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
Component Parts Location 5

SYSTEM 7

INTERIOR ROOM LAMP CONTROL SYSTEM 7
INTERIOR ROOM LAMP CONTROL SYSTEM : System Description 7

ILLUMINATION CONTROL SYSTEM 8
ILLUMINATION CONTROL SYSTEM : System Diagram 8
ILLUMINATION CONTROL SYSTEM : System Description 8

DIAGNOSIS SYSTEM (BCM) 9

COMMON ITEM 9
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM) 9

INT LAMP 10
INT LAMP : CONSULT Function (BCM - INT LAMP) 10

BATTERY SAVER 11
BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER) 11

ECU DIAGNOSIS INFORMATION 13

BCM 13
List of ECU Reference 13

WIRING DIAGRAM 14

INTERIOR ROOM LAMP 14
Wiring Diagram 14

ILLUMINATION 23
Wiring Diagram 23

BASIC INSPECTION 36

DIAGNOSIS AND REPAIR WORK FLOW 36
Work Flow 36

DTC/CIRCUIT DIAGNOSIS 39

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT 39
Component Function Check 39
Diagnosis Procedure 39

INTERIOR ROOM LAMP CONTROL CIRCUIT 41
Component Function Check 41
Diagnosis Procedure 41

TRUNK ROOM LAMP 43
Component Function Check 43
Diagnosis Procedure 43

STEP LAMP CIRCUIT 45
Component Function Check 45
Diagnosis Procedure 45

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT 47
Description 47
Component Function Check 47
Diagnosis Procedure 47

SYMPTOM DIAGNOSIS 49

INTERIOR LIGHTING SYSTEM SYMPTOMS... 49
Symptom Table 49

REMOVAL AND INSTALLATION 50

FRONT ROOM/MAP LAMP ASSEMBLY 50
Exploded View 50
Removal and Installation 50
Bulb Replacement 51

VANITY MIRROR LAMP 52
Removal and Installation 52

GLOVE BOX LAMP 53
Removal and Installation 53

FRONT STEP LAMP 54
Exploded View 54
Removal and Installation 54
Bulb Replacement 54

PERSONAL LAMP 55
Removal and Installation 55
Bulb Replacement 55

TRUNK ROOM LAMP 56
Removal and Installation 56
Bulb Replacement 56

MOOD LAMP 57
Removal and Installation 57
Bulb Replacement 57

METER CONTROL SWITCH 58
Removal and Installation 58

FOOT LAMP 59
Removal and Installation 59

SERVICE DATA AND SPECIFICATIONS (SDS) 60

SERVICE DATA AND SPECIFICATIONS (SDS) 60
Bulb Specifications 60

PRECAUTION

PRECAUTIONS

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

INFOID:0000000012239894

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

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

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

WARNING:

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

Precaution for Work

INFOID:0000000012239895

- 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.

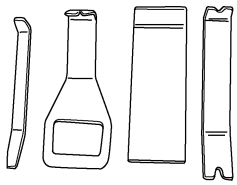
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000012239896

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

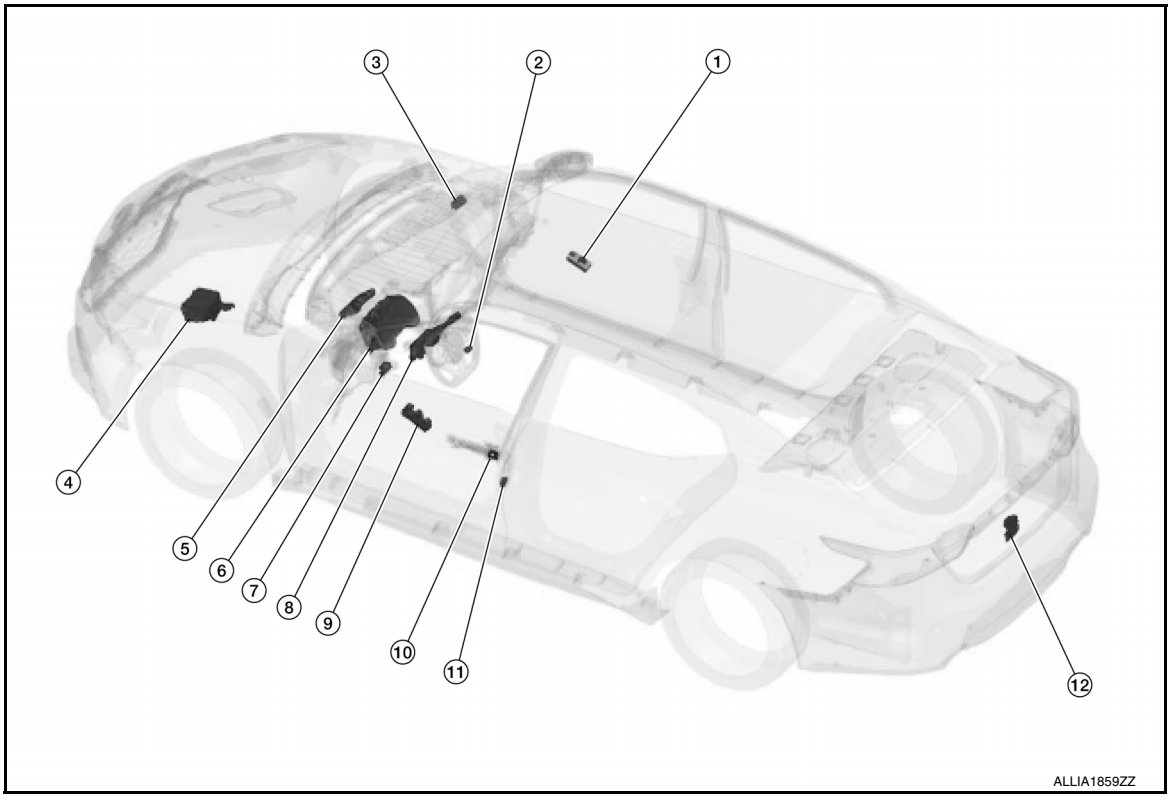
Tool number (TechMate No.) Tool name	Description
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000012239897



No.	Component	Function
1.	Power window and door lock/unlock switch RH	Refer to PWC-7, "Power Window and Door Lock/Unlock Switch RH" for detailed installation location.
2.	Push-button ignition switch (push-button ignition switch illumination)	• Provides ignition switch status to the BCM. • Refer to PCS-5, "Component Parts Location" for detailed installation location.
3.	Remote keyless entry receiver	Refer to DLK-15, "Remote Keyless Entry Receiver" for detailed installation location.
4.	IPDM E/R	• Controls the integrated relay according to the request signal from BCM (via CAN communication). • Refer to PCS-5, "Component Parts Location" for detailed installation location.
5.	BCM	• Activates the interior room lamp timer depending on the vehicle condition to turn the interior room lamps ON/OFF. • Operates the interior room lamp battery saver depending on the vehicle condition to turn interior room lamps OFF. • Detects each switch condition by the combination switch reading function. • Judges the illumination lamp ON/OFF status depending on the vehicle condition. And then transmits request signal to IPDM E/R and combination meter (via CAN communication). • Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
6.	Combination meter	• Controls the meter illumination according to the request signal from BCM (via CAN communication). • Refer to MWI-5, "METER SYSTEM : Component Parts Location" for detailed installation location.
7.	Meter control switch	Refer to MWI-8, "METER SYSTEM : Meter Control Switch" for detailed installation location

No.	Component	Function
8.	Combination switch (lighting & turn signal switch)	Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
9.	Main power window and door lock/unlock switch	Refer to PWC-7, "Main Power Window and Door Lock/Unlock Switch" for detailed installation location.
10.	Front door lock assembly LH (key cylinder switch)	Refer to DLK-17, "Front Door Lock Assembly (LH)" for detailed installation location.
11.	Door switches	Refer to DLK-17, "Front Door Switch" for detailed installation location.
12.	Trunk lamp switch and trunk release solenoid (trunk lamp switch)	Refer to DLK-14, "TRUNK LID OPENER SYSTEM : Component Parts Location" for detailed installation location.

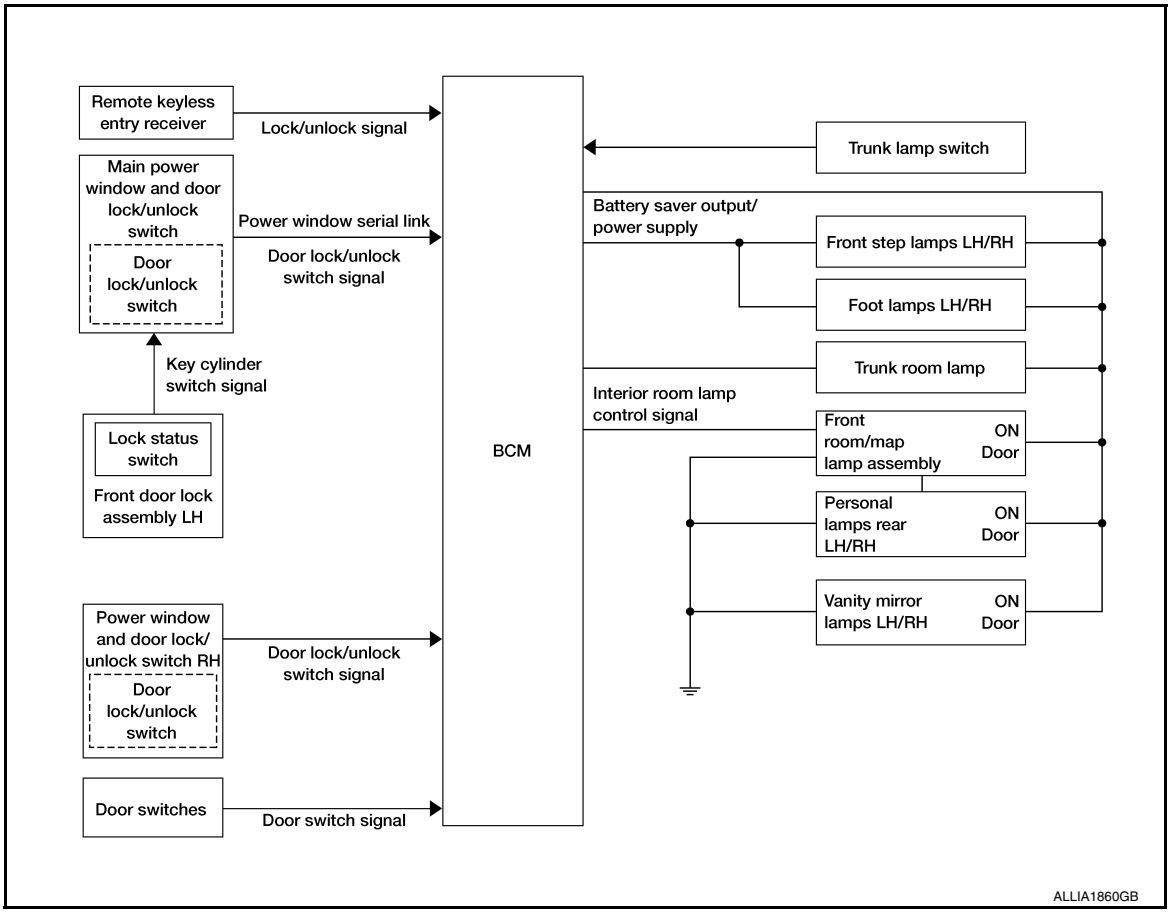
SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : System Description

INFOID:0000000012239898

SYSTEM DIAGRAM



OPERATION DESCRIPTION

- Front room/map lamp assembly, personal lamps 2nd row and luggage room lamp are controlled by the interior room lamp timer control function of the BCM when the lamp switch is in the DOOR position.
- Push-button ignition switch illumination is controlled by the push-button ignition switch illumination control function of BCM.
- Interior room lamps are illuminated by the welcome light function of the Intelligent Key system. Refer to DLK-21, "INTELLIGENT KEY SYSTEM : System Description".

ROOM LAMP TIMER OPERATION

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

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

Timer control is cancelled under the following conditions:

- When the front door LH is locked with Intelligent Key system, main power window and door lock/unlock switch or front door lock assembly LH (lock status 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.

