SECTION INTERIOR LIGHTING SYSTEM

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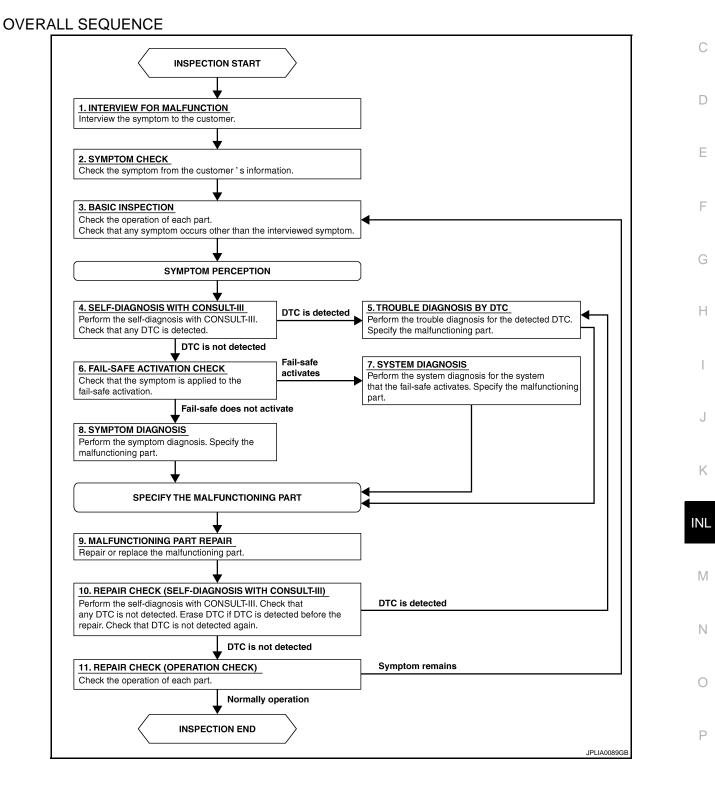
< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

DETAILED FLOW

1.INTERVIEW FOR MALFUNCTION

Interview the symptom to the customer.

>> GO TO 2.

2.SYMPTOM CHECK

Check the symptom from the customer's information.

>> GO TO 3.

3.BASIC INSPECTION

Check the operation of each part. Check that any symptom occurs other than the interviewed symptom.

>> 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

Check that the symptom is applied to the fail-safe activation.

Does the fail-safe activate?

YES >> GO TO 7. NO >> GO TO 8. 7 OVOTEM DIA ONOO

7.SYSTEM DIAGNOSIS

Perform the system diagnosis for the system that 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. Check that any DTC is not detected. Erase DTC if DTC is detected before the repair. Check that DTC is not detected again.

Is any DTC detected?

YES >> GO TO 5.

INL-4

DIAGNOSIS AND REPAIR WORKFLOW	
< BASIC INSPECTION >	
NO >> GO TO 11.	
11. REPAIR CHECK (OPERATION CHECK)	A
Check the operation of each part.	
Does it operate normally?	В
YES >> INSPECTION END NO >> GO TO 3.	
NO >> 00 10 3.	С
	C
	D
	E
	F
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	J
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	INL
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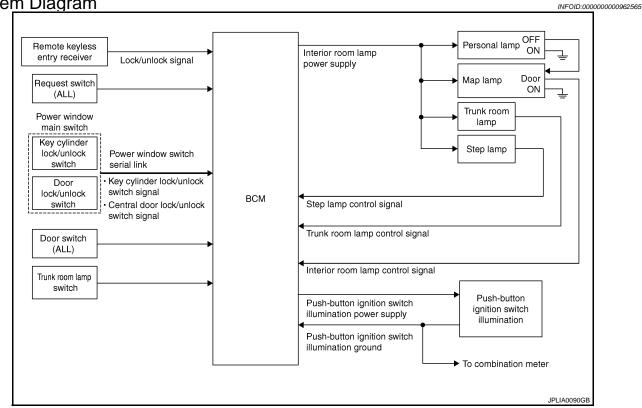
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< FUNCTION DIAGNOSIS >

FUNCTION DIAGNOSIS INTERIOR ROOM LAMP CONTROL SYSTEM

System Diagram



System Description

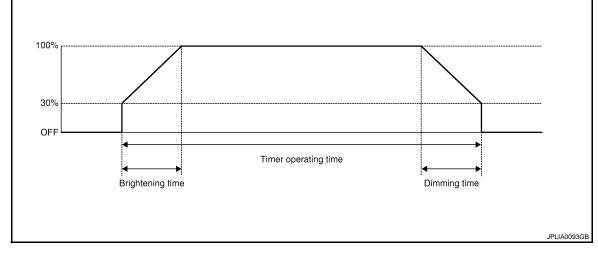
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OUTLINE

- Interior room lamps* are controlled by interior room lamp timer control function of BCM.
- *: Map lamp and personal lamp (when map lamp switch is in DOOR position).
- Trunk room lamp is controlled by trunk room lamp control function of BCM.
- Step lamp is controlled by step lamp control function of BCM.
- Push-button ignition switch illumination is controlled by the push-button ignition switch illumination control function of BCM.

INTERIOR ROOM LAMP TIMER CONTROL

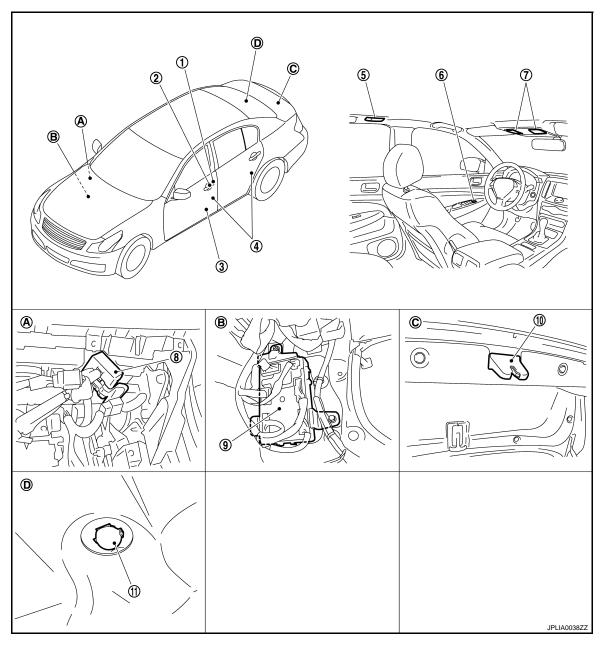
Interior Room Lamp Timer Basic Operation



< FUNCTION DIAGNOSIS >

 The interior room lamp turns ON and OFF (gradual brightening and dimming) by the interior room timer BCM judges the vehicle condition with the following items. It activates the interior room timer. Ignition switch status 	r. A
 Door switch signal (ALL) Door lock/unlock signal (Remote keyless entry receiver, each request switch, key cylinder lock/un switch, central door lock/unlock switch) NOTE: 	nlock _B
Each function of interior room lamp timer can be set by CONSULT-III. Refer to <u>INL-13, "INT LAMP : (SULT-III Function (BCM - INT LAMP)"</u> .	<u>CON-</u>
 Interior Room Lamp ON Operation BCM always turns the interior room lamp ON when any door opens. BCM activates the interior room timer in any of the following conditions to turn the interior room lamp O a period of time. Any door opens before all doors close. 	N for □
 Ignition switch is turned ON → OFF. Any door unlock signal is detected when all doors close with ignition switch OFF. NOTE: 	E
Restart the timer if new condition is input during the timer operating time.	F
Interior Room Lamp OFF Operation BCM stops the timer in any of the following conditions to turns the interior room lamp OFF. • The timer operating time is expired.	G
 Ignition switch position is other than OFF with all doors close. Any door lock operation is detected with all doors close. 	Ũ
TRUNK ROOM LAMP CONTROL BCM controls the trunk room lamp (ground-side) to turn ON with the trunk room lamp switch ON.	Н
STEP LAMP CONTROL BCM controls the step lamp (ground-side) to turn ON with any door switch ON.	I
PUSH-BUTTON IGNITION SWITCH ILLUMINATION CONTROL	
 Push-button Ignition Switch Illumination Basic Operation BCM provides the power supply and the ground to turn the push-button ignition switch illumination ON. BCM cuts the ground supply while the each illumination (tail lamp) ON. BCM switches to the ground co with the meter illumination control function. 	ontrol
Push-button Ignition Switch Illumination ON Operation BCM turns the push-button ignition switch illumination ON in the following conditions.	K
 Ignition switch ON Each illumination (tail lamp) ON Any of the following conditions with ignition switch OFF 	INL
 Engine start permission is entered. Intelligent Key inserted into the key slot. Driver door is LOCK → UNLOCK. Driver door is open. 	Μ
 Push-button Ignition Switch Illumination OFF Operation BCM turns the push-button ignition switch illumination OFF in any of the following conditions. The push-button ignition switch illumination ON conditions do not satisfy. 	Ν
 All of the following conditions with ignition switch OFF Each illumination (tail lamp) OFF 	0
 The push-button ignition switch illumination ON conditions do not change (15 seconds after the ign switch OFF) or the driver door is UNLOCK → LOCK. 	nition P
Component Parts Location	

< FUNCTION DIAGNOSIS >



- 1. Key cylinder switch
- 4. Door switch
- 7. Map lamp
- 10. Trunk room lamp switch
- A. Behind glove box
- D. Trunk room upward

Component Description

- 2. Request switch
- 5. Personal lamp
- 8. Remote keyless entry receiver
- 11. Trunk room lamp
- B. Dash side finisher (Passenger side)
- 3. Step lamp
- 6. Central door lock switch
- 9. BCM
- C. Trunk lid lock assembly

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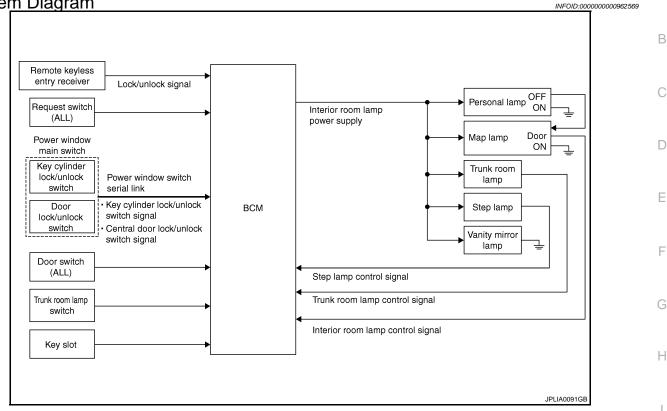
Part	Description
ВСМ	 Activates the interior room lamp timer depending on the vehicle condition to turn the interior room lamp ON/OFF. Turns the trunk room lamp ON /OFF according to the trunk room lamp switch status. Turns the step lamp ON /OFF according to any door switch status.

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

< FUNCTION DIAGNOSIS >

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

System Diagram



System Description

OUTLINE

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

Applicable lamps

- Map lamp
- Personal lamp
- Step lamp
- Trunk room lamp
- Vanity mirror lamp

INTERIOR ROOM LAMP BATTERY SAVER FANCTION

- When the ignition switch is turned OFF, BCM operates the timer for a period of time to cut the interior room lamp power supply.
- BCM restart the timer when any of the following signals changes while operating the timer.
- Ignition switch status
- Door switch signal (ALL)
- Door lock/unlock signal (Remote keyless entry receiver, each request switch, key cylinder lock/unlock switch, central door lock/unlock switch)
- Trunk loom lamp switch signal
- Key switch signal (Key slot)
- BCM provides the interior room lamp power supply continuously when the ignition switch position is other than OFF.

NOTE:

Each function of interior room lamp battery saver can be set by CONSULT-III Refer to <u>INL-15, "BATTERY</u> <u>SAVER : CONSULT-III Function (BCM - BATTERY SAVER)"</u>.

Component Parts Location

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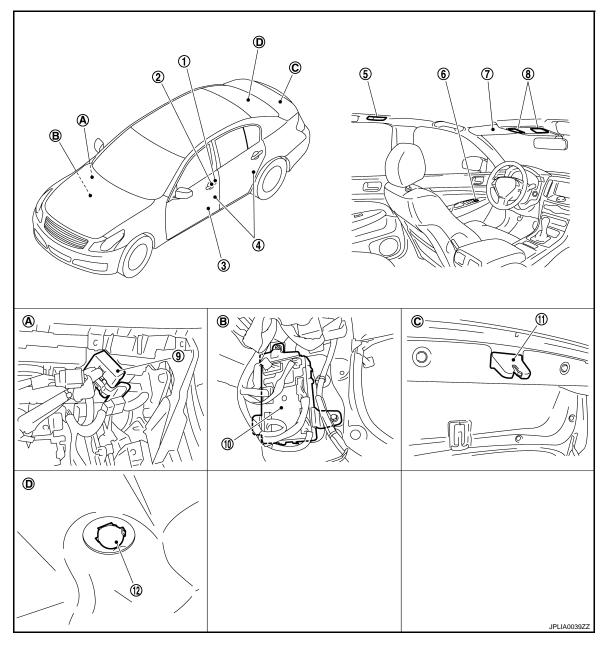
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INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

< FUNCTION DIAGNOSIS >



- 1. Key cylinder switch
- 4. Door switch
- 7. Vanity mirror lamp
- 10. BCM
- A. Behind glove box
- D. Trunk room upward

Component Description

- 2. Request switch
- 5. Personal lamp
- 8. Map lamp
- 11. Trunk room lamp switch
- B. Dash side finisher (Passenger side)
- 3. Step lamp
- 6. Central door lock switch
- 9. Remote keyless entry receiver
- 12. Trunk room lamp
- C. Trunk lid lock assembly

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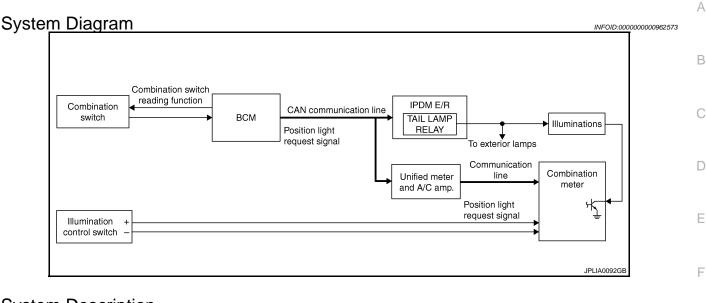
Part Description	
BCM	Operates the interior room lamp battery saver depending on the vehicle condition to cut the interior room lamp power supply.

INL-10

ILLUMINATION CONTROL SYSTEM

< FUNCTION DIAGNOSIS >

ILLUMINATION CONTROL SYSTEM



System Description

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OUTLINE

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

Control by BCM

- Combination switch reading function
- Headlamp control function

Control by IPDM E/R

Relay control function

Control by combination meter

 Meter illumination control function 	(Refer to MWI-24, "METER ILLUMIN	ATION CONTROL : System Dia-
<u>gram"</u> .)		

ILLUMINATION CONTROL

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits position light request signal to IPDM E/R and combination meter (through the unified meter and A/C amp.) according to tail lamp ON condition.

Tail lamp ON condition

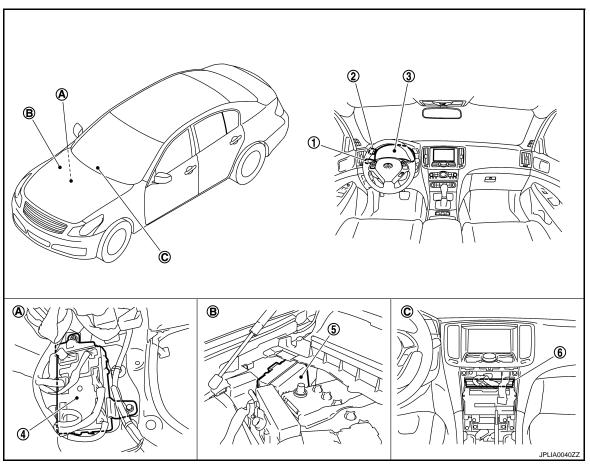
- Lighting switch 1ST
- Lighting switch 2ND
- Lighting switch AUTO, and the auto light function ON judgment (With auto light system)
- IPDM E/R turns the integrated tail lamp relay ON according to position light request signal. It provides the power supply to each illumination lamp.
- Combination meter enters in the nighttime mode according to position light request signal. Under the nighttime mode the combination meter controls the illuminance by controlling the each illumination lamp (ground side).

Component Parts Location

INL-11

ILLUMINATION CONTROL SYSTEM

< FUNCTION DIAGNOSIS >



- 1. Combination switch
- 4. BCM
- A Dash side finisher (Passenger side)
- 2. Illumination control switch
- 5. IPDM E/R
- B. Engine room dash panel (RH)
- 3. Combination meter
- 6. Unified meter and A/C amp.
- C. Behind cluster lid C

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Component Description

Part	Description		
BCM	 Judges each switch condition by the combination switch reading function. Judges the illumination lamp ON/OFF status depending on the vehicle condition. And then it transmits position light request signal to IPDM E/R and combination meter (through the unified meter and A/C amp.) (with CAN communication). 		
IPDM E/R	Controls the integrated relay according to the request from BCM (with CAN communication).		
COMBINATION METETR	 Enters in nighttime mode according to the request from BCM (with CAN communication). Controls the each illumination in the nighttime mode. Refer to <u>MWI-24</u>, "<u>METER ILLUMINATION CONTROL</u>: <u>System Diagram</u>". 		
Combination switch (Lighting & turn signal switch)	Refer to <u>BCS-5, "System Diagram"</u> .		

DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)

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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 INL-77, "DTC Index".	D
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.	
DATA MONITOR	The BCM input/output signals are displayed.	E
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.	
ECU IDENTIFICATION	The BCM part number is displayed.	
CONFIGURATION	This function is not used even though it is displayed.	F

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	-
Door lock	DOOR LOCK	×	×	×	-
Rear window defogger	REAR DEFOGGER		×	×	-
Warning chime	BUZZER		×	×	-
Interior room lamp timer	INT LAMP	×	×	×	J
Exterior lamp	HEAD LAMP	×	×	×	_
Wiper and washer	WIPER	×	×	×	ĸ
Turn signal and hazard warning lamps	FLASHER	×	×	×	
Air conditioner*	AIR CONDITONER		×		
Intelligent Key system	INTELLIGENT KEY	×	×	×	IN
Combination switch	COMB SW		×		-
BCM	BCM	×			N
IVIS - NATS	IMMU		×	×	IV
Interior room lamp battery saver	BATTERY SAVER	×	×	×	-
Trunk open	TRUNK		×		N
Vehicle security system	THEFT ALM	×	×	×	-
RAP system	RETAINED PWR		×		-
Signal buffer system	SIGNAL BUFFER		×	×	- 0
TPMS	TPMS (AIR PRESSURE MONI- TOR)	×	×	×	

*: This item is displayed, but is not used.

INT LAMP

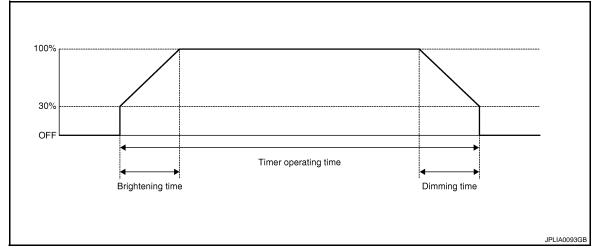
INT LAMP : CONSULT-III Function (BCM - INT LAMP)

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DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

WORK SUPPORT



Service item	Setting item	Setting		
	MODE 2	7.5 sec.		
ROOM LAMP TIMER SET	MODE 3*	15 sec.	Sets the interior room lamp ON time. (Timer operating time)	
	MODE 4	30 sec.		
SET I/L D-UNLCK INTCON	ON*	With the in	nterior room lamp timer function	
SET I/E D-ONLOR INTCOM	OFF	Without th	e interior room lamp timer function	
	MODE 1	0.5 sec.		
	MODE 2*	1 sec.		
ROOM LAMP ON TIME SET	MODE 3	2 sec.	Sets the interior room lamp gradual brightening time.	
	MODE 4	3 sec.		
	MODE 5	0 sec.		
	MODE 1	0.5 sec.		
	MODE 2	1 sec.		
ROOM LAMP OFF TIME SET	MODE 3	2 sec.	Sets the interior room lamp gradual dimming time.	
	MODE 4*	3 sec.		
	MODE 5	0 sec.		
	ON*	Interior room lamp timer activates with synchronizing all doors.		
R LAMP TIMER LOGIC SET	OFF	Interior room lamp timer activates with synchronizing the driver d only.		

*: Initial setting

DATA MONITOR

Monitor item [Unit]	Description
REQ SW-DR [ON/OFF]	The switch status input from request switch (driver side)
REQ SW-AS [ON/OFF]	The switch status input from front request switch (passenger side)
PUSH SW [ON/OFF]	The switch status input from push-button ignition switch
ACC RLY-F/B [ON/OFF]	ACC relay feedback signal status input from ACC relay
KEY SW-SLOT [ON/OFF]	Key switch status input from key slot

INL-14

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

Monitor item [Unit]	Description
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
DOOR SW-BK [ON/OFF]	NOTE: The item is indicated, but not monitored.
CDL LOCK SW [ON/OFF]	Lock switch status received from central door lock switch by power window switch se- rial link
CDL UNLOCK SW [ON/OFF]	Unlock switch status received from central door lock switch by power window switch serial link
KEY CYL LK-SW [ON/OFF]	Lock switch status received from key cylinder switch by power window switch serial link
KEY CYL UN-SW [ON/OFF]	Unlock switch status received from key cylinder switch by power window switch serial link
TRNK/HAT MNTR [ON/OFF]	The switch status input from trunk room lamp switch
RKE-LOCK [ON/OFF]	Lock signal status received from remote keyless entry receiver
RKE-UNLOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

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

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BATTERY SAVER

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

WORK SUPPORT

Service item	Setting item	Setting		0		
	ON*	With the e	With the exterior lamp battery saver function			
BATTERY SAVER SET	OFF	Without th	Without the exterior lamp battery saver function			
	ON*	With the interior room lamp battery saver function				
ROOM LAMP BAT SAV SET	OFF	Without the interior room lamp battery saver function				
	MODE 1*	30 min. Sets the interior room lamp battery saver timer operating				
ROOM LAMP TIMER SET	MODE 2	60 min.	time.			

*: Initial setting

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

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

ACTIVE TEST

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

*: Each lamp switch is in ON position.

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< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

1.CHECK FUSE AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuse and fusible link No.	D	
1	Battony power supply	к	-	
11	Battery power supply	10	E	

Is the fuse fusing?

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

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

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

	Voltage			
(-				
BC	CM		(Approx.)	
Connector Terminal		Cround		
M118	1	- Ground	Detter veltere	
M119 11			Battery voltage	

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BC	CM	Continuity	
Connector	Terminal	Ground	Continuity
M119	13	-	Existed
Does continuity	exist?		
	SPECTION END		
•	pair harness or		
BCM : Speci	ial Repair R	equirement	

1.REQUIRED WORK WHEN REPLACING BCM

Initialize IVIS by CONSULT-III. For the details of initialization refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< COMPONENT DIAGNOSIS >

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

Description

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

Component Function Check

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

CONSULT-III ACTIVE TEST

- 1. Turn ignition switch ON.
- 2. Turn each interior room lamp ON.
- Map lamp
- Personal lamp
- Step lamp
- Vanity mirror lamp
- Trunk room lamp
- 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 >> Interior room lamp power supply circuit is normal.
- NO >> Refer to INL-18, "Diagnosis Procedure".

Diagnosis Procedure

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

CONSULT-III ACTIVE TEST

1. Turn ignition switch ON.

- 2. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
- 3. With operating the test item, check voltage between BCM harness connector and ground.

	Terminals	Test item		
(+)		(-)	iest item	Voltage (Ap- prox.)
BCM			BATTERY	
Connector	Terminal		SAVER	
		Ground	OFF	0 V
M119 4	4		ON	Battery volt- age

Is the measurement value normal?

YES >> GO TO 2.

NO >> Replace BCM.

2.CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect the following connectors.
- Map lamp
- Personal lamp
- Vanity mirror lamp (LH)
- Vanity mirror lamp (RH)
- Trunk room lamp
- Step lamp (driver side)
- Step lamp (passenger side)

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INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< COMPONENT DIAGNOSIS >

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

BCM Eac		Each interio	Each interior room lamp		Continu-
Connec- tor	Terminal	Connector		Terminal	ity
		Map lamp	R15	1	
		Personal lamp	R14	1	
M119 4	Vanity mirror lamp (LH)	R12	2		
	4	Vanity mirror lamp (RH)	R13	2	Existed
		Trunk room lamp	B47	1	
		Step lamp (driver side)	D12	1	
	Step lamp (pas- senger side)	D42	1		

NO >> Repair the harnesses or connectors.

$\mathbf{3}$.check interior room lamp power supply short circuit

Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M119	4		Not existed	

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

Controls each interior room lamp (ground side) by PWM signal. **NOTE:**

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

Component Function Check

CAUTION:

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

- Interior room lamp power supply
- Map lamp bulb
- Personal lamp bulb

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT-III ACTIVE TEST

- 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 operating the test items, check that each interior room lamp turns ON/OFF (gradual brightening/dimming).

ON	: Interior room lamp gradual brightening
OFF	: Interior room lamp gradual dim-

ming

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

- YES >> Interior room lamp control circuit is normal.
- NO >> Refer to INL-20, "Diagnosis Procedure".

Diagnosis Procedure

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1. CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT-III ACTIVE TEST

- Turn ignition switch OFF.
- 2. Remove all the bulbs of map lamp and personal lamp.
- 3. Select "INT LAMP" of BCM (INT LAMP) active test item.
- 4. With operating the test item, check continuity between BCM harness connector and ground.

BC	СМ		Test item	Continuity	
Connector	Terminal	Ground	INT LAMP	Continuity	
M119	10	19		Existed	
101113	19		OFF	Not existed	

Is the measurement value normal?

YES >> GO TO 2.

Fixed ON>>GO TO 3.

Fixed OFF>>Replace BCM.

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect BCM connector, map lamp connector and personal lamp connector.

3. Check continuity between BCM harness connector, map lamp harness connector, and personal lamp harness connector.

INTERIOR ROOM LAMP CONTROL CIRCUIT

< COMPONENT DIAGNOSIS >

BCM Map lamp/personal lamp Continuity M119 19 Map lamp R15 2 Dees continuity exist? Personal R14 3 Existed Dees continuity exist? Personal R14 3 Existed Dees continuity exist? Personal arm or the personal lamp. NO >> Replace the map lamp or the personal lamp. NO >> Replace the map lamp or the personal lamp. NO >> Replace the map lamp connector and personal lamp connector. Image: The maximum lamp or the personal lamp. NO >> Replace the Map lamp connector and ground. Image: The maximum lamp or the personal lamp. Not existed Not existed Image: The maximum lamp or the personal lamp. Not existed Not existed Image: The maximum lamp or the personal lamp. Not existed Not existed Dees continuity exist? YES >> Replar the harnesses or connectors. NO >> Replace BCM. Not existed								
tor Terminal Connector Terminal M119 19 Map lamp R15 2 Personal lamp R14 3 Existed Does continuity exist? YES >> Replace the map lamp or the personal lamp. NO >> Repair the harnesses or connectors. Source the map lamp or the personal lamp. OCHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT . . Turn ignition switch OFF. . Disconnect BCM connector, map lamp connector and personal lamp connector. . Check continuity between BCM harness connector and ground. Existed Continuity M119 19 Opes continuity exist? Not existed Opes continuity exist? Not existed YES >> Repair the harnesses or connectors.	B	СМ	Map I	amp/persona	al lamp			
M119 19 Personal lamp R14 3 Existed Does continuity exist? YES >> Replace the map lamp or the personal lamp. NO >> Repair the harnesses or connectors. J.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT . Turn ignition switch OFF. . Disconnect BCM connector, map lamp connector and personal lamp connector. . Check continuity between BCM harness connector and ground. Example Continuity M119 19 Not existed Opes continuity exist? YES >> Repair the harnesses or connectors.		Terminal				Continuity		
Image R14 3 oes continuity exist? YES >> Replace the map lamp or the personal lamp. NO >> Repair the harnesses or connectors. OCHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT • Turn ignition switch OFF. • Disconnect BCM connector, map lamp connector and personal lamp connector. • Check continuity between BCM harness connector and ground. • M119 19 • Oes continuity exist? YES >> Repair the harnesses or connectors.			Map lamp	R15	2			
YES >> Replace the map lamp or the personal lamp. NO >> Repair the harnesses or connectors. S.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT . Turn ignition switch OFF. . Disconnect BCM connector, map lamp connector and personal lamp connector. . Check continuity between BCM harness connector and ground. Image: Second structure Image: Second structure </td <td>M119</td> <td>19</td> <td></td> <td>R14</td> <td>3</td> <td>Existed</td> <td></td> <td></td>	M119	19		R14	3	Existed		
NO >> Repair the harnesses or connectors. 3. CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT 1. Turn ignition switch OFF. 2. Disconnect BCM connector, map lamp connector and personal lamp connector. 3. Check continuity between BCM harness connector and ground. Image: Second stress of the two stress of two stresstress of two stress of two stress of two stress of two								
 3. CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT 1. Turn ignition switch OFF. 2. Disconnect BCM connector, map lamp connector and personal lamp connector. 3. Check continuity between BCM harness connector and ground. BCM Connector Terminal Ground Continuity M119 19 Does continuity exist? YES >> Repair the harnesses or connectors.						lamp.		
1. Turn ignition switch OFF. 2. Disconnect BCM connector, map lamp connector and personal lamp connector. 3. Check continuity between BCM harness connector and ground. BCM Connector Terminal Ground Continuity M119 19 Does continuity exist? YES >> Repair the harnesses or connectors.						HORT CIR	CUIT	
 2. Disconnect BCM connector, map lamp connector and personal lamp connector. 3. Check continuity between BCM harness connector and ground. BCM Connector Terminal Ground M119 19 Continuity Not existed Does continuity exist? YES >> Repair the harnesses or connectors. 								
BCM Connector Terminal M119 19 Not existed Does continuity exist? YES	2. Disco	nnect BCN	A connecto					
Connector Terminal Ground Continuity M119 19 Not existed Does continuity exist? YES >> Repair the harnesses or connectors.	3. Checl	< continuit	y between	BCM harn	ess conne	ector and g	round.	
Connector Terminal Ground Continuity M119 19 Not existed Does continuity exist? YES >> Repair the harnesses or connectors.		PCM						
M119 19 Not existed Does continuity exist? YES >> Repair the harnesses or connectors.	Connec		Terminal	Group	d C	Continuity		
Does continuity exist? YES >> Repair the harnesses or connectors.				Croan		ot existed		
YES >> Repair the harnesses or connectors.								

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< COMPONENT DIAGNOSIS >

STEP LAMP CIRCUIT

Description

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

Component Function Check

CAUTION:

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

- Interior room lamp power supply
- Step lamp bulb

1.CHECK STEP LAMP OPRATION

CONSULT-III ACTIVE TEST

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

ON : Step lamp ON

OFF : Step lamp OFF

Does the step lamp turn ON/OFF?

YES >> Step lamp circuit is normal. NO >> Refer to INL-22, "Diagnosis Procedure".

Diagnosis Procedure

1.CHECK STEP LAMP OUTPUT

CONSULT-III ACTIVE TEST

- 1. Turn ignition switch OFF.
- 2. Remove the step lamp bulbs (driver side and passenger side).
- 3. Turn ignition switch ON.
- 4. Select "STEP LAMP TEST" of BCM (INT LAMP) active test item.
- 5. With operating the test item, check continuity between BCM harness connector and ground.

B	CM		Test item		
Connector	Terminal	Ground	STEP LAMP TEST	Continuity	
M119	7	7		ON	Existed
101113	7		OFF	Not existed	

Is the measurement value normal?

YES >> GO TO 2. Fixed ON>>GO TO 3.

Fixed OFF>>Replace BCM.

2. CHECK STEP LAMP OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector, and step lamp connector.
- 3. Check continuity between BCM harness connector and step lamp harness connector.

B	СМ	Step lamp		
Connec- tor	Terminal	Connector	Terminal	Continuity

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STEP LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

M119	7	Driver side	D12	2	– Existed	
WI19	1	Passen- ger side	D42	2	- Existed	
Does cont	inuity exis	st?				
YES >	> Replace	e step lamp).	4 - 1 -		
		harnesses				
		AMP SHOP				
1. Turn i 2. Checł	gnition sw	vitch OFF. y between	BCM harn	ess conn	ector and c	Iround
. 011001	(oonanaa	y sourcon	Dominan			
	BCM					
Connec	tor	Terminal	Groun	d (Continuity	
M119)	7	-	Ν	lot existed	
Does cont	inuity exis	st?				·
YES >	> Repair t	the harnes	ses or con	nectors.		
NO >	> Replace	e BCM.				
						_

< COMPONENT DIAGNOSIS >

TRUNK ROOM LAMP CIRCUIT

Description

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

Component Function Check

CAUTION:

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

- Interior room lamp power supply
- Trunk room lamp bulb

1.CHECK TRUNK ROOM LAMP OPRATION

CONSULT-III ACTIVE TEST

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

ON : Trunk room lamp ON

OFF : Trunk room lamp OFF

Does the trunk room lamp turn ON/OFF?

YES >> Trunk room lamp circuit is normal.

NO >> Refer to INL-22, "Diagnosis Procedure".

Diagnosis Procedure

1.CHECK TRUNK ROOM LAMP OUTPUT

CONSULT-III ACTIVE TEST

- 1. Turn ignition switch OFF.
- 2. Remove trunk room lamp bulb.
- 3. Turn ignition switch ON.
- 4. Select "LUGGAGE LAMP TEST" of BCM (INT LAMP) active test item.
- 5. With operating the test item, check continuity between BCM harness connector and ground.

BC	CM		Test item		
Connector	Terminal	Ground	LUGGAGE LAMP TEST	Continuity	
M120	30	30		ON	Existed
101120	50		OFF	Not existed	

Is the measurement value normal?

YES >> GO TO 2.

Fixed ON>>GO TO 3.

Fixed OFF>>Replace BCM.

2. CHECK TRUNK ROOM LAMP OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector and trunk room lamp connector.
- 3. Check continuity between BCM harness connector and trunk room lamp harness connector.

BC	CM	Trunk ro	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M120	30	B47	2	Existed

Does continuity exist?

YES >> Replace trunk room lamp.

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INFOID:000000000962591

INFOID:00000000962592

TRUNK ROOM LAMP CIRCUIT

< COMPONEN	T DIAGNOSIS	5>			
	bair harnesses				
3. CHECK TRU	3. CHECK TRUNK ROOM LAMP SHORT CIRCUIT				
2. Disconnect		r and trunk roo BCM harness c			В
BC	CM		Continuity	-	С
Connector Terminal Ground Continuity					0
M120	30		Not existed		
	<u>exist?</u> pair harnesses place BCM.	or connectors.		-	D
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PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< COMPONENT DIAGNOSIS >

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description

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

Component Function Check

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT-III ACTIVE TEST

- 1. Turn the ignition switch ON.
- 2. Select "ENGINE SW ILLUMI" of BCM (INTELLGENT KEY) active test item.
- 3. With operating the test items, check that the push-button ignition switch illumination turns ON/OFF

ON : Push-button ignition switch illumination ON

OFF : Push-button ignition switch illumination OFF

Does the push-button ignition switch illumination turn ON/OFF?

- YES >> Push-button ignition switch illumination circuit is normal.
- NO >> Refer to INL-26, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000000962596

1. CHECK ILLUMINATION CONTROL SWITCHING OPERATION

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

Condition	Push-button ignition switch illumina- tion
 Ignition switch ON Lighting switch 1ST	ON
Ignition switch OFFLighting switch OFFDriver door LOCK	OFF

Does the push-button ignition switch illumination turn ON/OFF?

