SECTION INL
INTERIOR LIGHTING SYSTEM

CONTENTS

PRECAUTION 3

PRECAUTIONS 3
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" 3
Precaution for Work 3

PREPARATION 4

PREPARATION 4
Special Service Tool 4

SYSTEM DESCRIPTION 5

COMPONENT PARTS 5

INTERIOR ROOM LAMP CONTROL SYSTEM 5
INTERIOR ROOM LAMP CONTROL SYSTEM : Component Parts Location 5
INTERIOR ROOM LAMP CONTROL SYSTEM : Component Description 6

ILLUMINATION CONTROL SYSTEM 6
ILLUMINATION CONTROL SYSTEM : Component Parts Location 6
ILLUMINATION CONTROL SYSTEM : Component Description 6

SYSTEM 8

INTERIOR ROOM LAMP CONTROL SYSTEM 8
INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram 8
INTERIOR ROOM LAMP CONTROL SYSTEM : System Description 9

ILLUMINATION CONTROL SYSTEM 10
ILLUMINATION CONTROL SYSTEM : System Diagram 10
ILLUMINATION CONTROL SYSTEM : System Description 10

DIAGNOSIS SYSTEM (BCM) 11

COMMON ITEM 11
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM) 11

INT LAMP 11
INT LAMP : CONSULT Function (BCM - INT LAMP) 12

BATTERY SAVER 13
BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER) 13

ECU DIAGNOSIS INFORMATION 14

BCM (BODY CONTROL MODULE) 14
List of ECU Reference 14

WIRING DIAGRAM 15

INTERIOR ROOM LAMP CONTROL SYSTEM 15
Wiring Diagram - Cargo Van 15
Wiring Diagram - Passenger Van 25

ILLUMINATION 38
Wiring Diagram 38

BASIC INSPECTION 49

DIAGNOSIS AND REPAIR WORKFLOW 49
Work Flow 49

DTC/CIRCUIT DIAGNOSIS 52

POWER SUPPLY AND GROUND CIRCUIT 52
Diagnosis Procedure 52

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT 53
Description 53
Diagnosis Procedure 53

INTERIOR ROOM LAMP CONTROL CIRCUIT ... 56

CARGO VAN ... 56
CARGO VAN : Description ... 56
CARGO VAN : Component Function Check ... 56
CARGO VAN : Diagnosis Procedure ... 56

PASSENGER VAN ... 57
PASSENGER VAN : Description ... 57
PASSENGER VAN : Component Function Check ... 58
PASSENGER VAN : Diagnosis Procedure ... 58

STEP LAMP CIRCUIT ... 60
Description ... 60
Diagnosis Procedure ... 60

SYMPTOM DIAGNOSIS ... 61

INTERIOR LIGHTING SYSTEM SYMPTOMS ... 61
Symptom Table ... 61

REMOVAL AND INSTALLATION ... 62

FRONT ROOM/MAP LAMP ... 62
Exploded View ... 62
Removal and Installation ... 62
Bulb Replacement ... 63

PERSONAL LAMP ... 64
Removal and Installation ... 64
Bulb Replacement ... 64

STEP LAMP ... 66
Removal and Installation ... 66
Bulb Replacement ... 66

CARGO LAMP ... 68
Exploded View ... 68
Removal and Installation - Front, Center or Rear ... 68
Bulb Replacement ... 68

ILLUMINATION CONTROL SWITCH ... 70
Removal and Installation ... 70

SERVICE DATA AND SPECIFICATIONS (SDS) ... 71

BULB SPECIFICATIONS ... 71
Interior Lamp/Illumination ... 71

PRECAUTION

PRECAUTIONS

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

INFOID:0000000012519746

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

WARNING:

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

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

WARNING:

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

Precaution for Work

INFOID:0000000012519747

- 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.

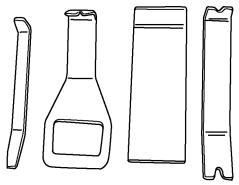
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000012519748

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

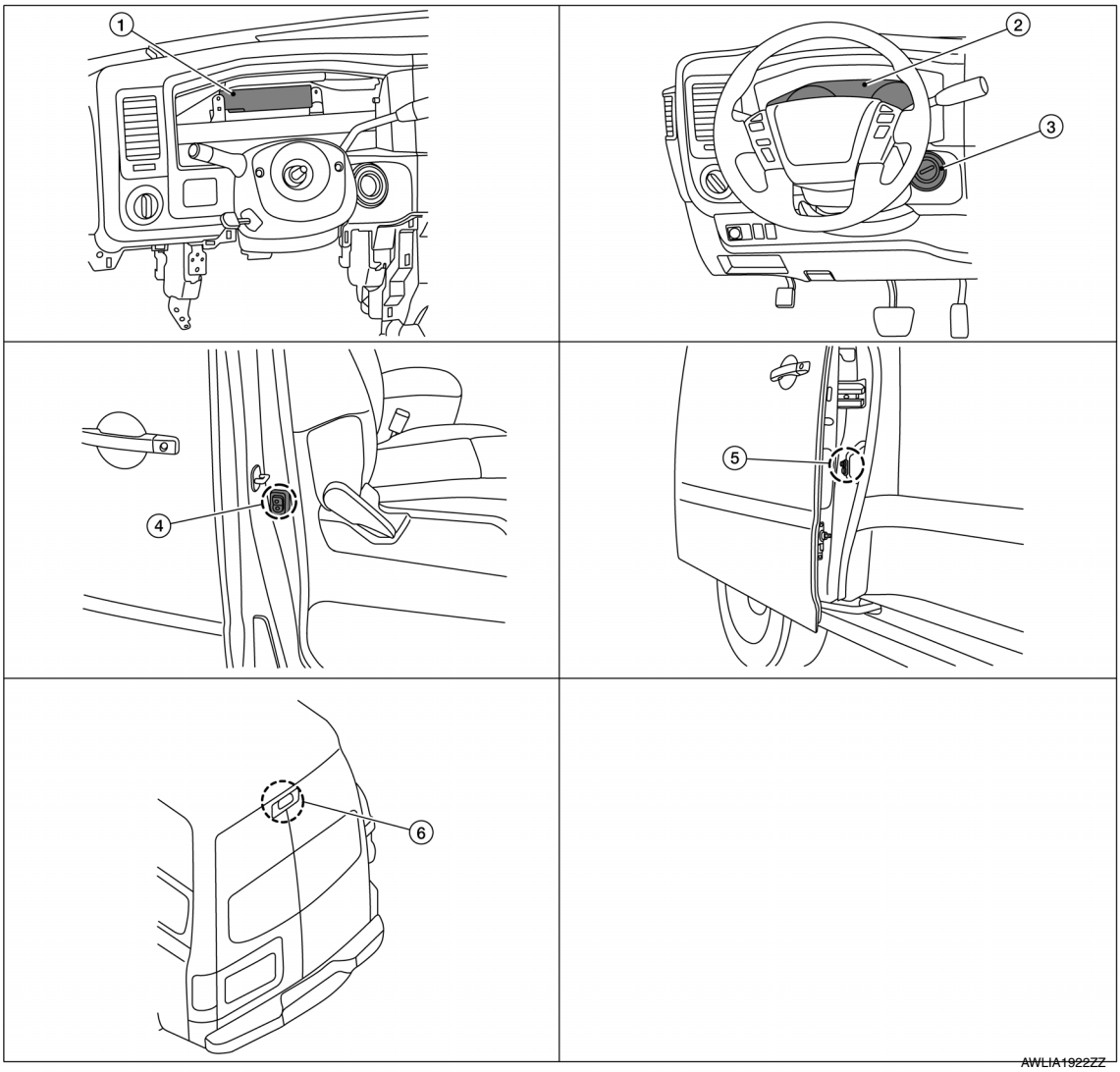
SYSTEM DESCRIPTION

COMPONENT PARTS

INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : Component Parts Location

INFOID:0000000012519749



1. BCM (view with steering wheel and combination meter removed)
2. Combination meter
3. Key switch
4. Front door switch RH/LH (RH shown)
5. Sliding door switch RH
6. Back door switch upper RH (cargo van shown, passenger van similar)

INTERIOR ROOM LAMP CONTROL SYSTEM : Component Description

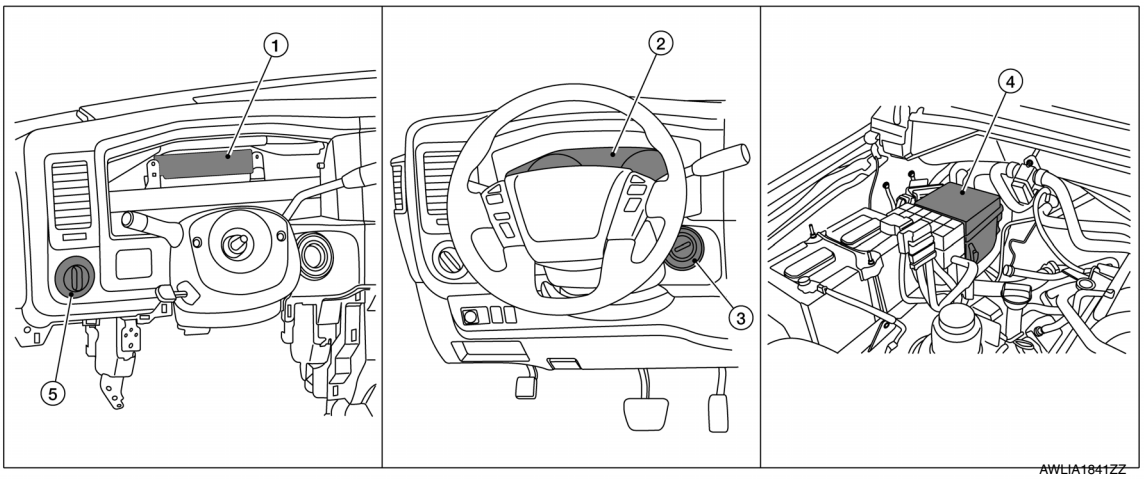
INFOID:0000000012519750

Part name	Description
BCM	Provides power and ground and controls timer functions for the following: • Front room lamp. • Rear Cargo lamp (cargo van). • Front and center cargo lamps (cargo van, if equipped). • Personal lamps and step lamps (passenger van, if equipped). • Cargo lamp (passenger van).
Key switch	Provides key in ignition status to the BCM.
Door switches	Provides door OPEN/CLOSED status to the BCM.
Back door switch	Provides back door OPEN/CLOSED status to the BCM.
Power window and door lock/unlock switch RH (if equipped)	Provides door lock/unlock position switch RH status to the BCM.
Main power window and door lock/unlock switch (if equipped)	Provides door lock/unlock position switch LH status to the BCM.
Front door lock assembly LH (key cylinder switch) (if equipped)	

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : Component Parts Location

INFOID:0000000012519751



1. BCM (view with steering wheel and combination meter removed)
2. Combination meter (illumination control switch)
3. Key switch
4. IPDM E/R
5. Lighting switch

ILLUMINATION CONTROL SYSTEM : Component Description

INFOID:0000000012519752

Part name	Description
BCM	The BCM monitors the lighting 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 network.

Combination meter (illumination control switch)	The illumination control switch is a part of the combination meter. The combination meter controls illumination intensity by varying ground to the illumination lamps based on the illumination control switch position.
Lighting switch	The lighting switch provides input to the BCM about the lighting switch position.

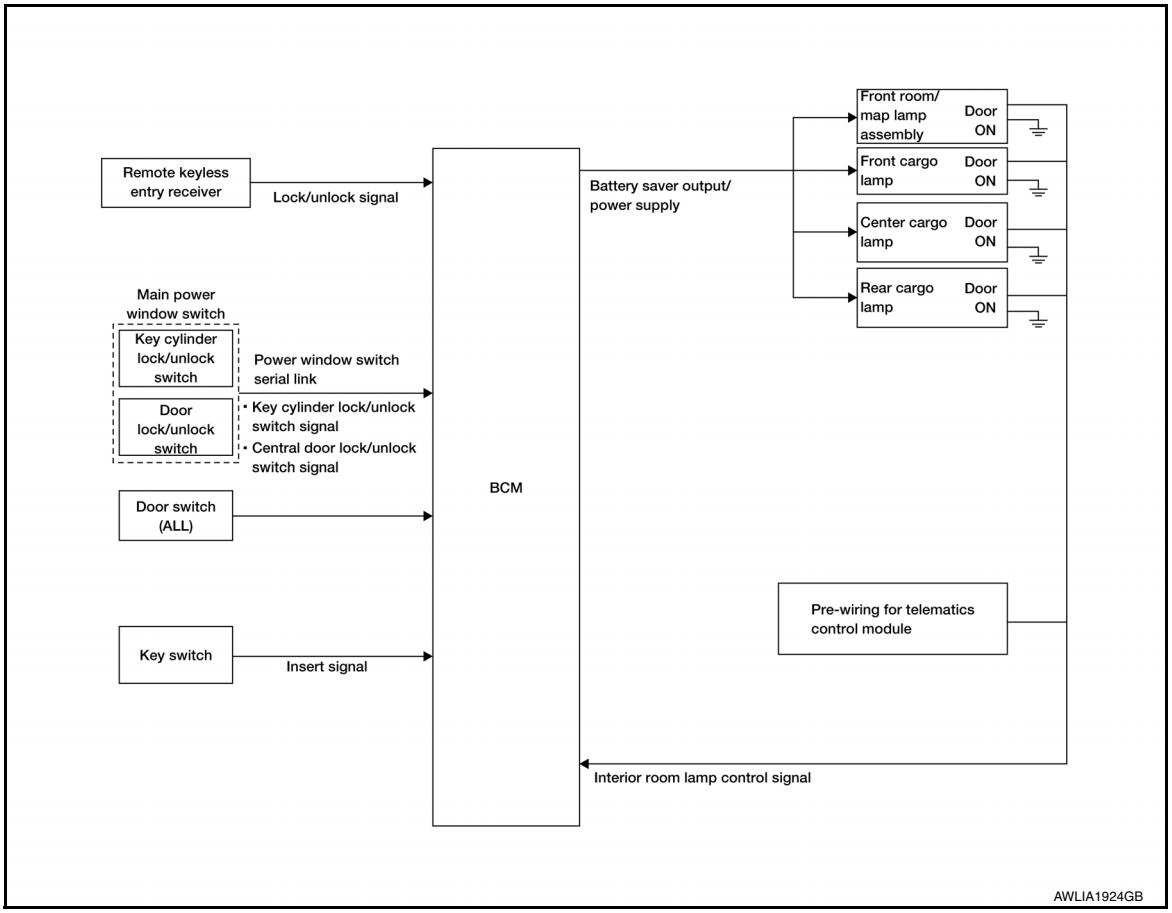
SYSTEM

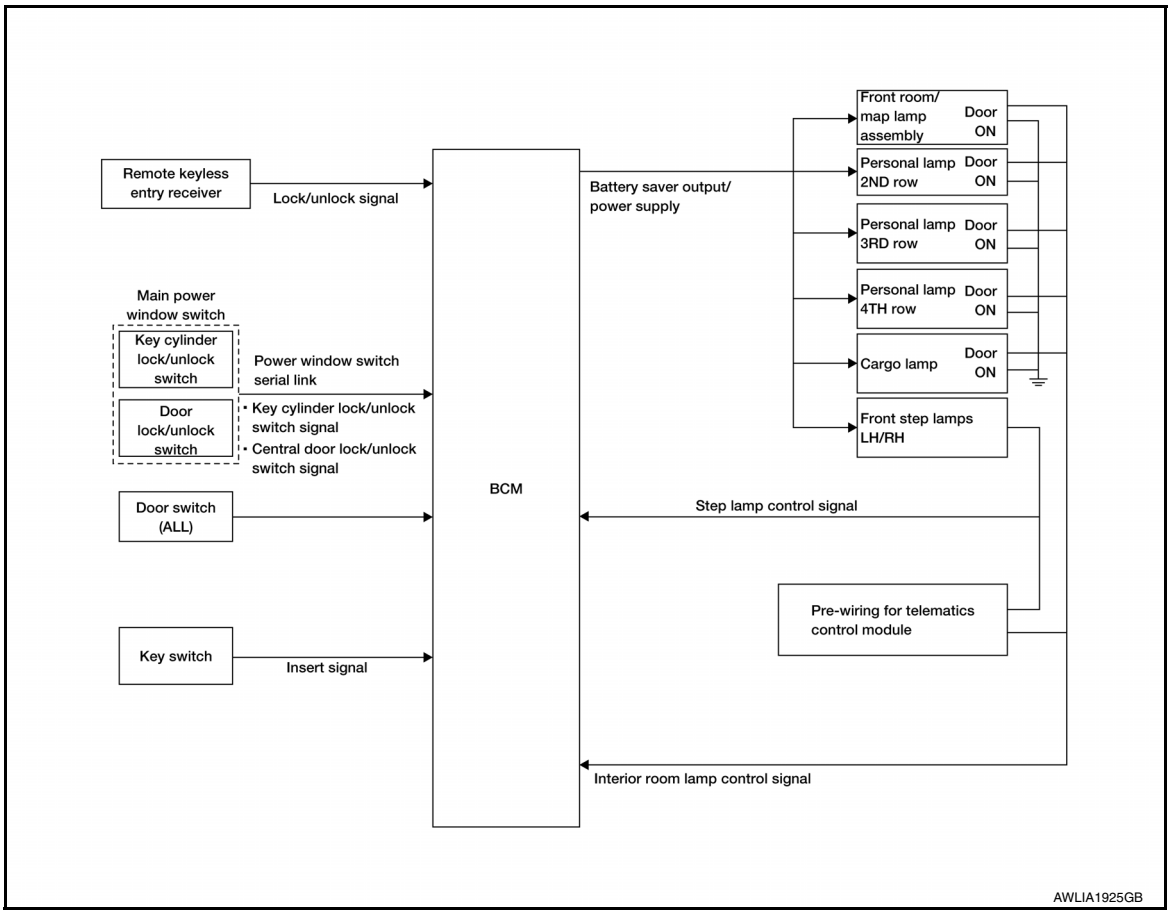
INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram

INFOID:0000000012519753

CARGO VAN





INTERIOR ROOM LAMP CONTROL SYSTEM : System Description

INFOID:0000000012519754

OUTLINE

Interior room lamps are controlled by the interior room lamp timer control function of the BCM when the lamp switch is in DOOR position.
Front step lamps are controlled by the step lamp control function of the BCM.
The timer control functions of the BCM activate based on inputs from the remote keyless entry receiver, the key cylinder lock/unlock switch, the door switches, the key switch and lock solenoid.