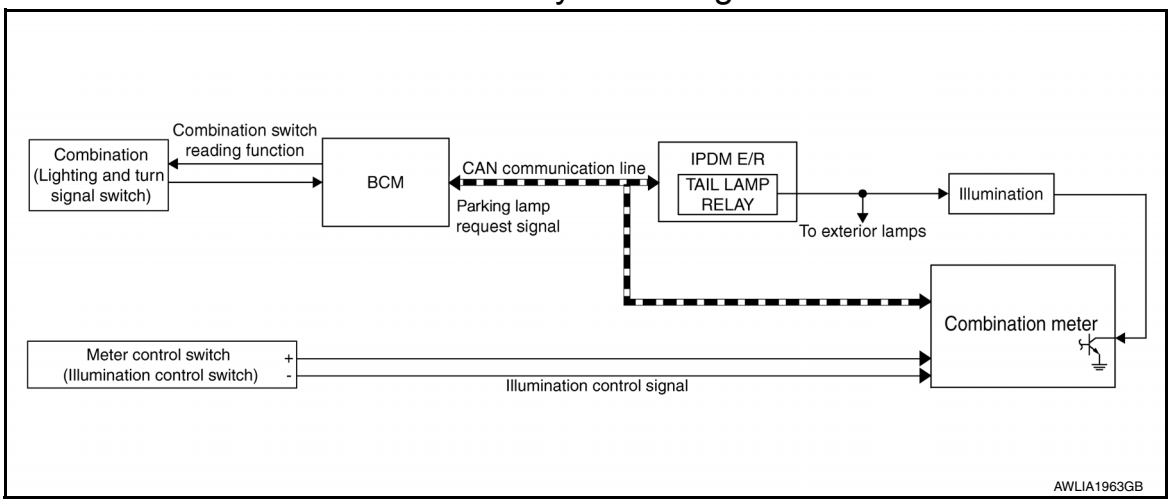
After the battery saver system turns the lamps OFF, the lamps will illuminate again when the following conditions are met:

- 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 (lock status switch) is locked or unlocked.
- A door is opened or closed.

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : System Diagram

INFOID:0000000012239899



ILLUMINATION CONTROL SYSTEM : System Description

INFOID:0000000012239900

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 meter control switch (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 the 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:0000000012250301

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			×	×			
Trunk	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×	×			
TPMS	AIR PRESSURE MONITOR		×	×	×			

FREEZE FRAME DATA (FFD)

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays it on CONSULT.

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

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

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

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:0000000012250302

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 trunk 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].
CARGO LAMP TEST	This test is able to check cargo 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:0000000012250303

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

Monitor Item [Unit]	Description
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH
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 trunk 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:0000000012239904

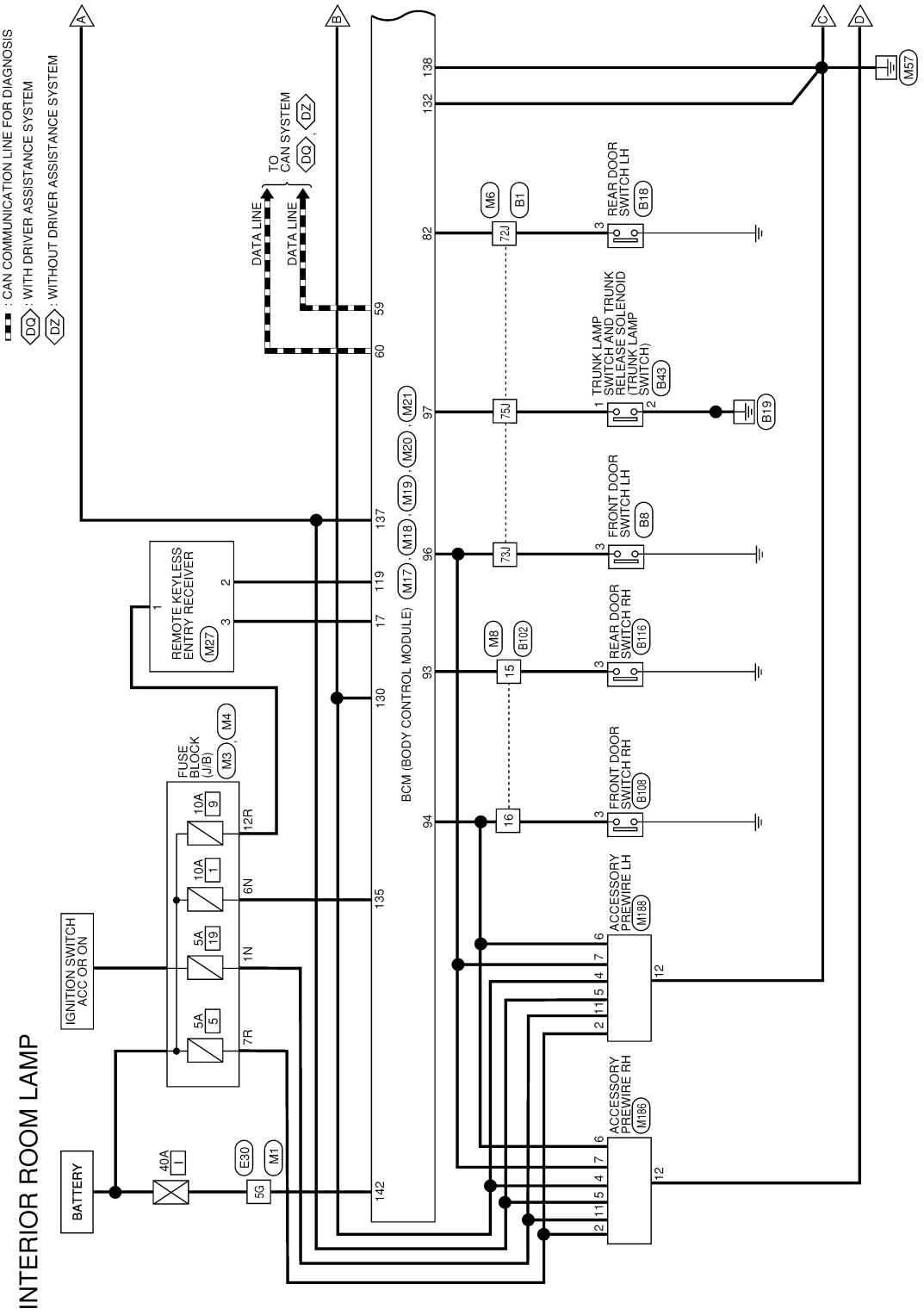
ECU	Reference
BCM	BCS-31, "Reference Value"
	BCS-51, "Fail Safe"
	BCS-52, "DTC Inspection Priority Chart"
	BCS-53, "DTC Index"

WIRING DIAGRAM

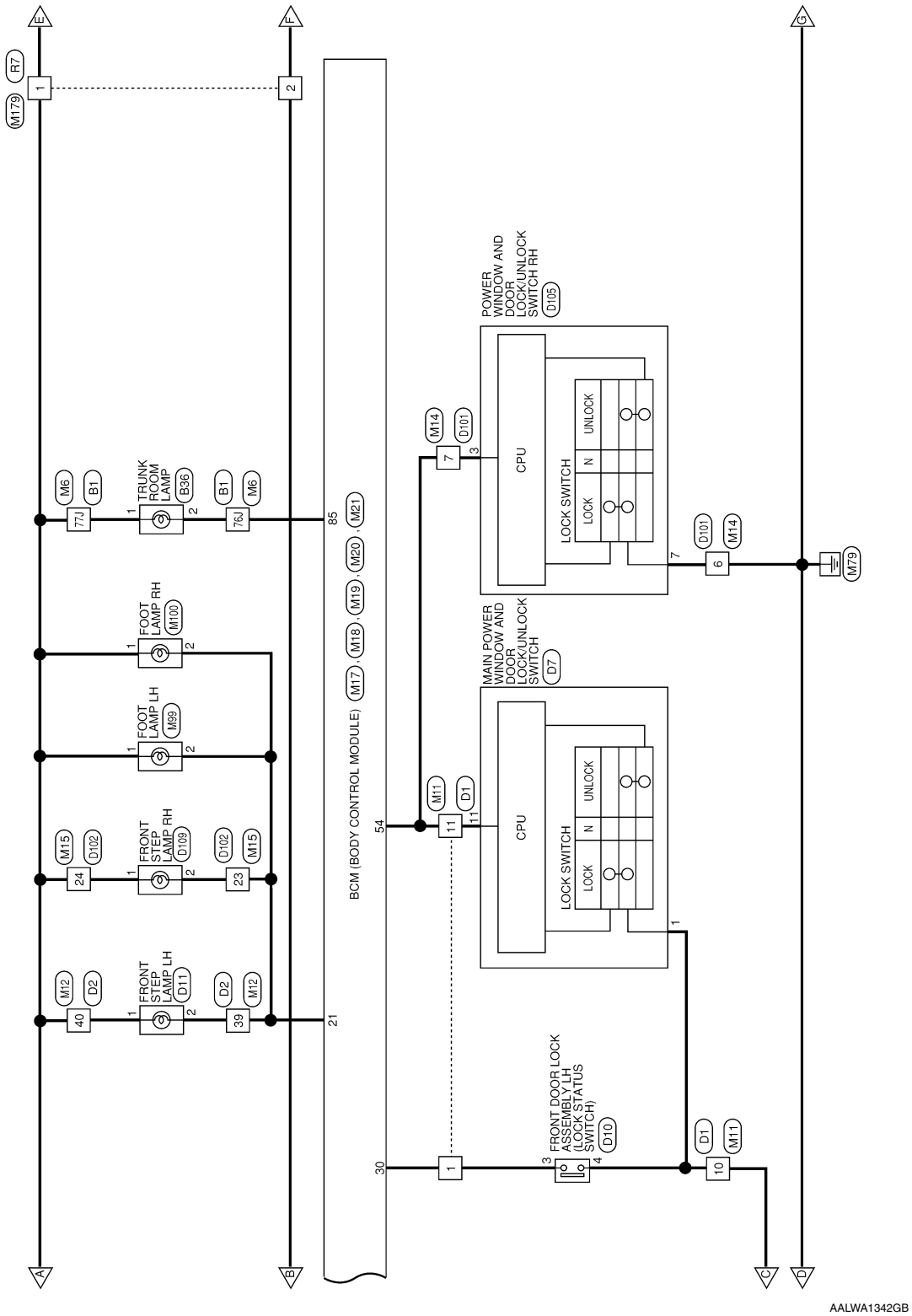
INTERIOR ROOM LAMP

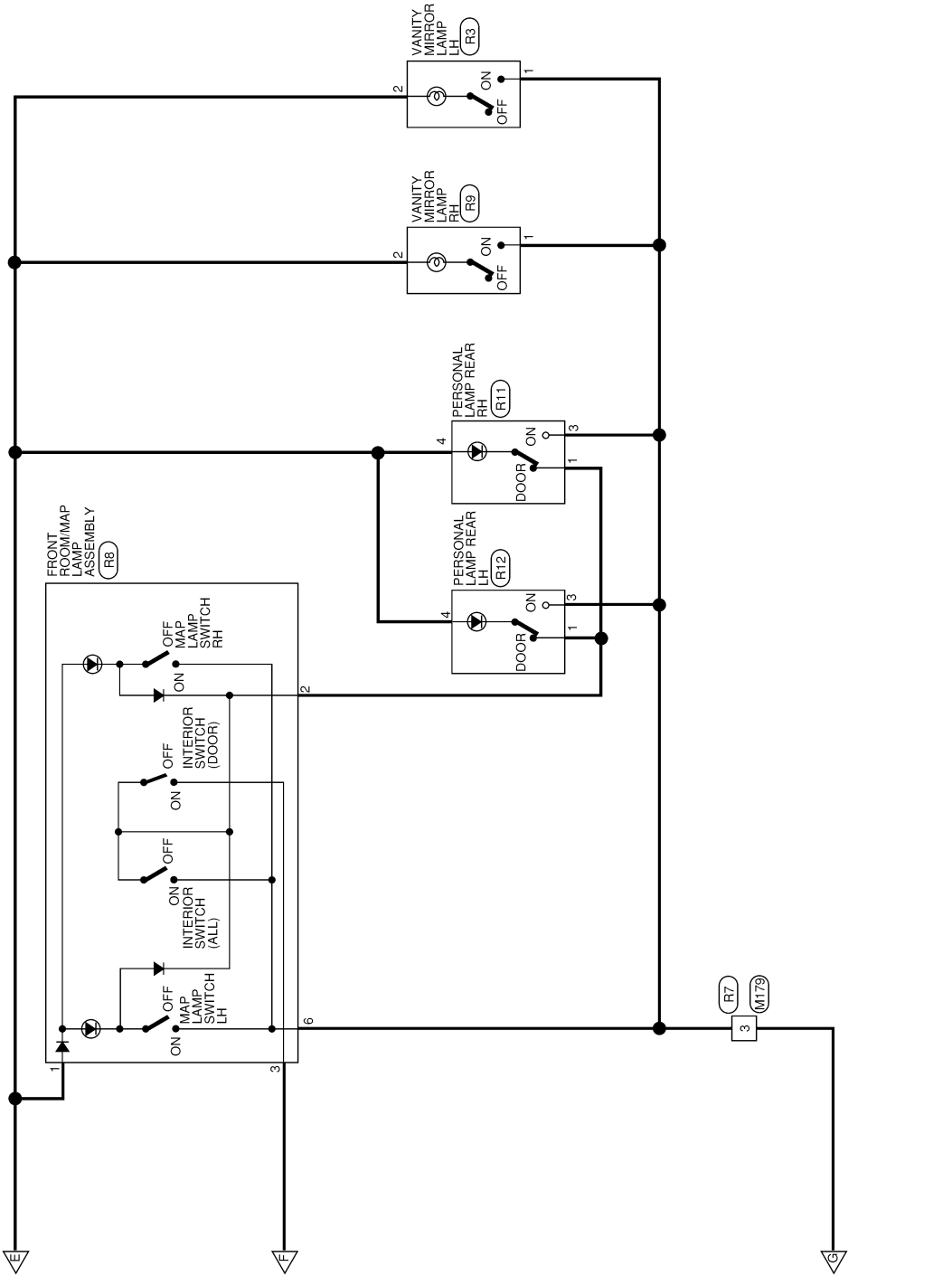
Wiring Diagram

INFOID:0000000012239905



AALWA1336GB


E
L
G
R7
M179
1
2
BCM (BODY CONTROL MODULE)
M17
M18
M19
M20
M21
85
54
21
30
TRUNK ROOM LAMP
B36
77J
76J
M6
B1
FOOT LAMP RH
M100
FOOT LAMP LH
M99
FRONT STEP LAMP RH
D109
24
23
M15
D102
FRONT STEP LAMP LH
D11
40
39
M12
D2
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
D105
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
D7
CPU
LOCK SWITCH
UNLOCK
N
LOCK
M14
D101
M11
D1
7
6
11
10
FRONT DOOR LOCK ASSEMBLY LH (LOCK STATUS SWITCH)
D10
3
4
M79
A
B
C
D
AALWA1342GB


VANITY MIRROR LAMP LH R3
VANITY MIRROR LAMP RH R9
PERSONAL LAMP REAR RH R11
PERSONAL LAMP REAR LH R12
FRONT ROOM/MAP LAMP ASSEMBLY R8
OFF MAP LAMP SWITCH RH
INTERIOR SWITCH (DOOR)
INTERIOR SWITCH (ALL)
OFF MAP LAMP SWITCH LH
ON
OFF
DOOR
R7
M179
E
F
G
AALWA1343GB

INTERIOR ROOM LAMP CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
5G	W	-

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

H.S.

