Close to 0 V	
Monitor Item CDL UNLOCK SW KEY CYL LK-SW KEY CYL UN-SW HAZARD SW REAR DEF SW TR CANCEL SW TR/BD OPEN SW TRNK/HAT MNTR RKE-LOCK RKE-UNLOCK RKE-PANIC RKE-PANIC RKE-PANIC RKE-PANIC RKE-POPEN RKE-MODE CHG OPTICAL SENSOR REQ SW-AS REQ SW-AS REQ SW-BD/TR PUSH SW IGN RLY2-F/B CLUTCH SW	When driver door request switch is not pressed	OFF	M
	When driver door request switch is pressed	ON	
EY CYL LK-SW EY CYL UN-SW AZARD SW EAR DEF SW R CANCEL SW R/BD OPEN SW RNK/HAT MNTR KE-LOCK KE-UNLOCK KE-PANIC KE-PANIC KE-P/W OPEN KE-MODE CHG PTICAL SENSOR EQ SW-DR EQ SW-AS EQ SW-BD/TR USH SW GN RLY2-F/B	When passenger door request switch is not pressed	OFF	
	When passenger door request switch is pressed	ON	- N
	When trunk request switch is not pressed	OFF	
REQ 5W-BD/TR	When trunk request switch is pressed	ON	0
EY CYL LK-SW EY CYL UN-SW EXAZARD SW EAR DEF SW R CANCEL SW R/BD OPEN SW RNK/HAT MNTR KE-LOCK KE-UNLOCK KE-PANIC KE-PANIC KE-P/W OPEN EQ SW-DR EQ SW-DR EQ SW-BD/TR JSH SW IN RLY2-F/B	When engine switch (push switch) is not pressed	OFF	
PUSH 3W	When engine switch (push switch) is pressed	ON	
ION DI VO E/D	Ignition switch OFF or ACC	OFF	P
IGN KLYZ-F/B	Ignition switch ON	ON	
4.00 DLV 5/D	Ignition switch OFF	OFF	
ACC RLY-F/B	Ignition switch ACC or ON	ON	
	When the clutch pedal is not depressed	OFF	
CLUTCH SW	When the clutch pedal is depressed	ON	

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Monitor Item	Condition	Value/Status
BRAKE SW 1	When the brake pedal is not depressed	ON
DRAKE SW I	When the brake pedal is depressed	OFF
DETE/CANCL SW	When selector lever is in P position	OFF
DETE/CANCL SW	When selector lever is in any position other than P	ON
OFT DAI/ALOW	When selector lever is in any position other than P or N	OFF
SFT PN/N SW	When selector lever is in P or N position	ON
LINII IZ CENI DD	Driver door UNLOCK status	OFF
UNLK SEN-DR	Driver door LOCK status	ON
DUOLI OW IDDM	When engine switch (push switch) is not pressed	OFF
PUSH SW-IPDM	When engine switch (push switch) is pressed	ON
10115114 5/5	Ignition switch OFF or ACC	OFF
IGN RLY1 F/B	Ignition switch ON	ON
	When selector lever is in P position	OFF
DETE SW -IPDM	When selector lever is in any position other than P	ON
	When selector lever is in any position other than P or N	OFF
SFT PN -IPDM	When selector lever is in P or N position	ON
	When selector lever is in any position other than P	OFF
SFT P-MET	When selector lever is in P position	ON
	When selector lever is in any position other than N	OFF
SFT N-MET	When selector lever is in N position	ON
	Engine stopped	STOP
ENGINE STATE	While the engine stalls	STALL
	At engine cranking	CRANK
	Engine running	RUN
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
	Driver door LOCK status	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
	Passenger door LOCK status	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
	Ignition switch ACC or ON	RESET
ID OK FLAG	Ignition switch OFF	SET
	When the engine start is prohibited	RESET
PRMT ENG STAT	When the engine start is permitted	SET
	When Intelligent Key is not inserted into key slot	OFF
KEY SW -SLOT	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Ke
	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET
CONFRM ID ALL	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE

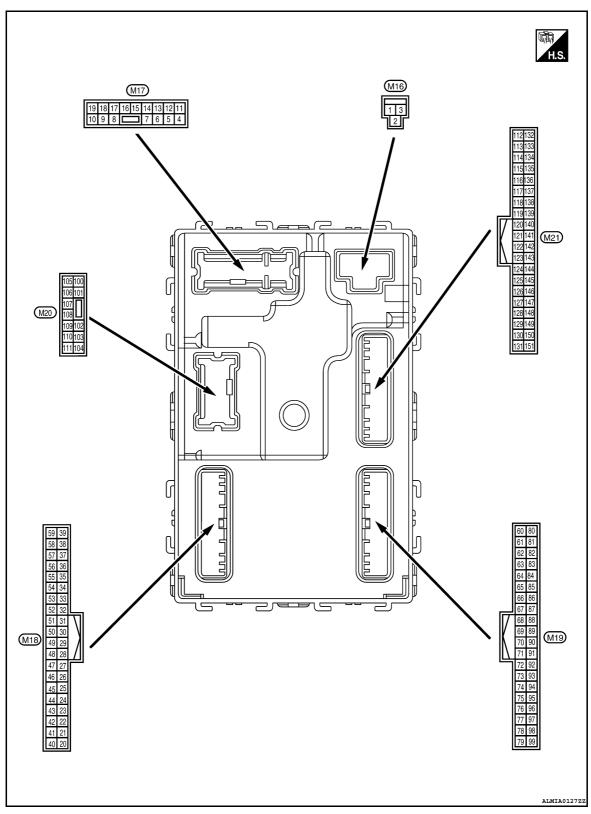
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[LH ONLY ANTI-PINCH-COUPE]

Monitor Item	Condition	Value/Status
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET
CONFINITID4	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET
COM INWINDS	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE
	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET
CONTINUID2	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET
OOM INWIDT	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE
DNFIRM ID3 DNFIRM ID3 DNFIRM ID2 DNFIRM ID1 P 4 P 3 P 2 P 1 R PRESS FL R PRESS FR R PRESS RR R PRESS RR R PRESS RL REGST FL1 REGST FR1 REGST RL1 REGST RL1	The ID of fourth key is not registered to BCM	YET
II 7	The ID of fourth key is registered to BCM	DONE
TD 2	The ID of third key is not registered to BCM	YET
1173	The ID of third key is registered to BCM	DONE
ΓP 2	The ID of second key is not registered to BCM	YET
	The ID of second key is registered to BCM	DONE
 ГР 1	The ID of first key is not registered to BCM	YET
IP1	The ID of first 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
P 1 IR PRESS FL IR PRESS FR IR PRESS RR	When ID of front LH tire transmitter is registered	DONE
D REGOTTET	When ID of front LH tire transmitter is not registered	YET
D REGST FR1	When ID of front RH tire transmitter is registered	DONE
	When ID of front RH tire transmitter is not registered	YET
D REGST RR1	When ID of rear RH tire transmitter is registered	DONE
D REGOT RICI	When ID of rear RH tire transmitter is not registered	YET
D DECST PL1	When ID of rear LH tire transmitter is registered	DONE
וט מבטטו גרו	When ID of rear LH tire transmitter is not registered	YET
	Tire pressure indicator OFF	OFF
WAKINING LAMP	Tire pressure indicator ON	ON
DUZZED	Tire pressure warning alarm is not sounding	OFF
BUZZEK	Tire pressure warning alarm is sounding	ON

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Terminal Layout



Physical Values

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	inal No.	Description				Value								
(Wire	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)								
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage								
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OF	F	Battery voltage								
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage								
4	0	Interior room lamp	Out-ut	After passing the ir er operation time	nterior room lamp battery sav-	ov								
(P/W)	Ground	power supply	Output	Any other time after lamp battery saver	er passing the interior room roperation time	Battery voltage								
5	Cravind	Front door RH UN-	Outenit	Front door DII	UNLOCK (actuator is activated)	Battery voltage								
(G/Y)	Ground	LOCK	Output	Front door RH	Other than UNLOCK (actuator is not activated)	ov								
7	0	Otan Inna	0	Otan Iaman	ON	0V								
(R/W)	Ground	Step lamp	Output	Step lamp OFF		Battery voltage								
8	0	d All doors LOCK	All Level COV	All Issue LOOK	All de see LOOK	All de ere I 00K	All doors I OCK	All doors I OOK	All deers LOCK	All da 1 001/	0	Output All doors	LOCK (actuator is activated)	Battery voltage
(V)	(V) Ground		Output	All doors	Other than LOCK (actuator is not activated)	OV								
9	9 F	Front door LH UN- LOCK	Outenit	Front door III	UNLOCK (actuator is activated)	Battery voltage								
(G)	Ground		LOCK	Output	Front door LH	Other than UNLOCK (actuator is not activated)	oV							
10 ¹	Ground	Rear door RH and rear door LH UN-	Output	Rear door RH	UNLOCK (actuator is activated)	Battery voltage								
(G/Y)	Giodila	LOCK	Output	and rear door LH	Other than UNLOCK (actuator is not activated)	0V								
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage								
13 (B)	Ground	Ground	_	Ignition switch ON		OV								
					OFF	oV								
14 ⁶ (R/Y)	Ground	Engine switch (push switch) illumination ground	switch) illumination Input	h) illumination Input Tail lamp	Tail lamp	ON	When the illumination brightening/dimming level is in the neutral position (V) 10 2 ms JSNIA0010GB							

	inal No.	Description				Value		
(+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)		
	()		•		OFF	OV		
14 ¹ (O/W)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 0 2 ms JSNIA0010GB		
15	Ground	ACC indicator lamp	Output Ignition switch	OFF	Battery voltage			
(Y/L)	Ground	Acc indicator lamp	Output	igilition switch	ACC or ON	OV		
					Turn signal switch OFF	0V		
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V		
							Turn signal switch OFF	0V
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 1 1 s PKID0926E 6.5 V		
19		Room lamp timer		Interior room	OFF	Battery voltage		
(Y)	Ground	control	Output	lamp	ON	0V		
21	Ground	Optical sensor signal	Input	Ignition switch	When outside of the vehi- cle is bright	Close to 5V		
(P/B)	Giouna	Optical serisor signal	трис	ON	When outside of the vehi- cle is dark	Close to 0V		
22	Ground	Clutch interlock	Input	Clutch interlock	OFF (clutch pedal is not depressed)	0V		
(R/Y)	Oround	switch	три	switch	ON (clutch pedal is depressed)	Battery voltage		
24 (R/W)	Ground	Stop lamp switch 1	Input		_	Battery voltage		
26	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	OV		
(O/L)	Cround	Stop turnp Switch 2	прис	Ctop ramp switch	ON (brake pedal is de- pressed)	Battery voltage		

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Terminal No. (Wire color)			O an distant		Value												
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)											
27 (G/W)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	(V) 15 10 5 0											
				LINII OOK AAA	JPMIA0011GB 11.8V												
				Mhan Intallinant K	UNLOCK status	0V											
29 (Y)	Ground	Key slot switch	Input		Ley is inserted into key slot ey is not inserted into key slot	Battery voltage 0V											
				when intelligent K	OFF	0											
30 (V/Y)	Ground	ACC feedback signal	Input	Ignition switch	ACC or ON	Battery voltage											
		Daniel I		Danni in I	OFF	0V											
31 (G)	Ground	Rear window defog- ger feedback signal	Input	Rear window de- fogger switch	ON	Battery voltage											
ν - /		<u> </u>		00	OIV.	Dattery voltage											
32 (R/B) Ground F	Front door RH switch	Front door RH switch	Front door RH switch	Front door RH switch	Front door RH switch	Front door RH switch	Front door RH switch	Front door RH switch	Front door RH switch	Front door RH switch	Front door RH switch	Front door RH switch	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	(V) 15 10 5 0
				ON (when front door RH opens)	11.8 V												
33	Ground	Compressor ON sig-	Input	A/C switch	OFF	9.0 - 12.0V											
(SB)		nal			ON	OV											
34 ²	Ground	Front door lock as-	Input	Front door lock	OFF (neutral)	5V											
(L/R)	Giodila	sembly LH (key cylin- der switch) (unlock)	iriput	assembly LH (key cylinder switch)	ON (unlock)	OV											
36 ²				Door lock/unlock	Lock	Battery voltage											
(GR)	Ground	Lock switch signal	Input	switch	Unlock	0V											
37 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	(V) 15 10 5 0											
						JPMIA0012GB 1.1V											
					ON	0V											
38 (GR/	Ground	Rear window defog- ger ON signal	Input	Rear window de-	OFF	5V											
W)		ger On Signal		fogger switch	ON	0V											
39 ² (GR/	Ground	Unlock switch signal	Input	Door lock/unlock	Unlock	Battery voltage											
				switch	Lock	0V											

	inal No. e color)	Description		•	O an alitica a	Value								
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)								
40 ³ (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms 10.2V								
				Ignition switch OFI	F or ACC	0V								
41	_	Engine switch (push		Engine switch	ON	5.5V								
(W)	Ground	switch) illumination	Output	(push switch) illu- mination	OFF	0V								
42	Ground	LOCK indicator lamp	Output	LOCK indicator	ON	0V								
(R)	Ground	LOOK indicator lamp	Output	lamp	OFF	Battery voltage								
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V								
46	Ground	Receiver & sensor	Output	Ignition switch	OFF	0V								
(V/W)	Orouna	power supply output	Output	ignition owner	ACC or ON	5.0V								
47 (G/O)	Ground	Tire pressure receiver signal	Input/	Ignition switch	Standby state	(V) 6 4 2 0 ••• 0.2s								
(0,0)		ei Signal	Output	Output	Cuipui				Suput	Output	Culput	Juput ON	When receiving the signal from the transmitter	(V) 6 4 2 0 ••• 0.2s
48	Ground	Selector lever P/N	Input	Selector lever	P or N position	12.0V								
(R/G)		position signal			Except P and N positions	0V								
					ON	0V								
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	Blinking	(V) 15 10 5 0 1 s								
						11.3V								
					OFF	Battery voltage								

< ECU DIAGNOSIS >

	inal No.	Description				Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
50 (LG/ B)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Lighting switch 1ST Lighting switch high-beam Lighting switch 2ND Turn signal switch RH All switch OFF (Wiper intermittent dial 4)	OV (V) 15 10 5 0 2 ms JPMIA0031GB 10.7V
51 (L/W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Front wiper switch HI (Wiper intermittent dial 4) Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0032GB
52 (G/B)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4) Front washer switch ON (Wiper intermittent dial 4) Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	OV (V) 15 10 5 0 2 ms JPMIA0033GB 10.7V
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Front wiper switch INT Front wiper switch LO Lighting switch AUTO	0V (V) 15 10 2 ms JPMIA0034GB 10.7V
54 (G/Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Front fog lamp switch ON Lighting switch 2ND Lighting switch flash-to- pass Turn signal switch LH	0V (V) 15 10 2 ms JPMIA0035GB 10.7V
55 (BR/ W)	Ground	Front blower monitor	Input	Front blower mo- tor switch	ON OFF	Battery voltage 0V

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	inal No. e color)	Description	T		Condition	Value				
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)				
56 ²		Front door lock as-		Front door lock	OFF (neutral)	5V				
(L/B)	Ground	sembly LH (key cylinder switch) (lock)	Input	assembly LH (key cylinder switch)	ON (lock)	0V				
57 (W)	Ground	Tire pressure warning check switch	Input		_	5V				
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	(V) 15 10 5 0 10 ms JPMIA0011GB				
				Rear window de-	ON (Control to the ODEN)	11.8V				
-					ON (front door LH OPEN)	0V				
59 (G/R)	Ground	Rear window defog- ger relay	Output	Rear window de- fogger	Active	Battery voltage				
(0/11)		ger relay		loggei	Not activated	0V				
60	Ground					0.4-4	Output	Output Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 1
(B/R)		na 2 (-)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB				
61	Ground	Center console an-	Qutout	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB				
(W/R)	Glound	Ground Center console antenna 2 (+) Output	Output OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB					

< ECU DIAGNOSIS >

	inal No.	Description				Value	٨
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
624		Front outside handle		When the front	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	ВС
62 (B/Y)	Ground	RH antenna (-)	Output	door RH request switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMRIA0063GB	E
63 ⁴	Ground	Front outside handle	Front outside handle RH antenna (+) Output door sw ed	When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	G H
(LG)	Glodina	Front outside handle RH antenna (+)		switch is operated with ignition switch OFF	d with ignition	(V) 15 10 5 11 1 s JMRIA0063GB	PW0
64 ⁴	64 ⁴ (V) Ground	Front outside handle LH antenna (-)	t outside bandle	When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	M
			switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	O P	

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Terminal No. Desc (Wire color)		Description			O litt	Value	
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)	
65 ⁴	Ground	Front outside handle		When the front door LH request switch is operat- ed with ignition switch OFF		When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(P)	Clound	LH antenna (+)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	
68 (G/O)	Ground	NATS antenna amp (built in key slot)	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.	
69 (O)	Ground	NATS antenna amp (built in key slot)	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.	
70 (R/B)	Ground	Ignition relay-2 control	Output	Ignition switch	OFF or ACC	0V Battery voltage	
71	Ground	Remote keyless entry	Input/	During waiting		(V) 15 10 1 ms 1 ms	
(L/O)	Ciounu	receiver signal	Output	When operating e	ther button on Intelligent Key	(V) 15 10 5 1 ms JMKIA0065GB	

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[LH ONLY ANTI-PINCH-COUPE]

	Condition	Value (Approx.)	Α
	All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB	С
Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB	E
			G
	Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 5 2 ms JPMIA0040GB	Н
		with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6	Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7

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	inal No.	Description				Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4V
76 (R/G)	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch high-beam (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB
(-2-5)					Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 2 ms JPMIA0040GB
78 (P)	Ground	CAN-L	Input/ Output		_	_
79 (L)	Ground	CAN-H	Input/ Output		-	_
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumina- tion	OFF	0V (V) 15 10 5 1
81 (LG)	Ground	ON indicator lamp	Output	Ignition switch	ON OFF or ACC ON	Battery voltage 0V Battery voltage

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[LH ONLY ANTI-PINCH-COUPE]

	inal No. e color)	Description				Value
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)
83	Ground	ACC relay control	Output	Ignition switch	OFF	0V
(L)	Ground	ACC relay control	Output	igintion switch	ACC or ON	Battery voltage
84 (Y/R)	Ground	CVT shift selector	Output		_	Battery voltage
87	Ground	Selector lever P posi-	Input	Selector lever	P position	OV
(G/B)	Ground	tion switch	input	Selector level	Any position other than P	Battery voltage
					ON (pressed)	OV
88 ⁴ (P/L)	Ground	Front door RH request switch	Input	Front door RH request switch	OFF (not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
					ON (pressed)	0V
89 ⁴ (B/W)	Ground	Front door LH request switch	Input	Input Front door LH request switch	OFF (not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
90	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	OV
(Y)	Giodila	lay control	Juipui	ignition switch	ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage

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	Terminal No. Description (Wire color)			On an elitrican		Value						
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)						
					All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4V						
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB						
95 (R/W)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	switch (Wiper intermit-	switch (Wiper intermit-	switch (Wiper intermit-	switch (Wiper intermit-	switch (Wiper intermit-	switch (Wiper intermit-	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB						
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3V						

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

Terminal No. (Wire color)		Description			Condition	Value	
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041gB	
96	Ground	Combination switch INPUT 4	switch Input	out Combination switch	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB	
(P/B)					Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB	
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB	

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	inal No.	Description				Value	
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF	(V) 15 10 2 ms JPMIA0041GB 1.4V	
					Lighting switch flash-to- pass	(V) 15 10 5 0 2 ms JPMIA0037GB	
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB	
					Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3V	
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB	
					Pressed	0 V	
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Not pressed	(V) 15 10 5 10 ms JPMIA0012GB 1.1V	

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

Terminal No. (Wire color)		Description			Condition	Value		
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)		
103	Ground	Trunk lid opening	Output	Trunk lid	Open (trunk lid opener actuator is activated)	Battery voltage		
(V)	Ground	Trunk ild Opening	Output	Trunk iiu	Close (trunk lid opener actuator is not activated)	OV		
110 (V/W)	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0V		
					OFF	(V) 15 10 5		
114	O-round	Rear parcel shelf an-	Outrack	lenition quiteb		When Intelligent Key is in the passenger compartment gnition switch	JMKIA0062GB	
114 (B) Grour	Ground	tenna 1 (-)		Output OFF		When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0	
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	F	
115 (W)	Ground	Rear parcel shelf antenna 1 (+)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s		

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< ECU DIAGNOSIS >

Terminal No. Description (Wire color)		Condition		Value		
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)
118 ⁴	Canada	Rear bumper anten-	Outout	When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(L/O)	Ground	na (-)	Output	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
119 ⁴ (BR/	Ground	Rear bumper anten-	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
W)	Ground	na (+)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
127 (BR/	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	Battery voltage
W)	Ground	E/R) control	Output	igilillori switch	ON	0V
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	(V) 15 10 5 0 10 ms 11.8V
					ON (trunk is open)	0V

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description				Value	
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	
				Ignition switch OFF (M/T vehi-	When the clutch pedal is depressed	Battery voltage	
				cle)	When the clutch pedal is not depressed	ov	
132 (R)	Ground	Starter motor relay control	Output	Ignition switch ON (other than M/	When selector lever is in P or N position and the brake is depressed	Battery voltage	
				T vehicle)	When selector lever is in P or N position and the brake is not depressed	ov	
140	Cravinal	Engine switch (push	lanut	Engine switch	Pressed	0V	
(BR)	Ground	switch)	Input	(push switch)	Not pressed	Battery voltage	
					ON (pressed)	0V	
141 (G/R)	Ground	Trunk request switch	vitch Input Trunk request switch		OFF (not pressed)	(V) 15 10 5 0 10 ms 10 ms JPMIA0016GB	
144 ⁴	Ground	Intelligent Key warn-	Output	Request switch	Sounding	0V	
(GR)	Orouna	ing buzzer	Output	buzzer	Not sounding	Battery voltage	
144 ⁵	Ground	Outside warning	Output	Outside warning	Sounding	0V	
(GR)		buzzer	-	buzzer	Not sounding	Battery voltage	
147 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed Not pressed	0V Battery voltage	
148 ¹ (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	(V) 15 10 5 0 JPMIA0011GB 11.8V	
					ON (when rear door RH opens)	ov	
149 ¹ (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	(V) 15 10 5 0 10 ms	
				_	ON (when rear door LH opens)	11.8V	

^{1:} Sedan

^{2:} With LH front window anti-pinch

< ECU DIAGNOSIS >

- 3: With LH and RH front window anti-pinch
- 4: With Intelligent Key
- 5: Without Intelligent Key
- 6: Coupe

Fail Safe

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 has become consistent • Starter control relay signal • Starter relay status signal
B2562: LO VOLTAGE	Inhibit engine cranking	100 ms after the power supply voltage increases to more than 8.8 V
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is 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
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
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: OFF (Battery voltage)

DTC Inspection Priority Chart

INFOID:0000000005783549

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)

[LH ONLY ANTI-PINCH-COUPE]

Priority	DTC	
	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY	
3	B2192: ID DISCORD BCM-ECM	
Ü	B2193: CHAIN OF BCM-ECM	
	B2195: ANTI SCANNING	
	B2553: IGNITION RELAY	
	B2555: STOP LAMP	
	B2556: PUSH-BTN IGN SW BOSSE AND TO BE	
	B2557: VEHICLE SPEED B2560: STARTER CONT RELAY	
	B2500: STARTER CONTINELAY B2601: SHIFT POSITION	
	B2602: SHIFT POSITION	
	B2603: SHIFT POSI STATUS	
	• B2604: PNP SW	
	• B2605: PNP SW	
	B2608: STARTER RELAY	
_	B260A: IGNITION RELAY	
4	B260F: ENG STATE SIG LOST B2614 AGG PELAY GIPG B2614 AGG PE	
	B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC	
	B2616: IGN RELAY CIRC	
	B2617: STARTER RELAY CIRC	
	• B2618: BCM	
	B261A: PUSH-BTN IGN SW	
	B261E: VEHICLE TYPE	
	B26E1: ENG STATE NO RECIV B26E3: GULTANA GUA B26E4: ENG STATE NO RECIV B26E5: GULTANA GUA B26E5: GUA B26E5: GULTANA GUA B26E5: GUA B26	
	B26E8: CLUTCH SW B26EA: KEY REGISTRATION	
	C1729: VHCL SPEED SIG ERR	
	U0415: VEHICLE SPEED SIG	
	C1704: LOW PRESSURE FL	
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR C1707: LOW PRESSURE RI	
	C1707: LOW PRESSURE RL C4709: INO DATA FI	
	C1708: [NO DATA] FL C1709: [NO DATA] FR	
	• C1710: [NO DATA] RR	
	• C1711: [NO DATA] RL	
	C1712: [CHECKSUM ERR] FL	
	C1713: [CHECKSUM ERR] FR	
	C1714: [CHECKSUM ERR] RR	
E	C1715: [CHECKSUM ERR] RL C4746: [RRESSDATA ERR] EL	
5	C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR	
	C1718: [PRESSDATA ERR] RR	
	C1719: [PRESSDATA ERR] RL	
	C1720: [CODE ERR] FL	
	• C1721: [CODE ERR] FR	
	C1722: [CODE ERR] RR	
	C1723: [CODE ERR] RL C4734: [RATT \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] FR	
	C1725: [BATT VOLT LOW] FR C1726: [BATT VOLT LOW] RR	
	C1720: [BATT VOLT LOW] RK C1727: [BATT VOLT LOW] RL	
	C1734: CONTROL UNIT	
	B2622: INSIDE ANTENNA	
6	B2623: INSIDE ANTENNA	

DTC Index

NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1
 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter
 remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch
 OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	BCS-38, "Description"
U1010: CONTROL UNIT (CAN)	_	_	_	BCS-39, "DTC Logic"
U0415: VEHICLE SPEED SIG	_	_	_	BCS-40, "Description"
B2190: NATS ANTENNA AMP	×	_	_	SEC-53, "Description" (Coupe) SEC-229, "Description" (Sedan with I- Key) SEC-399, "Description" (Sedan without I-Key)
B2191: DIFFERENCE OF KEY	×	_	_	SEC-56, "Description" (Coupe) SEC-232, "Description" (Sedan with I- Key) SEC-402, "Description" (Sedan without I-Key)
B2192: ID DISCORD BCM-ECM	×	_	_	SEC-57, "Description" (Coupe) SEC-233, "Description" (Sedan with I- Key) SEC-403, "Description" (Sedan without I-Key)
B2193: CHAIN OF BCM-ECM	×	_	_	SEC-58, "Description" (Coupe) SEC-234, "Description" (Sedan with I- Key) SEC-404, "Description" (Sedan without I-Key)
B2195: ANTI SCANNING	×	_	_	SEC-59, "Description" (Coupe) SEC-235, "Description" (Sedan with I-Key) SEC-405, "Description" (Sedan without I-Key)
B2553: IGNITION RELAY	_	_	_	PCS-61, "Description"
B2555: STOP LAMP	_	_	_	SEC-60, "Description" (Coupe) SEC-236, "Description" (Sedan with I- Key) SEC-406, "Description" (Sedan without I-Key)
B2556: PUSH-BTN IGN SW	_	×	_	SEC-63, "Description" (Coupe) SEC-239, "Description" (Sedan with I-Key) SEC-409, "Description" (Sedan without I-Key)
B2557: VEHICLE SPEED	_	×	_	SEC-65, "Description" (Coupe) SEC-241, "Description" (Sedan with I- Key) SEC-411, "Description" (Sedan without I-Key)

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	A
B2560: STARTER CONT RELAY	×	×	_	SEC-66, "Description" (Coupe) SEC-242, "Description" (Sedan with I-Key) SEC-412, "Description" (Sedan without I-Key)	E
B2562: LOW VOLTAGE	×	_	_	BCS-41, "DTC Logic"	(
B2601: SHIFT POSITION	_	×	_	SEC-67, "Description" (Coupe) SEC-243, "Description" (Sedan with I-Key) SEC-413, "Description" (Sedan without I-Key)	[
B2602: SHIFT POSITION	_	×	_	SEC-71, "Description" (Coupe) SEC-246, "Description" (Sedan with I-Key) SEC-416, "Description" (Sedan without I-Key)	E
B2603: SHIFT POSI STATUS	_	×	_	SEC-74, "Description" (Coupe) SEC-249, "Description" (Sedan with I-Key) SEC-419, "Description" (Sedan without I-Key)	(
B2604: PNP SW	_	×	_	SEC-77, "Description" (Coupe) SEC-252, "Description" (Sedan with I-Key) SEC-422, "Description" (Sedan without I-Key)	ŀ
B2605: PNP SW	_	×	_	SEC-79, "Description" (Coupe) SEC-254, "Description" (Sedan with I-Key) SEC-424, "Description" (Sedan without I-Key)	,
B2608: STARTER RELAY	×	×	_	SEC-81, "Description" (Coupe) SEC-256, "Description" (Sedan with I-Key) SEC-426, "Description" (Sedan without I-Key)	P
B260A: IGNITION RELAY	×	×	_	PCS-63, "Description"	
B260F: ENG STATE SIG LOST	×	×	_	SEC-83, "Description" (Coupe) SEC-258, "Description" (Sedan with I-Key) SEC-428, "Description" (Sedan without I-Key)	N
B2614: ACC RELAY CIRC	_	×	_	PCS-66, "Description"	1
B2615: BLOWER RELAY CIRC	_	×	_	PCS-69, "Description"	
B2616: IGN RELAY CIRC	_	×	_	PCS-72, "Description"	(
B2617: STARTER RELAY CIRC	×	×	_	SEC-87, "Description" (Coupe) SEC-262, "Description" (Sedan with I-Key) SEC-432, "Description" (Sedan without I-Key)	F
B2618: BCM	×	×	_	PCS-75, "Description"	
B261A: PUSH-BTN IGN SW	_	×	_	SEC-90, "Description" (Coupe) SEC-265, "Description" (Sedan with I-Key) SEC-435, "Description" (Sedan without I-Key)	

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CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	_	SEC-89, "Description" (Coupe) SEC-264, "Description" (Sedan with I-Key) SEC-434, "Description" (Sedan without I-Key)
B2622: INSIDE ANTENNA	_	_	_	DLK-60, "Description" (Coupe) DLK-283, "Description" (Sedan with I-Key) DLK-484, "Description" (Sedan without I-Key)
B2623: INSIDE ANTENNA	_	_	_	DLK-63, "Description" (Coupe) DLK-286, "Description" (Sedan with I-Key) DLK-487, "Description" (Sedan without I-Key)
B26E1: ENG STATE NO RES	×	×	_	SEC-92, "Description" (Coupe) SEC-267, "Description" (Sedan with I-Key) SEC-437, "Description" (Sedan without I-Key)
B26E8: CLUTCH SW	×	×	_	SEC-84, "Description" (Coupe) SEC-259, "Description" (Sedan with I-Key) SEC-429, "Description" (Sedan without I-Key)
B26EA: KEY REGISTRATION	×	× (Turn ON for 15 seconds)	_	SEC-86, "Description" (Coupe) SEC-261, "Description" (Sedan with I- Key) SEC-431, "Description" (Sedan without I-Key)
C1704: LOW PRESSURE FL	_	_	×	
C1705: LOW PRESSURE FR	_	_	×	WT-44, "Self-Diagnosis (With CON-
C1706: LOW PRESSURE RR	_	_	×	SULT-III)"
C1707: LOW PRESSURE RL	_	_	×	
C1708: [NO DATA] FL	_	_	×	
C1709: [NO DATA] FR	_	_	×	MT 44 IID a aniatia ul
C1710: [NO DATA] RR	_	_	×	WT-14, "Description"
C1711: [NO DATA] RL	_	_	×	
C1712: [CHECKSUM ERR] FL	_	_	×	
C1713: [CHECKSUM ERR] FR	_	_	×	WT-16, "Description"
C1714: [CHECKSUM ERR] RR	_	_	×	wi-ro, Description
C1715: [CHECKSUM ERR] RL	_	_	×	
C1716: [PRESSDATA ERR] FL	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	×	WT-18, "Description"
C1718: [PRESSDATA ERR] RR	_	_	×	W1-10, Description
C1719: [PRESSDATA ERR] RL	_	_	×	

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	
C1720: [CODE ERR] FL	_	_	×		
C1721: [CODE ERR] FR	_	_	×		
C1722: [CODE ERR] RR	_	_	×		
C1723: [CODE ERR] RL	_	_	×	WT-16, "Description"	
C1724: [BATT VOLT LOW] FL	_	_	×	W1-10, Description	
C1725: [BATT VOLT LOW] FR	_	_	×		
C1726: [BATT VOLT LOW] RR	_	_	×		
C1727: [BATT VOLT LOW] RL	_	_	×		
C1729: VHCL SPEED SIG ERR	_	_	×	WT-19, "Description"	
C1734: CONTROL UNIT	_	_	×	WT-20, "Description"	

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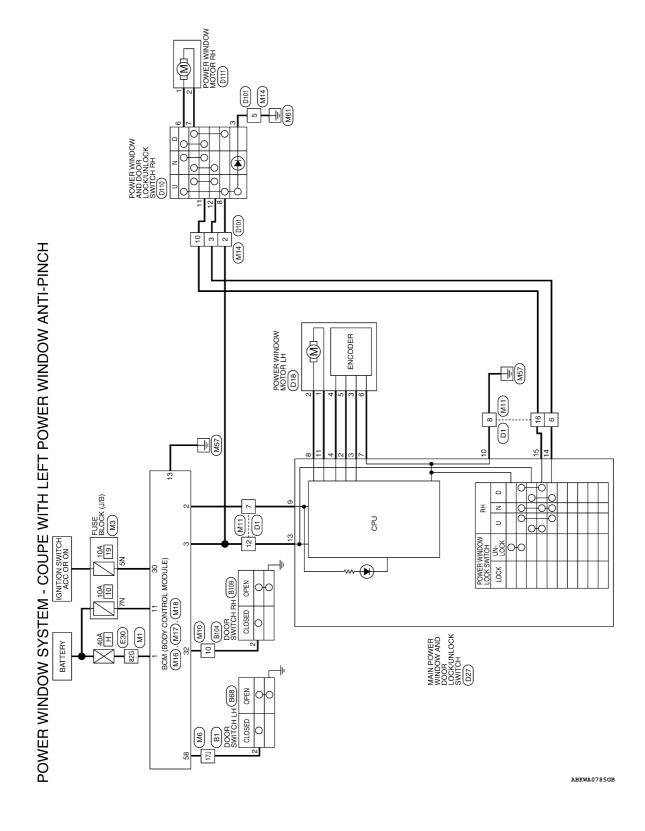
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WIRING DIAGRAM

POWER WINDOW SYSTEM - WITH LEFT POWER WINDOW ANTI-PINCH

Wiring Diagram INFOID:0000000005434218



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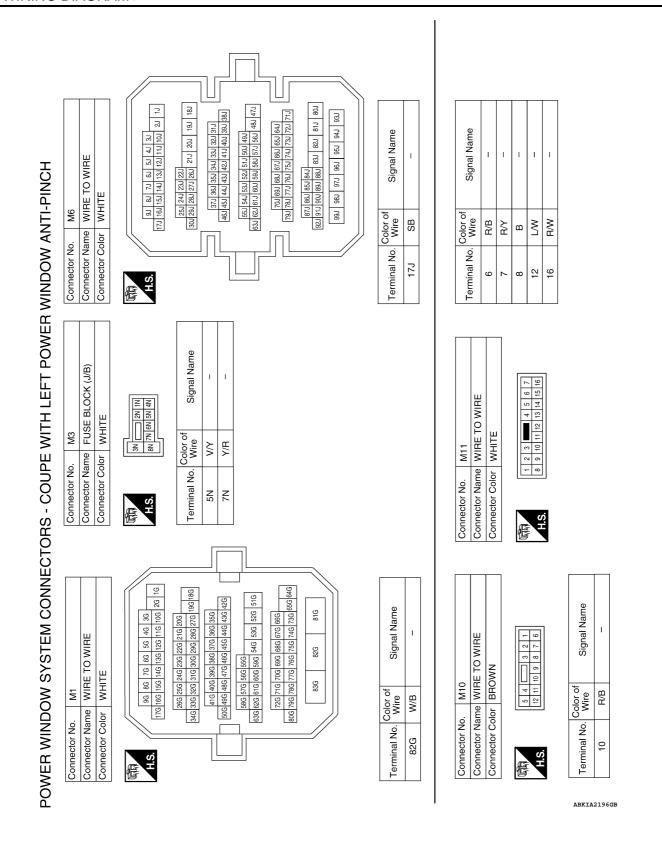
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PWC-65 2010 Altima Revision: September 2009

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Connector No. M17 Connector Name BCM (BODY CONTROL MODULE) Connector Color WHITE 4 5 6 7	Terminal No. Wire Signal Name 11 Y/R BAT_BCM_FUSE 13 B GND1	Terminal No. Wire Signal Name 82G LG -
Connector No. M16 Connector Name BCM (BODY CONTROL MODULE) Connector Color BLACK	Terminal No. Color of Signal Name 1 W/B BAT POWER F/L 2 R/Y P/W_POWER_SUPPLY_POWER_SUPPLY_POWER_SUPPLY_RAPPAGE SUPPLY_RAPPAGE SUPPLY_RAPPAG	Connector No. E30 Connector Name WIRE TO WIRE Connector Color WHITE Connector Color WHITE Connector Color WHITE 1G 26 106 116 126 136 146 156 166 176 20 210 226 226 226 246 256 256 188 198 276 286 276 286 376 386 386 406 16 226 436 446 456 466 476 486 486 506 516 526 536 576 586 576 586 576 586 516 526 536 576 576 776 786 796 800
Connector No. M14 Connector Name WIRE TO WIRE Connector Color WHITE T 2	Terminal No. Wire Signal Name 2 L/W	Connector No. M18 Connector Name BCM (BODY CONTROL MODULE) Connector Color GREEN Connector Color GREEN

PWC-66 Revision: September 2009 2010 Altima

POWER WINDOW SYSTEM - WITH LEFT POWER WINDOW ANTI-PINCH < WIRING DIAGRAM > [LH ONLY ANTI-PINCH-COUPE]

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Connector No. B68 Connector Name DOOR SWITCH LH Connector Color WHITE Laminal No. Wire Signal Name 2 SB 2 SB	Connector No. D1 Connector Name WIRE TO WIRE Connector Color WHITE The state of
Terminal No. Wire Signal Name 17J SB –	Connector No. B109 Connector Name DOOR SWITCH RH Connector Color WHITE Terminal No. Wire Signal Name 2 GR -
Connector Name WIRE TO WIRE Connector Color WHITE Connector Color WHITE Lu 2u 100 1110 120 130 140 150 181 181 181 171 171 172 172 172 172 172 172 172 17	Connector No. B104 Connector Name WIRE TO WIRE Connector Color BROWN Liz 3 m 4 5 6 7 8 9 10 11 12 Terminal No. Wire 10 GR

Revision: September 2009 PWC-67 2010 Altima

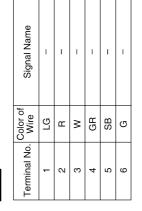
POWER WINDOW SYSTEM - WITH LEFT POWER WINDOW ANTI-PINCH [LH ONLY ANTI-PINCH-COUPE] < WIRING DIAGRAM >

Signal Name	ENCODER SIG1	ENCODER SIG2	ENCODER POWER	ENCODER GND	DR UP	BAT	GND	DR DOWN	IGN	AS UP	AS DOWN
Color of Wire	SB	8	GR	ŋ	æ	8	В	LG	>	BR	Γ
Terminal No.	2	က	4	7	8	6	10	=	13	14	15

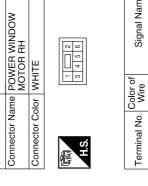
Connector No.	D27
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK Connector Name SWITCH (COUPE WITH LEFT POWWER WINDOW ANTI-PINCH SYSTEM)
Connector Color WHITE	WHITE



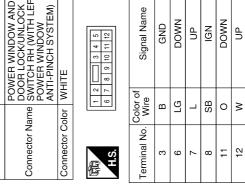
	DOW		
D18	POWER WIN MOTOR LH	WHITE	
Connector No.	Connector Name POWER WINDOW MOTOR LH	Connector Color WHITE	



Connector No.	D111
Connector Name	Connector Name POWER WINDOW MOTOR BH
Connector Color WHITE	WHITE



D110	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT POWER WINDOW ANTI-PINCH SYSTEM)	VHITE	
Connector No.	Connector Name S	Connector Color WHITE	

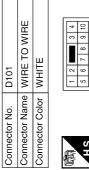


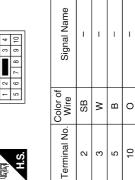
Signal Name

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PRECAUTIONS

< PRECAUTION >

[LH ONLY ANTI-PINCH-COUPE]

PRECAUTION

PRECAUTIONS

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 SR and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

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NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH [LH ONLY ANTI-PINCH-COUPE]

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY **SWITCH**

Diagnosis Procedure

INFOID:0000000005434229

$oldsymbol{1}$. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to BCS-42, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. Check main power window and door lock/unlock switch power supply and **GROUND CIRCUIT**

Check main power window and door lock/unlock switch power supply and ground circuit. Refer to PWC-19, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

3. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Check main power window and door lock/unlock switch.

Refer to PWC-19, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

1. CHECK POWER WINDOW MOTOR LH

Check power window motor LH.

Refer to PWC-24, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434231

1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Check power window and door lock/unlock switch RH.

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

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK FRONT POWER WINDOW MOTOR RH CIRCUIT

Check power window motor RH circuit.

Refer to PWC-26, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE) [LH ONLY ANTI-PINCH-COUPE]

< SYMPTOM DIAGNOSIS >

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE)

Diagnosis Procedure INFOID:0000000005434232

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-21, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK DOOR WINDOW SLIDING PART

- A foreign material adheres to window glass or glass run rubber.
- · Glass run rubber wear or deformation.
- Sash is tilted too much or not enough.

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

3. CHECK ENCODER CIRCUIT

Check encoder circuit.

Refer to PWC-19, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMAL-LY (DRIVER SIDE)

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY (DRIVER SIDE)

Diagnosis Procedure

INFOID:0000000005434233

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-21, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK ENCODER

Check encoder.

Refer to PWC-19, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

Diagnosis Procedure

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1. CHECK DOOR SWITCH

Check door switch.

Refer to PWC-31, "Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-COUPE]

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000005434235

1.REPLACE MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Replace main power window and door lock/unlock switch.

Refer to <u>PWC-78</u>, "Removal and Installation". After that, <u>PWC-21</u>, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

PRE-INSPECTION FOR DIAGNOSTIC

< ON-VEHICLE MAINTENANCE >

[LH ONLY ANTI-PINCH-COUPE]

ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection INFOID:0000000005434236 В

BASIC INSPECTION

1. INSPECTION START

- Check the service history.
- Check the following parts.
- Fuse/circuit breaker blown.
- Poor connection, open or short circuit of harness connector.
- Battery voltage.

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace the malfunctioning parts.

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ON-VEHICLE REPAIR

POWER WINDOW MAIN SWITCH

Removal and Installation

INFOID:0000000005789697

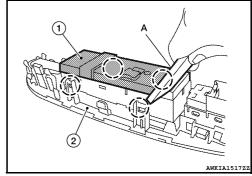
REMOVAL

- 1. Remove the power window main switch finisher (2) from the door finisher, refer to INT-11, "Exploded View".
- 2. Release the four tabs (two on each side) with a suitable tool (A), then separate the power window main switch (1) from the switch finisher (2).

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CAUTION:

Do not fold the pawl of switch finisher.



INSTALLATION

Installation is in the reverse order of removal.

FRONT POWER WINDOW SWITCH

Removal and Installation

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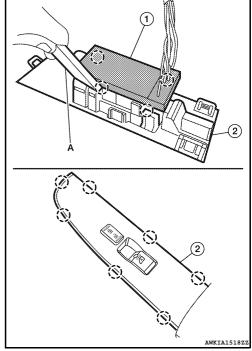
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REMOVAL

- 1. Remove the front power window switch finisher (2) from the front door finisher RH. Refer to INT-11, <a href="IExploded View".
- 2. Release the four tabs (two on each side) with a suitable tool (A), then separate the front power window switch (1) from the switch finisher (2).

(): Pawl CAUTION:

Do not fold the pawl of switch finisher.



INSTALLATION

Installation is in the reverse order of removal.

