SECTION INL
INTERIOR LIGHTING SYSTEM

CONTENTS

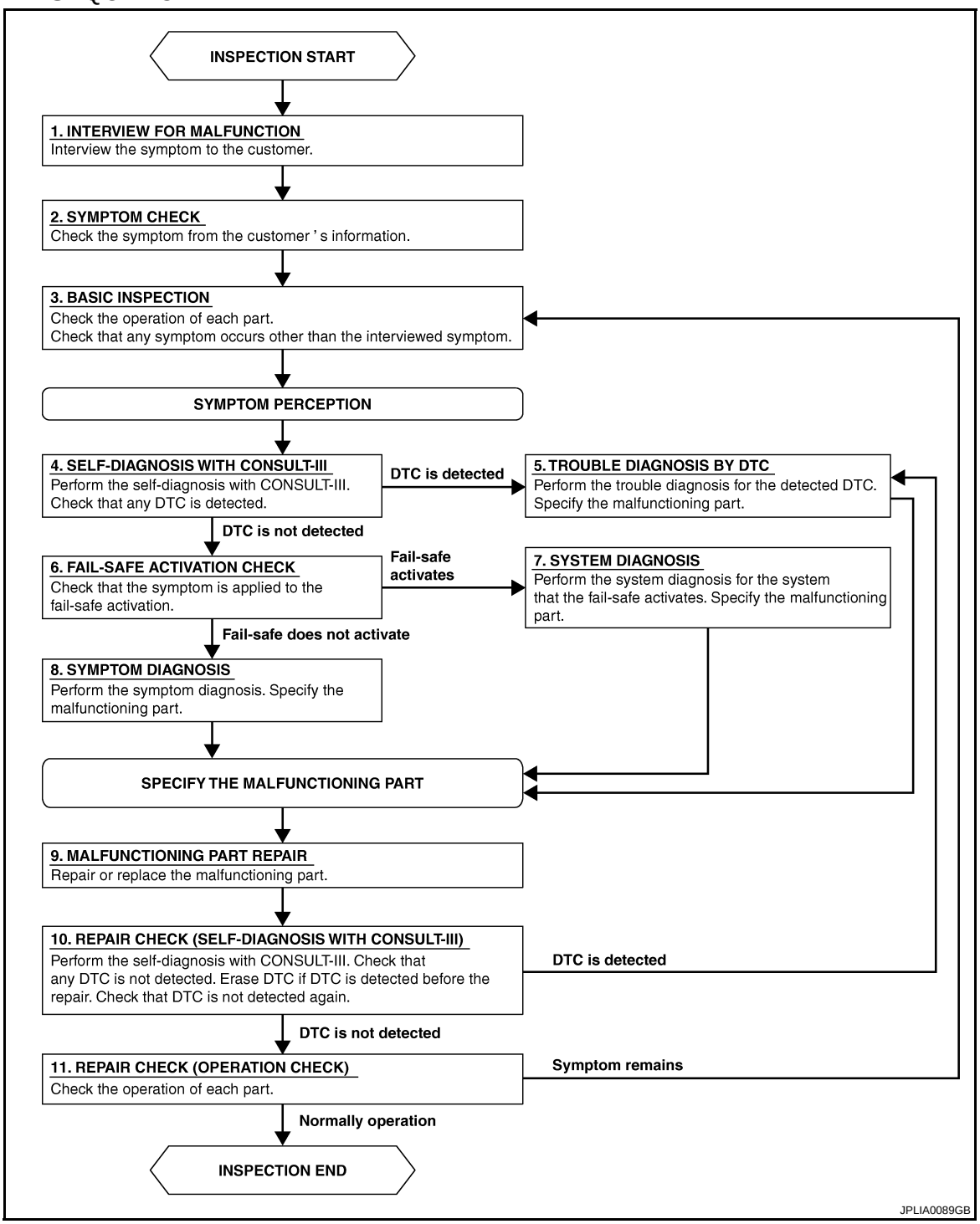
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000003071719

OVERALL SEQUENCE



DETAILED FLOW

1.INTERVIEW FOR MALFUNCTION

Find out what the customer's concerns are.

>> GO TO 2

2.SYMPTOM CHECK

Verify the symptom from the customer's information.

>> GO TO 3

3.BASIC INSPECTION

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

>> GO TO 4

4.SELF-DIAGNOSIS WITH CONSULT-III

Perform the self-diagnosis with CONSULT-III. 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. Specify the malfunctioning part.

>> GO TO 9

9.MALFUNCTION PART REPAIR

Repair or replace the malfunctioning part.

>> GO TO 11

10.REPAIR CHECK (SELF-DIAGNOSIS WITH CONSULT-III)

Perform the self-diagnosis with CONSULT-III. Verfied 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?

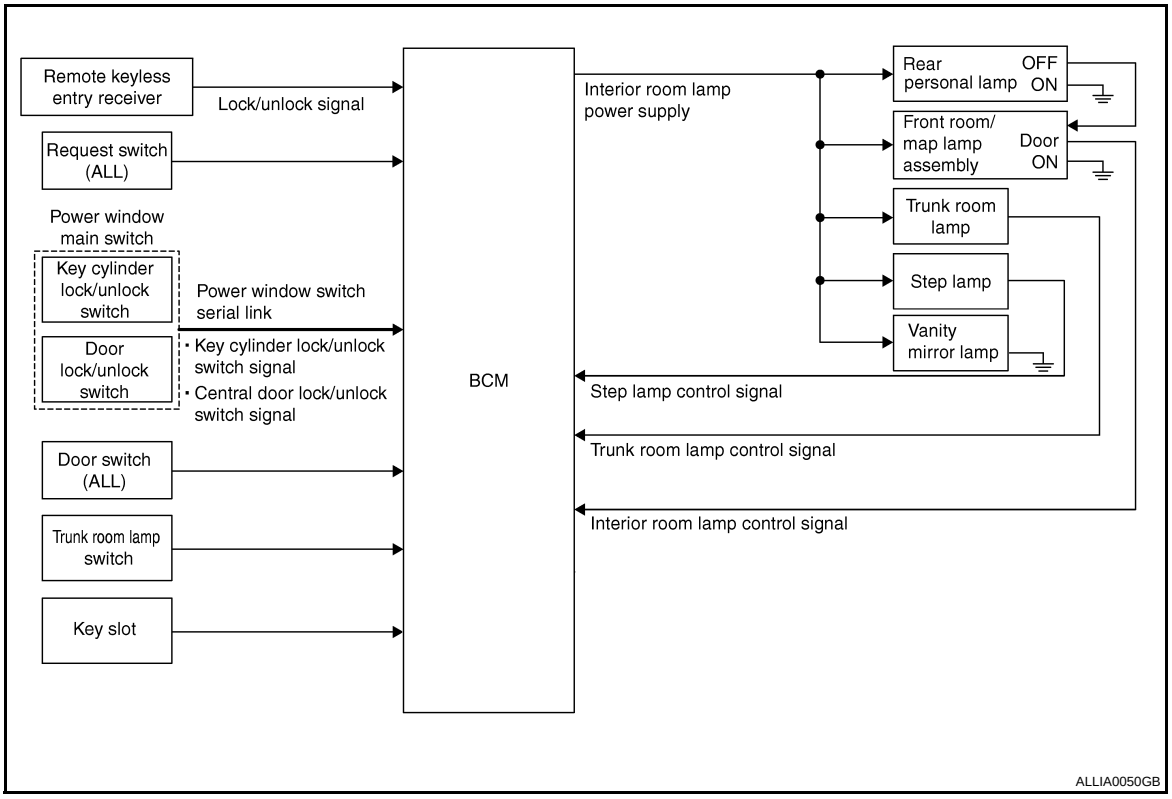
YES >> INSPECTION END
NO >> GO TO 3

FUNCTION DIAGNOSIS

INTERIOR ROOM LAMP CONTROL SYSTEM

System Diagram

INFOID:0000000003071720



System Description

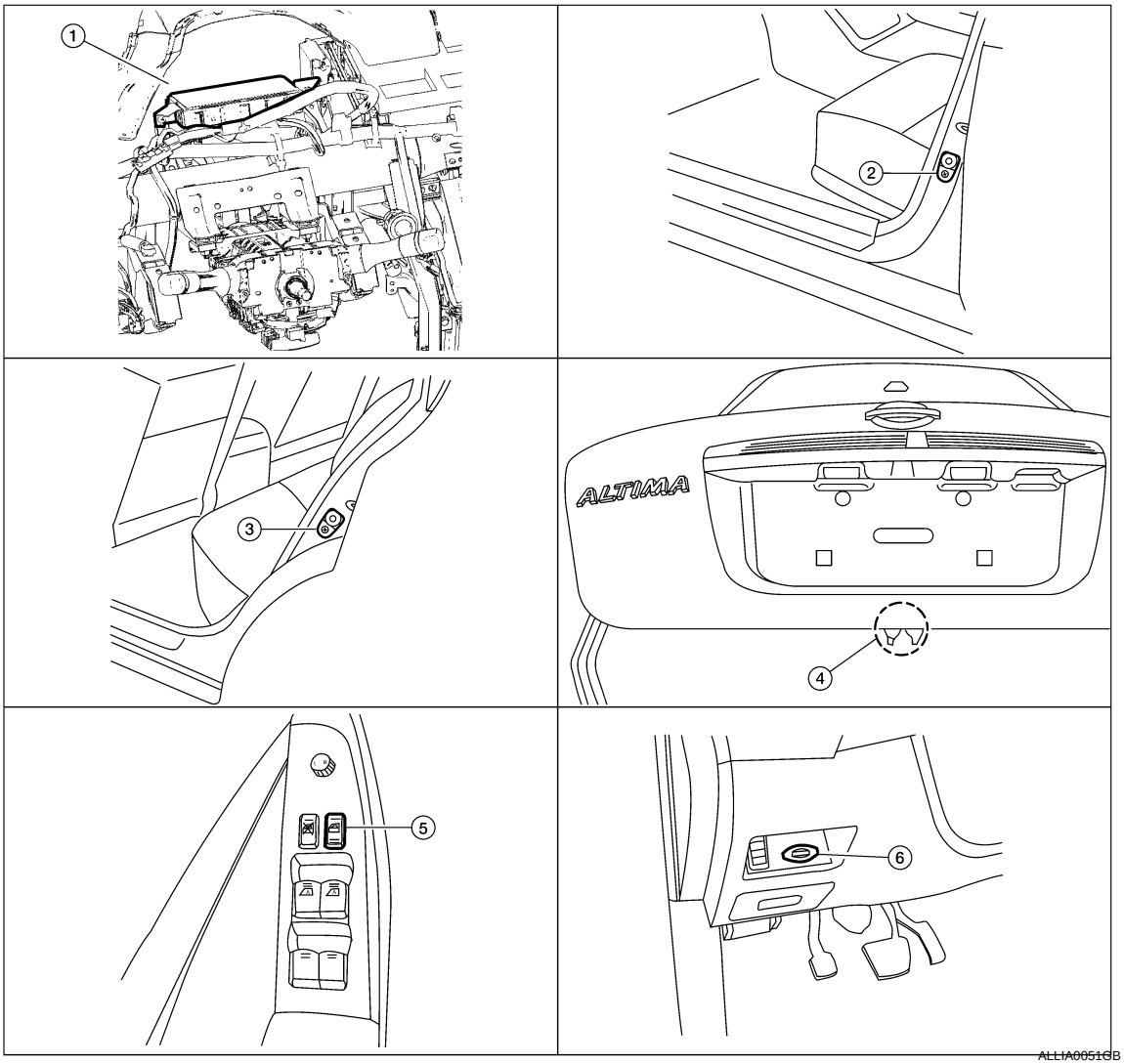
INFOID:0000000003071721

OUTLINE

- Interior room lamps* are controlled by interior room lamp timer control function of BCM.
  *:Front room/map lamps and personal lamps (when lamp switch is in DOOR position).
- Trunk room lamp is controlled by trunk room lamp control function of BCM.
- Step lamps are controlled by step lamp control function of BCM.

Component Parts Location

INFOID:0000000003071722



1. BCM M17, M18, M19, M20, M21 (view with instrument panel removed)
2. Front door switch LH, B8 and RH, B18
3. Rear door switch LH, B108 and RH, B116
4. Trunk lamp switch and trunk release solenoid B28
5. Main power window and door lock/unlock switch D7 and D8
6. Key slot M40

Component Description

INFOID:0000000003071723

SWITCH OPERATION

When a door is opened, the door switch closes to send a ground signal to the BCM. When the trunk is opened, the trunk lamp switch and trunk release solenoid closes sending a ground signal to the BCM.

ROOM LAMP TIMER OPERATION

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

- When the front door LH is unlocked [with Intelligent Key, main power window and door lock/unlock switch, or front door lock assembly (key cylinder switch)].
- When a door opens → closes and the Intelligent Key is not inserted in the key slot.

Timer control is canceled under the following conditions.

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

- A door is opened (door switch turns ON).
- Intelligent Key is inserted into the key slot.

Interior lamp operational settings can be changed with the function setting of CONSULT-III.

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 30 minutes after the ignition switch is turned OFF.
The BCM controls the interior lamps listed below

- Step lamp LH and RH
- Front room/map lamp LH and RH
- Personal lamp rear LH and RH
- Vanity mirror lamp LH and RH
- Trunk room lamp

After the battery saver system turns the lamps OFF, the lamps will illuminate again when

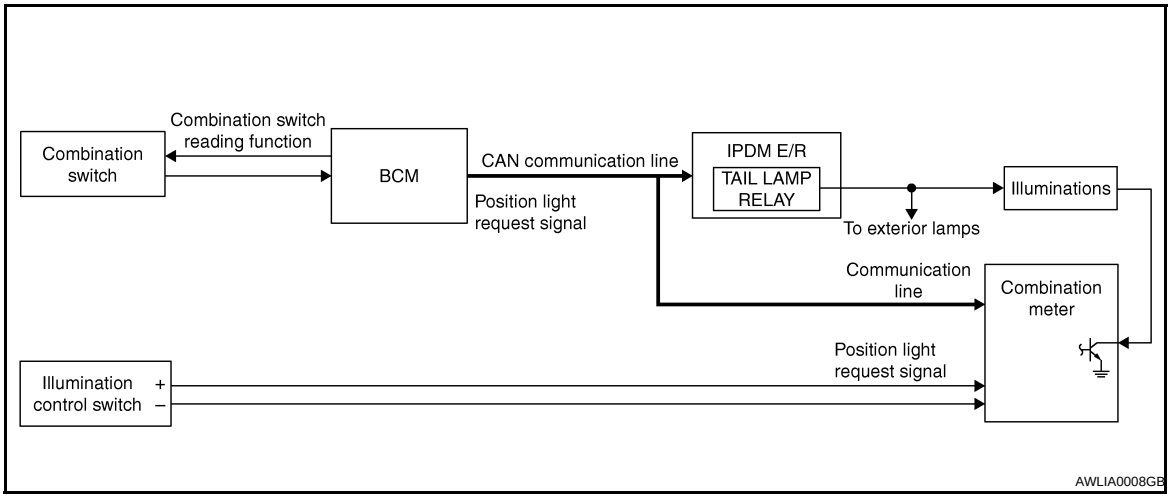
- a signal is received from an Intelligent Key or main power window and door lock/unlock switch, or when the front door LH lock assembly (key cylinder switch) is locked or unlocked
- a door is opened or closed
- the Intelligent Key is removed from or inserted into the key slot.

The Interior lamp battery saver control time period can be changed with the function setting of CONSULT-III.

ILLUMINATION CONTROL SYSTEM

System Diagram

INFOID:0000000003071724



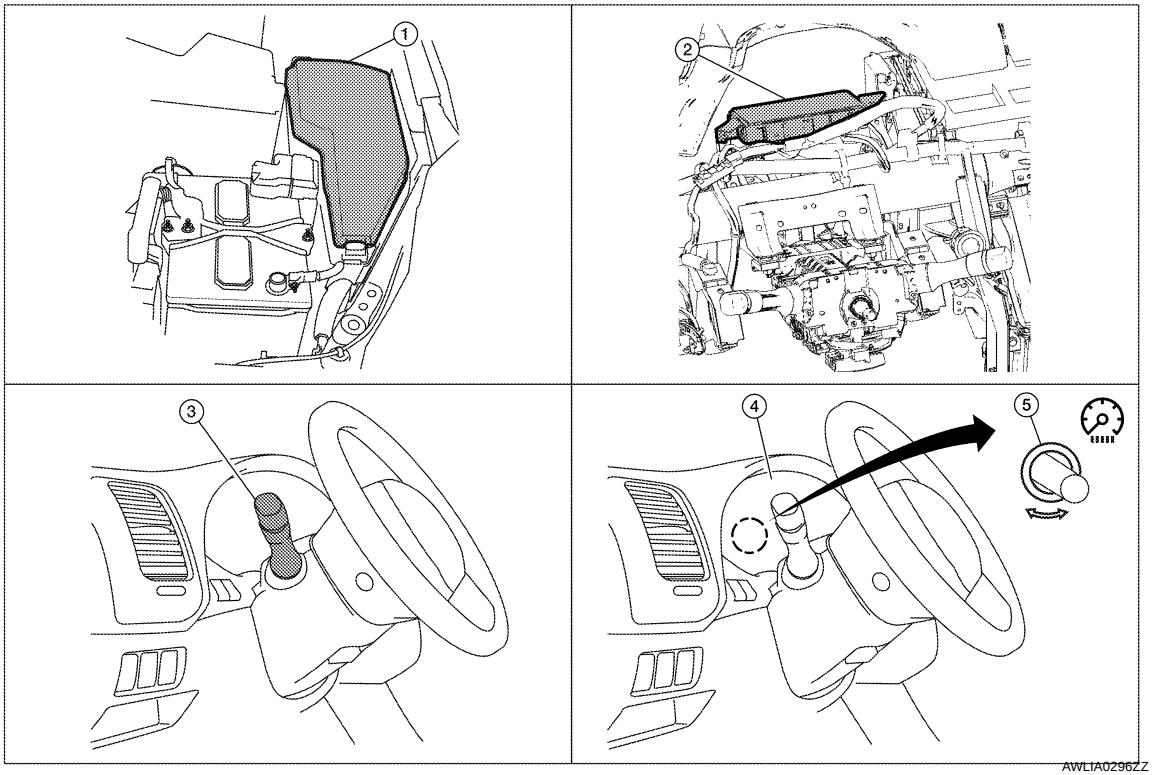
System Description

INFOID:0000000003071725

The illumination lamps operation is dependent upon the position of the lighting switch (combination switch). When the lighting switch is placed in the 1ST or 2ND position (or if the auto light system is activated) the BCM (body control module) receives input requesting the illumination lamps to illuminate. This input is communicated to the IPDM E/R (intelligent power distribution module engine room) across 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 illumination lamps, which then illuminate.

Component Parts Location

INFOID:0000000003303278



1. IPDM E/R E17, E18
2. BCM M16, M17, M18, M19 (view with instrument panel removed)
3. Combination switch M28
4. Combination meter M24
5. Illumination control switch (built into combination meter)

Component Description

INFOID:0000000003071727

ILLUMINATION OPERATION BY LIGHTING SWITCH

With the lighting switch in the 1ST or 2ND position (or if the auto light system is activated), the BCM receives input requesting the illumination lamps to illuminate. This input is communicated to the IPDM E/R across the CAN communication lines. The CPU of the IPDM E/R controls the tail lamp relay coil which, when energized, directs power

BATTERY SAVER CONTROL

When the lighting switch (combination 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 30 minutes unless the lighting switch position is changed. If the lighting switch position is changed, then the illumination lamps are turned off after a 30 second delay. When the lighting switch is turned from OFF to 1ST or 2ND position (or if auto light system is activated) after illumination lamps have been turned off by the battery saver control, the illumination lamps illuminate again.

DIAGNOSIS SYSTEM (BCM)

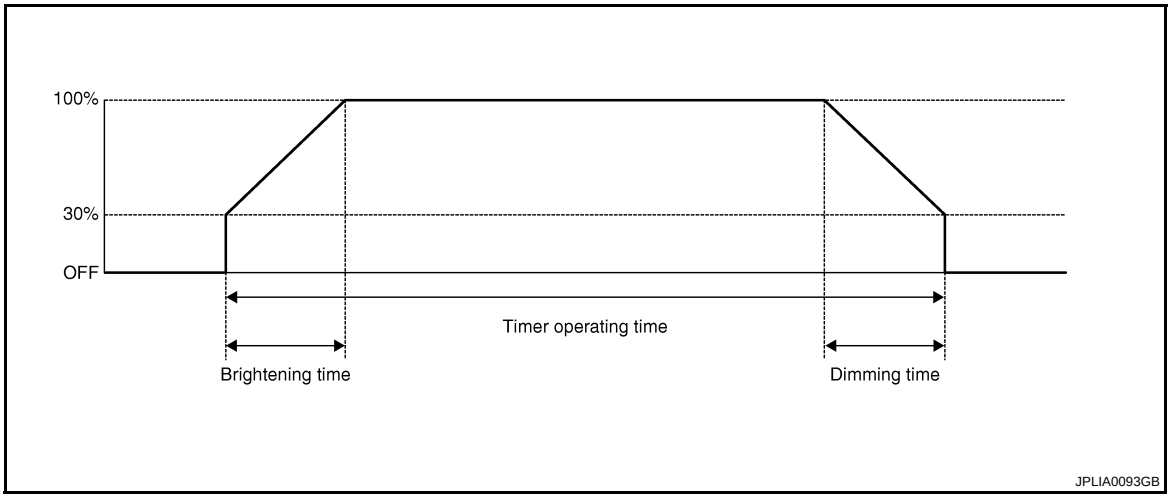
CONSULT-III Function

INFOID:0000000003303279

CONSULT-III can display each diagnostic item using the diagnostic test modes shown following.

