SECTION PWC

POWER WINDOW CONTROL SYSTEM

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000014391417

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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper repair, 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 Air Bag Diagnosis Sensor Unit or other Air Bag 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 or batteries, and wait at least three minutes before performing any service.**

Precaution for Work

INFOID:0000000014391418

- 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.

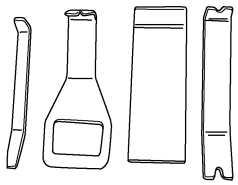
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000014391419

The actual shape of the tools may differ from those illustrated here.

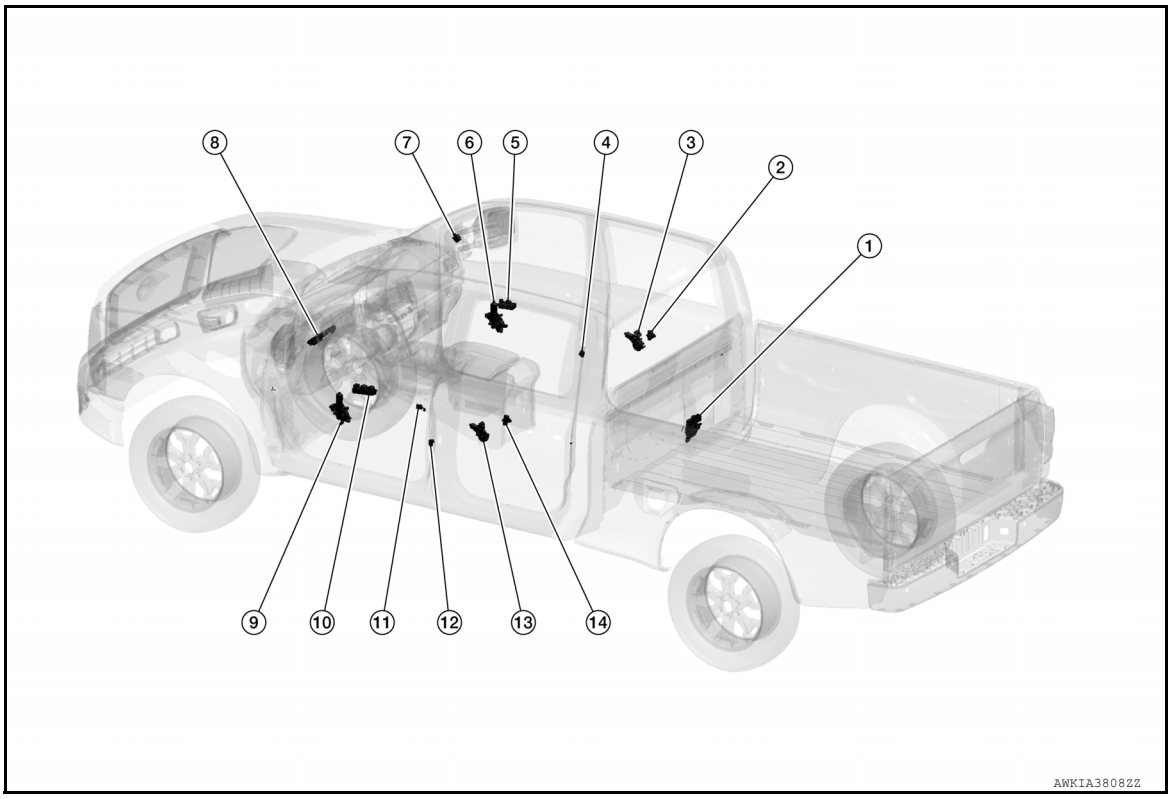
Tool number (TechMate No.) Tool name	Description
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000014391420

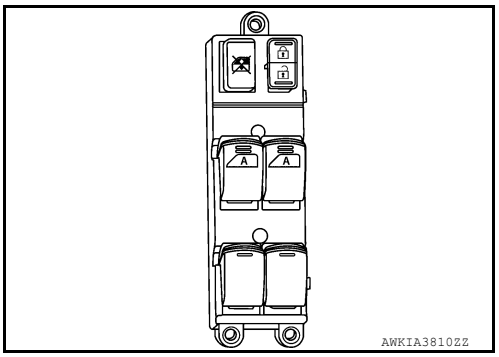


No.	Part	Function
1.	Rear power slide glass motor	Refer to PWC-8, "Rear Power Slide Glass Motor".
2.	Rear power window switch RH	Refer to PWC-7, "Rear Power Window Switch".
3.	Rear power window motor RH	Refer to PWC-7, "Power Window Motor".
4.	Front door switch RH	• Detects door open/close condition and transmits to BCM. • Refer to DLK-15, "Front Door Switch".
5.	Power window and door lock/unlock switch RH	Refer to PWC-7, "Power Window and Door Lock/Unlock Switch RH".
6.	Front power window motor RH	Refer to PWC-7, "Power Window Motor".
7.	Rear power slide glass switch	Refer to PWC-8, "Rear Power Slide Glass Switch".
8.	BCM	• Supplies power to the window switches. • Controls retained power. • Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
9.	Front power window motor LH	Refer to PWC-7, "Power Window Motor".
10.	Main power window and door lock/unlock switch	Refer to PWC-7, "Main Power Window and Door Lock/Unlock Switch".
11.	Front door lock assembly LH (key cylinder switch)	Transmits operation condition of door key cylinder switch to main power window and door lock/unlock switch.
12.	Front door switch LH	• Detects door open/close condition and transmits to BCM. • Refer to DLK-15, "Front Door Switch".
13.	Rear power window motor LH	Refer to PWC-7, "Power Window Motor".
14.	Rear power window switch LH	Refer to PWC-7, "Rear Power Window Switch".

Main Power Window and Door Lock/Unlock Switch

INFOID:0000000014391421

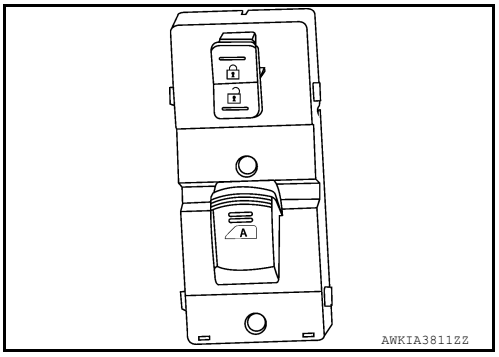
- Main power window and door lock/unlock switch controls all power windows.
- Main power window and door lock/unlock switch integrates UP/DOWN switch, power window lock switch, and door lock/unlock switch.
- Main power window and door lock/unlock switch controls power window lock function and AUTO UP/DOWN function.
- Receives encoder pulse signal and then controls anti-pinch system.



Power Window and Door Lock/Unlock Switch RH

INFOID:0000000014391422

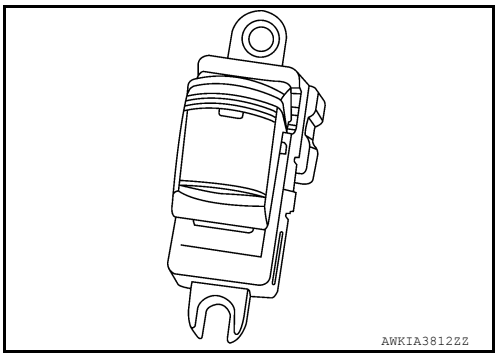
- Power window and door lock/unlock switch RH transmits AUTO UP/DOWN signal to front power window motor RH.
- Receives AUTO UP/DOWN signal from BCM and then transmits to front power window motor RH.
- Receives encoder pulse signal and then controls anti-pinch system.



Rear Power Window Switch

INFOID:0000000014391423

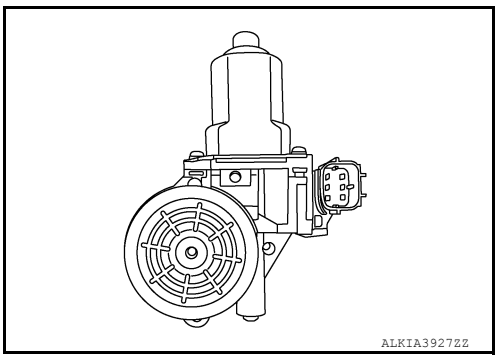
- Each power window switch transmits UP/DOWN signal to each motor.
- Each power window switch transmits UP/DOWN signal from main power window and door lock/unlock switch to each motor.



Power Window Motor

INFOID:0000000014391424

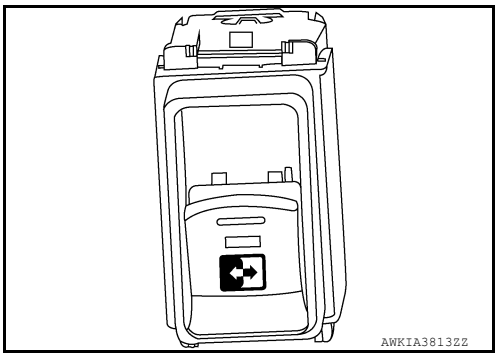
- Integrates the encoder for front power windows.
- Starts operation according to signals from each power window switch.
- Transmits each power window motor rotation as a pulse signal to each power window switch.



Rear Power Slide Glass Switch

INFOID:0000000014391425

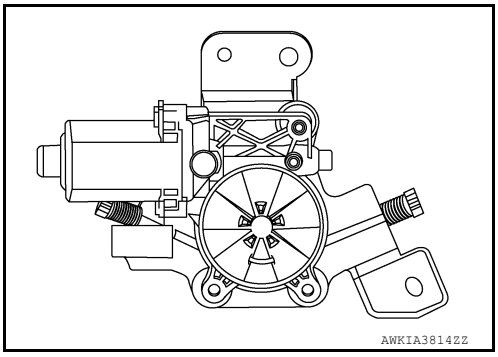
- Rear power slide glass switch is located in the overhead console.
- Rear power slide glass transmits OPEN/CLOSE signal to the rear power slide glass motor.



Rear Power Slide Glass Motor

INFOID:0000000014391426

- Starts operation according to signal from rear power sliding glass switch.
- Transmits rear power sliding glass motor rotation as a pulse signal to rear power sliding glass switch.

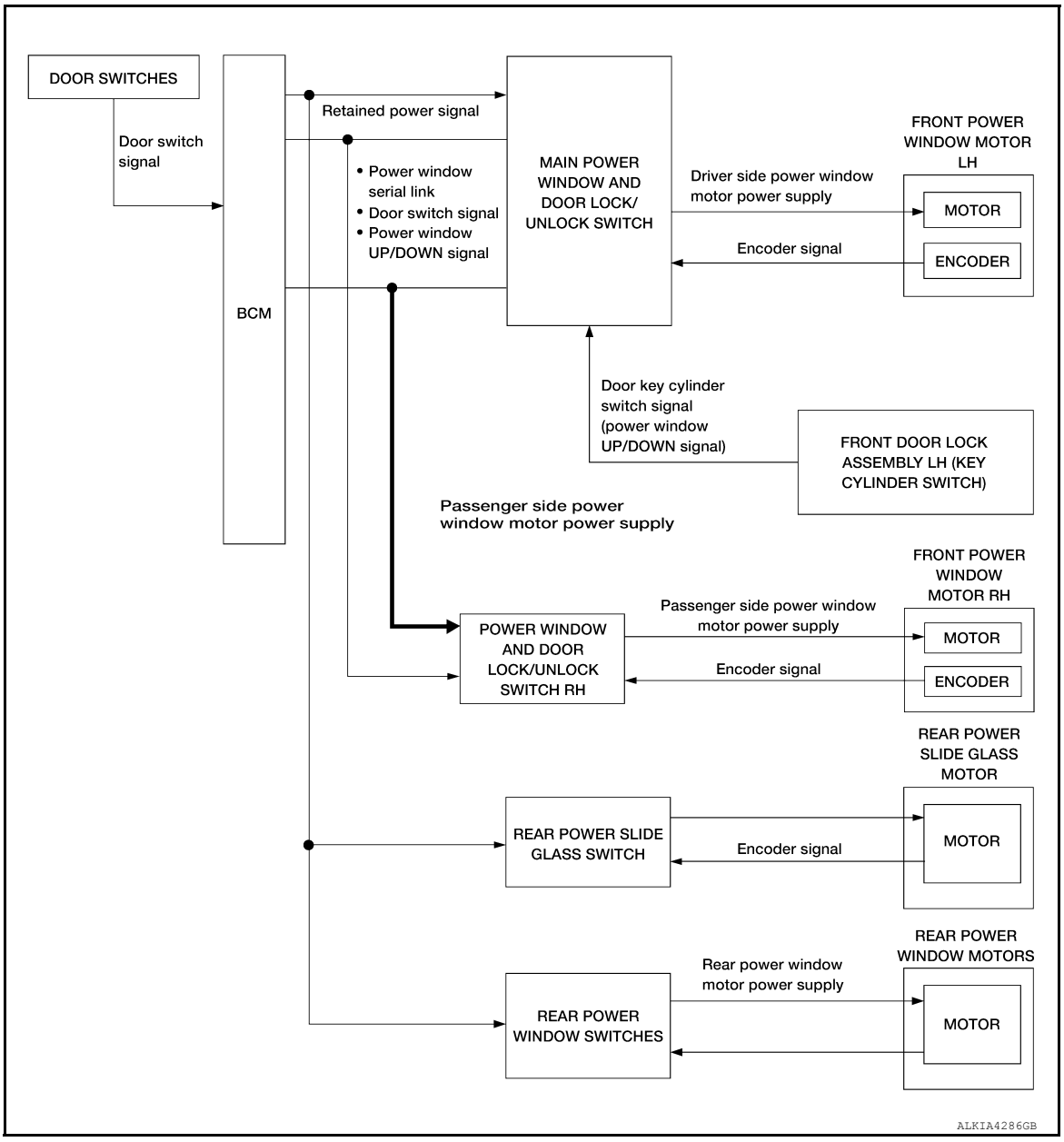


SYSTEM

System Description

INFOID:0000000014391427

SYSTEM DIAGRAM



POWER WINDOW OPERATION

- Power window system is activated by the power window switches when the ignition switch is in the ON position or during the retained power operation after ignition switch turns OFF.
- Main power window and door lock/unlock switch can open/close door glass.
- Front and rear power window switches can open/close the corresponding door glass.
- Power window lock switch can lock all power windows other than driver front.
- Front power windows open when pressing Intelligent Key unlock button for 3 seconds.
- If door glass receives resistance that is more than the specified value and the power window is in the AUTO-UP operation, power window will move in the reverse direction (anti-pinch function).

REAR POWER SLIDE GLASS OPERATION (IF EQUIPPED)

- Rear power slide glass system is operable during the retained power operation timer after turning ignition switch ON and OFF.
- Rear power slide glass switch can open/close the rear power slide glass.

POWER WINDOW AUTO-OPERATION

- AUTO-UP/DOWN operation can be performed when each power window motor turns to AUTO.
- Encoder continues detecting the movement of power window motor and outputs the encoder pulse signal to power window switch 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 open/closed position.
- Power window motor is operable in case encoder is malfunctioning.
- AUTO function does not operate if encoder is malfunctioning.

POWER WINDOW SERIAL LINK

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 signals mentioned below are 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.
- Door switch signal.
  The signals mentioned below are transmitted from power window main switch to front power window switch (passenger side).
- Front passenger side door window operation signal.
- Retained power operation signal.

RETAINED POWER OPERATION

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

Retained Power Function Cancel Conditions:

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

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

- 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 the 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 lowers the door glass for 150 mm (5.9 in) or 2 seconds after it detects encoder pulse signal frequency change.

Operation Condition

When front 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.

Fail-safe

INFOID:0000000014391428

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 malfunction	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 updated closed position of glass	When glass open/close operation is continuously performed without fully closing for 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.

DIAGNOSIS SYSTEM (BCM)
COMMON ITEM
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000014697570

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:

System	Sub System	Direct Diagnostic Mode						
		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			×	×	×		
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			×	×			
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				

FREEZE FRAME DATA (FFD)
The BCM records the following vehicle condition at the time a particular DTC is detected, and displays it on CONSULT.