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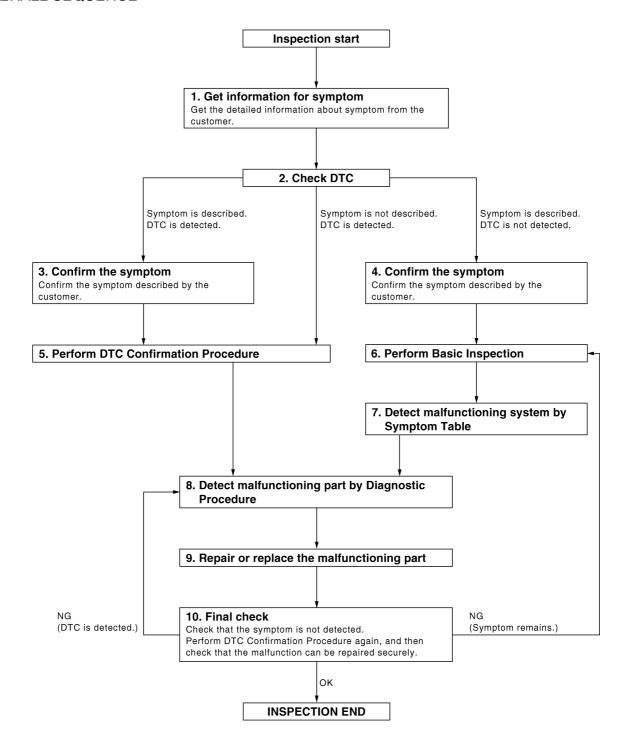
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

OVERALL SEQUENCE



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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[LH ONLY ANTI-PINCH-SEDAN]

1. GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2

2. CHECK DTC

- 1. Check DTC.
- 2. Perform the following procedure if DTC is displayed.
- Record DTC and freeze frame data (Print them out with CONSULT-III.)
- 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>>GO TO 3

Symptom is described, DTC is not displayed>>GO TO 4

Symptom is not described, DTC is displayed>>GO TO 5

3. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5

4. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6

PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again. At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time. If two or more DTCs are detected, refer to BCS-69, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual. This
 simplified check procedure is an effective alternative though DTC cannot be detected during this check.
 If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Confirmation Procedure.

Is DTC detected?

YES >> GO TO 8

NO >> Refer to GI-41, "Intermittent Incident".

6. PERFORM BASIC INSPECTION

Perform PWC-80, "Work Flow".

Inspection End>>GO TO 7

7. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

>> GO TO 8

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[LH ONLY ANTI-PINCH-SEDAN]

8. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

The Diagnostic Procedure described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

Is malfunctioning part detected?

YES >> GO TO 9

NO >> Check voltage of related BCM terminals using CONSULT-III.

9. REPAIR OR REPLACE THE MALFUNCTIONING PART

- 1. Repair or replace the malfunctioning part.
- Reconnect parts or connectors disconnected during Diagnostic Procedure again after repair and replacement.
- 3. Check DTC. If DTC is displayed, erase it.

>> GO TO 10

10. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.

When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8

YES (Symptom remains)>>GO TO 6

NO >> Inspection End.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH ONLY ANTI-PINCH-SEDAN]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description INFOID:0000000005434239

Initial setting is necessary when battery terminal is disconnected.

CAUTION:

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

- Auto-up operation
- Anti-pinch function
- Retained power operation

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement INFOID:0000000005434240

INITIALIZATION PROCEDURE

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

CHECK ANTI-PINCH FUNCTION

- 1. 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 or 2 seconds 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.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-115, "Fail Safe".
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- **Anti-pinch function** 2.
- Retained power operation when ignition switch is OFF.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

INFOID:0000000005434241

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
- Retained power operation

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement INFOID:0000000005434242

INITIALIZATION PROCEDURE

1. Disconnect battery minus terminal or power window main switch connector. Reconnect it after a minute or more.

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH ONLY ANTI-PINCH-SEDAN]

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

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 or 2 seconds without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window main switch while lowering.

CAUTION:

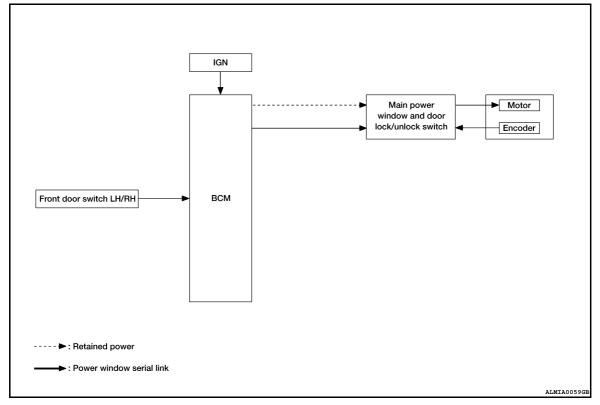
- Do not check with hands and other part of body because they may be pinched. Do not get pinched.
- Check that AUTO-UP operates before inspection when system initialization is performed.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-115, "Fail Safe".
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Retained power operation when ignition switch is OFF.

FUNCTION DIAGNOSIS

POWER WINDOW SYSTEM

System Diagram

FRONT POWER WINDOW LH ANTI-PINCH SYSTEM



System Description

INFOID:0000000005434244

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH INPUT/OUTPUT SIGNAL CHART

Item	Input signal to main power window and door lock/unlock switch	Main power window and door lock/unlock switch function	Actuator	
Encoder	Encoder pulse signal			
Main power window and door lock/unlock switch	Front power window motor LH UP/ DOWN signal		Front power window motor	
Power window and door lock/unlock switch RH	Front power window motor RH UP/ DOWN signal	Power window control		
BCM	RAP signal			
Rear power window switch	Rear power window motor UP/DOWN signal		Rear power window motor	

POWER WINDOW OPERATION

- Power window system is operable during the retained power operation timer after turning ignition switch ON and OFF.
- Main power window and door lock/unlock switch can open/close all windows.
- Front & rear power window switches can open/close the corresponding windows.

POWER WINDOW AUTO-OPERATION (FRONT LH)

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POWER WINDOW SYSTEM

< FUNCTION DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

- AUTO UP/DOWN operation can be performed when main power window and door lock/unlock switch turns to AUTO.
- Encoder continues detecting the movement of power window motor and transmits to main power window and door lock/unlock switch as the encoder pulse signal while power window motor is operating.
- Main power window and door lock/unlock switch reads the changes of encoder signal and stops AUTO operation when door glass is at fully opened/closed position.
- Power window motor is operable in case encoder is malfunctioning.

RETAINED POWER OPERATION

Retained power operation is an additional power supply function that enables power window system to operate during the 45 seconds even when ignition switch is turned OFF

Retained power function cancel conditions

- Front door CLOSE (door switch OFF)→OPEN (door switch ON).
- When ignition switch is ON.
- When timer time passes. (45 seconds)

POWER WINDOW LOCK

Ground circuit inside main power window and door lock/unlock switch shuts off when power window lock switch is ON. This inhibits power window switch operation except with the main power window and door lock/unlock switch.

ANTI-PINCH OPERATION (FRONT LH)

- Pinch foreign material in the door glass during AUTO-UP operation, and it is the anti-pinch function that lowers the door glass 150 mm or 2 seconds when detected.
- Encoder continues detecting the movement of power window motor and transmits to main power window and door lock/unlock 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 window glass for 150 mm or 2 seconds after it detects encoder pulse signal frequency change.

OPERATION CONDITION

 When 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.

Component Parts Location

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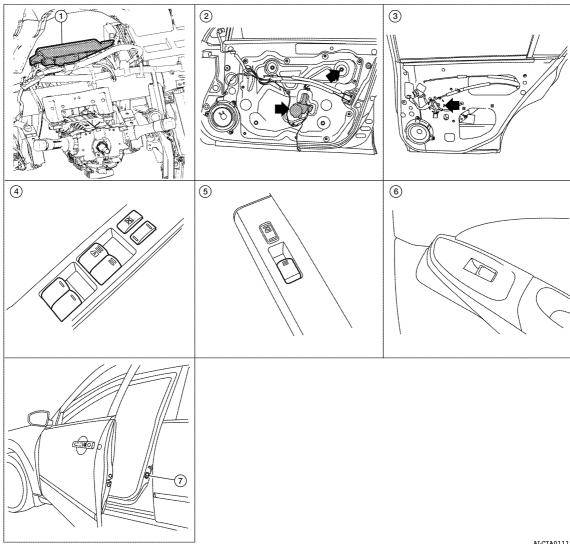
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- BCM M16, M17, M18 (view with instrument panel removed)
- Main power window and door lock/ unlock switch D8, D12
- 7. Front door switch LH B8, RH B108
- Front power window motor LH D9, RH D104
- Power window and door lock/unlock 6. switch RH D110
- Rear power window motor LH D204, **RH D304**
- Rear power window switch LH D203, **RH D303**

Component Description

INFOID:0000000005434246

FRONT POWER WINDOW LH ANTI-PINCH SYSTEM

Component	Function
ВСМ	Supplies power to power window switches.Controls retained power.
Main power window and door lock/unlock switch	 Directly controls all power window motor of all doors. Controls anti-pinch operation of front power window LH.
Power window and door lock/unlock switch RH	Controls front power window motor RH.
Rear power window switch	Controls rear power window motors LH and RH.

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POWER WINDOW SYSTEM

< FUNCTION DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

Component	Function
Front power window motor LH	 Integrates the ENCODER POWER and WINDOW MOTOR. Starts operating with signals from main power window and door lock/unlock switch. Transmits power window motor rotation as a pulse signal to main power window and door lock/unlock switch.
Front power window motor RH	Starts operating with signals from main power window and door lock/unlock switch & power window and door lock/unlock switch RH.
Rear power window motor	Starts operating with signals from main power window and door lock/unlock switch & rear power window switch.
Front door switch LH or RH	Detects door open/close condition and transmits to BCM.

[LH ONLY ANTI-PINCH-SEDAN]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: Diagnosis Description

INFOID:0000000005783551

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BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF DIAGNOSTIC RESULT	Displays the diagnosis results judged by BCM.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	 Read and save the vehicle specification. Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

Cristons	Cub avatara aplactica itara	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	×	×	×
Remote keyless entry system1	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system2	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
BCM	BCM	×		
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

^{1:} With remote keyless entry system

COMMON ITEM: CONSULT-III Function

INFOID:0000000005783552

ECU IDENTIFICATION

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^{2:} With intelligent Key system

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

Displays the BCM part No.

SELF-DIAG RESULT

Refer to BCS-70, "DTC Index".

RETAINED PWR

RETAINED PWR : CONSULT-III Function (BCM - RETAINED PWR)

INFOID:0000000005783553

Data monitor

Monitor Item [Unit]	Description
DOOR SW-DR [ON/OFF]	Indicates condition of front door switch LH.
DOOR SW-AS [ON/OFF]	Indicates condition of front door switch RH.

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH: Description

• BCM supplies power.

• It operates each power window motor via corresponding power window switch and makes window move up/ down when main power window and door lock/unlock switch is operated.

POWER WINDOW MAIN SWITCH: Component Function Check

Main Power Window And Door Lock/unlock Switch

1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH FUNCTION

Does power window motor operate with main power window and door lock/unlock switch operation? Is the inspection result normal?

YES >> Main power window and door lock/unlock switch power supply and ground circuit are OK.

NO >> Refer to PWC-91, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure".

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

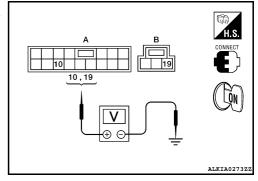
Regarding Wiring Diagram information, refer to PWC-332, "Wiring Diagram".

Main Power Window And Door Lock/unlock Switch Power Supply Circuit Check

1. CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch ON.
- Check voltage between main power window and door lock/ unlock switch connectors (A and B) and ground.

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(+)		Voltage (V)	
Main power window and door lock/unlock switch Terminal connector		(-)	(Approx.)
D12 (A)	10	Ground	Pottory voltage
D8 (B)	19	Giouria	Battery voltage



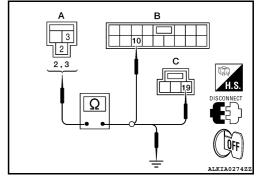
Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect BCM and main power window and door lock/unlock switch.
- Check continuity between BCM connector (A) and main power window and door lock/unlock switch connectors (B and C).

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M16 (A)	3	D12 (B)	10	Yes
WITO (A)	2	D8 (C)	19	162



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[LH ONLY ANTI-PINCH-SEDAN]

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M16 (A)	3	Ground	No
WTO (A)	2		NO

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

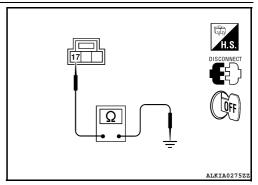
3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch.

3. Check continuity between main power window and door lock/ unlock switch connector and ground.

Main power window and door lock/un- lock switch connector	Terminal	Ground	Continuity
D8	17		Yes



Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-163, "Removal and Installation".

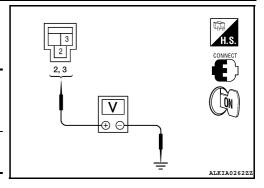
After that, refer to PWC-96, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

- Connect BCM.
- 2. Turn ignition switch ON.
- 3. Check voltage between BCM connector and ground.

Term				
(+)	(-)	Voltage (V) (Approx.)		
BCM connector	Terminal	(-)	, , ,	
M16	3	Ground	Battery voltage	
WITO	2	Giodila	Battery voltage	

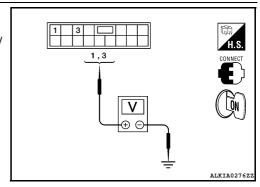


Is the measurement value within the specification?

- YES >> Check main power window and door lock/unlock switch output signal (rear power window switch LH) GO TO 5
- YES >> Check main power window and door lock/unlock switch output signal (rear power window switch RH) GO TO 6
- NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

5. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL (REAR POWER WINDOW SWITCH LH)

- 1. Connect main power window and door lock/unlock switch.
- 2. Turn ignition switch ON.
- 3. Check voltage between main power window and door lock/ unlock switch and ground.



[LH ONLY ANTI-PINCH-SEDAN]

Terr				
(+)			Window	Voltage (V) (Approx.)
Main power window and door lock/unlock Terminal switch connector		(-)	condition	
	1	1 Ground	UP	Battery voltage
D12			DOWN	0
DIZ	2		UP	0
	3		DOWN	Battery voltage

Is the measurement value within the specification?

YES >> GO TO 7

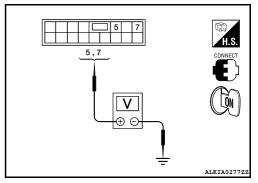
< COMPONENT DIAGNOSIS >

NO >> Replace main power window and door lock/unlock switch. Refer to PWC-163, "Removal and <a href="Installation". After that, refer to PWC-96, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

6. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL (REAR POWER WINDOW SWITCH RH)

- Connect main power window and door lock/unlock switch.
- 2. Turn ignition switch ON.
- 3. Check voltage between main power window and door lock/ unlock switch and ground.

Terminal				
(+)			Window	Voltage (V)
Main power window and door lock/unlock switch connector	Terminal	(–)	condition	(Approx.)
	7	UP	Battery voltage	
D12	,	Ground	DOWN	0
DIZ	_	Giodila	UP	0
	5		DOWN	Battery voltage



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Is the measurement value within the specification?

YES >> GO TO 8

NO

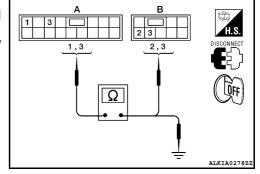
>> Replace main power window and door lock/unlock switch. Refer to PWC-163, "Removal and <a href="Installation". After that, refer to PWC-96, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

7. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH LH)

Turn ignition switch OFF.

- Disconnect main power window and door lock/unlock switch and rear power window switch LH.
- Check continuity between main power window and door lock/ unlock switch connector (A) and rear power window switch LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch LH connector	Terminal	Continuity
D12 (A)	1	D203 (B)	2	Yes
D12 (A)	3	D203 (B)	3	163



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

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Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D12 (A)	1		No
	3		140

Is the inspection result normal?

YES >> GO TO 9

NO >> Repair or replace harness.

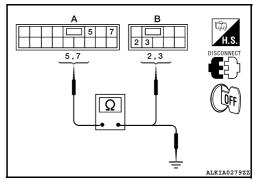
8. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH RH)

1. Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch and rear power window switch RH.

 Check continuity between main power window and door lock/ unlock switch connector (A) and rear power window switch RH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch RH connector	Terminal	Continuity
D12 (A)	5	D303 (B)	3	Yes
D12 (A)	7	D303 (B)	2	163



4. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/ unlock switch connector	Terminal		Continuity	
D12 (A)	5	Ground	No	
D12 (A)	7	-	INO	

Is the inspection result normal?

YES >> GO TO 9

NO >> Repair or replace harness.

9. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Check main power window and door lock/unlock switch.

Refer to PWC-94, "POWER WINDOW MAIN SWITCH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace main power window and door lock/unlock switch. Refer to PWC-163, "Removal and <a href="Installation". After that, refer to PWC-96, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

POWER WINDOW MAIN SWITCH: Component Inspection

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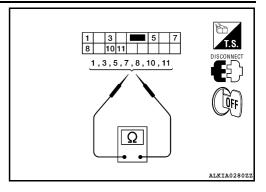
1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

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[LH ONLY ANTI-PINCH-SEDAN]

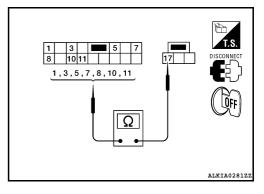
1. Check main power window and door lock/unlock switch.

Terr	minal	Main power window switch	Continuity	
10	1	Rear LH		
10	7	Rear RH UP		
10	8	Front RH		
1	3	Rear LH		
5	7	Rear RH NEUTRAL		Yes
8	11	Front RH		
10	3	Rear LH		
10	5	Rear RH	DOWN	
10	11	Front RH		



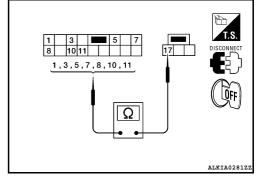
2. Check continuity between main power window and door lock/ unlock switch (power window lock switch) (Lock operation).

Terr	minal	Main power window and door lock/unlock switch condition		Continuity
3		Rear LH		
5		Rear RH	UP	
11		Front RH		
1		Rear LH		
3		Real LH		No
5	17	Rear RH	NEUTRAL	
7	17	Keal Kri	NEOTRAL	
8		Front RH		
11		TIOILKI		
1		Rear LH		
7		Rear RH	DOWN	
8		Front RH	1	



 Check continuity between main power window and door lock/ unlock switch (power window lock switch) (Unlock operation).

Terr	minal	Main power window and door lock/un- lock switch condition		Continuity
3		Rear LH		
5		Rear RH	UP	
11		Front RH		
1		Rear LH		
3			NEUTRAL	Yes
5	17			
7	17	Neal KH		
8		Front RH		
11		FIUILKH		
1		Rear LH		
7		Rear RH	DOWN	
8		Front RH		



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[LH ONLY ANTI-PINCH-SEDAN]

Is the inspection result normal?

YES >> Main power window and door lock/unlock switch is OK.

NO >> Replace main power window and door lock/unlock switch. Refer to PWC-163, "Removal and <a href="Installation". After that, refer to PWC-96, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

POWER WINDOW MAIN SWITCH: Special Repair Requirement

INFOID:0000000005434254

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-83, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

$2.\,$ CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to PWC-83, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Refer to PWC-91, "POWER WINDOW MAIN SWITCH: Component Function Check".

FRONT POWER WINDOW SWITCH

FRONT POWER WINDOW SWITCH: Description

INFOID:0000000005434255

- BCM supplies power.
- Front power window motor RH will be operated if power window and door lock/unlock switch RH is operated.

FRONT POWER WINDOW SWITCH: Component Function Check

INFOID:0000000005434256

Power Window And Door Lock/unlock Switch RH

1. CHECK POWER WINDOW MOTOR FUNCTION

Does front power window motor operate with power window and door lock/unlock switch RH operation? <u>Is the inspection result normal?</u>

YES >> Power window and door lock/unlock switch RH power supply and ground circuit are OK.

NO >> Refer to PWC-96, "FRONT POWER WINDOW SWITCH : Diagnosis Procedure".

FRONT POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:0000000005434257

Regarding Wiring Diagram information, refer to PWC-332, "Wiring Diagram".

Power Window And Door Lock/Unlock Switch RH Power Supply Circuit Check

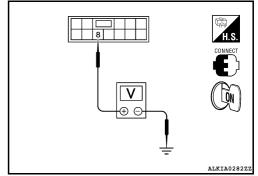
1. CHECK POWER SUPPLY CIRCUIT (POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH)

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[LH ONLY ANTI-PINCH-SEDAN]

- Turn ignition switch ON.
- Check voltage between power window and door lock/unlock switch RH connector and ground.

T			
(+)		Voltage (V)	
Power window and door lock/unlock Terminal switch RH connector		(–)	(Approx.)
D110	8	Ground	Battery voltage



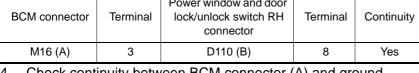
Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

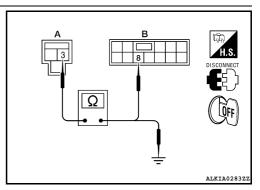
- Turn ignition switch OFF.
- Disconnect BCM and power window and door lock/unlock switch 2. RH.
- 3. Check continuity between BCM connector (A) and power window and door lock/unlock switch RH connector (B).

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M16 (A)	3	D110 (B)	8	Yes



Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Ground	Continuity
M16 (A)	3	Ground	No



Is the inspection result normal?

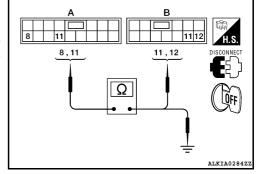
YES >> Refer to PWC-91, "POWER WINDOW MAIN SWITCH: Component Function Check".

NO >> Repair or replace harness.

3. CHECK HARNESS CONTINUITY (POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH)

- Turn ignition switch OFF.
- Disconnect main power window and door lock/unlock switch and power window and door lock/unlock switch RH.
- Check continuity between main power window and door lock/ unlock switch connector (A) and power window and door lock/ unlock switch RH connector (B).

Main power win- dow and door lock/unlock switch connector	Terminal	Power window and door lock/un- lock switch RH connector	Terminal	Continuity
D12 (A)	11	D110 (B)	11	Yes
D12 (A)	8	D110 (B)	12	163



Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/ unlock switch connector	Terminal		Continuity
D12 (A)	8	Ground	No
D12 (A)	11		NO

Is the inspection result normal?

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[LH ONLY ANTI-PINCH-SEDAN]

YES >> GO TO 4

NO >> Repair or replace harness.

4. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Check power window and door lock/unlock switch RH.

Refer to PWC-98, "FRONT POWER WINDOW SWITCH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace power window and door lock/unlock switch RH. Refer to PWC-163, "Removal and Installation".

FRONT POWER WINDOW SWITCH: Component Inspection

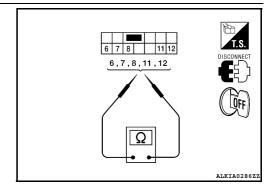
INFOID:0000000005434258

COMPONENT INSPECTION

1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Check power window and door lock/unlock switch RH.

Taux	minal	Dower window switch condition	Continuity
Terr	ninai	Power window switch condition	Continuity
8	6	UP	
12	7	OF .	
12	7	NEUTRAL	Yes
6	11	NEOTIVAL	163
8	7	DOWN	
6	11	DOWN	



Is the inspection result normal?

YES >> Power window and door lock/unlock switch RH is OK.

NO >> Replace power window and door lock/unlock switch RH. Refer to PWC-164, "Removal and Installation".

REAR POWER WINDOW SWITCH

REAR POWER WINDOW SWITCH: Description

INFOID:0000000005434259

- BCM supplies power.
- Rear power window motor will be operated if rear power window switch is operated. Rear power window switch.

REAR POWER WINDOW SWITCH: Component Function Check

INFOID:0000000005434260

Rear Power Window Switch

1. CHECK REAR POWER WINDOW MOTOR FUNCTION

Does rear power window motor operate with rear power window switch operation?

Is the inspection result normal?

YES >> Rear power window switch power supply and ground circuit are OK.

NO >> Refer to PWC-98, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".

REAR POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:000000005434261

Regarding Wiring Diagram information, refer to PWC-332, "Wiring Diagram".

Rear Power Window Switch Power Supply Circuit Check

1. CHECK POWER SUPPLY CIRCUIT

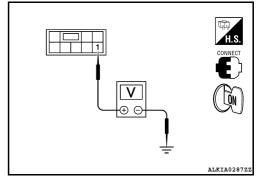
1. Turn ignition switch ON.

< COMPONENT DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

2. Check voltage between rear power window switch connector and ground.

Terminal						
(+)			Condition	Voltage (V)		
Rear power window switch connector		Terminal	(–)		(Approx.)	
LH	D203	1	Ground	Ignition switch	Battery	
RH	D303	'	Giodila	ON	voltage	



Is the measurement value within the specification?

YES >> GO TO 2 (Rear power window switch LH)

YES >> GO TO 3 (Rear power window switch RH)

NO >> GO TO 4

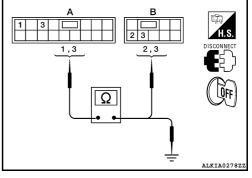
2. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH LH)

Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch and rear power window switch LH.

 Check continuity between main power window and door lock/ unlock switch connector (A) and rear power window switch LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Rear power win- dow switch LH connector	Terminal	Continuity
D12 (A)	1	D203 (B)	2	Yes
D12 (A)	3	D203 (B)	3	165



4. Check continuity between main power window and door lock/unlock switchh connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D12 (A)	1		No
D12 (A)	3		INO

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Repair or replace harness.

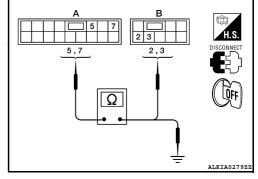
3. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH RH)

Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch and rear power window switch RH.

 Check continuity between main power window and door lock/ unlock switch connector (A) and rear power window switch RH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch RH connector	Terminal	Continuity
D12 (A)	5	D303 (B)	3	Yes
D12 (A)	7	D303 (B)	2	163



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

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Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D12 (A)	5		No
D12 (A)	7		INO

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

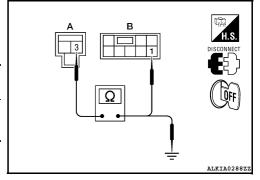
NO >> Repair or replace harness.

4. CHECK HARNESS CONTINUITY

1. Disconnect BCM and rear power window switch.

2. Check continuity between BCM connector (A) and rear power window switch connector (B).

BCM connector	Terminal	Rear power window switch connector		Terminal	Continuity
M16 (A)	3	LH	D203 (B)	1	Yes
WITO (A)	3	RH	D303 (B)	1	163



3. Check continuity between BCM connector and ground.

BCM connector Terminal		Ground	Continuity
M16	3	Ground	No

Is the inspection result normal?

YES >> GO TO 5

NO >> Repair or replace harness.

5. CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

Refer to PWC-100, "REAR POWER WINDOW SWITCH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace rear power window switch. Refer to <u>PWC-165</u>, "Removal and Installation - Rear Door Switch".

REAR POWER WINDOW SWITCH: Component Inspection

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COMPONENT INSPECTION

1. CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

Terr	minal	Power window switch condition	Continuity
1	5	UP	
3	4	OF .	
3	4	NEUTRAL	Yes
5	2	110.110.12	163
1	4	DOWN	
5	2	DOWN	

Is the inspection result normal?

YES >> Rear power window switch is OK.

NO >> Replace rear power window switch. Refer to PWC-165, "Removal and Installation - Rear Door Switch".

POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE: Description

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

DRIVER SIDE: Component Function Check

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CHECK FRONT POWER WINDOW MOTOR LH CIRCUIT

Does front power window motor LH operate with the main power window and door lock/unlock switch? Is the inspection result normal?

YES >> Front power window motor LH is OK.

>> Refer to PWC-101, "DRIVER SIDE: Diagnosis Procedure". NO

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000005434265

Regarding Wiring Diagram information, refer to PWC-332, "Wiring Diagram".

Front Power Window Motor LH Circuit Check

${f 1}$. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

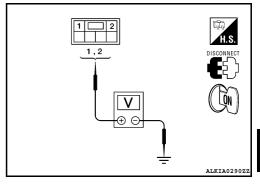
Turn ignition switch OFF.

2. Disconnect front power window motor LH.

3. Turn ignition switch ON.

Check voltage between front power window motor LH connector and ground.

Terminal				
(+)		Main power win- dow and door	Voltage (V)	
Terminal	(–)	lock/unlock switch condition	(Approx.)	
D9 1		UP	Battery voltage	
	Ground	DOWN	0	
	Giouria	UP	0	
		DOWN	Battery voltage	
	Terminal 2	Terminal (–) 2 Ground	Terminal (-) Main power window and door lock/unlock switch condition UP Ground 1	



Is the measurement value within the specification?

YES >> GO TO 3

NO >> GO TO 2

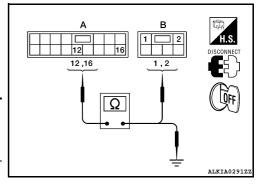
2. CHECK HARNESS CONTINUITY

Turn ignition switch OFF.

Disconnect main power window and door lock/unlock switch. 2.

Check continuity between main power window and door lock/ unlock switch connector (A) and front power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D12 (A)	16	D9 (B)	2	Yes
D12 (A)	12	D9 (B)	1	163



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POWER WINDOW MOTOR

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[LH ONLY ANTI-PINCH-SEDAN]

4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D12 (A)	16		No
D12 (A)	12		INO

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-163, "Removal and <a href="Installation". After that, refer to PWC-102, "DRIVER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

3. CHECK FRONT POWER WINDOW MOTOR LH

Check front power window motor LH.

Refer to PWC-102, "DRIVER SIDE: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace front power window motor LH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>". After that, refer to <u>PWC-102</u>, "<u>DRIVER SIDE</u>: <u>Special Repair Requirement</u>".

DRIVER SIDE: Component Inspection

INFOID:0000000005434266

COMPONENT INSPECTION

1. CHECK FRONT POWER WINDOW MOTOR LH

Does motor operate by connecting the battery voltage directly to power window motor?

Terminal		- Motor condition	
(+)	(-)	Wotor condition	
1	2	DOWN	
2	1	UP	

Is the inspection result normal?

YES >> Front power window motor LH is OK.

NO >> Replace front power window motor LH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>". After that, refer to <u>PWC-102</u>, "<u>DRIVER SIDE</u>: <u>Special Repair Requirement</u>".

DRIVER SIDE : Special Repair Requirement

INFOID:0000000005434267

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-83</u>, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

$2.\,$ CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to <u>PWC-83</u>, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Refer to PWC-101, "DRIVER SIDE : Component Function Check".

PASSENGER SIDE

PASSENGER SIDE: Description

INFOID:0000000005434268

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Door glass moves UP/DOWN by receiving the signal from main power window and door lock/unlock switch or power window and door lock/unlock switch RH.

PASSENGER SIDE : Component Function Check

INFOID:0000000005434269

1. CHECK FRONT POWER WINDOW MOTOR RH CIRCIUT

Does front power window motor RH operate with main power window and door lock/unlock switch or power window and door lock/unlock switch?

Is the inspection result normal?

YES >> Front power window motor RH is OK.

NO >> Refer to PWC-103, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000005434270

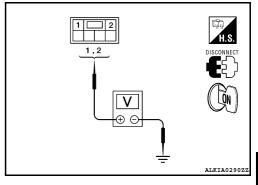
Regarding Wiring Diagram information, refer to PWC-332, "Wiring Diagram".

Front Power Window Motor RH Circuit Check

1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH OUTPUT SIGNAL

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

Terminal				
(+)			Front power window motor	Voltage (V)
Front power window motor RH connector	Terminal	(–)	RH condition	(Approx.)
	1 Ground	UP	Battery voltage	
D104		Ground	DOWN	0
D104 -		Giodila	UP	0
			DOWN	Battery voltage



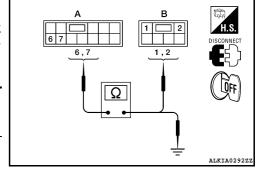
Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- Disconnect power window and door lock/unlock switch RH.
- Check continuity between power window and door lock/unlock switch RH connector (A) and front power window motor RH connector (B).

Power window and door lock/unlock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity
D110 (A)	6	D104 (B)	1	Yes
D110 (A)	7	D104 (B)	2	163



4. Check continuity between power window and door lock/unlock switch connector (A) and ground.

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< COMPONENT DIAGNOSIS >

Power window and door lock/ unlock switch RH connector	Terminal	01	Continuity
D110 (A)	6	Ground	No
D110 (A)	7		INO

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-164, "Removal and Installation".

NO >> Repair or replace harness.

3. CHECK FRONT POWER WINDOW MOTOR RH

Check front power window motor RH.

Refer to PWC-104, "PASSENGER SIDE: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace front power window motor RH. Refer to <u>GW-19</u>, "Removal and Installation".

PASSENGER SIDE: Component Inspection

INFOID:000000005434271

COMPONENT INSPECTION

COMPONENT INSPECTION

1. CHECK FRONT POWER WINDOW MOTOR RH

Does motor operate by connecting the battery voltage directly to front power window motor RH?

Terminal		Motor condition	
(+)	(-)	Wotor condition	
1	2	DOWN	
2	1	UP	

Is the inspection result normal?

YES >> Power window motor is OK.

NO >> Replace front power window motor RH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>".

REAR LH

REAR LH: Description

INFOID:0000000005434272

Door glass moves UP/DOWN by receiving the signal from main power window and door lock/unlock switch or rear power window switch LH.

REAR LH: Component Function Check

INFOID:0000000005434273

1. CHECK REAR POWER WINDOW MOTOR LH CIRCUIT

Does rear power window motor LH operate with main power window and door lock/unlock switch or rear power window switch LH?

Is the inspection result normal?

YES >> Rear power window motor LH is OK.

NO >> Refer to PWC-104, "REAR LH : Diagnosis Procedure"

REAR LH: Diagnosis Procedure

INFOID:0000000005434274

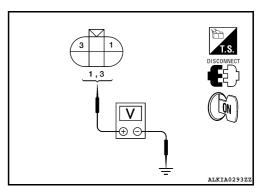
Regarding Wiring Diagram information, refer to PWC-332, "Wiring Diagram".

Rear Power Window Motor LH Circuit Check

1. CHECK REAR POWER WINDOW SWITCH LH OUTPUT SIGNAL

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

Terminal				
(+)			Window	Voltage (V)
Rear power window motor LH connector	Terminal	(–)	condition	(Approx.)
	1	Ground	UP	Battery voltage
D204			DOWN	0
D20 4	3		UP	0
			DOWN	Battery voltage



Is the measurement value within the specification?

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

CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- 2. Disconnect rear power window switch LH.
- Check continuity between rear power window switch LH connector (A) and rear power window motor LH connector (B).

Rear power window switch LH connector	Terminal	Rear power window motor LH connector	Terminal	Continuity
D203 (A)	5	D204 (B)	1	Yes
D203 (A)	4	D204 (B)	3	165

Check continuity between rear power window switch LH connector (A) and ground.

-	A 4,5 Ω	3 1 1,3	H.S. T.S. DISCONNECT OFF
		=======================================	ALKIA0294ZZ

Rear power window switch LH connector	Terminal	_	Continuity
D203 (A)	5	Ground	No
	4		INO

Is the inspection result normal?

YES >> Check rear power window switch LH. Refer to PWC-105, "REAR LH: Component Inspection".

PWC-105

NO >> Repair or replace harness.

3. CHECK REAR POWER WINDOW MOTOR LH

Check rear power window motor LH.

Refer to PWC-105, "REAR LH: Component Inspection".

Is the inspection result normal?

>> Check intermittent incident. Refer to GI-41, "Intermittent Incident". YES

>> Replace rear power window motor LH. Refer to GW-14, "Removal and Installation". NO

REAR LH: Component Inspection

COMPONENT INSPECTION

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 ${\sf 1.}$ CHECK REAR POWER WINDOW MOTOR LH

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INFOID:0000000005434275

POWER WINDOW MOTOR

< COMPONENT DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

Does motor operate by connecting the battery voltage directly to rear power window motor LH?

Terminal		Motor condition	
(+)	(-)	- Wiotor condition	
3	1	DOWN	
1	3	UP	

Is the inspection result normal?

YES >> Rear power window motor LH is OK.

NO >> Replace rear power window motor LH. Refer to <u>GW-14</u>, "<u>Removal and Installation</u>".

REAR RH

REAR RH: Description

Door glass moves UP/DOWN by receiving the signal from main power window and door lock/unlock switch or rear power window switch RH.

REAR RH: Component Function Check

INFOID:0000000005434277

INFOID:0000000005434276

1. CHECK POWER WINDOW MOTOR CIRCUIT

Does rear power window motor RH operate with operating power window main switch or rear power window switch RH?

Is the inspection result normal?

YES >> Power window motor is OK.

NO >> Refer to PWC-106, "REAR RH: Diagnosis Procedure".

REAR RH: Diagnosis Procedure

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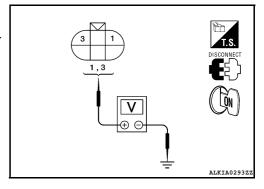
Regarding Wiring Diagram information, refer to PWC-332, "Wiring Diagram".

Rear Power Window Motor RH Circuit Check

1. CHECK REAR POWER WINDOW SWITCH RH OUTPUT SIGNAL

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

Te	erminal	D		
(+)			Rear power windowswitch	Voltage (V)
Rear power window motor RH connector	Terminal	(–)	RH condition	(Approx.)
	D304 3		UP	Battery voltage
D204		Ground	DOWN	0
D304		Giouna	UP	0
			DOWN	Battery voltage



Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

POWER WINDOW MOTOR

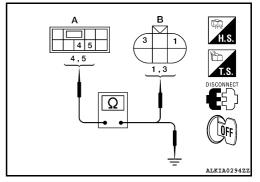
< COMPONENT DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

- 1. Turn ignition switch OFF.
- 2. Disconnect rear power window switch RH.
- 3. Check continuity between rear power window switch RH connector (A) and rear power window motor RH connector (B).

Rear power window switch RH connector	Terminal	Rear power window motor RH connector	Terminal	Continuity	
D303 (A)	5	D304 (B)	1	Yes	
	4	D304 (B)	3	163	

 Check continuity between rear power window switch RH connector (A) and ground.



Rear power window switch RH connector	Terminal		Continuity
D303 (A)	5	Ground	No
	4		

Is the inspection result normal?

YES >> Check rear power window switch RH. Refer to PWC-107, "REAR RH: Component Inspection".

NO >> Repair or replace harness.

3. CHECK REAR POWER WINDOW MOTOR RH

Check rear power window motor RH.

Refer to PWC-107, "REAR RH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace rear power window motor RH. Refer to <u>GW-14</u>, "Removal and Installation".

REAR RH: Component Inspection

INFOID:0000000005434279

COMPONENT INSPECTION

1. CHECK REAR POWER WINDOW MOTOR RH

Does motor operate by connecting the battery voltage directly to rear power window motor RH?

Terminal		Motor condition
(+)	(-)	Wotor condition
3	1	DOWN
1	3	UP

Is the inspection result normal?

YES >> Power window motor is OK.

NO >> Replace rear power window motor RH. Refer to <u>GW-14</u>, "<u>Removal and Installation</u>".

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ENCODER DRIVER SIDE

DRIVER SIDE: Description

INFOID:0000000005434280

Detects condition of the front power window motor LH operation and transmits to main power window and door lock/unlock switch as pulse signal.

DRIVER SIDE: Component Function Check

INFOID:0000000005434281

1. CHECK ENCODER OPERATION

Does front door glass LH perform AUTO open/close operation normally with main power window and door lock/unlock 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:0000000005434282

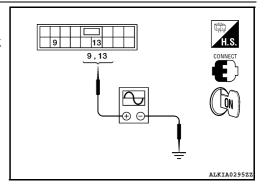
Regarding Wiring Diagram information, refer to PWC-332, "Wiring Diagram".

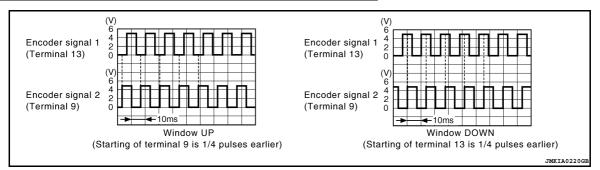
Encoder Circuit Check

1. CHECK ENCODER OPERATION

- 1. Connect front power window motor LH.
- 2. Turn ignition switch ON.
- 3. Check signal between main power window and door lock/unlock switch connector and ground with oscilloscope.

(+)				
Main power window and door lock/unlock switch connector	Terminal	(-)	Signal (Reference value)	
D12	9	Ground	Refer to following signal	
	13	Ground	Troid to following signal	





Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

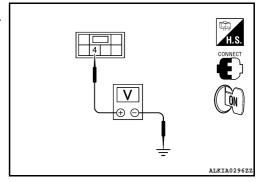
NO >> GO TO 2

2. CHECK FRONT POWER WINDOW MOTOR LH POWER SUPPLY

1. Turn ignition switch ON.

2. Check voltage between front power window motor LH connector and ground.

Term			
(+)		Voltage (V)	
Front power window motor LH connector Terminal		(–)	(Approx.)
D9	4	Ground	10



Is the measurement value within the specification?

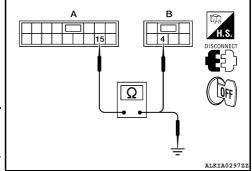
YES >> GO TO 4 NO >> GO TO 3

3. CHECK HARNESS CONTINUITY 1

1. Turn ignition switch OFF.

- 2. Disconnect main power window and door lock/unlock switch and front power window motor LH.
- Check continuity between main power window and door lock/ unlock switch connector (A) and front power window motor connector (B).

Main power window and door lock/unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D12 (A)	15	D9 (B)	4	Yes



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D12 (A)	15		No

Is the inspection result normal?

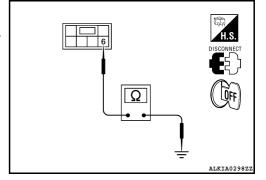
YES >> Replace main power window and door lock/unlock switch. Refer to PWC-163, "Removal and <a href="Installation". After that, refer to PWC-110, "DRIVER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

4. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front power window motor LH.
- Check continuity between front power window motor LH connector and ground.

Front power window motor LH connector	Terminal	Ground	Continuity
D9	6		Yes



Is the inspection result normal?

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

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5. CHECK HARNESS CONTINUITY 2

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[LH ONLY ANTI-PINCH-SEDAN]

- Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector (A) and front power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D12 (A)	2	D9 (B)	6	Yes

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Is the inspection result normal?

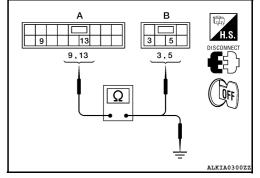
YES >> Replace main power window and door lock/unlock switch. Refer to PWC-163, "Removal and Installation". After that, refer to PWC-110, "DRIVER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

6. CHECK HARNESS CONTINUITY 3

- Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector (A) and front power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Front power win- dow motor LH connector	Terminal	Continuity
D12 (A)	9	D9 (B)	3	Yes
D12 (A)	13	D9 (B)	5	163



Check continuity between main power window and door lock/ unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D12 (A)	9		No
D12 (A)	13		INO

Is the inspection result normal?

YES >> Replace front power window motor LH. Refer to GW-19, "Removal and Installation". After that, refer to PWC-110, "DRIVER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

DRIVER SIDE: Special Repair Requirement

INFOID:0000000005434283

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-83, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

[LH ONLY ANTI-PINCH-SEDAN]

DOOR SWITCH

Description INFOID:000000005434284

Detects door open/close condition and transmits the signal to BCM.

Component Function Check

1. CHECK FRONT DOOR SWITCH INPUT SIGNAL

Check ("DOOR SW-DR" and "DOOR SW-AS") in "DATA MONITOR" mode with CONSULT-III. Refer to <u>BCS-34, "RETAINED PWR: CONSULT-III Function (BCM - RETAINED PWR)"</u>.

Monitor item	С	ondition
DOOR SW-DR	OPEN	: ON
	CLOSE	: OFF
DOOR SW-AS	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Front door switch circuit is OK.

NO >> Refer to <u>PWC-111</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

Regarding Wiring Diagram information, refer to PWC-332, "Wiring Diagram".

1. CHECK HARNESS CONTINUITY

Check voltage between BCM connector and ground.

	Terminals				
(+	(+)		Door condition		Voltage (V)
BCM connector	Terminal	(–)			(Approx.)
	32		Front door	OPEN	0
M18	32	Ground	RH		Battery voltage
IVITO	58	Giodila	Front door	OPEN	0
			LH	CLOSE	Battery voltage

Is the measurement value within the specification?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

NO >> GO TO 2

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- 2. Disconnect BCM and front door switch.
- 3. Check continuity between BCM connector and front door switch connector.

BCM connector	Terminal	Front door switch connector	Terminal	Continuity
M18	32	RH: B108	2	Yes
IVITO	58	LH: B8	2	162

4. Check continuity between BCM connector and ground.

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< COMPONENT DIAGNOSIS >

BCM connector	Terminal		Continuity	
M18	32	Ground	No	
IVI IO	58		NO	

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK BCM OUTPUT SIGNAL

- 1. Connect BCM connector.
- 2. Check voltage between BCM connector and ground.

