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SECTION INL

INTERIOR LIGHTING SYSTEM

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INTERIOR ROOM LAMP	53	SERVICE DATA AND SPECIFICATIONS	
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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

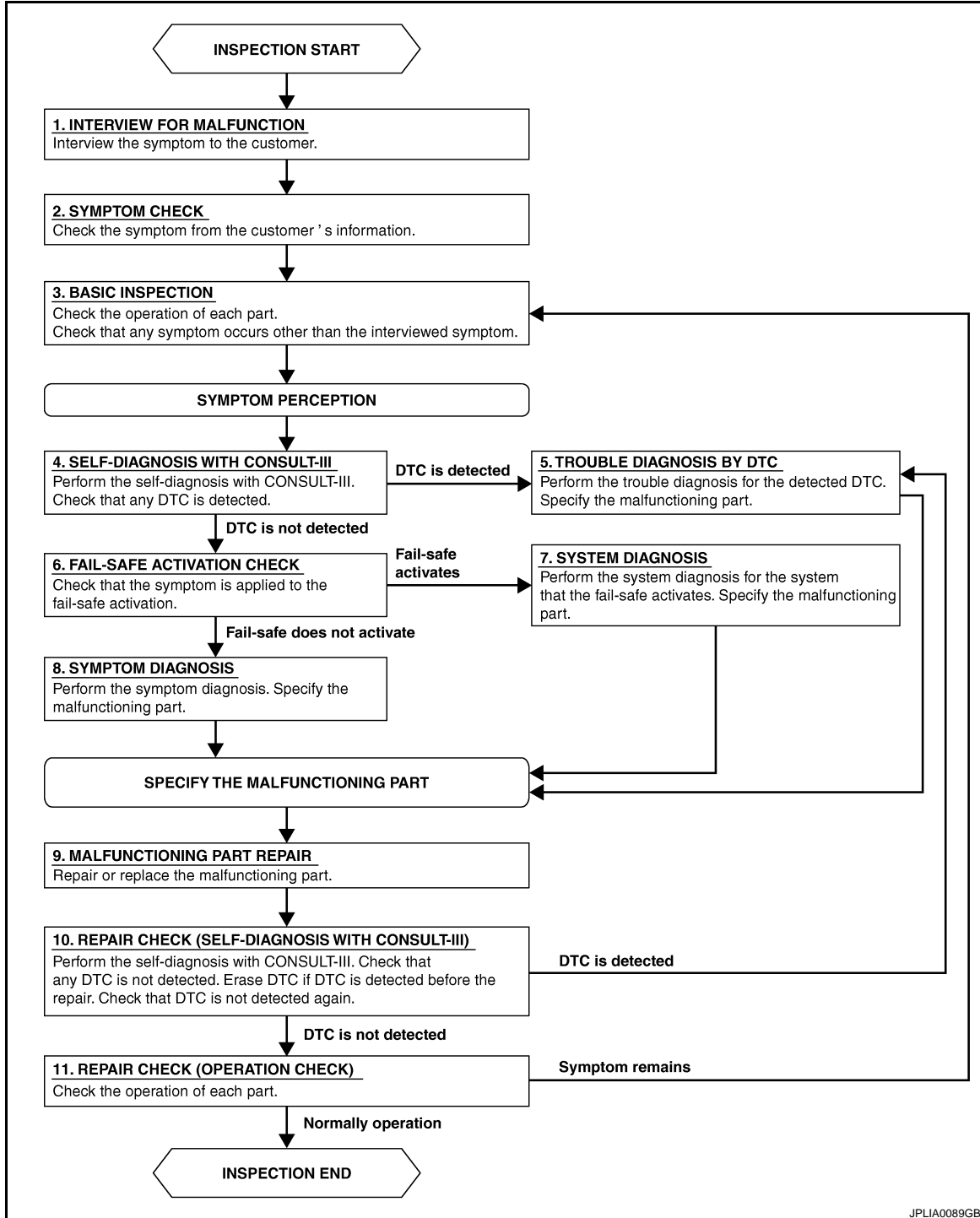
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000001712561

OVERALL SEQUENCE



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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

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. Verified 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

11. REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

Does it operate normally?

YES >> INSPECTION END

NO >> GO TO 3

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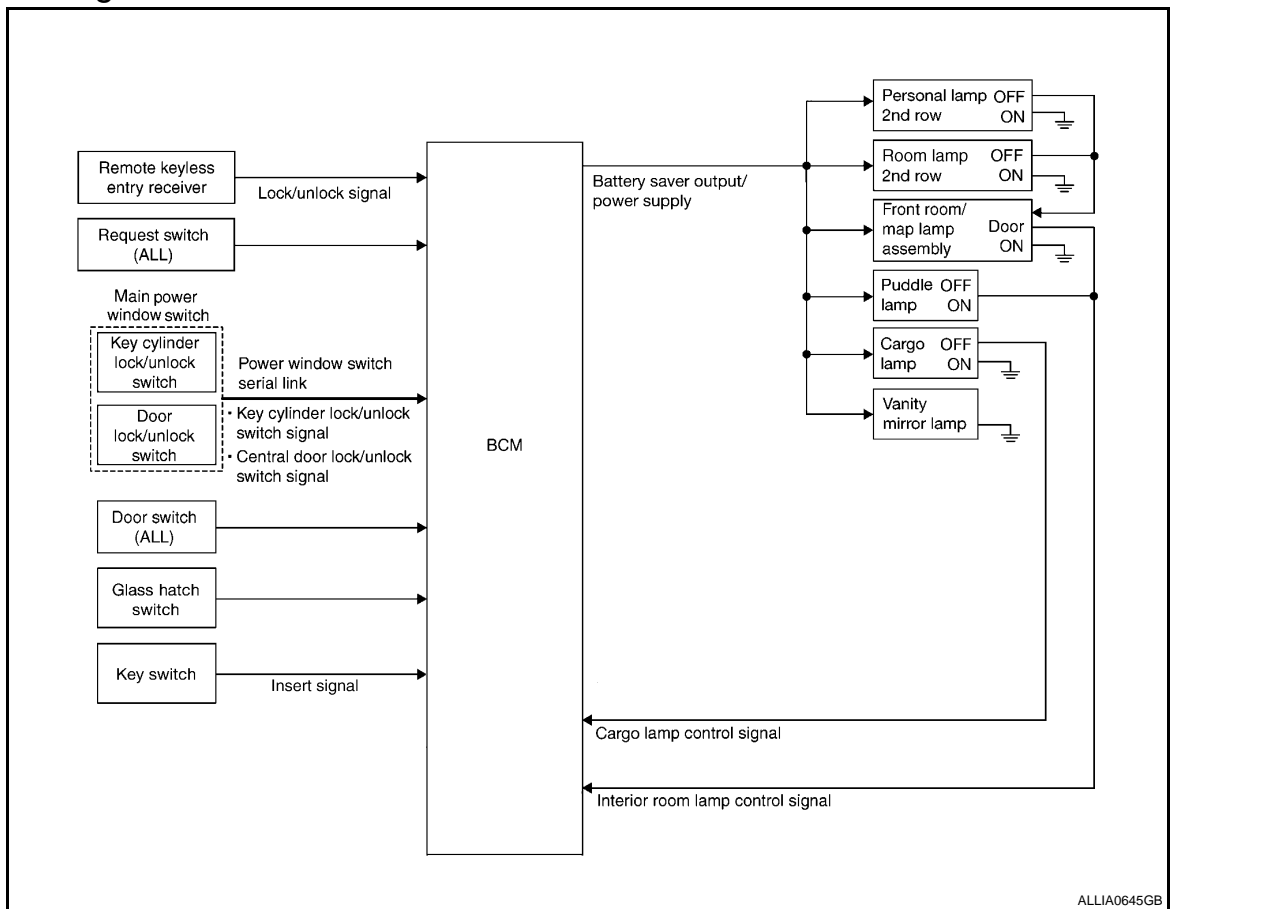
INTERIOR ROOM LAMP CONTROL SYSTEM

< FUNCTION DIAGNOSIS >

FUNCTION DIAGNOSIS

INTERIOR ROOM LAMP CONTROL SYSTEM

System Diagram



System Description

INFOID:000000001712563

OUTLINE

- Interior room lamps* are controlled by the interior room lamp timer control function of the BCM.
*Front room/map lamp, personal lamp 2nd row (with rear map lamps) or room lamp 2nd row (without rear map lamps).
 - 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 switch, the door switches, the key switch (without intelligent key) or the key switch and ignition knob switch (with intelligent key).

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 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 ROOM LAMP CONTROL SYSTEM

< FUNCTION DIAGNOSIS >

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 power and ground to all interior lamps.

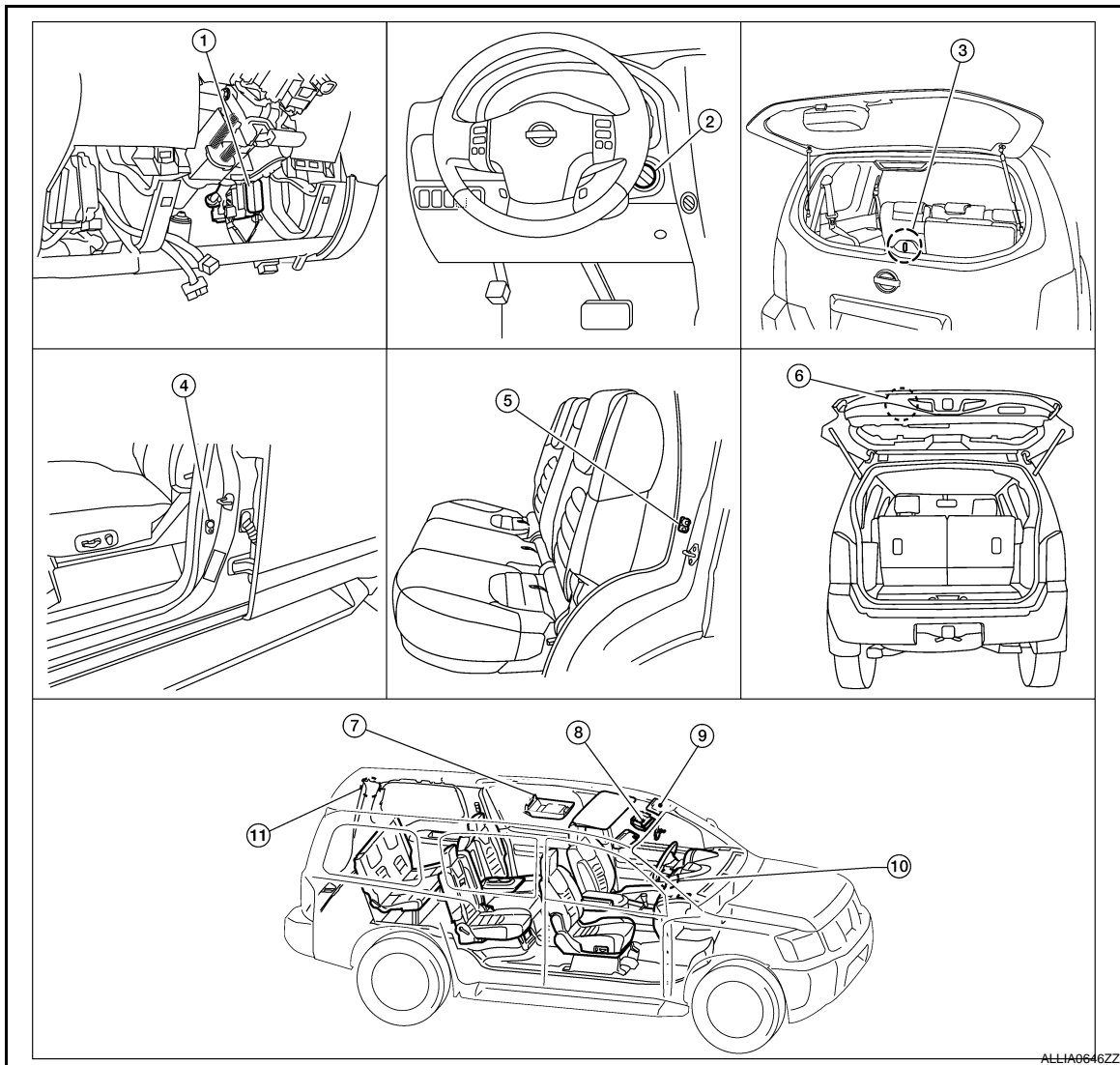
After the battery saver system turns the lamps OFF, the lamps will illuminate again when

- a signal is received from 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.

