SECTION INTERIOR LIGHTING SYSTEM

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CONTENTS

BASIC INSPECTION3
DIAGNOSIS AND REPAIR WORKFLOW
SYSTEM DESCRIPTION5
INTERIOR ROOM LAMP CONTROL SYSTEM
5 System Diagram
SYSTEM8System Diagram8System Description8Component Parts Location9Component Description9
ILLUMINATION CONTROL SYSTEM10 System Diagram10
System Description10
Component Parts Location11 Component Description11
DIAGNOSIS SYSTEM (BCM)12
COMMON ITEM
INT LAMP
BATTERY SAVER
DTC/CIRCUIT DIAGNOSIS18

POWER SUPPLY AND GROUND CIRCUIT 18	F
BCM18 BCM : Diagnosis Procedure18	G
CIRCUIT	Н
INTERIOR ROOM LAMP CONTROL CIRCUIT	
21 Description	J
STEP LAMP CIRCUIT	K
Diagnosis Procedure	INL
PUSH-BUTTON IGNITION SWITCH ILLUMI- NATION CIRCUIT	Ν
Description27 Component Function Check	0
INTERIOR ROOM LAMP CONTROL SYSTEM	
29 Wiring Diagram - INTERIOR ROOM LAMP	Ρ
ILLUMINATION40 Wiring Diagram - ILLUMINATION40	
ECU DIAGNOSIS INFORMATION55	

BCM (BODY CONTROL MODULE) Reference Value Wiring Diagram - BCM Fail-safe DTC Inspection Priority Chart DTC Index	55 78 83 85
COMBINATION METER	89
Reference Value	
Wiring Diagram - METER	
Fail-safe1	
DTC Index1	04
SYMPTOM DIAGNOSIS1	05
INTERIOR LIGHTING SYSTEM SYMPTOMS. 1	05
Symptom Table1	05
PRECAUTION1	06
PRECAUTIONS 1	06
Precaution for Supplemental Restraint System	
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	
SIONER"1	06
Precaution for Battery Service1	06
REMOVAL AND INSTALLATION1	07
MAP LAMP 1	07
Exploded View1	
Removal and Installation1	

Replacement 108 Disassembly and Assembly 108	;
VANITY MIRROR LAMP109 Exploded View)
CIGARETTE LIGHTER ILLUMINATION110 Exploded View)
GLOVE BOX LAMP111 Exploded View	
STEP LAMP112Exploded View112Removal and Installation112Replacement112	<u>,</u>
TRUNK ROOM LAMP113Exploded View113Removal and Installation113Replacement113	5
SERVICE DATA AND SPECIFICATIONS (SDS)114	ļ
SERVICE DATA AND SPECIFICATIONS (SDS)	

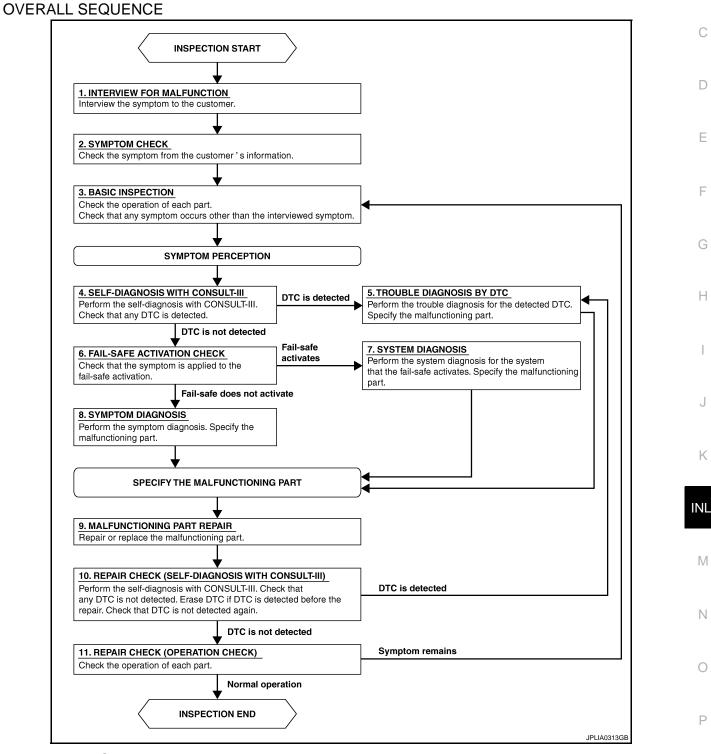
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BASIC INSPECTION DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

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DETAILED FLOW

1.INTERVIEW FOR MALFUNCTION

Interview the symptom to the customer.

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

>> 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.

NO >> GO 10 6. F

5.TROUBLE DIAGNOSIS BY DTC

Perform the trouble diagnosis for the detected DTC. Specify the malfunctioning part.

>> GO TO 9. 6.FAIL-SAFE ACTIVATION CHECK

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.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 10.

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. NO >> GO TO 11.

11.REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

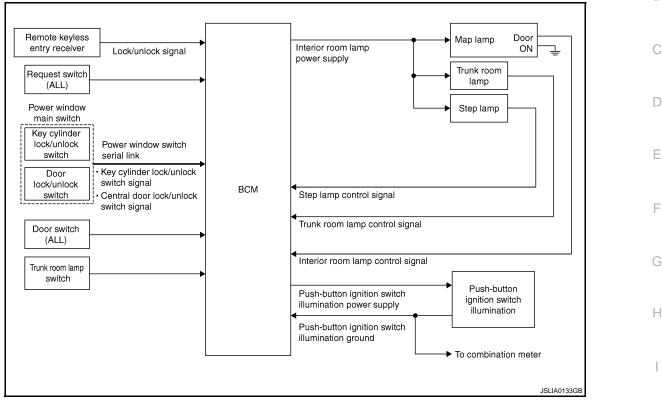
Does it operate normally?

YES >> INSPECTION END NO >> GO TO 3.

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION INTERIOR ROOM LAMP CONTROL SYSTEM

System Diagram



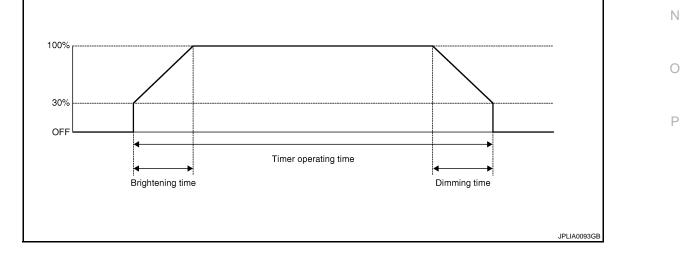
System Description

OUTLINE

- Interior room lamps* are controlled by interior room lamp timer control function of BCM.
 *: Map 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



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< SYSTEM DESCRIPTION >

- 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
- 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)

NOTE:

Each function of interior room lamp timer can be set by CONSULT-III. Refer to <u>INL-14, "INT LAMP : CON-</u> <u>SULT-III Function (BCM - INT LAMP)"</u>.

Interior Room Lamp ON Operation

- BCM always turns the interior room lamp ON when any door opens.
- BCM activates the interior room lamp timer in any of the following conditions to turn the interior room lamp ON for a period of time.
- Any door opens before all doors close.
- Ignition switch is turned $ON \rightarrow OFF$.
- Any door unlock signal is detected when all doors close with ignition switch OFF.

NOTE:

Restart the timer if new condition is input during the timer operating time.

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.
- Ignition switch position is other than OFF with all doors close.
- Any door lock operation is detected with all doors close.

TRUNK ROOM LAMP CONTROL

BCM controls the trunk room lamp (ground-side) to turn ON with the trunk room lamp switch ON.

STEP LAMP CONTROL

BCM controls the step lamp (ground-side) to turn ON with any door switch ON.

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 control with the meter illumination control function.

Push-button Ignition Switch Illumination ON Operation

BCM turns the push-button ignition switch illumination ON in the following conditions.

- Ignition switch ON
- Each illumination (tail lamp) ON
- Any of the following conditions with ignition switch OFF
- Engine start permission is entered.
- Intelligent Key inserted into the key slot.
- Driver door is LOCK \rightarrow UNLOCK.
- Driver door is open.

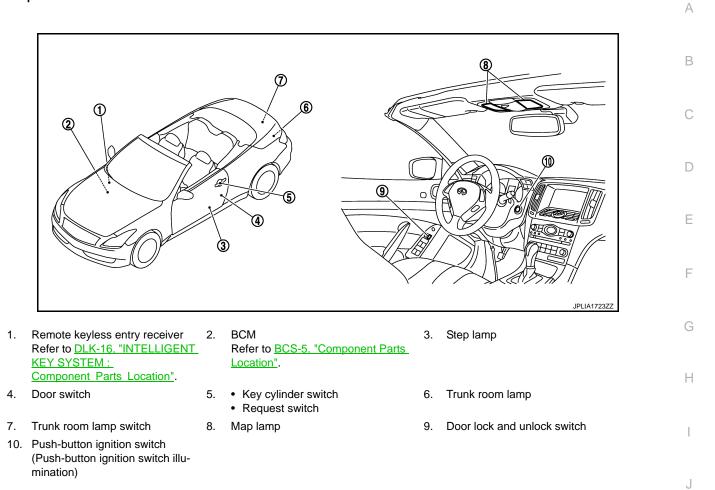
Push-button Ignition Switch Illumination OFF Operation

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.
- All of the following conditions with ignition switch OFF
- Each illumination (tail lamp) OFF
- The push-button ignition switch illumination ON conditions do not change (15 seconds after the ignition switch OFF) or the driver door is UNLOCK → LOCK.