Diagnostic mode	Description
WORK SUPPORT	Supports inspections and adjustments. Commands are transmitted to the BCM for setting the status suitable for required operation, input/output signals are received from the BCM and received data is displayed.
DATA MONITOR	Displays BCM input/output data in real time.
ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.
SELF-DIAG RESULTS	Displays BCM self-diagnosis results.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ECU PART NUMBER	BCM part number can be read.
CONFIGURATION	Performs BCM configuration read/write functions.

WORK SUPPORT



Service item	Setting item	Setting	
SET I/L D-UNLCK INTCON	ON*	With the interior room lamp timer function	
	OFF	Without the interior room lamp timer function	
ROOM LAMP TIMER SET	MODE 2	7.5 sec.	Sets the interior room lamp ON time. (Timer operating time)
	MODE 3*	15 sec.	
	MODE 4	30 sec.	
ROOM LAMP ON TIME SET	MODE 1	0.5 sec.	Sets the interior room lamp gradual brightening time.
	MODE 2*	1 sec.	
	MODE 3	2 sec.	
	MODE 4	3 sec.	
	MODE 5	0 sec.	
ROOM LAMP OFF TIME SET	MODE 1	0.5 sec.	Sets the interior room lamp gradual dimming time.
	MODE 2	1 sec.	
	MODE 3	2 sec.	
	MODE 4*	3 sec.	

Service item	Setting item	Setting
R LAMP TIMER LOGIC SET	MODE 1* (ON)	Interior room lamp timer activates with synchronizing all doors.
	MODE 2 (OFF)	Interior room lamp timer activates with synchronizing the front door LH only.

* : Initial setting

DATA MONITOR

Monitor item [Unit]	Description
REQ SW-DR [ON/OFF]	The switch status input from request switch (driver side)
REQ SW-AS [ON/OFF]	The switch status input from front request switch (passenger side)
REQ SW-RR [ON/OFF]	**NOTE:** The item is indicated, not monitored.
REQ SW-RL [ON/OFF]	**NOTE:** The item is indicated, not monitored.
PUSH SW [ON/OFF]	The switch status input from push-button ignition switch
ACC RLY-F/B [ON/OFF]	ACC relay feedback signal status input from ACC relay
UNLK SEN-DR [ON/OFF]	Door lock status input from front door LH
KEY SW-SLOT [ON/OFF]	Key switch status input from key slot
DOOR SW-DR [ON/OFF]	The switch status input from front door switch LH
DOOR SW-AS [ON/OFF]	The switch status input from front door switch RH
DOOR SW-RR [ON/OFF]	The switch status input from rear door switch RH
DOOR SW- RL [ON/OFF]	The switch status input from rear door switch LH
DOOR SW-BK [ON/OFF]	**NOTE:** The item is indicated, not monitored.
CDL LOCK SW [ON/OFF]	Lock switch status received from central door lock switch by power window switch serial link
CDL UNLOCK SW [ON/OFF]	Unlock switch status received from central door lock switch by power window switch serial link
KEY CYL LK-SW [ON/OFF]	Lock switch status received from key cylinder switch by power window switch serial link
KEY CYL UN-SW [ON/OFF]	Unlock switch status received from key cylinder switch by power window switch serial link
TRNK/HAT MNTR [ON/OFF]	The switch status input from trunk room lamp switch
RKE-LOCK [ON/OFF]	Lock signal status received from remote keyless entry receiver
RKE-UNLOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

Test item	Operation	Description
INT LAMP	ON	Outputs the interior room lamp control signal to turn map lamp and personal lamp ON (Map lamp switch is in DOOR position).
	OFF	Stops the interior room lamp control signal to turn map lamp and personal lamp OFF.
STEP LAMP TEST	ON	Outputs the step lamp control signal to turn step lamp ON.
	OFF	Stops the step lamp control signal to turn step lamp OFF.
LUGGAGE LAMP TEST	ON	Outputs the luggage room lamp control signal to turn step lamp ON.
	OFF	Stops the luggage room lamp control signal to turn step lamp ON.

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000003303313

1. CHECK FUSE AND FUSIBLE LINK

Check if the following BCM fuse or fusible link are blown.

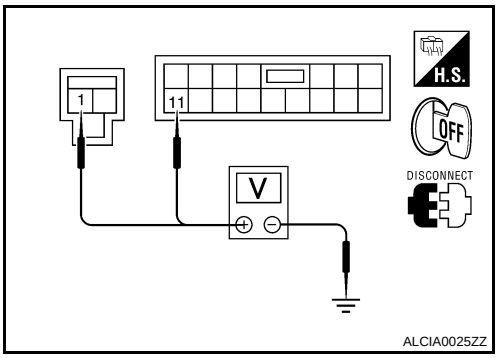
Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	J
11		10

Is the fuse or fusible link blown?

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

2. CHECK POWER SUPPLY CIRCUIT

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



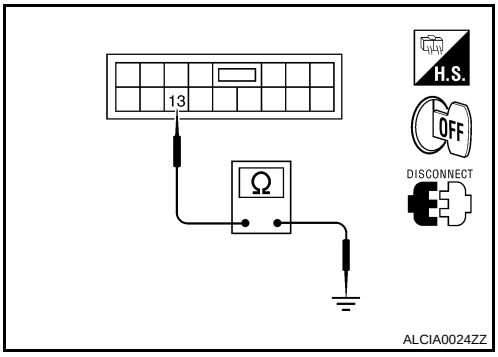
Terminals			Voltage (Approx.)
(+)		(–)	
BCM		Ground	
Connector	Terminal		
M16	1		Battery voltage
M17	11		

Is the measurement normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.



BCM		Ground	Continuity
Connector	Terminal		
M17	13		Yes

Does continuity exist?

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

Special Repair Requirement

INFOID:0000000003303314

1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to CONSULT-III operation manual.

>> Work end.

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

Description

INFOID:0000000003071730

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:0000000003071731

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

CONSULT-III
1. Turn ignition switch ON.
2. Turn each interior room lamp ON.
- Front room/map lamps
- Personal lamps
- Step lamps
- Vanity mirror lamps
- Trunk room lamp
3. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
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

Is the inspection result normal?

YES >> Interior room lamp power supply circuit is normal.
NO >> Refer to INL-15, "Diagnosis Procedure".

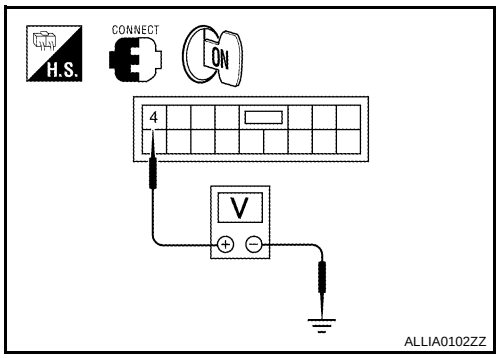
Diagnosis Procedure

INFOID:0000000003071732

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

CONSULT-III
1. Turn ignition switch ON.
2. Select “BATTERY SAVER” of BCM (BATTERY SAVER) active test item.
3. While operating the test item, check voltage between BCM harness connector M17 terminal 4 and ground.

Terminals			Test item	Voltage
(+)		(-)		
BCM		Ground	BATTERY SAVER	
Connector	Terminal			
M17	4		OFF	0 V
			ON	Battery voltage



Is the inspection result normal?

YES >> GO TO 2
NO >> Replace BCM. Refer to BCS-85, "Removal and Installation".

2.CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following connectors.
- BCM M17
- Front room/map lamp assembly
- Vanity mirror lamp LH
- Vanity mirror lamp RH
- Trunk room lamp
- Step lamp LH
- Step lamp RH

3. Check continuity between BCM harness connector M17 terminal 4 and each interior room lamp harness connector.

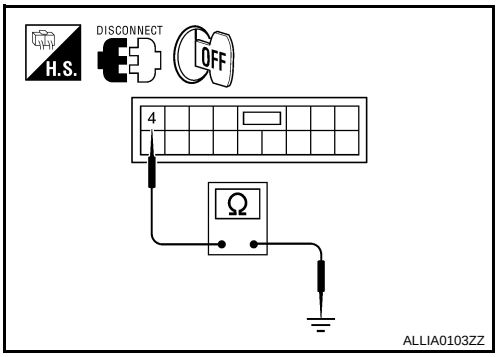
BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M17	4	Front room/map lamp assembly	R50	1	Yes
		Vanity mirror lamp LH	R3	2	
		Vanity mirror lamp RH	R9	2	
		Trunk room lamp	B36	1	
		Step lamp LH	D11	1	
		Step lamp RH	D109	1	

Is the inspection result normal?

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

3. CHECK INTERIOR ROOM LAMP POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM harness connector M17 terminal 4 and ground.



BCM		Ground	Continuity
Connector	Terminal		
M17	4		No

Is the inspection result normal?

YES >> Replace the interior room lamp. Refer to INL-87, "Removal and Installation".
NO >> Repair the harnesses or connectors.

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:0000000003071733

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:0000000003071734

CAUTION:
Before performing the diagnosis, check that the following is normal.
- **Interior room lamp power supply**
- **Front room/map lamp bulbs**
- **Personal lamp bulbs**

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT-III
1. Switch the map lamp switch to DOOR.
2. Turn ignition switch ON.
3. Select “INT LAMP” of BCM (INT LAMP) active test item.
4. While operating the test 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

Is the inspection result normal?

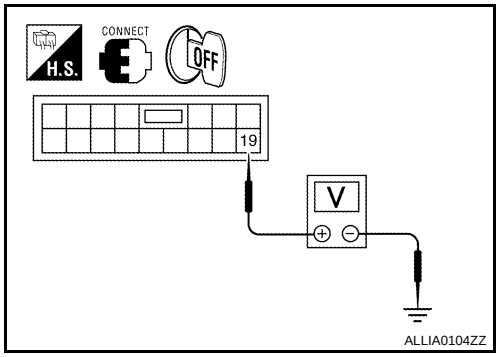
YES >> Interior room lamp control circuit is normal.
NO >> Refer to INL-17, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003071735

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT-III
1. Turn ignition switch OFF.
2. Select “INT LAMP” of BCM (INT LAMP) active test item.
3. While operating the test item, check voltage between BCM harness connector M17 terminal 19 and ground.



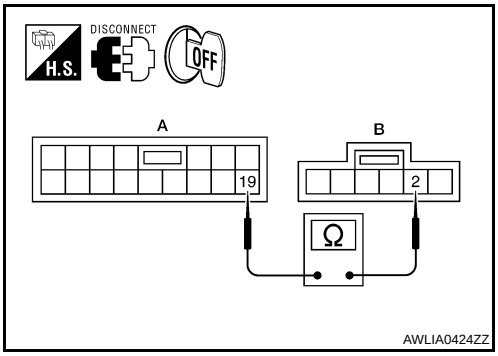
BCM		Ground	Test item	Voltage
Connector	Terminal		INT LAMP	
M17	19		ON	0V
			OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 2
Fixed ON>>GO TO 3
Fixed OFF>> Replace BCM. Refer to BCS-85, "Removal and Installation".

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M17 and front room/map lamp assembly connector.
3. Check continuity between BCM harness connector M17 (A) terminal 19 and front room/map lamp assembly harness connector R50 (B) terminal 2.



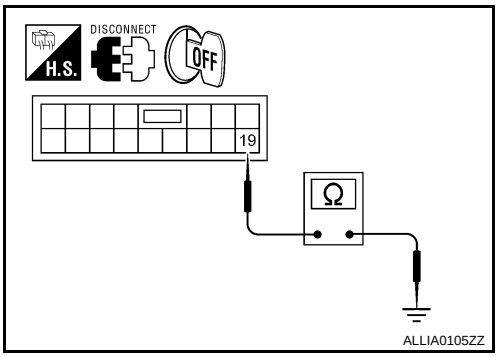
BCM		Front room/map lamp assembly		Continuity
Connector	Terminal	Connector	Terminal	
M17 (A)	19	R50 (B)	2	Yes

Is the inspection result normal?

YES >> Replace the front room/map lamp assembly. Refer to INL-87, "Removal and Installation".
NO >> Repair the harnesses or connectors.

3. CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M17 and front room/map lamp assembly connector.
3. Check continuity between BCM harness connector M17 terminal 19 and ground.



BCM		Ground	Continuity
Connector	Terminal		
M17	19		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-85, "Removal and Installation".
NO >> Repair the harnesses or connectors.

STEP LAMP CIRCUIT

Description

INFOID:0000000003071736

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

Component Function Check

INFOID:0000000003071737

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

1.CHECK STEP LAMP OPRATION

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

ON : Step lamp ON
OFF : Step lamp OFF

Is the inspection result normal?

YES >> Step lamp circuit is operating.
NO >> Refer to INL-19, "Diagnosis Procedure".

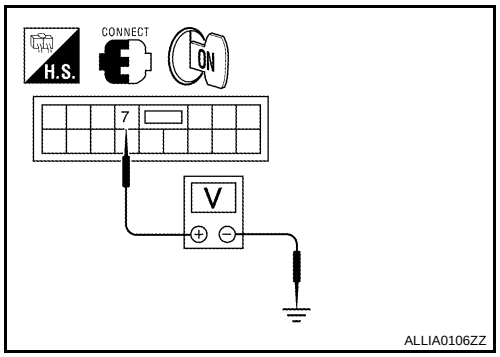
Diagnosis Procedure

INFOID:0000000003071738

1.CHECK STEP LAMP OUTPUT

CONSULT-III
1. Turn ignition switch ON.
2. Select “STEP LAMP TEST” of BCM (INT LAMP) active test item.
3. While operating the test item, check voltage between BCM harness connector M17 terminal 7 and ground.

BCM		Ground	Test item	Voltage
Connector	Terminal		STEP LAMP TEST	
M17	7		ON	0V
			OFF	Battery voltage



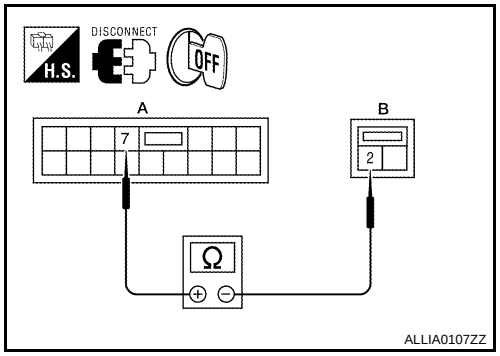
Is the inspection result normal?

YES >> GO TO 2
Fixed ON>>GO TO 3
Fixed OFF>> Replace BCM. Refer to BCS-85, "Removal and Installation".

2.CHECK STEP LAMP OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M17 and step lamp LH and RH connectors.
3. Check continuity between BCM harness connector M17 (A) terminal 7 and step lamp harness connector (B) terminal 2.

BCM		Step lamp			Continuity
Connector	Terminal	Connector		Terminal	
M17 (A)	7	LH	D11 (B)	2	Yes
		RH	D109 (B)	2	

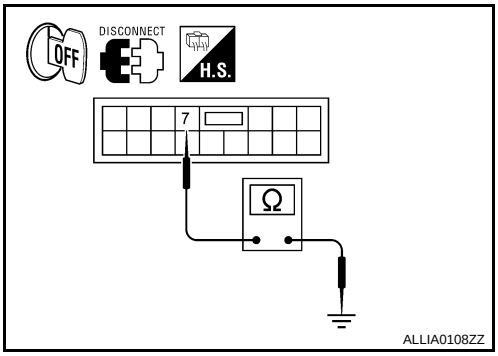


Is the inspection result normal?

YES >> Replace step lamp. Refer to INL-87, "Removal and Installation".
NO >> Repair harnesses or connectors.

3. CHECK STEP LAMP SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and step lamp LH and RH connectors.
3. Check continuity between BCM harness connector M17 terminal 7 and ground.



BCM		Ground	Continuity
Connector	Terminal		
M17	7		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-85, "Removal and Installation".
NO >> Repair the harnesses or connectors.

TRUNK ROOM LAMP CIRCUIT

Description

INFOID:0000000003071739

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

Component Function Check

INFOID:0000000003071740

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

1.CHECK TRUNK ROOM LAMP OPRATION

CONSULT-III
1. Turn ignition switch ON.
2. Select “LUGGAGE LAMP TEST” of BCM (INT LAMP) active test item.
3. While operating the test items, check that trunk room lamp turns ON/OFF.

ON : Trunk room lamp ON
OFF : Trunk room lamp OFF

Is the inspection result normal?

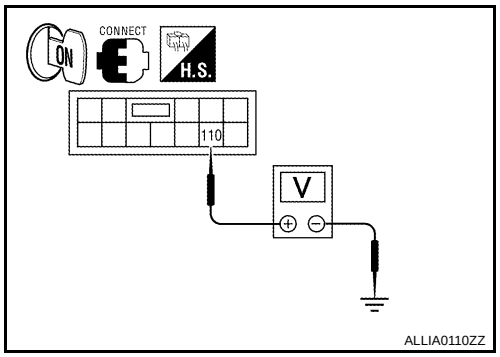
YES >> Trunk room lamp circuit is normal.
NO >> Refer to INL-21, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003071741

1.CHECK TRUNK ROOM LAMP OUTPUT

CONSULT-III
1. Turn ignition switch ON.
2. Select “LUGGAGE LAMP TEST” of BCM (INT LAMP) active test item.
3. While operating the test item, check voltage between BCM harness connector and ground.



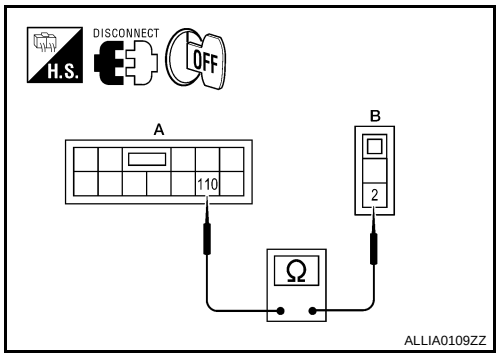
BCM		Ground	Test item	Voltage
Connector	Terminal		LUGGAGE LAMP TEST	
M20	110		ON	0V
			OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 2
Fixed ON>>GO TO 3
Fixed OFF>> Replace BCM. Refer to BCS-85, "Removal and Installation".

2.CHECK TRUNK ROOM LAMP OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M20 and trunk room lamp connector.
3. Check continuity between BCM harness connector M20 (A) terminal 110 and trunk room lamp harness connector B36 (B) terminal 2.



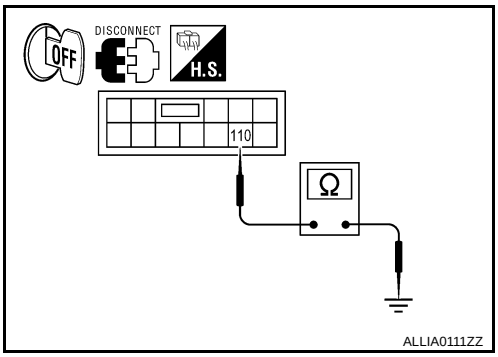
BCM		Trunk room lamp		Continuity
Connector	Terminal	Connector	Terminal	
M20 (A)	110	B36 (B)	2	Yes

Is the inspection result normal?

YES >> Replace trunk room lamp. Refer to INL-87, "Removal and Installation".
NO >> Repair harnesses or connectors.

3. CHECK TRUNK ROOM LAMP SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M20 and trunk room lamp connector.
3. Check continuity between BCM harness connector M20 terminal 110 and ground.



BCM		Ground	Continuity
Connector	Terminal		
M20	110		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-85, "Removal and Installation".
NO >> Repair harnesses or connectors.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description

INFOID:0000000003071742

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

Component Function Check

INFOID:0000000003071743

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT-III
1. Turn the ignition switch ON.
2. Select “ENGINE SW ILLUMI” of BCM (INTELLGENT KEY) active test item.
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

Is the inspection result normal?