	V. II 0.0			
(+)		(-)	Voltage (V) (Approx.)	
BCM connector	Terminal	(-)	(11 -)	
M18	32	Ground	Battery voltage	
IVITO	58	Glound	Battery voltage	

Is the measurement value within the specification?

YES >> GO TO 4

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

4. CHECK FRONT DOOR SWITCH

Check front door switch.

Refer to PWC-112, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace front door switch.

Component Inspection

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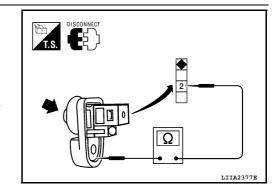
1. CHECK FRONT DOOR SWITCH

Check front door switches.

Te	erminal	Door switch	Continuity	
Door	switches	Door Switch		
2	Ground part of door	Pressed	No	
	switch		Yes	

Is the inspection result normal?

YES >> Front door switch is OK.
NO >> Replace front door switch.



POWER WINDOW LOCK SWITCH

< COMPONENT DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

POWER WINDOW LOCK SWITCH

Description INFOID:000000005434288

Ground circuit of main power window and door lock/unlock switch shuts off if power window lock switch of main power window and door lock/unlock switch is operated. This inhibits all operation, except for the main switch.

Component Function Check

1. CHECK POWER WINDOW LOCK SIGNAL

Exchanges for a normal main power window and door lock/unlock switch, and operation is checked. Does power window lock operate?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-163, "Removal and Installation". After that, refer to PWC-113, "Special Repair Requirement".

NO >> Check condition of harness and connector.

Special Repair Requirement

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-83</u>, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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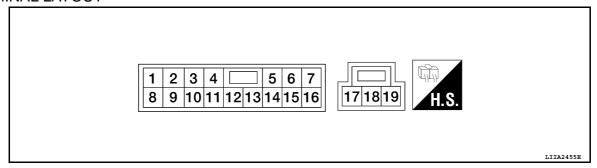
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ECU DIAGNOSIS

POWER WINDOW MAIN SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

	nal No. color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
1 (Y)	Ground	Rear power window motor LH UP signal	Output	When rear LH switch in power window main switch is operated UP.	Battery voltage
2 (G)	Ground	Encoder ground	_	_	0
3 (O)	Ground	Rear power window motor LH DOWN signal	Output	When rear LH switch in power window main switch is operated DOWN.	Battery voltage
5 (SB)	Ground	Rear power window motor RH DOWN signal	Output	When rear RH switch in power window main switch is operated DOWN.	Battery voltage
7 (P)	Ground	Rear power window motor RH UP signal	Output	When rear RH switch in power window main switch is operated UP.	Battery voltage
8 (BR)	11	Front power window motor RH UP signal	Output	When front RH switch in power window main switch is operated UP.	Battery voltage
9 (W)	2	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0 10 ms

Termir (Wire	nal No. color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
				IGN SW ON	Battery voltage
10	Ground	RAP signal	Input	Within 45 second after ignition switch is turned to OFF.	Battery voltage
(V)		J	•	When driver side or passenger side door is opened during retained power operation.	0
11 (L)	8	Front power window motor RH DOWN signal	Output	When front RH switch in power window main switch is operated DOWN.	Battery voltage
12 (LG)	16	Front power window motor LH DOWN signal	Output	When front LH switch in power window main switch is operated DOWN.	Battery voltage
13 (SB)	2	Encoder pulse signal 1	Input	When power window motor operates.	(V) 4 2 0 10 ms
15 (GR)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates.	10
16 (R)	12	Front power window motor LH UP signal	Output	When front LH switch in power window main switch is operated UP.	Battery voltage
17 (B)	Ground	Ground	_	_	0
19 (W)	Ground	Battery power supply	Input	_	Battery voltage

Fail Safe

FAIL-SAFE CONTROL

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 error beyond regulation value is detected between the fully closed position and the actual position of the glass.

Error	Error condition
Pulse sensor malfunction	When only one side of pulse signal is being detected for more than the specified value.
Both pulse sensors mal- function	When both pulse signals have not been detected for more than the specified value during glass open/close operation.
Pulse direction malfunction	When the pulse signal that is detected during glass open/close operation detects the opposite condition of power window motor operating direction.
Glass recognition position malfunction 1	When it detects the error between glass fully closed position in power window switch memory and actual fully closed position during glass open/close operation is more than the specified value.
Glass recognition position malfunction 2	When it detects pulse count more than the value of glass full stroke during glass open/close operation.
Malfunction of not yet up- dated closed position of glass	When glass open/close operation is continuously performed without fully closing more than the specified value (approximately 10 strokes).

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POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

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
- Retained power function

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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BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
ED WIDED III	Other than front wiper switch HI	OFF
FR WIPER HI	Front wiper switch HI	ON
ED WIDED LOW	Other than front wiper switch LO	OFF
FR WIPER LOW	Front wiper switch LO	ON
ED WACHED OW	Front washer switch OFF	OFF
FR WASHER SW	Front washer switch ON	ON
ED WIDED INT	Other than front wiper switch INT	OFF
FR WIPER INT	Front wiper switch INT	ON
ED WIDED STOD	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 OLONIAL I	Other than turn signal switch LH	OFF
TURN SIGNAL L	Turn signal switch LH	ON
	Other than lighting switch 1ST and 2ND	OFF
TAIL LAMP SW	Lighting switch 1ST or 2ND	ON
	Other than lighting switch HI	OFF
HI BEAM SW	Lighting switch HI	ON
	Other than lighting switch 2ND	OFF
HEAD LAMP SW 1	Lighting switch 2ND	ON
LIEAD LAMB OW 6	Other than lighting switch 2ND	OFF
HEAD LAMP SW 2	Lighting switch 2ND	ON
DA 001110 0111	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
ED E00 0W	Front fog lamp switch OFF	OFF
FR FOG SW	Front fog lamp switch ON	ON
	Driver door closed	OFF
DOOR SW-DR	Driver door opened	ON
DOOD OW 40	Passenger door closed	OFF
DOOR SW-AS	Passenger door opened	ON
	Rear door RH closed	OFF
DOOR SW-RR	Rear door RH opened	ON
D00D0W5:	Rear door LH closed	OFF
DOOR SW-RL	Rear door LH opened	ON
	Other than power door lock switch LOCK	OFF
CDL LOCK SW	Power door lock switch LOCK	ON

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Monitor Item	Condition	Value/Status
CDL UNLOCK SW	Other than power door lock switch UNLOCK	OFF
CDL UNLOCK SW	Power door lock switch UNLOCK	ON
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF
RETUTE LR-SW	Driver door key cylinder LOCK position	ON
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF
RETUTE ON-SW	Driver door key cylinder UNLOCK position	ON
HAZARD SW	When hazard switch is not pressed	OFF
HAZAKO SW	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
TR CANCEL SW	Trunk lid opener cancel switch OFF	OFF
TIT CANCLE OV	Trunk lid opener cancel switch ON	ON
TR/BD OPEN SW	Trunk lid opener switch OFF	OFF
TIVED OF ENGW	While the trunk lid opener switch is turned ON	ON
TRNK/HAT MNTR	Trunk lid closed	OFF
TRIVITAL WINTER	Trunk lid opened	ON
RKE-LOCK	When LOCK button of Intelligent Key is not pressed	OFF
KKL-LOOK	When LOCK button of Intelligent Key is pressed	ON
RKE-UNLOCK	When UNLOCK button of Intelligent Key is not pressed	OFF
INIC-ONLOOK	When UNLOCK button of Intelligent Key is pressed	ON
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
TITLE THY DD	When TRUNK OPEN button of Intelligent Key is pressed	ON
RKE-PANIC	When PANIC button of Intelligent Key is not pressed	OFF
INIC-I ANIC	When PANIC button of Intelligent Key is pressed	ON
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF
ICICL-17W OF LIN	When UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
MAE-MODE ONG	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V
OF HOAL BENOOR	When outside of the vehicle is dark	Close to 0 V
REQ SW-DR	When driver door request switch is not pressed	OFF
NEQ 3W-DIX	When driver door request switch is pressed	ON
REQ SW-AS	When passenger door request switch is not pressed	OFF
REQ 3W-A3	When passenger door request switch is pressed	ON
REQ SW-BD/TR	When trunk request switch is not pressed	OFF
NEQ 3W-DD/ IN	When trunk request switch is pressed	ON
PUSH SW	When engine switch (push switch) is not pressed	OFF
FUSITOW	When engine switch (push switch) is pressed	ON
IGN RLY2-F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
ACC RLY-F/B	Ignition switch OFF	OFF
AUU KLI-F/B	Ignition switch ACC or ON	ON
CLUTCH SW	When the clutch pedal is not depressed	OFF
OLUTON SW	When the clutch pedal is depressed	ON

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[LH ONLY ANTI-PINCH-SEDAN]

Monitor Item	Condition	Value/Status
BRAKE SW 1	When the brake pedal is not depressed	ON
DRAKE SW I	When the brake pedal is depressed	OFF
DETE/CANCL SW	When selector lever is in P position	OFF
DETE/CANCE 3W	When selector lever is in any position other than P	ON
SFT PN/N SW	When selector lever is in any position other than P or N	OFF
SET FIN/IN SVV	When selector lever is in P or N position	ON
UNLK SEN-DR	Driver door UNLOCK status	OFF
ONER SEN-DR	Driver door LOCK status	ON
	When engine switch (push switch) is not pressed	OFF
PUSH SW-IPDM	When engine switch (push switch) is pressed	ON
ICN DIVA E/D	Ignition switch OFF or ACC	OFF
IGN RLY1 F/B	Ignition switch ON	ON
DETE OW IDDA	When selector lever is in P position	OFF
DETE SW -IPDM	When selector lever is in any position other than P	ON
CET DN IDDM	When selector lever is in any position other than P or N	OFF
SFT PN -IPDM	When selector lever is in P or N position	ON
CET D MET	When selector lever is in any position other than P	OFF
SFT P-MET	When selector lever is in P position	ON
SFT N-MET	When selector lever is in any position other than N	OFF
	When selector lever is in N position	ON
	Engine stopped	STOP
	While the engine stalls	STALL
ENGINE STATE	At engine cranking	CRANK
	Engine running	RUN
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
	Driver door LOCK status	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
	Passenger door LOCK status	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
D OK ELAC	Ignition switch ACC or ON	RESET
D OK FLAG	Ignition switch OFF	SET
DDMT CNO OTAT	When the engine start is prohibited	RESET
PRMT ENG STAT	When the engine start is permitted	SET
VEV 0\M 0\ 07	When Intelligent Key is not inserted into key slot	OFF
KEY SW -SLOT	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
CONEDM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET
CONFRM ID ALL	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE

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Monitor Item	Condition	Value/Status
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET
CONTINUID4	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET
CON INWIED	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET
CONTINUID2	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET
COM IKWIDI	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE
TP 4	The ID of fourth key is not registered to BCM	YET
11 4	The ID of fourth key is registered to BCM	DONE
TP 3	The ID of third key is not registered to BCM	YET
11 3	The ID of third key is registered to BCM	DONE
TP 2	The ID of second key is not registered to BCM	YET
	The ID of second key is registered to BCM	DONE
TP 1	The ID of first key is not registered to BCM	YET
IF I	The ID of first 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	When ID of front LH tire transmitter is registered	DONE
ID REGOTTET	When ID of front LH tire transmitter is not registered	YET
ID REGST FR1	When ID of front RH tire transmitter is registered	DONE
ID RESOTT KT	When ID of front RH tire transmitter is not registered	YET
ID REGST RR1	When ID of rear RH tire transmitter is registered	DONE
	When ID of rear RH tire transmitter is not registered	YET
ID REGST RL1	When ID of rear LH tire transmitter is registered	DONE
ID REGOT RET	When ID of rear LH tire transmitter is not registered	YET
WARNING LAMP	Tire pressure indicator OFF	OFF
VV/AIXINIINO LAIVIE	Tire pressure indicator ON	ON
BUZZER	Tire pressure warning alarm is not sounding	OFF
DUZZEN	Tire pressure warning alarm is sounding	ON

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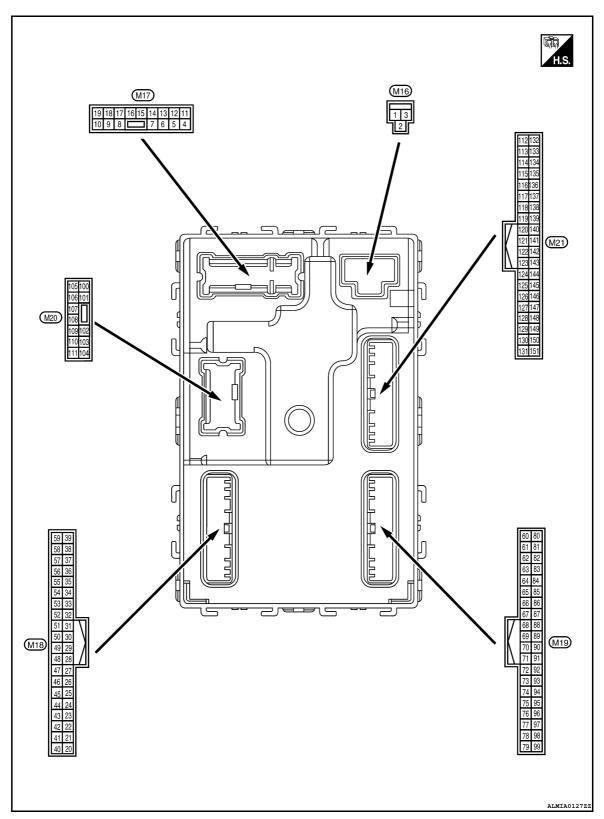
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Terminal Layout



Physical Values

	inal No.	Description				Value
(+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OF	F	Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage
4		Interior room lamp	•	After passing the ir er operation time	nterior room lamp battery sav-	ov
(P/W)	Ground	power supply	Output	Any other time after lamp battery saver	er passing the interior room roperation time	Battery voltage
5	0	Front door RH UN-	0 1 1	For the PH	UNLOCK (actuator is activated)	Battery voltage
(G/Y)	Ground	LOCK	Output	Front door RH	Other than UNLOCK (actuator is not activated)	ov
7		0		6	ON	0V
(R/W)	Ground	Step lamp	Output	Step lamp	OFF	Battery voltage
8		All 1 2001	•		LOCK (actuator is activated)	Battery voltage
(V)	Ground	All doors LOCK	Output	All doors	Other than LOCK (actuator is not activated)	ov
9		Front door LH UN-	_		UNLOCK (actuator is activated)	Battery voltage
(G)	Ground	LOCK	Output	Front door LH	Other than UNLOCK (actuator is not activated)	0V
10 ¹		Rear door RH and	•	Rear door RH	UNLOCK (actuator is activated)	Battery voltage
(G/Y)	Ground	rear door LH UN- LOCK	Output	and rear door LH	Other than UNLOCK (actuator is not activated)	ov
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch ON		ov
					OFF	0V
14 ⁶ (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 0 2 ms

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[LH ONLY ANTI-PINCH-SEDAN]

	inal No.	Description			0 10	Value	
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	
. ,	, ,				OFF	0V	
14 ¹ (O/W)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 0 2 ms	
15	0	A 00 is 1's at a large	0 1 1	1	OFF	Battery voltage	
(Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	ACC or ON	OV	
-					Turn signal switch OFF	OV	
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 PKID0926E	
					Turn signal switch OFF	6.5 V 0V	
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s	
					OFF	6.5 V	
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF ON	Battery voltage 0V	
21				Ignition switch	When outside of the vehi- cle is bright	Close to 5V	
(P/B)	Ground	Optical sensor signal	Input	ON	When outside of the vehi- cle is dark	Close to 0V	
22	Ground	Clutch interlock	Input	Clutch interlock	OFF (clutch pedal is not depressed)	OV	
(R/Y)	2.3und	switch		switch	ON (clutch pedal is de- pressed)	Battery voltage	
24 (R/W)	Ground	Stop lamp switch 1	Input		_	Battery voltage	
26	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	OV	
(O/L)	2.34114	2.5F 15P 5771511 2			ON (brake pedal is depressed)	Battery voltage	

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	inal No. e color)	Description			O a little a	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
27 (G/W)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	(V) 15 10 5 0 10 ms
						11.8V
					UNLOCK status	0V
29	Ground	Key slot switch	Input	When Intelligent K	ey is inserted into key slot	Battery voltage
(Y)	0.000			When Intelligent K	ey is not inserted into key slot	0V
30	Ground	ACC feedback signal	Input	Ignition switch	OFF	0
(V/Y)					ACC or ON	Battery voltage
31	Ground	Rear window defog-	Input	Rear window de-	OFF	0V
(G)	J.	ger feedback signal		fogger switch	ON	Battery voltage
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (when front door RH opens)	11.8 V
33		Compressor ON sig-		A/O :: 1	OFF	9.0 - 12.0V
(SB)	Ground	nal	Input	A/C switch	ON	0V
34 ² (L/R)	Ground	Front door lock as- sembly LH (key cylin- der switch) (unlock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral) ON (unlock)	5V 0V
36 ² (GR)	Ground	Lock switch signal	Input	Door lock/unlock switch	Lock Unlock	Battery voltage 0V
37 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB
					ON	OV
38		Daniel L		Danni in l	OFF	5V
(GR/ W)	Ground	Rear window defog- ger ON signal	Input	Rear window de- fogger switch	ON	ov
39 ²				Door lock/unlock	Unlock	Battery voltage
(GR/ R)	Ground	Unlock switch signal	Input	switch	Lock	OV

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	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
40 ³ (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms
				Ignition switch OFF	F or ACC	10.2V
41		Engine switch (push	_	Engine switch	ON	5.5V
(W)	Ground	switch) illumination	Output	(push switch) illu- mination	OFF	0V
42	Ground	LOCK indicator lamp	Output	LOCK indicator	ON	0V
(R)	2.04114		Japan	lamp	OFF	Battery voltage
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V
46	Ground	Receiver & sensor	Output	Ignition switch	OFF	0V
(V/W)	Ciodila	power supply output	Catput	- ignition switch	ACC or ON	5.0V
47	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 *** 0.2s
(G/O)		er signal	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0
48 (R/G)	Ground	Selector lever P/N	Input	Selector lever	P or N position	12.0V
(N/G)		position signal			Except P and N positions	0V
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	ON	(V) 15 10 1 s JPMIA0014GB 11.3V
					OFF	Battery voltage

	inal No. e color)	Description	ı		- W	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF	OV
					Lighting switch 1ST	
				Combination	Lighting switch high-beam	(V) 15
50 (LG/	Ground	Combination switch OUTPUT 5	Output	switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	10
B)	Glound		Output		Turn signal switch RH	0 2 ms JPMIA0031GB
					All switch OFF (Wiper intermittent dial 4)	10.7V
				ut Combination switch	Front wiper switch HI (Wiper intermittent dial 4)	(V)
51 (L/W)	Ground	Combination switch OUTPUT 1	Output		Any of the conditions below with all switch 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
					All switch OFF (Wiper intermittent dial 4)	ov
					Front washer switch ON (Wiper intermittent dial 4)	(<u>v</u>)
52 (G/B)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	15 10 5 0 2 ms JPMIA0033GB
					All switch OFF	0V
					Front wiper switch INT	
				Combination	Front wiper switch LO	(V) 15
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Output	switch (Wiper intermit-	Lighting switch AUTO	10 5 0 2 ms
					All switch OFF	10.7V
					Front fog lamp switch ON	0V
					Lighting switch 2ND	
54		Combination switch		Combination switch	Lighting switch flash-to-	15
(G/Y)	Ground	OUTPUT 4	Output	(Wiper intermit- tent dial 4)	pass	0
					Turn signal switch LH	2 ms JPMIA0035GB
55				Front blower mo-	ON	Battery voltage
(BR/ W)	Ground	Front blower monitor	Input	tor switch	OFF	0V

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	inal No.	Description				Value
(Wire (+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
56 ²		Front door lock as-		Front door lock	OFF (neutral)	5V
(L/B)	Ground	sembly LH (key cylin- der switch) (lock)	Input	assembly LH (key cylinder switch)	ON (lock)	OV
57 (W)	Ground	Tire pressure warn- ing check switch	Input			5V
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8V
					ON (front door LH OPEN)	OV
59		Rear window defog-	_	Rear window de-	Active	Battery voltage
(G/R)	Ground	ger relay	Output	fogger	Not activated	0V
60 (B/R)	Ground	Front console antenna 2 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1
61 (W/P)	Ground	Center console an-	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 S JMKIA0062GB
(W/R)		tenna 2 (+)		OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 1 s JMKIA0063GB

< ECU DIAGNOSIS >

	inal No. e color)	Description				Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
62 ⁴	Ground	Front outside handle	Output	When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(B/Y)	Glound	RH antenna (-)	Guipui	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0063GB
63 ⁴	Ground	Front outside handle	Output	When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(LG)		RH antenna (+)	Japa.	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMRIA0063GB
64 ⁴	Ground	Front outside handle	Qutout	When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 IS 1 JMRIA0062GB
(V)	Giound	LH antenna (-)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB

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[LH ONLY ANTI-PINCH-SEDAN]

	inal No. e color)	Description	ı		0 100	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
65 ⁴	Ground	Front outside handle	Output	When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(P)	Glound	LH antenna (+)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
68 (G/O)	Ground	NATS antenna amp (built in key slot)	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.
69 (O)	Ground	NATS antenna amp (built in key slot)	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.
70 (R/B)	Ground	Ignition relay-2 con- trol	Output	Ignition switch	OFF or ACC	0V
				ON During waiting		Battery voltage (V) 15 10 5 0 JMKIA0064GB
71 (L/O)	Ground	Remote keyless entry receiver signal	Input/ Output	When operating e	ither button on Intelligent Key	(V) 15 10 5 1 ms JMKIA0065GB

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< ECU DIAGNOSIS >

	inal No.	Description				Value
(Wir (+)	e color)	Signal name Input/ Output			Condition	(Approx.)
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4V
75 (R/Y)	Ground	Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 2 ms JPMIA0040GB 1.3V

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	inal No.	Description				Value	Λ
(Wire (+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0	В
						JPMIA0041GB 1.4V	D
					Lighting switch high-beam (Wiper intermittent dial 4)	(V) 15 10 5 0	Е
						2 ms JPMIA0036GB	F
76 (R/G)	Ground	Combination switch INPUT 3	Input	Combination switch		1.3V	G
					Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0	Н
						2 ms JPMIA0037GB	I
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1	(V) 15 10 5	J
					Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 3	2 ms	PV
78	Ground	CAN-L	Input/		_	1.3V	L
(P) 79	Ground	CAN-H	Output Input/		_	_	M
(L)			Output		OFF	OV	N
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0	0
						1 s JPMIA0015GB	Р
81	Ground	ON indicator lamp	Output	Ignition switch	ON OFF or ACC	Battery voltage 0V	
(LG)	Cround	ON INGICATOR IAITIP	Juiput	iginaon switch	ON	Battery voltage	

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	inal No.	Description				Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
83	Craund	ACC relevisentral	Outnut	lanition outlab	OFF	0V
(L)	Ground	ACC relay control	Output	Ignition switch	ACC or ON	Battery voltage
84 (Y/R)	Ground	CVT shift selector	Output		_	Battery voltage
87	Ground	Ground Selector lever P posi-		Selector lever	P position	OV
(G/B)	Ground	tion switch	Input	Selector level	Any position other than P	Battery voltage
					ON (pressed)	OV
88 ⁴ (P/L)	Ground	Front door RH request switch	Input	Front door RH request switch	OFF (not pressed)	(V) 15 10 5 10 10 ms JPMIA0016GB 1.0V
					ON (pressed)	OV
89 ⁴ (B/W)	Ground	Front door LH request switch	Input	Front door LH request switch	OFF (not pressed)	(V) 15 10 10 10 ms JPMIA0016GB 1.0V
90	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	OV
(Y)	Siodila	lay control	Juipui	iginuon switch	ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	=	Battery voltage

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

	inal No.	Description				Value	А
(+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)	Α.
					All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB	B C
					Turn signal switch LH	(V) 15 10 2 ms JPMIA0037GB 1.3V	E F
95 (R/W)	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 1.3V	G H
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3V	PWC
					Front washer switch ON	(V) 15 10 5 0	M
						JPMIA0039GB 1.3V	0

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	ninal No. e color)	Description			0 100	Value	
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4V	
96	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB	
(P/B)		INPUT 4	при	switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0036GB 1.3V	
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3V	

< ECU DIAGNOSIS >

	inal No.	Description				Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch flash-to- pass	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3V
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB
					Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3V
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB
					Pressed	0 V
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0012GB

< ECU DIAGNOSIS >

	inal No. e color)	Description			Condition	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
103	Ground	Trunk lid opening	Output	Trunk lid	Open (trunk lid opener actuator is activated)	Battery voltage
(V)	Ground	Trunk ilu opening	Output	Trunk iiu	Close (trunk lid opener actuator is not activated)	OV
110	Ground	Trunk room lamp	Output	Trunk room lamp	ON	OV
(V/W)					OFF	Battery voltage
114	Ground	Rear parcel shelf an-	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(B)		tenna 1 (-)	J Sapar		When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 1 s JMKIA0063GB
115	Ground	Rear parcel shelf an-	Output	t Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB
(W)	Ground	tenna 1 (+)	Output		When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB

< ECU DIAGNOSIS >

	inal No.	Description				Value	
(Wire (+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	
1184		Rear bumper anten-		When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 11 18 JMKIA0062GB	
(L/O)	Ground	na (-)	Output	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	
1194	Ground	Rear bumper anten-	Output	When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 S JMRIA0062GB	
(BR/ W)	Ground	na (+)	Output	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1	
127 (BR/ W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage OV	
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed) ON (trunk is open)	(V) 15 10 5 0 10 ms 11.8V	

Terminal No. (Wire color) Description		len: 4/	Condition		Value		
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)	
132 (R) Gr		Starter motor relay control	Output	Ignition switch OFF (M/T vehi- cle)	When the clutch pedal is depressed	Battery voltage	
					When the clutch pedal is not depressed	ov	
	Ground			Ignition switch ON (other than M/ T vehicle)	When selector lever is in P or N position and the brake is depressed	Battery voltage	
					When selector lever is in P or N position and the brake is not depressed	OV	
140	Cround	Engine switch (push		Engine switch	Pressed	0V	
(BR)	Ground	switch)	Input	(push switch)	Not pressed	Battery voltage	
					ON (pressed)	OV	
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	OFF (not pressed)	(V) 15 10 5 10 ms JPMIA0016 1.0V	
144 ⁴		Intelligent Key warn-		Request switch	Sounding	0V	
(GR)	Ground	ing buzzer	Output	buzzer	Not sounding	Battery voltage	
144 ⁵		Outside warning	side warning Outside war		Sounding	OV	
(GR)	Ground	buzzer	Output	buzzer	Not sounding	Battery voltage	
147	Ground	Trunk lid opener	la a t	Trunk lid opener	Pressed	0V	
(L/R)	Ground	switch	Input	switch	Not pressed	Battery voltage	
148 ¹ (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	(V) 15 10 5 0 10 ms 10 ms	
					ON (when rear door RH opens)	ov	
149 ¹ (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	(V) 15 10 5 0 10 ms	
					ON (when rear door LH opens)	11.8V	

^{1:} Sedan

^{2:} With LH front window anti-pinch

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

- 3: With LH and RH front window anti-pinch
- 4: With Intelligent Key
- 5: Without Intelligent Key
- 6: Coupe

Fail Safe

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 has become consistent • Starter control relay signal • Starter relay status signal		
B2562: LO VOLTAGE	Inhibit engine cranking	100 ms after the power supply voltage increases to more than 8.8 V		
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)		
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal) 		
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is 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		
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilled Power position changes to ACC Receives engine status signal (CAN)		
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: OFF (Battery voltage)		

DTC Inspection Priority Chart

INFOID:0000000005783607

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)

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[LH ONLY ANTI-PINCH-SEDAN]

Priority	DTC
3	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING
4	 B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW B2608: STARTER RELAY B2608: STARTER RELAY B2609: ENG STATE SIG LOST B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2618: BCM B2618: DWH-BTN IGN SW B2619: VEHICLE TYPE B2621: ENG STATE NO RECIV B26262: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG
5	C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RR C1711: [NO DATA] RL C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1717: [PRESSDATA ERR] FR C1719: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1719: [CODE ERR] FR C1720: [CODE ERR] FR C1721: [CODE ERR] RR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FR C1726: [BATT VOLT LOW] FR C1727: [BATT VOLT LOW] RR
6	B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA

DTC Index

NOTE:

Details of time display

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.

1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1
 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter
 remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch
 OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	BCS-38, "Description"
U1010: CONTROL UNIT (CAN)	_	_	_	BCS-39, "DTC Logic"
U0415: VEHICLE SPEED SIG	_	_	_	BCS-40, "Description"
B2190: NATS ANTENNA AMP	×	_	_	SEC-53, "Description" (Coupe) SEC-229, "Description" (Sedan with I- Key) SEC-399, "Description" (Sedan without I-Key)
B2191: DIFFERENCE OF KEY	×	_	_	SEC-56, "Description" (Coupe) SEC-232, "Description" (Sedan with I-Key) SEC-402, "Description" (Sedan without I-Key)
B2192: ID DISCORD BCM-ECM	×	_	_	SEC-57, "Description" (Coupe) SEC-233, "Description" (Sedan with I-Key) SEC-403, "Description" (Sedan without I-Key)
B2193: CHAIN OF BCM-ECM	×	_	_	SEC-58. "Description" (Coupe) SEC-234. "Description" (Sedan with I-Key) SEC-404. "Description" (Sedan without I-Key)
B2195: ANTI SCANNING	×	_	_	SEC-59, "Description" (Coupe) SEC-235, "Description" (Sedan with I-Key) SEC-405, "Description" (Sedan without I-Key)
B2553: IGNITION RELAY	_	_	_	PCS-61, "Description"
B2555: STOP LAMP	_	_	_	SEC-60, "Description" (Coupe) SEC-236, "Description" (Sedan with I- Key) SEC-406, "Description" (Sedan without I-Key)
B2556: PUSH-BTN IGN SW	_	×	_	SEC-63, "Description" (Coupe) SEC-239, "Description" (Sedan with I-Key) SEC-409, "Description" (Sedan without I-Key)
B2557: VEHICLE SPEED	_	×	_	SEC-65, "Description" (Coupe) SEC-241, "Description" (Sedan with I-Key) SEC-411, "Description" (Sedan without I-Key)

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CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2560: STARTER CONT RELAY	×	×	_	SEC-66, "Description" (Coupe) SEC-242, "Description" (Sedan with I-Key) SEC-412, "Description" (Sedan without I-Key)
B2562: LOW VOLTAGE	×	_	_	BCS-41, "DTC Logic"
B2601: SHIFT POSITION	_	×	_	SEC-67, "Description" (Coupe) SEC-243, "Description" (Sedan with I-Key) SEC-413, "Description" (Sedan without I-Key)
B2602: SHIFT POSITION	_	×	_	SEC-71, "Description" (Coupe) SEC-246, "Description" (Sedan with I-Key) SEC-416, "Description" (Sedan without I-Key)
B2603: SHIFT POSI STATUS	_	×	_	SEC-74, "Description" (Coupe) SEC-249, "Description" (Sedan with I-Key) SEC-419, "Description" (Sedan without I-Key)
B2604: PNP SW	_	×	_	SEC-77, "Description" (Coupe) SEC-252, "Description" (Sedan with I- Key) SEC-422, "Description" (Sedan without I-Key)
B2605: PNP SW	_	×	_	SEC-79, "Description" (Coupe) SEC-254, "Description" (Sedan with I- Key) SEC-424, "Description" (Sedan without I-Key)
B2608: STARTER RELAY	×	×	_	SEC-81, "Description" (Coupe) SEC-256, "Description" (Sedan with I- Key) SEC-426, "Description" (Sedan without I-Key)
B260A: IGNITION RELAY	×	×	_	PCS-63, "Description"
B260F: ENG STATE SIG LOST	×	×	_	SEC-83, "Description" (Coupe) SEC-258, "Description" (Sedan with I-Key) SEC-428, "Description" (Sedan without I-Key)
B2614: ACC RELAY CIRC	_	×	_	PCS-66, "Description"
B2615: BLOWER RELAY CIRC	_	×	_	PCS-69, "Description"
B2616: IGN RELAY CIRC	_	×	_	PCS-72, "Description"
B2617: STARTER RELAY CIRC	×	×	_	SEC-87, "Description" (Coupe) SEC-262, "Description" (Sedan with I- Key) SEC-432, "Description" (Sedan without I-Key)
B2618: BCM	×	×		PCS-75, "Description"
B261A: PUSH-BTN IGN SW	_	×	_	SEC-90, "Description" (Coupe) SEC-265, "Description" (Sedan with I- Key) SEC-435, "Description" (Sedan without I-Key)

< ECU DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	1
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	_	SEC-89, "Description" (Coupe) SEC-264, "Description" (Sedan with I-Key) SEC-434, "Description" (Sedan without I-Key)	[
B2622: INSIDE ANTENNA	_	_	_	DLK-60, "Description" (Coupe) DLK-283, "Description" (Sedan with I-Key) DLK-484, "Description" (Sedan without I-Key)	[
B2623: INSIDE ANTENNA	_	_	_	DLK-63, "Description" (Coupe) DLK-286, "Description" (Sedan with I-Key) DLK-487, "Description" (Sedan without I-Key)	E
B26E1: ENG STATE NO RES	×	×	_	SEC-92, "Description" (Coupe) SEC-267, "Description" (Sedan with I- Key) SEC-437, "Description" (Sedan without I-Key)	(
B26E8: CLUTCH SW	×	×	_	SEC-84, "Description" (Coupe) SEC-259, "Description" (Sedan with I-Key) SEC-429, "Description" (Sedan without I-Key)	ŀ
B26EA: KEY REGISTRATION	×	× (Turn ON for 15 seconds)	_	SEC-86, "Description" (Coupe) SEC-261, "Description" (Sedan with I-Key) SEC-431, "Description" (Sedan without I-Key)	,
C1704: LOW PRESSURE FL	_	_	×		
C1705: LOW PRESSURE FR	_	_	×	WT-44, "Self-Diagnosis (With CON-	P'
C1706: LOW PRESSURE RR	_	_	×	SULT-III)"	
C1707: LOW PRESSURE RL	_	_	×		
C1708: [NO DATA] FL	_	_	×		
C1709: [NO DATA] FR	_	_	×	WT-14, "Description"	
C1710: [NO DATA] RR	_	_	×		
C1711: [NO DATA] RL	_	_	×		
C1712: [CHECKSUM ERR] FL	_	_	×		
C1713: [CHECKSUM ERR] FR	_	_	×	WT-16, "Description"	
C1714: [CHECKSUM ERR] RR	_	_	×		
C1715: [CHECKSUM ERR] RL	_	_	×		
C1716: [PRESSDATA ERR] FL	_	_	×		
C1717: [PRESSDATA ERR] FR	_	_	×	WT 40 "D	
C1718: [PRESSDATA ERR] RR	_	_	×	WT-18, "Description"	
C1719: [PRESSDATA ERR] RL	_	_	×		

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< ECU DIAGNOSIS >

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1720: [CODE ERR] FL	_	_	×	
C1721: [CODE ERR] FR	_	_	×	
C1722: [CODE ERR] RR	_	_	×	
C1723: [CODE ERR] RL	_	_	×	WT-16, "Description"
C1724: [BATT VOLT LOW] FL	_	_	×	W1-16, Description
C1725: [BATT VOLT LOW] FR	_	_	×	
C1726: [BATT VOLT LOW] RR	_	_	×	
C1727: [BATT VOLT LOW] RL	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	×	WT-19, "Description"
C1734: CONTROL UNIT	_	_	×	WT-20, "Description"

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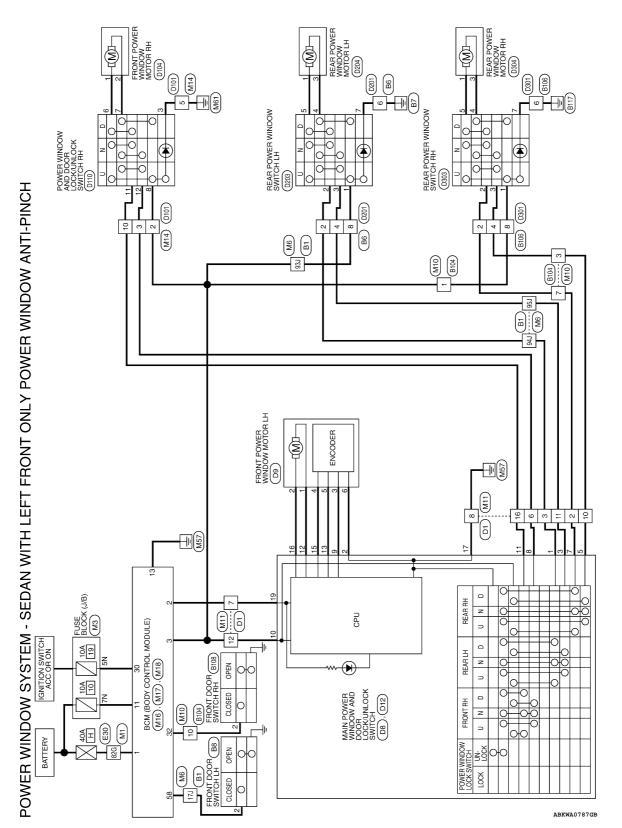
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WIRING DIAGRAM

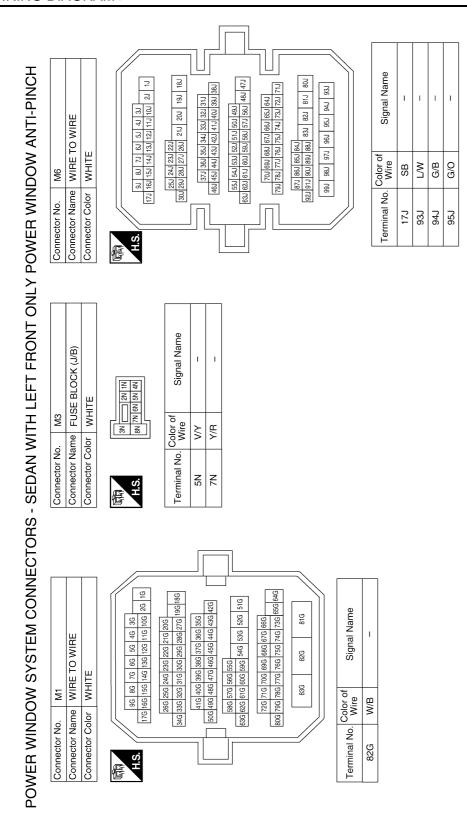
POWER WINDOW SYSTEM - WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH

Wiring Diagram



< WIRING DIAGRAM >

[LH ONLY ANTI-PINCH-SEDAN]



ABKIA2205GE

< WIRING DIAGRAM >

[LH ONLY ANTI-PINCH-SEDAN]

DR DOOR SW

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r No. M14	Connector Name WIRE TO WIRE	Connector Color WHITE	1	Terminal No. Wire Signal Name		R/B –	I B	B/W –
Connector No.	Connecto	Connecto	题 H.S.	Terminal	2	က	5	1
1	Connector Name WIRE TO WIRE	ITE	3	Signal Name	ı	I	ı	ı
. M11	ıme WII	olor WE	8 1 8	Color of Wire	G/W	G/B	B/B	R/Y
Connector No.	Connector Na	Connector Color WHITE	哥 H.S.	Terminal No. Wire	2	3	9	7

	JY CONTROL		H.S. (1.28) St. (2.18)	59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41	Signal Name	ACC F/B	AS DOOR SW
M18	BCM (BOD MODULE)	GREEN	33 32 33 30 29	53 52 51 50 49	olor of Wire		B/B
Connector No.	Connector Name BCM (BODY CONTROL MODULE)	Connector Color GREEN	H.S. 88 37 88 38 34	59 58 57 56 55 54	Terminal No. Wire	30	32
Connector No. M17	ē	Connector Color WHITE	4 6 6 7 8 9 10 1112 13 14 15 16 17 18 19	Terminal No. Color of Signal Name	11 Y/R BAT BCM FUSE	13 B GND1	

10 9 8 7 6	Signal Name	1	_	-	1
5 4 11 10 9	Color of Wire	L/W	G/R	G/W	R/B
H.S.	Terminal No. Wire	1	ε	2	10

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Connector No.	M16
Connector Name	Connector Name BCM (BODY CONTROL MODULE)
Connector Color BLACK	BLACK



Signal Name	BAT_POWER_F/L	P/W_POWER_ SUPPLY_PERM	POWER_WINDOW_ POWER_SUPPLY (RAI
Color of Wire	M/B	R/Y	M
erminal No. Wire	-	2	ဇ

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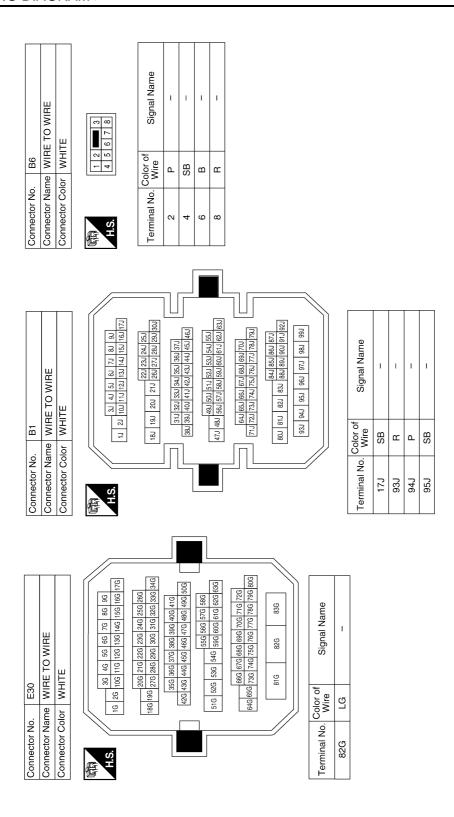
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[LH ONLY ANTI-PINCH-SEDAN]



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< WIRING DIAGRAM >

[LH ONLY ANTI-PINCH-SEDAN]

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Connector No. B106 Connector Name WIRE TO WIRE Connector Color WHITE	1 2	Terminal No. Color of Signal Name	2 W -	4 SB -	υ ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο	-	Connector No. D8	MAIN POWER WINDOW AND		Connector Color WHITE	H.S. 17 18 19	Color of	Wire Sign		19 W BAT						
Connector No. B104 Connector Name WIRE TO WIRE Connector Color BROWN	[新] 1 2 3 4 5	Terminal No. Wire Signal Name	т ш		10 GB -		Connector No. D1	Connector Name WIRE TO WIRE	Connector Color WHITE	5 5	S.	Terminal No. Color of Signal Name	2 P			 - B	10 SB –	 12 V –	16 L –		
Connector No. B8 Connector Name FRONT DOOR SWITCH LH Connector Color WHITE	H.S.		Terminal No. Color of Signal Name	o do	90 2		Connector No. B108	Connector Name FRONT DOOR SWITCH RH	Connector Color WHITE		H.S.		Torming No Color of Signal Nama	Wire	2 GR –					ABKIA2207GB	

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$\begin{array}{c} \textbf{POWER WINDOW SYSTEM-WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH} \\ \end{array}$

< WIRING DIAGRAM >

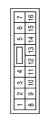
[LH ONLY ANTI-PINCH-SEDAN]

	_	_	_	_	_	_		_	_				_
Signal Name	RL UP	ENCODER GND	RL DOWN	RR DOWN	RR UP	AS UP	ENCODER SIG2	IGN	AS DOWN	DR DOWN	ENCODER SIG1	ENCODER POWER	DR UP
Color of Wire	>	ŋ	0	SB	۵	BR	Μ	>	_	ГG	SB	GR	В
Terminal No.	-	2	3	5	7	8	6	10	11	12	13	15	16

Connector No.	D110
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color WHITE	WHITE

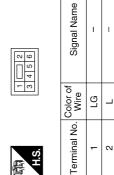
8 9 10 11 12	Signal Name	GND	DOWN	۵n	NSI	DOWN	dN
6 7	Color of Wire	В	EG	_	SB	0	M
H.S.	erminal No.	8	9	7	8	11	12

Connector No.	D12
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (SEDAN WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color WHITE	WHITE





Connector No. D104 Connector Name FRONT POWER WINDOW MOTOR RH	Connector Color WHITE
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D9	Connector Name FRONT POWER WINDOW MOTOR LH	WHITE	
Connector No.	Connector Name	Connector Color WHITE	





Signal Name	ſ	I	I	I	-	I
Color of Wire	LG	н	M	GR	SB	g
Terminal No. Wire	-	2	3	4	2	9

D101	WIRE TO WIRE	WHITE	
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	





	Signal Name	ı	_	1	_
-	Color of Wire	SB	Μ	В	0
	Terminal No.	2	8	5	10

ABKIA2208GB

< WIRING DIAGRAM >

[LH ONLY ANTI-PINCH-SEDAN]

_		_	1		_	_
4	Connector Name REAR POWER WINDOW MOTOR LH	EN	5 6 8	Signal Name	Ī	-
D204	me REA MO	or GRE	- 4	Color of Wire	_	re
Connector No.	Connector Na	Connector Color GREEN	高 H.S.	Terminal No. Wire	-	3

4	REAR POW MOTOR LH	N IEN	2 2 2	0)		
D204	MO.	GREEN	- 4	Color of Wire	_	ر او
	me.	ō		္ပိ>		_
Connector No.	Connector Name	Connector Color	(内) H.S.	Terminal No.	-	3

13	REAR POWER WINDOW SWITCH LH	WHITE	ΠĿ		Signal Name	IGN	UP	DOWN	DOWN	UP	GND	
. D203				5 7	Color of Wire	ш	Ь	SB	LG	Т	В	
Connector No.	Connector Name	Connector Color	E	H.S.	Terminal No.	-	2	3	4	5	7	

Connector No.		D201
Connector Name	_	WIRE TO WIRE
Connector Color	_	WHITE
H.S.	[m &]	2 1 2 1 2 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Terminal No. Wire	Color of Wire	Signal Name
2	۵	ı
4	SB	I
9	В	I
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Connector Name		REAR POWER WINDOW MOTOR RH
Connector Color	or GREEN	EN
同词 H.S.		2 s s
Terminal No. Wire	Color of Wire	Signal Name
-	٦	I
3	FG	I

										_
9	REAR POWER WINDOW SWITCH RH	ITE	3 4 5 1	Signal Name	IGN	UP	NMOG	DOWN	UP	
D303		lor WHITE	2	Color of Wire	œ	۵	SB	ГG	_	۵
Connector No.	Connector Name	Connector Color	「斯 H.S.	Terminal No.	-	2	8	4	5	7

Connector No.		D301	
Connector Na	ame	Connector Name WIRE TO WIRE	
Connector Color		WHITE	
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Terminal No. Wire	Color Wire	of Signal Name	Name
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4	SB		
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8	Н		

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PRECAUTION

PRECAUTIONS

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 SR and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH [LH ONLY ANTI-PINCH-SEDAN]

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY **SWITCH**

Diagnosis Procedure

INFOID:0000000005434303

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${f 1}$. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to BCS-42, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH POWER SUPPLY AND **GROUND CIRCUIT**

Check main power window and door lock/unlock switch power supply and ground circuit. Refer to PWC-91, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

3. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Check main power window and door lock/unlock switch.