< SYSTEM DESCRIPTION >

Component Parts Location



Component Description

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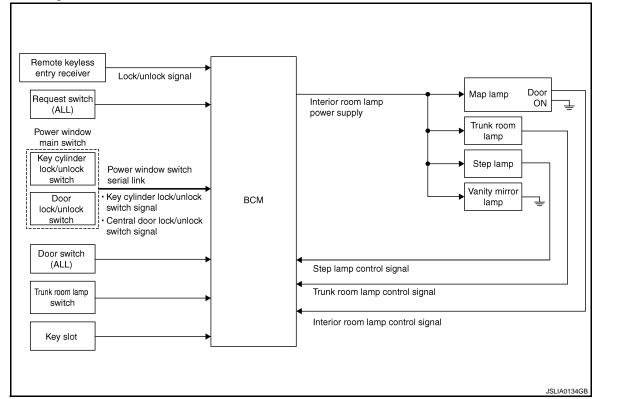
Part	Description			
BCM	 Activates the interior room lamp timer depending on the vehicle condition to turn the interior room lamp ON/OFF. Turns the trunk room lamp ON /OFF according to the trunk room lamp switch status. Turns the step lamp ON /OFF according to any door switch status. 			
Remote keyless entry receiver	Transmits the lock/unlock signal to BCM.			
Door lock and unlock switchKey cylinder switch	Transmits a switch signal by power window switch serial link.			
Request switchDoor switchTrunk room lamp switch	Inputs a switch signal to BCM.			

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

System Diagram



System Description

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INFOID:000000005633111

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
- Step lamp
- Trunk room lamp
- Vanity mirror lamp

INTERIOR ROOM LAMP BATTERY SAVER FUNCTION

- 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:

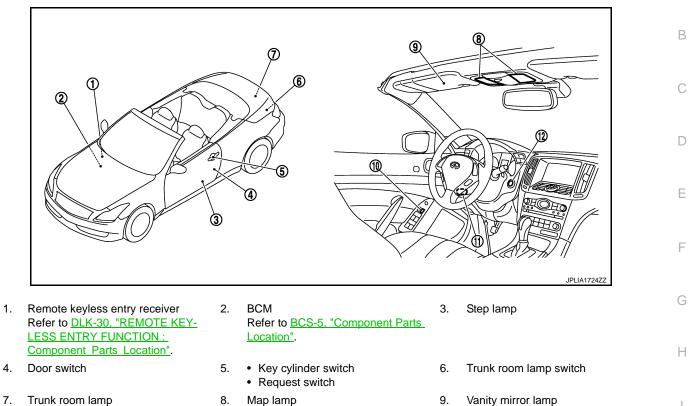
Each function of interior room lamp battery saver can be set by CONSULT-III. Refer to <u>INL-15, "BATTERY SAVER : CONSULT-III Function (BCM - BATTERY SAVER)"</u>.

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

Component Parts Location

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10. Door lock and unlock switch

4.

Component Description

- 8. Map lamp
- 11. Key slot

- Vanity mirror lamp
- 12. Push-button ignition switch

INFOID:000000005633114

Part	Description	
BCM	Operates the interior room lamp battery saver depending on the vehicle condition to cut the interior room lamp power supply.	
Remote keyless entry receiver	Transmits the lock/unlock signal to BCM.	
Door lock and unlock switchKey cylinder switch	Transmits a switch signal by power window switch serial link.	
Request switchDoor switchTrunk room lamp switch	Inputs a switch signal to BCM.	
Key slot	Inputs the key switch status to BCM.	

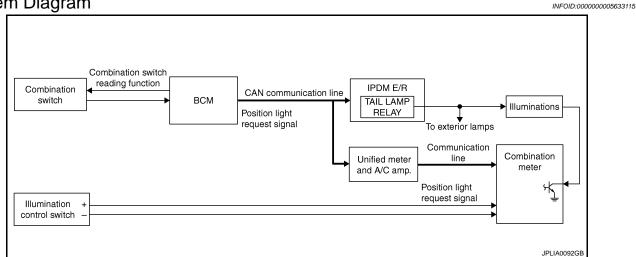
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ILLUMINATION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

ILLUMINATION CONTROL SYSTEM

System Diagram



System Description

INFOID:000000005633116

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 <u>MWI-25, "METER ILLUMINATION CONTROL : System Dia-</u> gram".)

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.

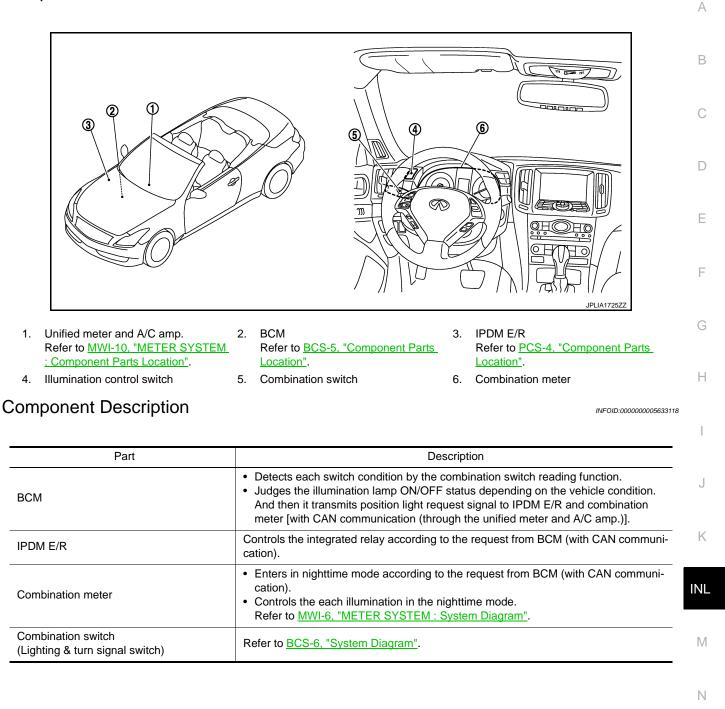
Tail lamp ON condition

- 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).

ILLUMINATION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

Component Parts Location



< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM) COMMON ITEM

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

INFOID:000000005897704

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 Diagnostic Result	Displays the diagnosis results judged by BCM.			
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III opera- tion manual.			
Data Monitor	The BCM input/output signals are displayed.			
Active Test	The signals used to activate each device are forcibly supplied from BCM.			
Ecu Identification	The BCM part number is displayed.			
Configuration	This function is not used even though it is displayed.			

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.

		Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
_	MULTI REMOTE ENT*1			
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×* ²	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
_	AIR CONDITONER* ¹			
Intelligent Key systemEngine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk lid open	TRUNK		×	×
Vehicle security system	THEFT ALM × ×		×	×
RAP system	RETAINED PWR ×		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

NOTE:

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

• *2: At models with rain sensor this mode is displayed, but is not used.

FREEZE FRAME DATA (FFD)

< SYSTEM DESCRIPTION >

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT-III.

CONSULT screen item	Indication/Unit	Description		
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected		
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected		
	SLEEP>LOCK	-	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK".)	
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)	
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"	
	ACC>ON		While turning power supply position from "ACC" to "IGN"	
	RUN>ACC	-	While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)	
	CRANK>RUN	Power position status of the moment a particular DTC is detected	While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)	
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emer- gency stop operation)	
Vehicle Condition	ACC>OFF		While turning power supply position from "ACC" to "OFF"	
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"	
	OFF>ACC		While turning power supply position from "OFF" to "ACC"	
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"	
	OFF>SLEEP		While turning BCM status from normal mode (Power supply posi- tion is "OFF".) to low power consumption mode	
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply posi- tion is "LOCK".) to low power consumption mode	
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steer- ing is locked.)	
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)	
	ACC		Power supply position is "ACC" (Ignition switch ACC)	
	ON	-	Power supply position is "IGN" (Ignition switch ON with engine stopped)	
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	
	CRANKING		Power supply position is "CRANKING" (At engine cranking)	
IGN Counter	0 - 39	 The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 		

INT LAMP

0

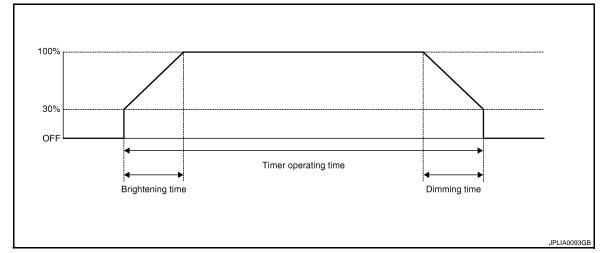
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< SYSTEM DESCRIPTION >

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

INFOID:000000005633120

WORK SUPPORT



Service item	Setting item	Setting		
SET I/L D-UNLCK INTCON	ON*	With the interior room lamp timer function		
SET I/E D-ONECK INTCOM	OFF	Without the interior room lamp timer function		
	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.		
	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.		
ROOM LAMP OFF TIME SET	MODE 2	1 sec.	Sate the interior room lamp gradual dimming time	
ROOM LAMP OFF TIME SET	MODE 3	2 sec.	Sets the interior room lamp gradual dimming time.	
	MODE 4*	3 sec.		
	MODE 1*	Interior room lamp timer activates with synchronizing all doors.		
R LAMP TIMER LOGIC SET	MODE 2	Interior room lamp timer activates with synchronizing the driver doo only.		

*: Factory setting

DATA MONITOR

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from front request switch (passenger side)
REQ SW-RR [On/Off]	NOTE:
REQ SW-RL [On/Off]	The item is indicated, but not monitored.
PUSH SW [On/Off]	The switch status input from push-button ignition switch

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description		
ACC RLY-F/B [On/Off]	NOTE: The item is indicated, but not monitored.		
KEY SW-SLOT [On/Off]	Key switch status input from key slot		
DOOR SW-DR [On/Off]	The switch status input from driver side door switch		
DOOR SW-AS [On/Off]	The switch status input from passenger side door switch		
DOOR SW-RR [On/Off]			
DOOR SW- RL [On/Off]	NOTE: The item is indicated, but not monitored.		
DOOR SW-BK [On/Off]			
CDL LOCK SW [On/Off]	Lock switch status received from the door lock and unlock switch by power window switch serial link		
CDL UNLOCK SW [On/Off]	Unlock switch status received from the door lock and unlock 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	Test item Operation Description			
INT LAMP	On	Outputs the interior room lamp control signal to turn map lamp ON (Map lamp switch is in DOOR position).		
	Off	Stops the interior room lamp control signal to turn map lamp OFF.		
	On	Outputs the step lamp control signal to turn step lamp ON.		
STEP LAMP TEST	Off	Stops the step lamp control signal to turn step lamp OFF.		
	On	Outputs the trunk room lamp control signal to turn the trunk room lamp ON.		
LUGGAGE LAMP TEST	Off	Stops the trunk room lamp control signal to turn the trunk room lamp OFF.		

