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# SECTION INL

## INTERIOR LIGHTING SYSTEM

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# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

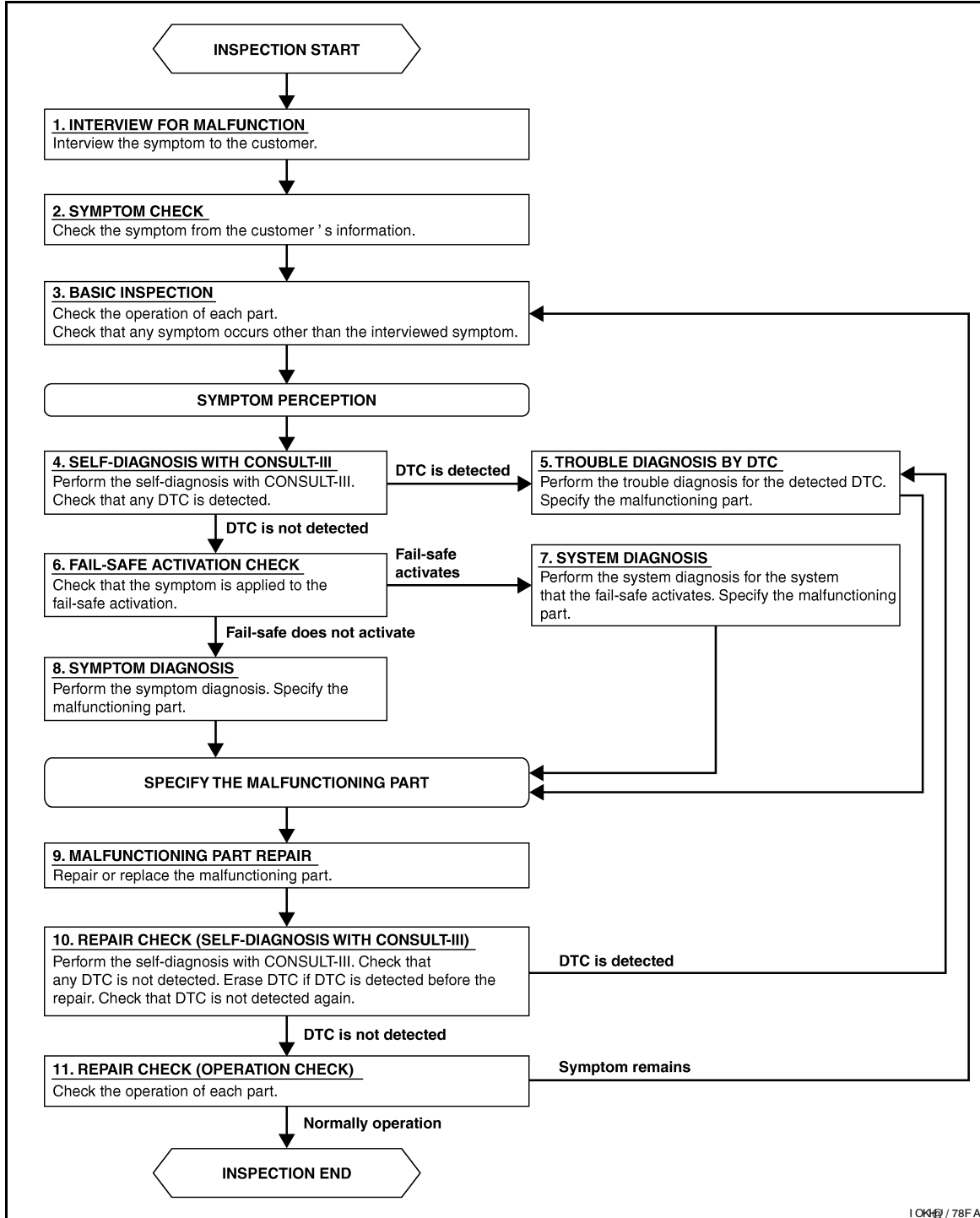
## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000004065604

#### OVERALL SEQUENCE



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# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

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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 10

## 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?

YES >> GO TO 5

# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

---

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

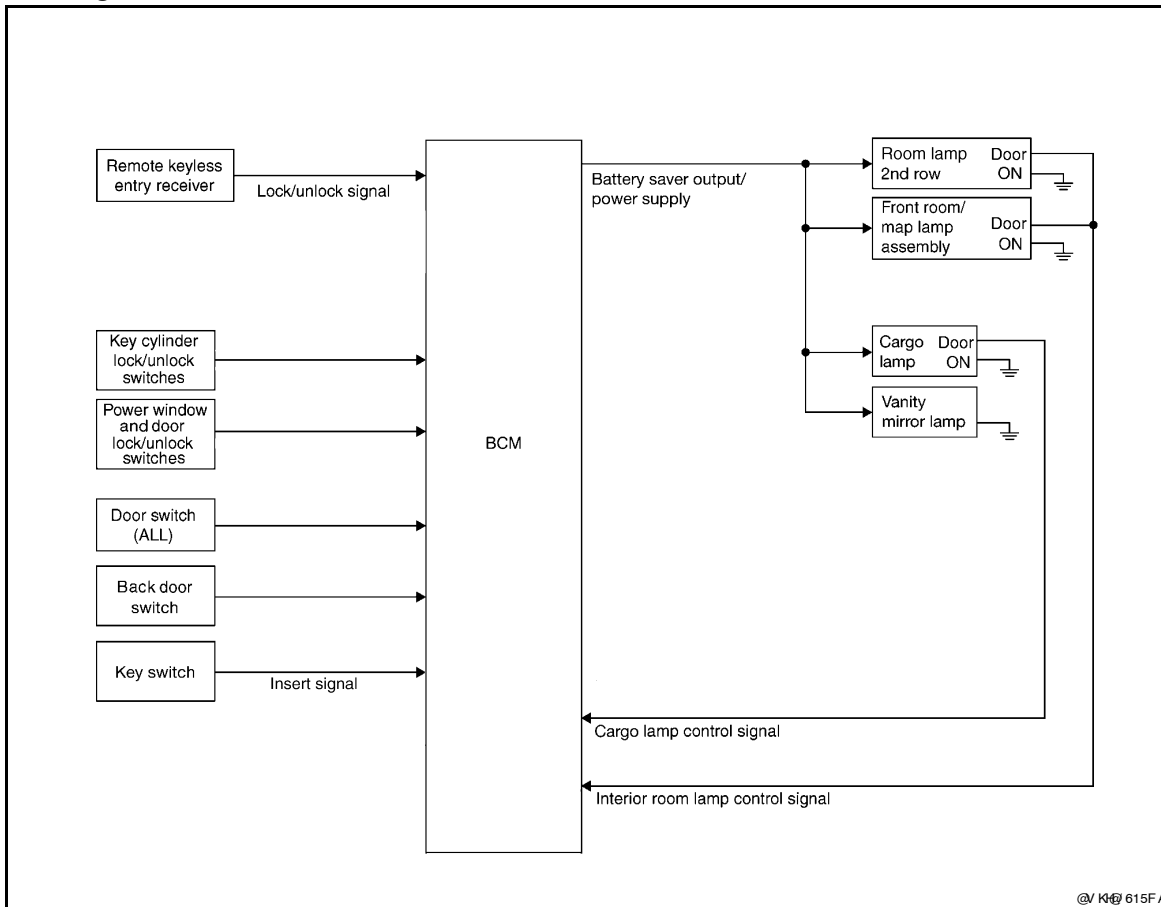
< FUNCTION DIAGNOSIS >

## FUNCTION DIAGNOSIS

### INTERIOR ROOM LAMP CONTROL SYSTEM

#### System Diagram

INFOID:000000004065605



@V K4@ 615F A

#### System Description

INFOID:000000004065606

##### 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

# INTERIOR ROOM LAMP CONTROL SYSTEM

## < 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.

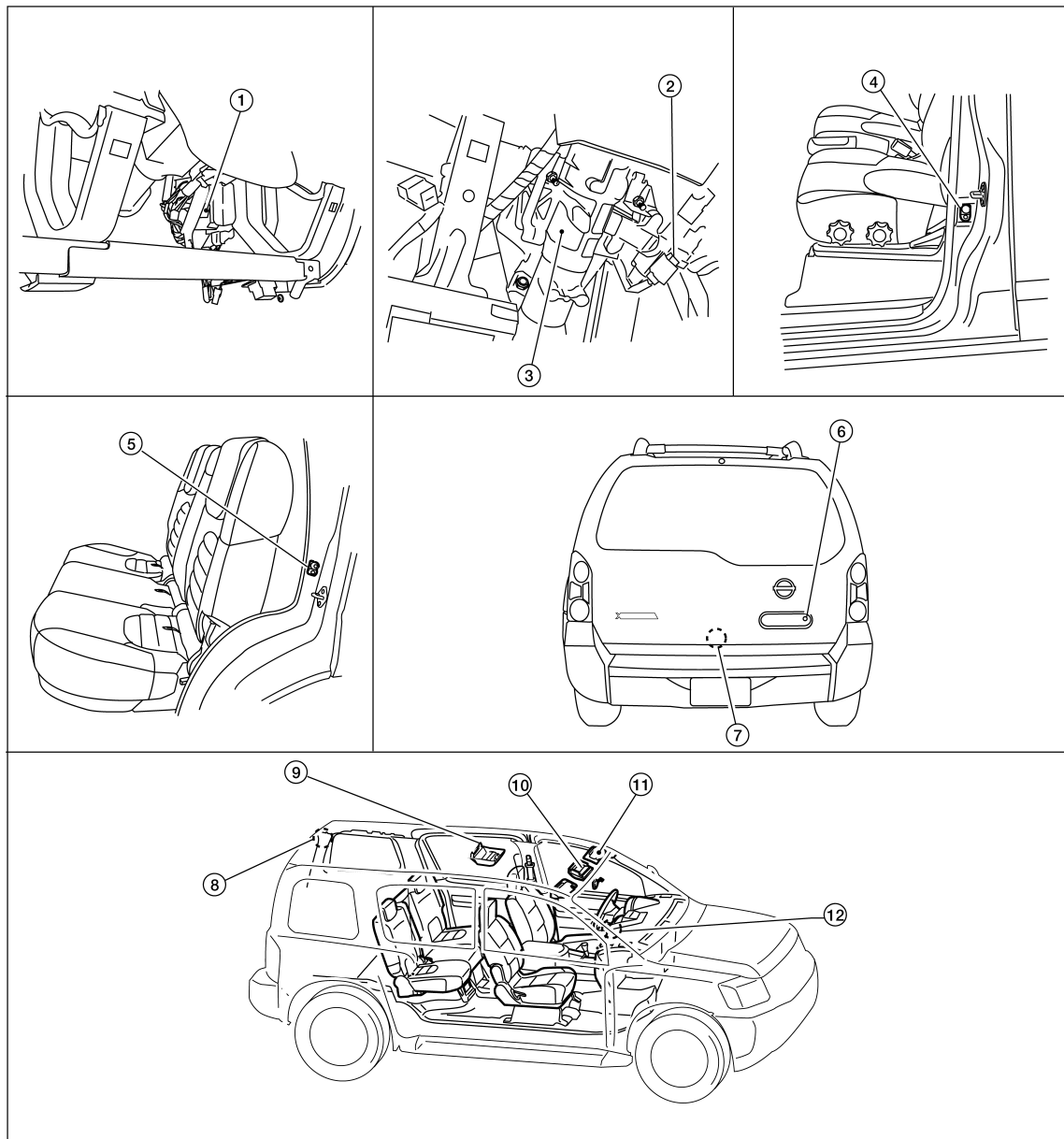
After the battery saver system turns the lamps OFF, the lamps will illuminate again when

- 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:000000004065607



- |  |  |                                       |
|--|--|---------------------------------------|
| 1. BCM M18, M19, M20 (view with lower instrument panel LH removed) | 2. Key switch M27                        | 3. Steering column assembly           |
| 4. Front door switch<br>LH B8<br>RH B108                           | 5. Rear door switch<br>LH B18<br>RH B116 | 6. Back door key cylinder switch D505 |

# INTERIOR ROOM LAMP CONTROL SYSTEM

## < FUNCTION DIAGNOSIS >

- |                                     |   |  |
|-------------------------------------|---|--|
| 7. Back door switch D502            | 8. Cargo lamp R11                                       | 9. Room lamp 2nd row R12               |
| 10. Front room/map lamp assembly R9 | 11. Vanity lamp (with vanity lamps)<br>LH B80<br>RH B81 | 12. Ignition keyhole illumination M150 |

## Component Description

INFOID:000000004065608

Part name	Description
BCM	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	
Front door lock assembly LH (key cylinder switch)	Provides door lock/unlock status to the BCM.
Back door key cylinder switch	

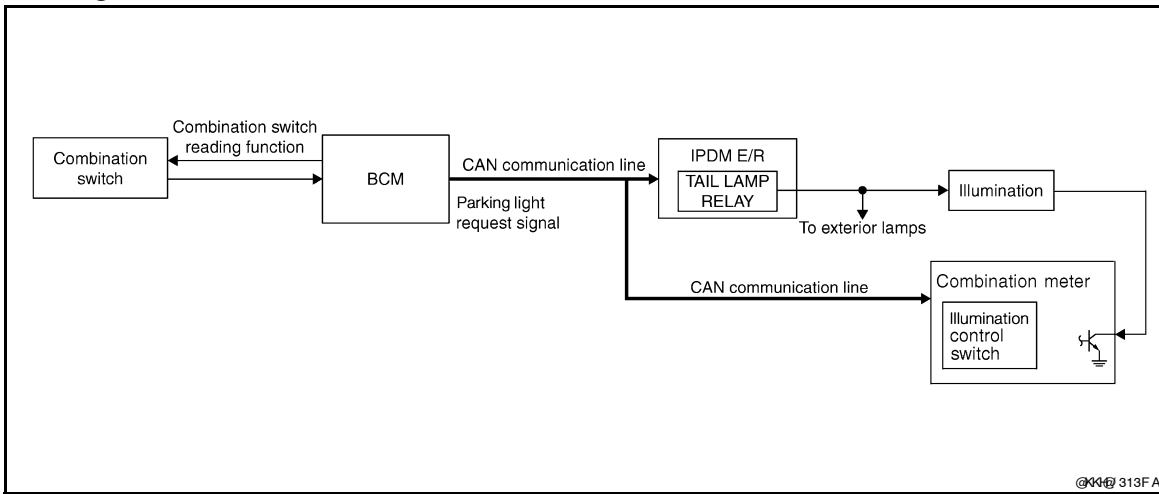


# ILLUMINATION CONTROL SYSTEM

< FUNCTION DIAGNOSIS >

## ILLUMINATION CONTROL SYSTEM

### System Diagram



### System Description

INFOID:000000004065610

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.