YES >> Push-button ignition switch illumination circuit is normal.
NO >> Refer to INL-23, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003071744

1.CHECK ILLUMINATION CONTROL SWITCHING OPERATION

1. Turn the ignition switch ON.
2. While operating the lighting switch, check that the push-button ignition switch illumination turns ON/OFF

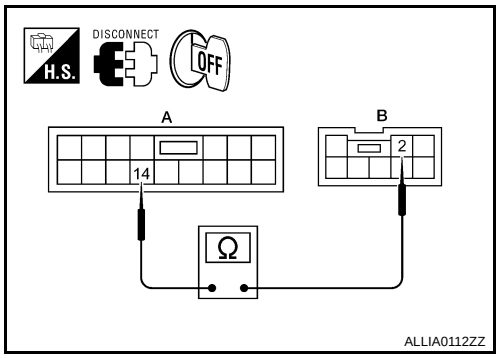
Condition	Push-button ignition switch illumination
• Ignition switch ON • Lighting switch 1ST	ON
• Ignition switch OFF • Lighting switch OFF • Driver door LOCK	OFF

Is the inspection result normal?

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

2.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM connector M17 and the push-button ignition switch connector.
3. Check continuity between BCM harness connector M17 (A) terminal 14 and the push-button ignition switch harness connector M38 (B) terminal 2.



BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M17 (A)	14	M38 (B)	2	Yes

Is the inspection result normal?

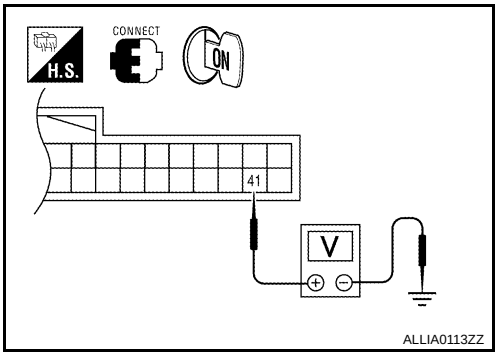
YES >> Replace BCM. Refer to BCS-85, "Removal and Installation".
NO >> Repair the harness or the connector.

3.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OUTPUT

CONSULT-III
1. Turn the ignition switch ON.
2. Select “ENGINE SW ILLUMI” of BCM (INTELLIGENT KEY) active test item.

3. While operating the test item, check voltage between BCM harness connector M18 terminal 41 and ground.

Terminals			Test item	Voltage
(+)		(-)		
BCM		Ground	ENGINE SW ILLUMI	
Connector	Terminal			
M18	41		ON	5 V
			OFF	0 V



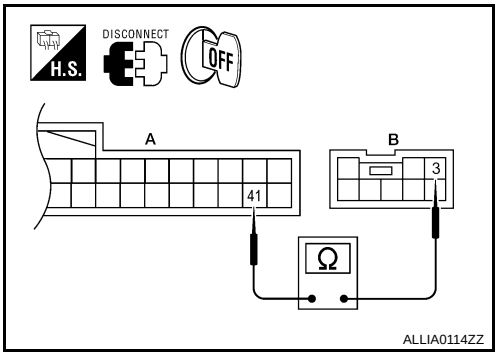
Is the inspection result normal?

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

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

1. Turn the ignition switch OFF.
2. Disconnect BCM connector M18 and the push-button ignition switch connector.
3. Check continuity between BCM harness connector M18 (A) terminal 41 and the push-button ignition switch harness connector M38 (B) terminal 3.

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M18	41	M38	3	Yes



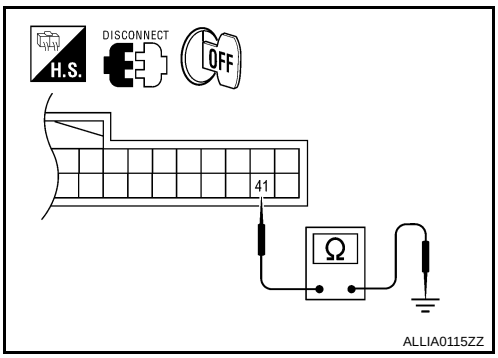
Is the inspection result normal?

YES >> Replace push-button ignition switch.
NO >> Repair the harness or the connector.

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

1. Turn the ignition switch OFF.
2. Disconnect BCM connector M18 and the push-button ignition switch connector.
3. Check continuity between BCM harness connector M18 terminal 41 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M18	41		No



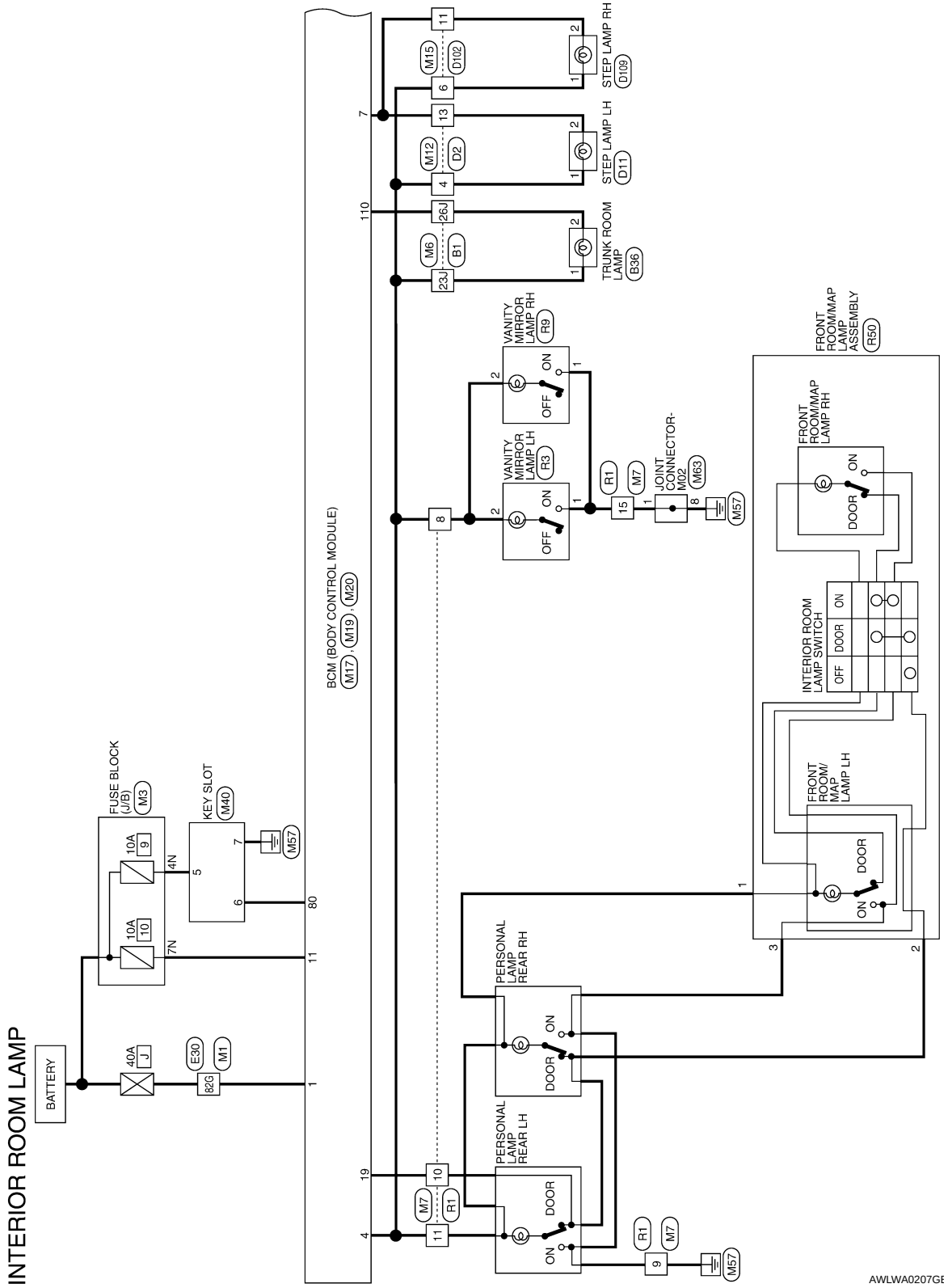
Is the inspection result normal?

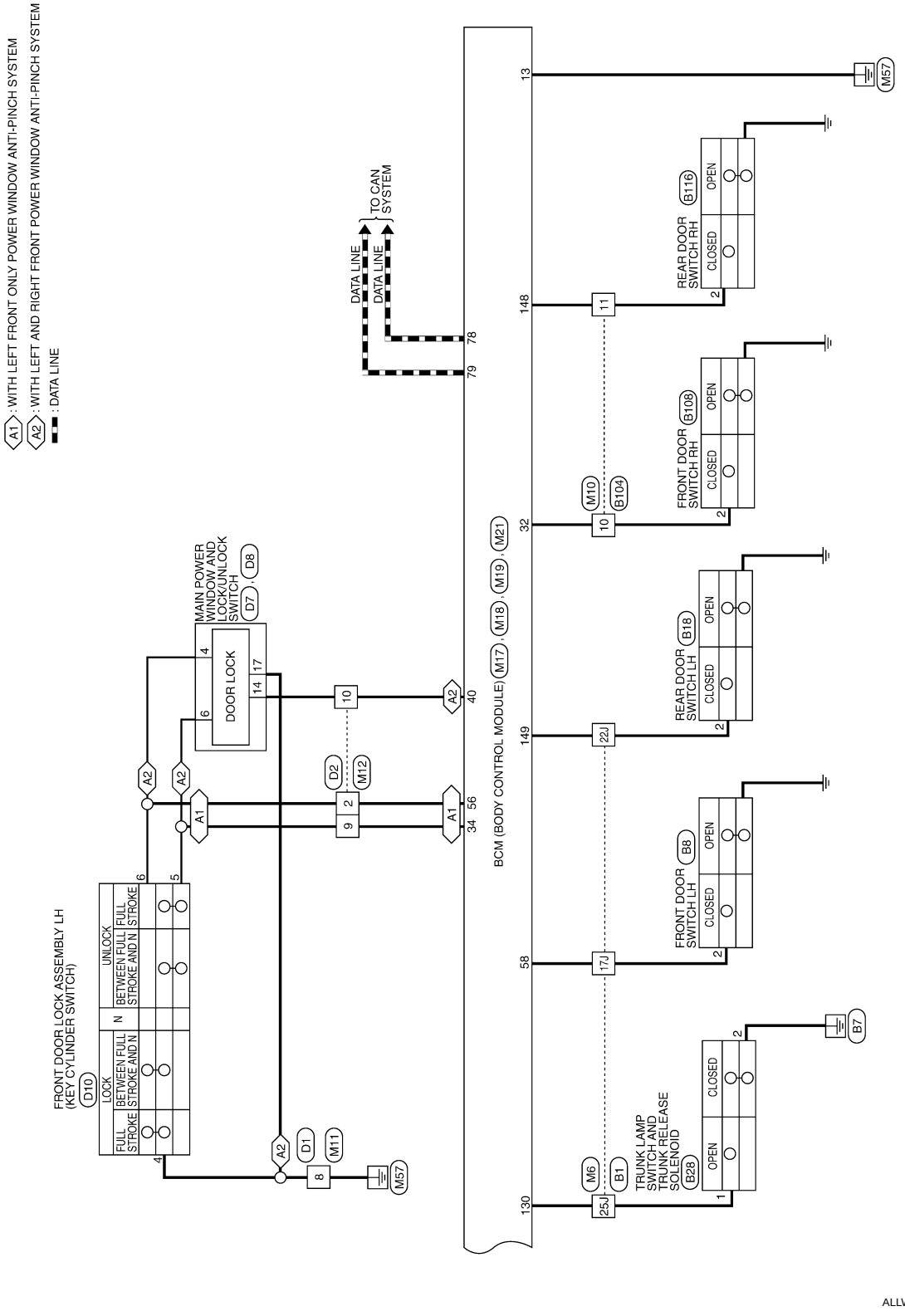
YES >> Replace BCM. Refer to BCS-85, "Removal and Installation".
NO >> Repair the harness or the connector.

INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram

INFOID:0000000003071745





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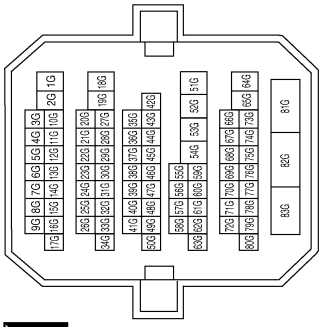
INTERIOR ROOM LAMP CONNECTORS

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

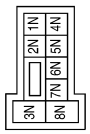
H.S.



Terminal No.	Color of Wire	Signal Name
82G	W/B	—

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

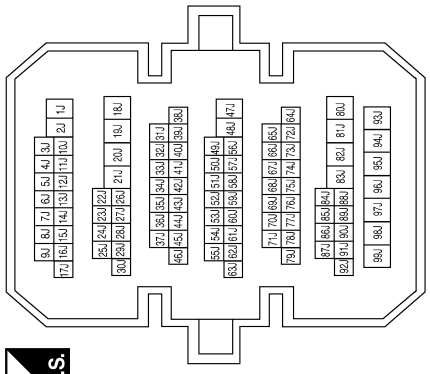
H.S.



Terminal No.	Color of Wire	Signal Name
4N	G/Y	—
7N	Y/R	—

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	WHITE

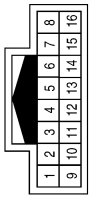
H.S.



Terminal No.	Color of Wire	Signal Name
17J	SB	—
22J	R/B	—
23J	P/W	—
25J	Y/G	—
26J	V/W	—

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
8	P/W	—
9	B	—
10	Y	—
11	P/W	—
15	B	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
10	R/B	—
11	R/W	—

Connector No.	M11
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
8	B	—

Connector No.	M12
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
2	L/B	—
4	P/W	—
9	L/R	—
10	Y/G	—
13	R/W	—

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	P/W	—
11	R/W	—

Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

1	3
	2

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

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	P/W	ROOM_LAMP_BAT_SAVER
7	R/W	STEP_LAMP_OUTPUT
11	Y/R	BAT_BCM_FUSE
13	B	GND1
19	Y	ROOM_LAMP_OUTPUT

ALLIA0188GB

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

H.S.

39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40

Terminal No.	Color of Wire	Signal Name
32	R/B	AS_DOOR_SW
34	L/R	DOOR_KEY/C UNLOCK_SW
40	Y/G	PW_K-LINE
56	L/B	DOOR_KEY/C_ LOCK_SW
58	SB	DR_DOOR_SW

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

H.S.

79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80

Terminal No.	Color of Wire	Signal Name
78	P	CAN-L
79	L	CAN-H
80	R/L	FOB_SLOT_ ILLUMINATION

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

H.S.

100	101		102	103	104
105	106	107	108	109	110	111

Terminal No.	Color of Wire	Signal Name
110	V/W	TRUNK_LAMP_ OUTPUT

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY

H.S.

131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112
151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	135	134	133	132

Terminal No.	Color of Wire	Signal Name
130	Y/G	TRUNK_SW
148	R/W	RR_DOOR_SW
149	R/B	RL_DOOR_SW

Connector No.	M40
Connector Name	KEY SLOT
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	G/Y	LIGHT_BAT+
6	R/L	LIGHT_A
7	B	GND

Connector No.	M63
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

H.S.

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

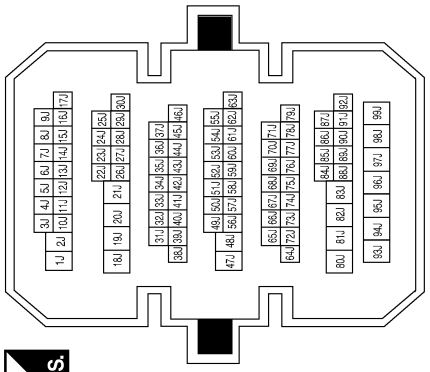
Terminal No.	Color of Wire	Signal Name
1	B	—
8	B	—

ALLIA0189GB

Terminal No.	Color of Wire	Signal Name
17J	SB	—
22J	R/B	—
23J	P	—
25J	Y/G	—
26J	V/W	—

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

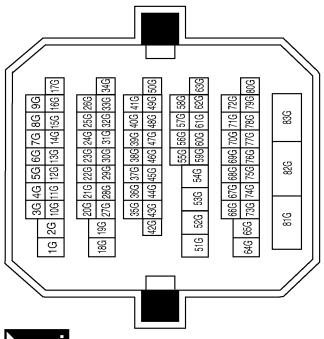
H.S.



Terminal No.	Color of Wire	Signal Name
82G	W/B	—

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



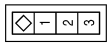
Connector No.	B28
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	Y/G	—
2	B	—

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

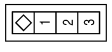
H.S.



Terminal No.	Color of Wire	Signal Name
2	R/B	DOOR SW(RL)

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

H.S.



Terminal No.	Color of Wire	Signal Name
2	SB	DOOR SW(DR)

ALLIA0190GB

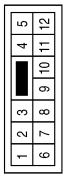
Connector No.	B36
Connector Name	TRUNK ROOM LAMP
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	P	—
2	V/W	—

Connector No.	B104
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.



Terminal No.	Color of Wire	Signal Name
10	R/B	—
11	R/W	—

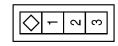
Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	R/B	DOOR SW (AS)

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

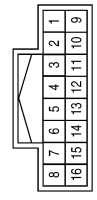
H.S.



Terminal No.	Color of Wire	Signal Name
2	R/W	DOOR SW (RR)

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

H.S.



Terminal No.	Color of Wire	Signal Name
8	P	—
9	W	—
10	W	—
11	W	—
15	B	—

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

H.S.

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

ALLIA0191GB

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

Terminal No.	Color of Wire	Signal Name
8	B	—

Connector No.	R50
Connector Name	FRONT ROOM/MAP LAMP ASSEMBLY
Connector Color	GRAY

Terminal No.	Color of Wire	Signal Name
1	W	—
2	W	—
3	W	—

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

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

AWLIA0710GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	L/B	—
4	P/W	—
9	L/R	—
10	Y/G	—
13	R/W	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	L/B	LOCK
6	L/R	UNLOCK
14	Y/G	COM

Connector No.	D8
Connector Name	MAIN POWER WINDOW AND LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

17	18	19

Terminal No.	Color of Wire	Signal Name
17	B	GND

Connector No.	D10
Connector Name	FRONT DOOR LOCK ASSEMBLY LH
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
4	B	GND
5	L/R	DOOR_KEY/C_ UNLOCK_SW
6	L/B	DOOR_KEY/C_ LOCK_SW

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

H.S.