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed at the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) at the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power position status at the moment a particular DTC is detected*	While turning BCM status from low power consumption mode to normal mode (Power supply position is “LOCK”*).
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is “OFF”.)
	LOCK>ACC		While turning power supply position from “LOCK” *to “ACC”
	ACC>ON		While turning power supply position from “ACC” to “IGN”
	RUN>ACC		While turning power supply position from “RUN” to “ACC” (Vehicle is stopped and selector lever is in P position.)
	CRANK>RUN		While turning power supply position from “CRANKING” to “RUN” (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from “RUN“ to “ACC” (Emergency stop operation)
	ACC>OFF		While turning power supply position from “ACC” to “OFF”
	OFF>LOCK		While turning power supply position from “OFF” to “LOCK”*
	OFF>ACC		While turning power supply position from “OFF” to “ACC”
	ON>CRANK		While turning power supply position from “IGN” to “CRANKING”
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is “OFF”.) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is “LOCK”*.) to low power consumption mode
	LOCK		Power supply position is “LOCK” (Ignition switch OFF)*
	OFF		Power supply position is “OFF” (Ignition switch OFF)
	ACC		Power supply position is “ACC” (Ignition switch ACC)
	ON		Power supply position is “IGN” (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is “RUN” (Ignition switch ON with engine running)
	CRANKING		Power supply position is “CRANKING” (At engine cranking)
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition is switched OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.	

NOTE:
*: Power supply position shifts to “LOCK” from “OFF”, when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met:
- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

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

RETAINED PWR

RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

INFOID:0000000014697571

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.

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000014391431

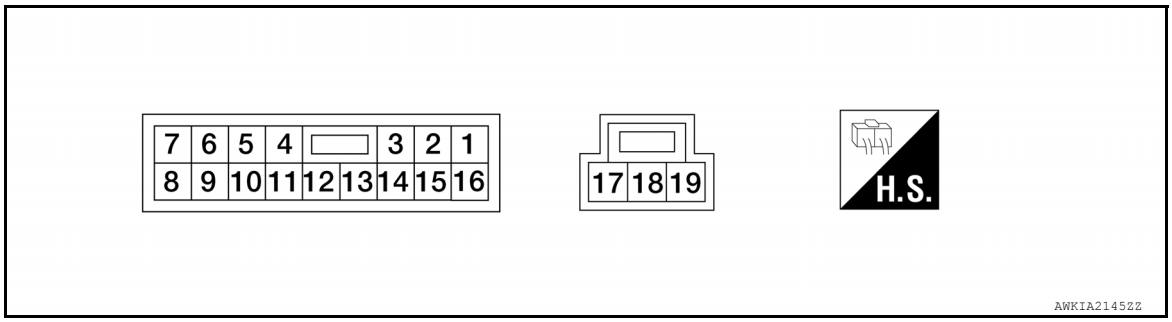
ECU	Reference
BCM	BCS-32, "Reference Value"
	BCS-51, "Fail Safe"
	BCS-51, "DTC Inspection Priority Chart"
	BCS-52, "DTC Index"

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

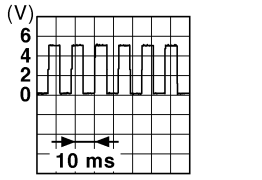
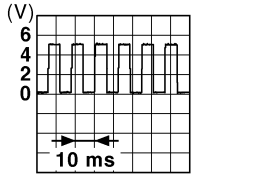
Reference Value

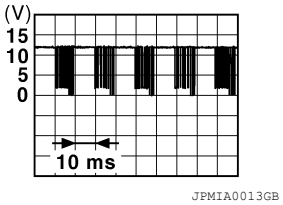
INFOID:0000000014391432

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Voltage (Approx.)
+	-	Signal name	Input/ Output		
1 (B)	Ground	Ground	Output	—	0 V
3 (W/R)	Ground	Door lock actuator signal	Output	—	—
4 (R)	12 (B)	Encoder pulse signal 2	Input	When power window motor operates	
5 (BG)	12 (B)	Encoder pulse signal 1	Input	When power window motor operates	
6 (SB)	Ground	Rear power window motor RH DOWN signal.	Output	When rear power window switch RH is operated DOWN	Battery voltage
7 (V)	Ground	Rear power window motor RH UP signal.	Output	When rear power window switch RH is operated UP	Battery voltage
8 (L)	Ground	Rear power window motor LH DOWN signal.	Output	When rear power window switch LH is operated DOWN	Battery voltage
9 (Y)	Ground	Rear power window motor LH UP signal.	Output	When rear power window switch LH is operated UP	Battery voltage
10 (LG)	Ground	Ignition switch power supply	Input	Ignition switch ON	Battery voltage
				Other than above	0 V

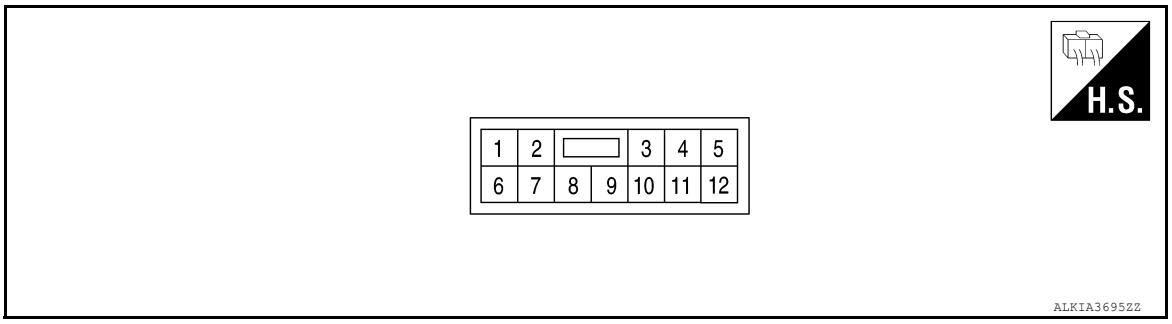
Terminal No. (Wire color)		Description		Condition	Voltage (Approx.)
+	-	Signal name	Input/ Output		
11 (W/L)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window operating	 JPMIA0013GB
12 (B)	Ground	Encoder ground	—	—	0 V
14 (P)	Ground	Encoder power supply	Output	When ignition is ON or power window timer operates	Battery voltage
15 (B/W)	Ground	Door lock actuator signal	Output	—	Battery voltage
17 (W)	19 (R)	Main power window and door lock/unlock switch UP signal	Output	When main power window and door lock/unlock switch is operated UP	Battery voltage
18 (V)	Ground	Battery power supply	Input	—	Battery voltage
19 (R)	17 (W)	Main power window and door lock/unlock switch DOWN signal	Output	When main power window and door lock/unlock switch is operated DOWN	Battery voltage

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

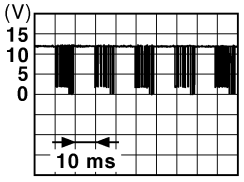
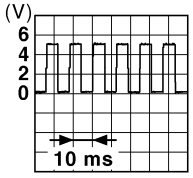
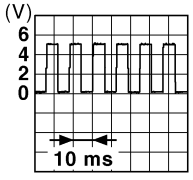
Reference Value

INFOID:0000000014391433

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Voltage (Approx.)
+	-	Signal name	Input/ Output		
3 (W/L)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window operating	 JPMIA0013GB
4 (G/B)	Ground	Encoder ground	—	—	—
5 (W)	Ground	Encoder power supply	Output	When ignition switch is ON or power window timer operates	Battery voltage
7 (B)	Ground	Ground	—	—	—
8 (V)	Ground	Battery power supply	Input	—	Battery voltage
9 (R/L)	4 (G/B)	Encoder pulse signal 1	Input	When power window motor operates	 JMKIA0070GB
10 (L/W)	4 (G/B)	Encoder pulse signal 2	Input	When power window motor operates	 JMKIA0070GB

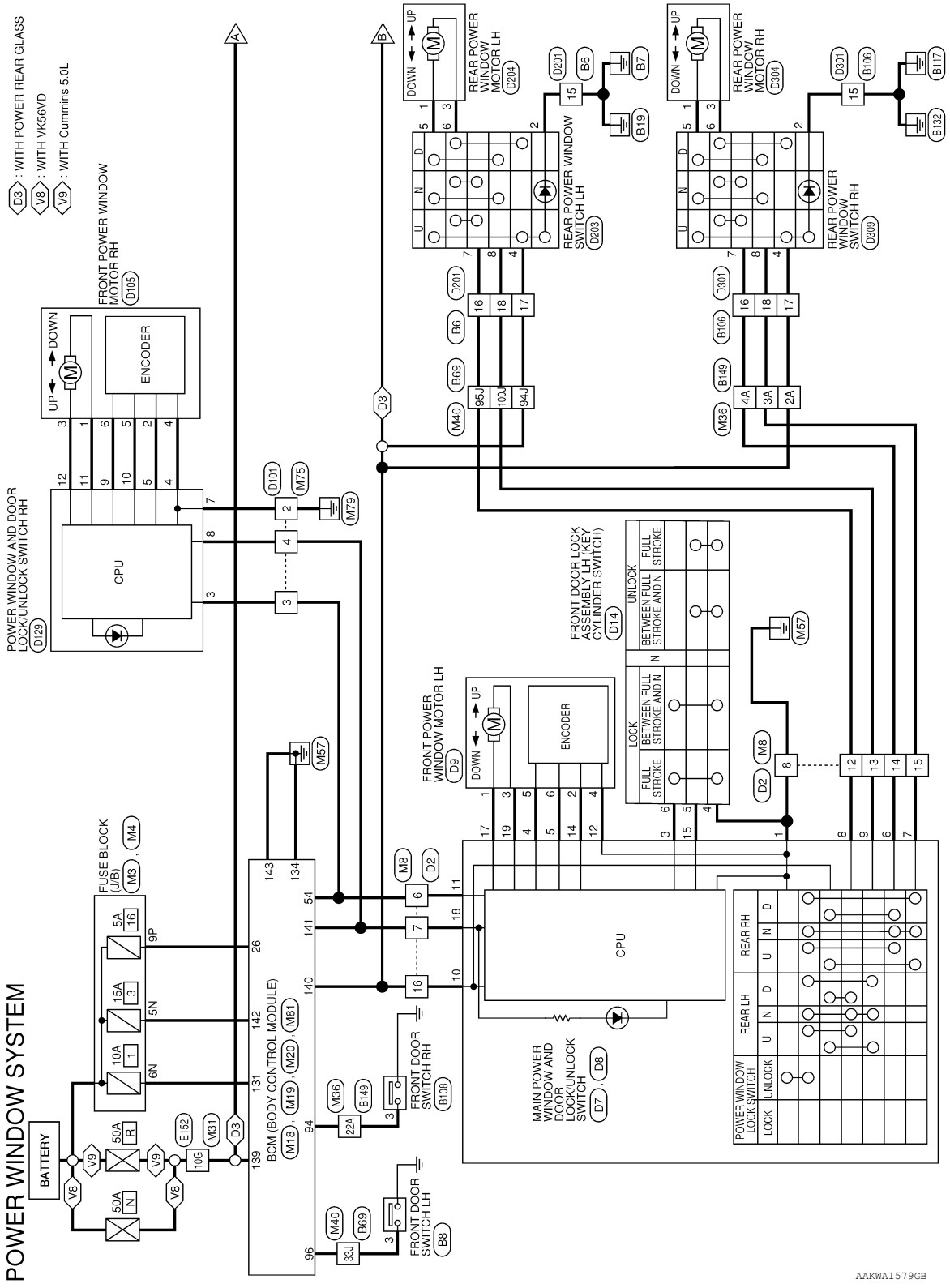
Terminal No. (Wire color)		Description		Condition	Voltage (Approx.)
+	-	Signal name	Input/ Output		
11 (G)	12 (L)	Assistant window switch UP signal	Output	When power window and door lock/unlock switch RH is operated UP	Battery voltage
12 (L)	11 (G)	Assistant window switch DOWN signal	Output	When power window and door lock/unlock switch RH is operated DOWN	Battery voltage

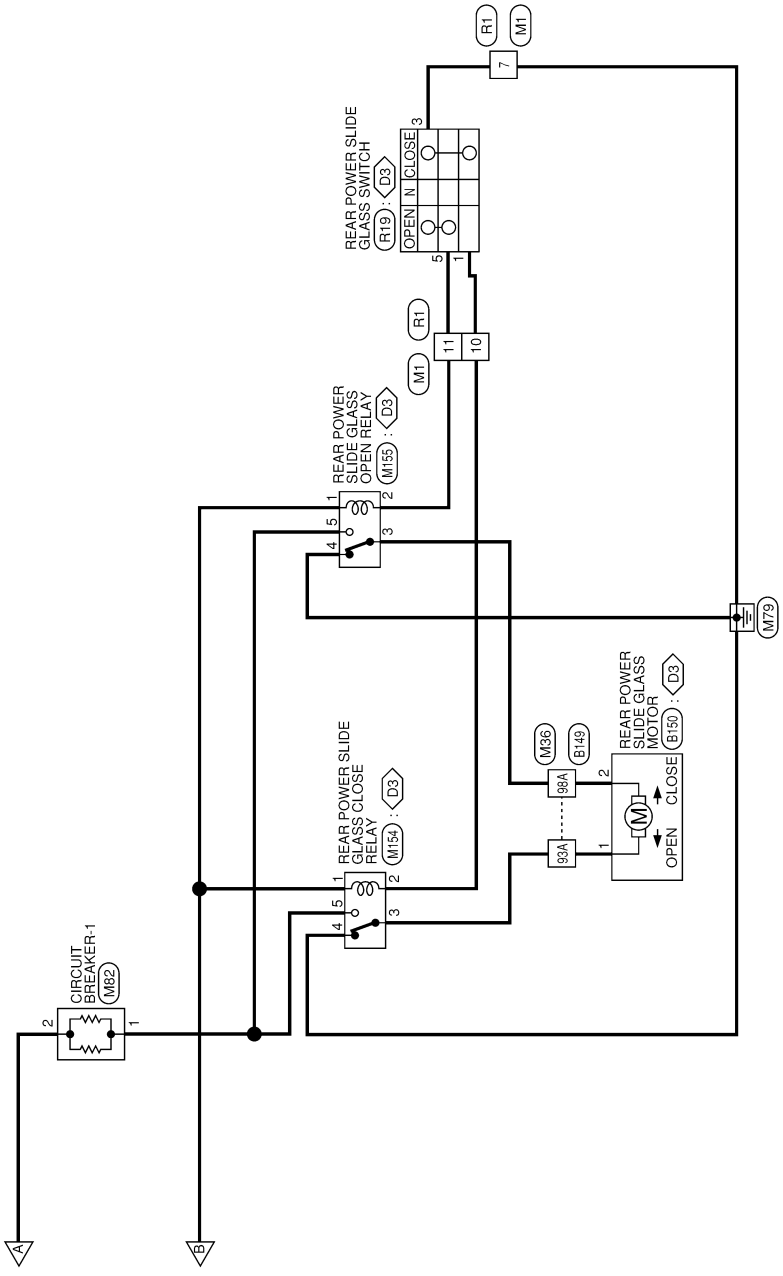
WIRING DIAGRAM

POWER WINDOW SYSTEM

Wiring Diagram

INFOID:0000000014391434





AAKWA1580GB

POWER WINDOW SYSTEM CONNECTORS

Connector No.	B6
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NS8
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	TO REAR DOOR LH HARNESS
2	–	TO REAR DOOR LH HARNESS
3	–	TO REAR DOOR LH HARNESS
4	–	TO REAR DOOR LH HARNESS
5	–	TO REAR DOOR LH HARNESS
6	–	TO REAR DOOR LH HARNESS
7	–	TO REAR DOOR LH HARNESS
8	O/L	TO REAR DOOR LH HARNESS
9	–	TO REAR DOOR LH HARNESS
10	–	TO REAR DOOR LH HARNESS
11	B/Y	TO REAR DOOR LH HARNESS
12	SB	TO REAR DOOR LH HARNESS
13	BR	TO REAR DOOR LH HARNESS
14	Y	TO REAR DOOR LH HARNESS
15	B	TO REAR DOOR LH HARNESS
16	LG	TO REAR DOOR LH HARNESS
17	L	TO REAR DOOR LH HARNESS
18	SB	TO REAR DOOR LH HARNESS