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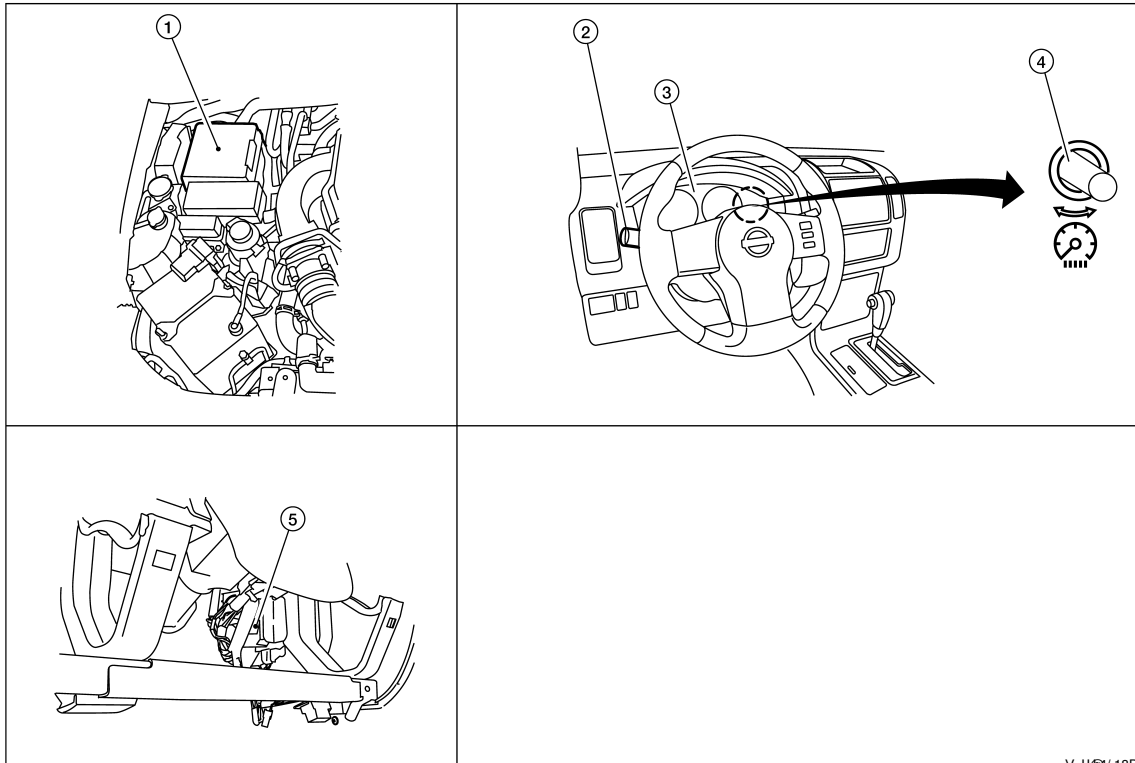
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# ILLUMINATION CONTROL SYSTEM

< FUNCTION DIAGNOSIS >

## Component Parts Location

INFOID:000000004065611



VJHE/18D

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 lower instrument panel LH removed)

## Component Description

INFOID:000000004065612

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 (BCM - COMMON ITEM)

INFOID:000000004459275

### APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to <a href="#">INL-56, "DTC Index"</a> .
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	<ul style="list-style-type: none"> <li>Enables to read and save the vehicle specification.</li> <li>Enables to write the vehicle specification when replacing BCM.</li> </ul>

### SYSTEM APPLICATION

BCM can perform the following functions for each system.

#### NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

System	Sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
BCM	BCM	×		
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP (retained accessory power)	RETAINED PWR	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
TPMS (tire pressure monitoring system)	AIR PRESSURE MONITOR	×	×	×
Panic alarm system	PANIC ALARM			×

### INT LAMP

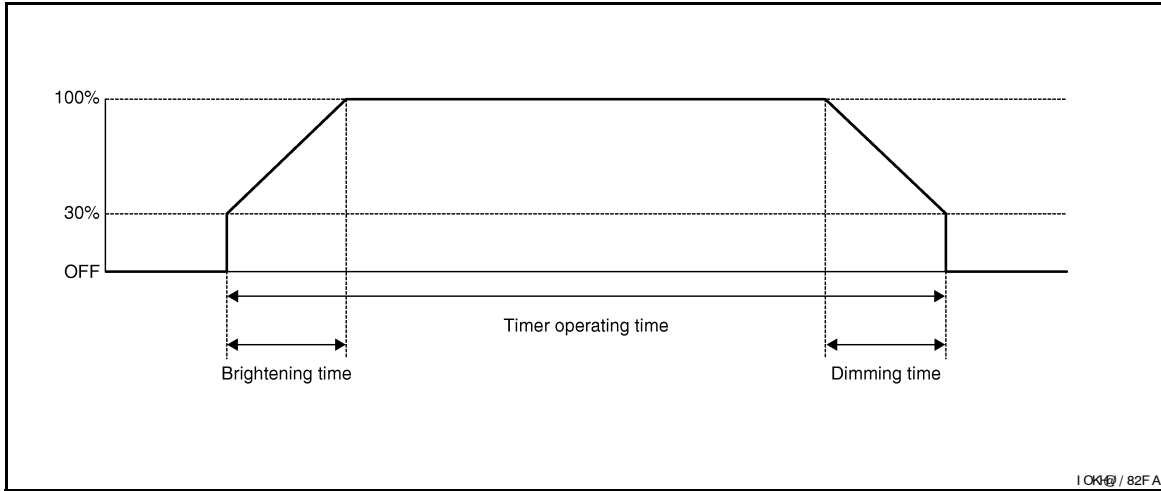
# DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

## INT LAMP : CONSULT-III Function (BCM - INT LAMP)

INFOID:000000004459276

### WORK SUPPORT



Work 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.	Sets the interior room lamp gradual brightening time.
	MODE 2*	1 sec.	
	MODE 3	2 sec.	
	MODE 4	3 sec.	
	MODE 5	0 sec.	
ROOM LAMP OFF TIME SET	MODE 1	0.5 sec.	Sets the interior room lamp gradual dimming time.
	MODE 2	1 sec.	
	MODE 3	2 sec.	
	MODE 4*	3 sec.	
	MODE 5	0 sec.	

\* : Initial setting

### DATA MONITOR

Monitor Item [Unit]	Description
IGN ON SW [ON/OFF]	Ignition switch (ON) status judges from IGN signal (ignition power supply)
KEY ON SW [ON/OFF]	The switch status input from key switch
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 input from door lock and unlock switch
KEY CYL UN-SW [ON/OFF]	Lock switch status input from door lock and unlock switch
CDL LOCK SW [ON/OFF]	Lock switch status input from door lock and unlock switch
CDL UNLOCK SW [ON/OFF]	Unlock switch status input from door lock and unlock switch

# DIAGNOSIS SYSTEM (BCM)

## < FUNCTION DIAGNOSIS >

Monitor Item [Unit]	Description
KEYLESS LOCK [ON/OFF]	Lock signal status received from remote keyless entry receiver (integrated in the BCM)
KEYLESS UNLOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver (integrated in the BCM)

## ACTIVE TEST

Test Item	Operation	Description
IGN ILLUM	ON	Outputs the ignition keyhole illumination control signal to turn the ignition keyhole illumination lamp ON.
	OFF	Stops the ignition keyhole illumination control signal to turn the ignition keyhole illumination lamp OFF.
INT LAMP	ON	Outputs the interior room lamp control signal to turn the interior room lamps ON.
	OFF	Stops the interior room lamp control signal to turn the interior room lamps OFF.
STEP LAMP TEST	ON	Outputs the step lamp control signal to turn the step lamps ON.
	OFF	Stops the step lamp control signal to turn the step lamps OFF.
LUGGAGE LAMP TEST	ON	Outputs the luggage lamp control signal to turn the luggage lamp ON.
	OFF	Stops the luggage lamp control signal to turn the luggage lamp OFF.

## BATTERY SAVER

### BATTERY SAVER : CONSULT-III Function (BCM - BATTERY SAVER)

INFOID:000000004459277

## WORK SUPPORT

Work Item	Setting Item	Setting	
ROOM LAMP TIMER SET	MODE 1*	15 min.	Sets the interior room lamp battery saver timer operating time.
	MODE 2	30 min.	

\*: Initial setting

## DATA MONITOR

Monitor Item [Unit]	Description
IGN ON SW [ON/OFF]	Ignition switch (ON) status judges from IGN signal (ignition power supply)
KEY ON SW [ON/OFF]	The switch status input from key switch
DOOR SW-DR [ON/OFF]	The switch status input from front door switch (driver side)
DOOR SW-AS [ON/OFF]	The switch status input from front door switch (passenger side)
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 input from door key cylinder switch
KEY CYL UN-SW [ON/OFF]	Unlock switch status input from door key cylinder switch
CDL LOCK SW [ON/OFF]	Lock switch status input from door lock and unlock switch
CDL UNLOCK SW [ON/OFF]	Unlock switch status input from door lock and unlock switch
KEYLESS LOCK [ON/OFF]	Lock signal status received from remote keyless entry receiver (integrated in the BCM)
KEYLESS UNLOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver (integrated in the BCM)

## ACTIVE TEST

## DIAGNOSIS SYSTEM (BCM)

### < FUNCTION DIAGNOSIS >

---

Test Item	Operation	Description
BATTERY SAVER	OFF	Cuts the interior room lamp power supply to turn interior room lamps OFF.
	ON	Outputs the interior room lamp power supply to turn interior room lamps ON.*

\*: Each lamp switch is in ON position.

# POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

## COMPONENT DIAGNOSIS

### POWER SUPPLY AND GROUND CIRCUIT

#### BCM

#### BCM : Diagnosis Procedure

INFOID:000000004459278

### 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		G (50A)
11	Ignition ACC or ON	4 (10A)
38	Ignition ON or START	1 (10A)

Is the fuse blown?

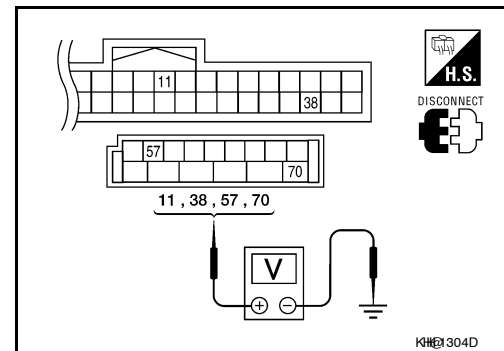
YES >> Replace the blown fuse or fusible link after repairing the affected circuit.

NO >> GO TO 2

### 2. CHECK POWER SUPPLY CIRCUIT

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

Connector	Terminals		Power source	Condition	Voltage (V) (Approx.)
	(+)	(-)			
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
	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

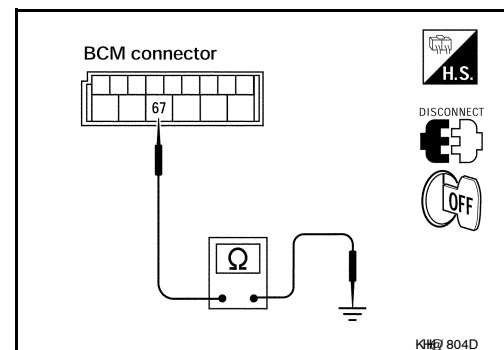
Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
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:000000004065617

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:000000004065618

#### 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
  - Room lamp 2nd row
3. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
4. While operating the test item, check that each interior room lamp turns ON/OFF.

**OFF** : Interior room lamp OFF

**ON** : Interior room lamp ON

Is the inspection result normal?

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

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

### Diagnosis Procedure

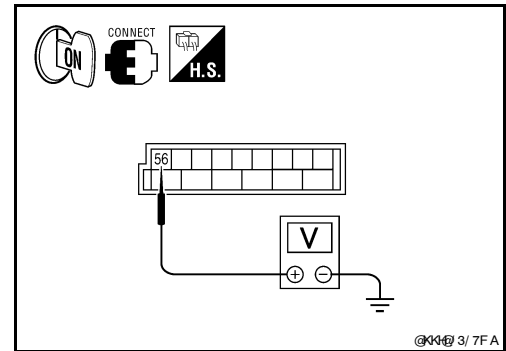
INFOID:000000004065619

#### 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. While operating the test item, check voltage between BCM connector M20 terminal 56 and ground.

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



Is the inspection result normal?

YES >> GO TO 2

NO >> Replace BCM. Refer to [BCS-57, "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
  - Room lamp 2nd row
3. Check continuity between BCM connector and each interior room lamp connector.



# BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

## < COMPONENT DIAGNOSIS >

BCM		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	
		Room lamp 2nd row	R12	2	

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair the harness or connectors.

### 3.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY SHORT CIRCUIT

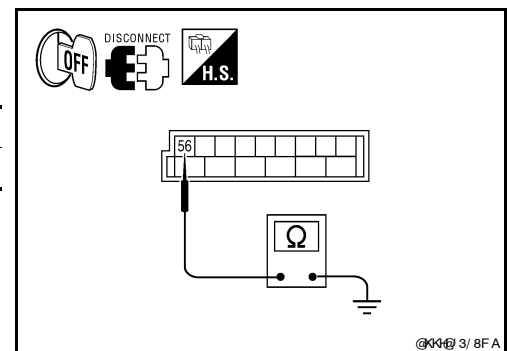
Check continuity between BCM connector M20 terminal 56 and ground.

Connector	Terminal	—	Continuity
M20	56	Ground	No

Is the inspection result normal?

YES >> Replace the interior room lamp. Refer to [INL-60](#), "[Removal and Installation](#)".

NO >> Repair the harness or connectors.