Terminal No.	Color of Wire	Signal Name
1N	BG	-
6N	LG	-

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
7R	G	-
12R	W	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80FDGY-CS16-TM4
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
72J	Y	-
73J	P	-
75J	L	-
76J	BG	-
77J	G	-

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
15	V	-
16	W	-

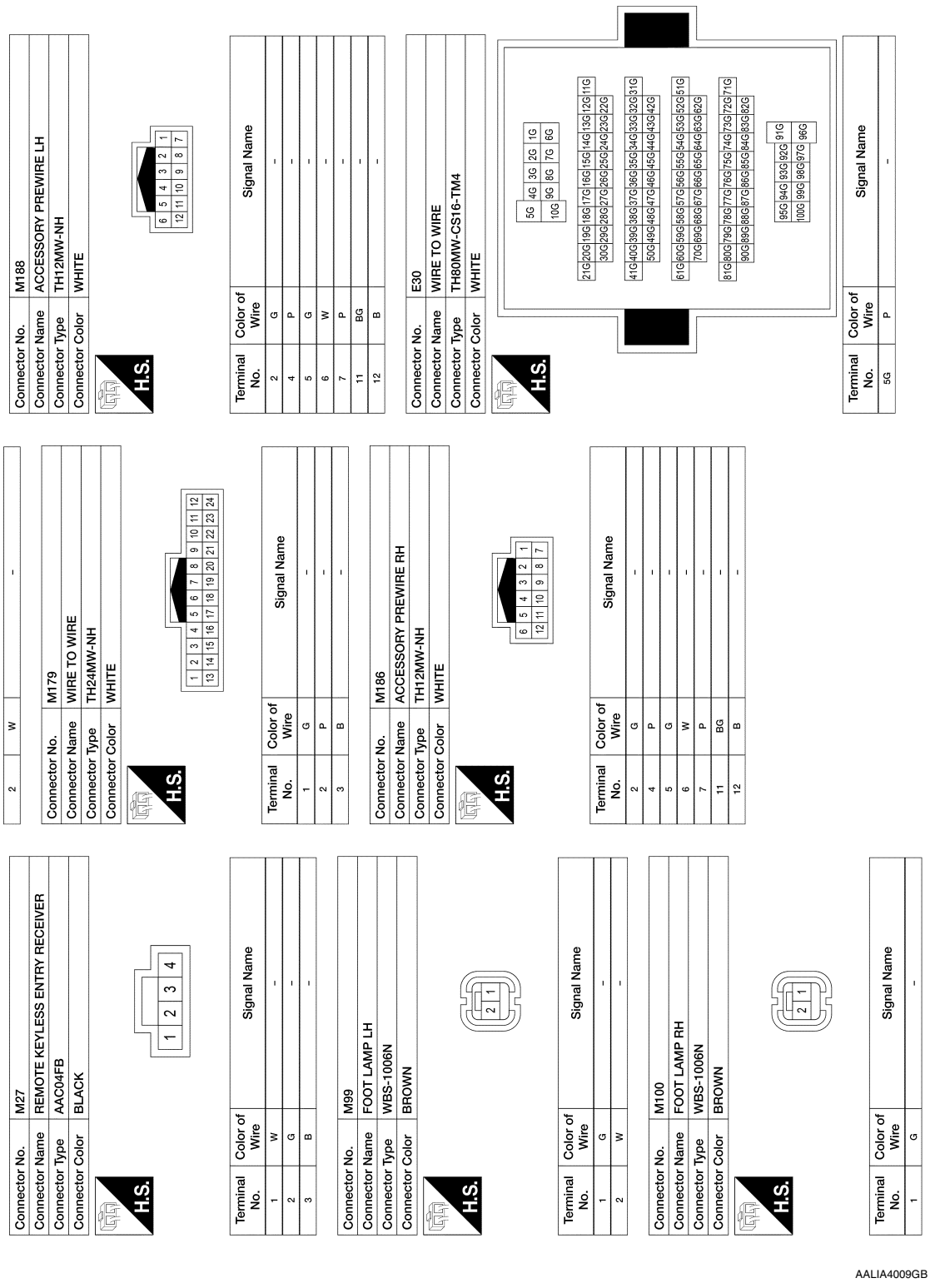
Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	P	-
10	B	-
11	P	-

AALIA3995GB

AALIA4008GB



Connector No.	M27
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	AAC04FB
Connector Color	BLACK

H.S.

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

Connector No.	M99
Connector Name	FOOT LAMP LH
Connector Type	WBS-1006N
Connector Color	BROWN

H.S.

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

Connector No.	M100
Connector Name	FOOT LAMP RH
Connector Type	WBS-1006N
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	–

2	W	–

Connector No.	M179
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH
Connector Color	WHITE

H.S.

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

Connector No.	M186
Connector Name	ACCESSORY PREWIRE RH
Connector Type	TH12MW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	G	–
4	P	–
5	G	–
6	W	–
7	P	–
11	BG	–
12	B	–

Connector No.	M188
Connector Name	ACCESSORY PREWIRE LH
Connector Type	TH12MW-NH
Connector Color	WHITE

H.S.

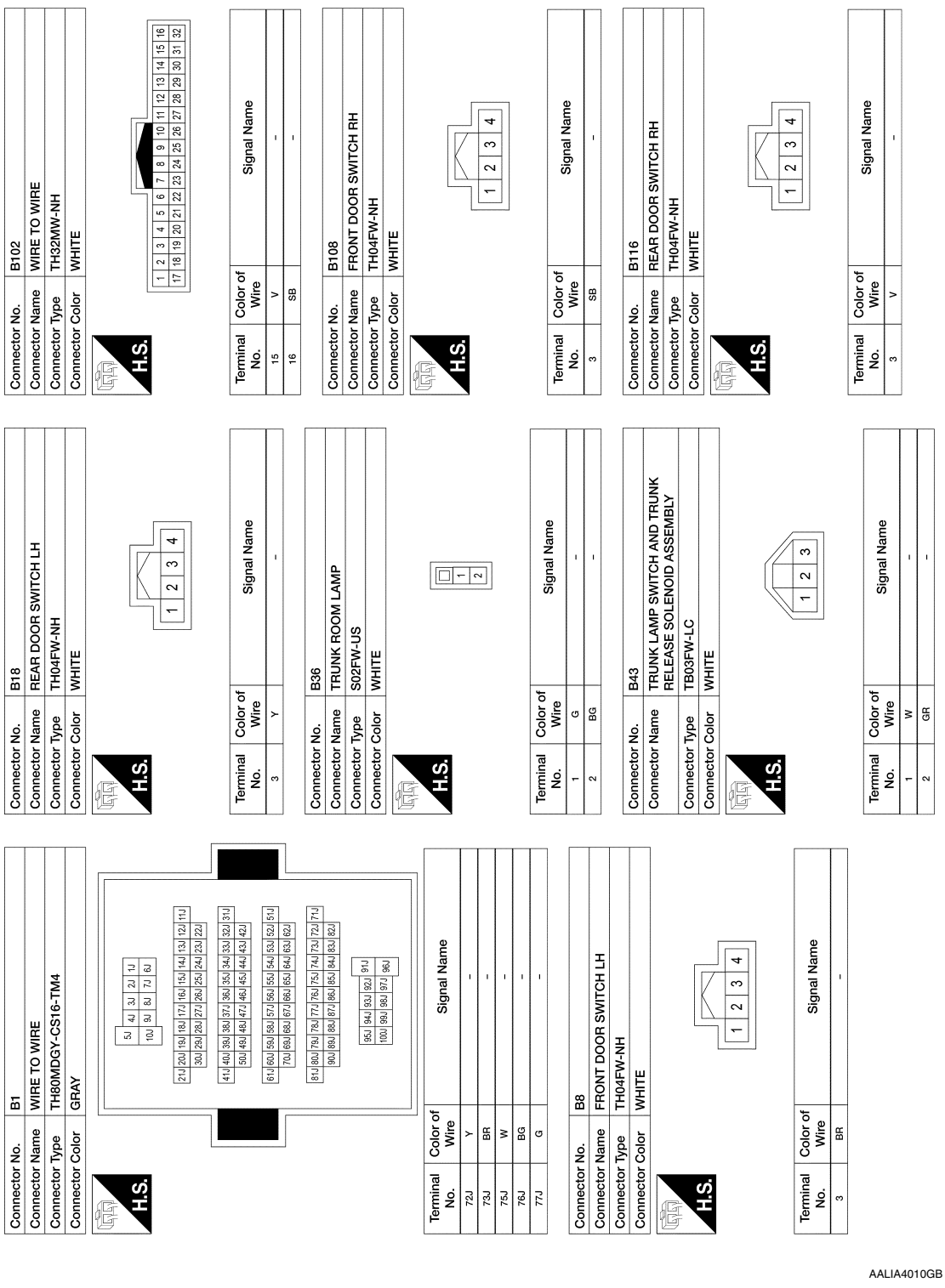
Terminal No.	Color of Wire	Signal Name
2	G	–
4	P	–
5	G	–
6	W	–
7	P	–
11	BG	–
12	B	–

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
5G	P	–

AALIA4009GB



AALIA4010GB

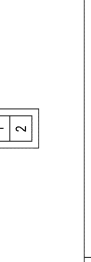
Connector No.	R3
Connector Name	VANITY MIRROR LAMP LH
Connector Type	MCA02FW
Connector Color	WHITE

H.S.

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

Connector No.	R7
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH
Connector Color	WHITE

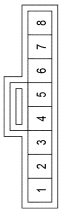
H.S.



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

Connector No.	R8
Connector Name	FRONT ROOM/MAP LAMP ASSEMBLY
Connector Type	TH08FW-1V-NH
Connector Color	WHITE

H.S.



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

3	R	–
6	B	–

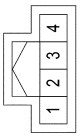
Connector No.	R9
Connector Name	VANITY MIRROR LAMP RH
Connector Type	MCA02FW
Connector Color	WHITE

H.S.

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

Connector No.	R11
Connector Name	PERSONAL LAMP REAR RH
Connector Type	TH04FW-NH
Connector Color	WHITE

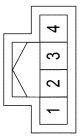
H.S.



Terminal No.	Color of Wire	Signal Name
1	W/L	–
3	B	–
4	R/W	–

Connector No.	R12
Connector Name	PERSONAL LAMP REAR LH
Connector Type	TH04FW-NH
Connector Color	WHITE

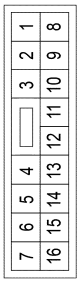
H.S.