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 key fob, main power window and door lock/unlock switch, or front door lock assembly LH (key cylinder switch).
- When a door opens → closes and the key is not inserted in the ignition switch.

Timer control is cancelled under the following conditions.

- When the front door LH is locked with key fob, 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 operational settings can be changed with the CONSULT.

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 the following conditions are met:

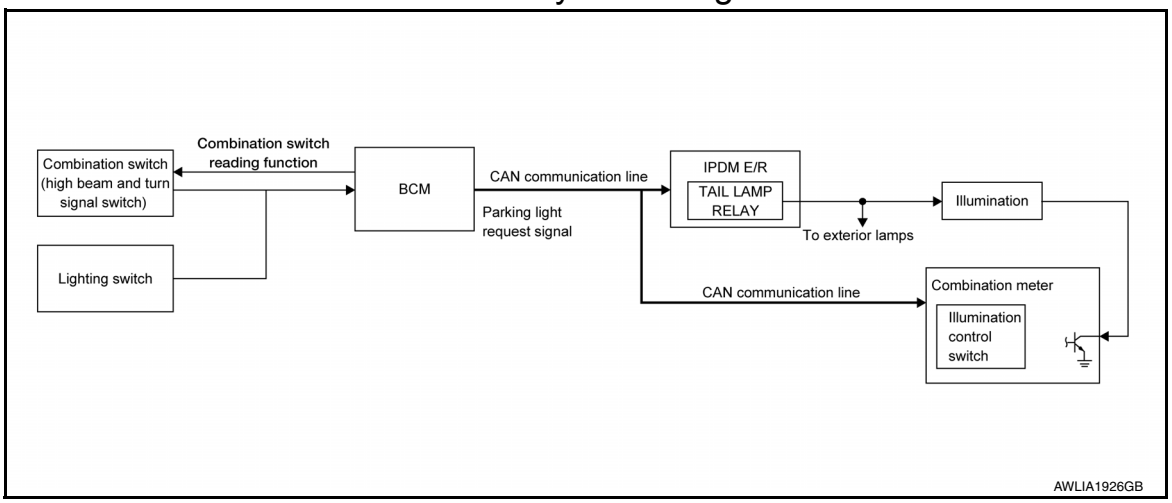
- a signal is received from a key fob, main power window and door lock/unlock switch, or when the front door lock assembly LH (key cylinder switch) is locked or unlocked
- a door is opened or closed
- the key is removed from or inserted into the ignition switch.

The interior lamp battery saver control time period can be changed with the CONSULT.

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : System Diagram

INFOID:0000000012519755



ILLUMINATION CONTROL SYSTEM : System Description

INFOID:0000000012519756

The illumination lamps operation is dependent upon the position of the lighting switch. When the lighting 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.

BATTERY SAVER CONTROL

When the lighting 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 lighting switch position is changed. If the lighting switch position is changed, then the illumination lamps are turned off after a 30 second delay. When the lighting 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:0000000012797927

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			×	×	×		
Remote keyless entry system	MULTI REMOTE ENT			×	×	×		
Exterior lamp	HEAD LAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
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			×	×			
Panic alarm system	PANIC ALARM				×			

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:0000000012797928

DATA MONITOR

Monitor Item [Unit]	Description
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.
KEY ON SW [On/Off]	Indicates condition of key switch.
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 back door switch.
DOOR SW-RL [On/Off]	Indicates condition of sliding door switch.
BACK DOOR SW [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.
KEYLESS LOCK [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK [On/Off]	Indicates condition of unlock signal from keyfob.
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.
ACC SW [On/Off]	Indicates condition of ignition switch ACC position.

ACTIVE TEST

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

WORK SUPPORT

Support Item	Setting		Description
SET I/L D-UNLCK INTCON	Off		Interior room lamp timer function OFF.
	On*		Interior room lamp timer function ON.
ROOM LAMP TIMER SET	MODE4*	30 sec.	Sets the interior room lamp ON time (timer operation).
	MODE3	15 sec.	
	MODE2	7.5 sec.	
	MODE1	0 sec.	
ROOM LAMP ON TIME SET	MODE7	0 sec.	Sets the interior room lamp gradual brightening time.
	MODE6	5 sec.	
	MODE5	4 sec.	
	MODE4	3 sec.	
	MODE3	2 sec.	
	MODE2*	1 sec.	
	MODE1	0.5 sec.	
ROOM LAMP OFF TIME SET	MODE7	0 sec.	Sets the interior room lamp gradual dimming time.
	MODE6	5 sec.	
	MODE5	4 sec.	
	MODE4	3 sec.	
	MODE3	2 sec.	
	MODE2*	1 sec.	
	MODE1	0.5 sec.	

Support Item	Setting	Description
R LAMP TIMER LOGIC SET	MODE2	Interior room lamp timer activation synchronizing all doors.
	MODE1*	Interior room lamp timer activation synchronizing driver door only.

* : Initial setting

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000012797929

DATA MONITOR

Monitor Item [Unit]	Description
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.
KEY ON SW [On/Off]	Indicates condition of key switch.
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 back door switch.
DOOR SW-RL [On/Off]	Indicates condition of sliding door switch.
BACK DOOR SW [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.
KEYLESS LOCK [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK [On/Off]	Indicates condition of unlock signal from keyfob.
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.
ACC SW [On/Off]	Indicates condition of ignition switch ACC position.

WORK SUPPORT

Support Item	Setting		Description
ROOM LAMP TIMER SET	MODE3	10 min	Sets the interior room lamp battery saver timer operating time.
	MODE2	60 min	
	MODE1*	15 min	

*: Initial setting

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000012519760

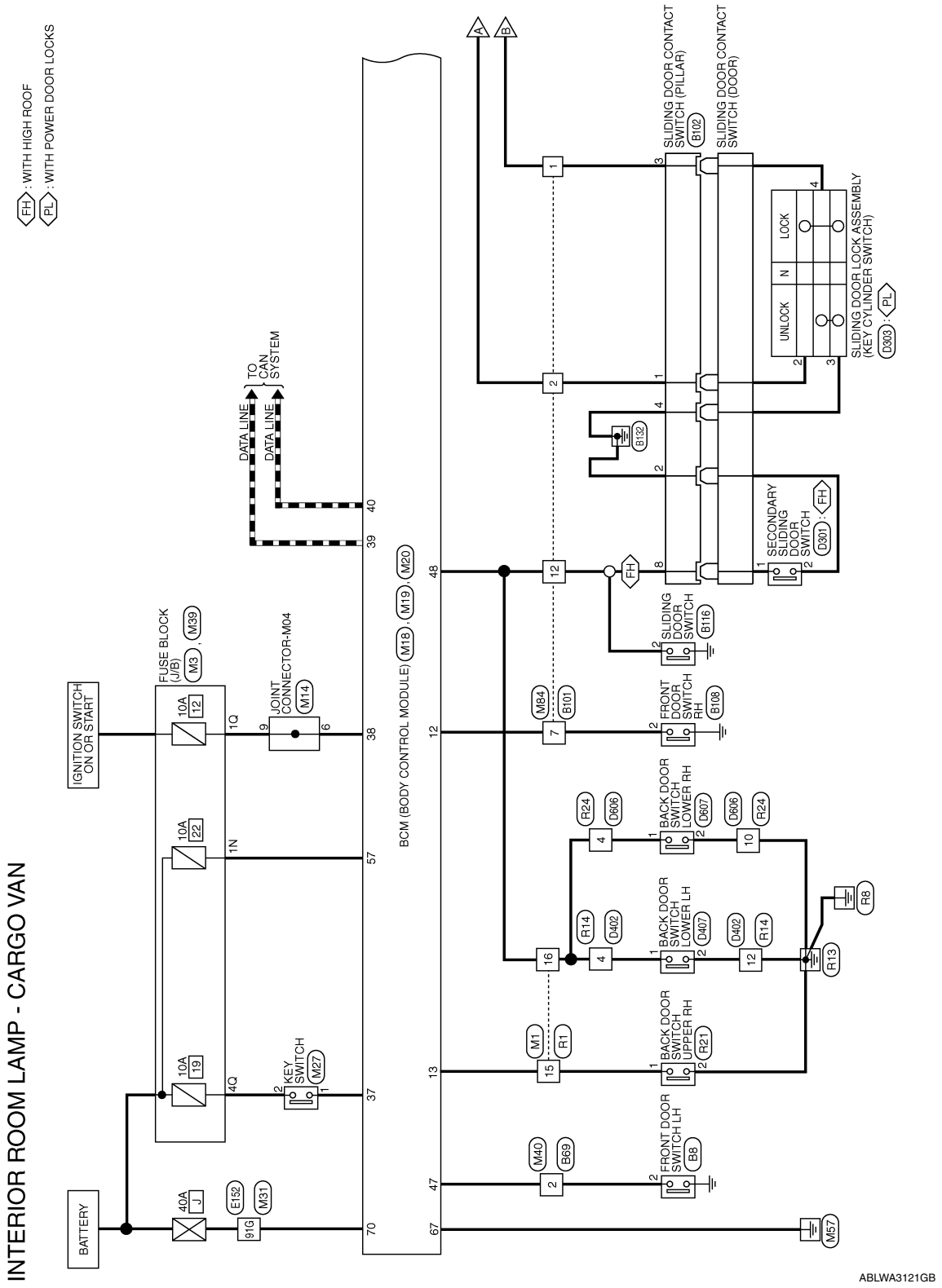
ECU	Reference
BCM	BCS-28, "Reference Value"
	BCS-39, "Fail-safe"
	BCS-39, "DTC Inspection Priority Chart"
	BCS-39, "DTC Index"

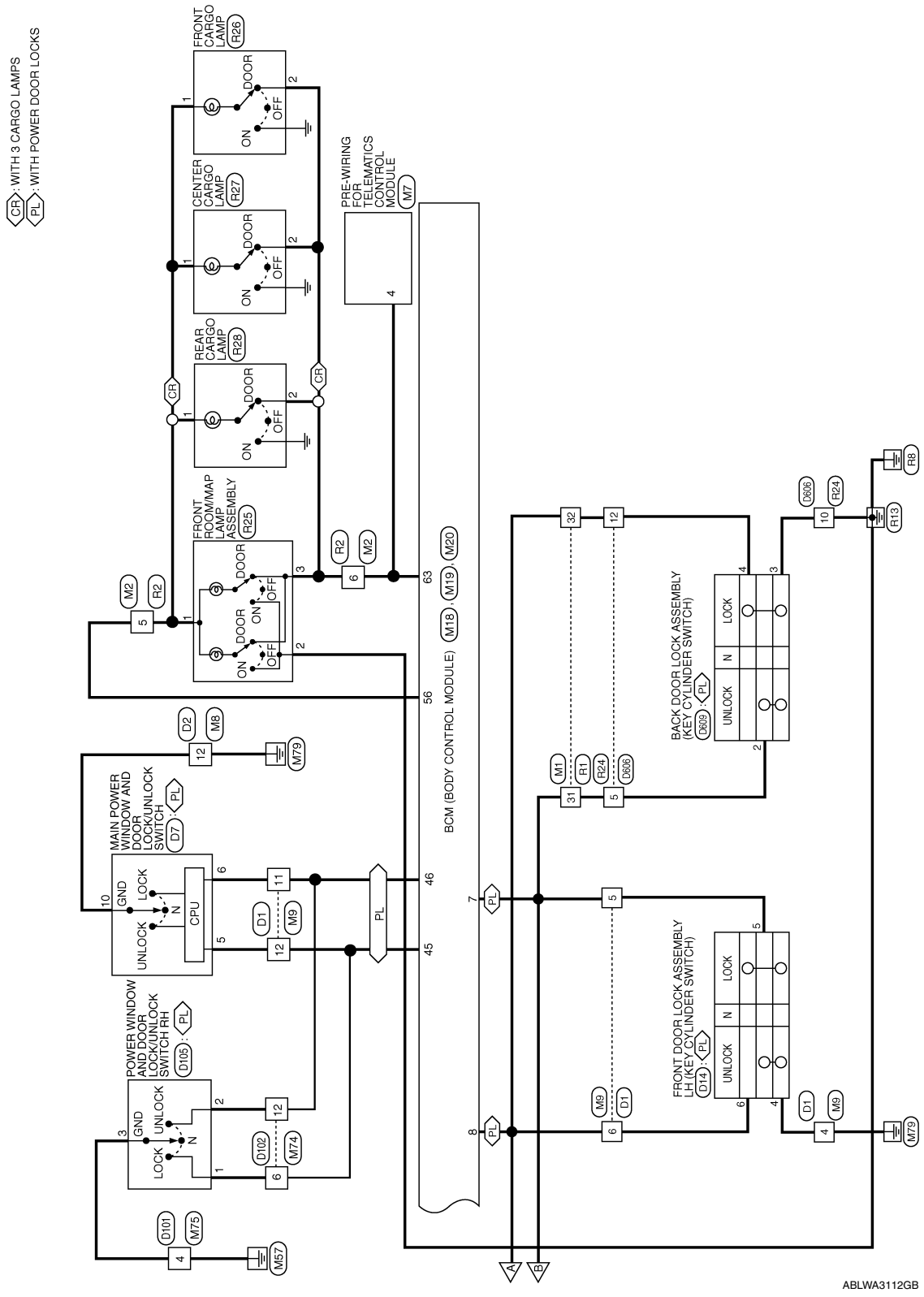
WIRING DIAGRAM

INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram - Cargo Van

INFOID:0000000012519761




CR : WITH 3 CARGO LAMPS
PL : WITH POWER DOOR LOCKS
FRONT CARGO LAMP R26
CENTER CARGO LAMP R27
REAR CARGO LAMP R28
FRONT ROOM/MAP LAMP ASSEMBLY R25
PRE-WIRING FOR TELEMATICS CONTROL MODULE M7
BCM (BODY CONTROL MODULE) M18, M19, M20
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D7
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH D105
BACK DOOR LOCK ASSEMBLY (KEY CYLINDER SWITCH) D609
FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH) D14
ABLWA3112GB

INTERIOR ROOM LAMP CONNECTORS - CARGO VAN

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	25	26	27	28	29	30	31	32

Terminal No.	Color of Wire	Signal Name
15	GR	–
16	O	–
31	Y	–
32	SB	–

Connector No.	M2
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
5	SB	–
6	L	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
1N	LG	–

Connector No.	M7
Connector Name	PRE-WIRING FOR TELEMATICS CONTROL MODULE
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
4	L	DOME LAMP (GND)

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	B	–

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	B	–
5	Y	–
6	SB	–
11	R	–
12	GR	–

AALIA0599GB

Connector No.	M14
Connector Name	JOINT CONNECTOR-M04
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	R	–
9	R	–

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
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
7	Y	KEY CYLINDER UNLOCK SW
8	SB	KEY CYLINDER LOCK SW
12	O	DOOR SW (AS)
13	GR	DOOR SW (RR)
37	BR	KEY SW
38	R	IGN SW
39	L	CAN-H
40	P	CAN-L

