

D

Е

F

K

INL

0

CONTENTS

BASIC INSPECTION3	INTERIOR ROOM LAMP CONTROL CIRCUIT
DIAGNOSIS AND REPAIR WORKFLOW3 Work Flow3	Description
FUNCTION DIAGNOSIS6	Diagnosis Procedure17
INTERIOR ROOM LAMP CONTROL SYSTEM	CARGO LAMP CONTROL CIRCUIT19 Description19
System Diagram	Component Function Check
ILLUMINATION CONTROL SYSTEM	Description
DIAGNOSIS SYSTEM (BCM)11	Wiring Diagram23
COMMON ITEM : CONSULT-III Function11	ILLUMINATION33 Wiring Diagram33
INT LAMP	ECU DIAGNOSIS44BCM (BODY CONTROL MODULE)44Reference Value44Terminal Layout46Physical Values46Wiring Diagram52DTC Inspection Priority Chart55
POWER SUPPLY AND GROUND CIRCUIT14	DTC Index56
BCM : Diagnosis Procedure	SYMPTOM DIAGNOSIS58
PLY CIRCUIT	INTERIOR LIGHTING SYSTEM SYMPTOMS 58 Symptom Table
Diagnosis Procedure15	PRECAUTIONS59

Supplemental Restraint System (SRS) "AIR BAG"	ILLUMINATION	. 62
and "SEAT BELT PRE-TENSIONER" 59	Removal and Installation	. 62
General precautions for service operations 59	SERVICE DATA AND SPECIFICATIONS	
ON-VEHICLE REPAIR60	(SDS)	. 64
INTERIOR ROOM LAMP60	BULB SPECIFICATIONS	. 64
Damas and Installation	Interior Lamp/Illumination	

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

Α

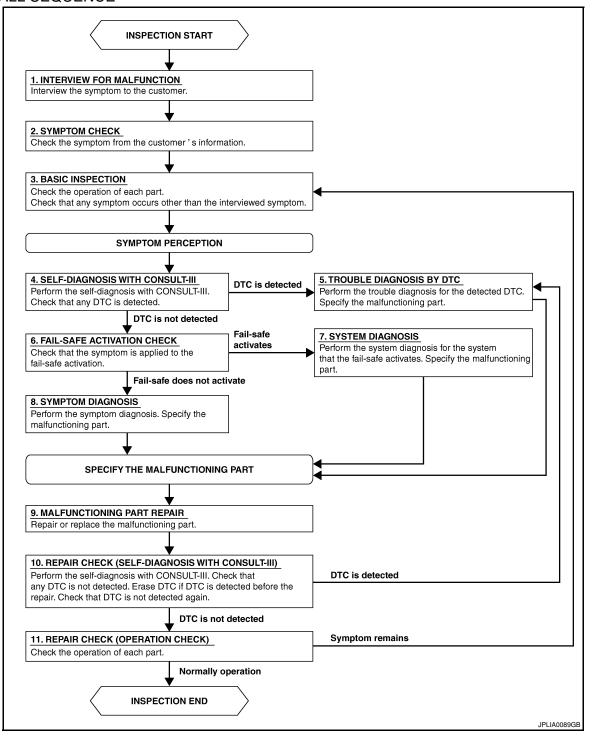
D

K

INL

Ν

OVERALL SEQUENCE



INL-3

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

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

${f 5}$. 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?

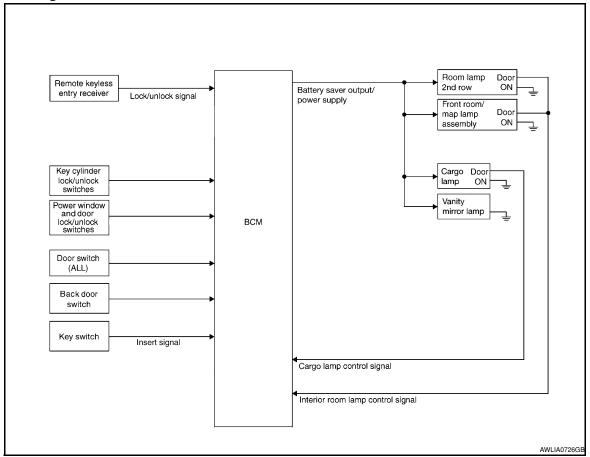
DIAGNOSIS AND REPAIR WORKFLOW	
< BASIC INSPECTION > YES >> GO TO 5	
NO >> GO TO 11	А
11.REPAIR CHECK (OPERATION CHECK)	
Check the operation of each part. <u>Does it operate normally?</u>	В
YES >> INSPECTION END	
NO >> GO TO 3	С
	D
	Е
	F
	G
	Н
	I
	J
	K
	INL
	M
	N
	0

FUNCTION DIAGNOSIS

INTERIOR ROOM LAMP CONTROL SYSTEM

System Diagram

INFOID:0000000003084497



System Description

INFOID:0000000003084498

OUTLINE

- Front room/map lamp and room lamp 2nd row are controlled by the interior room lamp timer control function
 of the BCM.
- Cargo lamp is controlled by the cargo lamp control function of the BCM.

The timer control functions of the BCM activate based on inputs from the remote keyless entry receiver, the key cylinder lock/unlock switches, the door switches, the key switch and the power window and door lock/unlock switches.

ROOM LAMP TIMER OPERATION

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

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

Timer control is cancelled under the following conditions.

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

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

INTERIOR LAMP BATTERY SAVER CONTROL

< FUNCTION DIAGNOSIS >

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 power and ground to all interior lamps.

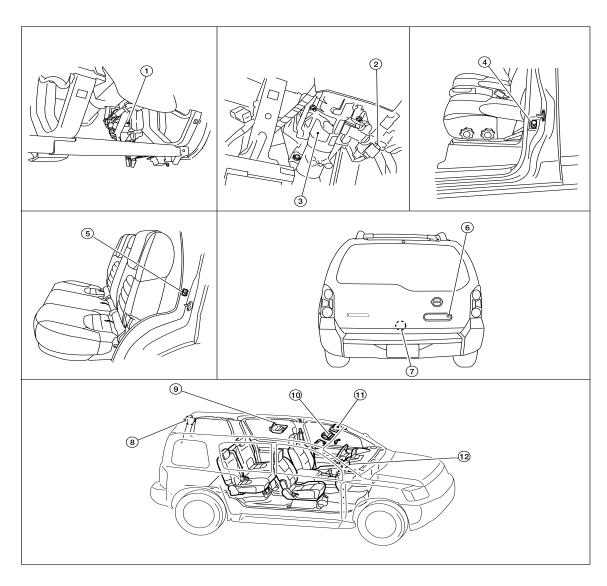
After the battery saver system turns the lamps OFF, the lamps will illuminate again when

- a signal is received from a 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 interior lamp battery saver control time period can be changed with the function setting of CONSULT-III.

Component Parts Location

INFOID:0000000003084499



- BCM M18, M19, M20 (view with lower 2. instrument panel LH removed)
- 4. Front door switch LH B8 RH B108
- 7. Back door switch D502
- 10. Front room/map lamp assembly R9
- Key switch M27
- 5. Rear door switch LH B18 RH B116
- 8. Cargo lamp R11
- Vanity lamp (with vanity lamps)
 LH B80
 RH B81
- 3. Steering column assembly
- Back door key cylinder switch D505
- 9. Room lamp 2nd row R12
- 12. Ignition keyhole illumination M150

D

Α

В

Е

F

G

Н

Κ

INL

N/I

Ν

C

< FUNCTION DIAGNOSIS >

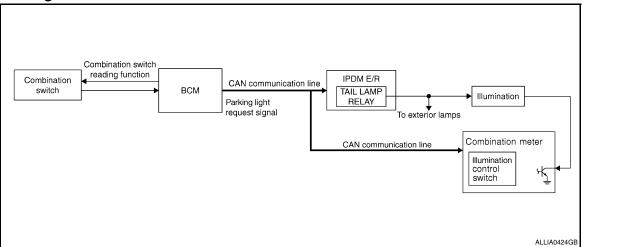
Component Description

INFOID:0000000003084500

Part name	Description	
ВСМ	Provides power and ground and controls timer functions for the interior room lamps and cargo lamp.	
Key switch	Provides key in ignition status to the BCM.	
Door switches	Provides door OPEN/CLOSED status to the BCM.	
Back door switch	Provides back door OPEN/CLOSED status to the BCM.	
Main power window and door lock/unlock switch	Provides door lock/unlock position switch status to the BCM.	
Power window and door lock/unlock switch RH	- Provides door lock/unlock position switch status to the BOW.	
Front door lock assembly LH (key cylinder switch)	Provides door lock/unlock status to the BCM.	
Back door key cylinder switch	- 1 TOVIGES GOOT TOCK GRIDGE STATUS TO THE DOWN.	

ILLUMINATION CONTROL SYSTEM

System Diagram



System Description

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 the BCM (body control module) receives input requesting the parking lamps to illuminate. This input is communicated to the IPDM E/R (intelligent power distribution module engine room) via the CAN communication lines. The CPU (central processing unit) of the IPDM E/R controls the tail lamp relay coil. When energized, this relay directs power to the parking and illumination lamps, which then illuminate.

BATTERY SAVER CONTROL

When the lighting switch (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 after illumination lamps have been turned off by the battery saver control, the illumination lamps illuminate again.

INL

K

Α

В

D

Е

F

INFOID:000000000308450

INFOID:0000000003084502

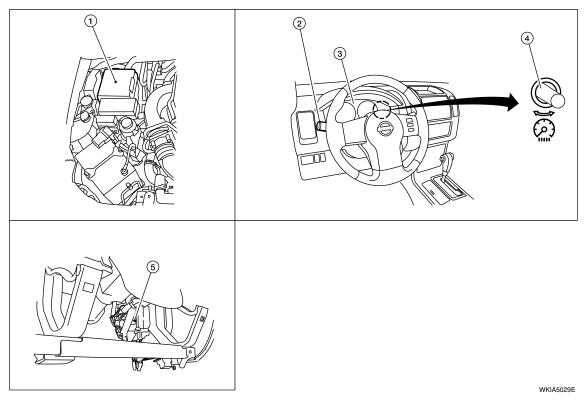
1. //

Ν

C

Component Parts Location

INFOID:0000000003084503



- 1. IPDM E/R E122, E124
- 4. Illumination control switch (built into combination meter)
- 2. Combination switch M28
- BCM M18, M20 (view with instrument lower panel LH removed)
- Combination meter M24

Component Description

INFOID:0000000003084504

Part name	Description
ВСМ	The BCM monitors the lighting switch position with the combination switch reading function. The BCM requests, via CAN communication, that the IPDM E/R activate the tail lamp relay.
IPDM E/R	The IPDM E/R activates the tail lamp relay based on inputs received from the BCM via the CAN communication network.
Combination meter (illumination control switch)	The illumination control switch is a part of the combination meter. The combination meter controls illumination intensity by varying ground to the illumination lamps based on the illumination control switch position.
Combination switch	The combination switch provides input to the BCM about the lighting switch position.

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT-III Function

INFOID:0000000003084505

Α

В

C

D

Е

F

G

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

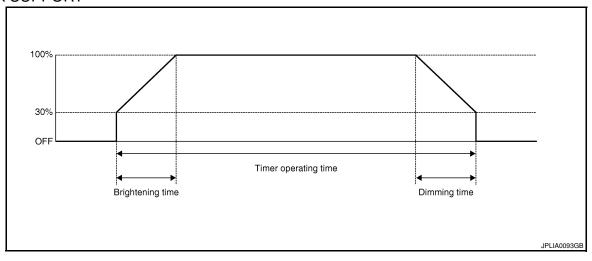
BCM diagnostic test item	Diagnostic mode	Description
WORK SUPPORT		Supports inspections and adjustments. Commands are transmitted to the BCM for setting the status suitable for required operation, input/output signals are received from the BCM and received data is displayed.
	DATA MONITOR	Displays BCM input/output data in real time.
Inspection by part	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.

INT LAMP

INT LAMP: CONSULT-III Function

INFOID:0000000003084506

WORK SUPPORT



Service item	Setting item		Setting	
OFT III B I IN II OK INTOON	ON	With the i	With the interior room lamp timer function	
SET I/L D-UNLCK INTCON	OFF	Without the interior room lamp timer function		
ROOM LAMP ON TIME SET	MODE 1	0.5 sec.		
	MODE 2	1 sec.		
	MODE 3	2 sec.		
	MODE 4	3 sec.	Sets the interior room lamp gradual brightening time.	
	MODE 5	4 sec.		
	MODE 6	5 sec.		
	MODE 7	0 sec.		