BATTERY SAVER

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

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WORK SUPPORT

Service item Setting item		Setting
BATTERY SAVER SET	On*	With the exterior lamp battery saver function
BATTERT SAVER SET	Off	Without the exterior lamp battery saver function
ROOM LAMP BAT SAV SET	On*	With the interior room lamp battery saver function
ROOM LAMP BAT SAV SET	Off	Without the interior room lamp battery saver function

< SYSTEM DESCRIPTION >

Service item	Setting item	Setting		
ROOM LAMP TIMER SET	MODE 1*	30 min.	Sets the interior room lamp battery saver timer operating	
ROOM EAMP TIMER SET	MODE 2	60 min.	time.	

*: Factory setting

DATA MONITOR

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from front request switch (passenger side)
REQ SW-RR [On/Off]	NOTE:
REQ SW-RL [On/Off]	The item is indicated, but not monitored.
PUSH SW [On/Off]	The switch status input from push-button ignition switch
ACC RLY-F/B [On/Off]	NOTE: The item is indicated, but not monitored.
KEY SW-SLOT [On/Off]	Key switch status input from key slot
UNLK SEN-DR [On/Off]	Driver door unlock status input from unlock sensor
DOOR SW-DR [On/Off]	The switch status input driver side front door switch
DOOR SW-AS [On/Off]	The switch status input from passenger side door switch
DOOR SW-RR [On/Off]	
DOOR SW- RL [On/Off]	NOTE: The item is indicated, but not monitored.
DOOR SW-BK [On/Off]	
CDL LOCK SW [On/Off]	Lock switch status received from the door lock and unlock switch by power window switch serial link
CDL UNLOCK SW [On/Off]	Unlock switch status received from the door lock and unlock 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

< SYSTEM DESCRIPTION >

Test item	Operation	Description	A
BATTERY SAVER	Off	Cuts the interior room lamp power supply to turn interior room lamp OFF.	_
DATIERTSAVER	On	Outputs the interior room lamp power supply to turn interior room lamp ON.*	_
Fach lamp quitch is in ON no			- B

*: Each lamp switch is in ON position.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS POWER SUPPLY AND GROUND CIRCUIT BCM

BCM : Diagnosis Procedure

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1.CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.	
Battery power supply	I	
	10	

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			
B	CM		(Approx.)	
Connector	Terminal	Ground		
M118	1	Giouna		
M119	11		Battery voltage	

is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

 $\mathbf{3.}$ CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Connector Terminal		Continuity	
M119	13	Ť	Existed	

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< DTC/CIRCUIT 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 ${}_{\sf B}$ saver activating.

Component Function Check INFOID:000000005633124	
1. CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION	С
 CONSULT-III ACTIVE TEST 1. Turn the ignition switch ON. 2. Turn each interior room lamp ON. - Map lamp 	D
 Step lamp Vanity mirror lamp Trunk room lamp 	E
 Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item. With operating the test items, check that each interior room lamp turns ON/OFF. 	F
Off: Interior room lamp OFFOn: Interior room lamp ON	G
Does the interior room lamp turn ON/OFF?YESYESNO>> Refer to INL-19, "Diagnosis Procedure".	Н
Diagnosis Procedure	
1. CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT	I
 CONSULT-III ACTIVE TEST Turn the ignition switch ON. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item. With operating the test item, check voltage between BCM harness connector and the ground. 	J
Terminals Test item	K

	Terminals	Test item	Voltage (Approx.)		
(+)		()			rest item
BCM					BATTERY
Connector	Terminal		SAVER		
		Ground	Off	0 V	
M119	4		On	Battery voltage	

Is the measurement value normal?

NO >> Replace BCM.

2. CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect the following connectors.
- Map lamp
- Vanity mirror lamp (LH)
- Vanity mirror lamp (RH)
- Trunk room lamp
- Step lamp (driver side)
- Step lamp (passenger side)
- 3. Check continuity between BCM harness connector and each interior room lamp harness connector.

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INFOID:000000005633123

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

BC	BCM Each interior room lamp				
Connector	Terminal	Connector		Terminal	Continuity
		Room lamp	R5	8	
		Vanity mirror lamp (LH)	R12	1	
M119 4	4	Vanity mirror lamp (RH)	R13	1	Existed
101113	4	Trunk room lamp	B47	1	LAISIEU
		Step lamp (driver side)	D12	1	
	Step lamp (passenger side)	D42	1		

Does continuity exist?

YES >> GO TO 3.

NO >> Repair the harnesses or connectors.

3.CHECK INTERIOR ROOM LAMP POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM harness connector and the ground.

B	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.

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIA		DR ROOM	LAMP CONTROL CIRCUIT	
INTERIOR RO		CONTR	OL CIRCUIT	
Description				A INFOID:000000005633126
Controls each interior	room lamp (g	round side) b	y PWM signal.	В
NOTE:			Hz (in the gradual brightening/dimming).	
Component Fund	••	-	(INFOID:000000005633127 C
 Interior room lamp Map lamp bulb 	power supp	ly	the following is normal.	D
		P CONTROL	FUNCTION	Ε
 CONSULT-III ACTI Switch the map la Turn the ignition s Select "INT LAMI With operating th ming). 	amp switch to switch ON. P" of BCM (IN	T LAMP) activ	/e test item. h interior room lamp turns ON/OFF (grad	F lual brightening/dim- G
	erior room la			
	erior room la		-	Н
YES >> Interior ro	oom lamp cont	rol circuit is n		
	NL-21, "Diagn	osis Procedu	<u>re"</u> .	I
Diagnosis Proce	dure			INFOID:000000005633128
1. CHECK INTERIOR	R ROOM LAM	P CONTROL	OUTPUT	J
 CONSULT-III ACTI 1. Turn the ignition s 2. Remove all the b 3. Select "INT LAMI 4. With operating the 	switch OFF. ulbs of map la ⊃" of BCM (IN	T LAMP) activ	ve test item. y between BCM harness connector and t	k he ground.
BCM		Test item		INL
Connector Terminal	Ground	INT LAMP	Continuity	Μ
M119 19		On Off	Existed Not existed	111
Is the measurement v	alue normal?			Ν
YES >> GO TO 2 Fixed ON>>GO TO Fixed OFF>>Replac 2. CHECK INTERIOR	3. e BCM.	P CONTROL	OPEN CIRCUIT	0
 Turn the ignition Disconnect BCM 	switch OFF. connector and between BCN	d map lamp c		P

B	BCM		Room lamp		
Connector	Terminal	Connector	Terminal	Continuity	
M119	19	R5	7	Existed	

Does continuity exist?

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace the map lamp.

NO >> Repair the harnesses or connectors.

3. CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect BCM connector and map lamp connector.

3. Check continuity between BCM harness connector and the ground.

B	СМ		Continuity	
Connector	Terminal	Ground	Continuity	
M119	19	-	Not existed	

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

STEP LAMP CIRCUIT

			SILF	LA		
< DTC/CIR		GNOSIS >				
STEP L	AMP C	IRCUIT				
Descripti	on					INFOID:000000005633129
Controls the	e step lam	p (ground sid	e) to turn the	e step	lamp ON and OFF.	
	-	tion Chec		•	,	INFOID:000000005633130
CAUTION:						
Before pe	rforming t oom lamp	he diagnosi power supp	s, check tha bly	t the	following is normal.	
	-	MP OPERATI	ON			
2. Select	e ignition s "STEP LA	switch ON. MP TEST" of			active test item. np turns ON/OFF.	_
On	: Ste	ep lamp ON				
Off	: Ste	ep lamp OFF				
		urn ON/OFF?				
		NL-23, "Diag		<u>dure"</u> .		
Diagnosi	s Proce	dure				INFOID:000000005633131
1. CHECK	STEP LA					
 Removing Turn the Select 	e ignition s the step ie ignition s "STEP LA	switch OFF. lamp bulbs (switch ON. MP TEST" of	BCM (INT L	AMP)	ssenger side). active test item. etween BCM harness connector a	and the ground.
BC	CM		Test item			
Connector	Terminal	Ground	STEP LAM TEST	Р (Continuity	
M119	7		On		Existed	
101119	1		Off	N	ot existed	
YES >> Fixed ON: Fixed OFF	> GO TO 2 >>GO TO 3 ⁼ >>Replac	3.	-			
2. Discon	nect BCM	switch OFF. connector, ar between BCN			ector. tor and step lamp harness conne	ctor.
BC	CM	S	tep lamp			
Connector	Terminal	Connect	tor Ter	minal	Continuity	
		Driver	D12	2		

STEP LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Does continuity exist?

YES >> Replace the step lamp.

NO >> Repair the harnesses or connectors.

3. CHECK STEP LAMP SHORT CIRCUIT

1. Turn the ignition switch OFF.

2. Check continuity between BCM harness connector and the ground.

B	СМ		Continuity
Connector	Terminal	Ground	Continuity
M119	7	† 	Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

TRUNK ROOM LAMP CIRCUIT

< DTC/CIR		GNOSIS >				
Descripti	on				INFOID:000000005633132	А
Controls th	e trunk roo	m lamp (grou	und side) to tu	rn the trunk r	oom lamp ON and OFF.	В
_		tion Chec	,		INF0ID:000000005633133	D
Interior rTrunk ro	rforming t oom lamp om lamp b	power supp ulb	s, check that oly OPERATION	the followin	g is normal.	C
			OPERATION			
 Turn th Select 	e ignition s "LUGGAG	witch ON. E LAMP TES	ST" of BCM (IN check that trui		ive test item. turns ON/OFF.	E
On	: Tru	ink room lai	np ON			F
Off		ink room lai				_
		<u>amp turn ON</u> m lamp circu				G
NO >>	Refer to <u>II</u>	NL-25, "Diag	nosis Procedu	<u>ıre"</u> .		
Diagnosi	s Procec	lure			INF01D:000000005633134	H
1.снеск		OOM LAMP	OUTPUT			
 Removing Turn the Select 	ne ignition s ve trunk roc ne ignition s "LUGGAG	witch OFF. om lamp bulb witch ON. E LAMP TES	ST" of BCM (IN		ive test item. CM harness connector and the ground.	J
BC	CM		Test item			
Connector	Terminal	Ground	LUGGAGE LAMP TEST	Continuity		INI
M120	30		On	Existed		
le the mass			Off	Not existed		M
YES >> Fixed ON: Fixed OFF 2.CHECK 1. Turn th 2. Discon	GO TO 2. SGO TO 3 SSReplace TRUNK R TRUNK R ne ignition s nect BCM	3. e BCM. OOM LAMP witch OFF. connector ar	OPEN CIRCL	lamp connec	or. unk room lamp harness connector.	N
J. UNEUK			vi Hailiess COI		unk room lamp hamess connector.	F
	BCM		k room lamp	Continuity		
Connector M120	Terminal 30	Connecto B47	or Terminal	Existed		
	ouity ovist?		2	LAISICU		

Does continuity exist?