YES >> GO TO 2.

NO >> GO TO 3.

2.check push-button ignition switch illumination ground circuit

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

BCM		Push-button ignition switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M119	14	M50	2	Existed	

Does the continuity exist?

YES >> Replace BCM.

NO >> Repair the harness or the connector.

${\it 3.}$ CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OUTPUT

CONSULT-III ACTIVE TEST

- 1. Turn the ignition switch ON.
- 2. Select "ENGINE SW ILLUMI" of BCM (INTELLGENT KEY) active test item.
- 3. With operating the test item, check voltage between BCM harness connector and ground.

INL-26

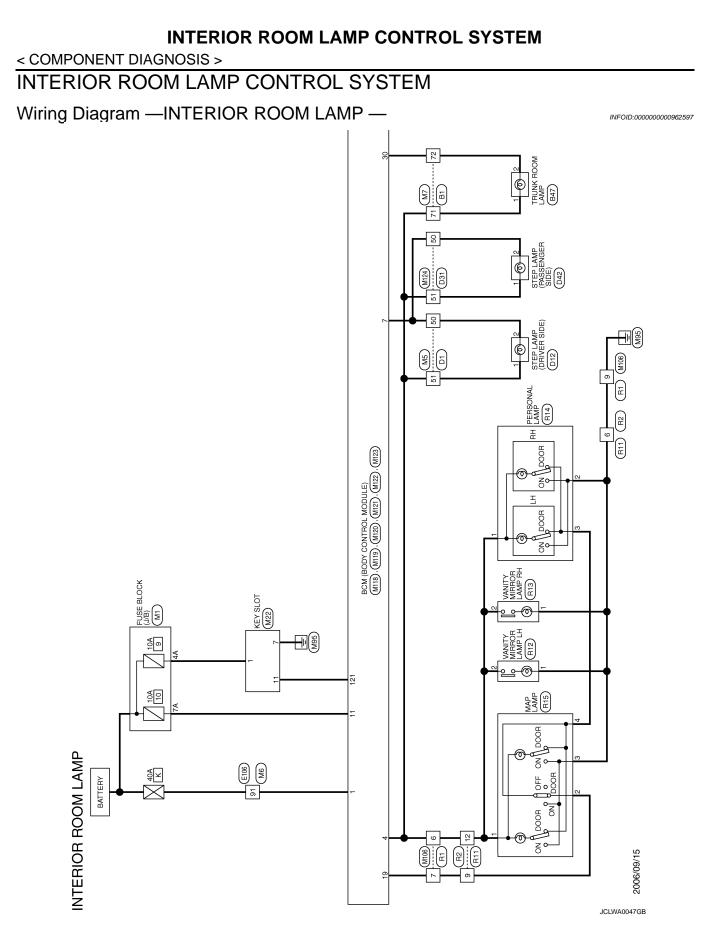
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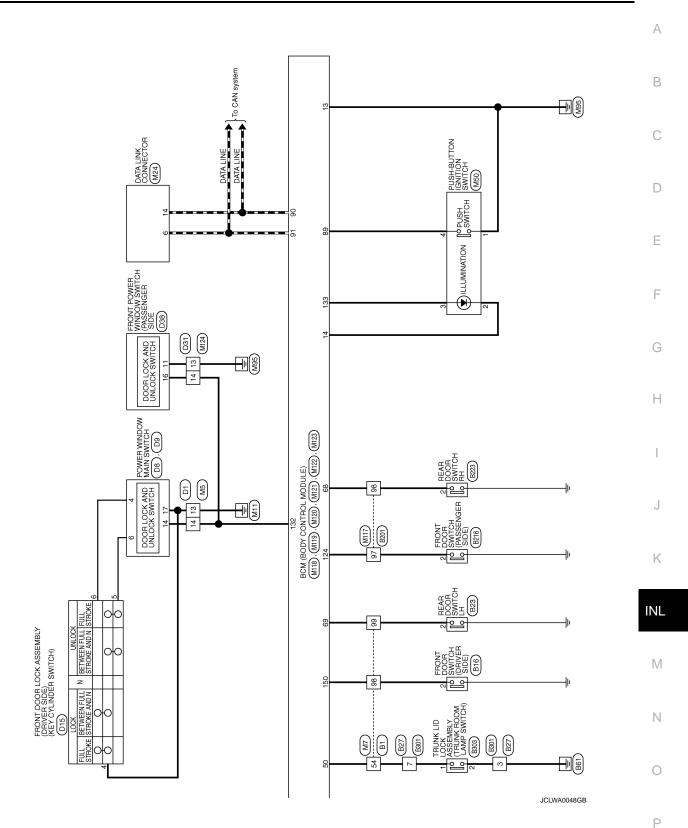
PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

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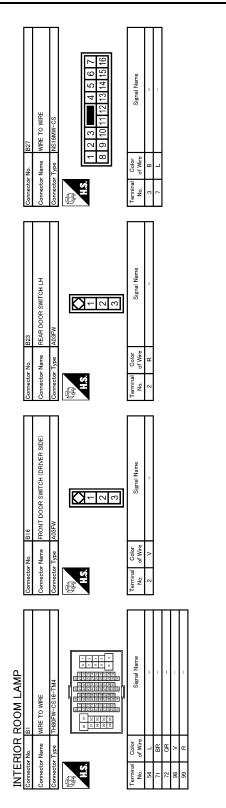
Terminals						
(+)		(-)	 Test item 	Voltage (Ap- prox.)		
	BCM Connector Terminal		ENGINE SW ILLUMI			
		Ground	ON	5 V		
M123	133		OFF	0 V		
Is the measu	irement valu	ue normal?	ų.	·		
	GO TO 4. GO TO 5.					
		ON IGNITIC	ON SWITCH	ILLUMINATI	ON POWER SUPPLY OPEN CIRCUIT	
2. Disconn		nnector and			switch connector. e push-button ignition switch harness connector.	
BC	CM	Push-button	ignition switch			
Connector	Terminal	Connector	Terminal	Continuity		
M123	133	M50	3	Existed		
Does the co	ntinuity exist	t <u>?</u>				
5.CHECK F 1. Turn the 2. Disconn	PUSH-BUTT ignition swi ect BCM co	ON IGNITIC	the push-bu	ILLUMINATIO	ON POWER SUPPLY SHORT CIRCUIT switch connector. e push-button ignition switch harness connector.	
	BCM			Continuity		
Connector	Termi		Ground			
M123	133			Not existed		
Does the co	•				-	
YES >> Repair the harness or the connector. NO >> Replace BCM.						
					-	

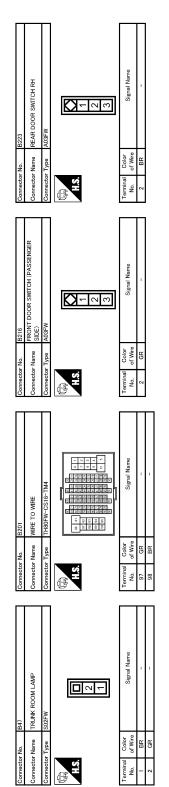


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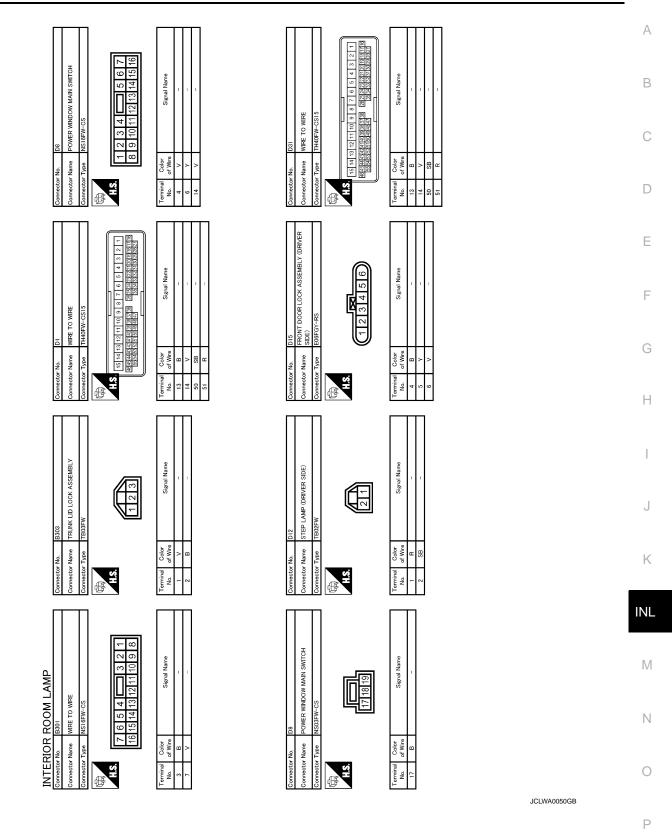
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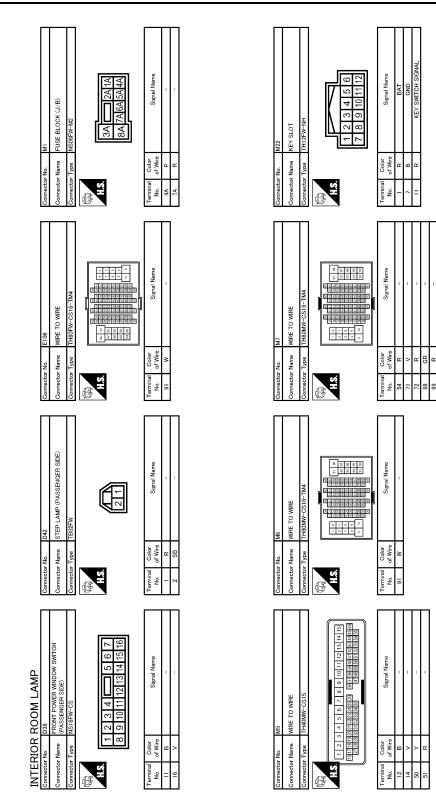
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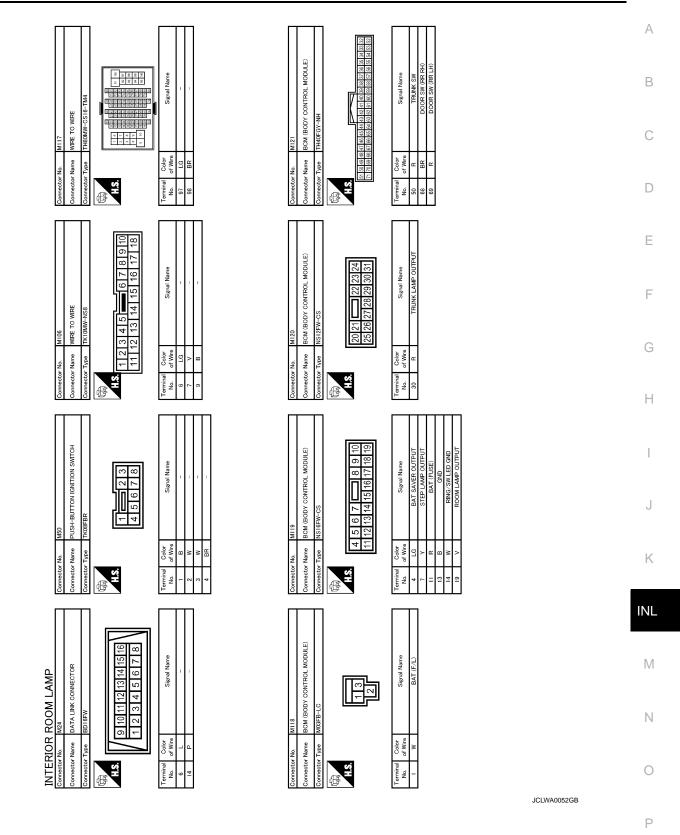
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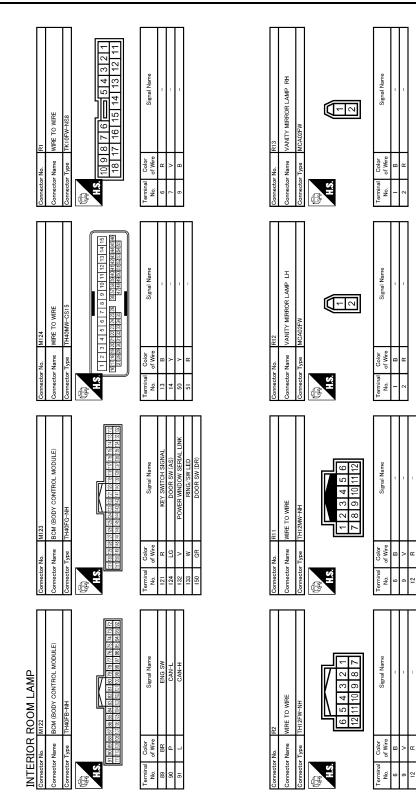
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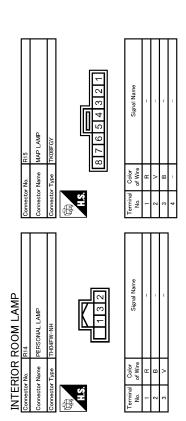
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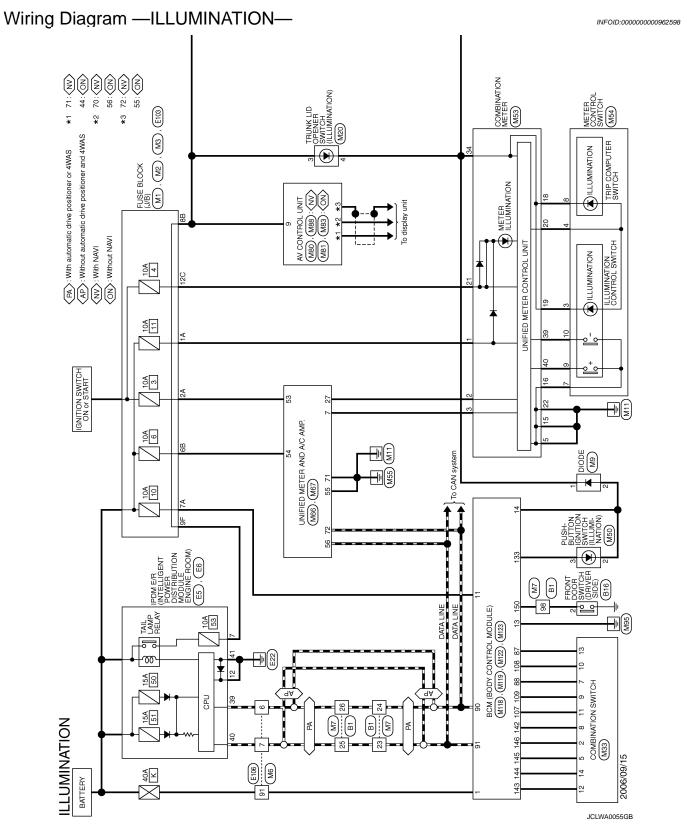
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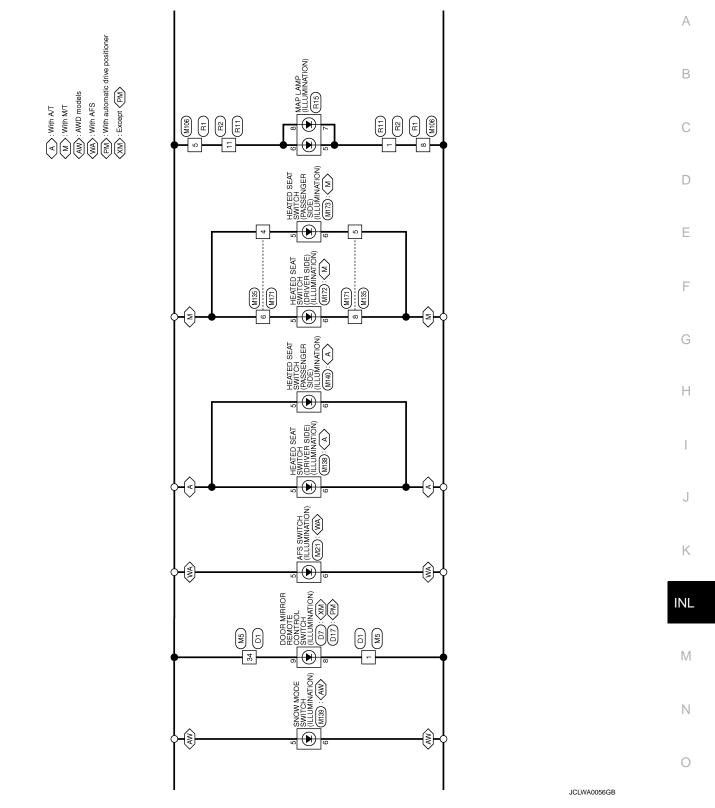
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ILLUMINATION



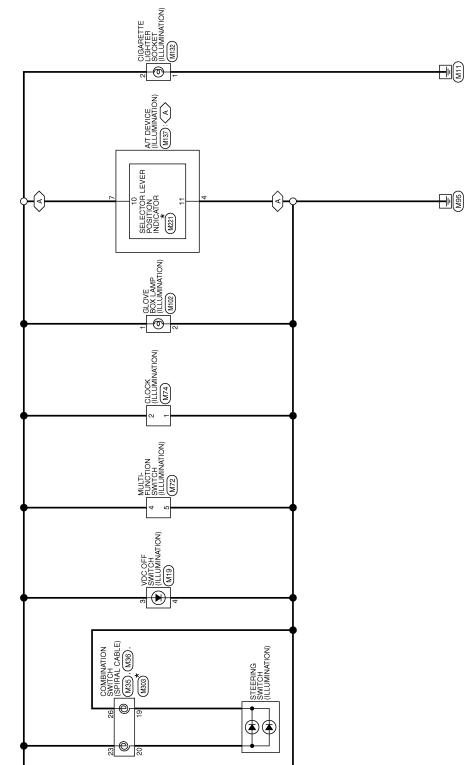


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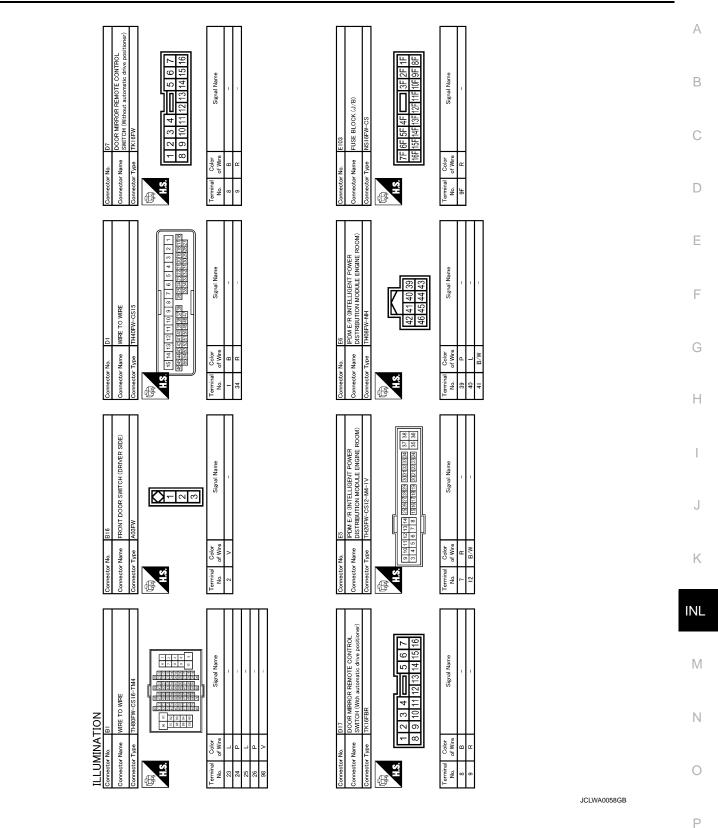
*: This connector is not shown in "Harness Layout".



