SECTION INL
INTERIOR LIGHTING SYSTEM

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PRECAUTION

PRECAUTIONS

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

INFOID:0000000009131986

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes dual stage front air bag modules. The SRS system may only deploy one front air bag, depending on the severity of a collision and whether the front passenger seat is occupied. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

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

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

WARNING:

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

Precaution for Work

INFOID:0000000009712192

- 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.

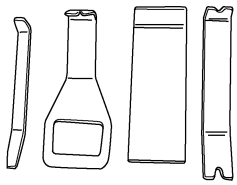
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000009131988

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

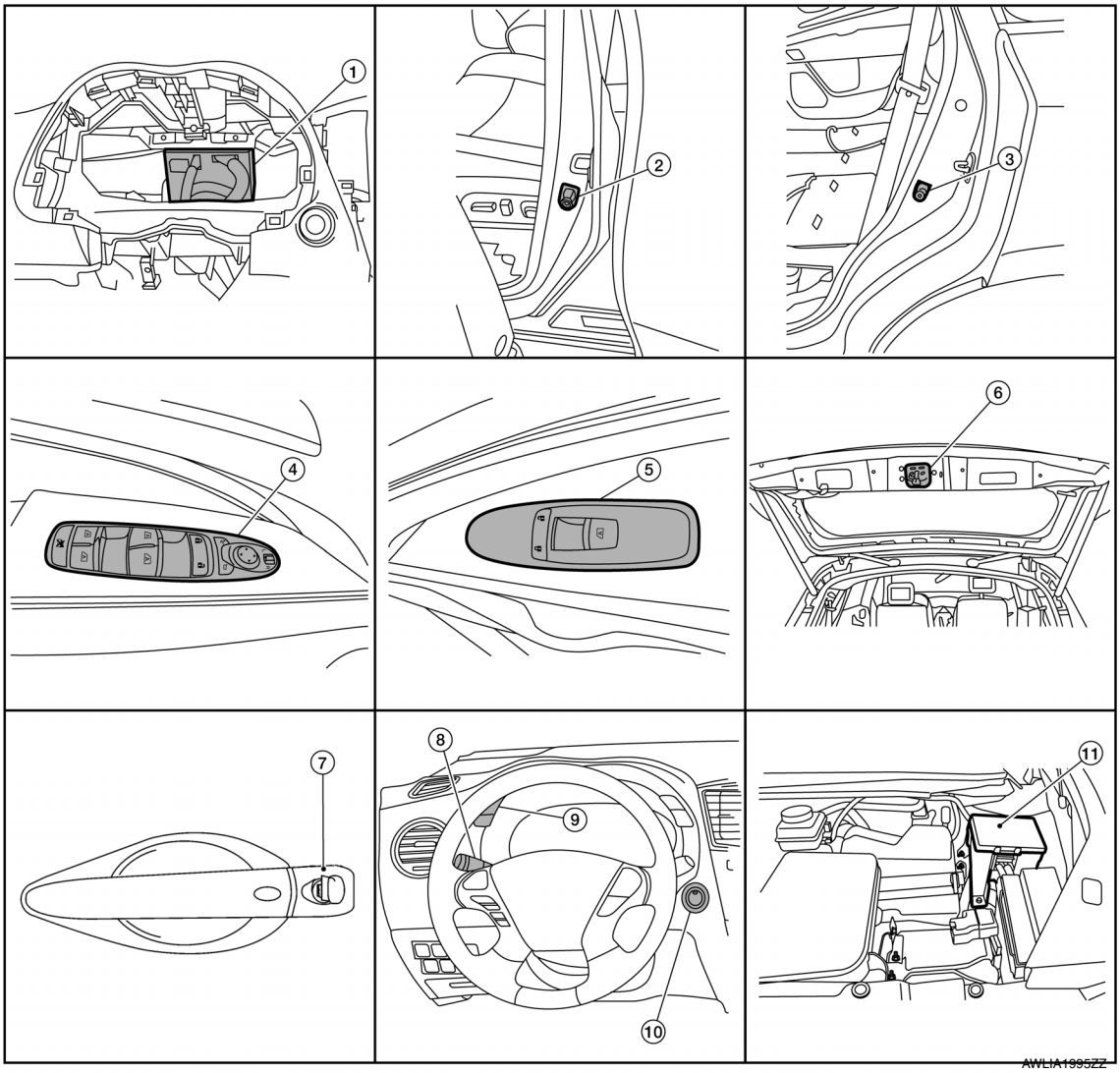
Tool number (Kent-Moore No.) Tool name	Description
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000009131989



1. BCM (view with combination meter removed)
2. Front door switch LH (RH similar)
3. Rear door switch LH (RH similar)
4. Main power window and door lock/unlock switch
5. Power window and door lock/unlock switch RH
6. Back door lock assembly (back door switch)
7. Front door lock assembly LH
8. Combination switch (lighting and turn signal switch)
9. Meter control switch (illumination control switch)
10. Push-button ignition switch
11. IPDM E/R

Component Description

INFOID:0000000009131990

Part name	Description
BCM	The BCM monitors the combination switch (lighting and turn signal switch) position. The BCM requests via CAN communication that the IPDM E/R activate the tail lamp relay.

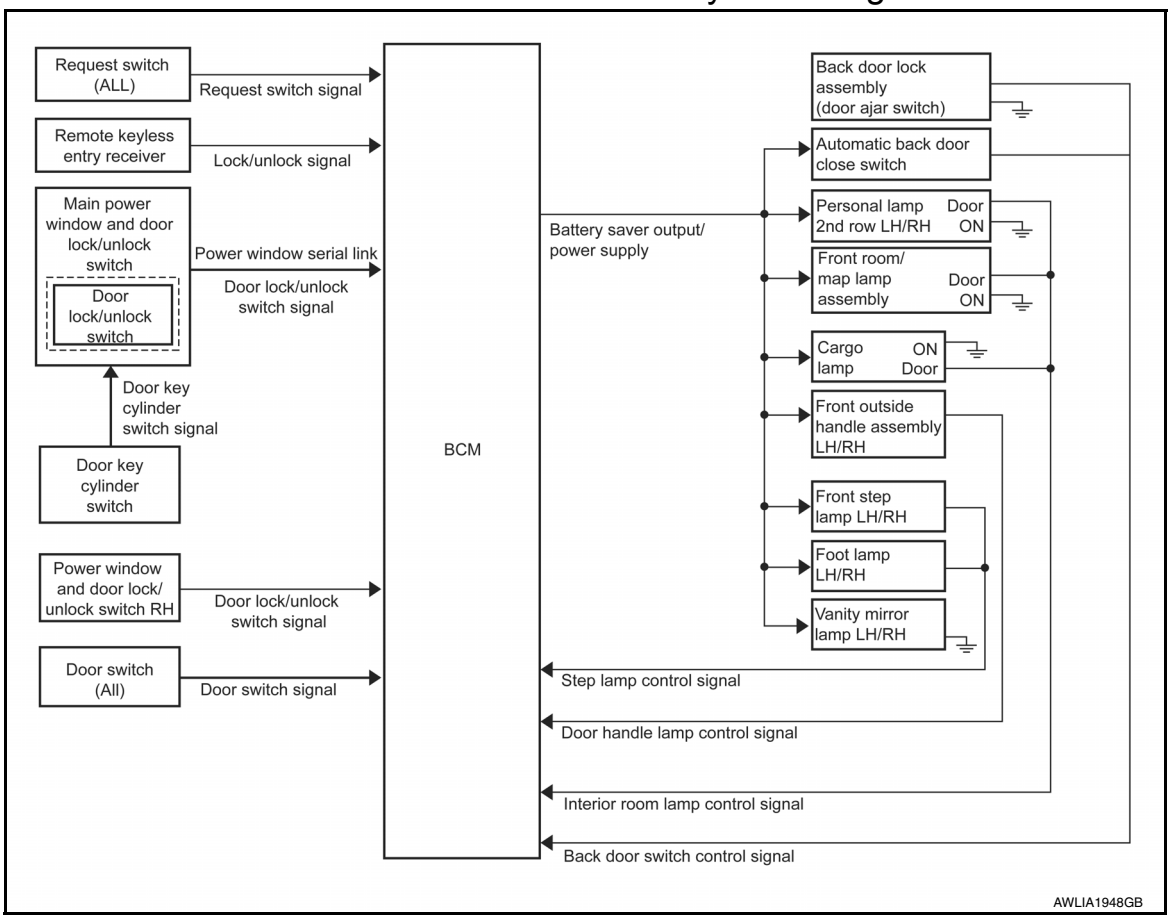
IPDM E/R	The IPDM E/R activates the tail lamp relay based on inputs received from the BCM via the CAN communication.
Push button ignition switch	Provides ignition status to the BCM.
Door switches	Provides door OPEN/CLOSED status to the BCM.
Combination switch (lighting and turn signal switch)	The combination switch (lighting and turn signal switch) provides input to the BCM about the combination switch (lighting and turn signal switch) position.
Back door lock assembly (door ajar switch)	Provides back door OPEN/CLOSED status to the BCM.
Power window and door lock/unlock switch RH	Provides door lock/unlock position switch RH status to the BCM.
Main power window and door lock/unlock switch [front door lock assembly LH (key cylinder switch)].	Provides door lock/unlock position switch LH status to the BCM.
Meter control switch (illumination control switch)	Adjusts the illumination system and combination meter illumination brightness.

SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram

INFOID:0000000009131991



INTERIOR ROOM LAMP CONTROL SYSTEM : System Description

INFOID:0000000009131992

OUTLINE

- Front room/map lamp, personal lamp 2nd row and cargo lamp are controlled by the interior room lamp timer control function of the BCM when the lamp switch is in the DOOR position.
- Front outside handle assembly lamps are controlled by door handle lamp control function of BCM.
- Step lamp and foot lamp are controlled by the step lamp control function of the BCM.
- Push-button ignition switch illumination is controlled by the push-button ignition switch illumination control function of BCM.
- Interior room lamps and outside handle lamp are illuminated by welcome light function of Intelligent Key system. Refer to DLK-33, "WELCOME LIGHT FUNCTION : System Description".

ROOM LAMP TIMER OPERATION

When the interior room lamp switch is in the DOOR position and when all conditions below are met, the BCM begins timer control (maximum 30 seconds) for interior room lamp ON/OFF.

- When the front door LH is unlocked [with Intelligent Key, main power window and door lock/unlock switch or front door lock assembly LH (key cylinder switch)].
- When a door opens → closes.

Timer control is cancelled under the following conditions:

- When the front door LH is locked [with Intelligent Key, main power window and door lock/unlock switch or front door lock assembly LH (key cylinder switch)].
- A door is opened (door switch turns ON).
- Ignition switch is turned ON.

INTERIOR LAMP BATTERY SAVER CONTROL

If an interior lamp is left ON and does not turn OFF even when the doors are closed, the BCM turns off power to the interior lamps automatically to save the battery 15 minutes after the ignition switch is turned OFF.
The BCM controls power and ground to all interior lamps.
After the battery saver system turns the lamps OFF, the lamps will illuminate again when:
- A signal is received from an Intelligent Key or main power window and door lock/unlock switch or when the front door lock assembly LH (key cylinder switch) is locked or unlocked.
- A door is opened or closed.

OUTSIDE HANDLE LAMP TIMER CONTROL

Outside Handle Lamp Timer Basic Operation
- BCM controls the ground to turn the outside handle lamp ON.
- The outside handle lamp turns ON and OFF by the outside handle lamp timer.
- BCM judges the vehicle condition with the following items: It activates the outside handle lamp timer.
- Ignition switch status
- Door switch signal
- Door lock/unlock signal (remote keyless entry receiver, each door request switch)
- Driver side door lock status

Outside Handle Lamp ON Operation
BCM activates the outside handle lamp timer in any of the following conditions to turn the outside handle lamp ON for a period of time
- Any door opens
- Any door opens before all doors close
- Ignition switch is turned ON → OFF
- Door unlock signal by remote keyless entry receiver or each door request switch is detected
- Driver side door is locked

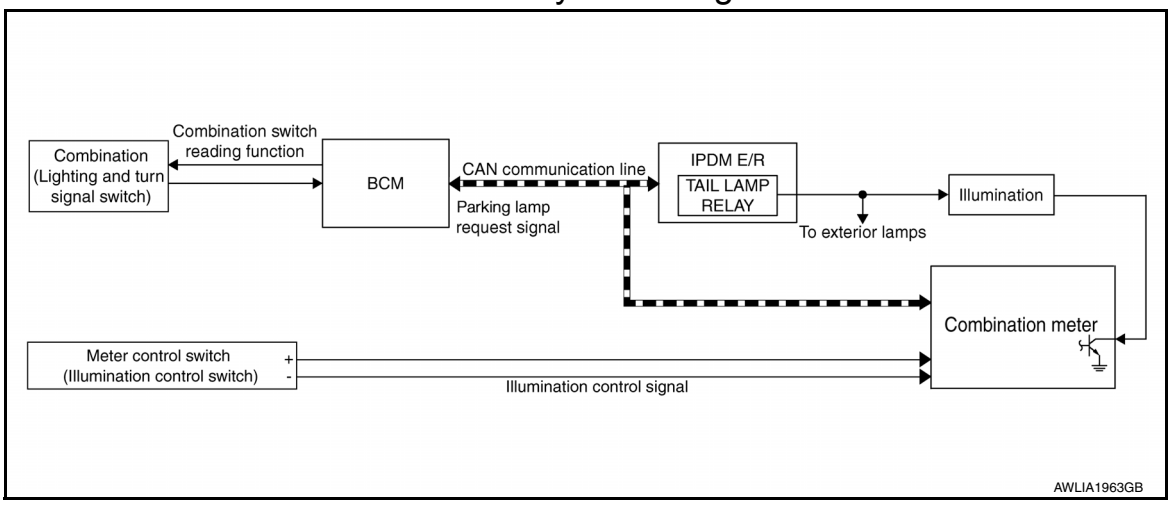
NOTE:
The timer is restarted if new condition is input during the timer operating time.