Terminal No.	Color of Wire	Signal Name
1	W/L	–
3	B	–
4	R/W	–

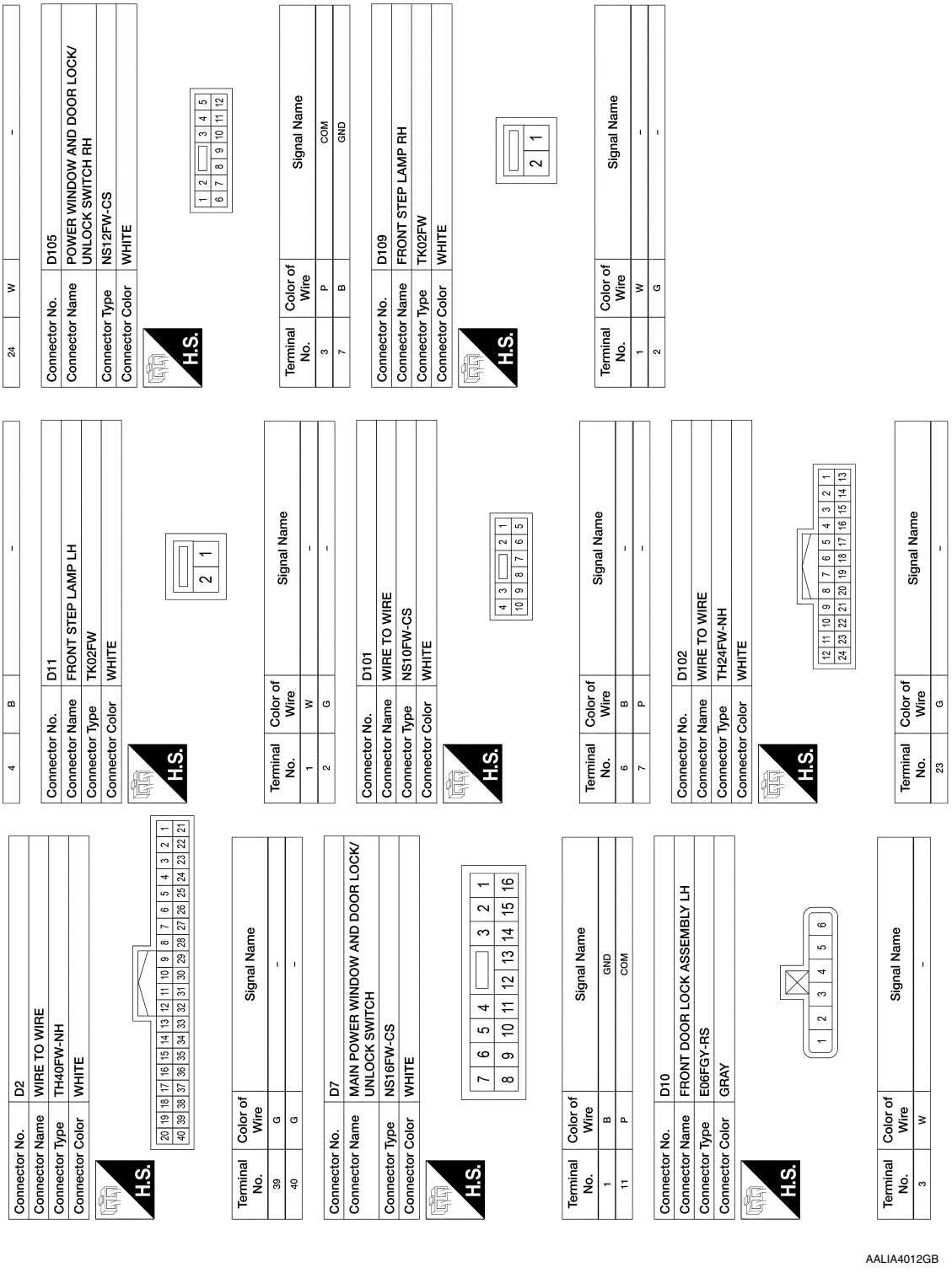
Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	W	–
10	B	–
11	P	–