2	1

Terminal No.	Color of Wire	Signal Name
1	P/W	—
2	R/W	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	P/W	—
11	R/W	—

ALLIA0194GB

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

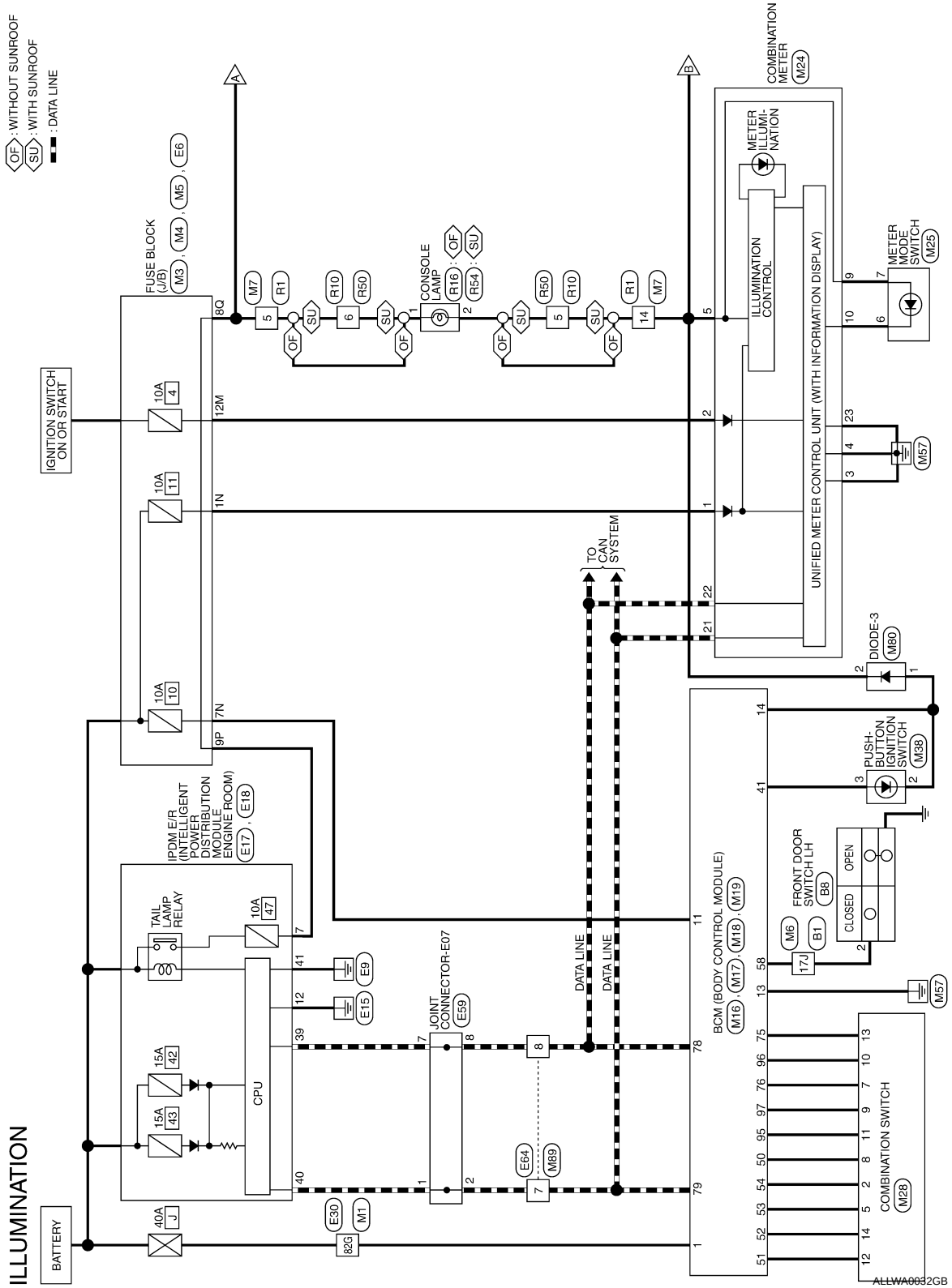
Terminal No.	Color of Wire	Signal Name
1	P/W	—
2	R/W	—

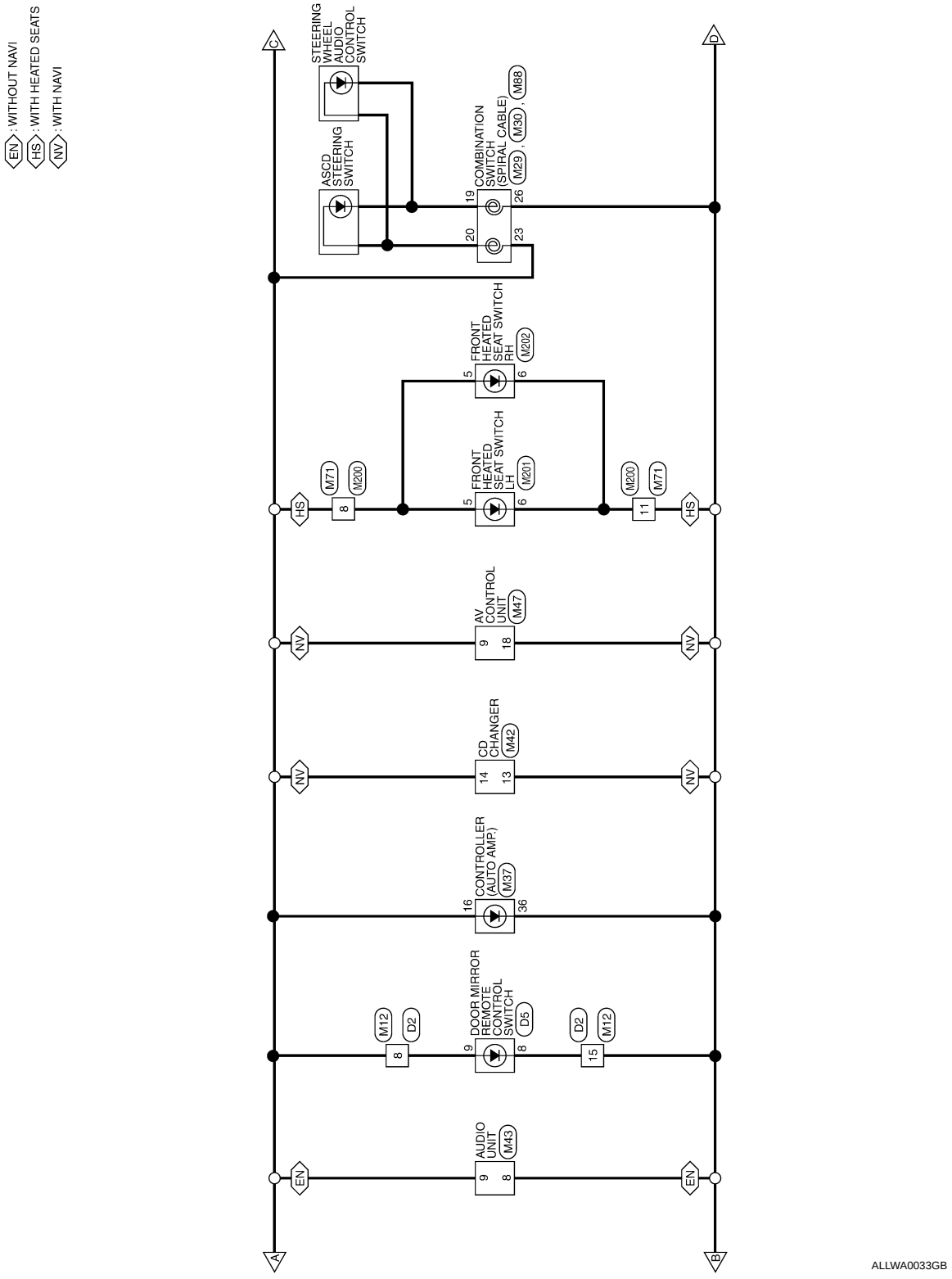
ALLIA0195GB

ILLUMINATION

Wiring Diagram

INFOID:0000000003071746





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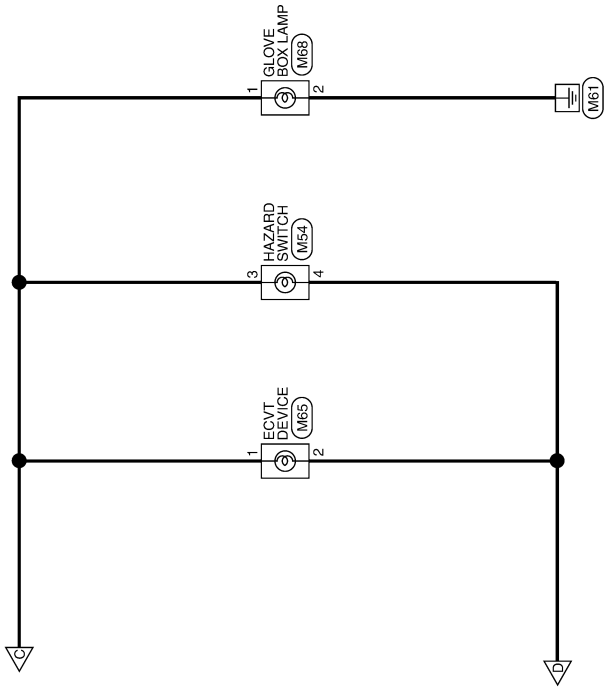
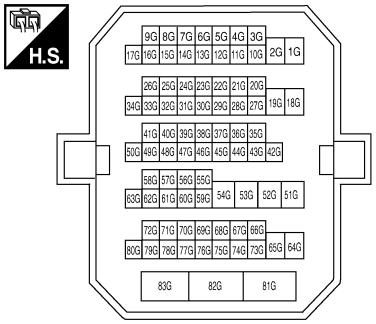


ALLWA0034GB

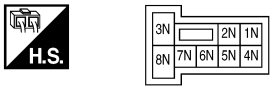
ILLUMINATION CONNECTORS

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

Terminal No.	Color of Wire	Signal Name
82G	W/B	—

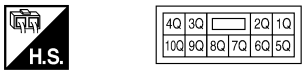


Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



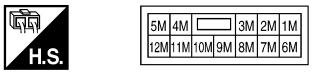
Terminal No.	Color of Wire	Signal Name
1N	W/L	—
7N	Y/R	—

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
8Q	R/L	—

Connector No.	M5
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
12M	P	—

AWLIA0712GB

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
17J	SB	—

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
5	R/L	—
14	R/Y	—

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
8	R/L	—
15	R/Y	—

Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

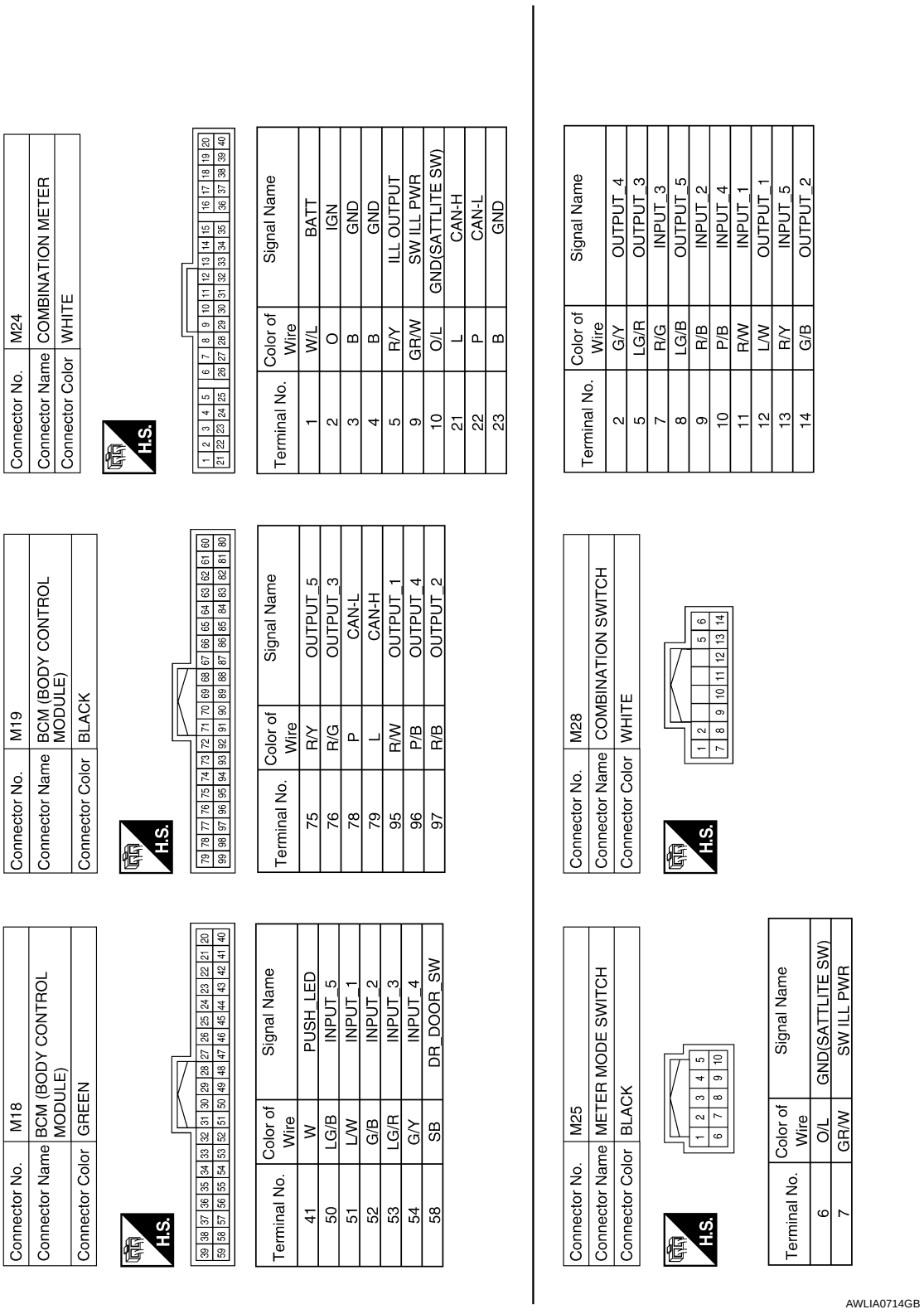
Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
11	Y/R	BAT_BCM_FUSE
13	B	GND1
14	R/Y	LOW_SIDE_PUSH_LED_OUTPUT

AWLIA0713GB


Connector No. M18
Connector Name BCM (BODY CONTROL MODULE)
Connector Color GREEN
H.S.
39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20
59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40
Terminal No. Color of Wire Signal Name
41 W PUSH_LED
50 LG/B INPUT_5
51 L/W INPUT_1
52 G/B INPUT_2
53 LG/R INPUT_3
54 G/Y INPUT_4
58 SB DR_DOOR_SW
Connector No. M19
Connector Name BCM (BODY CONTROL MODULE)
Connector Color BLACK
H.S.
79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60
99 98 97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80
Terminal No. Color of Wire Signal Name
75 R/Y OUTPUT_5
76 R/G OUTPUT_3
78 P CAN-L
79 L CAN-H
95 R/W OUTPUT_1
96 P/B OUTPUT_4
97 R/B OUTPUT_2
Connector No. M24
Connector Name COMBINATION METER
Connector Color WHITE
H.S.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Terminal No. Color of Wire Signal Name
1 W/L BATT
2 O IGN
3 B GND
4 B GND
5 R/Y ILL OUTPUT
9 GR/W SW ILL PWR
10 O/L GND(SATTLITE SW)
21 L CAN-H
22 P CAN-L
23 B GND
Connector No. M25
Connector Name METER MODE SWITCH
Connector Color BLACK
H.S.
1 2 3 4 5
6 7 8 9 10
Terminal No. Color of Wire Signal Name
6 O/L GND(SATTLITE SW)
7 GR/W SW ILL PWR
Connector No. M28
Connector Name COMBINATION SWITCH
Connector Color WHITE
H.S.
1 2 5 6
7 8 9 10 11 12 13 14
Terminal No. Color of Wire Signal Name
2 G/Y OUTPUT_4
5 LG/R OUTPUT_3
7 R/G INPUT_3
8 LG/B OUTPUT_5
9 R/B INPUT_2
10 P/B INPUT_4
11 R/W INPUT_1
12 L/W OUTPUT_1
13 R/Y INPUT_5
14 G/B OUTPUT_2
AWLIA0714GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
23	R/L	TAIL/ILL_RLY

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

H.S.

Terminal No.	Color of Wire	Signal Name
26	R/Y	ILL_CONT_OUT

Connector No.	M37
Connector Name	CONTROLLER (AUTO AMP.)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
16	R/L	ILL +
36	R/Y	ILL-

Connector No.	M38
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
2	O/W	—
3	W	PUSH_LED

Connector No.	M42
Connector Name	CD CHANGER
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
13	R/Y	ILL -
14	R/L	ILL +

Connector No.	M43
Connector Name	AUDIO UNIT
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
8	R/Y	ILL_CONT_OUT
9	R/L	TAIL/ILL_RLY

ALLIA0199GB

Connector No.	M47
Connector Name	AV CONTROL UNIT
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
9	R/L	ILL
18	R/Y	ILL_CONT

Connector No.	M54
Connector Name	HAZARD SWITCH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
3	R/L	TAIL/ILL_RLY
4	R/Y	ILL_CONT_OUT

Connector No.	M65
Connector Name	ECVT DEVICE
Connector Color	BROWN

Terminal No.	Color of Wire	Signal Name
1	R/L	TAIL/ILL_RLY
2	R/Y	ILL_CONT_OUT

Connector No.	M68
Connector Name	GLOVE BOX LAMP
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	R/L	TAIL/ILL_RLY
2	B	GND

Connector No.	M71
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
8	R/L	—
11	R/Y	—

Connector No.	M80
Connector Name	DIODE-3
Connector Color	—

Terminal No.	Color of Wire	Signal Name
1	O/W	LOW_SIDE_PUSH_LED_OUTPUT
2	R/Y	ILL_CONT_OUT

ALLIA0200GB

Connector No.	M88
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	P	ILL
20	Y	ILL

Connector No.	M89
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
7	L	–
8	P	–

Connector No.	M200
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	R/L	—
11	R/Y	—

Connector No.	M201
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	R/L	TAIL/ILL_RLY
6	R/Y	ILL_CONT_OUT

Connector No.	M202
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	R/L	TAIL/ILL_RLY
6	R/Y	ILL_CONT_OUT

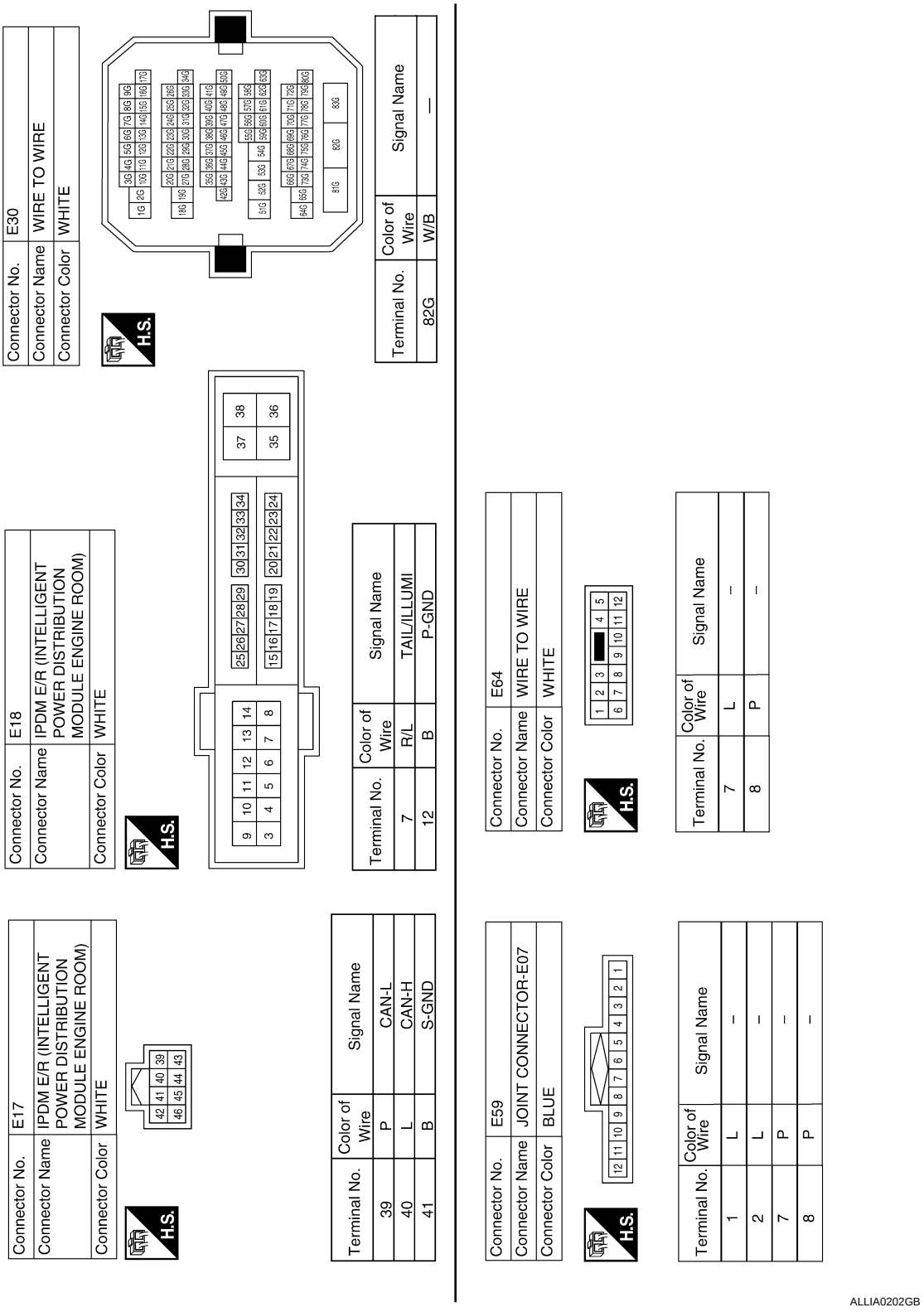
Connector No.	E6
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
9P	R/L	—

ALLIA0201GB


Connector No. E17
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE
H.S.
42 41 40 39
46 45 44 43
Terminal No. Color of Wire Signal Name
39 P CAN-L
40 L CAN-H
41 B S-GND
Connector No. E18
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE
H.S.
9 10 11 12 13 14
3 4 5 6 7 8
25 26 27 28 29 30 31 32 33 34
15 16 17 18 19 20 21 22 23 24
37 38
35 36
Terminal No. Color of Wire Signal Name
7 R/L TAIL/ILLUMI
12 B P-GND
Connector No. E30
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1G 2G 3G 4G 5G 6G 7G 8G 9G 10G 11G 12G 13G 14G 15G 16G 17G 18G 19G 20G 21G 22G 23G 24G 25G 26G 27G 28G 29G 30G 31G 32G 33G 34G 35G 36G 37G 38G 39G 40G 41G 42G 43G 44G 45G 46G 47G 48G 49G 50G 51G 52G 53G 54G 55G 56G 57G 58G 59G 60G 61G 62G 63G 64G 65G 66G 67G 68G 69G 70G 71G 72G 73G 74G 75G 76G 77G 78G 79G 80G 81G 82G 83G
Terminal No. Color of Wire Signal Name
82G W/B —
Connector No. E64
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
7 L –
8 P –
Connector No. E59
Connector Name JOINT CONNECTOR-E07
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 –
2 L –
7 P –
8 P –
ALLIA0202GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
5	L	—
14	Y	—

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

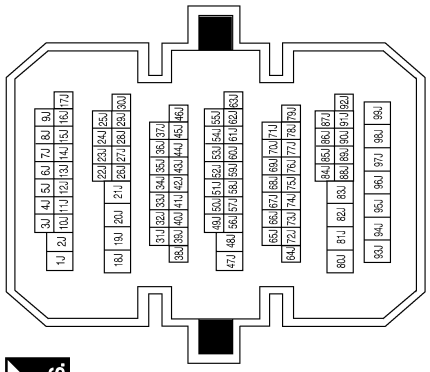
H.S.