Н

J

Κ

INL

M

Ν

0

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

Service item	Setting item		Setting	
ROOM LAMP OFF TIME SET	MODE 1	0.5 sec.		
	MODE 2	1 sec.		
	MODE 3	2 sec.		
	MODE 4	3 sec.	Sets the interior room lamp gradual dimming time.	
	MODE 5	4 sec.		
	MODE 6	5 sec.		
	MODE 7	0 sec.		

DATA MONITOR

Monitor item [Unit]	Description
IGN ON SW [ON/OFF]	The switch status input from ignition switch
KEY ON SW [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
BACK DOOR SW [ON/OFF]	The switch status input from back door switch
KEY CYL LK-SW [ON/OFF]	Lock switch status received from key cylinder switch
KEY CYL UN-SW [ON/OFF]	Unlock switch status received from key cylinder switch
CDL LOCK SW [ON/OFF]	Lock switch status received from door lock/unlock switch
CDL UNLOCK SW [ON/OFF]	Unlock switch status received from door lock/unlock switch
KEYLESS LOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver
KEYLESS UNLOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

Test item	Operation	Description	
ON INT LAMP		Outputs the interior room lamp control signal to turn the front room/map lamp and personal lamp (switches are in DOOR position) ON.	
IIVI EAWII	OFF	Stops the interior room lamp control signal to turn the front room/map lamp and personal lamp (switches are in DOOR position) OFF.	
IGN ILLUM OFF		Outputs the ignition keyhole illumination signal to turn the ignition keyhole illumination ON.	
		Stops the ignition keyhole illumination signal to turn the ignition keyhole illumination OFF.	

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

Test item	Operation	Description
LUCCACE LAMB TEST	ON	Outputs the cargo lamp control signal to turn cargo lamp (switch in DOOR position) ON.
LUGGAGE LAMP TEST OFF	Stops the cargo lamp control signal to turn cargo lamp (switch in DOOR position) OFF.	

BATTERY SAVER

BATTERY SAVER: CONSULT-III Function

INFOID:0000000003084507

WORK SUPPORT

Service item	Setting item	Setting
ROOM LAMP TIMER SET MODE 1 (ON)	Interior room lamp timer activates with synchronizing all doors.	
NOOM LAMI TIMEN GET	MODE 2 (OFF)	Interior room lamp timer activates with synchronizing the front door LH only.

DATA MONITOR

Monitor item [Unit]	Description			
IGN ON SW [ON/OFF]	The switch status input from ignition switch			
KEY ON SW [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			
BACK DOOR SW [ON/OFF]	The switch status input from back door switch			
KEY CYL LK-SW [ON/OFF]	Lock switch status received from key cylinder switch by power window serial link			
KEY CYL UN-SW [ON/OFF]	Unlock switch status received from key cylinder switch by power window serial link			
CDL LOCK SW [ON/OFF]	Lock switch status received from door lock/unlock switch by power window serial link			
CDL UNLOCK SW [ON/OFF]	Unlock switch status received from door lock/unlock switch by power window serial link			
KEYLESS LOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver			
KEYLESS UNLOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver			

ACTIVE TEST

Test item	Operation	Description
BATTERY SAVER	ON	Outputs the battery saver output/power supply to turn the interior lamps ON.
DATTERT SAVER	OFF	Stops the battery saver output/power supply to turn the interior lamps OFF.

Α

В

D

Е

F

G

Н

Κ

INL

M

Ν

0

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT BCM

BCM: Diagnosis Procedure

INFOID:0000000003260980

1. CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
57	Battery power supply	18 (10A)
70	Battery power suppry	G (50A)
11	Ignition ACC or ON	4 (10A)
38	Ignition ON or START	1 (10A)

Is the fuse blown?

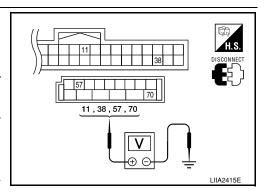
YES >> Replace the blown fuse or fusible link after repairing the affected circuit.

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

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

Connector	onnector (+) (-) Power source		Power	Condition	Voltage (V) (Ap-
Connector			Condition	prox.)	
M18	11	Ground	ACC power supply	Ignition switch ACC or ON	Battery voltage
	38	Ground	Ignition power supply	Ignition switch ON or START	Battery voltage
M20	57	Ground	Battery power supply	Ignition switch OFF	Battery voltage
M20	70	Ground	Battery power supply	Ignition switch OFF	Battery voltage



Is the measurement value normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

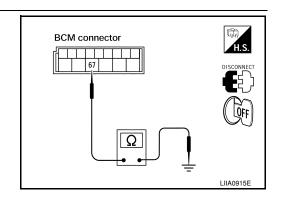
Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Connector Terminal		Continuity
M20	67		Yes

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.



BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

< COMPONENT DIAGNOSIS >

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

Description INFOID:0000000003084509

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

Component Function Check

${f 1}$.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY FUNCTION

(P)CONSULT-III

- Turn ignition switch ON.
- Turn each interior room lamp ON.
- Front room/map lamp assembly
- Vanity lamps (if equipped)
- Cargo lamp
- Room lamp 2nd row
- Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
- 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?

>> Battery saver output/power supply circuit is normal.

>> Refer to INL-15, "Diagnosis Procedure". NO

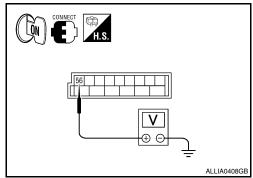
Diagnosis Procedure

${f 1}$.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OUTPUT

(E)CONSULT-III

- 1. Turn ignition switch ON.
- 2. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active
- 3. With test item operating, check voltage between BCM harness connector M20 terminal 56 and ground.

(+)		(-)	Test item	Voltage	
Connector	Terminal	(-)	BATTERY SAVER	voltage	
M20	56	Ground	OFF	0V	
IVIZO	30	Ground	ON	Battery voltage	



Is the inspection result normal?

YES >> GO TO 2

NO >> Replace BCM. Refer to BCS-52, "Removal and Installation".

2.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect the following connectors. 2.
- BCM M20
- Ignition key hole illumination
- Front room/map lamp assembly
- Vanity lamp LH (if equipped)
- Vanity lamp RH (if equipped)
- Cargo lamp
- Room lamp 2nd row
- Check continuity between BCM harness connector and each interior room lamp harness connector.

Р

K

INL

M

N

Α

В

D

INFOID:0000000003084510

INFOID:0000000003084511

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

< COMPONENT DIAGNOSIS >

BCI	М	Each interior room lamp			O = matimus its s
Connector	Terminal	Connector	Terminal	Continuity	
M20 56 Front room Vanity lam Vanity lam Cargo lam	Ignition key hole illumination	M150	1		
	Front room/map lamp assembly	R9	1		
	Vanity lamp LH (if equipped)	B80	1	V.	
	Vanity lamp RH (if equipped)	equipped) B81	1	Yes	
	Cargo lamp	R11	2		
	Room lamp 2nd row	R12	2		

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair the harnesses or connectors.

3. CHECK BATTERY SAVER OUTPUT/POWER SUPPLY SHORT CIRCUIT

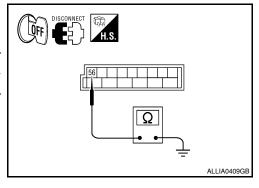
Check continuity between BCM harness connector M20 terminal 56 and ground.

Connector	Terminal	_	Continuity
M20	56	Ground	No

Is the inspection result normal?

YES >> Replace the interior room lamp. Refer to <u>INL-60</u>, <u>"Removal and Installation"</u>.

NO >> Repair the harnesses or connectors.



INTERIOR ROOM LAMP CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description INFOID:0000000003084512

Controls the following interior room lamps (ground side) by PWM signal

- Front room/map lamp assembly
- Room lamp 2nd row

NOTE:

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

Component Function Check

INFOID:0000000003084513

Α

В

D

Е

Н

CAUTION:

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

- Battery saver output/power supply
- Front room/map lamp bulbs
- Room lamp 2nd row bulb

${f 1}$.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

(E)CONSULT-III

- Switch the front room/map lamp assembly and room lamp 2nd row switches to DOOR.
- Turn ignition switch ON.
- Select "INT LAMP" of BCM (INT LAMP) active test item.
- With the test items operating, check that each interior room lamp turns ON/OFF (gradual brightening/dimming).

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

Is the inspection result normal?

YES >> Interior room lamp control circuit is normal.

>> Refer to INL-17. "Diagnosis Procedure". NO

Diagnosis Procedure

INFOID:0000000003084514

${f 1}$.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

(P)CONSULT-III

- Turn ignition switch ON.
- Select "INT LAMP" of BCM (INT LAMP) active test item.
- While operating the test item, check voltage between BCM harness connector M20 terminal 63 and ground.

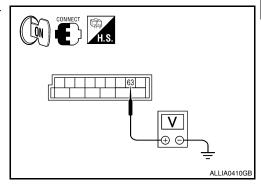
(+)		(-)	INT LAMP	Voltage
Connector	Terminal	(-)	IIVI LAWII	voltage
M20	63	Ground	ON	0V
IVIZU	03	Ground	OFF	Battery voltage

Is the inspection result normal?

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

Fixed OFF>> GO TO 2

2 .CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT



INL

K

M

Ν

INTERIOR ROOM LAMP CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

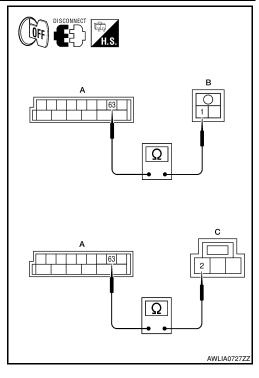
- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector M20, room lamp 2nd row connector and front room/map lamp connector.
- 3. Check continuity between BCM harness connector M20 terminal 63 and interior room lamp connectors.

Term	inal	Terminal			Continuity	
Connector	Terminal	Component	Connector	Terminal	Continuity	
A: M20	63	Room lamp 2nd row (without rear map lamps)	B: R9	1	Yes	
, <u>-</u>	Front room/map lamp	C: R12	2			

Is the inspection result normal?

YES >> Check interior room lamp for an open. If OK, replace the BCM. Refer to <u>BCS-52</u>, "Removal and Installation". If NG, replace the interior room lamp. Refer to <u>INL-60</u>, "Removal and Installation".

NO >> Repair the harnesses or connectors.



3. CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

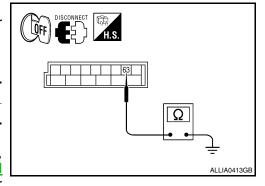
- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector M20, room lamp 2nd row connector and front room/map lamp connector.
- 3. Check continuity between BCM harness connector and ground.

Connector	Terminal	_	Continuity
M20	63	Ground	No

Is the inspection result normal?

YES >> Check interior room lamp for a short circuit. If OK, replace the BCM. Refer to <u>BCS-52</u>, "Removal and <u>Installation"</u>. If NG, replace the interior room lamp. Refer to INL-60, "Removal and Installation".

NO >> Repair the harnesses or connectors.



CARGO LAMP CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

CARGO LAMP CONTROL CIRCUIT

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

Component Function Check

CAUTION:

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

- Battery saver output/power supply
- Cargo lamp bulb
- 1. CHECK CARGO LAMP OPERATION

(P)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 cargo lamp turns ON/OFF.

ON : Cargo lamp ON OFF : Cargo lamp OFF

Is the inspection result normal?

YES >> Cargo lamp circuit is normal.

NO >> Refer to INL-19, "Diagnosis Procedure".

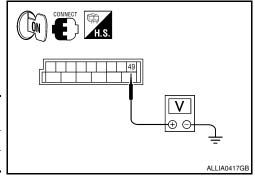
Diagnosis Procedure

1. CHECK CARGO LAMP OUTPUT

(E)CONSULT-III

- Turn ignition switch ON.
- Select "LUGGAGE LAMP TEST" of BCM (INT LAMP) active test item.
- While operating the test item, check voltage between BCM harness connector M19 terminal 49 and ground.

Connector	Terminal	_	LUGGAGE LAMP TEST	Voltage
M19	M19 49	Ground	ON	0V
	7	Ground	OFF	Battery voltage



Is the inspection result normal?

YES >> Cargo lamp control circuit is operating normally.

Fixed ON>>GO TO 3

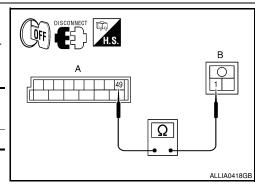
Fixed OFF>> GO TO 2

2. CHECK CARGO LAMP OPEN CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM connector M19 and cargo lamp connector.
- Check continuity between BCM harness connector M19 (A) terminal 49 and cargo lamp harness connector R11 (B) terminal 1.