YES >> Replace the trunk room lamp.

TRUNK ROOM LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair the harnesses or connectors.

3. CHECK TRUNK ROOM LAMP SHORT CIRCUIT

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

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M120	30	Ť	Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSI				
PUSH-BUTTON IGN	ITION SWITC	H ILLUMINA	FION CIRCUIT	А
Description			INF01D:00000005633135	
Provides the power supply an	d the ground to con	trol the push-button	ignition switch illumination.	В
Component Function C	heck		INFOID:000000005633136	
1.CHECK PUSH-BUTTON IC	GNITION SWITCH	LLUMINATION OPI	ERATION	С
 CONSULT-III ACTIVE TES 1. Turn the ignition switch O 2. Select "ENGINE SW ILLU 3. With operating the test ite 	N. JMI" of BCM (INTEL		e test item. switch illumination turns ON/OFF	D
On : Push-butte	on ignition switch	Ilumination ON		Ε
	on ignition switch			
Does the push-button ignitionYES>> Push-button ignitiNO>> Refer to INL-27. "	on switch illumination	on circuit is normal.		F
Diagnosis Procedure			INF0ID:000000005633137	G
1.CHECK ILLUMINATION C	ONTROL SWITCHI	NG OPERATION		
1. Turn the ignition switch O	N.			Н
2. With operating the lighting	g switch, check that	the push-button ign	ition switch illumination turns ON/OFF	
Condition	Push-button ignition	witch illumination		
Ignition switch ON	ON			
Lighting switch 1ST Ignition switch OFF				J
Lighting switch OFFDriver door LOCK	OFF			
Does the push-button ignition	switch illumination	urn ON/OFF?		Κ
YES >> GO TO 2. NO >> GO TO 3.				
2.CHECK PUSH-BUTTON I	GNITION SWITCH	U UMINATION GR		INL
1. Turn the ignition switch O				
2. Disconnect BCM connect	or and the push-but		connector. button ignition switch harness connector.	M
BCM Pusi	n-button ignition switch	Continuity		Ν
	nnector Terminal			
-	M50 2	Existed		0
<u>Does the continuity exist?</u> YES >> Replace BCM.				U
NO >> Repair the harnes				
3.CHECK PUSH-BUTTON IC		LLUMINATION PO	WER SUPPLY OUTPUT	Ρ
 CONSULT-III ACTIVE TES 1. Turn the ignition switch O 2. Select "ENGINE SW ILLU 	N.	LIGENT KEY) activ	re test item.	

3. With operating the test item, check voltage between BCM harness connector and the ground.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Terminals			Test item		
(+)		()	iest item	Voltage	
BCM		ENGINES		(Approx.)	
Connector	Terminal	Ground	ILLUMI		
M123	133	Gibunu	ON	5 V	
101123	133		OFF	0 V	

Is the measurement value normal?

YES >> GO TO 4.

NO >> GO TO 5.

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

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

B	BCM		Push-button ignition switch	
Connector	Terminal	Connector Terminal		Continuity
M123	133	M50	3	Existed

Does the continuity exist?

YES >> Replace the push-button ignition switch.

NO >> Repair the harness or the connector.

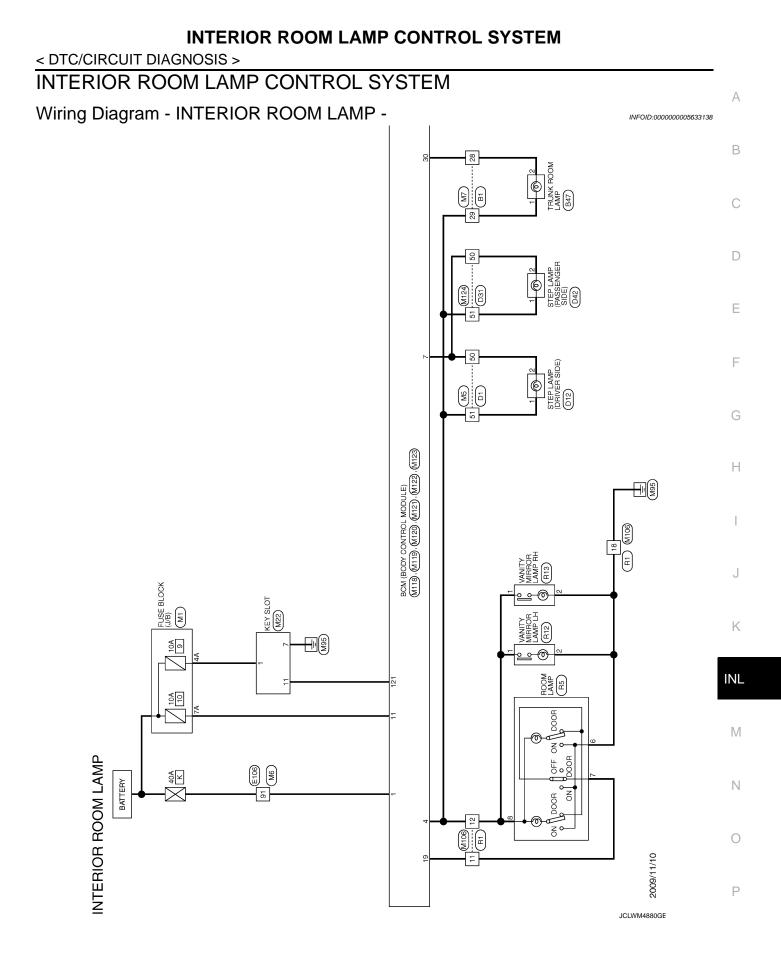
5.check push-button ignition switch illumination power supply short circuit

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

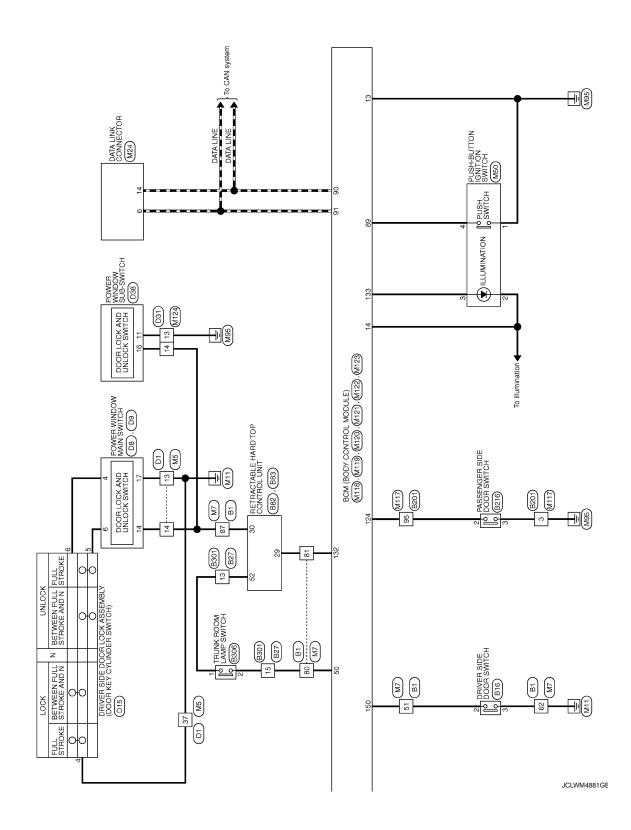
B	СМ		Continuity
Connector	Terminal	Ground	Continuity
M123	133	† 	Not existed

Does the continuity exist?

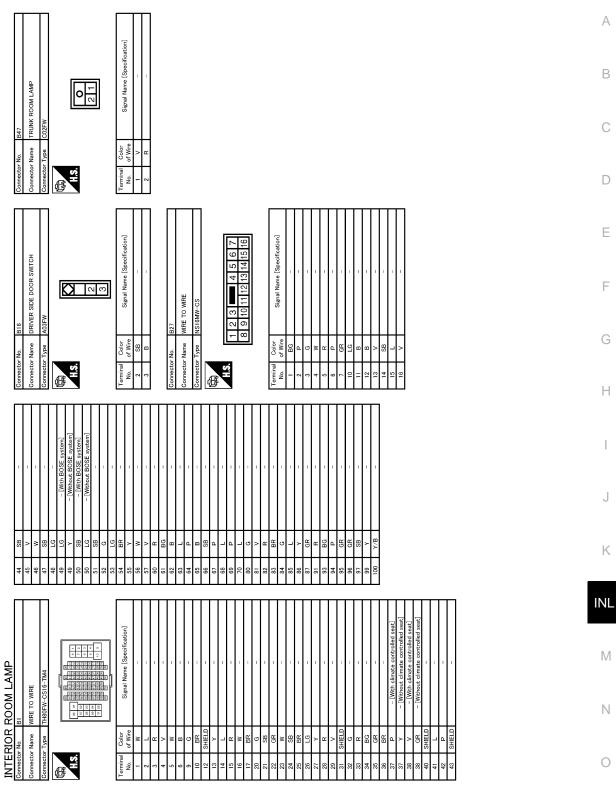
- YES >> Repair the harness or the connector.
- NO >> Replace BCM.



