

 D

Е

CONTENTS

LH FRONT ONLY ANTI-PINCH	WIRING DIAGRAM18
PRECAUTION 6 PRECAUTIONS 6	POWER WINDOW SYSTEM18 Wiring Diagram - With Left Front Only Power Window Anti- Pinch18
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN-SIONER"6	BASIC INSPECTION25
Precaution for Work6	DIAGNOSIS AND REPAIR WORKFLOW25 Work Flow25
PREPARATION7	INSPECTION AND ADJUSTMENT27
PREPARATION	ADDITIONAL SERVICE WHEN REMOVING BAT- TERY NEGATIVE TERMINAL27
SYSTEM DESCRIPTION8	ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description27
COMPONENT PARTS8Component Parts Location8Component Description8	ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement
SYSTEM10System Diagram10System Description10Fail-safe11	ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT
DIAGNOSIS SYSTEM (BCM)13	ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement27
COMMON ITEM	DTC/CIRCUIT DIAGNOSIS29 POWER SUPPLY AND GROUND CIRCUIT29
RETAINED PWR	BCM : Diagnosis Procedure
ECU DIAGNOSIS INFORMATION15	POWER WINDOW MAIN SWITCH29 POWER WINDOW MAIN SWITCH : Description29 POWER WINDOW MAIN SWITCH : Component
BCM (BODY CONTROL MODULE)15 List of ECU Reference15	Function Check30 POWER WINDOW MAIN SWITCH : Diagnosis
POWER WINDOW MAIN SWITCH16 Reference Value16	Procedure

POWER WINDOW MAIN SWITCH: Special Re-		Component Inspection	51
pair Requirement	34	POWER WINDOW LOCK SWITCH	52
FRONT POWER WINDOW SWITCH	. 34	Description	
FRONT POWER WINDOW SWITCH : Descrip-	• .	Component Function Check	
tion	34	Special Repair Requirement	
FRONT POWER WINDOW SWITCH : Compo-		Opecial Nepali Nequilement	32
nent Function Check	34	SYMPTOM DIAGNOSIS	53
FRONT POWER WINDOW SWITCH : Diagnosis	54		•
Procedure	25	POWER WINDOWS DO NOT OPERATE	
FRONT POWER WINDOW SWITCH : Compo-	ა၁	WITH ANY POWER WINDOW SWITCHES	53
•	00	Diagnosis Procedure	
nent Inspection	30	2.ag.100.0 1 1000da10	00
REAR POWER WINDOW SWITCH	36	DRIVER SIDE POWER WINDOW ALONE	
REAR POWER WINDOW SWITCH : Description.		DOES NOT OPERATE	54
REAR POWER WINDOW SWITCH : Component	00	Diagnosis Procedure	
Function Check	37		-
REAR POWER WINDOW SWITCH : Diagnosis	01	FRONT PASSENGER SIDE POWER WIN-	
Procedure	37	DOW ALONE DOES NOT OPERATE	55
REAR POWER WINDOW SWITCH : Component	31	Diagnosis Procedure	55
•	20	•	
Inspection	38	REAR LH SIDE POWER WINDOW ALONE	
POWER WINDOW MOTOR	40	DOES NOT OPERATE	56
	0	Diagnosis Procedure	56
DRIVER SIDE	. 40	v	
DRIVER SIDE : Description	. 40	REAR RH SIDE POWER WINDOW ALONE	
DRIVER SIDE : Component Function Check		DOES NOT OPERATE	57
DRIVER SIDE : Diagnosis Procedure		Diagnosis Procedure	57
DRIVER SIDE : Component Inspection		Š	
DRIVER SIDE : Special Repair Requirement		AUTO OPERATION DOES NOT OPERATE	
		BUT MANUAL OPERATES NORMALLY	
PASSENGER SIDE	. 41	(DRIVER SIDE)	58
PASSENGER SIDE : Description	. 42	Diagnosis Procedure	
PASSENGER SIDE: Component Function Check		2.ag.100.0 1 1000da10	•
	. 42	ANTI-PINCH SYSTEM DOES NOT OPERATE	
PASSENGER SIDE : Diagnosis Procedure	42	NORMALLY (DRIVER SIDE)	59
PASSENGER SIDE : Component Inspection	43	Diagnosis Procedure	
REAR LH		POWER WINDOW RETAINED POWER OP-	
REAR LH: Description		ERATION DOES NOT OPERATE PROPERLY	
REAR LH: Component Function Check	43		60
REAR LH: Diagnosis Procedure	43	Diagnosis Procedure	
REAR LH: Component Inspection	44	· ·	•
		POWER WINDOW LOCK SWITCH DOES	
REAR RH		NOT FUNCTION	61
REAR RH : Description		Diagnosis Procedure	
REAR RH : Component Function Check		2.ag.100.0 1 1000da10	٠.
REAR RH : Diagnosis Procedure		DOOR KEY CYLINDER SWITCH DOES NOT	
REAR RH : Component Inspection	46	OPERATE POWER WINDOWS	62
ENGODED		Diagnosis Procedure	
ENCODER	47	Blaghoolo i roccadio	02
DRIVER SIDE	47	KEYLESS POWER WINDOW DOWN DOES	
DRIVER SIDE : Description		NOT OPERATE	63
		Diagnosis Procedure	
DRIVER SIDE : Component Function Check		3g	55
DRIVER SIDE : Diagnosis Procedure		PERIODIC MAINTENANCE	64
DRIVER SIDE : Special Repair Requirement	49		
DOOR SWITCH	50	PRE-INSPECTION FOR DIAGNOSTIC	64
Description		Basic Inspection	64
Component Function Check		·	
Diagnosis Procedure		REMOVAL AND INSTALLATION	65
DIBUITO FIUCEUUIE	ວບ		

DIAGNOSIS AND REPAIR WORKFLOW91 Work Flow91	В
NSPECTION AND ADJUSTMENT93	С
ADDITIONAL SERVICE WHEN REMOVING BAT- TERY NEGATIVE TERMINAL93 ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description93 ADDITIONAL SERVICE WHEN REMOVING	D
BATTERY NEGATIVE TERMINAL : Special Repair Requirement	Е
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT93 ADDITIONAL SERVICE WHEN REPLACING	F
CONTROL UNIT : Description93 ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement93	G
OTC/CIRCUIT DIAGNOSIS95	Н
POWER SUPPLY AND GROUND CIRCUIT95	
BCM : Diagnosis Procedure95	I
POWER WINDOW MAIN SWITCH95 POWER WINDOW MAIN SWITCH : Description95 POWER WINDOW MAIN SWITCH : Component Function Check96	J
POWER WINDOW MAIN SWITCH : Diagnosis Procedure96 POWER WINDOW MAIN SWITCH : Component	PWC
Inspection	L
FRONT POWER WINDOW SWITCH99 FRONT POWER WINDOW SWITCH : Descrip-	M
tion	Ν
Procedure	0
REAR POWER WINDOW SWITCH101 REAR POWER WINDOW SWITCH : Description.101 REAR POWER WINDOW SWITCH : Component	Р
Function Check	
103	

Α

MAIN POWER WINDOW AND DOOR LOCK/	Wiring Diagram - With Left And Right Front Power
UNLOCK SWITCH65	Window Anti-Pinch83
Removal and Installation65	BASIC INSPECTION91
POWER WINDOW AND DOOR LOCK/UN-	DIAGNOSIS AND REPAIR WORKFLOW91
LOCK SWITCH RH66	
Removal and Installation66	Work Flow91
REAR POWER WINDOW SWITCH67	INSPECTION AND ADJUSTMENT93
Removal and Installation67	ADDITIONAL SERVICE WHEN REMOVING BAT-
LH & RH FRONT ANTI-PINCH	TERY NEGATIVE TERMINAL93
	ADDITIONAL SERVICE WHEN REMOVING
PRECAUTION68	BATTERY NEGATIVE TERMINAL : Description93
DDECAUTIONS 22	ADDITIONAL SERVICE WHEN REMOVING
PRECAUTIONS	BATTERY NEGATIVE TERMINAL : Special Re-
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	pair Requirement93
SIONER"68	ADDITIONAL SERVICE WHEN REPLACING
Precaution for Work68	CONTROL UNIT93
PREPARATION69	ADDITIONAL SERVICE WHEN REPLACING
PREPARATION59	CONTROL UNIT: Description93
PREPARATION69	ADDITIONAL SERVICE WHEN REPLACING
Special Service Tool69	CONTROL UNIT : Special Repair Requirement93
SYSTEM DESCRIPTION70	DTC/CIRCUIT DIAGNOSIS95
COMPONENT PARTS70	POWER SUPPLY AND GROUND CIRCUIT95
Component Parts Location70	BCM95
Component Description70	BCM : Diagnosis Procedure95
SYSTEM72	DOMED MINIDOM MAIN OMITOU
System Diagram72	POWER WINDOW MAIN SWITCH95
System Description	POWER WINDOW MAIN SWITCH: Description95
Fail-safe74	POWER WINDOW MAIN SWITCH : Component Function Check96
Tall bale	
DIAGNOSIS SYSTEM (BCM)75	POWER WINDOW MAIN SWITCH : Diagnosis Procedure96
· ,	POWER WINDOW MAIN SWITCH : Component
COMMON ITEM75	Inspection98
COMMON ITEM : CONSULT Function (BCM -	POWER WINDOW MAIN SWITCH : Special Re-
COMMON ITEM)75	pair Requirement99
RETAINED PWR76	pair requirement99
RETAINED PWR : CONSULT Function (BCM -	FRONT POWER WINDOW SWITCH99
RETAINED PWR)76	FRONT POWER WINDOW SWITCH : Descrip-
·	tion99
ECU DIAGNOSIS INFORMATION77	FRONT POWER WINDOW SWITCH: Compo-
DCM (DODY CONTROL MODULE)	nent Function Check100
BCM (BODY CONTROL MODULE)77	FRONT POWER WINDOW SWITCH : Diagnosis
List of ECU Reference77	Procedure100
POWER WINDOW MAIN SWITCH78	FRONT POWER WINDOW SWITCH : Special
Reference Value78	Repair Requirement101
Fail Safe79	REAR POWER WINDOW SWITCH101
	REAR POWER WINDOW SWITCH : Description. 101
FRONT POWER WINDOW SWITCH81	•
	REAR POWER WINDOW SWITCH : Component
Reference Value81	REAR POWER WINDOW SWITCH : Component Function Check
Reference Value81 Fail Safe82	Function Check101
Fail Safe82	Function Check101 REAR POWER WINDOW SWITCH : Diagnosis
	Function Check101

POWER WINDOW MOTOR 105	POWER WINDOW MAIN SWITCH : Diagnosis
DRIVER SIDE105	Procedure 123
DRIVER SIDE : Description105	FRONT POWER WINDOW SWITCH124
DRIVER SIDE : Component Function Check105	FRONT POWER WINDOW SWITCH: Descrip-
DRIVER SIDE : Diagnosis Procedure105	tion
DRIVER SIDE : Component Inspection106	FRONT POWER WINDOW SWITCH: Compo-
DRIVER SIDE : Special Repair Requirement106	nent Function Check124
	FRONT POWER WINDOW SWITCH: Diagnosis
PASSENGER SIDE106	Procedure125
PASSENGER SIDE : Description107	DOWED WINDOW LOCK CWITCH
PASSENGER SIDE : Component Function Check	POWER WINDOW LOCK SWITCH127
107 PASSENGER SIDE : Diagnosis Procedure107	Description
PASSENGER SIDE : Component Inspection107	Special Repair Requirement
PASSENGER SIDE: Special Repair Requirement	Special Nepall Nequilement127
108	SYMPTOM DIAGNOSIS128
REAR LH108	POWER WINDOWS DO NOT OPERATE
REAR LH : Description109	WITH ANY POWER WINDOW SWITCHES128
REAR LH: Component Function Check109	Diagnosis Procedure
REAR LH : Diagnosis Procedure109	-
REAR LH : Component Inspection110	DRIVER SIDE POWER WINDOW ALONE
DEAD DU	DOES NOT OPERATE129
REAR RH	Diagnosis Procedure 129
REAR RH: Description110 REAR RH: Component Function Check110	FRONT PASSENGER SIDE POWER WIN-
REAR RH : Diagnosis Procedure110	DOW ALONE DOES NOT OPERATE130
REAR RH : Component Inspection111	Diagnosis Procedure
NEAR NIT. Component inspection	Diagnosis i rocedure130
ENCODER 113	REAR LH SIDE POWER WINDOW ALONE
DDIVED OIDE	DOES NOT OPERATE131
DRIVER SIDE	Diagnosis Procedure131
DRIVER SIDE: Description	DEAD BUILDE BOWED WINDOW ALONE
DRIVER SIDE : Component Function Check113 DRIVER SIDE : Diagnosis Procedure113	REAR RH SIDE POWER WINDOW ALONE
DRIVER SIDE : Diagnosis Flocedure113	DOES NOT OPERATE132
PASSENGER SIDE115	Diagnosis Procedure 132
PASSENGER SIDE : Description115	ANTI-PINCH SYSTEM DOES NOT OPERATE
PASSENGER SIDE: Component Function Check	NORMALLY (DRIVER SIDE)133
115	Diagnosis Procedure
PASSENGER SIDE : Diagnosis Procedure115	C
DOOR SWITCH118	ANTI-PINCH SYSTEM DOES NOT OPERATE
Description	NORMALLY (PASSENGER SIDE)134
Component Function Check118	Diagnosis Procedure134
Diagnosis Procedure118	AUTO OPERATION DOES NOT OPERATE
Component Inspection119	
	BUT MANUAL OPERATES NORMALLY
DOOR KEY CYLINDER SWITCH 120	(DRIVER SIDE)135
Description120	Diagnosis Procedure
Component Function Check120	AUTO OPERATION DOES NOT OPERATE
Diagnosis Procedure120	BUT MANUAL OPERATES NORMALLY
Component Inspection121	(PASSENGER SIDE)136
Special Repair Requirement122	Diagnosis Procedure
POWER WINDOW SERIAL LINK 123	-
OTTER THROOT OF GENERAL FIRST	POWER WINDOW RETAINED POWER OP-
POWER WINDOW MAIN SWITCH123	ERATION DOES NOT OPERATE PROPERLY
POWER WINDOW MAIN SWITCH: Description123	137
POWER WINDOW MAIN SWITCH : Component	Diagnosis Procedure 137
Function Check123	

POWER WINDOW LOCK SWITCH DOES	Basic Inspection141
NOT FUNCTION138 Diagnosis Procedure138	REMOVAL AND INSTALLATION142
DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS	MAIN POWER WINDOW AND DOOR LOCK/ UNLOCK SWITCH
KEYLESS POWER WINDOW DOWN DOES NOT OPERATE	POWER WINDOW AND DOOR LOCK/UN-LOCK SWITCH RH
PERIODIC MAINTENANCE141 PRE-INSPECTION FOR DIAGNOSTIC141	REAR POWER WINDOW SWITCH144 Removal and Installation144

PWC

J

Α

В

С

 D

Е

F

G

Н

L

M

Ν

0

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. 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 three minutes before performing any service.

Precaution for Work

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:
- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.
- Oily dirt:
- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

PREPARATION

< PREPARATION >

[LH FRONT ONLY ANTI-PINCH]

PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000009460818

The actua	al shapes c	of the tools m	nay differ fron	n those illustrated he	re.

Tool number (TechMate No.) Tool name		Description	
(J-46534) Trim Tool Set		Removing trim components	
	AM/ IIA 0.492.77		

G

Α

С

 D

Е

Н

J

PWC

L

M

Ν

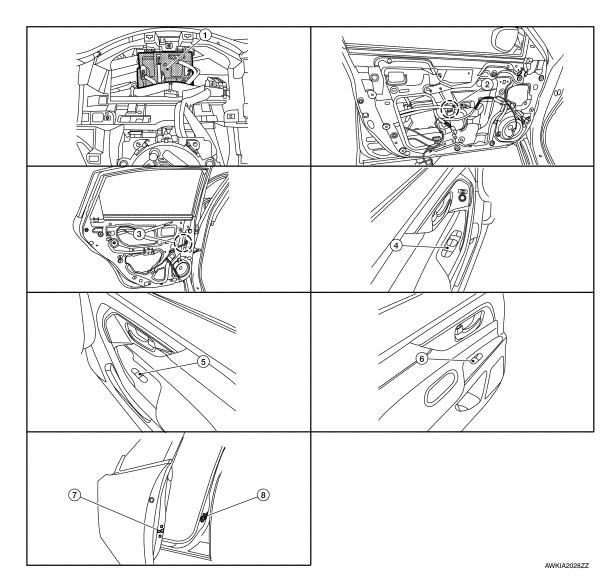
0

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000009460819



- BCM (view with combination meter removed)
- 4. Main power window and door lock/ unlock switch
- 7. Front door lock assembly LH (key cylinder switch)
- Front power window motor LH (RH similar)
- Power window and door lock/unlock 6. switch RH
- 8. Front door switch LH (RH similar)
- Rear power window motor LH (RH similar)
- Rear power window switch LH (RH similar)

Component Description

INFOID:0000000009460820

FRONT POWER WINDOW LH ANTI-PINCH SYSTEM

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[LH FRONT ONLY ANTI-PINCH]

Component	Function
BCM	Supplies power to power window switches. Controls retained power.
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.
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.
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.

G

Α

В

С

 D

Е

F

Н

J

PWC

 \mathbb{N}

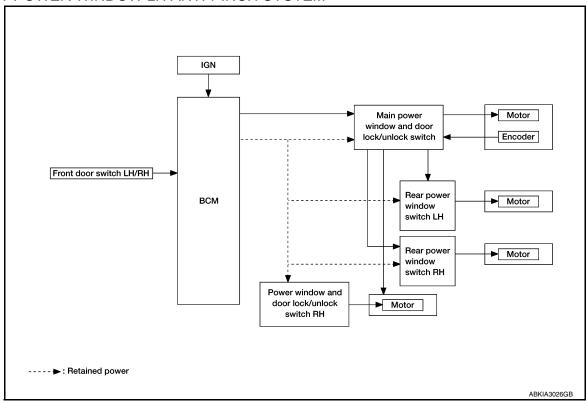
Ν

0

SYSTEM

System Diagram

FRONT POWER WINDOW LH ANTI-PINCH SYSTEM



System Description

INFOID:0000000009460822

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	From power window motor
ВСМ	RAP signal		
Rear power window switch	Rear power window motor UP/DOWN signal		Rear power window motor

POWER WINDOW OPERATION

- Power window system is activated by the power window switch when the ignition switch is in the ON position or during the retained power operation after ignition switch is turned 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 lock switch can lock all power windows other than driver seat.
- If door glass receives resistance that is more than the specified value and the power window is in the AUTO-UP operation (Front LH), power window will move in the reverse direction (Anti-Pinch Function).