	A		В	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M19	49	R11	1	Yes

Is the inspection result normal?



J

K

Н

Α

В

D

INFOID:0000000003084516

INFOID:0000000003084517

INL

M

Ν

0

CARGO LAMP CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

- YES >> Check cargo lamp for an open. If OK, replace BCM. Refer to BCS-52, "Removal and Installation". If NG, replace cargo lamp. Refer to INL-60, "Removal and Installation".
- NO >> Repair harnesses or connectors.

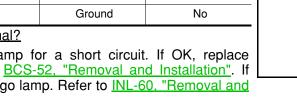
3.CHECK CARGO LAMP SHORT CIRCUIT

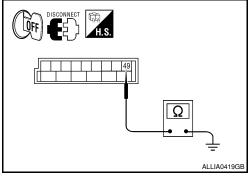
- Turn ignition switch OFF.
- Disconnect BCM connector M19 and cargo lamp connector R11. 2.
- Check continuity between BCM harness connector M19 terminal 49 and ground.

Connector	Terminal	_	Continuity
M19	49	Ground	No

Is the inspection result normal?

>> Check cargo lamp for a short circuit. If OK, replace BCM. Refer to BCS-52, "Removal and Installation". If YES NG, replace cargo lamp. Refer to INL-60, "Removal and Installation".





NO >> Repair harnesses or connectors.

IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

Description INFOID:0000000003084518

Controls the ignition keyhole illumination (ground side) to turn the ignition keyhole illumination ON and OFF.

Component Function Check

CAUTION:

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

- Battery saver output/power supply circuit
- Ignition keyhole illumination bulb
- ${f 1}$.CHECK IGNITION KEYHOLE ILLUMINATION OPERATION

(P)CONSULT-III

- Turn the ignition switch ON.
- Select "IGN ILLUM" of BCM (INT LAMP) active test item.
- While operating the test items, check that the ignition keyhole illumination turns ON/OFF

: Ignition keyhole illumination ON ON : Ignition keyhole illumination OFF

Is the inspection result normal?

>> Ignition keyhole illumination circuit is normal. >> Refer to INL-21, "Diagnosis Procedure". NO

Diagnosis Procedure

${f 1}$.CHECK IGNITION KEYHOLE OUTPUT

(P)CONSULT-III

- Turn ignition switch ON.
- Select "IGN ILLUM" of BCM (INT LAMP) active test item.
- While operating the test item, check voltage between BCM harness connector M18 terminal 1 and ground.

Connector	Terminal	_	IGN ILLUM	Voltage
M18	1	Ground	ON	0V
IVITO	'	Ground	OFF	Battery voltage

Is the inspection result normal?

YES >> Ignition keyhole illumination control circuit is operating normally.

Fixed ON>>GO TO 3.

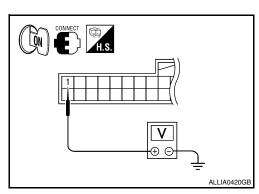
Fixed OFF>> GO TO 2.

2.check ignition keyhole illumination open circuit

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector M18 and ignition keyhole illumination connector M150.
- Check continuity between BCM harness connector M18 (A) ter-3. minal 1 and ignition keyhole illumination harness connector M150 (B) terminal 2.

	A		В	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M18	1	M150	2	Yes

Is the inspection result normal?



Ω ALLIA0421GE В

INFOID:0000000003084519

INFOID:0000000003084520

Α

D

Н

K

INL

M

Ν

IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

- YES >> Check the ignition keyhole illumination for an open. If OK, replace the BCM. Refer to <u>BCS-52</u>. "Removal and Installation". If NG, replace ignition keyhole illumination.
- NO >> Repair harnesses or connectors.

3.check ignition keyhole illumination short circuit

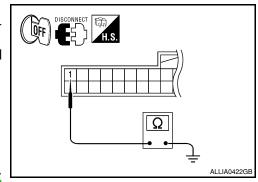
- 1. Turn ignition switch OFF.
- Disconnect BCM connector M18 and ignition keyhole illumination connector M150.
- 3. Check continuity between BCM harness connector M18 terminal 1 and ground.

Connector	Terminal	_	Continuity
M18	1	Ground	No

Is the inspection result normal?

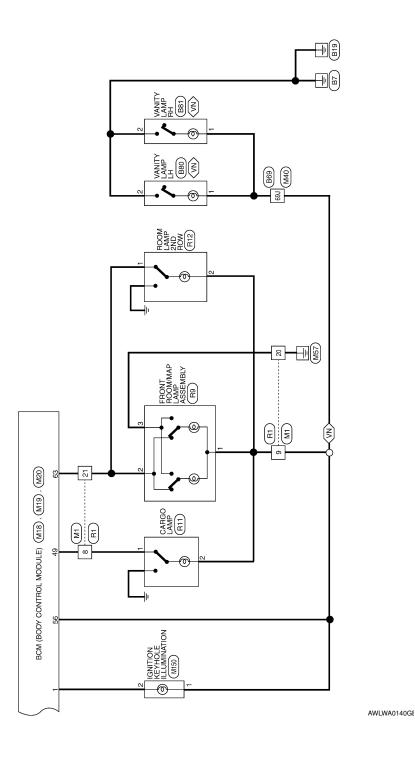
YES >> Check the ignition keyhole illumination for a short circuit. If OK, replace the BCM. Refer to BCS-52, "Removal and Installation". If NG, replace ignition keyhole illumination.

NO >> Repair harnesses or connectors.



INTERIOR ROOM LAMP CONTROL SYSTEM Α Wiring Diagram INFOID:0000000003084521 MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D7 ■ : DATA LINE В **€** E UNLOCK C LOCK 020 **®** REAR DOOR SWITCH RH D Е POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (D105) FUSE BLOCK (J/B) (M3), (M4) F z D101 M75 IGNITION SWITCH ON OR START G 10A (M18), (M19), (M20) REAR DOOR B18 10A Н BCM (BODY CONTROL MODULE) J BACK DOOR (K D401 D401 B48 INL FRONT DOOR LOCK ASSENBLY (D14) P6 KEY SWITCH (M27) M BACK DOOR KEY CYLINDER SWITCH (D505) REMOVED UNLOCK INTERIOR ROOM LAMP M31 UNLOCK z Ν LOCK ₩ 9 BATTERY 0 52J Q409 D501 M40 B48 D402 (98) Р

AWLWA0139GE



< COMPONENT DIAGNOSIS >

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

INTERIOR ROOM LAMP CONNECTORS

M3	Connector Name FUSE BLOCK (J/B)	WHITE	3N 2N 1N 8N 7N 6N 5N 4N
Connector No. M3	Connector Name	Connector Color WHITE	。 H.S.
Connector No. M1	Connector Name WIRE TO WIRE	Connector Color WHITE	(1) 2 3 4 5 6 7 8 9 10 11 12 H.S. (13 14 15 15 17 18 19 20 21 22 23 24

Terminal No. Color of Wire Signal Name 8 L - 9 R/Y - 20 B - 21 BR -					
Terminal No. Wire 8 L 9 R/Y 20 B 21 BR		I	-	I	1
Terminal No. 8 9 20 21	Color of Wire	_	R/Y	В	BR
	Terminal No.	8	6	20	21

	Signal Name	Ι				
30,0100	Wire	M/R				
	Terminal No. Wire	15P				
ſ						
	Signal Name	ı				
	Color of Wire	Ρ/Υ				
	Terminal No. Wire	N4				
	Signal Name	1	I	I	I	

	Connector No.	o. M8		Co	Connector No.	6W	
O WIRE	Connector Name WIRE TO WIRE	ame WIRE	TO WIRE	Ö	Connector Name WIRE TO WIRE	WIRE.	TO WIRE
	Connector Color BROWN	olor BROV	NN	O	Connector Color WHITE	WHITE	
		5	3 2 1				
	H.S.	12 11 10 9	0 9 8 7 6	7	H.S.	7 6 5 15 14 13	16 15 14 13 12 11 10 9
Signal Name							
1	Terminal No. Wire	Color of Wire	Signal Name	Тег	Terminal No. Wire	or of 'ire	Signal Name
	6	В	ı		6	GR	1
				1	10	SB	ı
					11	P	1

≥

12

Α

В

С

D

Е

F

G

Н

J

K

INL

M

Ν

0

Ρ

AWLIA0465GB

WIRE TO WIRE

Connector Name

M6

Connector No.

Connector Color WHITE

Color of Wire

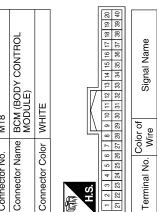
Terminal No. 9

< COMPONENT DIAGNOSIS >

Signal Name	DOOR SW (AS)	DOOR SW (RR)	KEY SW	MS NDI	CAN-H	CAN-L
Color of Wire	LG	٦	В	W/R	٦	Ь
Terminal No.	12	13	37	38	39	40

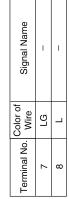
Signal Name	DOOR SW (AS)	DOOR SW (RR)	KEY SW	IGN SW	CAN-H	CAN-L
Color of Wire	LG	٦	В	W/R	٦	Ь
Terminal No.	12	13	37	38	39	40

Signal Na	DOOR SW () WS HOOD	KEY SW	IGN SW	CAN-H	CAN-L
Color of Wire	LG	٦	В	W/R	٦	Ь
Terminal No.	12	13	37	38	39	40
			•			



M18	BCM (BODY CON MODULE)	WHITE	
Connector No.	Connector Name	Connector Color WHITE	S.H

M16	WIRE TO WIRE	WHITE	12 11 10 8 8 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	r of
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	H.S.	Color of



KEY RING OUTPUT

HH H

KEY CYLINDER UNLOCK SW

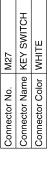
GR

KEY CYLINDER LOCK SW

SB

ω

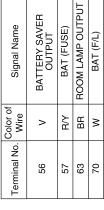




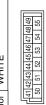
' SWITCH	ПЕ		Signal Name	-	
me KEY	lor WHI	M [©]	Color of Wire	В	>
Connector Name KEY SWITCH	Connector Color WHITE	南南 H.S.	Terminal No.	-	

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





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





Signal Name	BACK DOOR SW	CDL LOCK SW	CDL UNLOCK SW	DOOR SW (DR)	DOOR SW (RL)	CARGO LAMP OUTPUT
Color of Wire	>	^	LG	GR	Ь	_
Terminal No.	43	45	46	47	48	49

AWLIA0466GB

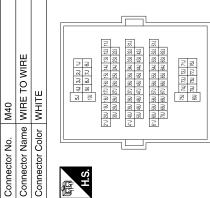
< COMPONENT DIAGNOSIS >

			1	ı		
Signal Name	I	I	ı	I	I	1
Color of Wire	GR	SB	>	۵	GR	R/Y
Terminal No. Wire	52J	53J	57J	601	61J	F69
						F

Connector No.	M150	09
Connector Na	ILLU	Connector Name IGNITION KEYHOLE ILLUMINATION
Connector Color WHITE	olor WH	世
H.S.		[M~I]
Terminal No.	Color of Wire	Signal Name
-	R/Y	ı

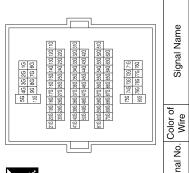
BB

N



	RE TO WIRE	ПЕ	8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Signal Name	1
. M75	me WIR	lor WHI	12 11 10 9	Color of Wire	В
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	明.S.	Terminal No.	12
			<u> </u>		

Connector No.	M31
Connector Name WIRE TO WIRE	WIRE TO WIRE
Connector Color WHITE	WHITE



Connector No.). M74	
Connector Name WIRE TO WIRE	me WIR	E TO WIRE
Connector Color	olor WHITE	TE
H.S.	8 7 6 16 15 14	13 12 11 10 9
Terminal No.	Color of Wire	Signal Name
4	ГС	I

AWLIA0467GB

2

В

Α

С

D

Е

F

G

Н

J

Κ

INL

 \mathbb{M}

Ν

0

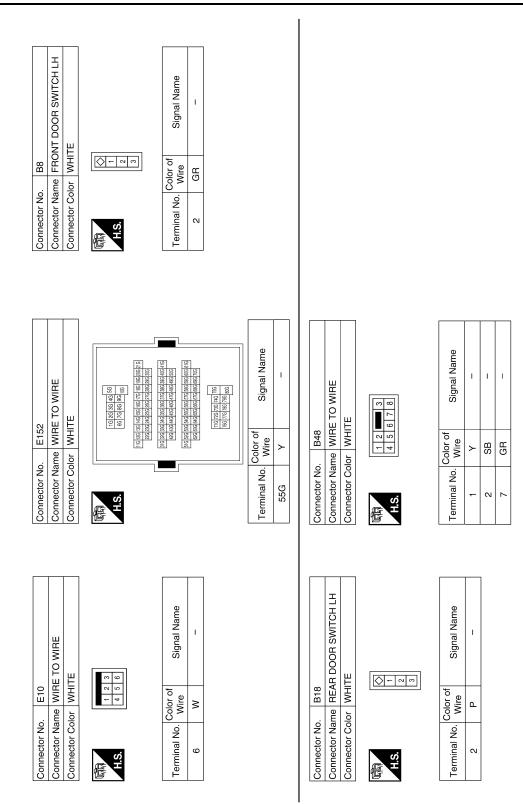
Ρ

Signal Name

Terminal No.