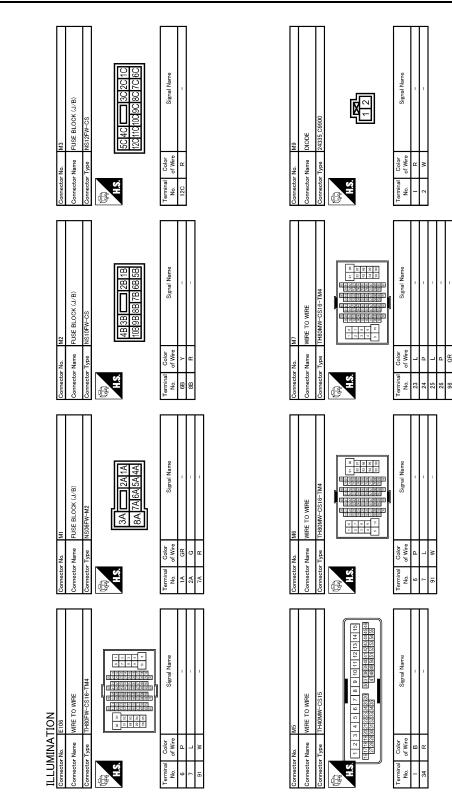


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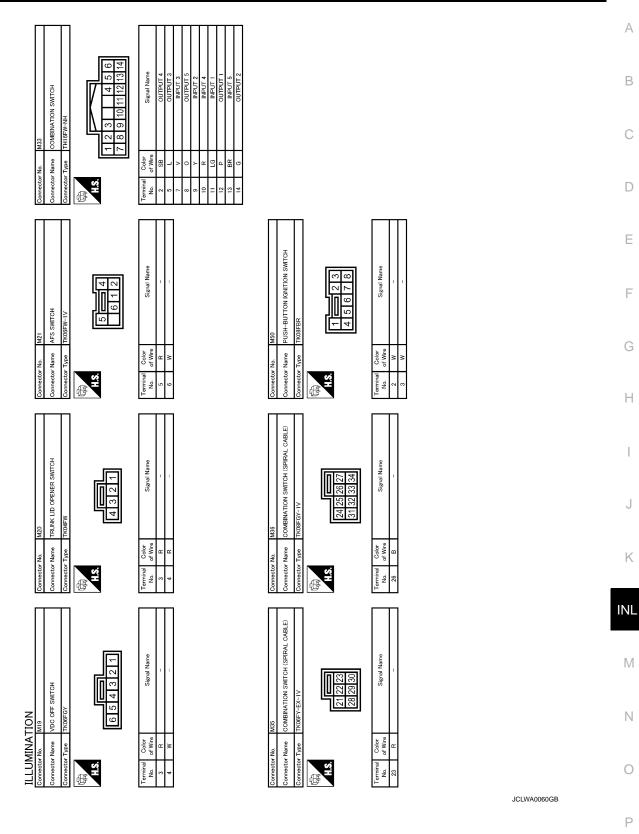


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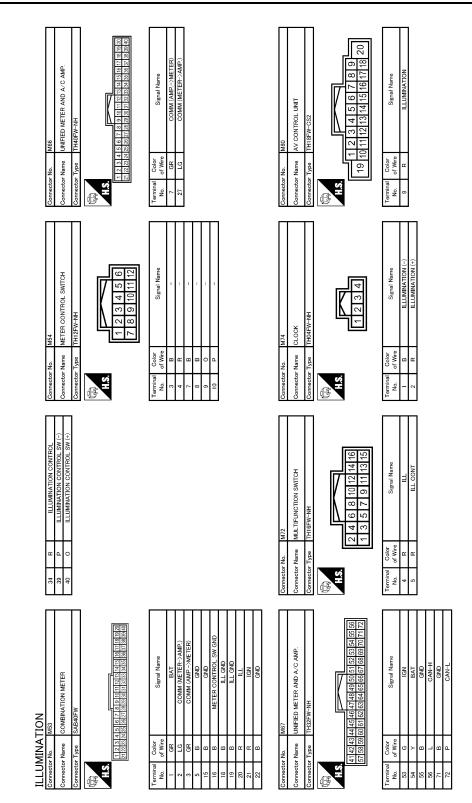
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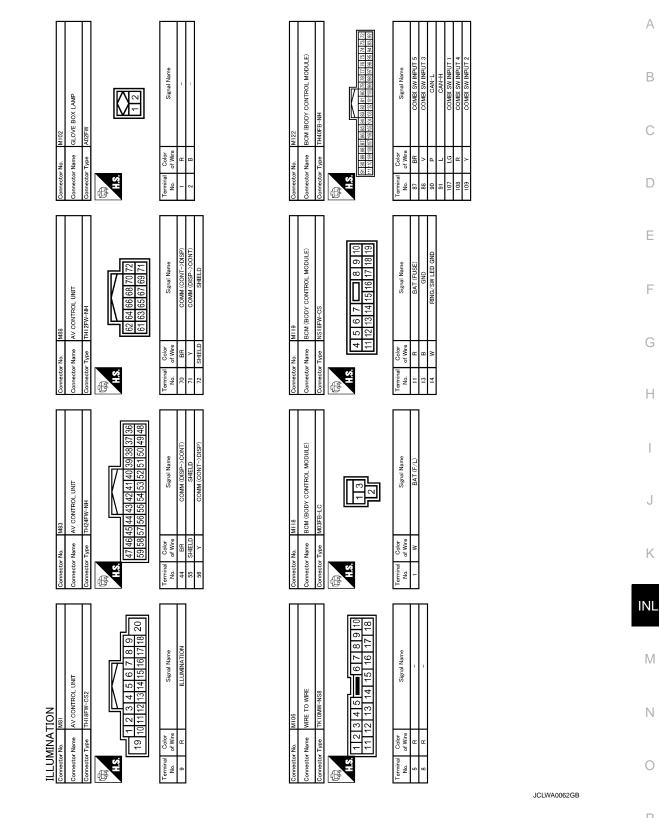
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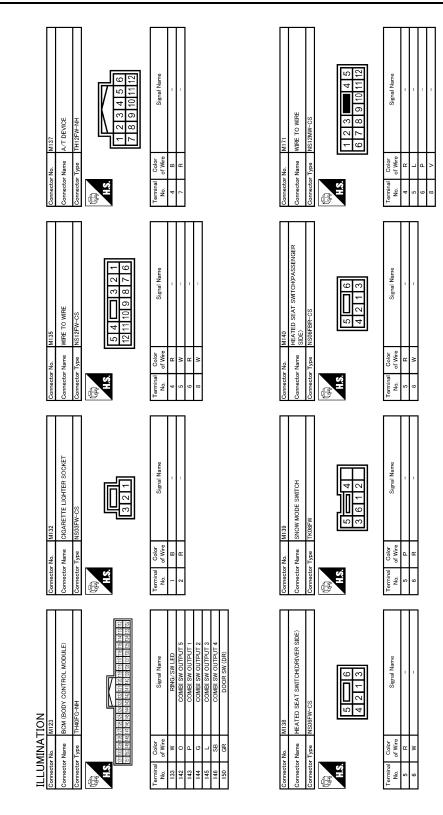
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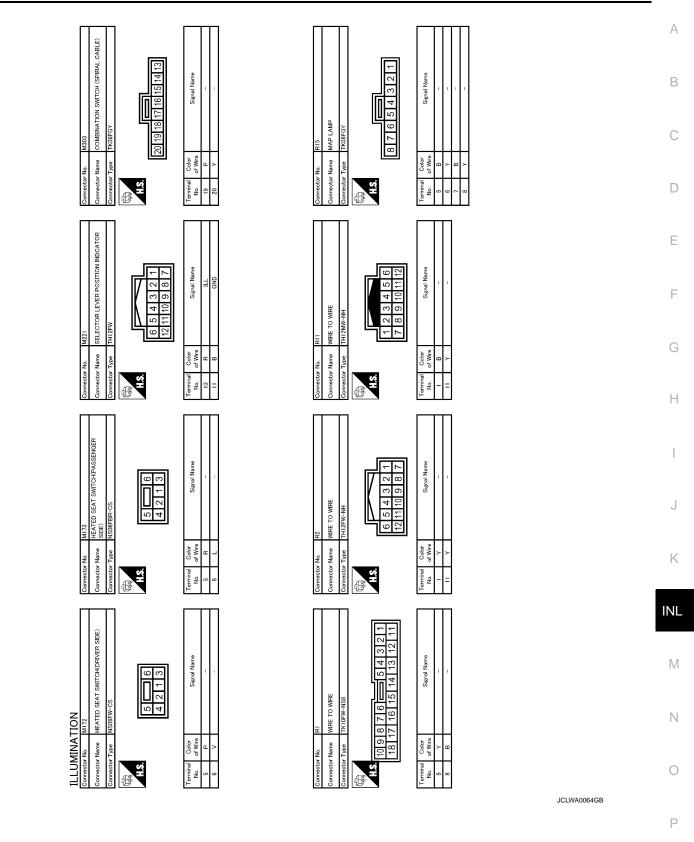
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< ECU DIAGNOSIS >

ECU DIAGNOSIS BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000000962599

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	OFF
	Front wiper switch HI	ON
	Other than front wiper switch LO	OFF
FR WIPER LOW	Front wiper switch LO	ON
FR WASHER SW	Front washer switch OFF	OFF
FR WASHER SW	Front washer switch ON	ON
FR WIPER INT	Other than front wiper switch INT	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Front wiper is not in STOP position	OFF
FR WIFER STOP	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TURN SIGNAL R	Other than turn signal switch RH	OFF
TURN SIGNAL R	Turn signal switch RH	ON
TURN SIGNAL L	Other than turn signal switch LH	OFF
TORN SIGNAL L	Turn signal switch LH	ON
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	OFF
TAIL LAWF SW	Lighting switch 1ST or 2ND	ON
HI BEAM SW	Other than lighting switch HI	OFF
	Lighting switch HI	ON
HEAD LAMP SW 1	Other than lighting switch 2ND	OFF
TIEAD EAMIF SW T	Lighting switch 2ND	ON
HEAD LAMP SW 2	Other than lighting switch 2ND	OFF
TIEAD EAWIF SW 2	Lighting switch 2ND	ON
PASSING SW	Other than lighting switch PASS	OFF
FASSING SW	Lighting switch PASS	ON
AUTO LIGHT SW	Other than lighting switch AUTO	OFF
AUTO LIGHT SW	Lighting switch AUTO	ON
FR FOG SW	Front fog lamp switch OFF	OFF
11110330	Front fog lamp switch ON	ON
RR FOG SW	NOTE: The item is indicated, but not monitored.	OFF
	Driver door closed	OFF
DOOR SW-DR	Driver door opened	ON
	Passenger door closed	OFF
DOOR SW-AS	Passenger door opened	ON
	Rear RH door closed	OFF
DOOR SW-RR	Rear RH door opened	ON

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< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
	Rear LH door closed	OFF
DOOR SW-RL	Rear LH door opened	ON
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	OFF
	Other than power door lock switch LOCK	OFF
CDL LOCK SW	Power door lock switch LOCK	ON
	Other than power door lock switch UNLOCK	OFF
CDL UNLOCK SW	Power door lock switch UNLOCK	ON
	Other than driver door key cylinder LOCK position	OFF
KEY CYL LK-SW	Driver door key cylinder LOCK position	ON
	Other than driver door key cylinder UNLOCK position	OFF
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	ON
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	OFF
	Hazard switch is not pressed	OFF
HAZARD SW	Hazard switch is pressed	ON
REAR DEF SW	NOTE: The item is indicated, but not monitored.	OFF
H/L WASH SW	NOTE: The item is indicated, but not monitored.	OFF
	Trunk lid opener cancel switch OFF	OFF
TR CANCEL SW	Trunk lid opener cancel switch ON	ON
	Trunk lid opener switch OFF	OFF
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	ON
TRNK/HAT MNTR	Trunk lid closed	OFF
	Trunk lid opened	ON
RKE-LOCK	LOCK button of Intelligent Key is not pressed	OFF
RRE-LOCK	LOCK button of Intelligent Key is pressed	ON
RKE-UNLOCK	UNLOCK button of Intelligent Key is not pressed	OFF
RRE-UNLOCK	UNLOCK button of Intelligent Key is pressed	ON
	TRUNK OPEN button of Intelligent Key is not pressed	OFF
RKE-TR/BD	TRUNK OPEN button of Intelligent Key is pressed	ON
	PANIC button of Intelligent Key is not pressed	OFF
RKE-PANIC	PANIC button of Intelligent Key is pressed	ON
	UNLOCK button of Intelligent Key is not pressed	OFF
RKE-P/W OPEN	UNLOCK button of Intelligent Key is pressed and held	ON
	LOCK/UNLOCK button of Intelligent Key is not pressed and held si- multaneously	OFF
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is pressed and held simul- taneously	ON
	Outside of the vehicle bright	Close to 5 V
OPTICAL SENSOR	Outside of the vehicle dark	Close to 0 V
	Driver door request switch is not pressed	OFF
REQ SW-DR	Driver door request switch is pressed	ON
	Passenger door request switch is not pressed	OFF
REQ SW-AS	Passenger door request switch is pressed	ON

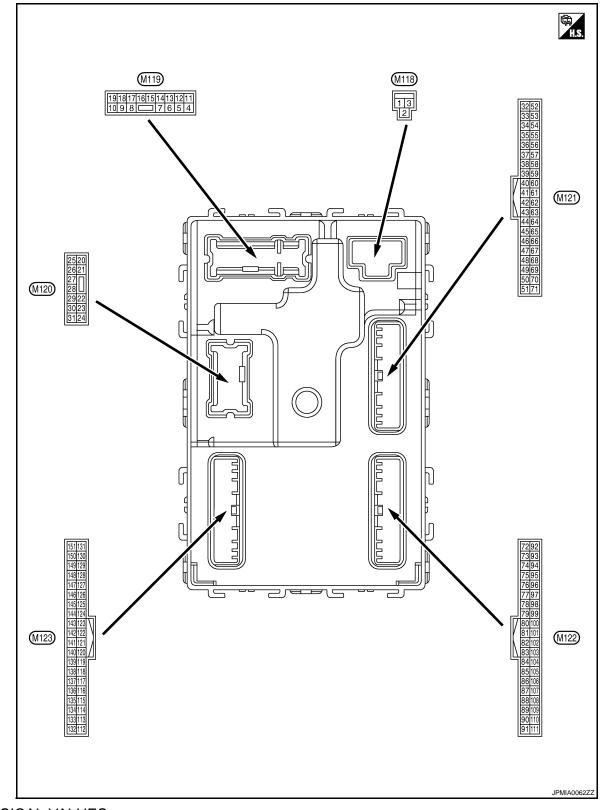
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Monitor Item	Condition	Value/Status
REQ SW-BD/TR	Trunk request switch is not pressed	OFF
	Trunk request switch is pressed	ON
PUSH SW	Push-button ignition switch (push switch) is not pressed	OFF
	Push-button ignition switch (push switch) is pressed	ON
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	OFF
IGN KLTZ -F/D	Ignition switch in ON position	ON
ACC RLY -F/B	Ignition switch in OFF position	OFF
ACC RLT -F/D	Ignition switch in ACC or ON position	ON
	The clutch pedal is not depressed	OFF
CLUCH SW	The clutch pedal is depressed	ON
BRAKE SW 1	The brake pedal is not depressed	ON
DRAKE SW I	The brake pedal is depressed	OFF
	Selector lever in P position	OFF
DETE/CANCL SW	Selector lever in any position other than P	ON
	Selector lever in any position other than P and N	OFF
SFT PN/N SW	Selector lever in P or N position	ON
	Steering is locked	OFF
S/L -LOCK	Steering is unlocked	ON
	Steering is unlocked	OFF
S/L -UNLOCK	Steering is locked	ON
	Ignition switch is OFF or ACC position	OFF
S/L RELAY-F/B	Ignition switch is ON position	ON
	Driver door is unlocked	OFF
UNLK SEN-DR	Driver door is locked	ON
	Push-button ignition switch (push-switch) is not pressed	OFF
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	ON
	Ignition switch is OFF or ACC position	OFF
IGN RLY1 -F/B	Ignition switch is ON position	ON
	Selector lever in P position	OFF
DETE SW -IPDM	Selector lever in any position other than P	ON
	Selector lever in any position other than P and N	OFF
SFT PN -IPDM	Selector lever in P or N position	ON
	Selector lever in any position other than P	OFF
SFT P -MET	Selector lever in P position	ON
	Selector lever in any position other than N	OFF
SFT N -MET	Selector lever in N position	ON
	Engine stopped	STOP
	While the engine stalls	STALL
ENGINE STATE	At engine cranking	CRANK
	Engine running	RUN
	Steering is locked	OFF
S/L LOCK-IPDM	Steering is unlocked	ON
	Steering is unlocked	OFF
S/L UNLK-IPDM	Steering is locked	ON