Front Outside Handle Lamp OFF Operation
BCM stops the timer in any of the following conditions to turn the front outside handle assembly lamp OFF.
- The front outside handle assembly lamp timer operating time is expired
- The interior room lamp OFF conditions
- The interior room lamp timer operating time is expired

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : System Diagram

INFOID:0000000009131993



ILLUMINATION CONTROL SYSTEM : System Description

INFOID:0000000009131994

The illumination lamps operation is dependent upon the position of the combination switch (lighting and turn signal switch). When the combination switch (lighting and turn signal switch) is placed in the 1st or 2nd position (or if the auto light system is activated) the BCM (body control module) receives input requesting the parking lamps to illuminate. This input is communicated to the IPDM E/R (intelligent power distribution module engine room) via the CAN communication lines. The CPU (central processing unit) of the IPDM E/R controls

the tail lamp relay coil. When energized, this relay directs power to the parking and illumination lamps, which then illuminate. The illumination brightness can be controlled by the illumination control switch.

BATTERY SAVER CONTROL

When the combination switch (lighting and turn signal switch) is in the 1st or 2nd position and the ignition switch is turned from ON or ACC to OFF, the battery saver control feature is activated. Under this condition, the illumination lamps remain illuminated for 15 minutes unless the combination switch (lighting and turn signal switch) position is changed. If the combination switch (lighting and turn signal switch) position is changed, then the illumination lamps are turned off after a 30 second delay. When the combination switch (lighting and turn signal switch) is turned from OFF to 1st or 2nd position (or if auto light system is activated) after illumination lamps have been turned off by the battery saver control, the illumination lamps illuminate again.

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

INFOID:0000000009724088

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

APPLICATION ITEM
CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION
BCM can perform the following functions.

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			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				

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

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:0000000009724089

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

DATA MONITOR

Monitor Item [Unit]	Description
REQ SW -DR [On/Off]	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	Indicates condition of door request switch RH.
PUSH SW [On/Off]	Indicates condition of push-button ignition switch.
UNLK SEN -DR [On/Off]	Indicates condition of door unlock sensor.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
TRNK/HAT MNTR [On/Off]	Indicates condition of trunk room lamp switch.
RKE-LOCK [On/Off]	Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]	Indicates condition of unlock signal from Intelligent Key.

ACTIVE TEST

Test Item	Description
INT LAMP	This test is able to check interior room lamp operation [On/Off].
STEP LAMP TEST	This test is able to check step lamp operation [On/Off].

WORK SUPPORT

NOTE:
The items listed below are the only applicable Work Support items for this vehicle. If other items are displayed on CONSULT, do not use or change the setting for these other items.

Support Item	Setting	Description
SCENARIO LIGHTING SETTING	On	**NOTE:** Do not use this function since interior room lamp control is changed.
	Off*	
SET I/L D-UNLCK INTCON	On	Interior room lamp timer function ON.
	Off*	Interior room lamp timer function OFF.
Fog Lamp Override	On*	Fog lamp override function ON.
	Off	Fog lamp override function OFF.

* : Initial setting

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000009724090

CAUTION:

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

DATA MONITOR

Monitor Item [Unit]	Description
REQ SW -DR [On/Off]	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	Indicates condition of door request switch RH.
PUSH SW [On/Off]	Indicates condition push-button ignition switch.
UNLK SEN -DR [On/Off]	Indicates condition of door unlock sensor.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
TRNK/HAT MNTR [On/Off]	Indicates condition of trunk room lamp switch.
RKE-LOCK [On/Off]	Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]	Indicates condition of unlock signal from Intelligent Key.

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check battery saver operation [On/Off].

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000009131998

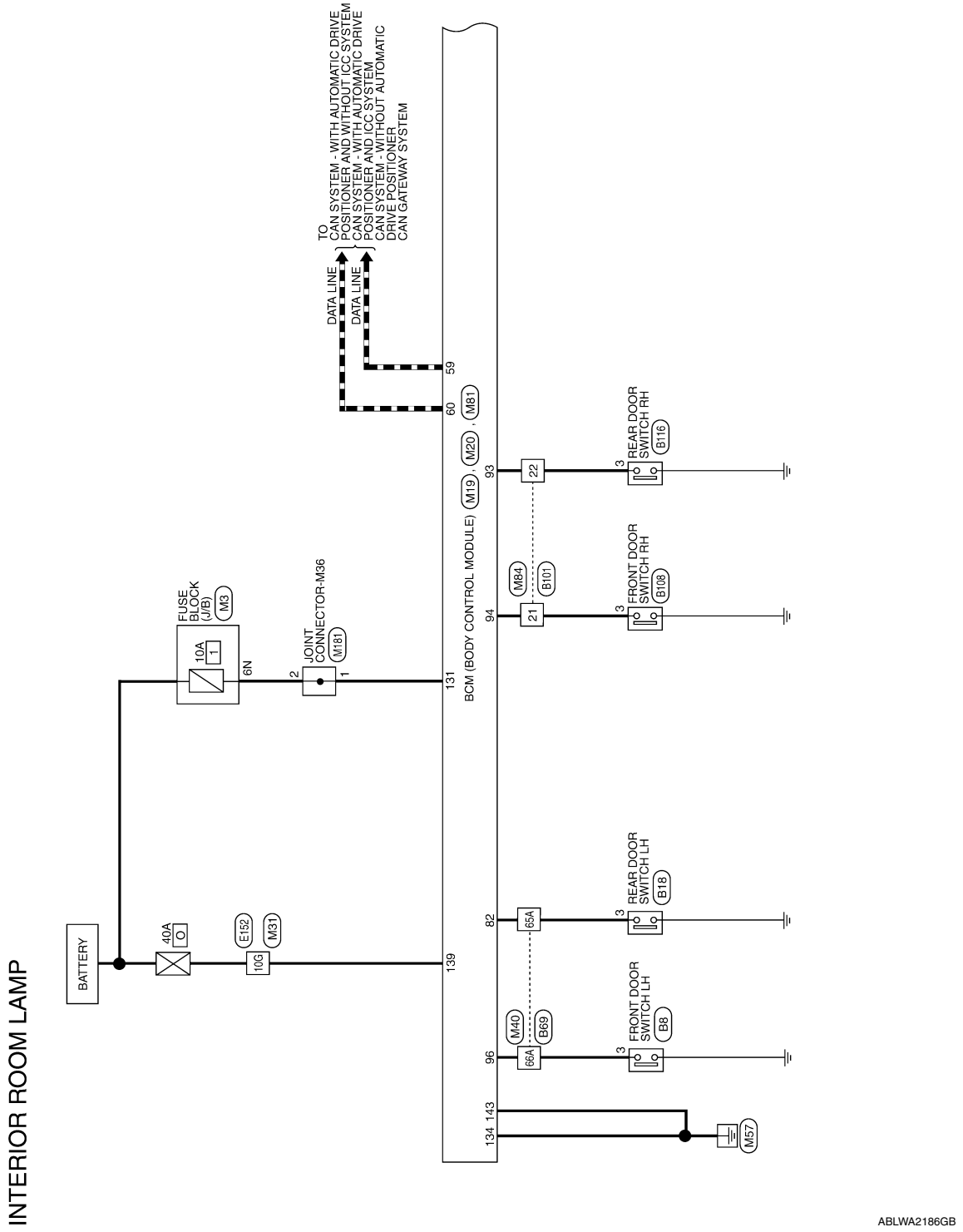
ECU	Reference
BCM	BCS-29, "Reference Value"
	BCS-49, "Fail Safe"
	BCS-49, "DTC Inspection Priority Chart"
	BCS-51, "DTC Index"

WIRING DIAGRAM

INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram

INFOID:0000000009131999



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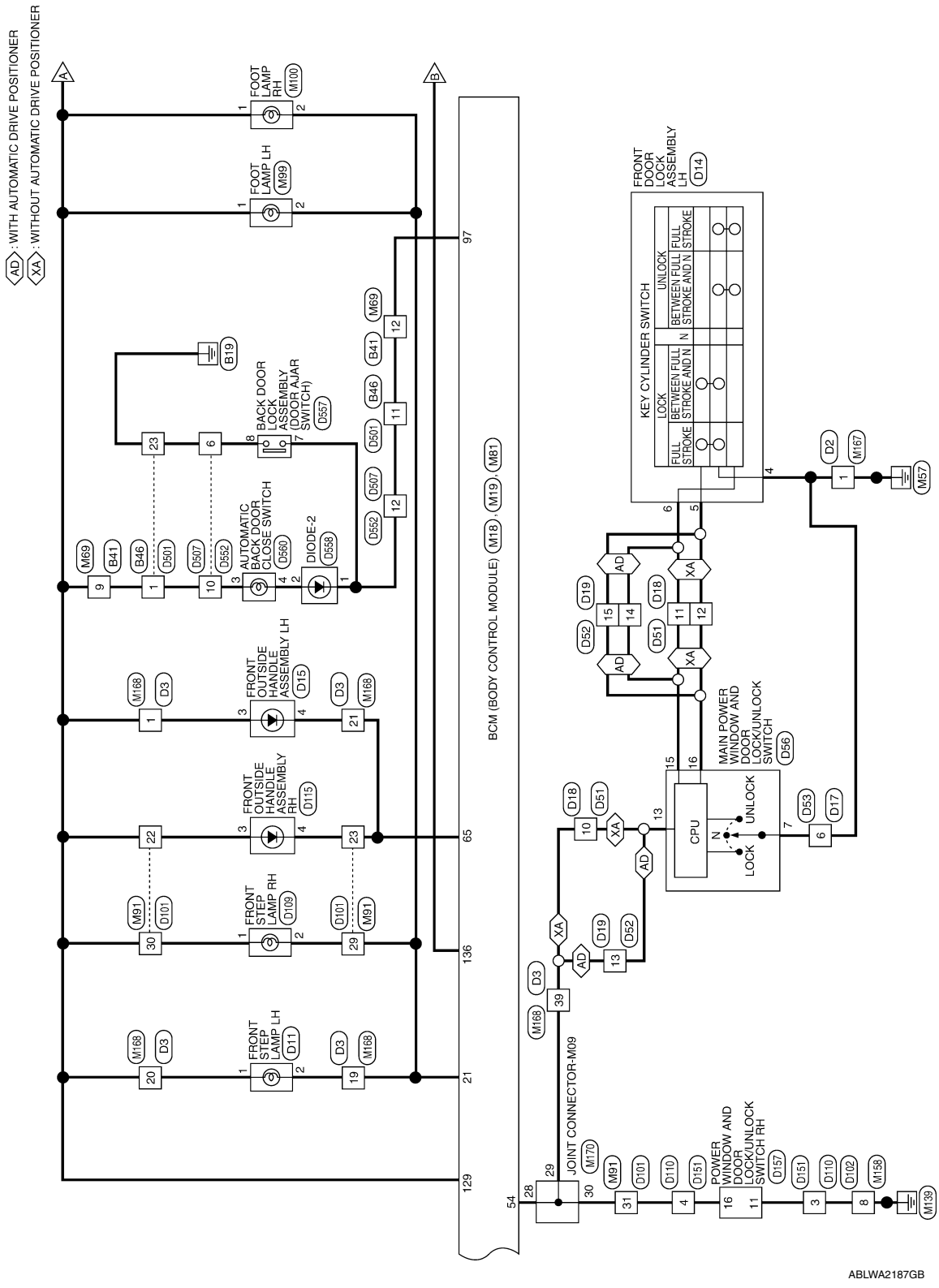
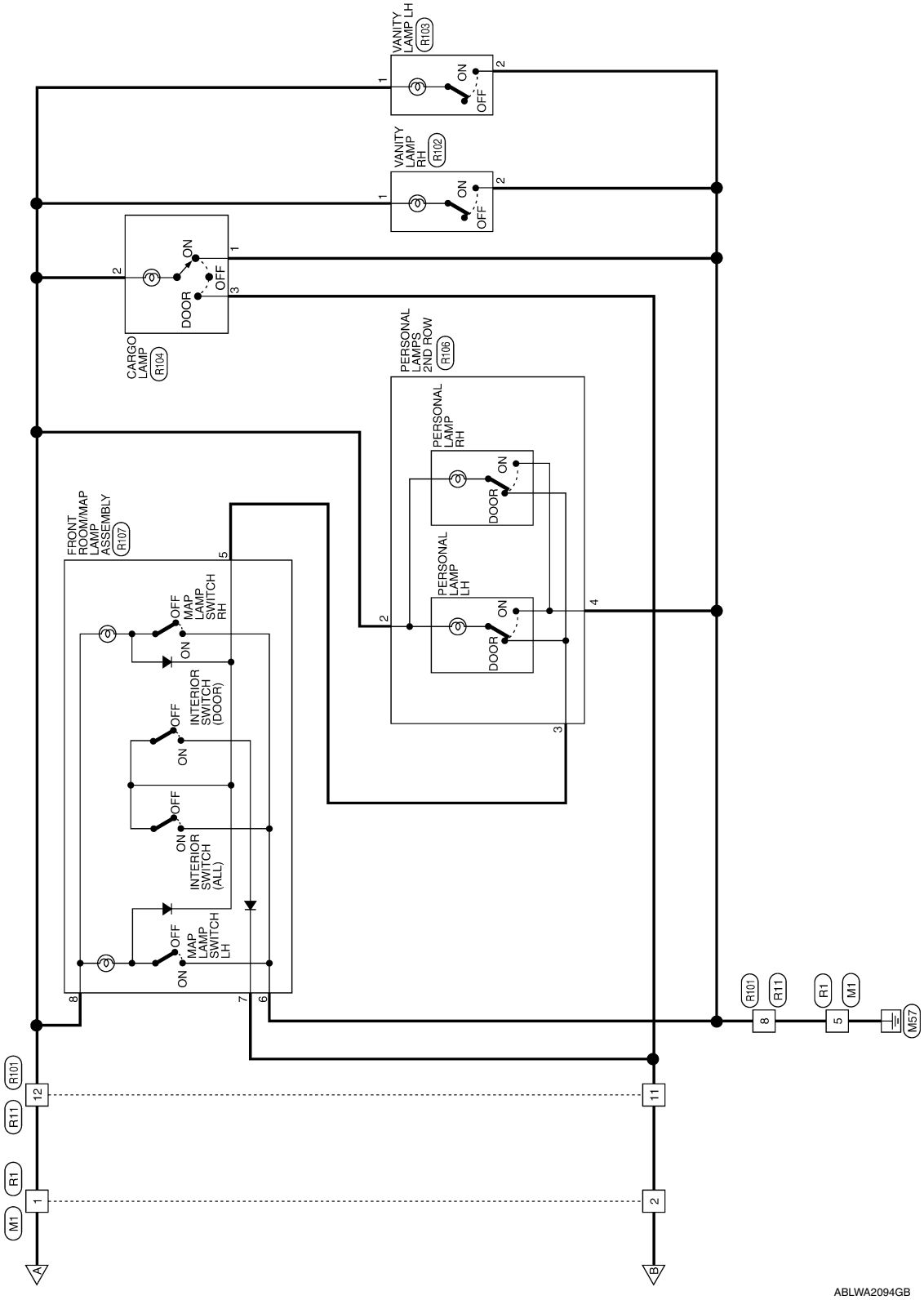