55G

< COMPONENT DIAGNOSIS >



AWLIA0468GB

< COMPONENT DIAGNOSIS >

Name	Connector No. B80 Connector Name VANITY LAMP LH	B80 WANIT	r LAMP LH
	Connector Color WHITE	WHILE	
	HS	- 0	
		7	
	Terminal No. Wire	olor of Wire	Signal Name
	-	Ρ/Υ	1
	2	В	1

Signal Name	ı	ı	I	ı	ı	1
Color of Wire	GR	SB	Y	Ь	GR	R/Y
Terminal No. Wire	52J	53J	57J	609	61J	691

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Color	WHITE
S.H.	1. 1. 2. 33. 4. 4. 54. 54. 54. 54. 54. 54. 54. 54.

			1				_			
	WIRE TO WIRE	TE		8 7 6 5 4 3 2 1 20 19 18 17 16 15 14 13		Signal Name	-	ı	I	-
E	me WIF	lor WHITE		12 11 10 9 8 24 23 22 21 20		Color of Wire	Т	Ρ/A	В	BR
Connector No.	Connector Name	Connector Color		رن د	J	Terminal No.	8	6	20	21

2	E TO WIRE	TE	100	Signal Name	_	_
. B162	me WIR	lor WHI	7 1 8 8 8 8	Color of Wire	ГG	Γ
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	H.S.	Terminal No.	7	8

Connector No. B81 Connector Name VANITY LAMP RH Connector Color WHITE H.S.				1			
Connector No. B81 Connector Name VAN Connector Color WHI A.S. Terminal No. Wire 1 R/Y 2 B		ITY LAMP RH	111111111111111111111111111111111111111		Signal Name	1	1
Connector No. Connector Col Connector Col H.S. Terminal No.		ne VAN	or WHI	- 2	Color of Wire	R/Υ	m
	Connector No.	Connector Nar	Connector Col	是 H.S.	Terminal No.	-	2

AWLIA0469GB

Α

В

С

D

Е

F

G

Н

Κ

INL

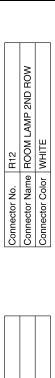
Ν

0

Ρ

INL-29

< COMPONENT DIAGNOSIS >



0 -





Connector No.	, D7	
Connector Na	me ANE SWI	Connector Name AND DOOR LOCK/UNLOCK SWITCH
Connector Color	lor WHITE	TE
H.S.	1 2 3 8 9 10	2 3 4 5 6 7 9 10 11 12 13 14 15 16
Terminal No.	Color of Wire	Signal Name
10	ГG	ı
11	M	ı
7-	α	1







-	ı	
Γ	R∕Y	
٠	2	

	WIRE		4
	ЕТО	MN	
D2	WIRI	BRO	2 3
Connector No.	Connector Name WIRE TO WIRE	Connector Color BROWN	
LO	U	S	

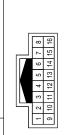
4 5	9 10 11 12	Signal Nan	ı
1 2 3	6 7 8	Color of Wire	В
偃	SH	Terminal No.	6

Connector No.	R9
onnector Name	Connector Name FRONT ROOM/MAP LAMP ASSEMBLY
Connector Color WHITE	WHITE





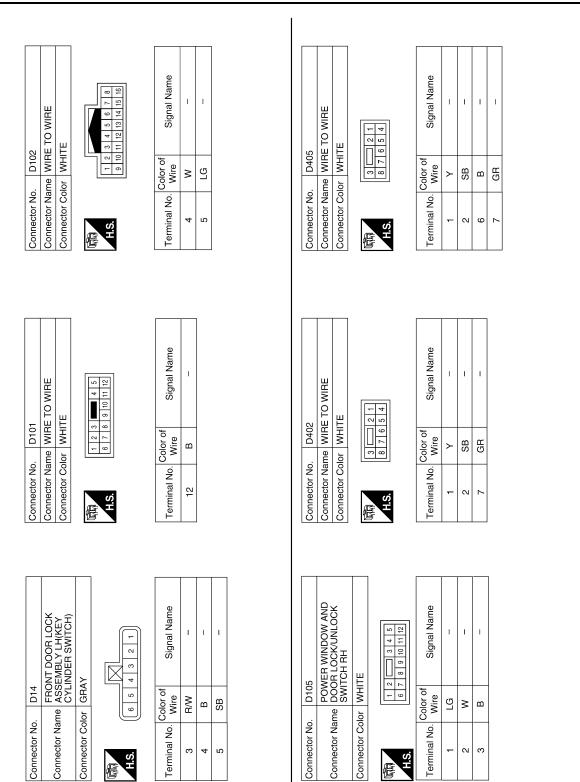
D1	Connector Name WIRE TO WIRE	r WHITE	9 10 11 12 13 14 15 16
Connector No.	Connector Nam	Connector Color WHITE	高 H.S.



Signal Name	ı	_	ı	ı
Color of Wire	M/A	SB	W	LG
Terminal No.	6	10	11	12

AWLIA0470GB

< COMPONENT DIAGNOSIS >



AWLIA0471GB

Α

В

C

 D

Е

F

G

Н

J

K

INL

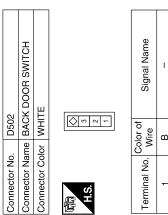
M

Ν

0

Ρ

< COMPONENT DIAGNOSIS >



Connector Name BACK DOOR SWITCH	12		Signal Name	I	
ne BAC	v WHITE		Color of Wire	В	>
Connector Narr	Connector Color	原 H.S.	Terminal No.	٢	ď
					

	T	
Connector No.	. D501	
Connector Name	me WIR	WIRE TO WIRE
Connector Color	lor WHITE	2
恒	1 2	3
H.S.	4 5 6	7 8
Terminal No.	Color of Wire	Signal Name
-	>	ı
2	SB	1
9	В	1
7	an	ı

Connector Name WIRE TO WIRE Connector Color WHITE

-2

D409

Connector No.

					Ι.							
0	ı	ı	ı	ı		0	WIRE TO WIRE	ТЕ			Signal Name	
wire	λ	SB	В	GR		. De50		lor WHITE	<u> </u>		Color of Wire	c
	1	2	9	7		Connector No.	Connector Name	Connector Color		H.S.	Terminal No.	(

Signal Name

Terminal No.

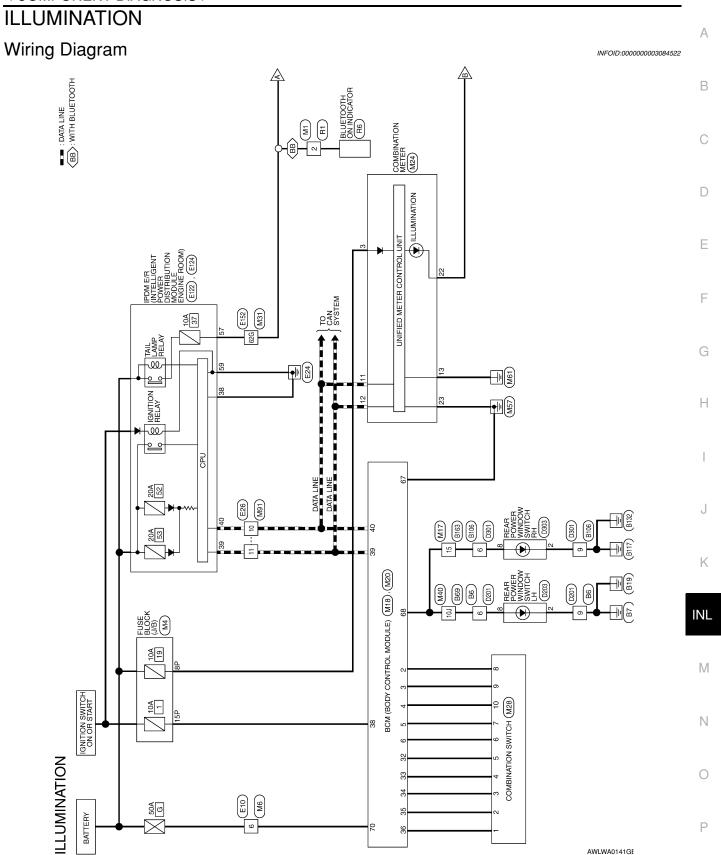
1 1

Color of Wire SB B B

N က

		1				
Signal Name	ı		10	BACK DOOR KEY CYLINDER SWITCH	TE	
Color of Wire	В		D205		r WHITE	-
Terminal No.	2		Connector No.	Connector Name	Connector Color	原 H.S.

AWLIA0472GB

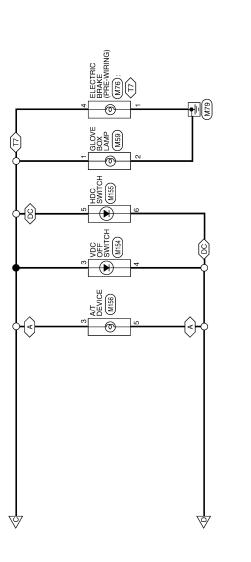


AWLWA0141GE



CC): WITH INTERLOCK CANCEL SWITCH
CD_: WITH ELECTRONIC LOCKING REAR
(EB): EXCEPT BASE AUDIO SYSTEM
(BA): WITH BASE AUDIO SYSTEM
(4W): WITH 4 WHEEL DRIVE
(AU): WITH AUDIO UNIT

 $\underbrace{\langle A \rangle}_{\text{TT}}: \text{WITH TRAILER TOW 7PIN} \\ \underbrace{\langle T7 \rangle}_{\text{CD}}: \text{WITH HILL DESCENT CONTROL AND HILL START ASSIST}$



D E

F

Α

В

С

G

Н

J

Κ

INL

M

Ν

0

Ρ

AWLWA0143GE

Signal Name

Color of Wire

Terminal No.

Connector Name | BCM (BODY CONTROL MODULE)

Connector No. M18

Connector Color WHITE

Signal Name

Terminal No. Wire

Signal Name

Color of Wire

Terminal No.

W/R ΡY

9P 15P

≥

Connector Name WIRE TO WIRE Connector Color WHITE

M6

Connector No.