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1J	P	TO MAIN HARNESS
2J	R/Y	TO MAIN HARNESS
3J	L	TO MAIN HARNESS
4J	L/B	TO MAIN HARNESS
5J	G/W	TO MAIN HARNESS
6J	LG/Y	TO MAIN HARNESS
7J	BR/LG	TO MAIN HARNESS
8J	SB/BR	TO MAIN HARNESS
9J	BR	TO MAIN HARNESS
10J	BR	TO MAIN HARNESS
11J	O/B	TO MAIN HARNESS
12J	L	TO MAIN HARNESS
13J	SB/O	TO MAIN HARNESS
14J	Y	TO MAIN HARNESS
15J	–	TO MAIN HARNESS
16J	R	TO MAIN HARNESS
17J	G	TO MAIN HARNESS
18J	SB	TO MAIN HARNESS
19J	O	TO MAIN HARNESS
20J	O/B	TO MAIN HARNESS
21J	Y/R	TO MAIN HARNESS
22J	P	TO MAIN HARNESS
23J	W	TO MAIN HARNESS
24J	W/R	TO MAIN HARNESS
25J	V	TO MAIN HARNESS
26J	L	TO MAIN HARNESS
27J	R	TO MAIN HARNESS
28J	L	TO MAIN HARNESS
29J	G/O	TO MAIN HARNESS
30J	SB	TO MAIN HARNESS
31J	LG	TO MAIN HARNESS
32J	R	TO MAIN HARNESS
33J	L	TO MAIN HARNESS
34J	Y	TO MAIN HARNESS
35J	P	TO MAIN HARNESS
36J	G/R	TO MAIN HARNESS
37J	LG/B	TO MAIN HARNESS
38J	SB	TO MAIN HARNESS
39J	Y/L	TO MAIN HARNESS
40J	BR	TO MAIN HARNESS
41J	L	TO MAIN HARNESS
42J	L	TO MAIN HARNESS
43J	SB	TO MAIN HARNESS
44J	BR	TO MAIN HARNESS
45J	BG	TO MAIN HARNESS
46J	P/Y	TO MAIN HARNESS
47J	Y/GR	TO MAIN HARNESS
48J	V	TO MAIN HARNESS
49J	BR/Y	TO MAIN HARNESS
50J	G/W	TO MAIN HARNESS
51J	–	TO MAIN HARNESS
52J	SHIELD	TO MAIN HARNESS
53J	R	TO MAIN HARNESS
54J	L	TO MAIN HARNESS
55J	R	TO MAIN HARNESS
56J	W	TO MAIN HARNESS
57J	L/G	TO MAIN HARNESS
58J	O	TO MAIN HARNESS
59J	–	TO MAIN HARNESS
60J	SHIELD	TO MAIN HARNESS
61J	G	TO MAIN HARNESS
62J	–	TO MAIN HARNESS
63J	R/W	TO MAIN HARNESS
64J	L/W	TO MAIN HARNESS
65J	SHIELD	TO MAIN HARNESS
66J	B	TO MAIN HARNESS
67J	SHIELD	TO MAIN HARNESS
68J	O/L	TO MAIN HARNESS
69J	SHIELD	TO MAIN HARNESS
70J	BR	TO MAIN HARNESS
71J	L/W	TO MAIN HARNESS
72J	–	TO MAIN HARNESS
72J	–	TO MAIN HARNESS
73J	–	TO MAIN HARNESS
74J	SHIELD	TO MAIN HARNESS
75J	LG/B	TO MAIN HARNESS
76J	R	TO MAIN HARNESS
77J	SHIELD	TO MAIN HARNESS
78J	GR/B	TO MAIN HARNESS
79J	B	TO MAIN HARNESS
80J	W	TO MAIN HARNESS
81J	SHIELD	TO MAIN HARNESS
82J	L/R	TO MAIN HARNESS
83J	–	TO MAIN HARNESS
84J	–	TO MAIN HARNESS
85J	Y/B	TO MAIN HARNESS
86J	G	TO MAIN HARNESS
87J	B/R	TO MAIN HARNESS
88J	SHIELD	TO MAIN HARNESS
89J	GR/R	TO MAIN HARNESS
90J	L	TO MAIN HARNESS
91J	L/B	TO MAIN HARNESS
92J	SB	TO MAIN HARNESS
93J	B	TO MAIN HARNESS
94J	L	TO MAIN HARNESS
95J	LG	TO MAIN HARNESS
96J	R	TO MAIN HARNESS
97J	B/Y	TO MAIN HARNESS
98J	L/B	TO MAIN HARNESS
99J	W/L	TO MAIN HARNESS
100J	SB	TO MAIN HARNESS

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	L	DR DOOR SW
4	–	–

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POWER WINDOW SYSTEM CONNECTORS

Connector No.	B106
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NS8
Connector Color	WHITE

H.S.

10 9 8 7 6 5 4 3 2 1
18 17 16 15 14 13 12 11

Terminal No.	Color of Wire	Signal Name
1	–	TO REAR DOOR RH HARNESS
2	–	TO REAR DOOR RH HARNESS
3	–	TO REAR DOOR RH HARNESS
4	–	TO REAR DOOR RH HARNESS
5	–	TO REAR DOOR RH HARNESS
6	–	TO REAR DOOR RH HARNESS
7	–	TO REAR DOOR RH HARNESS
8	O/L	TO REAR DOOR RH HARNESS
9	–	TO REAR DOOR RH HARNESS
10	–	TO REAR DOOR RH HARNESS
11	R/L	TO REAR DOOR RH HARNESS
12	O/L	TO REAR DOOR RH HARNESS
13	Y/LG	TO REAR DOOR RH HARNESS
14	BR/O	TO REAR DOOR RH HARNESS
15	B	TO REAR DOOR RH HARNESS
16	SB/R	TO REAR DOOR RH HARNESS
17	L	TO REAR DOOR RH HARNESS
18	V	TO REAR DOOR RH HARNESS

Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

1 2 3 4

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	LG/R	AS DOOR SW
4	–	–

Connector No.	B149
Connector Name	WIRE TO WIRE
Connector Type	TH80MDGY-CS16-TM4
Connector Color	GRAY

H.S.

5A 4A 3A 2A 1A
10A 9A 8A 7A 6A

21A 20A 19A 18A 17A 16A 15A 14A 13A 12A 11A
30A 29A 28A 27A 26A 25A 24A 23A 22A

41A 40A 39A 38A 37A 36A 35A 34A 33A 32A 31A
50A 49A 48A 47A 46A 45A 44A 43A 42A

61A 60A 59A 58A 57A 56A 55A 54A 53A 52A 51A
70A 69A 68A 67A 66A 65A 64A 63A 62A

81A 80A 79A 78A 77A 76A 75A 74A 73A 72A 71A
90A 89A 88A 87A 86A 85A 84A 83A 82A

100A 99A 98A 97A 96A 95A 94A 93A 92A 91A

Terminal No.	Color of Wire	Signal Name
1A	SB/G	TO MAIN HARNESS -(WITHOUT CLIMATE CONTROLLED SEATS)
1A	SB	TO MAIN HARNESS -(WITH CLIMATE CONTROLLED SEATS)
2A	L	TO MAIN HARNESS
3A	V	TO MAIN HARNESS
4A	SB/R	TO MAIN HARNESS
5A	–	TO MAIN HARNESS
6A	LG/Y	TO MAIN HARNESS -(WITHOUT CLIMATE CONTROLLED SEATS)
6A	LG	TO MAIN HARNESS -(WITH CLIMATE CONTROLLED SEATS)
7A	W	TO MAIN HARNESS
8A	B	TO MAIN HARNESS
9A	L/B	TO MAIN HARNESS
10A	W	TO MAIN HARNESS
11A	LG	TO MAIN HARNESS
12A	BR/O	TO MAIN HARNESS
13A	Y/W	TO MAIN HARNESS
14A	R/G	TO MAIN HARNESS
15A	Y/L	TO MAIN HARNESS
16A	O/L	TO MAIN HARNESS
17A	L	TO MAIN HARNESS
18A	Y	TO MAIN HARNESS
19A	LG	TO MAIN HARNESS
20A	R	TO MAIN HARNESS
21A	BG	TO MAIN HARNESS
22A	LG/R	TO MAIN HARNESS

23A	Y/LG	TO MAIN HARNESS
24A	BR/Y	TO MAIN HARNESS
25A	–	TO MAIN HARNESS
26A	GR	TO MAIN HARNESS
27A	LG	TO MAIN HARNESS
28A	LG/B	TO MAIN HARNESS
29A	–	TO MAIN HARNESS
30A	BR	TO MAIN HARNESS
31A	W/R	TO MAIN HARNESS
32A	G/R	TO MAIN HARNESS
33A	–	TO MAIN HARNESS
34A	SHIELD	TO MAIN HARNESS
35A	P	TO MAIN HARNESS
36A	B	TO MAIN HARNESS
37A	–	TO MAIN HARNESS
38A	R/B	TO MAIN HARNESS
39A	G/O	TO MAIN HARNESS
40A	V	TO MAIN HARNESS
41A	SHIELD	TO MAIN HARNESS
42A	SHIELD	TO MAIN HARNESS
43A	R	TO MAIN HARNESS
44A	G	TO MAIN HARNESS
45A	–	TO MAIN HARNESS
46A	–	TO MAIN HARNESS
47A	Y	TO MAIN HARNESS
48A	R/W	TO MAIN HARNESS
49A	R/L	TO MAIN HARNESS
50A	B	TO MAIN HARNESS
51A	–	TO MAIN HARNESS
52A	–	TO MAIN HARNESS
53A	–	TO MAIN HARNESS
54A	–	TO MAIN HARNESS
55A	–	TO MAIN HARNESS
56A	–	TO MAIN HARNESS
57A	–	TO MAIN HARNESS
58A	–	TO MAIN HARNESS
59A	–	TO MAIN HARNESS
60A	G/W	TO MAIN HARNESS
61A	–	TO MAIN HARNESS
62A	–	TO MAIN HARNESS
63A	–	TO MAIN HARNESS
64A	–	TO MAIN HARNESS
65A	–	TO MAIN HARNESS
66A	–	TO MAIN HARNESS
67A	–	TO MAIN HARNESS
68A	–	TO MAIN HARNESS
69A	Y/R	TO MAIN HARNESS
70A	R/G	TO MAIN HARNESS
71A	–	TO MAIN HARNESS
72A	Y/B	TO MAIN HARNESS
73A	G	TO MAIN HARNESS
74A	B/R	TO MAIN HARNESS
75A	SHIELD	TO MAIN HARNESS

76A	GR/R	TO MAIN HARNESS
77A	L	TO MAIN HARNESS
78A	SHIELD	TO MAIN HARNESS
79A	Y	TO MAIN HARNESS
80A	L	TO MAIN HARNESS
81A	R	TO MAIN HARNESS
82A	SHIELD	TO MAIN HARNESS
83A	LG/B	TO MAIN HARNESS
84A	R	TO MAIN HARNESS
85A	SHIELD	TO MAIN HARNESS
86A	GR/B	TO MAIN HARNESS
87A	B	TO MAIN HARNESS
88A	W	TO MAIN HARNESS
89A	SHIELD	TO MAIN HARNESS
90A	G	TO MAIN HARNESS
91A	W/L	TO MAIN HARNESS
92A	BR	TO MAIN HARNESS
93A	L/Y	TO MAIN HARNESS
94A	R/L	TO MAIN HARNESS
95A	BR	TO MAIN HARNESS
96A	R	TO MAIN HARNESS
97A	LG	TO MAIN HARNESS
98A	B/V	TO MAIN HARNESS
99A	O/L	TO MAIN HARNESS
100A	BR/W	TO MAIN HARNESS

Connector No.	B150
Connector Name	REAR POWER SLIDE GLASS MOTOR
Connector Type	RS02FB
Connector Color	BLACK

H.S.

1 2

Terminal No.	Color of Wire	Signal Name
1	L/Y	REAR POWER SLIDE GLASS CLOSE RELAY OUTPUT
2	B/V	REAR POWER SLIDE GLASS OPEN RELAY OUTPUT

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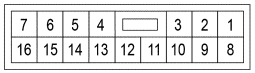
POWER WINDOW SYSTEM CONNECTORS

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

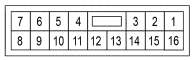
H.S.



Terminal No.	Color of Wire	Signal Name
1	B/W	TO MAIN HARNESS
2	G/B	TO MAIN HARNESS
3	L	TO MAIN HARNESS
4	R	TO MAIN HARNESS
5	W/R	TO MAIN HARNESS
6	W/L	TO MAIN HARNESS
7	V	TO MAIN HARNESS
8	B	TO MAIN HARNESS
9	L/W	TO MAIN HARNESS
10	L/R	TO MAIN HARNESS
11	L/W	TO MAIN HARNESS
12	L	TO MAIN HARNESS
13	Y	TO MAIN HARNESS
14	SB	TO MAIN HARNESS
15	V	TO MAIN HARNESS
16	LG	TO MAIN HARNESS

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	B	GND
2	–	–
3	W/R	D LOCK ACTR DR
4	R	ENCODER SIG2
5	BG	ENCODER SIG1

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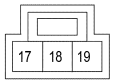
6	SB	RR DN
7	V	RR UP
8	L	RL DN
9	Y	RL UP
10	LG	IGN
11	W/L	COM
12	B	ENCODER GND
13	–	–
14	P	ENCODER+
15	B/W	D LOCK ACTR DR
16	–	–

Connector No.	D8
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Type	NS03FW-CS
Connector Color	WHITE

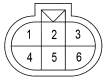
H.S.



Terminal No.	Color of Wire	Signal Name
17	W	DR UP
18	V	BAT
19	R	DR DN

Connector No.	D9
Connector Name	FRONT POWER WINDOW MOTOR LH
Connector Type	RS06FG
Connector Color	GREEN

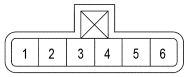
H.S.



Terminal No.	Color of Wire	Signal Name
1	W	DR UP
2	P	ENCODER +
3	R	DR DN
4	B	ENCODER GND
5	R	ENCODER SIG2
6	BG	ENCODER SIG1

Connector No.	D14
Connector Name	FRONT DOOR LOCK ASSEMBLY LH
Connector Type	E06FGY-RS
Connector Color	GRAY

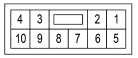
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	DOOR LOCK DR/AS/FL
2	V	DOOR UNLOCK DR/AS/FL
3	LG	DR DOOR LOCK STATUS
4	B	GROUND
5	B/W	D LOCK ACTUATOR DR
6	W/R	D LOCK ACTUATOR DR

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS
Connector Color	WHITE

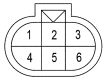
H.S.



Terminal No.	Color of Wire	Signal Name
1	B/W	TO MAIN HARNESS
2	B	TO MAIN HARNESS
3	W/L	TO MAIN HARNESS
4	V	TO MAIN HARNESS
5	W/B	TO MAIN HARNESS
6	G/Y	TO MAIN HARNESS
7	W/B	TO MAIN HARNESS
8	L/B	TO MAIN HARNESS
9	G/Y	TO MAIN HARNESS
10	–	TO MAIN HARNESS

Connector No.	D105
Connector Name	FRONT POWER WINDOW MOTOR RH
Connector Type	RS06FG
Connector Color	GREEN

H.S.