Monitor Item	Condition	Value/Status			
	Ignition switch in OFF or ACC position	OFF			
S/L RELAY-REQ	Ignition switch in ON position	ON			
VEH SPEED 1	While driving	Equivalent to speedometer reading			
VEH SPEED 2	While driving	Equivalent to speedometer reading			
	Driver door is locked	LOCK			
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY			
	Driver door is unlocked	UNLK			
	Passenger door is locked	LOCK			
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY			
	Passenger door is unlocked	UNLK			
	Ignition switch in ACC or ON position	RESET			
ID OK FLAG	Ignition switch in OFF position	SET			
	The engine start is prohibited	RESET			
PRMT ENG STRT	The engine start is permitted	SET			
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	RESET			
	Intelligent Key is not inserted into key slot	OFF			
KEY SW -SLOT	Intelligent Key is inserted into key slot	ON			
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key			
RKE OPE COUN2	NOTE:				
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire			
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire			
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire			
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire			
	ID of front LH tire transmitter is registered	DONE			
ID REGST FL1	ID of front LH tire transmitter is not registered	YET			
	ID of front RH tire transmitter is registered	DONE			
ID REGST FR1	ID of front RH tire transmitter is not registered	YET			
	ID of rear RH tire transmitter is registered	DONE			
ID REGST RR1	ID of rear RH tire transmitter is not registered	YET			
	ID of rear LH tire transmitter is registered	DONE			
ID REGST RL1	ID of rear LH tire transmitter is not registered	YET			
	Tire pressure indicator OFF	OFF			
WARNING LAMP	Tire pressure indicator ON	ON			
	Tire pressure warning alarm is not sounding	OFF			
BUZZER	Tire pressure warning alarm is sounding	ON			

< ECU DIAGNOSIS >

TERMINAL LAYOUT



PHYSICAL VALUES

	inal No.	Description				Value
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage
3 (O)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4	Ground	Interior room lamp	Output	After passing the ir er operation time	nterior room lamp battery sav-	0 V
(LG)	Giouna	power supply	Output	Any other time after lamp battery save	er passing the interior room roperation time	Battery voltage
5	Ground	Passenger door UN-	Outrout	Descensor desc	UNLOCK (Actuator is activated)	Battery voltage
(V)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V
7	Organi	Cton Jamn	Quitaria	Stan Jam'r	ON	0 V
(Y)	Ground	Step lamp	Output	Step lamp	OFF	Battery voltage
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors, fuel lid	LOCK (Actuator is activat- ed) Other than LOCK (Actuator	Battery voltage
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door, fuel lid	is not activated) UNLOCK (Actuator is activated) Other than UNLOCK (Actuator is not activated)	Battery voltage 0 V
10 (BR)	Ground	Rear RH door and rear LH door UN- LOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated) Other than UNLOCK (Actuator is not activated)	Battery voltage 0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
13 (B)	Ground	Ground		Ignition switch ON		0 V
					OFF	0 V NOTE:
14 (W)	(Fround ewitch illumination ()utput fail Jamp	Tail lamp	ON	When the illumination brighten- ing/dimming level is in the neutral position (V) 10 0 10 0 2 ms JSNIA0010GB		
15	Crownel	ACC indiactor lama	Quit	Ignition curitate	OFF	Battery voltage
(Y)	Ground	ACC indicator lamp	Output	Ignition switch	ACC or ON	0 V

	inal No.	Description				Value	
	e color)	Signal name	Input/	Condition		(Approx.)	
+	-	5	Output		The standard tel OFF	0.1/	
17 (W)	Ground	Turn signal (front RH)	Output	Ignition switch ON	Turn signal switch OFF	0 V	
					Turn signal switch OFF	0 V	
18 (O)	Ground	Turn signal (front LH)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V	
19	0	Room lamp timer	0	Interior room	OFF	Battery voltage	
(V)		Output	lamp	ON	0 V		
					Turn signal switch OFF	0 V	
20 (V)	Ground	Turn signal (rear RH)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 50 1 s PKID0926E 6.5 V	
23			_		Open (Trunk lid opener ac- tuator is activated)	Battery voltage	
(G)	Ground	Trunk lid opening.	Output	Trunk lid	Close (Trunk lid opener ac- tuator is not activated)	0 V	
					Turn signal switch OFF	0 V	
25 (G)	Ground	Turn signal (rear LH)	Output	lgnition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 5 0 1 5 0 FKID0926E 6.5 V	
30	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0 V	
(R)	Cround		Carpar		OFF	Battery voltage	

	inal No.	Description				Value	
(Wir) +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
34	0	Trunk room antenna	0.444	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(SB)		1 (-)	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	E
35	25	Trunk room antenna 1 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	G H
(V)	Ground				When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 s JMKIA0063GB	J K
38	Ground	Rear bumper anten-		When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 0 1 s JMKIA0062GB	M
(B) Gr	Ground	na (-)			When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB	P

	inal No.	Description		0		Value
(VVire +	e color)	Signal name	Input/ Output	Condition		(Approx.)
39	Ground	Rear bumper anten-	Output	When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 0 1 s JMKIA0062GB
(W)	Giouna	na (+)	Guiput	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 1 s JMKIA0063GB
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC ON	Battery voltage
50 (R)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk is closed)	(V) 15 0 10 ms JPMIA0011GB 11.8 V
					ON (Trunk is open)	0 V
				Ignition switch	When the clutch pedal is depressed	Battery voltage
		Starter relay control	Output	OFF (M/T mod- els)	When the clutch pedal is not depressed	0 V
52 (SB)	Ground			Ignition switch	When selector lever is in P or N position and the brake is depressed	Battery voltage
				ŎN (A/T models)	When selector lever is in P or N position and the brake is not depressed	0 V
					ON (Pressed)	0 V
61 (W)	Ground	Trunk request switch	Input	Trunk request switch	OFF (Not pressed)	(V) 15 10 50 10 ms JPMIA0016GB
64		Request switch buzz-		Request switch	Sounding	1.0 V
(V)	Ground	er	Output	buzzer	Not sounding	Battery voltage
	I	1			l	l

Terminal No. (Wire color)		Description				Value	
(Wir +	e color)	Signal name	Input/ Output		Condition	(Approx.)	
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed Not pressed	0 V (V) 15 10 5 0 	
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes) ON (When rear RH door opens)	(V) 11.8 V (V) 15 0 10 ms JPMIA0011GB 10 ms JPMIA0011GB 11.8 V 0 V	
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes) ON (When rear LH door opens)	(V) 15 10 10 10 10 11.8 V 0 V	
72	Ground	Room antenna 2 (-)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(R)	Siound	(center console)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0063GB	

	inal No.	Description				Value
(VVire +	e color)	Signal name	Input/ Output		Condition	(Approx.)
73	Ground	Room antenna 2 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0062GB
(G)	(G) Ground (center console) Out	Urr		When Intelligent Key is not in the passenger compart- ment	(V) 15 0 5 0 1 s JMKIA0063GB	
74	Ground	d Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(SB)					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
75	Ground	Passenger door an- tenna (+)		When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)	Ground		Output	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

	inal No.	Description				Value	
(Wire +	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)	A
76		Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(V)	Ground	(-)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E
77	77	Driver door antenna (+)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	G H
(LG)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	J K
78	Ground	Room antenna (-) (in- strument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	M
(Y)	Ground				When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	P

	inal No.	Description				Value	
(VVire +	e color)	Signal name	Input/ Output	Condition		(Approx.)	
79	Ground	Room antenna (+)	O the st	Output Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0062GB	
(BR)	Ground	(instrument panel)	Guipur		When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	
80 (GR)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	
81 (W)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	
82 (R)	Ground	Ignition relay (relay box) control	Output	Ignition switch	OFF or ACC ON	0 V Battery voltage	
83	Ground	Remote keyless entry	Remote keyless entry Inp				(V) 15 10 5 0 1 ms JMKIA0064GB
83 (Y)	Ground		Output	When operating e	ither button on Intelligent Key	(V) 15 10 5 0 1 ms JMKIA0065GB	

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description				Value	Δ
(VVir +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
							В
					All switch OFF (Wiper intermittent dial 4)	5 0 	С
						JPMIA0041GB 1.4 V	D
87 (BR)	Ground	Combination switch	Input	Combination	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0	E
()						2 ms	F
							G
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB	H
						1.3 V	

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	inal No.	Description				Value
(Wire +	e color)	Signal name	Input/ Output	Condition		Value (Approx.)
			Guipur		All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
88	Ground Combination switch	Combination	Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V		
(∨)		INPUT 3	switch	SWIGH	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0037GB 1.3 V
						Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3
89		Push-button ignition		Push-button igni-	Pressed	0 V
(BR)	Ground	switch (push switch)	Input	tion switch (push switch)	Not pressed	Battery voltage
90 (P)	Ground	CAN - L	Input/ Output		·	_
91 (L)	Ground	CAN - H	Input/ Output		_	—
					OFF	0 V
92 (LG)	Ground	Key slot illumination Ou	Output	Key slot illumina- tion	Blinking	
				ON	6.5 V Battery voltage	

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description				Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)	
93	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	0 V	
(V)					ON	Battery voltage	
95 (O)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V	
(O)		-		5	ACC or ON	Battery voltage	
96 (GR)	Ground	A/T device (detention switch) power supply	Output		_	Battery voltage	
97	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V	
(L)	Giouna	tion No. 1	input	Steering lock	UNLOCK status	Battery voltage	
98	Ground	Steering lock condi-	Input	Stooring look	LOCK status	Battery voltage	
(P)	Ground	tion No. 2	Input	Steering lock	UNLOCK status	0 V	
99	Crownel	Selector lever P posi-	الم من	Solostor lover	P position	0 V	
(R)	Ground	tion switch	Input	Selector lever	Any position other than P	Battery voltage	
					ON (Pressed)	0 V	
100 (G)		Passenger door re- quest switch	Input	Input Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V	
					ON (Pressed)	0 V	
101 (SB)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V	
102		Blower fan motor re-	<u> </u>		OFF or ACC	0 V	
(O)	Ground	lay control	Output	Ignition switch	ON	Battery voltage	
103 (LG)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OF	F	Battery voltage	
106	0	Steering wheel lock	0	Inviting to 10.1	OFF or ACC	Battery voltage	
(W)	Ground	unit power supply	Output	Ignition switch	ON	0 V	

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	inal No.	Description		2		Value
+	e color) –	Signal name	Input/ Output	Condition		(Approx.)
					All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V
107 (LG)	Ground	Combination switch INPUT 1	tch Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 0 2 ms JPMIA0036GB 1.3 V
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description				Value	٨
(VVire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
					All switch OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms 10 2 ms JPMIA0041GB 1.4 V	B C D
108	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0038GB 1.3 V	E
(R)		INPUT 4		switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3 V	G H
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB	J
						1.3 V	INL

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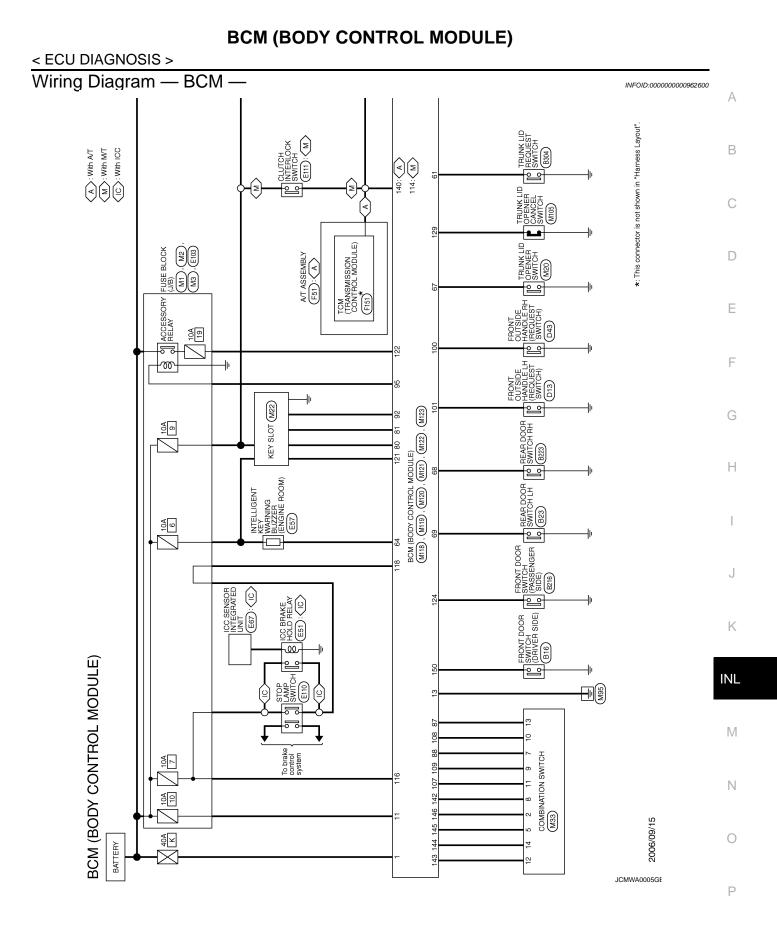
	inal No.	Description				Value					
	e color) _	Signal name	Input/ Output		Condition	(Approx.)					
+										All switch OFF	(V) 15 0 2 ms JPMIA0041GB 1.4 V
					Lighting switch PASS	(V) 15 0 2 ms JPMIA0037GB 1.3 V					
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 0 2 ms JPMIA0036GB 1.3 V					
					Front wiper switch INT	(V) 15 0 2 ms JPMIA0038GB 1.3 V					
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V					
					Pressed	0 V					
110 (G)	Ground	Hazard switch	Input	Hazard switch	Not pressed	(V) 15 10 10 10 10 1.1 V JPMIA0012GB					

nal No.	Description				Value	
color)	Signal name Input/ Output			Condition	(Approx.)	
				LOCK status	Battery voltage	
Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 50 ms JMKIA0066GB	
				For 15 seconds after UN- LOCK	Battery voltage	
				15 seconds or later after UNLOCK	0 V	
Ground	Ontical sensor signal	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V	
Ground	Optical serisor signal	input	ON	When dark outside of the vehicle	Close to 0 V	
Ground	Clutch interlock	Innit	Clutch interlock	OFF (Clutch pedal is not depressed)	0 V	
(R) Ground switch	switch	witch	switch	ON (Clutch pedal is de- pressed)	Battery voltage	
Ground	Stop lamp switch 1	Input		_	Battery voltage	
			Stop Jamp switch	OFF (Brake pedal is not depressed)	0 V	
Ground	Stop lamp switch 2	Input		ON (Brake pedal is de- pressed)	Battery voltage	
			ICC brake hold	OFF	0 V	
			relay (With ICC)	ON	Battery voltage	
Ground	Front door lock as- sembly driver side (unlock sensor)	Input	Driver door	LOCK status	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	
				UNLOCK status	0 V	
Ground	Key slot switch	Input	When Intelligent K	ey is inserted into key slot	Battery voltage	
Sibunu	Noy Slot Switch	mput	When Intelligent K	· · ·	0 V	
Ground	ACC feedback signal	Input	Ignition switch	OFF	0 V	
	0		-		Battery voltage	
Ground	IGN feedback signal	Input	Ignition switch	OFF or ACC ON	0 V Battery voltage	
	Ground Ground Ground Ground Ground Ground	Signal name-Signal nameGroundSteering lock unit communicationGroundOptical sensor signalGroundClutch interlock switchGroundStop lamp switch 1GroundStop lamp switch 2GroundStop lamp switch 2GroundFront door lock as- sembly driver side (unlock sensor)GroundKey slot switchGroundKey slot switch	Signal nameInput OutputSignal nameInput OutputGroundSteering lock unit communicationInput/ OutputGroundOptical sensor signalInputGroundClutch interlock switchInputGroundStop lamp switch 1InputGroundStop lamp switch 2InputGroundStop lamp switch 2InputGroundKey slot switchInputGroundKey slot switchInputGroundKey slot switchInput	Signal nameInput OutputGroundSteering lock unit communicationInput/ OutputSteering lockGroundOptical sensor signalInputIgnition switch ONGroundOptical sensor signalInputIgnition switch ONGroundClutch interlock switchInputClutch interlock switchGroundStop lamp switch 1InputClutch interlock switchGroundStop lamp switch 1InputStop lamp switch 1GroundStop lamp switch 2InputStop lamp switch 1GroundStop lamp switch 2InputClutch interlock switch relay (With ICC)GroundFront door lock assembly driver side (unlock sensor)InputDriver doorGroundKey slot switchInputWhen Intelligent K When Intelligent K When Intelligent K When Intelligent K When Intelligent KGroundACC feedback signalInputWhen Intelligent K When Intelligent K When Intelligent K	- Signal name Input Output Output Constant Ground Steering lock unit communication Input/ Output Steering lock LOCK or UNLOCK For 15 seconds after UN- LOCK For 15 seconds after UN- LOCK For 15 seconds after UN- LOCK Ground Optical sensor signal Input Ignition switch ON When bright outside of the vehicle Ground Optical sensor signal Input Input Clutch interlock switch V/Hen dark outside of the vehicle Ground Clutch interlock switch Input Clutch interlock switch OFF (Clutch pedal is not depressed) Ground Stop lamp switch 1 Input Stop lamp switch OFF (Brake pedal is de- pressed) Ground Stop lamp switch 2 Input Stop lamp switch OFF (Brake pedal is de- pressed) Ground Stop lamp switch 2 Input Stop lamp switch OFF Input Input Stop lamp switch UNLOCK status Ground Front door lock as- sembly driver side (unlock sensor) Input Driver door UNLOCK status Ground Key slot switch	