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

41	42	43	44	45	46	47	48	49
50	51	52	53	54	55
---	---	---	---	---	---

Terminal No.	Color of Wire	Signal Name
45	GR	CENTRAL DOOR LOCK SW
46	R	CENTRAL DOOR UNLOCK SW
47	SB	DOOR SW (DR)
48	O	DOOR SW (SLIDE, BK LWR)

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

56	57	58	59	60	61	62	63	64
65	66	67	68	69	70
---	---	---	---	---	---

Terminal No.	Color of Wire	Signal Name
56	SB	BATTERY SAVER OUTPUT
57	LG	BATTERY (FUSE)
63	L	ROOM LAMP OUTPUT
67	B	GND
70	R	BATTERY (F/L)

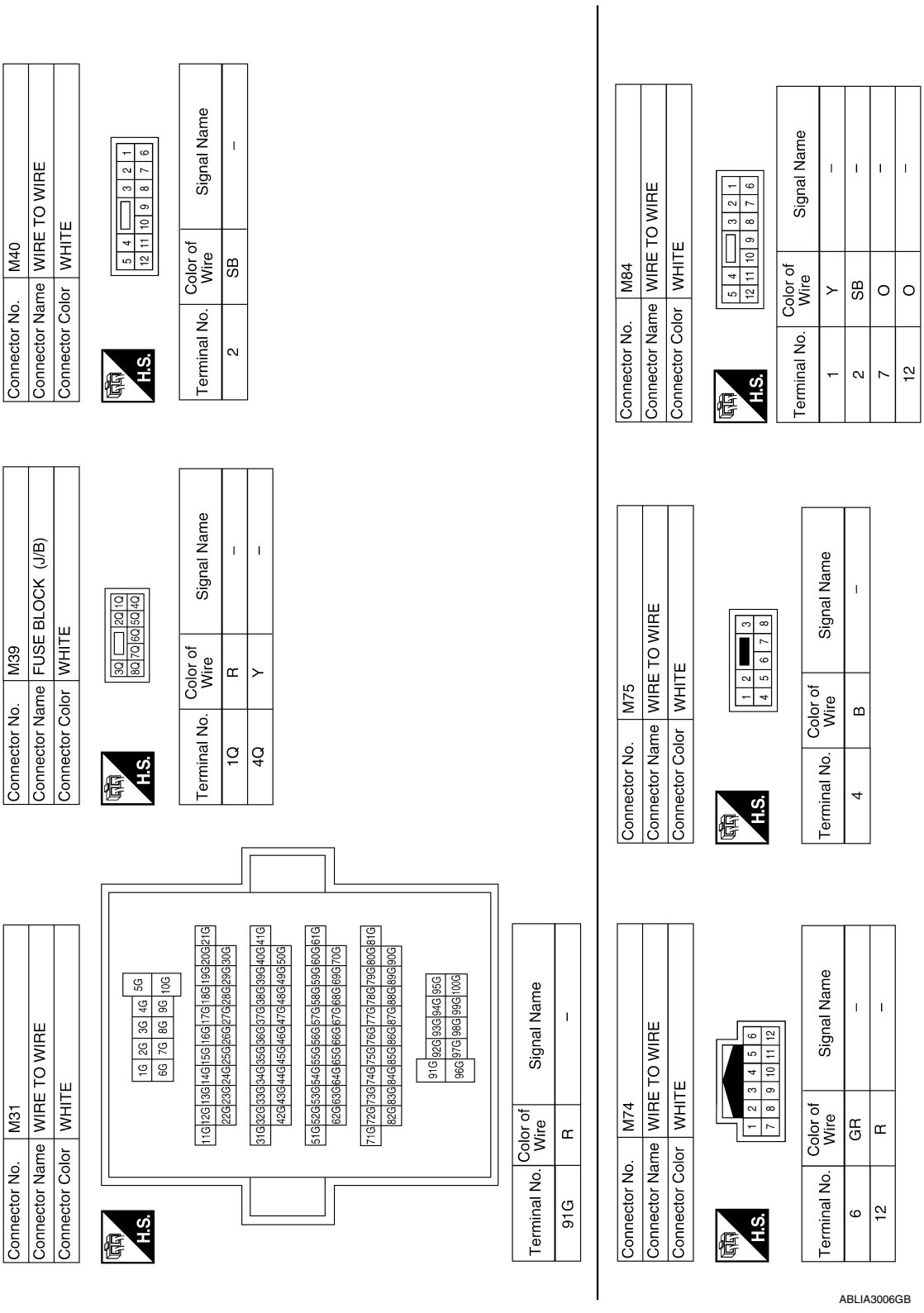
Connector No.	M27
Connector Name	KEY SWITCH
Connector Color	WHITE

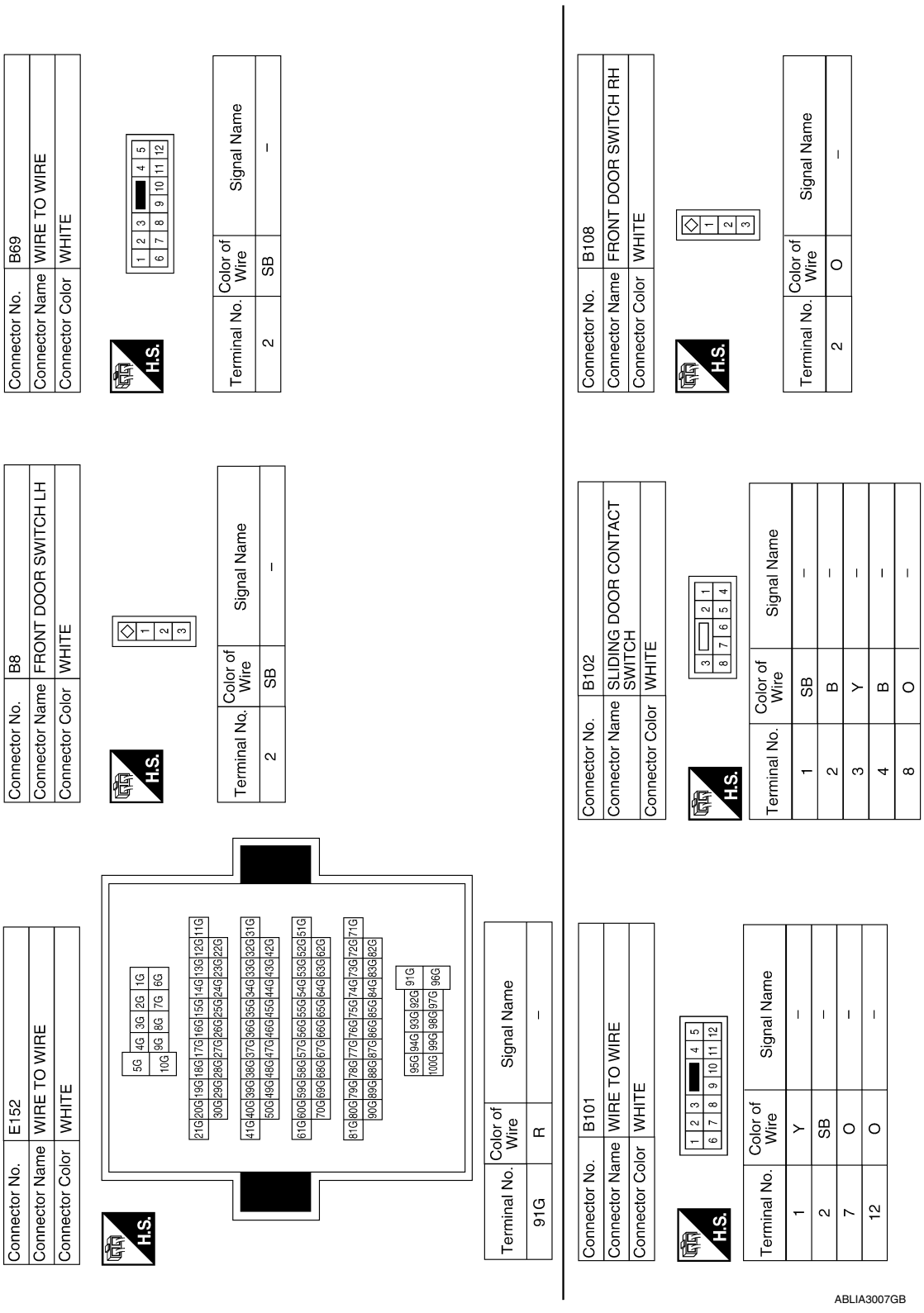
H.S.

2	1

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

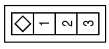
ABLIA3005GB


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
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
91G R –
Connector No. M39
Connector Name FUSE BLOCK (J/B)
Connector Color WHITE
H.S.
3Q 2Q 1Q
8Q 7Q 6Q 5Q 4Q
Terminal No. Color of Wire Signal Name
1Q R –
4Q Y –
Connector No. M40
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
5 4 3 2 1
12 11 10 9 8 7 6
Terminal No. Color of Wire Signal Name
2 SB –
Connector No. M74
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3 4 5 6
7 8 9 10 11 12
Terminal No. Color of Wire Signal Name
6 GR –
12 R –
Connector No. M75
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
4 B –
Connector No. M84
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
5 4 3 2 1
12 11 10 9 8 7 6
Terminal No. Color of Wire Signal Name
1 Y –
2 SB –
7 O –
12 O –
ABLIA3006GB


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
Terminal No. Color of Wire Signal Name
91G R –
Connector No. B8
Connector Name FRONT DOOR SWITCH LH
Connector Color WHITE
H.S.
1 2 3
Terminal No. Color of Wire Signal Name
2 SB –
Connector No. B69
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3 4 5
6 7 8 9 10 11 12
Terminal No. Color of Wire Signal Name
2 SB –
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
Terminal No. Color of Wire Signal Name
1 Y –
2 SB –
7 O –
12 O –
Connector No. B102
Connector Name SLIDING DOOR CONTACT SWITCH
Connector Color WHITE
H.S.
3 2 1
8 7 6 5 4
Terminal No. Color of Wire Signal Name
1 SB –
2 B –
3 Y –
4 B –
8 O –
Connector No. B108
Connector Name FRONT DOOR SWITCH RH
Connector Color WHITE
H.S.
1
2
3
Terminal No. Color of Wire Signal Name
2 O –
ABLIA3007GB

Connector No.	B116
Connector Name	SLIDING DOOR SWITCH
Connector Color	WHITE

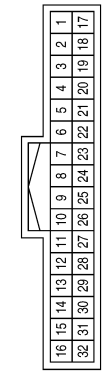
H.S.



Terminal No.	Color of Wire	Signal Name
2	O	–

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

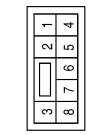
H.S.



Terminal No.	Color of Wire	Signal Name
15	GR	–
16	O	–
31	Y	–
32	SB	–

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

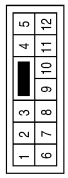
H.S.



Terminal No.	Color of Wire	Signal Name
5	SB	–
6	L	–

Connector No.	R14
Connector Name	WIRE TO WIRE
Connector Color	WHITE

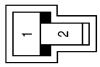
H.S.



Terminal No.	Color of Wire	Signal Name
4	O	–
12	B	–

Connector No.	R21
Connector Name	BACK DOOR SWITCH UPPER RH
Connector Color	WHITE

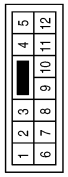
H.S.



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

Connector No.	R24
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
4	O	–
5	Y	–
10	B	–
12	SB	–

ABLIA3008GB

Connector No.	R25
Connector Name	FRONT ROOM/MAP LAMP ASSEMBLY
Connector Color	WHITE

H.S.

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

Connector No.	R26
Connector Name	FRONT CARGO LAMP
Connector Color	WHITE

H.S.

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

Connector No.	R27
Connector Name	CENTER CARGO LAMP
Connector Color	WHITE

H.S.

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

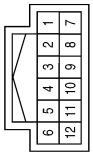
Connector No.	R28
Connector Name	REAR CARGO LAMP
Connector Color	WHITE

H.S.

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

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

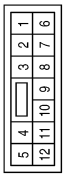
H.S.



Terminal No.	Color of Wire	Signal Name
4	B	–
5	Y	–
6	SB	–
11	R	–
12	GR	–

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

H.S.



Terminal No.	Color of Wire	Signal Name
12	B	–

ABLIA3009GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
5	GR	LOCK
6	R	UNLOCK
10	B	GND

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	Y	–
6	SB	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
4	B	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
6	GR	–
12	R	–

Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE

H.S.

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

Connector No.	D301
Connector Name	SECONDARY SLIDING DOOR SWITCH
Connector Color	BLACK

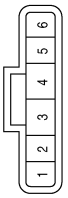
H.S.

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

ABLIA7704GB

Connector No.	D303
Connector Name	SLIDING DOOR LOCK ASSEMBLY
Connector Color	GRAY

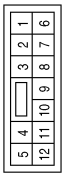
H.S.



Terminal No.	Color of Wire	Signal Name
2	BR	–
3	R	–
4	L	–

Connector No.	D402
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
4	O	–
12	B	–

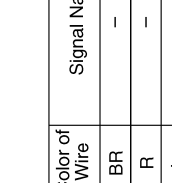
Connector No.	D407
Connector Name	BACK DOOR SWITCH LOWER LH
Connector Color	BLACK

H.S.

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

Connector No.	D606
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
4	O	–
5	Y	–
10	B	–
12	SB	–

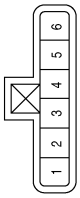
Connector No.	D607
Connector Name	BACK DOOR SWITCH LOWER RH
Connector Color	BLACK

H.S.

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

Connector No.	D609
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	GRAY

H.S.