Component Parts Location

INFOID:000000001712564



- | | | |
|---|---|--|
| 1. BCM M18, M19, M20 (view with instrument panel removed) | 2. • Key switch and ignition knob switch (with I-Key) M66
• Key switch (without I-key) M77 | 3. Glass hatch ajar switch D503 |
| 4. Front door switch
LH B8
RH B108 | 5. Rear door switch
LH B18
RH B116 | 6. Back door cinching latch unit (door ajar switch) D502 |

INTERIOR ROOM LAMP CONTROL SYSTEM

< FUNCTION DIAGNOSIS >

- | | | |
|---|------------------------------------|------------------------------------|
| 7. • Personal lamp 2nd row (with map lamps) R10 | 8. Front room/map lamp assembly R9 | 9. Vanity lamp
LH B80
RH B81 |
| • Room lamp 2nd row (without map lamps) R12 | | |
| 10. Ignition keyhole illumination M150 | 11. Cargo lamp R11 | |

Component Description

INFOID:000000001712565

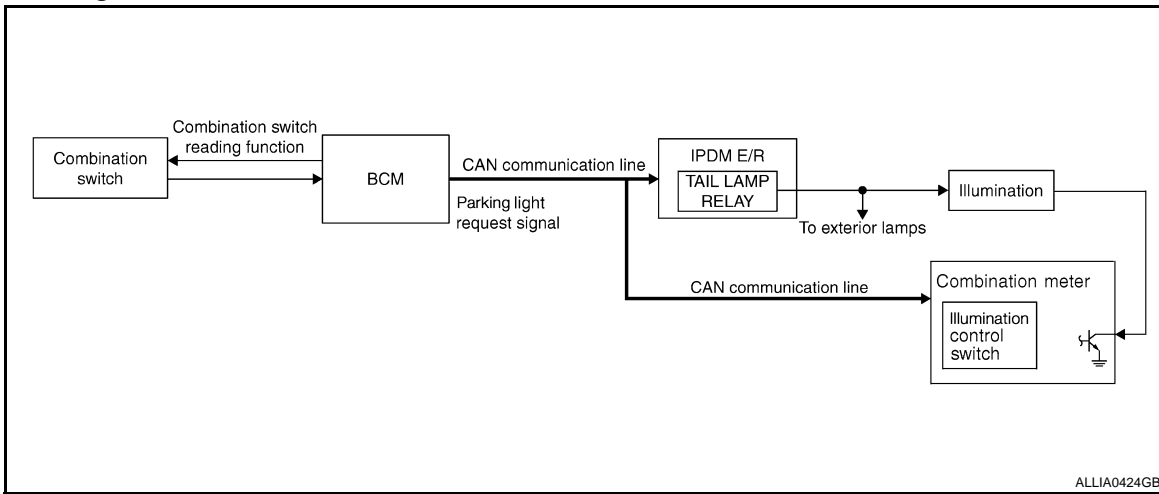
Part name	Description
BCM	Provides power and ground and controls timer functions for the interior room lamps, step lamps and cargo lamp.
Key switch and ignition knob switch (with I-Key)	Provides key in ignition status to the BCM.
Key switch and lock solenoid (without I-Key)	
Door switches	Provides door OPEN/CLOSED status to the BCM.
Glass hatch switch	Provides glass hatch OPEN/CLOSED status to the BCM.
Back door latch (with power back door)	Provides back door OPEN/CLOSED status to the BCM.
Back door switch (without power back door)	
Power window and door lock/unlock switch RH	Provides door lock/unlock position switch RH status to the BCM.
Main power window and door lock/unlock switch [front door lock assembly LH (key cylinder switch)].	Provides door lock/unlock position switch LH status to the BCM.

ILLUMINATION CONTROL SYSTEM

< FUNCTION DIAGNOSIS >

ILLUMINATION CONTROL SYSTEM

System Diagram



System Description

INFOID:000000001712567

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 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 (or if auto light system is activated) after illumination lamps have been turned off by the battery saver control, the illumination lamps illuminate again.

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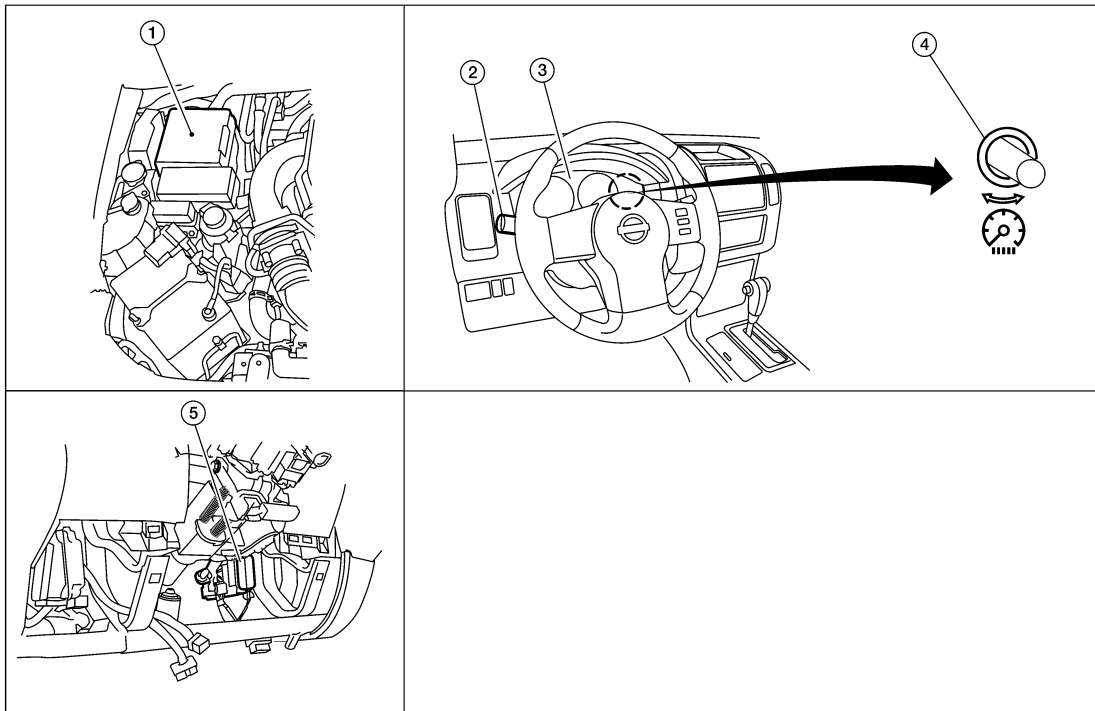
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ILLUMINATION CONTROL SYSTEM

< FUNCTION DIAGNOSIS >

Component Parts Location

INFOID:000000001712568



WKIA4973E

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

Component Description

INFOID:000000001712569

Part name	Description
BCM	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:000000001712570

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

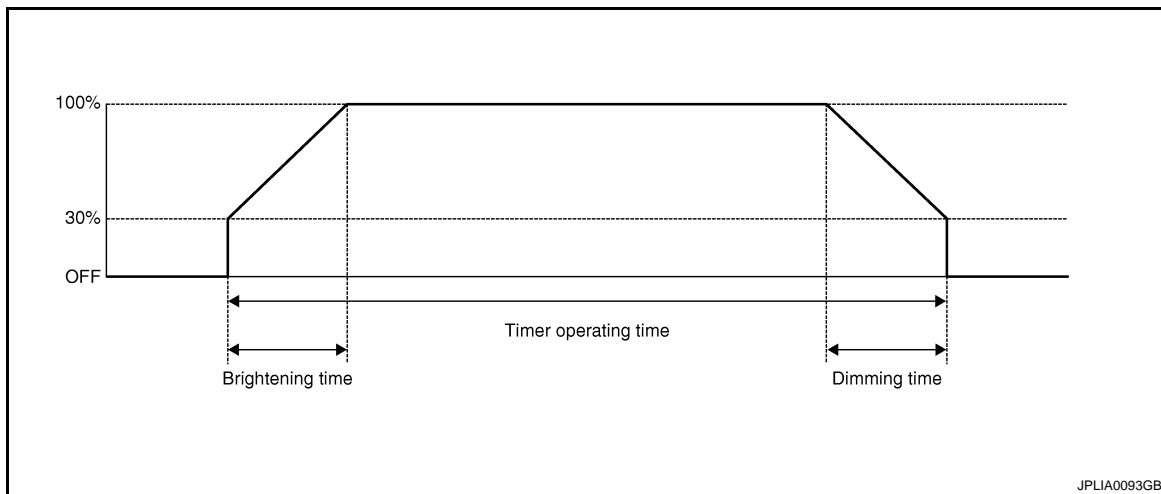
BCM diagnostic test item	Diagnostic mode	Description
Inspection by part	WORK SUPPORT	Supports inspections and adjustments. Commands are transmitted to the BCM for setting the status suitable for required operation, input/output signals are received from the BCM and received data is displayed.
	DATA MONITOR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

INT LAMP

INT LAMP : CONSULT-III Function

INFOID:000000001712571

WORK SUPPORT



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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 ON TIME SET	MODE 1	0.5 sec.
	MODE 2	1 sec.
	MODE 3	2 sec.
	MODE 4	3 sec.
	MODE 5	4 sec.
	MODE 6	5 sec.
	MODE 7	0 sec.

Sets the interior room lamp gradual brightening time.

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

Service item	Setting item	Setting	
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.	
	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 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
I-KEY LOCK [ON/OFF]	Lock signal status received from remote keyless entry receiver
I-KEY UNLOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver
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
INT LAMP	ON	Outputs the interior room lamp control signal to turn the front room/map lamp, personal lamps (Map lamp switch is in DOOR position) and puddle lamps (if equipped) ON.
	OFF	Stops the interior room lamp control signal to turn the front room/map lamp, personal lamps (Map lamp switch is in DOOR position) and puddle lamps (if equipped) OFF.

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

Test item	Operation	Description
IGN ILLUM	ON	Outputs the ignition keyhole illumination signal to turn the ignition keyhole illumination ON.
	OFF	Stops the ignition keyhole illumination signal to turn the ignition keyhole illumination OFF.
STEP LAMP TEST	ON	Test item is listed, but does not apply to this vehicle.
	OFF	
LUGGAGE LAMP TEST	ON	Outputs the cargo lamp control signal to turn cargo lamp ON.
	OFF	Stops the cargo lamp control signal to turn cargo lamp OFF.