POWER WINDOW AUTO-OPERATION (FRONT LH)

SYSTEM

< SYSTEM DESCRIPTION >

[LH FRONT ONLY ANTI-PINCH]

- 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)
- · AUTO function does not operate if encoder is malfunctioning.

POWER WINDOW LOCK FUNCTION

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 150mm. (5.9 in.) 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. (5.9 in.) 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.

KEYLESS POWER WINDOW DOWN FUNCTION

All power windows open when the unlock button on Intelligent Key is activated and pressed for more than 3 seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed. The power window opening stops when the following operations are performed:

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

While retained power operation activate, keyless power window down function cannot be operated.

Fail-safe

FAIL-SAFE CONTROL

Switches to fail-safe control when malfunction is detected in the encoder signal that detects UP/DOWN speed and direction of door glass. Switches to fail-safe control when an error beyond the regulation value is detected between the fully closed position and the actual position of the glass.

Malfunction	Malfunction 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.

PWC

M

Ν

INFOID:0000000009460823

Α

В

D

Е

Р

Revision: November 2013 PWC-11 2014 Altima NAM

SYSTEM

[LH FRONT ONLY ANTI-PINCH]

Malfunction	Malfunction condition
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 that 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 that 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.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[LH FRONT ONLY ANTI-PINCH]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000009955247

Α

В

D

Е

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF \rightarrow ON (for at least 5 seconds) \rightarrow OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and a no-start condition.

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
Ecu Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	 The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

		Direct Diagnostic Mode						
System	Sub System	Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×	×		
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Remote keyless entry system	MULTI REMOTE ENT			×	×	×		
Exterior lamp	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
Intelligent Key system	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			×	×	×		

Revision: November 2013 PWC-13 2014 Altima NAM

Н

PWC

Ν

 \circ

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[LH FRONT ONLY ANTI-PINCH]

				Direct D	Diagnosti	c Mode		
System	Sub System	Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

RETAINED PWR

RETAINED PWR: CONSULT Function (BCM - RETAINED PWR)

INFOID:0000000009955264

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF \rightarrow ON (for at least 5 seconds) \rightarrow OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and a no-start condition.

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.

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[LH FRONT ONLY ANTI-PINCH]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

ECU	Reference
	BCS-31, "Reference Value"
DCM	BCS-50, "Fail Safe"
BCM	BCS-50, "DTC Inspection Priority Chart"
	BCS-52, "DTC Index"

Η

Α

В

С

 D

Е

F

G

INFOID:0000000009460826

PWC

J

M

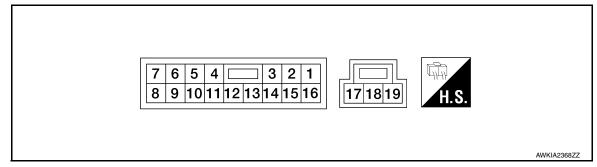
Ν

0

POWER WINDOW MAIN SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

	nal No. color)	Description		Condition	Voltage
+	-	Signal name	Input/ Output	Condition	(Approx.)
1 (B)	Ground	Ground	_	_	0
2 (L)	16	Front power window motor RH DOWN signal	Output	When front RH switch in power window main switch is operated DOWN.	Battery voltage
4 (BG)	12	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0 10 ms JMKIA0070GB
5 (R)	12	Encoder pulse signal 1	Input	When power window motor operates.	(V) 4 2 0 10 ms JMKIA0070GB
6 (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 (V)	Ground	Rear power window motor RH UP signal	Output	When rear RH switch in power window main switch is operated UP.	Battery voltage
8 (L)	Ground	Rear power window motor LH DOWN signal	Output	When rear LH switch in power window main switch is operated DOWN.	Battery voltage

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

[LH FRONT ONLY ANTI-PINCH]

Terminal No. (Wire color)		Description		Condition	Voltage		
+	-	Signal name	Input/ Output	Condition	(Approx.)		
9 (Y)	Ground	Rear power window motor LH		When rear LH switch in power window main switch is operated UP.	Battery voltage		
				IGN SW ON	Battery voltage		
10 (BR) Ground	nd RAP signal		Within 45 second after ignition switch is turned to OFF.	Battery voltage			
		The state of the s	Input	When driver side or passenger side door is opened during retained power operation.	0		
12 (B)	Ground	Encoder ground	_	_	0		
14 (P)	Ground	Encoder power supply	r power supply Output Output Output Output power window timer operates.		10		
16 (BR)	2	Front power window motor When front RH switch in		power window main switch	Battery voltage		
17 (W)	19	Front power window motor LH UP signal	nt power window motor LH Output pow		Battery voltage		
18 (LG)	Ground	Battery power supply	Input	_	Battery voltage		
19 (R)	17	Front power window motor LH DOWN signal	Output	When front LH switch in power window main switch is operated DOWN.	Battery voltage		

PWC

J

Α

В

С

 D

Е

F

G

Н

L

M

Ν

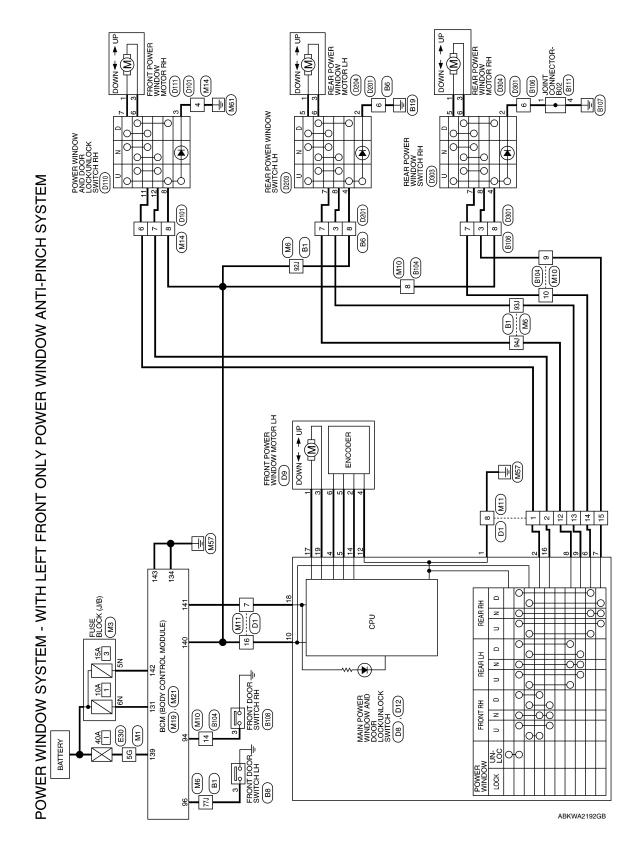
0

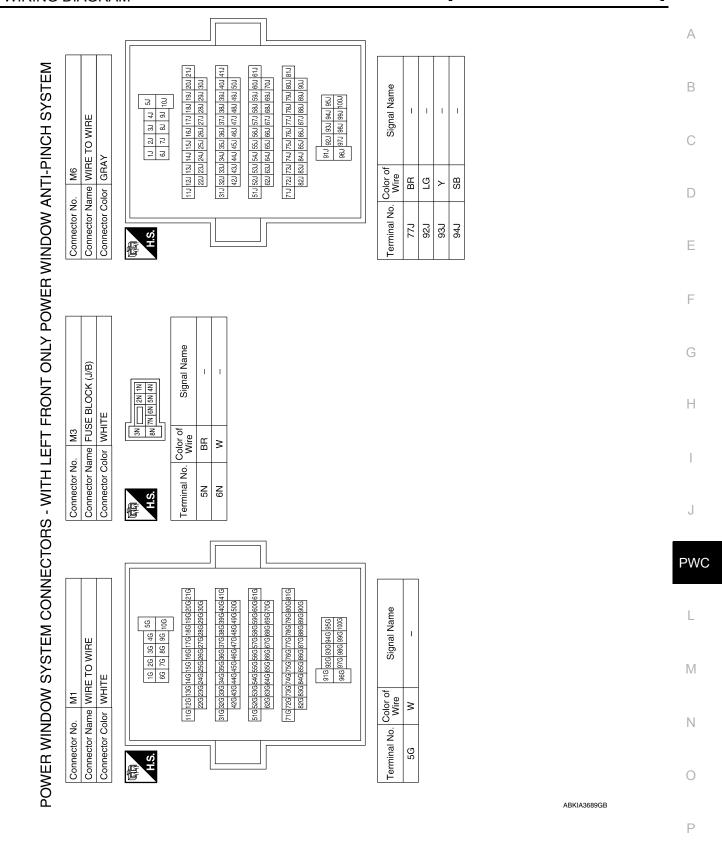
INFOID:0000000009460828

WIRING DIAGRAM

POWER WINDOW SYSTEM

Wiring Diagram - With Left Front Only Power Window Anti- Pinch





Connector No.). M14	14
Connector Name	ame WI	WIRE TO WIRE
Connector Color WHITE	olor W	HTE
是 H.S.	- 4 2 t	8 N
Terminal No.	Color of Wire	f Signal Name
4	GR	ı
9	>	ı
7	>	ı
8	ГG	1

Terminal No. Wire	Color of Wire	Signal Name
140	97	P/W POWER SUPPLY IGN
141	۸	P/W POWER SUPPLY BAT
142	BB	BAT FRONT DOOR
143	В	GND1

			_												
_	WIRE TO WIRE	ITE		12 13 14 15 16	Signal Name	ı	Ī	ı	ı	1	ı	ı	1	ı	
M11	me WIF	lor WH		9 10 11 12	Color of Wire	>	>	>	<u>ш</u>	SB	>	BB	>	LG	
Connector No.	Connector Name	Connector Color WHITE		H.S.	Terminal No.	-	2	7	80	12	13	14	15	16	
			1					ı		1					
	l					l									

	Connector Name BCM (BODY CONTROL MODULE)	ITE	1371.38[138[138[138]138]] 143 142 141 140 139 138	Signal Name
NZ	ne BCN MOI	or WH	137 136 13	Color of Wire
Connector No.	Connector Na	Connector Color WHITE	雨 H.S.	Terminal No. Wire
		•		

BAT BCM FUSE

| s | m | s

134

BAT POWER F/L

0	E TO WIRE	BROWN	3 2 1		Signal Name	1	_	ı	1	
. M10	me WIF	lor BR(7 6 5 4 16 15 14 13		Color of Wire	ГG	Λ	BR	SB	
Connector No.	Connector Name WIRE TO WIRE	Connector Color		i Ç	Terminal No.	8	6	10	14	

6	BCM (BODY CONTROL MODULE)	٨Ł	100 99 98 97 86 95 94 93	Signal Name	AS DOOR SW	DR DOOR SW
, M19		lor GRAY	91 90 89	Color of Wire	SB	BR
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	94	96

ABKIA3690GB

	A	7
Signal Name	N N Signal Name	
Color of Wire LG SB LG LG COLOR OF LG COLO	WIRE 8104 WIRE 01 10 11 12 12 13 14 15 15 15 15 15 15 15)
77.7 92.1 93.1 94.1	Connector No. Connector Name Connector Color H.S. H.S. 10 S 10 S 14 1	Ξ
	F	=
130 120 110 120 110 120 120 120 120 120 12	TICH LH IN THE PROPERTY OF THE	3
81 CGRAY Su 41 30 20 10 10 10 10 10 10 10 10 10 10 10 10 10	Connector No. B8 Connector Name FRONT DOOR SWITCH LH Connector Color WHITE Terminal No. Wire Signal Name 3 L -	-
6. B1 ame WIRE olor GRAY 10) 10) 10) 10) 10) 10) 10) 10) 10) 10)	ame FRONT olor Whire Land wire	
Connector No. B1 Connector Name WIRE TO WIRE Connector Color GRAY Substituting	Connector No. Connector Name Connector Color H.S. Terminal No. W	J
	PV	WC
E30	O WIRE Signal Name	- Л
5. E30 ame WIRE T alor	SB BB WIRE TO WHITE SIGN WHITE SIGN Wire BB	
Connector No. E30	Connector No. B6 Connector Name WIRE TO WIRE Connector Color WHITE Terminal No. Wire Signal S S B C LG R LG R L	
	ABKIA3691GB	5

Revision: November 2013 PWC-21 2014 Altima NAM

	Connector Name JOINT CONNECTOR-B02	щ		2 1 🔲	Signal Name	ı	I		
B11	ne JOIN	or WHIT		4 3	Color of Wire	В	В		
Connector No.	Connector Nar	Connector Color WHITE	4	H.S.	Terminal No. Wire	-	4		
	SWITCH RH				Signal Name	1			
8	NT DOOF	TE	[4	Signa				
Connector No. B108	Connector Name FRONT DOOR SWITCH RH	Connector Color WHITE	[, 	Terminal No. Wire Signa	, ,			

Connector No.	o. D9	
Connector Name		FRONT POWER WINDOW MOTOR LH
Connector Color		GREEN
é		
<u>6</u>		2 3
ý.		4 5 6
Terminal No.	Color of Wire	of Signal Name
-	8	dΩ
0	۵	VCC (WITH LEFT FRONT ONLY POWER
J		WINDOW ANTI-PINCH SYSTEM)
8	В	NO
4	В	GND (WITH LEFT FRONT ONLY POWER
		SYSTEM)
2	Œ	PLS A
9	BG	PLSB

Connector No.	. D8	
Connector Name		MAIN POWER WINDOW DOOR LOCK/UNLOCK SWITCH
Connector Color		WHITE
南 H.S.		18 19
Terminal No.	Color of Wire	Signal Name
17	Μ	DR UP
18	ГG	BAT
19	ш	DR DN

I	_	I	1	
>	В	SB	Γ	
n	9	2	8	

Signal Name

Color of Wire

Terminal No.

Connector Name WIRE TO WIRE Connector Color WHITE

Connector No. B106

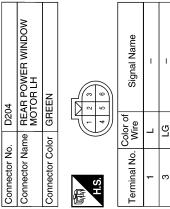
			ı					I		<u> </u>					
	WIRE TO WIRE	ПЕ		3 2 1	13 12 11 10 9 8	Signal Name	1	1	1	1	_	I	I	1	l
		lor WHITE		7 6 5 4	16 15 14 10	Color of Wire	_	BR	ГG	В	٦	\	SB	^	BR
Connector No.	Connector Name	Connector Color		優	H.S.	Terminal No.	-	2	7	8	12	13	14	15	16

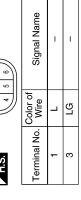
ABKIA4834GB

Connector No. D101		_		8 27					Color of Signal Name Wire) (1)		ı <u>e</u>	2 88	Connector No. D111	MOTOR BH (WITH LEFT	Connector Name FRON ONLY POWER WINDOW ANTI-PINCH	SYSTEM)			H.S.	Terminal No. Color of Signal Name	- X	٦ × «		A B C
																									F
Signal Name	ENCODER 2	ENCODER 1	RR DN	RR UP	RL DN	RL UP	ING	1	GND	ı	ENCODER +	I	AS UP	Signal Name	1	ı	1	ı	ı						G
Color of Wire	BG	æ	SB	>	_	>	BB	ı	В	ı	۵	ı	BB	Color of Wire	>	>	SB	_	re						
Terminal No.	4	5	9	2	8	6	10	11	12	13	14	15	16	Terminal No.	9	2	8	11	12						J
																									PV
POWER WINDOW	DOOR LOCK/UNLOCK	SWITCH (WITH LEFT FRONT ONLY POWER	DOW ANTI-PINCH	T LIVI)	ı		13 2		Signal Name		OND NO SV	AS DIN	1		POWER WINDOW AND DOOR LOCK/UNLOCK	ICH RH (WITH LEFT NT ONLY POWER	DOW ANTI-PINCH			8 9 10 11 12	Signal Name	1			L
	AND	Connector Name FRON	WINDOW	Connector Color WHITE	_	4	စ စ		Color of No. Wire		۵ -				*0!	Connector Name SWIT	MINI	Connector Color WHITE	-	6 1 8	al No. Wire	В	-		N
Connector No.		Connec		Connec		E		Ċ E	Terminal No.		- c	7 0	n	Connector No.		Connec	_	Connec		是 H.S.	Terminal No.	က		ABKIA4835GB	0

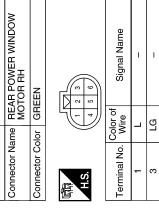
Р

PWC-23 Revision: November 2013 2014 Altima NAM

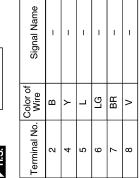




	D304
	Connector No.