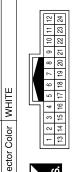
ILLUMINATION CONNECTORS

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

Connector Name | FUSE BLOCK (J/B)

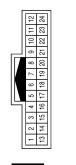
Connector No. M4

Connector Color WHITE



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



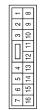


Signal Name	-	_	
Color of Wire	ш	R/Υ	
Ferminal No.	2	6	

Signal Name	ı	I	
Color of Wire	œ	R/Y	
inal No.	2	6	

Signal Name	I	1	
erminal No. Wire	2 B	9 R/Y	







32	0	COMBI SW OUTPUT 5 (PULL UP SIDE)
33	GR	COMBI SW OUTPUT 4 (PULL UP SIDE)
34	9	COMBI SW OUTPUT 3 (PULL UP SIDE)
35	BR	COMBI SW OUTPUT 2 (PULL UP SIDE)
98	Ы	COMBI SW OUTPUT 1 (PULL UP SIDE)
38	W/R	MS NDI
39	Τ	CAN-H
40	Ь	CAN-L

r							
	10 11 12 13 14 15 16 17 18 19 20 30 31 32 33 34 35 36 37 38 39 40	Signal Name	COMBI SW INPUT 5 (LOW SIDE)	COMBI SW INPUT 4 (LOW SIDE)	COMBI SW INPUT 3 (LOW SIDE)	COMBI SW INPUT 2 (LOW SIDE)	COMBI SW INPUT 1 (LOW SIDE)
	27 28 29	Color of Wire	Ъ	SB	^	Γ	В
H.S.	1 2 3 4 5 6 7 8 9 10 11 12 13 21 22 23 24 25 26 27 28 29 30 31 32 33	Terminal No.	2	ဇ	4	5	9

Signal Name Color of Wire ≥ Terminal No. 15

AWLIA0473GB

Α

В

C

 D

Е

F

Н

J

K

INL

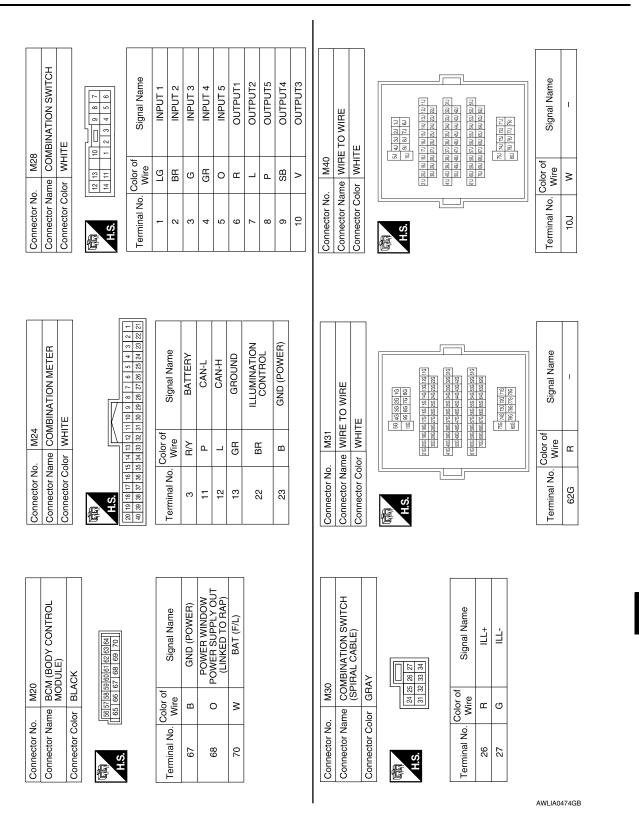
M

Ν

0

Ρ

< COMPONENT DIAGNOSIS >



< COMPONENT DIAGNOSIS >



Connector Name AUDIO UNIT (EXCEPT BASE AUDIO SYSTEM)

Connector Name | AUDIO UNIT (BASE AUDIO | SYSTEM)

M43

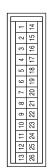
Connector No.

Connector Color WHITE

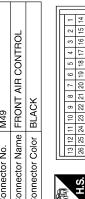
M43

Connector No.

Connector Color WHITE

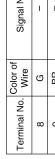






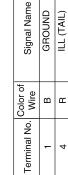


Signal Name	I	I
Color of Wire	G	BR
Terminal No.	8	6





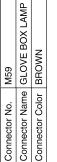




4



Signal Name	ILL CONT	MS THBIT
Color of Wire	GR	В
Terminal No.	7	8



Connector No.





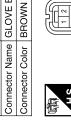
Signal Name	_	-
Color of Wire	В	В
Terminal No.	1	2







ω 6





Signal Name	_	-
Color of Wire	Н	НB

Terminal No.

4 က



Connector Name | HAZARD SWITCH

M55

Connector No.

Connector Color WHITE







AWLIA0475GB

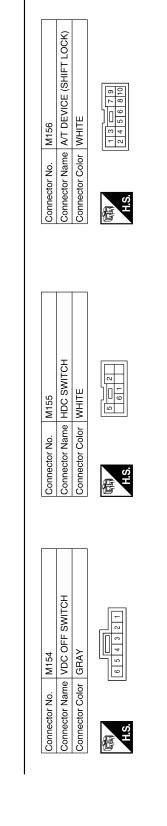
< COMPONENT DIAGNOSIS >

Connector Name | WIRE TO WIRE

Connector No. M91

Connector Color WHITE

Terminal No. Wire Color of Vire Signal Name Color of Vire Signal Name 7 R LIGHT_SW 4 R - 8 BR GND 5 BR -	Signal Name Terminal No. Color of Wire LIGHT_SW 4 R GND 5 BR				
Signal Name LIGHT_SW GND	Terminal No. Color of Wire Signal Name - 7 R LIGHT_SW - 8 BR GND	Signal Name	1	1	
Signal Name LIGHT_SW GND	Terminal No. Color of Signal Name	Color of Wire	Ж	BR	
	Terminal No. Color of	Terminal No.	4	5	
Terminal No. Color of Vire 7 R B BR	nal Name	Signal Name	LIGHT_SW	GND	
Terminal No. 7	nal Name	Color of Wire	ш	BR	
		Terminal No.	2		
Vo. Wire S		minal No.	10	11	



I	I	
Œ	BB	
က	5	
I	I	
ж	HB	
2	9	
ı	I	
Œ	BR	
ဗ	4	

Signal Name

Terminal No. Wire

Signal Name

Terminal No. Wire

Signal Name

Terminal No. Wire

Α

В

С

D

Е

F

G

Н

J

Κ

INL

M

Ν

0

Ρ

AWLIA0476GB

< COMPONENT DIAGNOSIS >



Connector Name CLUTCH INTERLOCK CANCEL SWITCH

Connector Name DOOR MIRROR REMOTE CONTROL SWITCH

M159

Connector No.

Connector Color WHITE

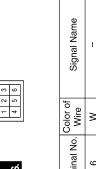
M163

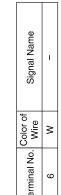
Connector No.

Connector Color WHITE

E







Signal Name

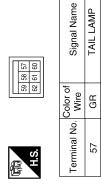
Color of Wire

Terminal No.

Signal Name	_	
Color of Wire	X	
Terminal No.	9	







GND (POWER)

മ

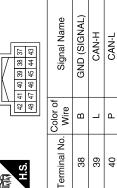
59



E122

Connector No.

PDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)					
		_		37	43
Z S			T	38	44
E D B		l II	/	39	45
PDM E/R POWER D MODULE	ш	l I	\	40	46
N N	WHITE		1	41	47
F S S	∣≶	-	ī	42	48

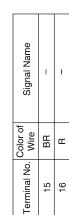




œ

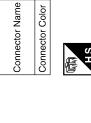


H.S. 偃

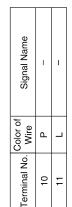


15

16



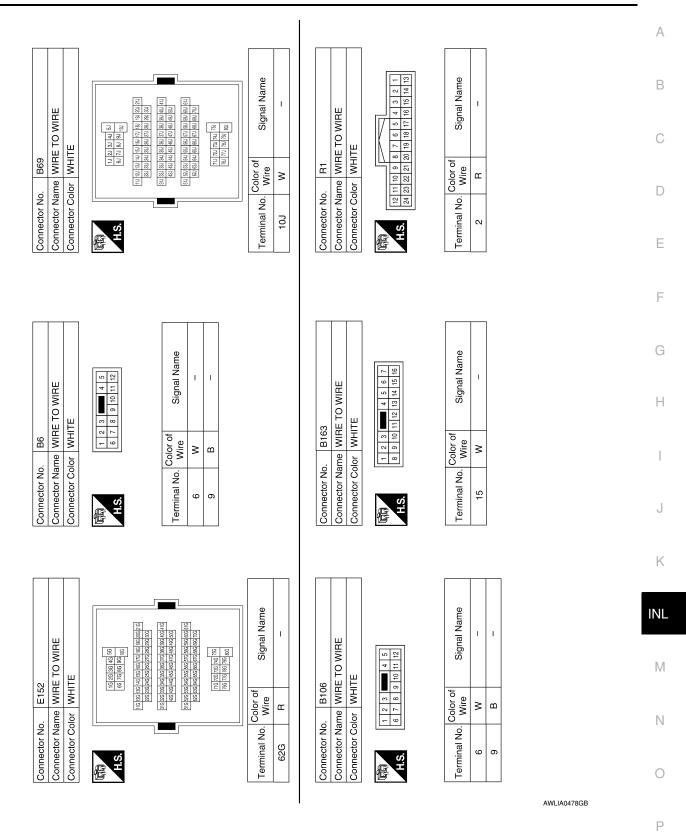
	7	16	7		
	9	15			
	2	13 14			
	4	13			
		12			
	Ш	Ξ			
	3	유			
	2	თ			
5	—	8			





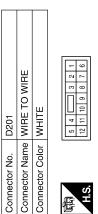


AWLIA0477GB



Connector No.	D203
Connector Name	Connector Name REAR POWER WINDOW SWITCH LH
Connector Color WHITE	WHITE

Signal Name	1	1
Color of Wire	В	8
Terminal No.	2	8



Signal Name	I	ı
Color of Wire	M	В
Terminal No.	9	6



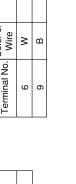
Connector Name BLUETOOTH ON INDICATOR

R6

Connector No.