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# INTERIOR ROOM LAMP CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

## INTERIOR ROOM LAMP CONTROL CIRCUIT

### Description

INFOID:000000004065620

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:000000004065621

**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

### 1. CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT-III

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

**ON** : Interior room lamp gradual brightening

**OFF** : Interior room lamp gradual dimming

Is the inspection result normal?

YES >> Interior room lamp control circuit is normal.

NO >> Refer to [INL-18. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000004065622

### 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 connector M20 terminal 63 and ground.

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

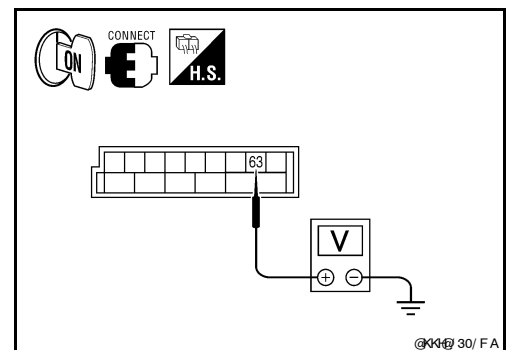
Is the inspection result normal?

YES >> Interior room lamp control circuit is operating normally.

Fixed ON>>GO TO 3

Fixed OFF>> GO TO 2

### 2. CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT



# INTERIOR ROOM LAMP CONTROL CIRCUIT

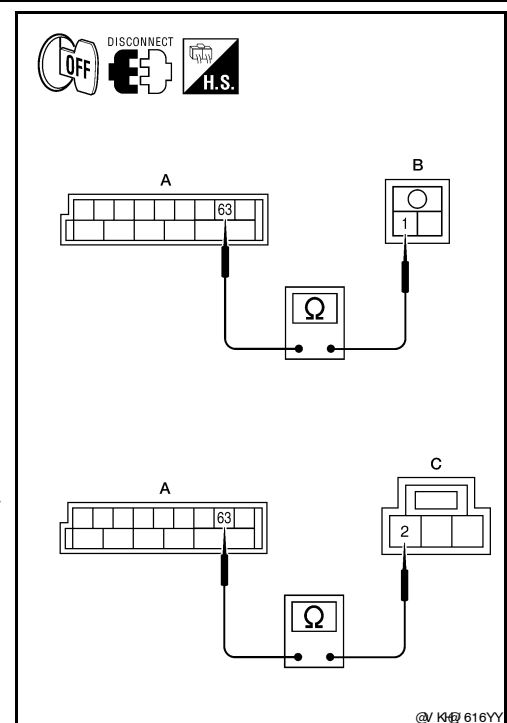
## < COMPONENT DIAGNOSIS >

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 connector M20 terminal 63 and interior room lamp connectors.

Terminal		Terminal			Continuity
Connector	Terminal	Component	Connector	Terminal	
M20 (A)	63	Room lamp 2nd row	R9 (B)	1	Yes
		Front room/map lamp	R12 (C)	2	

### Is the inspection result normal?

- YES >> Check interior room lamp for an open. If OK, replace the BCM. Refer to [BCS-57, "Removal and Installation"](#). If NG, replace the interior room lamp. Refer to [INL-60, "Removal and Installation"](#).
- NO >> Repair the harness or connectors.



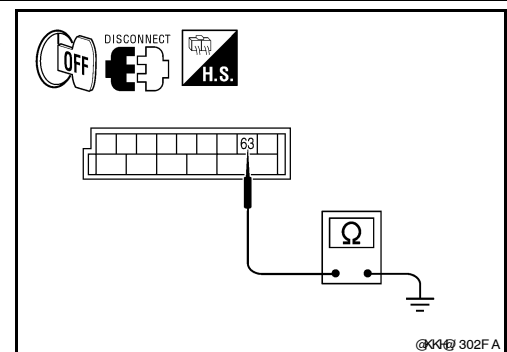
## 3. CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

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 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 [BCS-57, "Removal and Installation"](#). If NG, replace the interior room lamp. Refer to [INL-60, "Removal and Installation"](#).
- NO >> Repair the harness or connectors.



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INL

# CARGO LAMP CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

## CARGO LAMP CONTROL CIRCUIT

### Description

INFOID:000000004065623

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

### Component Function Check

INFOID:000000004065624

#### 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. While operating the test item, 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-20, "Diagnosis Procedure"](#).

### Diagnosis Procedure

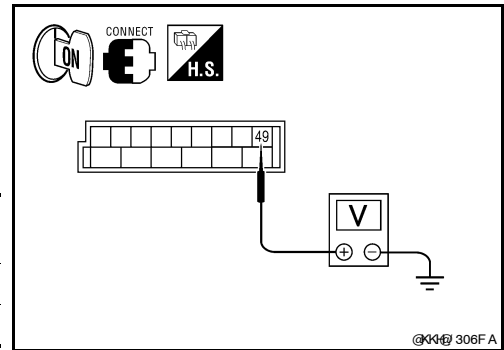
INFOID:000000004065625

### 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 connector M19 terminal 49 and ground.

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



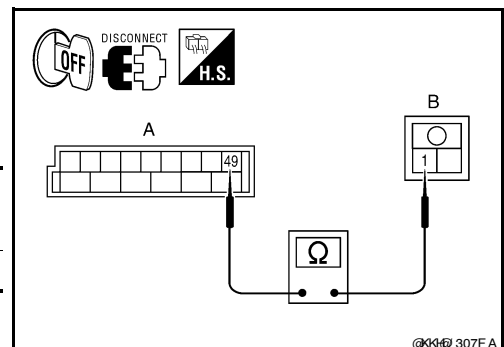
#### Is the inspection result normal?

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

### 2.CHECK CARGO LAMP OPEN CIRCUIT

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

BCM		Cargo lamp		Continuity
Connector	Terminal	Connector	Terminal	
M19 (A)	49	R11 (B)	1	Yes



#### Is the inspection result normal?

# CARGO LAMP CONTROL CIRCUIT

## < COMPONENT DIAGNOSIS >

- YES >> Check cargo lamp for an open. If OK, replace BCM. Refer to [BCS-57, "Removal and Installation"](#).  
 If NG, replace cargo lamp. Refer to [INL-60, "Removal and Installation"](#).
- NO >> Repair harness or connectors.

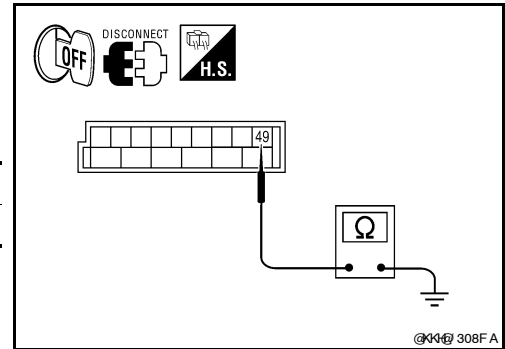
## 3. CHECK CARGO LAMP SHORT CIRCUIT

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

Connector	Terminal	—	Continuity
M19	49	Ground	No

### Is the inspection result normal?

- YES >> Check cargo lamp for a short circuit. If OK, replace BCM. Refer to [BCS-57, "Removal and Installation"](#). If NG, replace cargo lamp. Refer to [INL-60, "Removal and Installation"](#).
- NO >> Repair harness or connectors.



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# IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

## IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

### Description

INFOID:000000004065626

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

### Component Function Check

INFOID:000000004065627

#### 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. While operating the test item, check that the ignition keyhole illumination turns ON/OFF

**ON** : Ignition keyhole illumination ON

**OFF** : Ignition keyhole illumination OFF

#### Is the inspection result normal?

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

### Diagnosis Procedure

INFOID:000000004065628

### 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 connector M18 terminal 1 and ground.

Connector	Terminal	—	IGN ILLUM	Voltage
M18	1	Ground	ON	0V
			OFF	Battery voltage

#### Is the inspection result normal?

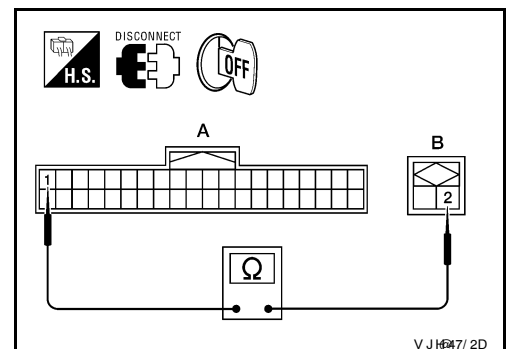
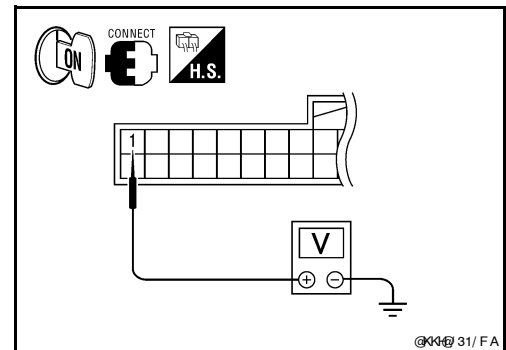
- YES >> Ignition keyhole illumination control circuit is operating normally.  
 Fixed ON>>>GO TO 3.  
 Fixed OFF>>> GO TO 2.

### 2. CHECK IGNITION KEYHOLE ILLUMINATION OPEN CIRCUIT

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

BCM		Ignition keyhole illumination		Continuity
Connector	Terminal	Connector	Terminal	
M18 (A)	1	M150 (B)	2	Yes

#### Is the inspection result normal?



# IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

## < COMPONENT DIAGNOSIS >

- YES >> Check the ignition keyhole illumination for an open. If OK, replace the BCM. Refer to [BCS-57. "Removal and Installation"](#). If NG, replace ignition keyhole illumination.
- NO >> Repair harness or connectors.

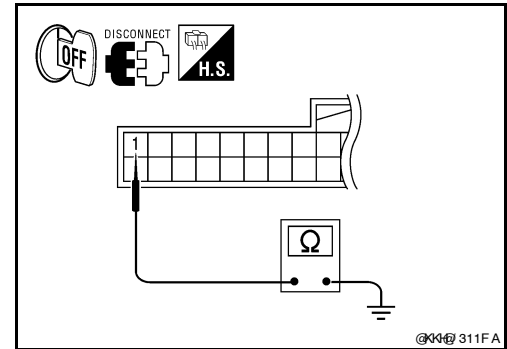
## 3. CHECK IGNITION KEYHOLE ILLUMINATION SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M18 and ignition keyhole illumination connector.
3. Check continuity between BCM 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-57. "Removal and Installation"](#). If NG, replace ignition keyhole illumination.
- NO >> Repair harness or connectors.



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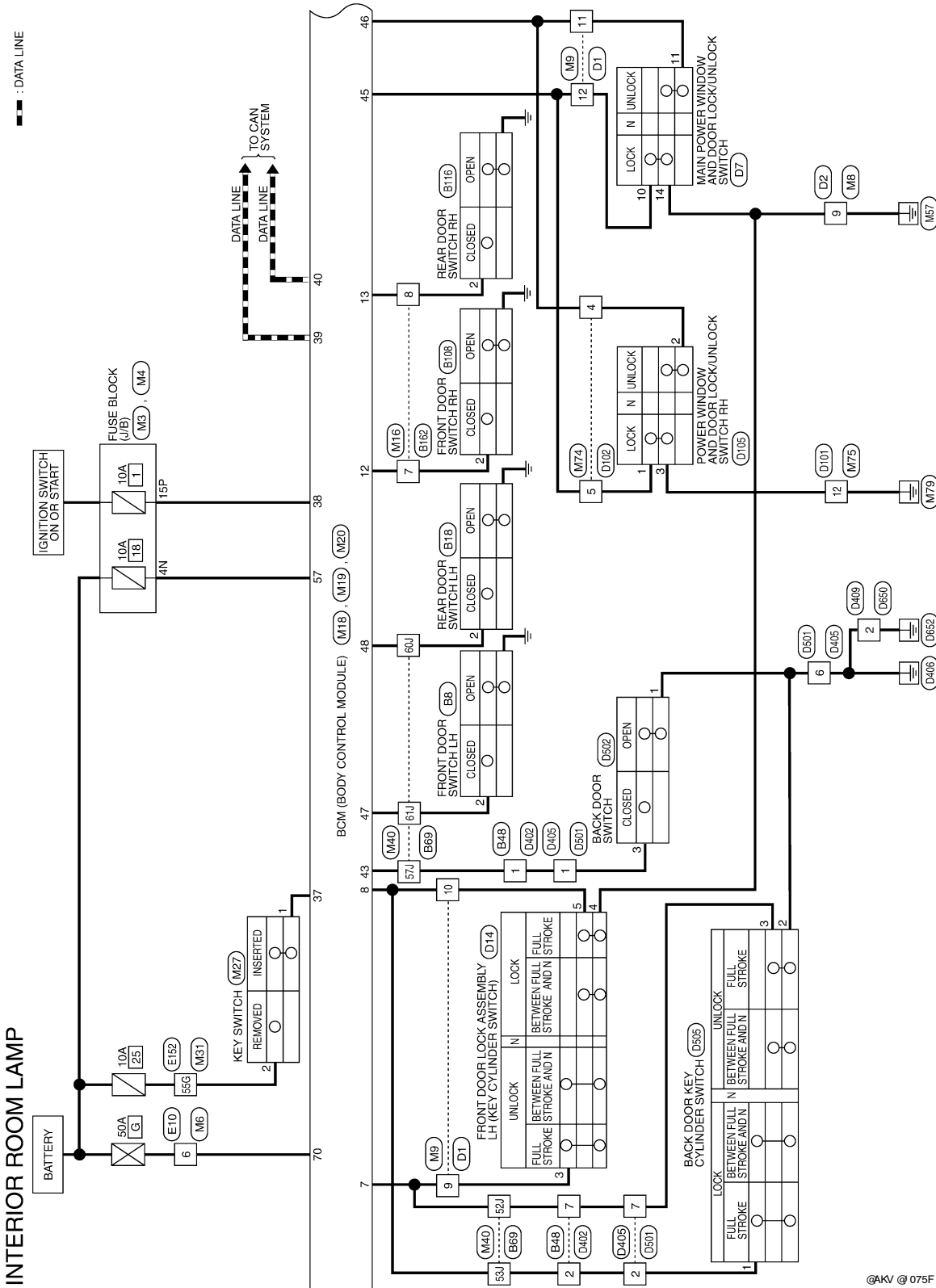
# INTERIOR ROOM LAMP CONTROL SYSTEM