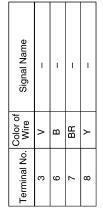
D203	Connector Name REAR POWER WINDOW SWITCH LH	WHITE	
Connector No.	Connector Name	Connector Color WHITE	



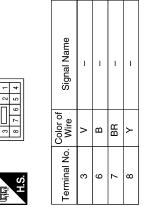
	D303	Connector Name REAR POWER WINDOW
		me RE
	Connector No.	Connector Na

SWITCH RH	ITE	0 2 S	Signal Name	1	ı	ı	ı	ı	1
_	lor WHITE	8 7	Color of Wire	В	>	_	FG	BR	>
Collifector Name	Connector Color	用.S.	Terminal No.	2	4	2	9	2	œ

D201	WIRE TO WIRE	WHITE	
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	



1	E TO WIRE	3	
D301	WIRE	MHI	
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	



ABKIA4836GB

Α

D

Е

PWC

Ν

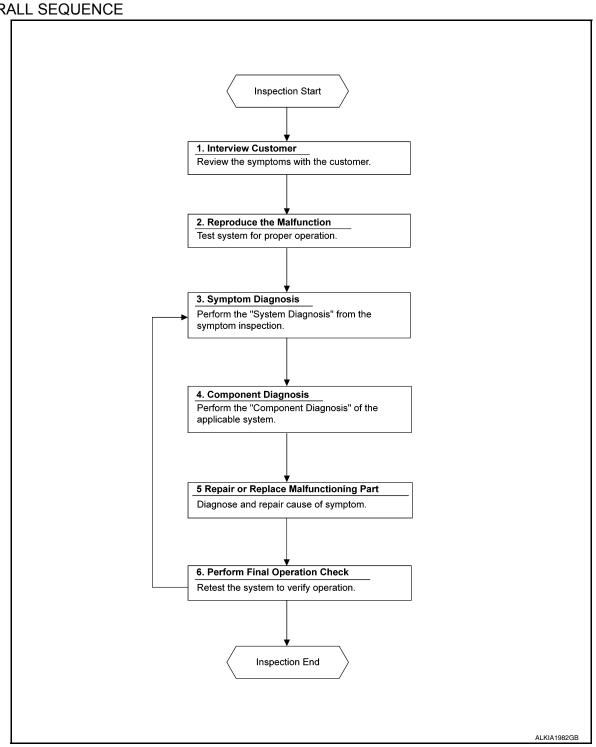
Р

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow INFOID:0000000009460829 В

OVERALL SEQUENCE



DETAILED FLOW

1. OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurred.

DIAGNOSIS AND REPAIR WORKFLOW

[LH FRONT ONLY ANTI-PINCH]

>> GO TO 2.

2. CONFIRM THE SYMPTOM

Check the malfunction on the vehicle that the customer describes.

Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 3.

3. IDENTIFY THE MALFUNCTIONING SYSTEM WITH SYMPTOM DIAGNOSIS

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

>> GO TO 4.

4. PERFORM THE COMPONENT DIAGNOSIS OF THE OF THE APPLICABLE SYSTEM

Perform the diagnosis with Component diagnosis of the applicable system.

>> GO TO 5.

REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

6. FINAL CHECK

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

Are the malfunctions corrected?

YES >> Inspection End.

NO >> GO TO 3.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH FRONT ONLY ANTI-PINCH]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description INFOID:0000000009460830

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:0000000009460831

INITIALIZATION PROCEDURE

- Disconnect battery minus terminal or power window main switch connector. Reconnect it after a minute or more.
- Turn ignition switch ON. 2.
- 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.
- 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-11, "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
- 3. Retained power operation when ignition switch is OFF.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

INFOID:0000000009460832

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:0000000009460833

INITIALIZATION PROCEDURE

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

PWC-27 Revision: November 2013 2014 Altima NAM **PWC**

Α

В

D

Е

Н

L

Ν

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH FRONT ONLY ANTI-PINCH]

- 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-11, "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.

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM: Diagnosis Procedure

INFOID:0000000009955265

Α

В

D

Е

Regarding Wiring Diagram information, refer to BCS-55, "Wiring Diagram".

1. CHECK FUSE AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuse and fusible link No.
139	Fusible link battery power	I (40A)
131	BCM battery fuse	1 (10A)

Is the fuse or fusible link blown?

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

NO >> GO TO 2

$2.\,$ CHECK POWER SUPPLY CIRCUIT

- 1. Disconnect BCM connector M21.
- Check voltage between BCM connector M21 terminals 131, 139 and ground.

В	CM	Ground	Voltage (Approx.)	
Connector Terminal		Giouna	(Approx.)	
M21	131		Pottony voltogo	
IVIZ I	139	_	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M21 terminals 134, 143 and ground.

В	CM	Ground	Continuity	
Connector Terminal		Giodila	Continuity	
M21	134		Yes	
IVIZ I	143	_	res	

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

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.

PWC

Ν

0

INFOID:0000000009460835

Revision: November 2013 PWC-29 2014 Altima NAM

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

POWER WINDOW MAIN SWITCH: Component Function Check

INFOID:0000000009460836

Main Power Window And Door Lock/unlock Switch

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

Check power window motor operation with main power window and door lock/unlock switch.

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-30, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

INFOID:0000000009460837

Regarding Wiring Diagram information, refer to <u>PWC-18</u>, "Wiring <u>Diagram - With Left Front Only Power Window Anti- Pinch"</u>.

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

1. CHECK POWER SUPPLY CIRCUIT

- 1. Turn ignition switch ON.
- 2. Check voltage between main power window and door lock/unlock switch connectors D8, D12 and ground.

Ter				
(+)	Voltage (Approx.)			
Main power window and door lock/unlock switch Terminal		(–)	(Approx.)	
D12	10	Ground	Pattonyvoltago	
D8	18	Giouna	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM, main power window and door lock/unlock switch, power window and door lock/unlock switch RH, rear power window switch LH and rear power window switch RH.
- Check continuity between BCM connector and main power window and door lock/unlock switch connectors.

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M21	140	D12	10	Yes
M21	141	D8	18	165

4. Check continuity between BCM connector M21 and ground.

BCM connector	Terminal		Continuity
M21	140	Ground	No
	141		No

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the harness or connectors.

3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect main power window and door lock/unlock switch.

Revision: November 2013 PWC-30 2014 Altima NAM

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

3. Check continuity between main power window and door lock/unlock switch connector D8 and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D8	1	Ground	Yes

Is the inspection result normal?

- 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.
- YES >> Check main power window and door lock/unlock switch output signal (front power window switch LH) GO TO 7.
- YES >> Check main power window and door lock/unlock switch output signal (front power window switch RH) GO TO 8.
- NO >> Repair or replace the harness or connectors.

4. CHECK BCM OUTPUT SIGNAL

- 1. Connect BCM.
- 2. Turn ignition switch ON.
- 3. Check voltage between BCM connector M21 and ground.

Ter	Voltage (Approx.)		
(+)			
BCM connector	Terminal	(-)	()
M21	140	Ground	Battery voltage
IVIZ I	141	Giodila	Dattery voltage

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".
- NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

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

- 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 D12 and ground.

Tern	ninal				
(+)			Window switch	Voltage	
Main power window and door lock/ unlock switch connector	Terminal	(-)	position (rear LH)	(Approx.)	
	8	0		UP	Battery voltage
D12		Ground	DOWN	0	
512	0	Giouria	UP	0	
	9		DOWN	Battery voltage	

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".
- NO >> Replace main power window and door lock/unlock switch. Refer to PWC-65, "Removal and Installation". After that, refer to PWC-27, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

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

- 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 D12 and ground.

PWC

А

В

D

Е

Н

M

Ν

0

Р

Revision: November 2013 PWC-31 2014 Altima NAM

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

Te	erminal			
(+)			Window switch	Voltage
Main power window and door lock/unlock switch connector	Terminal (-)		position (rear RH)	(Approx.)
	6		UP	Battery voltage
D40			DOWN	0
D12	7	Ground	UP	0
	7		DOWN	Battery voltage

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".
- NO >> Replace main power window and door lock/unlock switch. Refer to <u>PWC-65</u>. "Removal and Installation". After that, refer to <u>PWC-27</u>. "ADDITIONAL SERVICE WHEN REPLACING CONTROL <u>UNIT</u>: Special Repair Requirement".
- 7. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL (FRONT 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 D8 and ground.

Terminal				
(+)			Window switch	Voltage
Main power window and door lock/ unlock switch connector	Terminal	(–)	position (front LH)	(Approx.)
	17	Ground	UP	Battery voltage
D8			DOWN	0
В			UP	0
	19		DOWN	Battery voltage

Is the inspection result normal?

NO

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

>> Replace main power window and door lock/unlock switch. Refer to PWC-65, "Removal and Installation". After that, refer to PWC-27, "ADDITIONAL SERVICE WHEN REPLACING CONTROLUNIT: Special Repair Requirement".

- 8. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL (FRONT POWER WINDOW SWITCH RH)
- 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 D12 and ground.

Terminal				
(+)			Window switch	Voltage
Main power window and door lock/unlock switch connector	Terminal	(–)	position (front RH)	(Approx.)
	2	Ground	UP	Battery voltage
D12			DOWN	0
DIZ	46		UP	0
	16		DOWN	Battery voltage

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

NO >> Replace main power window and door lock/unlock switch. Refer to PWC-65, "Removal and Installation". After that, refer to PWC-27, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

POWER WINDOW MAIN SWITCH: Component Inspection

INFOID:0000000009460838

Α

В

D

Е

F

Н

J

PWC

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

1. Check main power window and door lock/unlock switch D12.

Ter	minal	Main power window and door lock/unlock switch condition		Continuity
10	8	Rear LH		
10	6	Rear RH	Rear RH UP	
10	2	Front RH		
8	9	Rear LH		Yes
6	7	Rear RH	NEUTRAL	
2	16	Front RH		
10	9	Rear LH		
10	7	Rear RH	DOWN	
10	16	Front RH		
1	12		-	

2. Check continuity between main power window and door lock/unlock switch D12 (power window lock switch) (Lock operation).

Terr	ninal	Main power window and door lock/unlock switch condition		Continuity
9		Rear LH		
7		Rear RH	UP	
16		Front RH		
8		Rear LH		
9		iveal Lii		
7	1	Rear RH	NEUTRAL	No
6		ixedi ixi i	NEOTIVAL	NO
2		Front RH		
16		TIONCIAN		
8		Rear LH		
6		Rear RH	DOWN	
2		Front RH		

3. Check continuity between main power window and door lock/unlock switch D12 (power window lock switch) (Unlock operation).

0

M

Ν

Ρ

Term	ninal	Main power window and door	lock/unlock switch condition	Continuity
9		Rear LH		
7		Rear RH	UP	
16		Front RH		
8		Rear LH		
9		Real Ln		
7	1	Rear RH	NEUTRAL	Yes
6	'			
2				
16		Front RH		
8		Rear LH		
6		Rear RH	DOWN	
2		Front RH		

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 <u>PWC-65</u>, "Removal and Installation". After that, refer to <u>PWC-27</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL <u>UNIT</u>: Special Repair Requirement".

POWER WINDOW MAIN SWITCH: Special Repair Requirement

INFOID:0000000009460839

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-27, "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-43, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to PWC-27, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Refer to PWC-30, "POWER WINDOW MAIN SWITCH: Component Function Check".

FRONT POWER WINDOW SWITCH

FRONT POWER WINDOW SWITCH: Description

INFOID:0000000009460840

- · 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:0000000009460841

Power Window And Door Lock/unlock Switch RH

$oldsymbol{1}_{-}$ CHECK POWER WINDOW MOTOR FUNCTION

Check front power window motor operation with power window and door lock/unlock switch RH. <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-35, "FRONT POWER WINDOW SWITCH: Diagnosis Procedure".

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

FRONT POWER	R WINDOW	SWITCH:	Diagnosis	Procedure
-------------	----------	---------	-----------	-----------

INFOID:0000000009460842

Regarding Wiring Diagram information, refer to PWC-18, "Wiring Diagram - With Left Front Only Power Window Anti- Pinch".

Α

В

D

Е

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)

- Turn ignition switch ON.
- Check voltage between power window and door lock/unlock switch RH connector D110 and ground.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

$oldsymbol{2}$. CHECK HARNESS CONTINUITY

Turn ignition switch OFF.

Disconnect BCM, power window and door lock/unlock switch RH, rear power window switch LH and rear power window switch RH.

3. Check continuity between BCM connector M21 and power window and door lock/unlock switch RH connector D110.

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M21	140	D110	8	Yes

Check continuity between BCM connector M21 and ground.

BCM connector	Terminal	Ground	Continuity
M21	140	Oround	No

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the harness or connectors.

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

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 D12 and power window and door lock/unlock switch RH connector D110.

Main power window and door lock/unlock switch connector	Terminal	Power window and door lock/ unlock switch RH connector	Terminal	Continuity
D12	2	D110	11	Yes
DIZ	16	DIIU	12	165

Check continuity between main power window and door lock/unlock switch connector D12 and ground.

PWC

M

0

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

Main power window and door lock/unlock switch con- nector	Terminal	0 1	Continuity
D12	2	Ground	No
DIZ	16		INO

Is the inspection result normal?

YES >> GO TO 5

NO >> Repair or replace the harness or connectors.

CHECK BCM OUTPUT SIGNAL

- 1. Connect BCM.
- 2. Turn ignition switch ON.
- 3. Check voltage between BCM connector M21 and ground.

Terr				
(+)	(_)	Voltage (Approx.)		
BCM connector	Terminal	(-)	(11 /	
M21	140	Ground	Battery voltage	

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

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

Check power window and door lock/unlock switch RH.

Refer to PWC-36, "FRONT POWER WINDOW SWITCH: Component Inspection".

Is the inspection result normal?

NO

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

>> Replace power window and door lock/unlock switch RH. Refer to PWC-65, "Removal and Installation".

FRONT POWER WINDOW SWITCH: Component Inspection

INFOID:0000000009460843

INFOID:0000000009460844

COMPONENT INSPECTION

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

Check power window and door lock/unlock switch RH D110.

Terminal		Power window switch condition	Continuity
8	7	UP	
12	6		Yes
12	6	- NEUTRAL	
7	11		
8	6	- DOWN	
7	11		

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-66, "Removal and Installation".

REAR POWER WINDOW SWITCH

REAR POWER WINDOW SWITCH: Description

BCM supplies power.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

 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:0000000009460845

Α

В

D

Е

Н

Rear Power Window Switch

${f 1}$. CHECK REAR POWER WINDOW MOTOR FUNCTION

Check rear power window motor operation with rear power window switch.

Is the inspection result normal?

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

NO >> Refer to PWC-37, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".

REAR POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:0000000009460846

Regarding Wiring Diagram information, refer to PWC-18, "Wiring Diagram - With Left Front Only Power Window Anti- Pinch".

Rear Power Window Switch Power Supply Circuit Check

1. CHECK POWER SUPPLY CIRCUIT

Turn ignition switch ON.

Check voltage between rear power window switch connector and ground.

Terminal					
(+)			Condition	Voltage	
	Rear power window switch connector		(–)		(Approx.)
LH	D203	4	Ground	Ignition switch ON	Battery voltage
RH	D303		Ground	ignition switch ON	Dattery voltage

Is the inspection result normal?

>> 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.

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 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
D12	8	D203	7	Yes
DIZ	9	D203	8	165

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	8	Ground	No	
DIZ	9		NO	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the harness or connectors.

PWC-37 Revision: November 2013 2014 Altima NAM **PWC**

Ν

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

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 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
D12	6	D303	7	Yes
DIZ	7	D303	8	163

4. 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		Continuity
D12	6	Ground	No
	7	_	INO

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the harness or connectors.

4. CHECK HARNESS CONTINUITY

- 1. Disconnect BCM, power window and door lock/unlock switch RH, rear power window switch LH and rear power window switch RH.
- 2. Check continuity between BCM connector and rear power window switch connector.

BCM connector	Terminal	Rear power windo	w switch connector	Terminal	Continuity
M21	140	LH	D203	1	Yes
M21 140	140	RH	D303	4	165

Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M21	140	Oround	No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".

NO >> Repair or replace harness or connectors.

5. CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

Refer to PWC-38, "REAR POWER WINDOW SWITCH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Replace rear power window switch. Refer to PWC-67, "Removal and Installation".

REAR POWER WINDOW SWITCH: Component Inspection

INFOID:0000000009460847

COMPONENT INSPECTION

1. CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

Terminal		Power window switch condition	Continuity
4	5	UP	
8	6	OF .	
8	6	NEUTRAL	Yes
5	7	NEOTRAL	165
4	6	DOWN	
5	7	DOWN	

Is the inspection result normal?

YES >> Rear power window switch is OK.

NO >> Replace rear power window switch. Refer to PWC-67, "Removal and Installation".

D

Α

В

C

Е

F

G

Н

J

PWC

M

Ν

0

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE: Description

INFOID:0000000009460848

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

DRIVER SIDE : Component Function Check

INFOID:0000000009460849

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

Check front power window motor LH operation with the main power window and door lock/unlock switch. <u>Is the inspection result normal?</u>

YES >> Front power window motor LH is OK.

NO >> Refer to PWC-40, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000009460850

Regarding Wiring Diagram information, refer to <u>PWC-18</u>, "Wiring <u>Diagram - With Left Front Only Power Window Anti- Pinch"</u>.

Front 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 front power window motor LH.
- 3. Turn ignition switch ON.
- 4. Check voltage between front power window motor LH connector D9 and ground.

	Terminal				
(+) Front power window motor LH connector Terminal			Main power window and door lock/unlock switch condition	Voltage	
		(–)		(Approx.)	
	1	Ground	UP	Battery voltage	
D9			DOWN	0	
Da	3		UP	0	
			DOWN	Battery voltage	

Is the inspection result normal?

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.
- Check continuity between main power window and door lock/unlock switch connector D8 and front power window motor LH connector D9.

Main power window and door lock/un- lock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity	
	17	D9	1	Yes	
D0	19	D9	3	165	

4. Check continuity between main power window and door lock/unlock switch connector D8 and ground.

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

Main power window and door lock/un-	Terminal		Continuity
lock switch connector		Ground	
D8 -	17 19		No
s the inspection result normal?	19		
YES >> Replace main power wing lation. After that, refer to the NO >> Repair or replace harne	o <u>PWC-41, "DRIVER SI</u> ss.	ck switch. Refer to <u>PWC</u> DE : Special Repair Req	
. CHECK FRONT POWER WIND	OW MOTOR LH		
heck front power window motor LF efer to PWC-41 , "DRIVER SIDE : the inspection result normal?			
YES >> Check intermittent incidence of the NO >> Replace front power wire	ndow motor LH. Refer to		
RIVER SIDE : Component	Inspection		INFOID:000000009460851
OMPONENT INSPECTION .CHECK FRONT POWER WINDO heck motor operation by connectin		ectly to power window m	otor D9.
Terminal			
(+)	(–)	Motor	condition
3	1	D	OWN
1	3		UP
the inspection result normal? YES >> Front power window monomodely to the second power window monomodely to the second power window. **STATE OF THE STATE OF THE SECOND POWER SIDE : Special Report Power with the second power window. **PRIVER SIDE : Special Report Power with the second power window.	ndow motor LH. Refer to PWC-41, "DRIVER SIDE	GW-16, "Removal and Ir : Special Repair Require	
. PERFORM INITIALIZATION PR	OCEDURE		
erform initialization procedure. efer to PWC-27, "ADDITIONAL Signal Requirement". the inspection result normal? YES >> GO TO 2. NO >> Check intermittent incid	ERVICE WHEN REMOVE		IVE TERMINAL : Special
theck anti-pinch operation. Refer to PWC-27, "ADDITIONAL SI Repair Requirement".		/ING BATTERY NEGAT	IVE TERMINAL : Special
s the inspection result normal? YES >> Inspection end. NO >> Refer to PWC-40, "DRIY ASSENGER SIDE	VER SIDE : Component	Function Check".	