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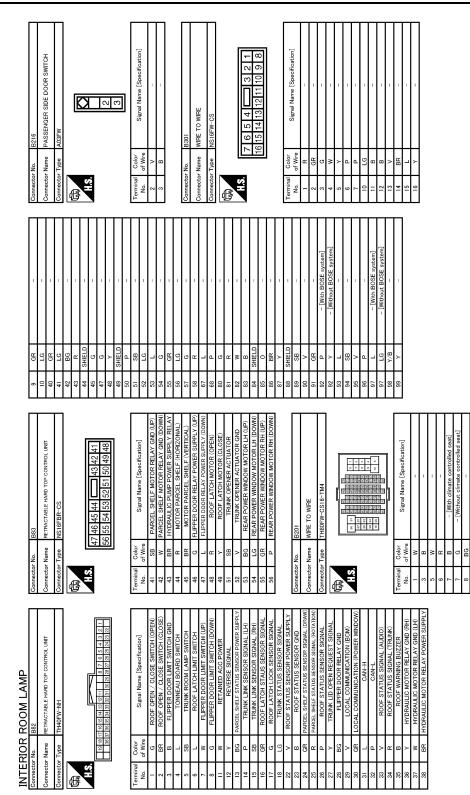


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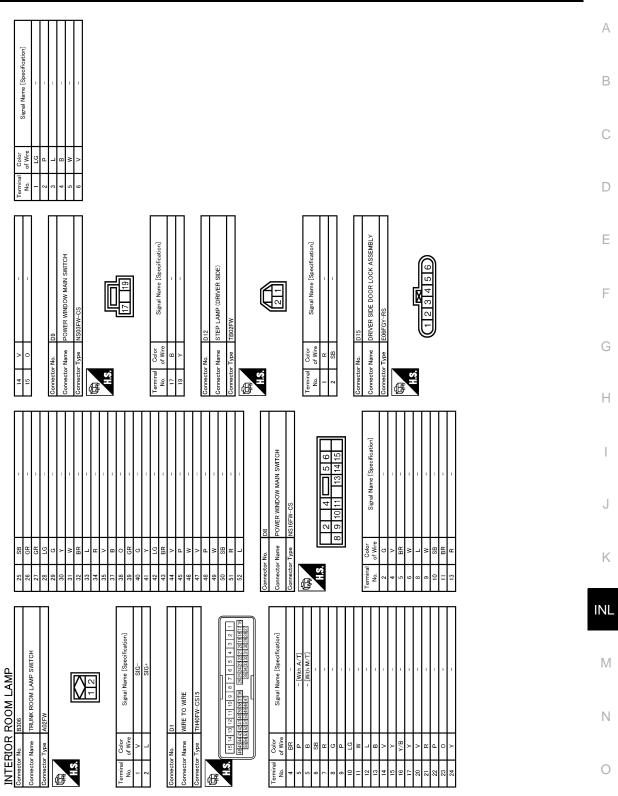
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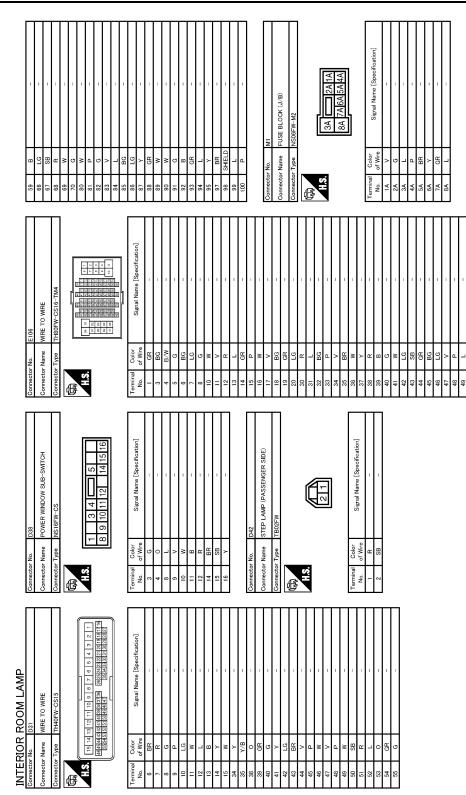
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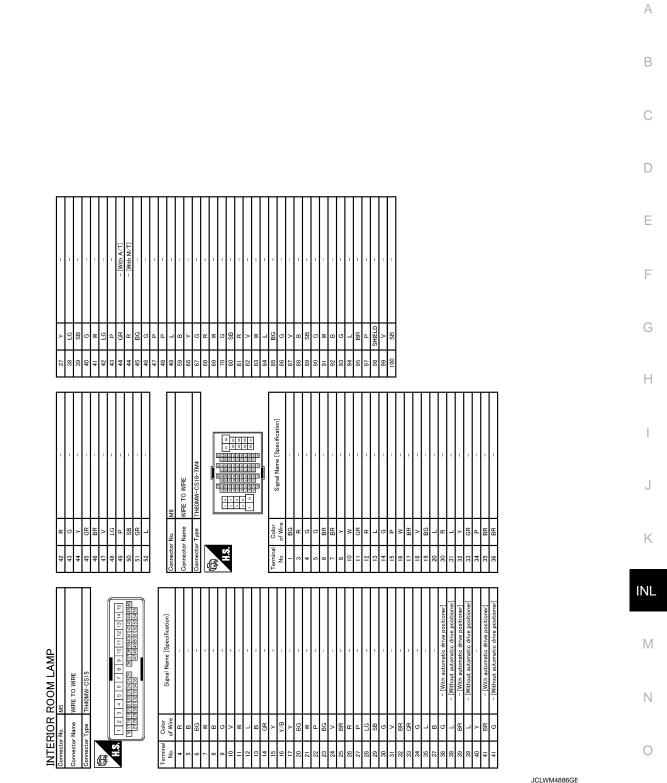
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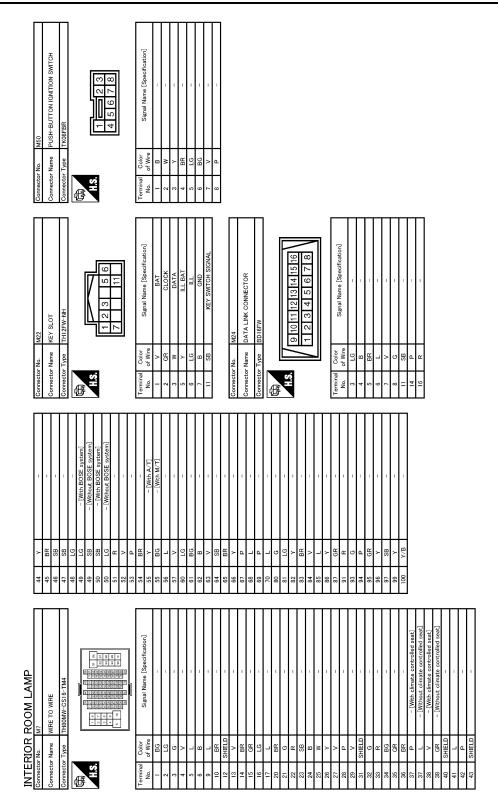
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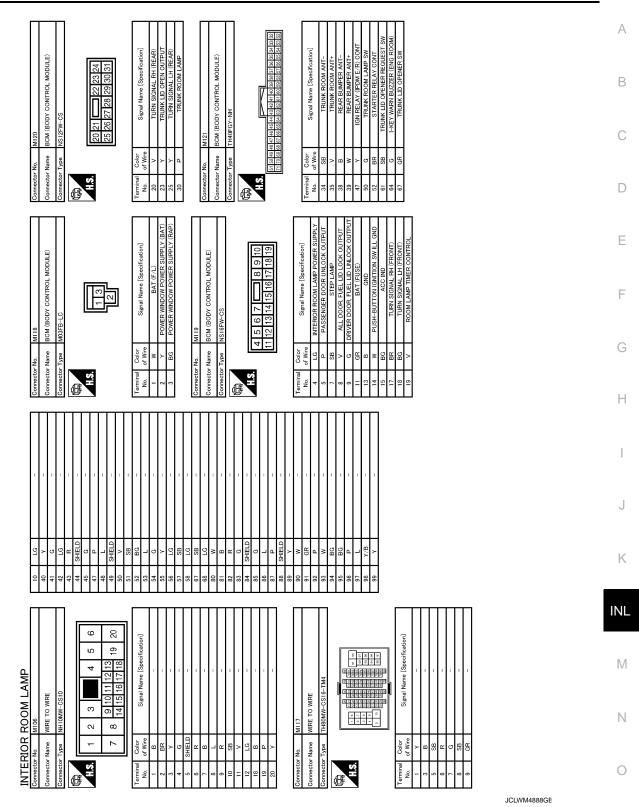
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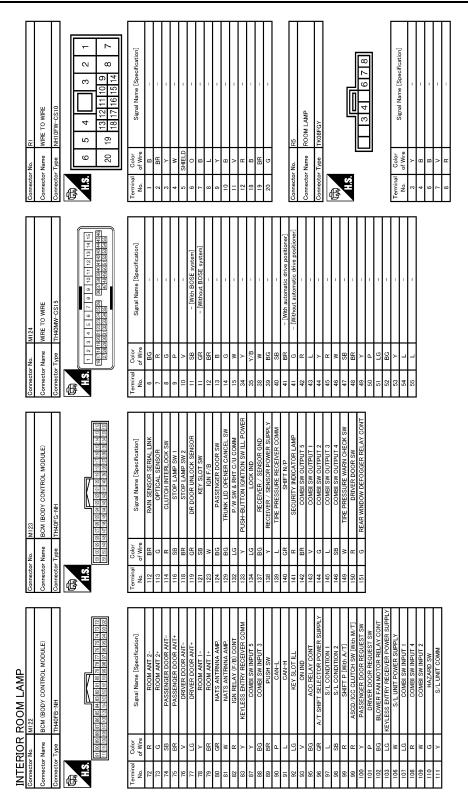
INTERIOR ROOM LAMP CONTROL SYSTEM

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INTERIOR ROOM LAMP CONTROL SYSTEM

