SECTION INL
INTERIOR LIGHTING SYSTEM

CONTENTS

PRECAUTION

PRECAUTIONS

Precaution for Technicians Using Medical Electric

INFOID:0000000010122255

OPERATION PROHIBITION

WARNING:

- **Parts with strong magnet is used in this vehicle.**
- **Technicians using a medical electric device such as pacemaker must never perform operation on the vehicle, as magnetic field can affect the device function by approaching to such parts.**

NORMAL CHARGE PRECAUTION

WARNING:

- **If a technician uses a medical electric device such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator, the possible effects on the devices must be checked with the device manufacturer before starting the charge operation.**
- **As radiated electromagnetic wave generated by on board charger at normal charge operation may effect medical electric devices, a technician using a medical electric device such as implantable cardiac pacemaker or an implantable cardioverter defibrillator must not enter the vehicle compartment (including luggage room) during normal charge operation.**

PRECAUTION AT TELEMATICS SYSTEM OPERATION

WARNING:

- **If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.**
- **The electromagnetic wave of TCU might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), when using the service, etc.**
- **If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of TCU might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before TCU use.**

PRECAUTION AT INTELLIGENT KEY SYSTEM OPERATION

WARNING:

- **If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.**
- **The electromagnetic wave of intelligent key might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), at door operation, at each request switch operation, or at engine starting.**
- **If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of intelligent key might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before intelligent key use.**

Point to Be Checked Before Starting Maintenance Work

INFOID:0000000010122256

The high voltage system may starts automatically. It is required to check that the timer air conditioner and timer charge (during EVSE connection) are not set before starting maintenance work.
NOTE:
If the timer air conditioner or timer charge (during EVSE connection) is set, the high voltage system starts automatically even when the power switch is in OFF state.

Precaution for Removing 12V Battery

INFOID:0000000010122257

1. Check that EVSE is not connected.
   NOTE:
   If EVSE is connected, the air conditioning system may be automatically activated by the timer A/C function.

2. Turn the power switch OFF → ON → OFF. Get out of the vehicle. Close all doors (including back door).
3. Check that the charge status indicator lamp does not blink and wait for 5 minutes or more.
   NOTE:
   If the battery is removed within 5 minutes after the power switch is turned OFF, plural DTCs may be detected.
4. Remove 12V battery within 1 hour after turning the power switch OFF → ON → OFF.
   NOTE:
   - The 12V battery automatic charge control may start automatically even when the power switch is in OFF state.
   - Once the power switch is turned ON → OFF, the 12V battery automatic charge control does not start for approximately 1 hour.

   CAUTION:

   - **After all doors (including back door) are closed, if a door (including back door) is opened before battery terminals are disconnected, start over from Step 1.**
   - **After turning the power switch OFF, if "Remote A/C" is activated by user operation, stop the air conditioner and start over from Step 1.**

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

INFOID:0000000010122258

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.**

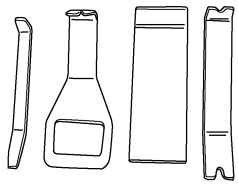
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000010122259

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

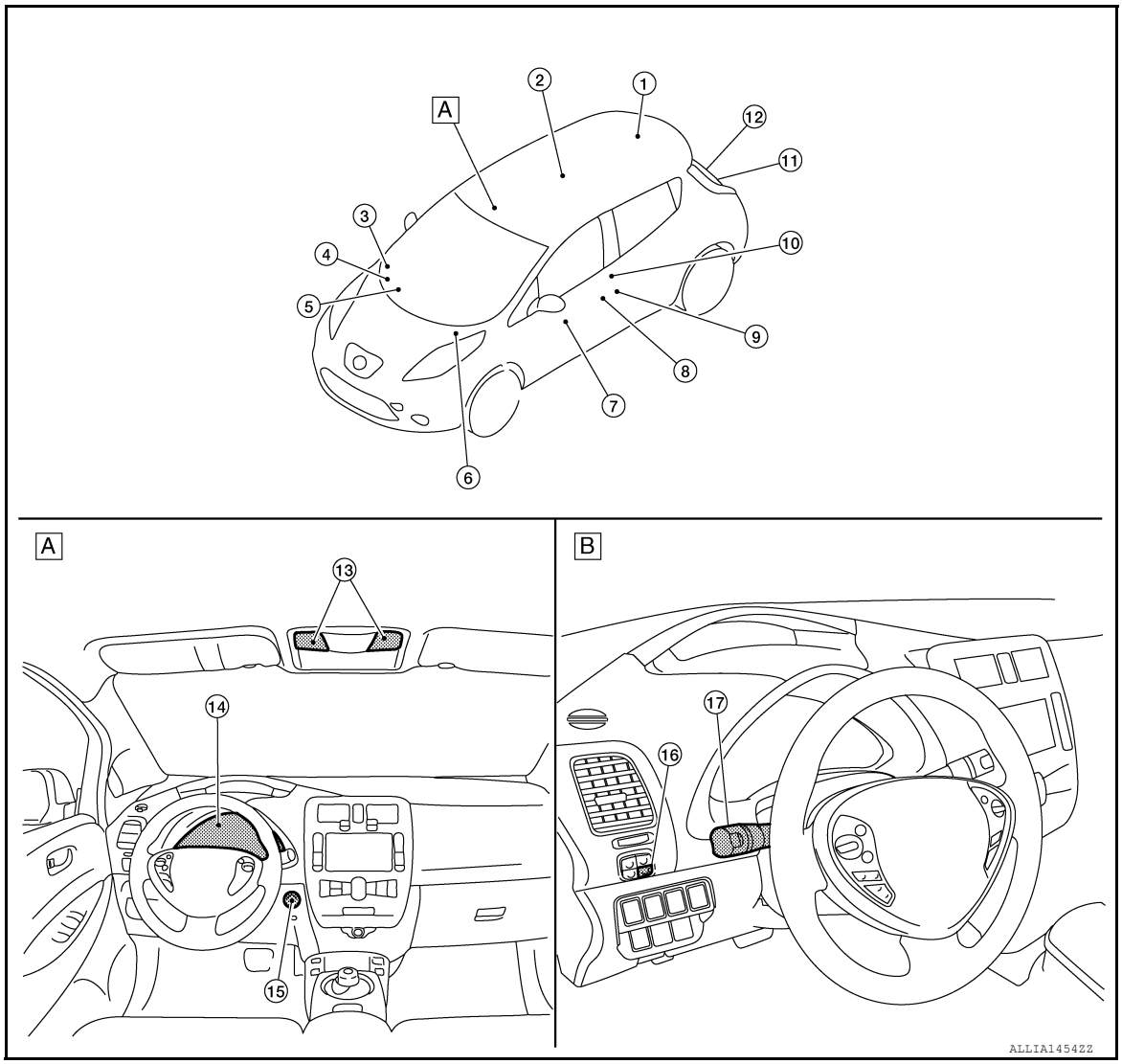
Tool number (TechMate No.) Tool name	Description
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000010122260



No.	Part	Description
1.	Luggage room lamp	Refer to INL-60, "Bulb Specifications".
2.	Room lamp	Refer to INL-60, "Bulb Specifications".
3.	Remote keyless entry receiver	Refer to DLK-18, "Remote Keyless Entry Receiver".
4.	Optical sensor	Refer to EXL-12, "Optical Sensor".
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 cut the interior room lamp power supply. • Detects each switch condition by the combination switch reading function. • Judges the illumination lamp ON/OFF status depending on the vehicle condition. And then it transmits position light request signal to IPDM E/R and combination meter (with CAN communication). Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.

No.	Part	Description
6.	IPDM E/R	Controls the integrated relay according to the request signal from BCM (via CAN communication). Refer to PCS-6, "Component Parts Location" for detailed installation location.
7.	Door lock and unlock switch	Refer to DLK-19, "Door Lock and Unlock Switch".
8.	Front outside handle LH (request switch) (RH similar)	Refer to DLK-19, "Front Door Request Switch (LH)".
9.	Front door lock assembly (LH) (door key cylinder switch)	Refer to DLK-18, "Front Door Lock Assembly (LH)".
10.	Front door switch LH (others similar)	Refer to DLK-20, "Door Switch".
11.	Back door lock assembly (back door switch)	Refer to DLK-19, "Back Door Lock Assembly".
12.	Back door opener switch (request switch)	Provides back door open/ close condition to BCM.
13.	Map lamp	Refer to INL-60, "Bulb Specifications"
14.	Combination meter	Receives the dimmer signal from BCM (via CAN communication).
15.	Power switch	Refer to PCS-34, "Power Switch".
16.	Meter control switch (illumination control switch)	Adjusts the illumination system and combination meter illumination brightness.
17.	Combination switch	The combination switch provides input to the BCM about the combination switch position.

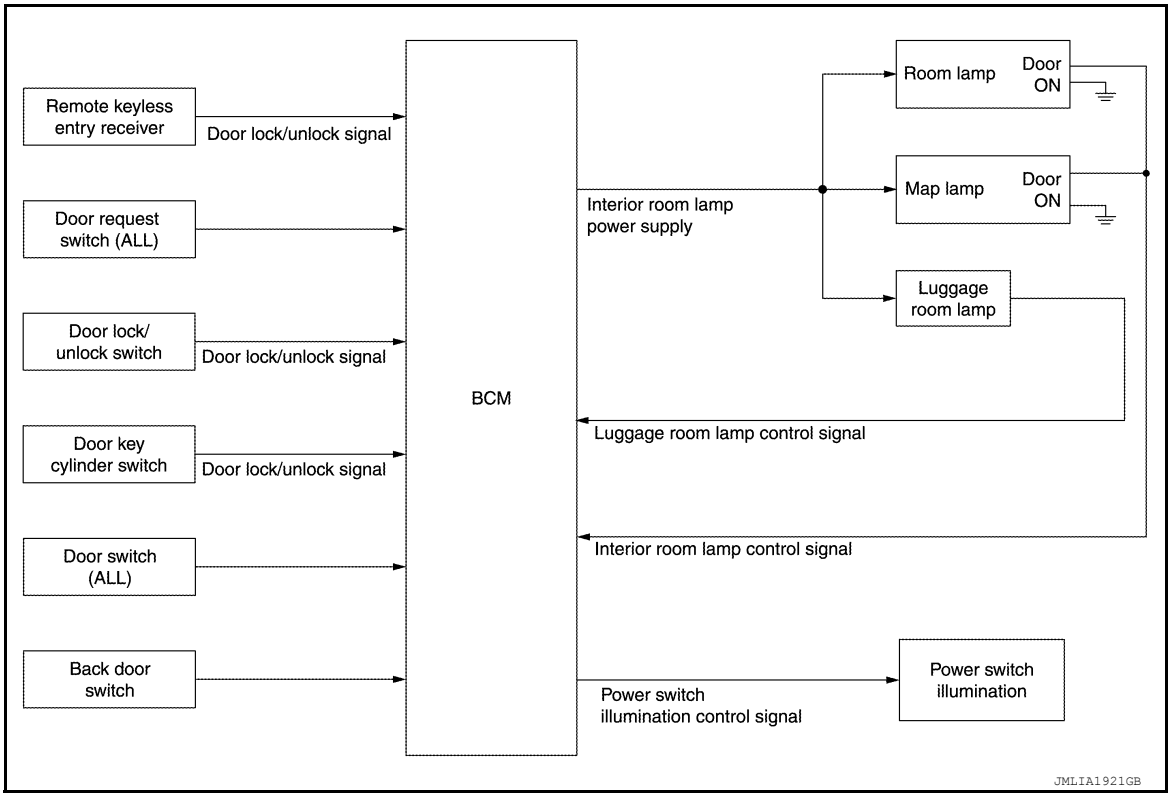
SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : System Description

INFOID:0000000010122261

SYSTEM DIAGRAM

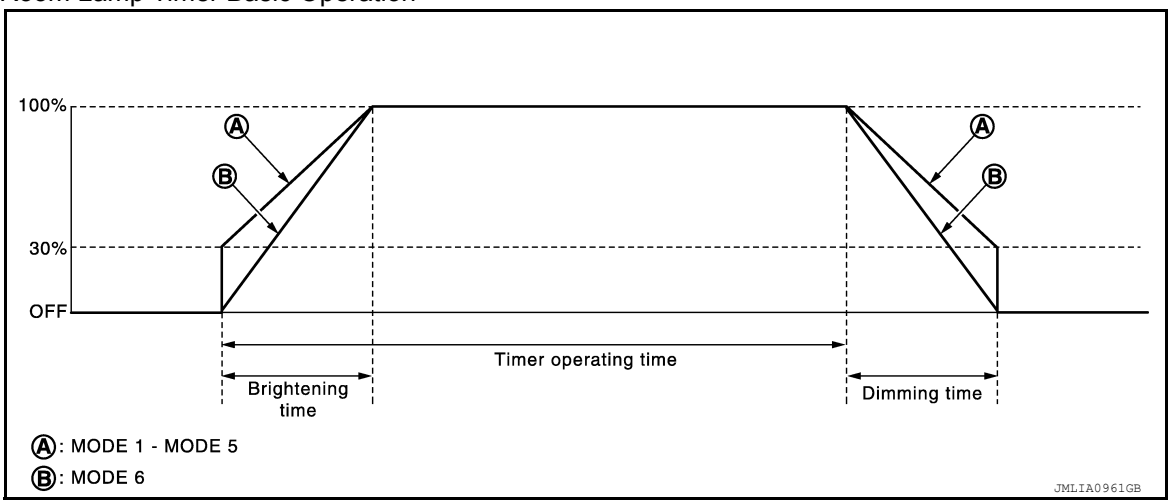


OUTLINE

- Interior room lamps* are controlled by interior room lamp timer control function of BCM.
  *: Map lamp and room lamp (when map lamp switch and room lamp switch are in DOOR position).
- Luggage room lamp is controlled by luggage room lamp control function of BCM.
- Power switch illumination is controlled by the power switch illumination control function of BCM.