1	2	3

Terminal No.	Color of Wire	Signal Name
2	SB	DOOR SW(DR)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
17J	SB	—

Connector No.	R50
Connector Name	WIRE TO WIRE
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
5	Y	—
6	L	—

Connector No.	R16
Connector Name	CONSOLE LAMP
Connector Color	—

H.S.

2	1

Terminal No.	Color of Wire	Signal Name
1	L	TAIL/ILL_RLY
2	Y	ILL_CONT_OUT

Connector No.	R10
Connector Name	WIRE TO WIRE
Connector Color	GRAY

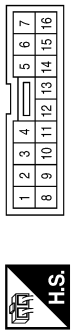
H.S.

6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
5	Y	—
6	L	—

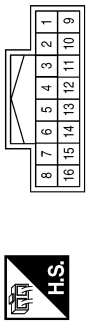
ALLIA0203GB

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



Terminal No.	Color of Wire	Signal Name
8	R/Y	ILL_CONT_OUT
9	R/L	TAIL/ILL_RLY

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



Terminal No.	Color of Wire	Signal Name
8	R/L	—
15	R/Y	—

Connector No.	R54
Connector Name	CONSOLE LAMP
Connector Color	—

Terminal No.	Color of Wire	Signal Name
1	L	TAIL/ILL_RLY
2	Y	ILL_CONT_OUT

AWLIA0715GB

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000003303315

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	OFF
	Front wiper switch HI	ON
FR WIPER LOW	Other than front wiper switch LO	OFF
	Front wiper switch LO	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
FR WIPER INT	Other than front wiper switch INT	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Front wiper is not in STOP position	OFF
	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TURN SIGNAL R	Other than turn signal switch RH	OFF
	Turn signal switch RH	ON
TURN SIGNAL L	Other than turn signal switch LH	OFF
	Turn signal switch LH	ON
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	OFF
	Lighting switch 1ST or 2ND	ON
HI BEAM SW	Other than lighting switch HI	OFF
	Lighting switch HI	ON
HEAD LAMP SW 1	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
AUTO LIGHT SW	Other than lighting switch AUTO	OFF
	Lighting switch AUTO	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
DOOR SW-DR	Front door LH closed	OFF
	Front door LH opened	ON
DOOR SW-AS	Front door RH closed	OFF
	Front door RH opened	ON
DOOR SW-RR	Rear door RH closed	OFF
	Rear door RH opened	ON
DOOR SW-RL	Rear door LH closed	OFF
	Rear door LH opened	ON

Monitor Item	Condition	Value/Status
DOOR SW-BK	**NOTE:** This item is displayed, but cannot be monitored.	OFF
CDL LOCK SW	Other than power door lock switch LOCK	OFF
	Door lock/unlock switch LOCK	ON
CDL UNLOCK SW	Other than door lock/unlock switch UNLOCK	OFF
	Door lock/unlock switch UNLOCK	ON
KEY CYL LK-SW	Other than front door LH key cylinder LOCK position	OFF
	Front door LH key cylinder LOCK position	ON
KEY CYL UN-SW	Other than front door LH key cylinder UNLOCK position	OFF
	Front door LH key cylinder UNLOCK position	ON
KEY CYL SW-TR	**NOTE:** This item is displayed, but cannot be monitored.	OFF
HAZARD SW	When hazard switch is not pressed	OFF
	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
FAN ON SIG	When AUTO switch or fan switch is pressed	ON
AIR COND SW	When A/C switch is pressed	ON
TR CANCEL SW	Trunk lid opener cancel switch OFF	OFF
	Trunk lid opener cancel switch ON	ON
TR/BD OPEN SW	Trunk lid opener switch OFF	OFF
	While the trunk lid opener switch is turned ON	ON
TRNK/HAT MNTR	Trunk lid closed	OFF
	Trunk lid opened	ON
RKE-LOCK	When LOCK button of Intelligent Key is not pressed	OFF
	When LOCK button of Intelligent Key is pressed	ON
RKE-UNLOCK	When UNLOCK button of Intelligent Key is not pressed	OFF
	When UNLOCK button of Intelligent Key is pressed	ON
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
	When TRUNK OPEN button of Intelligent Key is pressed	ON
RKE-PANIC	When PANIC button of Intelligent Key is not pressed	OFF
	When PANIC button of Intelligent Key is pressed	ON
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF
	When UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL (LIGHT) SENSOR	When outside of the vehicle is bright	Close to 5 V
	When outside of the vehicle is dark	Close to 0 V
REQ SW-DR	When front door LH request switch is not pressed	OFF
	When front door LH request switch is pressed	ON
REQ SW-AS	When front door RH request switch is not pressed	OFF
	When front door RH request switch is pressed	ON
REQ SW-BD/TR	When trunk request switch is not pressed	OFF
	When trunk request switch is pressed	ON

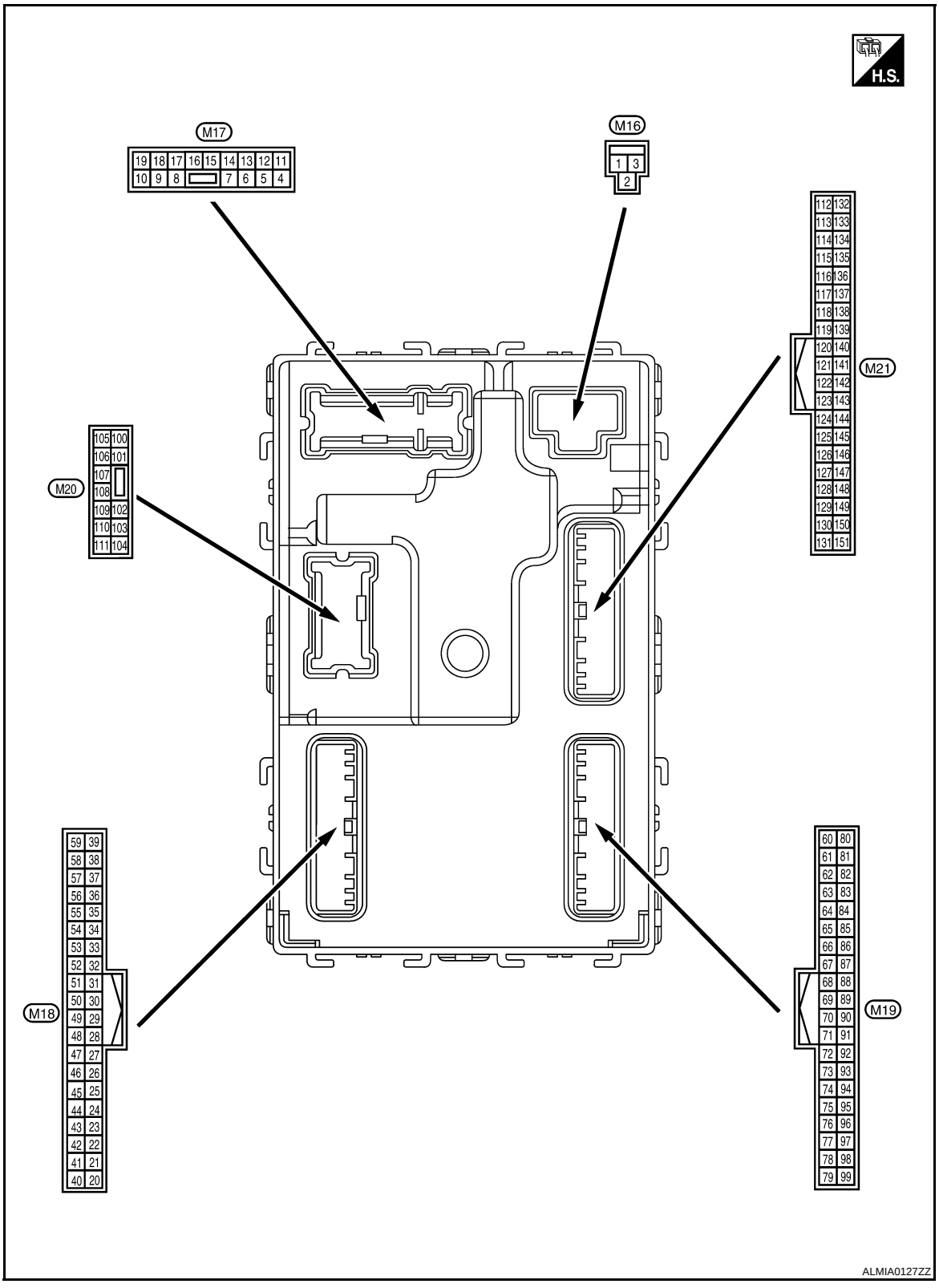
Monitor Item	Condition	Value/Status
PUSH SW	When push-button ignition switch is not pressed	OFF
	When push-button ignition switch is pressed	ON
IGN RLY -F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
ACC RLY -F/B	Ignition switch OFF	OFF
	Ignition switch ACC or ON	ON
BRAKE SW 1	When the brake pedal is not depressed	ON
	When the brake pedal is depressed	OFF
DETE/CANCL SW	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN/N SW	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
S/L -LOCK	Electronic steering column lock LOCK status	OFF
	Electronic steering column lock UNLOCK status	ON
S/L -UNLOCK	Electronic steering column lock UNLOCK status	OFF
	Electronic steering column lock LOCK status	ON
S/L RELAY-F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
UNLK SEN-DR	Front door LH UNLOCK status	OFF
	Front door LH LOCK status	ON
PUSH SW -IPDM	When push-button ignition switch is not pressed (IPDM E/R sends via CAN)	OFF
	When push-button ignition switch is pressed (IPDM E/R sends via CAN)	ON
IGN RLY1 F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
DETE SW -IPDM	When selector lever is in P position (IPDM E/R sends via CAN)	OFF
	When selector lever is in any position other than P (IPDM E/R sends via CAN)	ON
SFT PN -IPDM	When selector lever is in any position other than P or N (IPDM E/R sends via CAN)	OFF
	When selector lever is in P or N position (IPDM E/R sends via CAN)	ON
SFT P -MET	When selector lever is in any position other than P (combination meter sends via CAN)	OFF
	When selector lever is in P position (combination meter sends via CAN)	ON
SFT N -MET	When selector lever is in any position other than N (combination meter sends via CAN)	OFF
	When selector lever is in N position (combination meter sends via CAN)	ON
ENGINE STATE	Engine stopped	STOP
	While the engine stalls	STALL
	At engine cranking	CRANK
	Engine running	RUN
S/L LOCK-IPDM	Electronic steering column lock LOCK status (IPDM E/R sends via CAN)	OFF
	Electronic steering column lock UNLOCK status (IPDM E/R sends via CAN)	ON

Monitor Item	Condition	Value/Status
S/L UNLCK-IPDM	Electronic steering column lock UNLOCK status (IPDM E/R sends via CAN)	OFF
	Electronic steering column lock LOCK status (IPDM E/R sends via CAN)	ON
S/L RELAY-REQ	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DR DOOR STATE	Front door LH LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Front door LH UNLOCK status	UNLK
AS DOOR STATE	Front door RH LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Front door RH UNLOCK status	UNLK
ID OK FLAG	Ignition switch ACC or ON	RESET
	Ignition switch OFF	SET
PRMT ENG STAT	When the hybrid system start is prohibited	RESET
	When the hybrid system start is permitted	SET
PRMT RKE STAT	**NOTE:** This item is displayed, but cannot be monitored.	RESET
KEY SW -SLOT	When Intelligent Key is not inserted into key slot	OFF
	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	**NOTE:** This item is displayed, but cannot be monitored.	Operation frequency of Intelligent Key
AIR PRESS FL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	When ID of front LH tire transmitter is registered (refer to WT-6, "ID Registration Procedure")	DONE
	When ID of front LH tire transmitter is not registered (refer to WT-6, "ID Registration Procedure")	YET
ID REGST FR1	When ID of front RH tire transmitter is registered (refer to WT-6, "ID Registration Procedure")	DONE
	When ID of front RH tire transmitter is not registered (refer to WT-6, "ID Registration Procedure")	YET
ID REGST RR1	When ID of rear RH tire transmitter is registered (refer to WT-6, "ID Registration Procedure")	DONE
	When ID of rear RH tire transmitter is not registered (refer to WT-6, "ID Registration Procedure")	YET
ID REGST RL1	When ID of rear LH tire transmitter is registered (refer to WT-6, "ID Registration Procedure")	DONE
	When ID of rear LH tire transmitter is not registered (refer to WT-6, "ID Registration Procedure")	YET

Monitor Item	Condition	Value/Status
WARNING LAMP	Tire pressure indicator OFF	OFF
	Tire pressure indicator ON	ON

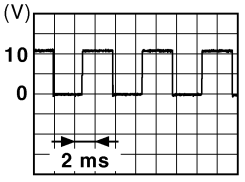
Terminal Layout

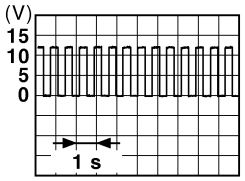
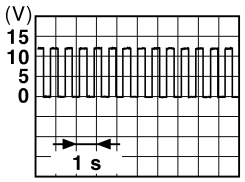
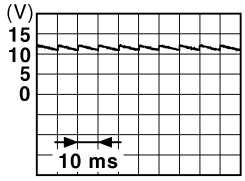
INFOID:0000000003303316

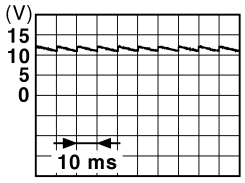
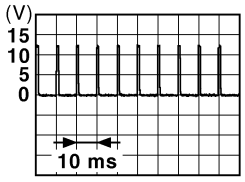
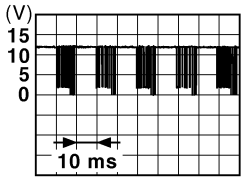


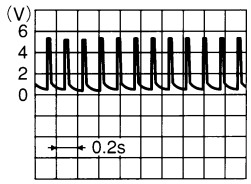
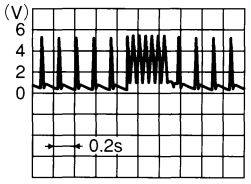
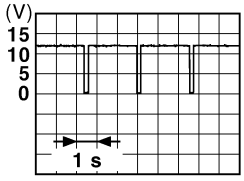
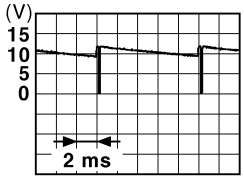
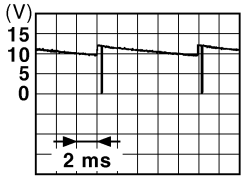
Physical Values

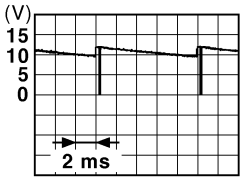
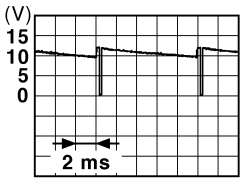
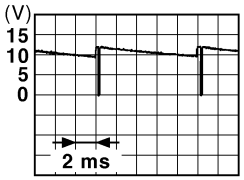
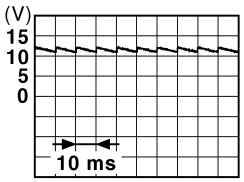
INFOID:0000000003303317

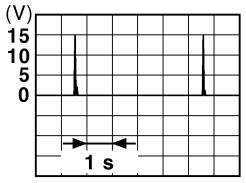
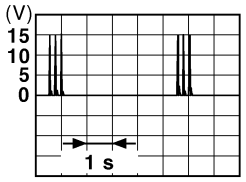
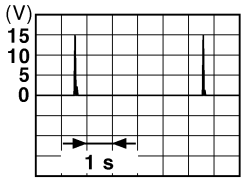
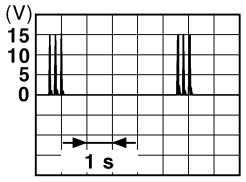
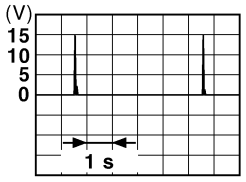
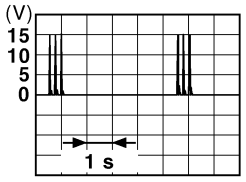
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
(+)	(-)					
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OFF		Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage
4 (P/W)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
5 (G/Y)	Ground	Front door RH UNLOCK	Output	Front door RH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
7 (R/W)	Ground	Step lamp	Output	Room lamp timer	ON	Battery voltage
					OFF	0V
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (actuator is activated)	Battery voltage
					Other than LOCK (actuator is not activated)	0V
9 (G)	Ground	Front door LH UNLOCK	Output	Front door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
10 (G/Y)	Ground	Rear door RH and rear door LH UNLOCK	Output	Rear door RH and rear door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0V
14 (R/Y)	Ground	Push-button ignition switch illumination ground	Input	Tail lamp	OFF	0V
					ON	**NOTE:** When the illumination brightening/dimming level is in the neutral position  JSNIA0010GB
15 (Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF	Battery voltage
					ACC	0V

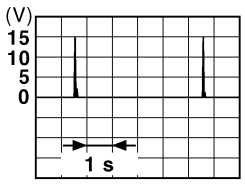
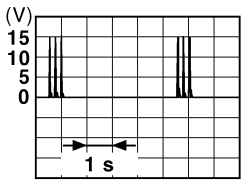
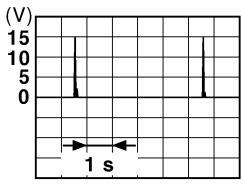
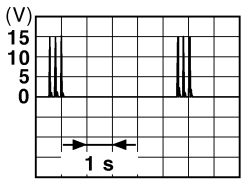
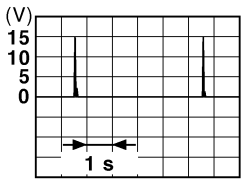
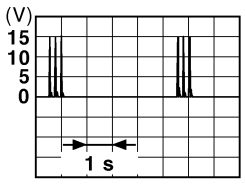
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch RH	 PKID0926E 6.5V
18 (G/O)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch LH	 PKID0926E 6.5V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	Lamps fully OFF	Battery voltage
					Lamps fully ON	0V
21 (P/B)	Ground	Optical sensor signal	Input	Ignition switch ON	When outside of the vehicle is bright	Close to 5V
					When outside of the vehicle is dark	Close to 0V
24 (R/W)	Ground	Stop lamp switch 1	Input	—		Battery voltage
26 (O/L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	0V
					ON (brake pedal is depressed)	Battery voltage
				ICC brake hold relay (with ICC)	OFF	0V
					ON	Battery voltage
27 (G/W)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	 JPMIA0011GB 11.8V
					UNLOCK status	0V
29 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot		Battery voltage
				When Intelligent Key is not inserted into key slot		0V
30 (V/Y)	Ground	ACC feedback signal	Input	Ignition switch	OFF	0
					ACC or ON	Battery voltage
31 (G)	Ground	Ignition relay-2 feedback signal	Input	Ignition switch	OFF	0V
					ON	Battery voltage

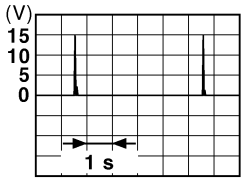
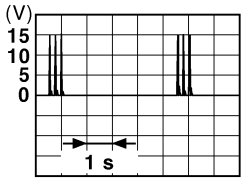
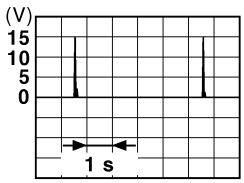
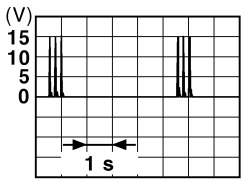
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	 JPMIA0011GB 11.8V
					ON (when front door RH opens)	0V
33 (SB)	Ground	Compressor ON signal	Input	A/C switch	OFF	Battery voltage
					ON	0V
34* (L/R)	Ground	Front door lock assembly LH (key cylinder switch) (unlock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	Battery voltage
					ON (unlock)	0V
36* (GR)	Ground	Lock switch signal	Input	Door lock/unlock switch	Lock	Battery Voltage
					Unlock	0V
37 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 JPMIA0012GB 1.1V
					ON	0V
38 (GR/ W)	Ground	Rear window defogger ON signal	Input	Rear window defogger switch	OFF	Battery Voltage V
					ON	0V
39* (GR/ R)	Ground	Unlock switch signal	Input	Door lock/unlock switch	Unlock	Battery Voltage
					Lock	0V
40* (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2V
				Ignition switch OFF or ACC		0V
41 (W)	Ground	Push-button ignition switch illumination	Output	Engine switch (push switch) illumination	ON	5.5V
					OFF	0V
42 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	0V
					OFF	Battery voltage
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V