Refer to PWC-91, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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PWC-153 2010 Altima Revision: September 2009

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434304

1. CHECK FRONT POWER WINDOW MOTOR LH

Check front power window motor LH.

Refer to PWC-101, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE [LH ONLY ANTI-PINCH-SEDAN]

< SYMPTOM DIAGNOSIS >

FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPER-**ATE**

Diagnosis Procedure

INFOID:0000000005434305

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1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Check power window and door lock/unlock switch RH.

Refer to PWC-96, "FRONT POWER WINDOW SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK FRONT POWER WINDOW MOTOR RH CIRCUIT

Check front power window motor RH circuit.

Refer to PWC-103, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

>> Check intermittent incident. Refer to GI-41, "Intermittent Incident". NO

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PWC-155 Revision: September 2009 2010 Altima

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434306

1. CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH.

Refer to PWC-98, "REAR POWER WINDOW SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR POWER WINDOW MOTOR LH

Check rear power window motor LH.

Refer to PWC-104, "REAR LH: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

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1. CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.

Refer to PWC-98, "REAR POWER WINDOW SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR POWER WINDOW MOTOR RH

Check rear power window motor RH.

Refer to PWC-106, "REAR RH: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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Revision: September 2009 PWC-157 2010 Altima

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE)

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE)

Diagnosis Procedure

INFOID:0000000005434308

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-96, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK DOOR WINDOW SLIDING PART

- · A foreign material adheres to window glass or glass run rubber.
- · Glass run rubber wear or deformation.
- Sash is tilted too much or not enough.

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

3. CHECK ENCODER CIRCUIT

Check encoder circuit.

Refer to PWC-91, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMAL-LY (DRIVER SIDE)

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY (DRIVER SIDE)

Diagnosis Procedure

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1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-96, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK ENCODER

Check encoder.

Refer to PWC-91, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPER-ATE PROPERLY

Diagnosis Procedure

INFOID:0000000005434310

1. CHECK FRONT DOOR SWITCH

Check front door switch.

Refer to PWC-111, "Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

[LH ONLY ANTI-PINCH-SEDAN]

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000005434311

1.REPLACE MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Replace main power window and door lock/unlock switch.

Refer to <u>PWC-163</u>, "Removal and Installation". After that, <u>PWC-96</u>, "<u>POWER WINDOW MAIN SWITCH</u>: <u>Special Repair Requirement"</u>.

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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PRE-INSPECTION FOR DIAGNOSTIC

< ON-VEHICLE MAINTENANCE >

[LH ONLY ANTI-PINCH-SEDAN]

ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

BASIC INSPECTION

1.INSPECTION START

- 1. Check the service history.
- 2. Check the following parts.
- Fuse/circuit breaker blown.
- Poor connection, open or short circuit of harness connector.
- · Battery voltage.

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace the malfunctioning parts.

POWER WINDOW MAIN SWITCH

< ON-VEHICLE REPAIR >

[LH ONLY ANTI-PINCH-SEDAN]

ON-VEHICLE REPAIR

POWER WINDOW MAIN SWITCH

Removal and Installation

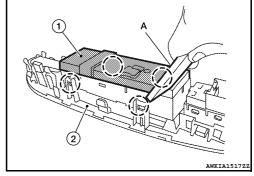
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REMOVAL

- 1. Remove the power window main switch finisher (2) from the door finisher, refer to INT-30, "Exploded View".
- 2. Release the four tabs (two on each side) with a suitable tool (A), then separate the power window main switch (1) from the switch finisher (2).

(); Pawl **CAUTION:**

Do not fold the pawl of switch finisher.



INSTALLATION

Installation is in the reverse order of removal.

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FRONT POWER WINDOW SWITCH

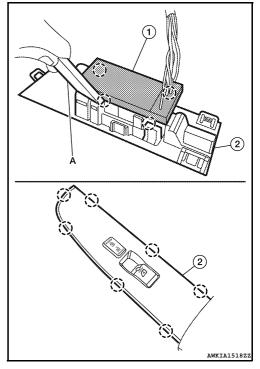
Removal and Installation

REMOVAL

- 1. Remove the front power window switch finisher (2) from the front door finisher RH. Refer to INT-30, "Exploded View".
- 2. Release the four tabs (two on each side) with a suitable tool (A), then separate the front power window switch (1) from the switch finisher (2).

(): Pawl CAUTION:

Do not fold the pawl of switch finisher.



INSTALLATION

Installation is in the reverse order of removal.

REAR POWER WINDOW SWITCH

Removal and Installation - Rear Door Switch

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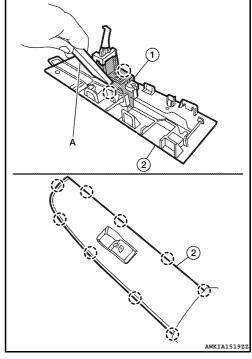
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REMOVAL

- 1. Remove the rear power window switch finisher (2) from the rear door finisher. Refer to INT-30, "Exploded View".
- 2. Release the tab (one on each side) with a suitable tool (A), then separate the rear power window switch (1) from the switch finisher (2).

(): Pawl CAUTION:

Do not fold the pawl of switch finisher.



INSTALLATION

Installation is in the reverse order of removal.

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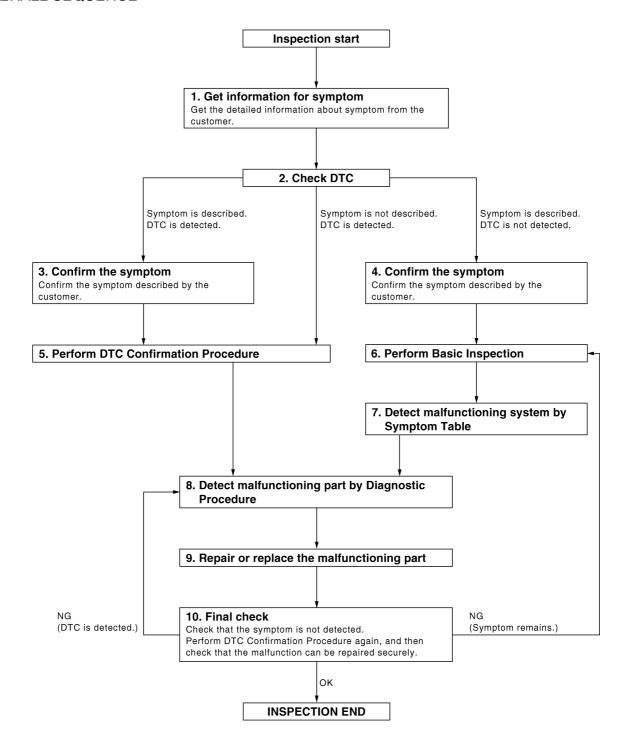
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

OVERALL SEQUENCE



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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[LH&RH FRONT ANTI-PINCH-COUPE]

1. GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2

2. CHECK DTC

- 1. Check DTC.
- 2. Perform the following procedure if DTC is displayed.
- Record DTC and freeze frame data (Print them out with CONSULT-III.)
- 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>>GO TO 3

Symptom is described, DTC is not displayed>>GO TO 4

Symptom is not described, DTC is displayed>>GO TO 5

3. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5

4. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6

PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again. At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time. If two or more DTCs are detected, refer to BCS-70, "DTC Index" and determine trouble diagnosis order. NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual. This
 simplified check procedure is an effective alternative though DTC cannot be detected during this check.
 If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Confirmation Procedure.

Is DTC detected?

YES >> GO TO 8

NO >> Refer to GI-41, "Intermittent Incident".

O. PERFORM BASIC INSPECTION

Perform PWC-166, "Work Flow".

Inspection End>>GO TO 7

7. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

>> GO TO 8

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[LH&RH FRONT ANTI-PINCH-COUPE]

8. Detect malfunctioning part by diagnostic procedure

Inspect according to Diagnostic Procedure of the system.

NOTE:

The Diagnostic Procedure described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

Is malfunctioning part detected?

YES >> GO TO 9

NO >> Check voltage of related BCM terminals using CONSULT-III.

9. REPAIR OR REPLACE THE MALFUNCTIONING PART

- 1. Repair or replace the malfunctioning part.
- Reconnect parts or connectors disconnected during Diagnostic Procedure again after repair and replacement.
- 3. Check DTC. If DTC is displayed, erase it.

>> GO TO 10

10. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.

When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8

YES (Symptom remains)>>GO TO 6

NO >> Inspection End.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH&RH FRONT ANTI-PINCH-COUPE]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

Initial setting is necessary when battery terminal is disconnected.

CAUTION:

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

- Auto-up operation
- Anti-pinch function
- Retained power operation

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INITIALIZATION PROCEDURE

- 1. Disconnect battery negative terminal or main power window and door lock/unlock switch. Reconnect it after a minute or more.
- Turn ignition switch ON.
- 3. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open)
- 4. Continue pulling the power window switch UP (AUTO-UP operation). Even after glass stops at fully closed position, keep pulling the switch for 4 seconds or more.
- 5. Inspect anti-pinch function.

CHECK ANTI-PINCH FUNCTION

- 1. Fully open the door window.
- 2. Place a piece of wood near fully closed position.
- Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm or 2 seconds 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.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-202, "Fail Safe".
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Retained power operation when ignition switch is OFF.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

INFOID:0000000005434317

Initial setting is necessary when replacing main power window and door lock/unlock switch.

CAUTION:

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

- Auto-up operation
- Anti-pinch function
- Retained power operation

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement

INITIALIZATION PROCEDURE

1. Disconnect battery negative terminal or main power window and door lock/unlock switch. Reconnect it after a minute or more.

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Revision: September 2009 PWC-169 2010 Altima

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH&RH FRONT ANTI-PINCH-COUPE]

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

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 or 2 seconds without pinching piece of wood and stops.
- Check that glass does not rise when operating the main power window and door lock/unlock switch while lowering.

CAUTION:

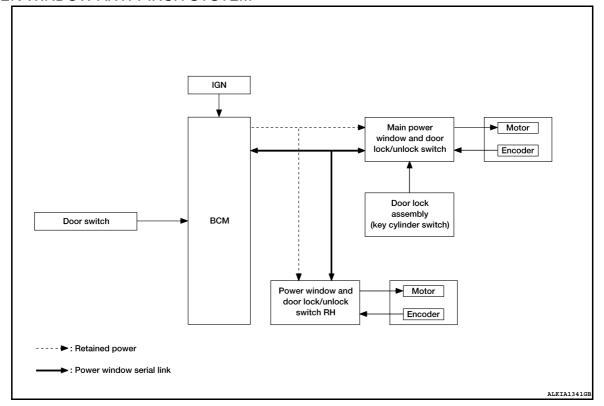
- Do not check with hands and other part of body because they may be pinched. Do not get pinched.
- Check that AUTO-UP operates before inspection when system initialization is performed.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-202, "Fail Safe".
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Retained power operation when ignition switch is OFF.

FUNCTION DIAGNOSIS

POWER WINDOW SYSTEM

System Diagram

POWER WINDOW ANTI-PINCH SYSTEM



System Description

INFOID:0000000005434320

POWER WINDOW MAIN SWITCH INPUT/OUTPUT SIGNAL CHART

Item	Input signal to main power window and door lock/unlock switch	Main power window and door lock/unlock switch function	Actuator	
Key cylinder switch	LOCK/UNLOCK signal (more than 1.5 seconds over)			
Encoder	Encoder pulse signal		Front power window motor	
Main power window and door lock/unlock switch	Power window motor LH UP/DOWN signal	Power window control		
Power window and door lock/unlock switch RH	Power window motor RH UP/DOWN signal			
BCM	RAP signal			

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH INPUT/OUTPUT SIGNAL CHART

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Revision: September 2009 PWC-171 2010 Altima

[LH&RH FRONT ANTI-PINCH-COUPE]

Item	Input signal to front power window switch	Front power window switch function	Actuator	
Power window and door lock/unlock switch RH	Power window motor RH UP/DOWN signal	Power window control	Front power window motor RH	
Encoder	Encoder pulse signal			
BCM	RAP signal			

POWER WINDOW OPERATION

- Power window system is operable during the retained power operation timer after turning ignition switch ON and OFF.
- Main power window and door lock/unlock switch can open/close all windows.
- Power window and door lock unlock switch RH can open/close the corresponding window.

POWER WINDOW AUTO-OPERATION (LH & RH)

- AUTO UP/DOWN operation can be performed when main power window and door lock/unlock switch & power window and door lock/unlock switch RH 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 fully opened/closed position.
- Power window motor is operable in case encoder is malfunctioning.

RETAINED POWER OPERATION

Retained power operation is an additional power supply function that enables power window system to operate during the 45 seconds even when ignition switch is turned OFF

Retained power function cancel conditions

- Door CLOSE (door switch OFF)→OPEN (door switch ON).
- When ignition switch is ON.
- When timer time passes. (45 seconds)

POWER WINDOW LOCK

Ground circuit inside main power window and door lock/unlock switch shuts off when power window lock switch is ON. This inhibits power window switch operation except with the main power window and door lock/unlock switch.

ANTI-PINCH OPERATION (LH & RH)

- Pinch foreign material in the door glass during AUTO-UP operation, and it is the anti-pinch function that lowers the door glass 150 mm or 2 seconds when detected.
- 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 window glass for 150 mm or 2 seconds 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.

KEY CYLINDER SWITCH OPERATION

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

OPERATION CONDITION

- Ignition switch OFF
- Hold door key cylinder to LOCK position for more than 1 second to perform CLOSE operation of the door glass.

POWER WINDOW SYSTEM

< FUNCTION DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

 Hold door key cylinder to UNLOCK position for more than 1 second to perform OPEN operation of the door glass.

KEYLESS POWER WINDOW DOWN OPERATION (LH & RH)

Front power windows open when the unlock button on Intelligent Key is activated and kept pressed for more than 3^(NOTE) seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed.

The power window opening stops when the following operations are performed:

- When the unlock button is kept pressed 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 activate, keyless power window down function cannot be operated.

NOTE:

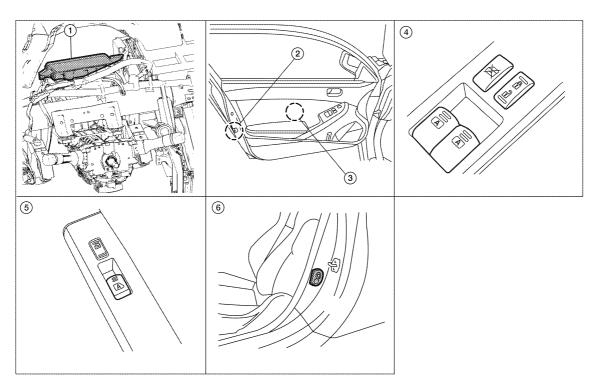
Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUP-PORT". Refer to BCS-18, "COMMON ITEM: CONSULT-III Function".

NOTE:

Use CONSULT-III to change settings.

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

Component Parts Location



- BCM M16, M17, M18 (view with instrument panel removed)
- Main power window and door lock/
 unlock switch D28
- Door lock assembly LH (key cylinder 3. switch) D26
- Power window and door lock/unlock 6. switch RH D105
- Power window motor LH D18, RH
- Front door switch LH B68, RH B109

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Component Description

POWER WINDOW ANTI-PINCH SYSTEM

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POWER WINDOW SYSTEM

[LH&RH FRONT ANTI-PINCH-COUPE]

Component	Function
ВСМ	Supplies power to power window switches.Controls retained power.
Main power window and door lock/unlock switch	 Directly controls all power window motor of all doors. Controls anti-pinch operation of power window LH.
Power window and door lock/unlock switch RH	Controls front power window motor RH.Controls anti-pinch operation of power window RH.
Power window motor LH	 Integrates the ENCODER POWER and WINDOW MOTOR. Starts operating with signals from main power window and door lock/unlock switch. Transmits power window motor rotation as a pulse signal to main power window and door lock/unlock switch.
Power window motor RH	Starts operating with signals from main power window and door lock/unlock switch & power window and door lock/unlock switch RH.
Door lock assembly LH (key cylinder switch)	Transmits operation condition of key cylinder switch to main power window and door lock/unlock switch.
Door switch LH or RH	Detects door open/close condition and transmits to BCM.

[LH&RH FRONT ANTI-PINCH-COUPE]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: Diagnosis Description

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BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF DIAGNOSTIC RESULT	Displays the diagnosis results judged by BCM.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	 Read and save the vehicle specification. Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

Cuatara	Cub quatam calcation items	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	×	×	×
Remote keyless entry system1	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system2	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
ВСМ	BCM	×		
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

^{1:} With remote keyless entry system

COMMON ITEM: CONSULT-III Function

INFOID:0000000005783620

ECU IDENTIFICATION

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^{2:} With intelligent Key system

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

Displays the BCM part No.

SELF-DIAG RESULT

Refer to BCS-70, "DTC Index".

RETAINED PWR

RETAINED PWR : CONSULT-III Function (BCM - RETAINED PWR)

INFOID:0000000005783621

Data monitor

Monitor Item [Unit]	Description
DOOR SW-DR [ON/OFF]	Indicates condition of front door switch LH.
DOOR SW-AS [ON/OFF]	Indicates condition of front door switch RH.

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH: Description

• BCM supplies power.

• It operates each power window motor via corresponding power window switch and makes window move up/ down when main power window and door lock/unlock switch is operated.

POWER WINDOW MAIN SWITCH: Component Function Check

Main Power Window And Door Lock/Unlock Switch

${f 1}$. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH FUNCTION

Does power window motor operate with main power window and door lock/unlock switch operation? Is the inspection result normal?

YES >> Main power window and door lock/unlock switch power supply and ground circuit are OK.

>> Refer to PWC-177, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure". NO

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

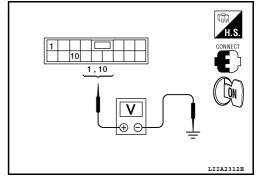
Regarding Wiring Diagram information, refer to PWC-233, "Wiring Diagram".

Main Power Window And Door Lock/Unlock Switch Power Supply Circuit Check

1. CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch ON.
- Check voltage between main power window and door lock/ unlock switch connectors and ground.

(+)		Voltage (V)		
Main power window and door lock/unlock switch connector		(-)	(Approx.)	
D28	1	Ground	Battery voltage	
	10			



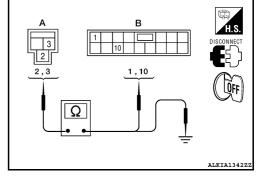
Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect BCM and main power window and door lock/unlock switch.
- Check continuity between BCM connector (A) and main power window and door lock/unlock switch connectors (B).

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M16 (A)	3	D28 (B)	10	Yes
W10 (A)	2	D20 (B)	1	163



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POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

4. Check continuity between BCM connector (A) and ground.

BCM connector	Terminal		Continuity
M16	3	Ground	No
IVITO	2		INO

Is the inspection result normal?

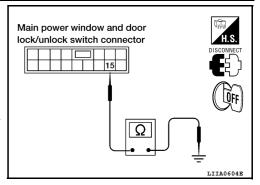
YES >> GO TO 4

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector and ground.

Main power window and door lock/ unlock switch connector	Terminal	Ground	Continuity
D28	15		Yes



Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-252, "Removal and Installation".

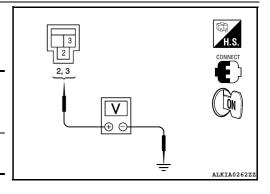
After that, refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : <u>Special Repair Requirement"</u>.

NO >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

- 1. Connect BCM.
- 2. Turn ignition switch ON.
- Check voltage between BCM connector and ground.

(+)		(-)	Voltage (V) (Approx.)	
BCM connector	Terminal			
M16	3	Ground	Battery voltage	
	2	Giodila	Dattery Voltage	



Is the measurement value within the specification?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-252, "Removal and <a href="Installation". After that, refer to PWC-169, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

POWER WINDOW MAIN SWITCH: Special Repair Requirement

INFOID:0000000005434329

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

Refer to PWC-169, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Refer to PWC-185, "DRIVER SIDE: Component Function Check".

PASSENGER SIDE

PASSENGER SIDE : Description

BCM supplies power.

Power window motor RH will be operated if power window and door lock/unlock switch RH is operated.

PASSENGER SIDE : Component Function Check

Power Window And Door Lock/Unlock Switch RH

CHECK POWER WINDOW MOTOR RH FUNCTION

Does power window motor RH operate with power window and door lock/unlock switch RH operation? Is the inspection result normal?

YES >> Power window and door lock/unlock switch RH power supply and ground circuit are OK.

NO >> Refer to PWC-179, "PASSENGER SIDE: Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

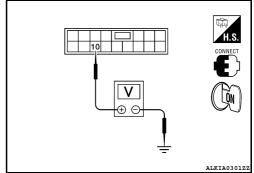
Regarding Wiring Diagram information, refer to PWC-233, "Wiring Diagram".

Power Window And Door Lock/Unlock Switch RH Power Supply Circuit Check

1. CHECK POWER SUPPLY CIRCUIT

Check voltage between power window and door lock/unlock switch RH connector and ground.

Terr	Voltage (V)		
(+)			
Power window and door lock/ unlock switch RH connector	Terminal	(-)	(Approx.)
D105	10	Ground	Battery voltage



Is the measurement value within the specification?

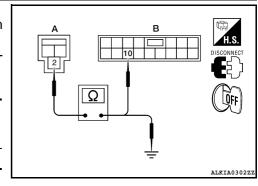
YES >> GO TO 3 NO >> GO TO 2

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect BCM and power window and door lock/unlock switch 2.
- 3. Check continuity between BCM connector (A) and power window and door lock/unlock switch RH connector (B).

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M16 (A)	2	D105 (B)	10	Yes

Check continuity between BCM connector (A) and ground.



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POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

BCM connector	Terminal	Ground	Continuity
M16 (A)	2	No	No

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect power window and door lock/unlock switch RH.
- Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/unlock switch RH	Terminal	Ground	Continuity
D105	11		Yes

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-253, "Removal and Installation". After

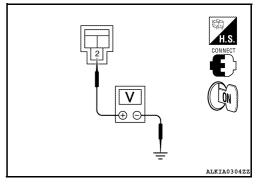
that, refer to PWC-180, "PASSENGER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

- Connect BCM.
- 2. Turn ignition switch ON.
- Check voltage between BCM connector and ground.

Terminals			
(+)		(-)	Voltage (V) (Approx.)
BCM connector	Terminal	(-)	(11 -)
M16	2	Ground	Battery voltage



Is the measurement value within the specification?

YES >> Replace power window and door lock/unlock switch RH.

Refer to <u>PWC-253</u>, "Removal and Installation". After that, refer to <u>PWC-180</u>, "PASSENGER SIDE : Special Repair Requirement".

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

PASSENGER SIDE : Special Repair Requirement

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1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Refer to PWC-187, "PASSENGER SIDE : Component Function Check".

Revision: September 2009 PWC-180 2010 Altima

POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE: Description

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

DRIVER SIDE : Component Function Check

INFOID:0000000005434335

1. CHECK POWER WINDOW MOTOR CIRCUIT

Does power window motor LH operate with operating main power window and door lock/unlock switch? Is the inspection result normal?

YES >> Power window motor LH is OK.

NO >> Refer to PWC-181, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000005434336

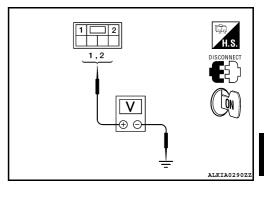
Regarding Wiring Diagram information, refer to PWC-233, "Wiring Diagram".

Power Window Motor LH Circuit Check

1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

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

٦	Terminal			
(+)			Main power win- dow and door lock/	Voltage (V)
Power window motor LH con- nector	Terminal	(–)	unlock switch con- dition	(Approx.)
	2		UP	Battery voltage
D18	_	Ground	DOWN	0
D16	1	Giodila	UP	0
	'		DOWN	Battery voltage
1 41	4 1	141 1 41	· · · · · · · · · · · · · · · · · · ·	



Is the measurement value within the specification?

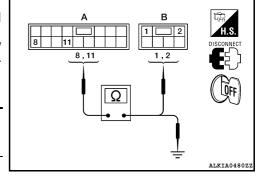
YES >> GO TO 3

NO >> GO TO 2

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch and power window motor LH.
- Check continuity between main power window and door lock/ unlock switch connector (A) and power window motor connector LH (B).

Main power window and door lock/unlock switch connector	Terminal	Power window mo- tor LH connector	Terminal	Continuity
D28 (A)	8	D18 (B)	2	Yes
D20 (A)	11	D 10 (B)	1	163



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POWER WINDOW MOTOR

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	01	Continuity	
D28 (A)	8	Ground	No	
D20 (A)	11		INO	

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-252, "Removal and <a href="Installation". After that, refer to PWC-178, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

3. CHECK POWER WINDOW MOTOR

Check power window motor LH.

Refer to PWC-182, "DRIVER SIDE: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace power window motor LH. Refer to <u>GW-19, "Removal and Installation"</u>. After that, refer to <u>PWC-182, "DRIVER SIDE : Special Repair Requirement"</u>.

DRIVER SIDE: Component Inspection

INFOID:0000000005434337

COMPONENT INSPECTION

1. CHECK POWER WINDOW MOTOR LH

Does motor operate by connecting the battery voltage directly to power window motor?

Terminal		Motor condition	
(+)	(–)	Wolor condition	
1	2	DOWN	
2	1	UP	

Is the inspection result normal?

YES >> Power window motor LH is OK.

NO >> Replace power window motor LH. Refer to <u>GW-19, "Removal and Installation"</u>. After that, refer to <u>PWC-182, "DRIVER SIDE : Special Repair Requirement"</u>.

DRIVER SIDE: Special Repair Requirement

INFOID:0000000005434338

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

$2.\,$ CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Refer to PWC-185, "DRIVER SIDE : Component Function Check".

PASSENGER SIDE

Revision: September 2009 P W C -1 8 2 2010 Altima

PASSENGER SIDE: Description

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Door glass moves UP/DOWN by receiving the signal from main power window and door lock/unlock switch or power window and door lock/unlock switch RH.

PASSENGER SIDE: Component Function Check

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1. CHECK POWER WINDOW MOTOR CIRCIUT

Does power window motor operate with operating main power window and door lock/unlock switch or power window and door lock/unlock switch RH?

Is the inspection result normal?

YES >> Power window motor RH is OK.

NO >> Refer to PWC-183, "PASSENGER SIDE: Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

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Regarding Wiring Diagram information, refer to PWC-233, "Wiring Diagram".

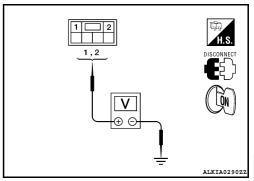
Power Window Motor RH Circuit Check

${f 1}$. CHECK POWER WINDOW SWITCH RH OUTPUT SIGNAL

Turn ignition switch OFF.

- 2. Disconnect power window motor RH.
- Turn ignition switch ON. 3.
- Check voltage between power window motor RH connector and ground.

Terminal			Danisalan		
(+)			Power window motor RH con-	Voltage (V)	
Power window mo- tor RH connector	Terminal	(–)	dition	(Approx.)	
	2		UP	Battery voltage	
D111	2	Ground	DOWN	0	
1	1	Giouna	UP	0	
	'		DOWN	Battery voltage	



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Is the measurement value within the specification?

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

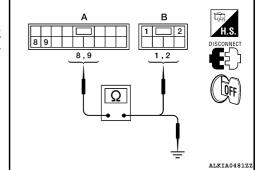
2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.

Revision: September 2009

- Disconnect power window and door lock/unlock switch RH.
- Check continuity between power window and door lock/unlock switch RH connector (A) and power window motor RH connector (B).

Power window and door lock/unlock switch RH connector	Terminal	Power window mo- tor RH connector	Terminal	Continuity
D105 (A)	8	D111 (B)	2	Yes
D103 (A)	9	D111 (B)	1	163



Check continuity between power window and door lock/unlock switch RH connector (A) and ground.

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POWER WINDOW MOTOR

< COMPONENT DIAGNOSIS >

Power window and door lock/unlock switch RH connector	Terminal	Ground	Continuity
D105 (A)	8		No
D105 (A)	9		No

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-253, "Removal and Installation". After that, refer to PWC-180, "PASSENGER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

3. CHECK POWER WINDOW MOTOR RH

Check power window motor RH.

Refer to PWC-184, "PASSENGER SIDE: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace power window motor RH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>". After that, refer to <u>PWC-184</u>, "<u>PASSENGER SIDE</u>: <u>Special Repair Requirement</u>".

PASSENGER SIDE: Component Inspection

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COMPONENT INSPECTION

1. CHECK POWER WINDOW MOTOR RH

Does motor operate by connecting the battery voltage directly to power window motor RH?

Terminal		Motor condition	
(+)	(-)	- Wotor condition	
1	2	DOWN	
2	1	UP	

Is the inspection result normal?

YES >> Power window motor RH is OK.

>> Replace power window motor RH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>". After that, refer to <u>PWC-184</u>, "<u>PASSENGER SIDE</u>: <u>Special Repair Requirement</u>".

PASSENGER SIDE: Special Repair Requirement

INFOID:0000000005434343

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Refer to PWC-187, "PASSENGER SIDE : Component Function Check".

ENCODER

DRIVER SIDE

DRIVER SIDE : Description

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Detects condition of the power window motor LH operation and transmits to main power window and door lock/unlock switch as pulse signal.

DRIVER SIDE: Component Function Check

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1. CHECK ENCODER OPERATION

Does door glass LH perform AUTO open/close operation normally when operating main power window and door lock/unlock switch?

Is the inspection result normal?

YES >> Encoder operation is OK.

NO >> Refer to PWC-185, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

Regarding Wiring Diagram information, refer to PWC-233, "Wiring Diagram".

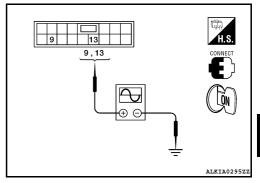
Encoder Circuit Check

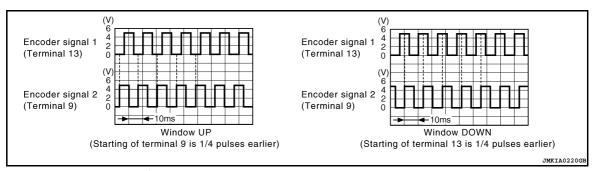
1. CHECK ENCODER OPERATION

1. Turn ignition switch ON.

2. Check signal between main power window and door lock/unlock switch connector and ground with oscilloscope.

Т				
(+)			Signal	
Main power window and door lock/unlock switch connector	door lock/unlock Terminal		(Reference value)	
D28	9	Ground	Refer to following signal	
D20	13	Ground	recici to following signal	





Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

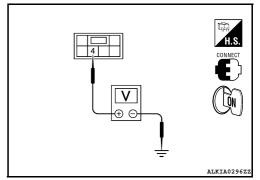
NO >> GO TO 2

2. CHECK POWER WINDOW MOTOR LH POWER SUPPLY

[LH&RH FRONT ANTI-PINCH-COUPE]

- Turn ignition switch ON.
- 2. Check voltage between power window motor LH connector and ground.

(+)			Voltage (V)
Power window mo- tor LH connector	Terminal	(–)	(Approx.)
D18	4	Ground	10



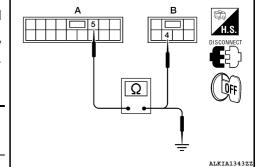
Is the measurement value within the specification?

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

3. CHECK HARNESS CONTINUITY 1

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch and power window motor LH.
- Check continuity between main power window and door lock/ unlock switch connector (A) and power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Power window mo- tor LH connector	Terminal	Continuity
D28 (A)	5	D18 (B)	4	Yes



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D28 (A)	5		No

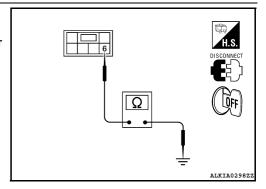
Is the inspection result normal?

- YES >> Replace main power window and door lock/unlock switch. Refer to PWC-252, "Removal and <a href="Installation". After that, refer to PWC-178, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".
- NO >> Repair or replace harness.

4. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect power window motor LH.
- Check continuity between power window motor LH connector and ground.

Power window motor LH connector	Terminal	Ground	Continuity
D18	6		Yes



Is the inspection result normal?

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

5. CHECK HARNESS CONTINUITY 2

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< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

- Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector (A) and power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Power window mo- tor LH connector	Terminal	Continuity
D28 (A)	14	D18 (B)	6	Yes

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Is the inspection result normal?

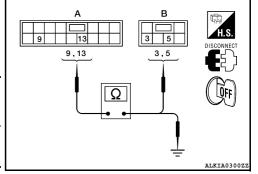
YES >> Replace main power window and door lock/unlock switch. Refer to PWC-252, "Removal and Installation". After that, refer to PWC-178, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

6. CHECK HARNESS CONTINUITY 3

- Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector (A) and power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Power window mo- tor LH connector	Terminal	Continuity
D28 (A)	9	D18 (B)	5	Yes
D20 (A)	13	D10 (B)	3	165



Check continuity between main power window and door lock/ unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity	
D28 (A)	9	Ground	No	
D26 (A)	13		INO	

Is the inspection result normal?

>> Replace power window motor LH. Refer to GW-19, "Removal and Installation". After that, refer to YES PWC-182, "DRIVER SIDE: Special Repair Requirement".

>> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE: Description

Detects condition of the power window motor RH operation and transmits to power window and door lock/ unlock switch RH as pulse signal.

PASSENGER SIDE : Component Function Check

${f 1}$. CHECK ENCODER OPERATION

Does door glass RH perform AUTO open/close operation normally when operating power window and door lock/unlock switch RH?

Is the inspection result normal?

YES >> Encoder operation is OK.

>> Refer to PWC-187, "PASSENGER SIDE: Diagnosis Procedure". NO

PASSENGER SIDE : Diagnosis Procedure

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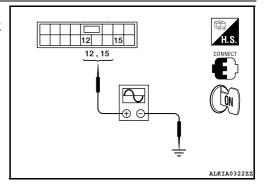
PWC-187 2010 Altima Revision: September 2009

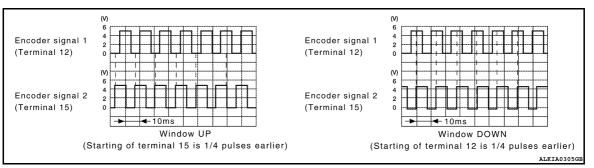
Regarding Wiring Diagram information, refer to PWC-233, "Wiring Diagram".

1. CHECK ENCODER SIGNAL

- 1. Turn ignition switch ON.
- Check signal between power window and door lock/unlock switch RH connector and ground with oscilloscope.

-				
(+)			Signal	
Power window and door lock/unlock switch RH connector	Terminal	(–)	(Reference value)	
D105	12	Ground	Refer to following	
D103	15	Glound	signal	





Is the inspection result normal?

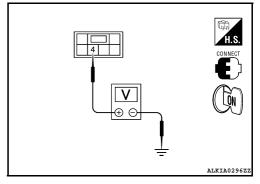
YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> GO TO 2

2. CHECK POWER WINDOW MOTOR RH POWER SUPPLY

- 1. Turn ignition switch ON.
- Check voltage between power window motor RH connector and ground.

(+)			Voltage (V)
Power window motor RH connector	Terminal	(–)	(Approx.)
D105	4	Ground	10



Is the measurement value within the specification?

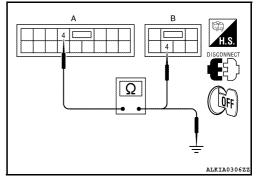
YES >> GO TO 4 NO >> GO TO 3

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3. CHECK HARNESS CONTINUITY 1

- Turn ignition switch OFF.
- 2. Disconnect power window and door lock/unlock switch RH and power window motor RH.
- 3. Check continuity between power window and door lock/unlock switch RH connector (A) and power window motor RH connector (B).

Power window and door lock/unlock switch RH connector	Terminal	Power window mo- tor RH connector	Terminal	Continuity
D105 (A)	4	D111 (B)	4	Yes



4. Check continuity between power window and door lock/unlock switch RH connector (A) and ground.

Power window and door lock/ unlock switch RH connector	Terminal	Ground	Continuity
D105 (A)	4		No

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-253, "Removal and Installation". After that, refer to PWC-180, "PASSENGER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

4. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect power window motor RH.

3. Check continuity between power window motor RH connector and ground.

Power window motor RH con- nector	Terminal	Ground	Continuity
D111	6		Yes

Is the inspection result normal?

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

5. CHECK HARNESS CONTINUITY 2

1. Disconnect power window and door lock/unlock switch RH.

 Check continuity between power window and door lock/unlock switch RH connector (A) and power window motor RH connector (B).

Power window and door lock/unlock switch RH connector	Terminal	Power window mo- tor RH connector	Terminal	Continuity
D105 (A)	3	D111 (B)	6	Yes

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Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH.

Refer to PWC-253, "Removal and Installation". After that, refer to PWC-180, "PASSENGER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

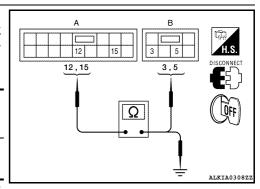
6. CHECK HARNESS CONTINUITY 3

Disconnect power window and door lock/unlock switch RH.

Check continuity between power window and door lock/unlock switch RH connector (A) and power window motor RH connector (B).

door lo	vindow and ck/unlock H connector	Terminal	Power window mo- tor RH connector	Terminal	Continuity
D1/	ο ς (Λ)	12	D111 (P)	3	Yes
D105 (A)	15	D111 (B)	5	res	

Check continuity between power window and door lock/unlock switch RH connector (A) and ground.



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[LH&RH FRONT ANTI-PINCH-COUPE]

Power window and door lock/unlock switch RH connector	Terminal	Ground	Continuity
D105 (A)	12		No
D103 (A)	15		NO

Is the inspection result normal?

YES >> Replace power window motor RH. Refer to <u>GW-19, "Removal and Installation"</u>. After that, refer to <u>PWC-184, "PASSENGER SIDE: Special Repair Requirement"</u>.

NO >> Repair or replace harness.

[LH&RH FRONT ANTI-PINCH-COUPE]

DOOR SWITCH

Description INFOID:000000005434350

Detects door open/close condition and transmits the signal to BCM.

Component Function Check

1. CHECK DOOR SWITCH INPUT SIGNAL

Check ("DOOR SW-DR" and "DOOR SW-AS") in "DATA MONITOR" mode with CONSULT-III. Refer to BCS-34, "RETAINED PWR: CONSULT-III Function (BCM - RETAINED PWR)".

Monitor item	Condition	
DOOR SW-DR	OPEN	: ON
DOOK SW-DK	CLOSE	: OFF
DOOR SW AS	OPEN	: ON
DOOR SW-AS	CLOSE	: OFF

Is the inspection result normal?

YES >> Door switch circuit is OK.

NO >> Refer to PWC-191, "Diagnosis Procedure".

Diagnosis Procedure

Regarding Wiring Diagram information, refer to PWC-233, "Wiring Diagram".

1. CHECK HARNESS CONTINUITY

Check voltage between BCM connector and ground.

	Terminals				
(+)			Door condition		Voltage (V)
BCM connector	Terminal	(–)	2001 00110111011		(Approx.)
	32	Front door		OPEN	0
M18	32	Ground	RH	CLOSE	Battery voltage
IVITO	58	Front door LH		OPEN	0
	36			CLOSE	Battery voltage

Is the measurement value within the specification?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

NO >> GO TO 2

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect BCM and door switch. 2.
- Check continuity between BCM connector and door switch connector.

BCM connector	Terminal	Door switch connector	Terminal	Continuity
M18	32	RH: B109	2	Yes
IVITO	58	LH: B68	2	162

Check continuity between BCM connector and ground.

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< COMPONENT DIAGNOSIS >

BCM connector	Terminal		Continuity
M18	32	Ground	No
IVI I O	58		INO

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK BCM OUTPUT SIGNAL

- Connect BCM connector.
- 2. Check voltage between BCM connector and ground.

Terminal			V-16 0.0
(-	+)	(-)	Voltage (V) (Approx.)
BCM connector	Terminal	(-)	,
M18	32	Ground	Battery voltage
WITO	58	Ground	Dattery Voltage

Is the measurement value within the specification?

YES >> GO TO 4

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

4. CHECK DOOR SWITCH

Check door switch.

Refer to PWC-192, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace door switch.

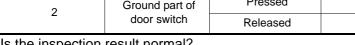
Component Inspection

INFOID:0000000005434353

1. CHECK DOOR SWITCH

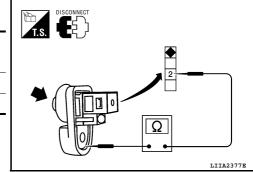
Check door switches.

Terminal Door switches		Door switch	Continuity
		Door Switch	Continuity
2	Ground part of	Pressed	No
2	door switch		Yes



Is the inspection result normal?

YES >> Door switch is OK. NO >> Replace door switch.



DOOR KEY CYLINDER SWITCH

Description INFOID:000000005434354

Main power window and door lock/unlock switch detects condition of the door key cylinder and transmits to BCM as the LOCK or UNLOCK signals.

Component Function Check

INFOID:0000000005434355

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1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check ("KEY CYL LK-SW", "KEY CYL UN-SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-III. Refer to BCS-19, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition		
KEY CYL LK-SW	Lock	: ON	
RET CTL LR-SW	Neutral / Unlock	: OFF	
KEY CYL UN-SW	Unlock	: ON	
RET CTL OIN-SW	Neutral / Lock	: OFF	

Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Refer to PWC-193, "Diagnosis Procedure".

Diagnosis Procedure

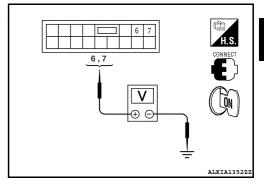
INFOID:0000000005434356

Regarding Wiring Diagram information, refer to PWC-233, "Wiring Diagram".

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

- 1. Turn ignition switch ON.
- Check voltage between main power window and door lock/ unlock switch connector and ground.

Te	Terminals			
(+)				Voltage (V)
Main power window and door lock/unlock switch connector	Terminal	(-)	Key position	(Approx.)
	6		Lock	0
D28	O	Ground	Neutral/Unlock	5
DZO	7	Giodila	Unlock	0
	7		Neutral/Lock	5



Is the measurement value within the specification?