AALIA4011GB

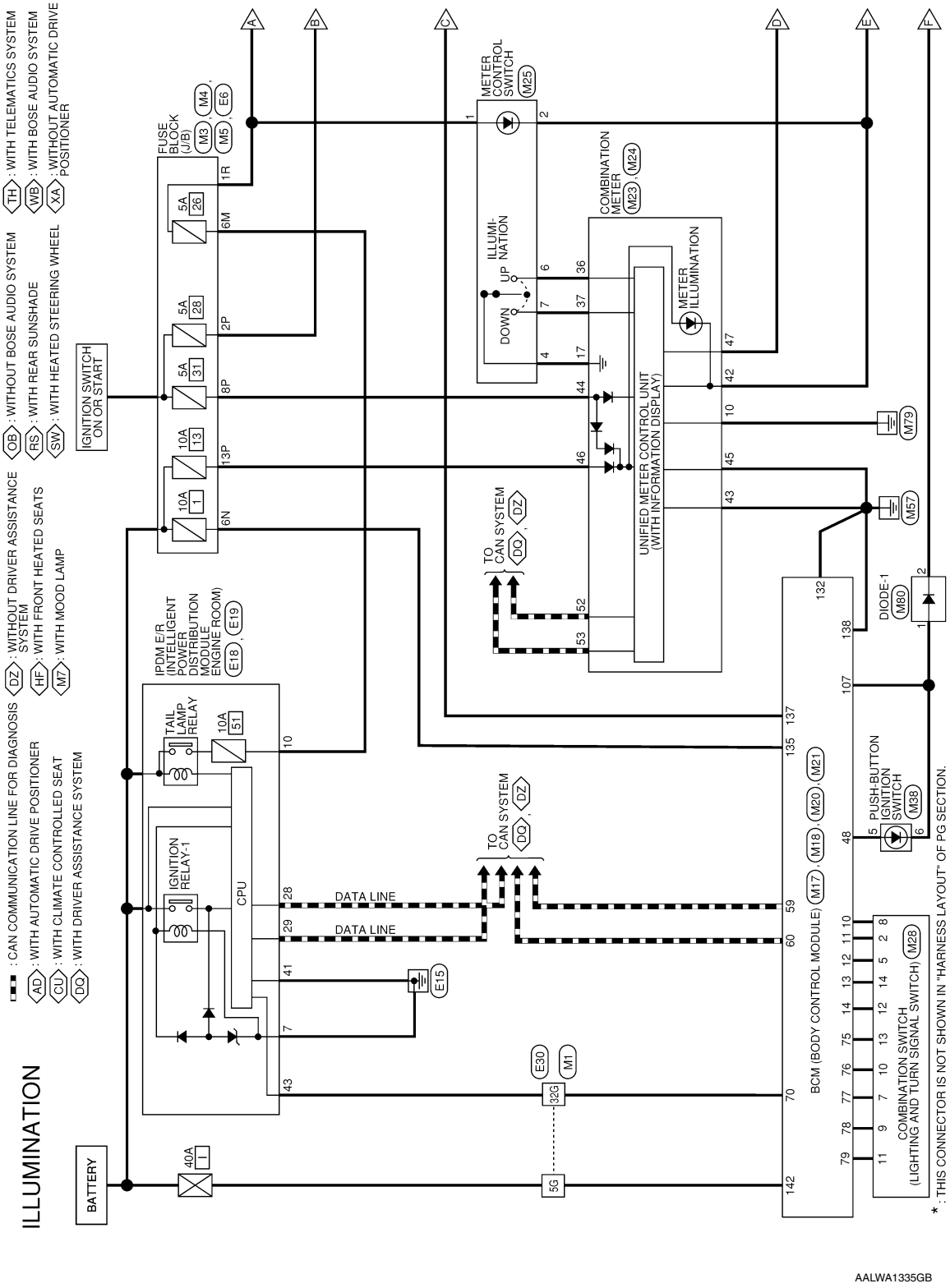


AALIA4012GB

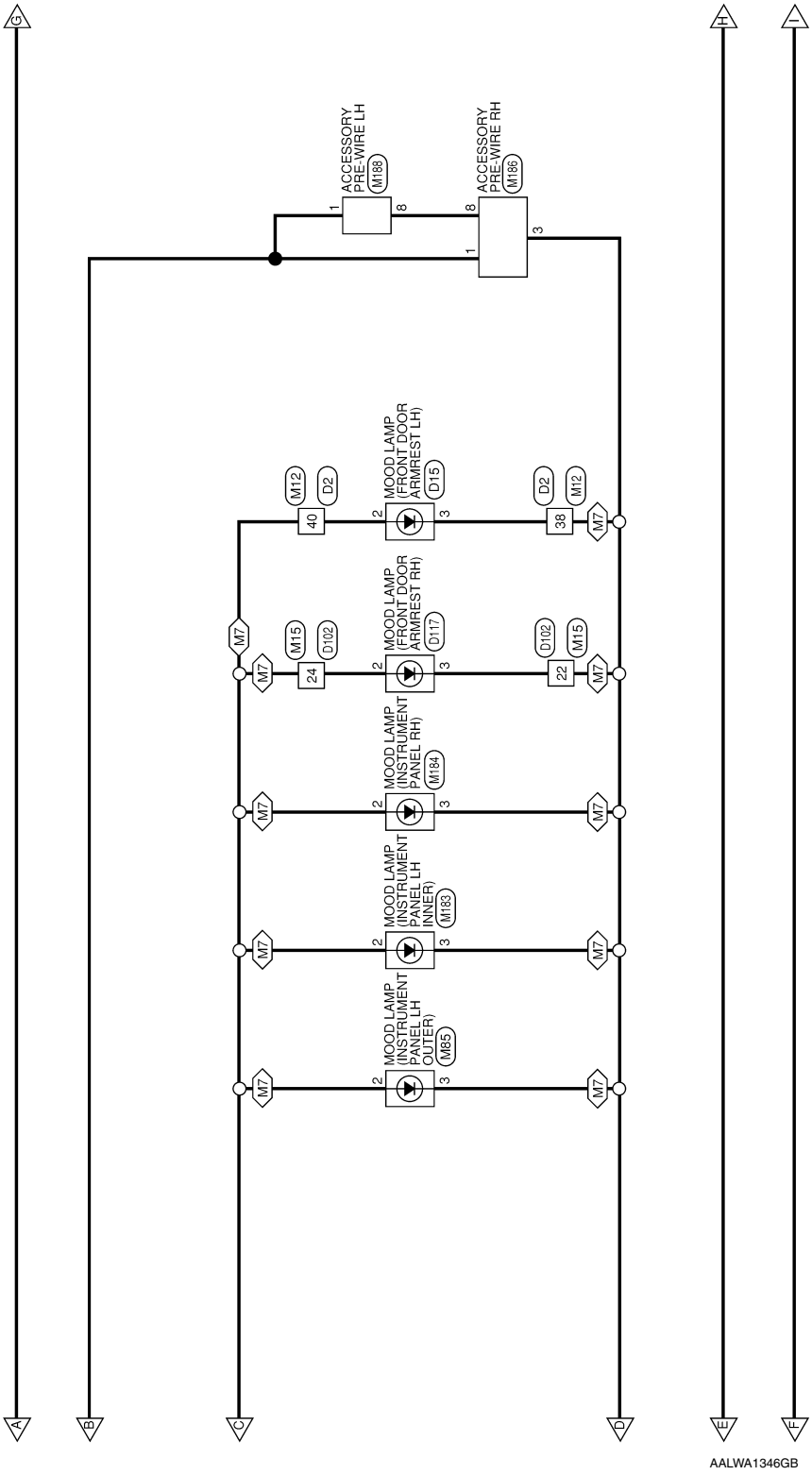
ILLUMINATION

Wiring Diagram

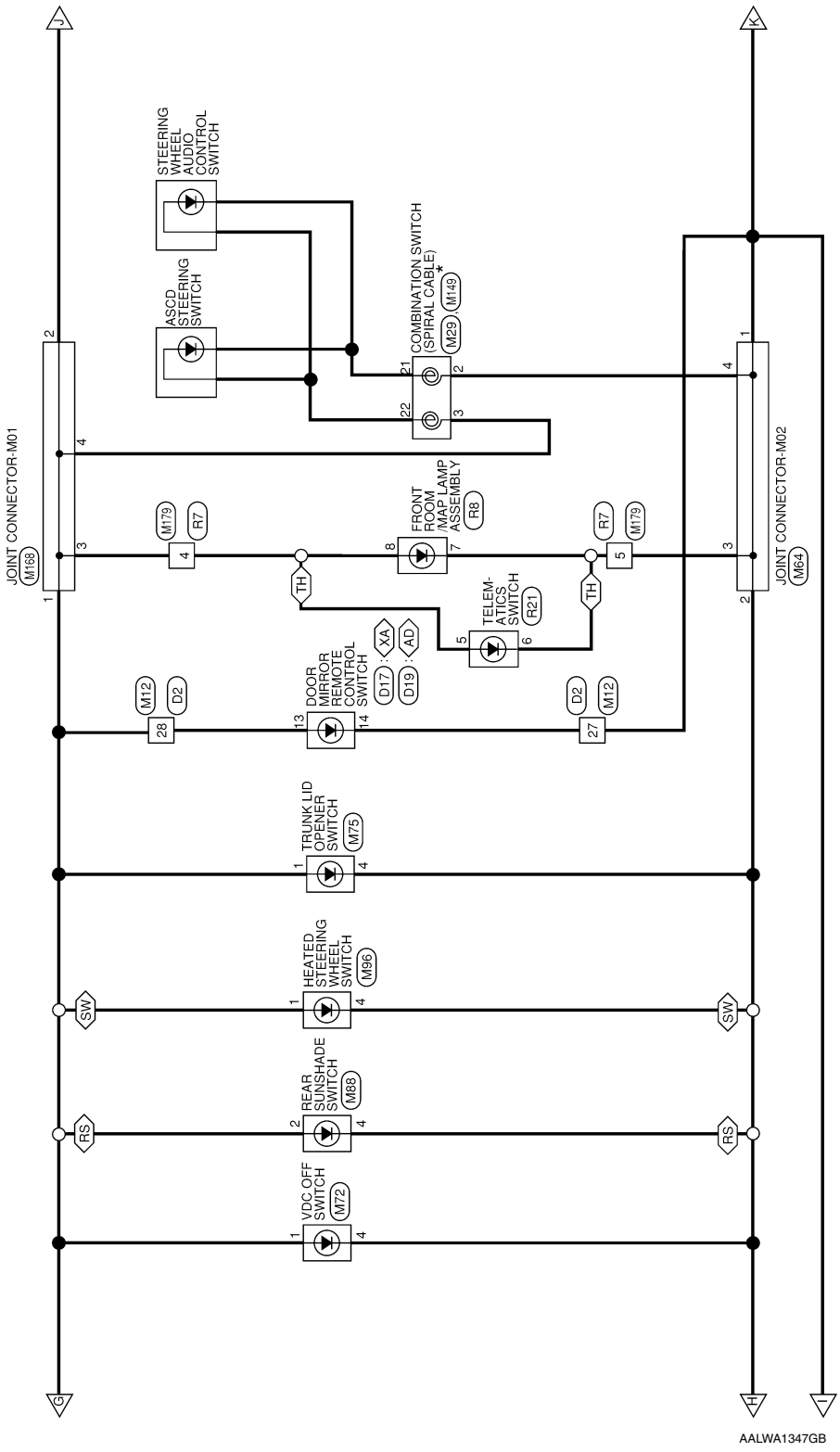
INFOID:0000000012239906

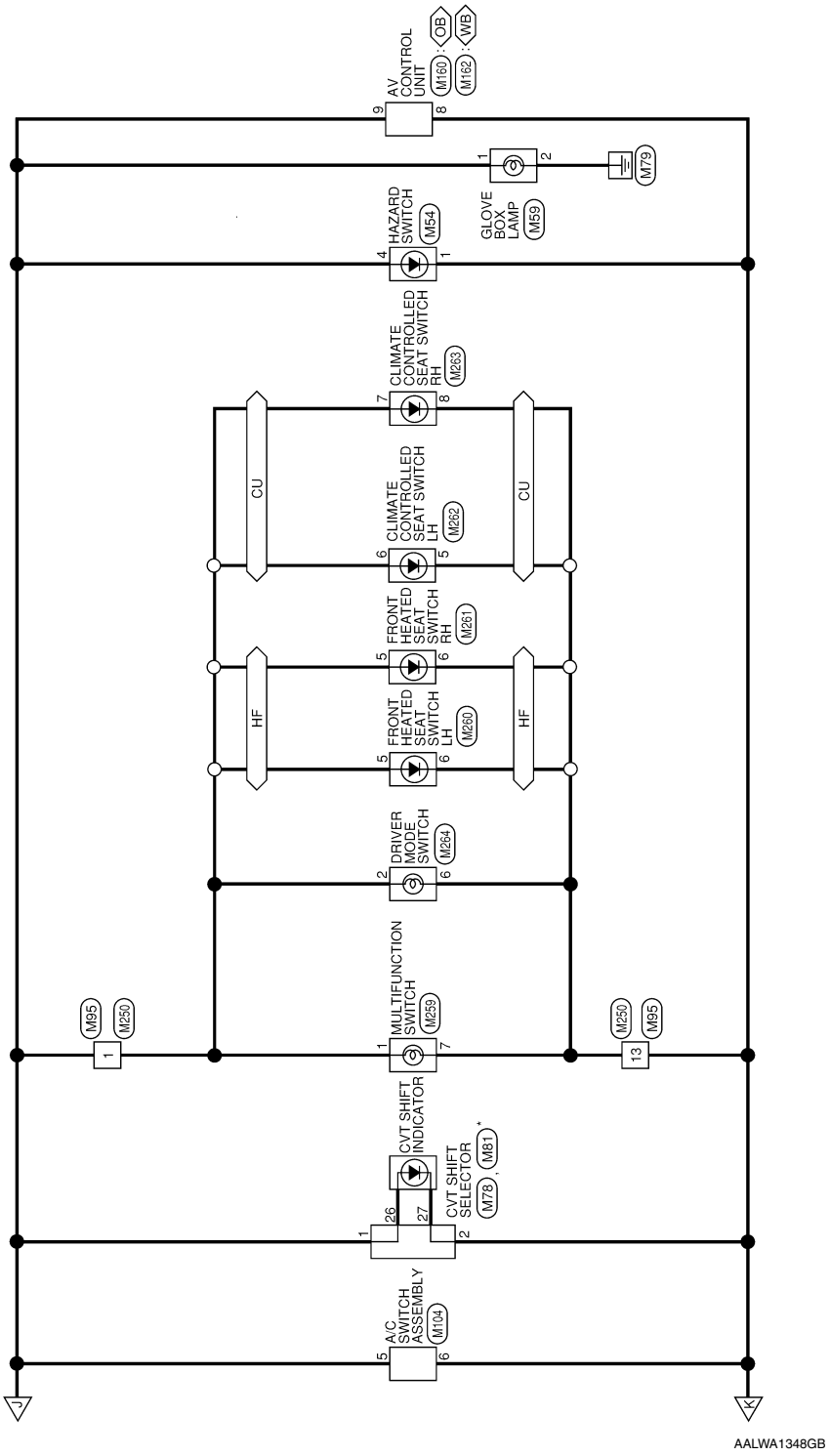


AALWA1335GB

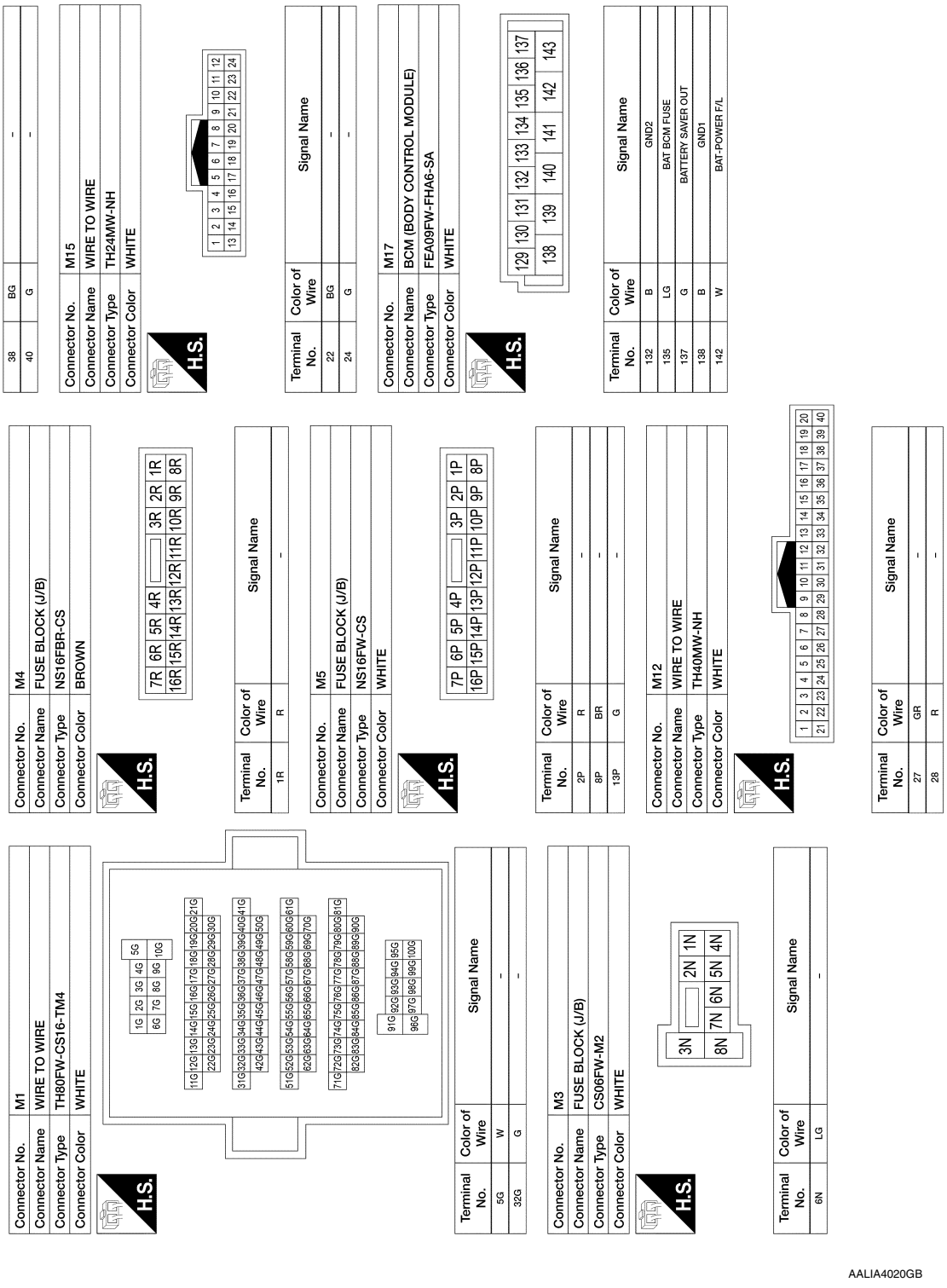


AALWA1346GB


STEERING WHEEL AUDIO CONTROL SWITCH
ASCD STEERING SWITCH
COMBINATION SWITCH (SPIRAL CABLE)
M149
M29
JOINT CONNECTOR-M01
M168
JOINT CONNECTOR-M02
M64
FRONT ROOM /MAP LAMP ASSEMBLY
R8
M179
R7
TELEM-ATICS SWITCH
R21
TH
XA
AD
D17
D19
DOOR MIRROR REMOTE CONTROL SWITCH
M12
D2
TRUNK LID OPENER SWITCH
M75
HEATED STEERING WHEEL SWITCH
M96
SW
REAR SUNSHADE SWITCH
M88
RS
VDC OFF SWITCH
M72
G
H
I
AALWA1347GB


AV CONTROL UNIT
M160
M162
OB
WB
M79
GLOVE BOX LAMP
M59
HAZARD SWITCH
M54
CLIMATE CONTROLLED SEAT SWITCH RH
M263
CLIMATE CONTROLLED SEAT SWITCH LH
M262
CU
FRONT HEATED SEAT SWITCH RH
M261
FRONT HEATED SEAT SWITCH LH
M260
HF
DRIVER MODE SWITCH
M264
MULTIFUNCTION SWITCH
M259
M95
M250
CVT SHIFT INDICATOR
CVT SHIFT SELECTOR
M81
M78
A/C SWITCH ASSEMBLY
M104
J
K
AALWA1348GB

ILLUMINATION CONNECTORS



AALIA4020GB

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FB-NH
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.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH
Connector Color	BLACK

H.S.

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

Terminal No.	Color of Wire	Signal Name
48	SB	HIGH SIDE START SW LED
59	P	CAN-L
60	L	CAN-H
70	G	IGN USM OUT 1
75	BG	COMBI SW OUT 5
76	W	COMBI SW OUT 4
77	R	COMBI SW OUT 3
78	P	COMBI SW OUT 2
79	G	COMBI SW OUT 1

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH
Connector Color	GREEN

H.S.

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

Terminal No.	Color of Wire	Signal Name
10	W	COMBI SW IN 5
11	BG	COMBI SW IN 4
12	R	COMBI SW IN 3
13	G	COMBI SW IN 2
14	P	COMBI SW IN 1

Connector No.	M23
Connector Name	COMBINATION METER
Connector Type	TH16FW-NH
Connector Color	WHITE

H.S.

41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56

Terminal No.	Color of Wire	Signal Name
42	GR	ILL CONT OUT
43	B	GND1
44	BR	POWER (IGN)
45	B	GND2
46	G	POWER (BAT)
47	BG	INDIRECT ILL CONT OUT
52	P	CAN-L
53	L	CAN-H

Connector No.	M24
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH
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
10	GR	INDIRECT ILLUMINATION SEMI-ACTIVE INPUT
17	G	GND (SATELLITE SW)
36	Y	ILL UP SW
37	SB	ILL DOWN SW

Connector No.	M25
Connector Name	METER CONTROL SWITCH
Connector Type	TH08FW-NH
Connector Color	WHITE

H.S.

1	2	3	4
5	6	7	8

Terminal No.	Color of Wire	Signal Name
1	R	–
2	B	–
4	G	–
6	Y	–
7	SB	–

AALIA4021GB

Connector No.	M28
Connector Name	COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)
Connector Type	TH16FW-NH
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	BG	–
5	R	–
7	R	–
8	W	–
9	P	–
10	W	–
11	G	–
12	P	–
13	BG	–
14	G	–

Connector No.	M29
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK06FY-EX-1V
Connector Color	YELLOW

H.S.