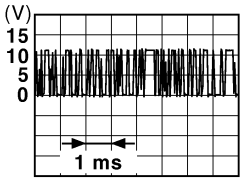
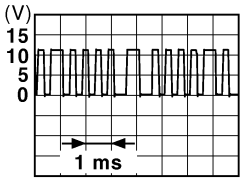
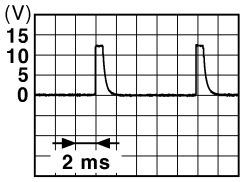
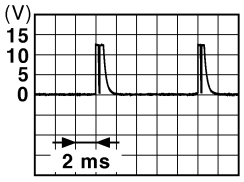
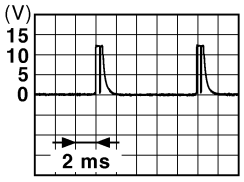
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description Signal name	Description Input/ Output	Condition		Value (Approx.)
46 (V/W)	Ground	Receiver & sensor power supply output	Output	Ignition switch	OFF	0V
					ACC or ON	5.0V
47 (G/O)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
48 (R/B)	Ground	Selector lever P/N position signal	Input	Selector lever	P or N position	12.0V
					Except P and N positions	0V
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	ON	0V
					Blinking	 JPMIA0014GB 11.3V
					OFF	Battery voltage
50 (LG/ B)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Lighting switch 1ST	 JPMIA0031GB 10.7V
					Lighting switch high-beam	
					Lighting switch 2ND	
					Turn signal switch RH	
51 (L/W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	

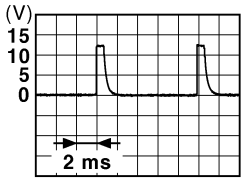
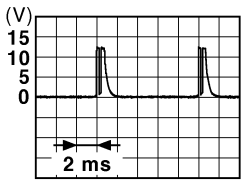
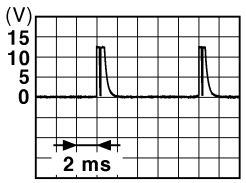
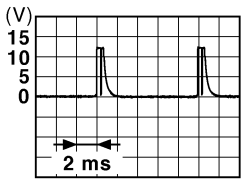
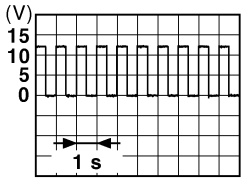
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
52 (G/B)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 5 • Wiper intermittent dial 6	
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Front wiper switch INT	 JPMIA0034GB 10.7V
					Front wiper switch LO	
					Lighting switch AUTO	
54 (G/Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Front fog lamp switch ON	 JPMIA0035GB 10.7V
					Lighting switch 2ND	
					Lighting switch flash-to-pass	
					Turn signal switch LH	
55 (BR/ W)	Ground	Front blower monitor	Input	Front blower motor switch	ON	Battery voltage
					OFF	0V
56 (L/B)	Ground	Front door lock assembly LH (key cylinder switch) (lock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	Battery voltage
					ON (lock)	0V
57 (W)	Ground	Tire pressure warning check switch	Input	—		Battery voltage
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	 JPMIA0011GB 11.8V
					ON (front door LH OPEN)	0V
59 (G/R)	Ground	Rear window defogger relay	Output	Rear window defogger	Active	Battery voltage
					Not activated	0V

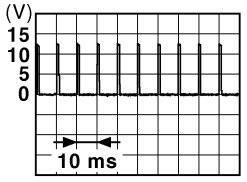
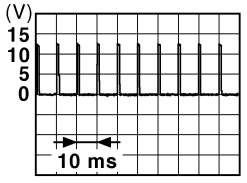
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
60 (B/R)	Ground	Front console antenna 2 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
61 (W/R)	Ground	Center console antenna 2 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
62 (B/Y)	Ground	Front outside handle RH antenna (-)	Output	When the front door RH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

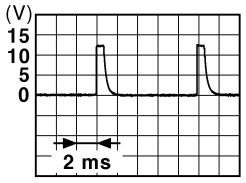
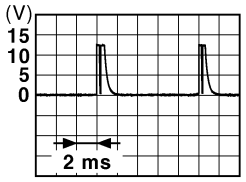
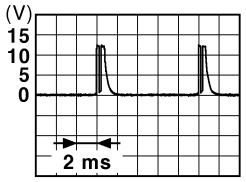
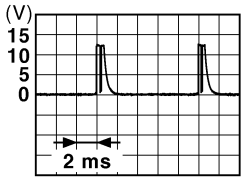
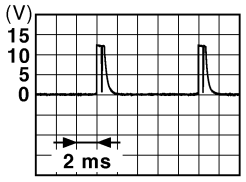
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
63 (LG)	Ground	Front outside handle RH antenna (+)	Output	When the front door RH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
64 (V)	Ground	Front outside handle LH antenna (-)	Output	When the front door LH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
65 (P)	Ground	Front outside handle LH antenna (+)	Output	When the front door LH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

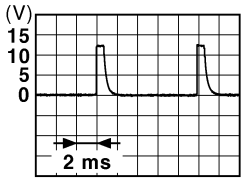
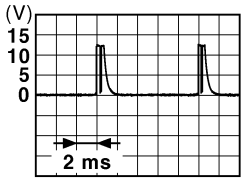
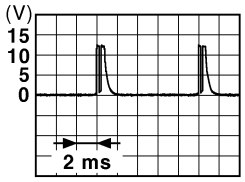
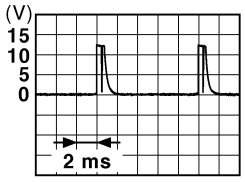
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
66 (R)	Ground	Instrument panel antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
67 (G)	Ground	Instrument panel antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
68 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
70 (R/B)	Ground	Ignition relay-2 control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage

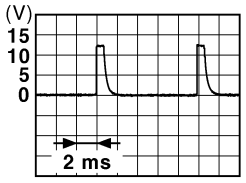
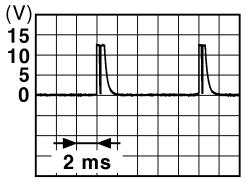
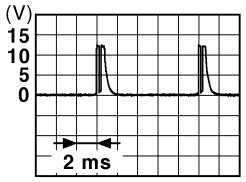
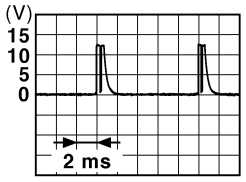
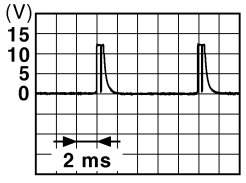
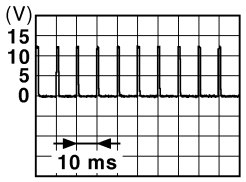
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
71 (L/O)	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on Intelligent Key		 JMKIA0065GB
75 (R/Y)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3V

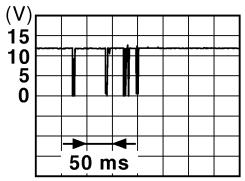
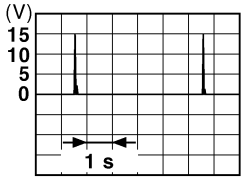
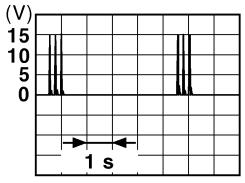
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description Signal name	Description Input/ Output	Condition		Value (Approx.)
76 (R/G)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch high-beam (Wiper intermittent dial 4)	 JPMIA0036GB 1.3V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3V
77 (BR)	Ground	Push-button ignition switch	Input	Engine switch (push switch)	Pressed	0V
					Not pressed	Battery voltage
78 (P)	Ground	CAN-L	Input/ Output	—		—
79 (L)	Ground	CAN-H	Input/ Output	—		—
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0V
					Blinking	 JPMIA0015GB 6.5V
					ON	Battery voltage

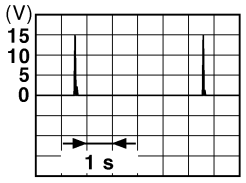
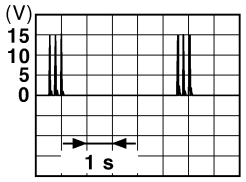
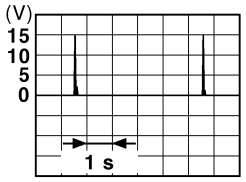
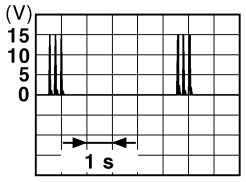
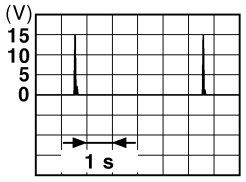
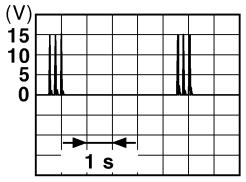
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
81 (LG)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V
83 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0V
					ACC or ON	Battery voltage
84 (Y/R)	Ground	ECTV device (detent switch)	Output	—		Battery voltage
85 (L/O)	Ground	Electronic steering column lock condition No. 1	Input	Electronic steering column lock	Lock status	0V
					Unlock status	Battery voltage
86 (G/R)	Ground	Electronic steering column lock condition No. 2	Input	Electronic steering column lock	Lock status	Battery voltage
					Unlock status	0V
87 (G/B)	Ground	ECTV device (detent switch)	Input	Selector lever	P position	0V
					Any position other than P	Battery voltage
88 (P/L)	Ground	Front door RH request switch	Input	Front door RH request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
89 (B/W)	Ground	Front door LH request switch	Input	Front door LH request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
90 (Y)	Ground	Front blower motor relay control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage
94 (G/Y)	Ground	Electronic steering column lock CPU power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V

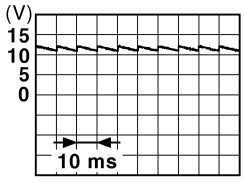
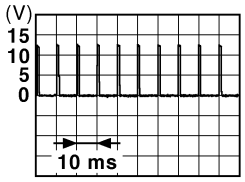
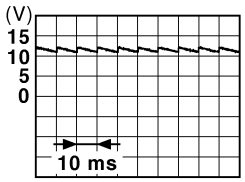
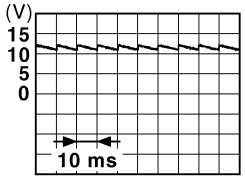
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
95 (R/W)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Turn signal switch LH	 JPMIA0037GB 1.3V
					Turn signal switch RH	 JPMIA0036GB 1.3V
					Front wiper switch LO	 JPMIA0038GB 1.3V
					Front washer switch ON	 JPMIA0039GB 1.3V

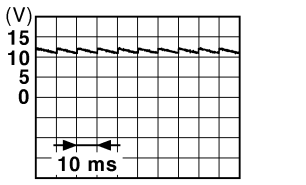
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
96 (P/B)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0036GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	 JPMIA0039GB 1.3V

Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description Signal name	Description Input/ Output	Condition		Value (Approx.)
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit-tent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Lighting switch flash-to-pass	 JPMIA0037GB 1.3V
					Lighting switch 2ND	 JPMIA0036GB 1.3V
					Front wiper switch INT	 JPMIA0038GB 1.3V
					Front wiper switch HI	 JPMIA0040GB 1.3V
98 (G/R)	Ground	Hazard switch	Input	Hazard switch	Pressed	0 V
					Not pressed	 JPMIA0012GB 1.1V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
99 (L/Y)	Ground	Electronic steering column lock CPU communication	Input/ Output	Electronic steering column lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 JMKIA0066GB
					For 15 seconds after UNLOCK	Battery voltage
					15 seconds or later after UNLOCK	0V
103 (V)	Ground	Trunk lid opening	Output	Trunk lid	Open (trunk lid opener actuator is activated)	Battery voltage
					Close (trunk lid opener actuator is not activated)	0V
110 (V/W)	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0V
					OFF	Battery voltage
114 (B)	Ground	Trunk room antenna 1 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
115 (W)	Ground	Trunk room antenna 1 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
118 (L/O)	Ground	Rear bumper antenna (-)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
119 (BR/ W)	Ground	Rear bumper antenna (+)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

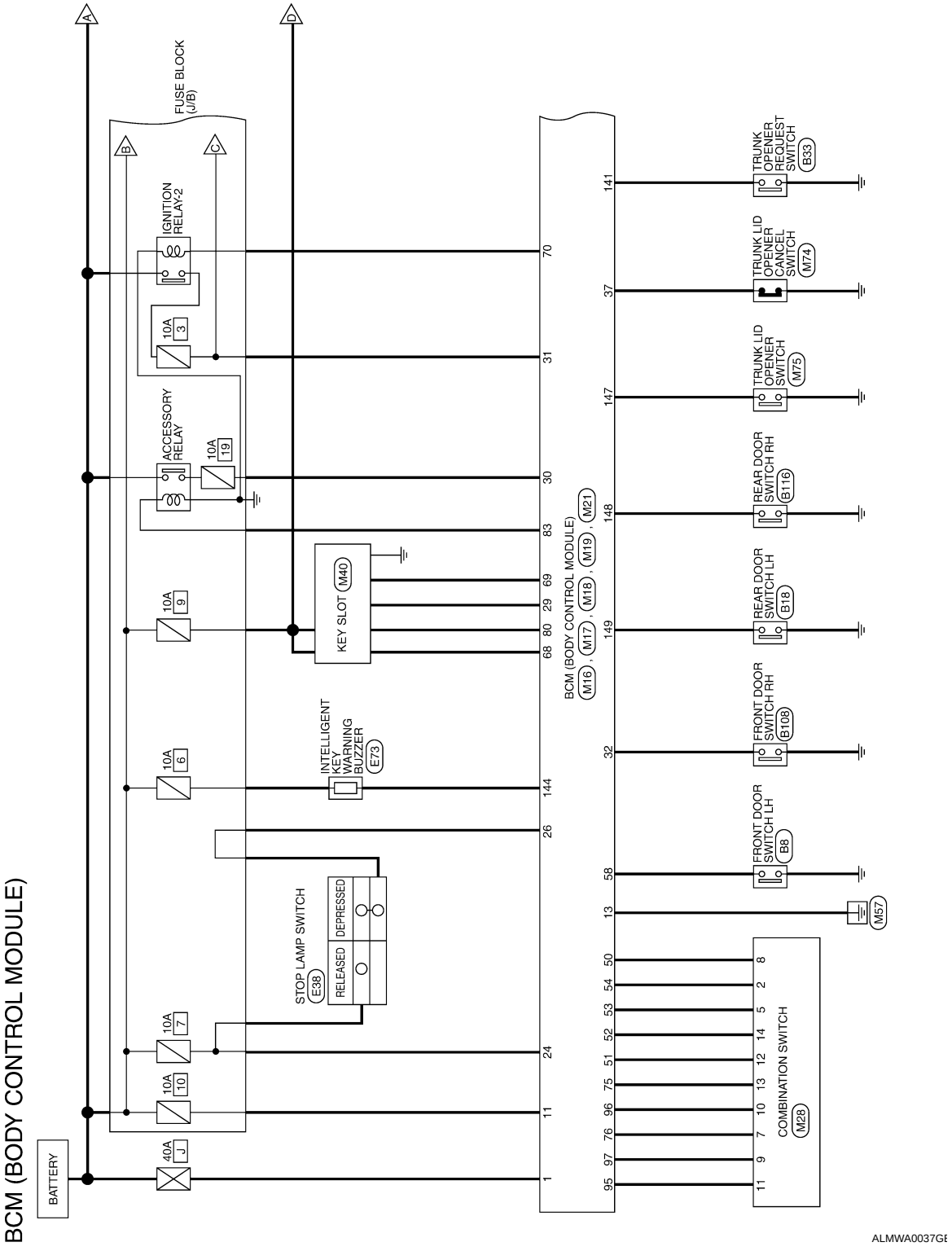
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
127 (BR/ W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	 JPMIA0011GB 11.8V
					ON (trunk is open)	0V
132 (R)	Ground	Start signal	Output	Ignition switch ON	When selector lever is in P or N position and the brake peddle is not depressed	0V
					When selector lever is in P or N position and the brake peddle is depressed	Battery voltage
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
144 (GR)	Ground	Request switch buzz-er	Output	Request switch buzzer	Sounding	0V
					Not sounding	Battery voltage
147 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0V
					Not pressed	 JPMIA0011GB 11.8V
148 (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	 JPMIA0011GB 11.8V
					ON (when rear door RH opens)	0V

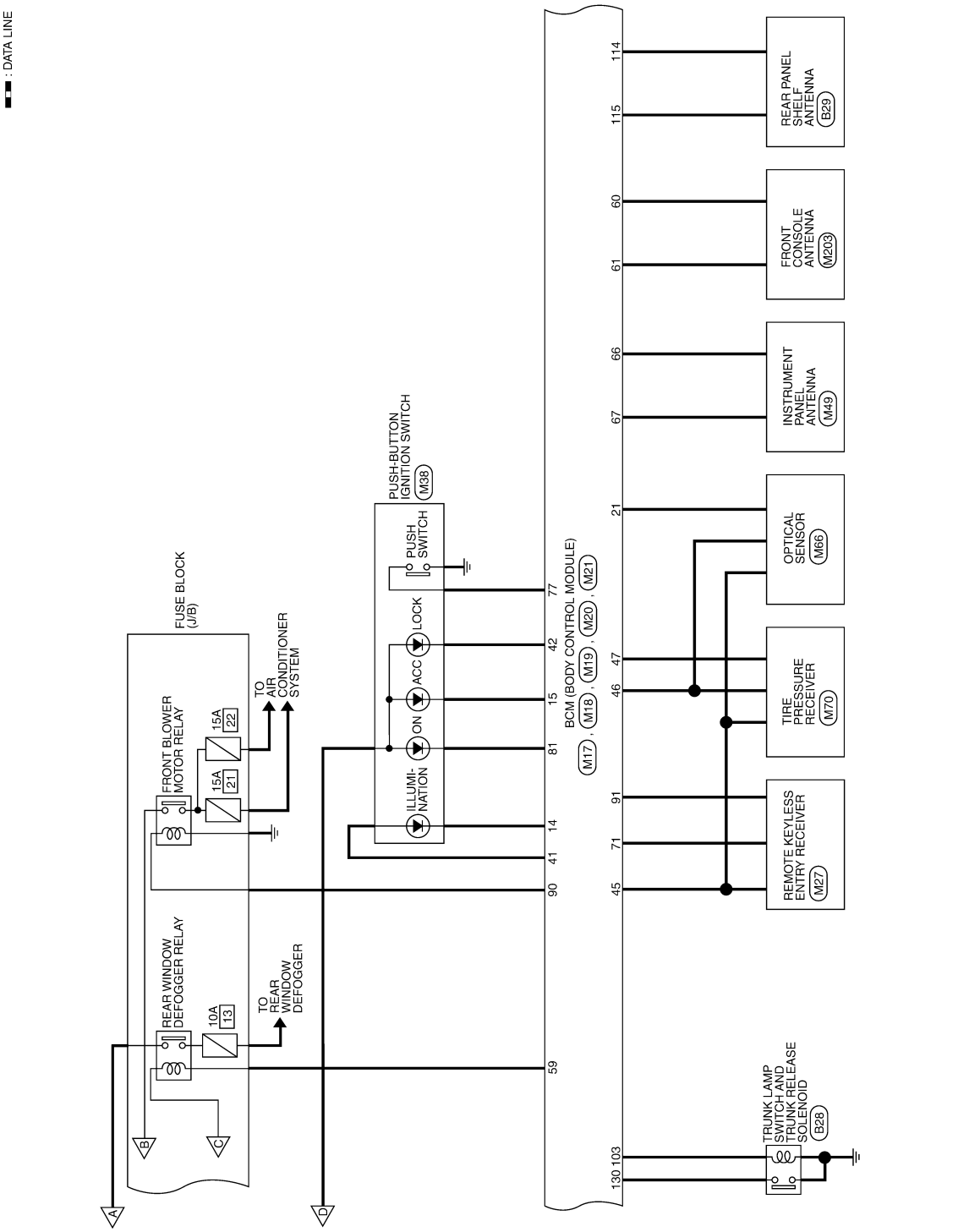
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
149 (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	 JPMIA0011GB 11.8V
					ON (when rear door LH opens)	0V