< COMPONENT DIAGNOSIS >

## INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram

INFOID:000000004065629



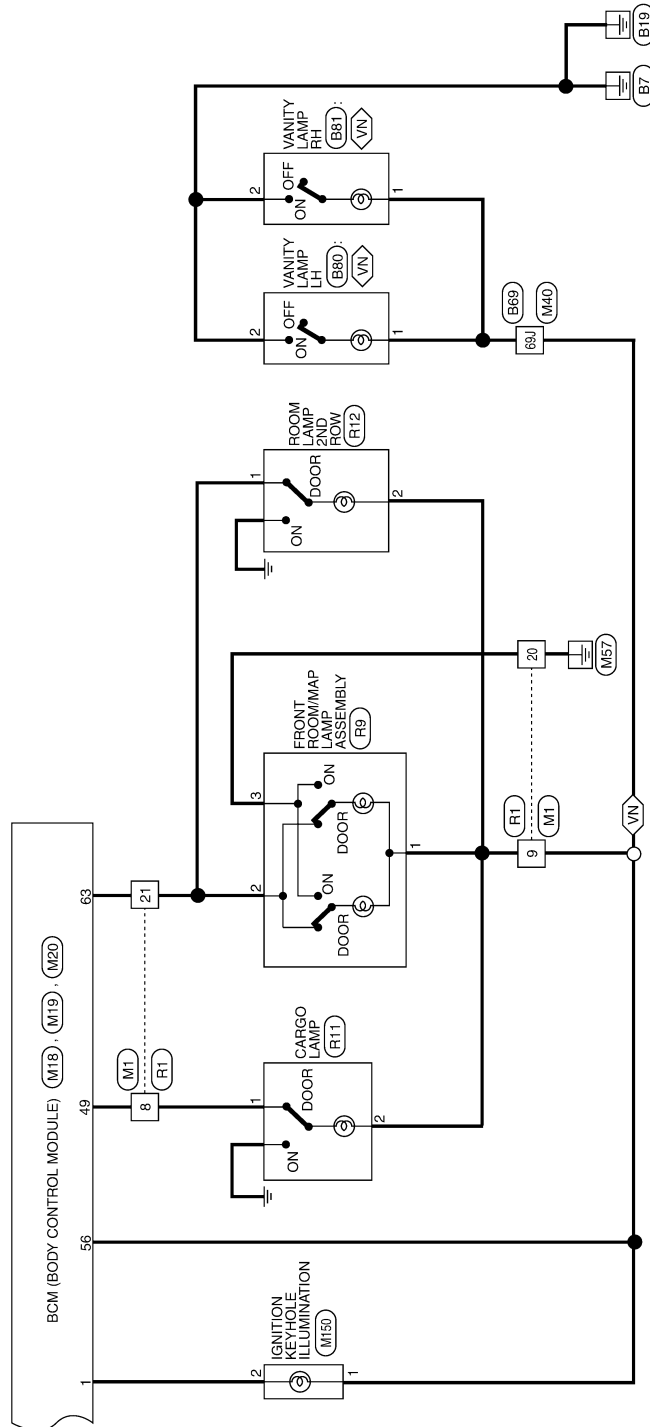
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# INTERIOR ROOM LAMP CONTROL SYSTEM

## < COMPONENT DIAGNOSIS >

(VN) : WITH VANITY LAMPS



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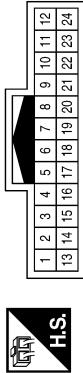
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# INTERIOR ROOM LAMP CONTROL SYSTEM

## < COMPONENT DIAGNOSIS >

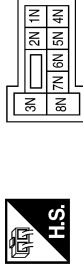
### INTERIOR ROOM LAMP CONNECTORS

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



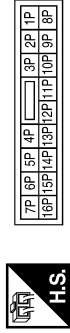
Terminal No.	Color of Wire	Signal Name
8	L	-
9	R/Y	-
20	B	-
21	BR	-

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



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

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



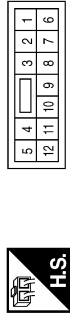
Terminal No.	Color of Wire	Signal Name
15P	W/R	-

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



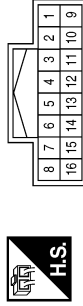
Terminal No.	Color of Wire	Signal Name
6	W	-

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



Terminal No.	Color of Wire	Signal Name
9	B	-

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	WHITE



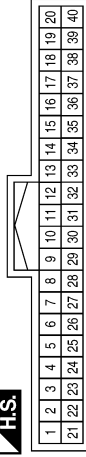
Terminal No.	Color of Wire	Signal Name
9	GR	-
10	SB	-
11	LG	-
12	V	-

# INTERIOR ROOM LAMP CONTROL SYSTEM

< COMPONENT DIAGNOSIS >

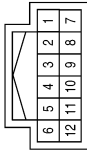
Terminal No.	Color of Wire	Signal Name
12	LG	DOOR SW (AS)
13	L	DOOR SW (RR)
37	B	KEY SW
38	W/R	IGN SW
39	L	CAN-H
40	P	CAN-L

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



Terminal No.	Color of Wire	Signal Name
1	BR	KEY RING OUTPUT
7	GR	KEY CYLINDER UNLOCK SW
8	SB	KEY CYLINDER LOCK SW

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Color	WHITE



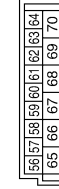
Terminal No.	Color of Wire	Signal Name
7	LG	-
8	L	-

Connector No.	M27
Connector Name	KEY SWITCH
Connector Color	WHITE



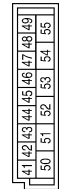
Terminal No.	Color of Wire	Signal Name
1	B	-
2	Y	-

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



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

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



Terminal No.	Color of Wire	Signal Name
43	Y	BACK DOOR SW
45	V	CDL LOCK SW
46	LG	CDL UNLOCK SW
47	GR	DOOR SW (DR)
48	P	DOOR SW (RL)
49	L	CARGO LAMP OUTPUT

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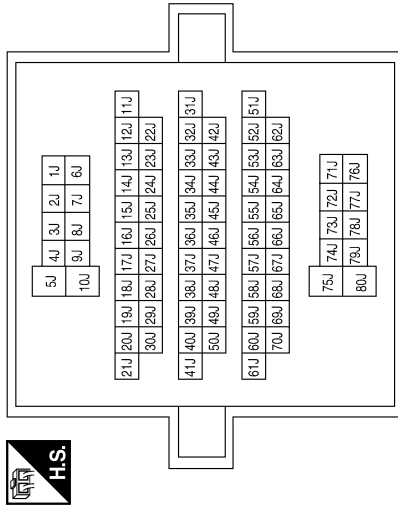


# INTERIOR ROOM LAMP CONTROL SYSTEM

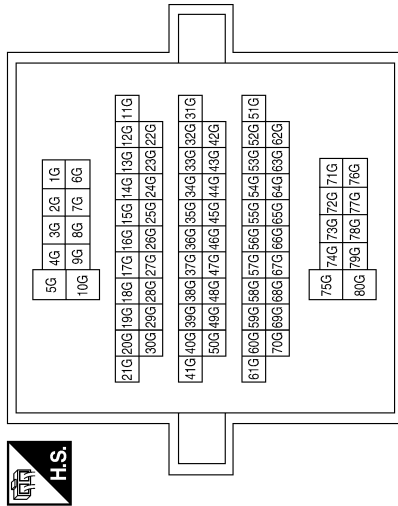
## < COMPONENT DIAGNOSIS >

Terminal No.	Color of Wire	Signal Name
52J	GR	-
53J	SB	-
57J	Y	-
60J	P	-
61J	GR	-
69J	R/Y	-

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



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



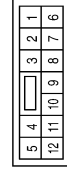
Terminal No.	Color of Wire	Signal Name
55G	Y	-

Connector No.	M150
Connector Name	IGNITION KEYHOLE ILLUMINATION
Connector Color	WHITE



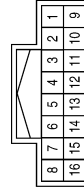
Terminal No.	Color of Wire	Signal Name
1	R/Y	-
2	BR	-

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



Terminal No.	Color of Wire	Signal Name
12	B	-

Connector No.	M74
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

# INTERIOR ROOM LAMP CONTROL SYSTEM

## < COMPONENT DIAGNOSIS >

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



1	2	3
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Terminal No.	2	Color of Wire	GR	Signal Name	-
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Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1G	2G	3G	4G	5G
6G	7G	8G	9G	10G

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

71G	72G	73G	74G	75G
76G	77G	78G	79G	80G

Terminal No.	55G	Color of Wire	Y	Signal Name	-
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Connector No.	E10
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3
4	5	6

Terminal No.	6	Color of Wire	W	Signal Name	-
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Connector No.	B18
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE



1	2	3
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Terminal No.	2	Color of Wire	P	Signal Name	-
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Connector No.	B48
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3
4	5	6
7	8	

Terminal No.	1	Color of Wire	Y	Signal Name	-
	2	Color of Wire	SB	Signal Name	-
	7	Color of Wire	GR	Signal Name	-

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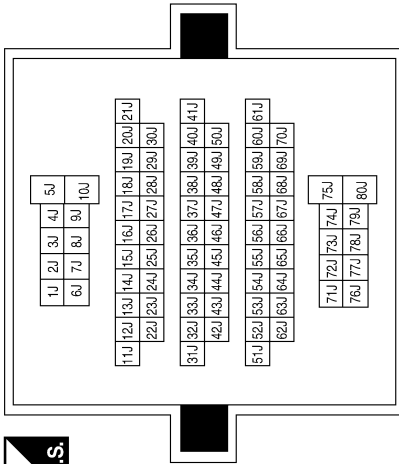
A B C D E F G H I J K L M N O P



# INTERIOR ROOM LAMP CONTROL SYSTEM

## < COMPONENT DIAGNOSIS >

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



Terminal No.	Color of Wire	Signal Name
52J	GR	-
53J	SB	-
57J	Y	-
60J	P	-
61J	GR	-
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	-

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



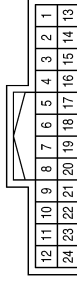
Terminal No.	Color of Wire	Signal Name
1	R/Y	-
2	B	-

Connector No.	B162
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	LG	-
8	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	-

# INTERIOR ROOM LAMP CONTROL SYSTEM

## < COMPONENT DIAGNOSIS >

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.	R11
Connector Name	CARGO LAMP
Connector Color	WHITE



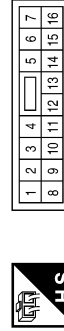
Terminal No.	Color of Wire	Signal Name
1	L	-
2	R/Y	-

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.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE



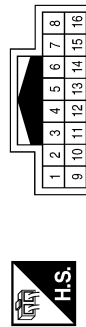
Terminal No.	Color of Wire	Signal Name
10	LG	-
11	W	-
14	B	-

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



Terminal No.	Color of Wire	Signal Name
9	B	-

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



Terminal No.	Color of Wire	Signal Name
9	R/W	-
10	SB	-
11	W	-
12	LG	-

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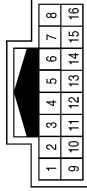
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# INTERIOR ROOM LAMP CONTROL SYSTEM

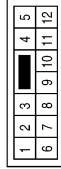
## < COMPONENT DIAGNOSIS >

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



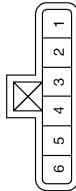
Terminal No.	Color of Wire	Signal Name
4	W	-
5	LG	-

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



Terminal No.	Color of Wire	Signal Name
12	B	-

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



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

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



Terminal No.	Color of Wire	Signal Name
1	Y	-
2	SB	-
6	B	-
7	GR	-

Connector No.	D402
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	Y	-
2	SB	-
7	GR	-

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



Terminal No.	Color of Wire	Signal Name
1	LG	-
2	W	-
3	B	-



# INTERIOR ROOM LAMP CONTROL SYSTEM

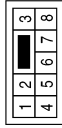
## < COMPONENT DIAGNOSIS >

Connector No.	D502
Connector Name	BACK DOOR SWITCH
Connector Color	WHITE



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

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



Terminal No.	Color of Wire	Signal Name
1	Y	-
2	SB	-
6	B	-
7	GR	-

Connector No.	D409
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	D650
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	D505
Connector Name	BACK DOOR KEY CYLINDER SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	SB	-
2	B	-
3	GR	-

@/ K4@ 361F A

A  
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D  
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INL  
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O  
P