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

PASSENGER SIDE: Description

INFOID:0000000009460853

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:0000000009460854

1. CHECK FRONT POWER WINDOW MOTOR RH CIRCUIT

Check front power window motor RH operation 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-42, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000009460855

Regarding Wiring Diagram information, refer to <u>PWC-18</u>, "Wiring <u>Diagram - With Left Front Only Power Window Anti- Pinch"</u>.

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.
- 4. Check voltage between front power window motor RH connector D111 and ground.

Т	erminal				
(+)			Front power window motor	Voltage (V)	
Front power window motor RH connector Terminal		(–)	RH condition	(Approx.)	
	1	Ground	UP	Battery voltage	
D111			DOWN	0	
וווט		Giouna	UP	0	
	3		DOWN	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- 2. Disconnect power window and door lock/unlock switch RH.
- Check continuity between power window and door lock/unlock switch RH connector D110 and front power window motor RH connector D111.

Power window and door lock/un- lock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity
D110	7	D111	1	Yes
2110	6	5111	3	163

4. Check continuity between power window and door lock/unlock switch connector D110 and ground.

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

Power window and door lock/unlock switch RH connector	Terminal	Ground	Continuity
D110	7		No
	6		
Is the inspection result normal? YES >> Replace power window and dong tion. NO >> Repair or replace the harness. 3. CHECK FRONT POWER WINDOW M	or connectors.	ch RH. Refer to <u>PWC</u>	-65, "Removal and Installa-
Check front power window motor RH.			
Refer to PWC-43, "PASSENGER SIDE : (Component Inspection	<u>on"</u> .	
<u>Is the inspection result normal?</u> YES >> Check intermittent incident. R	ofor to CL 42 "Intern	nittont Incident"	
NO >> Replace front power window lator".	motor RH. Refer to (GW-16, "Removal an	d Installation - Front Regu-
PASSENGER SIDE : Componen	t Inspection		INFOID:000000009460856
·	•		
COMPONENT INSPECTION			
COMPONENT INSPECTION			
1. CHECK FRONT POWER WINDOW N	IOTOR RH		
Check motor operation by connecting the	battery voltage direc	tly to front power wir	idow motor RH D111.
Terminal			
(+)	(–)	Mot	or condition
3	1		DOWN
1	3		UP
Is the inspection result normal? YES >> Power window motor is OK. NO >> Replace front power window in the lator REAR LH	motor RH. Refer to <u>(</u>	GW-16, "Removal an	d Installation - Front Regu-
REAR LH : Description			INFOID:000000009460857
Door glass moves UP/DOWN by receiving rear power window switch LH.	g the signal from ma	in power window and	door lock/unlock switch or
REAR LH : Component Function	Check		INFOID:000000009460858
1. CHECK REAR POWER WINDOW MC	TOR LH CIRCUIT		
Check rear power window motor LH oper power window switch LH.	ration with main pov	ver window and door	lock/unlock switch or rear
<u>Is the inspection result normal?</u> YES >> Rear power window motor LH	l is OK.		
NO >> Refer to PWC-43, "REAR LH	: Diagnosis Procedu	ıre"	
REAR LH : Diagnosis Procedure			INFOID:000000009460859

Regarding Wiring Diagram information, refer to <u>PWC-18</u>, "Wiring <u>Diagram - With Left Front Only Power Window Anti- Pinch"</u>.

INFOID:0000000009460860

Rear Power Window Motor LH Circuit Check

${f 1}$. 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.
- 4. Check voltage between rear power window motor LH connector D204 and ground.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

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 D203 and rear power window motor LH connector D204.

Rear power window switch LH connector	Terminal	Rear power window motor LH connector	Terminal	Continuity
D203	5	D204	1	Yes
D200	6	D20 4	3	163

Check continuity between rear power window switch LH connector D203 and ground.

Rear power window switch LH connector	Terminal		Continuity
D203	5	Ground	No
	6		INO

Is the inspection result normal?

YES >> Check rear power window switch LH. Refer to PWC-44, "REAR LH: Component Inspection".

NO >> Repair or replace the harness or connectors.

3. CHECK REAR POWER WINDOW MOTOR LH

Check rear power window motor LH.

Refer to PWC-44, "REAR LH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Replace rear power window motor LH. Refer to <u>GW-25</u>, "<u>Removal and Installation</u>".

REAR LH: Component Inspection

COMPONENT INSPECTION

1. CHECK REAR POWER WINDOW MOTOR LH

Check motor operation by connecting the battery voltage directly to rear power window motor LH D204.

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

Te	rminal	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 GW-25, "Removal and Installation".

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

1. CHECK POWER WINDOW MOTOR CIRCUIT

Check rear power window motor RH operation 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-45, "REAR RH: Diagnosis Procedure".

REAR RH: Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>PWC-18</u>, "Wiring <u>Diagram - With Left Front Only Power Window Anti- Pinch"</u>.

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.
- Turn ignition switch ON.
- Check voltage between rear power window motor RH connector D304 and ground.

Terminal				
(+)			Rear power window	Voltage
Rear power window motor RH connector	Terminal	(–)	switch RH condition	(Approx.)
	1		UP	Battery voltage
D304	'	Ground	DOWN	0
D304		Ground	UP	0
	3		DOWN	Battery voltage

Is the inspection result normal?

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 D303 and rear power window motor RH connector D304.

PWC

Α

В

D

Е

Н

INFOID:000000009460861

INFOID:0000000009460862

INFOID:0000000009460863

M

N

Р

Revision: November 2013 PWC-45 2014 Altima NAM

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

Rear power window switch RH connector	Terminal	Rear power window motor RH connector	Terminal	Continuity
D303	5	D304	1	Yes
5000	6		3	103

Check continuity between rear power window switch RH connector D303 and ground.

Rear power window switch RH connector	Terminal		Continuity
D303	5	Ground	No
	6		INU

Is the inspection result normal?

YES >> Check rear power window switch RH. Refer to PWC-46, "REAR RH: Component Inspection".

NO >> Repair or replace harness or connectors.

3. CHECK REAR POWER WINDOW MOTOR RH

Check rear power window motor RH.

Refer to PWC-46, "REAR RH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Replace rear power window motor RH. Refer to GW-25, "Removal and Installation".

REAR RH: Component Inspection

INFOID:0000000009460864

COMPONENT INSPECTION

1. CHECK REAR POWER WINDOW MOTOR RH

Check motor operation by connecting the battery voltage directly to rear power window motor RH D304.

Terr	ninal	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-25, "Removal and Installation"</u>.

[LH FRONT ONLY ANTI-PINCH]

ENCODER

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000009460865

Α

В

D

Е

Н

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:0000000009460866

1. CHECK ENCODER OPERATION

Check 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-47, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000009460867

Regarding Wiring Diagram information, refer to <u>PWC-18</u>, "Wiring <u>Diagram - With Left Front Only Power Window Anti- Pinch"</u>.

Encoder Circuit Check

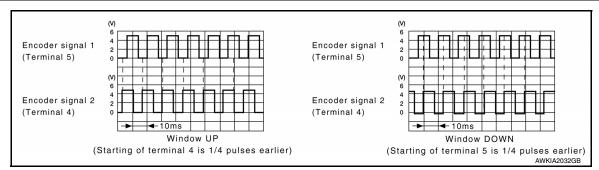
1. CHECK ENCODER OPERATION

1. Connect front power window motor LH.

Turn ignition switch ON.

Check signal between main power window and door lock/unlock switch connector D12 and ground with oscilloscope.

(+)			Signal
Main power window and door lock/ unlock switch connector	Terminal	(-)	(Reference value)
D12	4	Ground	Refer to following signal
DIZ	5	Giodila	Trefer to following signal



Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> GO TO 2.

2. CHECK FRONT POWER WINDOW MOTOR LH POWER SUPPLY

- Turn ignition switch ON.
- Check voltage between front power window motor LH connector D9 and ground.

PWC

M

Ν

0

Termir	17.16			
(+)	(-)	Voltage (Approx.)		
Front power window motor LH connector Terminal		(-)		
D9	2	Ground	10	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

${f 3}.$ 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.
- 3. Check continuity between main power window and door lock/unlock switch connector D12 and front power window motor connector D9.

Main power window and door lock/ unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D12	14	D9	2	Yes

4. Check continuity between main power window and door lock/unlock switch connector D12 and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D12	14		No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-65, "Removal and Installation". After that, refer to PWC-49, "DRIVER SIDE: Special Repair Requirement".

NO >> Repair or replace harness or connectors.

4. CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect front power window motor LH.
- 3. Check continuity between front power window motor LH connector D9 and ground.

Front power window motor LH connector	Terminal	Ground	Continuity
D9	4	Oround	Yes

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK HARNESS CONTINUITY 2

- 1. Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/unlock switch connector D12 and front power window motor LH connector D9.

Main power window and door lock/un- lock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D12	12	D9	4	Yes

Is the inspection result normal?

- YES >> Check main power window and door lock/unlock switch. Refer to PWC-33, "POWER WINDOW MAIN SWITCH: Component Inspection".
- NO >> Repair or replace the harness or connectors.

6. CHECK HARNESS CONTINUITY 3

Disconnect main power window and door lock/unlock switch.

ENCODER

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

2. Check continuity between main power window D12 and door lock/unlock switch connector and front power window motor LH connector D9.

Main power window and door lock/unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D12	4	D9	6	Yes
D12	5	Бэ	5	162

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	01	Continuity
D12	4	Ground	No
	5		NO

Is the inspection result normal?

YES >> Replace front power window motor LH. Refer to <u>GW-16</u>, "<u>Removal and Installation - Front Regulator</u>". After that, refer to <u>PWC-49</u>, "<u>DRIVER SIDE</u>: <u>Special Repair Requirement</u>".

NO >> Repair or replace harness or connectors.

DRIVER SIDE: Special Repair Requirement

.

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-27, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

PWC

Α

В

D

Е

F

INFOID:0000000009460868

Ν

0

Р

Revision: November 2013 PWC-49 2014 Altima NAM

DOOR SWITCH

Description

Detects door open/close condition.

Component Function Check

INFOID:0000000009460870

1. CHECK FUNCTION

(II) With CONSULT

Check door switches DOOR SW-DR, DOOR SW-AS in Data Monitor mode with CONSULT.

Monitor item	Condition
DOOR SW-DR	CLOSE → OPEN: OFF → ON
DOOR SW-AS	GLOGE 7 OF EIN. OFF 7 OIN

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to PWC-50, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009460871

Regarding Wiring Diagram information, refer to DLK-51, "Wiring Diagram".

1. CHECK DOOR SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Check signal between BCM connector and ground with oscilloscope.

	Terminals					
(+)			Door co	ndition	Voltage (V)	
BCM connector	Terminal	(-)			(Approx.)	
				OPEN	0	
M19	96	Ground	Front door switch LH	CLOSE	(V) 15 10 5 0 10 ms JPMIA0011GB	
14110		Cround	Front door switch RH	OPEN	0	
	94			CLOSE	(V) 15 10 5 0 10 ms JPMIA0011GB	

Is the inspection result normal?

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

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

2.check door switch circuit

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM connector and door switch connector.

BCM connector	Terminal	Door switch connector	Terminal	Continuity
M19	96	Front door switch LH	Ground part of	Yes
	94	Front door switch RH	door switch	163

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M19	96	Ground	No
	94		INO

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and door switch.

3. CHECK DOOR SWITCH

Refer to PWC-51, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4

NO >> Replace malfunctioning door switch.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:000000009460872

1. CHECK DOOR SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect door switch connector.
- 3. Check door switch.

Terminal		Door switch condition	Continuity	
Door switch		Door switch condition		
3	Ground part of	Pressed	No	
	door switch	Released	Yes	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunctioning door switch.

PWC

J

Α

В

D

Е

F

Н

. ...

M

Ν

POWER WINDOW LOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

POWER WINDOW LOCK SWITCH

Description INFOID:000000009460873

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:0000000009460874

1. CHECK POWER WINDOW LOCK SIGNAL

Exchanges for a normal main power window and door lock/unlock switch, and operation is checked. Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-65, "Removal and Installation". After that, refer to PWC-52, "Special Repair Requirement".

NO >> Check condition of harness and connector.

Special Repair Requirement

INFOID:0000000009460875

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-27</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-43, "Intermittent Incident".

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

< SYMPTOM DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

SYMPTOM DIAGNOSIS

POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCHES

Diagnosis Procedure

INFOID:0000000009460876

Α

В

D

Е

F

Н

1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to BCS-74, "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

Check main power window and door lock/unlock switch.

Refer to PWC-33, "POWER WINDOW MAIN SWITCH: Component Inspection".

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 power supply and ground circuit

Check main power window and door lock/unlock switch power supply and ground circuit. Refer to PWC-30, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

PWC

M

Ν

0

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009460877

1. CHECK FRONT POWER WINDOW MOTOR LH

Check front power window motor LH.

Refer to PWC-40, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

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

Check power window and door lock/unlock switch RH.

Refer to PWC-34, "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-42, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

PWC

Α

В

D

Е

F

Н

В. Л

Ν

0

Р

Revision: November 2013 PWC-55 2014 Altima NAM

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009460879

1. CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH.

Refer to PWC-37, "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-43, "REAR LH: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE Diagnosis Procedure

1. CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.

Refer to PWC-37, "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-42, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

PWC

J

Α

В

C

D

Е

F

Н

M

Ν

0

Р

Revision: November 2013 PWC-57 2014 Altima NAM

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

< SYMPTOM DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

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

Diagnosis Procedure

INFOID:0000000009460881

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-27, "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-47, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

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

< SYMPTOM DIAGNOSIS >

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE) Α Diagnosis Procedure INFOID:0000000009460882 1. PERFORM INITIALIZATION PROCEDURE В Perform initialization procedure. Refer to PWC-27, "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. D 2. CHECK DOOR WINDOW SLIDING PART · A foreign material adheres to window glass or glass run rubber. Е 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. $oldsymbol{3}$. CHECK ENCODER CIRCUIT Check encoder circuit. Refer to PWC-47, "DRIVER SIDE: Component Function Check". Is the inspection result normal? Н YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident". NO >> Repair or replace the malfunctioning parts.

PWC

Ν

0

Р

PWC-59 Revision: November 2013 2014 Altima NAM

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

Diagnosis Procedure

INFOID:0000000009460883

1. CHECK FRONT DOOR SWITCH

Check front door switch.

Refer to <u>DLK-100</u>, "<u>Diagnosis Procedure</u>".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

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

INFOID:0000000009460884

Replace main power window and door lock/unlock switch.

Refer to PWC-65, "Removal and Installation". After that, PWC-27, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

>> Inspection End.

D

Α

В

С

Ε

F

Н

J

PWC

L

M

Ν

0

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

< SYMPTOM DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

Diagnosis Procedure

INFOID:0000000009460885

1. PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.

Refer to PWC-27, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 2.

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

Check front door lock assembly LH (door key cylinder switch).

Refer to PWC-52, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> GO TO 1.

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH FRONT ONLY ANTI-PINCH]

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE	ı
Diagnosis Procedure	А
1. CHECK REMOTE KEYLESS ENTRY FUNCTION	В
Check remote keyless entry function.	
Is the inspection result normal?	0
YES >> GO TO 2.	С
NO >> Refer to <u>DLK-144, "Component Function Check"</u> .	
2.CHECK POWER WINDOW OPERATION	D
Check power window operation.	
In the inspection result normal?	Е
YES >> GO TO 3. NO >> Refer to <u>PWC-40, "DRIVER SIDE : Diagnosis Procedure"</u> .	
3.CONFIRM THE OPERATION	
Confirm the operation again.	F
Is the inspection result normal?	
YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident". NO >> GO TO 1.	G
	Н
	1
	J
	PWC
	L
	M
	Ν
	0

PRE-INSPECTION FOR DIAGNOSTIC

< PERIODIC MAINTENANCE >

[LH FRONT ONLY ANTI-PINCH]

PERIODIC 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.

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH [LH FRONT ONLY ANTI-PINCH]

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Removal and Installation

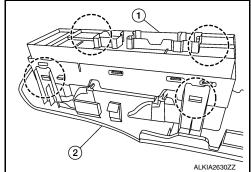
REMOVAL

- 1. Remove the front door pull handle outer finisher using a suitable tool.
- Release the pawls using a suitable tool and lift the main power window and door lock/unlock switch and finisher as an assembly by starting at the rear, then pull upward and remove.
- Disconnect the harness connector from the main power window and door lock/unlock switch. 3.
- Release the four pawls (two on each side) using a suitable tool, then separate the main power window and door lock/unlock switch (1) from the main power window and door lock switch finisher (2).

(): Pawl

CAUTION:

Do not bend back the pawls on the switch finisher too far or breakage may occur.



INSTALLATION

Installation is in the reverse order of removal.

NOTE:

When the main power window and door lock/unlock switch is disconnected from the harness connector it is necessary to perform the initialization procedure. Refer to PWC-27, "ADDITIONAL SERVICE WHEN REMOV-ING BATTERY NEGATIVE TERMINAL: Special Repair Requirement".

Α

В

D

Е

F

Н

INFOID:0000000009460888

PWC

Ν

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

< REMOVAL AND INSTALLATION >

[LH FRONT ONLY ANTI-PINCH]

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Removal and Installation

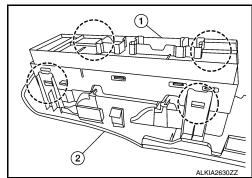
INFOID:0000000009460889

REMOVAL

- 1. Remove the front door pull handle outer finisher using a suitable tool.
- 2. Release the pawls using a suitable tool and lift the power window switch and door lock/unlock switch RH finisher as an assembly by starting at the rear, then pull upward and remove.
- 3. Disconnect the harness connector from the power window and door lock/unlock switch RH.
- Release the four pawls (two on each side) using a suitable tool, then separate the power window and door lock/unlock switch RH (1) from the power window and door lock/unlock switch RH finisher (2).