INTERIOR ROOM LAMP TIMER CONTROL

Interior Room Lamp Timer Basic Operation



NOTE:

A: Sets the interior room lamp gradual brightening and dimming time.

B: Gradually dims from 100% to 0% and gradually brightens 0% to 100% in 1 second.

- The interior room lamp turns ON and OFF (gradual brightening and dimming) by the interior room lamp timer.
- BCM judges the vehicle condition with the following items. It activates the interior room timer:
  - Power switch status
  - Door switch signal (except back door)
  - Door lock/unlock signal (Remote keyless entry receiver, each door request switch, door lock/unlock switch, door key cylinder switch)

NOTE:
Each function of interior room lamp timer can be set by CONSULT. Refer to BCS-16, "INT LAMP : CONSULT Function (BCM - INT LAMP)".

Interior Room Lamp ON Operation

- BCM always turns the interior room lamp ON when any door opens except back door.
- BCM activates the interior room lamp timer to turn the interior room lamp ON for a period of time in any of the following conditions:
  - Status of all doors except back door changes from open to close
  - Power switch is turned ON → OFF
  - Door unlock signal is detected when all doors close except back door with power switch OFF

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

Interior Room Lamp OFF Operation

BCM stops the timer to turn the interior room lamp OFF in any of the following conditions:

- The timer operating time is expired
- Power switch is turned OFF → ACC/ON
- Door lock signal is detected with all doors closed except back door.

LUGGAGE ROOM LAMP CONTROL

BCM turns luggage room lamp ON when the back door switch is ON.
BCM turns luggage room lamp OFF when the back door switch is OFF.

POWER SWITCH ILLUMINATION CONTROL

Power Switch Illumination Basic Operation

BCM provides the power supply to turn the power switch illumination ON.

Power Switch Illumination ON Operation

BCM turns the power switch illumination ON in the following conditions:

- Power switch ON
- Any of the following conditions with power switch OFF/ACC
  - Traction motor start permission is entered
  - Driver side door is LOCK → UNLOCK
  - Driver side door is open

Power Switch Illumination OFF Operation

BCM turns the power switch illumination OFF in any of the following conditions:

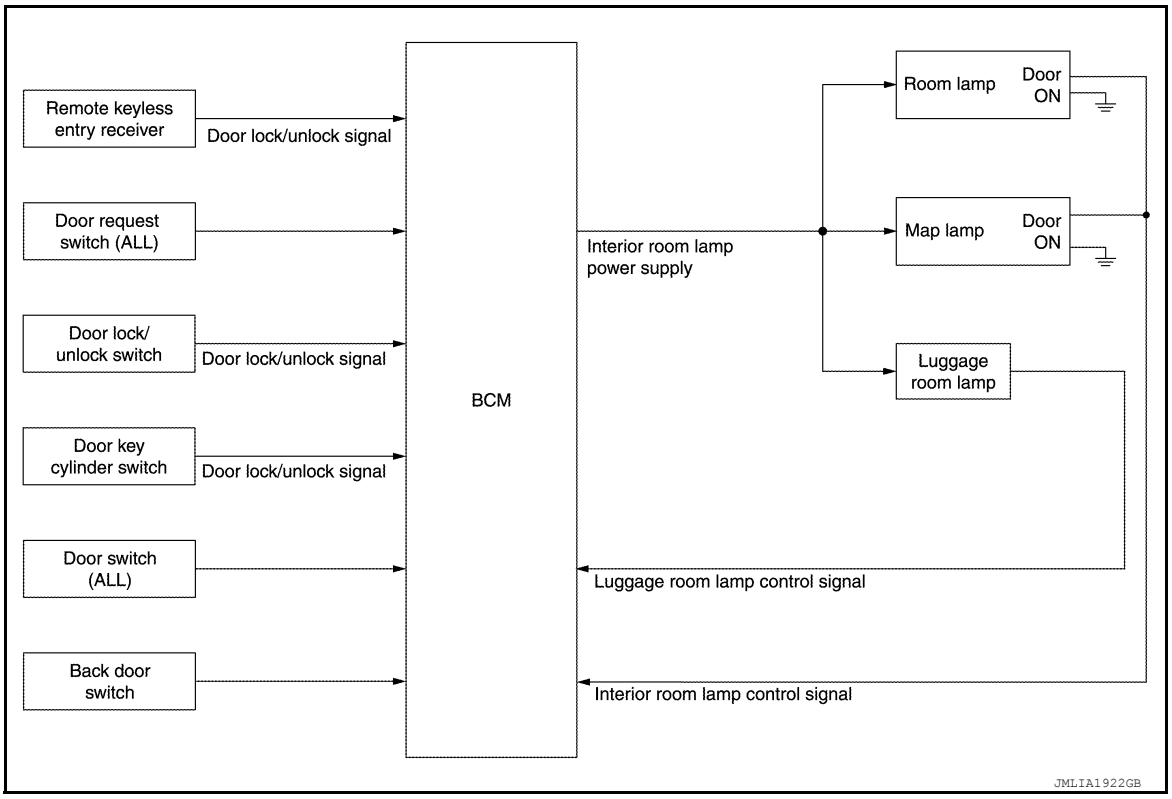
- The push-button power switch illumination ON conditions are not satisfied.
- Any of the following conditions with power switch OFF.
  - The power switch illumination ON conditions do not change (15 seconds after the power switch is OFF)
  - Driver side door is UNLOCK → LOCK

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Description

INFOID:0000000010122262

SYSTEM DIAGRAM



OUTLINE

- Interior room lamp battery saver is controlled by BCM.
- BCM turns applicable lamps OFF depending on the vehicle condition. This function prevents the 12V battery from over-discharging if the driver neglects turning OFF the lamps.

Applicable lamps:

- Map lamp
- Room lamp
- Luggage room lamp

INTERIOR ROOM LAMP BATTERY SAVER FUNCTION

- When the power switch is turned to other position than ON, BCM operates the timer for a period of time to cut the interior room lamp power supply.
- BCM restarts the timer when any of the following signals changes while operating the timer:
- Power switch status
- Door switch signal (ALL)
- Door lock/unlock signal (remote keyless entry receiver, each door request switch, door lock and unlock switch, door key cylinder switch)
- BCM provides the interior room lamp power supply continuously when the power switch position is ON.

NOTE:

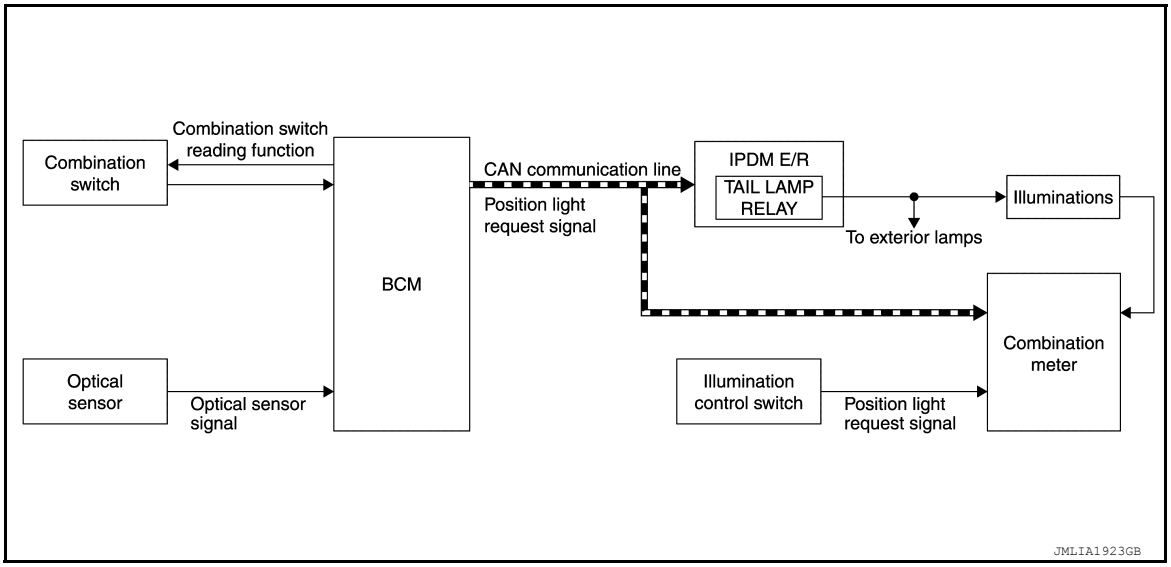
Each function of interior room lamp battery saver can be set by CONSULT. Refer to BCS-24, "BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)".

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : System Description

INFOID:0000000010122263

SYSTEM DIAGRAM



OUTLINE

Each illumination lamp is controlled by each function of BCM and IPDM E/R.

Control by BCM
- Combination switch reading function
- Headlamp control function

Control by IPDM E/R
- Relay control function

Control by combination meter
- Meter illumination control function (Refer to MWI-8, "METER SYSTEM : System Description".)

ILLUMINATION CONTROL

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits position light request signal to IPDM E/R and combination meter according to tail lamp ON condition.

Tail lamp ON condition:
- Lighting switch 1ST
- Lighting switch 2ND
- Lighting switch AUTO, and the auto light function ON judgment
- Lighting switch AUTO, with the front fog lamp switch ON and the power switch ON

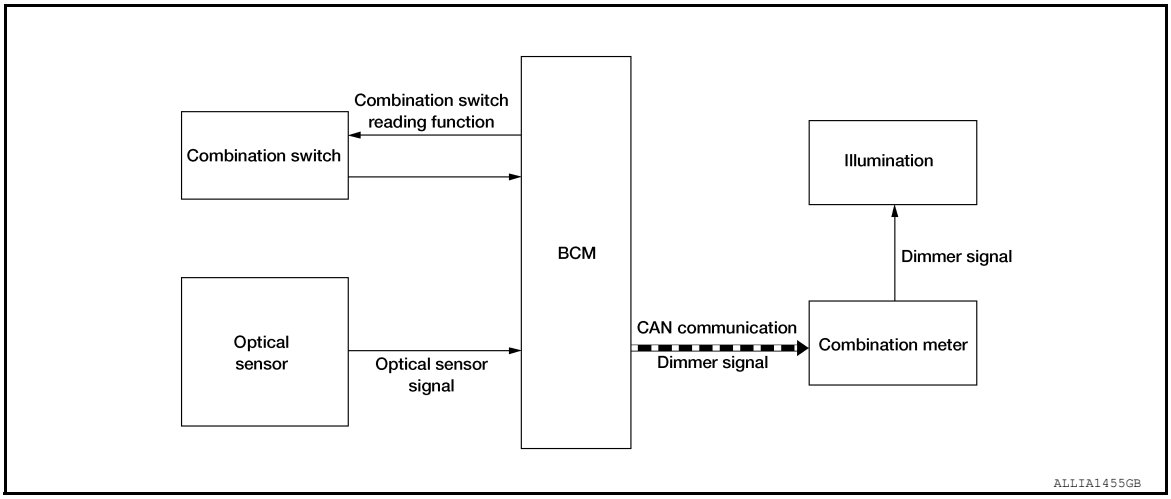
- IPDM E/R turns the integrated tail lamp relay ON according to position light request signal. It provides the power supply to each illumination lamp.
- Combination meter enters in the nighttime mode according to position light request signal. Under the night-time mode the combination meter controls the illuminance by controlling each illumination lamp (ground side).

AUTO LIGHT ADJUSTMENT SYSTEM

AUTO LIGHT ADJUSTMENT SYSTEM : System Description

INFOID:0000000010122264

SYSTEM DIAGRAM



OUTLINE

Auto light adjustment system is controlled by each function of BCM and combination meter.