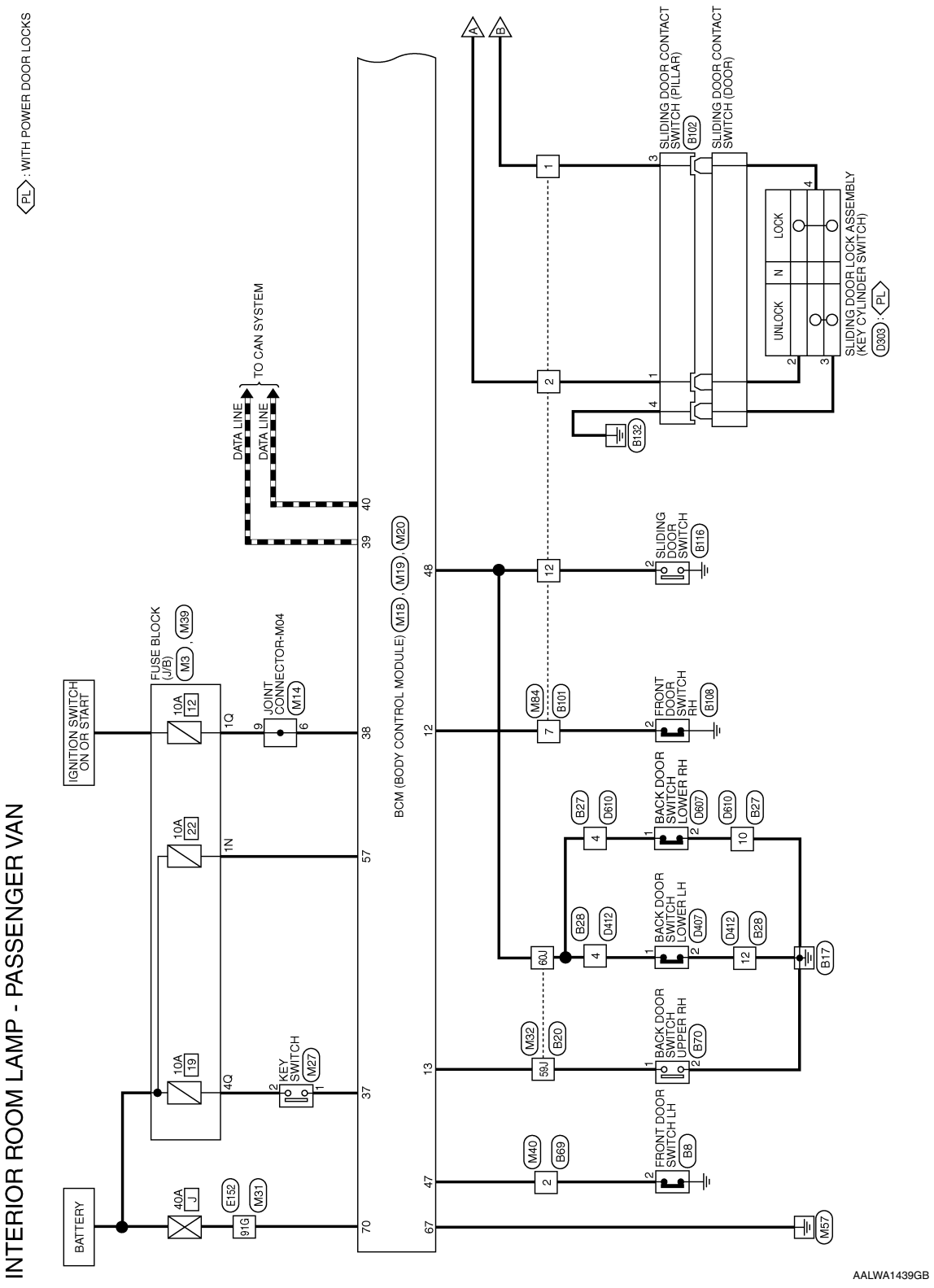


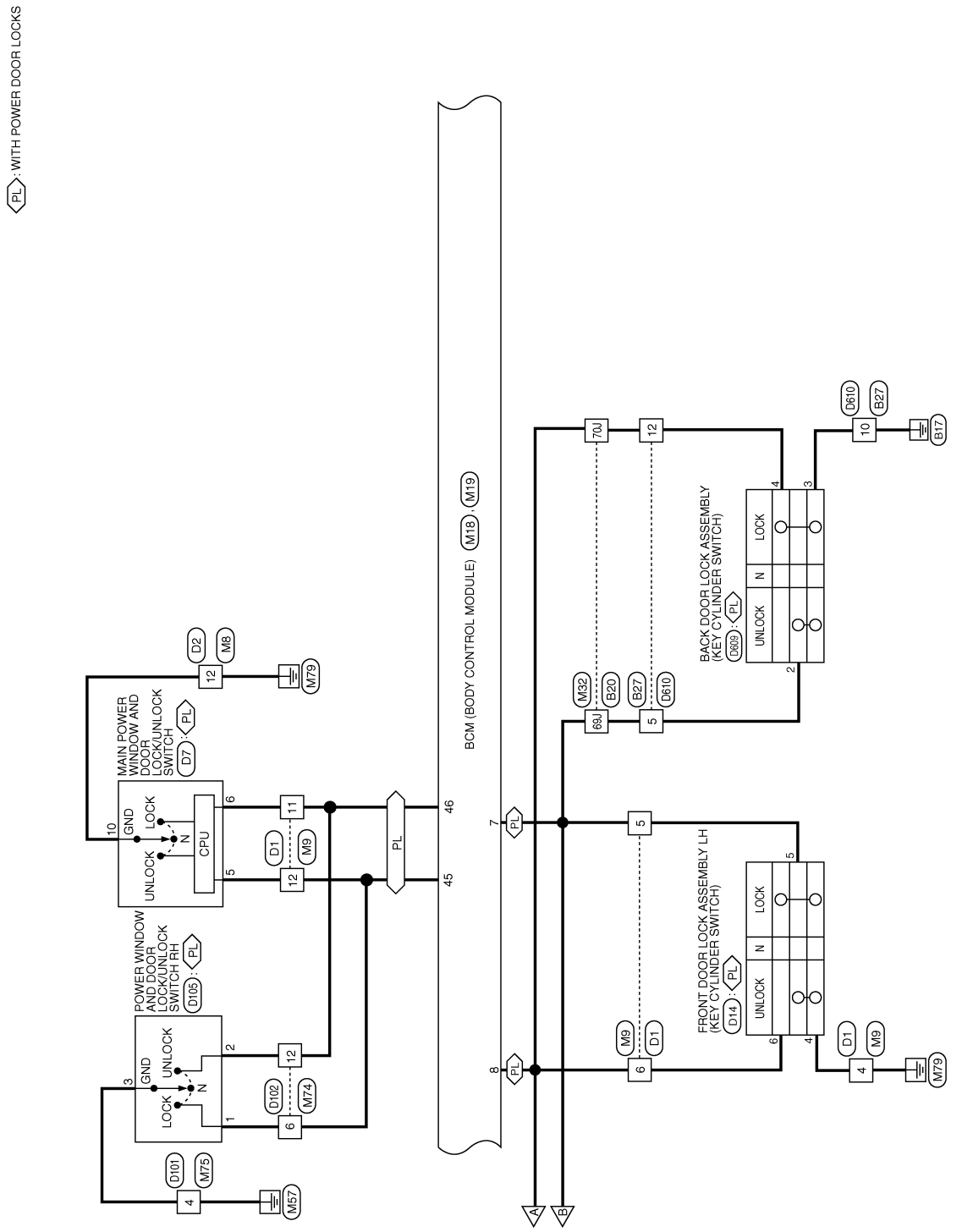
Terminal No.	Color of Wire	Signal Name
2	Y	–
3	B	–
4	SB	–

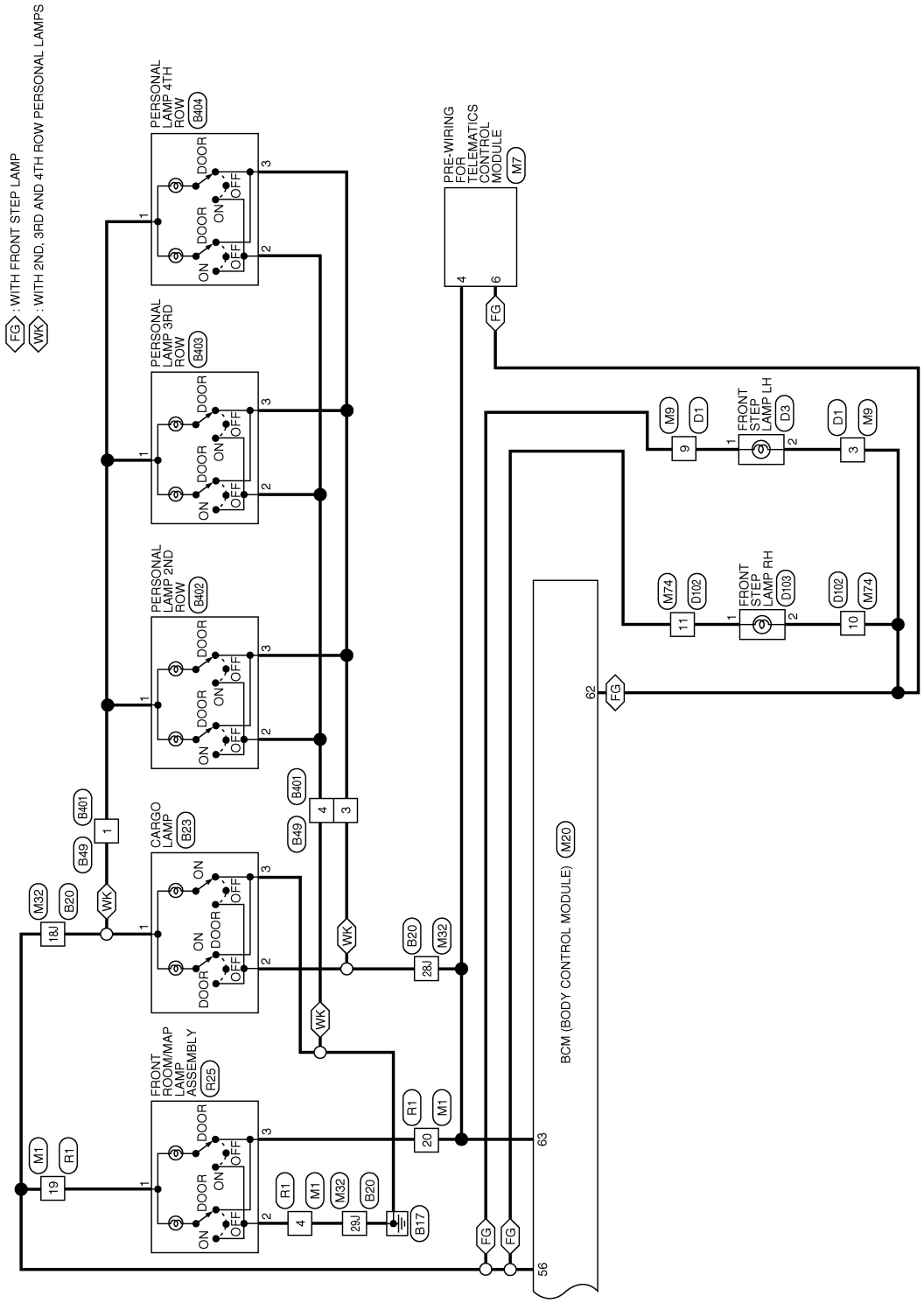
ABLIA6017GB

Wiring Diagram - Passenger Van

INFOID:0000000012519762

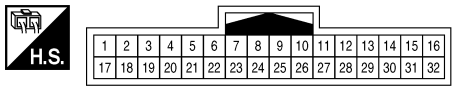



PL : WITH POWER DOOR LOCKS
BCM (BODY CONTROL MODULE) M18, M19
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D7 : PL
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH D105 : PL
BACK DOOR LOCK ASSEMBLY (KEY CYLINDER SWITCH) D609 : PL
FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH) D14 : PL
GND
LOCK
UNLOCK
N
CPU
PL
A
B
AALWA1440GB


FG : WITH FRONT STEP LAMP
WK : WITH 2ND, 3RD AND 4TH ROW PERSONAL LAMPS
PERSONAL LAMP 4TH ROW B404
PERSONAL LAMP 3RD ROW B403
PERSONAL LAMP 2ND ROW B402
CARGO LAMP B23
FRONT ROOM/MAP LAMP ASSEMBLY R25
DOOR
ON
OFF
PRE-WIRING FOR TELEMATICS CONTROL MODULE M7
FRONT STEP LAMP LH D3
FRONT STEP LAMP RH D103
BCM (BODY CONTROL MODULE) M20
B401
B49
M32
B20
M1
R1
B17
M9
D1
M74
D102
D1
M9
D102
M74
FG
WK
62
63
56
AALWA1441GB

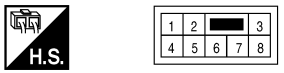
INTERIOR ROOM LAMP CONNECTORS - PASSENGER VAN

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



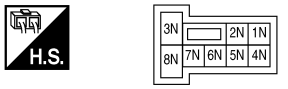
Terminal No.	Color of Wire	Signal Name
4	B	–
19	SB	–
20	L	–

Connector No.	M2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



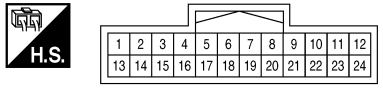
Terminal No.	Color of Wire	Signal Name
5	SB	–
6	L	–

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



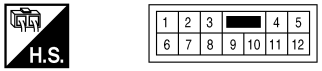
Terminal No.	Color of Wire	Signal Name
1N	LG	–

Connector No.	M7
Connector Name	PRE-WIRING FOR TELEMATICS CONTROL MODULE
Connector Color	WHITE



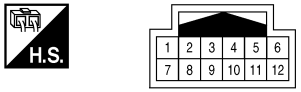
Terminal No.	Color of Wire	Signal Name
4	L	DOME LAMP (GND)
6	W	DOOR AJAR (ALL)

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
12	B	–

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	W	–
4	B	–
5	Y	–
6	SB	–
9	SB	–
11	R	–
12	GR	–

AALIA4280GB

Connector No.	M14
Connector Name	JOINT CONNECTOR-M04
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	R	–
9	R	–

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
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
7	Y	KEY CYLINDER UNLOCK SW
8	SB	KEY CYLINDER LOCK SW
12	O	DOOR SW (AS)
13	GR	DOOR SW (RR)
37	BR	KEY SW
38	R	IGN SW
39	L	CAN-H
40	P	CAN-L

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

41	42	43	44	45	46	47	48	49
50	51	52	53	54	55

Terminal No.	Color of Wire	Signal Name
45	GR	CENTRAL DOOR LOCK SW
46	R	CENTRAL DOOR UNLOCK SW
47	SB	DOOR SW (DR)
48	O	DOOR SW (SLIDE, BK LWR)

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

56	57	58	59	60	61	62	63	64
65	66	67	68	69	70

Terminal No.	Color of Wire	Signal Name
56	SB	BATTERY SAVER OUTPUT
57	LG	BATTERY (FUSE)
62	W	STEP LAMP OUTPUT
63	L	ROOM LAMP OUTPUT
67	B	GND
70	R	BATTERY (F/L)

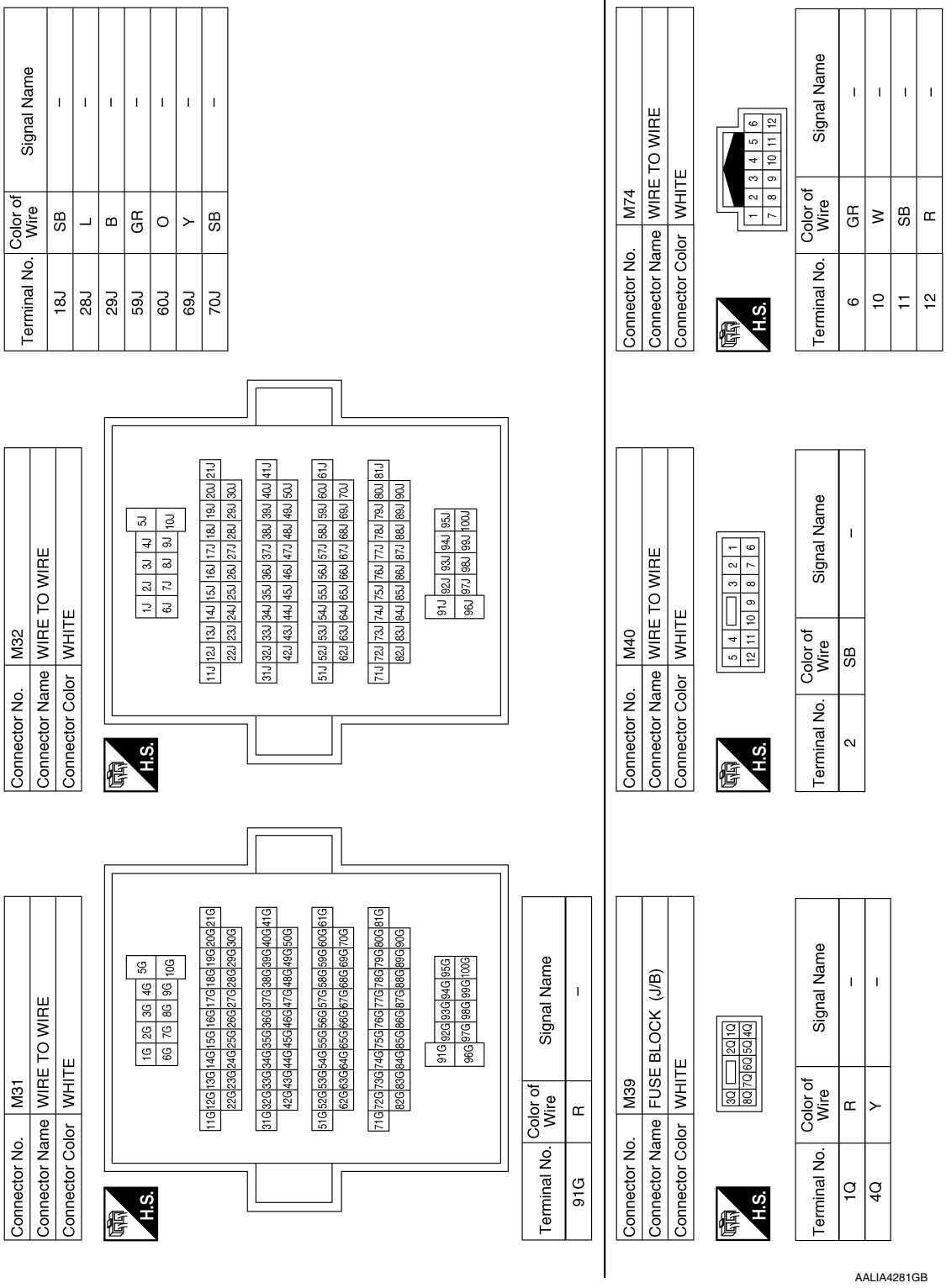
Connector No.	M27
Connector Name	KEY SWITCH
Connector Color	WHITE

H.S.