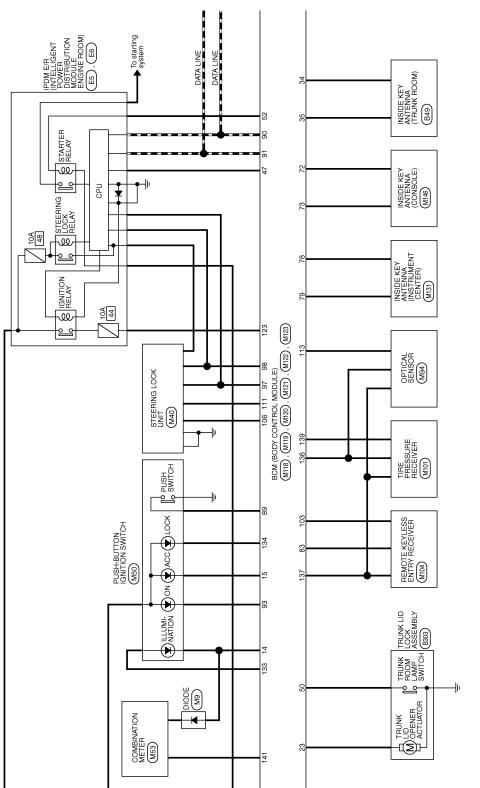
	inal No.	Description				
(Wire	e color)	Signal name	Input/	Condition		Value (Approx.)
+	_	Signal name	Output			
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	(V) 15 0 10 ms JPMA0011GB 11.8 V
					ON (When passenger door opens)	0 V
129 (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid opener cancel switch	CANCEL	(V) 15 10 10 ms JPMIA0012GB 1.1 V
					ON	0 V
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 10 10 10 10 10 10 10 10 10
				Ignition switch OFF	F or ACC	0 V
					ON (When tail lamps OFF)	5.5 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button igni- tion switch illumi- nation	ON (When tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level. (V) 15 10 5 0
					055	JPMIA0159GB
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON OFF	0 V Battery voltage
137		Receiver and sensor				
(O)	Ground	ground	Input	Ignition switch ON		0 V
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(V)		power supply output			ACC or ON	5.0 V

Terminal No.		Description				Value	
	e color)	Signal name Input/		Condition		(Approx.)	
+	-		Output				
139		Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 • • 0.2s O OCC3881D	B C D
(L)	Ground	er signal	Output		When receiving the signal from the transmitter	(V) 4 2 0 • • 0.2s OCC3880D	E
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	12.0 V	G
(GR)	Ground	position signal	input		Except P and N positions	0 V	
141 (G)	Ground	Security indicator sig- nal	Output	Security indicator	ON Blinking	0 V (V) 15 10 5 0	H
					OFF All switch OFF	I1.3 V Battery voltage	K
					Lighting switch 1ST		
142	Ground	Combination switch	Output	Combination switch	Lighting switch HI Lighting switch 2ND	(V) 15 10 5	INL
(O)		OUTPUT 5	Output	(Wiper intermit- tent dial 4)	Turn signal switch RH	0 2 ms JPMIA0031GB 10.7 V	M
					All switch OFF (Wiper intermittent dial 4)	0 V	
					Front wiper switch HI (Wiper intermittent dial 4)		0
143 (P)		nd Combination switch OUTPUT 1 Out	Output	Combination switch	 Any of the conditions below with all switch OFF Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 3 Wiper intermittent dial 6 Wiper intermittent dial 7 	15 10 5 0 2 ms JPMIA0032GB 10.7 V	Ρ

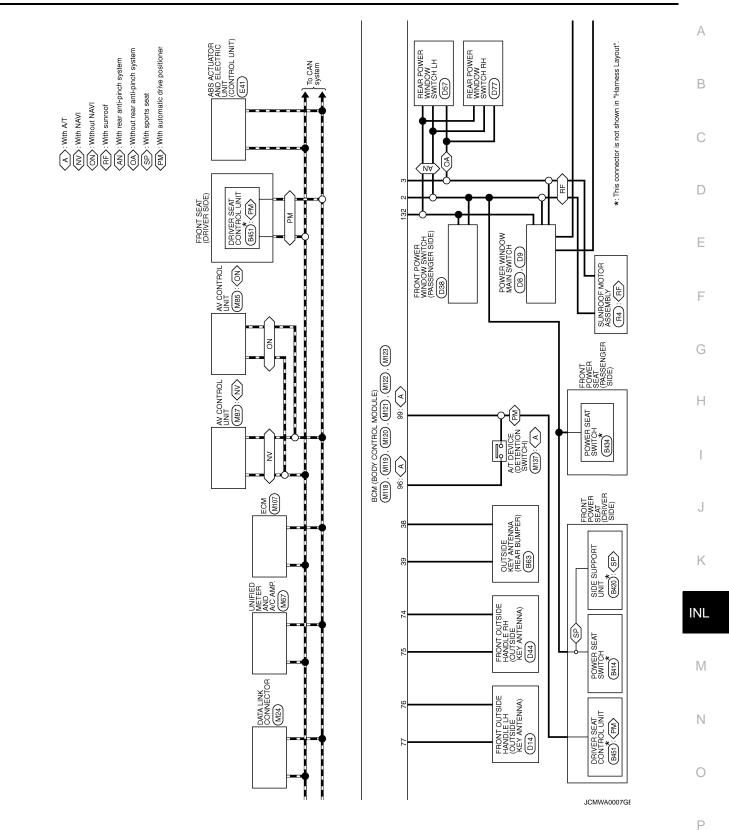
	inal No.	Description				Value	
(Wire +	e color) -	Signal name	Input/ Output		Condition	(Approx.)	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4) Front washer switch ON (Wiper intermittent dial 4) Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	0 V (V) 15 0 2 ms JPMIA0033GB 10.7 V	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF Front wiper switch INT Front wiper switch LO Lighting switch AUTO	0 V (V) 15 10 2 ms JPMIA0034GB 10.7 V	
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Front fog lamp switch ON Lighting switch 2ND Lighting switch PASS Turn signal switch LH	0 V	
149 (W)	Ground	Tire pressure warn- ing check switch	Input		_	5 V	
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes) ON (When driver door	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V 0 V	
151 (G)	Ground	Rear window defog- ger relay	Output	Rear window de- fogger	opens) Active Not activated	0 V Battery voltage	



< ECU DIAGNOSIS >

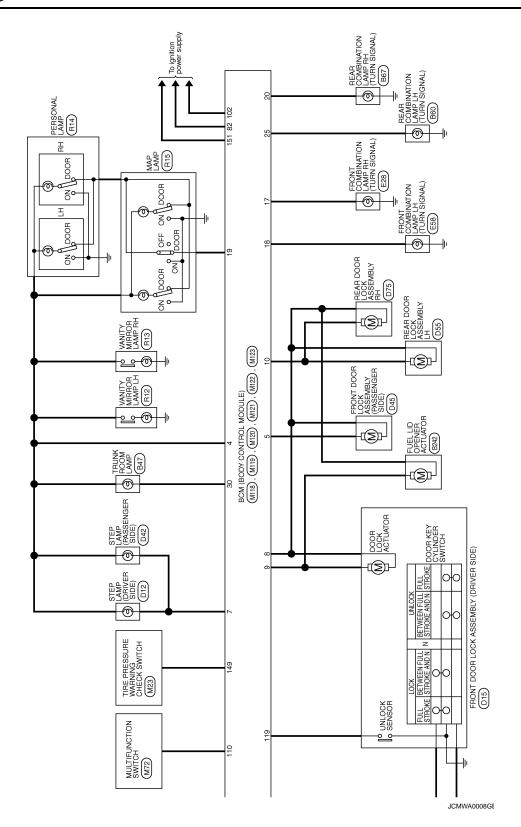


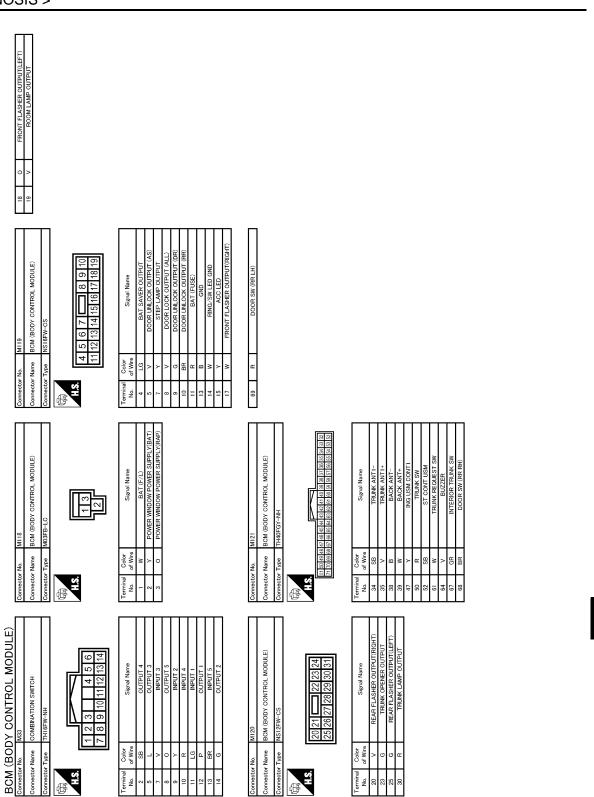
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JCMWA0009GE

	BCM (BODY CONTROL MODULE)		ł		,	[
Connector No. M122		83	Υ	KEYLESS TUNER SIGNAL	Connector No.		M123	133	M	RING/SW LED	
Canadar Name BCM (BORY CONTROL MODIILE)		87	BR	COMBI SW INPUT 5	Connector Name			134	GR	LOCK LED	
		88	>	COMBI SW INPUT 3	CONTRECTOR			137	0	SENSOR GND	
Connector Type TH40FB-NH		68	BR	ENG SW	Connector Type		TH40FG-NH	138	>	AUTO LIGHT SENSOR POER SUPPLY	
ſ		06	۵.	CAN-L	ſ			139	-	RECEIVER SIGNAL	
B		91	٦	CAN-H	E			140	GR	SHIFT N/P	
		92	ГG	KEY SLOT ILL				141	5	SECURITY INDICATOR OUTPUT	
		93	٨	ON LED	2 -			142	0	COMBI SW OUTPUT 5	
91 90 89 88 87 86 85 84 83 82 81 90 79	00 79 78 77 76 75 74 73 72	95	0	ACC CONT		31 130 129 128 12	23 122 121 120 119	143	٩.	COMBI SW OUTPUT 1	
111 110 109 108 107 108 105 104 103 102 101 10	00 99 98 97 96 95 94 93 92	96	GR	A/T DEVICE		51 150 149 148 14	9 148 148 148 148 148 148 148 148 148 148	144	9	COMBI SW OUTPUT 2	
		97	٢	S/L CONDITION 1				145	-	COMBI SW OUTPUT 3	
		98	٩	S/L CONDITION 2				146	SB	COMBI SW OUTPUT 4	
Terminal Color		66	н	SHIFT P	Terminal	Color	13	149	M	MODE TRG SW	
No. of Wire 31	olgnar ivanre	100	g	AS REQUEST SW	No.	of Wire	Olgran Name	150	GR	DOOR SW (DR)	
72 R R00	ROOM ANT2-	101	SB	DR REQUEST SW	113	٩	AUTO LIGHT SENSOR INPUT	151	9	REAR DEFOGGER OUTPUT	
73 G RO	ROOM ANT2+	102	0	IGN2 CONT	114	ч	CLUTCH SW				
74 SB ASD	AS DOOR ANT-	103	ГG	KEYLESS TUNER POWER SUPPLY	116	SB	STOP LAMP LOW				
75 BR ASD	AS DOOR ANT+	106	W	S/L 12V (CPU)	118	Ч	STOP LAMP HIGH				
76 V DRD	DR DOOR ANT-	107	ΓC	COMBI SW INPUT 1	119	SB	DR CONDITION SW				
77 LG DRD	DR DOOR ANT+	108	Я	COMBL SW INPUT 4	121	ч	KEY SWITCH SIGNAL				
78 Y ROG	ROOM ANT1-	109	Y	COMBI SW INPUT 2	122	^	ACC F/B				
79 BR R00	ROOM ANT1+	110	9	HAZARD SW	123	W	IGN F/B				
80 GR IMMOBI AN	IMMOBI ANTENNA CONTROL	111	Y	S/L (K LINE)	124	ΓC	DOOR SW (AS)				
81 W IMMOBIA	IMMOBI ANTENNA SIGNAL				129	0	TRUNK CANCEL SW				
82 R IGN F	IGN ELEC CONT				132	>	POWER WINDOW SERIAL LINK				

Fail Safe

JCMWA0010GE

INFOID:000000000962601

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTTENA AMP	Inhibit engine cranking	Erase DTC

BCM (BODY CONTROL MODULE)

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Display contents of CONSULT	Fail-safe	Cancellation
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistentStarter control relay signalStarter relay status signal
B2563: HI VOLTAGE	Inhibit engine crankingInhibit steering lock	500 ms after the power supply voltage decreases to less than 18 V
B2601: SHIFT POSITION	Inhibit steering lock	 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Vehicle speed: 4 /h or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions is ful- filled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (battery volt- age) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions is fulfilled Ignition switch is in the ON position Power position: IGN Selector lever P/N position signal: Except P and N positions (0 V) Interlock/PNP switch signal (CAN): OFF Status 2 Ignition switch is in the ON position Selector lever P/N position signal: P or N position (battery voltage) PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has become consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has become consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)

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< ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B2609: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilledPower position changes to ACCReceives engine status signal (CAN)
B2612: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When any of the following conditions is fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM be- comes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control in- side BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilledPower position changes to ACCReceives engine status signal (CAN)

DTC Inspection Priority Chart

INFOID:000000000962602

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

Priority	DTC
1	B2562: LOW VOLTAGE B2563: HI VOLTAGE
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
3	 B2190: NATS ANTTENA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM

< ECU DIAGNOSIS >

Priority	DTC	
	B2013: ID DISCORD BCM-S/L	-
	B2014: CHAIN OF S/L-BCM	
	B2553: IGNITION RELAY B2555: STOP LAMP	
	 B2555: STOP LAMP B2556: PUSH-BTN IGN SW 	E
	B2557: VEHICLE SPEED	
	B2560: STARTER CONT RELAY	
	B2601: SHIFT POSITION	(
	B2602: SHIFT POSITION	
	 B2603: SHIFT POSI STATUS B2604: PNP SW 	
	• B2605: PNP SW	Ι
	• B2606: S/L RELAY	
	B2607: S/L RELAY	
	 B2608: STARTER RELAY B2609: S/L STATUS 	E
	 B2609: 3/L STATUS B260A: IGNITION RELAY 	
4	B260B: STEERING LOCK UNIT	
	B260C: STEERING LOCK UNIT	F
	B260D: STEERING LOCK UNIT	-
	 B260F: ENG STATE SIG LOST B2611: ACC RELAY 	
	• B2612: S/L STATUS	(
	B2614: ACC RELAY CIRC	
	B2615: BLOWER RELAY CIRC	
	 B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC 	ŀ
	• B2618: BCM	1
	• B2619: BCM	
	B261A: PUSH-BTN IGN SW	
	B261E: VEHICLE TYPE B26E1: ENG STATE NO RECIV	
	C1729: VHCL SPEED SIG ERR	
	U0415: VEHICLE SPEED SIG	
	C1704: LOW PRESSURE FL	
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL	ł
	C1708: [NO DATA] FL	
	• C1709: [NO DATA] FR	
	• C1710: [NO DATA] RR	IN
	 C1711: [NO DATA] RL C1712: [CHECKSUM ERR] FL 	
	C1712. [CHECKSUM ERR] FR C1713: [CHECKSUM ERR] FR	
	C1714: [CHECKSUM ERR] RR	Ν
	C1715: [CHECKSUM ERR] RL	11
5	C1716: [PRESSDATA ERR] FL	
	 C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR 	
	C1719: [PRESSDATA ERR] RL	ľ
	C1720: [CODE ERR] FL	
	C1721: [CODE ERR] FR	
	 C1722: [CODE ERR] RR C1723: [CODE ERR] RL 	(
	C1723: [CODE ERK] KL C1724: [BATT VOLT LOW] FL	
	C1725: [BATT VOLT LOW] FR	_
	C1726: [BATT VOLT LOW] RR	F
	C1727: [BATT VOLT LOW] RL C1734: CONTROL UNIT	
6	B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA	

< ECU DIAGNOSIS >

NOTE:

Details of time display

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

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	
U1000: CAN COMM CIRCUIT	_	_	_	BCS-33
U1010: CONTROL UNIT (CAN)	_	_		BCS-34
U0415: VEHICLE SPEED SIG	_	_		BCS-35
B2013: ID DISCORD BCM-S/L	×	—	—	<u>SEC-43</u>
B2014: CHAIN OF S/L-BCM	×	_		<u>SEC-44</u>
B2190: NATS ANTTENA AMP	×	_	_	<u>SEC-37</u>
B2191: DIFFERENCE OF KEY	×	—	_	<u>SEC-40</u>
B2192: ID DISCORD BCM-ECM	×	_	_	<u>SEC-41</u>
B2193: CHAIN OF BCM-ECM	×	_	_	<u>SEC-42</u>
B2553: IGNITION RELAY	_	_	_	PCS-48
B2555: STOP LAMP	_	_	_	<u>SEC-47</u>
B2556: PUSH-BTN IGN SW	_	×	_	<u>SEC-49</u>
B2557: VEHICLE SPEED	×	×	_	<u>SEC-51</u>
B2560: STARTER CONT RELAY	×	×	_	<u>SEC-52</u>
B2562: LOW VOLTAGE	_	_	_	BCS-36
B2563: HI VOLTAGE	×	×	_	BCS-37
B2601: SHIFT POSITION	×	×	_	<u>SEC-53</u>
B2602: SHIFT POSITION	×	×	_	<u>SEC-56</u>
B2603: SHIFT POSI STATUS	×	×	_	<u>SEC-58</u>
B2604: PNP SW	×	×	_	<u>SEC-61</u>
B2605: PNP SW	×	×	_	<u>SEC-63</u>
B2606: S/L RELAY	×	×	—	<u>SEC-65</u>
B2607: S/L RELAY	×	×	_	<u>SEC-66</u>
B2608: STARTER RELAY	×	×	—	<u>SEC-68</u>
B2609: S/L STATUS	×	×	—	<u>SEC-70</u>
B260A: IGNITION RELAY	×	×	_	PCS-50
B260B: STEERING LOCK VNIT	_	×	_	<u>SEC-74</u>
B260C: STEERING LOCK VNIT	_	×	_	<u>SEC-75</u>
B260D: STEERING LOCK VNIT	—	×	—	<u>SEC-76</u>
B260F: ENG STATE SIG LOST	×	×	—	<u>SEC-77</u>
B2611: ACC RELAY			_	PCS-52
B2612: S/L STATUS	×	×	_	<u>SEC-79</u>
B2614: ACC RELAY CIRC		×	_	PCS-54
B2615: BLOWER RELAY CIRC		×	_	PCS-57

< ECU DIAGNOSIS >

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2616: IGN RELAY CIRC	_	×	_	PCS-60
B2617: STARTER RELAY CIRC	×	×	_	<u>SEC-83</u>
B2618: BCM	×	×	_	PCS-63
B2619: BCM	×	×	_	<u>SEC-85</u>
B261A: PUSH-BTN IGN SW	—	×	_	<u>SEC-86</u>
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	_	<u>SEC-88</u>
B2621: INSIDE ANTENNA	—	—	—	<u>DLK-58</u>
B2622: INSIDE ANTENNA	—	—	—	DLK-60
B2623: INSIDE ANTENNA	—	—	_	<u>DLK-62</u>
B26E1: ENG STATE NO RES	×	×	_	<u>SEC-78</u>
C1704: LOW PRESSURE FL	—	—	×	<u>WT-14</u>
C1705: LOW PRESSURE FR	—	—	×	<u>WT-14</u>
C1706: LOW PRESSURE RR	—	—	×	<u>WT-14</u>
C1707: LOW PRESSURE RL	_	—	×	<u>WT-14</u>
C1708: [NO DATA] FL	—	—	×	<u>WT-16</u>
C1709: [NO DATA] FR	_	_	×	<u>WT-16</u>
C1710: [NO DATA] RR	—	—	×	<u>WT-16</u>
C1711: [NO DATA] RL	—	—	×	<u>WT-16</u>
C1712: [CHECKSUM ERR] FL	—	—	×	<u>WT-19</u>
C1713: [CHECKSUM ERR] FR	—	—	×	<u>WT-19</u>
C1714: [CHECKSUM ERR] RR	_	—	×	<u>WT-19</u>
C1715: [CHECKSUM ERR] RL	_	—	×	<u>WT-19</u>
C1716: [PRESSDATA ERR] FL	—	—	×	<u>WT-22</u>
C1717: [PRESSDATA ERR] FR	—	—	×	<u>WT-22</u>
C1718: [PRESSDATA ERR] RR	—	—	×	<u>WT-22</u>
C1719: [PRESSDATA ERR] RL	-	—	×	<u>WT-22</u>
C1720: [CODE ERR] FL	—	—	×	<u>WT-24</u>
C1721: [CODE ERR] FR	—	—	×	<u>WT-24</u>
C1722: [CODE ERR] RR	-	_	×	<u>WT-24</u>
C1723: [CODE ERR] RL	—	—	×	<u>WT-24</u>
C1724: [BATT VOLT LOW] FL	—	—	×	<u>WT-27</u>
C1725: [BATT VOLT LOW] FR	—	—	×	<u>WT-27</u>
C1726: [BATT VOLT LOW] RR	—	—	×	<u>WT-27</u>
C1727: [BATT VOLT LOW] RL	_	—	×	<u>WT-27</u>
C1729: VHCL SPEED SIG ERR	—	—	×	<u>WT-30</u>
C1734: CONTROL UNIT		_	×	<u>WT-31</u>

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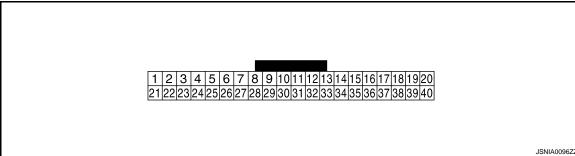
Reference Value

INFOID:000000000962604

VALUES ON THE DAIAGNOSIS TOOL

Refer to MWI-80, "Reference Value".

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
1 (GR)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
2 (LG)	Ground	Communication signal (METER→ AMP.)	Output	Ignition switch ON		(V) 6 2 0 2 2 0 2 2 0 2 0 2 0 2 0 2 0 2 0 2
3 (GR)	Ground	Communication signal (AMP.→ METER)	Input	Ignition switch ON	_	(V) 6 2 0 2 2 0 2 2 0 4 2 0 4 2 0 4 2 0 4 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5
5 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
6				Ignition	Charge warning lamp ON	0 V
(W)	Ground	Alternator signal	Input	switch ON	Charge warning lamp OFF	12 V
7		A. I		Ignition	Air bag warning lamp ON	4 V
(LG)	Ground	Air bag signal	Input	switch ON	Air bag warning lamp OFF	0 V
10	Orector			Ignition	Security warning lamp ON	0 V
(G)	Ground	Security signal	Input	switch OFF	Security warning lamp OFF	12 V
15 (B)	Ground	Ground	_	Ignition switch ON	_	0 V

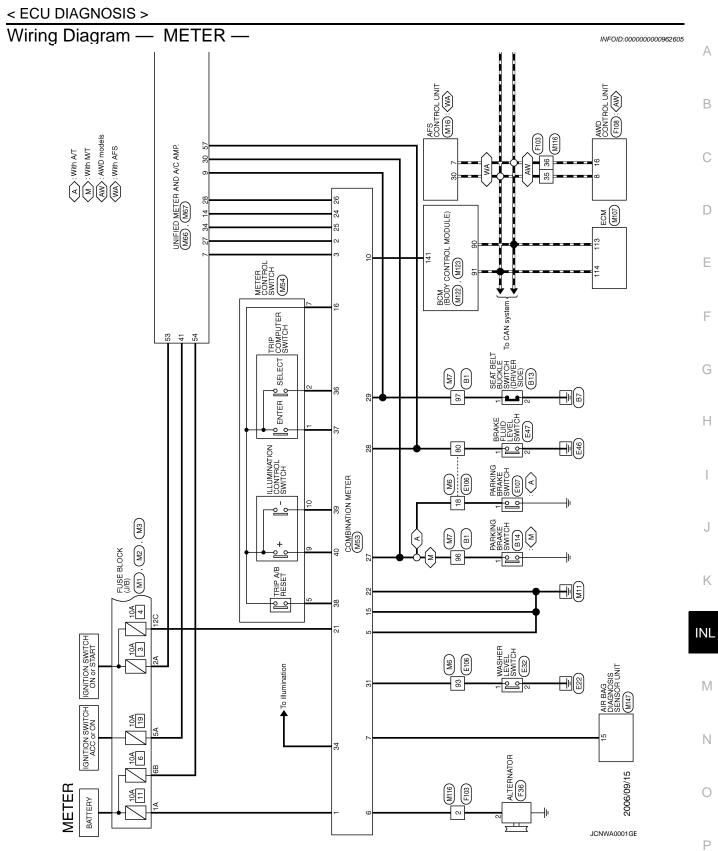


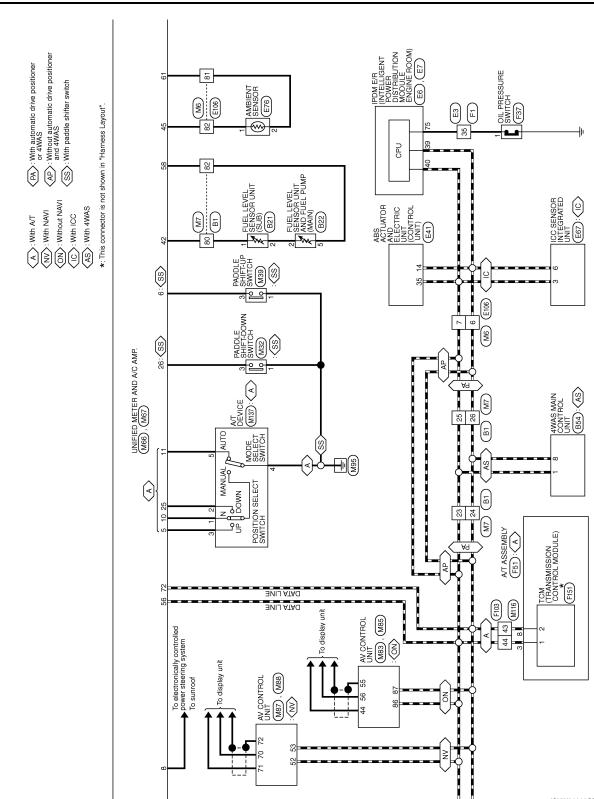
< ECU DIAGNOSIS >

	nal No. color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
16 (B)	Ground	Meter control switch ground		Ignition switch ON	_	0 V
21 (R)	Ground	Ignition signal	Input	Ignition switch ON	_	12 V
22 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
24 (BR)	Ground	Communication signal (LCD \rightarrow AMP.)	Output	Ignition switch ON		(V) 15 10 50 ▲ 400 µs JSNIA00286B
25 (Y)	Ground	Communication signal (AMP.→ LCD)	Input	Ignition switch ON		(V) 6 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
26 (R)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies de- pending on the specification (destination unit). 0 0 0 0 0 0 0 0 0 0 0 0 0
					Parking brake ON	0 V
27 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake OFF	(V) 8 4 0 10 ms JSNIA0007GB
28 (W)	Ground	Brake fluid level switch sig- nal	Input	Ignition switch ON	Brake fluid level is normal.	(V) 10 0 10 ms JSNIA0008GB
					The brake fluid level is low- er than the low level	0 V

< ECU DIAGNOSIS >

	nal No. color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
29	Ground	Seat belt buckle switch sig-	Input	Ignition switch	When driver seat belt is fas- tened	12 V
(SB)	Ground	nal (driver side)	mput	ON	When driver seat belt is un- fastened	0 V
31	Oneveral		luc ac ch	Ignition	Washer level switch ON	0 V
(L)	Ground	Washer level switch signal	Input	switch ON	Washer level switch OFF	5 V
34 (R)	Ground	Illumination control signal	Output	Ignition switch ON	Lighting switch ON, then operate the illumination control switch.	NOTE: When brightness level is midway (V) 10 0 2 ms JSNIA0010GB
36 (LG)	16 (B)	Select switch signal	Input	Ignition switch	When is pressed Other than the above	0 V 5 V
				ON		-
37	16	Enter switch signal	Input	Ignition switch	When 🖵 is pressed	0 V
(SB)	(B)			ON	Other than the above	5 V
38 (L)	16 (B)	Trip A/B reset switch signal	Input	Ignition switch	When trip A/B reset switch is pressed	0 V
(Ľ)				ON	Other than the above	5 V
39 (P)	16 (B)	Illumination control switch signal (–)	Input	Ignition switch	When 🕅 – switch is pressed	0 V
(•)	(-)			ON	Other than the above	5 V
40 (O)	16 (B)	Illumination control switch signal (+)	Input	Ignition switch	When 💏 + switch is pressed	0 V
				ON	Other than the above	5 V



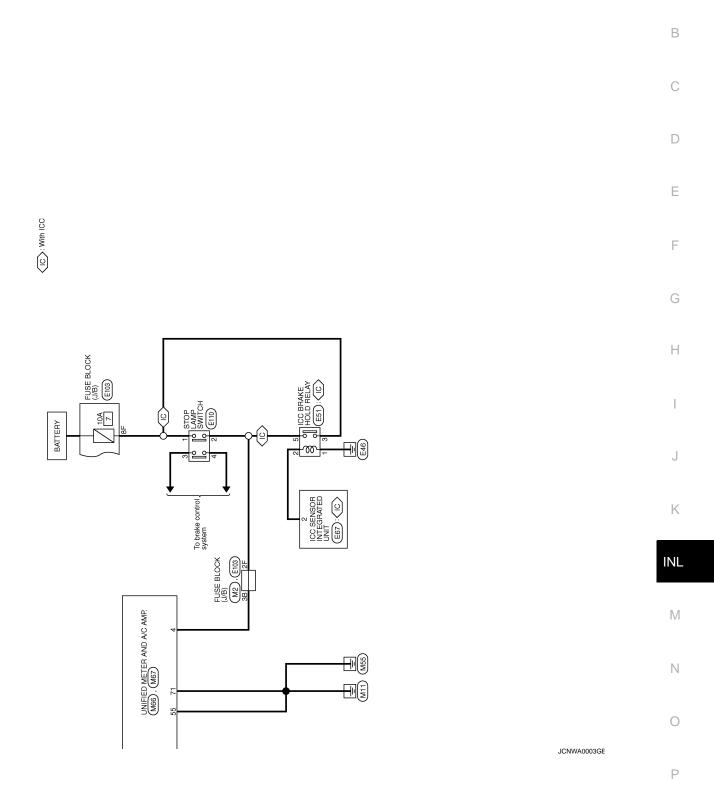


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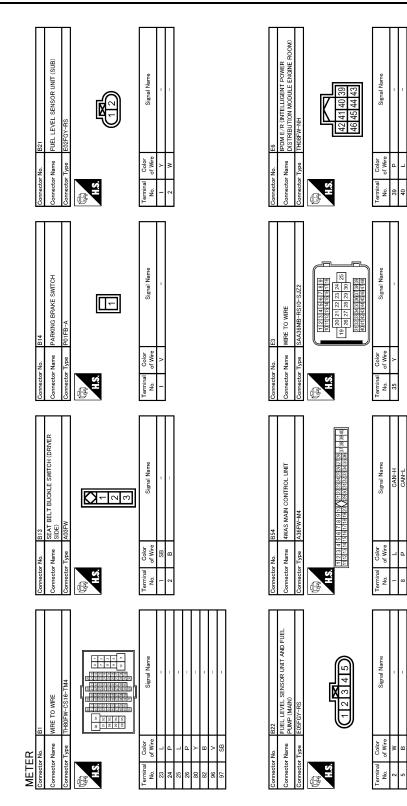
INL-84

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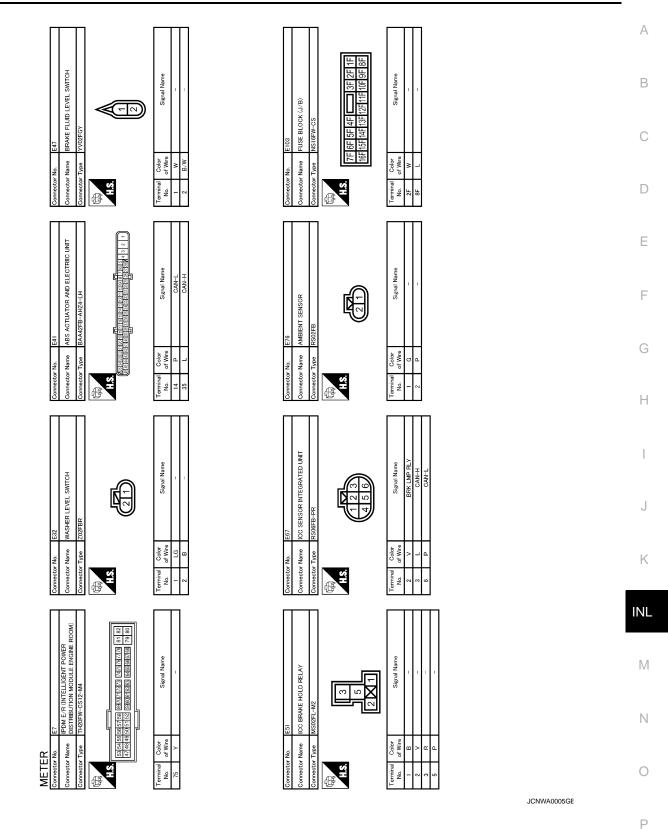


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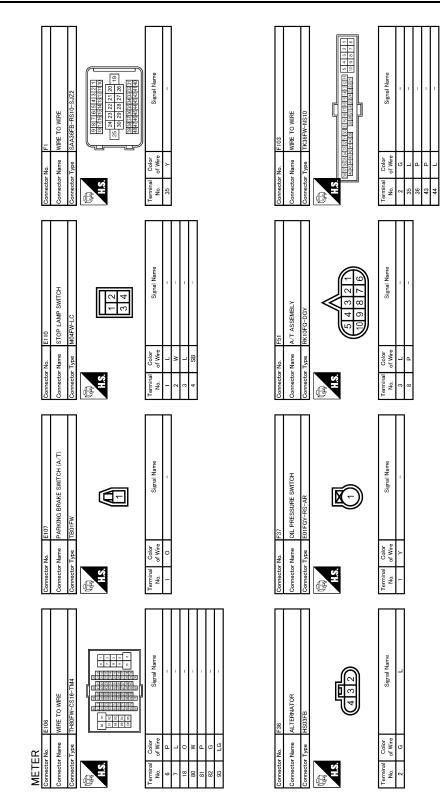