Control by BCM

- Auto light system
- Auto light adjustment system

AUTO LIGHT ADJUSTMENT SYSTEM

Description

- BCM supplies voltage to the optical sensor when the power switch is turned ON or ACC.
- Optical sensor converts outside brightness (lux) to voltage and transmits the optical sensor signal to BCM.
- BCM judges dimming/brightening of combination meter and display according to brightness outside the vehicle, when power switch is ON.
- BCM transmits dimmer signal to combination meter via CAN communication, according to auto light adjustment conditions.

NOTE:

As to dimming/brightening timing, the sensitivity depends on settings. The settings can be changed with CONSULT. Refer to BCS-17, "HEADLAMP : CONSULT Function (BCM - HEAD LAMP)".

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

INFOID:0000000010508725

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

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:0000000010508727

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 power 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.
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].

WORK SUPPORT

Support Item	Setting		Description
R LAMP TIMER LOGIC SET	MODE2		Interior room lamp timer activates from driver door switch only.
	MODE1*		Interior room lamp timer activates from any door switch.
SET I/L D-UNLCK INTCON	On*		Interior room lamp timer function ON.
	Off		Interior room lamp timer function OFF.
ROOM LAMP TIMER SET	MODE4	30 sec.	Interior room lamp timer ON time.
	MODE3*	15 sec.	
	MODE2	7.5 sec.	
FOG LAMP OVERRIDE	On		With fog override function.
	Off*		Without fog override function.

*: Initial setting

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000010508726

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 power switch.

Monitor Item [Unit]	Description
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.
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 [Off/On].

WORK SUPPORT

Support item	Setting		Description
ROOM LAMP TIMER SET	MODE3	15 min.	Interior room lamp battery saver timer operating time.
	MODE2	60 min.	
	MODE1*	30 min.	
BATTERY SAVER SET	On*		Exterior lamp battery saver function ON.
	Off		Exterior lamp battery saver function OFF.

*:Initial setting

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000010122268

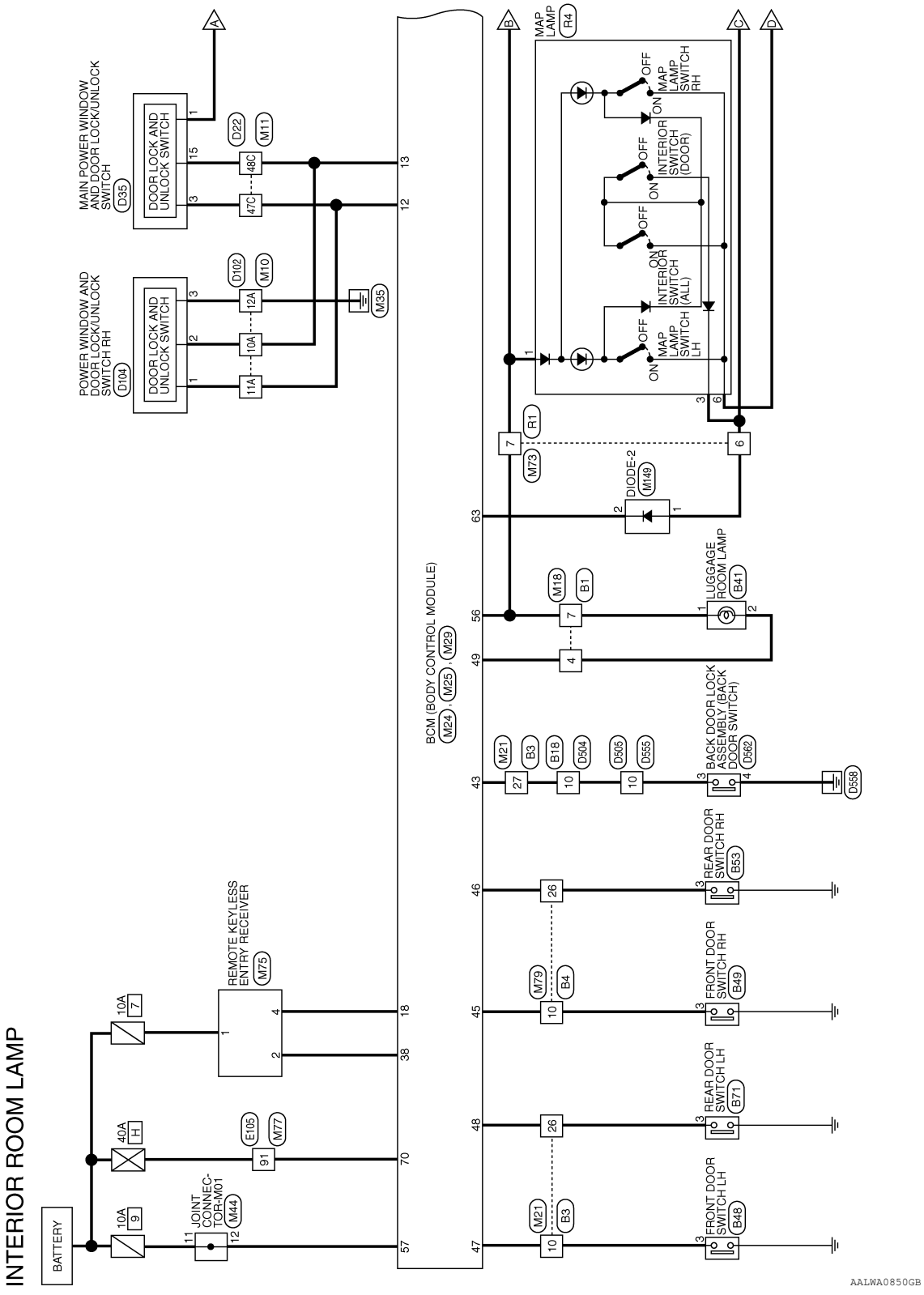
ECU	Reference
BCM	BCS-28, "Reference Value"
	BCS-46, "Fail-safe"
	BCS-47, "DTC Inspection Priority Chart"
	BCS-48, "DTC Index"

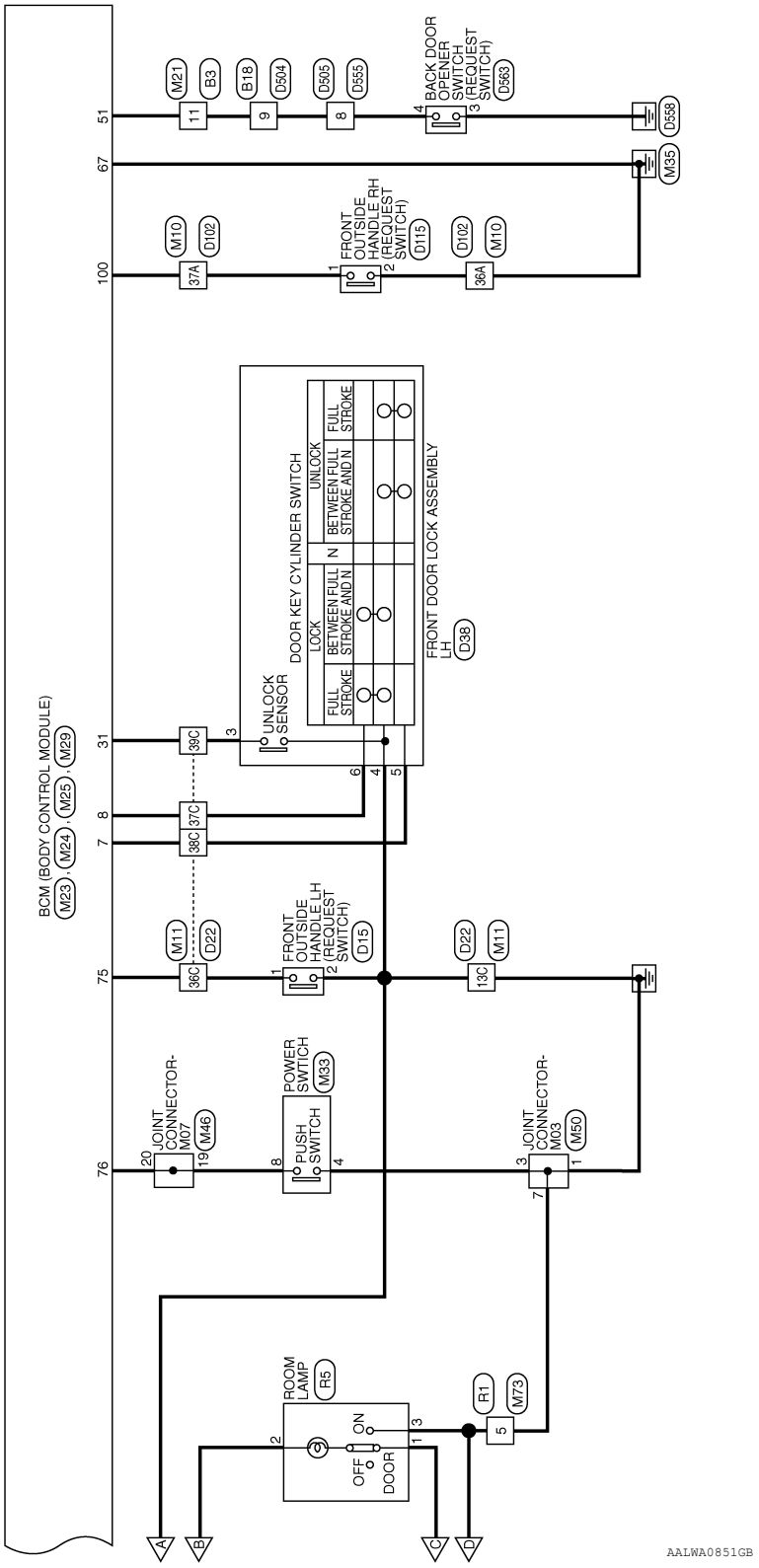
WIRING DIAGRAM

INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram

INFOID:0000000010122269

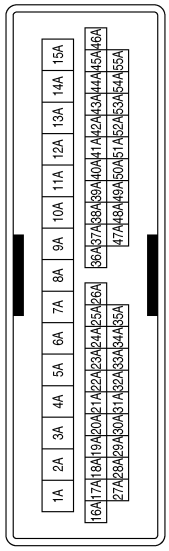



BCM (BODY CONTROL MODULE)
M23, M24, M25, M29
BACK DOOR OPENER SWITCH (REQUEST SWITCH)
FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
DOOR KEY CYLINDER SWITCH
UNLOCK SENSOR
FRONT DOOR LOCK ASSEMBLY LH
POWER SWTICH
PUSH SWITCH
JOINT CONNECTOR-M07
JOINT CONNECTOR-M03
ROOM LAMP
ON
OFF
DOOR
AALWA0851GB

INTERIOR ROOM LAMP - CONNECTORS

Connector No.	M10
Connector Name	WIRE TO WIRE
Connector Color	WHITE

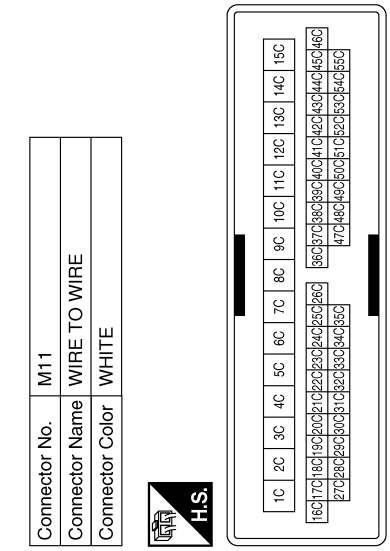
H.S.



Terminal No.	Color of Wire	Signal Name
10A	BR	–
11A	Y	–
12A	B	–
36A	B	–
37A	P	–

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Color	WHITE

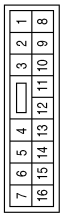
H.S.



Terminal No.	Color of Wire	Signal Name
13C	B	–
36C	LG	–
37C	R	–
38C	GR	–
39C	W	–
47C	Y	–
48C	BR	–

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



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

AALIA2461GB

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
10	SB	–
11	P	–
26	W	–
27	Y	–

Connector No.	M23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110

Terminal No.	Color of Wire	Signal Name
75	LG	REQUEST SW (DR)
76	SB	ENGINE START SW
100	P	REQUEST SW (AS)

Connector No.	M24
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

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	GR	KEY CYLINDER UNLOCK SW
8	R	KEY CYLINDER LOCK SW
12	Y	CENTRAL DOOR LOCK SW
13	BR	CENTRAL DOOR UNLOCK SW
18	L	KEYLESS TUNER, AUTO LIGHT SENSOR GND
31	W	DOOR LOCK STATUS SW (DR)
38	SB	INTELLIGENT TUNER

Connector No.	M25
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

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	P	BATTERY SAVER OUTPUT
57	P	BATTERY (FUSE)
63	BR	ROOM LAMP OUTPUT
67	B	GND
70	Y	BATTERY (F/L)

AALIA2462GB

Connector No.	M29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

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

Terminal No.	Color of Wire	Signal Name
43	Y	DOOR SW (BACK)
45	BR	DOOR SW (AS)
46	R	DOOR SW (RR)
47	SB	DOOR SW (DR)
48	W	DOOR SW (RL)
49	L	LUGGAGE LAMP OUTPUT
51	P	REQUEST SW (TRUNK/BACK DOOR)

Connector No.	M33
Connector Name	POWER SWITCH
Connector Color	WHITE

H.S.