Connector Color WHITE

Signal Name	DAY/NIGHT_ILL_SIG	
Color of Wire	В	
Terminal No.	3	



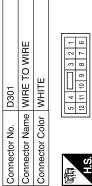


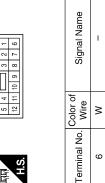


Signal Na	I	_
Color of Wire	В	W
Terminal No.	2	8

В

9 6







AWLIA0479GB



Α

В

С

 D

Е

F

G

Н

J

Κ

INL

M

Ν

0

AWLIA0480GB

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

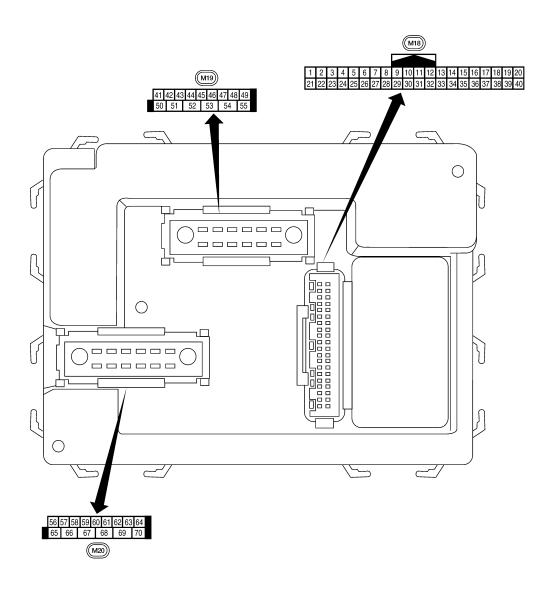
Reference Value

VALUES ON THE DIAGNOSIS TOOL

AIR COND SW AC switch OFF OFF AC G switch OFF OFF AC G switch ON ON BACK DOOR SW Back door opened ON CDL LOCK SW Door lock/unlock switch does not operate OFF CDL UNLOCK SW Door lock/unlock switch to the LOCK side ON CDL UNLOCK SW Press door lock/unlock switch to the UNLOCK side ON DOOR SW-AS Front door RH closed OFF Press door lock/unlock switch to the UNLOCK side ON DOOR SW-AS Front door RH closed OFF Pront door RH closed OFF Pront door RH closed OFF DOOR SW-RD Rear door LH closed OFF Pear door LH closed OFF Rear door LH closed OFF Rear door LH	Monitor Item	Condition	Value/Status
AC switch ON	AID COND CW	A/C switch OFF	OFF
BACK DOOR SW Back door opened ON CDL LOCK SW Door lock/unlock switch does not operate OFF Press door lock/unlock switch to the LOCK side ON CDL UNLOCK SW Press door lock/unlock switch to the UNLOCK side ON DOOR SW-AS Front door RH closed OFF Front door RH opened ON ON DOOR SW-DR Front door LH closed OFF Front door LH opened ON ON DOOR SW-RL Rear door LH closed OFF Rear door LH opened ON ON DOOR SW-RR Rear door RH opened ON ENGINE RUN Engine stopped OFF Engine stopped OFF Engine running ON FR FOG SW Front og lamp switch OFF OFF Front tog lamp switch OFF OFF Front washer switch OFF OFF Front washer switch OFF OFF Front wiper switch OFF OFF Front wiper switch OFF OFF Front wiper switch OFF OFF Front	AIR COND SW	A/C switch ON	ON
Back door opened	DACK DOOD CW	Back door closed	OFF
CDL LOCK SW Press door lock/unlock switch to the LOCK side ON CDL UNLOCK SW Door lock/unlock switch does not operate OFF Press door lock/unlock switch to the UNLOCK side ON DOOR SW-AS Front door RH opened OFF DOOR SW-DR Front door LH opened ON DOOR SW-BL Rear door LH olosed OFF DOOR SW-RI Rear door LH opened ON DOOR SW-RR Rear door LH opened ON Rear door LH opened ON PROGN Rear door RH opened ON Rear door RH opened ON PROGN Rear door RH opened ON PROGN PROGN ON Front spened OFF OFF Engine stopped OFF OFF Engine stopped OFF OFF Front spened ON ON FR WASHER SW Front spene switch OFF OFF Front washer switch OFF OFF Front washer switch OFF OFF Front wiper switch OFF OFF	BACK DOOR SW	Back door opened	ON
Press door lock/unlock switch to the LOCK side	CDL LOCK CW	Door lock/unlock switch does not operate	OFF
CDL UNLOCK SW Press door lock/unlock switch to the UNLOCK side ON DOOR SW-AS Front door RH closed OFF Front door LH closed OFF DOOR SW-DR Front door LH closed OFF DOOR SW-RL Rear door LH closed OFF Bear door LH opened ON ON BOOR SW-RR Rear door RH closed OFF Bear door RH closed OFF OFF Rear door RH opened ON ON Engine stopped OFF OFF Engine stopped OFF OFF Engine stopped OFF OFF Engine unning ON ON FR FOG SW Front fog lamp switch OFF OFF Front fog lamp switch OFF OFF OFF Front washer switch OFF OFF OFF Front washer switch OFF OFF OFF Front wiper switch OFF OFF OFF Front wiper switch OFF OFF OFF Front wiper switch OFF OFF OFF Front w	CDL LOCK SW	Press door lock/unlock switch to the LOCK side	ON
DOOR SW-AS Front door RH closed OFF Front door RH opened ON DOOR SW-DR Front door LH closed OFF Front door LH closed OFF Front door LH closed OFF Bear door LH closed OFF Rear door LH opened ON DOOR SW-RR Rear door RH closed OFF Rear door RH opened ON ENGINE RUN Engine stopped OFF Engine stopped OFF Engine stopped OFF Engine running ON Front tog lamp switch OFF OFF Front tog lamp switch OFF OFF Front washer switch OFF OFF Front washer switch OFF OFF Front wiper switch INT	CDL LINI OCK CW	Door lock/unlock switch does not operate	OFF
DOOR SW-AS	CDL UNLOCK SW	Press door lock/unlock switch to the UNLOCK side	ON
Front door HI opened	DOOD CW AC	Front door RH closed	OFF
DOOR SW-DR Front door LH opened ON DOOR SW-RL Rear door LH closed OFF DOOR SW-RR Rear door RH closed OFF Bear door RH opened ON ON ENGINE RUN Engine stopped OFF Engine tunning ON ON FR FOG SW Front fog lamp switch OFF OFF Front d glamp switch OFF OFF Front washer switch OFF OFF Front washer switch OFF OFF Front wiper switch OFF OFF When hazard switch is not p	DOOR SW-AS	Front door RH opened	ON
Front door LH opened	DOOD OW DD	Front door LH closed	OFF
DOOR SW-RL Rear door LH opened ON DOOR SW-RR Rear door RH closed OFF Rear door RH opened ON ENGINE RUN Engine stopped OFF Engine running ON FR FOG SW Front fog lamp switch OFF OFF Front fog lamp switch ON ON FR WASHER SW Front washer switch OFF OFF Front washer switch OFF OFF Front wiper switch INT ON HAZARD SW When hazard switch is not pressed OFF When hazard switch is not pressed OFF Uighting switch OFF OFF Lighting switch OFF OFF Lighting switch OFF OFF Headlamp switch OFF OFF Headlamp switch OFF	DOOK SW-DK	Front door LH opened	ON
Rear door LH opened	DOOD OW DI	Rear door LH closed	OFF
DOOR SW-RR Rear door RH opened ON ENGINE RUN Engine stopped OFF Engine running ON FR FOG SW Front fog lamp switch OFF OFF Front fog lamp switch ON ON FR WASHER SW Front washer switch OFF OFF Front washer switch ON ON FR WIPER LOW Front wiper switch OFF OFF Front wiper switch INT ON FR WIPER STOP Any position other than front wiper stop position OFF Front wiper stop position ON HAZARD SW When hazard switch is not pressed OFF Uighting switch OFF OFF Lighting switch OFF OFF Lighting switch OFF OFF Headlamp switch OFF OFF Headlamp switch OFF OFF Headlamp switch OFF OFF	DOOR SW-RL	Rear door LH opened	ON
Rear door RH opened	DOOD OW DD	Rear door RH closed	OFF
Engine running	DOOR SW-RR	Rear door RH opened	ON
Engine running	ENGINE DUN	Engine stopped	OFF
FR FOG SW Front fog lamp switch ON ON FR WASHER SW Front washer switch OFF OFF Front washer switch ON ON FR WIPER LOW Front wiper switch OFF OFF FR WIPER HI Front wiper switch OFF OFF FR WIPER INT Front wiper switch OFF OFF FR WIPER STOP Front wiper switch INT ON FR WIPER STOP Any position other than front wiper stop position OFF HAZARD SW When hazard switch is not pressed OFF When hazard switch is pressed ON LIGHT SW 1ST Lighting switch OFF OFF Lighting switch 1st ON HEADLAMP SW1 Headlamp switch OFF OFF HEADLAMP SW2 Headlamp switch OFF OFF	ENGINE RUN	Engine running	ON
Front fog lamp switch ON	ED 500 0W	Front fog lamp switch OFF	OFF
FR WASHER SW Front washer switch ON ON FR WIPER LOW Front wiper switch OFF OFF FR WIPER HI Front wiper switch OFF OFF FR WIPER INT Front wiper switch OFF OFF FR WIPER INT Front wiper switch INT ON FR WIPER STOP Any position other than front wiper stop position OFF Front wiper stop position ON HAZARD SW When hazard switch is not pressed OFF When hazard switch is pressed ON LIGHT SW 1ST Lighting switch OFF OFF Lighting switch 1st ON HEADLAMP SW1 Headlamp switch OFF OFF HEADLAMP SW2 Headlamp switch OFF OFF	FR FOG SW	Front fog lamp switch ON	ON
Front washer switch ON	ED MACHED OM	Front washer switch OFF	OFF
FR WIPER LOW Front wiper switch LO Front wiper switch OFF Front wiper switch OFF Front wiper switch HI ON FR WIPER INT Front wiper switch OFF Front wiper switch INT ON Any position other than front wiper stop position Front wiper stop position ON HAZARD SW When hazard switch is not pressed When hazard switch is pressed OFF Lighting switch OFF Lighting switch OFF Headlamp switch OFF Headlamp switch OFF Headlamp switch OFF OFF Headlamp switch OFF OFF Headlamp switch OFF OFF	FR WASHER SW	Front washer switch ON	ON
Front wiper switch LO FR WIPER HI Front wiper switch OFF Front wiper switch HI Front wiper switch OFF Front wiper switch OFF Front wiper switch INT ON Any position other than front wiper stop position FR WIPER STOP Any position other than front wiper stop position Front wiper stop position ON HAZARD SW When hazard switch is not pressed OFF When hazard switch is pressed ON LIGHT SW 1ST Lighting switch OFF Lighting switch OFF Headlamp switch OFF Headlamp switch OFF OFF Headlamp switch OFF OFF Headlamp switch OFF OFF OFF	ED MIDED LOW	Front wiper switch OFF	OFF
FR WIPER HI Front wiper switch HI Front wiper switch OFF Front wiper switch OFF Front wiper switch INT ON Any position other than front wiper stop position Front wiper stop position ON HAZARD SW When hazard switch is not pressed When hazard switch is pressed ON LIGHT SW 1ST Lighting switch OFF Lighting switch OFF Headlamp switch OFF OFF Headlamp switch 1st ON HEADLAMP SW2 Headlamp switch OFF OFF OFF	FR WIPER LOW	Front wiper switch LO	ON
Front wiper switch HI Front wiper switch OFF Front wiper switch INT ON FR WIPER STOP Any position other than front wiper stop position Front wiper stop position ON HAZARD SW When hazard switch is not pressed When hazard switch is pressed ON Lighting switch OFF Lighting switch OFF Headlamp switch OFF Headlamp switch 1st HEADLAMP SW2 Front wiper switch INT ON OFF OFF OFF Headlamp switch OFF OFF OFF OFF OFF OFF	ED WIDED III	Front wiper switch OFF	OFF
FR WIPER INT Front wiper switch INT ON Any position other than front wiper stop position Front wiper stop position ON HAZARD SW When hazard switch is not pressed When hazard switch is pressed ON LIGHT SW 1ST Lighting switch OFF Lighting switch 1st ON HEADLAMP SW1 HEADLAMP SW2 Headlamp switch OFF OFF OFF OFF ON Headlamp switch OFF ON Headlamp switch OFF OFF OFF OFF	FR WIPER HI	Front wiper switch HI	ON
Front wiper switch INT ON Any position other than front wiper stop position OFF Front wiper stop position ON HAZARD SW When hazard switch is not pressed OFF When hazard switch is pressed ON Lighting switch OFF Lighting switch 1st ON HEADLAMP SW1 HEADLAMP SW2 Front wiper switch position OFF Front wiper stop position OFF OFF OFF OFF OFF Headlamp switch OFF ON Headlamp switch OFF OFF OFF	ED WIDED INT	Front wiper switch OFF	OFF
Front wiper stop position HAZARD SW When hazard switch is not pressed When hazard switch is pressed ON Lighting switch OFF Lighting switch 1st HEADLAMP SW1 Headlamp switch 0FF Headlamp switch 1st ON Headlamp switch 0FF Headlamp switch 0FF OFF Headlamp switch 0FF OFF	FR WIPER IN	Front wiper switch INT	ON
Front wiper stop position	ED WIDED CTOD	Any position other than front wiper stop position	OFF
When hazard switch is pressed	FR WIPER STOP	Front wiper stop position	ON
When hazard switch is pressed ON	LIAZADD CM	When hazard switch is not pressed	OFF
LIGHT SW 1ST Lighting switch 1st ON Headlamp switch OFF Headlamp switch 1st ON Headlamp switch 1st ON Headlamp switch OFF OFF	HAZARD SW	When hazard switch is pressed	ON
Lighting switch 1st ON	LICUT OW 1CT	Lighting switch OFF	OFF
HEADLAMP SW1 Headlamp switch 1st ON Headlamp switch OFF OFF	LIGHT SW 151	Lighting switch 1st	ON
Headlamp switch 1st ON Headlamp switch OFF OFF	HEADLAMD CM4	Headlamp switch OFF	OFF
HEADLAMP SW2	HEADLAIVIP 3W1	Headlamp switch 1st	ON
Headlamp switch 1st ON	LIEADI AMB CIMO	Headlamp switch OFF	OFF
	HEADLAINIP SWZ	Headlamp switch 1st	ON

Monitor Item	Condition	Value/Status	
II DE AM CVA	High beam switch OFF	OFF	_
II BEAM SW	High beam switch HI	ON	
H/L WASH SW	NOTE: The item is indicated, but not monitored	OFF	
GN ON SW	Ignition switch OFF or ACC	OFF	
GIN OIN SVV	Ignition switch ON	ON	
GN SW CAN	Ignition switch OFF or ACC	OFF	
GN 3W CAN	Ignition switch ON	ON	
NT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7	
ZEV ON CW	Mechanical key is removed from key cylinder	OFF	
KEY ON SW	Mechanical key is inserted to key cylinder	ON	
VEV4 F00 L00V	LOCK button of key fob is not pressed	OFF	
(EYLESS LOCK	LOCK button of key fob is pressed	ON	_
VEVI ECC LINII OOV	UNLOCK button of key fob is not pressed	OFF	
KEYLESS UNLOCK	UNLOCK button of key fob is pressed	ON	
OIL PRESS SW	Ignition switch OFF or ACC Engine running	OFF	-
	Ignition switch ON	ON	
DA COINIO OW	Other than lighting switch PASS	OFF	
PASSING SW	Lighting switch PASS	ON	
	Rear window defogger switch OFF	OFF	
REAR DEF SW	Rear window defogger switch ON	ON	
RKE LOCK AND UN-	NOTE:	OFF	
LOCK	The item is indicated, but not monitored	ON	
	Rear washer switch OFF	OFF	
RR WASHER SW	Rear washer switch ON	ON	
	Rear wiper switch OFF	OFF	
RR WIPER INT	Rear wiper switch INT	ON	
	Rear wiper switch OFF	OFF	
RR WIPER ON	Rear wiper switch ON	ON	
ND W//DED 6765	Rear wiper stop position	OFF	
RR WIPER STOP	Other than rear wiper stop position	ON	
FAIL LAND CV	Lighting switch OFF	OFF	
TAIL LAMP SW	Lighting switch 1ST	ON	
EDNIK ODNIB OW	When back door opener switch is not pressed	OFF	
TRNK OPNR SW	When back door opener switch is pressed	ON	
FUDNI GIONIAL I	Turn signal switch OFF	OFF	
ΓURN SIGNAL L	Turn signal switch LH	ON	_
FURNICION -	Turn signal switch OFF	OFF	
ΓURN SIGNAL R	Turn signal switch RH	ON	_
VEHICLE SPEED	While driving	Equivalent to speedometer reading	_