AD : WITH AUTOMATIC DRIVE POSITIONER
XA : WITHOUT AUTOMATIC DRIVE POSITIONER
FOOT LAMP RH M100
FOOT LAMP LH M99
BACK DOOR LOCK ASSEMBLY (DOOR AJAR SWITCH) D557
B19
AUTOMATIC BACK DOOR CLOSE SWITCH D560
DIODE-2 D558
FRONT OUTSIDE HANDLE ASSEMBLY LH D15
FRONT OUTSIDE HANDLE ASSEMBLY RH D115
FRONT STEP LAMP RH D109
FRONT STEP LAMP LH D11
BCM (BODY CONTROL MODULE) M18, M19, M81
FRONT DOOR LOCK ASSEMBLY LH D14
KEY CYLINDER SWITCH
LOCK
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D56
CPU
JOINT CONNECTOR-M09 M170
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH D157
ABLWA2187GB


VANITY LAMP LH R103
VANITY LAMP RH R102
CARGO LAMP R104
PERSONAL LAMPS 2ND ROW R106
PERSONAL LAMP RH
PERSONAL LAMP LH
FRONT ROOM/MAP LAMP ASSEMBLY R107
ON
OFF
DOOR
OFF MAP LAMP SWITCH RH
INTERIOR SWITCH (DOOR)
INTERIOR SWITCH (ALL)
MAP LAMP SWITCH LH
R101
R11
R1
M1
M57
A
B
ABLWA2094GB

INTERIOR ROOM LAMP CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
1	SB	–
2	LG	–
5	GR	–

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

3N		2N	1N
8N	7N	6N	5N	4N

Terminal No.	Color of Wire	Signal Name
6N	W	–

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
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
21	W	STEP LAMP CONT

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
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
54	W	PW LIN/COM
59	P	CAN-L
60	L	CAN-H
65	P	DOOR HANDLE LAMP

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
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
82	W	RL DOOR SW
93	R	RR DOOR SW
94	G	AS DOOR SW
96	BG	DR DOOR SW
97	W	BACK DOOR SW

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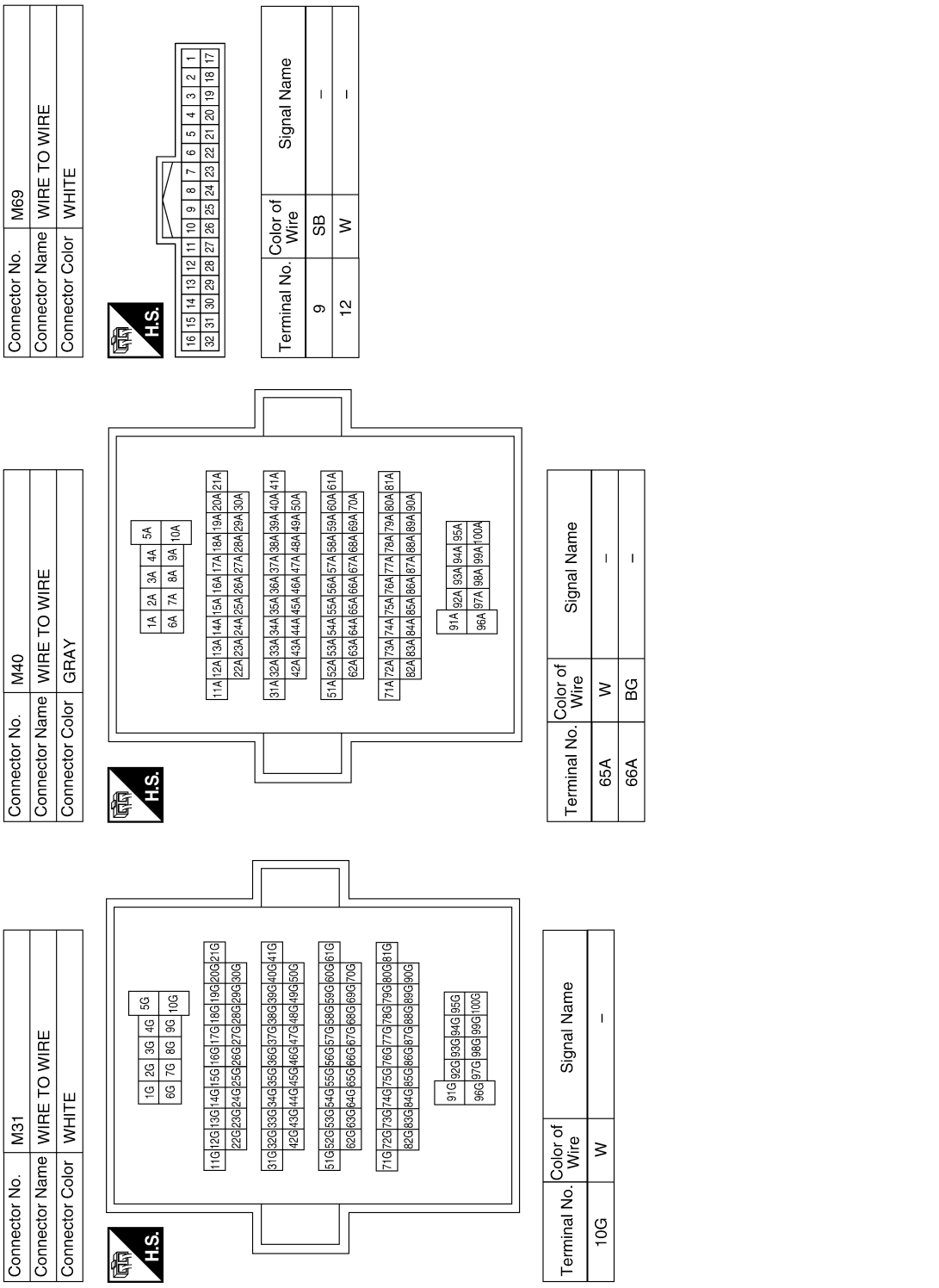


ABLIA4932GB

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

137	138	135	134	133	132	131	130	129
143	142	141	140	139				138

Terminal No.	Color of Wire	Signal Name
129	SB	BATTERY SAVER OUT
131	W	BAT BCM FUSE
134	B	GND 2
136	LG	ROOM LAMP CONT
139	W	BAT-POWER F/L
143	B	GND 1

Connector No.	M84
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
21	G	–
22	R	–

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
22	SB	–
23	P	–
29	W	–
30	SB	–
31	W	–

Connector No.	M99
Connector Name	FOOT LAMP LH
Connector Color	BLACK

H.S.

1	2

Terminal No.	Color of Wire	Signal Name
1	SB	–
2	W	–

Connector No.	M100
Connector Name	FOOT LAMP RH
Connector Color	BLACK

H.S.

1	2

Terminal No.	Color of Wire	Signal Name
1	SB	–
2	W	–

Connector No.	M158
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	GR	–

ABLIA4933GB

Connector No.	M167
Connector Name	WIRE TO WIRE
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	–

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	SB	–
19	W	–
20	SB	–
21	P	–
39	W	–

Connector No.	M170
Connector Name	JOINT CONNECTOR-M09
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
28	W	–
29	W	–
30	W	–

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
10G	P	–

Connector No.	M181
Connector Name	JOINT CONNECTOR-M36
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	W	–
2	W	–

ABLIA4934GB

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	L	–

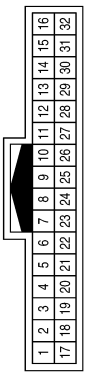
Connector No.	B18
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	SB	–

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

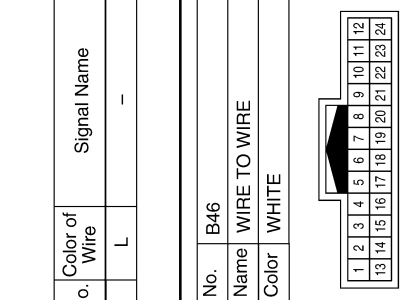
H.S.



Terminal No.	Color of Wire	Signal Name
9	V	–
12	G	–

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE

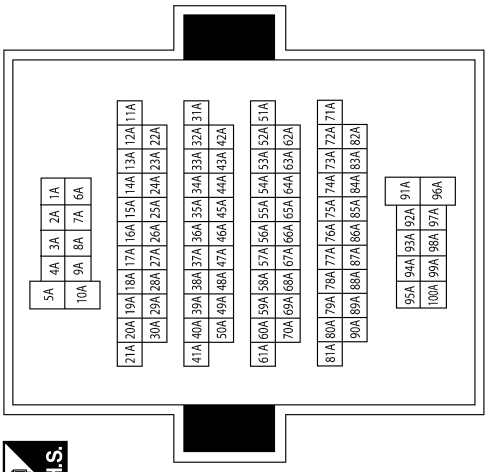
H.S.



Terminal No.	Color of Wire	Signal Name
1	V	–
11	G	–
23	GR	–

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Color	GRAY

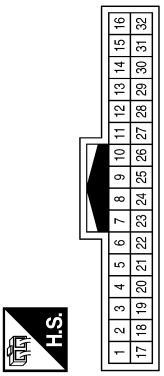
H.S.



Terminal No.	Color of Wire	Signal Name
65A	SB	–
66A	L	–

Connector No.	B101
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
21	LG	–
22	LG	–

ABLIA4935GB

Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	LG	–

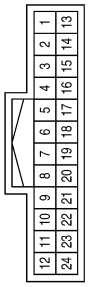
Connector No.	B116
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	LG	–

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

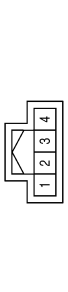
H.S.



Terminal No.	Color of Wire	Signal Name
1	G	–
2	R	–
5	B	–

Connector No.	R11
Connector Name	WIRE TO WIRE
Connector Color	WHITE

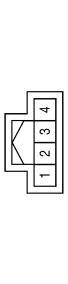
H.S.



Terminal No.	Color of Wire	Signal Name
8	B	–
11	R	–
12	G	–

Connector No.	R101
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
8	B	–
11	R	–
12	G	–

Connector No.	R102
Connector Name	VANITY LAMP RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	–
2	B	–

ABLIA3534GB

Connector No.	R103
Connector Name	VANITY LAMP LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	–
2	B	–

Connector No.	R104
Connector Name	CARGO LAMP
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–
2	G	–
3	R	–

Connector No.	R106
Connector Name	PERSONAL LAMPS 2ND ROW
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	G	–
3	L	–
4	B	–

Connector No.	R107
Connector Name	FRONT ROOM/MAP LAMP ASSEMBLY
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
5	L	–
6	B	–
7	R	–
8	G	–

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	Y	–
19	Y	–
20	LG	–
21	LG	–
39	Y	–

ABLIA4936GB

Connector No.	D11
Connector Name	FRONT STEP LAMP LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	Y	–

Connector No.	D14
Connector Name	FRONT DOOR LOCK ASSEMBLY LH
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
4	B	–
5	SB	–
6	BR	–

Connector No.	D15
Connector Name	FRONT OUTSIDE HANDLE ASSEMBLY LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	Y	–
4	LG	–

Connector No.	D17
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
6	B	–

Connector No.	D18
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
10	Y	–
11	BR	–
12	SB	–

Connector No.	D19
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
13	Y	–
14	BR	–
15	SB	–

ABLIA4937GB

Connector No.	D53
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2		3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
6	B	–

Connector No.	D52
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
13	Y	–
14	W	–
15	SB	–

Connector No.	D51
Connector Name	WIRE TO WIRE
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
10	Y	–
11	BR	–
12	SB	–

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

4	3		2	1
10	9	8	7	6	5

Terminal No.	Color of Wire	Signal Name
8	B	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
22	Y	–
23	LG	–
29	Y	–
30	LG	–
31	BR	–

Connector No.	D56
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

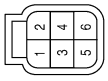
1	2	3	4		5	6	7
8	9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
7	B	GND
13	Y	COM
15	BR	LOCK SW
16	SB	UNLOCK SW

ABLIA4938GB

Connector No.	D115
Connector Name	FRONT OUTSIDE HANDLE ASSEMBLY RH
Connector Color	WHITE

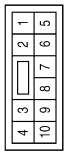
H.S.



Terminal No.	Color of Wire	Signal Name
3	Y	–
4	LG	–

Connector No.	D110
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
3	B	–
4	BR	–

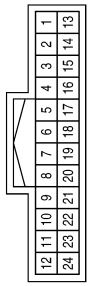
Connector No.	D109
Connector Name	FRONT STEP LAMP RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	Y	–

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE

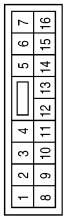
H.S.



Terminal No.	Color of Wire	Signal Name
1	BR	–
11	P	–
23	B	–

Connector No.	D157
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE

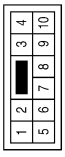
H.S.



Terminal No.	Color of Wire	Signal Name
11	B	GND
16	BR	COM

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

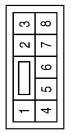


Terminal No.	Color of Wire	Signal Name
3	B	–
4	BR	–

ABLIA4939GB

Connector No.	D557
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

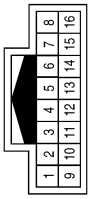
H.S.



Terminal No.	Color of Wire	Signal Name
7	G	–
8	B	–

Connector No.	D552
Connector Name	WIRE TO WIRE
Connector Color	WHITE

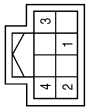
H.S.



Terminal No.	Color of Wire	Signal Name
6	B	–
10	P	–
12	G	–

Connector No.	D560
Connector Name	AUTOMATIC BACK DOOR CLOSE SWITCH
Connector Color	BLACK

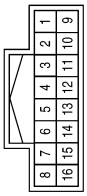
H.S.



Terminal No.	Color of Wire	Signal Name
3	P	–
4	BR	–

Connector No.	D507
Connector Name	WIRE TO WIRE
Connector Color	WHITE

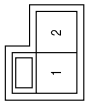
H.S.