3	2	1
6	5	4

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

Connector No.	M38
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TH08FW-NH
Connector Color	WHITE

H.S.

4			3
5	6	7	8

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

Connector No.	M54
Connector Name	HAZARD SWITCH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

4	3	2	1

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

Connector No.	M59
Connector Name	GLOVE BOX LAMP
Connector Type	A02FW
Connector Color	WHITE

H.S.

1	2

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

Connector No.	M64
Connector Name	JOINT CONNECTOR-M02
Connector Type	TK04FW-J
Connector Color	WHITE

H.S.

4	3	2	1

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

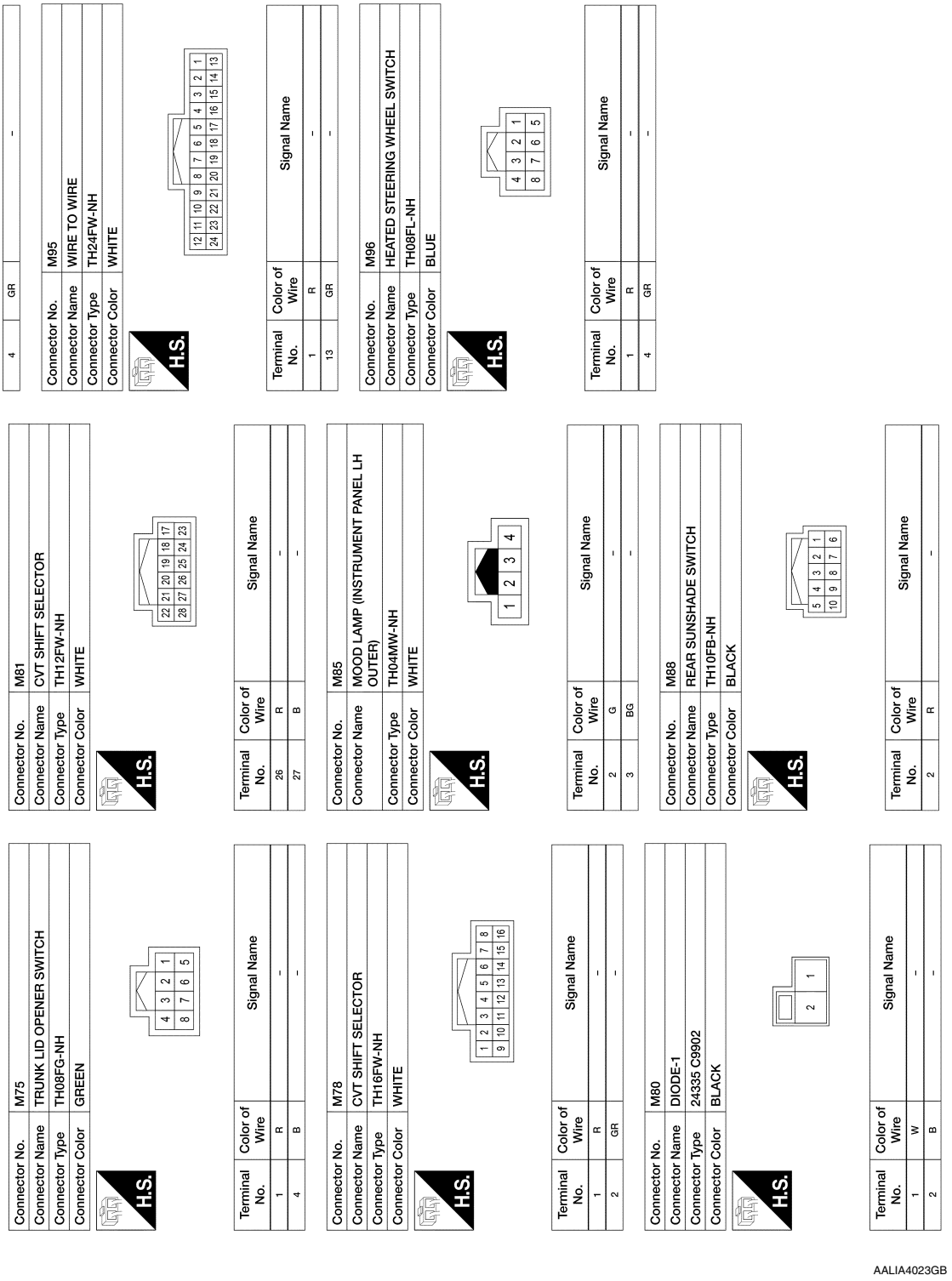
Connector No.	M72
Connector Name	VDC OFF SWITCH
Connector Type	TH08FB-NH
Connector Color	BLACK

H.S.

4	3	2	1
8	7	6	5

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

AALIA4022GB



AALIA4023GB

Connector No.	M104
Connector Name	A/C SWITCH ASSEMBLY
Connector Type	TH12FW-NH
Connector Color	WHITE

H.S.

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

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

Connector No.	M149
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-X
Connector Color	GRAY

H.S.

22	21	20	19	18	17	16	15

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

Connector No.	M160
Connector Name	AV CONTROL UNIT (WITHOUT BOSE AUDIO SYSTEM)
Connector Type	NH18FW-CS2
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	GR	ILL_CONT

9	R	ILL +

Connector No.	M162
Connector Name	AV CONTROL UNIT (WITH BOSE AUDIO SYSTEM)
Connector Type	NH18FW-CS2
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	GR	ILL_CONT
9	R	ILL +

Connector No.	M168
Connector Name	JOINT CONNECTOR-M01
Connector Type	TK04FW-J
Connector Color	WHITE

H.S.

4	3	2	1

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

Connector No.	M179
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH
Connector Color	WHITE

H.S.

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

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

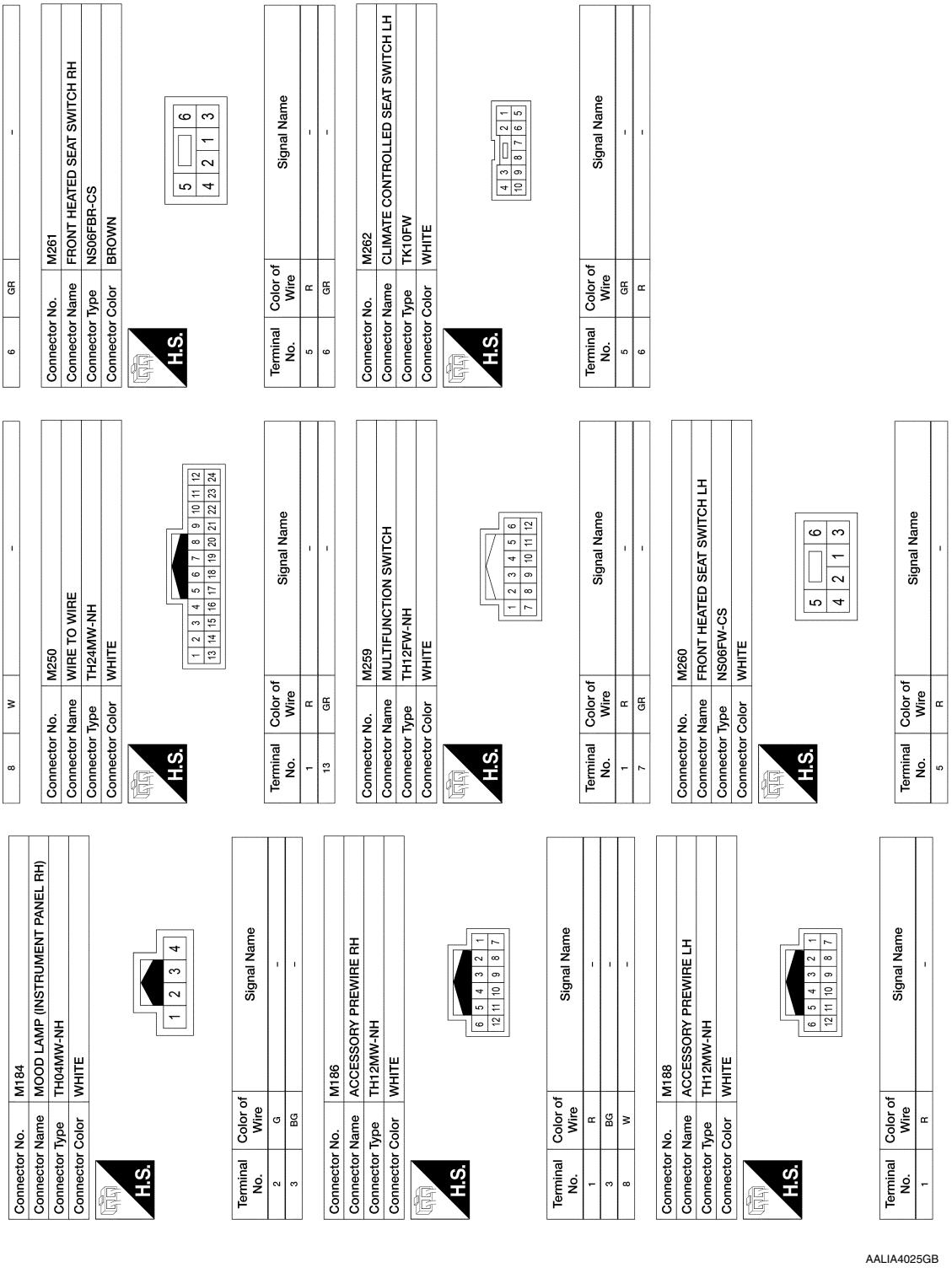
Connector No.	M183
Connector Name	MOOD LAMP (INSTRUMENT PANEL LH INNER)
Connector Type	TH04MW-NH
Connector Color	WHITE

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
2	G	–
3	BG	–

AALIA4024GB



AALIA4025GB

Connector No.	M263
Connector Name	CLIMATE CONTROLLED SEAT SWITCH RH
Connector Type	TK08FBR
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
7	R	-
8	GR	-

Connector No.	E18
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS12FW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
7	B	P-GND
10	V	TAIL LH

Connector No.	E19
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH32FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
28	P	CAN-L
29	L	CAN-H
41	B	S-GND
43	LG	IGN SIGNAL

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
5G	P	-
32G	LG	-

Connector No.	R7
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
4	P	-
5	GR	-

Connector No.	M264
Connector Name	DRIVE MODE SELECTOR
Connector Type	TH12FGY-NH
Connector Color	GRAY

H.S.

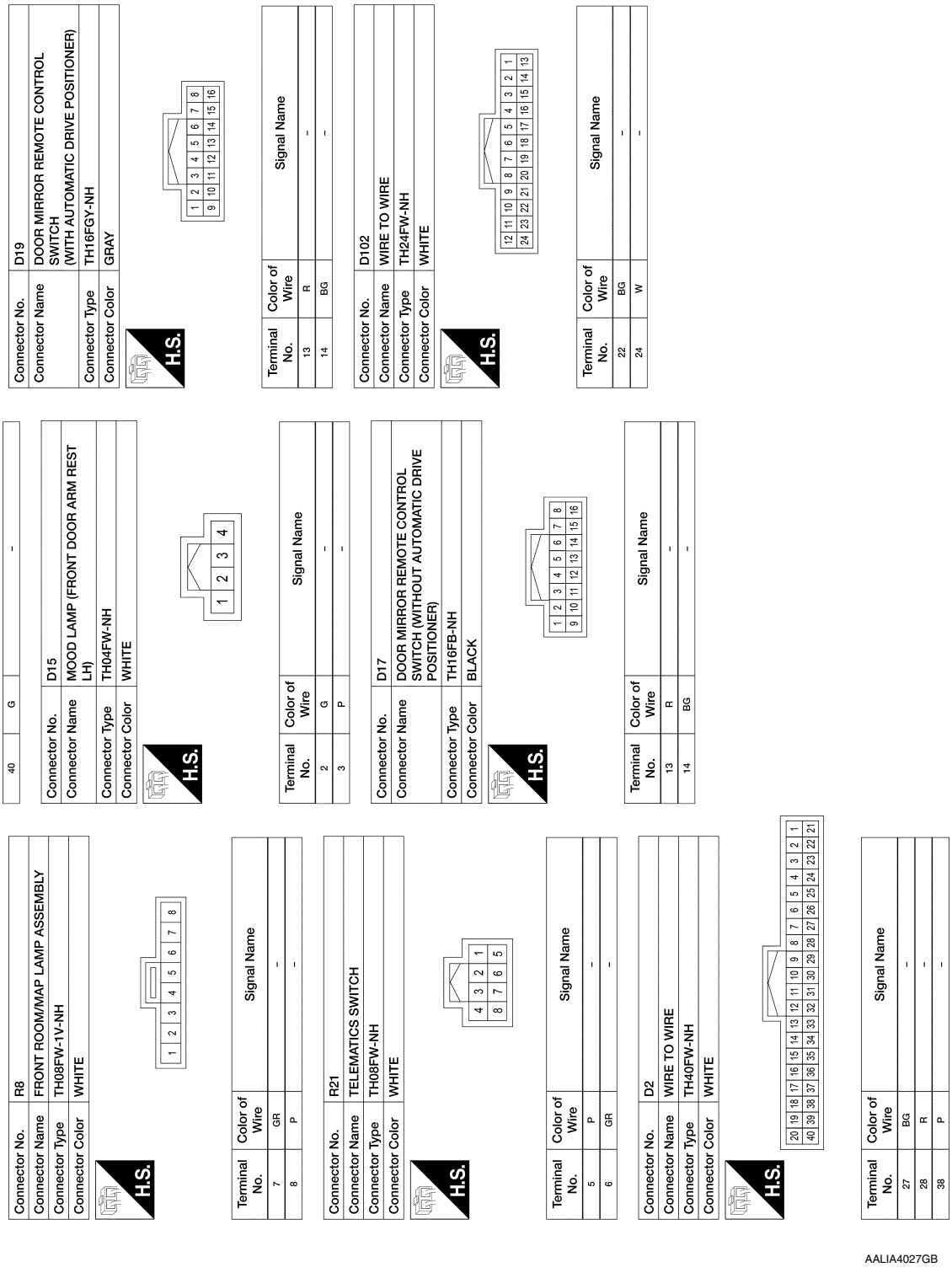
Terminal No.	Color of Wire	Signal Name
2	R	-
6	GR	-