Do not bend back the pawls on the switch finisher too far or breakage may occur.



INSTALLATION

Installation is in the reverse order of removal.

REAR POWER WINDOW SWITCH

< REMOVAL AND INSTALLATION >

[LH FRONT ONLY ANTI-PINCH]

REAR POWER WINDOW SWITCH

Removal and Installation

INFOID:0000000009460890

Α

В

C

D

Е

F

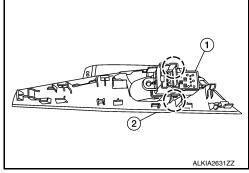
Н

REMOVAL

- Release the pawls using a suitable tool and lift the rear power window switch and finisher as an assembly by starting at the rear, then pull upward and remove
- 2. Disconnect the harness connector from the rear power window switch.
- 3. Release the pawl (one on each side) using a suitable tool, then separate the rear power window switch (1) from the rear power switch finisher (2).



Do not bend back the pawls on the switch finisher too far or breakage may occur.



INSTALLATION

Installation is in the reverse order of removal.

PWC

IVI

0

Ν

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. 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 three minutes before performing any service.

Precaution for Work

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:
- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.
- Oily dirt:
- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

	PREPARATION		
< PREPARATION >		[LH & RH FRONT	ANTI-PINCH]
PREPARATION			
PREPARATION			
Special Service Tool			INFOID:0000000009460893
The actual shapes of the tools may differ fr	om those illustrated here.		
Tool number (TechMate No.) Tool name		Description	-
		Removing trim components	
(J-46534) Trim Tool Set	AWJIA0483ZZ		
	AWJINO4002Z		
			Р

Ν

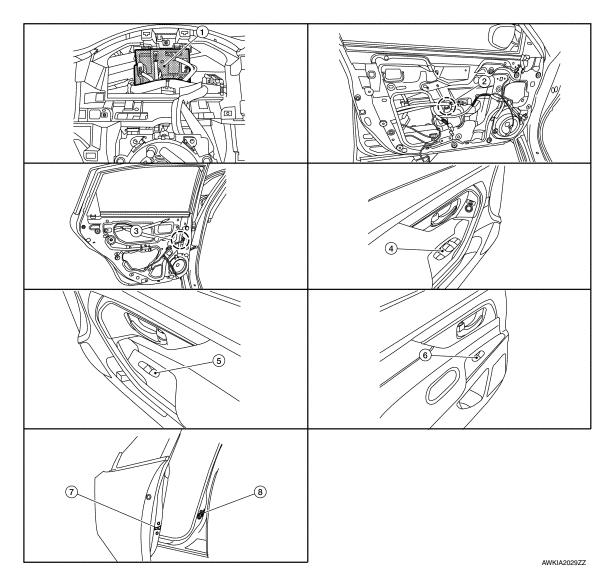
0

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000009460894



- BCM (view with combination meter removed)
- 4. Main power window and door lock/ unlock switch
- 7. Front door lock assembly LH (key cylinder switch)
- Front power window motor LH (RH similar)
- Power window and door lock/unlock 6. switch RH
- B. Front door switch LH (RH similar)
- Rear power window motor LH (RH similar)
- Rear power window switch LH (RH similar)

Component Description

FRONT WINDOW ANTI-PINCH SYSTEM

INFOID:0000000009460895

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[LH & RH FRONT ANTI-PINCH]

Component	Function	
BCM	Supplies power to power window switches.Controls retained power.	
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	 Integrates the ENCODER POWER and WINDOW MOTOR. Starts operating with signals from main power window and door lock/unlock switch & power window and door lock/unlock switch RH. Transmits power window motor rotation as a pulse signal to main power window and door lock/unlock switch. 	
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.	
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.	

PWC

J

Α

В

С

 D

Е

F

G

Н

 \mathbb{N}

Ν

0

Р

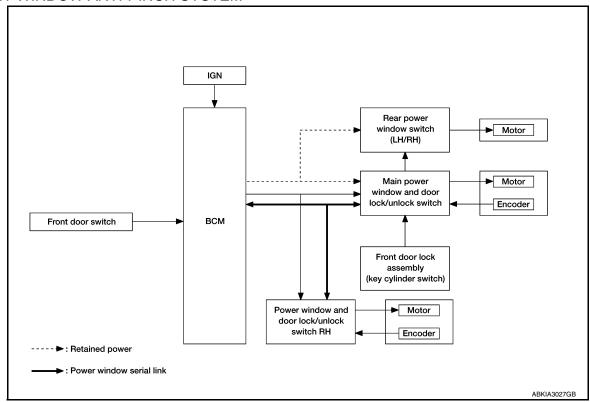
Revision: November 2013 PWC-71 2014 Altima NAM

SYSTEM

System Diagram

INFOID:0000000009460896

FRONT WINDOW ANTI-PINCH SYSTEM



System Description

INFOID:0000000009460897

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)		Front power window motor
Encoder	Encoder pulse signal	Power window control	
Main power window and door lock/unlock switch	Front power window motor LH UP/ DOWN signal		
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 AND DOOR LOCK/UNLOCK SWITCH INPUT/OUTPUT SIGNAL CHART

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 activated by the power window switch when the ignition switch is in the ON position or during the retained power operation after ignition switch turns OFF.
- Power window main switch (driver side) can open/close all windows.
- Front & rear power window switch can open/close the corresponding windows.
- If door glass receives resistance that is more than the specified value and the power window is in the AUTO-UP operation (Front LH & RH), power window will move in the reverse direction (Anti-Pinch Function).

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.
- AUTO function does not operate if 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 FUNCTION

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 (5.9 in.) 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 (5.9 in.) 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

Revision: November 2013

· Ignition switch OFF

PWC

Ν

Н

Α

В

D

< SYSTEM DESCRIPTION >

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

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

Malfunction	Malfunction 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 that 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 that 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.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[LH & RH FRONT ANTI-PINCH]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000009955266

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF \rightarrow ON (for at least 5 seconds) \rightarrow OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and a no-start condition.

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description					
Ecu Identification	The BCM part number is displayed.					
Self Diagnostic Result	The BCM self diagnostic results are displayed.					
Data Monitor	The BCM input/output data is displayed in real time.					
Active Test	The BCM activates outputs to test components.					
Work support	The settings for BCM functions can be changed.					
Configuration	 The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM. 					
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.					

SYSTEM APPLICATION

BCM can perform the following functions.

				Direct D	Diagnosti	c Mode		
System	Sub System	Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×	×		
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Remote keyless entry system	MULTI REMOTE ENT			×	×	×		
Exterior lamp	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	ВСМ	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Trunk open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		

Revision: November 2013 PWC-75 2014 Altima NAM

Е

D

Α

В

F

G

Н

PWC

Ν

 \circ

Р

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[LH & RH FRONT ANTI-PINCH]

				Direct [Diagnosti	c Mode		
System Sub System		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

RETAINED PWR

RETAINED PWR: CONSULT Function (BCM - RETAINED PWR)

INFOID:0000000009955267

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF \rightarrow ON (for at least 5 seconds) \rightarrow OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and a no-start condition.

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.			

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[LH & RH FRONT ANTI-PINCH]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

ECU	Reference
	BCS-31, "Reference Value"
DCM	BCS-50, "Fail Safe"
BCM	BCS-50, "DTC Inspection Priority Chart"
	BCS-52, "DTC Index"

PWC

J

Α

В

С

 D

Е

F

G

Н

INFOID:0000000009460901

L

M

Ν

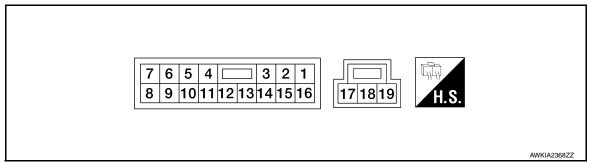
0

Р

POWER WINDOW MAIN SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Termina	al No.	Description			Voltage
+	-	Signal name	Input/ Output	Condition	(Approx.)
1 (B)	Ground	Ground	_	_	0
3 (P)	Ground	Door key cylinder switch LH LOCK signal	Input	Key position (Neutral/Unlocked → Locked)	5 → 0
4 (BG)	12	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0 10 ms
5 (R)	12	Encoder pulse signal 1	Input	When power window motor operates.	(V) 6 4 2 0 10 ms
6 (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 (V)	Ground	Rear power window motor RH UP signal	Output	When rear RH switch in power window main switch is operated UP.	Battery voltage
8 (L)	Ground	Rear power window motor LH DOWN signal	Output	When rear LH switch in power window main switch is operated DOWN.	Battery voltage
9 (Y)	Ground	Rear power window motor LH UP signal	Output	When rear LH switch in power window main switch is operated UP.	Battery voltage

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

[LH & RH FRONT ANTI-PINCH]

	Termina	ıl No.	Description			Voltage
	+	-	Signal name	Input/ Output	Condition	(Approx.)
					IGN SW ON	Battery voltage
	10 (BR)	Ground	RAP signal	Input	Within 45 second after ignition switch is turned to OFF.	Battery voltage
	(211)				When front LH or RH door is opened during retained power operation.	0
	11 (P)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window timer operating.	(V) 15 10 5 0 10 ms JPMIA0013GB
	12 (P)	Ground	Encoder ground	_	_	0
(14 (LG)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates.	10
	15 (G)	Ground	Door key cylinder switch LH UNLOCK signal	Input	Key position (Neutral/Locked → Unlocked)	5 → 0
	17 (W)	19	Front door power window motor LH UP signal	Output	When front LH switch in power window main switch is operated UP.	Battery voltage
	18 (LG)		Battery power supply	Input	_	Battery voltage
	19 (R)	17	Front door power window motor LH DOWN signal	Output	When front LH 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).

Revision: November 2013 PWC-79 2014 Altima NAM

PWC

Α

В

D

Е

F

Н

M

N

0

Р

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

[LH & RH FRONT ANTI-PINCH]

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

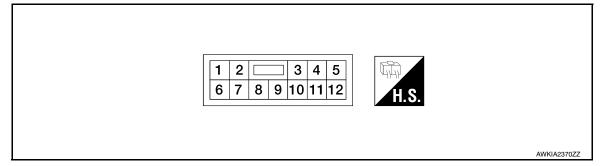
Perform initial operation to recover when switched to fail-safe mode. However, it switches back to fail-safe control when malfunction is found in power window switch or in motor.

FRONT POWER WINDOW SWITCH

FRONT POWER WINDOW SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Termi	inal No.	Description			Voltage
+	-	Signal name	Input/ Output	Condition	(Approx.)
3 (P)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window timer operating.	(V) 15 10 5 0 10 ms JPMIA0013GB
4 (BG)	Ground	Encoder ground	_	_	0
5 (W)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates	10
7 (B)	Ground	Ground	_	_	0
8 (LG)	Ground	Battery power supply	Input	_	Battery voltage
9 (LG)	4	Encoder pulse signal 1	Input	When power window motor operates.	(V) 6 4 2 0 10 ms JMKIA0070GB
10 (G)	4	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0

Revision: November 2013 PWC-81 2014 Altima NAM

PWC

J

В

D

Е

F

Н

Ν

 \circ

Р

JMKIA0070GB

FRONT POWER WINDOW SWITCH

< ECU DIAGNOSIS INFORMATION >

[LH & RH FRONT ANTI-PINCH]

Termi	nal No.	Description			Voltage
+	-	Signal name	Input/ Output	Condition	(Approx.)
11 (R)	12	Power window motor UP signal	Output	When power window motor is UP at operated.	Battery voltage
12 (P)	11	Power window motor DOWN signal	Output	When power window motor is DOWN at operated.	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.

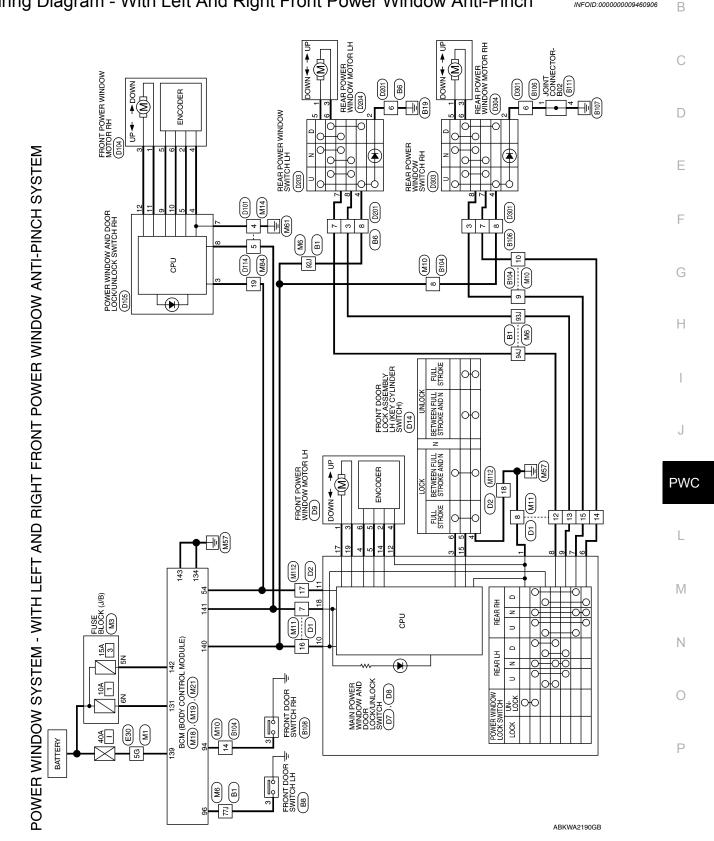
Α

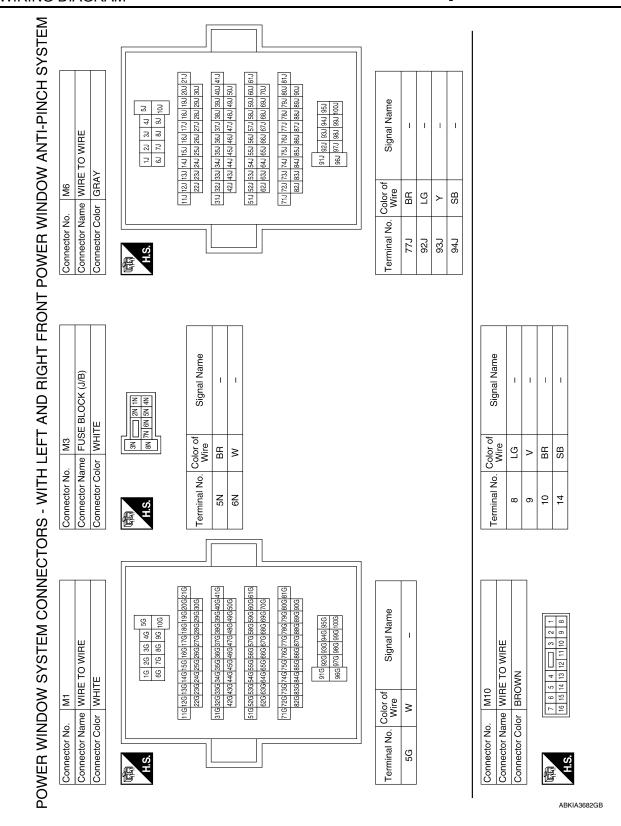
INFOID:0000000009460906

WIRING DIAGRAM

POWER WINDOW SYSTEM

Wiring Diagram - With Left And Right Front Power Window Anti-Pinch





Α

В

С

 D

Е

F

G

Н

J

PWC

 \mathbb{N}

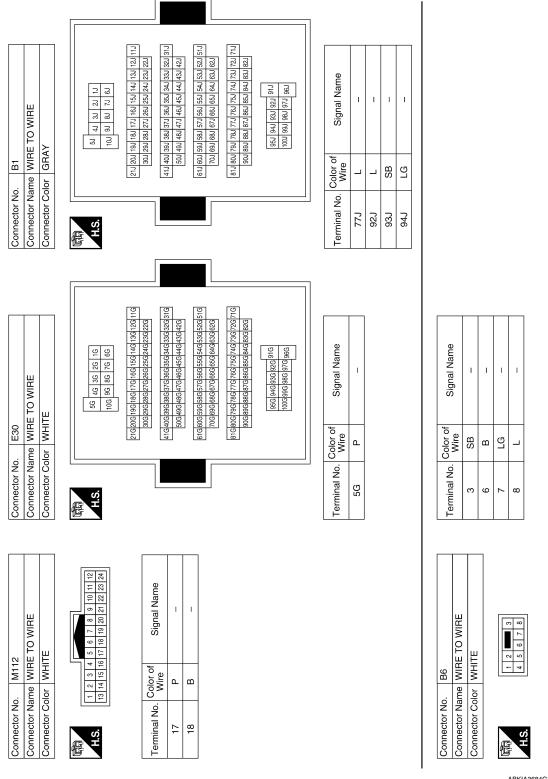
Ν

0

Р

Connector Color WHITE	lor WHITE				WHITE	Connector Color BLACK
H.S.	8 9 10	3	所.S.	- 4	8 2 9 9 2 S	斯 H.S.
Terminal No.	Color of Wire	Signal Name	Terminal No.	Color of Wire	Signal Name	60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 42 41 70 70 70 75 74 77 77 77 77 77 77 77 77 77 77 77 77
7	>	ı	4	GR	ı	
8	В	ı	5	_	ı	. (
12	SB	1				Terminal No. Color of Signal Name Wire
13	\	I				NI Md d 45
14	BB	ı				-
15	>	1				
16	ГG	ı				
	MOD :	MODULE)			MODÜLE)	Connector Color WHITE
Connector Color	lor GRAY	>	Connector Color	-	WHITE	
H.S.	92 91 90 89 88 104 103 102 101 100	88 87 86 85 84 83 82 81 81 80 89 81 82 81 81 82 81 81 82 81 81 81 81 81 81 81 81 81 81 81 81 81	H.S.	137 36 1	127 128 128 128 128 128 128 128	H.S. 13 14 15 16 17 18 19 20 21 22 23 24
Terminal No.	Color of Wire	Signal Name	Terminal No.	Color of Wire	Signal Name	Terminal No. Color of Wire Signal Name
94	SB	AS DOOR SW	131	Μ	BAT BCM FUSE	19 P –
96	BR	DR DOOR SW	134	В	GND2	
			139	Μ	BAT POWER F/L	
			140	ГG	P/W POWER SUPPLY IGN	
			141	>	P/W POWER SUPPLY BAT	
			142	ВВ	BAT FRONT DOOR	
			143	В	GND1	

Revision: November 2013 PWC-85 2014 Altima NAM



ABKIA3684GB

			А
	Vame	Yame	В
MIRE TO WIRE WHITE 1 2	Signal Name	Signal Name	С
	Color of Wire V V SB SB SB	Old D1 Old WIRE TO W Color of S 4 Old Old	D
Connector No. Connector Name Connector Color H.S.	Terminal No.	Connector No. D1 Connector Name WIRE TO WIRE Connector Color WHITE	Е
			F
BROWN 1 2 3	Signal Name	Connector No. B111	G H
B104 NMRE TC BROWN 1 2 3	Color of Wire V V V SB	Color of BI Signature B B B B B B B B B B B B B B B B B B B	I
Connector No. B104 Connector Name WIRE TO WIRE Connector Color BROWN 2 3	7 Terminal No. C	Connector No. B111 Connector Name JOINT (Connector Color WHITE) Terminal No. Wire H B H B B A B B B B B B B B B B B B B B	J
			PWC
эв ѕwітсн ін	Signal Name	Signal Name	L
FRONT DOOR SWIT		WHITE Sire of Si	M
ctor No.	Terminal No. Color of Wire 3 L	Connector No. B108 Connector Name FRONT DOOR SWIT Connector Color WHITE H.S. Terminal No. Wire Signal Na 3 L -	N
Conne Conne H.S.	Tem		0
		ABKIA3685GB	Р

Revision: November 2013 PWC-87 2014 Altima NAM

ENCODER SIG2 ENCODER SIG1

BG

α

2

ᡅ

Signal Name GND

Color of Wire

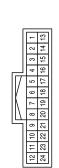
Terminal No.