4		3
5	6	7	8

Terminal No.	Color of Wire	Signal Name
4	B	–
8	SB	–

Connector No.	M44
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	P	–
12	P	–

Connector No.	M46
Connector Name	JOINT CONNECTOR-M07
Connector Color	ORANGE

H.S.

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

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

Connector No.	M50
Connector Name	JOINT CONNECTOR-M03
Connector Color	PINK

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	–
3	B	–
7	B	–

Connector No.	M73
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
5	B	–
6	GR	–
7	P	–

AALIA2463GB

Connector No.	M79
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
10	BR	–
26	R	–

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

96	91	6	1
97	92	7	2
98	93	8	3
99	94	9	4
100	95	10	5

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

Terminal No.	Color of Wire	Signal Name
91	Y	–

Connector No.	M75
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Color	WHITE

H.S.

1	2	3	4

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

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

96	91	6	1
97	92	7	2
98	93	8	3
99	94	9	4
100	95	10	5

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

Terminal No.	Color of Wire	Signal Name
91	Y	–

Connector No.	M149
Connector Name	DIODE-2
Connector Color	WHITE

H.S.

1	2

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

AALIA2464GB

Connector No.	B4
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
10	BR	–
26	R	–

Connector No.	B3
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
10	SB	–
11	P	–
26	LG	–
27	Y	–

Connector No.	B1
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	–
7	BR	–

Connector No.	B48
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
3	SB	–

Connector No.	B41
Connector Name	LUGGAGE ROOM LAMP
Connector Color	WHITE

H.S.

1	2

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

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

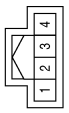
1	2	3	4	5	6
7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	---	---	---	---	---

Terminal No.	Color of Wire	Signal Name
9	P	–
10	Y	–

AALIA2465GB

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

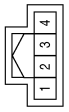
H.S.



Terminal No.	Color of Wire	Signal Name
3	LG	–

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

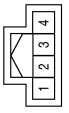
H.S.



Terminal No.	Color of Wire	Signal Name
3	R	–

Connector No.	B49
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

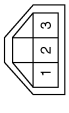
H.S.



Terminal No.	Color of Wire	Signal Name
3	BR	–

Connector No.	R5
Connector Name	ROOM LAMP
Connector Color	WHITE

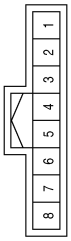
H.S.



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

Connector No.	R4
Connector Name	MAP LAMP
Connector Color	WHITE

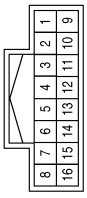
H.S.



Terminal No.	Color of Wire	Signal Name
1	Y	–
3	R	–
6	B	–

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

H.S.



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

AALIA2466GB

Connector No.	D15
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
Connector Color	BLACK

H.S.

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

Connector No.	D22
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
13C	B	–
36C	LG	–
37C	R	–
38C	L	–
39C	G	–
47C	Y	–
48C	BR	–

Connector No.	D35
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	GND
3	Y	LOCK SW
15	BR	UNLOCK SW

Connector No.	D38
Connector Name	FRONT DOOR LOCK ASSEMBLY LH
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
3	G	–
4	B	–
5	L	–
6	R	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
10A	BR	–
11A	Y	–
12A	B	–
36A	B	–
37A	P	–

AALIA2467GB

Connector No.	D104
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
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	BR	–
3	B	–

Connector No.	D115
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
Connector Color	BLACK

H.S.

2	1

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

Connector No.	D504
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
9	P	–
10	SB	–

Connector No.	D505
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
8	P	–
10	SB	–

Connector No.	D555
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
8	P	–
10	SB	–

Connector No.	D562
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.

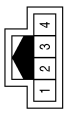
4	3	2	1

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

AALIA2468GB

Connector No.	D563
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	GRAY

H.S.