*: With LH and RH front window anti-pinch system

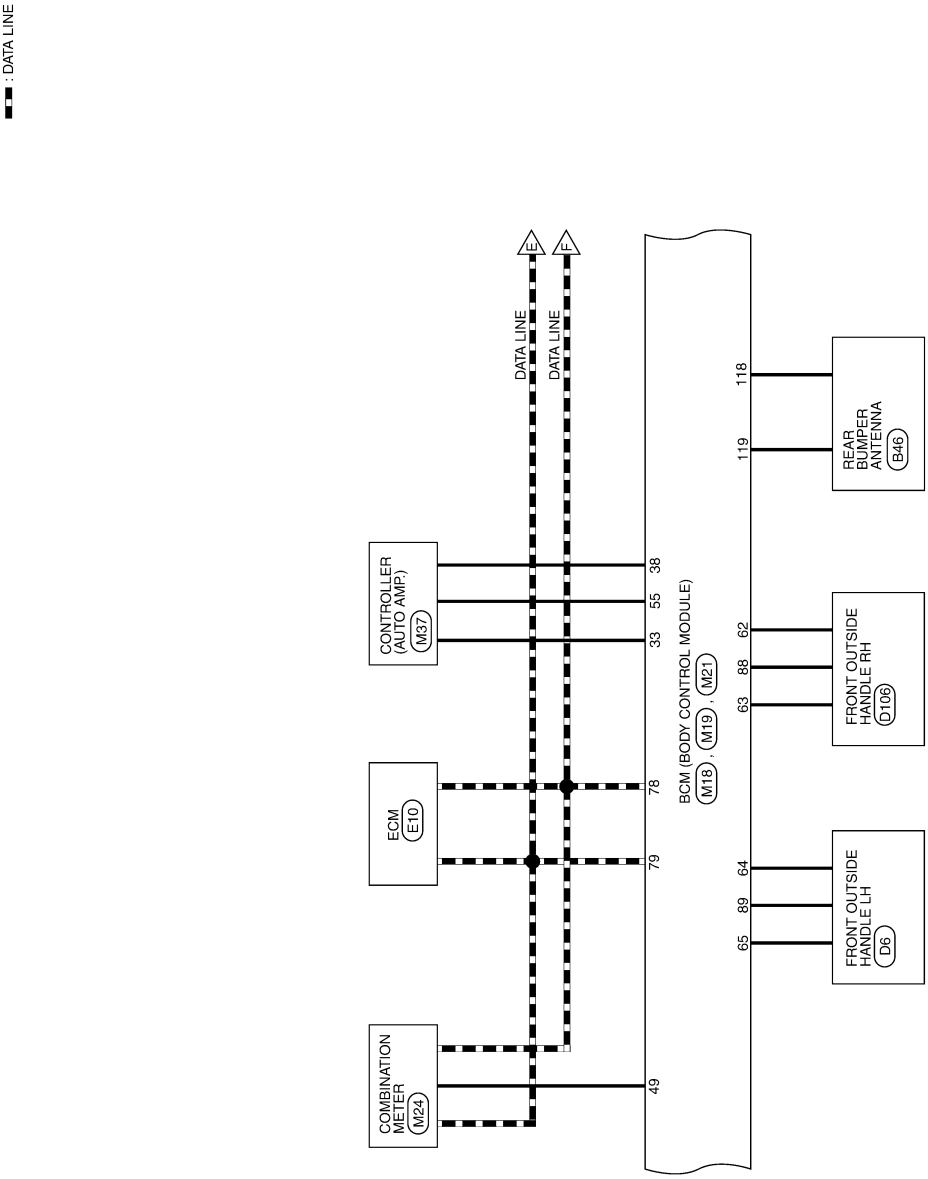
Wiring Diagram

INFOID:0000000003303318

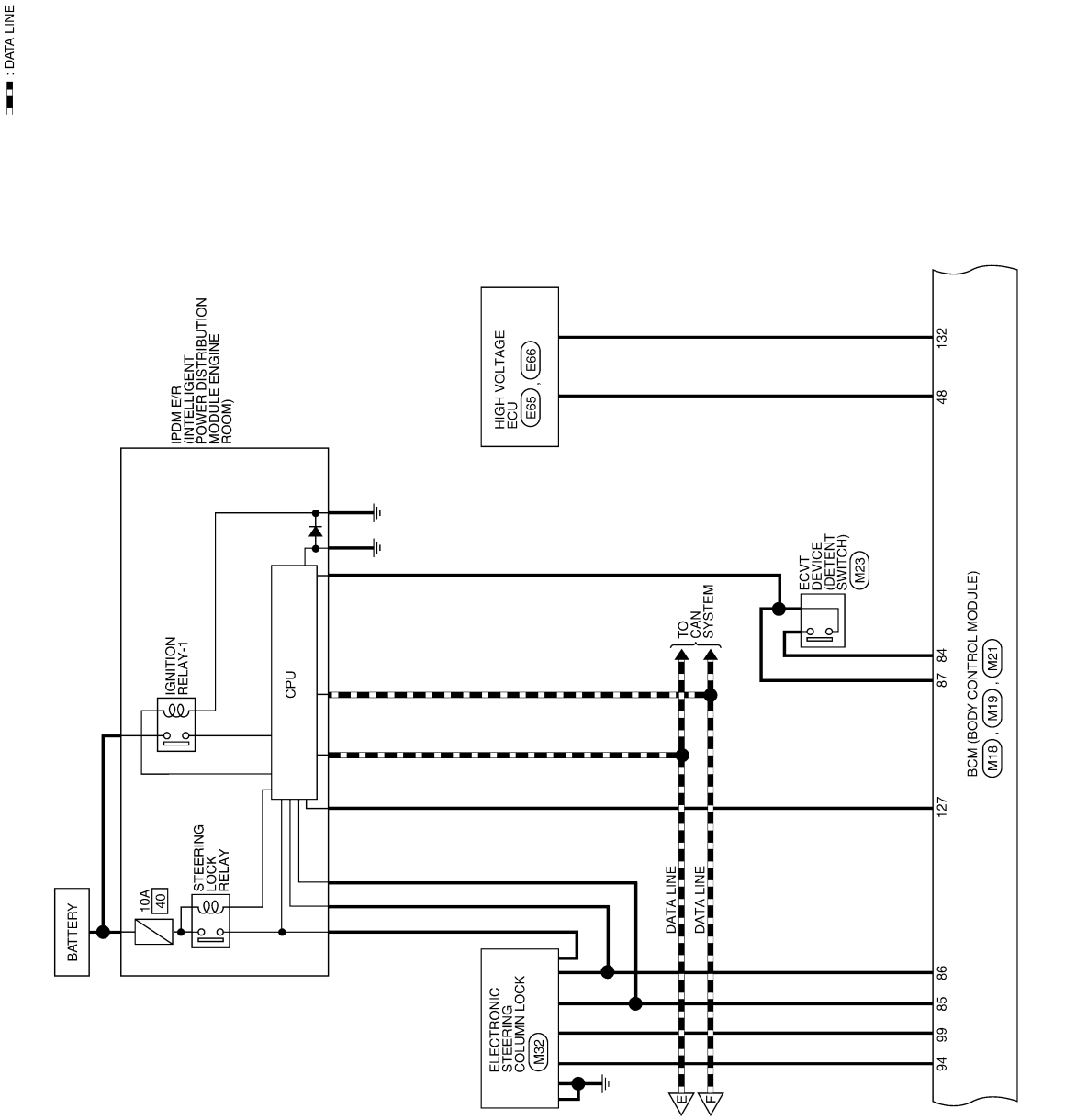


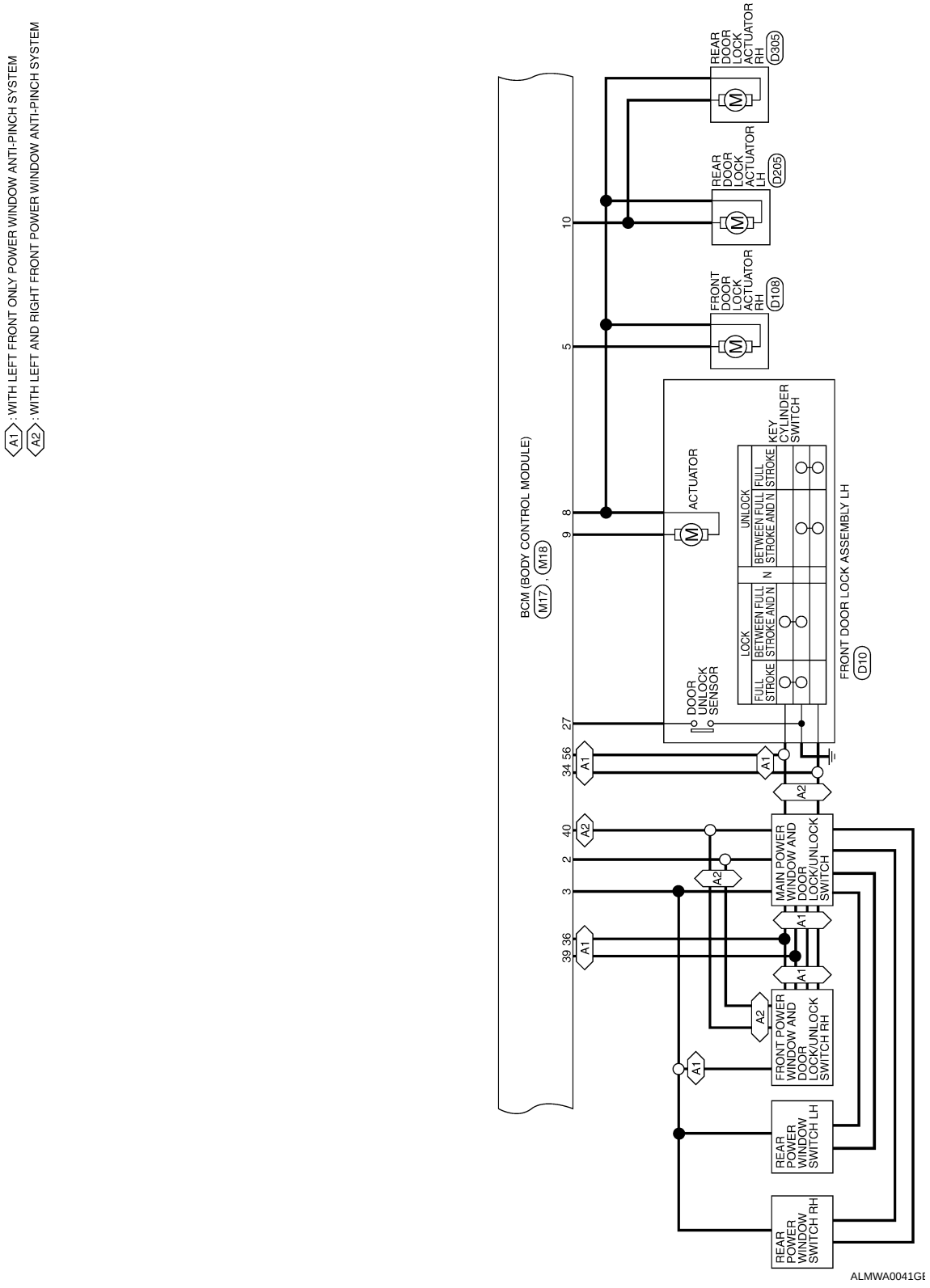


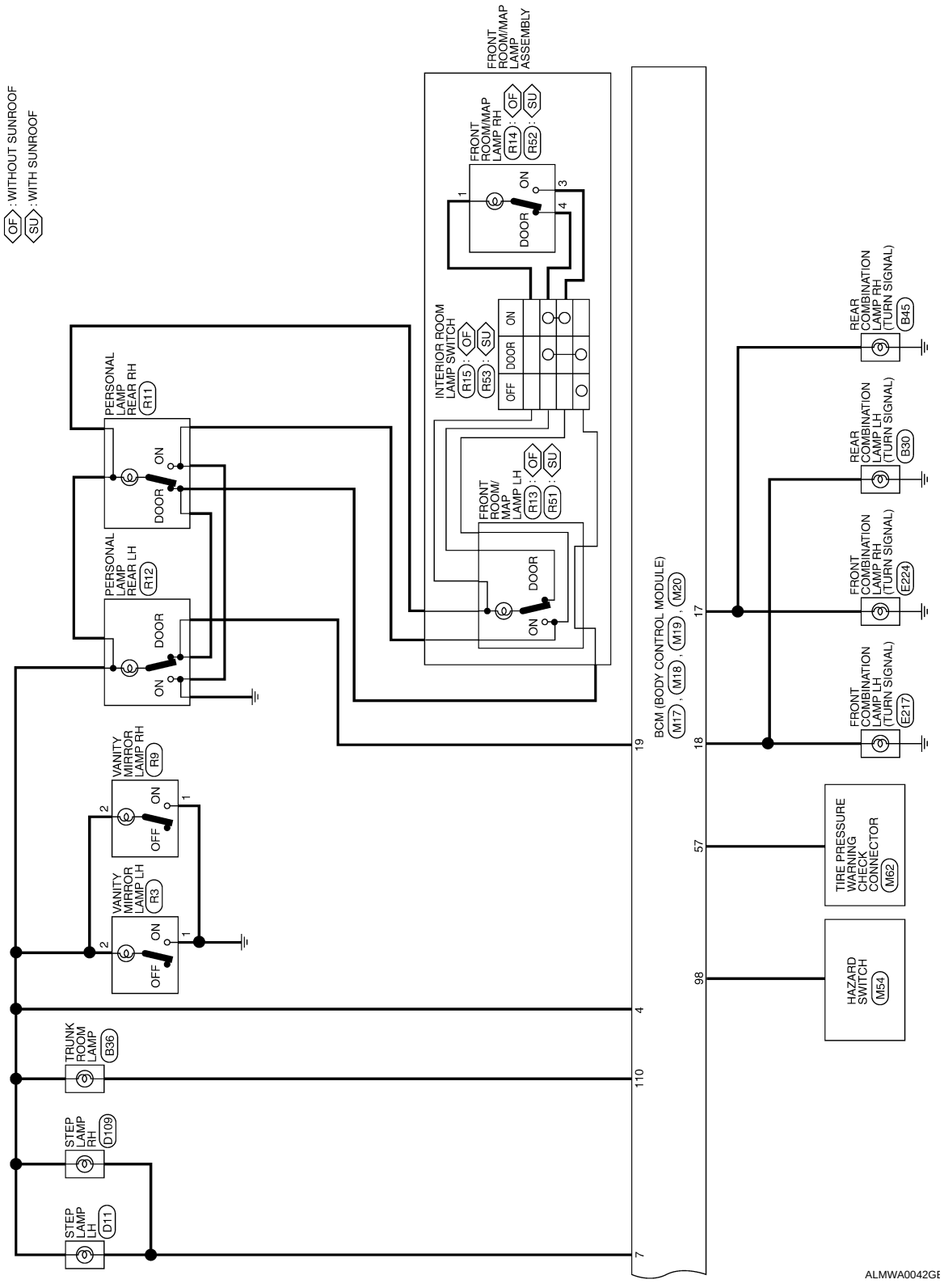
ALMWA0038GE



ALMWA0039GE


: DATA LINE
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
IGNITION RELAY-1
CPU
STEERING LOCK RELAY
10A 40
BATTERY
HIGH VOLTAGE ECU E65, E66
ECVT DEVICE (DETENT SWITCH) M23
TO CAN SYSTEM
DATA LINE
DATA LINE
ELECTRONIC STEERING COLUMN LOCK M32
BCM (BODY CONTROL MODULE) M18, M19, M21
132
48
84
87
127
86
85
99
94
E
F
ALMWA0040GE

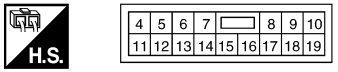

A1 : WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM
A2 : WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM
BCM (BODY CONTROL MODULE)
M17 , M18
REAR DOOR LOCK ACTUATOR RH
D305
REAR DOOR LOCK ACTUATOR LH
D205
FRONT DOOR LOCK ACTUATOR RH
D108
FRONT DOOR LOCK ASSEMBLY LH
D10
ACTUATOR
KEY CYLINDER SWITCH
UNLOCK
BETWEEN FULL STROKE AND N
FULL STROKE
LOCK
DOOR UNLOCK SENSOR
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
FRONT POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
REAR POWER WINDOW SWITCH LH
REAR POWER WINDOW SWITCH RH
ALMWA0041GB


OF : WITHOUT SUNROOF
SU : WITH SUNROOF
FRONT ROOM/MAP LAMP ASSEMBLY
FRONT ROOM/MAP LAMP RH (R14 : OF, R52 : SU)
INTERIOR ROOM LAMP SWITCH (R15 : OF, R53 : SU)
FRONT ROOM/ MAP LAMP LH (R13 : OF, R51 : SU)
PERSONAL LAMP REAR RH (R11)
PERSONAL LAMP REAR LH (R12)
VANITY MIRROR LAMP RH (R9)
VANITY MIRROR LAMP LH (R3)
TRUNK ROOM LAMP (B36)
STEP LAMP RH (D109)
STEP LAMP LH (D11)
BCM (BODY CONTROL MODULE) (M17), (M18), (M19), (M20)
REAR COMBINATION LAMP RH (TURN SIGNAL) (B45)
REAR COMBINATION LAMP LH (TURN SIGNAL) (B30)
FRONT COMBINATION LAMP RH (TURN SIGNAL) (E224)
FRONT COMBINATION LAMP LH (TURN SIGNAL) (E217)
TIRE PRESSURE WARNING CHECK CONNECTOR (M62)
HAZARD SWITCH (M54)
ALMWA0042GE

Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

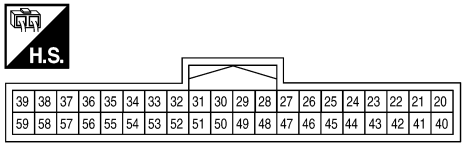
Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L
2	R/Y	P/W_POWER_SUPPLY_PERM
3	L/W	POWER_ WINDOW_ POWER_ SUPPLY (RAP)

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	P/W	ROOM_LAMP_BAT_SAVER
5	G/Y	CDL_AS
6	–	–
7	R/W	STEP_LAMP_OUTPUT
8	V	CDL_COMMON
9	G	CDL_DR/FL
10	G/Y	CDL_RR_RL_BACK
11	Y/R	BAT_BCM_FUSE
12	–	–
13	B	GND1
14	R/Y	LOW_SIDE_PUSH_LED_OUTPUT
15	Y/L	ACC_LED
16	–	–
17	G/B	FR_FLASHER
18	G/O	FL_FLASHER
19	Y	ROOM_LAMP_OUTPUT

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



Terminal No.	Color of Wire	Signal Name
20	–	–
21	P/B	AUTO_LIGHT_SENSOR_INPUT1
22	–	–
23	–	–
24	R/W	STOP_LAMP_LOW_SW
25	–	–
26	O/L	STOP_LAMP_HIGH_SW
27	G/W	DOOR_LOCK_STATUS
28	–	–
29	Y	FOB_IN_SW_1
30	V/Y	ACC_F/B
31	G	IGN_F/B
32	R/B	AS_DOOR_SW
33	SB	AIRCON_SW
34	L/R	DOOR_KEY/C_UNLOCK_SW
35	–	–
36	GR	CENTRAL_LOCK_SW
37	O	TRUNK_CANCEL_SW
38	GR/W	REAR_DEFOGGER_SW
39	GR/R	CENTRAL_UNLOCK_SW
40	Y/G	PW_K-LINE
41	W	PUSH_LED
42	R	S/L_LOCK_LED
43	–	–
44	–	–
45	P	GND_RF2_A/L
46	V/W	A/L_SENS_KEYLESS_TUNER_POWER_SUPPLY
47	G/O	KEYLESS_TUNER_SI
48	R/B	SHIFT_N/P
49	L/O	IMMO_LED
50	LG/B	INPUT_5
51	L/W	INPUT_1
52	G/B	INPUT_2
53	LG/R	INPUT_3
54	G/Y	INPUT_4
55	BR/W	BLOWER_FAN_SW/
56	L/B	DOOR_KEY/C_LOCK_SW
57	W	TPMS_MODE_TRIGGER_SW
58	SB	DR_DOOR_SW
59	G/R	REAR_DEFOGGER_RLY

ALMIA0083GB

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

H.S.

79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80

Terminal No.	Color of Wire	Signal Name
60	B/R	ROOM_ANT_2_B
61	W/R	ROOM_ANT_2_A

Terminal No.	Color of Wire	Signal Name
62	B/Y	AS_DOOR_ANT_B
63	LG	AS_DOOR_ANT_A
64	V	DR_DOOR_ANT_B
65	P	DR_DOOR_ANT_A
66	R	ROOM_ANT_1_B
67	G	ROOM_ANT_1_A
68	G/O	FOB_READER_CLOCK
69	O	FOB_READER_DATA
70	R/B	IGN_ELEC_CONT
71	L/O	RF1_TUNER_SIGNAL
72	–	–
73	–	–
75	R/Y	OUTPUT_5
76	R/G	OUTPUT_3
77	BR	ENG_START_SW
78	P	CAN-L
79	L	CAN-H
80	R/L	FOB_SLOT_ILLUMINATION
81	LG	IGN_ON_LED

Terminal No.	Color of Wire	Signal Name
82	–	–
83	L	ACC_CONT
84	Y/R	AT_DEVICE_OUT
85	L/O	S/L_CONDITION_1
86	G/R	S/L_CONDITION_2
87	G/B	SHIFT_P
88	P/L	AS_REQUEST SWITCH
89	B/W	DR_REQUEST SWITCH
90	Y	IGN2_CONT
91	L/R	RF1_POWER_SUPPLY
92	–	–
93	–	–
94	G/Y	S/L_POWER_SUPPLY_12V
95	R/W	OUTPUT_1
96	P/B	OUTPUT_4
97	R/B	OUTPUT_2
98	G/R	HAZARD_SW
99	L/Y	S/L_K-LINE

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

H.S.