Terminal No.	Color of Wire	Signal Name
6	B	–
10	BR	–
12	P	–

Connector No.	D558
Connector Name	DIODE-2
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
1	G	–
2	BR	–

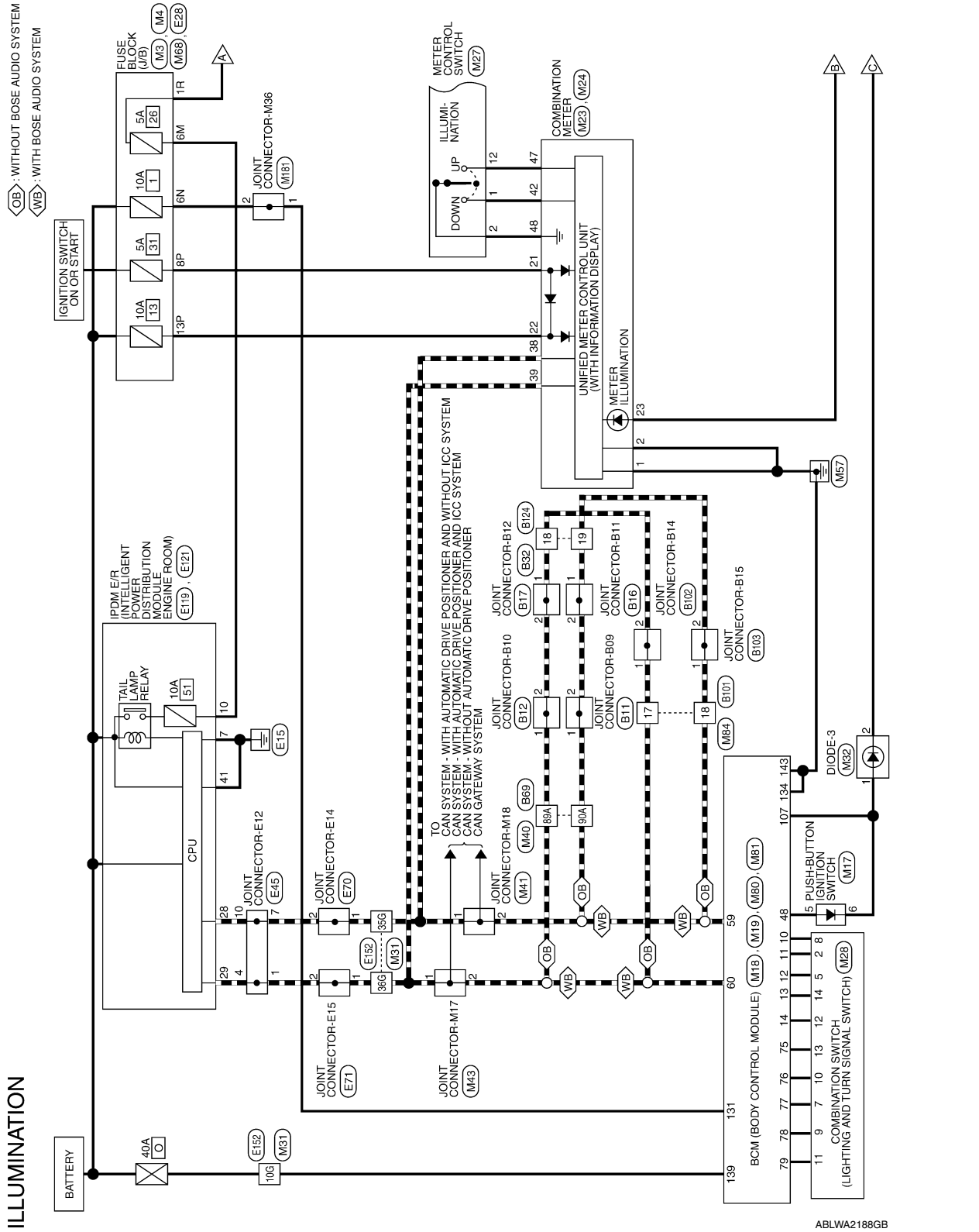
ABLIA4940GB

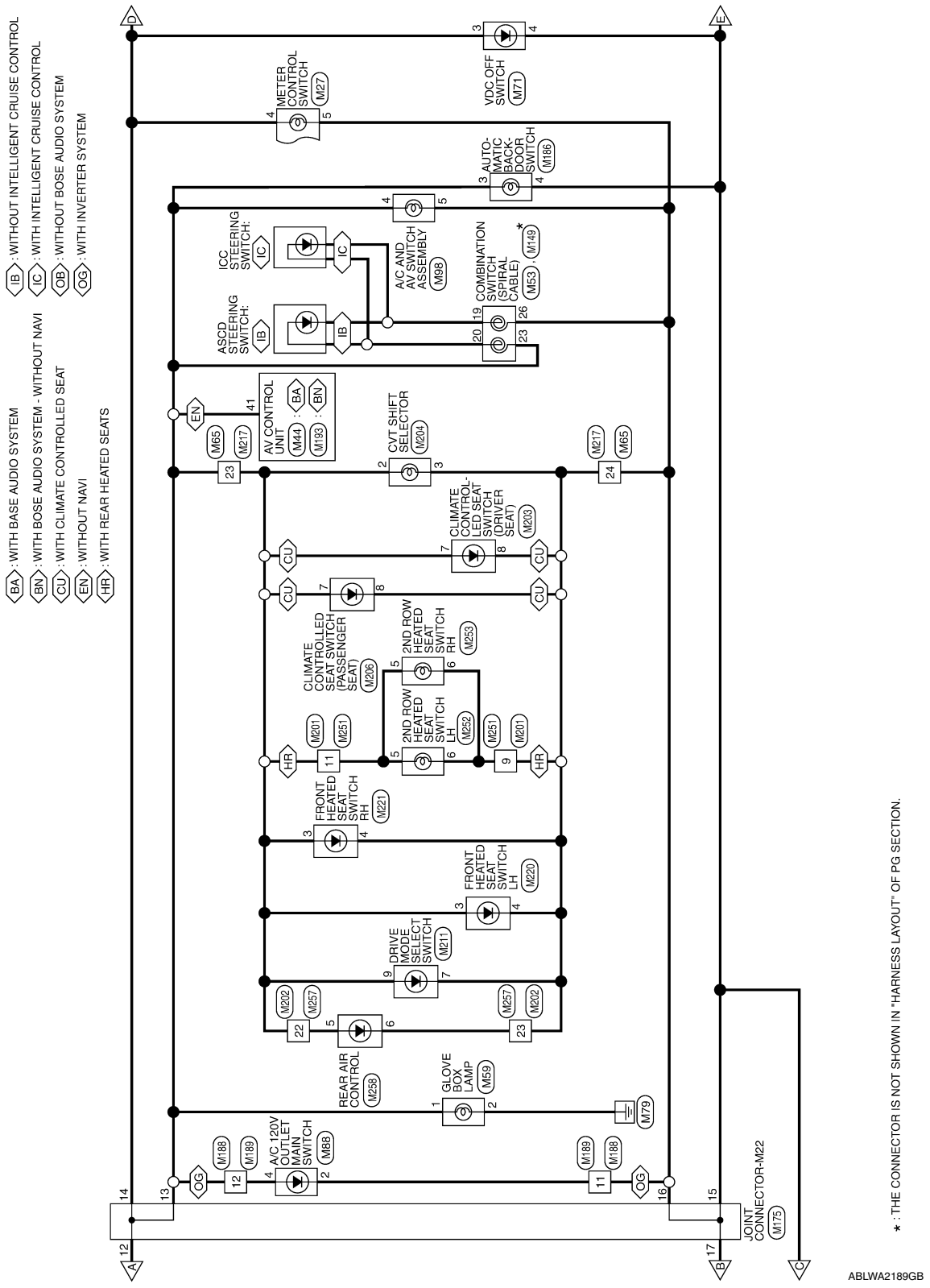
< WIRING DIAGRAM >

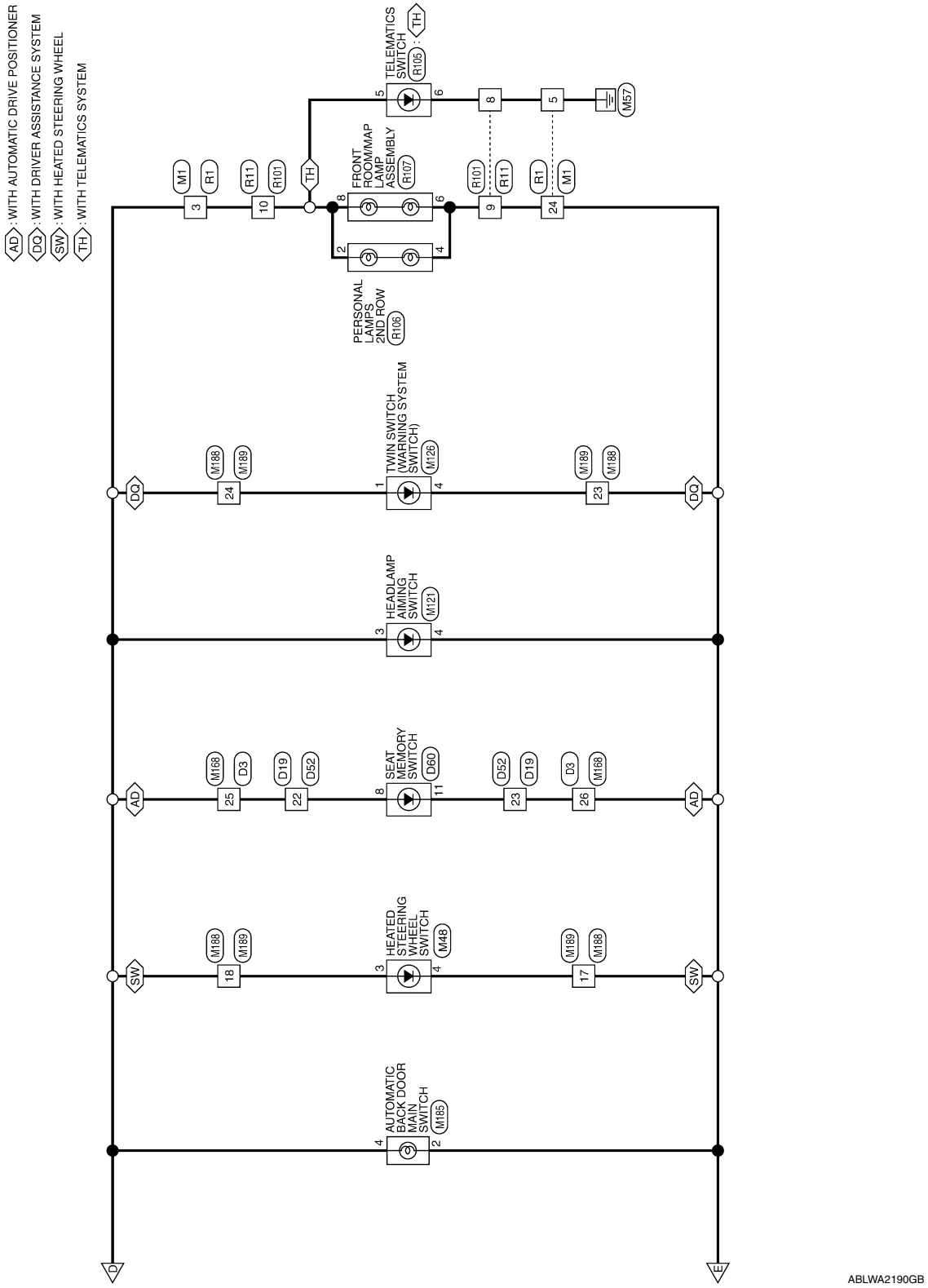
ILLUMINATION

Wiring Diagram

INFOID:0000000009132000




IB : WITHOUT INTELLIGENT CRUISE CONTROL
IC : WITH INTELLIGENT CRUISE CONTROL
OB : WITHOUT BOSE AUDIO SYSTEM
OG : WITH INVERTER SYSTEM
BA : WITH BASE AUDIO SYSTEM
BN : WITH BOSE AUDIO SYSTEM - WITHOUT NAVI
CU : WITH CLIMATE CONTROLLED SEAT
EN : WITHOUT NAVI
HR : WITH REAR HEATED SEATS
METER CONTROL SWITCH M27
VDC OFF SWITCH M71
AUTO-MATIC BACK-DOOR SWITCH M186
ICC STEERING SWITCH:
ASCD STEERING SWITCH:
A/C AND AV SWITCH ASSEMBLY M98
COMBINATION SWITCH (SPIRAL CABLE) M149 * M53
AV CONTROL UNIT M44 M193
CVT SHIFT SELECTOR M204
CLIMATE CONTROLLED SEAT SWITCH (DRIVER SEAT) M203
CLIMATE CONTROLLED SEAT SWITCH (PASSENGER SEAT) M206
2ND ROW HEATED SEAT SWITCH RH M253
2ND ROW HEATED SEAT SWITCH LH M252
FRONT HEATED SEAT SWITCH RH M221
FRONT HEATED SEAT SWITCH LH M220
DRIVE MODE SELECT SWITCH M211
REAR AIR CONTROL M258
GLOVE BOX LAMP M59
A/C 120V OUTLET MAIN SWITCH M88
JOINT CONNECTOR-M22 M175
* : THE CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.
ABLWA2189GB



ABLWA2190GB

ILLUMINATION CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
3	R	–
5	GR	–
24	B	–

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

3N		2N	1N
8N	7N	6N	5N	4N

Terminal No.	Color of Wire	Signal Name
6N	W	–

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
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
8P	BG	–
13P	W	–

Connector No.	M17
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	WHITE

H.S.

4		3
5	6	7	8

Terminal No.	Color of Wire	Signal Name
5	R	–
6	W	–

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
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
10	P	COMBI SW IN 5
11	P	COMBI SW IN 4
12	V	COMBI SW IN 3
13	W	COMBI SW IN 2
14	P	COMBI SW IN 1

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
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
48	R	HIGH SIDE START SW LED
59	P	CAN-L
60	L	CAN-H
75	BG	COMBI SW OUT 5
76	P	COMBI SW OUT 4
77	P	COMBI SW OUT 3
78	W	COMBI SW OUT 2
79	W	COMBI SW OUT 1

ABLIA4941GB

Connector No.	M23
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

46	45	44	43	42	41
52	51	50	49	48	47

Terminal No.	Color of Wire	Signal Name
42	Y	ILLUMI DOWN SW
47	BR	ILLUMI UP SW
48	G	SW GND

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

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	B	GND 1
2	B	GND 2
21	BG	IGN
22	W	BAT
23	B	ILLUMI CONT OUT
38	P	CAN-L
39	L	CAN-H

Connector No.	M27
Connector Name	METER CONTROL SWITCH
Connector Color	WHITE

H.S.