YES >> Replace main power window and door lock/unlock switch. After that, refer to PWC-178, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> GO TO 2

 $2.\,$ CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

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Revision: September 2009 PWC-193 2010 Altima

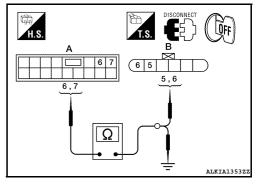
DOOR KEY CYLINDER SWITCH

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch and door lock assembly LH (key cylinder switch).
- Check continuity between main power window and door lock/ unlock switch connector (A) and door lock assembly LH (key cylinder switch) connector (B).

Main power window and door lock/unlock switch connector	Terminal	Door lock assembly LH (key cylinder switch) connector	Terminal	Continuity
D28 (A)	6	D26 (B)	6	Yes
D20 (A)	7	D20 (B)	5	163



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity
D28 (A)	6	Ground	No
D20 (A)	7		140

Is the inspection result normal?

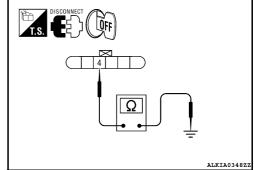
YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between door lock assembly LH (key cylinder switch) connector and ground.

Door lock assembly LH (key cyl- inder switch) connector	Terminal	Ground	Continuity
D26	4		Yes



Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to PWC-194, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace door lock assembly LH (door key cylinder switch). After that, refer to PWC-195. "Special Requirement".

Component Inspection

INFOID:000000005434357

COMPONENT INSPECTION

1. CHECK DOOR KEY CYLINDER SWITCH

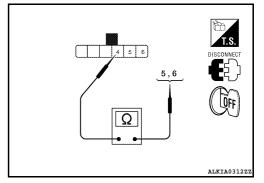
DOOR KEY CYLINDER SWITCH

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

Check door lock assembly LH (key cylinder switch).

Term	inal			
Door lock assembly LH (key cylinder switch) connector		Key position	Continuity	
E	5	Unlock	Yes	
5		Neutral/Lock	No	
C	4	Lock	Yes	
6	Neutral/Unlock	No		



Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Replace door lock assembly LH (key cylinder switch). After that, refer to PWC-195, "Special Repair Requirement".

Special Repair Requirement

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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POWER WINDOW SERIAL LINK

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

POWER WINDOW SERIAL LINK POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH: Description

INFOID:000000005434359

Main power window and door lock/unlock switch, power window and door lock/unlock switch RH and BCM transmit and receive the signal by power window serial link.

The signal mentioned below is transmitted from BCM to main power window and door lock/unlock switch and power window and door lock/unlock switch RH

Keyless power window down signal

The signal mentioned below is transmitted from main power window and door lock/unlock switch to power window and door lock/unlock switch RH

- Door window RH 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:000000005434360

1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-III. Refer to BCS-19, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	C	ondition	
CDL LOCK SW	LOCK	: ON	
CDL LOCK SW	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-196, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure".

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

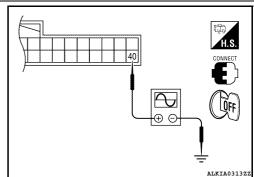
INFOID:0000000005434361

Regarding Wiring Diagram information, refer to PWC-233, "Wiring Diagram".

Power Window Serial Link Check

1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

- Remove Intelligent Key, and close front door LH and RH.
- 2. Check signal between BCM connector and ground with oscilloscope when door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".
- 3. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".



Terminal			0:	
(+)		(_)	Signal (Reference value)	
BCM connector	Terminal	(–)	(1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
M18	40	Ground	(V) 15 10 5 0	

Is the inspection result normal?

YES >> Power window serial link is OK.

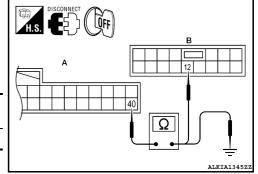
NO >> GO TO 2

2. CHECK POWER WINDOW SERIAL LINK CIRCUIT

Turn ignition switch OFF.

- 2. Disconnect BCM and main power window and door lock/unlock switch.
- Check continuity between BCM connector (A) and main power window and door lock/unlock switch connector (B).

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M18 (A)	40	D28 (B)	12	Yes



Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Ground	Continuity
M18 (A)	40	Ground	No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-252, "Removal and Installation". After that, refer to PWC-178, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE: Description

Main power window and door lock/unlock switch, power window and door lock/unlock switch RH and BCM transmit and receive the signal by power window serial link.

The signal mentioned below is transmitted from BCM to main power window and door lock/unlock switch and power window and door lock/unlock switch RH

Keyless power window down signal

The signal mentioned below is transmitted from main power window and door lock/unlock switch to power window and door lock/unlock switch RH

- Door window RH operation signal
- Power window control by key cylinder switch signal
- Retained power operation signal
- Power window lock switch signal

PASSENGER SIDE: Component Function Check

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 ${f 1}$. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH OUTPUT SIGNAL

POWER WINDOW SERIAL LINK

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-III. Refer to BCS-19, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

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

Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to PWC-198, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE: Diagnosis Procedure

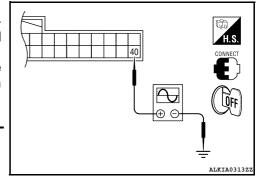
Regarding Wiring Diagram information, refer to PWC-233, "Wiring Diagram".

Power Window Serial Link Check

1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

- 1. Remove Intelligent Key, and close the door LH and RH.
- 2. Check signal between BCM connector and ground with oscilloscope when door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".
- 3. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".

	Terminal	0: 1	
(+)		(_)	Signal (Reference value)
BCM connector	Terminal	(-)	(,
M18	40	Ground	(V) 15 10 5 0 10 ms



INFOID:0000000005434364

Is the inspection result normal?

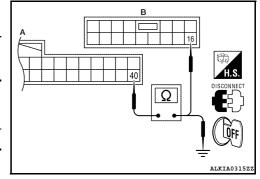
YES >> Power window serial link is OK.

NO >> GO TO 2

2. CHECK POWER WINDOW SERIAL LINK CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM.
- 3. Check continuity between BCM connector (A) and power window and door lock/unlock switch RH connector (B).

BCM connector	Terminal	Power window and door lock/unlock switch RH con- nector	Terminal	Continuity
M18 (A)	40	D105 (B)	16	Yes



POWER WINDOW SERIAL LINK

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

4. Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Ground	Continuity
M18 (A)	40	Ground	No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-252, "Removal and <a href="Installation". After that, refer to PWC-178, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

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POWER WINDOW LOCK SWITCH

[LH&RH FRONT ANTI-PINCH-COUPE]

POWER WINDOW LOCK SWITCH

Description INFOID:000000005434365

Ground circuit of main power window and door lock/unlock switch shuts off if power window lock switch of main power window and door lock/unlock switch is operated. This inhibits all operation, except for the main switch.

Component Function Check

INFOID:0000000005434366

1. CHECK POWER WINDOW LOCK SIGNAL

Exchanges for a normal main power window and door lock/unlock switch, and operation is checked. Does power window lock operate?

YES >> Replace main power window and door lock/unlock switch. Refer to <u>PWC-252</u>, "Removal and <u>Installation"</u>. After that, refer to <u>PWC-200</u>, "Special Repair Requirement".

NO >> Check condition of harness and connector.

Special Repair Requirement

INFOID:0000000005434367

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-169, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

POWER WINDOW MAIN SWITCH

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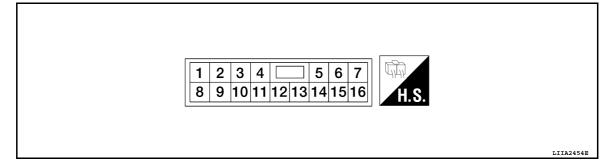
[LH&RH FRONT ANTI-PINCH-COUPE]

ECU DIAGNOSIS

POWER WINDOW MAIN SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Termina	al No.	Description			Voltage IV/I
+	_	Signal name	Input/ Output	Condition	Voltage [V] (Approx.)
1 (W)	Ground	Battery power supply	Input	_	Battery voltage
5 (GR)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates.	10
6 (L/B)	Ground	Door key cylinder switch LH LOCK signal	Input	Key position (Neutral → Locked)	5 → 0
7 (L/R)	Ground	Door key cylinder switch LH UNLOCK signal	Input	Key position (Neutral → Unlocked)	5 → 0
8 (R)	11	Front door power window motor LH UP signal	Output	When front LH switch in power window main switch is operated UP.	Battery voltage
9 (SB)	2	Encoder pulse signal 1	Input	When power window motor operates.	(V) 6 4 2 0 10 ms JMKIA0070GB
				IGN SW ON	Battery voltage
10 (V)	Ground	Ground RAP signal	Input	Within 45 second after ignition switch is turned to OFF.	Battery voltage
(*)			When front LH or RH door is opened during retained power operation.	0	
11 (LG)	8	Front door power window motor LH DOWN signal	Output	When front LH switch in power window main switch is operated DOWN.	Battery voltage

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POWER WINDOW MAIN SWITCH

[LH&RH FRONT ANTI-PINCH-COUPE]

Termina	al No.	Description			Voltage [V]
+	_	Signal name	Input/ Output	Condition	(Approx.)
12 (BR)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window timer operating.	(V) 15 10 5 0 10 ms
13 (W)	2	Encoder pulse signal 2	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

Fail Safe

FAIL-SAFE CONTROL

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 error beyond regulation value is detected between the fully closed position and the actual position of the glass.

Error	Error condition
Pulse sensor malfunction	When only one side of pulse signal is being detected for more than the specified value.
Both pulse sensors mal- function	When both pulse signals have not been detected for more than the specified value during glass open/close operation.
Pulse direction malfunction	When the pulse signal that is detected during glass open/close operation detects the opposite condition of power window motor operating direction.
Glass recognition position malfunction 1	When it detects the error between glass fully closed position in power window switch memory and actual fully closed position during glass open/close operation is more than the specified value.
Glass recognition position malfunction 2	When it detects pulse count more than the value of glass full stroke during glass open/close operation.
Malfunction of not yet up- dated closed position of glass	When glass open/close operation is continuously performed without fully closing more than the specified value (approximately 10 strokes).

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

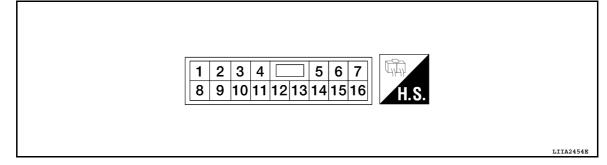
- Auto-up operation
- Anti-pinch function
- Retained power function

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.

FRONT POWER WINDOW SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Termi	nal No.	Description			Voltage [V]
+	_	Signal name	Input/ Output	Condition	(Approx.)
3 (W)	Ground	Encoder ground	_	_	0
4 (BR)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates	10
8 (L)	9	Power window motor UP signal	Output	When power window motor is UP at operated.	Battery voltage
9 (LG)	8	Power window motor DOWN signal	Output	When power window motor is DOWN at operated.	Battery voltage
10 (P)	Ground	Battery power supply	Input	_	Battery voltage
11 (B)	Ground	Ground	_	_	0
12 (G)	3	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0 10 ms

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FRONT POWER WINDOW SWITCH

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

Termi	inal No.	Description			Voltage [V]	
+	_	Signal name	Input/ Output	Condition	(Approx.)	
15 (Y)	3	Encoder pulse signal 1	Input	When power window motor operates.	(V) 6 4 2 0 10 ms JMKIA0070GB	
16 (R)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window timer operating.	(V) 15 10 5 0 10 ms	

Fail Safe

FAIL-SAFE CONTROL

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 error beyond regulation value is detected between the fully closed position and the actual position of the glass.

Error	Error condition
Pulse sensor malfunction	When only one side of pulse signal is being detected for more than the specified value.
Both pulse sensors mal- function	When both pulse signals have not been detected for more than the specified value during glass open/close operation.
Pulse direction malfunction	When the pulse signal that is detected during glass open/close operation detects the opposite condition of power window motor operating direction.
Glass recognition position malfunction 1	When it detects the error between glass fully closed position in power window switch memory and actual fully closed position during glass open/close operation is more than the specified value.
Glass recognition position malfunction 2	When it detects pulse count more than the value of glass full stroke during glass open/close operation.
Malfunction of not yet up- dated closed position of glass	When glass open/close operation is continuously performed without fully closing more than the specified value (approximately 10 strokes).

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
- Retained power function

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.

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

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BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
ED WIDED III	Other than front wiper switch HI	OFF
FR WIPER HI	Front wiper switch HI	ON
ED WIDED I OW	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
ED WIDED INT	Other than front wiper switch INT	OFF
FR WIPER INT	Front wiper switch INT	ON
ED WIDED STOD	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 CIONIAL D	Other than turn signal switch RH	OFF
TURN SIGNAL R	Turn signal switch RH	ON
TUDN CIONAL I	Other than turn signal switch LH	OFF
TURN SIGNAL L	Turn signal switch LH	ON
TAIL LAND OW	Other than lighting switch 1ST and 2ND	OFF
TAIL LAMP SW	Lighting switch 1ST or 2ND	ON
	Other than lighting switch HI	OFF
HI BEAM SW	Lighting switch HI	ON
	Other than lighting switch 2ND	OFF
HEAD LAMP SW 1	Lighting switch 2ND	ON
LIEAD LAMB OW O	Other than lighting switch 2ND	OFF
HEAD LAMP SW 2	Lighting switch 2ND	ON
DA COINIC OW	Other than lighting switch PASS	OFF
PASSING SW	Lighting switch PASS	ON
ALITO LICUT CW	Other than lighting switch AUTO	OFF
AUTO LIGHT SW	Lighting switch AUTO	ON
ED EOO 0W	Front fog lamp switch OFF	OFF
FR FOG SW	Front fog lamp switch ON	ON
DOOD OW DD	Driver door closed	OFF
DOOR SW-DR	Driver door opened	ON
DOOD 6\M A 6	Passenger door closed	OFF
DOOR SW-AS	Passenger door opened	ON
D00D 0W DD	Rear door RH closed	OFF
DOOR SW-RR	Rear door RH opened	ON
DOOD CIALDI	Rear door LH closed	OFF
DOOR SW-RL	Rear door LH opened	ON
ODL 1 00K 0W	Other than power door lock switch LOCK	OFF
CDL LOCK SW	Power door lock switch LOCK	ON

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
CDL UNLOCK SW	Other than power door lock switch UNLOCK	OFF
CDL UNLOCK SW	Power door lock switch UNLOCK	ON
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF
RET CTE LR-SW	Driver door key cylinder LOCK position	ON
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF
KET CTL UN-SW	Driver door key cylinder UNLOCK position	ON
HAZARD SW	When hazard switch is not pressed	OFF
HAZARD SW	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
TD CANCEL SW	Trunk lid opener cancel switch OFF	OFF
TR CANCEL SW	Trunk lid opener cancel switch ON	ON
TD/DD ODEN OW	Trunk lid opener switch OFF	OFF
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	ON
TONIZ/LIAT MANTO	Trunk lid closed	OFF
TRNK/HAT MNTR	Trunk lid opened	ON
DKE LOCK	When LOCK button of Intelligent Key is not pressed	OFF
RKE-LOCK	When LOCK button of Intelligent Key is pressed	ON
DKE TIMI OCK	When UNLOCK button of Intelligent Key is not pressed	OFF
RKE-UNLOCK	When UNLOCK button of Intelligent Key is pressed	ON
DVE TD/DD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is pressed	ON
DIZE DANIC	When PANIC button of Intelligent Key is not pressed	OFF
RKE-PANIC	When PANIC button of Intelligent Key is pressed	ON
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
IXXL-WODE ONG	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V
OF HOAL BENSON	When outside of the vehicle is dark	Close to 0 V
REQ SW-DR	When driver door request switch is not pressed	OFF
INEQ 3W-DIN	When driver door request switch is pressed	ON
REQ SW-AS	When passenger door request switch is not pressed	OFF
REQ 3W-A3	When passenger door request switch is pressed	ON
REQ SW-BD/TR	When trunk request switch is not pressed	OFF
INEQ OW-DD/TIN	When trunk request switch is pressed	ON
PUSH SW	When engine switch (push switch) is not pressed	OFF
FUSH 3W	When engine switch (push switch) is pressed	ON
IGN RLY2-F/B	Ignition switch OFF or ACC	OFF
ION INLIZ-F/D	Ignition switch ON	ON
ACC DIVE/D	Ignition switch OFF	OFF
ACC RLY-F/B	Ignition switch ACC or ON	ON
CLUTCH CW	When the clutch pedal is not depressed	OFF
CLUTCH SW	When the clutch pedal is depressed	ON

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

Monitor Item	Condition	Value/Status	_
BRAKE SW 1	When the brake pedal is not depressed	ON	
BRAKE SW I	When the brake pedal is depressed	OFF	
DETE/CANCL SW	When selector lever is in P position	OFF	
DETE/CANCL SW	When selector lever is in any position other than P	ON	
SFT PN/N SW	When selector lever is in any position other than P or N	OFF	
SFI PIN/IN SVV	When selector lever is in P or N position	ON	
UNLK SEN-DR	Driver door UNLOCK status	OFF	
UNLK SEN-DK	Driver door LOCK status	ON	
DUCULOW IDDM	When engine switch (push switch) is not pressed	OFF	
PUSH SW-IPDM	When engine switch (push switch) is pressed	ON	
10N B134 E/B	Ignition switch OFF or ACC	OFF	•
GN RLY1 F/B	Ignition switch ON	ON	
	When selector lever is in P position	OFF	
DETE SW -IPDM	When selector lever is in any position other than P	ON	
OFT DAL 15511	When selector lever is in any position other than P or N	OFF	
SFT PN -IPDM	When selector lever is in P or N position	ON	
	When selector lever is in any position other than P	OFF	
SFT P-MET	When selector lever is in P position	ON	
	When selector lever is in any position other than N	OFF	
SFT N-MET	When selector lever is in N position	ON	
	Engine stopped	STOP	
	While the engine stalls	STALL	
ENGINE STATE	At engine cranking	CRANK	
	Engine running	RUN	
/EH SPEED 1	While driving	Equivalent to speedometer reading	
/EH SPEED 2	While driving	Equivalent to speedometer reading	-
	Driver door LOCK status	LOCK	٠
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY	
	Driver door UNLOCK status	UNLK	
	Passenger door LOCK status	LOCK	
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY	
	Passenger door UNLOCK status	UNLK	
	Ignition switch ACC or ON	RESET	
D OK FLAG	Ignition switch OFF	SET	
	When the engine start is prohibited	RESET	
PRMT ENG STAT	When the engine start is permitted	SET	
	When Intelligent Key is not inserted into key slot	OFF	
KEY SW -SLOT	When Intelligent Key is inserted into key slot	ON	
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key	
	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET	
CONFRM ID ALL	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE	

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< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET
CONFIRM ID4	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET
CON INWIES	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET
CONTINUIDZ	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET
OCIVI II WILD I	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE
TP 4	The ID of fourth key is not registered to BCM	YET
11 4	The ID of fourth key is registered to BCM	DONE
TP 3	The ID of third key is not registered to BCM	YET
IF 3	The ID of third key is registered to BCM	DONE
TD 0	The ID of second key is not registered to BCM	YET
TP 2	The ID of second key is registered to BCM	DONE
TD 4	The ID of first key is not registered to BCM	YET
TP 1	The ID of first 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	When ID of front LH tire transmitter is registered	DONE
ID REGOTTET	When ID of front LH tire transmitter is not registered	YET
ID REGST FR1	When ID of front RH tire transmitter is registered	DONE
ID REGGI I RI	When ID of front RH tire transmitter is not registered	YET
ID REGST RR1	When ID of rear RH tire transmitter is registered	DONE
ID NEGGI KKI	When ID of rear RH tire transmitter is not registered	YET
ID DECET DL4	When ID of rear LH tire transmitter is registered	DONE
ID REGST RL1	When ID of rear LH tire transmitter is not registered	YET
WADNING LAND	Tire pressure indicator OFF	OFF
WARNING LAMP	Tire pressure indicator ON	ON
DUZZED	Tire pressure warning alarm is not sounding	OFF
BUZZER	Tire pressure warning alarm is sounding	ON

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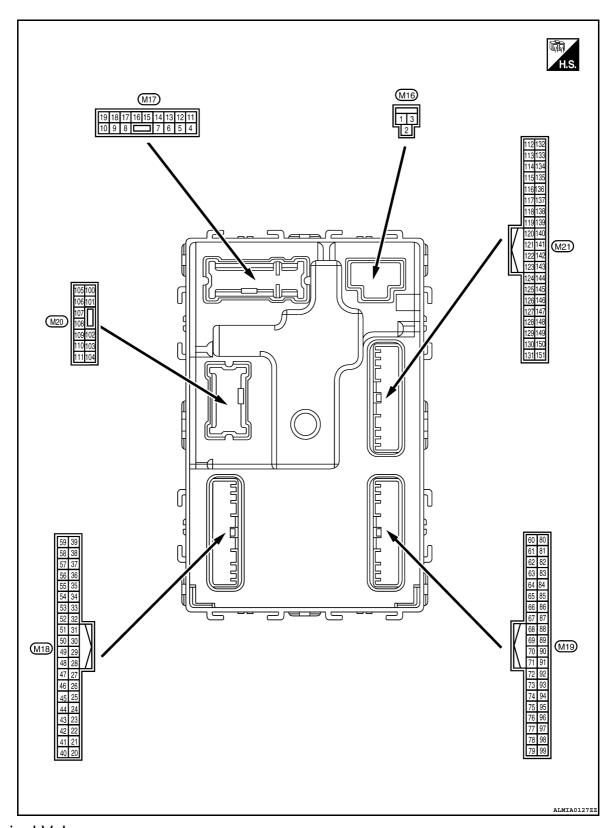
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Terminal Layout



Physical Values

	inal No. e color)	Description				Value			
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)			
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage			
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OF	F	Battery voltage			
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage			
4	Ground	Interior room lamp	Output	After passing the ir er operation time	nterior room lamp battery sav-	0V			
(P/W)	Giodila	power supply	Output	Any other time after lamp battery save	er passing the interior room r operation time	Battery voltage			
5	Ground	Front door RH UN-	Output	Front door RH	UNLOCK (actuator is activated)	Battery voltage			
(G/Y)	Giodila	LOCK	Output	Tront door Kir	Other than UNLOCK (actuator is not activated)	ov			
7	Ground	Step lamp	Output	Step lamp	ON	0V			
(R/W)	Ground	эсер таптр	Output	Step lamp	OFF	Battery voltage			
8	Cravad	All de ere LOCK	Output	•	•	0	0.1.1.4.1.1	LOCK (actuator is activated)	Battery voltage
(V)	(V) Ground All doo	All doors LOCK		All doors	Other than LOCK (actuator is not activated)	OV			
9	Ground	Front door LH UN-	H UN-	Output Fra	Output Front door LH	UNLOCK (actuator is activated)	Battery voltage		
(G)	Ground	LOCK	Output	Front door LH	Other than UNLOCK (actuator is not activated)	oV			
10 ¹	Ground	Rear door RH and rear door LH UN-	Output	, Rear door RH	UNLOCK (actuator is activated)	Battery voltage			
(G/Y)	Giodila	LOCK	Output	and rear door LH	Other than UNLOCK (actuator is not activated)	ov			
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage			
13 (B)	Ground	Ground	_	Ignition switch ON		0V			
					OFF	0V			
14 ⁶ (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	ON	When the illumination brightening/dimming level is in the neutral position (V) 10 0 2 ms			

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

	inal No. e color)	Description		Condition		Value
(+)	e color)	Signal name	Input/ Output	Condition		(Approx.)
14 ¹ (O/W)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 0
15	Crownd	ACC indicator large	Outenit	lanition quitab	OFF	JSNIA0010GB Battery voltage
(Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	ACC or ON	0V
					Turn signal switch OFF	0V
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s
					Turn signal switch OFF	6.5 V
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E
					OFF	6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage 0V
21	Ground	Optical sensor signal	Input	Ignition switch	When outside of the vehi- cle is bright	Close to 5V
(P/B)		,		ON	When outside of the vehi- cle is dark	Close to 0V
22	Ground	Clutch interlock	Input	Clutch interlock	OFF (clutch pedal is not depressed)	0V
(R/Y)		switch		switch	ON (clutch pedal is depressed)	Battery voltage
24 (R/W)	Ground	Stop lamp switch 1	Input		_	Battery voltage
26	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	0V
(O/L)		-1 1	F		ON (brake pedal is depressed)	Battery voltage

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< ECU DIAGNOSIS >

	inal No.	Description				Value
	e color)	Signal name	Input/		Condition	(Approx.)
(+)	(-)	3	Output			
27 (G/W)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	(V) 15 10 5 10 ms JPMIA0011GB 11.8V
					UNLOCK status	0V
				When Intelligent K	ey is inserted into key slot	Battery voltage
29 (Y)	Ground	Key slot switch	Input	_	ey is not inserted into key slot	0V
				When mengenere	OFF	0
30 (V/Y)	Ground	ACC feedback signal	Input	Ignition switch	ACC or ON	Battery voltage
		Deer wieden defea		Dear window do	OFF	0V
31 (G)	Ground	Rear window defog- ger feedback signal	Input	Rear window de- fogger switch	ON	Battery voltage
		3		33	014	Battery voltage
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
		0			ON (when front door RH	11.8 V
					opens)	9.0 - 12.0V
33 (SB)	Ground	Compressor ON signal	Input	A/C switch	ON	0V
		Front door lock as-		Front door lock	OFF (neutral)	5V
34 ² (L/R)	Ground	sembly LH (key cylin- der switch) (unlock)	Input	assembly LH (key cylinder switch)	ON (unlock)	ov
36 ²	Cround	Look quitab aignal	Innut	Door lock/unlock	Lock	Battery voltage
(GR)	Ground	Lock switch signal	Input	switch	Unlock	OV
37 (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid opener cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB
					ON	0V
38					OFF	5V
(GR/ W)	Ground	Rear window defog- ger ON signal	Input	Rear window de- fogger switch	ON	0V
39 ²				Door lock/unlock	Unlock	Battery voltage
(GR/ R)	Ground	Unlock switch signal	Input	switch	Lock	0V

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description				Value	
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	
40 ³ (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 JPMIA0013GB	
				Ignition switch OFI	F or ACC	10.2V	
41		Engine switch (push	0	Engine switch	ON	5.5V	
(W)	Ground	switch) illumination	Output	(push switch) illu- mination	OFF	0V	
42	Ground	LOCK indicator lamp	Output	LOCK indicator	ON	OV	
(R)	2.34.14	·	Carpat	lamp	OFF	Battery voltage	
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V	
46	Ground	Receiver & sensor	Output	Ignition switch	OFF	0V	
(V/W)	Cround	power supply output	σαιραί	igililon switch	ACC or ON	5.0V	
47	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 ••• 0.2s	
(G/O)	2.34.14	er signal	Output	ON	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	
48 (R/G)	Ground	Selector lever P/N position signal	Input	Selector lever	P or N position	12.0V	
(11/0)		Position signal			Except P and N positions ON	0V 0V	
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	Blinking	(V) 15 10 5 0 1 1 s JPMIA0014GB	
					OFF	Battery voltage	

< ECU DIAGNOSIS >

	inal No.	Description				Value				
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)				
	()				All switch OFF	0V				
					Lighting switch 1ST					
				Cambinatian	Lighting switch high-beam	(V)				
50 (LC)	Cround	Combination switch	Output	Combination switch	Lighting switch 2ND	10				
(LG/ B)	Ground	OUTPUT 5	Output	(Wiper intermit- tent dial 4)		ŏ				
				tent diai 4)	Turn signal switch RH	2 ms				
					ram signar switch ran	JPMIA0031GB				
					All a feel OFF	10.7V				
					All switch OFF (Wiper intermittent dial 4)	OV				
					Front wiper switch HI					
					(Wiper intermittent dial 4)	(V)				
51 (L/W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Any of the conditions below with all switch OFF	10				
(L/ VV)		0017011		SWITCH	Wiper intermittent dial 1	Ŏ I I I I I I I I I I I I I I I I I I I				
					Wlper intermittent dial 2Wiper intermittent dial 3	2 ms				
				1	Wiper intermittent dial 6	JPMIA0032GB				
					Wiper intermittent dial 7	10.7V				
					All switch OFF (Wiper intermittent dial 4)	0V				
				Combination switch	Front washer switch ON					
=0		Combination switch OUTPUT 2			(Wiper intermittent dial 4)	(V) 15				
52 (G/B)	Ground				Any of the conditions below with all switch OFF • Wiper intermittent dial 1	10 5				
								• V	Wiper intermittent dial 5	2 ms
					Wiper intermittent dial 6					
					All switch OFF	OV				
					Front wiper switch INT					
=0				Combination	Front wiper switch LO	(V)				
53 (LG/	Ground	Combination switch OUTPUT 3	Output	switch		10 5				
R)		001113		(Wiper intermit- tent dial 4)						
					Lighting switch AUTO	2 ms				
						JPMIA0034GB				
					All switch OFF	0V				
					Front fog lamp switch ON					
				Combination	Lighting switch 2ND	(V)				
54	Ground	Combination switch	Output	switch	Lighting switch flash-to-	10				
(G/Y)		OUTPUT 4		(Wiper intermit- tent dial 4)	pass	0				
				tent diai 4)	Turn signal switch LH	2 ms				
					. a.m orginal ownor Life	JPMIA0035GB 10.7V				
55				Front I-I	ON	Battery voltage				
(BR/	Ground	Front blower monitor	Input	Front blower mo- tor switch	OFF	0V				
VV)	W)			tor ownton						

< ECU DIAGNOSIS >

	inal No. e color)	Description			O a region	Value	
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	
56 ²		Front door lock as-		Front door lock	OFF (neutral)	5V	
(L/B)	Ground	sembly LH (key cylin- der switch) (lock)	Input	assembly LH (key cylinder switch)	ON (lock)	0V	
57 (W)	Ground	Tire pressure warn- ing check switch	Input		_	5V	
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	(V) 15 10 5 0 10 ms 10 ms JPMIA0011GB	
					ON (front door LH OPEN)	OV	
59		Rear window defog-		Rear window de-	Active	Battery voltage	
(G/R)	Ground	ger relay	Output	fogger	Not activated	0V	
			Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB		
60 (B/R)	Ground	Front console antenna 2 (-)	Output OFF	na 2 (-) Output OFF When Intelli		When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
61	Ground	Center console an-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 11 1 s JMKIA0062GB	
(W/R)	Ciounu	tenna 2 (+)	Curput	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1	

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value	
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)	
62 ⁴ (B/Y)	Ground	Front outside handle RH antenna (-)	Output	When the front door RH request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	
63 ⁴ (LG)	Ground	Front outside handle RH antenna (+)	Output	When the front door RH request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	
64 ⁴ (V)	Ground	Front outside handle LH antenna (-)	Output	When the front door LH request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 MKIA0063GB	

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

(-)	Signal name	1				/
	Signal name	Input/ Output		Condition	Value (Approx.)	/-
	Front outside handle		When the front	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 MKIA00620B	E
Ground	LH antenna (+)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 MKIA0063GB	E
Ground	NATS antenna amp (built in key slot)	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.	
Ground	NATS antenna amp (built in key slot)	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.	H
Ground	Ignition relay-2 control	Output	Ignition switch	OFF or ACC	0V Battery voltage	
0	Remote keyless entry	Input/	During waiting		(V) 15 10 5 1 ms	P\
Ground	receiver signal	Output	When operating ei	ither button on Intelligent Key	(V) 15 10 5 0	N
	Ground	Ground NATS antenna amp (built in key slot) Ground NATS antenna amp (built in key slot) Ground Ignition relay-2 control	Ground CH antenna (+) Ground NATS antenna amp (built in key slot) Ground NATS antenna amp (built in key slot) Ground Ignition relay-2 control Ground Remote keyless entry Input/	Ground Pront outside handle LH antenna (+) Ground NATS antenna amp (built in key slot) Ground NATS antenna amp (built in key slot) Ground Ignition relay-2 control Ground Remote keyless entry receiver signal Ground Remote keyless entry receiver signal	Ground Front outside handle LH antenna (+) Ground NATS antenna amp (built in key slot) Ground NATS antenna amp (built in key slot) Ground Ignition relay-2 control Ground Remote keyless entry Ground Remote keyless entry Ground Remote keyless entry Ground Remote keyless entry Output Output Switch is pressed while inserting the Intelligent Key into the key slot. Unring waiting Switch is pressed while inserting the Intelligent Key into the key slot. Output Ignition switch Output Output Ignition switch OFF or ACC ON ON Cround Remote keyless entry Input/	Ground Front outside handle LH antenna (+) When the front door LH request switch is operated within grintion switch OFF When Intelligent Key is not in the antenna detection area When Intelligent Key is not in the antenna detection area When Intelligent Key is not in the antenna detection area Just after pressing ignition switch is pressed while inserting the Intelligent Key into the key slot. Ground NATS antenna amp (built in key slot) Ground NATS antenna amp (built in key slot) Ground Ignition relay-2 control Ground Ignition relay-2 control Ground Remote keyless entry receiver signal Ground Remote keyless entry receiver signal When Intelligent Key is in the antenna detection area Just after pressing ignition switch. Pointer of tester should move. OFF or ACC OV ON Battery voltage When operating either button on Intelligent Key When operating either button on Intelligent Key

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< ECU DIAGNOSIS >

	inal No.	Description				Value	
(Wir (+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GE	
75 (R/Y)	Ground	Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB	
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GE	

< ECU DIAGNOSIS >

	inal No.	Description				Value	Λ
(Wire (+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms	В
							D
					Lighting switch high-beam (Wiper intermittent dial 4)	15 10 5 0	Е
					(vvpc) intermittent dial 4)	2 ms JPMIA0036GB	F
76 (R/G)	Ground	Combination switch INPUT 3	Input	Combination switch		1.3V	G
					Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5	Н
						2 ms JPMIA0037GB	I
					Any of the conditions below with all switch OFF	(V) 15 10 5	J
					Wiper intermittent dial 1Wiper intermittent dial 2Wiper intermittent dial 3	2 ms	PV
78	Ground	CAN-L	Input/		_	1.3V 	L
(P) 79	Ground	CAN-H	Output Input/				M
(L)			Output		OFF	OV	N
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0	0
					ON	6.5V Battery voltage	Р
81	Orac	ON indicator I	Outer	lanition audit-l-	OFF or ACC	0V	
(LG)	Ground	ON indicator lamp	Output	Ignition switch	ON	Battery voltage	

< ECU DIAGNOSIS >

	inal No.	Description				Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
83	Ground	ACC relay control	Output	Ignition switch	OFF	OV
(L)	Ground	ACC relay control	Output	ignition switch	ACC or ON	Battery voltage
84 (Y/R)	Ground	CVT shift selector	Output		_	Battery voltage
87	Ground	Selector lever P posi-	Input	Selector lever	P position	OV
(G/B)	Ground	tion switch	mput	Selector level	Any position other than P	Battery voltage
					ON (pressed)	OV
88 ⁴ (P/L)	Ground	Front door RH request switch	Input	Front door RH request switch	OFF (not pressed)	(V) 15 10 5 10 ms JPMIA0016GB 1.0V
					ON (pressed)	OV
89 ⁴ (B/W)	Ground	Front door LH request switch	Input	Front door LH request switch	OFF (not pressed)	(V) 15 10 10 10 ms JPMIA0016GB 1.0V
90	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	OV
(Y)	Siouria	lay control	Juipui	ignition switch	ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	=	Battery voltage

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

Terminal No.	Description				Value	
(Wire color) (+) (-)	Signal name	Input/ Output		Condition	(Approx.)	/
				All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB)
				Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB	I
95 (R/W) 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	ŀ
				Front wiper switch LO	(V) 15 10 2 ms JPMIA0038GB 1.3V	P
				Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3V	1

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	inal No. e color)	Description				Value
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
96	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3V
(P/B)	P/B) Ground INPUT 4		switch		Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3V
				Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3V	

< ECU DIAGNOSIS >

	inal No. e color)	Description				Value	/
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)	,
					All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4V	
					Lighting switch flash-to- pass	(V) 15 10 5 0 2 ms JPMIA0037GB	E
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3V	ŀ
					Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB	P'
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB	1
					Pressed	0 V	(
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0012GB	

< ECU DIAGNOSIS >

	inal No. e color)	Description	Inn.it/		Condition	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
103	Ground	Trunk lid opening	Output	Trunk lid	Open (trunk lid opener actuator is activated)	Battery voltage
(V)	Ground	Trunk ilu operiilig	Output		Close (trunk lid opener actuator is not activated)	OV
110	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0V
(V/W)		•	'	'	OFF	Battery voltage
114	Ground	Rear parcel shelf an-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(B)		tenna 1 (-)	Согра	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 1 s JMKIA0063GB
115	Ground	Rear parcel shelf an-	Quitout	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB
(W)	Giound	tenna 1 (+) Outp	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB

< ECU DIAGNOSIS >

	inal No.	Description				Value	Δ.
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)	А
118 ⁴		Rear bumper anten-		When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 1 s JMKIA0062GB	B C
(L/O)	Ground	na (-)	Output	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 1	E
1194	Ground	Rear bumper anten-	Outout	When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	G H
(BR/ W)	Glound	na (+)	Output	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	J PW
127 (BR/	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage 0V	
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed) ON (trunk is open)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8V	M N O

< ECU DIAGNOSIS >

	inal No. e color)	Description	len: 4/		Condition	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
				Ignition switch OFF (M/T vehi-	When the clutch pedal is depressed	Battery voltage
				cle)	When the clutch pedal is not depressed	ov
132 (R)		Starter motor relay control	Output	Ignition switch	When selector lever is in P or N position and the brake is depressed	Battery voltage
			ON (other than M/ T vehicle)	When selector lever is in P or N position and the brake is not depressed	0V	
140	Ground	Engine switch (push	Innut	Engine switch	Pressed	0V
(BR)	Ground	switch)	Input	(push switch)	Not pressed	Battery voltage
					ON (pressed)	OV
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	OFF (not pressed)	(V) 15 10 5 0 10 ms 10 ms JPMIA0016
144 ⁴		Intelligent Key warn-	•	Request switch	Sounding	0V
(GR)	Ground	ing buzzer	Output	buzzer	Not sounding	Battery voltage
144 ⁵	Craund	Outside warning	Outnut	Outside warning	Sounding	0V
(GR)	Ground	buzzer	Output	buzzer	Not sounding	Battery voltage
147	Ground	Trunk lid opener	Input	Trunk lid opener	Pressed	OV
(L/R)	Ground	switch	mput	switch	Not pressed	Battery voltage
148 ¹ (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	(V) 15 10 5 0 10 ms 10 ms
					ON (when rear door RH opens)	ov
149 ¹ (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	(V) 15 10 5 0 10 ms JPMIA001:
					ON (when rear door LH opens)	11.8V

^{1:} Sedan

^{2:} With LH front window anti-pinch

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

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- 3: With LH and RH front window anti-pinch
- 4: With Intelligent Key
- 5: Without Intelligent Key
- 6: Coupe

Fail Safe

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 has become consistent • Starter control relay signal • Starter relay status signal
B2562: LO VOLTAGE	Inhibit engine cranking	100 ms after the power supply voltage increases to more than 8.8 V
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is 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
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
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: OFF (Battery voltage)

DTC Inspection Priority Chart

INFOID:0000000005783629

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)

[LH&RH FRONT ANTI-PINCH-COUPE]

Priority	DTC
3	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING
4	 B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW B2605: PNP SW B2606: IGNITION RELAY B2607: ENG STATE SIG LOST B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2617: STARTER RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2618: DW B2618: PUSH-BTN IGN SW B2618: VEHICLE TYPE B2621: VEHICLE TYPE B2621: ENG STATE NO RECIV B2628: CLUTCH SW B2626A: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RR C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1720: [CODE ERR] FL C1721: [CODE ERR] FR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FR C1725: [BATT VOLT LOW] FR C1726: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RL C1727: [BATT VOLT LOW] RL
6	B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA

DTC Index

NOTE:

Details of time display

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.

1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1
 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter
 remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch
 OFF → ON after returning to the normal condition if the malfunction is detected again.