2	1

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

ABLIA5971GB


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
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
91G R –
Connector No. M32
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1J 2J 3J 4J 5J
6J 7J 8J 9J 10J
11J 12J 13J 14J 15J 16J 17J 18J 19J 20J 21J
22J 23J 24J 25J 26J 27J 28J 29J 30J
31J 32J 33J 34J 35J 36J 37J 38J 39J 40J 41J
42J 43J 44J 45J 46J 47J 48J 49J 50J
51J 52J 53J 54J 55J 56J 57J 58J 59J 60J 61J
62J 63J 64J 65J 66J 67J 68J 69J 70J
71J 72J 73J 74J 75J 76J 77J 78J 79J 80J 81J
82J 83J 84J 85J 86J 87J 88J 89J 90J
91J 92J 93J 94J 95J
96J 97J 98J 99J 100J
Terminal No. Color of Wire Signal Name
18J SB –
28J L –
29J B –
59J GR –
60J O –
69J Y –
70J SB –
Connector No. M39
Connector Name FUSE BLOCK (J/B)
Connector Color WHITE
H.S.
3Q 2Q 1Q
8Q 7Q 6Q 5Q 4Q
Terminal No. Color of Wire Signal Name
1Q R –
4Q Y –
Connector No. M40
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
5 4 3 2 1
12 11 10 9 8 7 6
Terminal No. Color of Wire Signal Name
2 SB –
Connector No. M74
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3 4 5 6
7 8 9 10 11 12
Terminal No. Color of Wire Signal Name
6 GR –
10 W –
11 SB –
12 R –
AALIA4281GB

Connector No.	M75
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
4	B	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	SB	–
7	O	–
12	O	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
91G	R	–

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

H.S.

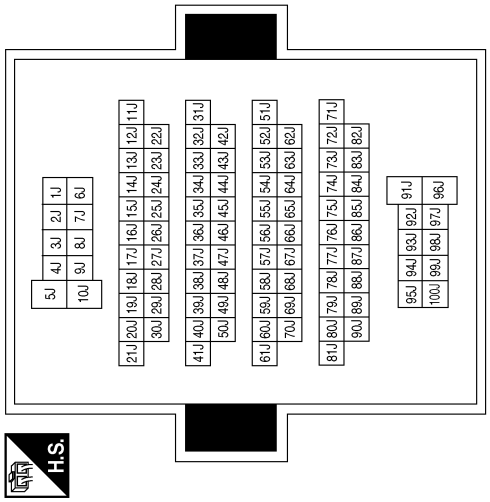
1	2	3

Terminal No.	Color of Wire	Signal Name
2	SB	–

AALIA4282GB

Connector No.	B20
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
18J	SB	–
28J	L	–
29J	B	–
59J	GR	–
60J	O	–
69J	Y	–
70J	SB	–

Connector No.	B23
Connector Name	CARGO LAMP
Connector Color	WHITE

H.S.

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

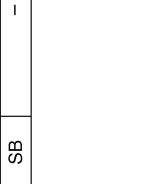
Connector No.	B27
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
4	O	–
5	Y	–
10	B	–
12	SB	–

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
4	O	–
12	B	–

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	SB	–
3	L	–
4	B	–

AALIA4283GB

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

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	SB	–
7	O	–
12	O	–

Connector No.	B70
Connector Name	BACK DOOR SWITCH UPPER RH
Connector Color	WHITE

H.S.

1	2

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

Connector No.	B116
Connector Name	SLIDING DOOR SWITCH
Connector Color	WHITE

H.S.

1	2	3

Terminal No.	Color of Wire	Signal Name
2	O	–

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

H.S.

1	2	3

Terminal No.	Color of Wire	Signal Name
2	O	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	SB	–

Connector No.	B102
Connector Name	SLIDING DOOR CONTACT SWITCH
Connector Color	WHITE

H.S.

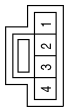
3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name
1	SB	–
3	Y	–
4	B	–

AALIA4284GB

Connector No.	B401
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	SB	–
3	L	–
4	B	–

Connector No.	B402
Connector Name	PERSONAL LAMP 2ND ROW
Connector Color	WHITE

H.S.

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

Connector No.	B403
Connector Name	PERSONAL LAMP 3RD ROW
Connector Color	WHITE

H.S.

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

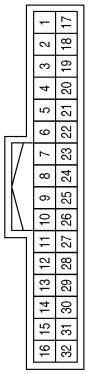
Connector No.	B404
Connector Name	PERSONAL LAMP 4TH ROW
Connector Color	WHITE

H.S.

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

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

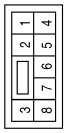
H.S.



Terminal No.	Color of Wire	Signal Name
4	B	–
19	SB	–
20	L	–

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
5	SB	–
6	L	–

AALIA4285GB

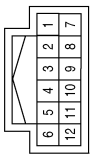
Connector No.	R25
Connector Name	FRONT ROOM/MAP LAMP ASSEMBLY
Connector Color	WHITE

H.S.

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

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

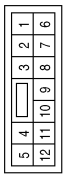
H.S.



Terminal No.	Color of Wire	Signal Name
3	W	–
4	B	–
5	Y	–
6	SB	–
9	SB	–
11	R	–
12	GR	–

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

H.S.



Terminal No.	Color of Wire	Signal Name
12	B	–

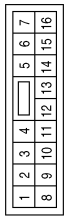
Connector No.	D3
Connector Name	FRONT STEP LAMP LH
Connector Color	WHITE

H.S.

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

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

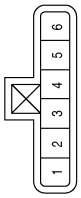
H.S.



Terminal No.	Color of Wire	Signal Name
5	GR	LOCK
6	R	UNLOCK
10	B	GND

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

H.S.

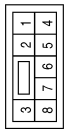


Terminal No.	Color of Wire	Signal Name
4	B	–
5	Y	–
6	SB	–

AALIA4286GB

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

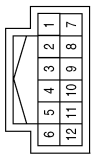
H.S.



Terminal No.	Color of Wire	Signal Name
4	B	–

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

H.S.



Terminal No.	Color of Wire	Signal Name
6	GR	–
10	W	–
11	SB	–
12	R	–

Connector No.	D103
Connector Name	FRONT STEP LAMP RH
Connector Color	WHITE

H.S.

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

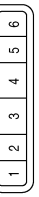
Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE

H.S.

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

Connector No.	D303
Connector Name	SLIDING DOOR LOCK ASSEMBLY
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
2	BR	–
3	R	–
4	L	–

Connector No.	D407
Connector Name	BACK DOOR SWITCH LOWER LH
Connector Color	BLACK

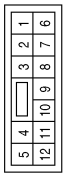
H.S.

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

AALIA4287GB

Connector No.	D412
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
4	O	–
12	B	–

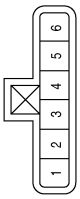
Connector No.	D607
Connector Name	BACK DOOR SWITCH LOWER RH
Connector Color	BLACK

H.S.

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

Connector No.	D609
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	GRAY

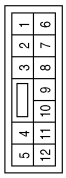
H.S.



Terminal No.	Color of Wire	Signal Name
2	Y	–
3	B	–
4	SB	–

Connector No.	D610
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
4	O	–
5	Y	–
10	B	–
12	SB	–