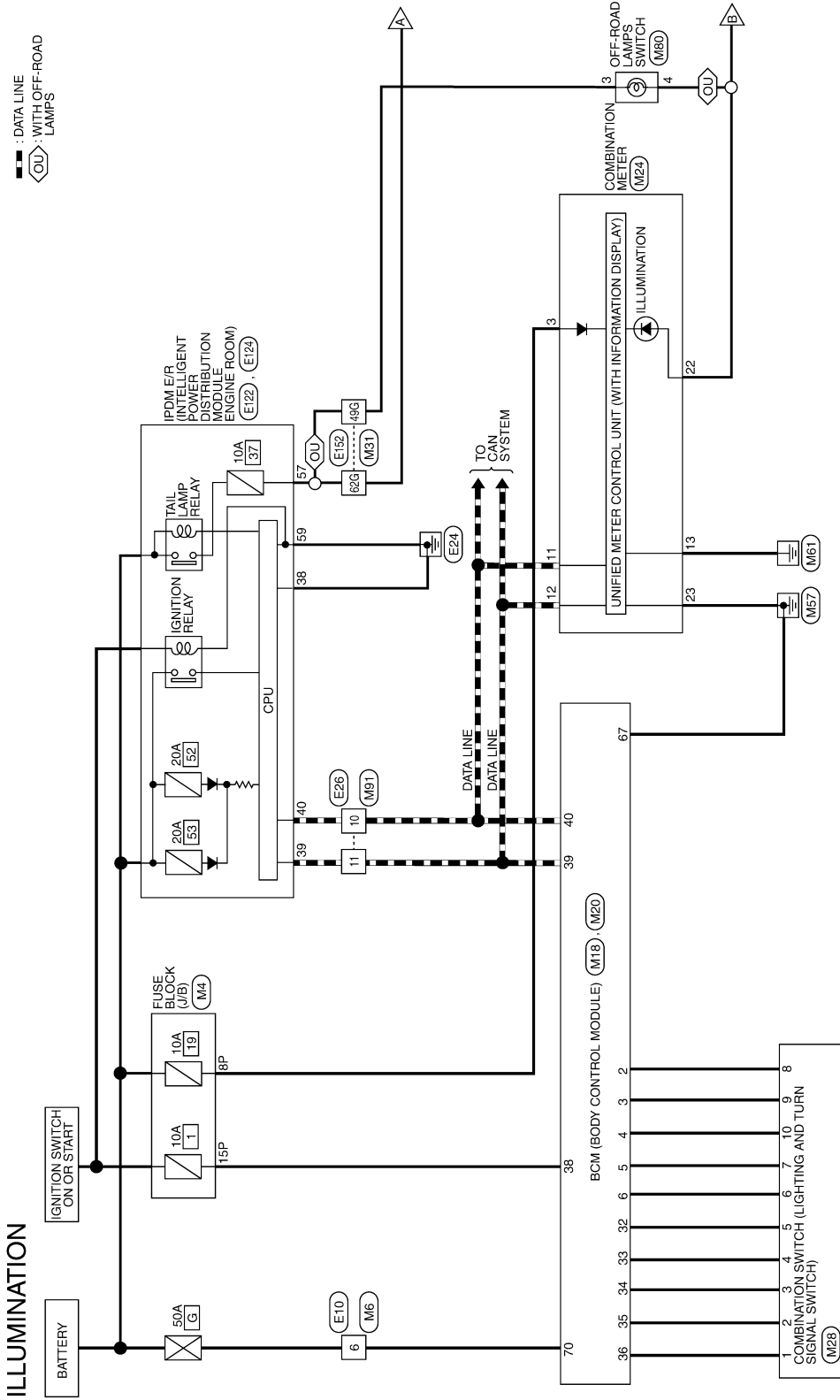
# ILLUMINATION

< COMPONENT DIAGNOSIS >

## ILLUMINATION

### Wiring Diagram

INFOID:000000004065630

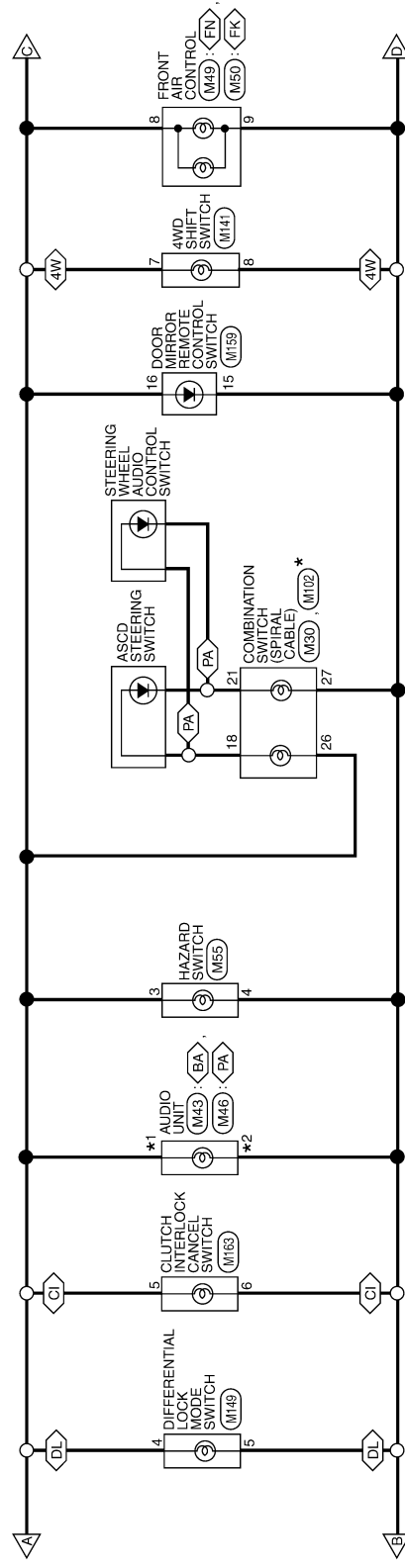


@AKV @ 077F A

# ILLUMINATION

## < COMPONENT DIAGNOSIS >

- <BA> : WITH BASE AUDIO SYSTEM
  - <CI> : WITH INTERLOCK CANCEL SWITCH
  - <DL> : WITH ELECTRONIC LOCKING REAR DIFFERENTIAL
  - <FK> : WITH VBC
  - <FN> : WITHOUT VBC
  - <4W> : WITH 4-WHEEL DRIVE
  - <PA> : WITH PREMIUM AUDIO SYSTEM
- <PA> : 8
  - <BA> : 9
- \*1
- <PA> : 7
  - <BA> : 8
- \*2



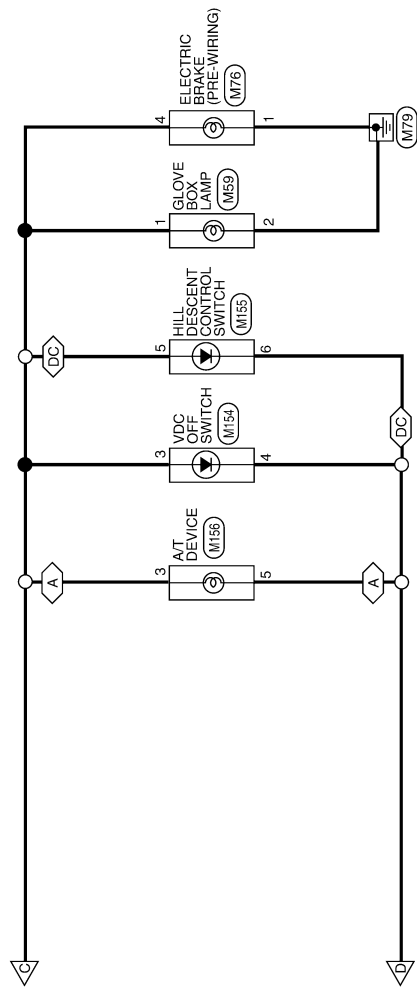
\* : THIS CONNECTOR IS NOT SHOWN IN "HARNES LAYOUT" OF PG SECTION.

A  
B  
C  
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G  
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K  
INL  
M  
N  
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# ILLUMINATION

## < COMPONENT DIAGNOSIS >

A : WITH AT  
DC : WITH HILL DESCENT CONTROL AND HILL START ASSIST



@AKV @ 08/FA

## ILLUMINATION CONNECTORS

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



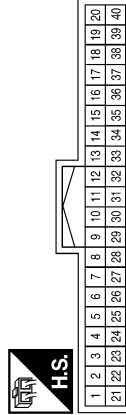
Terminal No.	Color of Wire	Signal Name
8P	R/Y	-
15P	W/R	-

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



Terminal No.	Color of Wire	Signal Name
6	W	-

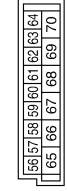
Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	P	INPUT 5
3	SB	INPUT 4
4	V	INPUT 3
5	L	INPUT 2
6	R	INPUT 1
32	O	OUTPUT 5
33	GR	OUTPUT 4
34	G	OUTPUT 3
35	BR	OUTPUT 2
36	LG	OUTPUT 1

Terminal No.	Color of Wire	Signal Name
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



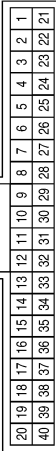
Terminal No.	Color of Wire	Signal Name
67	B	GND (POWER)
70	W	BAT (F/L)

©M4 526FA

# ILLUMINATION

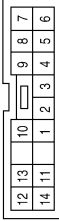
## < COMPONENT DIAGNOSIS >

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



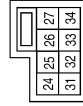
Terminal No.	Color of Wire	Signal Name
3	R/Y	BATTERY
11	P	CAN-L
12	L	CAN-H
13	GR	GROUND
22	BR	ILLUMINATION CONTROL
23	B	POWER GND

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE



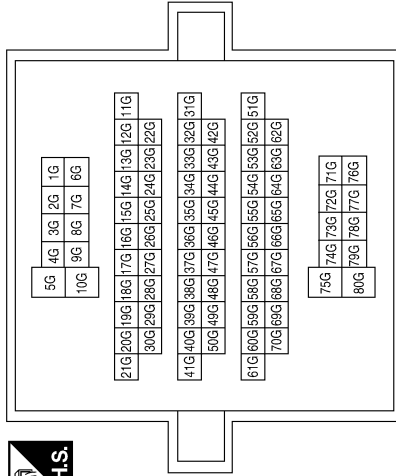
Terminal No.	Color of Wire	Signal Name
1	LG	INPUT 1
2	BR	INPUT 2
3	G	INPUT 3
4	GR	INPUT 4
5	O	INPUT 5
6	R	OUTPUT 1
7	L	OUTPUT 2
8	P	OUTPUT 5
9	SB	OUTPUT 4
10	V	OUTPUT 3

Connector No.	M30
Connector Name	COMBINATION SWITCH
Connector Color	GRAY



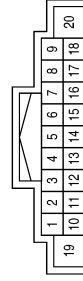
Terminal No.	Color of Wire	Signal Name
26	R	ILL+
27	G	ILL-

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



Terminal No.	Color of Wire	Signal Name
49G	V	-
62G	R	-

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

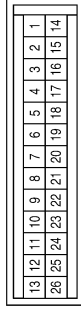


Terminal No.	Color of Wire	Signal Name
8	GR	ILL CONT
9	R	LIGHT SW

# ILLUMINATION

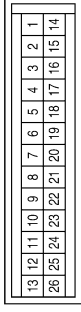
## < COMPONENT DIAGNOSIS >

Connector No.	M50
Connector Name	FRONT AIR CONTROL (WITH VBC)
Connector Color	BLACK



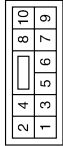
Terminal No.	Color of Wire	Signal Name
8	G	-
9	BR	-

Connector No.	M49
Connector Name	FRONT AIR CONTROL (WITHOUT VBC)
Connector Color	BLACK



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

Connector No.	M46
Connector Name	AUDIO UNIT (WITH PREMIUM AUDIO SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	GR	ILL CONT
8	R	LIGHT SW

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



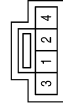
Terminal No.	Color of Wire	Signal Name
1	B	GROUND
4	R	ILL (TAIL)

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



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

Connector No.	M55
Connector Name	HAZARD SWITCH
Connector Color	WHITE



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

@M4 528FA

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INL

# ILLUMINATION

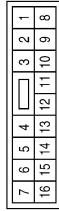
## < COMPONENT DIAGNOSIS >

Connector No.	M102
Connector Name	COMBINATION SWITCH
Connector Color	GRAY



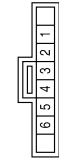
Terminal No.	Color of Wire	Signal Name
18	R	-
21	G	-

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



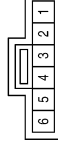
Terminal No.	Color of Wire	Signal Name
10	P	-
11	L	-

Connector No.	M80
Connector Name	OFF-ROAD LAMPS SWITCH
Connector Color	GRAY



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

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



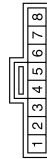
Terminal No.	Color of Wire	Signal Name
3	R	-
4	BR	-

Connector No.	M149
Connector Name	DIFFERENTIAL LOCK MODE SWITCH
Connector Color	WHITE



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

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



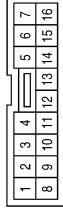
Terminal No.	Color of Wire	Signal Name
7	R	LIGHT_SW
8	BR	GND



# ILLUMINATION

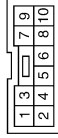
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Connector No.	M159
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH
Connector Color	WHITE



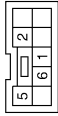
Terminal No.	Color of Wire	Signal Name
15	BR	-
16	R	-

Connector No.	M156
Connector Name	A/T DEVICE
Connector Color	WHITE



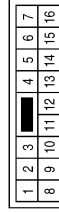
Terminal No.	Color of Wire	Signal Name
3	R	-
5	BR	-

Connector No.	M155
Connector Name	HILL DESCENT CONTROL SWITCH
Connector Color	WHITE



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

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



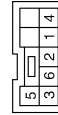
Terminal No.	Color of Wire	Signal Name
10	P	-
11	L	-

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



Terminal No.	Color of Wire	Signal Name
6	W	-

Connector No.	M163
Connector Name	CLUTCH INTERLOCK CANCEL SWITCH
Connector Color	WHITE



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

@M4 530FA

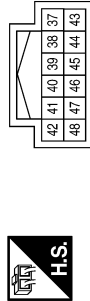
A  
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D  
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G  
H  
I  
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O  
P

INL

# ILLUMINATION

## < COMPONENT DIAGNOSIS >

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



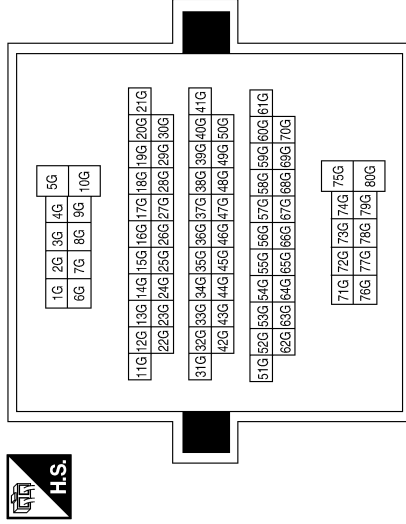
Terminal No.	Color of Wire	Signal Name
38	B	GND (SIGNAL)
39	L	CAN-H
40	P	CAN-L

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 LAMP
59	B	GND (POWER)