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

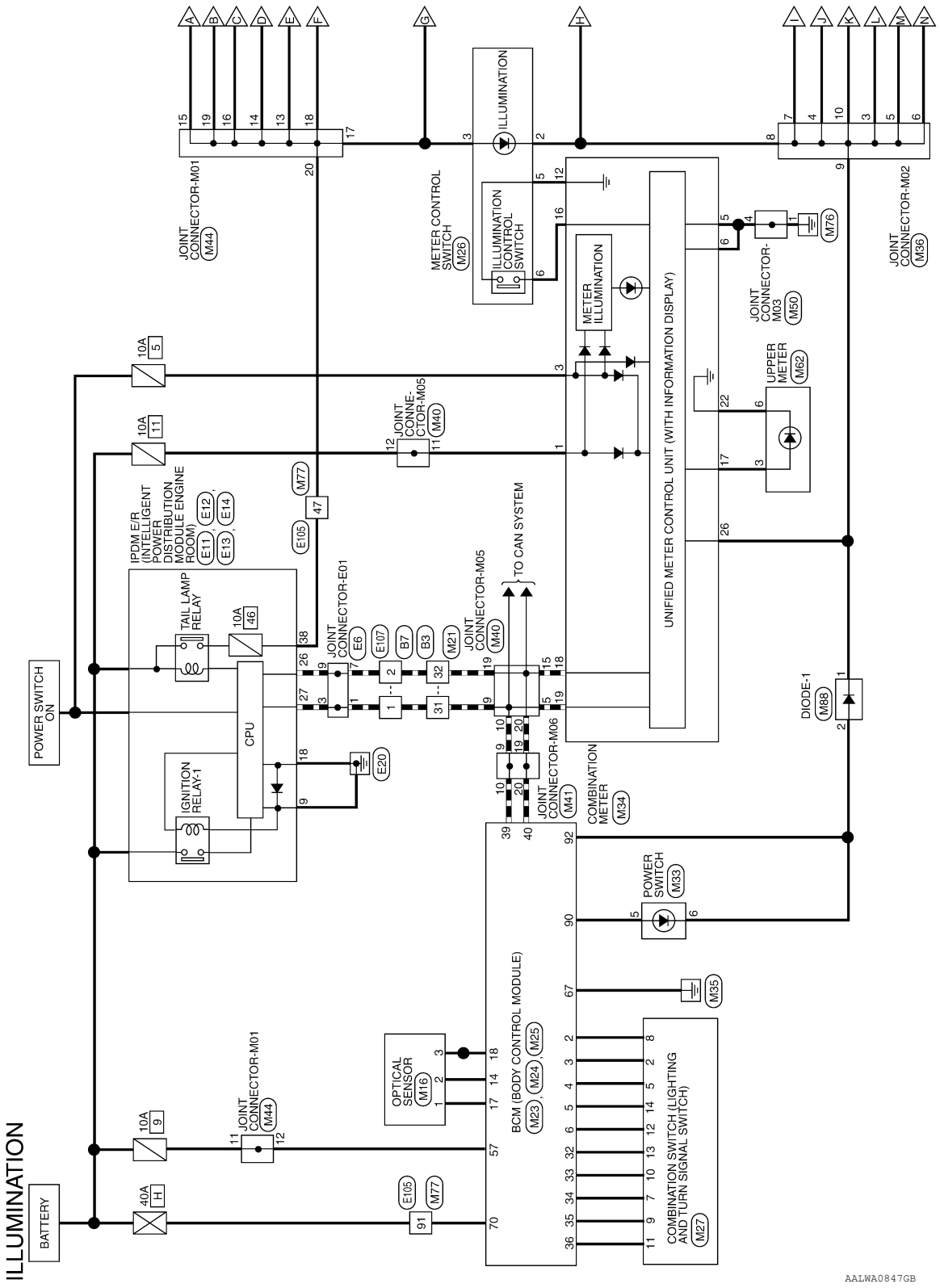
AALIA2469GB

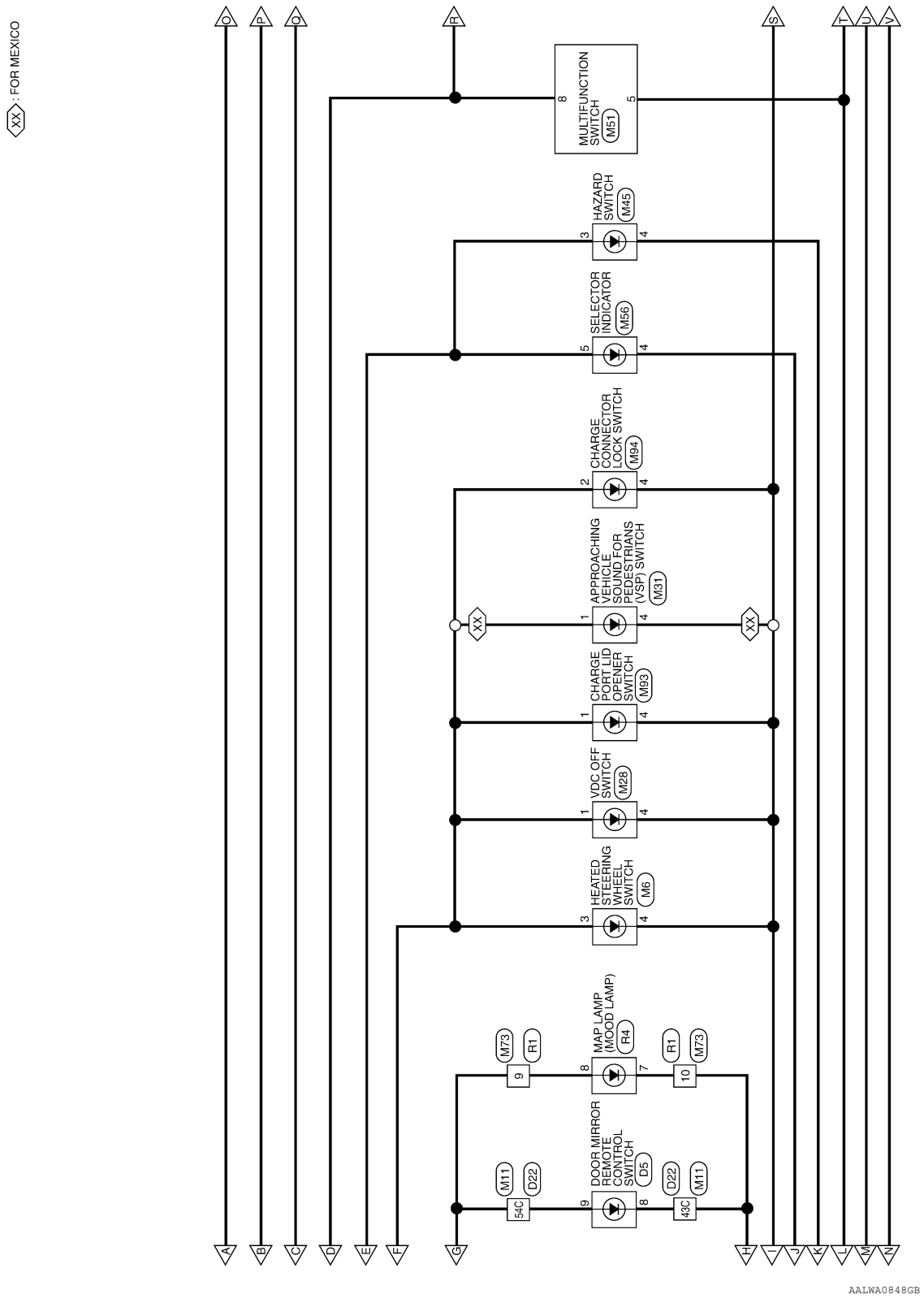
< WIRING DIAGRAM >

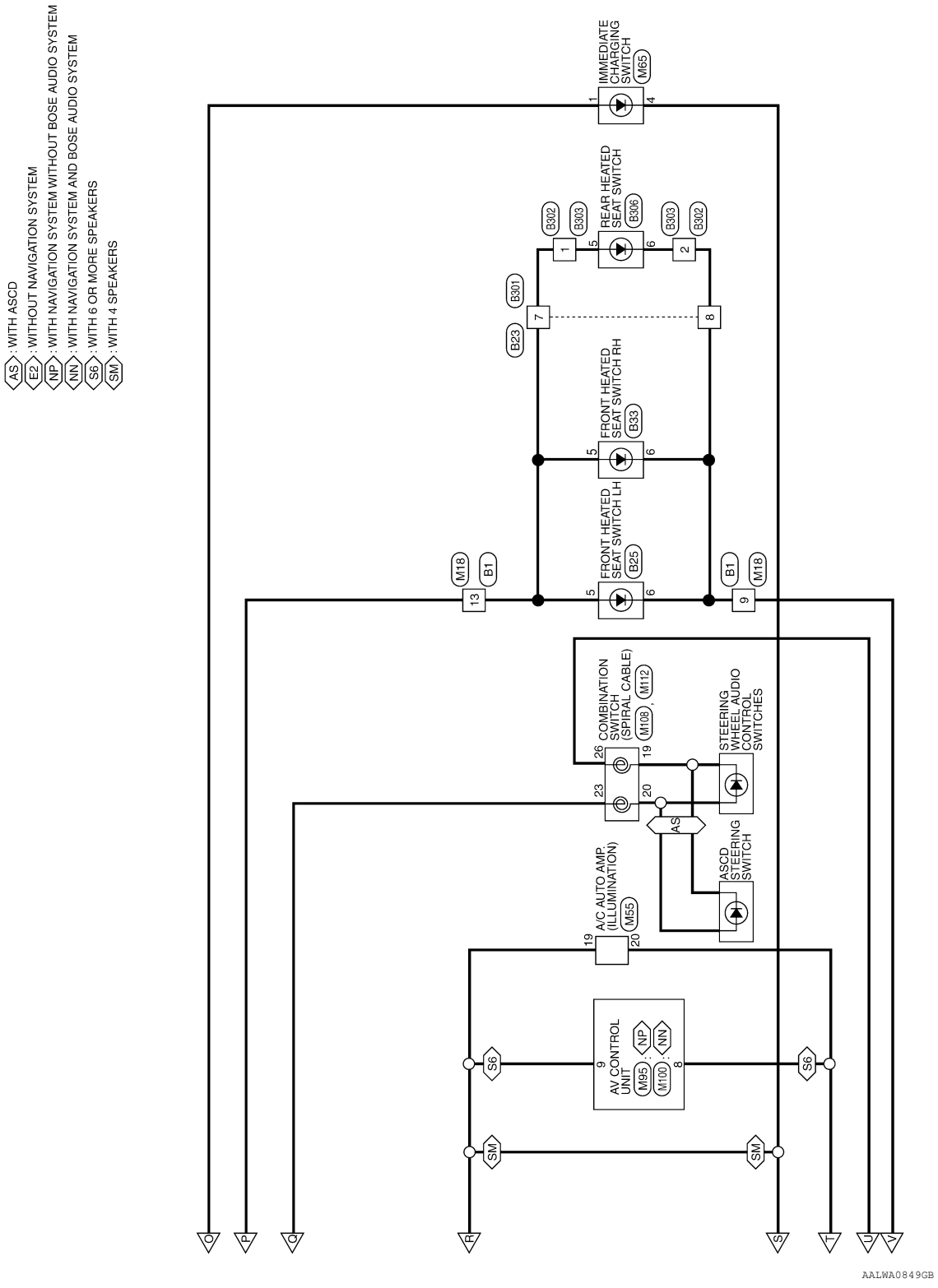
ILLUMINATION

Wiring Diagram

INFOID:0000000010122270




XX : FOR MEXICO
MULTIFUNCTION SWITCH M51
HAZARD SWITCH M45
SELECTOR INDICATOR M56
CHARGE CONNECTOR LOCK SWITCH M94
APPROACHING VEHICLE SOUND FOR PEDESTRIANS (VSP) SWITCH M31
CHARGE PORT LID OPENER SWITCH M93
VDC OFF SWITCH M28
HEATED STEERING WHEEL SWITCH M6
MAP LAMP (MOOD LAMP) R4
DOOR MIRROR REMOTE CONTROL SWITCH D5
M73
R1
M11
D22
54C
43C
AALWA0848GB

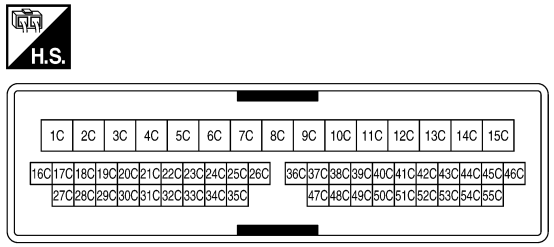

AS : WITH ASCD
E2 : WITHOUT NAVIGATION SYSTEM
NP : WITH NAVIGATION SYSTEM WITHOUT BOSE AUDIO SYSTEM
NN : WITH NAVIGATION SYSTEM AND BOSE AUDIO SYSTEM
S6 : WITH 6 OR MORE SPEAKERS
SM : WITH 4 SPEAKERS
IMMEDIATE CHARGING SWITCH M65
REAR HEATED SEAT SWITCH B306
B302 B303 B303 B302
B301 B23
FRONT HEATED SEAT SWITCH RH B33
FRONT HEATED SEAT SWITCH LH B25
M18 B1 B1 M18
COMBINATION SWITCH (SPIRAL CABLE) M108, M112
STEERING WHEEL AUDIO CONTROL SWITCHES
ASCD STEERING SWITCH
A/C AUTO AMP. (ILLUMINATION) M55
AV CONTROL UNIT M95 : NP M100 : NN
S6
SM
O P O R S T V V
AALWA0849GB

ILLUMINATION - CONNECTORS

Connector No.	M6
Connector Name	HEATED STEERING WHEEL SWITCH
Connector Color	BLUE

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

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Color	WHITE

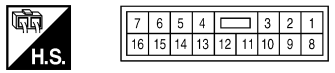


Terminal No.	Color of Wire	Signal Name
43C	B	–
54C	R	–

Connector No.	M16
Connector Name	OPTICAL SENSOR
Connector Color	WHITE

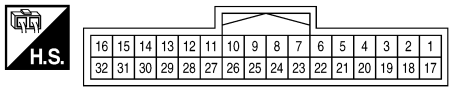
Terminal No.	Color of Wire	Signal Name
1	Y	–
2	G	–
3	V	–

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Color	WHITE



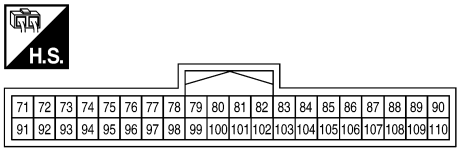
Terminal No.	Color of Wire	Signal Name
9	B	–
13	W	–

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
31	L	–
32	P	–

Connector No.	M23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

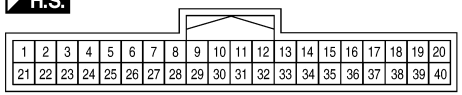


Terminal No.	Color of Wire	Signal Name
90	W	HIGHSIDE ENGINE START SW ILLUMINATION LED
92	B	LOW SIDE ENGINE START SW ILLUMINATION LED OUTPUT

AALIA2451GB

Connector No.	M24
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

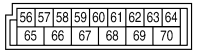
H.S.



Terminal No.	Color of Wire	Signal Name
2	L	COMBINATION SW INPUT 5
3	GR	COMBINATION SW INPUT 4
4	BR	COMBINATION SW INPUT 3
5	G	COMBINATION SW INPUT 2
6	V	COMBINATION SW INPUT 1
14	G	AUTO LIGHT SENSOR INPUT
17	Y	AUTO LIGHT SENSOR POWER SUPPLY OUTPUT
18	L	KEYLESS TUNER, AUTO LIGHT SENSOR GND
32	GR	COMBINATION SW OUTPUT 5
33	Y	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	BG	COMBINATION SW OUTPUT 2
36	P	COMBINATION SW OUTPUT 1
39	L	CAN–H
40	P	CAN–L

Connector No.	M25
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

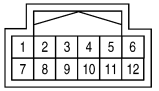
H.S.



Terminal No.	Color of Wire	Signal Name
57	P	BATTERY (FUSE)
67	B	GND
70	Y	BATTERY (F/L)

Connector No.	M26
Connector Name	METER CONTROL SWITCH
Connector Color	WHITE

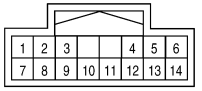
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	–
3	R	–
5	V	–
6	P	–

Connector No.	M27
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.



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

AALIA2452GB

Connector No.	M28
Connector Name	VDC OFF SWITCH
Connector Color	BLACK

H.S.

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

Connector No.	M31
Connector Name	APPROACHING VEHICLE SOUND FOR PEDESTRIANS (VSP) SWITCH
Connector Color	WHITE

H.S.

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

Connector No.	M33
Connector Name	POWER SWITCH
Connector Color	WHITE

H.S.

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

Connector No.	M34
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	BAT
3	GR	IGN
5	B	GND
6	B	GND

Terminal No.	Color of Wire	Signal Name
12	V	SATTELITE SW GND
16	P	ILL UP SW
17	G	ILL CONT OUT (FOR UPPER)
18	P	CAN-L
19	L	CAN-H
22	GR	GND (FOR UPPER METER)
26	B	ILL CONT OUT (GENERAL)

Connector No.	M36
Connector Name	JOINT CONNECTOR-M02
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
3	B	–
4	B	–
5	B	–
6	B	–
7	B	–
8	B	–
9	B	–
10	B	–

AALIA2453GB

Connector No.	M40
Connector Name	JOINT CONNECTOR-M05
Connector Color	BLUE

H.S.

Terminal No.	Color of Wire	Signal Name
5	L	–
9	L	–
10	L	–
15	P	–
19	P	–
20	P	–

Connector No.	M41
Connector Name	JOINT CONNECTOR-M06
Connector Color	BLUE

H.S.

Terminal No.	Color of Wire	Signal Name
9	L	–
10	L	–
19	P	–
20	P	–

Connector No.	M44
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
11	P	–
12	P	–
13	W	–
14	W	–
15	LG	–
16	R	–
17	R	–
18	W	–
19	W	–
20	W	–

Connector No.	M45
Connector Name	HAZARD SWITCH
Connector Color	WHITE

H.S.

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

Connector No.	M50
Connector Name	JOINT CONNECTOR-M03
Connector Color	PINK

H.S.

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

Connector No.	M51
Connector Name	MULTIFUNCTION SWITCH
Connector Color	WHITE

H.S.

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

AALIA2454GB

Connector No.	M55
Connector Name	A/C AUTO AMP.
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
19	W	ILL+
20	B	ILL–

Connector No.	M56
Connector Name	SELECTOR INDICATOR
Connector Color	WHITE

H.S.

1	2	3	4
5	6	7	8

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

Connector No.	M62
Connector Name	UPPER METER
Connector Color	WHITE

H.S.

4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name
3	G	–
6	GR	–

Connector No.	M65
Connector Name	IMMEDIATE CHARGING SWITCH
Connector Color	GRAY

H.S.

4	3	2	1
8	7	6	5

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

Connector No.	M73
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
9	R	–
10	B	–

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

80	81	71	82	72	83	73	84	74	85	75	86	76	87	77	88	78	89	79	90
96	91	92	97	93	98	94	99	95	100										

60	61	51	62	52	63	53	64	54	65	55	66	56	67	57	68	58	69	59	70
40	41	31	42	32	43	33	44	34	45	35	46	36	47	37	48	38	49	39	50
20	21	11	22	12	23	13	24	14	25	15	26	16	27	17	28	18	29	19	30

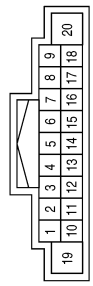
6	1
7	2
8	3
9	4
10	5

Terminal No.	Color of Wire	Signal Name
47	W	–
91	Y	–

AALIA2455GB

Connector No.	M83
Connector Name	AUDIO UNIT
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
8	B	ILL(-)
9	W	ILL(+)

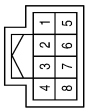
Connector No.	M88
Connector Name	DIODE-1
Connector Color	WHITE

H.S.

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

Connector No.	M93
Connector Name	CHARGE PORT LID OPENER SWITCH
Connector Color	GREEN

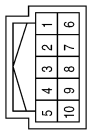
H.S.



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

Connector No.	M94
Connector Name	CHARGE CONNECTOR LOCK SWITCH
Connector Color	GRAY

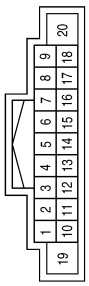
H.S.



Terminal No.	Color of Wire	Signal Name
2	G	–
4	GR	–

Connector No.	M95
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM WITHOUT BOSE)
Connector Color	WHITE

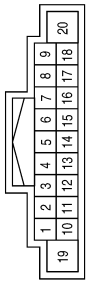
H.S.



Terminal No.	Color of Wire	Signal Name
8	B	ILL CONT
9	W	ILL

Connector No.	M100
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM WITH BOSE)
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
8	B	ILL_CONT
9	W	ILL

AALIA2456GB

Connector No.	M150
Connector Name	AV CONTROL UNIT (WITHOUT NAVIGATION SYSTEM)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	B	ILL CONT
9	W	ILL

Connector No.	M112
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	GRAY

H.S.