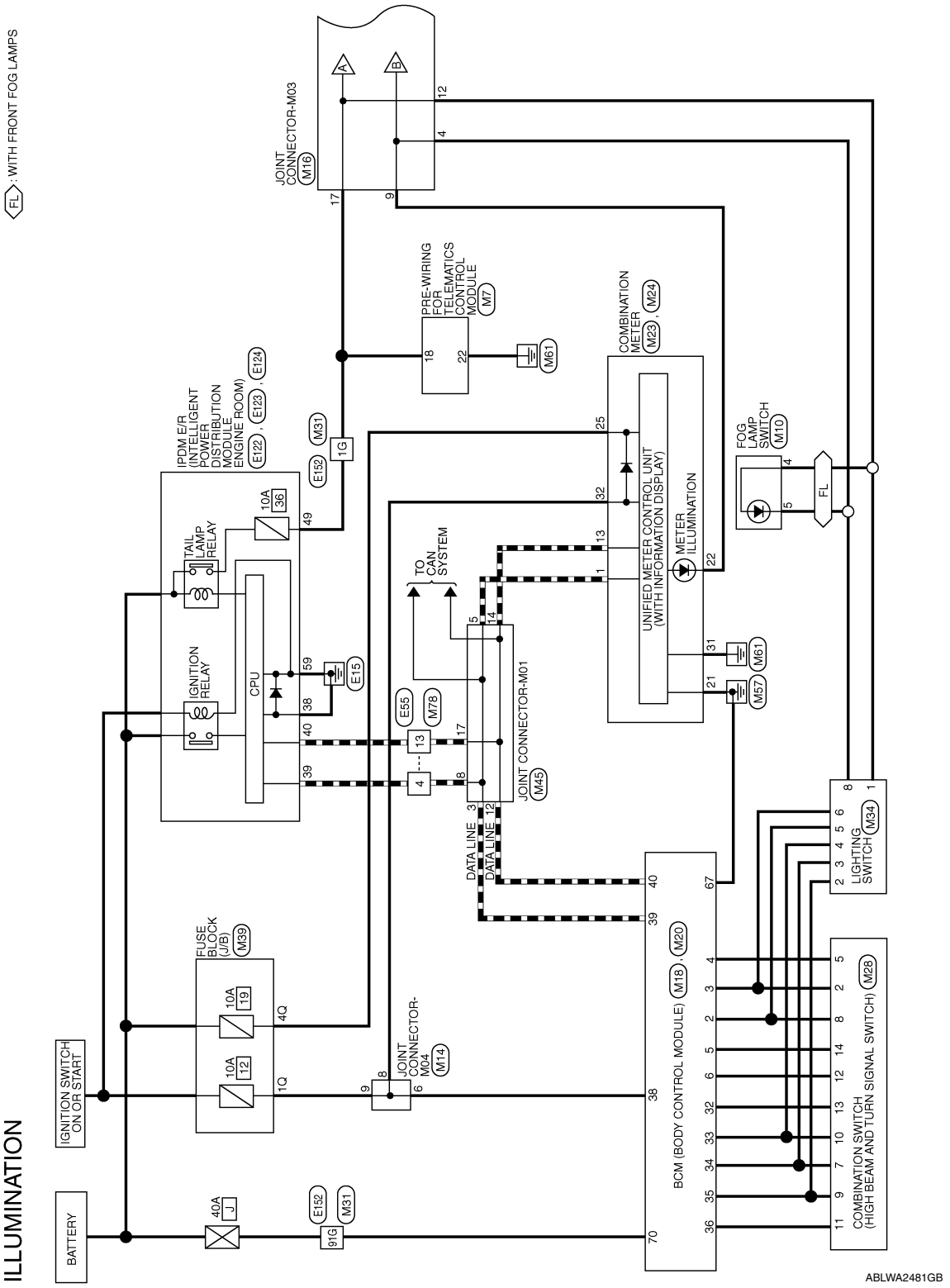
AALIA4288GB

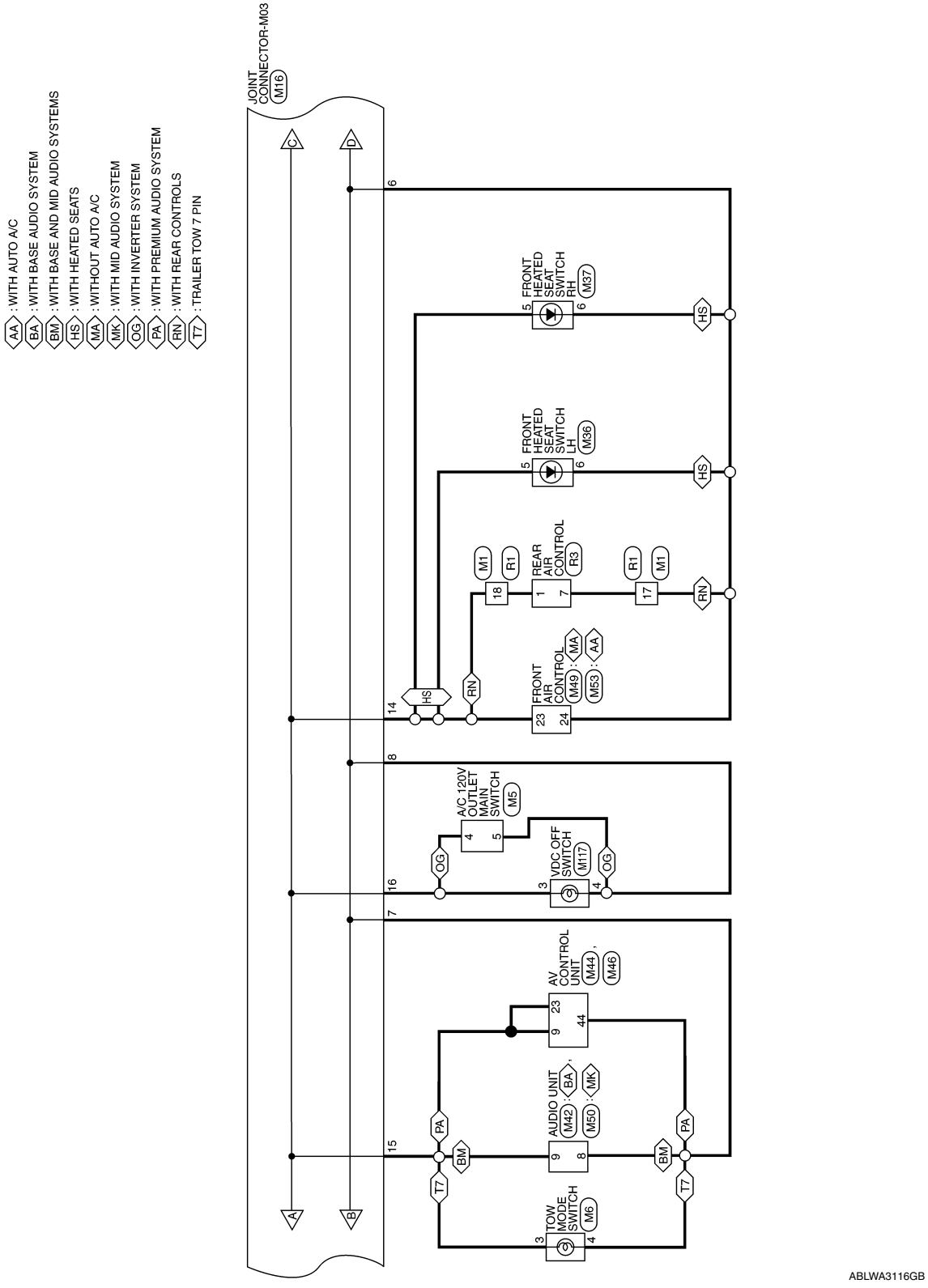
< WIRING DIAGRAM >

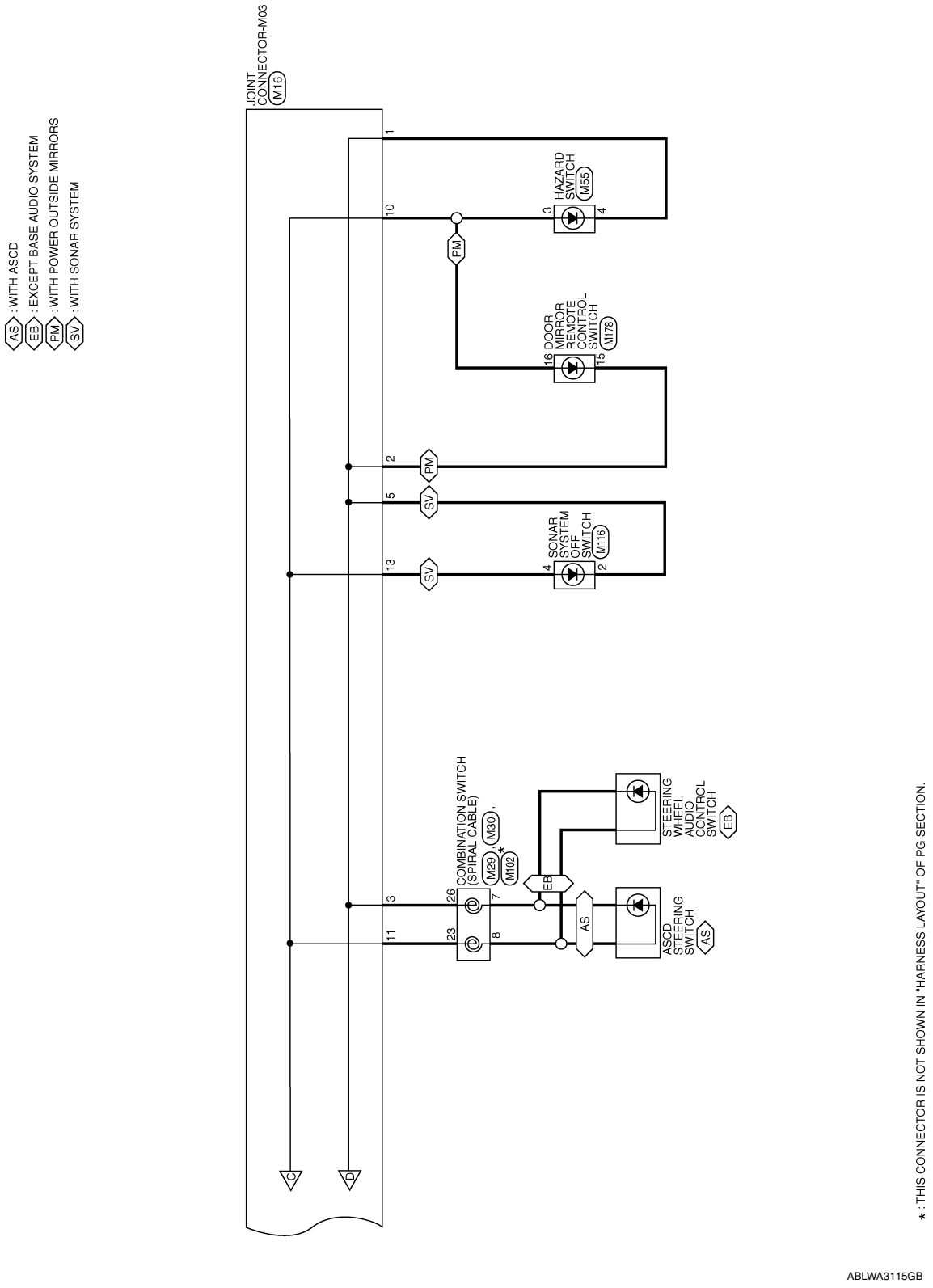
ILLUMINATION

Wiring Diagram

INFOID:0000000012519763




AA : WITH AUTO A/C
BA : WITH BASE AUDIO SYSTEM
BM : WITH BASE AND MID AUDIO SYSTEMS
HS : WITH HEATED SEATS
MA : WITHOUT AUTO A/C
MK : WITH MID AUDIO SYSTEM
OG : WITH INVERTER SYSTEM
PA : WITH PREMIUM AUDIO SYSTEM
RN : WITH REAR CONTROLS
T7 : TRAILER TOW 7 PIN
JOINT CONNECTOR-M03 (M16)
FRONT HEATED SEAT SWITCH RH (M37)
FRONT HEATED SEAT SWITCH LH (M36)
REAR AIR CONTROL (R3)
FRONT AIR CONTROL (M49) : MA, AA (M53)
A/C 120V OUTLET MAIN SWITCH (M5)
VDC OFF SWITCH (M117)
AV CONTROL UNIT (M44), (M46)
AUDIO UNIT (M42) : BA, (M50) : MK
TOW MODE SWITCH (M6)
ABLWA3116GB



ABLWA3115GB

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	25	26	27	28	29	30	31	32

Terminal No.	Color of Wire	Signal Name
17	BR	–
18	V	–

Connector No.	M5
Connector Name	A/C 120V OUTLET MAIN SWITCH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	V	ILL CONT SW (+)
5	BR	ILL CONT SW (-)

Connector No.	M6
Connector Name	TOW MODE SWITCH
Connector Color	GRAY

H.S.

4	3	2	1

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

Connector No.	M7
Connector Name	PRE-WIRING FOR TELEMATICS CONTROL MODULE
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
18	V	ILL +
22	B	GROUND

Connector No.	M10
Connector Name	FOG LAMP SWITCH
Connector Color	WHITE

H.S.

4	1
2	5

Terminal No.	Color of Wire	Signal Name
4	V	–
5	BR	–

Connector No.	M14
Connector Name	JOINT CONNECTOR-M04
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	R	–
8	R	–
9	R	–

AALIA0590GB

Connector No.	M16
Connector Name	JOINT CONNECTOR-M03
Connector Color	BLUE

H.S.

Terminal No.	Color of Wire	Signal Name
1	BR	–
2	BR	–
3	BR	–
4	BR	–
5	BR	–
6	BR	–
7	BR	–
8	BR	–
9	BR	–

Terminal No.	Color of Wire	Signal Name
10	V	–
11	V	–
12	V	–
13	V	–
14	V	–
15	V	–
16	V	–
17	V	–

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	L	INPUT 5
3	P	INPUT 4
4	LG	INPUT 3
5	O	INPUT 2
6	R	INPUT 1
32	SB	OUTPUT 5
33	G	OUTPUT 4
34	Y	OUTPUT 3
35	BR	OUTPUT 2
36	Y	OUTPUT 1
38	R	IGN SW
39	L	CAN-H
40	P	CAN-L

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
67	B	GND
70	R	BATTERY (F/L)

AALIA0591GB

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	–
5	LG	–
7	Y	–
8	L	–
9	BR	–
10	G	–
11	Y	–
12	R	–
13	SB	–
14	O	–

Connector No.	M24
Connector Name	COMBINATION METER
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
1	L	CAN-H
13	P	CAN-L
21	B	GND (ILL)
22	BR	ILLUMINATION CONTROL

Connector No.	M23
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

30	29	28	27	26	25
36	35	34	33	32	31

Terminal No.	Color of Wire	Signal Name
25	Y	BATTERY
31	B	GND (POWER)
32	R	RUN START

Connector No.	M30
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	GRAY

H.S.

24	25	26	27
31	32	33	34

Terminal No.	Color of Wire	Signal Name
26	BR	–

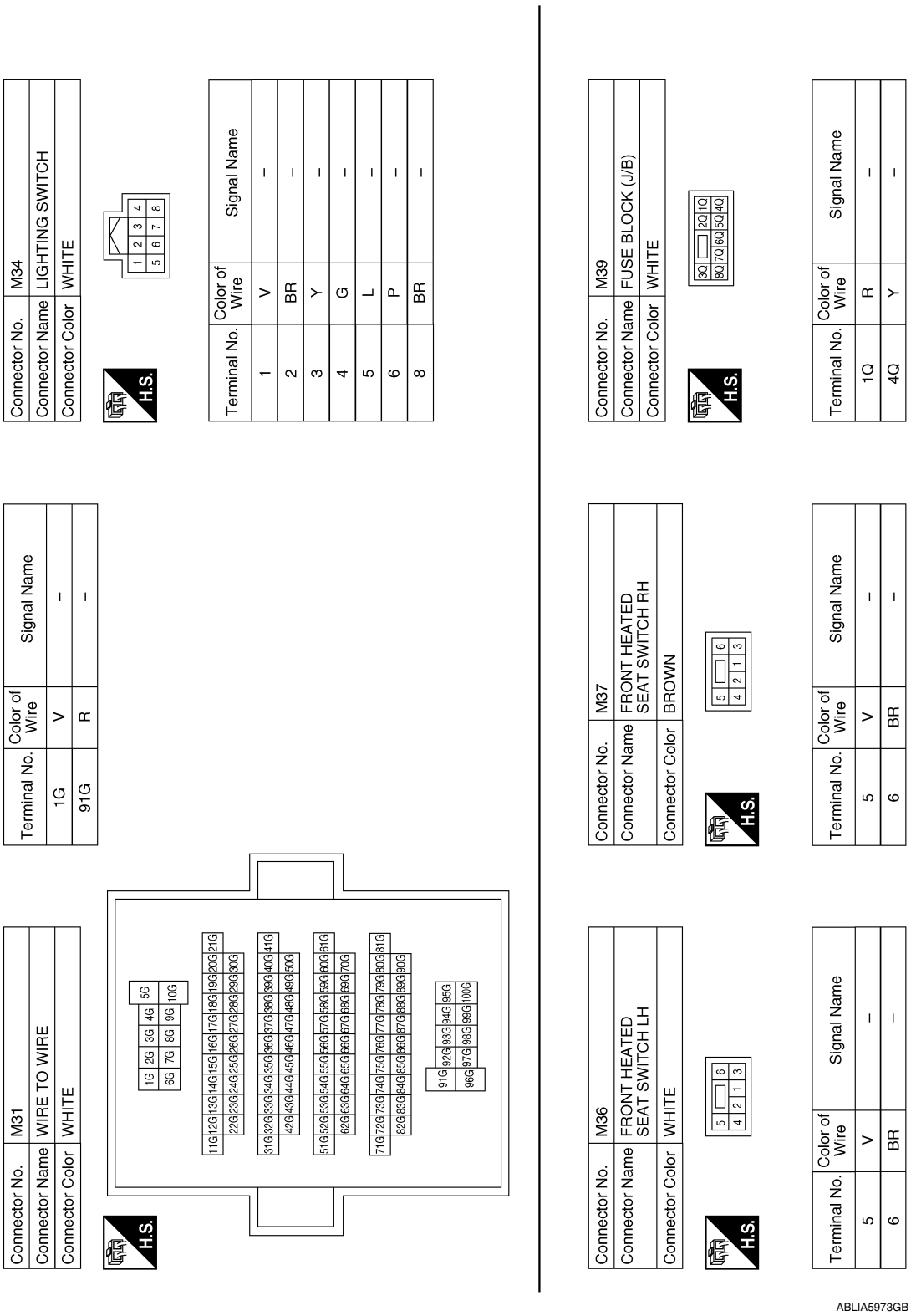
Connector No.	M29
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	YELLOW

H.S.

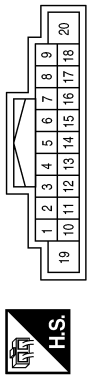
21	22	23
28	29	30

Terminal No.	Color of Wire	Signal Name
23	V	–

ABLIA5972GB

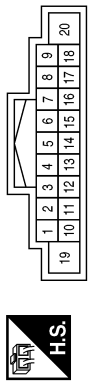

Connector No. M34
Connector Name LIGHTING SWITCH
Connector Color WHITE
H.S.
1 2 3 4
5 6 7 8
Terminal No. Color of Wire Signal Name
1 V –
2 BR –
3 Y –
4 G –
5 L –
6 P –
8 BR –
Connector No. M39
Connector Name FUSE BLOCK (J/B)
Connector Color WHITE
H.S.
3Q 2Q 1Q
8Q 7Q 6Q 5Q 4Q
Terminal No. Color of Wire Signal Name
1Q R –
4Q Y –
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
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 V –
91G R –
Connector No. M37
Connector Name FRONT HEATED SEAT SWITCH RH
Connector Color BROWN
H.S.
5 6
4 2 1 3
Terminal No. Color of Wire Signal Name
5 V –
6 BR –
Connector No. M36
Connector Name FRONT HEATED SEAT SWITCH LH
Connector Color WHITE
H.S.
5 6
4 2 1 3
Terminal No. Color of Wire Signal Name
5 V –
6 BR –
ABLIA5973GB

Connector No.	M42
Connector Name	AUDIO UNIT (WITH BASE AUDIO SYSTEM)
Connector Color	WHITE



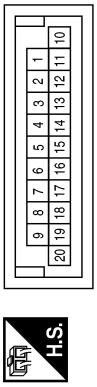
Terminal No.	Color of Wire	Signal Name
8	BR	ILL (-)
9	V	ILL (+), LIGHT SW

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



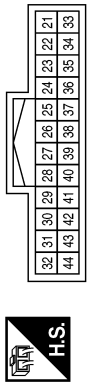
Terminal No.	Color of Wire	Signal Name
9	V	ILL (+), LIGHT SW
44	BR	ILL (-)

Connector No.	M45
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE



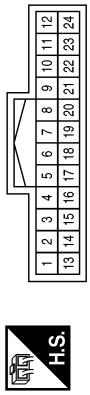
Terminal No.	Color of Wire	Signal Name
3	L	–
5	L	–
8	L	–
12	P	–
14	P	–
17	P	–

Connector No.	M46
Connector Name	AV CONTROL UNIT (WITH PREMIUM AUDIO SYSTEM)
Connector Color	WHITE



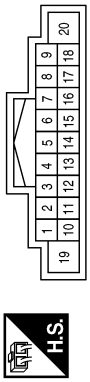
Terminal No.	Color of Wire	Signal Name
23	V	MR OUTPUT

Connector No.	M49
Connector Name	FRONT AIR CONTROL (WITHOUT AUTO A/C)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
23	V	ILL +
24	BR	ILL -

Connector No.	M50
Connector Name	AUDIO UNIT (WITH MID AUDIO SYSTEM)
Connector Color	WHITE

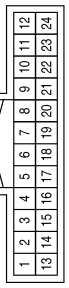


Terminal No.	Color of Wire	Signal Name
8	BR	ILL (-)
9	V	ILL (+), LIGHT SW

ABLIA7698GB

Connector No.	M53
Connector Name	FRONT AIR CONTROL (WITH AUTO A/C)
Connector Color	WHITE

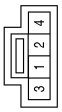
H.S.



Terminal No.	Color of Wire	Signal Name
23	V	ILL+
24	BR	ILL-

Connector No.	M55
Connector Name	HAZARD SWITCH
Connector Color	WHITE

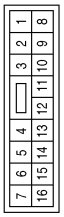
H.S.



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

Connector No.	M78
Connector Name	WIRE TO WIRE
Connector Color	WHITE

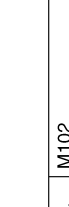
H.S.



Terminal No.	Color of Wire	Signal Name
4	L	–
13	P	–

Connector No.	M102
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
7	P	–
8	Y	–

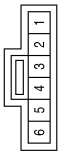
Connector No.	M116
Connector Name	SONAR SYSTEM OFF SWITCH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	BR	–
4	V	–

Connector No.	M117
Connector Name	VDC OFF SWITCH
Connector Color	GRAY

H.S.



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

ABLIA7701GB

Connector No.	M178
Connector Name	DOOR MIRROR REMOTE CONTROL 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
15	BR	–
16	V	–

Connector No.	E55
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
4	L	–
13	P	–

Connector No.	E122
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

42	41	40	39	38	37
48	47	46	45	44	43

Terminal No.	Color of Wire	Signal Name
38	B	GND (SIGNAL)
39	L	CAN-H
40	P	CAN-L

Connector No.	E123
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN

H.S.

51				50	49
56	55	54	53	52	

Terminal No.	Color of Wire	Signal Name
49	V	ILLUMINATION

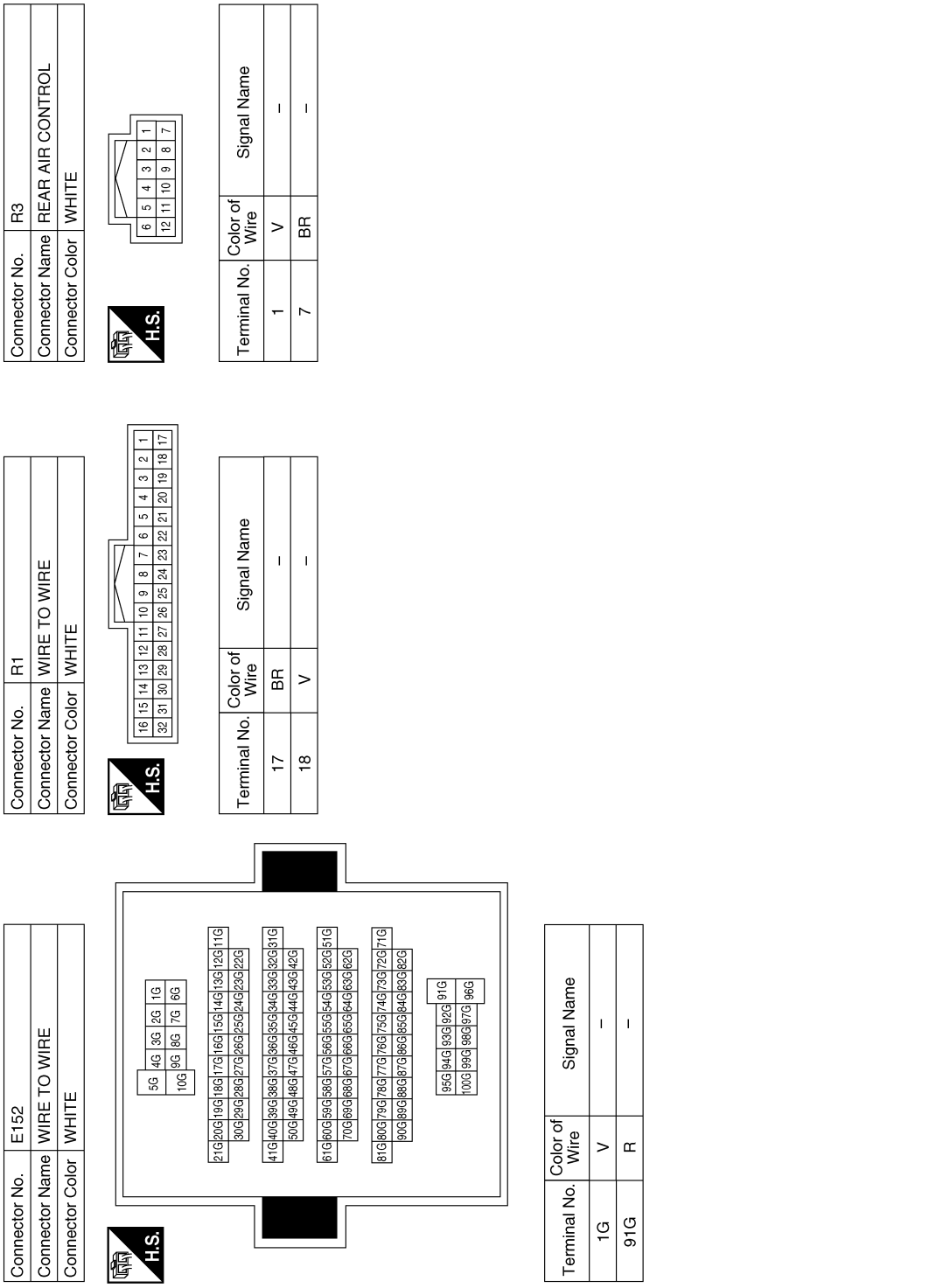
Connector No.	E124
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK

H.S.