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



Terminal No.	Color of Wire	Signal Name
49G	V	-
62G	R	-

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## ECU DIAGNOSIS

### BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000004459279

#### VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
IGN ON SW	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
KEY ON SW	Mechanical key is removed from key cylinder	OFF
	Mechanical key is inserted to key cylinder	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	Door lock/unlock switch does not operate	OFF
	Press door lock/unlock switch to the unlock side	ON
DOOR SW-DR	Driver's door closed	OFF
	Driver's door opened	ON
DOOR SW-AS	Passenger door closed	OFF
	Passenger door opened	ON
DOOR SW-RR	Rear RH door closed	OFF
	Rear RH door opened	ON
DOOR SW-RL	Rear LH door closed	OFF
	Rear LH door opened	ON
BACK DOOR SW	Back door closed	OFF
	Back door opened	ON
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF
	Driver door key cylinder LOCK position	ON
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF
	Driver door key cylinder UNLOCK position	ON
KEYLESS LOCK	"LOCK" button of key fob is not pressed	OFF
	"LOCK" button of key fob is pressed	ON
KEYLESS UNLOCK	"UNLOCK" button of key fob is not pressed	OFF
	"UNLOCK" button of key fob is pressed	ON
ACC ON SW	Ignition switch OFF	OFF
	Ignition switch ACC or ON	ON
REAR DEF SW	Rear window defogger switch OFF	OFF
	Rear window defogger switch ON	ON
LIGHT SW 1ST	Lighting switch OFF	OFF
	Lighting switch 1ST	ON
BUCKLE SW	The seat belt (driver side) is unfastened. [Seat belt switch (driver side) OFF]	OFF
	The seat belt (driver side) is fastened. [Seat belt switch (driver side) ON]	ON
KEYLESS PANIC	PANIC button of key fob is not pressed	OFF
	PANIC button of key fob is pressed	ON

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
KEYLESS TRUNK	<b>NOTE:</b> The item is indicated, but not monitored.	OFF
TRNK OPN MNTR	<b>NOTE:</b> The item is indicated, but not monitored.	OFF
RKE LCK-UNLCK	LOCK/UNLOCK button of key fob is not pressed and held simultaneously	OFF
	LOCK/UNLOCK button of key fob is pressed and held simultaneously	ON
RKE KEEP UNLK	UNLOCK button of key fob is not pressed	OFF
	UNLOCK button of key fob is pressed and held	ON
HI BEAM SW	Lighting switch OFF	OFF
	Lighting switch HI	ON
HEAD LAMP SW 1	Lighting switch OFF	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Lighting switch OFF	OFF
	Lighting switch 2ND	ON
AUTO LIGHT SW	<b>NOTE:</b> The item is indicated, but not monitored.	OFF
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
RR FOG SW	<b>NOTE:</b> The item is indicated, but not monitored.	OFF
TURN SIGNAL R	Turn signal switch OFF	OFF
	Turn signal switch RH	ON
TURN SIGNAL L	Turn signal switch OFF	OFF
	Turn signal switch LH	ON
CARGO LAMP SW	Cargo lamp switch OFF	OFF
	Cargo lamp switch ON	ON
OPTICAL SENSOR	<b>NOTE:</b> The item is indicated, but not monitored.	OFF
IGN SW CAN	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
FR WIPER HI	Front wiper switch OFF	OFF
	Front wiper switch HI	ON
FR WIPER LOW	Front wiper switch OFF	OFF
	Front wiper switch LO	ON
FR WIPER INT	Front wiper switch OFF	OFF
	Front wiper switch INT	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7
FR WIPER STOP	Any position other than front wiper stop position	OFF
	Front wiper stop position	ON
VEHICLE SPEED	While driving	Equivalent to speedometer reading

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status	
RR WIPER ON	Rear wiper switch OFF	OFF	A
	Rear wiper switch ON	ON	
RR WIPER INT	Rear wiper switch OFF	OFF	B
	Rear wiper switch INT	ON	
RR WASHER SW	Rear washer switch OFF	OFF	C
	Rear washer switch ON	ON	
RR WIPER STOP	Any position other than rear wiper stop position	OFF	D
	Rear wiper stop position	ON	
H/L WASH SW	<b>NOTE:</b> The item is indicated, but not monitored.	OFF	
HAZARD SW	Hazard switch OFF	OFF	E
	Hazard switch ON	ON	
BRAKE SW	Brake pedal is not depressed	OFF	F
	Brake pedal is depressed	ON	
FAN ON SIG	Blower fan motor switch OFF	OFF	G
	Blower fan motor switch ON (other than OFF)	ON	
AIR COND SW	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	OFF	H
	Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	ON	
TRNK OPNR SW	<b>NOTE:</b> The item is indicated, but not monitored.	OFF	I
TRUNK CYL SW	<b>NOTE:</b> The item is indicated, but not monitored.	OFF	J
HOOD SW	<b>NOTE:</b> The item is indicated, but not monitored.	OFF	
OIL PRESS SW	• Ignition switch OFF or ACC • Engine running	OFF	K
	Ignition switch ON	ON	
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire	INL
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	M
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire	N
ID REGST FL1	ID of front LH tire transmitter is registered	DONE	O
	ID of front LH tire transmitter is not registered	YET	
ID REGST FR1	ID of front RH tire transmitter is registered	DONE	P
	ID of front RH tire transmitter is not registered	YET	
ID REGST RR1	ID of rear RH tire transmitter is registered	DONE	
	ID of rear RH tire transmitter is not registered	YET	
ID REGST RL1	ID of rear LH tire transmitter is registered	DONE	
	ID of rear LH tire transmitter is not registered	YET	
WARNING LAMP	Tire pressure indicator OFF	OFF	
	Tire pressure indicator ON	ON	

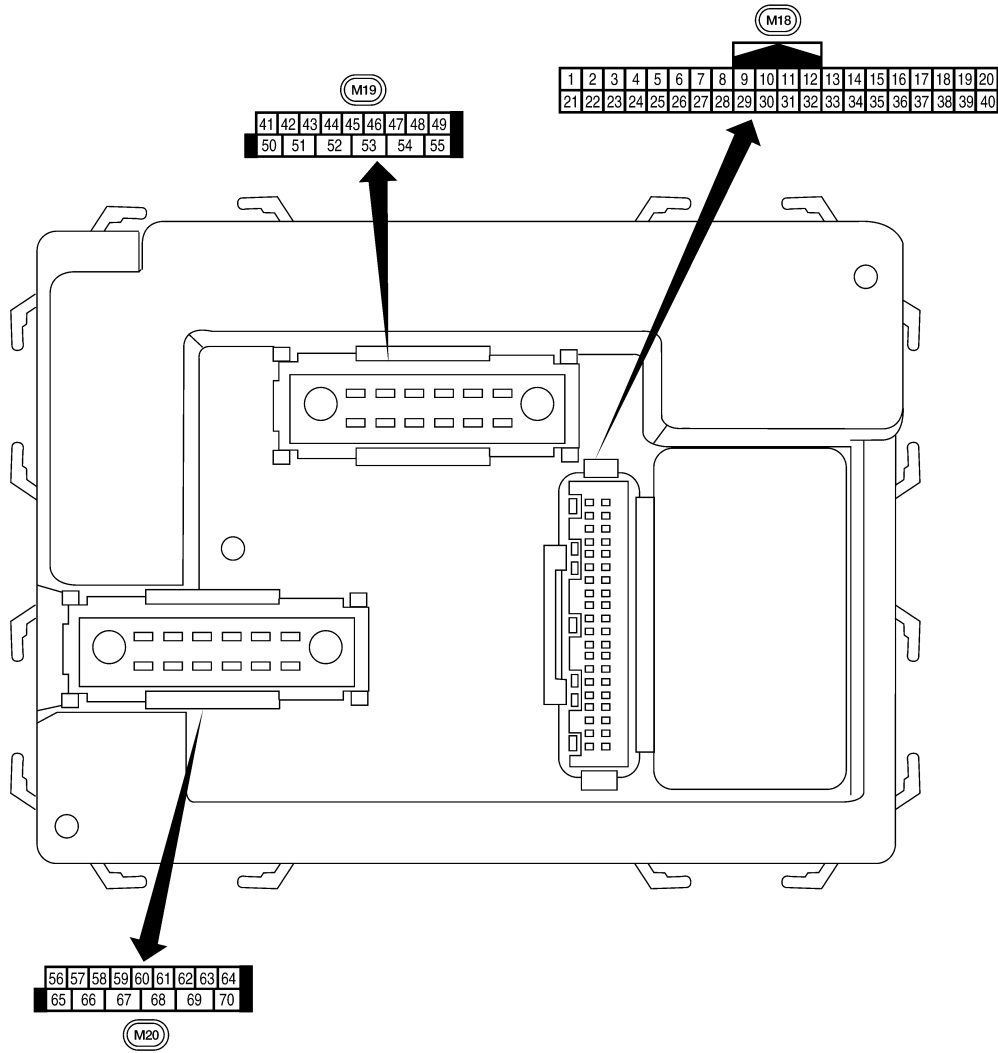
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
BUZZER	Tire pressure warning alarm is not sounding	OFF
	Tire pressure warning alarm is sounding	ON

## Terminal Layout

INFOID:000000004459280



# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## Physical Values

INFOID:000000004459281

Terminal	Wire color	Signal name	Signal input/output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
1	BR	Ignition keyhole illumination	Output	OFF	Door is locked (SW OFF)	Battery voltage
					Door is unlocked (SW ON)	0V
2	P	Combination switch input 5	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	<p style="text-align: right;">RJI 180D</p>
3	SB	Combination switch input 4	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	<p style="text-align: right;">RJI 181D</p>
4	V	Combination switch input 3	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	<p style="text-align: right;">RJI 180D</p>
5	L	Combination switch input 2	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	<p style="text-align: right;">RJI 181D</p>
6	R	Combination switch input 1				
7	GR	Front door lock assembly LH (key cylinder switch) and back door key cylinder switch (unlock)	Input	OFF	ON (open, 2nd turn)	Momentary 1.5V
					OFF (closed)	0V
8	SB	Front door lock assembly LH (key cylinder switch) and back door key cylinder switch (lock)	Input	OFF	ON (open)	Momentary 1.5V
					OFF (closed)	0V
9	Y	Rear window defogger switch	Input	ON	Rear window defogger switch ON	0V
					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

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# BCM (BODY CONTROL MODULE)

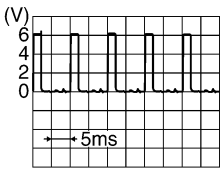
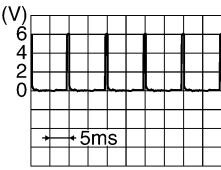
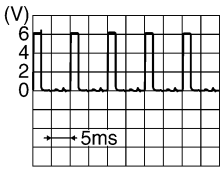
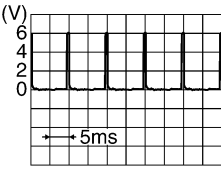
## < ECU DIAGNOSIS >

Terminal	Wire color	Signal name	Signal input/output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
12	LG	Front door switch RH	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage
13	L	Rear door switch RH	Input	OFF	ON (open)	0V
					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 supply)	Output	OFF	Ignition switch OFF	 KHE0782D
20	G	Remote keyless entry receiver (signal)	Input	OFF	Stand-by (keyfob buttons released)	 KHE0783D
					When remote keyless entry receiver receives signal from keyfob (keyfob buttons pressed)	 KHE0784D
21	GR	NATS antenna amp.	Input	OFF → ON	Ignition switch (OFF → 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 → illuminates (Every 2.4 seconds)	Battery voltage → 0V
25	BR	NATS antenna amp.	Input	OFF → ON	Ignition switch (OFF → 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
					A/C switch ON	0V
28	R	Front blower monitor	Input	ON	Front blower motor OFF	Battery voltage
					Front blower motor ON	0V
29	G	Hazard switch	Input	OFF	ON	0V
					OFF	5V
31	R	Off-road lamps switch	Input	ON	ON	0V
					OFF	5V



# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

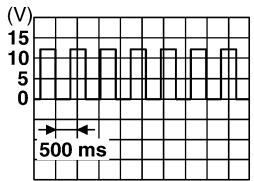
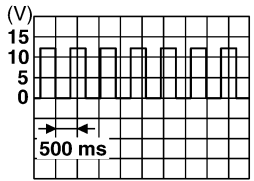
Terminal	Wire color	Signal name	Signal input/output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
32	O	Combination switch output 5	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 <p style="text-align: right; font-size: small;">RJ18180D</p>
33	GR	Combination switch output 4	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 <p style="text-align: right; font-size: small;">RJ18181D</p>
34	G	Combination switch output 3	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 <p style="text-align: right; font-size: small;">RJ18180D</p>
35	BR	Combination switch output 2	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 <p style="text-align: right; font-size: small;">RJ18181D</p>
36	LG	Combination switch output 1				
37	B	Key switch and key lock solenoid	Input	OFF	Key inserted	Battery voltage
					Key inserted	0V
38	W/R	Ignition switch (ON)	Input	ON	—	Battery voltage
39	L	CAN-H	—	—	—	—
40	P	CAN-L	—	—	—	—
42	L	Off-road lamps	Output	ON	Off-road lamps switch	ON: 0V OFF: Battery voltage
43	Y	Back door switch	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage
44	O	Rear wiper auto stop switch	Input	ON	Rise up position (rear wiper arm on stopper)	0V
					A Position (full clockwise stop position)	Battery voltage
					Forward sweep (counterclockwise direction)	Fluctuating
					B Position (full counterclockwise stop position)	0V
					Reverse sweep (clockwise direction)	Fluctuating

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# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal	Wire color	Signal name	Signal input/output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
45	V	Lock switch	Input	OFF	ON (lock)	0V
					OFF	Battery voltage
46	LG	Unlock switch	Input	OFF	ON (unlock)	0V
					OFF	Battery voltage
47	GR	Front door switch LH	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage
48	P	Rear door switch LH	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage
49	L	Cargo lamp	Output	OFF	Any door open (ON)	0V
					All doors closed (OFF)	Battery voltage
50	W	Off-road lamps relay	Output	ON	Off-road lamps switch	ON
					OFF	Battery voltage
51	G	Trailer turn signal (right)	Output	ON	Turn right ON	 <p style="text-align: right; font-size: small;">RJ H2 / 81</p>
52	V	Trailer turn signal (left)	Output	ON	Turn left ON	 <p style="text-align: right; font-size: small;">RJ H2 / 81</p>
55	W	Rear wiper output circuit 1	Output	ON	OFF	0
					ON	Battery voltage
56	V	Battery saver output	Output	OFF	30 minutes after ignition switch is turned OFF	0V
				ON	—	Battery voltage
57	R/Y	Battery power supply	Input	OFF	—	Battery voltage
59	GR	Front door lock assembly LH actuator (unlock)	Output	OFF	OFF (neutral)	0V
					ON (unlock)	Battery voltage
60	LG	Turn signal (left)	Output	ON	Turn left ON	 <p style="text-align: right; font-size: small;">RJ H2 / 81</p>