20	19	18	17	16	15	14	13

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

Connector No.	E12
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN

H.S.

17		16	15
22	21	20	19	18

Terminal No.	Color of Wire	Signal Name
18	B/W	GND (SIGNAL)

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK

H.S.

11	10	9
14	13	12

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

Connector No.	M108
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	YELLOW

H.S.

23	26	34
28	29	30

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

Connector No.	E6
Connector Name	JOINT CONNECTOR-E01
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	L	–
3	L	–
7	P	–
9	P	–

AALIA2457GB

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

28	27	26	25	24	23
34	33	32	31	30	29

Terminal No.	Color of Wire	Signal Name
26	P	CAN-L
27	L	CAN-H

Connector No.	E14
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN

H.S.

39	38		37	36	35
46	45	44	43	42	41	40

Terminal No.	Color of Wire	Signal Name
38	LG	TAIL 1 (WITHOUT SOLAR CELL)
38	R	TAIL 1 (WITH SOLAR CELL)

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	6	20	40	60	80	91	96	97
2	7	11	21	31	41	51	61	71	81	92	98
3	8	12	22	32	42	52	62	72	82	93	99
4	9	13	23	33	43	53	63	73	83	94	100
5	10	14	24	34	44	54	64	74	84	95	
		15	25	35	45	55	65	75	85		
		16	26	36	46	56	66	76	86		
		17	27	37	47	57	67	77	87		
		18	28	38	48	58	68	78	88		
		19	29	39	49	59	69	79	89		
		30		50		70		90			

Terminal No.	Color of Wire	Signal Name
47	LG	– (WITHOUT SOLAR CELL)
47	R	– (WITH SOLAR CELL)
91	Y	–

Connector No.	E107
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

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

Connector No.	B1
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
9	GR	–
13	V	–

Connector No.	B3
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
31	L	–
32	P	–

AALIA2458GB

Connector No.	B7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

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

Connector No.	B23
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
7	G	–
8	B	–

Connector No.	B25
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	SB	–
6	P	–

Connector No.	B33
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	Y	–
6	GR	–

Connector No.	B301
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

3	2	1
8	7	6	5	4

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

Connector No.	B302
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.

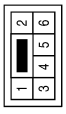
2	1
6	5	4	3

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

AALIA2459GB

Connector No.	B303
Connector Name	WIRE TO WIRE
Connector Color	BROWN

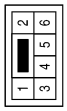
H.S.



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

Connector No.	B306
Connector Name	REAR HEATED SEAT SWITCH
Connector Color	BROWN

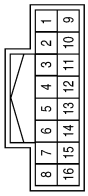
H.S.



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

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

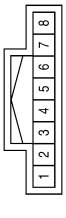
H.S.



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

Connector No.	R4
Connector Name	MAP LAMP
Connector Color	WHITE

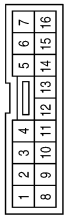
H.S.



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

Connector No.	D5
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH
Connector Color	WHITE

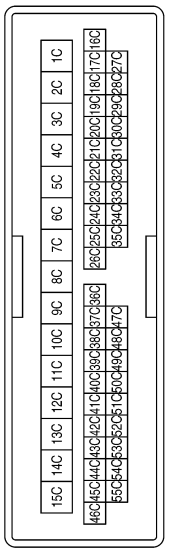
H.S.



Terminal No.	Color of Wire	Signal Name
8	GR	–
9	V	–

Connector No.	D22
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
43C	GR	–
54C	V	–

AALIA2460GB

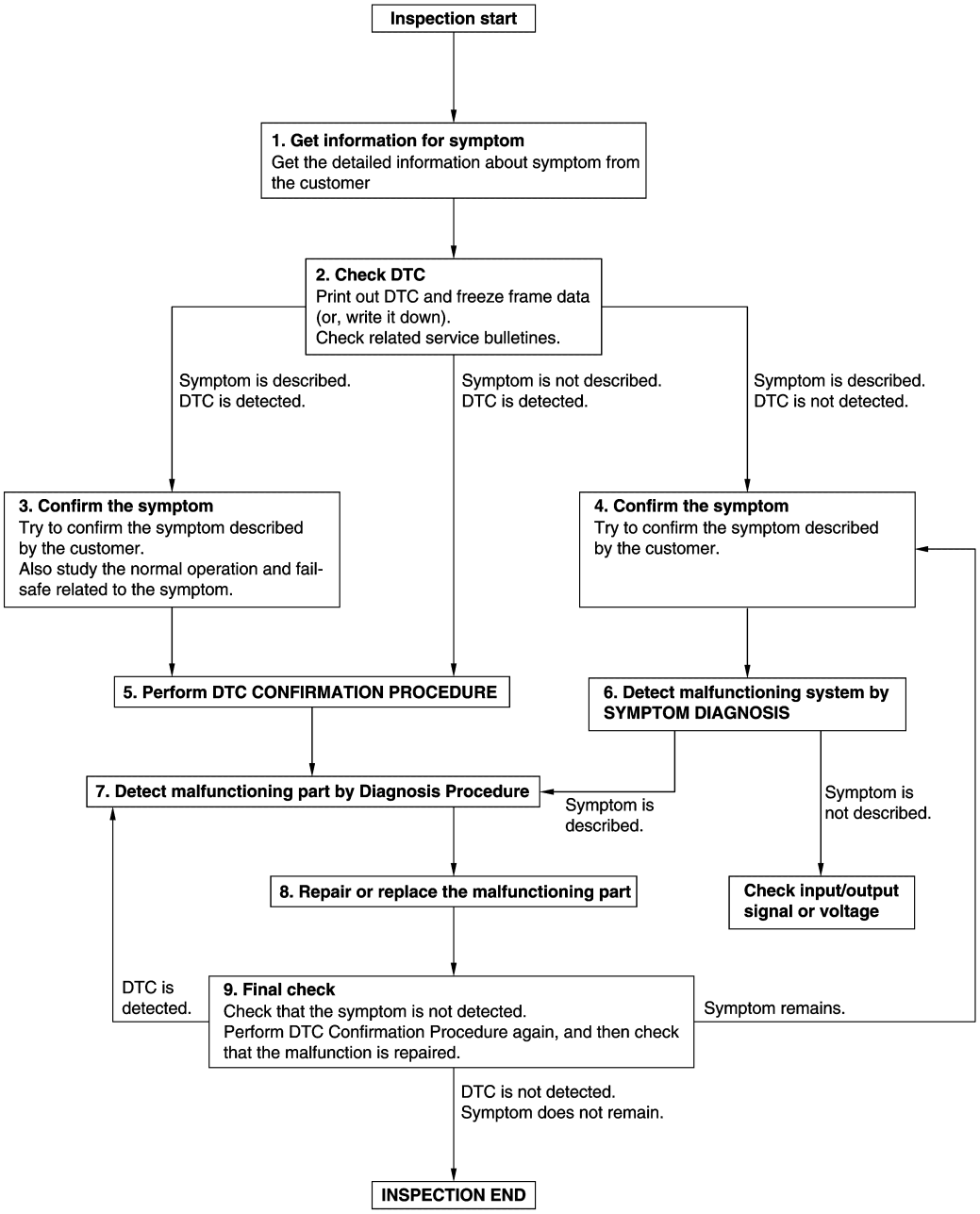
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000010122271

OVERALL SEQUENCE



JMKIA8652GB

DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

1. Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).
2. Check operation condition of the function that is malfunctioning.

>> GO TO 2.

2.CHECK DTC

1. Check DTC.
2. Perform the following procedure if DTC is detected:

- Record DTC and freeze frame data (Print them out using CONSULT.)
- Erase DTC.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.

3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

Symptom is described, DTC is detected>>GO TO 3.
Symptom is described, DTC is not detected>>GO TO 4.
Symptom is not described, DTC is detected>>GO TO 5.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Also study the normal operation and fail-safe related to the symptom.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time.
If two or more DTCs are detected, refer to BCS-47, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
  If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.
NO >> Check according to GI-53, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

Is the symptom described?

YES >> GO TO 7.
NO >> Monitor input data from related sensors or check voltage of related module terminals using CONSULT.

7.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-53, "Intermittent Incident".

8.REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnostic Procedure again after repair and replacement.
3. Check DTC. If DTC is detected, erase it.

>> GO TO 9.

9.FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.
When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 7.
YES-2 >> Symptom remains: GO TO 4.
NO >> Before returning the vehicle to the customer, always erase DTC.

DTC/CIRCUIT DIAGNOSIS

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

Description

INFOID:0000000010122272

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

Component Function Check

INFOID:0000000010122273

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

CONSULT ACTIVE TEST
1. Turn power switch ON.
2. Turn each interior room lamp ON:
- Map lamp
- Room lamp
- Luggage room lamp
3. Select “BATTERY SAVER” in “Active Test” of “BCM”.
4. While operating the test items, check that each interior room lamp turns ON/OFF.

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

Does each interior room lamp turn ON/OFF?

YES >> Interior room lamp power supply circuit is normal.
NO >> Refer to INL-44, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010122274

Regarding Wiring Diagram information. Refer to INL-17, "Wiring Diagram".

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

CONSULT ACTIVE TEST
1. Turn power switch OFF.
2. Disconnect the following connectors:
- Map lamp
- Room lamp
- Luggage room lamp
3. Turn power switch ON.
4. Select “BATTERY SAVER” in “Active Test” of “BCM”.
5. While operating the test item, check voltage between BCM harness connector and ground.

BCM		(–)	Test item		Voltage (Approx.)
(+)					
Connector	Terminal				
M25	56	Ground	BATTERY SAVER	Off	0 V
				On	Battery voltage

Is the inspection result normal?

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

2.CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

1. Turn power 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	
M25	56	Map lamp	R4	1	Yes
		Room lamp	R5	2	
		Luggage room lamp	B41	1	

Is the inspection result normal?

YES >> Check for internal short circuit of each interior room lamp.
NO >> Repair or replace harnesses.

3.CHECK INTERIOR ROOM LAMP POWER SUPPLY SHORT CIRCUIT

1. Turn power switch OFF.
2. Disconnect the BCM connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M25	56		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".
NO >> Repair or replace harnesses.

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:0000000010122275

Controls each interior room lamp (ground side) by PWM signal.
NOTE:
PWM signal control period is approximately 250 Hz (in the gradual brightening/dimming).

Component Function Check

INFOID:0000000010122276

CAUTION:
Before performing the diagnosis, check that the following is normal:
- **Interior room lamp power supply**
- **Map lamp bulb**
- **Room lamp bulb**

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT ACTIVE TEST
1. Switch the map lamp switch and room lamp switch to DOOR.
2. Turn power switch ON.
3. Select “INT LAMP” in “Active Test” of “BCM”.
4. While operating the test items, check that each interior room lamp turns ON/OFF (gradual brightening/dimming).

On : Interior room lamp gradual brightening
Off : Interior room lamp gradual dimming

Does the interior room lamp turns ON/OFF (gradual brightening/dimming)?

YES >> Interior room lamp control circuit is normal.
NO >> Refer to INL-46, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010122277

Regarding Wiring Diagram information. Refer to INL-17, "Wiring Diagram".

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT ACTIVE TEST
1. Turn power switch OFF.
2. Remove all the bulbs of map lamp and room lamp.
3. Turn power switch ON.
4. Select “INT LAMP” in “Active Test” of “BCM”.
5. While operating the test item, check continuity between BCM harness connector and ground.

BCM		Ground	Test item		Continuity
Connector	Terminal				
M25	63		INT LAMP	On	Yes
				Off	No

Is the inspection result normal?

YES >> GO TO 2.
Fixed ON>>GO TO 3.
Fixed OFF>>Replace BCM. Refer to BCS-72, "Removal and Installation".

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn power switch OFF.
2. Disconnect BCM connector, map lamp and room lamp connectors.
3. Check continuity between BCM harness connector and map lamp harness connector.

BCM		Map lamp		Continuity
Connector	Terminal	Connector	Terminal	
M25	63	R4	3	Yes

4. Check continuity between BCM harness connector and room lamp harness connector.

BCM		Room lamp		Continuity
Connector	Terminal	Connector	Terminal	
M25	63	R5	1	Yes

Is the inspection result normal?

YES >> Replace map lamp or room lamp.
NO >> Repair or replace harnesses.

3.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

1. Turn power switch OFF.
2. Disconnect BCM connector, map lamp connector and room lamp connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M25	63		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".
NO >> Repair or replace harnesses.

LUGGAGE ROOM LAMP CIRCUIT

Description

INFOID:0000000010122278

Controls the luggage room lamp (ground side) to turn the luggage room lamp ON and OFF.

Diagnosis Procedure

INFOID:0000000010122279

CAUTION:
Before performing the diagnosis, check that the following is normal:
- **Interior room lamp power supply**
- **Luggage room lamp bulb**

Regarding Wiring Diagram information. Refer to INL-17, "Wiring Diagram".