Terminal Layout



LIIA2443E

Physical Values

	Wire		Signal		Measuring condition	Reference value or waveform
Terminal	color	Signal name	input/ output	Ignition switch	Operation or condition	(Approx.)
4		Ignition keyhole illumi-	0 1. 1	OFF	Door is locked (SW OFF)	Battery voltage
1	BR	nation	Output	OFF	Door is unlocked (SW ON)	0V
2	Р	Combination switch input 5	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 **5ms SKIA5291E
3	SB	Combination switch input 4	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 4 2 0 + + 5ms SKIA5292E
4	V	Combination switch input 3	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 **5ms SKIA5291E
5	L	Combination switch input 2				(V)
6	R	Combination switch input 1	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	5ms SKIA5292E
		Front door lock as-			ON (open, 2nd turn)	Momentary 1.5V
7	GR	sembly LH (key cylin- der switch) and back door key cylinder switch (unlock)	Input	OFF	OFF (closed)	0V
		Front door lock as-			ON (open)	Momentary 1.5V
8	SB	sembly LH (key cylin- der switch) and back door key cylinder switch (lock)	Input	OFF	OFF (closed)	OV
					Rear window defogger switch	0V
9	Υ	Rear window defogger switch	Input	ON	ON Rear window defogger switch OFF	5V
11	G/B	Ignition switch (ACC or ON)	Input	ACC or ON	Ignition switch ACC or ON	Battery voltage
12	LG	Front door switch RH	Input	OFF	ON (open)	0V
14	LG	TOTAL GOOD SWALLTEN	iiiput	011	OFF (closed)	Battery voltage

	17 (G) (C)					
Torminal	Wire	Cianal nama	Signal		Measuring condition	Reference value or waveform
Terminal	color	Signal name	input/ output	Ignition switch	Operation or condition	(Approx.)
13	L	Rear door switch RH	Input	OFF	ON (open)	OV
10	L	rtear door switch rtir	input	OII	OFF (closed)	Battery voltage
15	W	Tire pressure warning check connector	Input	OFF	_	5V
18	BR	Remote keyless entry receiver and optical sensor (ground)	Output	OFF	_	0V
19	V	Remote keyless entry receiver (power sup- ply)	Output	OFF	Ignition switch OFF	(V) 6 4 2 0 +50 ms
20	G	Remote keyless entry	Input	OFF	Stand-by (keyfob buttons released)	(V) 6 4 2 0 ++50 ms
20	G	receiver (signal)	mput	OFF	When remote keyless entry receiver receives signal from keyfob (keyfob buttons pressed)	(V) 6 4 2 0 + 50 ms
21	GR	NATS antenna amp.	Input	OFF → ON	Ignition switch (OFF \rightarrow ON)	Just after turning ignition switch ON: Pointer of tester should move for approx. 1 second, then return to battery voltage.
23	G	Security indicator lamp	Output	OFF	Goes OFF \rightarrow illuminates (Every 2.4 seconds)	Battery voltage → 0V
25	BR	NATS antenna amp.	Input	OFF → ON	Ignition switch (OFF \rightarrow ON)	Just after turning ignition switch ON: Pointer of tester should move for approx. 1 second, then return to battery voltage.
27	W	Compressor ON signal	Input	ON	A/C switch OFF	5V
		IIal			A/C switch ON	0V
28	R	Front blower monitor	Input	ON	Front blower motor OFF Front blower motor ON	Battery voltage 0V
					ON	0V 0V
29	G	Hazard switch	Input	OFF		
					OFF	5V

Α

В

С

 D

Е

F

G

Н

Κ

INL

Ν

 \bigcirc

Р

_	Wire		Signal		Measuring condition	Reference value or waveform	
Terminal	color	Signal name	input/ output	Ignition switch	Operation or condition	(Approx.)	
32	0	Combination switch output 5	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 ***5ms	
33	GR	Combination switch output 4	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 → +5ms SKIA5292E	
34	G	Combination switch output 3	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 **5ms	
35	BR	Combination switch output 2				(V)	
36	LG Combination switch output 1		Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	*** 5ms SKIA5292E	
		Key switch and key			Key inserted	Battery voltage	
37	В	lock solenoid	Input	OFF	Key inserted	0V	
38	W/R	Ignition switch (ON)	Input	ON	_	Battery voltage	
39	L	CAN-H	_	_	_	1	
40	Р	CAN-L	_		_	_	
43	Υ	Back door switch	Input	OFF	ON (open)	0V	
					OFF (closed) Rise up position (rear wiper	Battery voltage	
					arm on stopper)	0V	
					A Position (full clockwise stop position)	Battery voltage	
44	0	Rear wiper auto stop switch	Input	ON	Forward sweep (counterclockwise direction)	Fluctuating	
					B Position (full counterclock- wise stop position)	0V	
					Reverse sweep (clockwise direction)	Fluctuating	
45	V	Lock switch	Input	OFF	ON (lock)	0V	
-	=				OFF	Battery voltage	

	Wire		Signal		Measuring cond	dition	Reference value or waveform	
Terminal	color	Signal name	input/ output	Ignition switch	Operation	or condition	(Approx.)	
46	LG	Unlock switch	Input	OFF	ON (unlock)		0V	
	- 5	ormook ownor	pat	0	OFF		Battery voltage	
47	GR	Front door switch LH	Input	OFF	ON (open)		0V	
.,	511	Trong door ownor Err	pat	0	OFF (closed)		Battery voltage	
48	Р	Rear door switch LH	Input	OFF	ON (open)		0V	
	-				OFF (closed)		Battery voltage	
49	L	Cargo lamp	Output	OFF	Any door open		0V	
		oa.go lap			All doors close	d (OFF)	Battery voltage	
51	G	Trailer turn signal (right)	Output	ON	Turn right ON		(V) 15 10 500 ms SKIA3009J	
52	V	Trailer turn signal (left)	Output	ON	Turn left ON		(V) 15 10 5 0 5 0 SKIA3009J	
55	W	Rear wiper output cir-	Output	ON	OFF		0	
		cuit 1	·		ON		Battery voltage	
56	V	Battery saver output	Output	OFF	30 minutes after switch is turner		0V	
				ON	-	<u> </u>	Battery voltage	
57	R/Y	Battery power supply	Input	OFF	-	<u> </u>	Battery voltage	
59	GR	Front door lock as- sembly LH actuator	Output	OFF	OFF (neutral)		0V	
00	G 11	(unlock)	Output	011	ON (unlock)		Battery voltage	
60	LG	Turn signal (left)	Output	ON	Turn left ON		(V) 15 10 5 0 500 ms SKIA3009J	
61	G	Turn signal (right)	Output	ON	Turn right ON		(V) 15 10 5 0 500 ms	
63	BR	Interior room/map lamp	Output	OFF	Any door switch	ON (open) OFF (closed)	0V Battery voltage	

< ECU DIAGNOSIS >

	Wire		Signal		Measuring condition	Reference value or waveform	
Terminal	color	Signal name	input/ output	Ignition switch	Operation or condition	(Approx.)	
65	V	All door lock actuators	Output	OFF	OFF (neutral)	0V	
05	V	(lock)	Output	011	ON (lock)	Battery voltage	
		Front door lock actua-			OFF (neutral)	0V	
66			ON (unlock)	Battery voltage			
67	В	Ground	Input	ON	_	0V	
					Ignition switch ON	Battery voltage	
					Within 45 seconds after ignition switch OFF	Battery voltage	
68	0	Power window power supply (RAP)	Output	_	More than 45 seconds after ignition switch OFF	oV	
					When front door LH or RH is open or power window timer operates	OV	
70	W	Battery power supply	Input	OFF	_	Battery voltage	

Н

Α

В

С

 D

Е

F

G

J

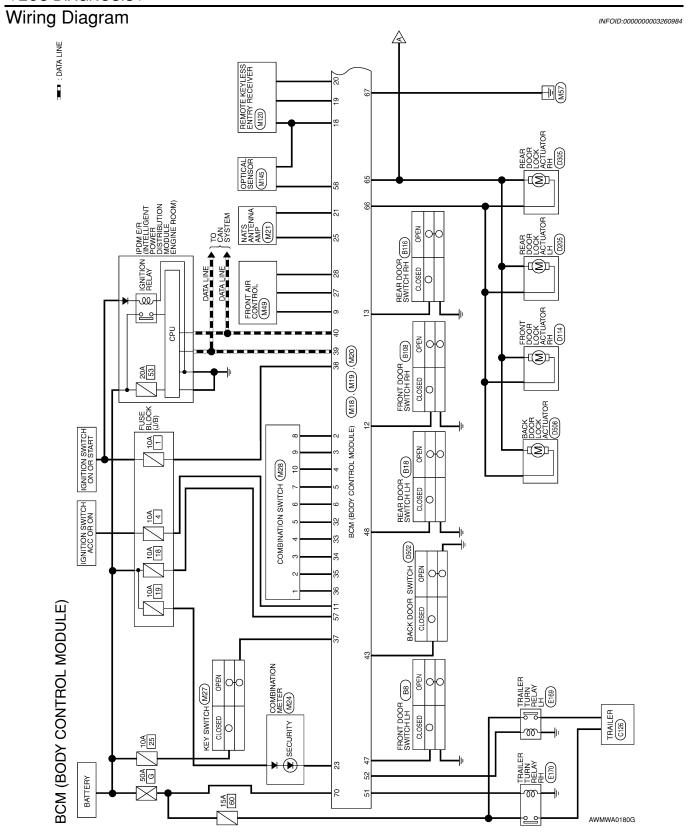
Κ

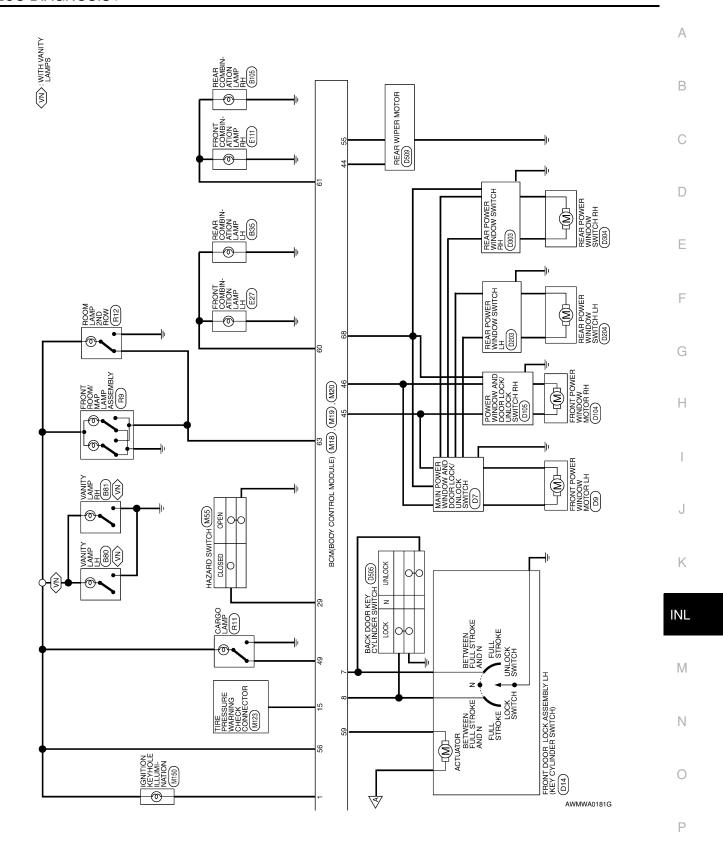
INL

M

Ν

0





BCM (BODY CONTROL MODULE) CONNECTORS

Connector Name BCM (BODY CONTROL MODULE)

M18

Connector No.