Connector No.	E6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
6M	V	-

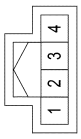
AALIA4026GB



AALIA4027GB

Connector No.	D117
Connector Name	MOOD LAMP (FRONT DOOR ARM REST RH)
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
2	W	-
3	BG	-

AALIA4028GB

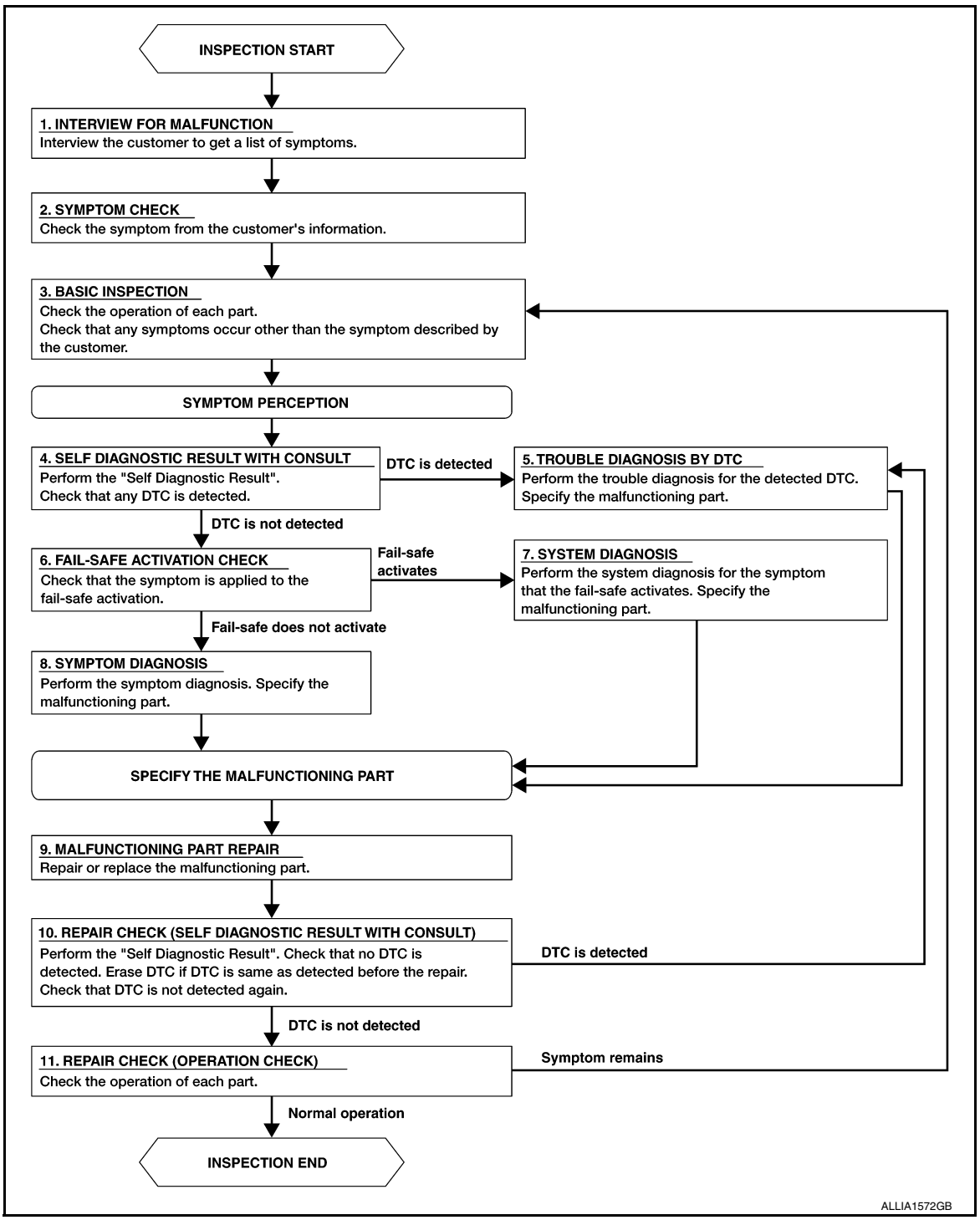
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000012250304

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 DIAGNOSTIC RESULT WITH CONSULT

Perform the “Self Diagnostic Result”. 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-49, "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-DIAGNOSTIC RESULT WITH CONSULT)

Perform the “Self Diagnostic Result”. 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

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

Component Function Check

INFOID:0000000012239908

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

CONSULT
1. Turn ignition switch ON.
2. Turn each interior room lamp ON:
- Personal lamps rear
- Front room/map lamp assembly
- Trunk room lamp
- Foot lamps
- Front step lamps
- Vanity mirror lamps
3. Select “BATTERY SAVER” in “Active Test” mode of “BCM”.
4. While operating the test items, check that each interior room lamp turns ON/OFF.

Off : Interior room lamp ON
On : Interior room lamp OFF

Does the interior room lamp turn ON/OFF?

YES >> Interior room lamp power supply circuit is normal.
NO >> Refer to INL-39, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012239909

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

CONSULT
1. Turn ignition switch OFF.
2. Disconnect the following connectors:
- Personal lamps rear
- Front room/map lamp assembly
- Trunk room lamp
- Foot lamps
- Front step lamps
- Vanity mirror lamps
3. Turn ignition switch ON.
4. Select “BATTERY SAVER” in “Active Test” mode of “BCM”.
5. While operating the test item, check voltage between BCM harness connector and ground.

BCM (+)		(–)	Test item		Voltage (Approx.)
Connector	Terminal				
M17	137	Ground	BATTERY SAVER	Off	Battery voltage
				On	0 V

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace BCM. Refer to BCS-82, "Removal and Installation".

2.CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the BCM connector.
3. Check continuity between BCM harness connector and each interior room lamp harness connector.

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M17	137	Front room/map lamp assembly	R8	1	Yes
		Trunk room lamp	B36		
		Foot lamp LH	M99		
		Foot lamp RH	M100		
		Front step lamp LH	D11		
		Front step lamp RH	D109		
		Vanity mirror lamp LH	R3	2	
		Vanity mirror lamp RH	R9		
		Personal lamp rear LH	R12	4	
		Personal lamp rear RH	R11		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".
NO >> Repair or replace harnesses.

INTERIOR ROOM LAMP CONTROL CIRCUIT

Component Function Check

INFOID:0000000012239910

CAUTION:

Before performing the diagnosis, check that the following are normal:

- **Battery saver output/power supply**
- **Front room/map lamp assembly bulbs**
- **Personal lamps rear bulbs**
- **Vanity mirror lamp LH/RH bulbs**

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT

1. Set the front room/map lamp assembly switch, personal lamps rear switch and vanity mirror lamps switch to DOOR:
2. Turn ignition switch ON.
3. Select “INT LAMP” in “Active Test” mode of “BCM”.
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-41, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012239911

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” in “Active Test” mode of “BCM”.
3. While operating the test item, check voltage between BCM harness connector and ground.

BCM		Ground	Test item		Voltage (Approx.)
Connector	Terminal				
M17	130		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 and front room/map lamp assembly harness connector.
3. Check continuity between BCM harness connector and front room/map lamp assembly harness connector.

BCM		Front room/map lamp assembly		Continuity
Connector	Terminal	Connector	Terminal	
M17	130	R8	3	Yes

4. Disconnect the personal lamps 2nd row harness connector.

5. Check continuity between front room/map lamp assembly connector and personal lamps rear harness connector.

Front room/map lamp assembly		Personal lamps rear		Continuity
Connector	Terminal	Connector	Terminal	
R8	2	R12 (LH)	1	Yes
		R11 (RH)		

Is the inspection result normal?

YES >> Check interior room lamps for an open. If open is found, replace lamp in question. Refer to INL-50, "Removal and Installation" for front room/map lamp assembly or INL-50, "Removal and Installation" for personal lamps rear. If OK, replace BCM. Refer to BCS-82, "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 and front room/map lamp harness connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M17	130		No

Is the inspection result normal?

YES >> Check interior room lamps for a short circuit. If short is found, replace lamp in question. Refer to INL-50, "Removal and Installation" or INL-50, "Removal and Installation". If OK, replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness or connectors.

TRUNK ROOM LAMP

Component Function Check

INFOID:0000000012239912

NOTE:
Before performing the diagnosis, check that the following is normal.
- Interior room lamp power supply
- Trunk room lamp bulb

1.CHECK TRUNK ROOM LAMP OPERATION

CONSULT
1. Turn ignition switch ON.
2. Select “TRUNK/LUGGAGE LAMP TEST” in “Active Test” mode of “BCM”.
3. While operating the test items, check that trunk room lamp turns ON/OFF.

On : Trunk room lamp ON
Off : Trunk room lamp OFF

Does the trunk room lamp turn ON/OFF?

YES >> Trunk room lamp circuit is normal.
NO >> Refer to INL-43, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012239913

1.CHECK TRUNK ROOM LAMP OUTPUT

1. Turn ignition switch OFF.
2. Disconnect trunk room lamp connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Condition		Continuity
Connector	Terminal				
M19	85		Trunk	Open	Yes
				Closed	No

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Continuity exists and remains unchanged: GO TO 3.
NO-2 >> Continuity does not exist and remains unchanged: Replace BCM. Refer to BCS-82, "Removal and Installation".

2.CHECK TRUNK ROOM LAMP OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and trunk room lamp harness connector.

BCM		Trunk room lamp		Continuity
Connector	Terminal	Connector	Terminal	
M19	85	B36	2	Yes

Is the inspection result normal?

YES >> Replace trunk room lamp. Refer to INL-56, "Removal and Installation".
NO >> Repair or replace harnesses.

3.CHECK TRUNK ROOM LAMP SHORT CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	85		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".
NO >> Repair or replace harnesses.

STEP LAMP CIRCUIT

Component Function Check

INFOID:0000000012244608

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

1.CHECK STEP LAMP OPERATION

CONSULT
1. Turn ignition switch ON.
2. Select “STEP LAMP TEST” in “Active Test” mode of ”BCM”.
3. While operating the test items, check that front step lamp and foot lamp turns ON/OFF.

On : Front step lamp and foot lamp ON
Off : Front step lamp and foot lamp OFF

Is the inspection result normal?

YES >> Step lamp circuit is normal.
NO >> Refer to INL-45, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012244609

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”“BCM”.
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 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 open is found, replace lamp in question. Refer to INL-54, "Removal and Installation" or INL-60, "Bulb Specifications" or INL-59, "Removal and Installation". If OK, replace BCM. Refer to BCS-82, "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 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M18	21		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness or connectors.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description

INFOID:0000000012239914

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

Component Function Check

INFOID:0000000012239915

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT
1. Turn the ignition switch ON.
2. Select “ENGINE SW ILLUMI” in “Active Test” mode of “BCM”.
3. While 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-47, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012239916

Regarding Wiring Diagram information, refer to INL-23, "Wiring Diagram".

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT
1. Turn the ignition switch ON.
2. Select “ENGINE SW ILLUMI” in “Active Test” mode of “BCM”.
3. While operating the test item, check voltage between push-button ignition switch connector terminal.

(+)		(-)	Test item	Voltage (Approx.)
Push-button ignition switch		Ground	ENGINE SW ILLUMI	
Connector	Terminal			
M38	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 and the push-button ignition switch harness connector.
3. Check continuity between BCM harness connector and the push-button ignition switch harness connector.

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M20	48	M38	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 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	48		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "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.
3. Check continuity between push-button ignition switch harness connector and ground.

Push-button ignition switch		Ground	Continuity
Connector	Terminal		
M38	6		Yes

Is the inspection result normal?

YES >> Replace push-button ignition switch. Refer to PCS-36, "Removal and Installation".
NO >> GO TO 5.