В

N က

Signal Name	UNLOCK	RR UP	AS UP	ENCODER SIG2	IGN	COM	ENCODER GND	1	ENCODER +	UNLOCK	ı
Color of Wire	SB	>	_	У	BR	۵	Ь	_	ГG	9	_
Terminal No.	9	7	8	6	10	11	12	13	14	15	16

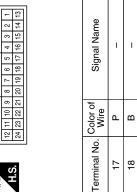
Connector No.	20
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color WHITE	MHITE

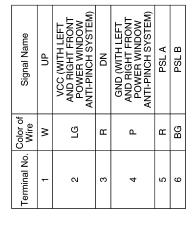


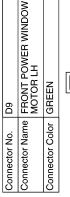
Connector Name | WIRE TO WIRE Connector Color WHITE

D5

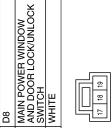
Connector No.











Connector Name

Connector No.

WHITE	18 19	Signal Name	DR UP	BAT	NG BG
lor WHI		Color of Wire	Μ	ГG	В
Connector Color WHITE	崎 H.S.	Terminal No.	17	18	61

ABKIA4826GB

Connector No. D114
Connector Name WIRE TO WIRE

Connector Color WHITE

Signal Name

Color of Wire

Terminal No. 19

۵

	FRONT POWER WINDOW MOTOR RH (WITH LEFT AND RIGHT POWER	WINDOW ANTI-PINCH SYSTEM) GREEN	2 3	5 6	Signal Name		UP SW	VCC	DOWN SW	GND	PULSE A	PULSEB
D104		SYS SYS	7(-		Color of	D .	В	>	۵	BG	ГG	C
Connector No.	Connector Name	WINDO SYSTEN Connector Color GREEN		AHS.	Terminal No.		1	7	က	4	2	œ
	ro wire	~ .	† †	Signal Name	1	1						
D101	ne WIRE 1	1 0	•	Solor of Wire	В	FG						
Connector No.	Connector Name WIRE TO WIRE Connector Color WHITE		H.S.	Terminal No. Wire	4	2						

Signal Name	-	ı	COM	ENCODER GND	ENCODER +	I	GND	BAT	ENCODER SGN1	ENCODER SGN2	UP	DOWN
Color of Wire	-	1	۵	BG	>	1	В	ГG	ГG	5	œ	۵
Terminal No.	1	2	က	4	2	9	2	8	6	10	11	12

Connector No.	, D14		
Connector Name	me FRC ASS	FRONT DOOR LOCK ASSEMBLY LH	
Connector Color	lor GRAY	47	
2	1 2	3 4 5 6	
Terminal No.	Color of Wire	Signal Name	
4	В	ı	
9	9	-	
9	Ь	1	

Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color WHITE	WHITE
S.H	1 2 3 4 5 6 7 8 9 10 11 12

ABKIA4827GB

Α

В

C

 D

Е

F

G

Н

J

PWC

M

Ν

0

Р

	Connector No. D203	Connector No. D204	D204
	Connector Name REAR POWER WINDOW SWITCH LH	Connector Name	Connector Name REAR POWER WINDOW MOTOR LH
1 1	Connector Color WHITE	Connector Color GREEN	GREEN
11	88 37 7 6 5 6 7 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	H.S.	- 4 \(\times \)
ı ⊼ <	Color of Signal Name Signal Name	Terminal No. Wire	olor of Signal Name
ı —	ا ا	-	-
ľ	1	ď	ا

1	0 C C C C C C C C C	Signal Name	I	ı	1	ı	Ī	ı	
lor	8 3	Color of Wire	В	>	_	ΓG	BR	^	
Connector Color WHITE	H.S.	erminal No.	2	4	2	9	7	8	

<u>-</u>	WIRE TO WIRE	ITE	7 6 5 4	Signal Name	ı	-	ı	ı	
D201		or WH	8 3	Color of Wire	۸	В	BB	Υ	
Connector No.	Connector Name	Connector Color WHITE	प्रोक्ते H.S.	Terminal No.	3	9	7	8	

	MO			Ф		
4	REAR POWER WINDOW MOTOR RH	EN	0 P	Signal Name	ı	I
. D304		lor GREEN	- 4	Color of Wire	٦	LG
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	-	8

33	REAR POWER WINDOW SWITCH RH	WHITE	6 5 4	Signal Name	1	ı	ı	I	I	1
. D303		_	8 3	Color of Wire	В	>	_	ല	BB	>
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	2	4	വ	9	7	8

Connector Name	me WIF	WIRE TO WIRE
Connector Color	lor WHITE	ITE
原 H.S.		3 7 6 5 4 4
Terminal No.	Color of Wire	Signal Name
3	۸	ı
9	В	ı
7	на	ı
8	λ	I

ABKIA4828GB

Connector No. D301

Α

D

Е

PWC

Ν

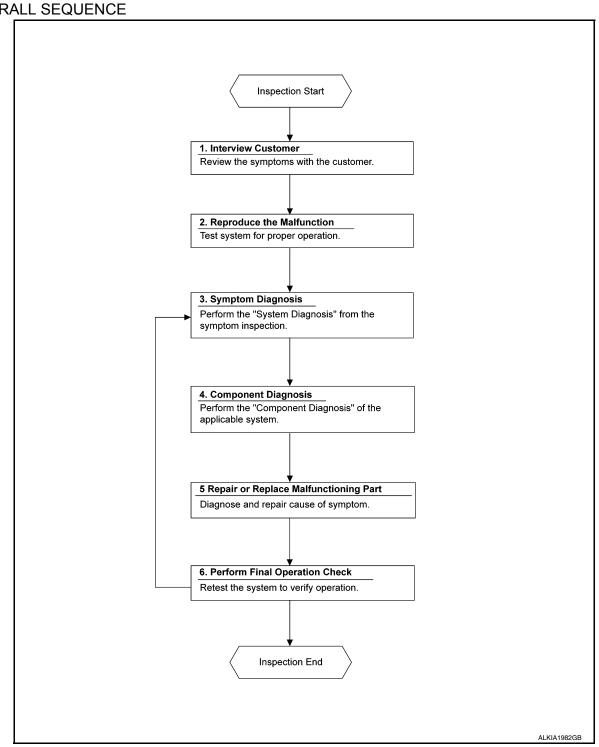
Р

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow INFOID:0000000009460907 В

OVERALL SEQUENCE



DETAILED FLOW

1. OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurred.

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[LH & RH FRONT ANTI-PINCH]

>> GO TO 2.

2. CONFIRM THE SYMPTOM

Check the malfunction on the vehicle that the customer describes.

Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 3.

3. IDENTIFY THE MALFUNCTIONING SYSTEM WITH SYMPTOM DIAGNOSIS

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

>> GO TO 4.

4. PERFORM THE COMPONENT DIAGNOSIS OF THE OF THE APPLICABLE SYSTEM

Perform the diagnosis with Component diagnosis of the applicable system.

>> GO TO 5.

5. REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

6. FINAL CHECK

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

Are the malfunctions corrected?

YES >> Inspection End.

NO >> GO TO 3.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH & RH FRONT ANTI-PINCH]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description INFOID:0000000009460908

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:0000000009460909

INITIALIZATION PROCEDURE

- Disconnect battery minus terminal or power window main switch connector. 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.
- Place a piece of wood near fully closed position.
- Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm (5.91 in.) 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-79, "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
- Retained power operation when ignition switch is OFF.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

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:0000000009460911

INITIALIZATION PROCEDURE

PWC

Α

В

D

Е

Н

N

INFOID:0000000009460910

Р

PWC-93 Revision: November 2013 2014 Altima NAM

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[LH & RH FRONT ANTI-PINCH]

- 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.
- 3. Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm (5.91 in.) 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-79, "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.

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM: Diagnosis Procedure

INFOID:0000000009955268

Α

В

D

Е

Regarding Wiring Diagram information, refer to BCS-55, "Wiring Diagram".

1. CHECK FUSE AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuse and fusible link No.
139	Fusible link battery power	I (40A)
131	BCM battery fuse	1 (10A)

Is the fuse or fusible link blown?

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

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

- 1. Disconnect BCM connector M21.
- Check voltage between BCM connector M21 terminals 131, 139 and ground.

В	CM	Ground	Voltage (Approx.)	
Connector	Terminal	Giodila	(Approx.)	
M21	131		Pottony voltage	
IVIZ I	139	_	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M21 terminals 134, 143 and ground.

В	CM	Ground	Continuity	
Connector	Terminal	Ground	Continuity	
M21	134		Yes	
IVIZ1	143	_	165	

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

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.

PWC

Ν

INFOID:0000000009460913

Revision: November 2013 PWC-95 2014 Altima NAM

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

POWER WINDOW MAIN SWITCH: Component Function Check

INFOID:0000000009460914

Main Power Window And Door Lock/unlock Switch

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

Check power window motor operation with main power window and door lock/unlock switch.

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-96, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

INFOID:0000000009460915

Regarding Wiring Diagram information, refer to <u>PWC-83</u>, "Wiring Diagram - With Left And Right Front Power <u>Window Anti-Pinch"</u>.

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

1. CHECK POWER SUPPLY CIRCUIT

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

(+)			Voltage (Approx.)	
Main power window and door lock/un- lock switch connector	Terminal	(-)		
D7	10	Ground	Battery voltage	
D8	18	Giodila	Dattery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM, main power window and door lock/unlock switch, power window and door lock/unlock switch RH, rear power window switch LH and rear power window switch RH.
- 3. Check continuity between BCM connector and main power window and door lock/unlock switch connectors.

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M21	140	D7	10	Yes
IVIZ I	141	D8	18	163

4. Check continuity between BCM connector M21 and ground.

BCM connector	Terminal		Continuity	
M21	140	Ground	No	
IVIZ I	141		NO	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the harness or connectors.

$3.\,$ CHECK GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

- 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 D7 and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D7	1		Yes

Is the inspection result normal?

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.

YES >> Check main power window and door lock/unlock switch output signal (front power window switch LH) GO TO 7.

NO >> Repair or replace the harness and connectors.

4. CHECK BCM OUTPUT SIGNAL

- Connect BCM.
- 2. Turn ignition switch ON.
- 3. Check voltage between BCM connector M21 and ground.

	Valla e a		
(+)		()	Voltage (Approx.)
BCM connector	Terminal	(-)	()
M21	140	Ground	Pattony voltago
IVIZ I	141	Giouna	Battery voltage

Is the measurement value within the specification?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

${f 5.}$ 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 connector D7 and ground.

-	Terminal				
(+)			Window switch	Voltage	
Main power window and door lock/unlock switch connector	Terminal	(–)	position (rear LH)	(Approx.)	
	8	Ground	UP	Battery voltage	
D7			DOWN	0	
DI.	9		UP	0	
			DOWN	Battery voltage	

Is the inspection result normal?

NO

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

>> Replace main power window and door lock/unlock switch. Refer to PWC-142, "Removal and <a href="Installation". After that, refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

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

- 1. Connect main power window and door lock/unlock switch.
- 2. Turn ignition switch ON.
- Check voltage between main power window and door lock/unlock switch connector D7 and ground.

Revision: November 2013 PWC-97 2014 Altima NAM

PWC

Α

В

D

Е

Н

N/I

Ν

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

	Terminal			
(+)			Window switch	Voltage
Main power window and door lock/unlock switch connector	Terminal	(–)	position (rear RH)	(Approx.)
	7	Ground	UP	Battery voltage
D7			DOWN	0
	6		UP	0
			DOWN	Battery voltage

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".
- NO >> Replace main power window and door lock/unlock switch. Refer to PWC-142, "Removal and lnstallation".
- 7. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL (FRONT 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 connector D7 and ground.

	Terminal			
(+)			Window switch	Voltage
Main power window and door lock/unlock switch connector	Terminal	(–)	position (front LH)	(Approx.)
D7	17	Ground	UP	Battery voltage
			DOWN	0
	19		UP	0
			DOWN	Battery voltage

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Replace main power window and door lock/unlock switch. Refer to PWC-142, "Removal and Installation".

POWER WINDOW MAIN SWITCH: Component Inspection

INFOID:0000000009460916

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

1. Check main power window and door lock/unlock switch D7.

Terr	minal	Main power window and do	Continuity	
10	8	Rear LH	UP	
10	7	Rear RH	OF OF	
8	9	Rear LH	NEUTRAL	
6	7	Rear RH	NEOTIVAL	Yes
10	9	Rear LH	DOWN	
10	6	Rear RH		
1	12		-	

^{2.} Check continuity between main power window and door lock/unlock switch D7 (power window lock switch). (Lock operation).

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

Tern	Terminal Main power w		r window and door lock/unlock switch condition	
9		Rear LH		
6		Rear RH	UP	
8		Decrill		No
9	1	Rear LH	NEUTRAL	
7		Door DII	NEOTRAL	
6		Rear RH		
8		Rear LH	DOWN	
7		Rear RH	DOWN	

3. Check continuity between main power window and door lock/unlock switch D7 (power window lock switch). (Unlock operation).

Terr	minal	Main power window and door lock/unlock switch condition		Continuity
9		Rear LH	- UP	
6		Rear RH	- Or	
8		Rear LH		
9	1	ixeai Li i	NEUTRAL	Yes
6	'	Rear RH		
7		ixeai ixii		
8		Rear LH	DOWN	
7		Rear RH	DOWN	

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-142, "Removal and <a href="Installation". After that, refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

POWER WINDOW MAIN SWITCH: Special Repair Requirement

INFOID:0000000009460917

INFOID:0000000009460918

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-93, "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-43, "Intermittent Incident".

$2.\,$ CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Refer to PWC-105, "DRIVER SIDE : Component Function Check".

FRONT POWER WINDOW SWITCH

FRONT POWER WINDOW SWITCH: Description

•

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

PWC

Α

В

D

Е

Н

PVVC

M

0

Р

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

FRONT POWER WINDOW SWITCH : Component Function Check

INFOID:0000000009460919

Power Window And Door Lock/unlock Switch RH

${f 1}$. CHECK FRONT POWER WINDOW MOTOR RH FUNCTION

Check front power window motor RH operation with power window and door lock/unlock switch RH. 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-100, "FRONT POWER WINDOW SWITCH: Diagnosis Procedure".

FRONT POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:0000000009460920

Regarding Wiring Diagram information, refer to PWC-83, "Wiring Diagram - With Left And Right Front Power Window Anti-Pinch".

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 D105 and ground.

Ter			
(+)			Voltage (Approx.)
Power window and door lock/unlock switch RH connector	Terminal	(–)	(Approx.)
D105 8		Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- Disconnect BCM and power window and door lock/unlock switch RH.
- Check continuity between BCM connector M21 and power window and door lock/unlock switch RH connector D105.

BCM connector	Terminal	Power window and door lock/un- lock switch RH connector	Terminal	Continuity
M21	141	D105	8	Yes

4. Check continuity between BCM connector M21 and ground.

BCM connector	Terminal	Ground	Continuity
M21	141	Oround	No

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the harness or connectors.

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 D105 and ground.

Power window and door lock/unlock switch RH	Terminal	Ground	Continuity
D105	7	Olouliu	Yes

Is the inspection result normal?

[LH & RH FRONT ANTI-PINCH] < DTC/CIRCUIT DIAGNOSIS > YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident". NO >> Repair or replace the harness or connectors. Α CHECK BCM OUTPUT SIGNAL Connect BCM. В 2. Turn ignition switch ON. Check voltage between BCM connector M21 and ground. **Terminals** Voltage (+) (Approx.) (-) BCM connector **Terminal** D M21 141 Ground Battery voltage Is the inspection result normal? YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident". Е >> Replace BCM. Refer to BCS-80, "Removal and Installation". NO FRONT POWER WINDOW SWITCH: Special Repair Requirement INFOID:000000009460921 ${f 1}$. PERFORM INITIALIZATION PROCEDURE Perform initialization procedure. Refer to PWC-93. "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement". Is the inspection result normal? Н YES >> GO TO 2. NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident". 2. CHECK ANTI-PINCH OPERATION Check anti-pinch operation. Refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement". Is the inspection result normal? YFS >> Inspection end. >> Refer to PWC-100, "FRONT POWER WINDOW SWITCH: Component Function Check" NO REAR POWER WINDOW SWITCH REAR POWER WINDOW SWITCH: Description INFOID:0000000009460922 BCM supplies power. Rear power window motor will be operated if rear power window switch is operated. Rear power window switch. M REAR POWER WINDOW SWITCH: Component Function Check INFOID:0000000009460923 N Rear Power Window Switch ${f 1}$. CHECK REAR POWER WINDOW MOTOR FUNCTION Check rear power window motor operation with rear power window switch.