59	58	57
62	61	60

Terminal No.	Color of Wire	Signal Name
59	B	GND (POWER)

ABLIA7702GB



ABLIA7703GB

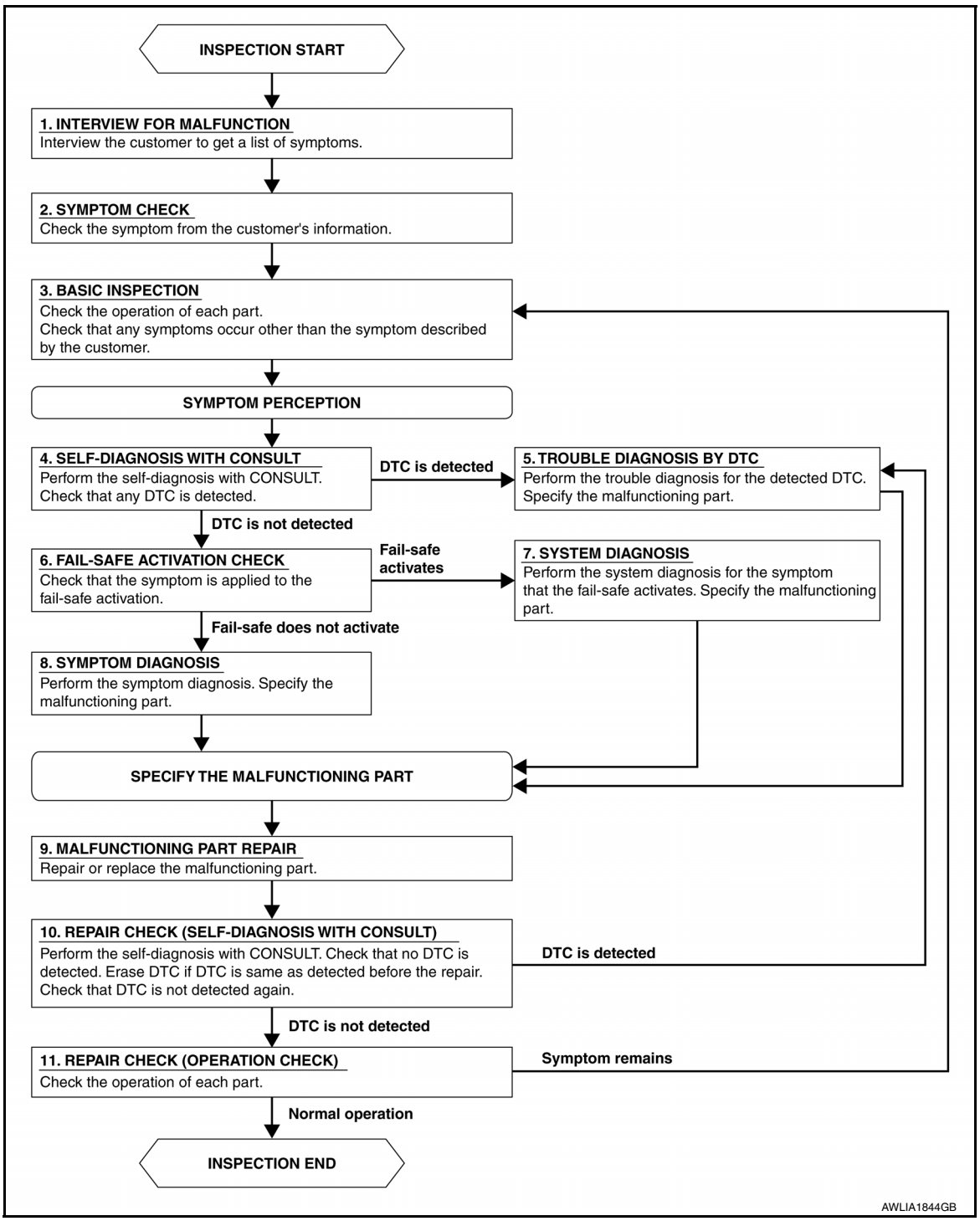
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000012519764

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-61, "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:0000000012797954

Regarding Wiring Diagram information, refer to BCS-41, "Wiring Diagram".

1.CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
57	Battery power supply	22 (10A)
70		J (40A)
11	Ignition ACC or ON	9 (10A)
38	Ignition ON or START	12 (10A)

Is the fuse blown?

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

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connectors.
3. Check voltage between BCM connector and ground.

Terminals			Ignition switch position		
(+)		(–)			
BCM			OFF	ACC	ON
Connector	Terminal				
M20	70	Ground	Battery voltage	Battery voltage	Battery voltage
	57				
M18	11		Approx. 0 V	Battery voltage	Battery voltage
	38		Approx. 0 V	Approx. 0 V	Battery voltage

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between BCM connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	67		Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair harness or connector.

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

Description

INFOID:0000000012519766

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

Diagnosis Procedure

INFOID:0000000012519767

CARGO VAN

Regarding Wiring Diagram information, refer to INL-15, "Wiring Diagram - Cargo Van".

1.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between BCM harness connector M20 terminal 56 and ground.

(+)		(-)	Voltage (V) (Approx.)
Connector	Terminal		
M20	56	Ground	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 ground. Refer to BCS-62, "Removal and Installation".

2.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following harness connectors.

- BCM M20
- Front room/map lamp assembly R25
- Front cargo lamp R26 (if equipped)
- Center cargo lamp R27 (if equipped)
- Rear cargo lamp R28

3. Check continuity between BCM harness connector M20 terminal 56 and each interior room lamp harness connector terminal 1.

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M20	56	Front room/map lamp assembly	R25	1	Yes
		Front cargo lamp	R26	1	
		Center cargo lamp	R27	1	
		Rear cargo lamp	R28	1	

Is the inspection result normal?

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

3.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM harness connector M20 terminal 56 and ground.

Connector	Terminal	—	Continuity
M20	56	Ground	No

Is the inspection result normal?

YES >> Check that each interior room lamp has no internal short circuit.

NO >> Repair the harness or connectors.

PASSENGER VAN

Regarding Wiring Diagram information, refer to INL-25, "Wiring Diagram - Passenger Van".

1.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between BCM harness connector M20 terminal 56 and ground.

(+)		(-)	Voltage (V) (Approx.)
Connector	Terminal		
M20	56	Ground	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 ground. Refer to BCS-62, "Removal and Installation".

2.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following harness connectors.
- BCM M20
- Front room/map lamp assembly R25
- Cargo lamp B23
- Personal lamp 2nd row B402 (if equipped)
- Personal lamp 3rd row B403 (if equipped)
- Personal lamp 4th row B404 (if equipped)
- Front step lamp LH D3 (if equipped)
- Front step lamp RH D103 (if equipped)
3. Check continuity between BCM harness connector M20 terminal 56 and each interior room lamp harness connector terminal 1.

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M20	56	Front room/map lamp assembly	R25	1	Yes
		Cargo lamp	B23	1	
		Personal lamp 2nd row	B402	1	
		Personal lamp 3rd row	B403	1	
		Personal lamp 4th row	B404	1	
		Step lamp LH	D3	1	
		Step lamp RH	D103	1	

Is the inspection result normal?

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

3.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM harness connector M20 terminal 56 and ground.

Connector	Terminal	—	Continuity
M20	56	Ground	No

Is the inspection result normal?

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

INTERIOR ROOM LAMP CONTROL CIRCUIT
CARGO VAN

CARGO VAN : Description

INFOID:0000000012519768

Controls the following interior room lamps (ground side) by PWM signal.
- Front room/map lamp assembly
- Front and center cargo lamp (if equipped)
- Rear cargo lamp

NOTE:
PWM signal control period is approximately 250 Hz (in the gradual brightening/dimming).

CARGO VAN : Component Function Check

INFOID:0000000012519769

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

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT
1. Place each room lamp switch into the DOOR position on an individual basis. Test each of the following switches individually.
- Front room/map lamp
- Front cargo lamp (if equipped)
- Center cargo lamp (if equipped)
- Rear cargo lamp
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 turns ON/OFF (gradual brightening/dimming).

ON : Interior room lamp gradual brightening
OFF : Interior room lamp gradual dimming

Is the inspection result normal?

YES >> Interior room lamp control circuit is normal.
NO >> Refer to INL-56, "CARGO VAN : Diagnosis Procedure".

CARGO VAN : Diagnosis Procedure

INFOID:0000000012519770

Regarding Wiring Diagram information, refer to INL-15, "Wiring Diagram - Cargo Van".

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT
1. Place each room lamp switch into the DOOR position on an individual basis. Test each of the following switches individually.
- Front room/map lamp
- Front cargo lamp (if equipped)
- Center cargo lamp (if equipped)
- Rear cargo lamp
2. Turn ignition switch ON.
3. Select “INT LAMP” of BCM (INT LAMP) active test item.
4. While operating the test item, check voltage between BCM connector M20 terminal 63 and ground.

(+)		(-)	INT LAMP	Voltage
Connector	Terminal			
M20	63	Ground	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 M20 and interior room lamp harness connector in question.
3. Check continuity between BCM harness connector M20 terminal 63 and interior room harness connector terminal in question.

BCM		Interior room lamp			Continuity
Connector	Terminal	Component	Connector	Terminal	
M20	63	Front room/map lamp	R25	3	Yes
		Front cargo lamp	R26	2	
		Center cargo lamp	R27	2	
		Rear cargo lamp	R28	2	

Is the inspection result normal?

YES >> Check interior room lamps for an open. If NG, replace lamp in question. Refer to INL-62, "Removal and Installation", INL-68, "Removal and Installation - Front, Center or Rear". If OK, replace BCM. Refer to BCS-62, "Removal and Installation".
NO >> Repair the harness or connectors.

3.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM harness connector M20.
3. Check continuity between BCM harness connector M20 terminal 63 and ground.

Connector	Terminal	—	Continuity
M20	63	Ground	No

Is the inspection result normal?

YES >> Check interior room lamps for a short circuit. If NG, replace lamp in question. Refer to INL-62, "Removal and Installation", INL-68, "Removal and Installation - Front, Center or Rear". If OK, replace BCM. Refer to BCS-62, "Removal and Installation".
NO >> Repair the harness or connectors.

PASSENGER VAN

PASSENGER VAN : Description

INFOID:0000000012519771

Controls the following interior room lamps (ground side) by PWM signal.
- Front room/map lamp assembly
- Cargo lamp
- Personal lamp 2nd, 3rd, and 4th row (if equipped)

NOTE:
PWM signal control period is approximately 250 Hz (in the gradual brightening/dimming).

PASSENGER VAN : Component Function Check

INFOID:0000000012519772

CAUTION:

Before performing the diagnosis, check that the following is normal.

- **Battery saver output/power supply**
- **Front room/map lamp bulbs**
- **Cargo lamp bulbs**
- **Personal lamp bulbs**

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT

1. Place each room lamp switch into the DOOR position on an individual basis. Test each of the following switches individually.

- Front room/map lamp
- Cargo lamp
- Personal lamp 2nd row (if equipped)
- Personal lamp 3rd row (if equipped)
- Personal lamp 4th row (if equipped)

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 turns ON/OFF (gradual brightening/dimming).

ON : Interior room lamp gradual brightening
OFF : Interior room lamp gradual dimming

Is the inspection result normal?

YES >> Interior room lamp control circuit is normal.
NO >> Refer to INL-58, "PASSENGER VAN : Diagnosis Procedure".

PASSENGER VAN : Diagnosis Procedure

INFOID:0000000012519773

Regarding Wiring Diagram information, refer to INL-25, "Wiring Diagram - Passenger Van".

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT

1. Place each interior room lamp switch into the DOOR position on an individual basis. Test each of the following switches individually.

- Front room/map lamp
- Cargo lamp
- Personal lamp 2nd row (if equipped)
- Personal lamp 3rd row (if equipped)
- Personal lamp 4th row (if equipped)

2. Turn ignition switch ON.
3. Select “INT LAMP” of BCM (INT LAMP) active test item.
4. While operating the test item, check voltage between BCM connector M20 terminal 63 and ground.

(+)		(-)	INT LAMP	Voltage
Connector	Terminal			
M20	63	Ground	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 connector M20 and interior room lamp harness connector in question.
3. Check continuity between BCM connector M20 terminal 63 and interior room lamp harness connector in question.

BCM		Interior room lamp			Continuity
Connector	Terminal	Component	Connector	Terminal	
M20	63	Front room/map lamp	R25	3	Yes
		Personal lamp 2nd row	B23	3	
		Personal lamp 3rd row	B402	3	
		Personal lamp 4th row	B403	3	
		Cargo lamp	B404	2	

Is the inspection result normal?

YES >> Check interior room lamps for an open. If NG, replace lamp in question. Refer to INL-62, "Removal and Installation", INL-68, "Removal and Installation - Front, Center or Rear" or INL-64, "Removal and Installation". If OK, replace BCM. Refer to BCS-62, "Removal and Installation".

NO >> Repair the harness or connectors.

3.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM harness connector M20.
3. Check continuity between BCM harness connector M20 terminal 63 and ground.

Connector	Terminal	—	Continuity
M20	63	Ground	No

Is the inspection result normal?

YES >> Check interior room lamps for a short circuit. If NG, replace lamp in question. Refer to INL-62, "Removal and Installation", INL-68, "Removal and Installation - Front, Center or Rear" or INL-64, "Removal and Installation". If OK, replace BCM. Refer to BCS-62, "Removal and Installation".

NO >> Repair the harness or connectors.

STEP LAMP CIRCUIT

Description

INFOID:0000000012519774

Controls the front step lamps (if equipped) (ground side) to turn the lamps ON and OFF.

Diagnosis Procedure

INFOID:0000000012519775

Regarding Wiring Diagram information, refer to INL-25, "Wiring Diagram - Passenger Van".

1.CHECK STEP LAMP CONTROL CIRCUIT

1. Turn ignition switch OFF.
2. Open driver's door.
3. Check voltage between BCM harness connector M20 terminal 62 and ground.

NOTE:
Observe interior lamp timer period when performing test.

Connector	Terminal	—	DRIVER DOOR	Voltage
M20	62	Ground	OPEN	0V
			CLOSED	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 BCM harness connector M20 and front step lamp harness connector in question.
3. Check continuity between BCM harness connector M20 terminal 62 and step lamp harness connector in question.

Connector	Terminal	Connector		Terminal	Continuity
M20	62	Front step lamp LH	D3	2	Yes
		Front step lamp RH	D103	2	

Is the inspection result normal?

YES >> Check step lamp for an open. If NG, replace step lamp. Refer to INL-66, "Removal and Installation". If OK, replace BCM. Refer to BCS-62, "Removal and Installation".
NO >> Repair harness or connectors.

3.CHECK STEP LAMP SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM harness connector M20.
3. Check continuity between BCM harness connector M20 terminal 62 and ground.

Connector	Terminal	—	Continuity
M20	62	Ground	No

Is the inspection result normal?

YES >> Check step lamps for a short circuit. If NG, replace step lamp. Refer to INL-66, "Removal and Installation". If OK, replace BCM. Refer to BCS-62, "Removal and Installation".
NO >> Repair the harness or connectors.