Terminal No.	Color of Wire	Signal Name
1	G	AS UP
2	W	ENCODER +
3	L	AS DN
4	G/B	ENCODER GND
5	L/W	ENCODER SIG2
6	R/L	ENCODER SIG1

Connector No.	D129
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Type	NS12FW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	W/L	COM
4	G/B	ENCODER GND
5	W	ENCODER +
6	–	–
7	B	GND
8	V	BAT
9	R/L	ENCODER SIG1
10	L/W	ENCODER SIG2
11	G	AS UP
12	L	AS DN

POWER WINDOW SYSTEM CONNECTORS

Connector No.	D201
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NS8
Connector Color	WHITE

H.S.

1	2	3	4	5		6	7	8	9	10
11	12	13	14	15		16	17	18		

Terminal No.	Color of Wire	Signal Name
1	–	TO BODY HARNESS
2	–	TO BODY HARNESS
3	–	TO BODY HARNESS
4	–	TO BODY HARNESS
5	–	TO BODY HARNESS
6	–	TO BODY HARNESS
7	–	TO BODY HARNESS
8	O/L	TO BODY HARNESS
9	–	TO BODY HARNESS
10	–	TO BODY HARNESS
11	B/Y	TO BODY HARNESS
12	SB	TO BODY HARNESS
13	BR	TO BODY HARNESS
14	Y	TO BODY HARNESS
15	B	TO BODY HARNESS
16	BR	TO BODY HARNESS
17	Y	TO BODY HARNESS
18	V	TO BODY HARNESS

Connector No.	D203
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS08FW-CS
Connector Color	WHITE

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name
1	–	–
2	B	GND
3	–	–
4	G	IGN

5	L	UP
6	LG	DOWN
7	BR	DOWN
8	V	UP

Connector No.	D204
Connector Name	REAR POWER WINDOW MOTOR LH
Connector Type	RS06FG
Connector Color	GREEN

H.S.

3	2	1
6	5	4

Terminal No.	Color of Wire	Signal Name
1	L	UP
2	–	–
3	LG	DOWN
4	–	–
5	–	–
6	–	–

Connector No.	D301
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NS8
Connector Color	WHITE

H.S.

1	2	3	4	5		6	7	8	9	10
11	12	13	14	15		16	17	18		

Terminal No.	Color of Wire	Signal Name
1	–	TO BODY NO. 2 HARNESS
2	–	TO BODY NO. 2 HARNESS
3	–	TO BODY NO. 2 HARNESS
4	–	TO BODY NO. 2 HARNESS
5	–	TO BODY NO. 2 HARNESS
6	–	TO BODY NO. 2 HARNESS
7	–	TO BODY NO. 2 HARNESS
8	O/L	TO BODY NO. 2 HARNESS
9	–	TO BODY NO. 2 HARNESS
10	–	TO BODY NO. 2 HARNESS
11	R/L	TO BODY NO. 2 HARNESS

12	O/L	TO BODY NO. 2 HARNESS
13	Y	TO BODY NO. 2 HARNESS
14	BR	TO BODY NO. 2 HARNESS
15	B	TO BODY NO. 2 HARNESS
16	BR	TO BODY NO. 2 HARNESS
17	Y	TO BODY NO. 2 HARNESS
18	V	TO BODY NO. 2 HARNESS

Connector No.	D304
Connector Name	REAR POWER WINDOW MOTOR RH
Connector Type	RS06FG
Connector Color	GREEN

H.S.

3	2	1
6	5	4

Terminal No.	Color of Wire	Signal Name
1	L	UP
2	–	–
3	LG	DOWN
4	–	–
5	–	–
6	–	–

Connector No.	D309
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS08FW-CS
Connector Color	WHITE

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name
1	–	–
2	B	GND
3	–	–
4	Y	IGN
5	L	UP
6	LG	DOWN
7	BR	DOWN

8	V	UP

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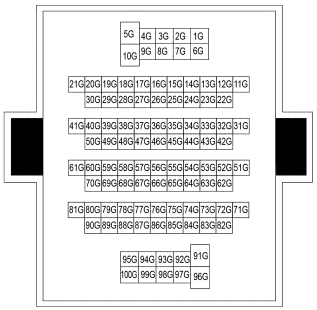
POWER WINDOW SYSTEM CONNECTORS

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

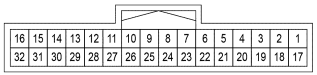
H.S.



Terminal No.	Color of Wire	Signal Name
1G	G	TO MAIN HARNESS
2G	B/R	TO MAIN HARNESS
3G	W/B	TO MAIN HARNESS
4G	BR/W	TO MAIN HARNESS
5G	BR	TO MAIN HARNESS
6G	P	TO MAIN HARNESS - (WITH VK56VD)
6G	R/W	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
7G	Y	TO MAIN HARNESS
8G	G	TO MAIN HARNESS
9G	R	TO MAIN HARNESS
10G	W	TO MAIN HARNESS
11G	R/G	TO MAIN HARNESS
12G	W/B	TO MAIN HARNESS
13G	BR	TO MAIN HARNESS
14G	Y/B	TO MAIN HARNESS
15G	G/W	TO MAIN HARNESS
16G	G	TO MAIN HARNESS
17G	G/Y	TO MAIN HARNESS
18G	G/Y	TO MAIN HARNESS
19G	Y/V	TO MAIN HARNESS
20G	G/Y	TO MAIN HARNESS
21G	B/Y	TO MAIN HARNESS
22G	G/R	TO MAIN HARNESS
23G	Y/R	TO MAIN HARNESS
24G	G/B	TO MAIN HARNESS
25G	R/W	TO MAIN HARNESS
26G	R	TO MAIN HARNESS
27G	LG	TO MAIN HARNESS
28G	G/B	TO MAIN HARNESS
29G	G/B	TO MAIN HARNESS
30G	BR/Y	TO MAIN HARNESS
31G	P	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
31G	R	TO MAIN HARNESS - (WITH VK56VD)
32G	P	TO MAIN HARNESS
33G	Y/L	TO MAIN HARNESS
34G	GR	TO MAIN HARNESS
35G	G/R	TO MAIN HARNESS
36G	SB	TO MAIN HARNESS
37G	R/W	TO MAIN HARNESS
38G	BR	TO MAIN HARNESS
39G	BR	TO MAIN HARNESS
40G	–	TO MAIN HARNESS
41G	R/G	TO MAIN HARNESS
42G	O	TO MAIN HARNESS
43G	B	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
43G	G	TO MAIN HARNESS - (WITH VK56VD)
44G	R/Y	TO MAIN HARNESS
45G	G	TO MAIN HARNESS
46G	LG	TO MAIN HARNESS
47G	R	TO MAIN HARNESS
48G	W	TO MAIN HARNESS
49G	–	TO MAIN HARNESS
50G	BR	TO MAIN HARNESS
51G	R	TO MAIN HARNESS
52G	L	TO MAIN HARNESS
53G	W	TO MAIN HARNESS
54G	W	TO MAIN HARNESS
55G	G	TO MAIN HARNESS
56G	W	TO MAIN HARNESS
57G	Y	TO MAIN HARNESS
58G	BG	TO MAIN HARNESS
59G	BG	TO MAIN HARNESS
60G	BG	TO MAIN HARNESS
61G	B	TO MAIN HARNESS
62G	W	TO MAIN HARNESS
63G	R	TO MAIN HARNESS
64G	W/L	TO MAIN HARNESS
65G	W/R	TO MAIN HARNESS
66G	BG	TO MAIN HARNESS
67G	BG	TO MAIN HARNESS
68G	B	TO MAIN HARNESS
69G	Y	TO MAIN HARNESS
70G	L	TO MAIN HARNESS
71G	R/W	TO MAIN HARNESS
72G	L/W	TO MAIN HARNESS
73G	SHIELD	TO MAIN HARNESS
74G	W	TO MAIN HARNESS
75G	R	TO MAIN HARNESS
76G	R/G	TO MAIN HARNESS
77G	G	TO MAIN HARNESS
78G	W	TO MAIN HARNESS
79G	–	TO MAIN HARNESS
80G	R	TO MAIN HARNESS
81G	L	TO MAIN HARNESS
82G	R	TO MAIN HARNESS
83G	L	TO MAIN HARNESS
84G	L	TO MAIN HARNESS
85G	W/B	TO MAIN HARNESS
86G	B/R	TO MAIN HARNESS
87G	W/B	TO MAIN HARNESS
88G	P	TO MAIN HARNESS
89G	L	TO MAIN HARNESS
90G	G	TO MAIN HARNESS
91G	G	TO MAIN HARNESS
92G	V/W	TO MAIN HARNESS
93G	BR	TO MAIN HARNESS
94G	G	TO MAIN HARNESS
95G	G	TO MAIN HARNESS
96G	W	TO MAIN HARNESS
97G	R	TO MAIN HARNESS
98G	W/B	TO MAIN HARNESS
99G	BR	TO MAIN HARNESS
100G	GR/W	TO MAIN HARNESS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

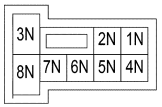
H.S.



Terminal No.	Color of Wire	Signal Name
1	SHIELD	TO ROOM LAMP HARNESS
2	R	TO ROOM LAMP HARNESS
3	W	TO ROOM LAMP HARNESS
4	SB	TO ROOM LAMP HARNESS
5	G/W	TO ROOM LAMP HARNESS
6	G/R	TO ROOM LAMP HARNESS
7	B	TO ROOM LAMP HARNESS
8	L	TO ROOM LAMP HARNESS
9	R/G	TO ROOM LAMP HARNESS
10	G	TO ROOM LAMP HARNESS
11	L/W	TO ROOM LAMP HARNESS
12	L	TO ROOM LAMP HARNESS
13	GR	TO ROOM LAMP HARNESS
14	R	TO ROOM LAMP HARNESS
15	W/B	TO ROOM LAMP HARNESS
16	L/B	TO ROOM LAMP HARNESS
17	–	TO ROOM LAMP HARNESS
18	P	TO ROOM LAMP HARNESS
19	W/L	TO ROOM LAMP HARNESS
20	W/B	TO ROOM LAMP HARNESS
21	–	TO ROOM LAMP HARNESS
22	–	TO ROOM LAMP HARNESS
23	–	TO ROOM LAMP HARNESS
24	–	TO ROOM LAMP HARNESS
25	–	TO ROOM LAMP HARNESS
26	–	TO ROOM LAMP HARNESS
27	–	TO ROOM LAMP HARNESS
28	Y/R	TO ROOM LAMP HARNESS
29	G/R	TO ROOM LAMP HARNESS
30	G/W	TO ROOM LAMP HARNESS
31	LG/B	TO ROOM LAMP HARNESS
32	Y/V	TO ROOM LAMP HARNESS

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	CS06FW-M2
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1N	–	–
2N	W	BATTERY
3N	W	BLOWER FAN RELAY OUT
4N	V	BATTERY
5N	Y	BATTERY
6N	W	BATTERY
7N	L	ACC RELAY OUT
8N	W	IGNITION

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POWER WINDOW SYSTEM CONNECTORS

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.

7P	6P	5P	4P		3P	2P	1P
16P	15P	14P	13P	12P	11P	10P	9P	8P

Terminal No.	Color of Wire	Signal Name
1P	R	IGNITION
2P	Y	IGNITION
3P	G	IGNITION RELAY OUT
4P	B/W	RR DEF RLY
5P	B/W	RR DEF RLY
6P	O	RR DEF RLY OUT
7P	G	IGNITION
8P	W	IGNITION
9P	L	BATTERY
10P	–	–
11P	–	–
12P	–	–
13P	R	BATTERY
14P	Y	BATTERY
15P	Y/LG	BATTERY
16P	W	BLOWER FAN RELAY OUT

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE

H.S.

1	2	3		4	5	6	7
8	9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
1	B/W	TO FRONT DOOR LH HARNESS
2	G/B	TO FRONT DOOR LH HARNESS
3	L	TO FRONT DOOR LH HARNESS
4	R	TO FRONT DOOR LH HARNESS
5	W/R	TO FRONT DOOR LH HARNESS
6	W/L	TO FRONT DOOR LH HARNESS
7	V	TO FRONT DOOR LH HARNESS
8	B	TO FRONT DOOR LH HARNESS
9	L/W	TO FRONT DOOR LH HARNESS
10	L/R	TO FRONT DOOR LH HARNESS
11	L/W	TO FRONT DOOR LH HARNESS
12	L	TO FRONT DOOR LH HARNESS
13	Y	TO FRONT DOOR LH HARNESS
14	SB	TO FRONT DOOR LH HARNESS
15	V	TO FRONT DOOR LH HARNESS
16	LG	TO FRONT DOOR LH HARNESS

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH
Connector Color	GREEN

H.S.

20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21

Terminal No.	Color of Wire	Signal Name
1	G	ENG START SW NO ESCL
2	–	–
3	R	A/L POWER SUPPLY 5V
4	W/R	A/L SIGNAL
5	–	–
6	–	–
7	–	–
8	–	–
9	–	–
10	SB	COMBI SW IN 5
11	G/Y	COMBI SW IN 4
12	Y	COMBI SW IN 3
13	G/B	COMBI SW IN 2
14	V	COMBI SW IN 1
15	–	–
16	–	–
17	P	GND RF A/L
18	V	SECURITY INDICATOR
19	–	–
20	R	SHIFT P
21	R/W	STEP LAMP CONT
22	–	–
23	Y	AIRCON SW
24	–	–
25	W	BRAKE SW FUSE
26	L	SHORT IN PIN INPUT
27	R/G	BRAKE SW LAMP
28	–	–
29	W	BLOWER FAN SW
30	P	DR DOOR LOCK STATUS
31	–	–
32	Y	REAR DEFOGGER SW
33	–	–
34	–	–
35	R/G	REVERSE SW
36	W/B	HAZARD SW
37	–	–
38	–	–
39	B/R	SHIFT N/P
40	–	–

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH
Connector Color	BLACK

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
41	Y/L	TRAILER LIGHT CHECK RELAY OUT
42	R/Y	CARGO LAMP OUT
43	–	–
44	–	–
45	–	–
46	–	–
47	–	–
48	R	HIGH SIDE START SW LED
49	–	–
50	–	–
51	–	–
52	W	AUDIO DONGLE
53	–	–
54	W/L	PW UART
55	W/B	L&R SENSOR K-LINE
56	–	–
57	–	–
58	–	–
59	P	CAN-L
60	L	CAN-H
61	O	REAR DEFOGGER RELAY OUT
62	W	STARTER RELAY OUT
63	–	–
64	P	BUZZER OUT
65	–	–
66	W	BLOWER FAN RELAY OUT
67	G	IGN ELEC RELAY OUT 2
68	L	MR OUTPUT
69	R/B	AT DEVICE OUT
70	P	IGN USM OUT 1
71	O	DR REQUEST SW
72	G	AS REQUEST SW
73	–	–
74	–	–
75	L/W	COMBI SW OUT 5
76	P	COMBI SW OUT 4
77	L	COMBI SW OUT 3
78	O/B	COMBI SW OUT 2
79	R/W	COMBI SW OUT 1
80	–	–

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POWER WINDOW SYSTEM CONNECTORS

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FGY-NH
Connector Color	GRAY

H.S.

92	91	90	89	88	87	86	85	84	83	82	81
104	103	102	101	100	99	98	97	96	95	94	93

Terminal No.	Color of Wire	Signal Name
81	–	–
82	W	RL DOOR SW
83	–	–
84	–	–
85	–	–
86	G/B	TRAILER FLASHER RL
87	Y/B	TRAILER FLASHER RR
88	–	–
89	–	–
90	–	–
91	–	–
92	O	RR FLASHER
93	R	RR DOOR SW
94	G	AS DOOR SW
95	–	–
96	BG	DR DOOR SW
97	P/L	CARGO LAMP SW
98	–	–
99	–	–
100	–	–
101	–	–
102	–	–
103	G/B	RL FLASHER
104	–	–

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

H.S.