Is the inspection result normal?

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

>> Refer to PWC-101, "REAR POWER WINDOW SWITCH: Diagnosis Procedure". NO

REAR POWER WINDOW SWITCH : Diagnosis Procedure

Regarding Wiring Diagram information, refer to PWC-83, "Wiring Diagram - With Left And Right Front Power Window Anti-Pinch".

PWC-101 Revision: November 2013 2014 Altima NAM **PWC**

Р

INFOID:0000000009460924

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

Rear Power Window Switch Power Supply Circuit Check

CHECK POWER SUPPLY CIRCUIT

Check voltage between rear power window switch connector and ground.

	Terminal				
(+)			Condition	Voltage	
	Rear power window switch connector		(–)		(Approx.)
LH	D203	4	Ground	Ignition switch ON	Battery voltage
RH	D303	4	Ground	Ignition switch ON	Battery voltage

Is the inspection result normal?

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 D7 and rear power window switch LH connector D203.

Main power window and door lock/ unlock switch connector	Terminal	Rear power window switch LH connector	Terminal	Continuity
D7	8	D203	7	Yes
	9	D203	8	165

4. Check continuity between main power window and door lock/unlock switch connector D7 and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity
D7	8	Ground	No
יט	9		INU

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the harness or connectors.

$3. \ \mathsf{CHECK} \ \mathsf{HARNESS} \ \mathsf{CONTINUITY} \ (\mathsf{REAR} \ \mathsf{POWER} \ \mathsf{WINDOW} \ \mathsf{SWITCH} \ \mathsf{RH})$

- 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 D7 and rear power window switch RH connector D303.

Main power window and door lock/ unlock switch connector	Terminal	Rear power window switch RH connector	Terminal	Continuity
	6	D303	7	Yes
D1	7	2303	8	163

4. Check continuity between main power window and door lock/unlock switch connector D7 and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity
D7	6	Ground	No
UI	7		INO

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the harness or connectors.

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

CHECK HARNESS CONTINUITY

- Disconnect BCM and rear power window switch.
- Check continuity between BCM connector and rear power window switch connector.

BCM connector	Terminal	Rear power windo	ow switch connector	Terminal	Continuity
M21	140	LH	D203	4	Yes
IVIZ I	140	RH	D303	4 	163

Check continuity between BCM connector M21 and ground.

BCM connector	BCM connector Terminal		Continuity
M21	M21 140		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".

NO >> Repair or replace the harness or connectors.

${f 5}$. CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

Refer to PWC-103, "REAR POWER WINDOW SWITCH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

>> Replace rear power window switch. Refer to PWC-144, "Removal and Installation". NO

REAR POWER WINDOW SWITCH: Component Inspection

COMPONENT INSPECTION

1. CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH D203.

Terr	minal	Power window switch condition	Continuity
4	5	UP	
8	6	UF .	
8	6	NEUTRAL	Yes
5	7	NEOTIVAL	Tes
6	4	DOWN	
5	7	DOWN	

Is the inspection result normal?

YES >> Rear power window switch LH is OK.

NO >> Replace rear power window switch. Refer to PWC-144, "Removal and Installation".

2.CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH D303.

Terr	minal	Power window switch condition	Continuity	
4	5	LID		
7	6	UP		
7	6	NEUTRAL	Yes	
5	8	NEUTRAL	165	
6	4	DOWN		
5	8	DOWIN		

Is the inspection result normal?

PWC-103 Revision: November 2013 2014 Altima NAM **PWC**

Α

В

D

Е

INFOID:0000000009460925

Ν

Р

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

YES >> Rear power window switch RH is OK.

NO >> Replace rear power window switch. Refer to PWC-144, "Removal and Installation".

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000009460926

Α

В

D

Е

Н

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

DRIVER SIDE: Component Function Check

INFOID:0000000009460927

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

Check front power window motor LH operation 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-105, "DRIVER SIDE: Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000009460928

Regarding Wiring Diagram information, refer to <u>PWC-83</u>, "Wiring Diagram - With Left And Right Front Power <u>Window Anti-Pinch"</u>.

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 D9 and ground.

Terminal					
(+)			Main power window and door	Voltage	
Power window motor LH connector	Terminal	(–)	lock/unlock switch condition	(Approx.)	
	1	1	UP	Battery voltage	
D9	'	1	Ground	DOWN	0
Da	3		Ground	UP	0
	3		DOWN	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

$oldsymbol{2}$. CHECK HARNESS CONTINUITY

Turn ignition switch OFF.

Disconnect main power window and door lock/unlock switch and front power window motor LH.

3. Check continuity between main power window and door lock/unlock switch connector D8 and front power window motor connector LH D9.

Main power window and door lock/ unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D8	17	D9	1	Yes
50	19	D9	3	165

4. Check continuity between main power window and door lock/unlock switch connector D8 and ground.

PWC

_

M

Ν

Р

Revision: November 2013 PWC-105 2014 Altima NAM

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

Main power window and door lock/unlock switch connector	Terminal		Continuity
D8	17	Ground	No
D0	19		INU

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-142, "Removal and <a href="Installation". After that, refer to PWC-106, "DRIVER SIDE: Special Repair Requirement".

NO >> Repair or replace the harness or connectors.

3. CHECK POWER WINDOW MOTOR

Check front power window motor LH.

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

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Replace power window motor LH. Refer to <u>GW-16, "Removal and Installation - Front Regulator"</u>. After that, refer to <u>PWC-106, "DRIVER SIDE : Special Repair Requirement"</u>.

DRIVER SIDE : Component Inspection

INFOID:0000000009460929

COMPONENT INSPECTION

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

Check motor operation by connecting the battery voltage directly to power window motor D9.

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

Is the inspection result normal?

YES >> Front power window motor LH is OK.

>> Replace front power window motor LH. Refer to <u>GW-16</u>, "<u>Removal and Installation - Front Regulator</u>". After that, refer to <u>PWC-106</u>, "<u>DRIVER SIDE</u>: <u>Special Repair Requirement</u>".

DRIVER SIDE: Special Repair Requirement

INFOID:0000000009460930

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-93</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-43, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to <u>PWC-93</u>, "<u>ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL</u>: <u>Special</u> Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Refer to PWC-113, "DRIVER SIDE : Component Function Check".

PASSENGER SIDE

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

PASSENGER SIDE: Description

INFOID:000000009460931

Α

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:0000000009460932

CHECK POWER WINDOW MOTOR CIRCUIT

Check power window motor operation with operating main power window and door lock/unlock switch or power window and door lock/unlock switch RH.

Is the inspection result normal?

D

YES >> Front power window motor RH is OK.

NO >> Refer to PWC-107, "PASSENGER SIDE: Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

Е INFOID:0000000009460933

Regarding Wiring Diagram information, refer to PWC-83, "Wiring Diagram - With Left And Right Front Power Window Anti-Pinch".

Front Power Window Motor RH Circuit Check

1. CHECK FRONT POWER WINDOW SWITCH RH OUTPUT SIGNAL

Н

- 1 Turn ignition switch OFF. Disconnect front power window motor RH.
- Turn ignition switch ON.

2.

Check voltage between front power window motor RH connector D104 and ground.

Terminal					
(+)			Front power window motor	Voltage	
Front power window motor RH connector	Terminal	(–) RH C	RH condition	(Approx.)	
	D104		UP	Battery voltage	
D104		ı	Ground	DOWN	0
D10 4		Giouna	UP	0	
3		DOWN	Battery voltage		

PWC

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2. M

Ν

0

Р

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect power window and door lock/unlock switch RH. 2.
- Check continuity between power window and door lock/unlock switch RH connector D105 and front power window motor RH connector D104.

Power window and door lock/un- lock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity	
D105	11	D104	1	Yes	
	12	D104	3	163	

Check continuity between power window and door lock/unlock switch RH connector D105 and ground.

PWC-107 Revision: November 2013 2014 Altima NAM

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

Power window and door lock/unlock switch RH connector	Terminal	Ground	Continuity
D105	11		No
D103	12		

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-143, "Removal and Installation". After that, refer to PWC-108, "PASSENGER SIDE: Special Repair Requirement".

NO >> Repair or replace harness or connectors.

3. CHECK FRONT POWER WINDOW MOTOR RH

Check front power window motor RH.

Refer to PWC-108, "PASSENGER SIDE: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Replace front power window motor RH. Refer to <u>GW-16</u>, "<u>Removal and Installation - Front Regulator</u>". After that, refer to <u>PWC-108</u>, "<u>PASSENGER SIDE</u>: <u>Special Repair Requirement</u>".

PASSENGER SIDE: Component Inspection

INFOID:0000000009460934

COMPONENT INSPECTION

1. CHECK FRONT POWER WINDOW MOTOR RH

Check motor operation by connecting the battery voltage directly to front power window motor RH D104.

Terminal		Motor condition	
(+)	(–)	Wotor Condition	
3	1	DOWN	
1	3	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-16</u>, "Removal and Installation - Front Regulator". After that, refer to <u>PWC-108</u>, "PASSENGER SIDE: Special Repair Requirement".

PASSENGER SIDE: Special Repair Requirement

INFOID:0000000009460935

${f 1}$. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-93</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-43, "Intermittent Incident".

2. CHECK ANTI-PINCH OPERATION

Check anti-pinch operation.

Refer to <u>PWC-93</u>, "<u>ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL</u>: <u>Special</u> Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> Refer to PWC-115, "PASSENGER SIDE : Component Function Check".

RFARIH

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

REAR LH: Description

INFOID:0000000009460936

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

INFOID:0000000009460937

1. CHECK REAR POWER WINDOW MOTOR LH CIRCUIT

Check rear power window motor LH operation with main power window and door lock/unlock switch or rear power window switch LH.

Is the inspection result normal?

NO

D

Α

YES >> Rear power window motor LH is OK.

>> Refer to PWC-109, "REAR LH : Diagnosis Procedure"

REAR LH: Diagnosis Procedure

INFOID:0000000009460938

Regarding Wiring Diagram information, refer to PWC-83, "Wiring Diagram - With Left And Right Front Power Window Anti-Pinch".

Power Window Motor Circuit Check

1. CHECK REAR POWER WINDOW SWITCH OUTPUT SIGNAL

G

Н

- 1. Turn ignition switch OFF.
- 2. Disconnect rear power window motor LH connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between rear power window motor LH connector D204 and ground.

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

PWC

Ν

Р

Is the measurement value within the specification?

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

M

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 D203 and rear power window motor LH connector D204.

Rear power window switch LH con- nector	Terminal	Rear power window motor LH con- nector	Terminal	Continuity	
D203	5	D204	1	Yes	
5200	6	D204	3		

Check continuity between rear power window switch LH connector D203 and ground.

Rear power window switch LH connector	Terminal		Continuity	
D203	5	Ground	No	
	6		INO	

Revision: November 2013 PWC-109 2014 Altima NAM

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

Is the inspection result normal?

YES >> Check rear power window switch LH. Refer to PWC-103, "REAR POWER WINDOW SWITCH: Component Inspection".

NO >> Repair or replace the harness or connectors.

3. CHECK REAR POWER WINDOW MOTOR LH

Check rear power window motor LH.

Refer to PWC-110, "REAR LH: Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident"

NO >> Replace rear power window motor LH. Refer to GW-25, "Removal and Installation".

REAR LH: Component Inspection

INFOID:0000000009460939

COMPONENT INSPECTION

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

Check motor operation by connecting the battery voltage directly to rear power window motor LH D204.

Terr	minal	Motor condition	
(+)	(–)	iviolal 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-25, "Removal and Installation"</u>.

REAR RH

REAR RH: Description

INFOID:0000000009460940

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:0000000009460941

${f 1}$. CHECK REAR POWER WINDOW MOTOR RH CIRCUIT

Check rear power window motor RH operation 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-110, "REAR RH: Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000009460942

Regarding Wiring Diagram information, refer to <u>PWC-83</u>, "Wiring Diagram - With Left And Right Front Power <u>Window Anti-Pinch"</u>.

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.
- 4. Check voltage between rear power window motor RH connector D304 and ground.

[LH & RH FRONT ANTI-PINCH]

Terminal					
(+)			Rear power window	Voltage	
Rear power window motor RH connector	Terminal	(–)	switch RH condition	(Approx.)	
	1 Ground	_	UP	Battery voltage	
D204		1	Onesia	DOWN	0
D304		_	Ground	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 D303 and rear power window motor RH connector D304.

Rear power window switch RH connector	Terminal	Rear power window motor RH con- nector	Terminal	Continuity
D303	5	D304	1	Yes
D303	6	D304	3	163

Check continuity between rear power window switch RH connector D303 and ground.

Rear power window switch RH connector	Terminal		Continuity
D303	5	Ground	No
D303	6	_	

Is the inspection result normal?

>> Check rear power window switch RH. Refer to PWC-103, "REAR POWER WINDOW SWITCH : YES Component Inspection".

NO >> Repair or replace the harness or connectors.

3. CHECK REAR POWER WINDOW MOTOR RH

Check rear power window motor RH.

Refer to PWC-111, "REAR RH: Component Inspection".

Is the inspection result normal?

COMPONENT INSPECTION

YFS >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

>> Replace rear power window motor RH. Refer to GW-25, "Removal and Installation". NO

REAR RH: Component Inspection

1. CHECK REAR POWER WINDOW MOTOR RH

Check motor operation by connecting the battery voltage directly to rear power window motor RH D304.

Terr	minal	Motor condition
(+)	(–)	ivioloi condition
3	1	DOWN
1	3	UP

Is the inspection result normal?

Revision: November 2013

YES >> Rear power window motor RH is OK.

> **PWC-111** 2014 Altima NAM

PWC

Α

В

D

Е

Н

M

INFOID:0000000009460943

0

Р

POWER WINDOW MOTOR

[LH & RH FRONT ANTI-PINCH]

NO >> Replace rear power window motor RH. Refer to <u>GW-25, "Removal and Installation"</u>.

Α

В

D

Е

Н

J

PWC

M

Ν

Р

INFOID:0000000009460945

INFOID:0000000009460946

ENCODER

DRIVER SIDE

DRIVER SIDE: Description

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

1. CHECK ENCODER OPERATION

Check 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-113, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

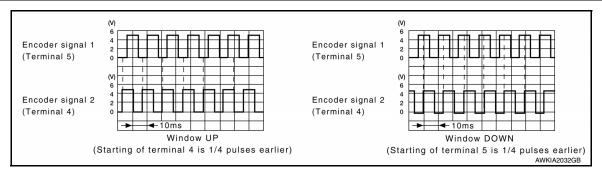
Regarding Wiring Diagram information, refer to PWC-83, "Wiring Diagram - With Left And Right Front Power Window Anti-Pinch".

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 D7 and ground with oscilloscope.

(+)			Signal	
Main power window and door lock/un- lock switch connector	Terminal	(–)	(Reference value)	
D7	4	Ground	Refer to following signal	
D1	5	Ground	ixeler to following signal	



Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> GO TO 2.

$oldsymbol{2}.$ CHECK FRONT POWER WINDOW MOTOR LH POWER SUPPLY

- Turn ignition switch ON.
- Check voltage between front power window motor LH connector D9 and ground.

	Terminal			
(+)			Voltage (Approx.)	
Front power window motor LH connector	Terminal	(–)	(Approx.)	
D9	2	Ground	10	

Is the measurement value within the specification?

YES >> GO TO 4.

NO >> GO TO 3.

$oldsymbol{3}$. 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 D7 and front power window motor LH connector D9.

Main power window and door lock/ unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D7	14	D9	2	Yes

4. Check continuity between main power window and door lock/unlock switch connector D7 and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D7	14		No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-142. "Removal and <a href="Installation". After that, refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

NO >> Repair or replace the harness or connectors.

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 D9 and ground.

Front power window motor LH connector	Terminal	Ground	Continuity
D9	4	Ground	Yes

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK HARNESS CONTINUITY 2

- Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/unlock switch connector D7 and front power window motor LH connector D9.

Main power window and door lock/un- lock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D7	12	D9	4	Yes

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-142, "Removal and <a href="Installation". After that, refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

NO >> Repair or replace the harness or connectors.

6. CHECK HARNESS CONTINUITY 3

ENCODER

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

Disconnect main power window and door lock/unlock switch.

2. Check continuity between main power window and door lock/unlock switch connector D7 and front power window motor LH connector D9.

Main power window and door lock/un- lock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
	5	D9	5	Yes
<i>D1</i>	4	59	6	163

3. Check continuity between main power window and door lock/unlock switch connector D7 and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity
D7	5	Ground	No
D/	4		INO

Is the inspection result normal?

YES >> Replace front power window motor LH. Refer to <u>GW-16</u>, "<u>Removal and Installation - Front Regulator</u>". After that, refer to <u>PWC-93</u>, "<u>ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT</u>: <u>Special Repair Requirement</u>".

NO >> Repair or replace the harness or connectors.

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

Check 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.

NO >> Refer to PWC-115, "PASSENGER SIDE: Diagnosis Procedure".

PASSENGER SIDE: Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>PWC-83</u>, "Wiring Diagram - With Left And Right Front Power Window Anti-Pinch".

1. CHECK ENCODER SIGNAL

- Connect front power window motor RH.
- 2. Turn ignition switch ON.
- 3. Check signal between power window and door lock/unlock switch RH connector D105 and ground with oscilloscope.

(+)			Signal (Reference value)	
Power window and door lock/unlock switch RH connector	Terminal	(–)		
D105	9	Ground	Refer to following signal	

PWC

В

D

Е

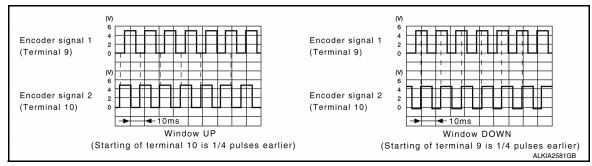
INFOID:0000000009460948

INFOID:0000000009460949

Ν

Р

2014 Altima NAM



Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> GO TO 2.

2. CHECK FRONT POWER WINDOW MOTOR RH POWER SUPPLY

- Turn ignition switch ON.
- Check voltage between front power window motor RH connector D105 and ground.