Intelligent Key Tire pressure CONSULT display Fail-safe warning lamp monitor warning Reference page ON lamp ON No DTC is detected. further testing may be required. U1000: CAN COMM CIRCUIT BCS-38, "Description" U1010: CONTROL UNIT (CAN) BCS-39, "DTC Logic" U0415: VEHICLE SPEED SIG BCS-40, "Description" SEC-53, "Description" (Coupe) SEC-229, "Description" (Sedan with I-B2190: NATS ANTENNA AMP Kev) × SEC-399, "Description" (Sedan without I-Key) SEC-56, "Description" (Coupe) SEC-232, "Description" (Sedan with I-**B2191: DIFFERENCE OF KEY** Key) SEC-402, "Description" (Sedan without I-Key) SEC-57, "Description" (Coupe) SEC-233, "Description" (Sedan with I-B2192: ID DISCORD BCM-ECM Key) × SEC-403, "Description" (Sedan without I-Key) SEC-58, "Description" (Coupe) SEC-234, "Description" (Sedan with I-B2193: CHAIN OF BCM-ECM Key) × SEC-404, "Description" (Sedan without I-Key) SEC-59, "Description" (Coupe) SEC-235, "Description" (Sedan with I-**B2195: ANTI SCANNING** Key) × SEC-405, "Description" (Sedan without I-Key) **B2553: IGNITION RELAY** PCS-61, "Description" SEC-60, "Description" (Coupe) SEC-236, "Description" (Sedan with I-B2555: STOP LAMP Key) SEC-406, "Description" (Sedan without I-Key) SEC-63, "Description" (Coupe) SEC-239, "Description" (Sedan with I-B2556: PUSH-BTN IGN SW Key) SEC-409, "Description" (Sedan without I-Key) SEC-65, "Description" (Coupe) SEC-241, "Description" (Sedan with I-**B2557: VEHICLE SPEED** Key) × SEC-411, "Description" (Sedan without I-Key)

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CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2560: STARTER CONT RELAY	×	×	_	SEC-66, "Description" (Coupe) SEC-242, "Description" (Sedan with I-Key) SEC-412, "Description" (Sedan without I-Key)
B2562: LOW VOLTAGE	×	_	_	BCS-41, "DTC Logic"
B2601: SHIFT POSITION	_	×	_	SEC-67, "Description" (Coupe) SEC-243, "Description" (Sedan with I-Key) SEC-413, "Description" (Sedan without I-Key)
B2602: SHIFT POSITION	_	×	_	SEC-71, "Description" (Coupe) SEC-246, "Description" (Sedan with I-Key) SEC-416, "Description" (Sedan without I-Key)
B2603: SHIFT POSI STATUS	_	×	_	SEC-74, "Description" (Coupe) SEC-249, "Description" (Sedan with I- Key) SEC-419, "Description" (Sedan without I-Key)
B2604: PNP SW	_	×	_	SEC-77, "Description" (Coupe) SEC-252, "Description" (Sedan with I- Key) SEC-422, "Description" (Sedan without I-Key)
B2605: PNP SW	_	×	_	SEC-79, "Description" (Coupe) SEC-254, "Description" (Sedan with I- Key) SEC-424, "Description" (Sedan without I-Key)
B2608: STARTER RELAY	×	×	_	SEC-81, "Description" (Coupe) SEC-256, "Description" (Sedan with I- Key) SEC-426, "Description" (Sedan without I-Key)
B260A: IGNITION RELAY	×	×	_	PCS-63, "Description"
B260F: ENG STATE SIG LOST	×	×	_	SEC-83, "Description" (Coupe) SEC-258, "Description" (Sedan with I-Key) SEC-428, "Description" (Sedan without I-Key)
B2614: ACC RELAY CIRC	_	×	_	PCS-66, "Description"
B2615: BLOWER RELAY CIRC	_	×	_	PCS-69, "Description"
B2616: IGN RELAY CIRC		×		PCS-72, "Description"
B2617: STARTER RELAY CIRC	×	×	_	SEC-87, "Description" (Coupe) SEC-262, "Description" (Sedan with I- Key) SEC-432, "Description" (Sedan without I-Key)
B2618: BCM	×	×		PCS-75, "Description"
B261A: PUSH-BTN IGN SW	_	×	_	SEC-90, "Description" (Coupe) SEC-265, "Description" (Sedan with I- Key) SEC-435, "Description" (Sedan without I-Key)

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[LH&RH FRONT ANTI-PINCH-COUPE]

200 811 (0110010 >				
CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	_	SEC-89, "Description" (Coupe) SEC-264, "Description" (Sedan with I-Key) SEC-434, "Description" (Sedan without I-Key)
B2622: INSIDE ANTENNA	_	_	_	DLK-60. "Description" (Coupe) DLK-283. "Description" (Sedan with I-Key) DLK-484. "Description" (Sedan without I-Key)
B2623: INSIDE ANTENNA	_	_	_	DLK-63, "Description" (Coupe) DLK-286, "Description" (Sedan with I-Key) DLK-487, "Description" (Sedan without I-Key)
B26E1: ENG STATE NO RES	×	×	_	SEC-92, "Description" (Coupe) SEC-267, "Description" (Sedan with I- Key) SEC-437, "Description" (Sedan without I-Key)
B26E8: CLUTCH SW	×	×	_	SEC-84, "Description" (Coupe) SEC-259, "Description" (Sedan with I-Key) SEC-429, "Description" (Sedan without I-Key)
B26EA: KEY REGISTRATION	×	× (Turn ON for 15 seconds)	_	SEC-86, "Description" (Coupe) SEC-261, "Description" (Sedan with I- Key) SEC-431, "Description" (Sedan without I-Key)
C1704: LOW PRESSURE FL	_	_	×	
C1705: LOW PRESSURE FR	_	_	×	WT-44, "Self-Diagnosis (With CON-
C1706: LOW PRESSURE RR	_	_	×	SULT-III)"
C1707: LOW PRESSURE RL	_	_	×	
C1708: [NO DATA] FL	_	_	×	
C1709: [NO DATA] FR	_	_	×	WT-14, "Description"
C1710: [NO DATA] RR	_	_	×	WI-14, Description
C1711: [NO DATA] RL	_		×	
C1712: [CHECKSUM ERR] FL	_	_	×	
C1713: [CHECKSUM ERR] FR	_	_	×	WT-16, "Description"
C1714: [CHECKSUM ERR] RR	_	_	×	VII 10, Description
C1715: [CHECKSUM ERR] RL	_	_	×	
C1716: [PRESSDATA ERR] FL	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	×	WT-18, "Description"
C1718: [PRESSDATA ERR] RR	_	_	×	
C1719: [PRESSDATA ERR] RL	_	_	×	

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CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1720: [CODE ERR] FL	_	_	×	
C1721: [CODE ERR] FR	_	_	×	
C1722: [CODE ERR] RR	_	_	×	
C1723: [CODE ERR] RL	_	_	×	WT-16, "Description"
C1724: [BATT VOLT LOW] FL	_	_	×	W1-10, Description
C1725: [BATT VOLT LOW] FR	_	_	×	
C1726: [BATT VOLT LOW] RR	_	_	×	
C1727: [BATT VOLT LOW] RL	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	×	WT-19, "Description"
C1734: CONTROL UNIT	_	_	×	WT-20, "Description"

< WIRING DIAGRAM >

[LH&RH FRONT ANTI-PINCH-COUPE]

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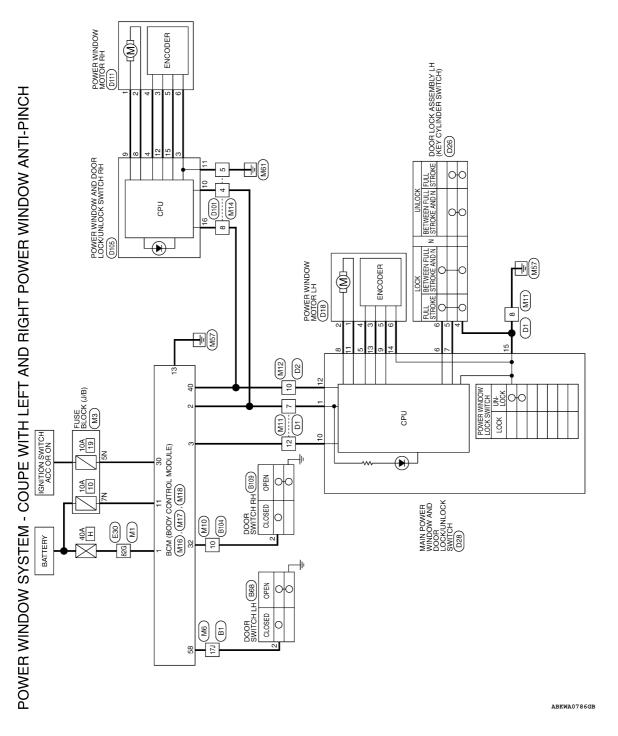
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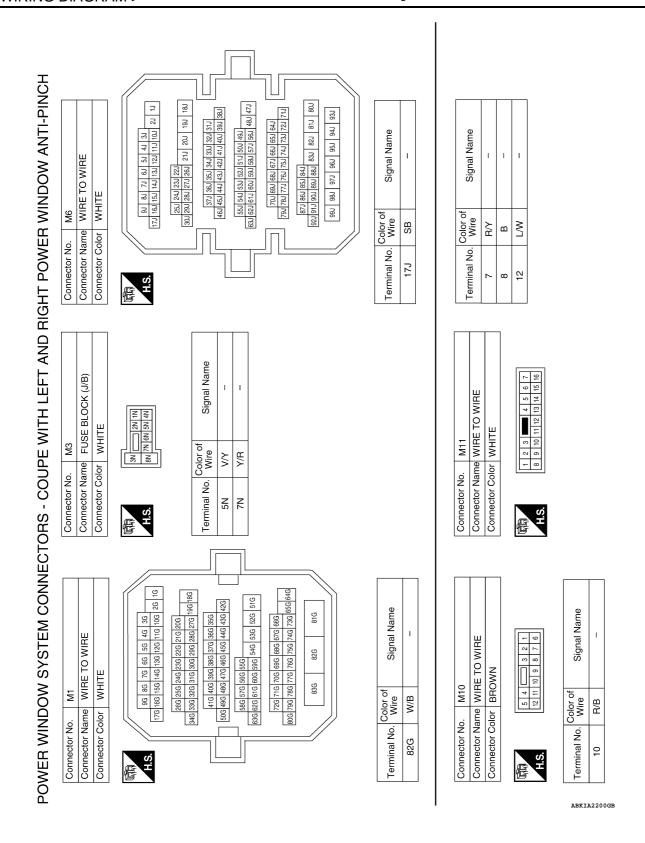
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WIRING DIAGRAM

POWER WINDOW SYSTEM - WITH LEFT AND RIGHT POWER WINDOW ANTI-PINCH

Wiring Diagram





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< WIRING DIAGRAM >

[LH&RH FRONT ANTI-PINCH-COUPE]

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Connector No. M16 Connector Name BCM (BODY CONTROL MODULE) Connector Color BLACK H.S. Terminal No. Vire Signal Name 1 W/B BAT_POWER_F/L SUPPLY_PERM 2 R/Y SUPPLY_PERM 3 L/W POWER_WINDOW_ 3 L/W POWER_WINDOW_	Connector No. E30 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Color WHITE Solution Solutio
Connector No. M14 Connector Name WIRE TO WIRE Connector Color WHITE Terminal No. Wire	Connector No. M18 Connector Name BCM (BODY CONTROL MODULE) Connector Color GREEN
Connector No. M12 Connector Name WIRE TO WIRE Connector Color WHITE Terminal No. Color of Signal Name 10 Y/G -	Connector No. M17

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Revision: September 2009 PWC-235 2010 Altima

< WIRING DIAGRAM >

Connector No. B104 Connector Name WIRE TO WIRE Connector Color BROWN	[五] [1 2 3 1 4 5 1 1 1 2] 1 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1	Terminal No. Wire Signal Name					Connector No. D2 Connector Name WIRE TO WIRE Connector Color WHITE	H.S. 16 15 14 13 12 11 10 9	Terminal No. Wire Signal Name	10 BR –		
Connector No. B68 Connector Name DOOR SWITCH LH Connector Color WHITE	H.S.	Terminal No. Wire Signal Name					Connector No. D1 Connector Name WIRE TO WIRE Connector Color WHITE	[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]	Terminal No. Wire Signal Name			12 V -
Connector No. B1 Connector Name WIRE TO WIRE Connector Color WHITE	1.0 2.1 10.1 11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 17.0 17.0 17.0 17.0 17.0 17.0 17.0 17	181 180 211 280 211 280 231 230	47.7 48.4 56.4 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55		Terminal No. Wire Signal Name	17G SB –	Connector No. B109 Connector Name DOOR SWITCH RH Connector Color WHITE	H.S.	- I L	Terminal No. Wire Signal Name	- CB	

< WIRING DIAGRAM >

[LH&RH FRONT ANTI-PINCH-COUPE]

D101	WIRE TO WIRE	WHITE	1 2 8 9 10 4 10 10 10 10 10 10 10 10 10 10 10 10 10	or of Signal Name	ı	ı	ı
		_		Color of Wire	Ь	В	œ
Connector No.	Connector Name	Connector Color	是 H.S.	Ferminal No.	4	5	80

	TH LEFT R ICH			ne		3W	
)26	DOOR LOCK SSEMBLY LH (WITH LEFT IND RIGHT POWER VINDOW ANTI-PINCH SYSTEM)	3RAY	8 8 9 9	Signal Name	GND	DOOR_KEY/C UNLOCK_SW	DOOR_KEY/C_
Ø	12945%	一先	0	7			

Connector Name

Connector No.

Connector Color

8 4 8 8	Signal Name	GND	DOOR_KEY/C	DOOR_KEY/C LOCK_SW
<u>-</u>	Color of Wire	В	L/R	L/B
原 H.S.	Terminal No.	4	5	9

Terminal No. Wire	Color of Wire	Signal Name
4	В	GND
5	ПЛ	DOOR_KEY/(UNLOCK_SV
9	L/B	DOOR_KEY/0 LOCK_SW

	POWER WINDOW MOTOR LH	IE	3 4 5 6 2	Signal Name	ı	1	1	ı	ı	1
). D18	_	olor WHITE		Color of Wire	LG	ш	Μ	GR	SB	В
Connector No.	Connector Name	Connector Color	原 H.S.	Terminal No.	-	2	3	4	5	9

Signal Name	BAT	ENCODER POWER	LOCK	NNFOCK	AS UP	ENCODER SIG1	IGN	AS DOWN	COM	ENCODER SIG2	ENCODER GND	GND
Color of Wire	*	GR	L/B	L/R	В	SB	>	LG	BR	Μ	G	В
Terminal No.	-	5	9	7	8	6	10	11	12	13	14	15

No. D28	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (COUPE WITH LEFI AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM)	Sonnector Color WHITE	1 2 3 4 5 6	8 9 10 11 12 13 14 15 16
Connector No.	Connector Name	onnector	堰	Ų.

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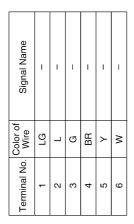
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Connector No.	D111
Connector Name	Connector Name POWER WINDOW MOTOR RH
Connector Color WHITE	WHITE

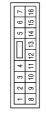






Signal Name	GND	ENCODER POWER	UP	DOWN	BAT	GND	ENCODER SIG2	ENCODER SIG1	COM
Color of Wire	8	BR EN	7	re	۵	В	. B	\ 	<u>«</u>
Terminal No.	8	4	8	6	10	11	12	15	16

D105	POWER WINDOW AND DOOR LOCKUNLOCK SWITCH RH (WITH LEFT AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM)	/HITE	
Connector No.	Connector Name	Connector Color WHITE	





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PRECAUTIONS

< PRECAUTION >

[LH&RH FRONT ANTI-PINCH-COUPE]

PRECAUTION

PRECAUTIONS

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 SR and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

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NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH [LH&RH FRONT ANTI-PINCH-COUPE]

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY **SWITCH**

Diagnosis Procedure

INFOID:0000000005434383

$oldsymbol{1}$. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to BCS-42, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. Check main power window and door lock/unlock switch power supply and **GROUND CIRCUIT**

Check power window switch main power supply and ground circuit.

Refer to PWC-177, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

$oldsymbol{3}.$ CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH SERIAL CIRCUIT

Check main power window and door lock/unlock switch serial circuit.

Refer to PWC-177. "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace the malfunctioning parts.

4. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Check main power window and door lock/unlock switch.

Refer to PWC-177, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

>> Check intermittent incident. Refer to GI-41, "Intermittent Incident". NO

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434384

1. CHECK POWER WINDOW MOTOR LH

Check power window motor LH.

Refer to PWC-181, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434385

1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Check power window and door lock/unlock switch RH.

Refer to PWC-179, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH SERIAL LINK CIRCUIT

Check power window and door lock/unlock switch RH serial link circuit.

Refer to PWC-197, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

3. CHECK POWER WINDOW MOTOR RH CIRCUIT

Check power window motor RH circuit.

Refer to PWC-183, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE) [LH&RH FRONT ANTI-PINCH-COUPE]

< SYMPTOM DIAGNOSIS >

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE)

Diagnosis Procedure INFOID:0000000005434386

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-169, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK DOOR WINDOW SLIDING PART

- · A foreign material adheres to window glass or glass run rubber.
- Glass run rubber wear or deformation.
- Sash is tilted too much or not enough.

Is the inspection result normal?

>> GO TO 3 YES

NO >> Repair or replace the malfunctioning parts.

3. CHECK ENCODER CIRCUIT

Check encoder circuit.

Refer to PWC-185, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (PASSENGER SIDE)

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (PASSENGER SIDE)

Diagnosis Procedure

INFOID:0000000005434387

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK DOOR WINDOW SLIDING PART

- A foreign material adheres to window glass or glass run rubber.
- Glass run rubber wear or deformation.
- Sash is tilted too much or not enough.

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

3. CHECK ENCODER CIRCUIT

Check encoder circuit.

Refer to PWC-187, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMAL-LY (DRIVER SIDE)

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY (DRIVER SIDE)

Diagnosis Procedure

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1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK ENCODER

Check encoder.

Refer to PWC-185, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMAL-LY (PASSENGER SIDE)

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY (PASSENGER SIDE)

Diagnosis Procedure

INFOID:0000000005434389

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK ENCODER

Check encoder.

Refer to PWC-187, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPER-ATE PROPERLY

Diagnosis Procedure

INFOID:0000000005434390

1. CHECK DOOR SWITCH

Check door switch.

Refer to PWC-191, "Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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DOES NOT OPERATE BY KEY CYLINDER SWITCH

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

DOES NOT OPERATE BY KEY CYLINDER SWITCH

Diagnosis Procedure

INFOID:0000000005434391

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-169</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. Check door lock assembly LH (key cylinder switch)

Check door lock assembly LH (key cylinder switch).

Refer to PWC-193, "Component Function Check".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434392

1. CHECK INTELLIGENT KEY FUNCTION

Check Intelligent Key function.

Refer to SEC-16, "System Description".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

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POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-COUPE]

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000005434393

1. REPLACE MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Replace main power window and door lock/unlock switch.

Refer to <u>PWC-252</u>, "Removal and Installation". After that, <u>PWC-178</u>, "POWER WINDOW MAIN SWITCH: <u>Special Repair Requirement"</u>.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

PRE-INSPECTION FOR DIAGNOSTIC

< ON-VEHICLE MAINTENANCE >

[LH&RH FRONT ANTI-PINCH-COUPE]

ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

BASIC INSPECTION

1. INSPECTION START

- 1. Check the service history.
- Check the following parts.
- Fuse/circuit breaker blown.
- Poor connection, open or short circuit of harness connector.
- Battery voltage.

Is the inspection result normal?

YES >> Inspection end.

NO >> Repair or replace the malfunctioning parts.

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ON-VEHICLE REPAIR

POWER WINDOW MAIN SWITCH

Removal and Installation

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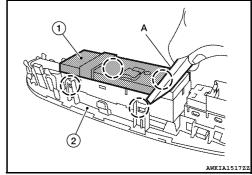
REMOVAL

- 1. Remove the power window main switch finisher (2) from the door finisher, refer to INT-11, "Exploded View".
- 2. Release the four tabs (two on each side) with a suitable tool (A), then separate the power window main switch (1) from the switch finisher (2).

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CAUTION:

Do not fold the pawl of switch finisher.



INSTALLATION

Installation is in the reverse order of removal.

FRONT POWER WINDOW SWITCH

< ON-VEHICLE REPAIR >

[LH&RH FRONT ANTI-PINCH-COUPE]

FRONT POWER WINDOW SWITCH

Removal and Installation

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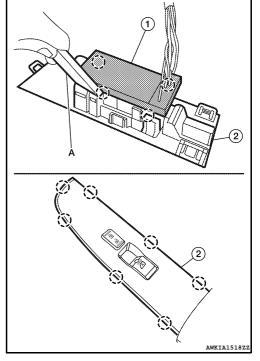
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REMOVAL

- 1. Remove the front power window switch finisher (2) from the front door finisher RH. Refer to INT-11, "Exploded View".
- 2. Release the four tabs (two on each side) with a suitable tool (A), then separate the front power window switch (1) from the switch finisher (2).

(): Pawl CAUTION:

Do not fold the pawl of switch finisher.



INSTALLATION

Installation is in the reverse order of removal.

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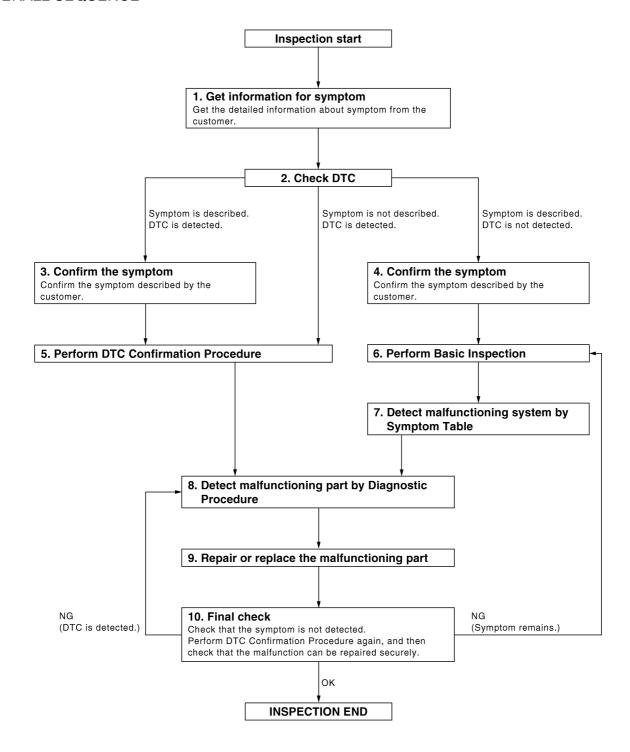
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

OVERALL SEQUENCE



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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[LH&RH FRONT ANTI-PINCH-SEDAN]

${f 1}$. GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2

2. CHECK DTC

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

Is any symptom described and any DTC detected?

Symptom is described, DTC is displayed>>GO TO 3

Symptom is described. DTC is not displayed>>GO TO 4

Symptom is not described, DTC is displayed>>GO TO 5

3. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5

4. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6

PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again. At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time. If two or more DTCs are detected, refer to BCS-69, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check. If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Confirmation Procedure.

Is DTC detected?

YES >> GO TO 8

NO >> Refer to GI-41, "Intermittent Incident".

6. PERFORM BASIC INSPECTION

Perform PWC-254. "Work Flow".

Inspection End>>GO TO 7

7. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

>> GO TO 8

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[LH&RH FRONT ANTI-PINCH-SEDAN]

8. Detect malfunctioning part by diagnostic procedure

Inspect according to Diagnostic Procedure of the system.

NOTE:

The Diagnostic Procedure described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

Is malfunctioning part detected?

YES >> GO TO 9

NO >> Check voltage of related BCM terminals using CONSULT-III.

9. REPAIR OR REPLACE THE MALFUNCTIONING PART

- 1. Repair or replace the malfunctioning part.
- Reconnect parts or connectors disconnected during Diagnostic Procedure again after repair and replacement.
- 3. Check DTC. If DTC is displayed, erase it.

>> GO TO 10

10. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.

When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8

YES (Symptom remains)>>GO TO 6

NO >> Inspection End.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH&RH FRONT ANTI-PINCH-SEDAN]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

Initial setting is necessary when battery terminal is disconnected.

CAUTION:

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

- Auto-up operation
- Anti-pinch function
- Retained power operation

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INITIALIZATION PROCEDURE

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

CHECK ANTI-PINCH FUNCTION

- 1. Fully open the door window.
- 2. Place a piece of wood near fully closed position.
- Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm or 2 seconds 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.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-300, "Fail Safe".
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Retained power operation when ignition switch is OFF.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

INFOID:000000005434399

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
- Retained power operation

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement

INITIALIZATION PROCEDURE

1. Disconnect battery minus terminal or power window main switch connector. Reconnect it after a minute or more.

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH&RH FRONT ANTI-PINCH-SEDAN]

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

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 or 2 seconds without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window main switch while lowering.

CAUTION:

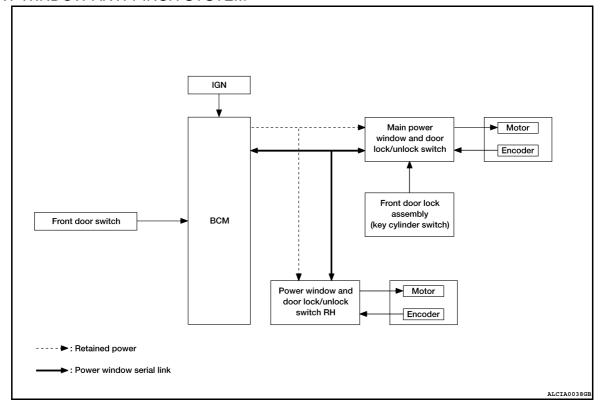
- Do not check with hands and other part of body because they may be pinched. Do not get pinched.
- Check that AUTO-UP operates before inspection when system initialization is performed.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-300, "Fail Safe".
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Retained power operation when ignition switch is OFF.

FUNCTION DIAGNOSIS

POWER WINDOW SYSTEM

System Diagram

FRONT WINDOW ANTI-PINCH SYSTEM



System Description

INFOID:0000000005434402

POWER WINDOW MAIN SWITCH INPUT/OUTPUT SIGNAL CHART

Item	Input signal to main power window and door lock/unlock switch	Main power window and door lock/unlock switch function	Actuator	
Key cylinder switch	LOCK/UNLOCK signal (more than 1 seconds over)			
Encoder	Encoder pulse signal			
Main power window and door lock/unlock switch	Front power window motor LH UP/ DOWN signal	Power window control	Front power window motor	
Power window and door lock/unlock switch RH	Front power window motor RH UP/ DOWN signal	Fower window control		
ВСМ	RAP signal			
Rear power window switch	Rear power window motor UP/DOWN signal		Rear power window motor	

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH INPUT/OUTPUT SIGNAL CHART

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< FUNCTION DIAGNOSIS >

Item	Input signal to front power window switch	Front power window switch function	Actuator	
Power window and door lock/unlock switch RH	Front power window motor RH UP/ DOWN signal	Power window control	Front power window motor RH	
Encoder	Encoder pulse signal			
BCM	RAP signal			

POWER WINDOW OPERATION

- Power window system is operable during the retained power operation timer after turning ignition switch ON and OFF.
- Power window main switch (driver side) can open/close all windows.
- Front & rear power window switch can open/close the corresponding windows.

POWER WINDOW AUTO-OPERATION (FRONT LH & RH)

- AUTO UP/DOWN operation can be performed when main power window and door lock/unlock switch & power window and door lock/unlock switch RH 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 fully opened/closed position.
- Power window motor is operable in case encoder is malfunctioning.

RETAINED POWER OPERATION

Retained power operation is an additional power supply function that enables power window system to operate during the 45 seconds even when ignition switch is turned OFF

Retained power function cancel conditions

- Front door CLOSE (door switch OFF)→OPEN (door switch ON).
- When ignition switch is ON.
- When timer time passes. (45 seconds)

POWER WINDOW LOCK

Ground circuit inside power window main switch shuts off when power window lock switch is ON. This inhibits power window switch operation except with the power window switch.

ANTI-PINCH OPERATION (FRONT LH & RH)

- Pinch foreign material in the door glass during AUTO-UP operation, and it is the anti-pinch function that lowers the door glass 150 mm or 2 seconds when detected.
- 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 window glass for 150 mm or 2 seconds 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.

KEY CYLINDER SWITCH OPERATION

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

OPERATION CONDITION

- Ignition switch OFF
- Hold door key cylinder to LOCK position for more than 1 second to perform CLOSE operation of the door glass.

POWER WINDOW SYSTEM

< FUNCTION DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

 Hold door key cylinder to UNLOCK position for more than 1 second to perform OPEN operation of the door glass.

KEYLESS POWER WINDOW DOWN OPERATION (FRONT LH & RH)

Front power windows open when the unlock button on Intelligent Key is activated and kept pressed for more than 3^(NOTE) seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed.

The power window opening stops when the following operations are performed:

- When the unlock button is kept pressed 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 activate, keyless power window down function cannot be operated.

NOTE:

Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUP-PORT". Refer to BCS-18, "COMMON ITEM: CONSULT-III Function".

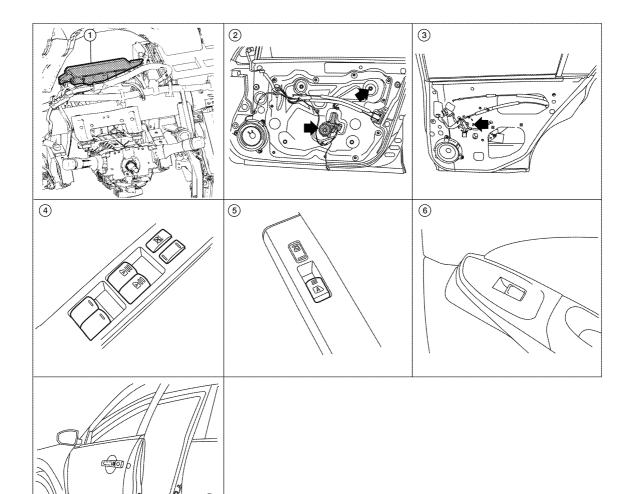
NOTE:

Use CONSULT-III to change settings.

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

Component Parts Location

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POWER WINDOW SYSTEM

< FUNCTION DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

- 1. BCM M16, M17, M18 (view with instrument panel removed)
- 4. Main power window and door lock/ unlock switch D7, D8
- 7. Front door lock assembly LH (key cylinder switch) D10
- 2. Front power window motor LH D9, RH D104
- Power window and door lock/unlock 6. switch RH D105
- B. Front door switch LH B8, RH B108
- 3. Rear power window motor LH D204, RH D304
 - Rear power window switch LH D203, RH D303

Component Description

INFOID:0000000005434404

FRONT WINDOW ANTI-PINCH SYSTEM

Component	Function
BCM	Supplies power to power window switches.Controls retained power.
Main power window and door lock/unlock switch	 Directly controls all power window motor of all doors. Controls anti-pinch operation of front power window LH.
Power window and door lock/unlock switch RH	 Controls front power window motor RH. Controls anti-pinch operation of front power window RH.
Rear power window switch	Controls rear power window motors LH and RH.
Front power window motor LH	 Integrates the ENCODER POWER and WINDOW MOTOR. Starts operating with signals from main power window and door lock/unlock switch. Transmits power window motor rotation as a pulse signal to main power window and door lock/unlock switch.
Front power window motor RH	Starts operating with signals from main power window and door lock/unlock switch & power window and door lock/unlock switch RH.
Rear power window motor	Starts operating with signals from main power window and door lock/unlock switch & rear power window switch.
Front door lock assembly LH (key cylinder switch)	Transmits operation condition of key cylinder switch to power window main switch.
Front door switch LH or RH	Detects door open/close condition and transmits to BCM.

[LH&RH FRONT ANTI-PINCH-SEDAN]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: Diagnosis Description

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BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF DIAGNOSTIC RESULT	Displays the diagnosis results judged by BCM.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	 Read and save the vehicle specification. Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

Cristons	Cub avatara adaption itara	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	×	×	×
Remote keyless entry system1	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system2	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
BCM	BCM	×		
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

^{1:} With remote keyless entry system

COMMON ITEM: CONSULT-III Function

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ECU IDENTIFICATION

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^{2:} With intelligent Key system

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Displays the BCM part No.

SELF-DIAG RESULT

Refer to BCS-70, "DTC Index".

RETAINED PWR

RETAINED PWR : CONSULT-III Function (BCM - RETAINED PWR)

INFOID:0000000005803223

Data monitor

Monitor Item [Unit]	Description
DOOR SW-DR [ON/OFF]	Indicates condition of front door switch LH.
DOOR SW-AS [ON/OFF]	Indicates condition of front door switch RH.

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH: Description

• BCM supplies power.

• It operates each power window motor via corresponding power window switch and makes window move up/ down when main power window and door lock/unlock switch is operated.

POWER WINDOW MAIN SWITCH: Component Function Check

Main Power Window And Door Lock/unlock Switch

1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH FUNCTION

Does power window motor operate with main power window and door lock/unlock switch operation? Is the inspection result normal?

YES >> Main power window and door lock/unlock switch power supply and ground circuit are OK.

NO >> Refer to PWC-265, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure".

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

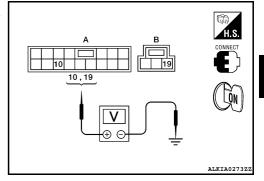
Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

Main Power Window And Door Lock/unlock Switch Power Supply Circuit Check

1. CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch ON.
- Check voltage between main power window and door lock/ unlock switch connectors (A and B) and ground.

(+)			Voltage (V)
Main power window and door lock/unlock switch connector		(-)	(Approx.)
D7 (A)	10	Ground	Battery voltage
D8 (B)	19	Giouna	Ballery Vollage



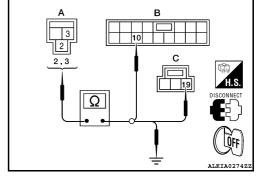
Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect BCM and main power window and door lock/unlock switch.
- Check continuity between BCM connector (A) and main power window and door lock/unlock switch connectors (B and C).

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M16 (A)	3	D7 (B)	10	Yes
WTO (A)	2	D8 (C)	19	165



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< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

4. Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Terminal	
M16 (A)	3	Ground	No
WITO (A)	2		NO

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

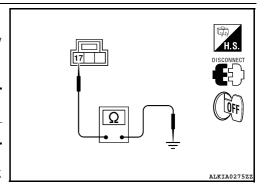
3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch.

3. Check continuity between main power window and door lock/ unlock switch connector and ground.

Main power window and door lock/ unlock switch connector	Terminal	Ground	Continuity
D8	17		Yes



Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-355, "Removal and Installation".

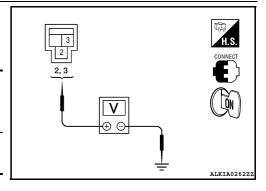
After that, refer to PWC-269, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

- 1. Connect BCM.
- 2. Turn ignition switch ON.
- 3. Check voltage between BCM connector and ground.

	V I 00		
(+)		(–)	Voltage (V) (Approx.)
BCM connector	Terminal		, , ,
M16	3	Ground	Battery voltage
IVITO	2	Giouna	Dattery Voltage

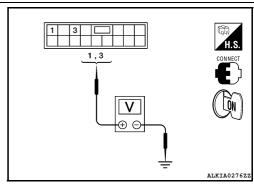


Is the measurement value within the specification?

- YES >> Check main power window and door lock/unlock switch output signal (rear power window switch LH) GO TO 5
- YES >> Check main power window and door lock/unlock switch output signal (rear power window switch RH) GO TO 6
- NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

5. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL (REAR POWER WINDOW SWITCH LH)

- Turn ignition switch ON.
- 2. Check voltage between main power window and door lock/ unlock switch connector and ground.



				ı
Te	erminal			
(+) Main power window and door lock/unlock switch connector			Window	Voltage (V)
		(-)	condition	(Approx.)
	1	Ground	UP	Battery voltage
D7	•		DOWN	0
D1	3		UP	0
	3		DOWN	Battery voltage

Is the measurement value within the specification?

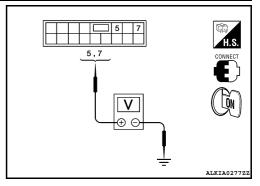
YES >> GO TO 7

NO >> Replace main power window and door lock/unlock switch. Refer to PWC-355, "Removal and <a href="Installation". After that, refer to PWC-269, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

6. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL (REAR POWER WINDOW SWITCH RH)

- Turn ignition switch ON.
- Check voltage between main power window and door lock/ unlock switch connector and ground.

Terminal					
(+)			NA C 1		
Main power win- dow and door lock/unlock switch connector	Terminal	(-)	Window condition	Voltage (V) (Approx.)	
	7		UP	Battery voltage	
D7		Ground	DOWN	0	
DI .		Giouna	UP	0	
	3		DOWN	Battery voltage	



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Is the measurement value within the specification?

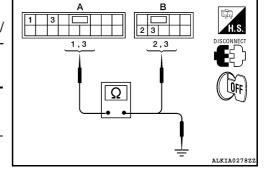
YES >> GO TO 8

NO >> Replace main power window and door lock/unlock switch. Refer to PWC-355, "Removal and Installation".

7. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH LH)

- Turn ignition switch OFF.
- 2. Disconnect rear power window switch LH.
- Check continuity between main power window and door lock/ unlock switch connector and rear power window switch LH connector.

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch LH connector	Terminal	Continuity
D7 (A)	1	D203 (B)	2	Yes
DT (A)	3	D203 (B)	3	162



4. Check continuity between main power window and door lock/unlock switch connector and ground.

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Main power window and door lock/unlock switch connector	Terminal	01	Continuity
D7 (A)	1	Ground	No
DI (A)	3	i in	INO

Is the inspection result normal?

YES >> GO TO 9

NO >> Repair or replace harness.

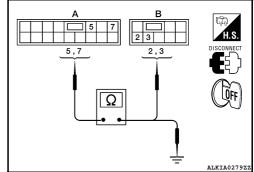
8. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH RH)

1. Turn ignition switch OFF.

2. Disconnect rear power window switch RH.

 Check continuity between main power window and door lock/ unlock switch connector and rear power window switch RH connector.

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch RH connector	Terminal	Continuity
D7 (A)	5	D303 (B)	3	Yes
DI (A)	7	D303 (B)	2	165



4. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity
D7 (A)	5	Ground	No
DI (A)	7		NO

Is the inspection result normal?

YES >> GO TO 9

NO

NO >> Repair or replace harness.

9. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Check main power window and door lock/unlock switch.

Refer to PWC-268, "POWER WINDOW MAIN SWITCH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

>> Replace main power window and door lock/unlock switch. Refer to PWC-355, "Removal and <a href="Installation". After that, refer to PWC-269, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

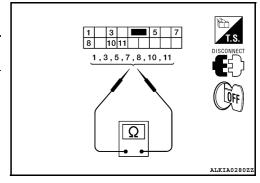
POWER WINDOW MAIN SWITCH: Component Inspection

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1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

1. Check main power window and door lock/unlock switch.

Terr	minal	Main power windo	Continuity	
10	1	Rear LH	UP	
10	7	Rear RH	UP	
1	3	Rear LH	NEUTRAL	Yes
5	7	Rear RH	NEOTRAL	165
10	3	Rear LH	DOWN	
10	5	Rear RH DOWN		

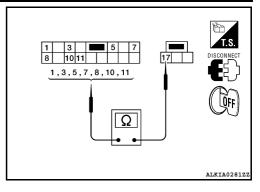


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[LH&RH FRONT ANTI-PINCH-SEDAN]

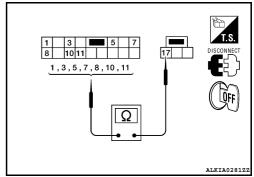
Check continuity between main power window and door lock/ unlock switch (power window lock switch). (Lock operation).

Tern	ninal	Main power window and door lock/unlock switch condition		·		Continuity
3		Rear LH	UP			
5		Rear RH	OF .			
1		Rear LH				
3	17	Rear RH	NEUTRAL	No		
5	17					
7		ixeai ixii				
1		Rear LH	DOWN			
7		Rear RH	DOWN			



3. Check continuity between main power window and door lock/ unlock switch (power window lock switch). (Unlock operation).

Terr	minal	Main power window and door lock/unlock switch condition				Continuity
3		Rear LH	UP			
5		Rear RH	O1			
1		Rear LH				
3	17	Rear RH	NEUTRAL	Yes		
5	.,					
7		rtour tit				
1		Rear LH	DOWN			
7		Rear RH	BOWN			



Is the inspection result normal?

YES >> Main power window and door lock/unlock switch is OK.

NO >> Replace main power window and door lock/unlock switch. Refer to PWC-355, "Removal and <a href="Installation". After that, refer to PWC-269, "POWER WINDOW MAIN SWITCH: Special Repair Requirement.

POWER WINDOW MAIN SWITCH: Special Repair Requirement

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1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Refer to PWC-283, "DRIVER SIDE : Component Function Check".

FRONT POWER WINDOW SWITCH

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[LH&RH FRONT ANTI-PINCH-SEDAN]

FRONT POWER WINDOW SWITCH: Description

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- BCM supplies power.
- Front power window motor RH will be operated if power window and door lock/unlock switch RH is operated.

FRONT POWER WINDOW SWITCH : Component Function Check

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Power Window And Door Lock/unlock Switch RH

1. CHECK FRONT POWER WINDOW MOTOR RH FUNCTION

Does front power window motor RH operate with power window and door lock/unlock switch RH operation? Is the inspection result normal?

YES >> Power window and door lock/unlock switch RH power supply and ground circuit are OK.

NO >> Refer to PWC-270, "FRONT POWER WINDOW SWITCH: Diagnosis Procedure".

FRONT POWER WINDOW SWITCH: Diagnosis Procedure

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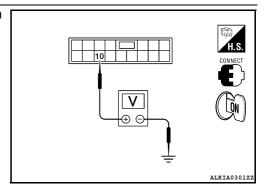
Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

Power Window And Door Lock/unlock Switch RH Power Supply Circuit Check

1. CHECK POWER SUPPLY CIRCUIT

Check voltage between power window and door lock/unlock switch RH connector and ground.

Terr			
(+)		Voltage (V)	
Power window and door lock/ unlock switch RH connector	Terminal	(–)	(Approx.)
D105	10	Ground	Battery voltage



Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM and power window and door lock/unlock switch RH.
- Check continuity between BCM connector (A) and power window and door lock/unlock switch RH connector (B).

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M16 (A)	2	D105 (B)	10	Yes

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4. Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Ground	Continuity
M16 (A)	2	Ground	No

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

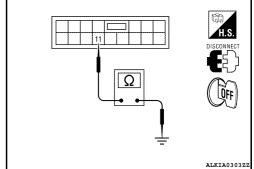
< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

$\overline{3}$. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect power window and door lock/unlock switch RH.
- 3. Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/unlock switch RH	Terminal	Ground	Continuity
D105	11		Yes



Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-356, "Removal and Installation". After

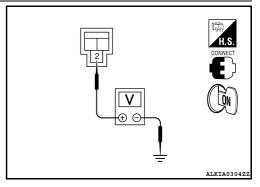
that, refer to PWC-271, "FRONT POWER WINDOW SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

- Connect BCM.
- 2. Turn ignition switch ON.
- 3. Check voltage between BCM connector and ground.

(+)	(+)		Voltage (V) (Approx.)	
BCM connector	Terminal	(-)	(11 - 7	
M16	2	Ground	Battery voltage	



Is the measurement value within the specification?

YES >> Replace power window and door lock/unlock switch RH.

Refer to <u>PWC-356</u>, "Removal and Installation". After that, refer to <u>PWC-271</u>, "FRONT POWER WINDOW SWITCH: Special Repair Requirement".

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

FRONT POWER WINDOW SWITCH: Special Repair Requirement

INFOID:0000000005434416

INFOID:000000005434417

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

switch.

NO >> Refer to PWC-285, "PASSENGER SIDE : Component Function Check".

REAR POWER WINDOW SWITCH

REAR POWER WINDOW SWITCH: Description

BCM supplies power.
Rear power window motor will be operated if rear power window switch is operated. Rear power window

Revision: September 2009 PWC-271 2010 Altima

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[LH&RH FRONT ANTI-PINCH-SEDAN]

REAR POWER WINDOW SWITCH : Component Function Check

INFOID:0000000005434418

Rear Power Window Switch

1. CHECK REAR POWER WINDOW MOTOR FUNCTION

Does rear power window motor operate with rear power window switch operation? Is the inspection result normal?

YES >> Rear power window switch power supply and ground circuit are OK.

NO >> Refer to PWC-272, "REAR POWER WINDOW SWITCH : Diagnosis Procedure".

REAR POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:0000000005434419

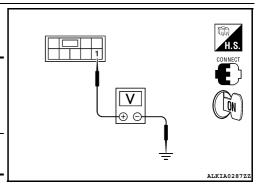
Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

Rear Power Window Switch Power Supply Circuit Check

1. CHECK POWER SUPPLY CIRCUIT

Check voltage between rear power window switch connector and ground.

		Terr	minal			
•	(+)			Condition	Voltage (V)	
	•	ver window connector	Terminal	(–)		(Approx.)
	LH	D203	1	Ground	Ignition switch	Battery voltage
	RH	D303	I	Giodila	ON	Battery voltage



Is the measurement value within the specification?

YES >> GO TO 2 (Rear power window switch LH)

YES >> GO TO 3 (Rear power window switch RH)

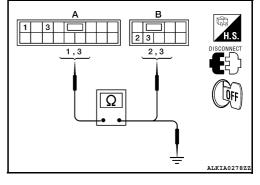
NO >> GO TO 4

2. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH LH)

1. Turn ignition switch OFF.

- 2. Disconnect main power window and door lock/unlock switch and rear power window switch LH.
- Check continuity between main power window and door lock/ unlock switch connector (A) and rear power window switch LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch LH connector	Terminal	Continuity
D7 (A)	1	D203 (B)	2	Yes
DI (A)	3	D203 (B)	3	163



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/un- lock switch connector	Terminal		Continuity
D7 (A)	1	Ground	No
D7 (A)	3		NO

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Repair or replace harness.

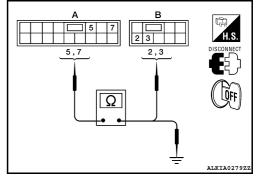
< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

3. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH RH)

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch and rear power window switch RH.
- Check continuity between main power window and door lock/ unlock switch connector (A) and rear power window switch RH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch RH connector	Terminal	Continuity
D7 (A)	5	D303 (B)	3	Yes
Dr (A)	7	D303 (B)	2	163



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity	
D7 (A)	5	Ground	No	
טו (ה)	7		140	

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Repair or replace harness.

4. CHECK HARNESS CONTINUITY

- 1. Disconnect BCM and rear power window switch.
- 2. Check continuity between BCM connector (A) and rear power window switch connector (B).

BCM connector	Terminal	Rear power window switch connector		Terminal	Continuity
M16 (A)	3	LH	D203 (B)	1	Yes
W16 (A)	,	RH	D303 (B)		162

3. Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Ground	Continuity
M16 (A)	3	Giodila	No

A B DISCONNECT CFF

Is the inspection result normal?

YES >> GO TO 5

NO

NO >> Repair or replace harness.

5. CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

Refer to PWC-273, "REAR POWER WINDOW SWITCH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

>> Replace rear power window switch. Refer to PWC-357, "Removal and Installation - Rear Door Switch".

REAR POWER WINDOW SWITCH: Component Inspection

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COMPONENT INSPECTION

1. CHECK REAR POWER WINDOW SWITCH

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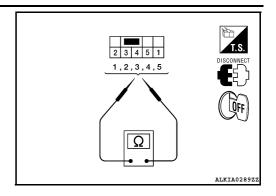
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< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Check rear power window switch.

Terr	ninal	Power window switch condition	Continuity
1	5	UP	
3	4	OF .	
3	4	NEUTRAL	Yes
5	2	NEOTIME	163
1	4	DOWN	
5	2	DOWN	



Is the inspection result normal?

- YES >> Rear power window switch is OK.
- NO >> Replace rear power window switch. Refer to PWC-357, "Removal and Installation Rear Door Switch".

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000005434421

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

DRIVER SIDE: Component Function Check

INFOID:0000000005434422

1. CHECK POWER WINDOW MOTOR CIRCUIT

Does front power window motor LH operate with operating main power window and door lock/unlock switch? Is the inspection result normal?

YES >> Front power window motor LH is OK.

NO >> Refer to PWC-275, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000005434423

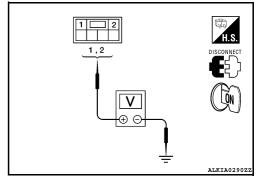
Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

Front Power Window Motor LH Circuit Check

1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

- Disconnect front power window motor LH.
- 2. Turn ignition switch ON.
- 3. Check voltage between front power window motor LH connector and ground.

Terminal					
(+)			Main power win- dow and door lock/	Voltage (V)	
Power window motor LH con- nector	Terminal	(–)	unlock switch con- dition	(Approx.)	
	2		UP	Battery voltage	
D9	2	Ground	DOWN	0	
D9	1	Giodila	UP	0	
	'		DOWN	Battery voltage	



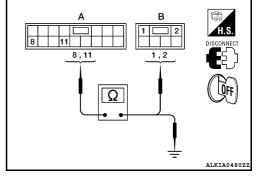
Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch and front power window motor LH.
- Check continuity between main power window and door lock/ unlock switch connector (A) and front power window motor connector LH (B).

Main power window and door lock/unlock switch connector	Terminal	Front power win- dow motor LH con- nector	Terminal	Continuity
D7 (A)	8	D9 (B)	2	Yes
<i>D7</i> (A)	11	D9 (B)	1	163



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[LH&RH FRONT ANTI-PINCH-SEDAN]

4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	01	Continuity	
D7 (A)	8	Ground	No	
DI (A)	11	1	INO	

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-355, "Removal and Installation". After that, refer to PWC-276, "DRIVER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

$3.\,$ CHECK POWER WINDOW MOTOR

Check front power window motor LH.