1G	2G	3G	4G	5G
6G	7G	8G	9G	10G

11G	12G	13G	14G	15G	16G	17G	18G	19G	20G	21G	22G	23G	24G	25G	26G	27G
28G	29G	30G	31G	32G	33G	34G	35G	36G	37G	38G	39G	40G	41G	42G	43G	44G
45G	46G	47G	48G	49G	50G	51G	52G	53G	54G	55G	56G	57G	58G	59G	60G	61G
62G	63G	64G	65G	66G	67G	68G	69G	70G	71G	72G	73G	74G	75G	76G	77G	78G
79G	80G	81G	82G	83G	84G	85G	86G	87G	88G	89G	90G	91G	92G	93G	94G	95G
96G	97G	98G	99G	100G												

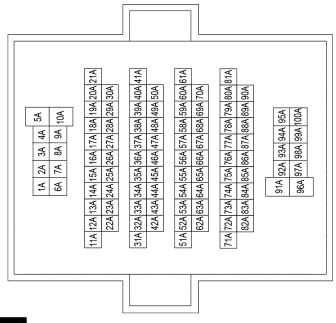
Terminal No.	Color of Wire	Signal Name
1G	G	TO ENGINE ROOM HARNESS
2G	B/R	TO ENGINE ROOM HARNESS
3G	W	TO ENGINE ROOM HARNESS
4G	BR/W	TO ENGINE ROOM HARNESS
5G	–	TO ENGINE ROOM HARNESS
6G	R/W	TO ENGINE ROOM HARNESS
7G	Y	TO ENGINE ROOM HARNESS
8G	G	TO ENGINE ROOM HARNESS
9G	R	TO ENGINE ROOM HARNESS
10G	W	TO ENGINE ROOM HARNESS
11G	R/G	TO ENGINE ROOM HARNESS
12G	W/B	TO ENGINE ROOM HARNESS
13G	BR	TO ENGINE ROOM HARNESS
14G	Y/B	TO ENGINE ROOM HARNESS
15G	G/W	TO ENGINE ROOM HARNESS
16G	G	TO ENGINE ROOM HARNESS
17G	O	TO ENGINE ROOM HARNESS
18G	G/Y	TO ENGINE ROOM HARNESS
19G	Y/V	TO ENGINE ROOM HARNESS
20G	G/Y	TO ENGINE ROOM HARNESS
21G	B/Y	TO ENGINE ROOM HARNESS
22G	G/R	TO ENGINE ROOM HARNESS
23G	Y/R	TO ENGINE ROOM HARNESS
24G	G/B	TO ENGINE ROOM HARNESS
25G	R/W	TO ENGINE ROOM HARNESS
26G	R	TO ENGINE ROOM HARNESS
27G	LG	TO ENGINE ROOM HARNESS
28G	G/B	TO ENGINE ROOM HARNESS
29G	G/B	TO ENGINE ROOM HARNESS
30G	BR/Y	TO ENGINE ROOM HARNESS
31G	R	TO ENGINE ROOM HARNESS
32G	R	TO ENGINE ROOM HARNESS
33G	Y/L	TO ENGINE ROOM HARNESS
34G	GR	TO ENGINE ROOM HARNESS
35G	G/R	TO ENGINE ROOM HARNESS
36G	SB	TO ENGINE ROOM HARNESS
37G	R/W	TO ENGINE ROOM HARNESS
38G	BR	TO ENGINE ROOM HARNESS
39G	BR	TO ENGINE ROOM HARNESS
40G	–	TO ENGINE ROOM HARNESS
41G	R/G	TO ENGINE ROOM HARNESS
42G	O	TO ENGINE ROOM HARNESS
43G	G	TO ENGINE ROOM HARNESS
44G	R/Y	TO ENGINE ROOM HARNESS
45G	G	TO ENGINE ROOM HARNESS
46G	LG	TO ENGINE ROOM HARNESS
47G	R	TO ENGINE ROOM HARNESS
48G	W	TO ENGINE ROOM HARNESS
49G	–	TO ENGINE ROOM HARNESS
50G	BR	TO ENGINE ROOM HARNESS
51G	R	TO ENGINE ROOM HARNESS
52G	L	TO ENGINE ROOM HARNESS
53G	W	TO ENGINE ROOM HARNESS
54G	W	TO ENGINE ROOM HARNESS
55G	G	TO ENGINE ROOM HARNESS
56G	W	TO ENGINE ROOM HARNESS
57G	Y	TO ENGINE ROOM HARNESS
58G	BG	TO ENGINE ROOM HARNESS
59G	BG	TO ENGINE ROOM HARNESS
60G	BG	TO ENGINE ROOM HARNESS
61G	O	TO ENGINE ROOM HARNESS
62G	W	TO ENGINE ROOM HARNESS
63G	O	TO ENGINE ROOM HARNESS
64G	W/L	TO ENGINE ROOM HARNESS
65G	W/R	TO ENGINE ROOM HARNESS
66G	BG	TO ENGINE ROOM HARNESS
67G	O	TO ENGINE ROOM HARNESS
68G	B	TO ENGINE ROOM HARNESS
69G	Y	TO ENGINE ROOM HARNESS
70G	L	TO ENGINE ROOM HARNESS
71G	R/W	TO ENGINE ROOM HARNESS
72G	L/W	TO ENGINE ROOM HARNESS
73G	SHIELD	TO ENGINE ROOM HARNESS
74G	W	TO ENGINE ROOM HARNESS
75G	R	TO ENGINE ROOM HARNESS
76G	R/G	TO ENGINE ROOM HARNESS
77G	BG	TO ENGINE ROOM HARNESS
78G	P	TO ENGINE ROOM HARNESS
79G	–	TO ENGINE ROOM HARNESS
80G	R	TO ENGINE ROOM HARNESS
81G	L	TO ENGINE ROOM HARNESS
82G	R	TO ENGINE ROOM HARNESS
83G	L	TO ENGINE ROOM HARNESS
84G	L	TO ENGINE ROOM HARNESS
85G	W	TO ENGINE ROOM HARNESS
86G	B/R	TO ENGINE ROOM HARNESS
87G	W	TO ENGINE ROOM HARNESS
88G	G	TO ENGINE ROOM HARNESS
89G	P	TO ENGINE ROOM HARNESS
90G	G	TO ENGINE ROOM HARNESS
91G	P	TO ENGINE ROOM HARNESS
92G	V/W	TO ENGINE ROOM HARNESS
93G	BR	TO ENGINE ROOM HARNESS
94G	B	TO ENGINE ROOM HARNESS
95G	G	TO ENGINE ROOM HARNESS
96G	R	TO ENGINE ROOM HARNESS
97G	R	TO ENGINE ROOM HARNESS
98G	W/B	TO ENGINE ROOM HARNESS
99G	R	TO ENGINE ROOM HARNESS
100G	GR/W	TO ENGINE ROOM HARNESS

AAKIA4148GB

POWER WINDOW SYSTEM CONNECTORS

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	TH80FDGY-CS16-TM4
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
1A	W	TO BODY NO. 2 HARNESS
2A	LG	TO BODY NO. 2 HARNESS
3A	V	TO BODY NO. 2 HARNESS
4A	SB	TO BODY NO. 2 HARNESS
5A	–	TO BODY NO. 2 HARNESS
6A	BG	TO BODY NO. 2 HARNESS - (WITH CLIMATE CONTROLLED SEAT)
6A	LG	TO BODY NO. 2 HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
7A	W	TO BODY NO. 2 HARNESS
8A	B	TO BODY NO. 2 HARNESS
9A	L/B	TO BODY NO. 2 HARNESS
10A	W	TO BODY NO. 2 HARNESS
11A	R	TO BODY NO. 2 HARNESS
12A	BR	TO BODY NO. 2 HARNESS
13A	G	TO BODY NO. 2 HARNESS
14A	R/G	TO BODY NO. 2 HARNESS
15A	O	TO BODY NO. 2 HARNESS
16A	O/L	TO BODY NO. 2 HARNESS
17A	L	TO BODY NO. 2 HARNESS
18A	Y	TO BODY NO. 2 HARNESS
19A	B/W	TO BODY NO. 2 HARNESS
20A	R	TO BODY NO. 2 HARNESS
21A	BG	TO BODY NO. 2 HARNESS
22A	G	TO BODY NO. 2 HARNESS
23A	Y	TO BODY NO. 2 HARNESS
24A	L	TO BODY NO. 2 HARNESS
25A	–	TO BODY NO. 2 HARNESS
26A	GR	TO BODY NO. 2 HARNESS
27A	LG	TO BODY NO. 2 HARNESS
28A	LG	TO BODY NO. 2 HARNESS
29A	GR	TO BODY NO. 2 HARNESS
30A	BR	TO BODY NO. 2 HARNESS
31A	W/R	TO BODY NO. 2 HARNESS
32A	G/R	TO BODY NO. 2 HARNESS
33A	–	TO BODY NO. 2 HARNESS
34A	SHIELD	TO BODY NO. 2 HARNESS
35A	P	TO BODY NO. 2 HARNESS
36A	B	TO BODY NO. 2 HARNESS
37A	–	TO BODY NO. 2 HARNESS
38A	R/B	TO BODY NO. 2 HARNESS
39A	G/O	TO BODY NO. 2 HARNESS
40A	V	TO BODY NO. 2 HARNESS
41A	SHIELD	TO BODY NO. 2 HARNESS
42A	SHIELD	TO BODY NO. 2 HARNESS
43A	R	TO BODY NO. 2 HARNESS
44A	G	TO BODY NO. 2 HARNESS
45A	–	TO BODY NO. 2 HARNESS
46A	–	TO BODY NO. 2 HARNESS
47A	Y	TO BODY NO. 2 HARNESS
48A	R/W	TO BODY NO. 2 HARNESS
49A	R/L	TO BODY NO. 2 HARNESS
50A	B	TO BODY NO. 2 HARNESS
51A	–	TO BODY NO. 2 HARNESS
52A	–	TO BODY NO. 2 HARNESS
53A	–	TO BODY NO. 2 HARNESS
54A	–	TO BODY NO. 2 HARNESS
55A	–	TO BODY NO. 2 HARNESS
56A	–	TO BODY NO. 2 HARNESS
57A	–	TO BODY NO. 2 HARNESS
58A	–	TO BODY NO. 2 HARNESS
59A	–	TO BODY NO. 2 HARNESS
60A	G/W	TO BODY NO. 2 HARNESS
61A	–	TO BODY NO. 2 HARNESS
62A	–	TO BODY NO. 2 HARNESS
63A	–	TO BODY NO. 2 HARNESS
64A	–	TO BODY NO. 2 HARNESS
65A	–	TO BODY NO. 2 HARNESS
66A	–	TO BODY NO. 2 HARNESS
67A	–	TO BODY NO. 2 HARNESS
68A	–	TO BODY NO. 2 HARNESS
69A	Y/R	TO BODY NO. 2 HARNESS
70A	R/G	TO BODY NO. 2 HARNESS
71A	–	TO BODY NO. 2 HARNESS
72A	W	TO BODY NO. 2 HARNESS
73A	G	TO BODY NO. 2 HARNESS
74A	W	TO BODY NO. 2 HARNESS
75A	SHIELD	TO BODY NO. 2 HARNESS
76A	R	TO BODY NO. 2 HARNESS
77A	L	TO BODY NO. 2 HARNESS
78A	SHIELD	TO BODY NO. 2 HARNESS
79A	GR	TO BODY NO. 2 HARNESS
80A	V	TO BODY NO. 2 HARNESS
81A	R	TO BODY NO. 2 HARNESS
82A	SHIELD	TO BODY NO. 2 HARNESS
83A	R	TO BODY NO. 2 HARNESS
84A	O	TO BODY NO. 2 HARNESS
85A	SHIELD	TO BODY NO. 2 HARNESS
86A	W	TO BODY NO. 2 HARNESS
87A	B	TO BODY NO. 2 HARNESS
88A	W	TO BODY NO. 2 HARNESS
89A	SHIELD	TO BODY NO. 2 HARNESS
90A	G	TO BODY NO. 2 HARNESS
91A	W/L	TO BODY NO. 2 HARNESS
92A	BR	TO BODY NO. 2 HARNESS
93A	L/Y	TO BODY NO. 2 HARNESS
94A	R/L	TO BODY NO. 2 HARNESS
95A	BR	TO BODY NO. 2 HARNESS
96A	R	TO BODY NO. 2 HARNESS
97A	LG	TO BODY NO. 2 HARNESS
98A	B/V	TO BODY NO. 2 HARNESS
99A	O/L	TO BODY NO. 2 HARNESS
100A	BR/W	TO BODY NO. 2 HARNESS

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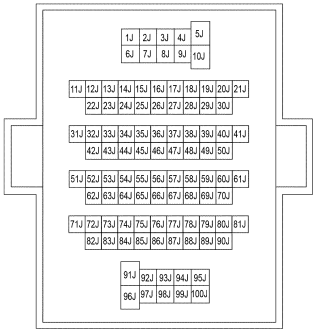
POWER WINDOW SYSTEM CONNECTORS

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

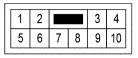
H.S.



Terminal No.	Color of Wire	Signal Name
1J	G	TO BODY HARNESS
2J	R/Y	TO BODY HARNESS
3J	L	TO BODY HARNESS
4J	L/B	TO BODY HARNESS
5J	B	TO BODY HARNESS
6J	BR	TO BODY HARNESS
7J	BG	TO BODY HARNESS
8J	SB	TO BODY HARNESS
9J	BR	TO BODY HARNESS
10J	R	TO BODY HARNESS
11J	O/B	TO BODY HARNESS
12J	L	TO BODY HARNESS
13J	W	TO BODY HARNESS
14J	Y	TO BODY HARNESS
15J	–	TO BODY HARNESS
16J	R	TO BODY HARNESS
17J	G	TO BODY HARNESS
18J	SB	TO BODY HARNESS
19J	O	TO BODY HARNESS
20J	O/B	TO BODY HARNESS
21J	Y	TO BODY HARNESS
22J	P	TO BODY HARNESS
23J	W	TO BODY HARNESS
24J	W/R	TO BODY HARNESS
25J	P	TO BODY HARNESS
26J	L	TO BODY HARNESS
27J	R	TO BODY HARNESS
28J	L	TO BODY HARNESS
29J	G/O	TO BODY HARNESS
30J	SB	TO BODY HARNESS
31J	L/G	TO BODY HARNESS
32J	R	TO BODY HARNESS
33J	BG	TO BODY HARNESS
34J	Y	TO BODY HARNESS
35J	P	TO BODY HARNESS
36J	G/R	TO BODY HARNESS
37J	LG	TO BODY HARNESS
38J	SB	TO BODY HARNESS
39J	Y	TO BODY HARNESS
40J	SB	TO BODY HARNESS
41J	L	TO BODY HARNESS
42J	L	TO BODY HARNESS
43J	W	TO BODY HARNESS
44J	BR	TO BODY HARNESS
45J	BG	TO BODY HARNESS
46J	P	TO BODY HARNESS
47J	O	TO BODY HARNESS
48J	V	TO BODY HARNESS
49J	BR	TO BODY HARNESS
50J	G/W	TO BODY HARNESS
51J	–	TO BODY HARNESS
52J	SHIELD	TO BODY HARNESS
53J	R	TO BODY HARNESS
54J	L	TO BODY HARNESS
55J	R	TO BODY HARNESS
56J	W	TO BODY HARNESS
57J	R	TO BODY HARNESS
58J	B	TO BODY HARNESS
59J	–	TO BODY HARNESS
60J	SHIELD	TO BODY HARNESS
61J	G	TO BODY HARNESS
62J	–	TO BODY HARNESS
63J	R/W	TO BODY HARNESS
64J	L/W	TO BODY HARNESS
65J	SHIELD	TO BODY HARNESS
66J	B	TO BODY HARNESS
67J	SHIELD	TO BODY HARNESS
68J	W	TO BODY HARNESS
69J	SHIELD	TO BODY HARNESS
70J	B/R	TO BODY HARNESS
71J	L/W	TO BODY HARNESS
72J	–	TO BODY HARNESS
73J	–	TO BODY HARNESS
74J	SHIELD	TO BODY HARNESS
75J	R	TO BODY HARNESS
76J	O	TO BODY HARNESS
77J	SHIELD	TO BODY HARNESS
78J	W	TO BODY HARNESS
79J	B	TO BODY HARNESS
80J	W	TO BODY HARNESS
81J	SHIELD	TO BODY HARNESS
82J	L/R	TO BODY HARNESS
83J	–	TO BODY HARNESS
84J	–	TO BODY HARNESS
85J	W	TO BODY HARNESS
86J	G	TO BODY HARNESS
87J	W	TO BODY HARNESS
88J	SHIELD	TO BODY HARNESS
89J	R	TO BODY HARNESS
90J	L	TO BODY HARNESS
91J	L/B	TO BODY HARNESS
92J	SB	TO BODY HARNESS
93J	B	TO BODY HARNESS
94J	LG	TO BODY HARNESS
95J	L	TO BODY HARNESS
96J	G	TO BODY HARNESS
97J	B/Y	TO BODY HARNESS
98J	L/B	TO BODY HARNESS
99J	W/L	TO BODY HARNESS
100J	Y	TO BODY HARNESS

Connector No.	M75
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS
Connector Color	WHITE

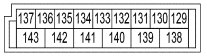
H.S.