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

1. Disconnect BCM harness connector and push-button ignition switch harness connector.
2. Check continuity between BCM harness connector and push-button ignition switch harness connector.

Push-button ignition switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M38	6	M18	107	Yes

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".
NO >> Repair or replace harness or connectors.

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000012239917

NOTE:
Perform the “Self Diagnostic Result” with CONSULT before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

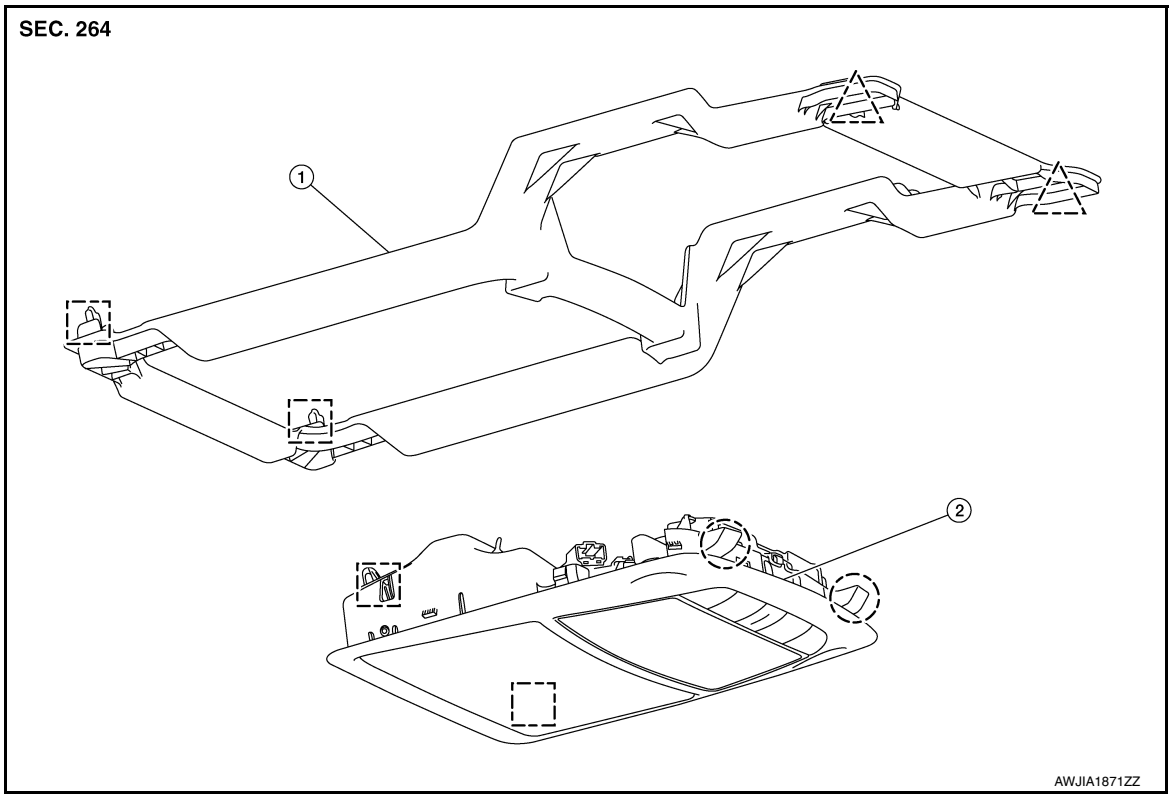
Symptom	Possible cause	Inspection item
All the following lamps do not turn ON: • Front room/map lamp assembly • Personal lamps rear • Trunk room lamp • Foot lamps • Front step lamps • Vanity mirror lamp LH/RH	• Harness between BCM and each interior room lamp • BCM	Battery saver output/power supply circuit Refer to INL-39, "Component Function Check".
• 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-98, "Component Function Check".
		Interior room lamp control circuit Refer to INL-41.
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-7, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description".
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-47.
Interior room lamp battery saver does not activate.	BCM	Replace BCM. Refer to BCS-82, "Removal and Installation".

REMOVAL AND INSTALLATION

FRONT ROOM/MAP LAMP ASSEMBLY

Exploded View

INFOID:0000000012239918



1. Front room/map lamp assembly bracket
2. Front room/map lamp assembly
- Pawl
- Clip
- Metal clip
- Front

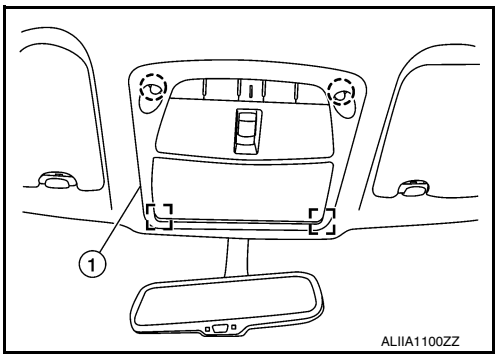
Removal and Installation

INFOID:0000000012239919

REMOVAL

1. Lower front edge of front room/map lamp assembly (1) down from headlining by releasing metals clips, then slide forward to clear pawls at rear.

: Pawl
: Metal clip



2. Disconnect the harness connectors from the front room/map lamp assembly and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Visually check metal clips and pawls for deformation and damage during installation. Replace if necessary.

Bulb Replacement

INFOID:0000000012239920

The front room/map lamp assembly bulb is an LED and is serviced as part of the map lamp assembly. Refer to INL-50, "Removal and Installation".

VANITY MIRROR LAMP

Removal and Installation

INFOID:0000000012239921

The vanity mirror lamp is serviced as part of the sun visor. Refer to INT-47, "Exploded View".

GLOVE BOX LAMP

Removal and Installation

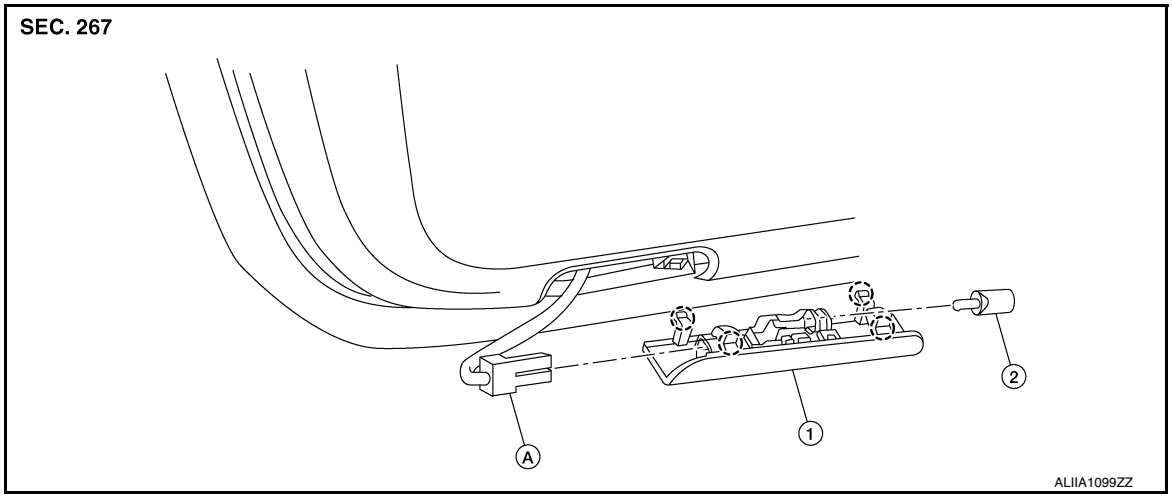
INFOID:0000000012273844

The glove box lamp is serviced as part of the glove box assembly. Refer to IP-24, "Removal and Installation".

FRONT STEP LAMP

Exploded View

INFOID:0000000012269751



1. Front step lamp
2. Bulb
A. Front step lamp harness connector

Pawl

Removal and Installation

INFOID:0000000012269752

REMOVAL

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

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000012269753

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 front step lamp. Refer to INL-54, "Removal and Installation".
2. Grasp the bulb and pull straight out from the front step lamp to remove.
3. Install the front step lamp bulb to front step lamp.
4. Install the front step lamp. Refer to INL-54, "Removal and Installation"

PERSONAL LAMP

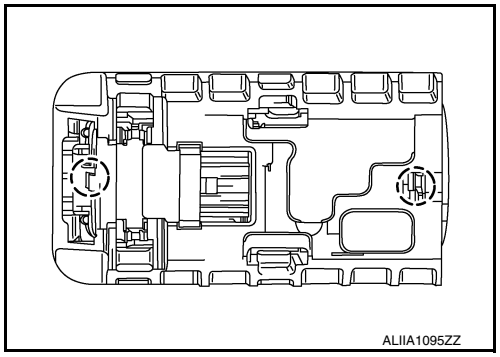
Removal and Installation

INFOID:0000000012271809

REMOVAL

1. Remove the headlining. Refer to INT-48, "Removal and Installation".
2. Release pawls using a suitable tool and remove personal lamp.

: Pawl



INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000012271810

The personal lamp bulb is an LED and is serviced with the personal lamp. Refer to INL-55, "Removal and Installation".

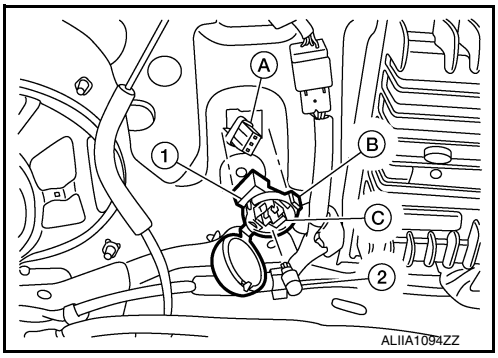
TRUNK ROOM LAMP

Removal and Installation

INFOID:0000000012495284

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

1. Release the pawl (B) to open the lens.
2. Remove the trunk room lamp bulb (2).
3. Release pawl (C), then pull trunk room lamp (1) down to remove.
4. Disconnect the harness connector (A) from the trunk room lamp and remove.



INSTALLATION

Installation is in the reverse order of removal.

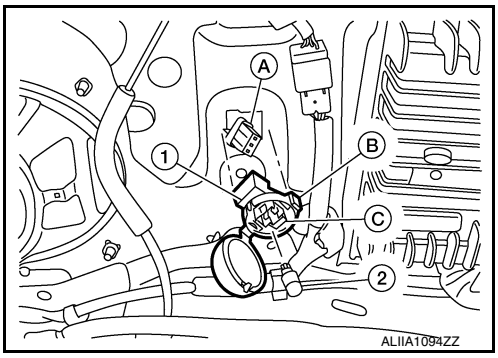
Bulb Replacement

INFOID:0000000012495285

WARNING:
Do not touch bulb while it is lit or right after being turned OFF. Burning may result.
CAUTION:

- **Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect performance of lamp.**
- **Release and insert pawl as indicated or damage may occur.**

1. Release the pawl (B) to open the lens.



A. Harness connector
C. Pawl

2. Remove trunk room lamp bulb (2).
3. Install bulb to trunk room lamp (1).
4. Close lens.

MOOD LAMP

Removal and Installation

INFOID:0000000012269758

INSTRUMENT PANEL LH OUTER

The mood lamp (instrument panel LH outer) is serviced as part of instrument finisher A. Refer to IP-16, "INSTRUMENT FINISHER A : Removal and Installation".

INSTRUMENT PANEL LH INNER

The mood lamp (instrument panel LH inner) is serviced as part of instrument finisher C. Refer to IP-17, "INSTRUMENT FINISHER C : Removal and Installation".

INSTRUMENT PANEL RH

The mood lamp (instrument panel RH) is serviced as part of instrument finisher B. Refer to IP-16, "INSTRUMENT FINISHER B : Removal and Installation".

FRONT DOOR ARMREST LH/RH

The mood lamp (front door armrest LH/RH) is serviced as part of the front door finisher. Refer to INT-27, "Removal and Installation".

Bulb Replacement

INFOID:0000000012269759

The mood lamp bulbs are LED and not serviced separately.

METER CONTROL SWITCH

Removal and Installation

INFOID:0000000012239930

The meter control switch is serviced as part of instrument finisher A. Refer to IP-16, "INSTRUMENT FINISHER A : Removal and Installation".

FOOT LAMP

Removal and Installation

INFOID:0000000012290588

FOOT LAMP LH

The foot lamp LH is serviced as part of the instrument lower panel LH. Refer to IP-23, "Removal and Installation".

FOOT LAMP RH

The foot lamp RH is serviced as part of the glove box assembly. Refer to IP-24, "Removal and Installation".

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000012239931

Item	Wattage (W)*
Front room/map lamp assembly	–
Vanity mirror lamp	1.8
Glove box lamp	1.4
Front step lamp	3.8
Personal lamp	–
Trunk room lamp	3.4
Mood lamp (instrument panel LH outer)	–
Mood lamp (instrument panel LH inner)	–
Mood lamp (instrument panel RH)	–
Mood lamp (front door armrest LH/RH)	–
Foot lamp LH/RH	3.4

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