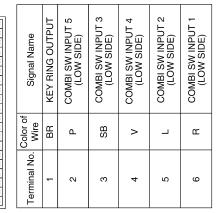
WHITE

Connector Color

僵

Terminal No.	Color of Wire	Signal Name
22	ı	ı
23	5	SECURITY INDICATOR OUTPUT
24	ı	-
52	BR	IMMOBILISER ATNENNA SIG (TX,RX)
56	-	1
22	Ν	AIRCON SW
58	В	BLOWER FAN SW
29	ŋ	HAZARD SW
30	1	ı
31	1	1
32	0	COMBI SW OUTPUT 5 (PULL UP SIDE)
33	GR	COMBI SW OUTPUT 4 (PULL UP SIDE)
34	G	COMBI SW OUTPUT 3 (PULL UP SIDE)
32	BR	COMBI SW OUTPUT 2 (PULL UP SIDE)
96	PT	COMBI SW OUTPUT 1 (PULL UP SIDE)
37	В	KEY SW
38	W/R	IGN SW
39	٦	CAN-H
40	۵	CAN-L

Signal Name	KEY CYLINDER UNLOCK SW	KEY CYLINDER LOCK SW	DEFOGGER SW	1	ACC_SW	DOOR SW (AS)	DOOR SW (RR)	I	TPMS MODE TRIGGER SW	1	ı	KEYLESS & AUTO LIGHT SENSOR GND	KEYLESS TUNER POWER SUPPLY OUTPUT	KEYLESS TUNER SIGNAL	IMMOBILSER ATNENNA SIG (CLOCK)
Color of Wire	GR	SB	>	ı	G/B	ГG	٦	ı	>	ı	ı	BR	>	g	GR
Terminal No.	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21



AWMIA0384GB

Signal Name	CDL LOCK SW	CDL UNLOCK SW	DOOR SW (DR)	DOOR SW (RL)	LUGGCARGO LAMP OUTPUT	ı	TRAILER FLASHER OUTPUT (RIGHT)	TRAILEŘ FLASHER OUTPUT (LEFT)	ı	_	REAR WIPER MOTOR OUTPUT 1	
Color of Wire	^	ГG	GR	Ь	Г	ı	ŋ	>	ı	_	M	
Terminal No.	45	46	47	48	49	50	51	52	53	54	55	

Signal Name	FLASHER OUTPUT (RIGHT)	ı	ROOM LAMP OUTPUT	-	DOOR LOCK OUTPUT (ALL)	DOOR UNLOCK OUTPUT (OTHER)	GND (POWER)	POWER WINDOW POWER SUPPLY OUT (LINKED TO RAP)	I	BAT (F/L)
Color of Wire	g	1	BR	1	>	7	В	0	1	8
Terminal No.	61	62	63	64	99	99	29	89	69	70

Collineated No.	n.
Connector Name BC	BCM (BODY CONTROL MODULE)
Connector Color WH	WHITE
4	41 42 43 44 45 46 47 48 49
Color of Wire	Signal Name
ı	1
ı	1
Υ	BACK DOOR SW
0	REAR WIPER AUTO STOP SW1
	 - ō⊱ ≻ ∩

Connector No.). M20	0
Connector Name		BCM (BODY CONTROL MODULE)
Connector Color		BLACK
H.S.	56 57 56	
Terminal No.	Color of Wire	Signal Name
56	۸	BATTERY SAVER OUTPUT
57	R√	BAT (FUSE)
28	_	1
59	В	DOOR UNLOCK OUTPUT (DR)
09	рП	FLASHER OUTPUT (LEFT)

AWMIA0385GB

INFOID:0000000003260985

Α

В

D

Е

F

G

Н

Κ

INL

Ν

0

DTC Inspection Priority Chart

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

< ECU DIAGNOSIS >

Priority	DTC
1	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
2	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM
3	C1729: VHCL SPEED SIG ERR
4	C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RR C1711: [NO DATA] RR C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1717: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1720: [CODE ERR] FL C1721: [CODE ERR] RR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FL C1726: [BATT VOLT LOW] FR C1727: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RR

DTC Index

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	_	_	_	BCS-28
U1010: CONTROL UNIT (CAN)	_	_	_	BCS-29
B2190: NATS ANTTENA AMP	_	_	_	<u>SEC-17</u>
B2191: DIFFERENCE OF KEY	_	_	_	SEC-20
B2192: ID DISCORD BCM-ECM	_	_	_	SEC-21
B2193: CHAIN OF BCM-ECM	_	_	_	SEC-23
C1708: [NO DATA] FL	_	_	_	<u>WT-13</u>
C1709: [NO DATA] FR	_	_	_	<u>WT-13</u>

< ECU DIAGNOSIS >

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1710: [NO DATA] RR	_	_	_	<u>WT-13</u>
C1711: [NO DATA] RL	_	_	_	<u>WT-13</u>
C1712: [CHECKSUM ERR] FL	_	_	_	<u>WT-15</u>
C1713: [CHECKSUM ERR] FR	_	_	_	<u>WT-15</u>
C1714: [CHECKSUM ERR] RR	_	_	_	<u>WT-15</u>
C1715: [CHECKSUM ERR] RL	_	_	_	<u>WT-15</u>
C1716: [PRESSDATA ERR] FL	_	_	_	<u>WT-17</u>
C1717: [PRESSDATA ERR] FR	_	_	_	<u>WT-17</u>
C1718: [PRESSDATA ERR] RR	_	_	_	<u>WT-17</u>
C1719: [PRESSDATA ERR] RL	_	_	_	<u>WT-17</u>
C1720: [CODE ERR] FL	_	_	_	<u>WT-15</u>
C1721: [CODE ERR] FR	_	_	_	<u>WT-15</u>
C1722: [CODE ERR] RR	_	_	_	<u>WT-15</u>
C1723: [CODE ERR] RL	_	_	_	<u>WT-15</u>
C1724: [BATT VOLT LOW] FL	_	_	_	<u>WT-15</u>
C1725: [BATT VOLT LOW] FR	_	_	_	<u>WT-15</u>
C1726: [BATT VOLT LOW] RR	_	_	_	<u>WT-15</u>
C1727: [BATT VOLT LOW] RL	_	_	_	<u>WT-15</u>
C1729: VHCL SPEED SIG ERR	_	_	_	<u>WT-18</u>
C1734: CONTROL UNIT	_	_	_	_

J

Κ

INL

 \mathbb{N}

Ν

0

Ρ

INTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

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 of the following lamps do not turn ON Front room/map lamp assembly Room lamp 2nd row Cargo room lamp Vanity mirror lamps (if equipped) Ignition keyhole illumination	Harness between BCM and each interior room lamp Harness between BCM and each door switch BCM	Battery saver output/power supply circuit Refer to INL-15.
Some or all of the following interior room lamps do not turn ON/OFF Front room/map lamp assembly Room lamp 2nd row	Harness between BCM and each interior room lamp BCM	Interior room lamp control circuit Refer to INL-17.
Cargo lamp does not turn ON/OFF	Harness between BCM and cargo lamp BCM	Cargo lamp circuit Refer to INL-19.
Ignition keyhole illumination does not turn ON/ OFF	Harness between BCM and ignition keyhole illumination BCM	Ignition keyhole illumination circuit Refer to INL-21
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	_	Check the interior room lamp setting. Refer to INL-11 .
Interior room lamp battery saver does not activate.	_	Check the interior room lamp battery saver setting. Refer to INL-11.

PRECAUTION

PRECAUTIONS

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

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

- 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.

INL

K

Α

В

D

Е

INFOID:0000000003084526

Ν

ON-VEHICLE REPAIR

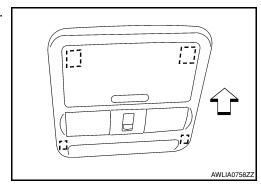
INTERIOR ROOM LAMP

Removal and Installation

MAP LAMP

Removal

The map lamp is replaced as part of the overhead console assembly. Refer to INT-16, "Removal and Installation".



INFOID:0000000003084527

Installation

Installation is in the reverse order of removal.

Bulb Replacement

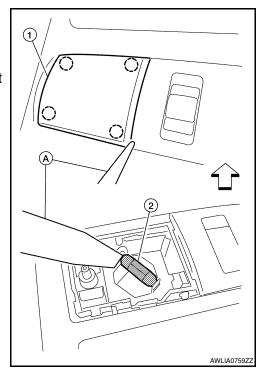
- 1. Disconnect the negative battery terminal.
- Using a suitable tool (A), remove map lamp lens (1).⇐: Vehicle front

CAUTION:

Wrap a cloth around tool to protect the housing and lens.

3. Release one side of the bulb (2) from the tab, then pull straight downward to remove.

Map lamp bulb : 12V - 8W



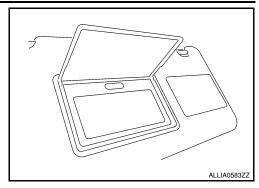
VANITY MIRROR LAMP

Removal

INTERIOR ROOM LAMP

< ON-VEHICLE REPAIR >

The vanity mirror lamp is replaced as part of the sunvisor assembly. Refer to INT-16, "Removal and Installation".



Installation

Installation is in the reverse order of removal.

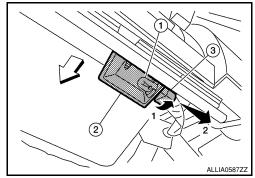
Bulb Replacement

The vanity mirror lamp bulb is replaced as part of the sunvisor assembly. Refer to INT-16, "Removal and Installation".

GLOVE BOX LAMP

Removal

- 1. Remove lower instrument panel RH and glove box. Refer to IP-10, "Removal and Installation".
- 2. Rotate glove box lamp socket (3) with bulb (1) counterclockwise, then pull away from lamp shield (2) on steering member to remove.



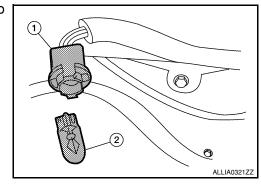
Installation

Installation is in the reverse order of removal.

Bulb Replacement

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

Glove box lamp bulb : 12V - 3.4W



Α

В

С

D

Е

F

Н

INL

K

M

Ν

0

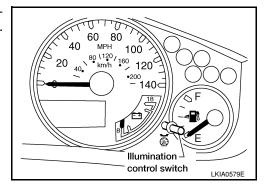
Removal and Installation

INFOID:0000000003084528

ILLUMINATION CONTROL SWITCH

Removal

The illumination control switch (1) is replaced as a part of the combination meter assembly. Refer to MWI-90, "Removal and Installation".



Installation

Installation is in the reverse order of removal.

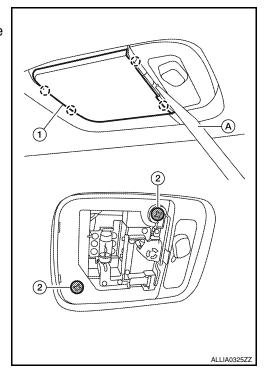
CARGO/PERSONAL LAMP

Removal

- Disconnect the negative battery terminal.
- Using a suitable tool (A), release the pawls and remove the cargo/personal lamp lens (1). CAUTION:

Wrap a cloth around tool to protect the housing and lens.

- 3. Remove cargo/personal lamp screws (2).
- 4. Disconnect the connector, then remove cargo/personal lamp.



Installation

Installation is in the reverse order of removal.

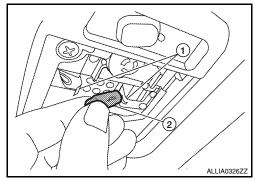
Bulb Replacement

- 1. Disconnect the negative battery terminal.
- 2. Using a suitable tool, release the pawls and remove the cargo/personal lamp lens.

< ON-VEHICLE REPAIR >

3. Release the cargo/personal lamp bulb retainers (1), then pull bulb (2) straight out to remove.

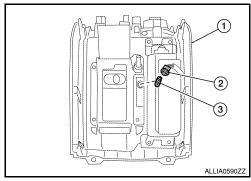
Cargo/personal lamp bulb : 12V - 8W



AT FINISHER LAMP

Removal

- 1. Remove AT finisher from center console. Refer to IP-10, "Removal and Installation".
- 2. Rotate AT finisher lamp socket (2) with bulb (3) counterclockwise, then pull away from finisher (1).



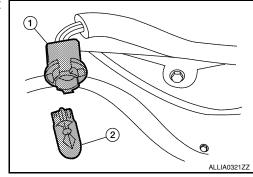
Installation

Installation is in the reverse order of removal.

Bulb Replacement

- 1. Remove AT finisher from center console. Refer to IP-10, "Removal and Installation".
- Remove AT finisher lamp socket (1), then pull bulb (2) straight out away from socket.

AT finisher lamp bulb : 12V - 3W



Α

В

С

D

Ε

F

G

Н

J

K

INL

M

Ν

0

BULB SPECIFICATIONS

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

BULB SPECIFICATIONS

Interior Lamp/Illumination

INFOID:0000000003084529

ltem	Wattage (W)*
Map lamp	8
Vanity lamp	*
Glove box lamp	3.4
Cargo/personal lamp	8
A/T finisher lamp	3

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