100	101		102	103	104
105	106	107	108	109	110	111

Terminal No.	Color of Wire	Signal Name
100	–	–
101	–	–
102	–	–
103	V	CDL_BACK_TRUNK
104	–	–
105	–	–
106	–	–
107	–	–
108	–	–
109	–	–
110	V/W	TRUNK_LAMP_OUTPUT
111	–	–

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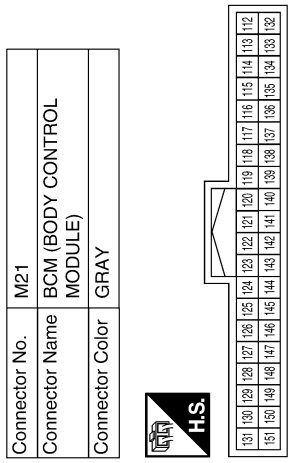
Terminal No.	Color of Wire	Signal Name
119	BR/W	BACK_DOOR_ANT_A
120	–	–
121	–	–
122	–	–
123	–	–
124	–	–
125	–	–
126	–	–
127	BR/W	IGN_USM_CONT1
128	–	–
129	–	–
130	Y/G	TRUNK_SW
131	–	–
132	R	ST_CONT_USM
133	–	–
134	–	–
135	–	–
136	–	–
137	–	–
138	–	–
139	–	–
140	–	–
141	G/R	TRUNK_REQUEST_SW
142	–	–
143	–	–
144	GR	BUZZER
145	–	–
146	–	–
147	L/R	BACK_TRUNK_OPENER
148	R/W	RR_DOOR_SW
149	R/B	RL_DOOR_SW
150	–	–
151	–	–

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
112	–	–
113	–	–
114	B	TRUNK_ANT_1_B
115	W	TRUNK_ANT_1_A
116	–	–
117	–	–
118	L/O	BACK_DOOR_ANT_B

ALMIA0085GB

Fail Safe

INFOID:0000000003303319

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit hybrid system cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit hybrid system cranking	Erase DTC

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit hybrid system cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit hybrid system cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit hybrid system cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit hybrid system cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit hybrid system cranking	Erase DTC
B2557: VEHICLE SPEED	Inhibit electronic steering column lock	When normal vehicle speed signals have been received from brake ECU actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit hybrid system cranking	500 ms after the following CAN signal communication status has become consistent • Starter control relay signal • Starter relay status signal
B2562: LOW VOLTAGE	• Inhibit hybrid system cranking • Inhibit electronic steering column lock	100 ms after the power supply voltage increases to more than 8.8 V
B2563: HI VOLTAGE	• Inhibit hybrid system cranking • Inhibit electronic steering column lock	500 ms after the power supply voltage decreases to less than 18 V
B2601: SHIFT POSITION	Inhibit electronic steering column lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit electronic steering column lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 /h or more
B2603: SHIFT POSI STATUS	Inhibit electronic steering column lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit electronic steering column lock	500 ms after any of the following BCM recognition conditions is fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF

Display contents of CONSULT	Fail-safe	Cancellation
B2605: PNP SW	Inhibit electronic steering column lock	500 ms after any of the following BCM recognition conditions is fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit hybrid system cranking	500 ms after the following CAN signal communication status has become consistent • Electronic steering column lock relay signal (Request signal) • Electronic steering column lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit hybrid system cranking	500 ms after the following CAN signal communication status has become consistent • Electronic steering column lock relay signal (Request signal) • Electronic steering column lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit hybrid system cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B2609: S/L STATUS	• Inhibit hybrid system cranking • Inhibit electronic steering column lock	When the following electronic steering column lock conditions agree • BCM electronic steering column lock control status • Electronic steering column lock condition No. 1 signal status • Electronic steering column lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit hybrid system cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilled • Power position changes to ACC • Receives hybrid system status signal (CAN)
B2612: S/L STATUS	• Inhibit hybrid system cranking • Inhibit electronic steering column lock	When any of the following conditions is fulfilled • Electronic steering column lock unit status signal (CAN) is received normally • The BCM electronic steering column lock control status matches the electronic steering column lock status recognized by the electronic steering column lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit hybrid system cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit hybrid system cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit hybrid system cranking	1 second after the electronic steering column lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit hybrid system cranking	BCM initialization
B26E1: ENG STATE NO RECIV	Inhibit hybrid system cranking	When any of the following conditions is fulfilled • Power position changes to ACC • Receives hybrid system status signal (CAN)

DTC Inspection Priority Chart

INFOID:0000000003303320

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

Priority	DTC
1	• B2562: LOW VOLTAGE • B2563: HI VOLTAGE • B261E: VEHICLE TYPE
2	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
3	• B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM
4	• B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2611: ACC RELAY • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B26E1: ENG STATE NO RECIV • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG

Priority	DTC
5	• C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1712: [CHECKSUM ERR] FL • C1713: [CHECKSUM ERR] FR • C1714: [CHECKSUM ERR] RR • C1715: [CHECKSUM ERR] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1720: [CODE ERR] FL • C1721: [CODE ERR] FR • C1722: [CODE ERR] RR • C1723: [CODE ERR] RL • C1724: [BATT VOLT LOW] FL • C1725: [BATT VOLT LOW] FR • C1726: [BATT VOLT LOW] RR • C1727: [BATT VOLT LOW] RL • C1734: CONTROL UNIT
6	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000003303321

NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	PCS-45
U1010: CONTROL UNIT (CAN)	—	—	—	PCS-46
U0415: VEHICLE SPEED SIG	—	—	—	BCS-38
B2013: ID DISCORD BCM-S/L	×	—	—	SEC-35
B2014: CHAIN OF S/L-BCM	×	—	—	SEC-36
B2190: NATS ANTENNA AMP	×	—	—	SEC-28
B2191: DIFFERENCE OF KEY	×	—	—	SEC-32
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-33
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-34
B2553: IGNITION RELAY	—	—	—	PCS-47
B2555: STOP LAMP	—	—	—	SEC-40

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2556: PUSH-BTN IGN SW	—	×	—	SEC-43
B2557: VEHICLE SPEED	×	×	—	SEC-45
B2560: STARTER CONT RELAY	×	×	—	SEC-46
B2562: LOW VOLTAGE	—	—	—	BCS-39
B2563: HI VOLTAGE	×	×	—	BCS-40
B2601: SHIFT POSITION	×	×	—	SEC-47
B2602: SHIFT POSITION	×	×	—	SEC-51
B2603: SHIFT POSI STATUS	×	×	—	SEC-54
B2604: PNP SW	×	×	—	SEC-58
B2607: S/L RELAY	×	×	—	SEC-60
B2608: STARTER RELAY	×	×	—	SEC-62
B2609: S/L STATUS	×	×	—	SEC-64
B260A: IGNITION RELAY	×	×	—	PCS-49
B260B: STEERING LOCK UNIT	—	×	—	SEC-69
B260C: STEERING LOCK UNIT	—	×	—	SEC-70
B260D: STEERING LOCK UNIT	—	×	—	SEC-71
B260F: ENG STATE SIG LOST	×	×	—	SEC-72
B2611: ACC RELAY	—	—	—	PCS-50
B2612: S/L STATUS	×	×	—	SEC-73
B2614: ACC RELAY CIRC	—	×	—	PCS-52
B2615: BLOWER RELAY CIRC	—	×	—	PCS-55
B2616: IGN RELAY CIRC	—	×	—	PCS-58
B2617: STARTER RELAY CIRC	×	×	—	SEC-78
B2618: BCM	×	×	—	PCS-61
B2619: BCM	×	×	—	SEC-80
B261A: PUSH-BTN IGN SW	—	×	—	SEC-81
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	—	SEC-84
B2621: INSIDE ANTENNA	—	—	—	DLK-42
B2622: INSIDE ANTENNA	—	—	—	DLK-45
B2623: INSIDE ANTENNA	—	—	—	DLK-48
C1704: LOW PRESSURE FL	—	—	×	WT-8
C1705: LOW PRESSURE FR	—	—	×	WT-8
C1706: LOW PRESSURE RR	—	—	×	WT-8
C1707: LOW PRESSURE RL	—	—	×	WT-8
C1708: [NO DATA] FL	—	—	×	WT-13
C1709: [NO DATA] FR	—	—	×	WT-13
C1710: [NO DATA] RR	—	—	×	WT-13
C1711: [NO DATA] RL	—	—	×	WT-13
C1712: [CHECKSUM ERR] FL	—	—	×	WT-14
C1713: [CHECKSUM ERR] FR	—	—	×	WT-14
C1714: [CHECKSUM ERR] RR	—	—	×	WT-14
C1715: [CHECKSUM ERR] RL	—	—	×	WT-14

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1716: [PRESSDATA ERR] FL	—	—	×	WT-15
C1717: [PRESSDATA ERR] FR	—	—	×	WT-15
C1718: [PRESSDATA ERR] RR	—	—	×	WT-15
C1719: [PRESSDATA ERR] RL	—	—	×	WT-15
C1720: [CODE ERR] FL	—	—	×	WT-14
C1721: [CODE ERR] FR	—	—	×	WT-14
C1722: [CODE ERR] RR	—	—	×	WT-14
C1723: [CODE ERR] RL	—	—	×	WT-14
C1724: [BATT VOLT LOW] FL	—	—	×	WT-14
C1725: [BATT VOLT LOW] FR	—	—	×	WT-14
C1726: [BATT VOLT LOW] RR	—	—	×	WT-14
C1727: [BATT VOLT LOW] RL	—	—	×	WT-14
C1729: VHCL SPEED SIG ERR	—	—	×	WT-16

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000003071748

CAUTION:

Perform the self-diagnosis with CONSULT-III 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 LH and RH • Personal lamp rear LH and RH • Trunk room lamp • Step lamp LH and RH • Vanity mirror lamp LH and RH	• Harness between BCM and each interior room lamp • BCM	Interior room lamp power supply circuit Refer to INL-15.
• 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-52.
		Interior room lamp control circuit Refer to INL-17.
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	—	Check the interior room lamp setting. Refer to BCS-19.
Step lamps do not turn ON. (The front room/map lamps and the personal lamps turn ON.)	• Harness between BCM and each step lamp • BCM	Step lamp circuit Refer to INL-19.
Step lamps (driver side and passenger side) do not turn OFF. (The room/map lamps and the personal lamps turn OFF.)		
• Trunk room lamp does not turn ON. (The bulb is normal.) • Trunk room lamp does not turn OFF.	• Harness between BCM and trunk room lamp switch • Harness between BCM and trunk room lamp • BCM	Trunk room lamp switch circuit Refer to INL-21.
		Trunk room lamp circuit Refer to INL-21.
Interior room lamp battery saver does not activate.	—	Check the interior room lamp battery saver setting. Refer to BCS-29.

PRECAUTION

PRECAUTIONS

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

INFOID:0000000003071749

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.**

General precautions for service operations

INFOID:0000000003071750

- When removing or disassembling any part, be careful not to damage or deform it. Protect parts which may get in the way with cloth.
- When removing parts with a screw driver or other tool, protect parts by wrapping them with vinyl or tape.
- Keep removed parts protected with cloth.
- If an non-reuseable part is removed, replace it with a new one.
- After re-assembly has been completed, make sure each part functions correctly.
- Never work with wet hands.
- Turn the lighting switch OFF before disconnecting and connecting the connector.
- Do not use organic solvent (paint thinner or gasoline) to clean lamps or remove sealant residue.

ON-VEHICLE REPAIR

INTERIOR ROOM LAMP

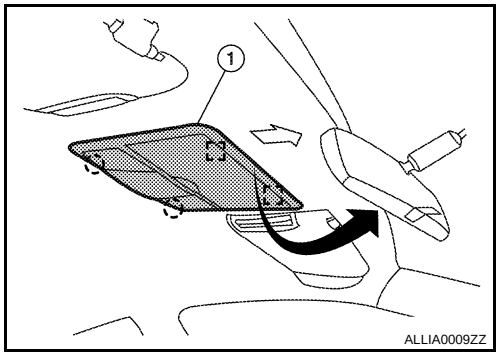
Removal and Installation

INFOID:0000000003071751

FRONT ROOM/MAP LAMP

Removal

1. Disconnect the negative battery cable.
2. Release the metal clips and drop front edge of front room/map lamp (1) away from headlining. Slide front room/map lamp forward in vehicle to clear pawls at rear.
3. Disconnect the connectors, then remove front room/map lamp.



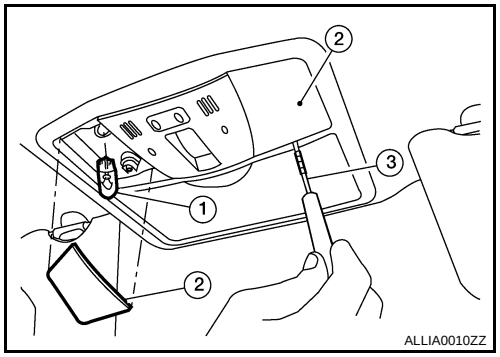
Installation

Installation is in the reverse order of removal.

Bulb Replacement

1. Disconnect the negative battery cable.
2. Using a suitable tool (3), remove front room/map lamp lens (2) RH/LH.
3. Pull bulb (1) straight out to remove.

Front room/ map lamp bulb : 12V - 8W



VANITY MIRROR LAMP

Removal

The vanity mirror lamp is replaced as part of the sunvisor assembly. Refer to INT-18, "Exploded View".

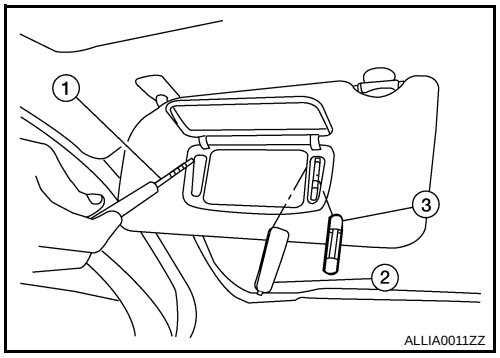
Installation

Installation is in the reverse order of removal.

Bulb Replacement

1. Disconnect the negative battery cable.
2. Using a suitable tool (1), remove the vanity mirror lamp lens (2) RH/LH.
3. Pull bulb (3) straight out to remove.

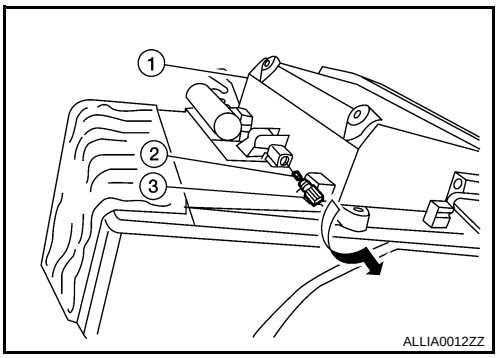
Vanity mirror lamp bulb : 12V - 2W



GLOVE BOX LAMP

Removal

1. Disconnect the negative battery cable.
2. Remove the lower instrument glove box assembly (1). Refer to IP-10, "Exploded View".
3. Rotate glove box lamp socket (3) counterclockwise to remove.



Installation
Installation is in the reverse order of removal.

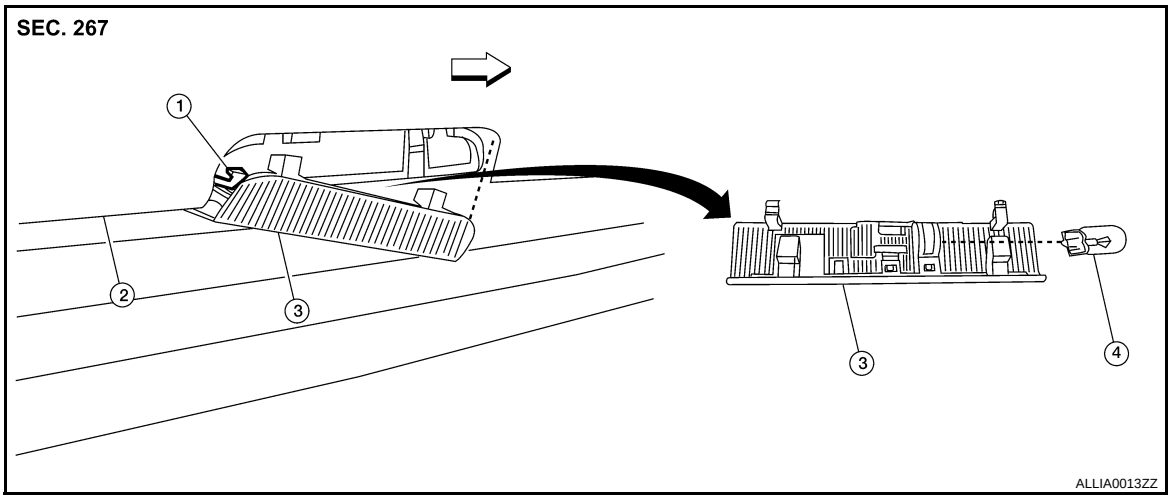
Bulb Replacement

1. Disconnect the negative battery cable.
2. Remove glove box lamp socket (3).
3. Pull bulb (2) straight out to remove.

Glove box lamp bulb : 12V - 3.4W

STEP LAMP

Removal



1. Step lamp connector
2. Door finisher
3. Step lamp lens/socket
4. Step lamp bulb
⇦ Vehicle front

1. Disconnect the negative battery cable.
2. Insert a suitable tool between door finisher (2) and step lamp lens/socket (1) to release the pawls.
3. Disconnect the step lamp connector, then remove step lamp.

Installation
Installation is in the reverse order of removal.

Bulb Replacement

1. Disconnect the negative battery cable.
2. Remove the step lamp lens/socket.

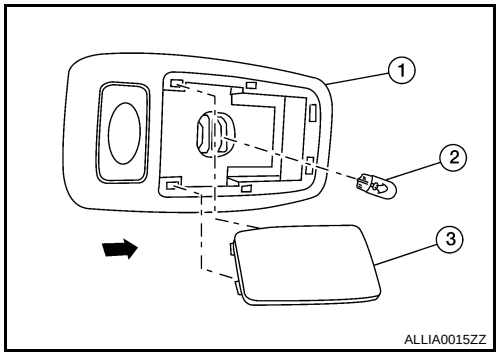
3. Pull the bulb straight out to remove.

Step lamp bulb : 12V - 5W

PERSONAL LAMP

Removal

The personal lamp (RH/LH) (1) is replaced as part of the headlining assembly. Refer to INT-18, "Removal and Installation".



Installation

Installation is in the reverse order of removal.

Bulb Replacement

1. Disconnect the negative battery cable.
2. Using a suitable tool, release the pawls and remove personal lamp lens (3)
3. Pull bulb (2) straight out to remove.

Personal lamp bulb : 12V - 8W

ILLUMINATION

Removal and Installation

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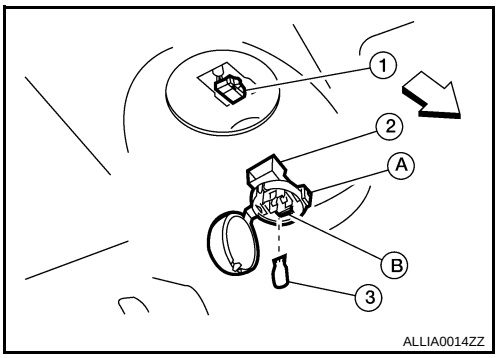
TRUNK ROOM LAMP

Removal

1. Disconnect the negative battery cable.
2. Release the tab (A), then swing open the lens.
3. Remove the bulb (3).
4. Release the tab (B), then pull trunk room lamp (2) away from body opening.
5. Disconnect the connector (1) and remove trunk room lamp.



Installation

Installation is in the reverse order of removal.

Bulb Replacement

1. Disconnect the negative battery cable.
2. Release the tab (A), then swing open the lens.
3. Pull bulb (3) straight out to remove.

Trunk room lamp bulb : 12V - 3.4W

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000003071753

Item	Type	Wattage (W)	Bulb No.*
Front room/map lamp	Wedge	8	B5Y
Push-button ignition switch illumination	LED	-	-
Vanity mirror lamp	Cylinder	2	-
Glove box lamp	Wedge	3.4	658
Step lamp	Wedge	5	-
Personal lamp	Wedge	8	B5Y
Trunk room lamp	Wedge	3.4	158

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