Refer to PWC-276, "DRIVER SIDE: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41. "Intermittent Incident".

NO >> Replace power window motor LH. Refer to <u>GW-19, "Removal and Installation"</u>. After that, refer to <u>PWC-276, "DRIVER SIDE : Special Repair Requirement"</u>.

DRIVER SIDE: Component Inspection

INFOID:0000000005434424

COMPONENT INSPECTION

1. CHECK FRONT POWER WINDOW MOTOR LH

Does motor operate by connecting the battery voltage directly to power window motor?

Terminal		Motor condition
(+)	(-)	Wolor condition
1	2	DOWN
2	1	UP

Is the inspection result normal?

NO

YES >> Front power window motor LH is OK.

>> Replace front power window motor LH. Refer to <u>GW-19</u>, "Removal and Installation". After that, refer to PWC-276, "DRIVER SIDE: Special Repair Requirement".

DRIVER SIDE: Special Repair Requirement

INFOID:0000000005434425

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

$2.\,$ CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Refer to PWC-283, "DRIVER SIDE : Component Function Check".

PASSENGER SIDE

PASSENGER SIDE: Description

INFOID:0000000005434426

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Door glass moves UP/DOWN by receiving the signal from main power window and door lock/unlock switch or power window and door lock/unlock switch RH.

PASSENGER SIDE : Component Function Check

INFOID:0000000005434427

1. CHECK POWER WINDOW MOTOR CIRCIUT

Does power window motor operate with operating main power window and door lock/unlock switch or power window and door lock/unlock switch RH?

Is the inspection result normal?

YES >> Front power window motor RH is OK.

NO >> Refer to PWC-277, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000005434428

Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

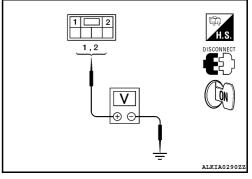
Front Power Window Motor RH Circuit Check

1. Check front power window switch RH output signal

1. Turn ignition switch OFF.

- 2. Disconnect front power window motor RH.
- 3. Turn ignition switch ON.
- Check voltage between front power window motor RH connector and ground.

Terminal			_		
(+)			Front power window motor	Voltage (V)	
Front power window motor RH connector	Terminal	(–)	RH condition	(Approx.)	
	2		UP	Battery voltage	
D104	2	Ground	DOWN	0	
	1		UP	0	
			DOWN	Battery voltage	



Is the measurement value within the specification?

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

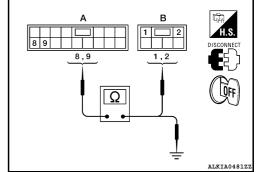
2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.

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- 2. Disconnect power window and door lock/unlock switch RH.
- Check continuity between power window and door lock/unlock switch RH connector (A) and front power window motor RH connector (B).

Power window and door lock/unlock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity
D105 (A)	8	D104 (B)	2	Yes
D103 (A)	9	D104 (B)	1	163



4. Check continuity between power window and door lock/unlock switch RH connector (A) and ground.

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< COMPONENT DIAGNOSIS >

Power window and door lock/unlock switch RH connector	Terminal	Ground	Continuity	
D105 (A)	8		No	
D103 (A)	9		INO	

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-356, "Removal and Installation". After that, refer to PWC-278, "PASSENGER SIDE: Special Repair Requirement".

NO >> Repair or replace harness.

3. CHECK FRONT POWER WINDOW MOTOR RH

Check front power window motor RH.

Refer to PWC-278, "PASSENGER SIDE: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace front power window motor RH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>". After that, refer to <u>PWC-278</u>, "<u>PASSENGER SIDE</u>: <u>Special Repair Requirement</u>".

PASSENGER SIDE: Component Inspection

INFOID:0000000005434429

COMPONENT INSPECTION

1. CHECK FRONT POWER WINDOW MOTOR RH

Does motor operate by connecting the battery voltage directly to front power window motor RH?

Terminal		Motor condition
(+)	(-)	Wotor condition
1	2	DOWN
2	1	UP

Is the inspection result normal?

NO

YES >> Front power window motor RH is OK.

>> Replace front power window motor RH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>". After that, refer to PWC-278, "PASSENGER SIDE: Special Repair Requirement".

PASSENGER SIDE: Special Repair Requirement

INFOID:0000000005434430

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to PWC-257, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Refer to PWC-285. "PASSENGER SIDE: Component Function Check".

REAR LH

REAR LH: Description

INFOID:000000005434431

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

REAR LH: Component Function Check

1. CHECK REAR POWER WINDOW MOTOR LH CIRCUIT

Does rear power window motor LH operate with main power window and door lock/unlock switch or rear power window switch LH?

Is the inspection result normal?

>> Rear power window motor LH is OK.

NO >> Refer to PWC-279, "REAR LH: Diagnosis Procedure"

REAR LH: Diagnosis Procedure

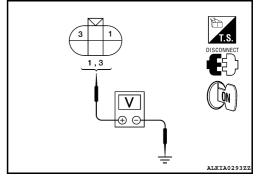
Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

Power Window Motor Circuit Check

${f 1}$. CHECK REAR POWER WINDOW SWITCH OUTPUT SIGNAL

- Turn ignition switch OFF.
- 2. Disconnect rear power window motor LH connector.
- 3. Turn ignition switch ON.
- Check voltage between rear power window motor LH connector and ground.

Terminal					
(+)			Window	Voltage (V)	
Rear power window motor LH connector	Terminal	(–)	condition	(Approx.)	
	1	Ground	UP	Battery voltage	
D204			DOWN	0	
	3	Giodila	UP	0	
			DOWN	Battery voltage	



Is the measurement value within the specification?

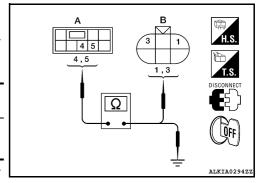
YES >> GO TO 3 >> GO TO 2 NO

2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect rear power window switch LH.
- Check continuity between rear power window switch LH connector (A) and rear power window motor LH connector (B).

Rear power window switch LH connector	Terminal	Rear power window motor LH connector	Terminal	Continuity
D203 (A)	5	D204 (B)	1	Yes
D203 (A)	4	D204 (B)	3	163

Check continuity between rear power window switch LH connector (A) and ground.



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[LH&RH FRONT ANTI-PINCH-SEDAN]

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Rear power window switch LH connector	Terminal	0	Continuity	
D203 (A)	5	Ground	No	
D203 (A)	4		INO	

Is the inspection result normal?

YES >> Check rear power window switch LH. Refer to PWC-273, "REAR POWER WINDOW SWITCH: Component Inspection".

NO >> Repair or replace harness.

3. CHECK REAR POWER WINDOW MOTOR LH

Check rear power window motor LH.

Refer to PWC-280, "REAR LH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace rear power window motor LH. Refer to <u>GW-14</u>, "Removal and Installation".

REAR LH: Component Inspection

INFOID:0000000005434434

COMPONENT INSPECTION

1. CHECK REAR POWER WINDOW MOTOR LH

Does motor operate by connecting the battery voltage directly to rear power window motor LH?

Terminal		Motor condition
(+)	(-)	Wotor condition
3	1	DOWN
1	3	UP

Is the inspection result normal?

YES >> Rear power window motor LH is OK.

NO >> Replace rear power window motor LH. Refer to <u>GW-14</u>, "Removal and <u>Installation"</u>.

REAR RH

REAR RH: Description

INFOID:0000000005434435

Door glass moves UP/DOWN by receiving the signal from main power window and door lock/unlock switch or rear power window switch RH.

REAR RH: Component Function Check

INFOID:0000000005434436

1. CHECK REAR POWER WINDOW MOTOR RH CIRCUIT

Does rear power window motor RH operate with operating main power window and door lock/unlock switch or rear power window switch RH?

Is the inspection result normal?

YES >> Rear power window motor RH is OK.

NO >> Refer to PWC-280, "REAR RH: Diagnosis Procedure".

REAR RH: Diagnosis Procedure

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Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

Rear Power Window Motor RH Circuit Check

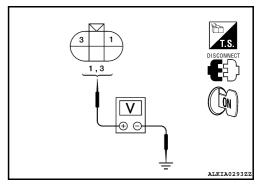
1. CHECK REAR POWER WINDOW SWITCH RH OUTPUT SIGNAL

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

- Turn ignition switch OFF.
- 2. Disconnect rear power window motor RH.
- Turn ignition switch ON.
- Check voltage between rear power window motor RH connector and ground.

Terminal			5	
(+)			Rear power window switch	Voltage (V)
Rear power window motor RH connector	Terminal	(–)	RH condition	(Approx.)
	1 Ground	UP	Battery voltage	
D304		Ground	DOWN	0
	3	Giodila	UP	0
			DOWN	Battery voltage



Is the measurement value within the specification?

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

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect rear power window switch RH.
- Check continuity between rear power window switch RH connector (A) and rear power window motor RH connector (B).

Rear power window switch RH connector	Terminal	Rear power window motor RH connector	Terminal	Continuity
D303 (A)	5	D304 (B)	1	Yes
D303 (A)	4	D304 (B)	3	res

Check continuity between rear power window switch RH connector (A) and ground.

A B 3 1	H.S.
4,5	T.S.
Ω	E SCONNECT
	OFF
<u></u>	ALKIA0294ZZ

Rear power window switch RH connector	Terminal	Ground	Continuity
D303 (A)	5		No
D303 (A)	4		INO

Is the inspection result normal?

>> Check rear power window switch RH. Refer to PWC-273, "REAR POWER WINDOW SWITCH: YES Component Inspection".

NO >> Repair or replace harness.

3. CHECK REAR POWER WINDOW MOTOR RH

Check rear power window motor RH.

Refer to PWC-281, "REAR RH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

>> Replace rear power window motor RH. Refer to GW-14, "Removal and Installation". NO

REAR RH: Component Inspection

COMPONENT INSPECTION

${f 1}$.CHECK REAR POWER WINDOW MOTOR RH

Does motor operate by connecting the battery voltage directly to rear power window motor RH?

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< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Terminal		Motor condition
(+)	(-)	Wotor Condition
3	1	DOWN
1	3	UP

Is the inspection result normal?

YES >> Rear power window motor RH is OK.

NO >> Replace rear power window motor RH. Refer to <u>GW-14</u>, "<u>Removal and Installation</u>".

[LH&RH FRONT ANTI-PINCH-SEDAN]

ENCODER

DRIVER SIDE

DRIVER SIDE: Description

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Detects condition of the front power window motor LH operation and transmits to main power window and door lock/unlock switch as pulse signal.

DRIVER SIDE: Component Function Check

INFOID:0000000005434440

1. CHECK ENCODER OPERATION

Does front door glass LH perform AUTO open/close operation normally when operating main power window and door lock/unlock switch?

Is the inspection result normal?

YES >> Encoder operation is OK.

NO >> Refer to PWC-283, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000005434441

Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

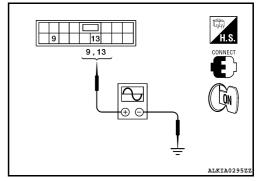
Encoder Circuit Check

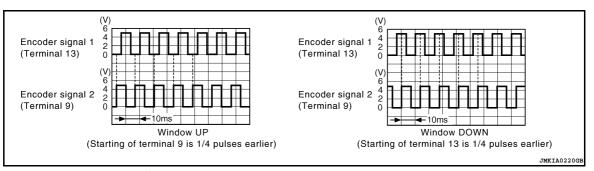
1. CHECK ENCODER OPERATION

1. Turn ignition switch ON.

2. Check signal between main power window and door lock/unlock switch connector and ground with oscilloscope.

Т				
(+)			Signal	
Main power window and door lock/unlock switch connector	Terminal	(–)	(Reference value)	
D7	9 13	Ground	Refer to following signal	





PWC-283

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> GO TO 2

2. CHECK FRONT POWER WINDOW MOTOR LH POWER SUPPLY

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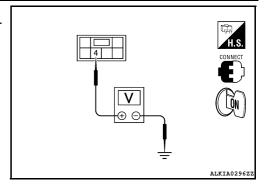
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[LH&RH FRONT ANTI-PINCH-SEDAN]

- 1. Turn ignition switch ON.
- 2. Check voltage between front power window motor LH connector and ground.

Terminal				
(+)			Voltage (V)	
Front power win- dow motor LH con- nector	Terminal	(–)	(Approx.)	
D9	4	Ground	10	



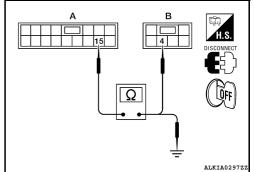
Is the measurement value within the specification?

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

3. CHECK HARNESS CONTINUITY 1

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch and front power window motor LH.
- Check continuity between main power window and door lock/ unlock switch connector (A) and front power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D7 (A)	15	D9 (B)	4	Yes



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D7 (A)	15		No

Is the inspection result normal?

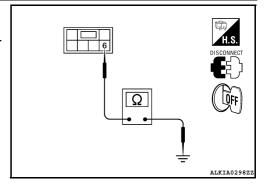
YES >> Replace main power window and door lock/unlock switch. Refer to PWC-355, "Removal and <a href="Installation". After that, refer to PWC-269, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

4. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front power window motor LH.
- 3. Check continuity between front power window motor LH connector and ground.

Front power window motor LH connector	Terminal	Ground	Continuity
D9	6		Yes



Is the inspection result normal?

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

5. CHECK HARNESS CONTINUITY 2

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< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

- Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector (A) and front power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Front power win- dow motor LH con- nector	Terminal	Continuity
D7 (A)	2	D9 (B)	6	Yes

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Is the inspection result normal?

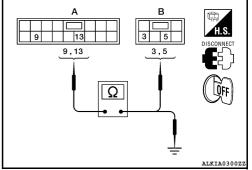
YES >> Replace main power window and door lock/unlock switch. Refer to PWC-355, "Removal and Installation". After that, refer to PWC-269, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

6. CHECK HARNESS CONTINUITY 3

- Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector (A) and front power window motor LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D7 (A)	9	D9 (B)	3	Yes
Dr (A)	13	D9 (B)	5	163



Check continuity between main power window and door lock/ unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D7 (A)	9		No
Dr (A)	13		NO

Is the inspection result normal?

>> Replace front power window motor LH. Refer to GW-19, "Removal and Installation". After that, YES refer to PWC-276, "DRIVER SIDE: Special Repair Requirement".

>> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE: Description

Detects condition of the front power window motor RH operation and transmits to power window and door lock/unlock switch RH as pulse signal.

PASSENGER SIDE: Component Function Check

1 .CHECK ENCODER OPERATION

Does front door glass RH perform AUTO open/close operation normally when operating power window and door lock/unlock switch RH?

Is the inspection result normal?

YES >> Encoder operation is OK.

>> Refer to PWC-285, "PASSENGER SIDE: Diagnosis Procedure". NO

PASSENGER SIDE : Diagnosis Procedure

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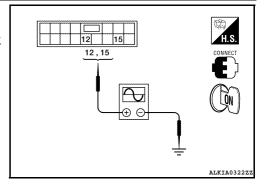
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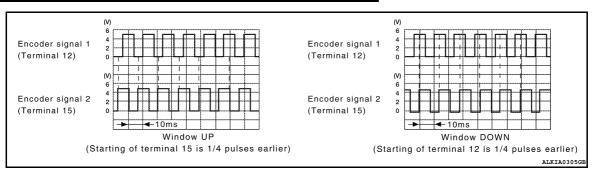
Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

1. CHECK ENCODER SIGNAL

- 1. Connect front power window motor RH.
- 2. Turn ignition switch ON.
- 3. Check signal between power window and door lock/unlock switch RH connector and ground with oscilloscope.

-			
(+)			Signal
Power window and door lock/unlock switch RH connector	Terminal	(–)	(Reference value)
D105	12	Ground	Refer to following
2100	15	Giodila	signal





Is the inspection result normal?

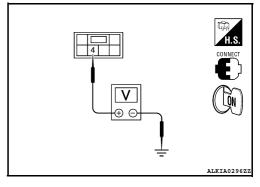
YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> GO TO 2

2. Check front power window motor RH power supply

- 1. Turn ignition switch ON.
- 2. Check voltage between front power window motor RH connector and ground.

(+)	(+)		Voltage (V)
Front power window motor RH connector	Terminal	(–)	(Approx.)
D105	4	Ground	10



Is the measurement value within the specification?

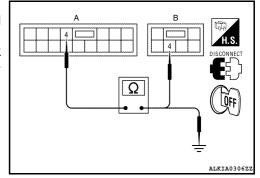
YES >> GO TO 4 NO >> GO TO 3

3. CHECK HARNESS CONTINUITY 1

1. Turn ignition switch OFF.

- 2. Disconnect power window and door lock/unlock switch RH and front power window motor RH.
- 3. Check continuity between power window and door lock/unlock switch RH connector (A) and front power window motor RH connector (B).

Power window and door lock/unlock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity
D105 (A)	4	D104 (B)	4	Yes



4. Check continuity between power window and door lock/unlock switch RH connector (A) and ground.

Power window and door lock/ unlock switch RH connector	Terminal	Ground	Continuity
D105 (A)	4		No

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-356, "Removal and Installation". After that, refer to PWC-271, "FRONT POWER WINDOW SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

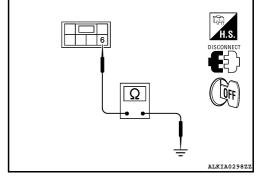
4. CHECK GROUND CIRCUIT

Turn ignition switch OFF.

2. Disconnect front power window motor RH.

3. Check continuity between front power window motor RH connector and ground.

Front power window motor RH connector	Terminal	Terminal Ground	Continuity
D104	6		Yes



Is the inspection result normal?

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

CHECK HARNESS CONTINUITY 2

1. Disconnect power window and door lock/unlock switch RH.

 Check continuity between power window and door lock/unlock switch RH connector (A) and front power window motor RH connector (B).

Power window and door lock/unlock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity
D105 (A)	3	D104 (B)	6	Yes

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH.

Refer to PWC-356, "Removal and Installation". After that, refer to PWC-271, "FRONT POWER WINDOW SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

6. CHECK HARNESS CONTINUITY 3

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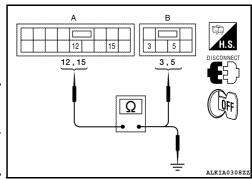
< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

1. Disconnect power window and door lock/unlock switch RH.

 Check continuity between power window and door lock/unlock switch RH connector (A) and front power window motor RH connector (B).

Power window and door lock/unlock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity	
D105 (A)	D105 (A) 12 D104 (B)		5	Yes	
D103 (A)	15	D 104 (B)	3	165	



Check continuity between power window and door lock/unlock switch RH connector (A) and ground.

Power window and door lock/unlock switch RH connector	Terminal	Ground	Continuity	
D105 (A)	12		No	
	15			

Is the inspection result normal?

YES >> Replace front power window motor RH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>". After that, refer to <u>PWC-278</u>, "<u>PASSENGER SIDE</u>: <u>Special Repair Requirement</u>".

NO >> Repair or replace harness.

DOOR SWITCH

Description INFOID:000000005434445

Detects door open/close condition and transmits the signal to BCM.

Component Function Check

1. CHECK FRONT DOOR SWITCH INPUT SIGNAL

Check ("DOOR SW-DR" and "DOOR SW-AS") in "DATA MONITOR" mode with CONSULT-III. Refer to <u>BCS-34, "RETAINED PWR: CONSULT-III Function (BCM - RETAINED PWR)"</u>.

Monitor item	C	ondition
DOOR SW-DR	OPEN	: ON
DOOR SW-DR	CLOSE	: OFF
DOOR SW-AS	OPEN	: ON
DOOR SW-AS	CLOSE	: OFF

Is the inspection result normal?

YES >> Front door switch circuit is OK.

NO >> Refer to PWC-289, "Diagnosis Procedure".

Diagnosis Procedure

Regarding Wiring Diagram information, refer to PWC-145. "Wiring Diagram".

1. CHECK HARNESS CONTINUITY

Check voltage between BCM connector and ground.

	Terminals					
(+)			Door condition		Voltage (V)	
BCM connector	Terminal	(–)	200.00		(Approx.)	
	32	Front door		OPEN	0	
M18	32	Ground	RH	CLOSE	Battery voltage	
58	Ground	Front door	OPEN	0		
	36		LH	CLOSE	Battery voltage	

Is the measurement value within the specification?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

NO >> GO TO 2

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- 2. Disconnect BCM and front door switch.
- 3. Check continuity between BCM connector and front door switch connector.

BCM connector	Terminal	Front door switch connector	Terminal	Continuity
M18	32	RH: B108	2	Yes
IVI I O	58	LH: B8	2	162

4. Check continuity between BCM connector and ground.

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< COMPONENT DIAGNOSIS >

BCM connector	Terminal		Continuity
M18	32	Ground	No
	58	-	NO

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK BCM OUTPUT SIGNAL

- 1. Connect BCM connector.
- 2. Check voltage between BCM connector and ground.

	V 14 0 0			
(-	+)	(-)	Voltage (V) (Approx.)	
BCM connector	Terminal	(-)	, , ,	
M18	32	Ground	Battery voltage	
14110	58	Giodila	battery voltage	

Is the measurement value within the specification?

YES >> GO TO 4

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

4. CHECK FRONT DOOR SWITCH

Check front door switch.

Refer to PWC-290, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace front door switch.

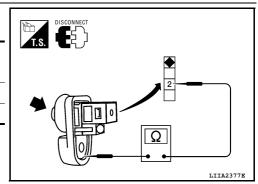
Component Inspection

INFOID:0000000005434448

1. CHECK FRONT DOOR SWITCH

Check front door switches.

Door switches Ground part of door switch Released Yes	Terminal Door switches		Door switch	Continuity
2 Glound part of			Door Switch	Continuity
door switch Released Yes	2	'	Pressed	No
			Released	Yes



Is the inspection result normal?

YES >> Front door switch is OK.

NO >> Replace front door switch.

DOOR KEY CYLINDER SWITCH

Description INFOID:000000005434449

Power window main switch detects condition of the door key cylinder and transmits to BCM as the LOCK or UNLOCK signals.

Component Function Check

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1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check ("KEY CYL LK-SW", "KEY CYL UN-SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-III. Refer to <u>BCS-19</u>, "DOOR LOCK: CONSULT-III Function (<u>BCM - DOOR LOCK</u>)".

Monitor item	Condition		
KEY CYL LK-SW	Lock	: ON	
RET CTL LN-SW	Neutral / Unlock	: OFF	
KEY CYL UN-SW	Unlock	: ON	
KEY CYL UN-SW	Neutral / Lock	: OFF	

Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Refer to PWC-291, "Diagnosis Procedure".

Diagnosis Procedure

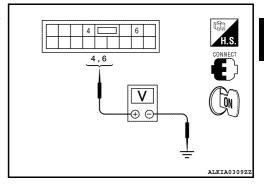
INFOID:0000000005434451

Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

- 1. Turn ignition switch ON.
- Check voltage between main power window and door lock/ unlock switch connector and ground.

Terminals					
(+)				Voltage (V)	
Main power window and door lock/unlock switch connector	Terminal	(–)	Key position	(Approx.)	
	4		Lock	0	
D7	4	Ground	Neutral/Unlock	5	
	6	Glound	Unlock	0	
	0		Neutral/Lock	5	



Is the measurement value within the specification?

YES >> Replace main power window and door lock/unlock switch. After that, refer to PWC-269, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> GO TO 2

 $2.\,$ CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

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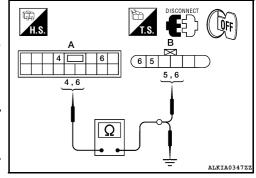
DOOR KEY CYLINDER SWITCH

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch and front door lock assembly LH (key cylinder switch).
- 3. Check continuity between main power window and door lock/ unlock switch connector (A) and front door lock assembly LH (key cylinder switch) connector (B).

Main power window and door lock/unlock switch connector	Terminal	Front door lock as- sembly LH (key cylin- der switch) connector	Terminal	Continuity
D7 (A)	4	D10 (B)	6	Yes
D1 (A)	6	D10 (B)	5	163



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	0 1	Continuity	
D7 (A)	4	Ground	No	
DI (A)	6		INO	

Is the inspection result normal?

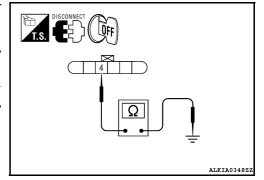
YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between front door lock assembly LH (key cylinder switch) connector and ground.

Front door lock assembly LH (key cylinder switch) connector	Terminal	Ground	Continuity
D10	4		Yes



Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to PWC-292, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace front door lock assembly LH (door key cylinder switch). After that, refer to PWC-293. "Special Repair Requirement".

Component Inspection

INFOID:0000000005434452

COMPONENT INSPECTION

1. CHECK DOOR KEY CYLINDER SWITCH

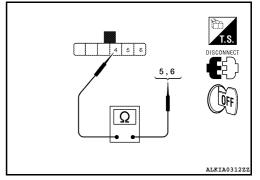
DOOR KEY CYLINDER SWITCH

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Check front door lock assembly LH (key cylinder switch).

Term	inal			
Front door lock assembly LH (key cylinder switch) connector		Key position	Continuity	
5		Unlock	Yes	
3	4	Neutral/Lock	No	
6	4	Lock	Yes	
0		Neutral/Unlock	No	



Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Replace front door lock assembly LH (key cylinder switch). After that, refer to PWC-293, "Special Repair Requirement".

Special Repair Requirement

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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POWER WINDOW SERIAL LINK

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

POWER WINDOW SERIAL LINK POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH: Description

INFOID:000000005434454

Main power window and door lock/unlock switch, power window and door lock/unlock switch RH and BCM transmit and receive the signal by power window serial link.

The signal mentioned below is transmitted from BCM to main power window and door lock/unlock switch and power window and door lock/unlock switch RH

Keyless power window down signal

The signal mentioned below is transmitted from main power window and door lock/unlock switch to power window and door lock/unlock switch RH

- Front door window RH 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:0000000005434455

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-III. Refer to BCS-19, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

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

Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to PWC-294, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure".

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

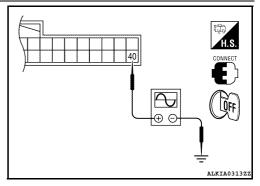
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Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

Power Window Serial Link Check

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

- Remove Intelligent Key, and close front door LH and RH.
- 2. Check signal between BCM connector and ground with oscilloscope when door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".
- 3. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".



< COMPONENT DIAGNOSIS >

	Terminal		0: 1
(+)		(-)	Signal (Reference value)
BCM connector	Terminal	(-)	,
M18	40	Ground	(V) 15 10 5 0

Is the inspection result normal?

YES >> Power window serial link is OK.

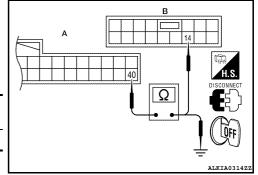
NO >> GO TO 2

2. CHECK POWER WINDOW SERIAL LINK CIRCUIT

Turn ignition switch OFF.

- Disconnect BCM and main power window and door lock/unlock switch.
- 3. Check continuity between BCM connector (A) and main power window and door lock/unlock switch connector (B).

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M18 (A)	40	D7 (B)	14	Yes



4. Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Ground	Continuity
M18 (A)	40	Ground	No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-355, "Removal and <a href="Installation". After that, refer to PWC-269, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

FRONT POWER WINDOW SWITCH

FRONT POWER WINDOW SWITCH: Description

Main power window and door lock/unlock switch, power window and door lock/unlock switch RH and BCM transmit and receive the signal by power window serial link.

The signal mentioned below is transmitted from BCM to main power window and door lock/unlock switch and power window and door lock/unlock switch RH

Keyless power window down signal

The signal mentioned below is transmitted from main power window and door lock/unlock switch to power window and door lock/unlock switch RH

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

FRONT POWER WINDOW SWITCH: Component Function Check

1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH OUTPUT SIGNAL

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POWER WINDOW SERIAL LINK

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-III. Refer to BCS-19, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

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

Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to PWC-296, "FRONT POWER WINDOW SWITCH: Diagnosis Procedure".

FRONT POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:0000000005434459

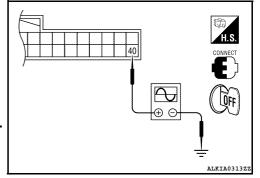
Regarding Wiring Diagram information, refer to PWC-145, "Wiring Diagram".

Power Window Serial Link Check

1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

- 1. Remove Intelligent Key, and close the front door LH and RH.
- 2. Check signal between BCM connector and ground with oscilloscope when door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".
- 3. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".

	Terminal	0: 1	
(+)		()	Signal (Reference value)
BCM connector	Terminal	(-)	(,
M18	40	Ground	(V) 15 10 5 0 10 ms



Is the inspection result normal?

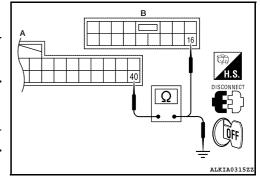
YES >> Power window serial link is OK.

NO >> GO TO 2

2. CHECK POWER WINDOW SERIAL LINK CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM.
- 3. Check continuity between BCM connector (A) and power window and door lock/unlock switch RH connector (B).

BCM connector	Terminal	Power window and door lock/unlock switch RH con- nector	Terminal	Continuity
M18 (A)	40	D105 (B)	16	Yes



POWER WINDOW SERIAL LINK

< COMPONENT DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

4. Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Ground	Continuity
M18 (A)	40	Giodila	No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-355, "Removal and <a href="Installation". After that, refer to PWC-269, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> Repair or replace harness.

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POWER WINDOW LOCK SWITCH

[LH&RH FRONT ANTI-PINCH-SEDAN]

POWER WINDOW LOCK SWITCH

Description INFOID:000000005434460

Ground circuit of main power window and door lock/unlock switch shuts off if power window lock switch of main power window and door lock/unlock switch is operated. This inhibits all operation, except for the main switch.

Component Function Check

INFOID:0000000005434461

1. CHECK POWER WINDOW LOCK SIGNAL

Exchanges for a normal main power window and door lock/unlock switch, and operation is checked. Does power window lock operate?

YES >> Replace main power window and door lock/unlock switch. Refer to <u>PWC-355</u>, "Removal and <u>Installation"</u>. After that, refer to <u>PWC-298</u>, "Special Repair Requirement".

NO >> Check condition of harness and connector.

Special Repair Requirement

INFOID:0000000005434462

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-257, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

POWER WINDOW MAIN SWITCH

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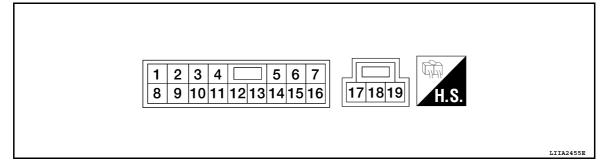
[LH&RH FRONT ANTI-PINCH-SEDAN]

ECU DIAGNOSIS

POWER WINDOW MAIN SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Termin	al No.	Description			Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
1 (Y)	Ground	Rear power window motor LH UP signal	Output	When rear LH switch in power window main switch is operated UP.	Battery voltage
2 (G)	Ground	Encoder ground	_	_	0
3 (O)	Ground	Rear power window motor LH DOWN signal	Output	When rear LH switch in power window main switch is operated DOWN.	Battery voltage
4 (L/B)	Ground	Door key cylinder switch LH LOCK signal	Input	Key position (Neutral → Locked)	5 → 0
5 (SB)	Ground	Rear power window motor RH DOWN signal	Output	When rear RH switch in power window main switch is operated DOWN.	Battery voltage
6 (L/R)	Ground	Door key cylinder switch LH UNLOCK signal	Input	Key position (Neutral → Unlocked)	5 → 0
7 (P)	Ground	Rear power window motor RH UP signal	Output	When rear RH switch in power window main switch is operated UP.	Battery voltage
8 (R)	11	Front door power window motor LH UP signal	Output	When front LH switch in power window main switch is operated UP.	Battery voltage
9 (W)	2	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0 10 ms

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Revision: September 2009 PWC-299 2010 Altima

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Termina	al No.	Description			Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
				IGN SW ON	Battery voltage
10 (V)	Ground	RAP signal	Input	Within 45 second after ignition switch is turned to OFF.	Battery voltage
				When front LH or RH door is opened during retained power operation.	0
11 (LG)	8	Front door power window motor LH DOWN signal	Output	When front LH switch in power window main switch is operated DOWN.	Battery voltage
13 (SB)	2	Encoder pulse signal 1	Input	When power window motor operates.	(V) 6 4 2 0 10 ms JMKIA0070GB
14 (BR)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window timer operating.	(V) 15 10 5 0 10 ms
15 (GR)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates.	10
17 (B)	Ground	Ground	_	_	0
19 (W)		Battery power supply	Input	_	Battery voltage

Fail Safe

FAIL-SAFE CONTROL

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 error beyond regulation value is detected between the fully closed position and the actual position of the glass.

Error	Error condition
Pulse sensor malfunction	When only one side of pulse signal is being detected for more than the specified value.
Both pulse sensors mal- function	When both pulse signals have not been detected for more than the specified value during glass open/close operation.
Pulse direction malfunction	When the pulse signal that is detected during glass open/close operation detects the opposite condition of power window motor operating direction.
Glass recognition position malfunction 1	When it detects the error between glass fully closed position in power window switch memory and actual fully closed position during glass open/close operation is more than the specified value.

POWER WINDOW MAIN SWITCH

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[LH&RH FRONT ANTI-PINCH-SEDAN]

Error	Error condition
Glass recognition position malfunction 2	When it detects pulse count more than the value of glass full stroke during glass open/close operation.
Malfunction of not yet up- dated closed position of glass	When glass open/close operation is continuously performed without fully closing more than the specified value (approximately 10 strokes).

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
- · Retained power function

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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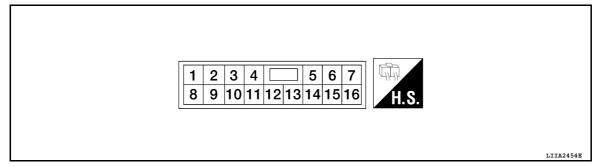
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FRONT POWER WINDOW SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Termi	nal No.	Description			Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
3 (W)	Ground	Encoder ground	_	_	0
4 (BR)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates	10
8 (L)	9	Power window motor UP signal	Output	When power window motor is UP at operated.	Battery voltage
9 (LG)	8	Power window motor DOWN signal	Output	When power window motor is DOWN at operated.	Battery voltage
10 (P)	Ground	Battery power supply	Input	_	Battery voltage
11 (B)	Ground	Ground	_	_	0
12 (Y)	3	Encoder pulse signal 1	Input	When power window motor operates.	(V) 6 4 2 0 10 ms

FRONT POWER WINDOW SWITCH [LH&RH FRONT ANTI-PINCH-SEDAN]

< ECU DIAGNOSIS >

Termi	nal No.	Description			Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
15 (G)	3	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0 10 ms JMKIA0070GB
16 (R)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window timer operating.	(V) 15 10 5 10 ms JPMIA0013GB

Fail Safe

FAIL-SAFE CONTROL

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 error beyond regulation value is detected between the fully closed position and the actual position of the glass.

Error	Error condition
Pulse sensor malfunction	When only one side of pulse signal is being detected for more than the specified value.
Both pulse sensors mal- function	When both pulse signals have not been detected for more than the specified value during glass open/close operation.
Pulse direction malfunction	When the pulse signal that is detected during glass open/close operation detects the opposite condition of power window motor operating direction.
Glass recognition position malfunction 1	When it detects the error between glass fully closed position in power window switch memory and actual fully closed position during glass open/close operation is more than the specified value.
Glass recognition position malfunction 2	When it detects pulse count more than the value of glass full stroke during glass open/close operation.
Malfunction of not yet up- dated closed position of glass	When glass open/close operation is continuously performed without fully closing more than the specified value (approximately 10 strokes).

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
- Retained power function

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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< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
ED WIDED HI	Other than front wiper switch HI	OFF
FR WIPER HI	Front wiper switch HI	ON
ED WIDED LOW	Other than front wiper switch LO	OFF
FR WIPER LOW	Front wiper switch LO	ON
ED WACHED CW	Front washer switch OFF	OFF
FR WASHER SW	Front washer switch ON	ON
ED WIDED INT	Other than front wiper switch INT	OFF
FR WIPER INT	Front wiper switch INT	ON
ED WIDED STOD	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 CIONAL 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 LAIVIP SVV	Lighting switch 1ST or 2ND	ON
LILDEAM CW	Other than lighting switch HI	OFF
HI BEAM SW	Lighting switch HI	ON
LIEAD LAMB CW/4	Other than lighting switch 2ND	OFF
HEAD LAMP SW 1	Lighting switch 2ND	ON
LIEAD LAMB CW/ 2	Other than lighting switch 2ND	OFF
HEAD LAMP SW 2	Lighting switch 2ND	ON
DA CCINIC CW	Other than lighting switch PASS	OFF
PASSING SW	Lighting switch PASS	ON
ALITO LICLIT CW	Other than lighting switch AUTO	OFF
AUTO LIGHT SW	Lighting switch AUTO	ON
ED EOC SW	Front fog lamp switch OFF	OFF
FR FOG SW	Front fog lamp switch ON	ON
DOOD OW DD	Driver door closed	OFF
DOOR SW-DR	Driver door opened	ON
DOOD OW AC	Passenger door closed	OFF
DOOR SW-AS	Passenger door opened	ON
DOOD OW DD	Rear door RH closed	OFF
DOOR SW-RR	Rear door RH opened	ON
DOOD OW D	Rear door LH closed	OFF
DOOR SW-RL	Rear door LH opened	ON
ODI 1 00K 0W	Other than power door lock switch LOCK	OFF
CDL LOCK SW	Power door lock switch LOCK	ON

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Monitor Item	Condition	Value/Status	
	Other than power door lock switch UNLOCK	OFF	_ /
CDL UNLOCK SW	Power door lock switch UNLOCK	ON	_
(E) (O) (I I C) (I)	Other than driver door key cylinder LOCK position	OFF	E
(EY CYL LK-SW	Driver door key cylinder LOCK position	ON	_
(E) (O) (LIN LO) ()	Other than driver door key cylinder UNLOCK position	OFF	_
EY CYL UN-SW	Driver door key cylinder UNLOCK position	ON	(
14.74.DD 014/	When hazard switch is not pressed	OFF	_
IAZARD SW	When hazard switch is pressed	ON	
REAR DEF SW	When rear window defogger switch is pressed	ON	_ '
	Trunk lid opener cancel switch OFF	OFF	
R CANCEL SW	Trunk lid opener cancel switch ON	ON	_
	Trunk lid opener switch OFF	OFF	_
R/BD OPEN SW	While the trunk lid opener switch is turned ON	ON	
	Trunk lid closed	OFF	
RNK/HAT MNTR	Trunk lid opened	ON	_
	When LOCK button of Intelligent Key is not pressed	OFF	- (
RKE-LOCK	When LOCK button of Intelligent Key is pressed	ON	_
	When UNLOCK button of Intelligent Key is not pressed	OFF	
RKE-UNLOCK	When UNLOCK button of Intelligent Key is pressed	ON	_
	When TRUNK OPEN button of Intelligent Key is not pressed	OFF	_
KE-TR/BD	When TRUNK OPEN button of Intelligent Key is pressed	ON	_
	When PANIC button of Intelligent Key is not pressed	OFF	_
RKE-PANIC	When PANIC button of Intelligent Key is pressed	ON	_
	When UNLOCK button of Intelligent Key is not pressed and held	OFF	
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is pressed and held	ON	_
NKE MODE OLIO	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF	P\
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON	
PTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V	
P HOAL SENSOR	When outside of the vehicle is dark	Close to 0 V	
DEO SW DD	When driver door request switch is not pressed	OFF	-
EQ SW-DR	When driver door request switch is pressed	ON	
	When passenger door request switch is not pressed	OFF	
REQ SW-AS	When passenger door request switch is pressed	ON	_
DEO CW DD/TD	When trunk request switch is not pressed	OFF	_
EQ SW-BD/TR	When trunk request switch is pressed	ON	
NICH CW	When engine switch (push switch) is not pressed	OFF	_ `
USH SW	When engine switch (push switch) is pressed	ON	_
ON DIVE 5/2	Ignition switch OFF or ACC	OFF	_
GN RLY2-F/B	Ignition switch ON	ON	_
	Ignition switch OFF	OFF	
CC RLY-F/B	Ignition switch ACC or ON	ON	
	When the clutch pedal is not depressed	OFF	
CLUTCH SW	When the clutch pedal is depressed	ON	_

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
BRAKE SW 1	When the brake pedal is not depressed	ON
BRAKE SW I	When the brake pedal is depressed	OFF
DETE/CANCL CV	When selector lever is in P position	OFF
DETE/CANCL SW	When selector lever is in any position other than P	ON
CET DAI/ALOVA/	When selector lever is in any position other than P or N	OFF
SFT PN/N SW	When selector lever is in P or N position	ON
LINII IZ OENI DD	Driver door UNLOCK status	OFF
UNLK SEN-DR	Driver door LOCK status	ON
BUOLLOW/IBBM	When engine switch (push switch) is not pressed	OFF
PUSH SW-IPDM	When engine switch (push switch) is pressed	ON
1011 51111 515	Ignition switch OFF or ACC	OFF
IGN RLY1 F/B	Ignition switch ON	ON
	When selector lever is in P position	OFF
DETE SW -IPDM	When selector lever is in any position other than P	ON
	When selector lever is in any position other than P or N	OFF
SFT PN -IPDM	When selector lever is in P or N position	ON
	When selector lever is in any position other than P	OFF
SFT P-MET	When selector lever is in P position	ON
	When selector lever is in any position other than N	OFF
SFT N-MET	When selector lever is in N position	ON
	Engine stopped	STOP
	While the engine stalls	STALL
ENGINE STATE	At engine cranking	CRANK
	Engine running	RUN
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
	Driver door LOCK status	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
	Passenger door LOCK status	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
ID OLCELAG	Ignition switch ACC or ON	RESET
ID OK FLAG	Ignition switch OFF	SET
DDMT FNO OTAT	When the engine start is prohibited	RESET
PRMT ENG STAT	When the engine start is permitted	SET
1/E// O/M/ O/ C/	When Intelligent Key is not inserted into key slot	OFF
KEY SW -SLOT	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET
SOM MINI ID ALL	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE

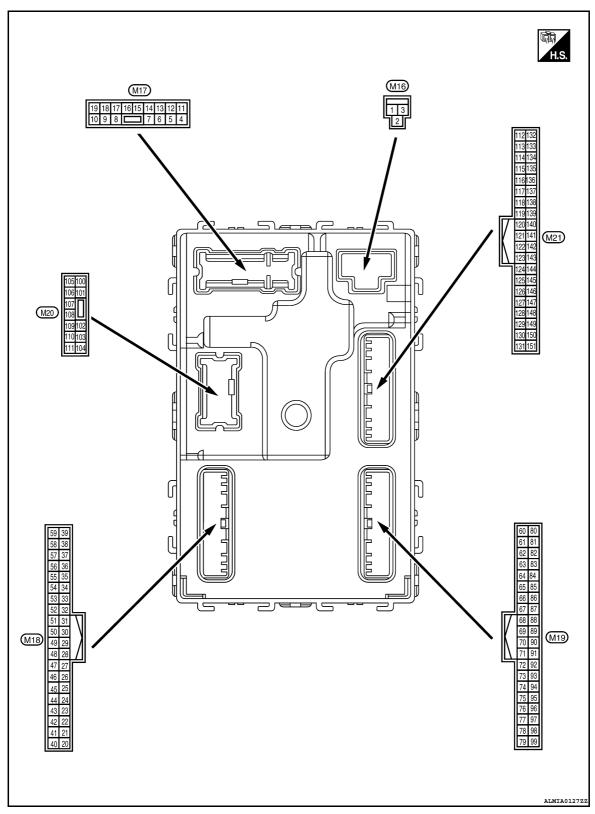
< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Monitor Item	Condition	Value/Status	
CONFIDM ID 4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET	
CONFIRM ID4	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE	_
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET	_
CONTINUEDS	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE	_ (
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET	
CONTINUED2	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE	
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET	
OOM INWIND	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE	
TP 4	The ID of fourth key is not registered to BCM	YET	
	The ID of fourth key is registered to BCM	DONE	_
TD 0	The ID of third key is not registered to BCM	YET	
TP 3	The ID of third key is registered to BCM	DONE	
TD 0	The ID of second key is not registered to BCM	YET	_
TP 2	The ID of second key is registered to BCM	DONE	
TD 4	The ID of first key is not registered to BCM	YET	
TP 1	The ID of first 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	Р
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire	
ID REGST FL1	When ID of front LH tire transmitter is registered	DONE	
ID REGGITEI	When ID of front LH tire transmitter is not registered	YET	_
ID REGST FR1	When ID of front RH tire transmitter is registered	DONE	_
ID REGOT FRI	When ID of front RH tire transmitter is not registered	YET	_
ID DECCE DD4	When ID of rear RH tire transmitter is registered	DONE	_
ID REGST RR1	When ID of rear RH tire transmitter is not registered	YET	_
ID DECOT 5: :	When ID of rear LH tire transmitter is registered	DONE	
ID REGST RL1	When ID of rear LH tire transmitter is not registered	YET	_
	Tire pressure indicator OFF	OFF	_
WARNING LAMP	Tire pressure indicator ON	ON	_
	Tire pressure warning alarm is not sounding	OFF	
BUZZER	Tire pressure warning alarm is sounding	ON	_