Terminal No.	Color of Wire	Signal Name
1	B/W	TO FRONT DOOR RH HARNESS
2	B	TO FRONT DOOR RH HARNESS
3	W/L	TO FRONT DOOR RH HARNESS
4	V	TO FRONT DOOR RH HARNESS
5	W/B	TO FRONT DOOR RH HARNESS
6	G/Y	TO FRONT DOOR RH HARNESS
7	W/B	TO FRONT DOOR RH HARNESS
8	L/B	TO FRONT DOOR RH HARNESS
9	G/Y	TO FRONT DOOR RH HARNESS
10	–	TO FRONT DOOR RH HARNESS

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHA6-SA
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
129	R/G	BATTERY SAVER OUT
130	LG	SUPER LOCK/DOOR UNLOCK AS
131	W	BAT BCM FUSE
132	Y	DOOR LOCK AS/RR/RL
133	BR	DOOR UNLOCK AS/RR/RL
134	B	GND2
135	O	DOOR LOCK DR/AS/FL
136	L	ROOM LAMP CONT
137	V	DOOR UNLOCK DR/AS/FL
138	V	BAT REAR DOOR
139	W	BAT-POWER F/L
140	LG	P/W POWER SUPPLY IGN
141	V	P/W POWER SUPPLY BAT
142	Y	BAT FRONT DOOR
143	B	GND1

Connector No.	M82
Connector Name	CIRCUIT BREAKER-1
Connector Type	M02FW-LC
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L/B	BATTERY
2	W	BATTERY

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POWER WINDOW SYSTEM CONNECTORS

Connector No.	M154
Connector Name	REAR POWER SLIDE GLASS CLOSE RELAY
Connector Type	MS03FB-M2-LC
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	P/W POWER SUPPLY IGN
2	G	RELAY CONTROL
3	L/Y	RELAY OUTPUT
4	B	GROUND
5	L/W	BATTERY

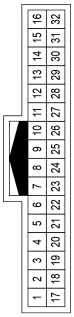
Connector No.	M155
Connector Name	REAR POWER SLIDE GLASS OPEN RELAY
Connector Type	MS03FB-M2-LC
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	P/W POWER SUPPLY IGN
2	L/W	RELAY CONTROL
3	B/V	RELAY OUTPUT
4	B	GROUND
5	L/BR	BATTERY

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH
Connector Color	WHITE

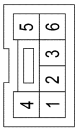
H.S.



Terminal No.	Color of Wire	Signal Name
1	SHIELD	TO MAIN HARNESS
2	R	TO MAIN HARNESS
3	W	TO MAIN HARNESS
4	Y/R	TO MAIN HARNESS
5	G/W	TO MAIN HARNESS
6	G/R	TO MAIN HARNESS
7	B	TO MAIN HARNESS
8	L	TO MAIN HARNESS
9	R/G	TO MAIN HARNESS
10	G	TO MAIN HARNESS
11	L/W	TO MAIN HARNESS
12	L	TO MAIN HARNESS
13	GR	TO MAIN HARNESS
14	R	TO MAIN HARNESS
15	W/B	TO MAIN HARNESS
16	L/B	TO MAIN HARNESS
17	–	TO MAIN HARNESS
18	P	TO MAIN HARNESS
19	W/L	TO MAIN HARNESS
20	W/B	TO MAIN HARNESS
21	–	TO MAIN HARNESS
22	–	TO MAIN HARNESS
23	–	TO MAIN HARNESS
24	–	TO MAIN HARNESS
25	–	TO MAIN HARNESS
26	–	TO MAIN HARNESS
27	–	TO MAIN HARNESS
28	Y/R	TO MAIN HARNESS
29	G/R	TO MAIN HARNESS
30	G/W	TO MAIN HARNESS
31	LG/B	TO MAIN HARNESS
32	Y/V	TO MAIN HARNESS

Connector No.	R19
Connector Name	REAR POWER SLIDE GLASS SWITCH
Connector Type	TK06FW-1V
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	G	SWITCH OUTPUT (CLOSE)
2	GR	ILLUMINATION -
3	B	GROUND
4	L	ILLUMINATION +
5	L/W	SWITCH OUTPUT (OPEN)
6	–	–

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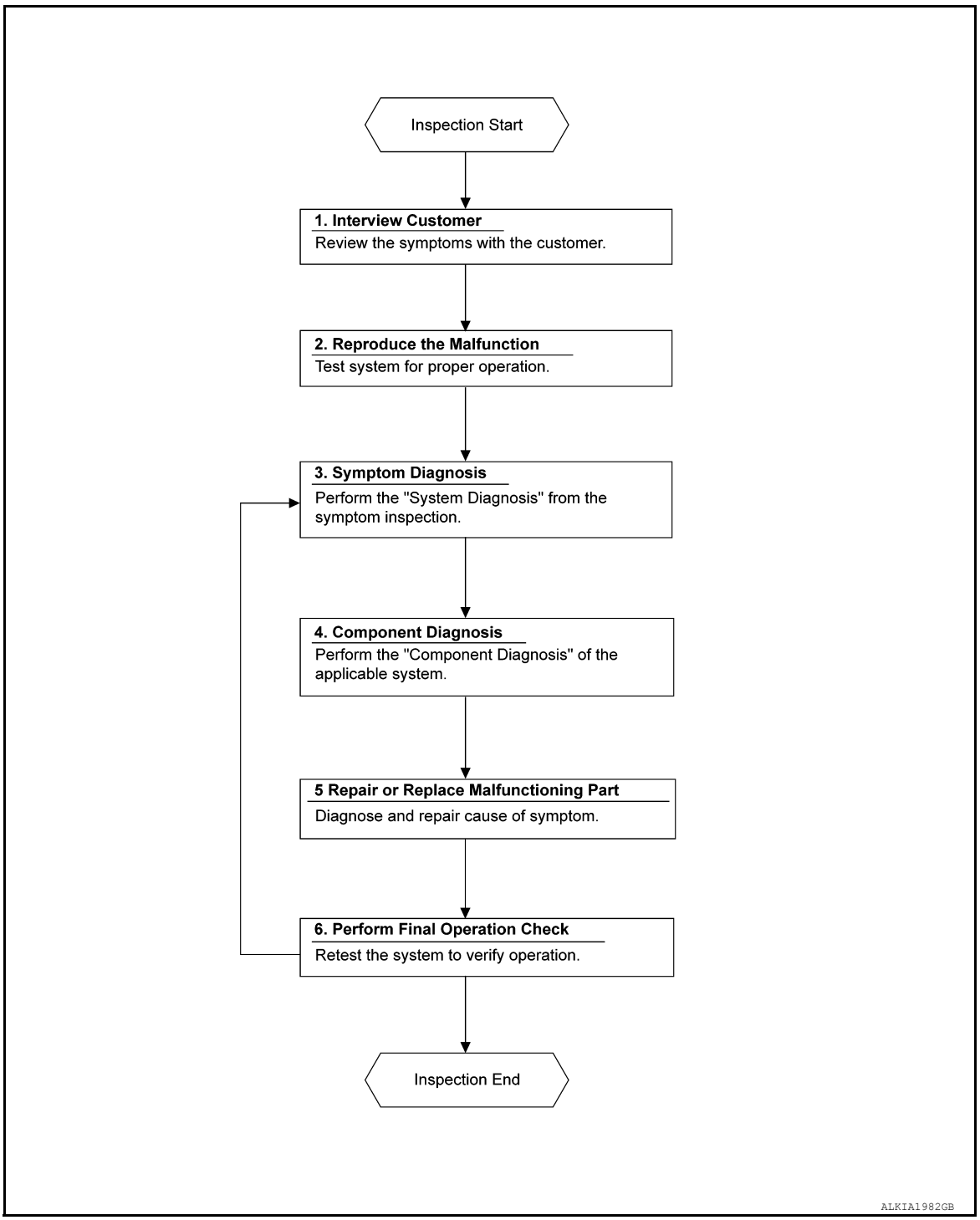
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000014391435

OVERALL SEQUENCE



DETAILED FLOW

1. INTERVIEW CUSTOMER

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

>> GO TO 2.

2. REPRODUCE THE MALFUNCTION

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

>> GO TO 3.

3. 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. COMPONENT DIAGNOSIS

Perform the diagnosis with Component Diagnosis of the applicable system.

>> GO TO 5.

5. REPAIR OR REPLACE THE MALFUNCTIONING PART

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

6. PERFORM FINAL OPERATIONAL 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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:0000000014391436

If any of the following work has been done Initial setting is necessary:
- Power supply to the main power window and door lock/unlock switch or power window motor is cut off by the removal
  of battery terminal or the battery fuse is blown.
- Disconnection and connection of main power window and door lock/unlock switch harness connector.
- Removal and installation of motor from regulator assembly.
- Operation of regulator assembly as an independent unit.
- Removal and installation of glass.
- Removal and installation of door glass run.

The following specified operations can not be performed under the non-initialized condition:
- Auto-up operation
- Anti-pinch function

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:0000000014391437

INITIALIZATION PROCEDURE
1. Disconnect battery minus terminal or main power and window door lock/unlock 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 2 seconds or more.
5. Initializing procedure is completely.
6. 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 (5.9 in) without pinching piece of wood and stops.
- Check that glass does not rise when operating the main power and door lock/unlock switch while lowering.

CAUTION:
- **Perform initial setting when auto-up operation or anti-pinch function does not operate normally.**
- **Check that AUTO-UP operates before inspection when system initialization is performed.**
- **Do not check with hands and other body parts because they may be pinched. Do not get pinched.**
- **It may switch to fail-safe mode if open/close operation is performed continuously without full close. Perform initial setting in that situation. Refer to PWC-10, "Fail-safe"**
- **Finish initial setting. Otherwise, next operation cannot be done.**

1. **Auto-up operation**
2. **Anti-pinch function**

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000014391438

Refer to PWC-34, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Re-

quirement

INFOID:0000000014391439

Refer to PWC-34, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement" for initialization procedure and check anti-pinch function.

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000014697572

Regarding Wiring Diagram information, refer to BCS-54, "Wiring Diagram".

1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.	
	Cummins 5.0L	VK56VD
Fusible link battery power	R (50A)	N (50A)
BCM battery fuse	1 (10A)	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 M81.
2. Check voltage between BCM connector M81 terminals 131, 139 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M81	131	(—)	Battery voltage
	139		

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 M81 terminals 134, 143 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	134	—	Yes
	143		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:0000000014391441

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connectors.
3. Turn ignition switch ON.
4. Check voltage between main power window and door lock/unlock switch harness connectors and ground.

(+)		(–)	Voltage (Approx.)
Main power window and door lock/unlock switch			
Connector	Terminal		
D7	10	Ground	Battery voltage
D8	18		

Is the inspection result normal?

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

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M81.
3. Check continuity between BCM harness connector M81 and main power window and door lock/unlock switch harness connector.

BCM		Main power window and door lock/unlock switch		Continuity
Connector	Terminal	Connector	Terminal	
M17	140	D7	10	Yes
	141	D8	18	

4. Check continuity between BCM harness connector M81 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	140	Ground	No
	141		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between main power window and door lock/unlock switch harness connector D7 and ground.

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

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure

INFOID:0000000014391442

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector D129.
3. Turn ignition switch ON.
4. Check voltage between power window and door lock/unlock switch RH harness connector D129 and ground.

(+)		(–)	Voltage (Approx.)
Power window and door lock/unlock switch RH			
Connector	Terminal		
D129	8	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M81.
3. Check continuity between BCM harness connector M81 and power window and door lock/unlock switch RH harness connector D129.

BCM		Power window and door lock/unlock switch RH		Continuity
Connector	Terminal	Connector	Terminal	
M81	141	D129	8	Yes

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between power window and door lock/unlock switch RH harness connector D129 and ground.

Power window and door lock/unlock switch RH		Ground	Continuity
Connector	Terminal		
D129	7		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

REAR POWER WINDOW SWITCH

REAR POWER WINDOW SWITCH : Diagnosis Procedure

INFOID:0000000014391443

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH connector D203 and rear power window switch RH connector D309.
3. Turn ignition switch ON.
4. Check voltage between rear power window switch harness connector D203, D309, and ground.

(+)			(–)	Voltage (Approx.)
Rear power window switch				
Connector		Terminal		
LH	D203	4	Ground	Battery voltage
RH	D309			

Is the inspection result normal?

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

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM harness connector M17 and rear power window switch harness connector D203 and D309.

BCM		Rear power window switch			Continuity
Connector	Terminal	Connector		Terminal	
M17	140	LH	D203	4	Yes
		RH	D309		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between rear power window switch harness connector D203, D309, and ground.

Rear power window switch			Ground	Continuity
Connector		Terminal		
LH	D203	2		Yes
RH	D309			

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

POWER WINDOW MOTOR
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000014391444

1.CHECK POWER WINDOW MOTOR CIRCUIT

Check front power window motor LH operation with 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-40, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000014391445

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1.CHECK FRONT POWER WINDOW MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front power window motor LH connector D9.
3. Turn ignition switch ON.
4. Check voltage between front power window motor LH harness connector D9 and ground.

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

Is the inspection result normal?

YES >> Replace front power window motor LH. Refer to GW-19, "Removal and Installation".
NO >> GO TO 2.

2.CHECK POWER WINDOW MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connector D8.
3. Check continuity between main power window and door lock/unlock switch harness connector D8 and front power window motor LH harness connector D9.

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

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

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

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-77, "Removal and Installation".
NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000014391446

1. CHECK POWER WINDOW MOTOR 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 RH.

Is the inspection result normal?

YES >> Front power window motor RH is OK.
NO >> Refer to PWC-41, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000014391447

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1. CHECK FRONT POWER WINDOW MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front power window motor RH connector D105.
3. Turn ignition switch ON.
4. Check voltage between front power window motor RH harness connector D105 and ground.

(+)		(–)	Condition		Voltage (Approx.)
Front power window motor RH					
Connector	Terminal				
D105	1	Ground	Power window and door lock/unlock switch RH	UP	Battery voltage
				DOWN	0
	3			UP	0
				DOWN	Battery voltage

Is the inspection result normal?

YES >> Replace front power window motor RH. Refer to GW-19, "Removal and Installation".
NO >> GO TO 2.

2. CHECK POWER WINDOW MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/switch RH connector D129.
3. Check continuity between power window and door lock/unlock switch RH harness connector D129 and front power window motor RH harness connector D105.

Power window and door lock/unlock switch RH		Front power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	
D129	11	D105	1	Yes
	12		3	

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

Power window and door lock/unlock switch RH		Ground	Continuity
Connector	Terminal		
D129	11		No
	12		

Is the inspection result normal?