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000012519776

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

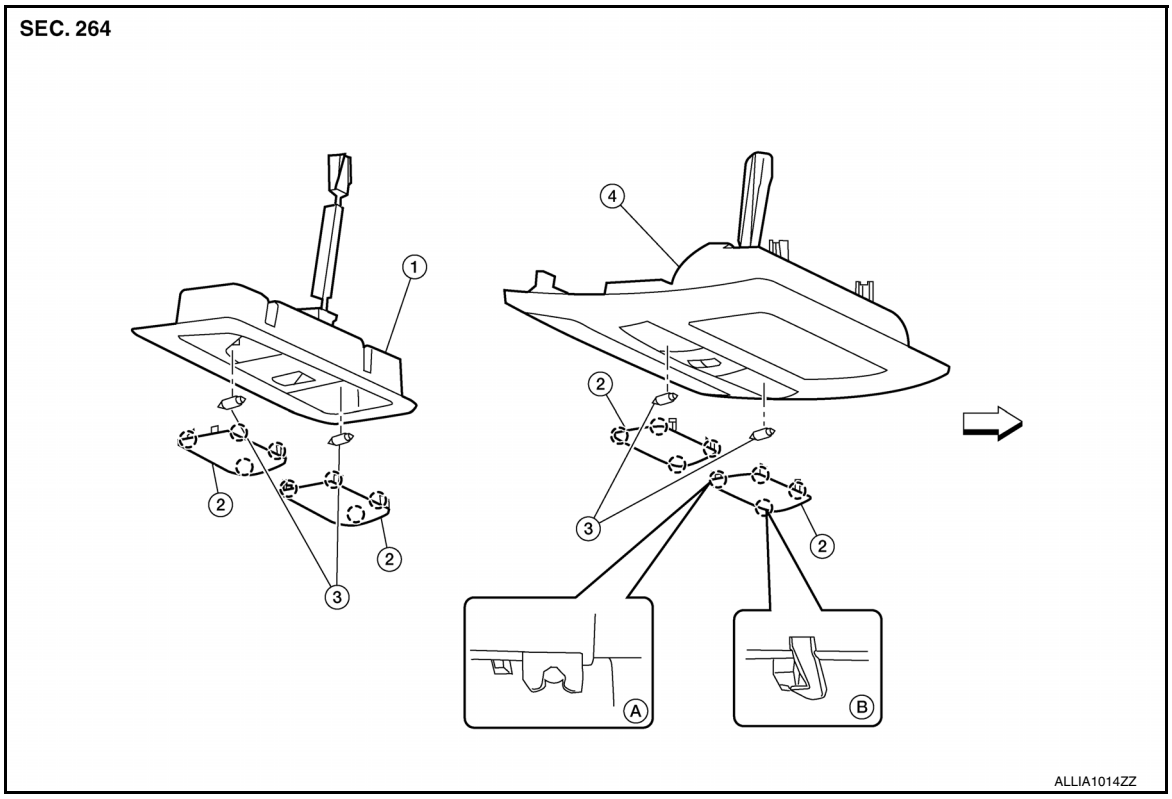
Symptom	Possible cause	Inspection item
All of the following lamps do not turn ON. • Front room/map lamp assembly • Front and center cargo lamp (cargo van, if equipped) • Rear cargo lamp (cargo van) • Personal lamp 2nd, 3rd and 4th row (passenger van, if equipped) • Front step lamp LH/RH (passenger van, if equipped) • Cargo lamp (passenger van)	• Harness between BCM and each interior room lamp • BCM	Battery saver output/power supply circuit Refer to INL-53, "Description".
Some or all of the following interior room lamps do not turn ON/OFF when opening/closing door. • Front room/map lamp assembly • Front and center cargo lamp (cargo van, if equipped) • Rear cargo lamp (cargo van) • Personal lamp 2nd, 3rd and 4th row (passenger van, if equipped) • Cargo lamp (passenger van)	• Harness between BCM and each door switch • Harness between BCM and each interior room lamp • BCM	Door switch circuit Refer to DLK-50, "Description". Interior room lamp control circuit Refer to INL-56, "CARGO VAN : Description" or INL-57, "PASSENGER VAN : Description".
Front step lamps do not turn ON/OFF when opening/closing door.	• Harness between BCM and each door switch • Harness between BCM and each front step lamp • BCM	Door switch circuit Refer to DLK-50, "Description". Front step lamp control circuit Refer to INL-60, "Description".
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	—	Check the interior room lamp setting. Refer to BCS-18, "INT LAMP : CONSULT Function (BCM - INT LAMP)".
Interior room lamp battery saver does not activate.	—	Check the interior room lamp battery saver setting. Refer to BCS-24, "BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)".

REMOVAL AND INSTALLATION

FRONT ROOM/MAP LAMP

Exploded View

INFOID:0000000012519777



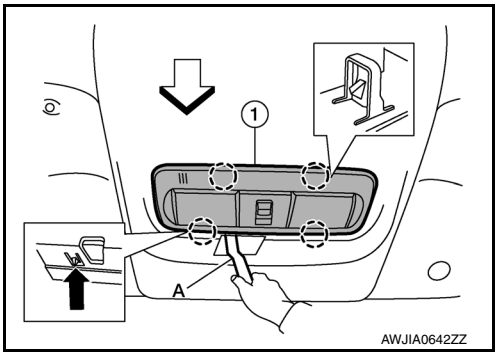
1.	Front room/map lamp assembly (high roof models)	2.	Lens	3.	Bulb
4.	Front room/map lamp assembly (w/overhead console) (standard roof models)	A.	Pawl (primary)	B.	Pawl (secondary)
	Pawl		Front		

Removal and Installation

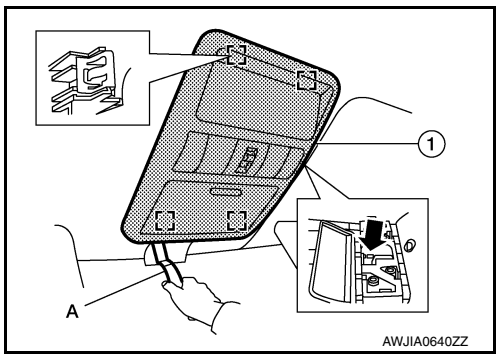
INFOID:0000000012519778

WARNING:
Do not touch bulb with your hand while it is on or right after being turned off. Burning may result.
CAUTION:
Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.

1. Remove the front room/map lamp assembly.
   - For high roof models, release the pawls beginning at the front edge using a suitable tool (A), disconnect the harness connectors from front room/map lamp assembly (1) and remove.
     : Front
     : Pawl



- For standard roof models, release the metal clips beginning at the front edge using a suitable tool (A), disconnect the harness connectors from front room/map lamp assembly (1) and remove.
  : Metal clip



Bulb Replacement

INFOID:0000000012519779

WARNING:
Do not touch bulb with your hand while it is on or right after being turned off. Burning may result.
CAUTION:
- **Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

1. Insert a suitable tool into the gap between the lens and the front room/map lamp assembly at the inside edge to release the pawl (primary).
2. Slide the lens aside enough to release the pawl (secondary).
3. Remove the front room lamp bulb.
4. Install a new front room lamp bulb and securely snap the lens into the front room/map lamp assembly.

PERSONAL LAMP

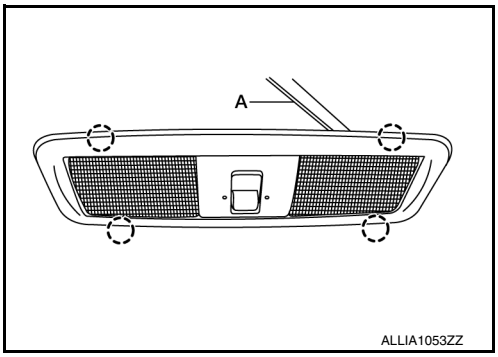
Removal and Installation

INFOID:0000000012519780

WARNING:
Do not touch bulb with your hand while it is on or right after being turned off. Burning may result.
CAUTION:
Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.

REMOVAL

1. Release the personal lamp pawls and remove the personal lamp from the headlining, using a suitable tool (A).
   : Pawl



2. Disconnect the harness connector from personal lamp.
3. Remove the personal lamp from the headlining.

INSTALLATION

Installation is in the reverse order of removal.

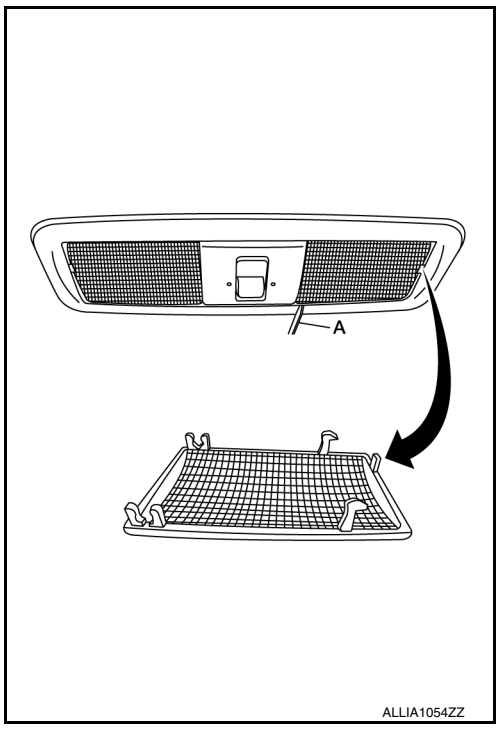
Bulb Replacement

INFOID:0000000012519781

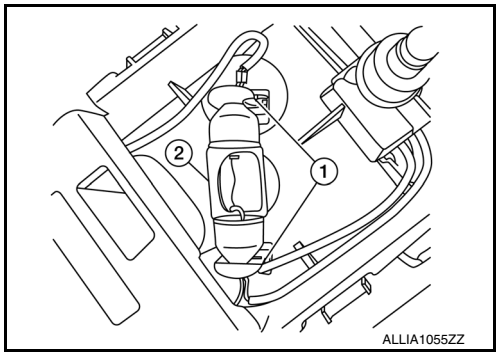
WARNING:
Do not touch bulb with your hand while it is on or right after being turned off. Burning may result.
CAUTION:
- **Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

PERSONAL LAMP BULB

1. Release the personal lamp lens pawls, then remove the personal lamp lens, using a suitable tool (A).



2. Release the personal lamp bulb retainers (1), then pull the bulb (2) straight out to remove.
3. Install a new personal lamp bulb securely into the retainers and install the lens into the personal lamp.



STEP LAMP

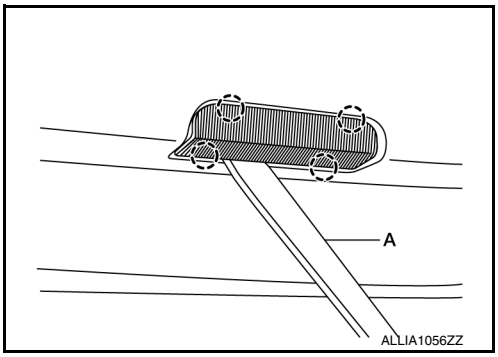
Removal and Installation

INFOID:0000000012519782

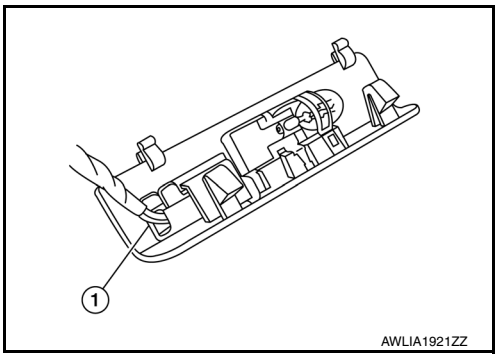
WARNING:
Do not touch bulb with your hand while it is on or right after being turned off. Burning may result.
CAUTION:
Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.

REMOVAL

1. Replace the step lamp pawls and remove the step lamp from the door, using a suitable tool (A).
   ◌: Pawl



2. Disconnect harness connector from step lamp (1).



3. Remove the step lamp from the vehicle.

INSTALLATION
Installation is in the reverse order of removal.

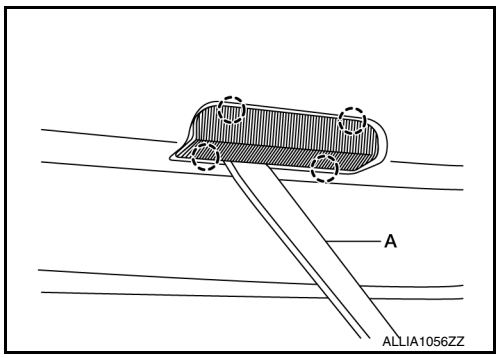
Bulb Replacement

INFOID:0000000012519783

WARNING:
Do not touch bulb with your hand while it is on or right after being turned off. Burning may result.
CAUTION:
- **Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

STEP LAMP BULB

1. Release the step lamp pawls and remove the step lamp from the door, using a suitable tool (A).
   ◌: Pawl

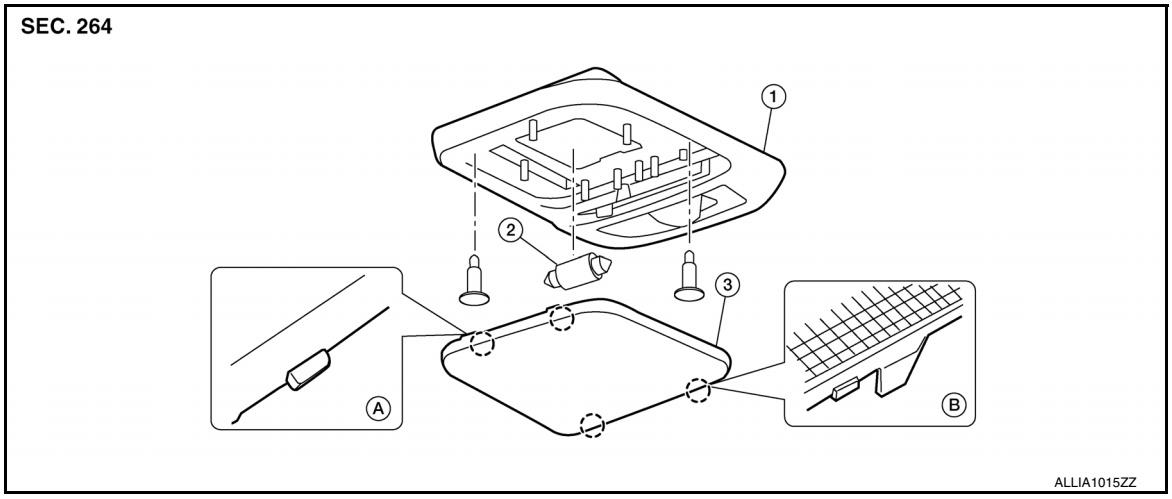


2. Pull the bulb straight out to remove.
3. Install the new step lamp bulb and securely snap the step lamp into the door.

CARGO LAMP

Exploded View

INFOID:0000000012519784



1. Cargo area courtesy lamp housing
2. Bulb
3. Cargo area courtesy lamp lens
A. Pawl (top edge)
B. Pawl (bottom edge)
Pawl

Removal and Installation - Front, Center or Rear

INFOID:0000000012519785

WARNING:
Do not touch bulb with your hand while it is on or right after being turned off. Burning may result.
CAUTION:
Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.
NOTE:
Front cargo lamp shown: procedure also applies to center and rear cargo lamps (if equipped).

REMOVAL

1. Remove the cargo lamp lens.
2. Remove the cargo lamp screws.
3. Disconnect the harness connector from cargo lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

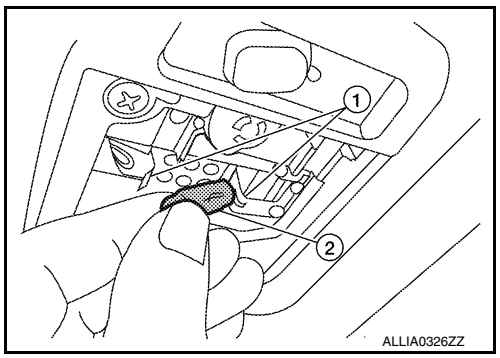
INFOID:0000000012519786

WARNING:
Do not touch bulb with your hand while it is on or right after being turned off. Burning may result.
CAUTION:
- **Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

NOTE:
Front cargo lamp shown; procedure also applies to center and rear cargo lamps (if equipped).

1. Release the cargo lamp lens pawls, then remove the cargo lamp lens, using a suitable tool.

2. Release the bulb retainers (1), then pull bulb (2) straight out to remove.



3. Insert a new bulb and securely snap the lens into the cargo lamp.

ILLUMINATION CONTROL SWITCH

Removal and Installation

INFOID:0000000012519787

The illumination control switch is replaced as a part of the combination meter. Refer to MWI-68, "Removal and Installation".

SERVICE DATA AND SPECIFICATIONS (SDS)

BULB SPECIFICATIONS

Interior Lamp/Illumination

INFOID:0000000012519788

Item	Wattage (W)*
Front room/map lamp (Cargo Van)	8
Front room/map lamp (Passenger Van)	8
Cargo lamp (Front, Center or Rear)	10
Personal lamp (Passenger van)	8
Step lamp (Passenger van)	3.8

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