6	5	4	3	2	1
12	11	10	9	8	7

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	G	–
4	R	–
5	B	–
12	BR	–

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	–
5	V	–
7	P	–
8	P	–
9	W	–
10	P	–
11	W	–
12	P	–
13	BG	–
14	W	–

Connector No.	M31
Connector Name	WIRE TO WIRE
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	31G	32G	33G	34G	35G	36G	37G	38G	39G	40G	41G
	22G	23G	24G	25G	26G	27G	28G	29G	30G			42G	43G	44G	45G	46G	47G	48G	49G	50G	
51G	52G	53G	54G	55G	56G	57G	58G	59G	60G	61G	71G	72G	73G	74G	75G	76G	77G	78G	79G	80G	81G
	62G	63G	64G	65G	66G	67G	68G	69G	70G			82G	83G	84G	85G	86G	87G	88G	89G	90G	
											91G	92G	93G	94G	95G					
											96G	97G	98G	99G	100G					

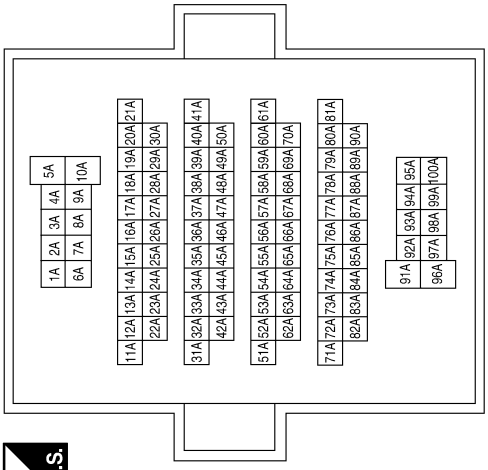
Terminal No.	Color of Wire	Signal Name
10G	W	–
35G	P	–
36G	L	–

ABLIA4942GB

Terminal No.	Color of Wire	Signal Name
89A	L	–
90A	P	–

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Color	GRAY

H.S.



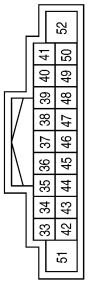
Connector No.	M32
Connector Name	DIODE-3
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–
2	B	–

Connector No.	M44
Connector Name	AV CONTROL UNIT (WITH BASE AUDIO SYSTEM)
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
41	R	ILL

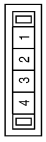
Connector No.	M43
Connector Name	JOINT CONNECTOR-M17
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–

Connector No.	M41
Connector Name	JOINT CONNECTOR-M18
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	P	–
2	P	–

ABLIA4943GB

Connector No.	M59
Connector Name	GLOVE BOX LAMP
Connector Color	BLACK

Terminal No.	Color of Wire	Signal Name
1	R	–
2	GR	–

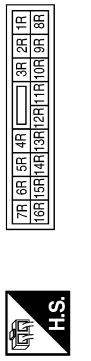
Connector No.	M53
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	YELLOW

Terminal No.	Color of Wire	Signal Name
23	R	–
26	B	–

Connector No.	M71
Connector Name	VDC OFF SWITCH
Connector Color	GREEN

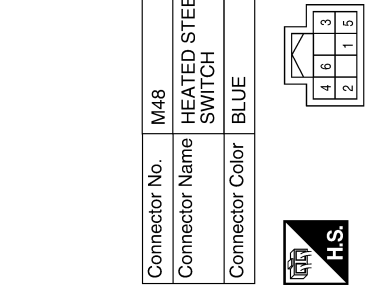
Terminal No.	Color of Wire	Signal Name
3	R	–
4	B	–

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1R	R	–

Connector No.	M48
Connector Name	HEATED STEERING WHEEL SWITCH
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
3	R	–
4	B	–

Connector No.	M65
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
23	R	–
24	B	–

ABLIA4944GB

Connector No.	M84
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
17	L	–
18	P	–

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

137	136	135	134	133	132	131	130	129
143	142	141	140	139	138			

Terminal No.	Color of Wire	Signal Name
131	W	BAT BCM FUSE
134	B	GND 2
139	W	BAT POWER F/L
143	B	GND 1

Connector No.	M80
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

116	115	114	113	112	111	110	109	108	107	106	105
128	127	126	125	124	123	122	121	120	119	118	117

Terminal No.	Color of Wire	Signal Name
107	W	LOW SIDE START SW LED

Connector No.	M121
Connector Name	HEADLAMP AIMING SWITCH
Connector Color	WHITE

H.S.

2	1	3	4

Terminal No.	Color of Wire	Signal Name
3	R	–
4	B	–

Connector No.	M98
Connector Name	A/C AND AV SWITCH ASSEMBLY
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	R	–
5	B	–

Connector No.	M88
Connector Name	A/C 120V OUTLET MAIN SWITCH
Connector Color	BLACK

H.S.

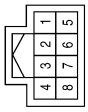
	2		4	6
5	1			3

Terminal No.	Color of Wire	Signal Name
2	B	–
4	R	–

ABLIA4945GB

Connector No.	M126
Connector Name	TWIN SWITCH (WARNING SYSTEM SWITCH)
Connector Color	BLACK

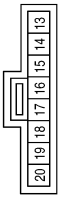
H.S.



Terminal No.	Color of Wire	Signal Name
1	R	–
4	B	–

Connector No.	M149
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	GRAY

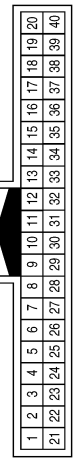
H.S.



Terminal No.	Color of Wire	Signal Name
19	Y	–
20	W	–

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Color	WHITE

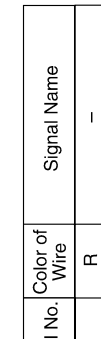
H.S.



Terminal No.	Color of Wire	Signal Name
25	R	–
26	B	–

Connector No.	M175
Connector Name	JOINT CONNECTOR-M22
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
12	R	–
13	R	–
14	R	–
15	B	–
16	B	–
17	B	–

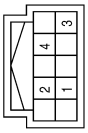
Connector No.	M181
Connector Name	JOINT CONNECTOR-M36
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–
2	W	–

Connector No.	M185
Connector Name	AUTOMATIC BACK DOOR MAIN SWITCH
Connector Color	WHITE

H.S.

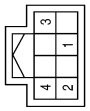


Terminal No.	Color of Wire	Signal Name
2	B	–
4	R	–

ABLIA4946GB

Connector No.	M186
Connector Name	AUTOMATIC BACK DOOR SWITCH
Connector Color	BLACK

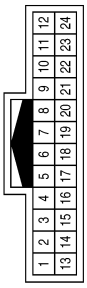
H.S.



Terminal No.	Color of Wire	Signal Name
3	R	–
4	B	–

Connector No.	M188
Connector Name	WIRE TO WIRE
Connector Color	WHITE

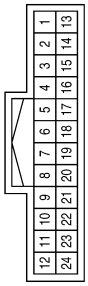
H.S.



Terminal No.	Color of Wire	Signal Name
11	B	–
12	R	–
17	B	–
18	R	–
23	B	–
24	R	–

Connector No.	M189
Connector Name	WIRE TO WIRE
Connector Color	WHITE

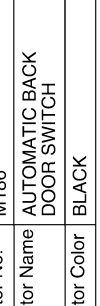
H.S.



Terminal No.	Color of Wire	Signal Name
11	B	–
12	R	–
17	B	–
18	R	–
23	B	–
24	R	–

Connector No.	M193
Connector Name	AV CONTROL UNIT (WITH BOSE AUDIO SYSTEM WITHOUT NAVI)
Connector Color	WHITE

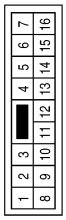
H.S.



Terminal No.	Color of Wire	Signal Name
41	R	ILL

Connector No.	M201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

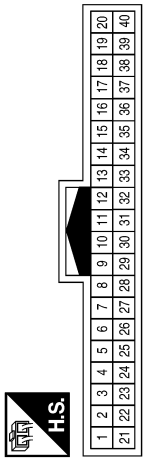
H.S.



Terminal No.	Color of Wire	Signal Name
9	B	–
11	R	–

Connector No.	M202
Connector Name	WIRE TO WIRE
Connector Color	WHITE

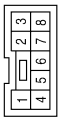
H.S.



Terminal No.	Color of Wire	Signal Name
22	R	–
23	B	–

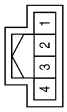
ABLIA4947GB

Connector No.	M206
Connector Name	CLIMATE CONTROLLED SEAT SWITCH (PASSENGER SEAT)
Connector Color	BROWN



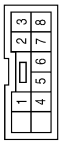
Terminal No.	Color of Wire	Signal Name
7	R	–
8	B	–

Connector No.	M204
Connector Name	CVT SHIFT SELECTOR
Connector Color	WHITE



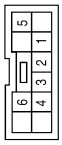
Terminal No.	Color of Wire	Signal Name
2	R	–
3	B	–

Connector No.	M203
Connector Name	CLIMATE CONTROLLED SEAT SWITCH (DRIVER SEAT)
Connector Color	WHITE



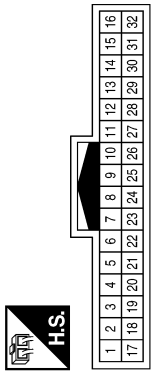
Terminal No.	Color of Wire	Signal Name
7	R	–
8	B	–

Connector No.	M220
Connector Name	FRONT HEATED SEAT SWITCH LH
Connector Color	WHITE



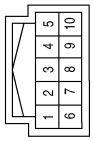
Terminal No.	Color of Wire	Signal Name
3	R	–
4	B	–

Connector No.	M217
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
23	R	–
24	B	–

Connector No.	M211
Connector Name	DRIVE MODE SELECT SWITCH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
7	B	–
9	R	–

ABLIA4948GB

Connector No.	M252
Connector Name	2ND ROW HEATED SEAT SWITCH LH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
5	R	–
6	B	–

Connector No.	M251
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
9	B	–
11	R	–

Connector No.	M258
Connector Name	REAR AIR CONTROL
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
5	R	ILL(+)
6	B	ILL(-)

Connector No.	M257
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
22	R	–
23	B	–

Connector No.	M221
Connector Name	FRONT HEATED SEAT SWITCH RH
Connector Color	BROWN

Terminal No.	Color of Wire	Signal Name
3	R	–
4	B	–

Connector No.	M253
Connector Name	2ND ROW HEATED SEAT SWITCH RH
Connector Color	BROWN

Terminal No.	Color of Wire	Signal Name
5	R	–
6	B	–

ABLIA4949GB

Connector No.	E28
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6M	L	–

Connector No.	E45
Connector Name	JOINT CONNECTOR-E12
Connector Color	BLUE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	L	–
4	L	–
7	P	–
10	P	–

Connector No.	E70
Connector Name	JOINT CONNECTOR-E14
Connector Color	BLACK

H.S.

6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	P	–
2	P	–

Connector No.	E71
Connector Name	JOINT CONNECTOR-E15
Connector Color	BLACK

H.S.

6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50

Terminal No.	Color of Wire	Signal Name
28	P	CAN-L
29	L	CAN-H
41	B	GND (SIGNAL)

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

7	8		9	10	11
12	13	14	15	16	17	18

Terminal No.	Color of Wire	Signal Name
7	B	GND (POWER)
10	L	TAIL LH

ABLIA4950GB

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

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

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

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

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

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

Connector No.	B12
Connector Name	JOINT CONNECTOR-B10
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–

Connector No.	B11
Connector Name	JOINT CONNECTOR-B09
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	P	–
2	P	–

Connector No.	B16
Connector Name	JOINT CONNECTOR-B11
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	P	–
2	P	–

Connector No.	B17
Connector Name	JOINT CONNECTOR-B12
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–

ABLIA4951GB

Connector No. B32
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
Terminal No. Color of Wire Signal Name
18 L –
19 P –
Connector No. B69
Connector Name WIRE TO WIRE
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
95A 94A 93A 92A 91A
100A 99A 98A 97A 96A
Terminal No. Color of Wire Signal Name
89A L –
90A P –
Connector No. B101
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
Terminal No. Color of Wire Signal Name
17 L –
18 P –
Connector No. B102
Connector Name JOINT CONNECTOR-B14
Connector Color WHITE
H.S.
4 3 2 1
Terminal No. Color of Wire Signal Name
1 L –
2 L –
Connector No. B103
Connector Name JOINT CONNECTOR-B15
Connector Color WHITE
H.S.
4 3 2 1
Terminal No. Color of Wire Signal Name
1 P –
2 P –
ABLIA4952GB

Connector No.	R11
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
8	B	–
9	B	–
10	W	–

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
3	W	–
5	B	–
24	B	–

Connector No.	R106
Connector Name	PERSONAL LAMPS 2ND ROW
Connector Color	WHITE

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
2	SB	–
4	L	–

Connector No.	B124
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
18	L	–
19	P	–

Connector No.	R105
Connector Name	TELEMATICS SWITCH
Connector Color	WHITE

H.S.

4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name
5	W	ILL
6	B	ILL CONT (GND)

Connector No.	R101
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
8	B	–
9	B	–
10	W	–

ABLIA4953GB

Connector No.	R107
Connector Name	FRONT ROOM/MAP LAMP ASSEMBLY
Connector Color	GRAY

H.S.