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal	Wire color	Signal name	Signal input/output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
61	G	Turn signal (right)	Output	ON	Turn right ON	
63	BR	Interior room/map lamp	Output	OFF	Any door switch	ON (open) 0V
						OFF (closed) Battery voltage
65	V	All door lock actuators (lock)	Output	OFF	OFF (neutral)	0V
					ON (lock)	Battery voltage
66	L	Front door lock actuator RH, rear door lock actuators LH/RH and back door lock actuator (unlock)	Output	OFF	OFF (neutral)	0V
					ON (unlock)	Battery voltage
67	B	Ground	Input	ON	—	0V
68	O	Power window power supply (RAP)	Output	—	Ignition switch ON	Battery voltage
					Within 45 seconds after ignition switch OFF	Battery voltage
					More than 45 seconds after ignition switch OFF	0V
					When front door LH or RH is open or power window timer operates	0V
70	W	Battery power supply	Input	OFF	—	Battery voltage

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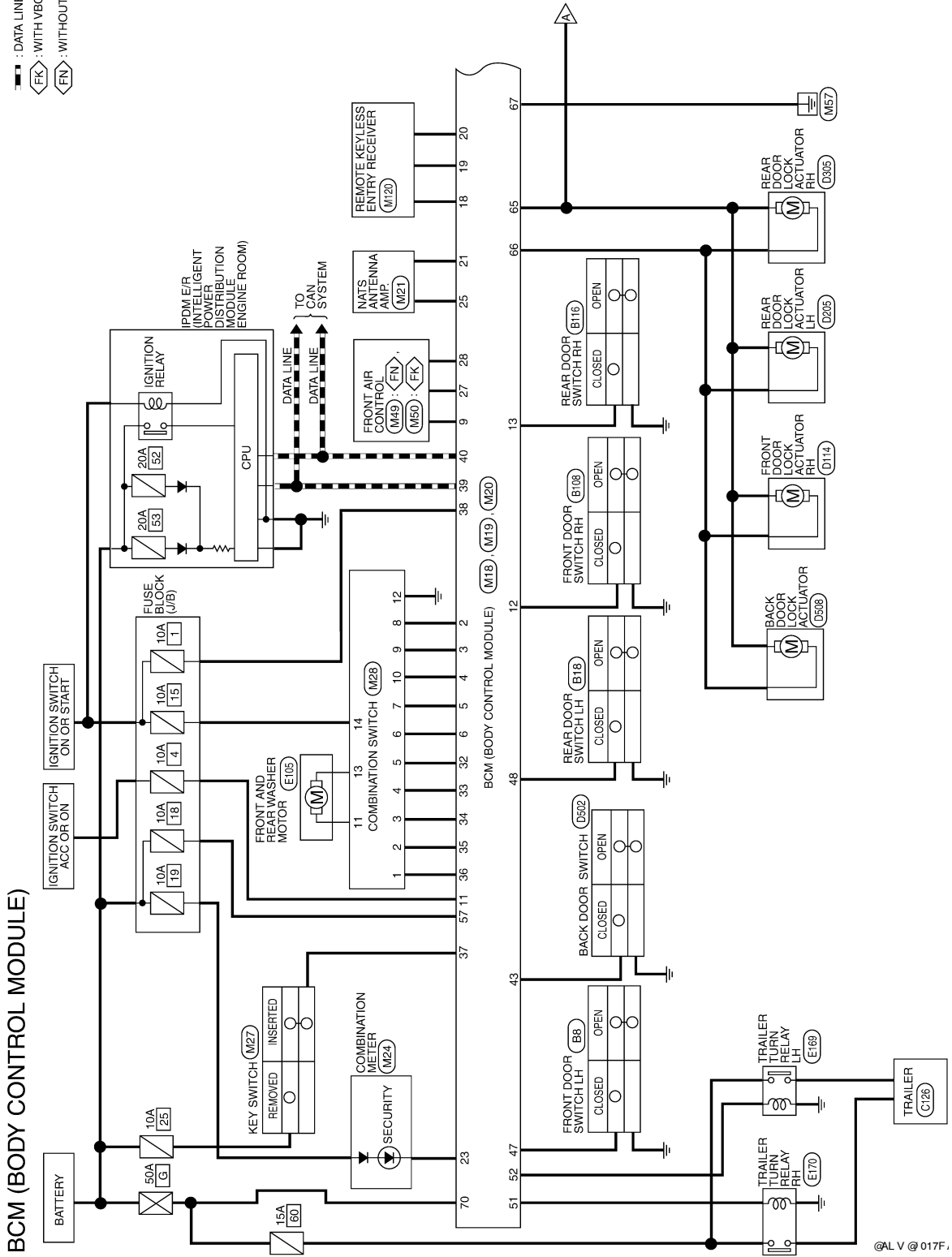
# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## Wiring Diagram

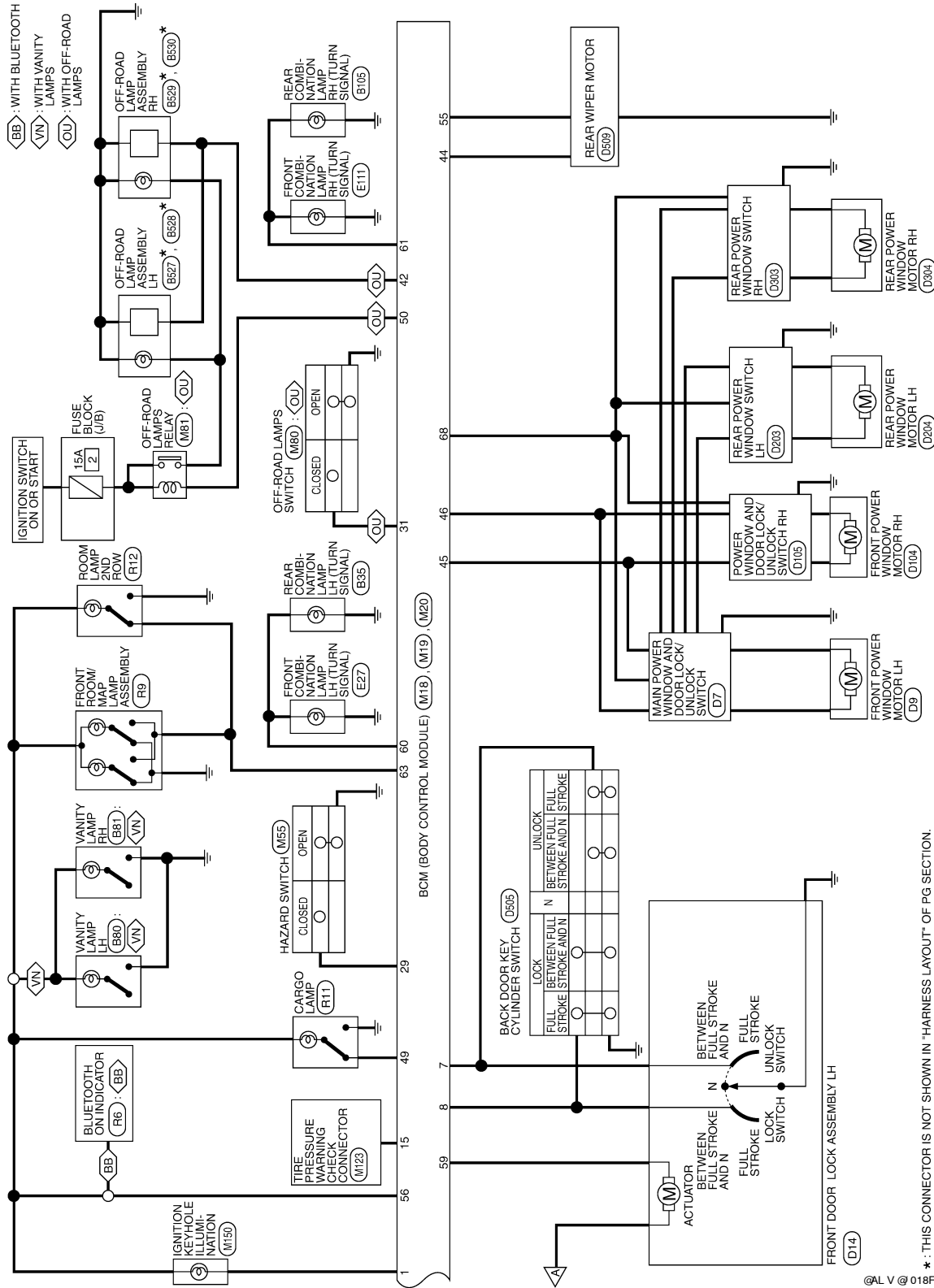
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 : DATA LINE  
 : WITH VBC  
 : WITHOUT VBC



# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >



\* : THIS CONNECTOR IS NOT SHOWN IN "HARNES LAYOUT" OF PG SECTION.

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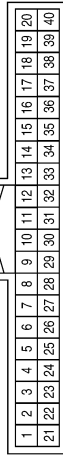


# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## BCM (BODY CONTROL MODULE) CONNECTORS

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



Terminal No.	Color of Wire	Signal Name
1	BR	KEY RING OUTPUT
2	P	INPUT 5
3	SB	INPUT 4
4	V	INPUT 3
5	L	INPUT 2
6	R	INPUT 1

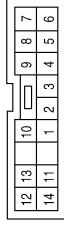
Terminal No.	Color of Wire	Signal Name
7	GR	KEY CYLINDER UNLOCK SW
8	SB	KEY CYLINDER LOCK SW
9	Y	DEFOGGER SW
10	-	-
11	G/B	ACC. SW
12	LG	DOOR SW (AS)
13	L	DOOR SW (RR)
14	-	-
15	W	TPMS MODE TRIGGER SW
16	-	-
17	-	-
18	BR	KEYLESS & AUTO LIGHT SENSOR GND
19	V	KEYLESS TUNER POWER SUPPLY OUTPUT
20	G	KEYLESS TUNER SIGNAL
21	GR	IMMOBILIZER ANTENNA SIGNAL (CLOCK)

Terminal No.	Color of Wire	Signal Name
22	-	-
23	G	SECURITY INDICATOR OUTPUT
24	-	-
25	BR	IMMOBILIZER ANTENNA SIG (RX, TX)
26	-	-
27	W	AIRCON SW
28	R	BLOWER FAN SW
29	G	HAZARD SW
30	-	-
31	R	OFF ROAD LAMP SW
32	O	OUTPUT 5
33	GR	OUTPUT 4
34	G	OUTPUT 3
35	BR	OUTPUT 2
36	LG	OUTPUT 1
37	B	KEY SW
38	W/R	IGN SW
39	L	CAN-H
40	P	CAN-L

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE



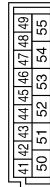
Terminal No.	Color of Wire	Signal Name
1	LG	INPUT 1
2	BR	INPUT 2
3	G	INPUT 3
4	GR	INPUT 4
5	O	INPUT 5
6	R	OUTPUT 1
7	L	OUTPUT 2
8	P	OUTPUT 5
9	SB	OUTPUT 4
10	V	OUTPUT 3
11	O	WASH FR (-) RR (+)
12	B	GND
13	L	WASH FR (+) RR (-)
14	W	IGN

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



Terminal No.	Color of Wire	Signal Name
56	V	BATTERY SAVER OUTPUT
57	R/Y	BAT (FUSE)
58	-	-
59	GR	DOOR UNLOCK OUTPUT (DR)
60	LG	FLASHER OUTPUT (LEFT)
61	G	FLASHER OUTPUT (RIGHT)
62	-	-
63	BR	ROOM LAMP OUTPUT
64	-	-
65	V	DOOR LOCK OUTPUT (ALL)
66	L	DOOR UNLOCK OUTPUT (OTHER)
67	B	GND (POWER)
68	O	POWER WINDOW POWER SUPPLY OUT (LINKED TO RAP)
69	-	-
70	W	BAT (F/L)

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



Terminal No.	Color of Wire	Signal Name
41	-	-
42	L	PCA OUTPUT
43	Y	BACK DOOR SW
44	O	REAR WIPER AUTO STOP SW1
45	V	CDL LOCK SW
46	LG	CDL UNLOCK SW
47	GR	DOOR SW (DR)
48	P	DOOR SW (RL)
49	L	CARGO LAMP OUTPUT
50	W	OFF ROAD LAMP OUTPUT
51	G	TRAILER FLASHER OUTPUT (RIGHT)
52	V	TRAILER FLASHER OUTPUT (LEFT)
53	-	-
54	-	-
55	W	REAR WIPER MOTOR OUTPUT 1

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## DTC Inspection Priority Chart

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

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# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Priority	DTC
1	<ul style="list-style-type: none"> <li>• U1000: CAN COMM CIRCUIT</li> <li>• U1010: CONTROL UNIT (CAN)</li> </ul>
2	<ul style="list-style-type: none"> <li>• B2190: NATS ANTENNA AMP</li> <li>• B2191: DIFFERENCE OF KEY</li> <li>• B2192: ID DISCORD BCM-ECM</li> <li>• B2193: CHAIN OF BCM-ECM</li> </ul>
3	<ul style="list-style-type: none"> <li>• C1729: VHCL SPEED SIG ERR</li> <li>• C1735: IGNITION SIGNAL</li> </ul>
4	<ul style="list-style-type: none"> <li>• C1704: LOW PRESSURE FL</li> <li>• C1705: LOW PRESSURE FR</li> <li>• C1706: LOW PRESSURE RR</li> <li>• C1707: LOW PRESSURE RL</li> <li>• C1708: [NO DATA] FL</li> <li>• C1709: [NO DATA] FR</li> <li>• C1710: [NO DATA] RR</li> <li>• C1711: [NO DATA] RL</li> <li>• C1712: [CHECKSUM ERR] FL</li> <li>• C1713: [CHECKSUM ERR] FR</li> <li>• C1714: [CHECKSUM ERR] RR</li> <li>• C1715: [CHECKSUM ERR] RL</li> <li>• C1716: [PRESSDATA ERR] FL</li> <li>• C1717: [PRESSDATA ERR] FR</li> <li>• C1718: [PRESSDATA ERR] RR</li> <li>• C1719: [PRESSDATA ERR] RL</li> <li>• C1720: [CODE ERR] FL</li> <li>• C1721: [CODE ERR] FR</li> <li>• C1722: [CODE ERR] RR</li> <li>• C1723: [CODE ERR] RL</li> <li>• C1724: [BATT VOLT LOW] FL</li> <li>• C1725: [BATT VOLT LOW] FR</li> <li>• C1726: [BATT VOLT LOW] RR</li> <li>• C1727: [BATT VOLT LOW] RL</li> </ul>