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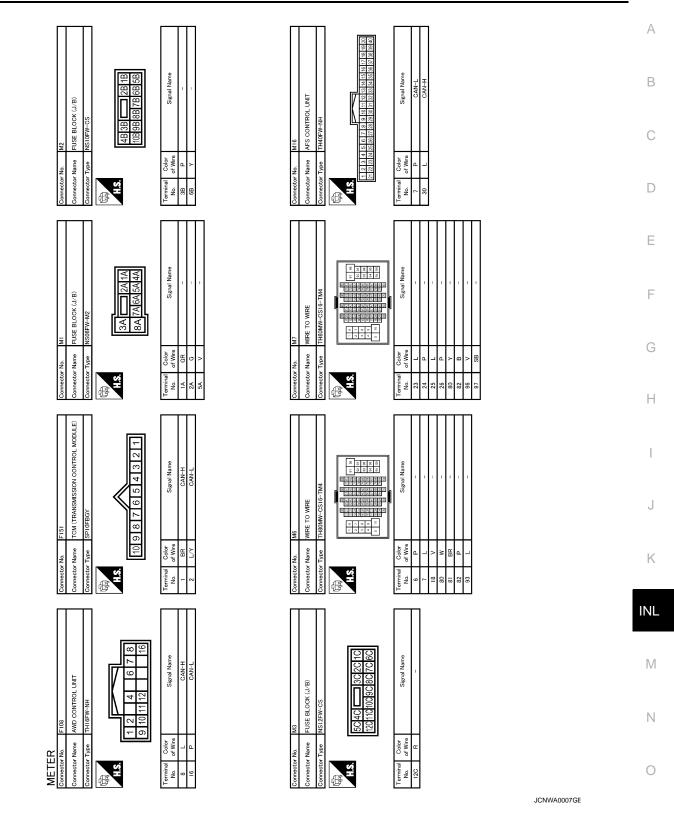


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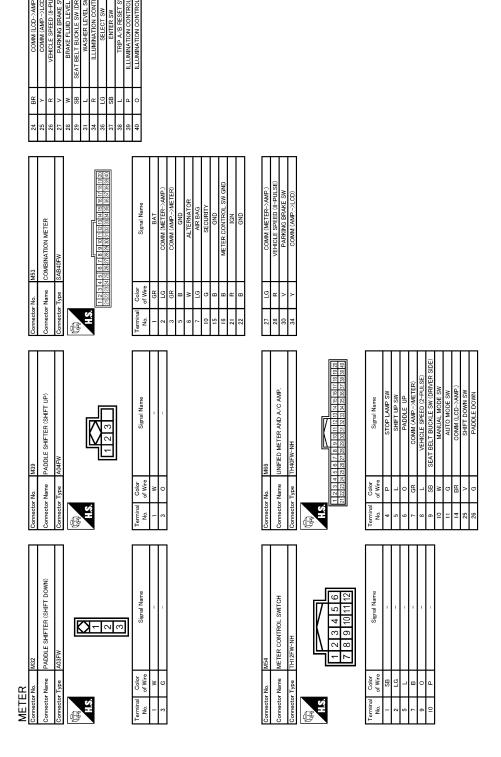


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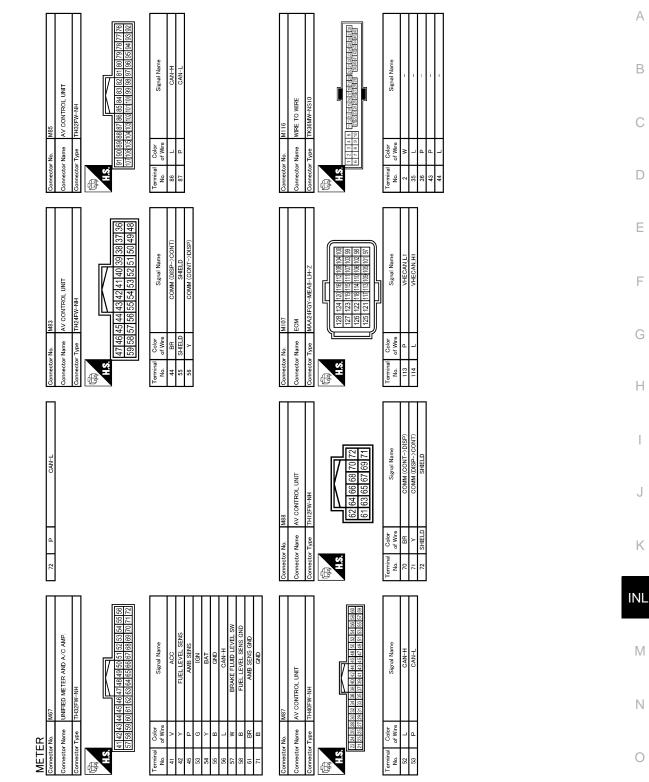


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COMBINATION METER

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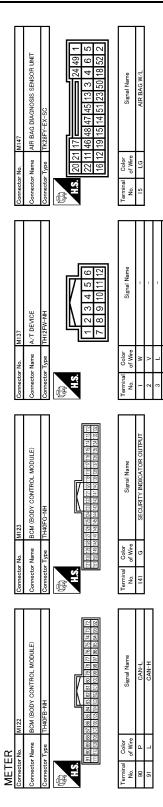
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Fail Safe

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FAIL SAFE

Combination meter performs fail-safe operation when unified meter and A/C amp. communication is malfunction.

Solution for communication error between the unified meter and A/C amp. and combination meter.

INL-92

< ECU DIAGNOSIS >

	Function	Specifications		
Speedometer				
Tachometer				
Fuel gauge		 Reset to zero by suspending communication. 		
Water temperature gauge		_		
Illumination control		When suspending communication, change to nighttime mode.		
Information display		The display turns off by suspending communication.		
Buzzer		The buzzer turns off by suspending communication.		
	ABS warning lamp			
	VDC OFF indicator lamp			
SLIP indicator lamp Brake warning lamp CRUISE warning lamp BA warning lamp				
		 The lamp turns on by suspending communication. 		
	High beam indicator			
	Turn signal indicator lamp			
Warning lamp/indicator	Front fog indicator lamp	_		
lamp	Oil pressure warning lamp			
	Malfunction indicator lamp			
	A/T CHECK warning lamp	 The lamp turns off by suspending communication. 		
	AWD warning lamp			
	Low tire pressure warning lamp			
	Key warning lamp			
	AFS OFF indicator lamp			
	4WAS warning lamp			
	Master warning lamp			

DTC Index

Refer to <u>MWI-97, "DTC Index"</u>.

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< 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 the following lamps do not turn ON. • Map lamp • Personal lamp • Trunk room lamp • Step lamp • Vanity mirror lamp	 Harness between BCM and each interior room lamp BCM 	Interior room lamp power supply cir- cuit Refer to <u>INL-18</u> .
 Interior room lamp does not turn ON even though the door is open. (It turns ON when turning the interior room lamp ON.) Interior room lamp does not turn OFF even though the door is closed. 	 Harness between BCM and each door switch Harness between BCM and each interior room lamp BCM 	Door switch circuit Refer to <u>DLK-65</u> . Interior room lamp control circuit Refer to <u>INL-20</u> .
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	_	Check the interior room lamp setting. Refer to <u>INL-13</u> .
Step lamps (driver side and passenger side) do not turn ON. (The map lamp and the personal lamp turn ON.) Step lamps (driver side and passenger side) do	 Harness between BCM and each step lamp BCM 	Step lamp circuit Refer to <u>INL-22</u> .
not turn OFF. (The map lamp and the personal lamp turn OFF.)		
 Trunk room lamp does not turn ON. (The bulb is normal.) Trunk room lamp does not turn OFF. 	 Harness between BCM and trunk room lamp switch Harness between BCM and trunk room lamp BCM 	Trunk room lamp switch circuit Refer to <u>DLK-84</u> .
		Trunk room lamp circuit Refer to <u>INL-24</u> .
Push-button ignition switch illumination does not illuminate.	 Harness between BCM and push- button ignition switch BCM 	Push-button ignition switch illumina- tion circuit Refer to <u>INL-24</u> .
Interior room lamp battery saver does not activate.	_	Check the interior room lamp battery saver setting. Refer to <u>INL-15</u> .

< PRECAUTION > PRECAUTION PRECAUTIONS

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

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 SRS 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 SRS 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.
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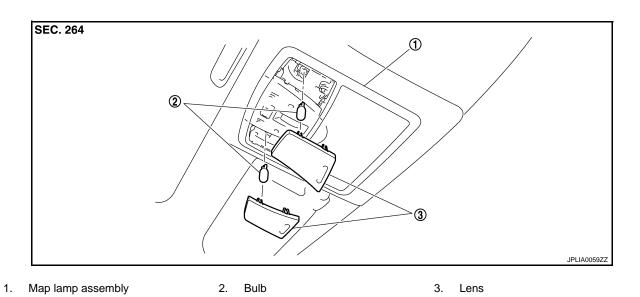
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< ON-VEHICLE REPAIR > ON-VEHICLE REPAIR MAP LAMP

Exploded View

INFOID:000000000962610



Removal and Installation

Refer to INT-22, "Exploded View" for the map lamp assembly installation/removal.

Replacement

INFOID:000000000962612

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CAUTION:

Disconnect the battery negative terminal or the fuse.

MAP LAMP BULB

- 1. Insert any appropriate tool into the gap between the lens. Remove the lens.
- 2. Remove the bulb.

VANITY MIRROR LAMP

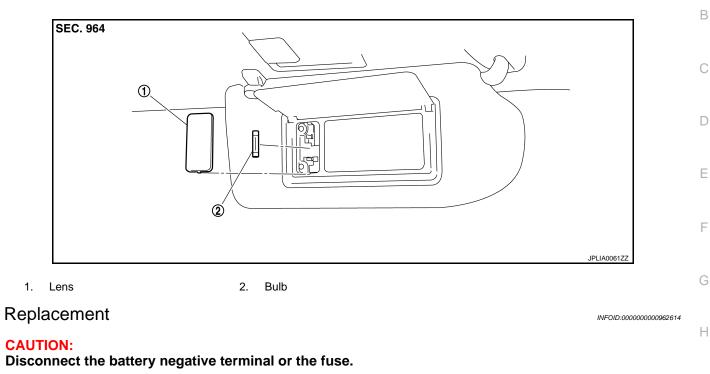
< ON-VEHICLE REPAIR >

VANITY MIRROR LAMP

Exploded View

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VANITY MIRROR LAMP BULB

- 1. Insert any appropriate tool into the gap between the lens. Remove the lens.
- 2. Remove the bulb.

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CIGARETTE LIGHTER ILLUMINATION

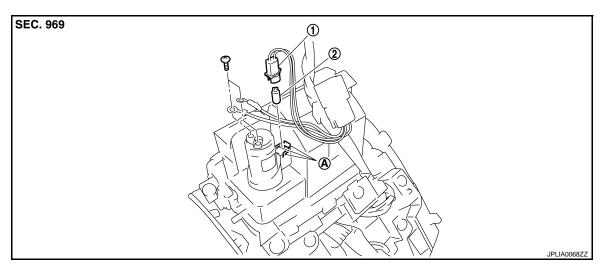
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CIGARETTE LIGHTER ILLUMINATION

Exploded View

INFOID:000000000962615

INFOID:000000000962616



1. Bulb socket

2. Bulb (Share with the ashtray illumination)

A Hook

Replacement

CAUTION:

Disconnect the battery negative terminal or the fuse.

CIGARETTE LIGHTER ILLMINATION BULB

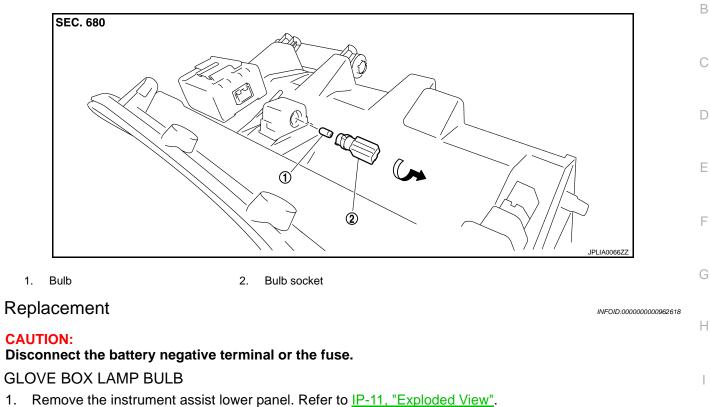
- 1. Remove the console finisher. Refer to <u>IP-22, "Exploded View"</u>.
- 2. Insert any appropriate tool into the gap of the bulb socket. Widen the hook and remove the bulb socket.
- 3. Remove the bulb.

< ON-VEHICLE REPAIR > GLOVE BOX LAMP

Exploded View

INFOID:000000000962617

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- T. Remove the instrument assist lower panel. Refer to <u>IP-TT, Explo</u>
- 2. Rotate the bulb socket counterclockwise and unlock it.
- 3. Remove the bulb.

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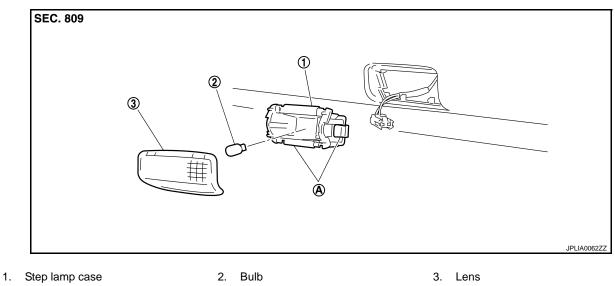
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< ON-VEHICLE REPAIR >

STEP LAMP

Exploded View

INFOID:000000000962619



A Metal clip

Removal and Installation

CAUTION:

Disconnect the battery negative terminal or the fuse.

REMOVAL

- 1. Insert any appropriate tool into the gap between the step lamp and the door trim. Remove the step lamp.
- 2. Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

CAUTION:

Disconnect the battery negative terminal or the fuse.

STEP LAMP BULB

- 1. Remove the step lamp.
- 2. Remove the lens.
- 3. Remove the bulb.

INL-100

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INFOID:000000000962620

< ON-VEHICLE REPAIR >

PERSONAL LAMP

Exploded View

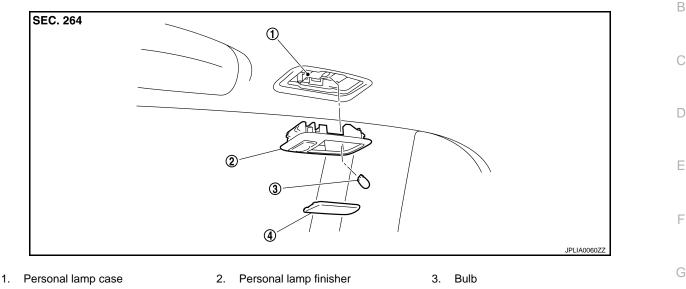
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4. Lens

NOTE:

Replace the personal lamp case as a set (right and left). Before installing the headlining assembly, remove the personal lamp case. Refer to <u>INT-22</u>, "<u>Exploded View</u>".

Removal and Installation

CAUTION:

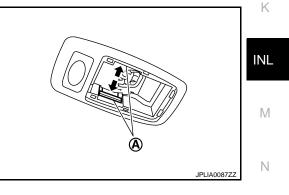
Disconnect the battery negative terminal or the fuse.

REMOVAL

- 1. Insert any appropriate tool into the gap between the lens. Remove the lens.
- 2. Press the both side pawls (A) to the arrow direction (+). Remove the personal lamp finisher.

NOTE:

Replace the personal lamp case as a set (right and left). Remove the personal lamp case after installing the headlining assembly. Refer to INT-22, "Exploded View".



INSTALLATION

Install in the reverse order of removal.

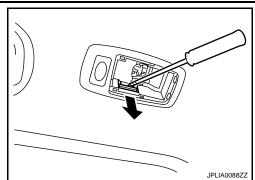
NOTE:

The following is easier to install the personal lamp finisher with the headlining installed.

PERSONAL LAMP

< ON-VEHICLE REPAIR >

• Press the personal lamp finisher to the headlining. Pull the personal lamp case pawl to the arrow direction (<) with any appropriate tool.



Replacement

INFOID:000000000962624

CAUTION:

Disconnect the battery negative terminal or the fuse.

PERSONAL LAMP BULB

- 1. Insert any appropriate tool into the gap between the lens. Remove the lens.
- 2. Remove the bulb.

< ON-VEHICLE REPAIR >

TRUNK ROOM LAMP

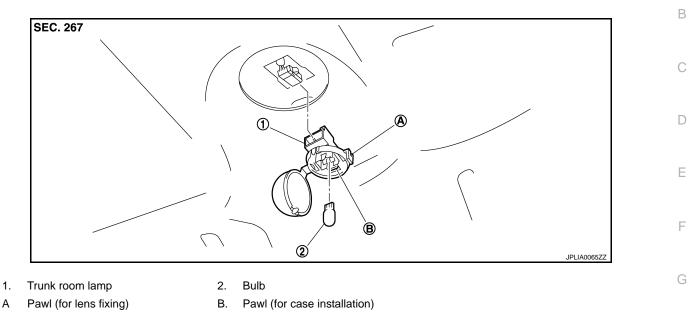
Exploded View

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Removal and Installation

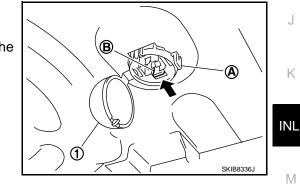
CAUTION:

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Disconnect the battery negative terminal or the fuse.

REMOVAL

- 1. Widen the pawl (A). Open the lens (1).
- 2. Remove the bulb.
- 3. Pressing the pawl (B) to the arrow direction (-). Pull out the trunk room lamp.
- 4. Disconnect the connector.
- 5. Remove the trunk room lamp.



INSTALLATION

Install in the reverse order of removal.

Replacement

CAUTION:

Disconnect the battery negative terminal or the fuse.

TRUNK ROOM LAMP BULB

- Widen the lens pawl. Open the lens. 1.
- 2. Remove the bulb.

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INL-103

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS) SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:000000000962628

Item	Туре	Wattage (W)
Push-button ignition switch illumination	LED	_
Map lamp	Wedge	8
Center console indirect illumination (Integrated into the map lamp assembly)	LED	-
Vanity mirror lamp	_	2
Glove box lamp	_	1.4
Cigarette lighter illumination (Shared with ash tray illumination)	_	1.4
Step lamp-	Wedge	8
Personal lamp	Wedge	8
Trunk room lamp	Wedge	3.4