1	2	3	4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
3	W	–
4	B	–

Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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
25	BR	–
26	B	–

Connector No.	D19
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
22	BR	–
23	B	–

Connector No.	D52
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
22	BR	–
23	B	–

Connector No.	D60
Connector Name	SEAT MEMORY SWITCH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	BR	–
9	B	–

ABLIA4954GB

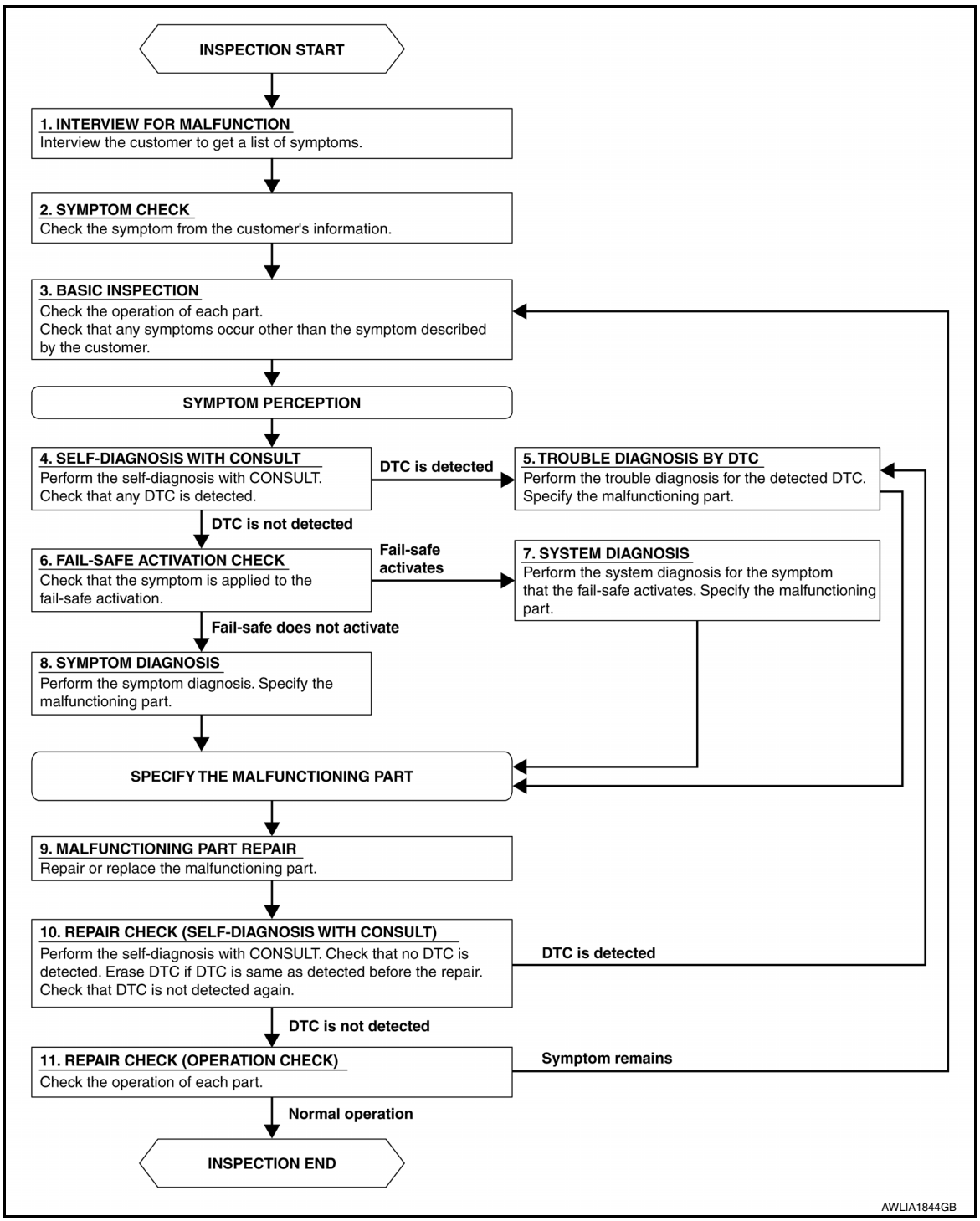
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000009132001

OVERALL SEQUENCE



DETAILED FLOW

1.INTERVIEW FOR MALFUNCTION

Find out what the customer's concerns are.

>> GO TO 2.

2.SYMPTOM CHECK

Verify the symptom from the customer's information.

>> GO TO 3.

3.BASIC INSPECTION

Check the operation of each part. Check that any concerns occur other than those mentioned in the customer interview.

>> GO TO 4.

4.SELF-DIAGNOSIS WITH CONSULT

Perform the self-diagnosis with CONSULT. Check that any DTC is detected.

Is any DTC detected?

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

5.TROUBLE DIAGNOSIS BY DTC

Perform the trouble diagnosis for the detected DTC. Specify the malfunctioning part.

>> GO TO 9.

6.FAIL-SAFE ACTIVATION CHECK

Determine if the customer's concern is related to fail-safe activation.

Does the fail-safe activate?

YES >> GO TO 7.
NO >> GO TO 8.

7.SYSTEM DIAGNOSIS

Perform the system diagnosis for the system in which the fail-safe activates. Specify the malfunctioning part.

>> GO TO 9.

8.SYMPTOM DIAGNOSIS

Perform the symptom diagnosis, refer to INL-59, "Symptom Table". Specify the malfunctioning part.

>> GO TO 9.

9.MALFUNCTION PART REPAIR

Repair or replace the malfunctioning part.

>> GO TO 10.

10.REPAIR CHECK (SELF-DIAGNOSIS WITH CONSULT)

Perform the self-diagnosis with CONSULT. Verify that no DTCs are detected. Erase all DTCs detected prior to the repair. Verify that DTC is not detected again.

Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 11.

11. REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

Does it operate normally?

YES >> Inspection End.
NO >> GO TO 3.

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000009726248

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.

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

Is the fuse or fusible link blown?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit.
NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector 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.

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

Description

INFOID:0000000009132003

Provides the battery saver output/power supply. Also cuts the power supply when the interior room lamp battery saver is activating.

Component Function Check

INFOID:0000000009132004

1.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY FUNCTION

CONSULT
1. Turn ignition switch ON.
2. Turn each interior room lamp ON:
- Front room/map lamp assembly
- Vanity lamps
- Personal lamp 2nd row
- Cargo lamp
3. Open the driver door to turn ON the following lamps:
- Front step lamps
- Foot lamps
- Front outside handle assembly lamps
4. Select BATTERY SAVER of BCM (BATTERY SAVER) active test item.
5. While operating the test item, check that each interior room lamp turns ON/OFF.

OFF : Interior room lamp OFF
ON : Interior room lamp ON

Is the inspection result normal?

YES >> Battery saver output/power supply circuit is normal.
NO >> Refer to INL-49, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009132005

Regarding Wiring Diagram information, refer to INL-14, "Wiring Diagram".

1.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OUTPUT

CONSULT
1. Turn ignition switch ON.
2. Select BATTERY SAVER of BCM (BATTERY SAVER) active test item.
3. While operating the test item, check voltage between BCM connector M81 terminal 129 and ground.

(+)		(-)	Test item	Voltage (Approx.)
Connector	Terminal		BATTERY SAVER	
M81	129	Ground	OFF	0V
			ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 2
NO >> Replace BCM after making sure battery saver output/power supply circuit is not shorted to voltage. Refer to BCS-79, "Removal and Installation".

2.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following connectors:
- BCM M81
- Front step lamp LH D11

- Front step lamp RH D109
- Front outside handle assembly LH D15
- Front outside handle assembly RH D115
- Foot lamp LH M99
- Foot lamp RH M100
- Front room/map lamp assembly R107
- Vanity lamp LH R103
- Vanity lamp RH R102
- Cargo lamp R104
- Personal lamp 2nd row R106

3. Check continuity between BCM connector M81 terminal 129 and interior room lamp connector terminal in question.

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M81	129	Front step lamp LH	D11	1	Yes
		Front step lamp RH	D109	1	
		Front outside handle assembly LH	D15	3	
		Front outside handle assembly RH	D115	3	
		Foot lamp LH	M99	1	
		Foot lamp RH	M100	1	
		Front room/map lamp assembly	R107	8	
		Vanity lamp LH	R103	1	
		Vanity lamp RH	R102	1	
		Cargo lamp	R104	2	
		Personal lamp 2nd row	R106	2	

Is the inspection result normal?

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

3. CHECK BATTERY SAVER OUTPUT/POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM connector M81 terminal 129 and ground.

Connector	Terminal	—	Continuity
M81	129	Ground	No

Is the inspection result normal?

YES >> Check that each interior room lamp has no internal short circuit.
NO >> Repair or replace harness or connectors.

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:0000000009132006

Controls the room lamp control circuit (ground side) to turn the room lamps ON and OFF.

Component Function Check

INFOID:0000000009132007

CAUTION:
Before performing the diagnosis, check that the following are normal.
- **Battery saver output/power supply**
- **Front room/map lamp bulb**
- **Personal lamp bulb**
- **Cargo lamp bulb**

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT
1. Set the front room/map lamp switch, personal lamp switch and cargo lamp switch to DOOR.
2. Turn ignition switch ON.
3. Select INT LAMP of BCM (INT LAMP) active test item.
4. While operating the test item, check that each interior room lamp turn ON/OFF.

On : Interior room lamp On
Off : Interior room lamp Off

Does the interior room lamp turn ON/OFF?

YES >> Interior room lamp control circuit is normal.
NO >> Refer to INL-51, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009132008

Regarding Wiring Diagram information, refer to INL-14, "Wiring Diagram".

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT
1. Turn ignition switch ON.
2. Select INT LAMP of BCM (INT LAMP) active test item.
3. While operating the test item, check voltage between BCM harness connector M81 terminal 136 and ground.

BCM		Ground	Test item		Voltage (Approx.)
Connector	Terminal				
M81	136		INT LAMP	On	0V
				Off	Battery voltage

Is the inspection result normal?

YES >> Interior room lamp control circuit is operating normally.
Fixed ON>>GO TO 3.
Fixed OFF>>GO TO 2.

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM harness connector M81, front room/map lamp harness connector R107 and cargo lamp harness connector R104.
3. Check continuity between BCM harness connector M81 terminal 136 and front room/map lamp assembly harness connector R107 terminal 7 and cargo lamp harness connector R104 terminal 3.

BCM		Foot lamp			Continuity
Connector	Terminal	Connector		Terminal	
M81	136	Front room/map lamp	R107	7	Yes
		Cargo lamp	R104	3	

4. Reconnect the front room/map lamp assembly harness connector.
5. Check continuity between BCM harness connector M81 terminal 136 and personal lamps 2nd row harness connector R106 terminal 3.

BCM		Personal lamp		Continuity
Connector	Terminal	Connector	Terminal	
M81	136	R106	3	Yes

Is the inspection result normal?

YES >> Check interior room lamps for an open. If NG, replace lamp in question. Refer to INL-60, "Removal and Installation" or INL-68, "Removal and Installation" or INL-67, "Removal and Installation". If OK, replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness or connectors.

3. CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM harness connector M81 and front room/map lamp harness connector R107 and cargo lamp harness connector R104.
3. Check continuity between BCM harness connector M81 terminal 136 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	136		No

Is the inspection result normal?

YES >> Check interior room lamps for a short circuit. If NG, replace lamp in question. Refer to INL-60, "Removal and Installation" or INL-68, "Removal and Installation" or INL-67, "Removal and Installation". If OK, replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness or connectors.

STEP LAMP CIRCUIT

Description

INFOID:0000000009132009

Controls the step lamp control circuit (ground side) to turn the step lamps and foot lamps ON and OFF.

Component Function Check

INFOID:0000000009132010

CAUTION:
Before performing the diagnosis, check that the following is normal.
- **Battery saver output/power supply**
- **Front step lamp bulb**
- **Foot lamp bulb**

1.CHECK STEP LAMP OPERATION

CONSULT
1. Turn ignition switch ON.
2. Select STEP LAMP TEST of BCM (INT LAMP) active test item.
3. While operating the test items, check that front step lamp and foot lamp turns ON/OFF.

On : Step lamp and foot lamp ON
Off : Step lamp and foot lamp OFF

Is the inspection result normal?

YES >> Step lamp circuit is normal.
NO >> Refer to INL-53, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009132011

Regarding Wiring Diagram information, refer to INL-14, "Wiring Diagram".

1.CHECK STEP LAMP OUTPUT

CONSULT
1. Turn ignition switch ON.
2. Select STEP LAMP TEST of BCM (INT LAMP) active test item.
3. While operating the test item, check voltage between BCM harness connector M18 terminal 21 and ground.

BCM		Ground	STEP LAMP TEST	Voltage (Approx.)
Connector	Terminal			
M18	21		On	0V
			Off	Battery voltage

Is the inspection result normal?

YES >> Step lamp control circuit is operating normally.
Fixed ON>>GO TO 3
Fixed OFF>>GO TO 2

2.CHECK STEP LAMP OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following harness connectors:
- BCM M18
- Front step lamp LH D11
- Front step lamp RH D109
- Foot lamp LH M99
- Foot lamp RH M100

3. Check continuity between BCM harness connector M18 terminal 21 and the following lamp harness connector terminal.

BCM		Step lamp			Continuity
Connector	Terminal	Connector		Terminal	
M18	21	Front step lamp LH	D11	2	Yes
		Front step lamp RH	D109		
		Foot lamp LH	M99		
		Foot lamp RH	M100		

Is the inspection result normal?

YES >> Check front step lamp or foot lamp for an open. If NG, replace lamp in question. Refer to INL-64, "DRIVER SIDE : Removal and Installation" or INL-65, "PASSENGER SIDE : Bulb Replacement" or INL-66, "Removal and Installation". If OK, replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness or connectors.

3.CHECK STEP LAMP SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following harness connectors:
- BCM M18
- Front step lamp LH D11
- Front step lamp RH D109
- Foot lamp LH M99
- Foot lamp RH M100
3. Check continuity between BCM harness connector M18 terminal 21 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M18	21		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness or connectors.

OUTSIDE HANDLE LAMP CIRCUIT

Description

INFOID:0000000009132012

Controls the outside door handle lamp circuit (ground side) to turn the outside door handle lamps ON and OFF.

Component Function Check

INFOID:0000000009132013

1.CHECK OUTSIDE DOOR HANDLE LAMP OPERATION

CONSULT
1. Turn the ignition switch ON.
2. Select DOOR HANDLE LAMP TEST of BCM (INTELLIGENT KEY) active test item.
3. While operating the test item, check that the outside door handle lamp turn ON/OFF.

On : Outside door handle lamp ON
Off : Outside door handle lamp OFF

Is the inspection results normal?

YES >> Outside door handle lamp circuit is normal.
NO >> Refer to INL-55, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009132014

Regarding Wiring Diagram information, refer to INL-14, "Wiring Diagram".

CAUTION:
Before performing the diagnosis, check that the following is normal:
- **Battery saver output/power supply**

1.CHECK OUTSIDE HANDLE LAMP OUTPUT

1. Turn ignition switch OFF.
2. Open driver's door.
3. Check voltage between BCM harness connector M19 terminal 65 and ground.

BCM		Ground	Condition		Voltage (Approx.)
Connector	Terminal				
M19	65		Any door	Open	0V
				Closed	Battery voltage

Is the inspection result normal?

YES >> Front outside handle assembly control circuit is operating normally.
Fixed ON>>GO TO 3
Fixed OFF>>GO TO 2

2.CHECK OUTSIDE HANDLE LAMP OPEN CIRCUIT

1. Disconnect BCM harness connector and front outside handle assembly LH/RH harness connectors.
2. Check continuity between BCM harness connector and front outside handle assembly harness connector.