BATTERY SAVER

BATTERY SAVER : CONSULT-III Function

INFOID:000000001712572

WORK SUPPORT

Service item	Setting item	Setting
ROOM LAMP TIMER 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.

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
I-KEY LOCK [ON/OFF]	Lock signal status received from remote keyless entry receiver
I-KEY UNLOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

Monitor item [Unit]	Description
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.
	OFF	Stops the battery saver output/power supply to turn the interior lamps OFF.

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Inspection Procedure

INFOID:000000001712573

POWER SUPPLY AND GROUND CIRCUIT INSPECTION FOR BCM

For information about power and ground circuit inspection for the BCM, refer to [BCS-32, "Diagnosis Procedure"](#).

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BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

< COMPONENT DIAGNOSIS >

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

Description

INFOID:000000001712574

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

Component Function Check

INFOID:000000001712575

1. CHECK BATTERY SAVER OUTPUT/POWER SUPPLY FUNCTION

CONSULT-III

1. Turn ignition switch ON.
2. Turn each interior room lamp ON.
 - Front room/map lamp assembly
 - Vanity lamps (if equipped)
 - Cargo lamp
 - Personal lamp 2nd row (with rear map lamps)
 - Room lamp 2nd row (without rear map lamps)
3. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
4. With operating the test items, check that each interior room lamp turns ON/OFF.

OFF : Interior room lamp OFF

ON : Interior room lamp ON

Does the interior room lamp turn ON/OFF?

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

NO >> Refer to [INL-16. "Diagnosis Procedure"](#).

Diagnosis Procedure

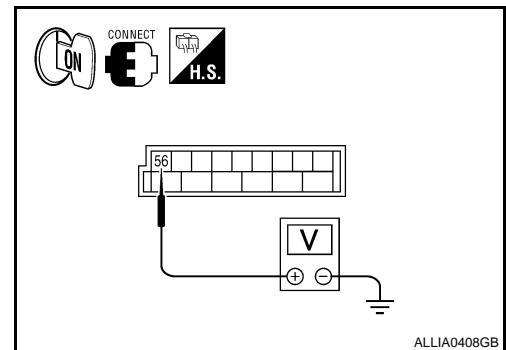
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1. CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OUTPUT

CONSULT-III

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

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



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Is the voltage reading as specified?

YES >> GO TO 2

NO >> Replace BCM. Refer to [BCS-54. "Removal and Installation"](#).

2. CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following connectors.
 - BCM M20
 - Ignition key hole illumination
 - Front room/map lamp assembly
 - Vanity lamp LH (if equipped)
 - Vanity lamp RH (if equipped)
 - Cargo lamp
 - Personal lamp 2nd row (with rear map lamps)
 - Room lamp 2nd row (without rear map lamps)

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

< COMPONENT DIAGNOSIS >

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

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M20	56	Ignition key hole illumination	M150	1	Yes
		Front room/map lamp assembly	R9	1	
		Vanity lamp LH (if equipped)	B80	1	
		Vanity lamp RH (if equipped)	B81	1	
		Cargo lamp	R11	2	
		Personal lamp 2nd row (with rear map lamps)	R10	1	
		Room lamp 2nd row (without rear map lamps)	R12	2	

Does continuity exist?

YES >> GO TO 3

NO >> Repair the harnesses or connectors.

3. CHECK BATTERY SAVER OUTPUT/POWER SUPPLY SHORT CIRCUIT

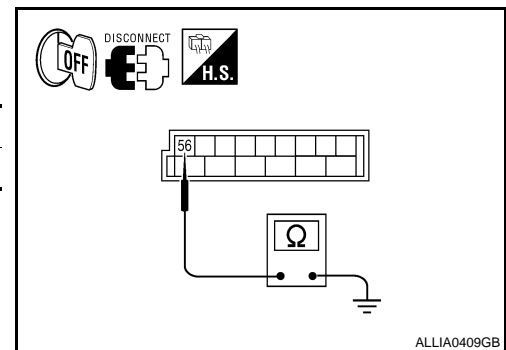
Check continuity between BCM harness connector M20 terminal 56 and ground.

Connector	Terminal	—	Continuity
M20	56	Ground	No

Does continuity exist?

YES >> Repair the harnesses or connectors.

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



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INTERIOR ROOM LAMP CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:000000001712577

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

- Front room/map lamp assembly
- Personal lamp 2nd row (with rear map lamps)
- Room lamp 2nd row (without rear map lamps)

NOTE:

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

Component Function Check

INFOID:000000001712578

CAUTION:

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

- Battery saver output/power supply
- Front room/map lamp bulbs
- Personal lamp 2nd row bulbs
- Room lamp 2nd row 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. With the test items operating, check that each interior room lamp turns ON/OFF (gradual brightening/dimming).

ON : Interior room lamp gradual brightening

OFF : Interior room lamp gradual dimming

Do the interior room lamps turn ON/OFF (gradual brightening/dimming)?

- YES >> Interior room lamp control circuit is normal.
 NO >> Refer to [INL-18, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001712579

1. CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

ⓑCONSULT-III

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

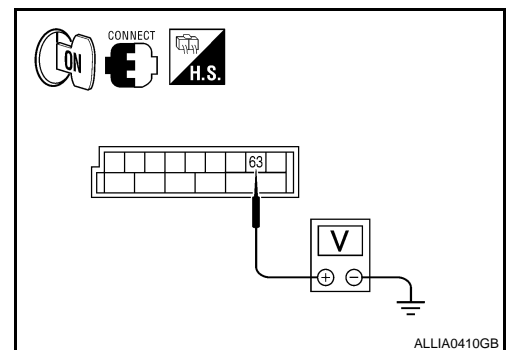
(+)		(-)	INT LAMP	Voltage
Connector	Terminal			
M20	63	Ground	ON	0V
			OFF	Battery voltage

Are voltage readings as specified?

- YES >> Interior room lamp control circuit is operating normally.
 Fixed ON>> GO TO 3
 Fixed OFF>> GO TO 2

2. CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M20, personal lamp 2nd row connector (with rear map lamps) or room lamp 2nd row connector (without rear map lamps) and front room/map lamp connector.



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INTERIOR ROOM LAMP CONTROL CIRCUIT

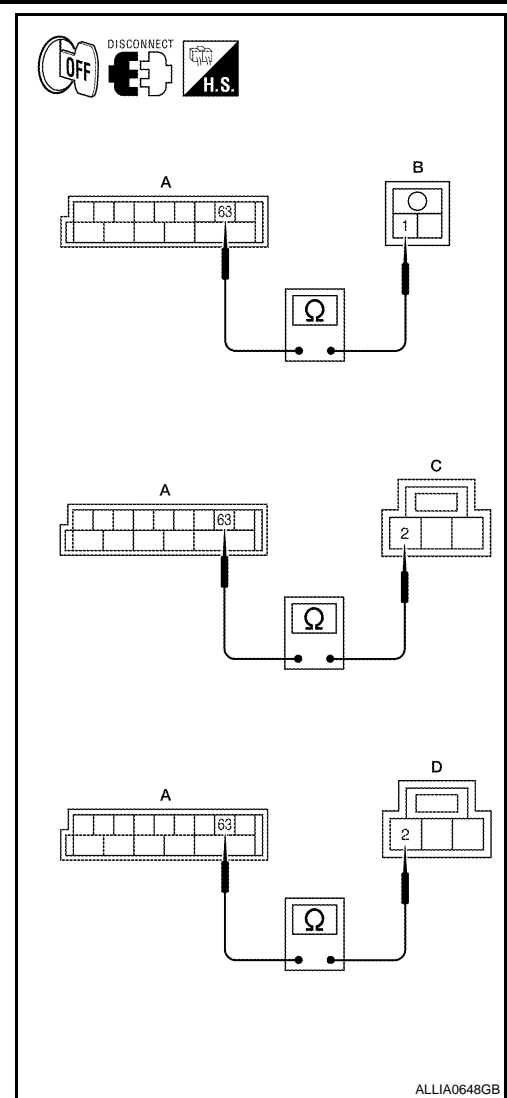
< COMPONENT DIAGNOSIS >

- Check continuity between BCM harness connector M20 terminal 63 and interior room lamp connectors.

Terminal		Terminal			Continuity
Connector	Terminal	Component	Connector	Terminal	
A: M20	63	Front room/map lamp	B: R9	1	Yes
		Personal lamp 2nd row (with rear map lamps)	C: R10	2	
		Room lamp 2nd row (without rear map lamps)	D: R12	1	

Are the continuity test results as specified?

- YES >> Replace the BCM. Refer to [BCS-54, "Removal and Installation"](#).
- NO >> Repair the harnesses or connectors.



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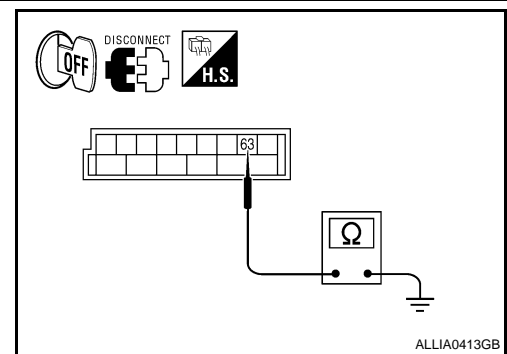
3. CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

- Turn ignition switch OFF.
- Disconnect BCM connector M20, personal lamps 2nd row connector (with rear map lamps) or room lamp 2nd row connector (without rear map lamps).
- Check continuity between BCM harness connector and ground.

Connector	Terminal	—	Continuity
M20	63	Ground	No

Does continuity exist?

- YES >> Repair the harnesses or connectors.
- NO >> Replace BCM. Refer to [BCS-54, "Removal and Installation"](#).



ALLIA0413GB

CARGO LAMP CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

CARGO LAMP CONTROL CIRCUIT

Description

INFOID:000000001712583

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

Component Function Check

INFOID:000000001712584

CAUTION:

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

- Battery saver output/power supply
- Cargo lamp bulb

1. CHECK CARGO LAMP OPERATION

CONSULT-III

1. Turn ignition switch ON.
2. Select "LUGGAGE LAMP TEST" of BCM (INT LAMP) active test item.
3. With operating the test items, check that cargo lamp turns ON/OFF.

ON : Cargo lamp ON

OFF : Cargo lamp OFF

Does the cargo lamp turn ON/OFF?

- YES >> Cargo lamp circuit is normal.
 NO >> Refer to [INL-20, "Diagnosis Procedure"](#).

Diagnosis Procedure

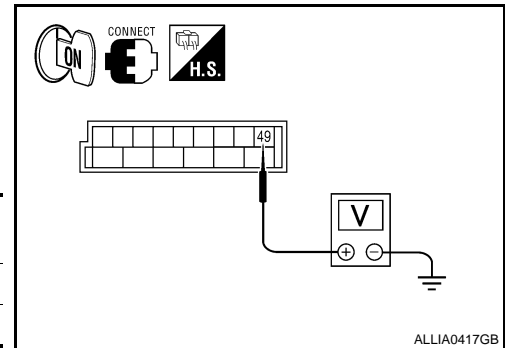
INFOID:000000001712585

1. CHECK CARGO 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 M19 terminal 49 and ground.

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



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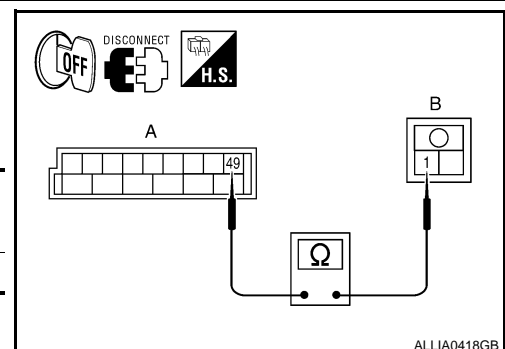
Are the voltage readings as specified?