(+)			Voltage (Approx.)
Front power window motor RH connector Terminal		(–)	(Approx.)
D105	5	Ground	10

Is the inspection result normal?

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.
- Check continuity between power window and door lock/unlock switch RH connector D105 and front power window motor RH connector D104.

Power window and door lock/unlock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity
D105	5	D104	2	Yes

4. Check continuity between power window and door lock/unlock switch RH connector D105 and ground.

Power window and door lock/unlock switch RH connector	Terminal	Ground	Continuity
D105	5		No

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-143, "Removal and Installation". After that, refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROLUNIT: Special Repair Requirement".

NO >> Repair or replace the harness or connectors.

$oldsymbol{4}$. CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect front power window motor RH.
- 3. Check continuity between front power window motor RH connector D104 and ground.

Front power window motor RH connector	Terminal	Ground	Continuity
D104	4	Glound	Yes

Is the inspection result normal?

ENCODER

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

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 D105 and front power window motor RH connector D104.

Power window and door lock/unlock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity
D105	4	D104	4	Yes

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to PWC-143, "Removal and Installation". After that, refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

NO >> Repair or replace the harness or connectors.

6. CHECK HARNESS CONTINUITY 3

1. Disconnect power window and door lock/unlock switch RH.

Check continuity between power window and door lock/unlock switch RH connector D105 and front power window motor RH connector D104.

Power window and door lock/un- lock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity
D105	9	D104	5	Yes
	10	D104	6	163

3. Check continuity between power window and door lock/unlock switch RH connector D105 and ground.

Power window and door lock/unlock switch RH connector	Terminal	01	Continuity
D105	9	Ground	No
D105	10		No

Is the inspection result normal?

YES >> Replace front power window motor RH. Refer to <u>GW-16</u>, "<u>Removal and Installation - Front Regulator</u>". After that, refer to <u>PWC-93</u>, "<u>ADDITIONAL SERVICE WHEN REPLACING CONTROL</u> UNIT: Special Repair Requirement".

NO >> Repair or replace the harness or connectors.

PWC

Α

В

D

Е

Н

7000

M

L

Ν

0

Р

< DTC/CIRCUIT DIAGNOSIS >

DOOR SWITCH

Description INFOID:000000009460950

Detects door open/close condition.

Component Function Check

INFOID:0000000009460951

1. CHECK FUNCTION

(II) With CONSULT

Check door switches DOOR SW-DR, DOOR SW-AS in Data Monitor mode with CONSULT.

Monitor item	Condition	
DOOR SW-DR	CLOSE → OPEN: OFF → ON	
DOOR SW-AS	CLOSE -> OF LIN. OF I -> ON	

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to PWC-118, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009460952

Regarding Wiring Diagram information, refer to DLK-51, "Wiring Diagram".

1. CHECK DOOR SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Check signal between BCM connector and ground with oscilloscope.

Terminals						
(+)		Door condition		Voltage (V)	
BCM connector	Terminal	(–)			(Approx.)	
				OPEN	0	
M19	96	- Ground	Front door switch LH	CLOSE	(V) 15 10 5 0 10 ms JPMIA0011GB	
WITS			Oround		OPEN	0
	94		Front door switch RH	CLOSE	(V) 15 10 5 0 10 ms JPMIA0011GB	

Is the inspection result normal?

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

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

2.check door switch circuit

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM connector and door switch connector.

BCM connector	Terminal	Door switch connector	Terminal	Continuity
M19	96	Front door switch LH	Ground part of	Vac
M19	94	Front door switch RH	door switch	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M19	96	Ground	No
	94		INO

PWC-119

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and door switch.

3. CHECK DOOR SWITCH

Refer to PWC-119, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4

NO >> Replace malfunctioning door switch.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> Inspection End.

Component Inspection

1. CHECK DOOR SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect door switch connector.
- 3. Check door switch.

Terminal		Door switch condition	Continuity	
Door switch		Door switch condition		
3 Ground part of door switch	Ground part of	Pressed	No	
	Released	Yes		

Is the inspection result normal?

Revision: November 2013

YES >> Inspection End.

NO >> Replace malfunctioning door switch.

PWC

Ν

Р

J

INFOID:0000000009460953

Α

В

D

Е

F

Н

2014 Altima NAM

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

DOOR KEY CYLINDER SWITCH

Description INFOID:000000009460954

Power window main switch detects condition of the door key cylinder and transmits to BCM as the LOCK or UNLOCK signals.

Component Function Check

INFOID:0000000009460955

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. Refer to <u>BCS-15</u>, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Monitor item	Condition		
KEY CYL LK-SW	Lock	: ON	
RET CTL LN-SW	Neutral / Unlock	: OFF	
KEY CYL UN-SW	Unlock	: ON	
	Neutral / Lock	: OFF	

Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Refer to PWC-120, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009460956

Regarding Wiring Diagram information, refer to <u>PWC-83</u>, "Wiring Diagram - With Left And Right Front Power <u>Window Anti-Pinch"</u>.

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

- Turn ignition switch ON.
- 2. Check voltage between main power window and door lock/unlock switch connector D7 and ground.

Terminals				
(+) Main power window and door lock/unlock switch connector Terminal			Key position	Voltage
		(–)	, , , , , , , , , , , , , , , , , , , ,	(Approx.)
	3	Ground	Lock	0
D7			Neutral/Unlock	5
	45	Ground	Unlock	0
	15		Neutral/Lock	5

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. After that, refer to PWC-122, "Special Requirement".

NO >> GO TO 2.

2. CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

- Turn ignition switch OFF.
- Disconnect main power window and door lock/unlock switch and front door lock assembly LH (key cylinder switch).
- Check continuity between main power window and door lock/unlock switch connector D7 and front door lock assembly LH (key cylinder switch) connector D14.

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

Main power window and door lock/ unlock switch connector	Terminal	Front door lock assembly LH (key cylinder switch) connector	Terminal	Continuity
	3	D14	6	Yes
D1	15	514	5	163

Check continuity between main power window and door lock/unlock switch connector D7 and ground.

Main power window and door lock/unlock switch connector	Terminal	•	Continuity
D7	3	Ground	No
	15		NO

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connectors.

3. CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between front door lock assembly LH (key cylinder switch) connector D14 and ground.

Front door lock assembly LH (key cylinder switch) connector	Terminal	Ground	Continuity
D14	4		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connectors.

4. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to PWC-121, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Replace front door lock assembly LH (door key cylinder switch). After that, refer to PWC-122, "Special Repair Requirement".

Component Inspection

COMPONENT INSPECTION

1. CHECK DOOR KEY CYLINDER SWITCH

Check front door lock assembly LH (key cylinder switch) D14.

Terminal			
Front door lock assembly LH (key cylinder switch) connector		Key position	Continuity
_		Unlock	Yes
5	_	Neutral/Lock	No
6	4	Lock	Yes
6	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-122, "Special Requirement".

PWC

Α

В

D

Е

Н

. ,,

INFOID:0000000009460957

 \mathbb{N}

Ν

Р

0

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

Special Repair Requirement

INFOID:0000000009460958

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>DLK-84</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-43, "Intermittent Incident".

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

POWER WINDOW SERIAL LINK POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH: Description

INFOID:000000009460959

Α

В

D

Е

Н

PWC

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:0000000009460960

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. Refer to BCS-15, "DOOR LOCK: CONSULT 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-123, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure".

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

INFOID:0000000009460961

Regarding Wiring Diagram information, refer to <u>PWC-83, "Wiring Diagram - With Left And Right Front Power Window Anti-Pinch"</u>.

Power Window Serial Link Check

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

- 1. 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".

Ν

M

Р

Revision: November 2013 PWC-123 2014 Altima NAM

INFOID:0000000009460962

INFOID:0000000009460963

Terminal			Q	
(+)		(_)	Signal (Reference value)	
BCM connector	Terminal	(-)	,	
M18	54	Ground	(V) 15 10 5 0 High and the second of the sec	

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 and main power window and door lock/unlock switch.
- 3. Check continuity between BCM connector M18 and main power window and door lock/unlock switch connector D7.

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M18	54	D7	11	Yes

4. Check continuity between BCM connector M18 and ground.

BCM connector	Terminal	Ground	Continuity
M18	54	Ground	No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-142, "Removal and <a href="Installation". After that, refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

NO >> Repair or replace harness or connectors.

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

$1. \ \mathsf{CHECK} \ \mathsf{POWER} \ \mathsf{WINDOW} \ \mathsf{AND} \ \mathsf{DOOR} \ \mathsf{LOCK/UNLOCK} \ \mathsf{SWITCH} \ \mathsf{RH} \ \mathsf{OUTPUT} \ \mathsf{SIGNAL}$

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to BCS-15. "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

Monitor item	Condition		
CDL LOCK SW	LOCK	: ON	
CDL LOCK 3W	UNLOCK	: OFF	
CDL UNLOCK SW	LOCK	: OFF	
ODE UNLOCK SW	UNLOCK	: ON	

Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to PWC-125, "FRONT POWER WINDOW SWITCH: Diagnosis Procedure".

FRONT POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:0000000009460964

Regarding Wiring Diagram information, refer to <u>PWC-83</u>, "Wiring <u>Diagram - With Left And Right Front Power Window Anti-Pinch"</u>.

Power Window Serial Link Check

${f 1}$. 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				
(+)		()	Signal (Reference value)	
BCM connector	Terminal	(–)	(13.3.3.3.3	
M18	54	Ground	(V) 15 10 5 0 PIIA1297E	

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.
- Disconnect BCM.
- 3. Check continuity between BCM connector M18 and power window and door lock/unlock switch RH connector D105.

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M18	54	D105	3	Yes

4. Check continuity between BCM connector M18 and ground.

BCM connector	Terminal	Ground	Continuity
M18	54	Ground	No

Н

Α

В

D

Е

F

PWC

N.I.

Ν

0

Р

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

Is the inspection result normal?

- YES >> Replace main power window and door lock/unlock switch. Refer to PWC-142, "Removal and <a href="Installation". After that, refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".
- NO >> Repair or replace the harness or connectors.

POWER WINDOW LOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

POWER WINDOW LOCK SWITCH

Description INFOID:0000000009460965

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-142, "Removal and Installation". After that, refer to PWC-127, "Special Repair Requirement".

NO >> Check condition of harness and connector.

Special Repair Requirement

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

PWC

Α

D

Е

Н

INFOID:0000000009460966

INFOID:0000000009460967

N/I

Ν

 \cup

Р

Revision: November 2013 PWC-127 2014 Altima NAM

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

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

SYMPTOM DIAGNOSIS

POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCHES

Diagnosis Procedure

INFOID:0000000009460968

1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to BCS-74, "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

Check main power window and door lock/unlock switch.

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

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 POWER SUPPLY AND GROUND CIRCUIT

Check power window switch main power supply and ground circuit.

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

f 4. 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-123, "POWER WINDOW MAIN SWITCH: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

[LH & RH FRONT ANTI-PINCH]

< SYMPTOM DIAGNOSIS > DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE Α Diagnosis Procedure INFOID:0000000009460969 1. CHECK FRONT POWER WINDOW MOTOR LH В Check front power window motor LH. Refer to PWC-105, "DRIVER SIDE: Component Function Check". C Is the inspection result normal? YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident". NO >> Repair or replace the malfunctioning parts. D Е F Н J

PWC

L

M

Ν

0

Р

FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009460970

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

Check power window and door lock/unlock switch RH.

Refer to PWC-100, "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-124, "FRONT POWER WINDOW SWITCH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

${f 3}.$ CHECK FRONT POWER WINDOW MOTOR RH CIRCUIT

Check front power window motor RH circuit.

Refer to PWC-107, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE	''
Diagnosis Procedure	A 90971
1. CHECK REAR POWER WINDOW SWITCH LH	В
Check rear power window switch LH. Refer to PWC-101, "REAR POWER WINDOW SWITCH: Component Function Check". Is the inspection result normal?	C
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CHECK REAR POWER WINDOW MOTOR LH	D
Check rear power window motor LH. Refer to PWC-109, "REAR LH: Component Function Check". Is the inspection result normal?	E
YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident". NO >> Repair or replace the malfunctioning parts.	F
	G
	Н
	I
	J
	PW
	L
	M
	N

Revision: November 2013 PWC-131 2014 Altima NAM

REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009460972

1. CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.

Refer to PWC-101, "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-110, "REAR RH: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

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

< SYMPTOM DIAGNOSIS >

 $oldsymbol{3}$. CHECK ENCODER CIRCUIT

Is the inspection result normal?

Refer to PWC-113, "DRIVER SIDE: Component Function Check".

>> Repair or replace the malfunctioning parts.

>> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

Check encoder circuit.

YES

NO

[LH & RH FRONT ANTI-PINCH]

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE) Α Diagnosis Procedure INFOID:0000000009460973 1. PERFORM INITIALIZATION PROCEDURE В Perform initialization procedure. Refer to PWC-93, "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. D 2. CHECK DOOR WINDOW SLIDING PART · A foreign material adheres to window glass or glass run rubber. Е 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.

PWC

Н

D. Л

Ν

0

Р

Revision: November 2013 PWC-133 2014 Altima NAM

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

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

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

Diagnosis Procedure

INFOID:0000000009460974

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-93, "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-115, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

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

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

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

Diagnosis Procedure

INFOID:0000000009460975

Α

В

D

Е

F

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-93, "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-113, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

Н

J

PWC

M

Ν

0

Р

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

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

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

Diagnosis Procedure

INFOID:0000000009460976

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to PWC-93, "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-115, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

Diagnosis Procedure

INFOID:0000000009460977

1. CHECK FRONT DOOR SWITCH

Check front door switch.

Refer to <u>DLK-100</u>, "<u>Diagnosis Procedure</u>".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Repair or replace the malfunctioning parts.

Е

Α

В

C

D

F

Н

J

PWC

L

M

Ν

0

Р

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000009460978

 $1. \ \mathsf{REPLACE} \ \mathsf{MAIN} \ \mathsf{POWER} \ \mathsf{WINDOW} \ \mathsf{AND} \ \mathsf{DOOR} \ \mathsf{LOCK/UNLOCK} \ \mathsf{SWITCH}$

Replace main power window and door lock/unlock switch.

Refer to <u>PWC-142</u>, "Removal and Installation". After that, <u>PWC-99</u>, "<u>POWER WINDOW MAIN SWITCH</u>: <u>Special Repair Requirement"</u>.

>> INSPECTION END

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WIN-DOWS

Diagnosis Procedure

INFOID:0000000009460979

Α

В

D

Е

F

Н

1. PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.

Refer to PWC-93, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 2.

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

Check front door lock assembly LH (door key cylinder switch).

Refer to PWC-120, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> GO TO 1.

PWC

M

Ν

0

Р

Revision: November 2013 PWC-139 2014 Altima NAM

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[LH & RH FRONT ANTI-PINCH]

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009460980

1. CHECK INTELLIGENT KEY FUNCTION

Check Intelligent Key function.

Refer to DLK-146, "Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

PRE-INSPECTION FOR DIAGNOSTIC

< PERIODIC MAINTENANCE >

[LH & RH FRONT ANTI-PINCH]

PERIODIC 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.

PWC

J

Α

В

C

D

Е

F

Н

M

N

0

Р

Revision: November 2013 PWC-141 2014 Altima NAM

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

< REMOVAL AND INSTALLATION >

[LH & RH FRONT ANTI-PINCH]

REMOVAL AND INSTALLATION

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Removal and Installation

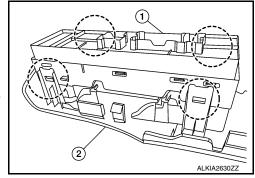
INFOID:0000000009460982

REMOVAL

- 1. Remove the front door pull handle outer finisher using a suitable tool.
- 2. Release the pawls using a suitable tool and lift the main power window and door lock/unlock switch and finisher as an assembly by starting at the rear, then pull upward and remove.
- 3. Disconnect the harness connector from the main power window and door lock/unlock switch.
- Release the four pawls (two on each side) using a suitable tool, then separate the main power window and door lock/unlock switch (1) from the main power window and door lock switch finisher (2).

(): Pawl CAUTION:

Do not bend back the pawls on the switch finisher too far or breakage may occur.



INSTALLATION

Installation is in the reverse order of removal.

NOTE:

When the main power window and door lock/unlock switch is disconnected from the harness connector it is necessary to perform the initialization procedure. Refer to PWC-27, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement".

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

< REMOVAL AND INSTALLATION >

[LH & RH FRONT ANTI-PINCH]

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Removal and Installation

INFOID:0000000009460983

Α

В

D

Е

F

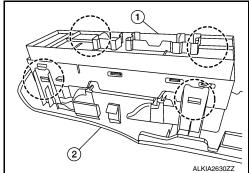
Н

REMOVAL

- 1. Remove the front door pull handle outer finisher using a suitable tool.
- 2. Release the pawls using a suitable tool and lift the power window and door lock/unlock switch RH and finisher as an assembly by starting at the rear, then pull upward and remove.
- Disconnect the harness connector from the power window and door lock/unlock switch RH.
- 4. Release the four pawls (two on each side) using a suitable tool, then separate the power window and door lock/unlock switch RH (1) from the power window and door lock switch RH finisher (2).



Do not bend back the pawls on the switch finisher too far or breakage may occur.



INSTALLATION

Installation is in the reverse order of removal.

PWC

IVI

Ν

0

Р

REAR POWER WINDOW SWITCH

< REMOVAL AND INSTALLATION >

[LH & RH FRONT ANTI-PINCH]

REAR POWER WINDOW SWITCH

Removal and Installation

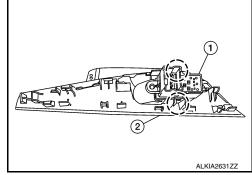
INFOID:0000000009460984

REMOVAL

- 1. Release the pawls using a suitable tool and lift the rear power window switch and finisher as an assembly by starting at the rear, then pull upward and remove
- 2. Disconnect the harness connector from the rear power window switch.
- 3. Release the pawl (one on each side) using a suitable tool, then separate the rear power window switch (1) from the rear power switch finisher (2).



Do not bend back the pawls on the switch finisher too far or breakage may occur.



INSTALLATION

Installation is in the reverse order of removal.