BCM		Front Outside Handle Assembly			Continuity
Connector	Terminal	Connector		Terminal	
M19	65	LH	D15	4	Yes
		RH	D115		

Is the inspection result normal?

YES >> Replace front outside handle lamp. Refer to DLK-296, "OUTSIDE HANDLE : Removal and Installation".
NO >> Repair or replace harness or connector.

3. CHECK OUTSIDE HANDLE LAMP SHORT CIRCUIT

1. Disconnect BCM harness connector and front outside handle assembly LH/RH harness connectors.
2. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	65		No

Is the inspection result normal?

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

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description

INFOID:0000000009132015

Provides the power supply and the ground to control the push-button ignition switch illumination.

Component Function Check

INFOID:0000000009132016

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT
1. Turn the ignition switch ON.
2. Select ENGINE SW ILLUMI of BCM (INTELLIGENT KEY) active test item.
3. With operating the test items, check that the push-button ignition switch illumination turns ON/OFF.

On : Push-button ignition switch illumination ON
Off : Push-button ignition switch illumination OFF

Does the push-button ignition switch illumination turn ON/OFF?

YES >> Push-button ignition switch illumination circuit is normal.
NO >> Refer to INL-57, "Diagnosis Procedure" .

Diagnosis Procedure

INFOID:0000000009132017

Regarding Wiring Diagram information, refer to INL-28, "Wiring Diagram".

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT
1. Turn the ignition switch ON.
2. Select ENGINE SW ILLUMI of BCM (INTELLIGENT KEY) active test item.
3. While operating the test item, check voltage between push-button ignition switch connector M17 terminal 5 and ground.

Terminals			Test item	Voltage (Approx.)
(+)		(-)		
Push-button ignition switch		Ground	ENGINE SW ILLUMI	
Connector	Terminal			
M17	5		ON	5 V
			OFF	0 V

Is the inspection result normal?

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

2.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM harness connector M19 and the push-button ignition switch harness connector M17.
3. Check continuity between BCM harness connector M19 terminal 48 and the push-button ignition switch harness connector M17 terminal 5.

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M19	48	M17	5	Yes

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

3. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM harness connector M19 terminal 48 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	48		No

Is the inspection result normal?

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

4. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect push-button ignition switch harness connector M17.
3. Check continuity between push-button ignition switch harness connector M17 terminal 6 and ground.

Push-button ignition switch		Ground	Continuity
Connector	Terminal		
M17	6		Yes

Is the inspection result normal?

YES >> Replace push-button ignition switch. Refer to SEC-153, "Removal and Installation".
NO >> GO TO 5

5. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND OPEN CIRCUIT

1. Disconnect BCM harness connector M80 and push-button ignition switch harness connector M17.
2. Check continuity between BCM harness connector M80 terminal 107 and push-button ignition switch harness connector M17 terminal 6.

Push-button ignition switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M17	6	M80	107	Yes

Is the inspection result normal?

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

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000009132018

CAUTION:
Perform the self-diagnosis with CONSULT before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

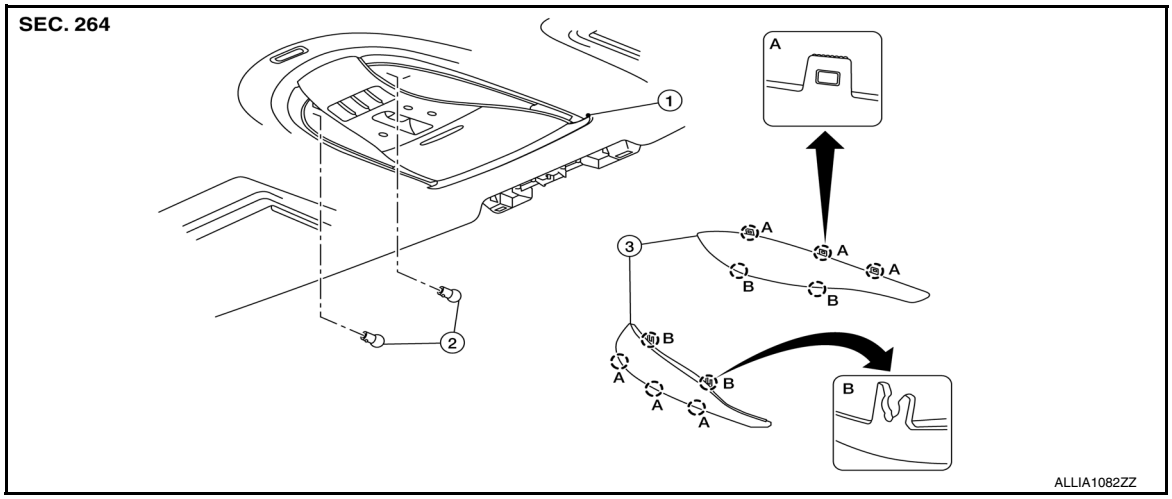
Symptom	Possible cause	Inspection item
All the following lamps do not turn ON: • Front room/map lamp • Personal lamp 2nd row • Foot lamp LH/RH • Step lamp LH/RH • Cargo lamp • Vanity lamp LH/RH • Front outside handle assembly LH/RH	• Harness between BCM and each interior room lamp • BCM	Battery saver output/power supply circuit Refer to INL-49.
• Interior room lamp does not turn ON even though the door is open. (It turns ON when turning the interior room lamp ON.) • Interior room lamp does not turn OFF even though the door is closed.	• Harness between BCM and each door switch • Harness between BCM and each interior room lamp • BCM	Door switch circuit Refer to DLK-170.
		Interior room lamp control circuit Refer to INL-51.
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	—	Check the interior room lamp setting. Refer to INL-11.
• Front outside handle assembly lamp does not turn ON even though the door is open. • Front outside handle assembly lamp does not turn OFF even though the door is closed.	• Harness between BCM and each door switch • Harness between BCM and Front outside handle assembly lamp. • BCM	Door switch circuit Refer to DLK-170.
		Front outside handle assembly lamp circuit Refer to INL-55.
• Step lamps (ALL) do not turn ON. • Step lamps (ALL) do not turn OFF.	• Harness between BCM and each step lamp • BCM	Door switch circuit Refer to DLK-170.
		Step lamp circuit Refer to INL-53.
Push-button ignition switch illumination does not illuminate.	• Harness between BCM and push-button ignition switch • BCM	Push-button ignition switch illumination circuit Refer to INL-57.
Interior room lamp battery saver does not activate.	BCM	Replace BCM. Refer to BCS-79.

REMOVAL AND INSTALLATION

FRONT ROOM/MAP LAMP

Exploded View

INFOID:0000000009132019



1. Front room/map lamp assembly
2. Bulb
3. Lens

(◌) Pawl

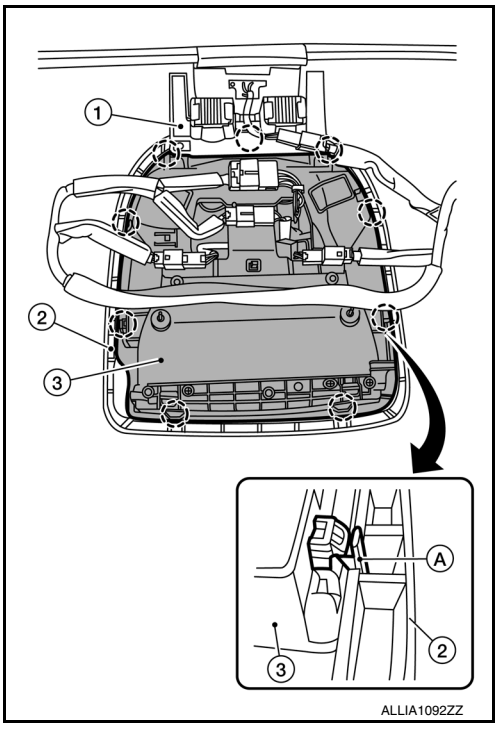
Removal and Installation

INFOID:0000000009132020

CAUTION:
Do not attempt to separate the front room/map lamp assembly from the headlining prior to removing headlining, or damage to the components may occur.

REMOVAL

1. Remove the headlining. Refer to INT-27, "Removal and Installation".
2. Remove the two bracket screws, then remove the front room/map lamp assembly bracket (1) from front room/map assembly (3) and position aside.
3. Disconnect the harness connectors from front room/map lamp assembly (3).
4. Release the nine back plate pawls (A) using a suitable tool and remove the front room/map lamp assembly (3).
   (◌): Pawl
   CAUTION:
   When removing, support front room/map lamp assembly (3) by hand so it does not fall out and get damaged during the removal.
5. Remove the front room/map lamp back plate (2) from the headlining.



INSTALLATION

Installation is in the reverse order of removal.

Bulb or Lens Replacement

INFOID:0000000009132021

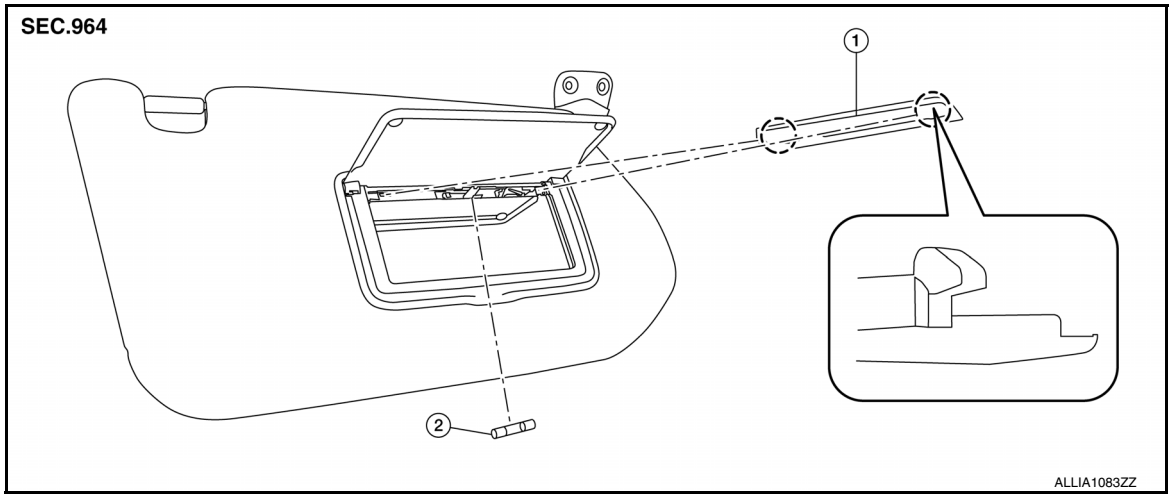
WARNING:
Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns.
CAUTION:
- **Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.**

1. Insert a suitable tool into the gap between the lens and the front room/map lamp assembly, then gently release the lens pawls and remove the lens.
2. Push the bulb inward slightly and twist it counterclockwise to remove from the front room/map lamp assembly.
3. Push the bulb in and twist clockwise to install.
4. Install the front room/map lamp lens.

VANITY LAMP

Exploded View

INFOID:0000000009132022



1. Lens
2. Bulb
Pawl

Removal and Installation

INFOID:0000000009132023

CAUTION:
Do not attempt to separate the vanity lamp from the sun visor or damage to the components may occur.
The vanity lamp is replaced as part of the sun visor. Refer to INT-27, "Removal and Installation".

Bulb or Lens Replacement

INFOID:0000000009132024

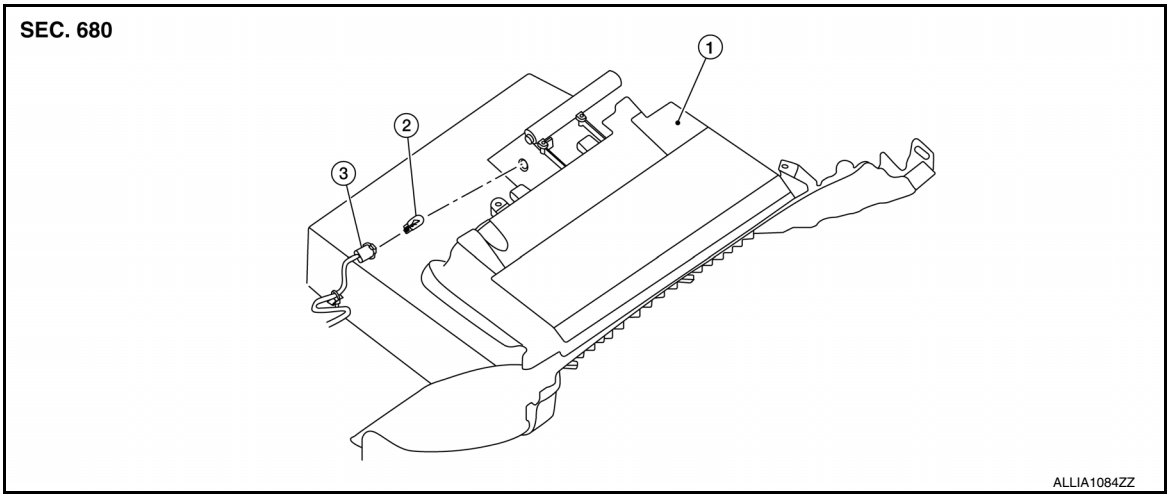
WARNING:
Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns.
CAUTION:
- **Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.**
- **Do not attempt to separate the vanity lamp from the sun visor or damage to the components may occur.**

1. Insert a suitable tool into the gap between the lens and vanity lamp, then gently release the lens pawls and remove the lens.
2. Grasp the bulb and pull straight out of the vanity lamp to remove.
3. Install vanity lamp bulb to vanity lamp.
4. Install the vanity lamp lens.

GLOVE BOX LAMP

Exploded View

INFOID:0000000009132025



1. Glove box assembly
2. Bulb
3. Bulb socket

Bulb Replacement

INFOID:0000000009132026

WARNING:

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns.