- YES >> Cargo lamp control circuit is operating normally.
 Fixed ON >> GO TO 3
 Fixed OFF >> GO TO 2

2. CHECK CARGO LAMP OPEN CIRCUIT

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

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



ALLIA0418GB

Does continuity exist?

- YES >> Replace cargo lamp.
 NO >> Repair harnesses or connectors.

CARGO LAMP CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

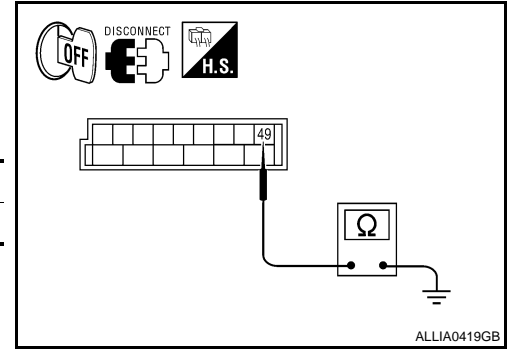
3. CHECK CARGO LAMP SHORT CIRCUIT

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

Connector	Terminal	—	Continuity
M19	49	Ground	No

Does continuity exist?

- YES >> Repair harnesses or connectors.
NO >> Replace BCM. Refer to [BCS-54, "Removal and Installation"](#).



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INL

IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

Description

INFOID:000000001712586

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

Component Function Check

INFOID:000000001712587

CAUTION:

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

- Battery saver output/power supply circuit
- Ignition keyhole illumination bulb

1. CHECK IGNITION KEYHOLE ILLUMINATION OPERATION

CONSULT-III

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

ON : Ignition keyhole illumination ON

OFF : Ignition keyhole illumination OFF

Does the ignition keyhole illumination turn ON/OFF?

- YES >> Ignition keyhole illumination circuit is normal.
 NO >> Refer to [INL-22, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001712588

1. CHECK IGNITION KEYHOLE OUTPUT

CONSULT-III

1. Turn ignition switch ON.
2. Select "IGN ILLUM" of BCM (INT LAMP) active test item.
3. 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
			OFF	Battery voltage

Are the voltage readings as specified?

- YES >> Ignition keyhole illumination control circuit is operating normally.
 Fixed ON >> GO TO 3.
 Fixed OFF >> GO TO 2.

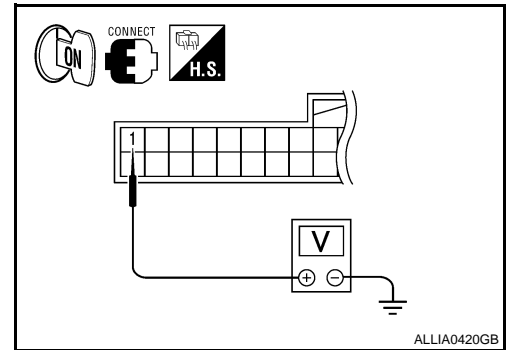
2. CHECK IGNITION KEYHOLE ILLUMINATION OPEN CIRCUIT

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

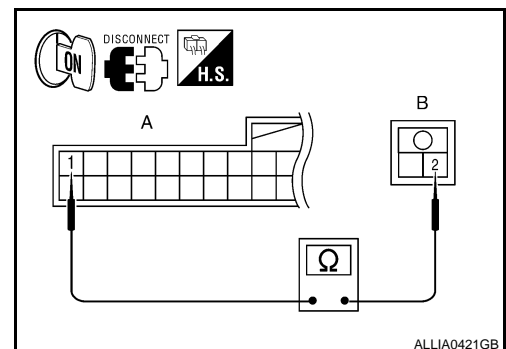
A		B		Continuity
Connector	Terminal	Connector	Terminal	
M18	1	M150	2	Yes

Does continuity exist?

- YES >> Replace ignition keyhole illumination.



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ALLIA0421GB

IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

NO >> Repair harnesses or connectors.

3. CHECK IGNITION KEYHOLE ILLUMINATION SHORT CIRCUIT

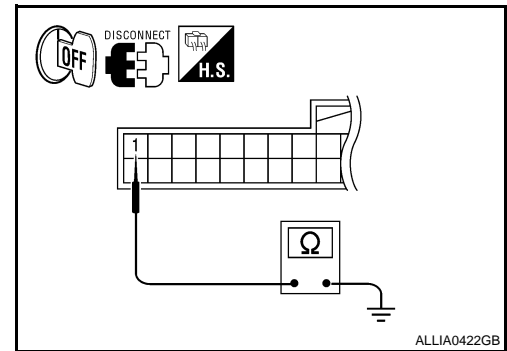
1. Turn ignition switch OFF.
2. Disconnect BCM connector M18 and ignition keyhole illumination connector M150.
3. Check continuity between BCM harness connector M18 terminal 1 and ground.

Connector	Terminal	—	Continuity
M18	1	Ground	No

Does continuity exist?

YES >> Repair harnesses or connectors.

NO >> Replace BCM. Refer to [BCS-54. "Removal and Installation"](#).

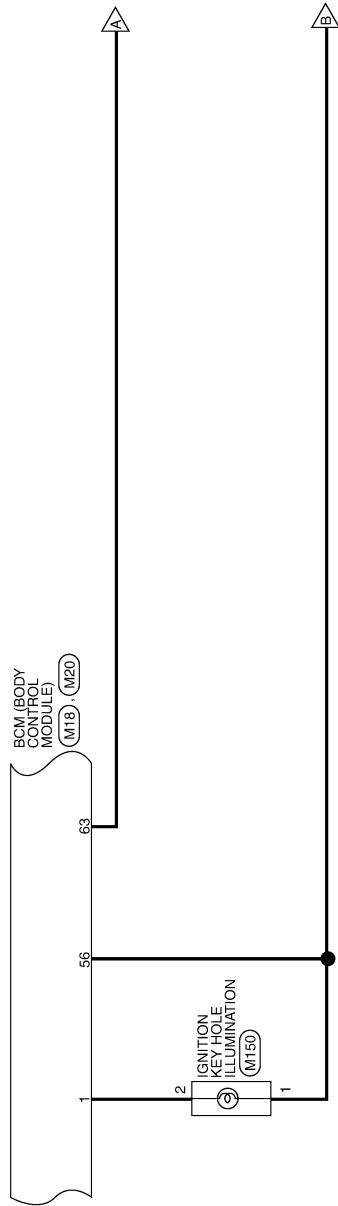


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INL

INTERIOR ROOM LAMP CONTROL SYSTEM

< COMPONENT DIAGNOSIS >



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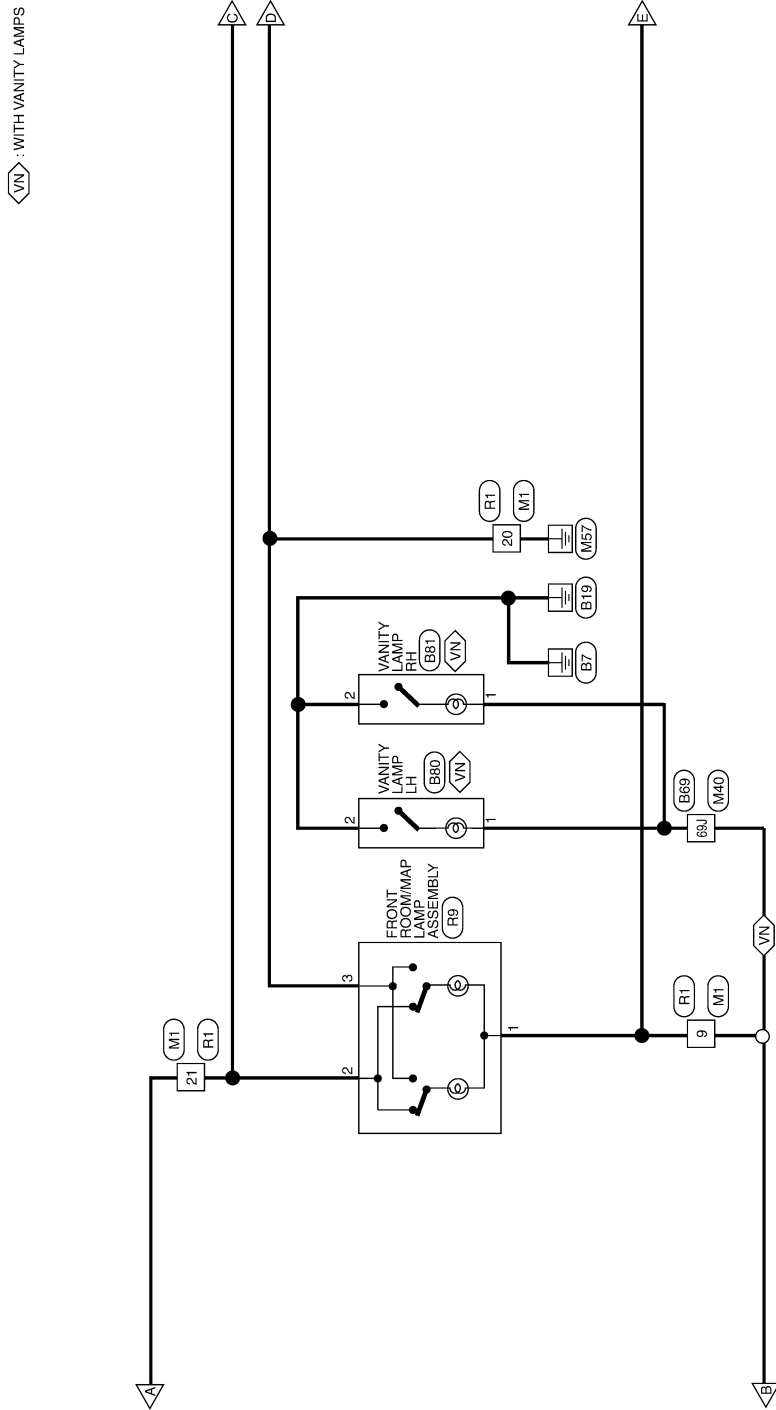
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INTERIOR ROOM LAMP CONTROL SYSTEM