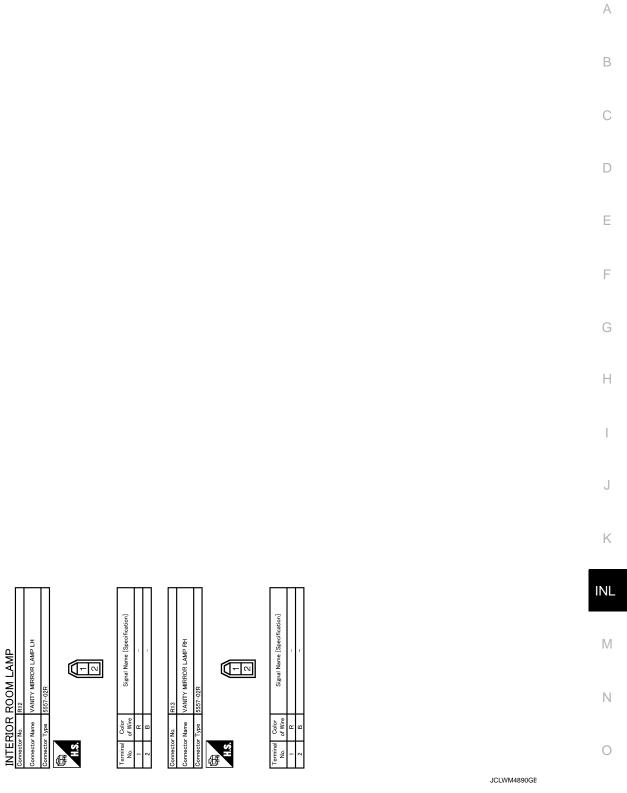
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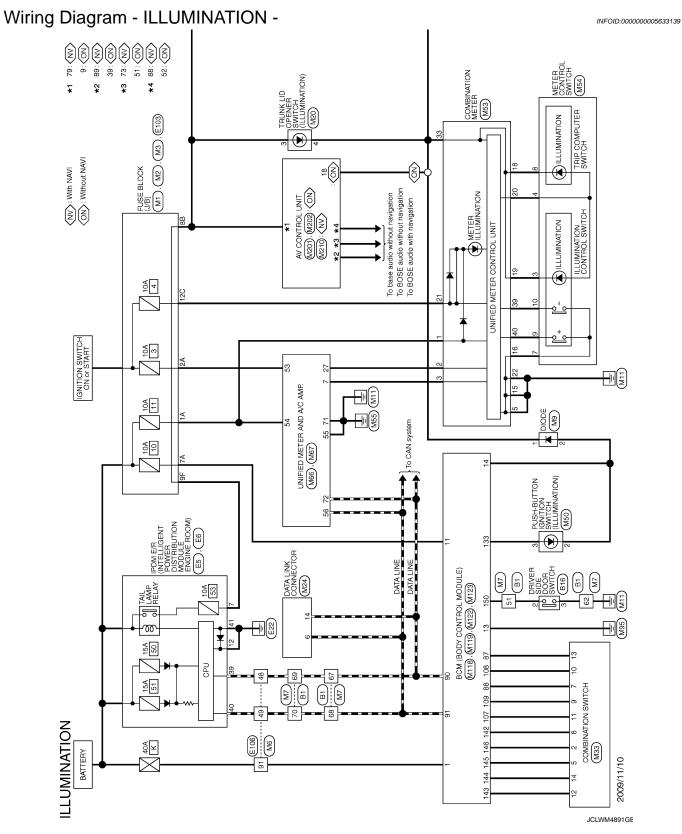
INTERIOR ROOM LAMP CONTROL SYSTEM

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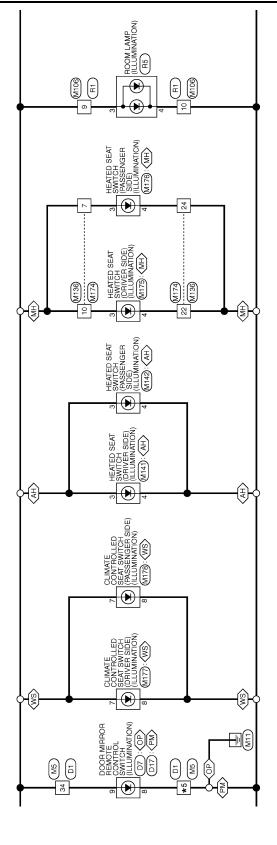
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ILLUMINATION



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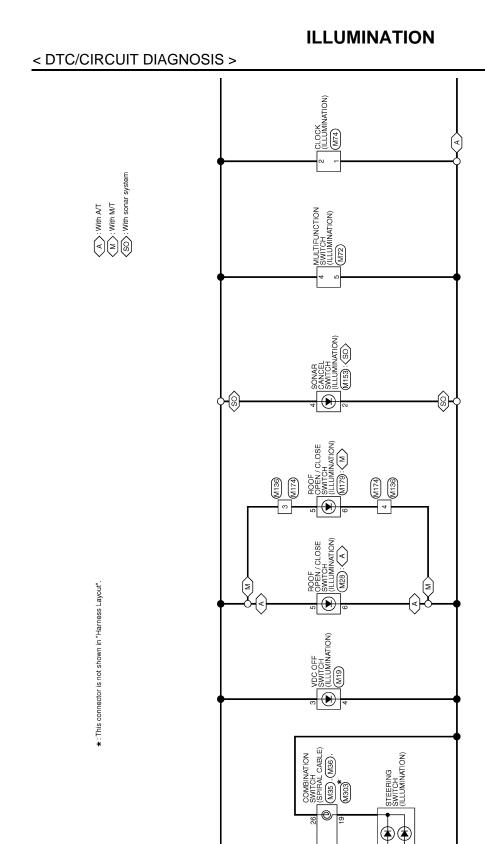
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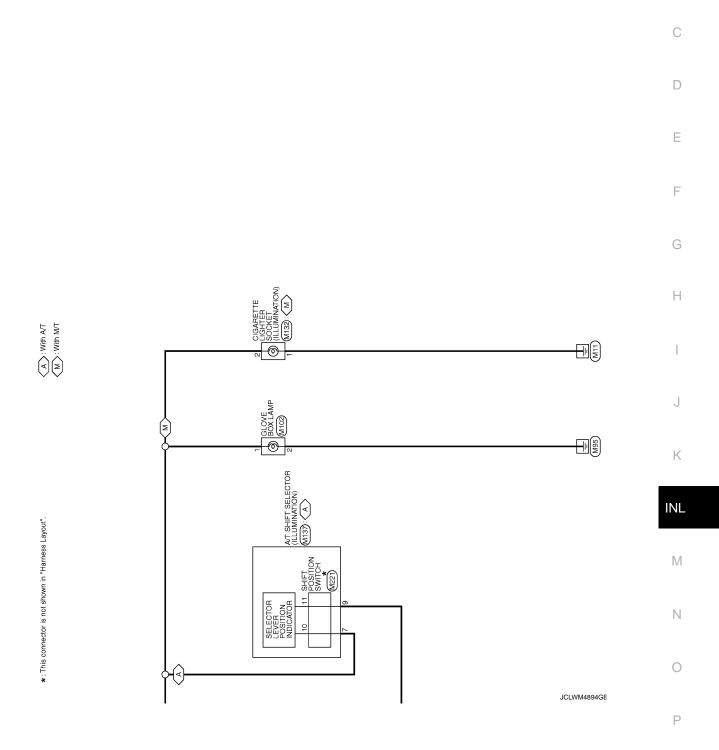
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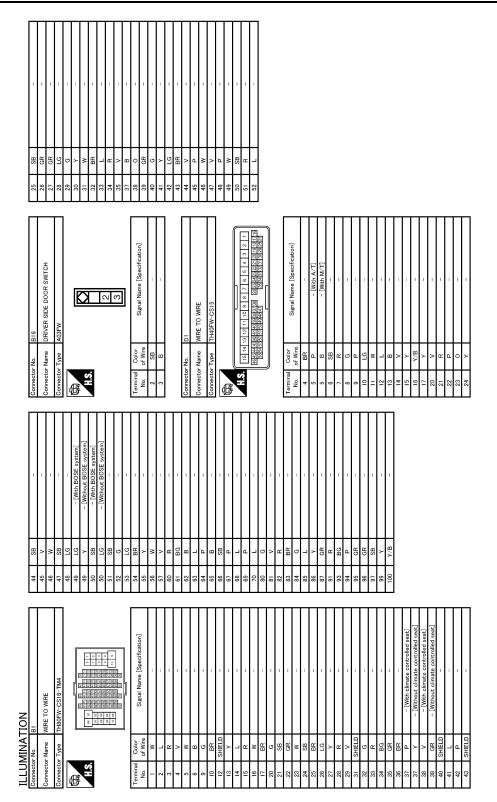
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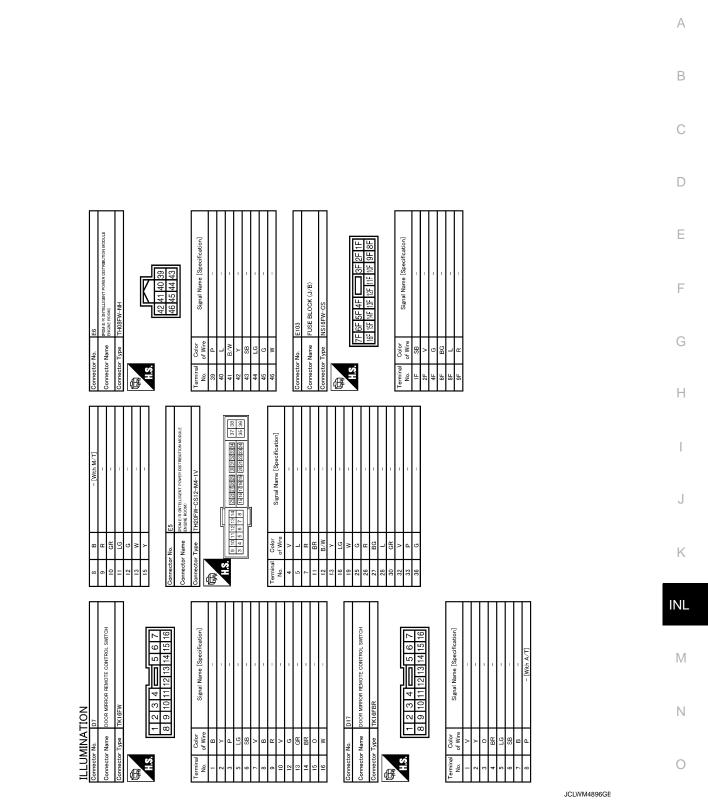
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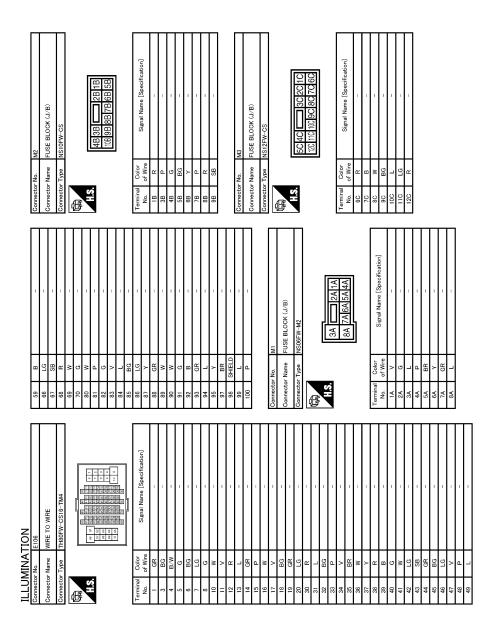
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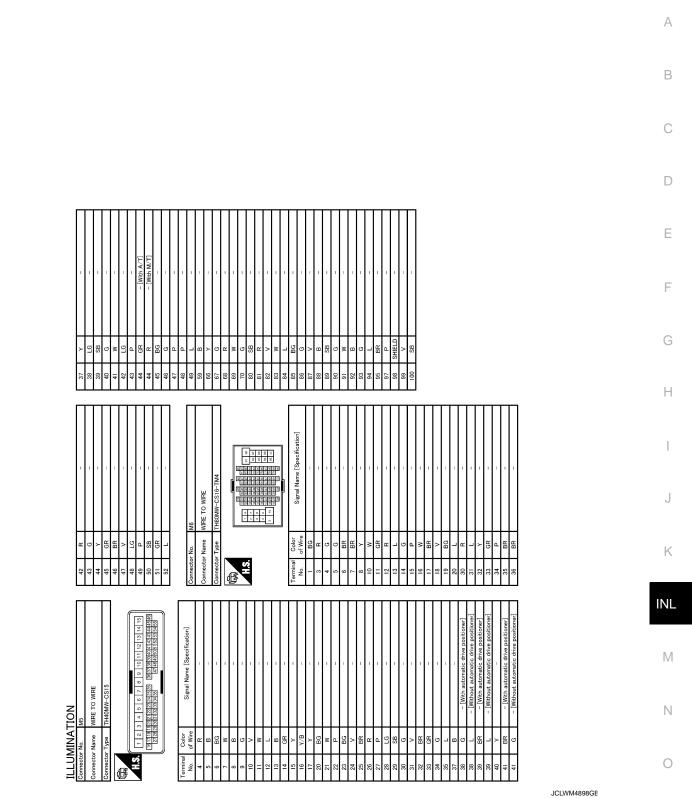
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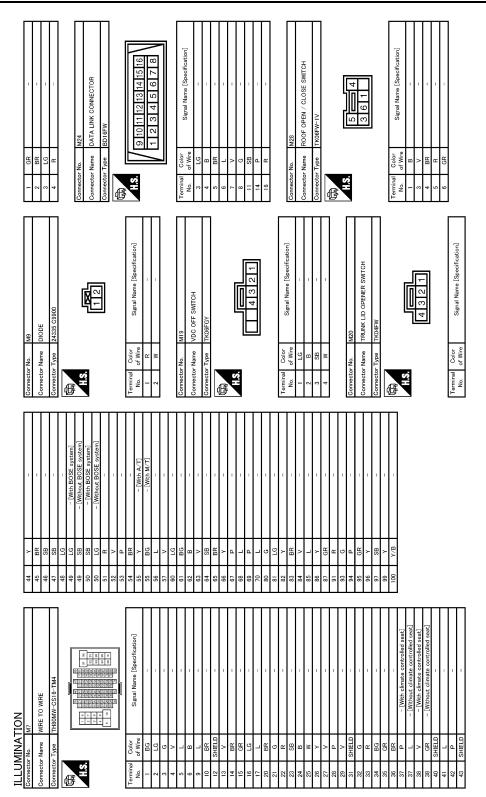