1.CHECK LUGGAGE ROOM LAMP OUTPUT

1. Turn power switch OFF.
2. Remove the luggage room lamp bulb.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Condition		Continuity
Connector	Terminal				
M29	49		Back door	Open	Yes
				Closed	No

Is the inspection result normal?

YES >> GO TO 2.
Fixed ON>>GO TO 3.
Fixed OFF>>Replace BCM. Refer to BCS-72, "Removal and Installation".

2.CHECK LUGGAGE ROOM LAMP OPEN CIRCUIT

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

BCM		Luggage room lamp		Continuity
Connector	Terminal	Connector	Terminal	
M29	49	B41	2	Yes

Is the inspection result normal?

YES >> Replace luggage room lamp.
NO >> Repair or replace harnesses.

3.CHECK LUGGAGE ROOM LAMP SHORT CIRCUIT

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

BCM		Ground	Continuity
Connector	Terminal		
M29	49		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".
NO >> Repair or replace harnesses.

POWER SWITCH ILLUMINATION CIRCUIT

Description

INFOID:0000000010122280

Provides the power supply and the ground to control the power switch illumination.

Component Function Check

INFOID:0000000010122281

1.CHECK POWER SWITCH ILLUMINATION OPERATION

CONSULT ACTIVE TEST
1. Turn the power switch ON.
2. Select “ENGINE SW ILLUMI” in “Active Test” of “BCM (INTELLIGENT KEY)”.
3. While operating the test items, check that the power switch illumination turns ON/OFF.

On : Power switch illumination ON
Off : Power switch illumination OFF

Does the power switch illumination turn ON/OFF?

YES >> Power switch illumination circuit is normal.
NO >> Refer to INL-49, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010122282

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

1.CHECK POWER SWITCH ILLUMINATION POWER SUPPLY OUTPUT

1. Turn power switch OFF.
2. Disconnect power switch connector.
3. Check voltage between power switch harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Power switch					
Connector	Terminal				
M33	5	Ground	Power switch illumination	ON	Battery voltage
				OFF	0 V

Is the inspection result normal?

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

2.CHECK POWER SWITCH ILLUMINATION POWER SUPPLY OPEN CIRCUIT

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

BCM		Power switch		Continuity
Connector	Terminal	Connector	Terminal	
M23	90	M33	5	Yes

Is the inspection result normal?

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

3.CHECK POWER SWITCH ILLUMINATION POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M23	90		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".
NO >> Repair or replace harnesses.

4. CHECK POWER SWITCH ILLUMINATION GROUND CIRCUIT

1. Check continuity between power switch harness connector and ground.

Power switch		Ground	Continuity
Connector	Terminal		
M33	6		Yes

Is the inspection result normal?

YES >> Replace power switch.
NO >> Repair or replace harnesses.

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000010122283

CAUTION:
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: • Map lamp • Room lamp • Luggage room lamp	• Harness between BCM and each interior room lamp • BCM	Interior room lamp power supply circuit Refer to INL-44.
• 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-102.
		Interior room lamp control circuit Refer to INL-46.
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-10, "INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Description".
• Luggage room lamp does not turn ON even though the back door is open. • Luggage room lamp does not turn OFF even though the back door is closed.	• Harness between BCM and back door switch • Harness between BCM and luggage room lamp • BCM	Back door switch circuit Refer to DLK-102.
		Luggage room lamp circuit Refer to INL-48.
Power switch illumination does not illuminate.	• Harness between BCM and power switch • BCM	Power switch illumination circuit Refer to INL-49.
Interior room lamp battery saver does not activate.	BCM	Replace BCM. Refer to BCS-72.

REMOVAL AND INSTALLATION

MAP LAMP

Removal and Installation

INFOID:0000000010122284

CAUTION:
- **Disconnect the 12V battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage. Refer to INL-3, "Precaution for Removing 12V Battery".**
- **Do not attempt to separate the map lamp assembly from the headlining prior to removing headlining, or damage to the components may occur.**

REMOVAL

1. Remove the headlining. Refer to INT-37, "Removal and Installation".
2. Remove the two bracket screws, then remove the map lamp assembly bracket from the map lamp assembly and position aside.
3. Disconnect the harness connectors from the map lamp assembly.
4. Release the back plate pawls using a suitable tool and remove the map lamp assembly.
   CAUTION:
   When removing, support the map lamp assembly by hand so it does not fall out and get damaged during removal.
5. Remove the map lamp back plate from the headlining.

INSTALLATION

Installation is in the reverse order of removal.

Replacement

INFOID:0000000010122285

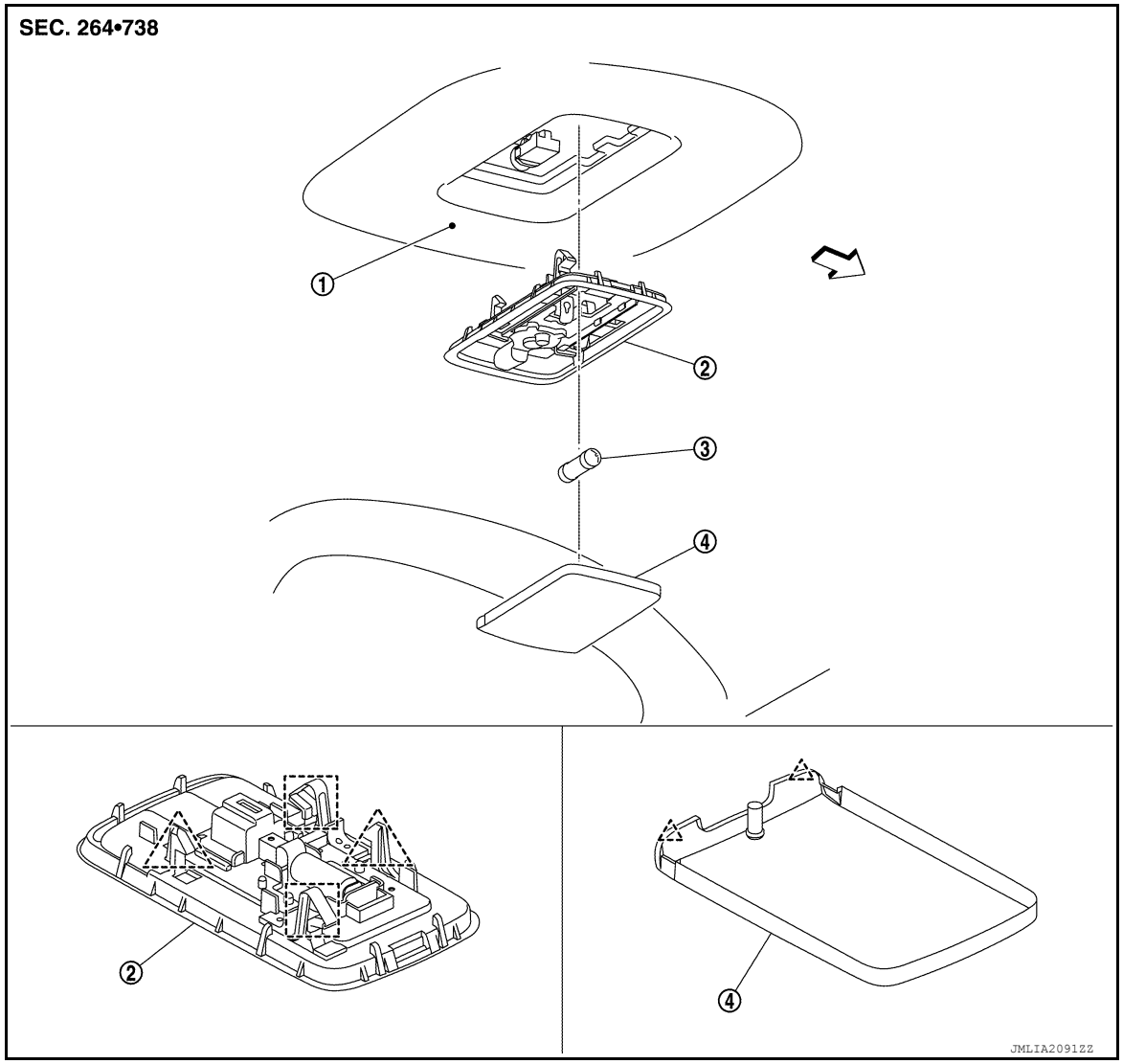
MAP LAMP BULB

The map lamp LED bulbs are replaced as part of the map lamp.

ROOM LAMP

Exploded View

INFOID:0000000010122286



1. Headlining
2. Room lamp assembly
3. Bulb
4. Lens

: Pawl

: Metal clip

: Vehicle front

Removal and Installation

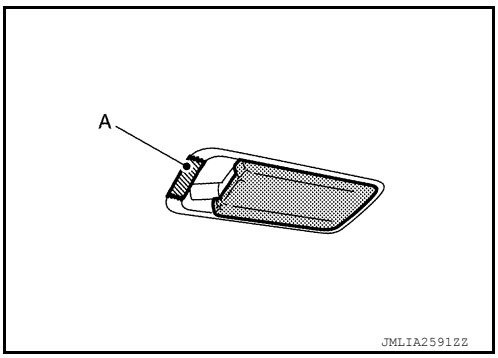
INFOID:0000000010122287

CAUTION:

- **Disconnect the 12V battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage. Refer to INL-3, "Precaution for Removing 12V Battery".**
- **Never 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.**
- **Never touch the glass surface of the bulb with bare hands because the surface is very hot just after the lamp is turned OFF to prevent a burns.**

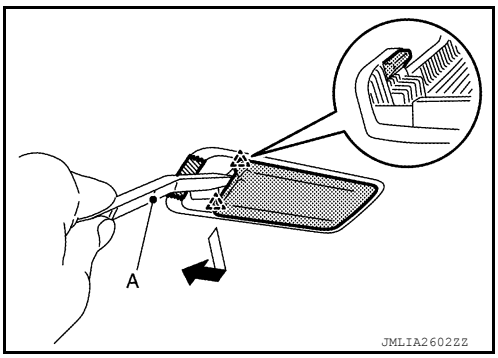
REMOVAL

1. Apply protective tape (A) on the parts to protect it from damage.



2. Disengage lens fixing pawls with a remover tool (A), and then remove lens.

: Pawl



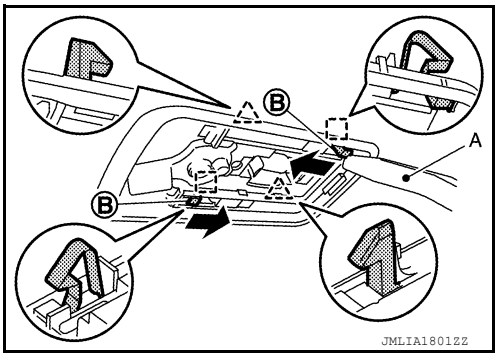
3. Using a remover tool (A), press the metal clip (B), and then disengage.
4. Pull downward and then disengage the room lamp mounting pawls.

CAUTION:

Be careful not to disengage the pawls forcibly. Doing so may cause damage to the headliner by pawls that are fully engaged to the headliner.

: Pawl

: Metal clip



5. Disconnect the harness connector, and then remove room lamp assembly.

INSTALLATION

Install in the reverse order of removal.