< COMPONENT DIAGNOSIS >

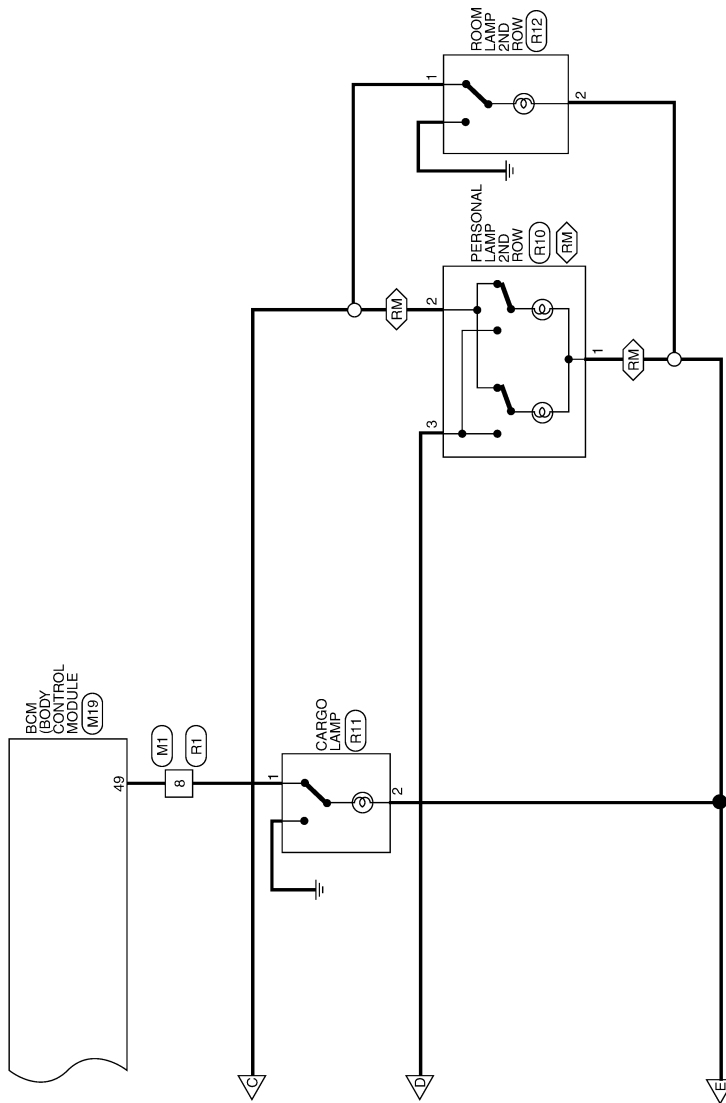


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INTERIOR ROOM LAMP CONTROL SYSTEM

< COMPONENT DIAGNOSIS >

◊ FM : WITH REAR MAP LAMPS



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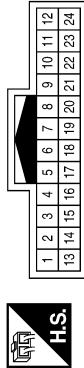
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INTERIOR ROOM LAMP CONTROL SYSTEM

< COMPONENT DIAGNOSIS >

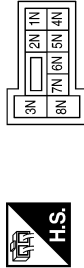
INTERIOR ROOM LAMP CONNECTORS

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



Terminal No.	Color of Wire	Signal Name
8	L	-
9	R/Y	-
20	B	-
21	BR	-

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



Terminal No.	Color of Wire	Signal Name
3N	R/B	-
4N	R/Y	-

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



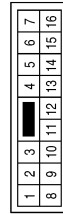
Terminal No.	Color of Wire	Signal Name
15P	W/R	-

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



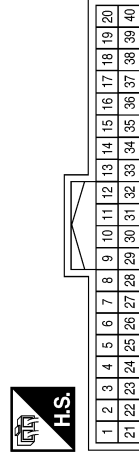
Terminal No.	Color of Wire	Signal Name
7	W	-

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



Terminal No.	Color of Wire	Signal Name
7	V	-
11	B	-

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



Terminal No.	Color of Wire	Signal Name
1	BR	IGN KEY ILL
12	LG	DOOR SW (AS)
13	L	DOOR SW (RR)
22	V	BUS
37	B	KEY SW
38	W/R	IGN SW
39	L	CAN-H
40	P	CAN-L

ALLIA0428GB

INTERIOR ROOM LAMP CONTROL SYSTEM

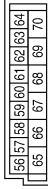
< COMPONENT DIAGNOSIS >

Connector No.	M27
Connector Name	KEY SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-
2	Y	-

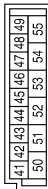
Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
56	V	BAT SAVER
57	R/Y	BAT (FUSE)
63	BR	ROOM LAMP
67	B	GND (POWER)
70	W	BAT (F/L)

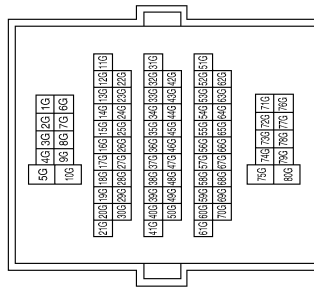
Terminal No.	Color of Wire	Signal Name
55G	Y	-

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



Terminal No.	Color of Wire	Signal Name
42	LG	GLASS HATCH AJAR
43	SB	BACK DOOR SW
47	GR	DOOR SW (DR)
48	P	DOOR SW (RL)
49	L	LUGGAGE LAMP OUTPUT

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

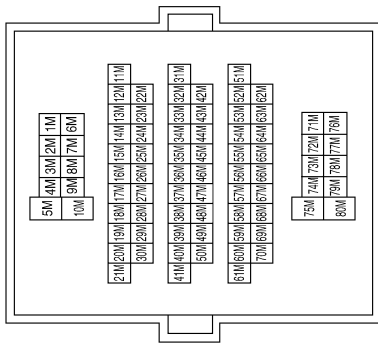


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INTERIOR ROOM LAMP CONTROL SYSTEM

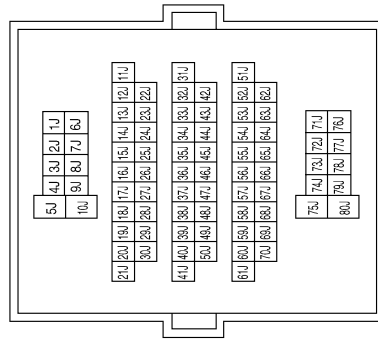
< COMPONENT DIAGNOSIS >

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Color	WHITE



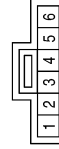
Terminal No.	Color of Wire	Signal Name
57M	LG	-
58M	L	-

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
56J	LG	-
60J	P	-
61J	GR	-
65J	SB	-
69J	R/Y	-

Connector No.	M66
Connector Name	KEY SWITCH AND IGNITION KNOB SWITCH
Connector Color	GRAY

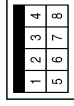


Terminal No.	Color of Wire	Signal Name
3	R/B	-
4	SB	-

INTERIOR ROOM LAMP CONTROL SYSTEM

< COMPONENT DIAGNOSIS >

Connector No.	E10
Connector Name	WIRE TO WIRE
Connector Color	WHITE



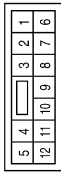
Terminal No.	7	Color of Wire	W	Signal Name	-
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Connector No.	M150
Connector Name	IGNITION KEYHOLE ILLUMINATION
Connector Color	WHITE



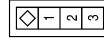
Terminal No.	1	Color of Wire	R/Y	Signal Name	-
2	BR	-	-	-	-

Connector No.	M75
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	5	Color of Wire	V	Signal Name	-
12	B	-	-	-	-

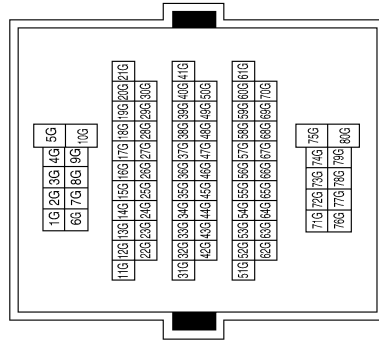
Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE



Terminal No.	2	Color of Wire	GR	Signal Name	-
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Terminal No.	55G	Color of Wire	Y	Signal Name	-
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Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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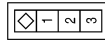
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INTERIOR ROOM LAMP CONTROL SYSTEM

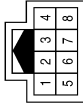
< COMPONENT DIAGNOSIS >

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



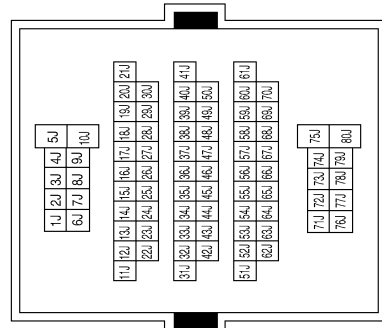
Terminal No.	Color of Wire	Signal Name
2	P	-

Connector No.	B43
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	SB	-
6	LG	-

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



Terminal No.	Color of Wire	Signal Name
56J	LG	-
60J	P	-
61J	GR	-
65J	SB	-
69J	R/Y	-

Connector No.	B80
Connector Name	VANITY LAMP LH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	R/Y	-
2	B	-

ALLIA0432GB

INTERIOR ROOM LAMP CONTROL SYSTEM

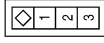
< COMPONENT DIAGNOSIS >

Connector No.	B81
Connector Name	VANITY LAMP RH
Connector Color	WHITE



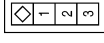
Terminal No.	Color of Wire	Signal Name
1	R/Y	-
2	B	-

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



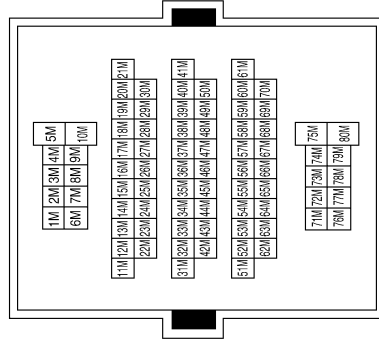
Terminal No.	Color of Wire	Signal Name
2	LG	-

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



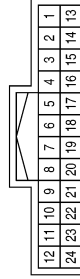
Terminal No.	Color of Wire	Signal Name
2	L	-

Connector No.	B149
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
57M	LG	-
58M	L	-

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



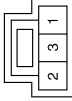
Terminal No.	Color of Wire	Signal Name
8	L	-
9	R/Y	-
20	B	-
21	BR	-

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INTERIOR ROOM LAMP CONTROL SYSTEM

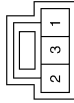
< COMPONENT DIAGNOSIS >

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



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

Connector No.	R10
Connector Name	PERSONAL LAMP 2ND ROW
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	R/Y	-
2	BR	-
3	B	-

Connector No.	R11
Connector Name	CARGO LAMP
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	L	-
2	R/Y	-

Connector No.	R12
Connector Name	ROOM LAMP 2ND ROW
Connector Color	WHITE



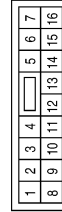
Terminal No.	Color of Wire	Signal Name
1	BR	-
2	R/Y	-

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



Terminal No.	Color of Wire	Signal Name
7	V	-
11	B	-

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



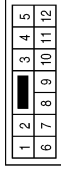
Terminal No.	Color of Wire	Signal Name
4	SB	KEY CYL LOCK SW
6	R/W	KEY CYL UNLOCK SW
14	V	POWER WINDOW SERIAL LINK

ALLIA0434GB

INTERIOR ROOM LAMP CONTROL SYSTEM

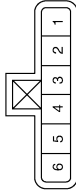
< COMPONENT DIAGNOSIS >

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



Terminal No.	Color of Wire	Signal Name
5	V	-
12	B	-

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



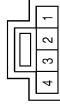
Terminal No.	Color of Wire	Signal Name
3	SB	-
4	B	-
5	R/W	-

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



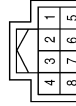
Terminal No.	Color of Wire	Signal Name
17	B	GND

Connector No.	D404
Connector Name	WIRE TO WIRE
Connector Color	WHITE



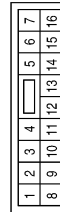
Terminal No.	Color of Wire	Signal Name
1	B	-

Connector No.	D401
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	SB	-
6	LG	-

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



Terminal No.	Color of Wire	Signal Name
11	B	GND
16	V	POWER WINDOW SERIAL LINK

ALLIA0435GB

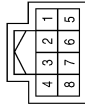
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INTERIOR ROOM LAMP CONTROL SYSTEM

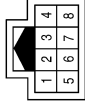
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Connector No.	D405
Connector Name	WIRE TO WIRE
Connector Color	WHITE



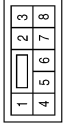
Terminal No.	Color of Wire	Signal Name
6	LG	-
7	SB	-

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	LG	-
7	SB	-

Connector No.	D502
Connector Name	BACK DOOR CINCHING LATCH UNIT
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	SB	-
8	B	-