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

REAR LH

REAR LH : Component Function Check

INFOID:0000000014391448

1.CHECK POWER WINDOW MOTOR 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?

YES >> Rear power window motor LH is OK.
NO >> Refer to PWC-42, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000014391449

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1.CHECK REAR POWER WINDOW MOTOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Rear power window motor LH					
Connector	Terminal				
D204	3	Ground	Rear power window switch LH	UP	Battery voltage
				DOWN	0
	1			UP	0
				DOWN	Battery voltage

Is the inspection result normal?

YES >> Replace rear power window motor LH. Refer to GW-25, "Removal and Installation".
NO >> GO TO 2.

2.CHECK POWER WINDOW MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH connector D203.
3. Check continuity between rear power window switch LH harness connector D203 and rear power window motor LH harness connector D204.

Rear power window switch LH		Rear power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	
D203	5	D204	1	Yes
	6		3	

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

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

Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to PWC-80, "Removal and Installation".
NO >> Repair or replace harness.

REAR RH

REAR RH : Component Function Check

INFOID:0000000014391450

1. CHECK POWER WINDOW MOTOR CIRCUIT

Check rear power window motor RH operation with 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-43, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000014391451

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1. CHECK REAR POWER WINDOW MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect rear power window motor RH connector D304.
3. Turn ignition switch ON.
4. Check voltage between rear power window motor RH harness connector D304 and ground.

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

Is the inspection result normal?

YES >> Replace rear power window motor RH. Refer to GW-25, "Removal and Installation".
NO >> GO TO 2.

2. CHECK POWER WINDOW MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power window switch RH connector D309.
3. Check continuity between rear power window switch RH harness connector D309 and rear power window motor RH harness connector D304.

Rear power window switch RH		Rear power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	
D309	5	D304	1	Yes
	6		3	

4. Check continuity between rear power window switch RH harness connector D309 and ground.

Rear power window switch RH		Ground	Continuity
Connector	Terminal		
D309	5		No
	6		

Is the inspection result normal?

YES >> Replace rear power window switch RH. Refer to PWC-80, "Removal and Installation".
NO >> Repair or replace harness.

ENCODER
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000014391452

1.CHECK ENCODER

Check that driver side door glass performs AUTO open/close operation normally by main power window and door lock/unlock switch.

Is the inspection result normal?

YES >> Encoder is OK.
NO >> Refer to PWC-45, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

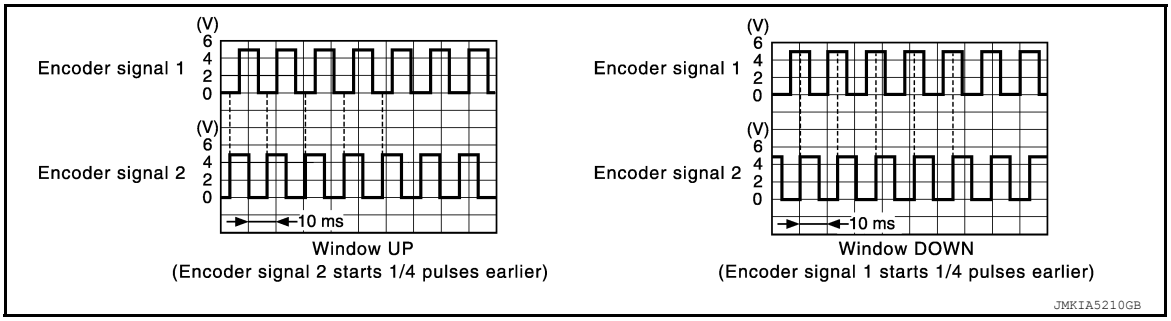
INFOID:0000000014391453

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1.CHECK ENCODER SIGNAL

1. Turn ignition switch ON.
2. Check signal between main power window and door lock/unlock switch harness connector D7 and ground with oscilloscope.

Signal name	(+)		(–)	Signal (Reference value)
	Main power window and door lock/unlock switch			
	Connector	Terminal		
Encoder signal 1	D7	5	Ground	Refer to following signals
Encoder signal 2		4		



Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-77, "Removal and Installation".
NO >> GO TO 2.

2.CHECK ENCODER SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connector D7 and front power window motor LH connector D9.
3. Check continuity between main power window and door lock/unlock switch harness connector D7 and front power window motor LH harness connector D9.

Main power window and door lock/unlock switch		Front power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	
D7	4	D9	5	Yes
	5		6	

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

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

Is the inspection result normal?

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

3. CHECK ENCODER POWER SUPPLY

1. Connect main power window and door lock/unlock switch connector D9.
2. Turn ignition switch ON.
3. Check voltage between front power window motor LH harness connector D9 and ground.

(+)		(–)	Voltage (Approx.)
Front power window motor LH			
Connector	Terminal		
D9	2	Ground	Battery voltage

Is the inspection result normal?

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

4. CHECK ENCODER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connector D7.
3. Check continuity between main power window and door lock/unlock switch harness connector D7 and front power window motor LH harness connector D9.

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

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

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

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-77, "Removal and Installation".
NO >> Repair or replace harness.

5. CHECK GROUND CIRCUIT 1

1. Turn ignition switch OFF.
2. Check continuity between front power window motor LH harness connector D9 and ground.

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

Is the inspection result normal?

YES >> Replace front power window motor LH. Refer to GW-19, "Removal and Installation".

NO >> GO TO 6.

6.CHECK GROUND CIRCUIT 2

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

Main power window and door lock/unlock switch		Front power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	
D7	12	D9	4	Yes

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

Main power window and door lock/unlock switch		Ground	Continuity
Connector	Terminal		
D7	12		No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-77, "Removal and Installation".
NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000014391454

1.CHECK ENCODER

Check that passenger side door glass performs AUTO open/close operation normally by main power window and door lock/unlock switch or power window and door lock/unlock switch RH.

Is the inspection result normal?

YES >> Encoder is OK.
NO >> Refer to PWC-47, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

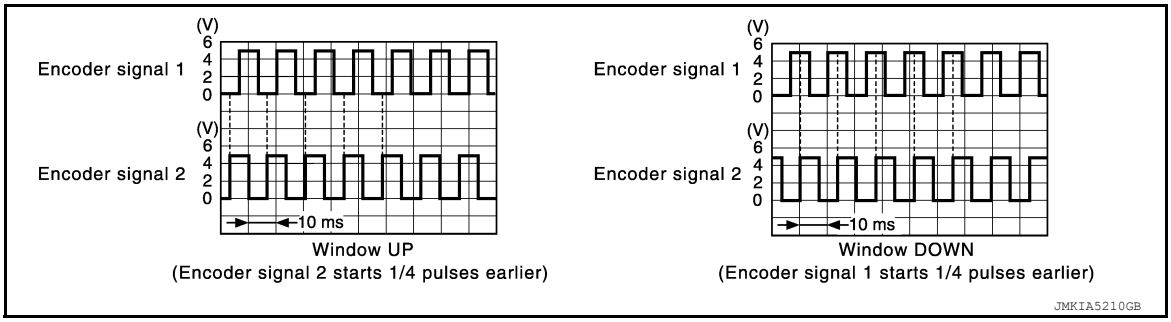
INFOID:0000000014391455

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1.CHECK ENCODER SIGNAL

1. Turn ignition switch ON.
2. Check signal between power window and door lock/unlock switch RH harness connector D129 and ground with oscilloscope.

Signal name	(+)		(–)	Signal (Reference value)
	Power window and door lock/unlock switch RH			
	Connector	Terminal		
Encoder signal 1	D129	9	Ground	Refer to following signals
Encoder signal 2		10		



Is the inspection result normal?

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

NO >> GO TO 2.

2.CHECK ENCODER SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector D129 and front power window motor RH connector D105.
3. Check continuity between power window and door lock/unlock switch RH harness connector D129 and front power window motor RH harness connector D105.

Power window and door lock/unlock switch RH		Front power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	
D129	9	D105	6	Yes
	10		5	

4. Check continuity between power window and door lock/unlock switch RH harness connector D129 and ground.

Power window and door lock/unlock switch RH		Ground	Continuity
Connector	Terminal		
D129	9		No
	10		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK ENCODER POWER SUPPLY

1. Connect power window and door lock/unlock switch RH connector D129.
2. Turn ignition switch ON.
3. Check voltage between power window and door lock/unlock switch RH harness connector D129 and ground.

(+)		(–)	Voltage (Approx.)
Power window and door lock/unlock switch RH			
Connector	Terminal		
D129	2	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK ENCODER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector D129.

3. Check continuity between power window and door lock/unlock switch RH harness connector D129 and power window and door lock/unlock motor RH harness connector D105.

Power window and door lock/unlock switch RH		Front power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	
D129	5	D105	2	Yes

4. Check continuity between power window and door lock/unlock switch RH harness connector D129 and ground.

Power window and door lock/unlock switch RH		Ground	Continuity
Connector	Terminal		
D129	5		No

Is the inspection result normal?

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

NO >> Repair or replace harness.

5. CHECK GROUND CIRCUIT 1

1. Turn ignition switch OFF.
2. Check continuity between front power window motor RH harness connector D105 and ground.

Front power window motor RH		Ground	Continuity
Connector	Terminal		
D105	4		Yes

Is the inspection result normal?

YES >> Replace front power window motor RH. Refer to GW-19, "Removal and Installation".

NO >> GO TO 6.

6. CHECK GROUND CIRCUIT 2

1. Disconnect power window and door lock/unlock switch RH connector D129.
2. Check continuity between power window and door lock/unlock switch RH harness connector D129 and front power window motor RH harness connector D105.

Power window and door lock/unlock switch RH		Front power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	
D129	4	D105	4	Yes

3. Check continuity between power window and door lock/unlock switch RH harness connector D129 and ground.

Power window and door lock/unlock switch RH		Ground	Continuity
Connector	Terminal		
D129	4		No

Is the inspection result normal?

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

NO >> Repair or replace harness.

DOOR SWITCH

Component Function Check

INFOID:0000000014697573

1.CHECK FUNCTION

CONSULT
1. Select “DOOR LOCK” of “BCM”.
2. Select “DOOR SW-DR”, “DOOR SW-AS”, “DOOR SW-RL” or “DOOR SW-RR” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions:

Monitor Item	Condition		Status
DOOR SW-DR	Front door LH	Open	On
		Closed	Off
DOOR SW-AS	Front door RH	Open	On
		Closed	Off
DOOR SW-RL	Rear door LH	Open	On
		Closed	Off
DOOR SW-RR	Rear door RH	Open	On
		Closed	Off

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to PWC-50, "Diagnosis Procedure".

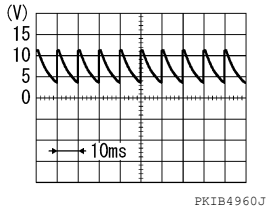
Diagnosis Procedure

INFOID:0000000014697574

Regarding Wiring Diagram information, refer to DLK-39, "Wiring Diagram".

1.CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning door switch connector.
3. Check signal between malfunctioning door switch harness connector and ground using oscilloscope.

(+)			(–)	Signal (Reference value)
Door switch				
Connector		Terminal		
Front LH	B8	3	Ground	
Front RH	B108			
Rear LH	B18			
Rear RH	B116			

7.0 - 8.0 V

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

Door switch			BCM		Continuity
Connector		Terminal	Connector	Terminal	
Front LH	B8	3	M20	96	Yes
Front RH	B108			94	
Rear LH	B18			82	
Rear RH	B116			93	

3. Check continuity between door switch harness connector and ground.

Door switch			Ground	Continuity
Connector		Terminal		
Front LH	B8	3	Ground	No
Front RH	B108			
Rear LH	B18			
Rear RH	B116			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR SWITCH

Refer to DLK-99, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace malfunctioning door switch. Refer to DLK-191, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014697575

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect malfunctioning door switch connector.
3. Check continuity between door switch terminals.

Door switch		Condition		Continuity
Terminal				
3	Ground contact is part of the switch.	Door switch	Pressed	No
			Released	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace malfunctioning door switch. Refer to DLK-191, "Removal and Installation".

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000014697576

1.CHECK FUNCTION

CONSULT
1. Select “DOOR LOCK” of “BCM”.
2. Select “KEY CYL LK-SW” or “KEY CYL UN-SW” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions:

Monitor Item	Condition		Status
KEY CYL LK-SW	Driver side door key cylinder	Lock	ON
		Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
		Neutral / Lock	OFF

Is the inspection result normal?

YES >> Door key cylinder switch is OK.
NO >> Refer to PWC-52, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014697577

Regarding Wiring Diagram information, refer to DLK-56, "Wiring Diagram".

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check voltage between front door lock assembly LH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front door lock assembly LH			
Connector	Terminal		
D14	5	Ground	5 V
	6		

Is the inspection result normal?

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

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

1. Disconnect main power window and door lock/unlock switch connector.
2. Check continuity between main power window and door lock/unlock switch harness connector and front door lock assembly LH harness connector.

Main power window and door lock/unlock switch		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
D7	3	D14	6	Yes
	15		5	

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

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

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-77, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between front door lock assembly LH harness connector and ground.

Front door lock assembly LH		Ground	Continuity
Connector	Terminal		
D14	4		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-111, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly LH. Refer to DLK-172, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014697578

1.CHECK DOOR KEY CYLINDER SWITCH

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check continuity between front door lock assembly LH terminals.

Front door lock assembly LH		Condition		Continuity
Terminal				
5	4	Driver side door key cylinder	Unlock	Yes
			Neutral / Lock	No
6			Lock	Yes
			Neutral / Unlock	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to DLK-172, "DOOR LOCK : Removal and Installation".

POWER WINDOW SERIAL LINK
POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH : Description

INFOID:0000000014391462

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 signals mentioned below are 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:0000000014391463

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

Check “CDL LOCK SW ” or “CDL UNLOCK SW” in “Data Monitor” mode of “BCM (DOOR LOCK)” with CONSULT. Refer to BCS-20, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Monitor item	Condition	
CDL LOCK SW	LOCK	: ON
	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-54, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

POWER WINDOW MAIN SWITCH : Diagnosis Procedure

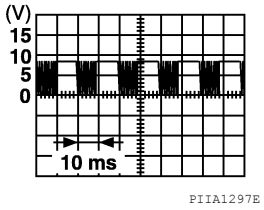
INFOID:0000000014391464

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

Power Window Serial Link Check

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Remove key and close front door LH and RH.
2. Check signal between BCM harness connector M20 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 seconds just after door lock and unlock switch (LH and RH) is turned to “LOCK” or “UNLOCK”.

Terminal			Signal (Reference value)
(+)		(–)	
BCM	Terminal		
M20	54	Ground	

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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 harness connector M20 and main power window and door lock/unlock switch harness connector D7.

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M20	54	D7	11	Yes

4. Check continuity between BCM connector M20 and ground.

BCM connector	Terminal	Ground	Continuity
M20	54		No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-77, "Removal and Installation".
NO >> Repair or replace harness or connectors.

FRONT POWER WINDOW SWITCH

FRONT POWER WINDOW SWITCH : Description

INFOID:0000000014391465

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 signals mentioned below are 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

INFOID:0000000014391466

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

Check “CDL LOCK SW ” or “CDL UNLOCK SW” in “Data Monitor” mode of “” with CONSULT. Refer to BCS-20, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Monitor item	Condition	
CDL LOCK SW	LOCK	: ON
	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-56, "FRONT POWER WINDOW SWITCH : Diagnosis Procedure".

FRONT POWER WINDOW SWITCH : Diagnosis Procedure

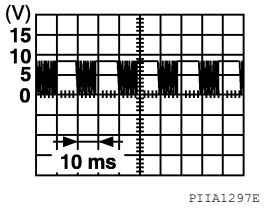
INFOID:0000000014391467

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

Power Window Serial Link Check

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

1. Remove key and close the front door LH and RH.
2. Check signal between BCM harness connector M20 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 seconds just after door lock and unlock switch (LH and RH) is turned to “LOCK” or “UNLOCK”.

Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M20	54	Ground	

Is the inspection result normal?

YES >> Power window serial link is OK.
NO >> GO TO 2.

2. CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM.
3. Check continuity between BCM harness connector M20 and power window and door lock/unlock switch RH harness connector M129.

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M20	54	D129	3	Yes

4. Check continuity between BCM connector M20 and ground.

BCM connector	Terminal	Ground	Continuity
M20	54		No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-77, "Removal and Installation".

NO >> Repair or replace the harness or connectors.

REAR POWER SLIDE GLASS CIRCUIT CHECK

Rear Power Slide Glass Circuit Inspection

INFOID:0000000014391468

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1. CHECK REAR POWER SLIDE GLASS SWITCH OPERATION

1. Turn ignition switch OFF.
2. Disconnect rear power slide glass switch connector R19.
3. Check continuity between rear power slide glass switch terminals 1, 3 and 5.

Terminals		Condition	Continuity
3	5	Rear power drop glass switch is pressed OPEN	Yes
	1	Rear power drop glass switch is pressed CLOSE	Yes

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace rear power slide glass switch. Refer to PWC-81, "Removal and Installation".

2. CHECK REAR POWER SLIDE GLASS SWITCH GROUND CIRCUIT HARNESS CONTINUITY

Check continuity between rear power slide glass switch connector R19 and ground.

Connector	Terminal	Ground	Continuity
R19	3		Yes

Is the inspection result normal?

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

3. CHECK REAR POWER SLIDE GLASS SIGNAL

1. Connect rear power slide glass switch.
2. Disconnect rear power slide glass motor connector B150.
3. Turn ignition switch ON.
4. Check voltage between rear power slide glass motor connector B150 and ground.

Connector	(+)	(-)	Condition	Voltage (Approx.)
B150	1	Ground	Close	Battery voltage
			Open	0
	2		Close	0
			Open	Battery voltage

Is the inspection result normal?

YES >> Replace rear power slide glass motor. Refer to GW-27, "Removal and Installation".
NO >> Repair or replace harness.

REAR POWER SLIDE GLASS OPEN RELAY CHECK

Rear Power Slide Glass Open Relay Check

INFOID:0000000014391469

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1. CHECK REAR POWER SLIDE GLASS OPEN RELAY POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power slide glass open relay connector M155.
3. Turn ignition switch ON.
4. Check voltage between rear power slide glass open relay connector M155 and ground.

Connector	(+)	(-)	Voltage (Approx.)
M155	1	Ground	Battery voltage
	5		

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2. CHECK REAR POWER SLIDE GLASS OPEN RELAY

Check continuity between rear power slide glass open relay terminals.

Terminals		Condition	Continuity
3	4	12V direct current supply between terminals 1 and 2	No
		No current supply	Yes
	5	12V direct current supply between terminals 1 and 2	Yes
		No current supply	No

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace rear power slide glass open relay.

3. CHECK REAR POWER SLIDE GLASS OPEN RELAY GROUND CIRCUIT

Check continuity between rear power slide glass open relay connector M155 and ground.

Connector	Terminal	Ground	Continuity
M155	4		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4. CHECK REAR POWER SLIDE GLASS OPEN RELAY CIRCUIT

1. Disconnect rear power slide glass switch.
2. Check continuity between rear power slide glass open relay connector M155 and rear power slide glass switch connector R19.

Rear power slide glass open relay		Rear power slide switch		Continuity
Connector	Terminal	Connector	Terminal	
M155	2	R19	5	Yes

Is the inspection result normal?

YES >> Replace rear power slide glass switch. Refer to PWC-81, "Removal and Installation".
NO >> Repair or replace harness.

REAR POWER SLIDE GLASS CLOSE RELAY CHECK

Rear Power Slide Glass Close Relay Check

INFOID:0000000014391470

Regarding Wiring Diagram information, refer to PWC-20, "Wiring Diagram".

1. CHECK REAR POWER SLIDE GLASS CLOSE RELAY POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power slide glass close relay connector M154.
3. Turn ignition switch ON.
4. Check voltage between rear power slide glass close relay connector M154 and ground.

Connector	(+)	(-)	Voltage (Approx.)
M154	1	Ground	Battery voltage
	5		

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2. CHECK REAR POWER SLIDE GLASS CLOSE RELAY

Check continuity between rear power slide glass close relay terminals.

Terminals		Condition	Continuity
3	4	12V direct current supply between terminals 1 and 2	No
		No current supply	Yes
	5	12V direct current supply between terminals 1 and 2	Yes
		No current supply	No

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace rear power drop glass close relay.

3. CHECK REAR POWER SLIDE GLASS CLOSE RELAY GROUND CIRCUIT

Check continuity between rear power slide glass close relay connector M154 and ground.

Connector	Terminal	Ground	Continuity
M154	4		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4. CHECK REAR POWER SLIDE GLASS CLOSE RELAY CIRCUIT

1. Disconnect rear power slide glass switch.
2. Check continuity between rear power slide glass close relay connector M154 and rear power slide glass switch connector R19.

Rear power slide glass open relay		Rear power slide switch		Continuity
Connector	Terminal	Connector	Terminal	
M154	2	R19	1	Yes

Is the inspection result normal?

YES >> Replace rear power slide glass switch. Refer to PWC-81, "Removal and Installation".
NO >> Repair or replace harness.

SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

Diagnosis Procedure

INFOID:0000000014391471

1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.
Refer to BCS-72, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

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

Check power window switch main power supply and ground circuit.
Refer to PWC-36, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

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 SERIAL CIRCUIT

Check main power window and door lock/unlock switch serial circuit.
Refer to PWC-54, "POWER WINDOW MAIN SWITCH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

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

Check main power window and door lock/unlock switch.
Refer to PWC-36, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000014391472

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 >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000014391473

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

Check power window and door lock/unlock switch RH.
Refer to PWC-38, "FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure".

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-54, "POWER WINDOW MAIN SWITCH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3. CHECK FRONT POWER WINDOW MOTOR RH CIRCUIT

Check front power window motor RH circuit.
Refer to PWC-40, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000014391474

1. CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH.
Refer to PWC-39, "REAR POWER WINDOW SWITCH : Diagnosis Procedure".

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-42, "REAR LH : Component Function Check".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000014391475

1. CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.
Refer to PWC-39, "REAR POWER WINDOW SWITCH : Diagnosis Procedure".

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-43, "REAR RH : Component Function Check".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

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

Diagnosis Procedure

INFOID:0000000014391476

1. 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 2.
NO >> Repair or replace the malfunctioning parts.

2. CHECK ENCODER CIRCUIT

Check encoder circuit.
Refer to PWC-45, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

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

Diagnosis Procedure

INFOID:0000000014391477

1. 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 2.
NO >> Repair or replace the malfunctioning parts.

2. CHECK ENCODER CIRCUIT

Check encoder circuit.
Refer to PWC-45, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

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

Diagnosis Procedure

INFOID:0000000014391478

1. PERFORM INITIALIZATION PROCEDURE

Refer to PWC-34, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description".

Does automatic function operate normally?

YES >> Inspection End.
NO >> GO TO 2.

2. CHECK ENCODER

Check encoder.
Refer to PWC-45, "DRIVER SIDE : Diagnosis Procedure".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

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

Diagnosis Procedure

INFOID:0000000014391479

1. PERFORM INITIALIZATION PROCEDURE

Refer to PWC-34, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description".

Does automatic function operate normally?

YES >> Inspection End.
NO >> GO TO 2.

2. CHECK ENCODER

Check encoder.
Refer to PWC-45, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

Diagnosis Procedure

INFOID:0000000014391480

1. CHECK FRONT DOOR SWITCH

Check front door switch.
Refer to DLK-98, "Component Function Check".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

DOES NOT OPERATE BY KEY CYLINDER SWITCH

Diagnosis Procedure

INFOID:0000000014391481

1. CHECK FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH)

Check front door lock assembly LH (key cylinder switch).
Refer to DLK-102, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000014391482

1. CHECK KEYFOB FUNCTION

Check keyfob function.
Refer to BCS-26, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)" with remote keyless entry system.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".
NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000014391483

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

Replace main power window and door lock/unlock switch.
Refer to PWC-77, "Removal and Installation".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

REAR POWER SLIDE GLASS DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000014391484

1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.
Refer to BCS-72, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR POWER SLIDE GLASS SWITCH

Check rear power slide glass switch.
Refer to PWC-58, "Rear Power Slide Glass Circuit Inspection".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3. CHECK REAR POWER SLIDE GLASS MOTOR CIRCUIT

Check rear power slide glass motor circuit.
Refer to PWC-58, "Rear Power Slide Glass Circuit Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4. CHECK REAR POWER SLIDE GLASS RELAYS

Check rear power slide glass relays.
Refer to PWC-59, "Rear Power Slide Glass Open Relay Check" and PWC-61, "Rear Power Slide Glass Close Relay Check".

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

REMOVAL AND INSTALLATION

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

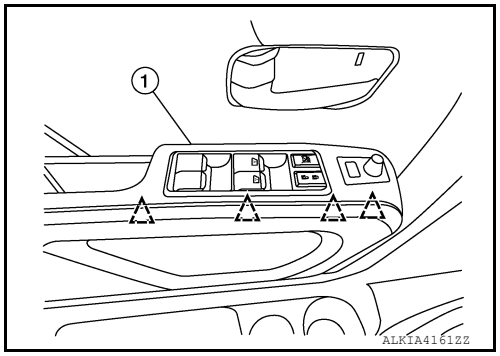
Removal and Installation

INFOID:0000000014391485

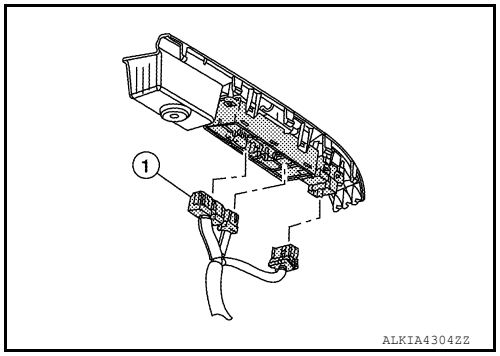
REMOVAL

1. Remove the main power window and door lock/unlock switch finisher and main power window and door lock/unlock switch (1) from the door finisher using suitable tool.

: Clip

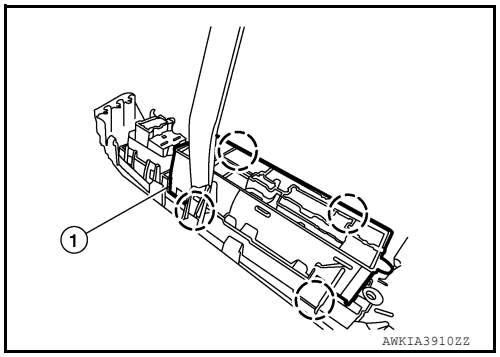


2. Disconnect the harness connector (1) from the main power window and door lock/unlock switch.

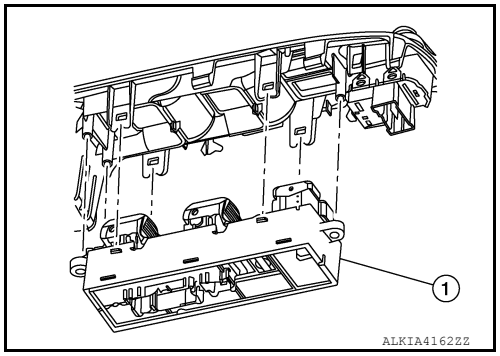


3. Release the main power window and door lock/unlock switch finisher pawls from the main power window and door lock/unlock switch (1) using suitable tool.

: Pawl



4. Remove the main power window and door lock/unlock switch (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Whenever 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-34, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description".

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

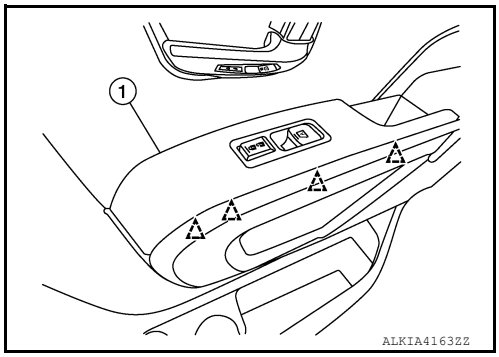
Removal and Installation

INFOID:0000000014391486

REMOVAL

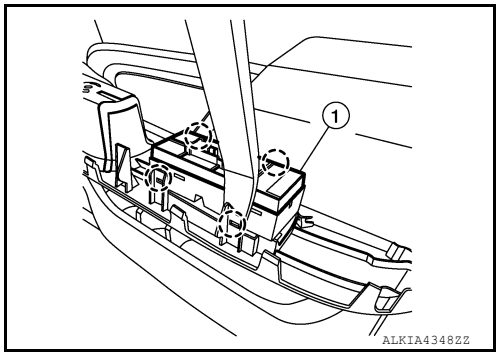
1. Using a suitable tool release the clips and remove power window and door lock/unlock switch RH and the power window and door lock/unlock switch RH finisher (1).

: Clip



2. Disconnect the harness connector from the power window and door lock/unlock switch RH.
3. Using a suitable tool, release the pawls and remove the power window and door lock/unlock switch RH (1).

: Pawl



INSTALLATION

Installation is in the reverse order of removal.

REAR POWER WINDOW SWITCH

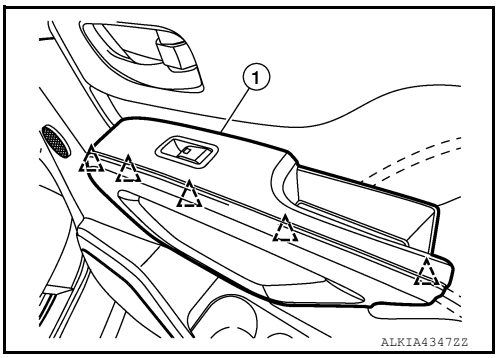
Removal and Installation

INFOID:0000000014391487

REMOVAL

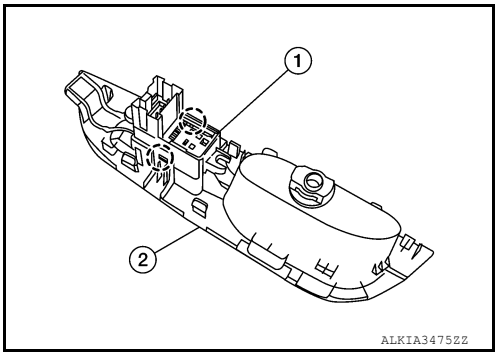
1. Remove the rear power window switch finisher and rear power window switch (1) using suitable tool.
   NOTE:
   RH shown, LH similar.

   : Clip



2. Disconnect the harness connector from the rear power window switch.
3. Using a suitable tool, release the pawls and remove the rear power window switch (1) from the rear power window switch finisher (2).

   : Pawl



INSTALLATION

Installation is in the reverse order of removal.

REAR POWER SLIDE GLASS SWITCH

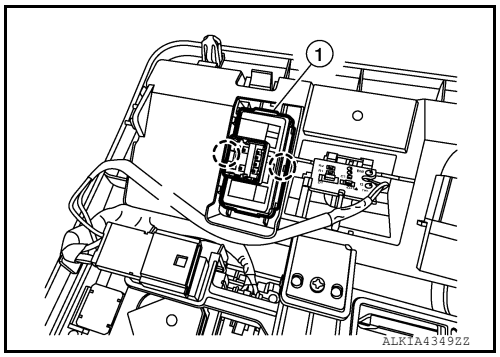
Removal and Installation

INFOID:0000000014391488

REMOVAL

1. Remove the overhead console. Refer to INT-32, "Removal and Installation".
2. Disconnect the harness connector from the rear power slide glass switch.
3. Remove rear power slide glass switch (1) from the overhead console using suitable tool.

: Pawl



INSTALLATION

Installation is in the reverse order of removal.