Replacement

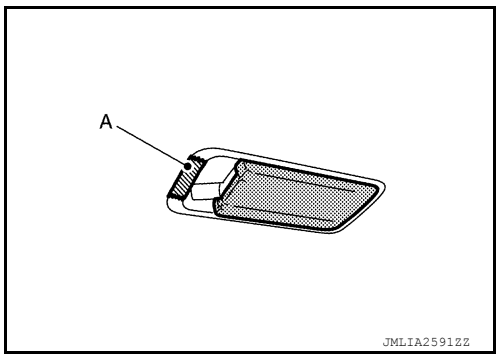
INFOID:0000000010122288

CAUTION:

- **Disconnect the 12V battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage. Refer to INL-3, "Precaution for Removing 12V Battery".**
- **Never 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.**
- **Never touch the glass surface of the bulb with bare hands because the surface is very hot just after the lamp is turned OFF to prevent a burns.**
- **Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (causing dirty or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.**

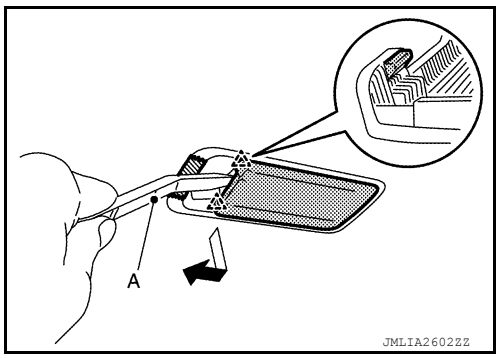
ROOM LAMP BULB

1. Apply protective tape (A) on the parts to protect it from damage.



2. Disengage lens fixing pawls with a remover tool (A), and then remove lens.

: Pawl

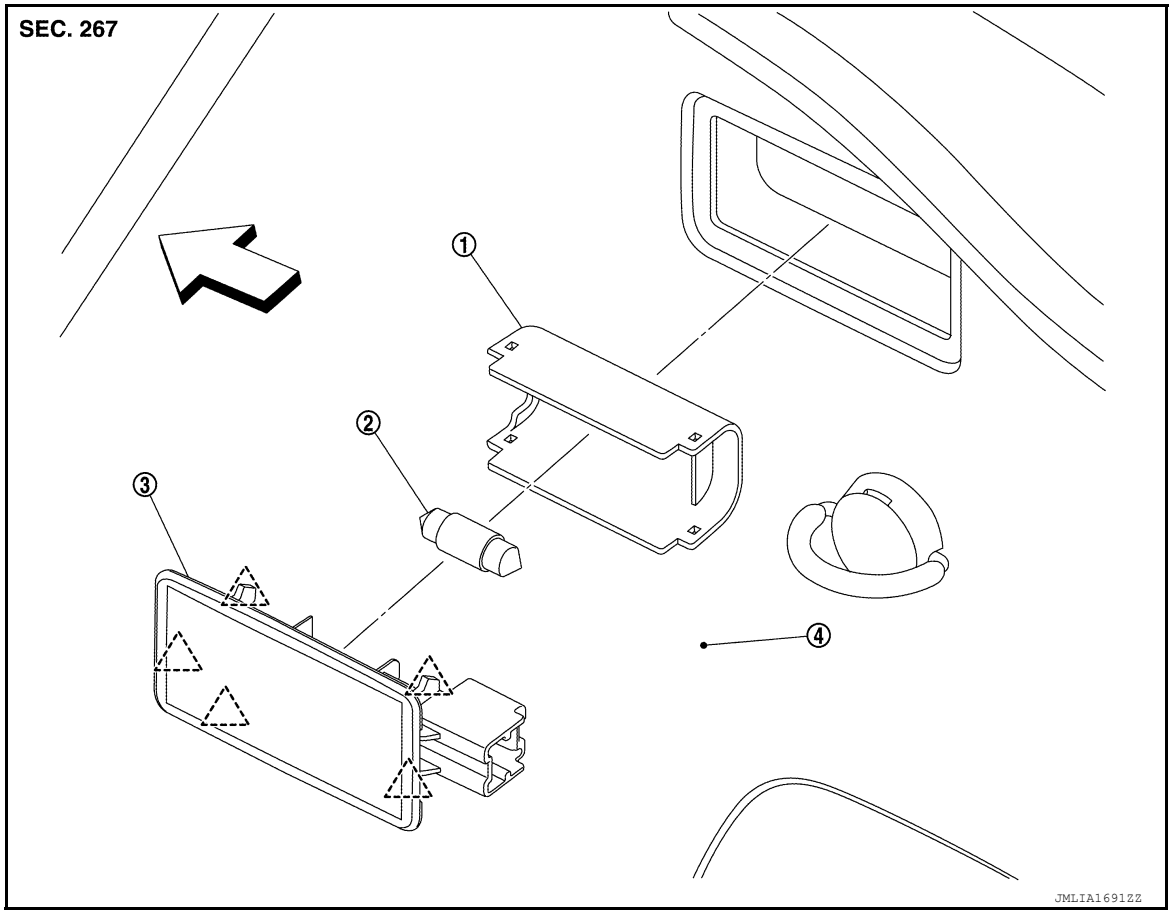


3. Remove the bulb.

LUGGAGE ROOM LAMP

Exploded View

INFOID:0000000010122289



1. Shade
2. Bulb
3. Luggage room lamp assembly
4. Luggage side lower finisher

: Pawl

: Vehicle front

Removal and Installation

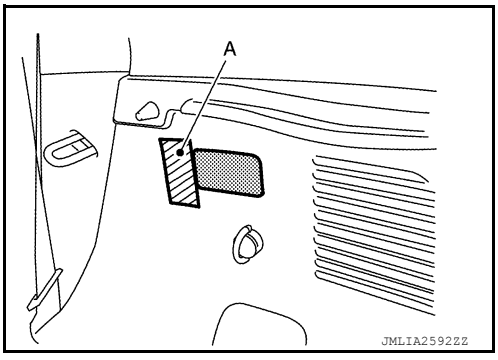
INFOID:0000000010122290

CAUTION:

Disconnect the 12V battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage. Refer to INL-3, "Precaution for Removing 12V Battery".

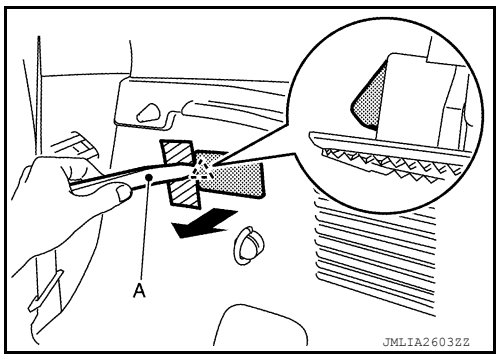
REMOVAL

1. Apply protective tape (A) on the parts to protect it from damage.



2. Disengage luggage room lamp fixing pawl with a remover tool (A).

: Pawl



3. Disconnect harness connector, and then remove luggage room lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000010122291

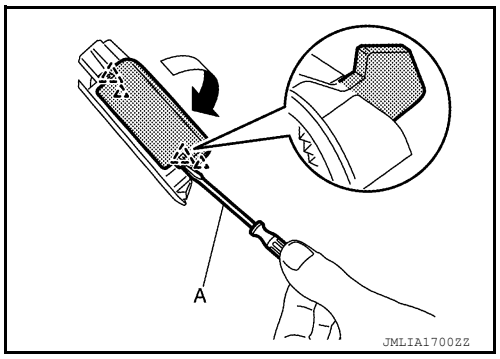
CAUTION:

- **Disconnect the 12V battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage. Refer to INL-3, "Precaution for Removing 12V Battery".**
- **Never 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.**
- **Never touch the glass surface of the bulb with bare hands because the surface is very hot just after the lamp is turned OFF to prevent a burns.**
- **Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (causing dirty or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.**

LUGGAGE ROOM LAMP BULB

1. Remove luggage room lamp assembly. Refer to INL-56, "Removal and Installation".
2. Disengage shade fixing pawls using a remover tool (A), and then remove shade.

: Pawl

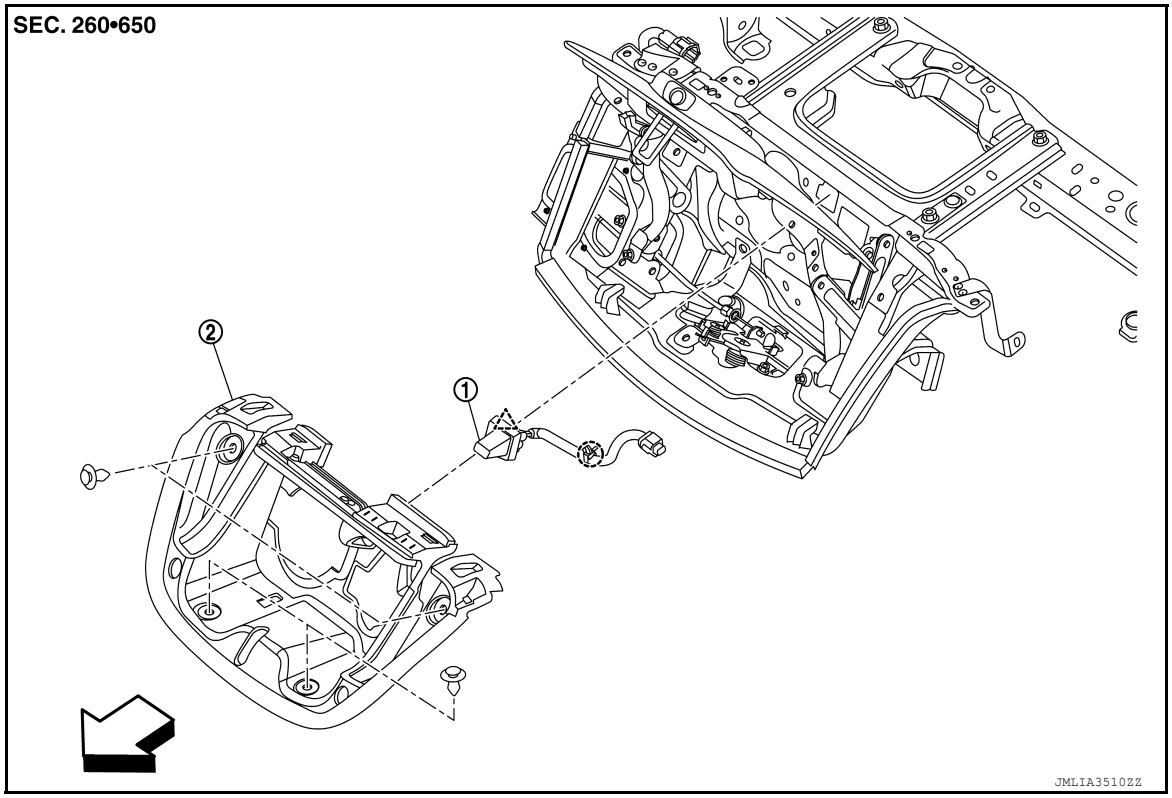


3. Remove the bulb.

CHARGE PORT LIGHT

Exploded View

INFOID:0000000010122292



1. Charge port light
2. Charge port cover
3. Clip
4. Pawl
5. Front

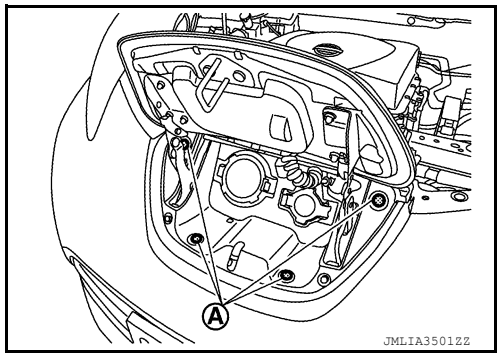
Removal and Installation

INFOID:0000000010122293

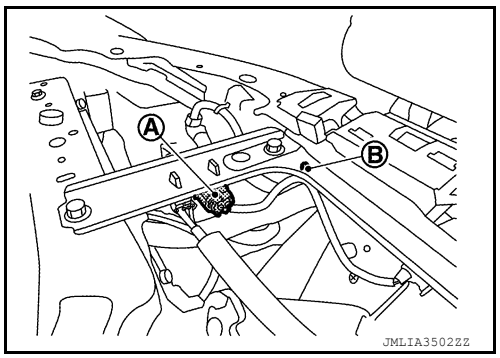
CAUTION:
Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to INL-3, "Precaution for Removing 12V Battery".

REMOVAL

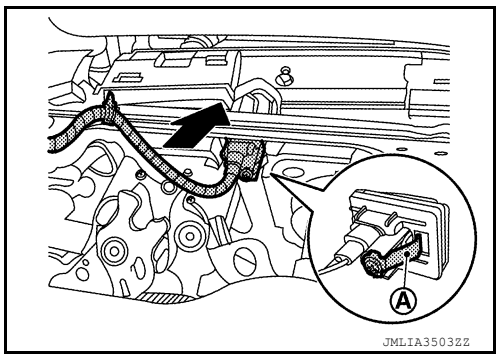
1. Remove radiator upper grille. Refer to DLK-165, "RADIATOR UPPER GRILLE : Removal and Installation".
2. Remove charge port cover clips (A).



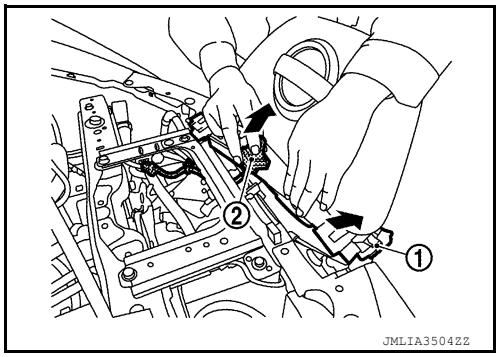
3. Disconnect the harness connector (A) and harness fixing clip (B).



4. Disengage charge port light assembly fixing portion (A), and then push charge port light assembly, as shown (⬅).



5. Pull charge port cover (1) toward vehicle front and remove charge port light assembly (2) from between charge port cover and charge port bracket.



INSTALLATION

Installation is in the reverse order of removal.

Replacement

INFOID:0000000010122294

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace charge port light assembly as a set.

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000010122295

Item	Type	Wattage (W)*
Map lamp	LED	—
Room lamp	—	8
Luggage room lamp	—	5

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