Connector No.	D503
Connector Name	GLASS HATCH AJAR SWITCH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	LG	-

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-

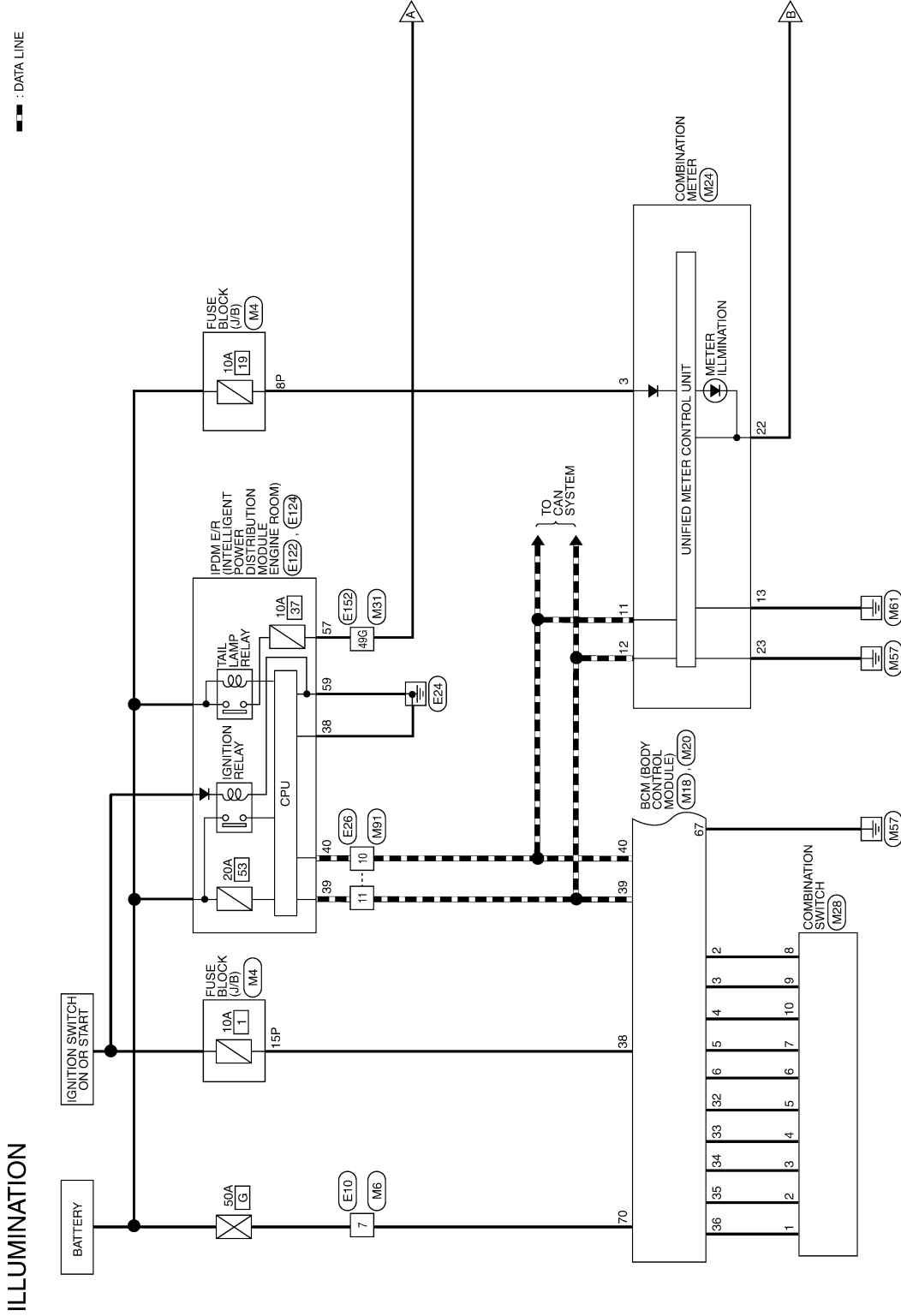
ILLUMINATION

< COMPONENT DIAGNOSIS >

ILLUMINATION

Wiring Diagram

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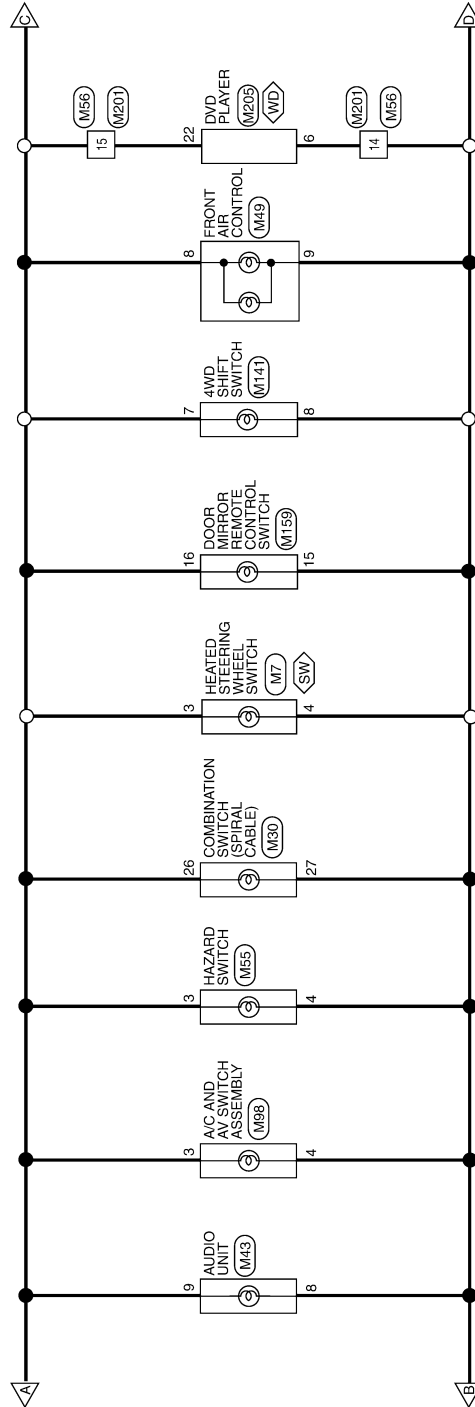
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ILLUMINATION

< COMPONENT DIAGNOSIS >

SW : WITH HEATED STEERING WHEEL
WD : WITH DVD ENTERTAINMENT SYSTEM

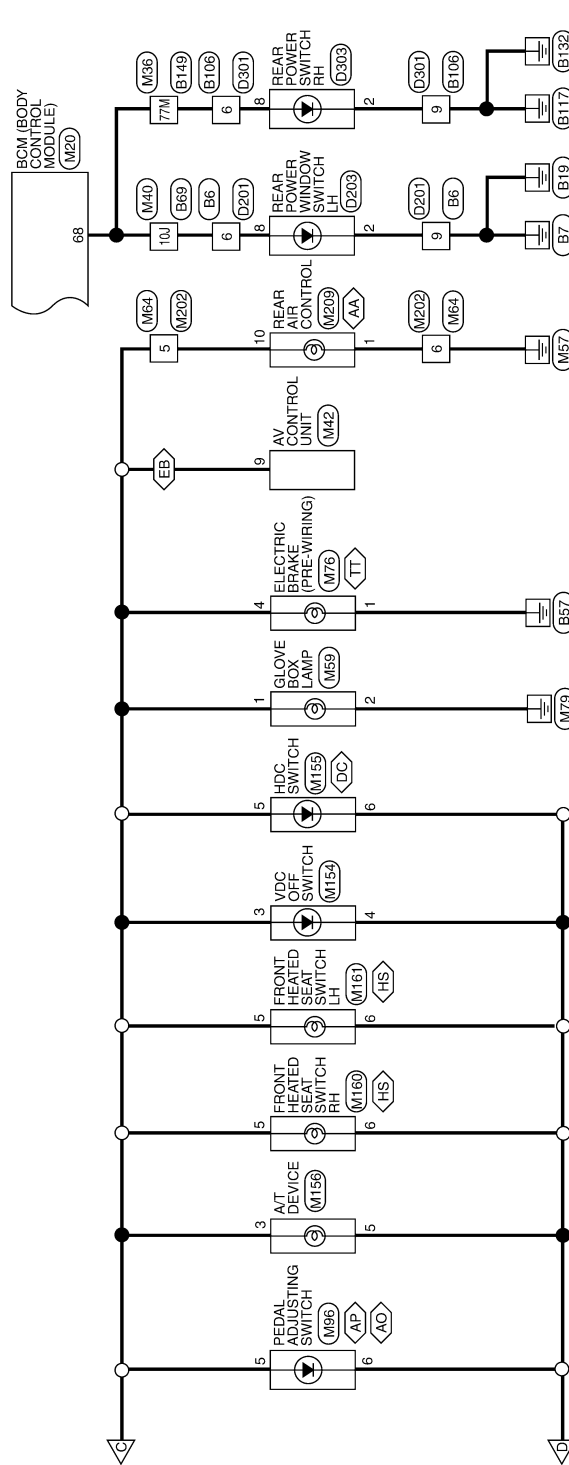


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ILLUMINATION

< COMPONENT DIAGNOSIS >

- <AD> : WITH AUTOMATIC DRIVER POSITIONER
- <EB> : EXCEPT BASE AUDIO SYSTEM
- <AP> : WITH ADJUSTABLE PEDALS WITHOUT MEMORY
- <TT> : WITH TRAILER TOW
- <HS> : WITH HEATED SEATS
- <DC> : WITH HILL DESCENT CONTROL AND HILL START ASSIST
- <AA> : WITH AUTO A/C



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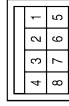
ILLUMINATION CONNECTORS

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



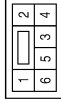
Terminal No.	Color of Wire	Signal Name
8P	R/Y	-
15P	W/R	-

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



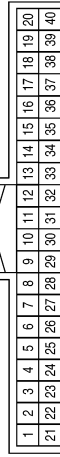
Terminal No.	Color of Wire	Signal Name
7	W	-

Connector No.	M7
Connector Name	HEATED STEERING WHEEL SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	R	-
4	BR	-

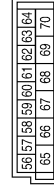
Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	P	COMBI SW INPUT 5
3	SB	COMBI SW INPUT 4
4	V	COMBI SW INPUT 3
5	L	COMBI SW INPUT 2

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

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

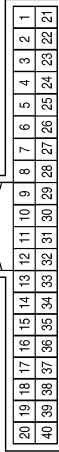


Terminal No.	Color of Wire	Signal Name
67	B	GND (POWER)
68	O	POWER WINDOW POWER SUPPLY (RAP)
70	W	BAT (F/L)

ILLUMINATION

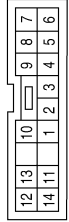
< COMPONENT DIAGNOSIS >

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	R/Y	-
11	P	-
12	L	-
13	GR	-
22	BR	-
23	B	-

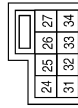
Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	LG	INPUT 1
2	BR	INPUT 2
3	G	INPUT 3
4	GR	INPUT 4
5	O	INPUT 5
6	R	OUTPUT 1
7	L	OUTPUT 2
8	P	OUTPUT 5

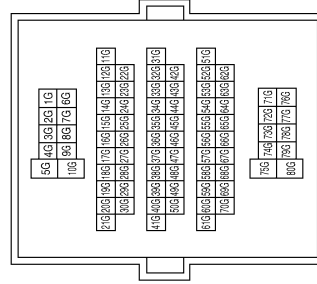
Terminal No.	Color of Wire	Signal Name
9	SB	OUTPUT 4
10	V	OUTPUT 3