CAUTION:

- **Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.**

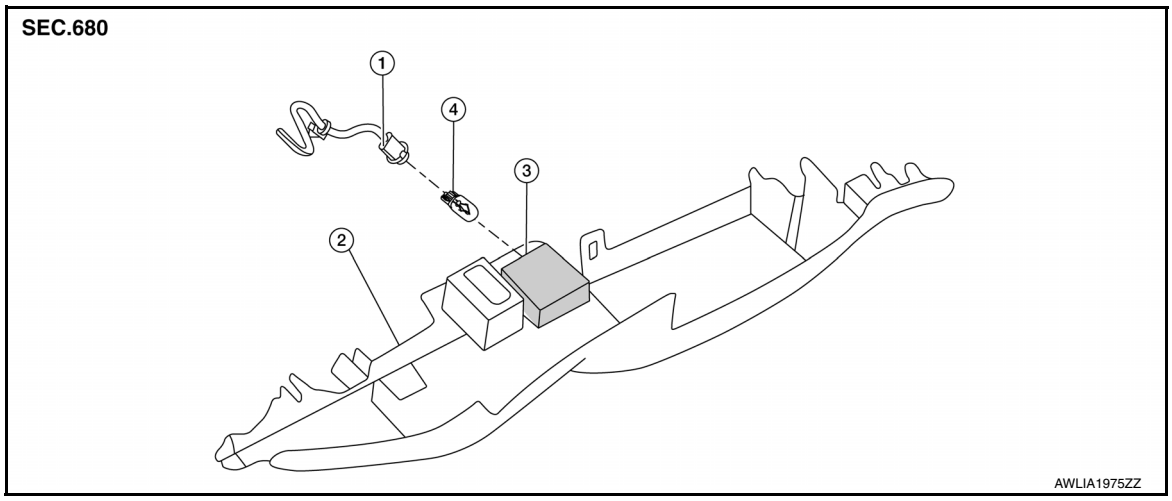
1. Remove glove box assembly. Refer to IP-26, "Removal and Installation".
2. Rotate the bulb socket counterclockwise and remove from glove box assembly.
3. Grasp the bulb and pull straight out of the bulb socket to remove.
4. Install glove box lamp bulb to bulb socket.
5. Insert bulb socket into glove box assembly and rotate clockwise to lock in position.
6. Install glove box assembly. Refer to IP-26, "Removal and Installation".

FOOT LAMP

DRIVER SIDE

DRIVER SIDE : Exploded View

INFOID:0000000009132027



1. Bulb socket
2. Instrument lower panel LH
3. Foot lamp housing
4. Bulb

DRIVER SIDE : Removal and Installation

INFOID:0000000009132028

The foot lamp housing is replaced as part of the instrument lower panel LH. Refer to IP-25, "Removal and Installation".

DRIVER SIDE : Bulb Replacement

INFOID:0000000009132029

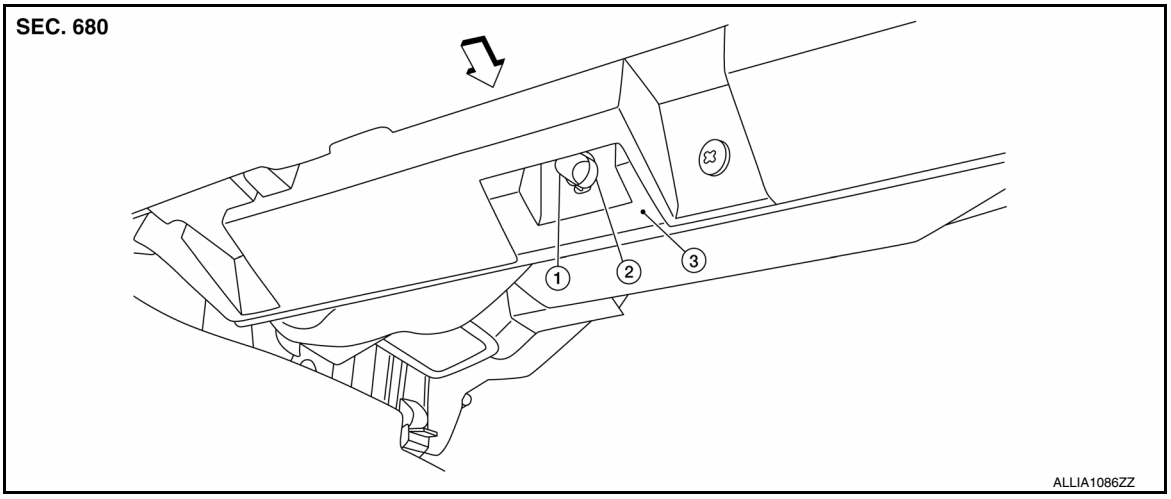
WARNING:
Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns.
CAUTION:
- **Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.**

1. Remove instrument lower panel LH. Refer to IP-25, "Removal and Installation".
2. Rotate the bulb socket counterclockwise and remove from foot lamp housing.
3. Grasp the bulb and pull straight out of the bulb socket to remove.
4. Install foot lamp bulb to bulb socket.
5. Insert bulb socket into foot lamp housing and rotate clockwise to lock in position.
6. Install the instrument lower panel LH. Refer to IP-25, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Exploded View

INFOID:0000000009132030



1. Bulb
2. Bulb socket
3. Instrument panel substrate

⇦ Front

PASSENGER SIDE : Bulb Replacement

INFOID:0000000009132031

WARNING:

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns.

CAUTION:

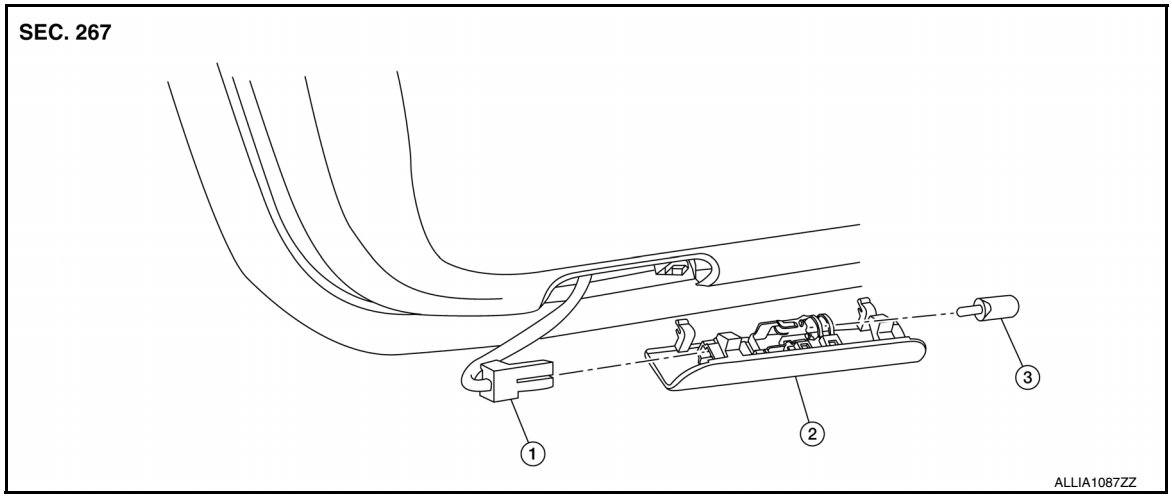
- **Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.**

1. Reach under instrument panel on RH side, locate foot lamp socket, rotate the bulb socket and remove from instrument panel substrate.
2. Grasp the bulb and pull straight out of the bulb socket to remove.
3. Install foot lamp bulb to bulb socket.
4. Insert bulb socket into instrument panel substrate and rotate to lock in position.

STEP LAMP

Exploded View

INFOID:0000000009132032



1. Step lamp harness connector
2. Step lamp
3. Bulb

Removal and Installation

INFOID:0000000009132033

REMOVAL

1. Insert a suitable tool into the gap between the step lamp and front door finisher and gently release the pawls and step lamp.
2. Disconnect the harness connector from the step lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb or Lens Replacement

INFOID:0000000009132034

WARNING:

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns.

CAUTION:

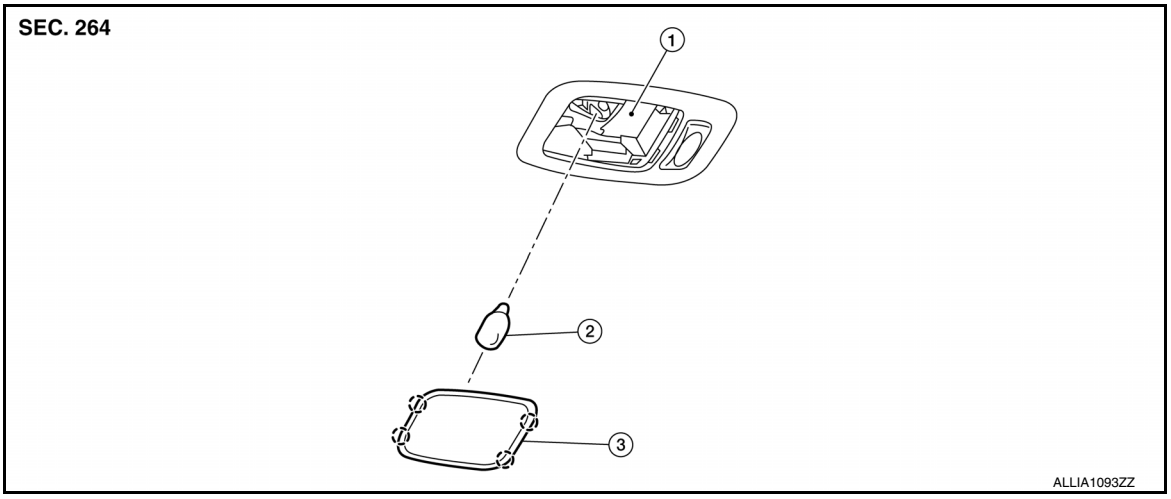
- **Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.**

1. Remove the step lamp. Refer to INL-66, "Removal and Installation".
2. Grasp the bulb and pull straight out from the step lamp to remove.
3. Install the step lamp bulb to step lamp.
4. Install the step lamp. Refer to INL-66, "Removal and Installation"

PERSONAL LAMP

Exploded View

INFOID:0000000009132035



1. Personal lamp
2. Bulb
3. Lens

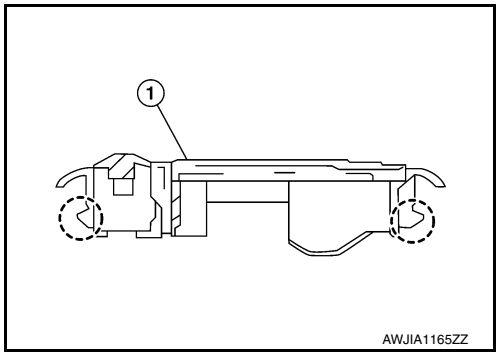
Pawl

Removal and Installation

INFOID:0000000009132036

REMOVAL

1. Remove the headlining. Refer to INT-27, "Removal and Installation"
2. Insert a suitable tool into the gap between the headlining and personal lamp (1), release personal lamp pawls and remove.
   : Pawl



INSTALLATION

Installation is in the reverse order of removal.

Bulb or Lens Replacement

INFOID:0000000009132037

WARNING:

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns.

CAUTION:

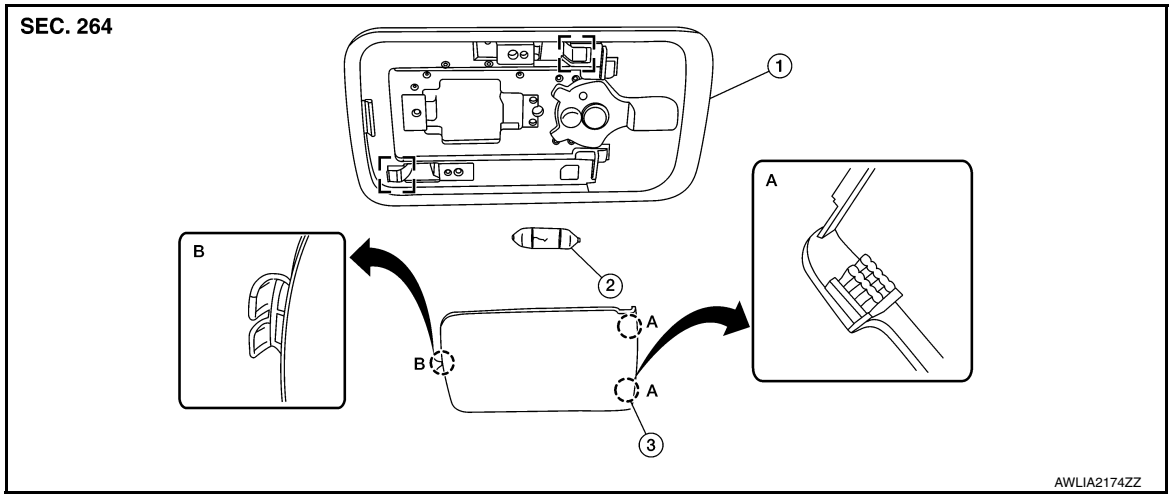
- **Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.**
- **Do not attempt to separate the personal lamp from the headlining or damage may occur.**

1. Insert a suitable tool into the gap between the lens and personal lamp, then gently release the lens pawls and remove the lens.
2. Grasp the bulb and pull straight out from its socket to remove.
3. Install personal lamp bulb to personal lamp.
4. Install the personal lamp lens.

CARGO LAMP

Exploded View

INFOID:0000000009132038



1.	Cargo lamp	2.	Bulb	3.	Lens
A.	Pawls to release first for lens removal	B.	Pawl to install first for lens installation		Pawl
	Metal clip				

Removal and Installation

INFOID:0000000009132039

REMOVAL

1. Insert a suitable tool into the gap between the headlining and cargo lamp and gently release the metal clips and the cargo lamp.
2. Disconnect the harness connector from cargo lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb or Lens Replacement

INFOID:0000000009132040

WARNING:

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns.

CAUTION:

- **Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.**
- **Release and insert pawl as indicated in exploded view or damage may occur.**

1. Beginning at the switch end, insert a suitable tool into the gap between the lens and cargo lamp, then gently release the lens pawls and remove the lens.
2. Push the tab to release one bulb end, then grasp the bulb and pull out the second end from its socket to remove.
3. Install cargo lamp bulb to cargo lamp.
4. Insert pawl at the end opposite the switch first, then insert the remaining two pawls to lock the lens in position.

ILLUMINATION CONTROL SWITCH

Removal and Installation

INFOID:0000000009132041

The illumination control switch is serviced as part of the meter control switch. Refer to MWI-96, "Removal and Installation".

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000009132042

Item	Wattage (W)*
Front room/map lamp	8
Push-button ignition switch illumination	–
Vanity lamp	2
Glove box lamp	8
Foot lamp	3.4
Step lamp	3.4
Personal lamp	8
Cargo lamp	8

*: Always check with the Parts Department for the latest parts information.