Revision: September 2009 PWC-307 2010 Altima

Terminal Layout



Physical Values

< ECU DIAGNOSIS >

	inal No.	Description				Value
(Wire (+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OF	F	Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage
4	Cravind	Interior room lamp	Outenit	After passing the ir er operation time	nterior room lamp battery sav-	ov
(P/W)	Ground	power supply	Output	Any other time after lamp battery saver	er passing the interior room roperation time	Battery voltage
5	Cravind	Front door RH UN-	Outenit	Front door RH	UNLOCK (actuator is activated)	Battery voltage
(G/Y)	Ground	LOCK	Output	Front door RH	Other than UNLOCK (actuator is not activated)	ov
7		C		G: 1	ON	0V
(R/W)	Ground	Step lamp	Output	Step lamp	OFF	Battery voltage (
8			_		LOCK (actuator is activated)	Battery voltage
(V)	Ground	All doors LOCK	Output	put All doors	Other than LOCK (actuator is not activated)	ov
9	01	Front door LH UN-	0 1 1	5	UNLOCK (actuator is activated)	Battery voltage
(G)	Ground	LOCK	Output	Front door LH	Other than UNLOCK (actuator is not activated)	OV
10 ¹	Ground	Rear door RH and rear door LH UN-	Output	Rear door RH	UNLOCK (actuator is activated)	Battery voltage
(G/Y)	Giodila	LOCK	Output	and rear door LH	Other than UNLOCK (actuator is not activated)	0V P
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch ON		OV
-					OFF	0V
14 ⁶ (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 2 ms JSNIA0010GB

< ECU DIAGNOSIS >

	inal No. e color)	Description		•	O Bit	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
14 ¹ (O/W)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 0 2 ms
15	Ground	ACC indicator lamp	Output	Ignition switch	OFF	Battery voltage
(Y/L)	Ground	ACC indicator famp	Output	ignition switch	ACC or ON	0V
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH	0V (V) 15 10 1 1 1 1 1 1 1 1 1 1
					Turn signal switch OFF	0V
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s
					OFF	6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage 0V
21 (P/B)	Ground		Input	Ignition switch	When outside of the vehicle is bright When outside of the vehi-	Close to 5V
` ,					cle is dark	Close to 0V
22	Ground	Clutch interlock	Input	Clutch interlock	OFF (clutch pedal is not depressed)	0V
(R/Y)		switch	1 2.5	switch	ON (clutch pedal is depressed)	Battery voltage
24 (R/W)	Ground	Stop lamp switch 1	Input		_	Battery voltage
26	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	0V
(O/L)		· ·		Stop tamp ownor	ON (brake pedal is de- pressed)	Battery voltage

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		9		Value	
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	
27 (G/W)	Ground	Front door lock as- sembly LH (unlock sensor)	Input	Front door LH	LOCK status	(V) 15 10 5 0	
					LINII OOK AA	JPMIA0011GB 11.8V	
				Mhan Intallinant K	UNLOCK status	OV Pottom visitorio	
29 (Y)	Ground	Key slot switch	Input	_	ey is inserted into key slot	Battery voltage	
(')				vvnen intelligent K	ey is not inserted into key slot	0V	
30 (V/Y)	Ground	ACC feedback signal	Input	Ignition switch	OFF	0	
					ACC or ON	Battery voltage	
31 (G)	Ground	Rear window defog-	Input	Rear window de-	OFF	0V	
(G)		ger feedback signal	-	fogger switch	ON	Battery voltage	
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (when front door RH opens)	11.8 V	
33	Ground	Compressor ON sig-	Innut	A/C switch	OFF	9.0 - 12.0V	
(SB)	Ground	nal	Input	A/C SWILCH	ON	0V	
34 ²		Front door lock as-		Front door lock	OFF (neutral)	5V	
(L/R)	Ground	sembly LH (key cylin- der switch) (unlock)	Input	assembly LH (key cylinder switch)	ON (unlock)	0V	
36 ² (GR)	Ground	Lock switch signal	Input	Door lock/unlock	Lock Unlock	Battery voltage 0V	
(OII)					Officek	OV	
37 (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid opener cancel switch	CANCEL	(V) 15 10 5 0 JPMIA0012GB	
					ON	1.1V	
					ON	0V	
38 (GR/	Ground	Rear window defog-	Input	Rear window de-	OFF	5V	
W)		ger ON signal		fogger switch	ON	0V	
2				Door lock/unlock	Unlock	Battery voltage	
39 ² (GR/	Ground	Unlock switch signal	Input				

< ECU DIAGNOSIS >

	inal No. e color)	Description			O British	Value
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)
40 ³ (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0013GB
				Ignition switch OFI	F or ACC	10.2V
41		Engine switch (push		Engine switch	ON	5.5V
(W)	Ground	switch) illumination	Output	(push switch) illu- mination	OFF	0V
42	Craund	LOCK in digator laws	Outnut	LOCK indicator	ON	OV
(R)	Ground	LOCK indicator lamp	Output	lamp	OFF	Battery voltage
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V
46	Ground	Receiver & sensor	Output	Ignition switch	OFF	OV
(V/W)		power supply output			ACC or ON	5.0V
47 (G/O)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	Standby state	(V) 6 4 2 0 ••• 0.2s ••• 0.2s
, ,		· ·			When receiving the signal from the transmitter	(V) 6 4 2 0 ••• 0.2s
48	Ground	Selector lever P/N	Input	Selector lever	P or N position	12.0V
(R/G)		position signal	•		Except P and N positions	0V
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	ON Blinking	OV (V) 15 10 5 0 JPMIA0014GB 11.3V
					OFF	Battery voltage

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description				Value	
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)	
50 (LG/ B)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Lighting switch 1ST Lighting switch high-beam Lighting switch 2ND Turn signal switch RH	0V (V) 15 10 5 0 2 ms JPMIA0031GB	
51 (L/W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	10.7V 0V (V) 15 10 2 ms JPMIA0032GB	
52 (G/B)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4) Front washer switch ON (Wiper intermittent dial 4) Any of the conditions below with all switch OFF Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6	0V (V) 15 10 5 0 2 ms JPMIA0033GB 10.7V	
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Front wiper switch INT Front wiper switch LO Lighting switch AUTO	0V (V) 15 10 5 0 2 ms JPMIA0034GB 10.7V	
54 (G/Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Front fog lamp switch ON Lighting switch 2ND Lighting switch flash-to- pass Turn signal switch LH	0V (V) 15 10 5 0 2 ms JPMIA0035GB 10.7V	
55 (BR/ W)	Ground	Front blower monitor	Input	Front blower mo-	ON OFF	Battery voltage 0V	

< ECU DIAGNOSIS >

	inal No.	Description				Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
56 ²	.,	Front door lock as-	•	Front door lock	OFF (neutral)	5V
(L/B)	Ground	sembly LH (key cylin- der switch) (lock)	Input	assembly LH (key cylinder switch)	ON (lock)	OV
57 (W)	Ground	Tire pressure warning check switch	Input			5V
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8V
					ON (front door LH OPEN)	0V
59		Rear window defog-		Rear window de-	Active	Battery voltage
(G/R)	Ground	ger relay	Output	fogger	Not activated	0V
60 (B/R)	Ground	Front console antenna 2 (-)	Output	ut Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMXIA0062GB
					When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
61	Ground	d Center console antenna 2 (+)		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(W/R)	Ground		2 a.par	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB

< ECU DIAGNOSIS >

	inal No.	Description Signal name Input/ Output				Value	
(Wire (+)	e color)				Condition	(Approx.)	
62 ⁴	0	Front outside handle	0.1	When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s	
(B/Y)	Ground	RH antenna (-)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMRIA0063GB	
63 ⁴ Ground F	Front outside handle		When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 S JMKIA0062GB		
(LG)	Ground	RH antenna (+)	Output	door RH request switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s	
64 ⁴	Ground	Front outside handle	Output	When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 10 15 10 1	
(V)	Ground	LH antenna (-)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMRIA0063GB	

< ECU DIAGNOSIS >

	inal No. e color)	Description			One dition	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
65 ⁴	Ground	Front outside handle		When the front door LH request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0062GB
(P)	Glound	LH antenna (+)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0063GB
68 (G/O)	Ground	NATS antenna amp (built in key slot)	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.
69 (O)	Ground	NATS antenna amp (built in key slot)	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.
70 (R/B)	Ground	Ignition relay-2 control	Output	Ignition switch	OFF or ACC	0V Battery voltage
71	Canada	Remote keyless entry	Input/	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB
(L/O)	Ground	Remote keyless entry receiver signal Output		When operating either button on Intelligent Key		(V) 15 10 1 ms JMKIA0065GB

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

	inal No.	Description				Value	۸
(Wir	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
						(V) 15 10	В
					All switch OFF (Wiper intermittent dial 4)	5 0 2 ms	С
						JPMIA0041GB 1.4V	D
75	Ground	Combination switch	Input	Combination	Front fog lamp switch ON	(V) 15 10 5 0	Е
(R/Y)		INPUT 5	•	switch	(Wiper intermittent dial 4)	2 ms JPMIA0037GB 1.3V	F
							G
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 0 2 ms	Н
						лем 1.3V	

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	inal No. e color)	Description			0 10	Value	
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)	
			Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4V	
76	Ground	Combination switch			Lighting switch high-beam (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB	
(R/G)		INPUT 3			Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB	
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB	
78 (P)	Ground	CAN-L	Input/ Output		_	_	
79 (L)	Ground	CAN-H	Input/ Output		_	_	
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumina- tion	OFF	0V (V) 15 10 5 0 JPMIA0015GB 6.5V	
81					ON OFF or ACC	Battery voltage 0V	
(LG)	Ground	ON indicator lamp	Output	Ignition switch	ON	Battery voltage	

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

	inal No. e color)	Description	·			Value	
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)	
83	Ground	ACC relay control	Output	Ignition switch	OFF	0V	
(L)	Ground	ACC relay control	Output	igintion switch	ACC or ON	Battery voltage	
84 (Y/R)	Ground	CVT shift selector	Output		_	Battery voltage	
87	Ground	Selector lever P posi-	Input	Selector lever	P position	OV	
(G/B)	Giodila	tion switch	input	Selector level	Any position other than P	Battery voltage	
					ON (pressed)	OV	
88 ⁴ (P/L)	Ground	Front door RH request switch	Input	Front door RH request switch	OFF (not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB	
					ON (pressed)	0V	
89 ⁴ (B/W)	Ground	Front door LH request switch	Input	Front door LH request switch	OFF (not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB	
90	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	OV	
(Y)	Giodila	lay control	Juipui	ignition switch	ON	Battery voltage	
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	F	Battery voltage	

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< ECU DIAGNOSIS >

	inal No. e color)	Description				Value	
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4V	
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB	
95 (R/W)	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	
					Front washer switch ON	(V) 15 10 5 2 ms JPMIA0039GB	

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

	inal No. e color)	Description		Condition		Value	
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041gB	
96 (P/B)	Ground	Combination switch INPUT 4	Input	Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB	
				switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB	
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB	

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< ECU DIAGNOSIS >

	inal No.	Description				Value	
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF	(V) 15 10 5 0 JPMIA0041GB 1.4V	
					Lighting switch flash-to- pass	(V) 15 10 5 0 2 ms JPMIA0037GB	
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB	
					Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB	
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB	
					Pressed	0 V	
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Not pressed	(V) 15 10 5 10 ms JPNIA0012GB 1.1V	

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Terminal No. (Wire color)		Description				Value	
(Wire (+)	e color)	Signal name	Input/ Output		Condition	(Approx.)	A
103	Cround	Trunk lid aponing	Output	Trunk lid	Open (trunk lid opener actuator is activated)	Battery voltage	Е
(V)	Ground	Trunk lid opening	Output	Trunk lid	Close (trunk lid opener actuator is not activated)	OV	
110 (V/W)	Ground	Trunk room lamp	Output	Trunk room lamp	ON OFF	0V Battery voltage	(
114		Rear parcel shelf an-		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 11 1 s JMKIA0062GB	E
(B)	Ground	tenna 1 (-)	Output Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMXIA0063GB	F	
115	Ground	Rear parcel shelf an-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	P\
(W)	Ground	tenna 1 (+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	I.

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< ECU DIAGNOSIS >

	inal No.	Description				Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
1184	Poor humper enten lid request quit		When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
(L/O)	Ground	na (-)	Output	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
119 ⁴ (BR/	Ground	Rear bumper anten-	Output	When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
W)	Giodila	na (+)	Guipar	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0063GB
127 (BR/	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	Battery voltage
·W)		E/R) control	•	-	ON	0V
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ONI (Amondo in anno 1)	11.8V
					ON (trunk is open)	OV

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

	inal No.	Description				Value
(Wire	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)
				Ignition switch OFF (M/T vehi-	When the clutch pedal is depressed	Battery voltage
				cle)	When the clutch pedal is not depressed	ov
132 (R)	Ground	Starter motor relay control	Output	Ignition switch ON (other than M/	When selector lever is in P or N position and the brake is depressed	Battery voltage
				T vehicle)	When selector lever is in P or N position and the brake is not depressed	0V
140	Ground	Engine switch (push	Innut	Engine switch	Pressed	OV
(BR)	Ground	switch)	Input	(push switch)	Not pressed	Battery voltage
					ON (pressed)	OV
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	OFF (not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
144 ⁴	Ground	Intelligent Key warn-	Output	Request switch	Sounding	OV
(GR)		ing buzzer	- Garpar	buzzer	Not sounding	Battery voltage
144 ⁵	Ground	Outside warning	Output	Outside warning	Sounding	0V
(GR)		buzzer	•	buzzer	Not sounding	Battery voltage
147 (L/R)	Ground	Trunk lid opener	Input	Trunk lid opener switch	Pressed	0V
(L/K)		switch		SWILCIT	Not pressed	Battery voltage
148 ¹ (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (when rear door RH opens)	11.8V
149 ¹ (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	(V) 15 10 5 0
						JPMIA0011GB
					ON (when rear door LH opens)	11.8V

^{1:} Sedan

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^{2:} With LH front window anti-pinch

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[LH&RH FRONT ANTI-PINCH-SEDAN]

- 3: With LH and RH front window anti-pinch
- 4: With Intelligent Key
- 5: Without Intelligent Key
- 6: Coupe

Fail Safe

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 has become consistent • Starter control relay signal • Starter relay status signal
B2562: LO VOLTAGE	Inhibit engine cranking	100 ms after the power supply voltage increases to more than 8.8 V
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	 When any of the following conditions is 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
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
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: OFF (Battery voltage)

DTC Inspection Priority Chart

INFOID:0000000005783652

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)

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Priority	DTC	
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING 	
	 B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS 	
	 B2604: PNP SW B2605: PNP SW B2608: STARTER RELAY B260A: IGNITION RELAY 	
4	 B260F: ENG STATE SIG LOST B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2616: IGN RELAY CIRC 	
	 B2617: STARTER RELAY CIRC B2618: BCM B261A: PUSH-BTN IGN SW B261E: VEHICLE TYPE B26E1: ENG STATE NO RECIV 	
	 B26E8: CLUTCH SW B26EA: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG 	
	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL 	
	 C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RL C1712: [CHECKSUM ERR] FL 	
5	 C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RL C1716: [PRESSDATA ERR] FL 	
	 C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1720: [CODE ERR] FL 	
	 C1721: [CODE ERR] FR C1722: [CODE ERR] RR C1723: [CODE ERR] RL C1724: [BATT VOLT LOW] FL 	
	 C1725: [BATT VOLT LOW] FR C1726: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RL C1734: CONTROL UNIT 	
	B2622: INSIDE ANTENNA	

DTC Index INFOID:0000000005783653

NOTE:

Details of time display

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[LH&RH FRONT ANTI-PINCH-SEDAN]

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1
 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter
 remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch
 OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	BCS-38, "Description"
U1010: CONTROL UNIT (CAN)	_	_	_	BCS-39, "DTC Logic"
U0415: VEHICLE SPEED SIG	_	_	_	BCS-40, "Description"
B2190: NATS ANTENNA AMP	×	_	_	SEC-53, "Description" (Coupe) SEC-229, "Description" (Sedan with I- Key) SEC-399, "Description" (Sedan without I-Key)
B2191: DIFFERENCE OF KEY	×	_	_	SEC-56, "Description" (Coupe) SEC-232, "Description" (Sedan with I- Key) SEC-402, "Description" (Sedan without I-Key)
B2192: ID DISCORD BCM-ECM	×	_	_	SEC-57, "Description" (Coupe) SEC-233, "Description" (Sedan with I- Key) SEC-403, "Description" (Sedan without I-Key)
B2193: CHAIN OF BCM-ECM	×	_	_	SEC-58, "Description" (Coupe) SEC-234, "Description" (Sedan with I- Key) SEC-404, "Description" (Sedan without I-Key)
B2195: ANTI SCANNING	×	_	_	SEC-59, "Description" (Coupe) SEC-235, "Description" (Sedan with I-Key) SEC-405, "Description" (Sedan without I-Key)
B2553: IGNITION RELAY	_	_	_	PCS-61, "Description"
B2555: STOP LAMP	_	_	_	SEC-60, "Description" (Coupe) SEC-236, "Description" (Sedan with I- Key) SEC-406, "Description" (Sedan without I-Key)
B2556: PUSH-BTN IGN SW	_	×	_	SEC-63, "Description" (Coupe) SEC-239, "Description" (Sedan with I-Key) SEC-409, "Description" (Sedan without I-Key)
B2557: VEHICLE SPEED	_	×	_	SEC-65, "Description" (Coupe) SEC-241, "Description" (Sedan with I- Key) SEC-411, "Description" (Sedan without I-Key)

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	A
B2560: STARTER CONT RELAY	×	×	_	SEC-66, "Description" (Coupe) SEC-242, "Description" (Sedan with I-Key) SEC-412, "Description" (Sedan without I-Key)	[
B2562: LOW VOLTAGE	×		_	BCS-41, "DTC Logic"	(
B2601: SHIFT POSITION	_	×	_	SEC-67, "Description" (Coupe) SEC-243, "Description" (Sedan with I-Key) SEC-413, "Description" (Sedan without I-Key)	I
B2602: SHIFT POSITION	_	×	_	SEC-71, "Description" (Coupe) SEC-246, "Description" (Sedan with I-Key) SEC-416, "Description" (Sedan without I-Key)	
B2603: SHIFT POSI STATUS	_	×	_	SEC-74, "Description" (Coupe) SEC-249, "Description" (Sedan with I-Key) SEC-419, "Description" (Sedan without I-Key)	(
B2604: PNP SW	_	×	_	SEC-77, "Description" (Coupe) SEC-252, "Description" (Sedan with I-Key) SEC-422, "Description" (Sedan without I-Key)	
B2605: PNP SW	_	×	_	SEC-79, "Description" (Coupe) SEC-254, "Description" (Sedan with I-Key) SEC-424, "Description" (Sedan without I-Key)	
B2608: STARTER RELAY	×	×	_	SEC-81, "Description" (Coupe) SEC-256, "Description" (Sedan with I-Key) SEC-426, "Description" (Sedan without I-Key)	Ρ
B260A: IGNITION RELAY	×	×	_	PCS-63, "Description"	
B260F: ENG STATE SIG LOST	×	×	_	SEC-83, "Description" (Coupe) SEC-258, "Description" (Sedan with I-Key) SEC-428, "Description" (Sedan without I-Key)	ľ
B2614: ACC RELAY CIRC	_	×	_	PCS-66, "Description"	1
B2615: BLOWER RELAY CIRC	_	×	_	PCS-69, "Description"	
B2616: IGN RELAY CIRC	_	×	_	PCS-72, "Description"	
B2617: STARTER RELAY CIRC	×	×	_	SEC-87, "Description" (Coupe) SEC-262, "Description" (Sedan with I-Key) SEC-432, "Description" (Sedan without I-Key)	(
B2618: BCM	×	×	_	PCS-75, "Description"	
B261A: PUSH-BTN IGN SW	_	×	_	SEC-90, "Description" (Coupe) SEC-265, "Description" (Sedan with I-Key) SEC-435, "Description" (Sedan without I-Key)	

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[LH&RH FRONT ANTI-PINCH-SEDAN]

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	_	SEC-89, "Description" (Coupe) SEC-264, "Description" (Sedan with I-Key) SEC-434, "Description" (Sedan without I-Key)
B2622: INSIDE ANTENNA	_	_	_	DLK-60, "Description" (Coupe) DLK-283, "Description" (Sedan with I- Key) DLK-484, "Description" (Sedan without I-Key)
B2623: INSIDE ANTENNA	_	_	_	DLK-63, "Description" (Coupe) DLK-286, "Description" (Sedan with I- Key) DLK-487, "Description" (Sedan without I-Key)
B26E1: ENG STATE NO RES	×	×	_	SEC-92, "Description" (Coupe) SEC-267, "Description" (Sedan with I- Key) SEC-437, "Description" (Sedan without I-Key)
B26E8: CLUTCH SW	×	×	_	SEC-84, "Description" (Coupe) SEC-259, "Description" (Sedan with I-Key) SEC-429, "Description" (Sedan without I-Key)
B26EA: KEY REGISTRATION	×	× (Turn ON for 15 seconds)	_	SEC-86, "Description" (Coupe) SEC-261, "Description" (Sedan with I- Key) SEC-431, "Description" (Sedan without I-Key)
C1704: LOW PRESSURE FL	_	_	×	
C1705: LOW PRESSURE FR	_	_	×	WT-44, "Self-Diagnosis (With CON-
C1706: LOW PRESSURE RR	_	_	×	SULT-III)"
C1707: LOW PRESSURE RL	_	_	×	
C1708: [NO DATA] FL	_	_	×	
C1709: [NO DATA] FR	_	_	×	MT 44 "Description"
C1710: [NO DATA] RR	_	_	×	WT-14, "Description"
C1711: [NO DATA] RL	_	_	×	
C1712: [CHECKSUM ERR] FL	_	_	×	
C1713: [CHECKSUM ERR] FR	_	_	×	WT-16 "Description"
C1714: [CHECKSUM ERR] RR	_	_	×	WT-16, "Description"
C1715: [CHECKSUM ERR] RL	_	_	×	
C1716: [PRESSDATA ERR] FL	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	×	WT-18, "Description"
C1718: [PRESSDATA ERR] RR	_		×	<u>vv 1-10, Description</u>
C1719: [PRESSDATA ERR] RL	_	_	×	

< ECU DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	
C1720: [CODE ERR] FL	_	_	×		
C1721: [CODE ERR] FR	_	_	×		
C1722: [CODE ERR] RR	_	_	×		
C1723: [CODE ERR] RL	_	_	×	WT-16, "Description"	
C1724: [BATT VOLT LOW] FL	_	_	×	W1-10, Description	
C1725: [BATT VOLT LOW] FR	_	_	×		
C1726: [BATT VOLT LOW] RR	_	_	×		
C1727: [BATT VOLT LOW] RL	_	_	×		
C1729: VHCL SPEED SIG ERR	_	_	×	WT-19, "Description"	
C1734: CONTROL UNIT	_	_	×	WT-20, "Description"	

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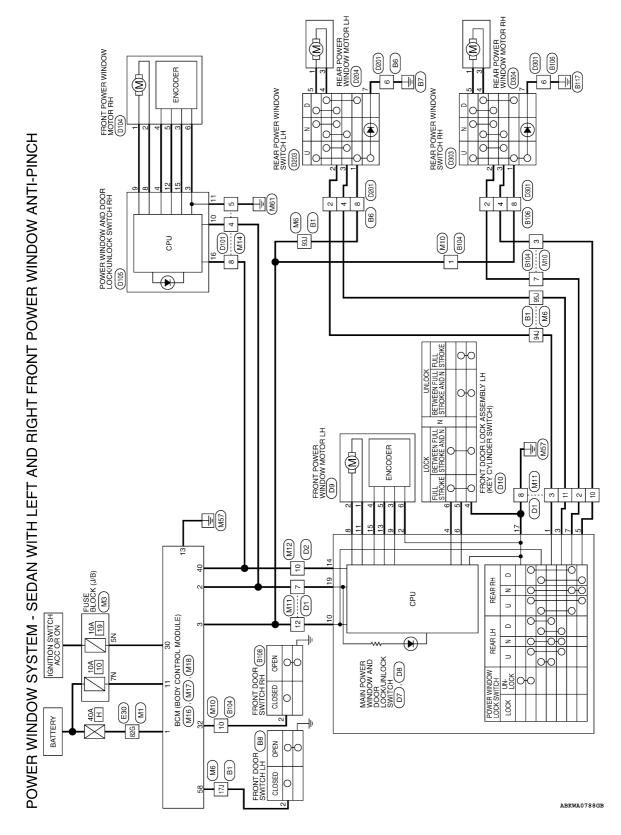
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WIRING DIAGRAM

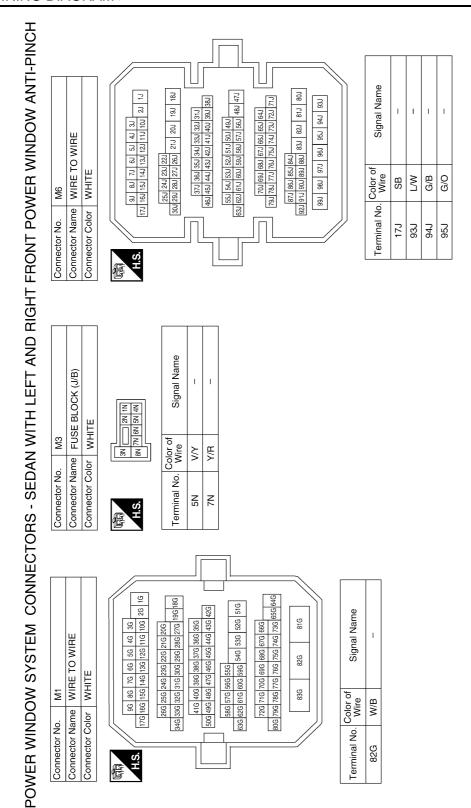
POWER WINDOW SYSTEM - WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH

Wiring Diagram



< WIRING DIAGRAM >

[LH&RH FRONT ANTI-PINCH-SEDAN]



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Revision: September 2009 PWC-333 2010 Altima

< WIRING DIAGRAM >

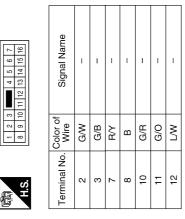
[LH&RH FRONT ANTI-PINCH-SEDAN]

Old rotograph		
Connector No.	ZLIM .	
Connector Name		WIRE TO WIRE
Connector Color	lor WHITE	TE
原动 H.S.	9 10 11	2 3 4 5 6 7 8 10 11 12 13 14 15 16
Terminal No. Wire	Color of Wire	Signal Name
5	\ \ \	

Signal Name	1	
Color of Wire	Y/G	
Terminal No.	10	

	Connector Name BCM (BODY CONTROL MODULE)	ITE	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Signal Name	BAT BCM FUSE	GND1
. M17	me BCN MOI	lor WH	4 5 6 111 12 13	Color of Wire	Y/R	В
Connector No.	Connector Na	Connector Color WHITE	所.S.	Terminal No. Wire	1	13

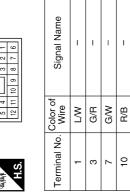
Connector No.	M11
Connector Name	Connector Name WIRE TO WIRE
Connector Color WHITE	WHITE



M16	. Out. 100 / 100 / 100
Connector No.	

Connector No.	. M16	
Connector Name		BCM (BODY CONTROL MODULE)
Connector Color	lor BLACK	CK
原 H.S.	السيا	13
Terminal No.	Color of Wire	Signal Name
-	W/B	BAT_POWER_F/L
2	R/Y	P/W_POWER_ SUPPLY_PERM
ဇ	M/¬	POWER_ WINDOW_ POWER_ SUPPLY (RAP)





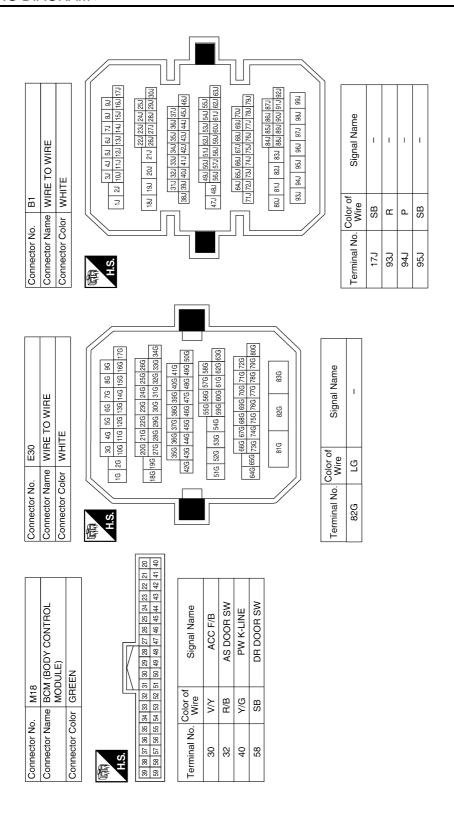
Connector No.	M14
Connector Name	Connector Name WIRE TO WIRE
Connector Color WHITE	WHITE

Signal Name	ı	_	I	
Color of Wire	R/Y	В	Y/G	
Terminal No. Wire	4	2	80	

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< WIRING DIAGRAM >

[LH&RH FRONT ANTI-PINCH-SEDAN]



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< WIRING DIAGRAM >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Connector No. Connector Name Connector Color	lo. B6 lame WIRE T	Connector No. B6 Connector Name WIRE TO WIRE Connector Color WHITE	Connector No. B8 Connector Name FRONT DOOR SWITCH LH Connector Color WHITE	Connector No. Connector Name Connector Color		B104 WIRE TO WIRE BROWN	
H.S.	1 2 5	8 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	H.S.	所 H.S.	6 7 8	9 10 11 12	
Terminal No.	Color of Wire	Signal Name	بار برادر	Terminal No.	Color of Wire	Signal Name	
2	۵	I	Terminal No. Wire Signal Name	-	Ж	-	
4	SB	ı	2 SB –	3	SB	_	
9	В	ı		7	M	-	
8	æ	I		10	GR	ı	
Connector No.	0. B106	٧	Connector No. R108	Connector No.	jo.		
Connector N	ame WIR	Connector Name WIRE TO WIRE	e	Connector Name		WIRE TO WIRE	
Connector Color	olor WHITE	IITE	Connector Color WHITE	Connector Color	olor WHITE	ITE	
H.S.	4 5 5	8 2 8	H.S.	E.S.	7 6 5 14 16 15 14	13 12 11 10 9 8	
Terminal No.	Color of	Signal Name	n	Terminal No.	Color of Wire	Signal Name	
c	D 3	, '		2	۵	ı	
1 <	S 0	ı	Terminal No. Wire Signal Name	က	>	I	
t u	900		- GB	7	>	I	
٥	A (8	В	ı	
α	r	ı		10	SB	I	
				11	0	-	
				12	>	ı	

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< WIRING DIAGRAM >

[LH&RH FRONT ANTI-PINCH-SEDAN]

DOOR_KEY/C_ UNLOCK_SW

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DOOR_KEY/C_ LOCK_SW

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Signal Name	UNLOCK	RR UP	AS UP	ENCODER SIG2	NSI	AS DOWN	ENCODER SIG1	COM	ENCODER POWER
Color of Wire	L/R	۵	œ	M	>	LG	SB	BR	GR
Terminal No. Wire	9	7	8	6	10	11	13	14	15

Signal Na	UNLOCI	AR UP	AS UP	ENCODER	IGN	AS DOW	ENCODER	COM	ENCODER P
Color of Wire	L/R	۵	æ	Μ	>	LG	SB	BR	GR
Terminal No.	9	7	8	6	10	11	13	14	15

MAIN POWER WINDOW
AND DOOR LOCKUNLOCK
SWITCH (SEDAN WITH
ETF AND RIGHT FRONT
POWER WINDOW
ANTI-PINCH SYSTEM)

Connector Name

Connector No.

2 3 4	Signal Name	RL UP	ENCODER GND	RL DOWN	LOCK	RR DOWN	
1 8 9 2	Color of Wire	Y	В	0	I/B	SB	
H.S.	erminal No.	1	2	3	4	5	

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Connector No.

			1		
	WIRE TO WIRE	ITE	16 15 14 13 12 11 10 9	Signal Name	I
. D2	me WI	lor WH	8 7 16 15	Color of Wire	BR
Connector No.	Connector Name	Connector Color WHITE	所 H.S.	Terminal No.	10

Connector Color WHITE

	FRONT DOOR LOCK ASSEMBLY LH (WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM)]	٩٧	\$\times \text{\text{\$\alpha\$}} \text{\$\alpha\$}	Signal Name	GND	
. D10	'	lor GRAY	<u>-</u>	Color of Wire	В	
Connector No.	Connector Name	Connector Color	所 H.S.	Terminal No. Wire	4	

Sonnector Name		FRONT POWER WINDOW MOTOR LH
Connector Color	lor WHITE	丑
所 H.S.		3 4 5 6
Terminal No.	Color of Wire	Signal Name
-	2	I
2	æ	ı
က	>	I
4	GR	I
5	SB	-
ç	ď	ı

	Connector No. D8 MAIN POWER WINDOW AND Connector Name DOOR LOCK/UNLOCK SWITCH Connector Color WHITE	17 18 19	r of Signal Name	GND	/ BAT
Connector Name Connector Color H.S. H.S. 17 Eminal No. Wolc	Vo.		Terminal No. Wire	m	>

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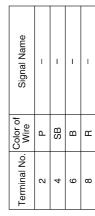
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< WIRING DIAGRAM >

[LH&RH FRONT ANTI-PINCH-SEDAN]

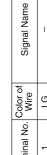
or No. D201	Connector Name WIRE TO WIRE	Connector Color WHITE	
Connector No.	Connector Name	Connector Color	





Connector No.	D104
Connector Name	Connector Name FRONT POWER WINDOW MOTOR RH
Connector Color WHITE	WHITE



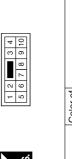


Signal Name	1	ı	1	_	ı	-	
Color of Wire	ΡΠ	٦	g	BR	>	Μ	
Terminal No. Wire	1	2	3	4	5	9	

Signal Name	UP	DOWN	BAT	GND	ENCODER SIG1	ENCODER SIG2	COM
Color of Wire	Т	ГG	Ь	В	\	g	ш
Terminal No.	8	6	10	11	12	15	16

Connector No.	D101
Connector Name WIRE TO WIRE	WIRE TO WIRE
Connector Color WHITE	WHITE





Signal Name	1	1	1
Color of Wire	Ь	В	В
Terminal No.	4	2	8

Connector No. D105	POWER V DOOR LO SWITCH F SWITCH F AND RIGH WINDOW SYSTEM)	Connector Color WHITE
	POWER WINDOW AND DDOR LOCK/UNLOCK SWITCH RH (WITH LEFT AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM)	

2	က	4	\Box	П	2	9	7
6	유	Ξ	12	3	4	15	16

Signal Name	GND	ENCODER POWE
Color of Wire	8	BR
erminal No. Wire	3	4

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< WIRING DIAGRAM >

[LH&RH FRONT ANTI-PINCH-SEDAN]

Connector No.	D301	01
Connector Name		WIRE TO WIRE
Connector Color	olor WH	WHITE
唇		2 1
H.S.	8	7 6 5 4
Terminal No. Wire	Color of Wire	Signal Name
2	Ь	ı
4	SB	ı
9	В	ı
α	α	1

Signal Name	ı	I	ı	I
Color of Wire	۵	SB	В	В
Terminal No. Wire	2	4	9	8

Connector No.		D204	4
Connector Na	ame	REA	Connector Name REAR POWER WINDOW MOTOR LH
Connector Color GREEN	olor	GRE	EN
副 H.S.		1 4	0 0 0
Terminal No.	Color of Wire	or of re	Signal Name
-			ı
3	Ľ	re	ı
	l	1	

	Signal Name	I	1	
<i>y</i> [Color of Wire	٦	ГG	
	Terminal No. Color of Wire	-	3	

)3	REAR POWER WINDOW SWITCH LH	WHITE	2 3 4 5 1	Signal Name	NÐI	UP	DOWN	DOWN	UP	GND
. D203			 =	Color of Wire	<u>~</u>	_	SB	re	_	В
Connector No.	Connector Name	Connector Color	原式 H.S.	Terminal No.	-	2	3	4	5	7

4	Connector Name REAR POWER WINDOW MOTOR RH	EN	2 2 5	Signal Name	1	_
. D304	me RE/	lor GREEN		Color of Wire	_	P
Connector No.	Connector Na	Connector Color	H.S.	Terminal No. Wire	-	3

_			i							
3	REAR POWER WINDOW SWITCH RH	TE	3 4 5 1	Signal Name	IGN	UP	DOWN	DOWN	٩n	GND
D303		or WH	2	Color of Wire	æ	۵	SB	LG	٦	В
Connector No.	Connector Name	Connector Color WHITE	斯 H.S.	Terminal No. Wire	-	2	ဇ	4	5	2

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PRECAUTION

PRECAUTIONS

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 SR and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH [LH&RH FRONT ANTI-PINCH-SEDAN]

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY **SWITCH**

Diagnosis Procedure

INFOID:0000000005434478

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$oldsymbol{1}$. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to BCS-42, "Diagnosis Procedure".

Is the inspection result normal?

>> GO TO 2 YES

NO >> Repair or replace the malfunctioning parts.

2. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH POWER SUPPLY AND **GROUND CIRCUIT**

Check power window switch main power supply and ground circuit.

Refer to PWC-265, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

$oldsymbol{3}.$ CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH SERIAL CIRCUIT

Check main power window and door lock/unlock switch serial circuit.

Refer to PWC-265, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace the malfunctioning parts.

4. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Check main power window and door lock/unlock switch.

Refer to PWC-265, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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PWC-341 2010 Altima Revision: September 2009

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434479

1. CHECK FRONT POWER WINDOW MOTOR LH

Check front power window motor LH.

Refer to PWC-275, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434480

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1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Check power window and door lock/unlock switch RH.

Refer to PWC-270, "FRONT POWER WINDOW SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

 $2.\,$ CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH SERIAL LINK CIRCUIT

Check power window and door lock/unlock switch RH serial link circuit.

Refer to PWC-295, "FRONT POWER WINDOW SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

3. CHECK FRONT POWER WINDOW MOTOR RH CIRCUIT

Check front power window motor RH circuit.

Refer to PWC-277, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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Revision: September 2009 PWC-343 2010 Altima

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434481

1. CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH.

Refer to PWC-272, "REAR POWER WINDOW SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR POWER WINDOW MOTOR LH

Check rear power window motor LH.

Refer to PWC-279, "REAR LH: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434482

1. CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.

Refer to PWC-272, "REAR POWER WINDOW SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR POWER WINDOW MOTOR RH

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Check rear power window motor RH.

Refer to PWC-280, "REAR RH: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

>> Check intermittent incident. Refer to GI-41, "Intermittent Incident". NO

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ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE)

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE)

Diagnosis Procedure

INFOID:0000000005434483

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK DOOR WINDOW SLIDING PART

- · A foreign material adheres to window glass or glass run rubber.
- · Glass run rubber wear or deformation.
- Sash is tilted too much or not enough.

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

3. CHECK ENCODER CIRCUIT

Check encoder circuit.

Refer to PWC-283, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (PASSENGER SIDE) [LH&RH FRONT ANTI-PINCH-SEDAN]

< SYMPTOM DIAGNOSIS >

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (PASSENGER SIDE)

Diagnosis Procedure

INFOID:0000000005434484

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1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-257, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

$2.\,$ CHECK DOOR WINDOW SLIDING PART

- A foreign material adheres to window glass or glass run rubber.
- Glass run rubber wear or deformation.
- Sash is tilted too much or not enough.

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace the malfunctioning parts.

3. CHECK ENCODER CIRCUIT

Check encoder circuit.

Refer to PWC-285, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

>> Check intermittent incident. Refer to GI-41, "Intermittent Incident". NO

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PWC-347 2010 Altima Revision: September 2009

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMAL-LY (DRIVER SIDE)

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY (DRIVER SIDE)

Diagnosis Procedure

INFOID:0000000005434485

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK ENCODER

Check encoder.

Refer to PWC-283, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMAL-LY (PASSENGER SIDE)

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY (PASSENGER SIDE)

Diagnosis Procedure

INFOID:0000000005434486

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1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK ENCODER

Check encoder.

Refer to PWC-285, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

Diagnosis Procedure

INFOID:0000000005434487

1. CHECK FRONT DOOR SWITCH

Check front door switch.

Refer to PWC-289, "Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

DOES NOT OPERATE BY KEY CYLINDER SWITCH

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

DOES NOT OPERATE BY KEY CYLINDER SWITCH

Diagnosis Procedure

INFOID:0000000005434488

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1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-257</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

2. CHECK FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH)

Check front door lock assembly LH (key cylinder switch).

Refer to PWC-291, "Component Function Check".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41. "Intermittent Incident".

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KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005434489

1. CHECK INTELLIGENT KEY FUNCTION

Check Intelligent Key function.

Refer to DLK-339, "Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

[LH&RH FRONT ANTI-PINCH-SEDAN]

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000005434490

 ${\bf 1}$. REPLACE MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Replace main power window and door lock/unlock switch.

Refer to <u>PWC-355</u>, "Removal and Installation". After that, <u>PWC-269</u>, "<u>POWER WINDOW MAIN SWITCH</u>: <u>Special Repair Requirement</u>".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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PRE-INSPECTION FOR DIAGNOSTIC

< ON-VEHICLE MAINTENANCE >

[LH&RH FRONT ANTI-PINCH-SEDAN]

ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

BASIC INSPECTION

1.INSPECTION START

- 1. Check the service history.
- 2. Check the following parts.
- Fuse/circuit breaker blown.
- Poor connection, open or short circuit of harness connector.
- · Battery voltage.

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace the malfunctioning parts.

POWER WINDOW MAIN SWITCH

< ON-VEHICLE REPAIR >

[LH&RH FRONT ANTI-PINCH-SEDAN]

ON-VEHICLE REPAIR

POWER WINDOW MAIN SWITCH

Removal and Installation

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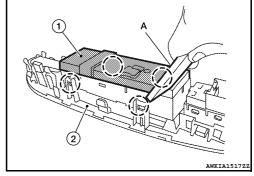
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REMOVAL

- 1. Remove the power window main switch finisher (2) from the door finisher, refer to INT-30, "Exploded View".
- 2. Release the four tabs (two on each side) with a suitable tool (A), then separate the power window main switch (1) from the switch finisher (2).

(); Pawl CAUTION:

Do not fold the pawl of switch finisher.



INSTALLATION

Installation is in the reverse order of removal.

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FRONT POWER WINDOW SWITCH

Removal and Installation

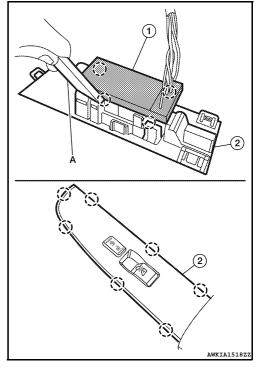
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REMOVAL

- 1. Remove the front power window switch finisher (2) from the front door finisher RH. Refer to INT-30, "Exploded View".
- 2. Release the four tabs (two on each side) with a suitable tool (A), then separate the front power window switch (1) from the switch finisher (2).

(): Pawl CAUTION:

Do not fold the pawl of switch finisher.



INSTALLATION

Installation is in the reverse order of removal.

REAR POWER WINDOW SWITCH

< ON-VEHICLE REPAIR >

[LH&RH FRONT ANTI-PINCH-SEDAN]

REAR POWER WINDOW SWITCH

Removal and Installation - Rear Door Switch

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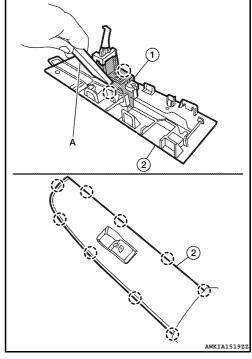
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REMOVAL

- 1. Remove the rear power window switch finisher (2) from the rear door finisher. Refer to INT-30, "Exploded View".
- 2. Release the tab (one on each side) with a suitable tool (A), then separate the rear power window switch (1) from the switch finisher (2).

(): Pawl CAUTION:

Do not fold the pawl of switch finisher.



INSTALLATION

Installation is in the reverse order of removal.

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