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



Terminal No.	Color of Wire	Signal Name
26	R	ILL+
27	G	ILL-

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



Terminal No.	Color of Wire	Signal Name
49G	V	-

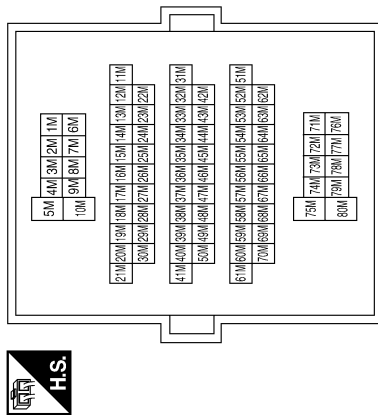
ALLIA0438GB

ILLUMINATION

< COMPONENT DIAGNOSIS >

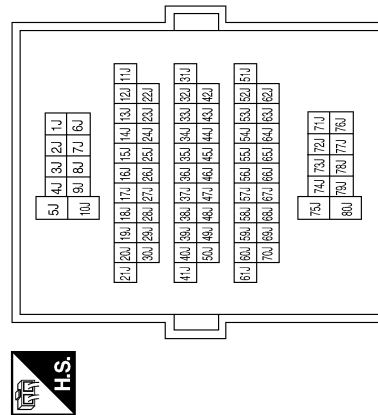
Terminal No.	Color of Wire	Signal Name
77M	W	-

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Color	WHITE

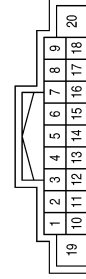


Terminal No.	Color of Wire	Signal Name
10J	W	-

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	M42
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Color	WHITE

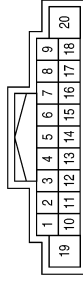


Terminal No.	Color of Wire	Signal Name
9	V	ILL

ILLUMINATION

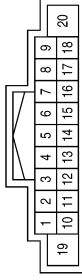
< COMPONENT DIAGNOSIS >

Connector No.	M43
Connector Name	AUDIO UNIT (BASE)
Connector Color	WHITE



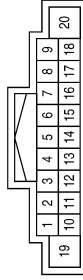
Terminal No.	Color of Wire	Signal Name
8	GR	-
9	R	-

Connector No.	M42
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Color	WHITE



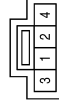
Terminal No.	Color of Wire	Signal Name
9	V	ILL+

Connector No.	M42
Connector Name	AUDIO UNIT
Connector Color	WHITE



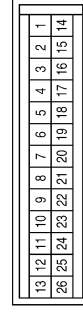
Terminal No.	Color of Wire	Signal Name
9	R	TAIL/ILL RLY

Connector No.	M55
Connector Name	HAZARD SWITCH
Connector Color	WHITE



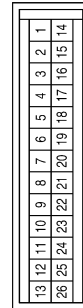
Terminal No.	Color of Wire	Signal Name
3	R	-
4	BR	-

Connector No.	M49
Connector Name	FRONT AIR CONTROL (WITH AUTOMATIC A/C)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
8	G	-
9	BR	-

Connector No.	M49
Connector Name	FRONT AIR CONTROL (WITH MANUAL A/C)
Connector Color	BLACK



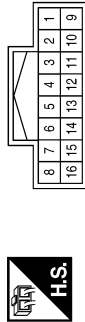
Terminal No.	Color of Wire	Signal Name
8	G	-
9	BR	-

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ILLUMINATION

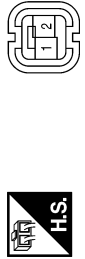
< COMPONENT DIAGNOSIS >

Connector No.	M56
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
14	BR	-
15	SB	-

Connector No.	M59
Connector Name	GLOVE BOX LAMP
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1	R	-
2	B	-

Connector No.	M64
Connector Name	WIRE TO WIRE
Connector Color	WHITE



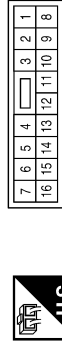
Terminal No.	Color of Wire	Signal Name
5	G	-
6	B	-

Connector No.	M76
Connector Name	ELECTRIC BRAKE (PRE-WIRING)
Connector Color	WHITE



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

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Connector No.	M96
Connector Name	PEDAL ADJUSTING SWITCH
Connector Color	BROWN



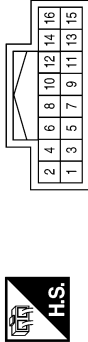
Terminal No.	Color of Wire	Signal Name
5	R	-
6	BR	-

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ILLUMINATION

< COMPONENT DIAGNOSIS >

Connector No.	M98
Connector Name	A/C AND AV SWITCH ASSEMBLY
Connector Color	WHITE



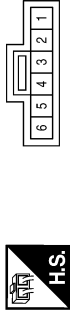
Terminal No.	Color of Wire	Signal Name
3	LG	ILL
4	BR	ILL_CONT_GND

Connector No.	M141
Connector Name	4WD SHIFT SWITCH
Connector Color	GRAY



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

Connector No.	M154
Connector Name	VDC OFF SWITCH
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
3	R	-
4	BR	-

Connector No.	M155
Connector Name	HDC SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	R	-
6	BR	-

Connector No.	M156
Connector Name	A/T DEVICE (WITHOUT MANUAL MODE SWITCH)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	R	-
5	BR	-

Connector No.	M156
Connector Name	A/T DEVICE (WITH MANUAL MODE SWITCH)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	R	-
5	BR	-

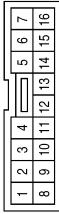
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ILLUMINATION

< COMPONENT DIAGNOSIS >

Connector No.	M159
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
15	BR	-
16	R	-

Connector No.	M160
Connector Name	FRONT HEATED SEAT SWITCH RH
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
5	SB	-
6	O	-

Connector No.	M161
Connector Name	FRONT HEATED SEAT SWITCH LH
Connector Color	BROWN



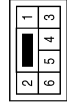
Terminal No.	Color of Wire	Signal Name
5	R	-
6	BR	-

Connector No.	M201
Connector Name	WIRE TO WIRE
Connector Color	WHITE



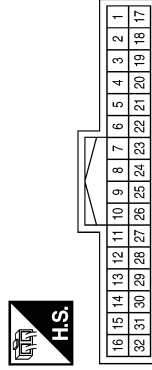
Terminal No.	Color of Wire	Signal Name
14	BR	-
15	SB	-

Connector No.	M202
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	SB	-
6	B	-

Connector No.	M205
Connector Name	DVD PLAYER
Connector Color	WHITE

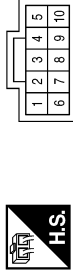


Terminal No.	Color of Wire	Signal Name
6	BR	ILL-
22	SB	ILL+

ILLUMINATION

< COMPONENT DIAGNOSIS >

Connector No.	M209
Connector Name	REAR AIR CONTROL
Connector Color	BLACK



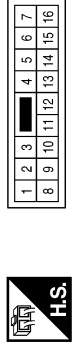
Terminal No.	Color of Wire	Signal Name
1	B	GND
10	G	ILL+

Connector No.	E10
Connector Name	WIRE TO WIRE
Connector Color	WHITE



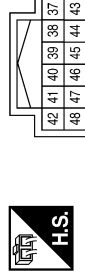
Terminal No.	Color of Wire	Signal Name
7	W	-

Connector No.	E26
Connector Name	WIRE TO WIRE
Connector Color	WHITE



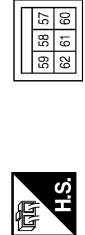
Terminal No.	Color of Wire	Signal Name
10	P	-
11	L	-

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



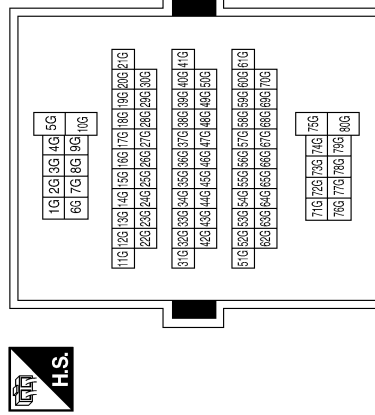
Terminal No.	Color of Wire	Signal Name
38	B	GND (SIGNAL)
39	L	CAN-H
40	P	CAN-L

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



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

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



Terminal No.	Color of Wire	Signal Name
49G	V	-

ILLUMINATION

< COMPONENT DIAGNOSIS >

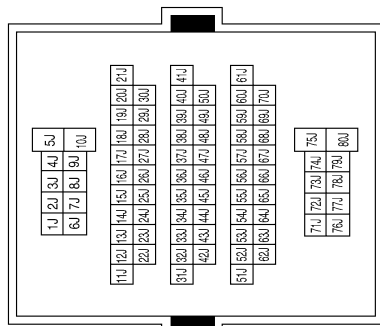
Connector No.	B6
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
6	W	-
9	B	-

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



Terminal No.	10J	Color of Wire	W	Signal Name	-
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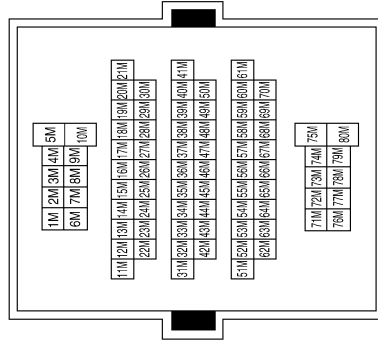
Connector No.	B106
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
6	W	-
9	B	-

Connector No.	B149
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	D201	Color of Wire	WIRE TO WIRE	Signal Name	-
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5	4	3	2	1
12	11	10	9	8
7	6			

Terminal No.	6	Color of Wire	W	Signal Name	-
Terminal No.	9	Color of Wire	B	Signal Name	-

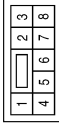
Terminal No.	77M	Color of Wire	W	Signal Name	-
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ILLUMINATION

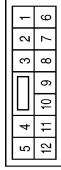
< COMPONENT DIAGNOSIS >

Connector No.	D303
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Color	WHITE



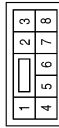
Terminal No.	Color of Wire	Signal Name
2	B	-
8	W	-

Connector No.	D301
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	W	-
9	B	-

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



Terminal No.	Color of Wire	Signal Name
2	B	-
8	W	-

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ALLIA0446GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Description

INFOID:000000001712591

REFERENCE VALUES FOR BCM

For BCM reference values, refer to [BCS-38, "Reference Value"](#).

TERMINAL LAYOUT FOR BCM

For the terminal layout for the BCM, refer to [BCS-41, "Terminal Layout"](#).

PHYSICAL VALUES FOR BCM

For physical values for the BCM, refer to [BCS-41, "Physical Values"](#).

WIRING DIAGRAM - BCM

For the BCM wiring diagram, refer to [BCS-47, "Wiring Diagram"](#).

DTC INSPECTION PRIORITY CHART - BCM

For the BCM DTC inspection priority chart, refer to [BCS-50, "DTC Inspection Priority Chart"](#).

DTC INDEX - BCM

For the BCM DTC index, refer to [BCS-51, "DTC Index"](#).

INTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:000000001712592

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 <ul style="list-style-type: none"> • Front room/map lamp assembly • Personal lamp 2nd row (with rear map lamps) • Room lamp 2nd row (without rear map lamps) • Cargo room lamp • Vanity mirror lamps (if equipped) • Ignition keyhole illumination 	<ul style="list-style-type: none"> • 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-16 .
Some or all of the following interior room lamps do not turn ON/OFF <ul style="list-style-type: none"> • Front room/map lamp assembly • Personal lamp 2nd row (with rear map lamps) • Room lamp 2nd row (without rear map lamps) 	<ul style="list-style-type: none"> • Harness between BCM and each interior room lamp • BCM 	Interior room lamp control circuit Refer to INL-18 .
Cargo lamp does not turn ON/OFF	<ul style="list-style-type: none"> • Harness between BCM and cargo lamp • BCM 	Cargo lamp circuit Refer to INL-20 .
Ignition keyhole illumination does not turn ON/OFF	<ul style="list-style-type: none"> • Harness between BCM and cargo lamp • BCM 	Ignition keyhole illumination circuit Refer to INL-22
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 .

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000001702208

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:000000001702209

- 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 a 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.

INTERIOR ROOM LAMP

< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

INTERIOR ROOM LAMP

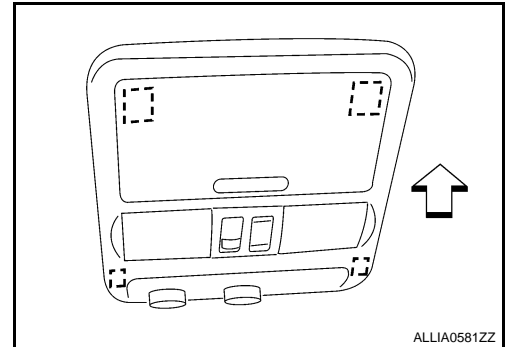
Removal and Installation

INFOID:000000001697740

MAP LAMP

Removal

The map lamp is replaced as part of the overhead console assembly.
Refer to [INT-16. "Removal and Installation"](#).



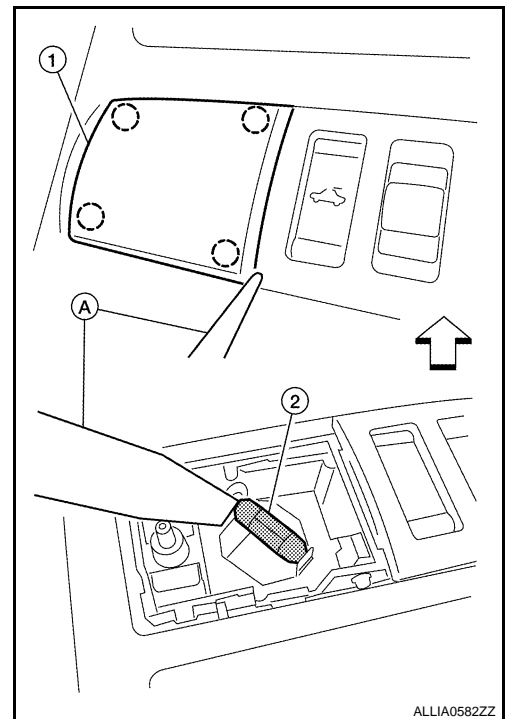
Installation

Installation is in the reverse order of removal.

Bulb Replacement

1. Disconnect the negative battery terminal.
2. 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

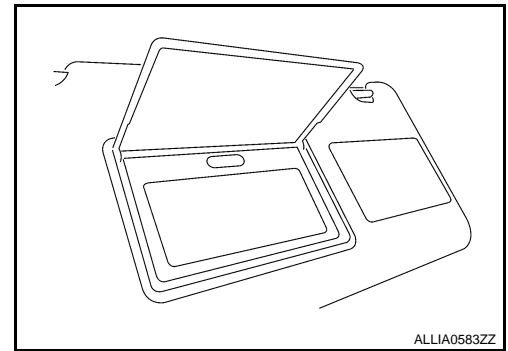
Removal

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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

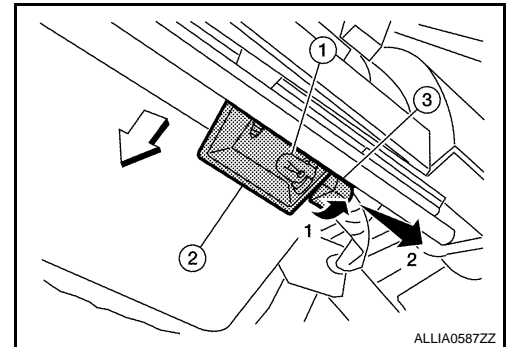
The vanity mirror lamp bulb is replaced as part of the sunvisor assembly. Refer to [INT-16, "Removal and Installation"](#).

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.

⇐: Vehicle front



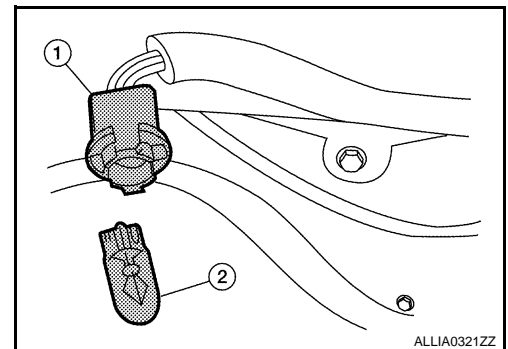
Installation

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



PERSONAL LAMP

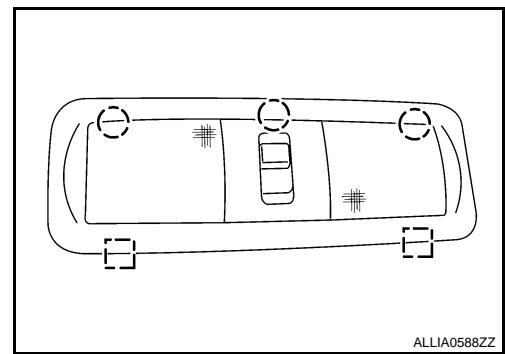
Removal

1. Disconnect the negative battery terminal.

INTERIOR ROOM LAMP

< ON-VEHICLE REPAIR >

2. Release the clips and remove personal lamp from headlining. Refer to [INT-16, "Removal and Installation"](#).
3. Disconnect personal lamp electrical connector, then remove from overhead console.

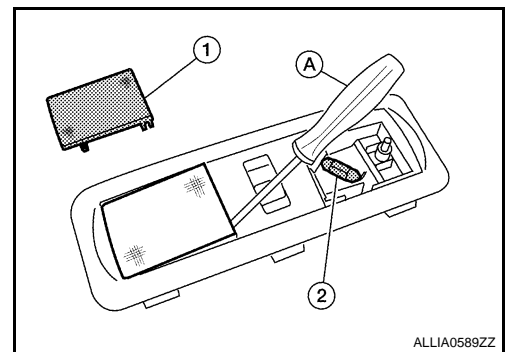


Installation

Installation is in the reverse order of removal.

Bulb Replacement

1. Remove personal lamp.
 2. Using a suitable tool (A), release the pawls and remove personal lamp lens (1).
- 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.



Personal lamp bulb : 12V - 8W

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ILLUMINATION

< ON-VEHICLE REPAIR >

ILLUMINATION

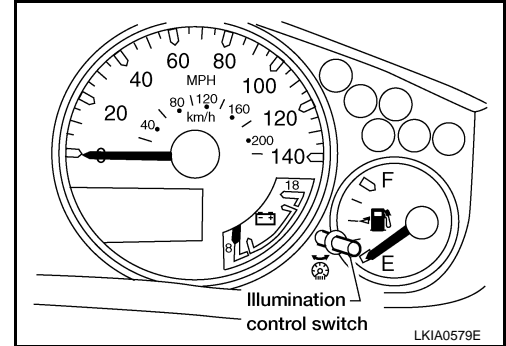
Removal and Installation

INFOID:000000001697741

ILLUMINATION CONTROL SWITCH

Removal

The illumination control switch (1) is replaced as a part of the combination meter assembly. Refer to [MWI-94, "Removal and Installation"](#).



Installation

Installation is in the reverse order of removal.

CARGO LAMP

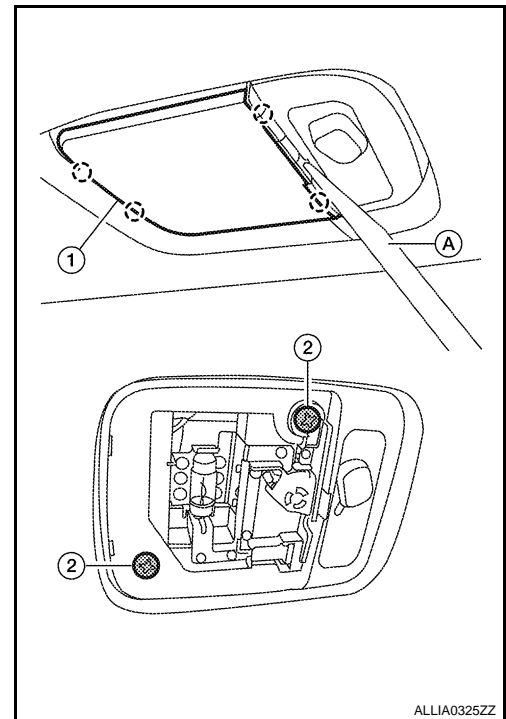
Removal

1. Disconnect the negative battery terminal.
2. Using a suitable tool (A), release the pawls and remove the cargo lamp lens (1).

CAUTION:

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

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

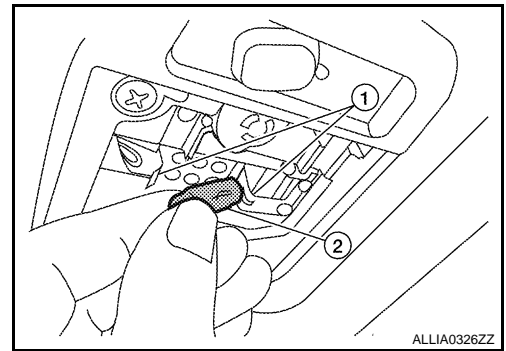
ILLUMINATION

< ON-VEHICLE REPAIR >

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

Cargo lamp bulb

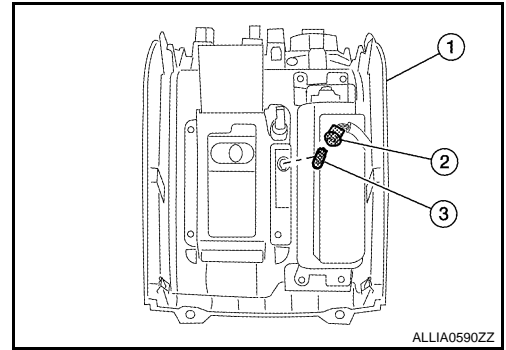
: 12V - 8W



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

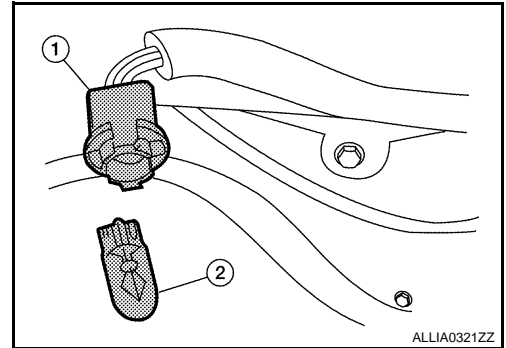
Installation is in the reverse order of removal.

Bulb Replacement

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

AT finisher lamp bulb

: 12V - 3W



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BULB SPECIFICATIONS

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

BULB SPECIFICATIONS

Interior Lamp/Illumination

INFOID:000000001694270

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

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