## DTC Index

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### 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	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—
U1000: CAN COMM CIRCUIT	—	—	<a href="#">BCS-31</a>
U1010: CONTROL UNIT (CAN)	—	—	<a href="#">BCS-32</a>
B2190: NATS ANTENNA AMP	—	—	<a href="#">SEC-18</a>
B2191: DIFFERENCE OF KEY	—	—	<a href="#">SEC-21</a>
B2192: ID DISCORD BCM-ECM	—	—	<a href="#">SEC-22</a>
B2193: CHAIN OF BCM-ECM	—	—	<a href="#">SEC-24</a>
C1708: [NO DATA] FL	—	—	<a href="#">WT-14</a>



## BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

CONSULT display	Fail-safe	Tire pressure monitor warning lamp ON	Reference page
C1709: [NO DATA] FR	—	—	<a href="#">WT-14</a>
C1710: [NO DATA] RR	—	—	<a href="#">WT-14</a>
C1711: [NO DATA] RL	—	—	<a href="#">WT-14</a>
C1712: [CHECKSUM ERR] FL	—	—	<a href="#">WT-16</a>
C1713: [CHECKSUM ERR] FR	—	—	<a href="#">WT-16</a>
C1714: [CHECKSUM ERR] RR	—	—	<a href="#">WT-16</a>
C1715: [CHECKSUM ERR] RL	—	—	<a href="#">WT-16</a>
C1716: [PRESSDATA ERR] FL	—	—	<a href="#">WT-18</a>
C1717: [PRESSDATA ERR] FR	—	—	<a href="#">WT-18</a>
C1718: [PRESSDATA ERR] RR	—	—	<a href="#">WT-18</a>
C1719: [PRESSDATA ERR] RL	—	—	<a href="#">WT-18</a>
C1720: [CODE ERR] FL	—	—	<a href="#">WT-16</a>
C1721: [CODE ERR] FR	—	—	<a href="#">WT-16</a>
C1722: [CODE ERR] RR	—	—	<a href="#">WT-16</a>
C1723: [CODE ERR] RL	—	—	<a href="#">WT-16</a>
C1724: [BATT VOLT LOW] FL	—	—	<a href="#">WT-16</a>
C1725: [BATT VOLT LOW] FR	—	—	<a href="#">WT-16</a>
C1726: [BATT VOLT LOW] RR	—	—	<a href="#">WT-16</a>
C1727: [BATT VOLT LOW] RL	—	—	<a href="#">WT-16</a>
C1729: VHCL SPEED SIG ERR	—	—	<a href="#">WT-19</a>
C1735: IGNITION SIGNAL	—	—	—

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# INTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### INTERIOR LIGHTING SYSTEM SYMPTOMS

#### Symptom Table

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**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"> <li>• Front room/map lamp assembly</li> <li>• Room lamp 2nd row</li> <li>• Cargo room lamp</li> <li>• Vanity mirror lamps (if equipped)</li> <li>• Ignition keyhole illumination</li> </ul>	<ul style="list-style-type: none"> <li>• Harness between BCM and each interior room lamp</li> <li>• Harness between BCM and each door switch</li> <li>• BCM</li> </ul>	Battery saver output/power supply circuit Refer to <a href="#">INL-16</a> .
Some or all of the following interior room lamps do not turn ON/OFF <ul style="list-style-type: none"> <li>• Front room/map lamp assembly</li> <li>• Room lamp 2nd row</li> </ul>	<ul style="list-style-type: none"> <li>• Harness between BCM and each door switch</li> <li>• Harness between BCM and each interior room lamp</li> <li>• BCM</li> </ul>	Door switch circuit Refer to <a href="#">DLK-24</a> .  Interior room lamp control circuit Refer to <a href="#">INL-18</a> .
Cargo lamp does not turn ON/OFF	<ul style="list-style-type: none"> <li>• Harness between BCM and cargo lamp</li> <li>• BCM</li> </ul>	Cargo lamp circuit Refer to <a href="#">INL-20</a> .
Ignition keyhole illumination does not turn ON/OFF	<ul style="list-style-type: none"> <li>• Harness between BCM and ignition keyhole illumination</li> <li>• BCM</li> </ul>	Ignition keyhole illumination circuit Refer to <a href="#">INL-22</a>
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	—	Check the interior room lamp setting. Refer to <a href="#">INL-12</a> .
Interior room lamp battery saver does not activate.	—	Check the interior room lamp battery saver setting. Refer to <a href="#">INL-13</a> .

# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

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

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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:000000004065639

- 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.

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# INTERIOR ROOM LAMP

< ON-VEHICLE REPAIR >

## ON-VEHICLE REPAIR

### INTERIOR ROOM LAMP

#### Removal and Installation

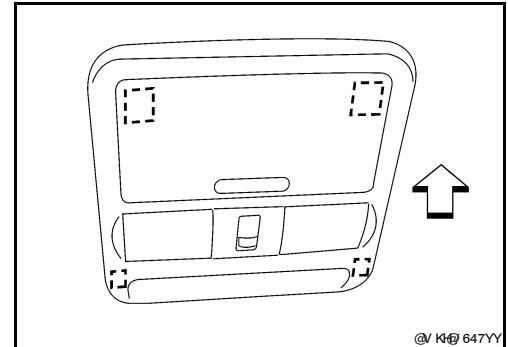
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#### MAP LAMP

##### Removal

The map lamp is replaced as part of the overhead console assembly. Refer to [INT-19, "Removal and Installation"](#).

⇐: Vehicle front



##### 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).

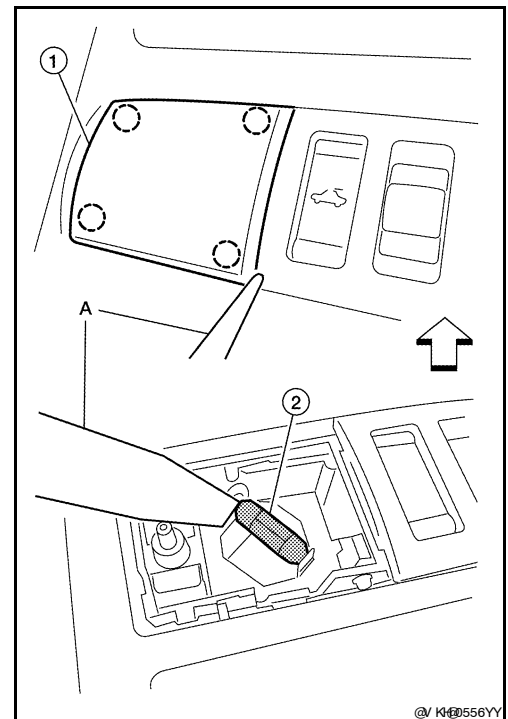
⇐: Vehicle front

##### **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**



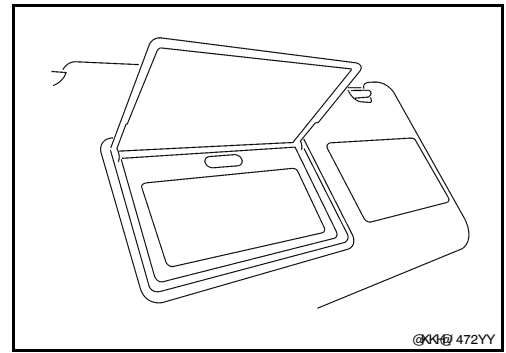
#### VANITY MIRROR LAMP

##### Removal

# INTERIOR ROOM LAMP

## < ON-VEHICLE REPAIR >

The vanity mirror lamp is replaced as part of the sunvisor assembly. Refer to [INT-19, "Removal and Installation"](#).



### Installation

Installation is in the reverse order of removal.

### Bulb Replacement

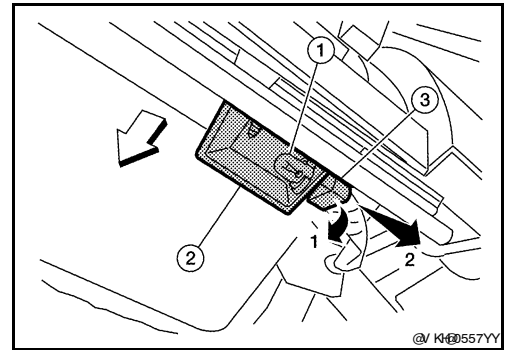
The vanity mirror lamp bulb is replaced as part of the sunvisor assembly. Refer to [INT-19, "Removal and Installation"](#).

## GLOVE BOX LAMP

### Removal

1. Remove lower instrument panel RH and glove box. Refer to [IP-11, "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



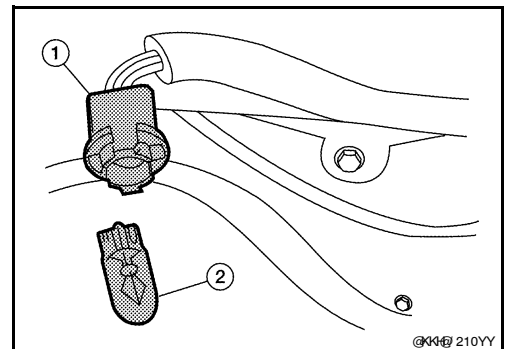
### Installation

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**



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# ILLUMINATION

< ON-VEHICLE REPAIR >

## ILLUMINATION

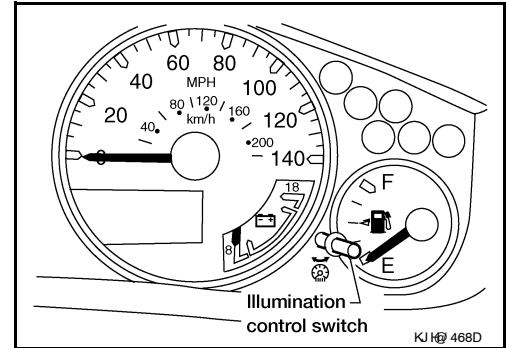
### Removal and Installation

INFOID:000000004065641

#### 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

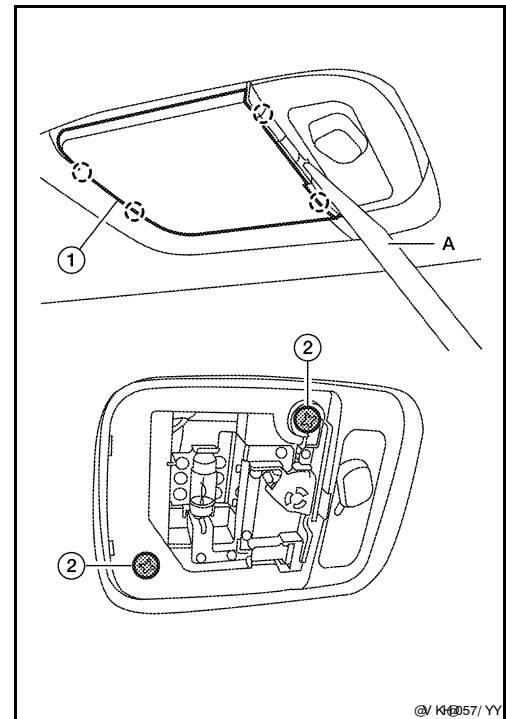
##### Removal

1. Disconnect the negative battery terminal.
2. 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

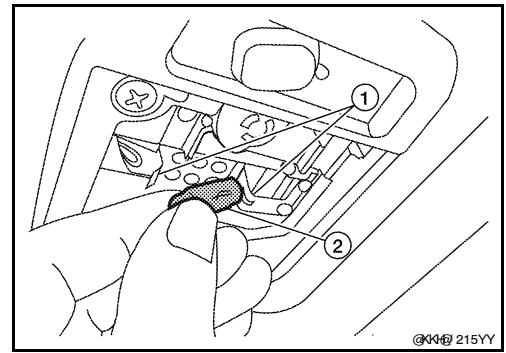
1. Disconnect the negative battery terminal.
2. Using a suitable tool, release the pawls and remove the cargo/personal lamp lens.

# ILLUMINATION

## < ON-VEHICLE REPAIR >

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

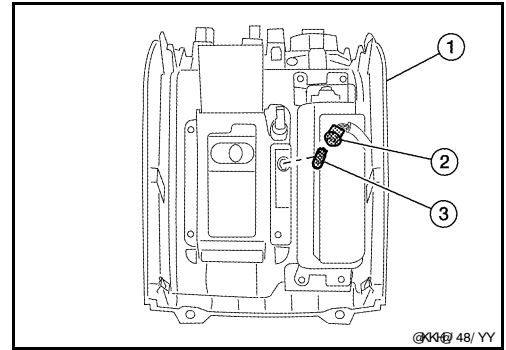
**Cargo/personal lamp bulb** : 12V - 8W



## AT FINISHER LAMP

### Removal

1. Remove AT finisher from center console. Refer to [IP-11, "Removal and Installation"](#).
2. Rotate AT finisher lamp socket (2) with bulb (3) counterclockwise, then pull away from finisher (1).



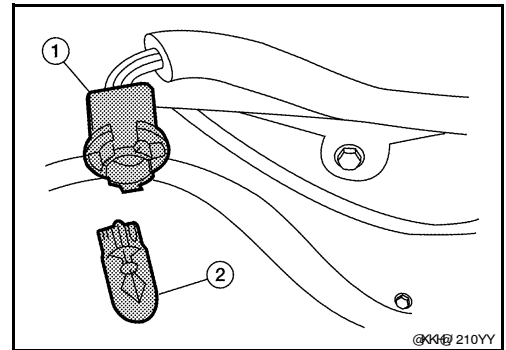
### Installation

Installation is in the reverse order of removal.

### Bulb Replacement

1. Remove AT finisher from center console. Refer to [IP-11, "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:000000004065642

Item	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.