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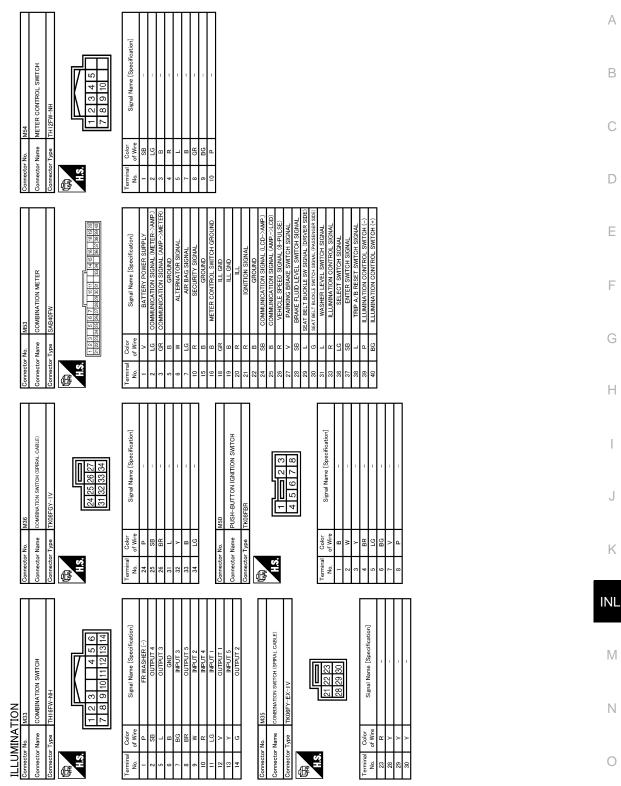


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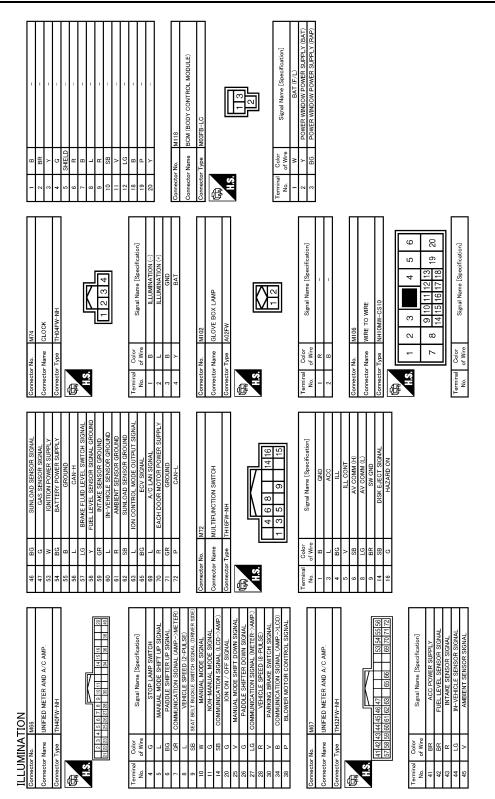
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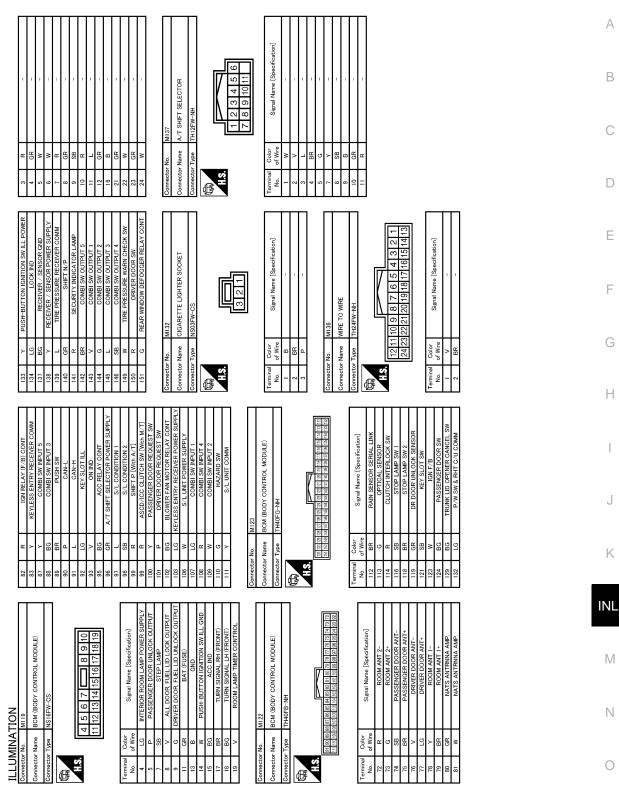
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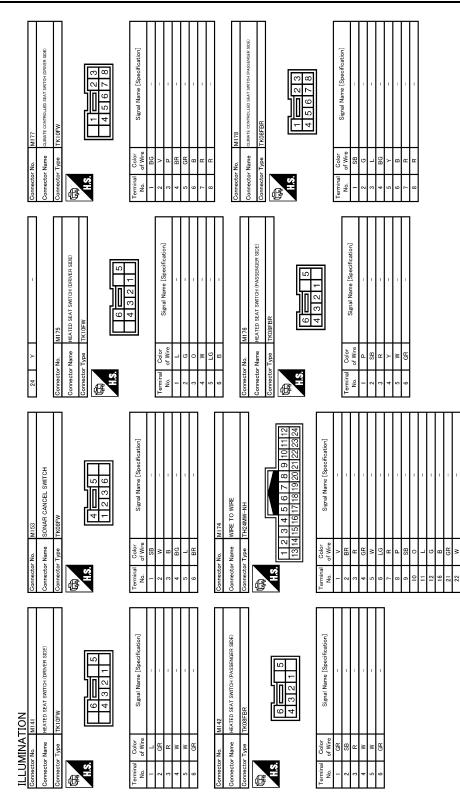
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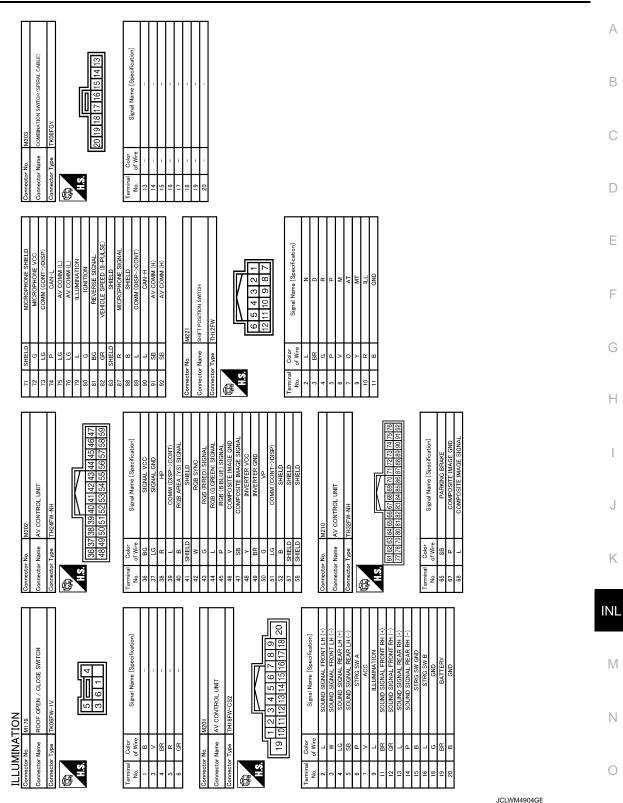
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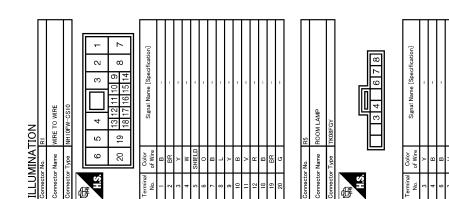
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JCLWM4905GE

ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

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
	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
	Other than front wiper switch INT/AUTO	Off
	WIPER INT Front wiper switch INT/AUTO WIPER STOP Front wiper is not in STOP position VOLUME Wiper volume dial is in a dial position 1 - 7 RN SIGNAL R Other than turn signal switch RH Turn signal switch RH Turn signal switch LH RN SIGNAL L Other than turn signal switch LH LAMP SW Other than lighting switch 1ST and 2ND	On
R WIPER STOP	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial posi- tion
	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
	Other than turn signal switch LH	Off
I URN SIGNAL L	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
AIL LAMP SW Light II BEAM SW Light IEAD LAMP SW 1 IEAD LAMP SW 2 Othe	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
	Front fog lamp switch OFF	Off
FR FOG SW	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
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off

А

В

INFOID:000000005897707

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
DOOR SW-RL	NOTE: The item is indicated, but not monitored.	Off	
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	
	SW Other than power door lock switch UNLOCK Power door lock switch UNLOCK N Other than driver door key cylinder LOCK position N Driver door key cylinder LOCK position W Other than driver door key cylinder UNLOCK position W Other than driver door key cylinder UNLOCK position W Other than driver door key cylinder UNLOCK position R NOTE: The item is indicated, but not monitored. Hazard switch is OFF Hazard switch is OFF Hazard switch is ON NOTE: The item is indicated, but not monitored. NOTE: The item is indicated, but not monitored. NOTE: The item is indicated, but not monitored. V Trunk lid opener cancel switch OFF Trunk lid opener cancel switch ON Trunk lid opener switch OFF		
JDE UNLOCK SW	CK SW Power door lock switch UNLOCK K-SW Other than driver door key cylinder LOCK position Driver door key cylinder LOCK position	On	
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off	
	Other than driver door key cylinder LOCK position Driver door key cylinder LOCK position Other than driver door key cylinder UNLOCK position Driver door key cylinder UNLOCK position Driver door key cylinder UNLOCK position NOTE: The item is indicated, but not monitored. Hazard switch is OFF Hazard switch is ON NOTE: The item is indicated, but not monitored. NOTE: The item is indicated, but not monitored.	On	
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off	
	Other than power door lock switch LOCK Power door lock switch LOCK Other than power door lock switch UNLOCK Power door lock switch UNLOCK Other than driver door key cylinder LOCK position Driver door key cylinder LOCK position Other than driver door key cylinder UNLOCK position NOTE: The item is indicated, but not monitored. Hazard switch is OFF Hazard switch is ON NOTE: The item is indicated, but not monitored. True item is indicated, but not monitored. True item is indicated, but not monitored. Trunk lid opener cancel switch OFF Trunk lid opener switch OFF While the trunk lid opener switch is turned ON Trunk lid closed	On	
KEY CYL SW-TR		Off	
HAZARD SW	Hazard switch is OFF	Off	
	Hazard switch is ON	On	
REAR DEF SW		Off	
H/L WASH SW		Off	
TR CANCEL SW	Trunk lid opener cancel switch OFF	Off	
IR CANCEL SW	Trunk lid opener cancel switch ON	On	
	Trunk lid opener switch OFF	Off	
INBD OF EN SW	While the trunk lid opener switch is turned ON	On	
	Trunk lid closed	Off	
	MNTR Trunk lid closed Trunk lid opened		
	LOCK button of the Intelligent Key is not pressed	Off	
	LOCK button of the Intelligent Key is pressed	On	
	UNLOCK button of the Intelligent Key is not pressed	Off	
RNK/HAT MNTR KE-LOCK KE-UNLOCK	UNLOCK button of the Intelligent Key is pressed	On	
	TRUNK OPEN button of the Intelligent Key is not pressed	Off	
	W-BK NOTE: The item is indicated, but not monitored. CK SW Other than power door lock switch LOCK LOCK SW Other than power door lock switch UNLOCK Power door lock switch UNLOCK Power door lock switch UNLOCK LK-SW Other than driver door key cylinder LOCK position Driver door key cylinder LOCK position Driver door key cylinder UNLOCK position LW-SW Other than driver door key cylinder UNLOCK position Driver door key cylinder UNLOCK position Driver door key cylinder UNLOCK position LW-SW Other than driver door key cylinder UNLOCK position Driver door key cylinder UNLOCK position Hazard switch is OFF Hazard switch is OFF The item is indicated, but not monitored. PSW NOTE: The item is indicated, but not monitored. CEL SW Trunk lid opener cancel switch OFF Trunk lid opener cancel switch OFF Trunk lid copened CK LOCK button of the Intelligent Key is not pressed LOCK UNLOCK button of the Intelligent Key is not pressed LOCK UNLOCK button of the Intelligent Key is not pressed NIC PANIC button of the Intelligent Key is not pressed NIC PANIC button	On	
	PANIC button of the Intelligent Key is not pressed	Off	
TR/BD OPEN SW TRNK/HAT MNTR RKE-LOCK RKE-UNLOCK RKE-TR/BD RKE-PANIC RKE-P/W OPEN	PANIC button of the Intelligent Key is pressed	On	
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off	
	UNLOCK button of the Intelligent Key is pressed and held	On	
RKE-MODE CHG		Off	
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On	
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V	
	Dark outside of the vehicle	Close to 0 V	
REQ SW -DR	Driver door request switch is not pressed	Off	
	Driver door request switch is pressed	On	
REQ SW -AS	Passenger door request switch is not pressed	Off	
	Passenger door request switch is pressed	On	
REQ SW -RR		Off	

Revision: 2009 Novemver

Monitor Item	Condition	Value/Status
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
	NOTE: The item is indicated, but not monitored. Trunk lid opener request switch is not pressed Trunk lid opener request switch is pressed Push-button ignition switch (push switch) is pressed Push-button ignition switch (push switch) is pressed Ignition switch in OFF or ACC position Ignition switch in ON position NOTE: The item is indicated, but not monitored. The clutch pedal is not depressed The clutch pedal is depressed The clutch pedal is depressed when No. 7 fuse is blown The brake pedal is not depressed The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal The brake pedal is not depressed (M/T models) • Selector lever in P position (Except M/T models) • The clutch pedal is depressed (M/T models) • Selector lever in any position other than P (Except M/T models) • The clutch pedal is not depressed (M/T models) • Selector lever in any position other than P and N Selector lever in P or N position Steering is unlocked Steering is locked Steering is locked Steering is locked Ignition switch in OFF or ACC position Ignition switch in OFF or ACC position	Off
REQ SW -BD/TR		On
	NOTE: Off The item is indicated, but not monitored. Off Trunk lid opener request switch is not pressed Off Trunk lid opener request switch is pressed Off Push-button ignition switch (push switch) is not pressed Off Push-button ignition switch (push switch) is pressed Off Ignition switch in OFF or ACC position Off Ignition switch in ON position On NOTE: Off The litem is indicated, but not monitored. Off The clutch pedal is not depressed Off The clutch pedal is not depressed when No. 7 fuse is blown Off The brake pedal is depressed when No. 7 fuse is blown, or No. 7 fuse is normal On The brake pedal is not depressed (M/T models) Off • The clutch pedal is not depressed (M/T models) Off • The clutch pedal is not depressed (M/T models) Off • The clutch pedal is not depressed (M/T models) Off • The clutch pedal is not depressed (M/T models) On • Selector lever in any position other than P (Except M/T models) On Selector lever in P or N position On Selecto	Off
2028 200		On
	NOTE: The item is indicated, but not monitored. Trunk lid opener request switch is not pressed Invalid opener request switch is pressed Push-button ignition switch (push switch) is not pressed Invalid opener request switch is pressed Push-button ignition switch (push switch) is pressed Invalid opener request switch is pressed Ignition switch in OFF or ACC position Invalid opener request switch is pressed Ignition switch in OFF or ACC position Invalid opener request switch is pressed NOTE: The item is indicated, but not monitored. The item is indicated, but not monitored. The clutch pedal is not depressed The brake pedal is not depressed Invalid opener request switch is pressed The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal The brake pedal is not depressed (M/T models) Invalid opener is non position (Except M/T models) Selector lever in P position other than P (Except M/T models) Invalid opener is non position other than P (Except M/T models) Selector lever in any position other than P and N Selector lever in any position other than P and N Selector lever in P or N position Invalid openeer and	Off
GN RLYZ -F/B		On
ACC RLY -F/B		Off
CLUCH SW	The clutch pedal is not depressed	Off
SLUCH SW	W-BD/TR Trunk lid opener request switch is pressed SW Push-button ignition switch (push switch) is not pressed SW Push-button ignition switch (push switch) is pressed Y2 -F/B Ignition switch in OFF or ACC position Ignition switch in ON position Ignition switch in ON position LY -F/B NOTE: The item is indicated, but not monitored. 1 SW The clutch pedal is not depressed 1 SW The clutch pedal is depressed 2 SW 1 The brake pedal is depressed when No. 7 fuse is blown The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal 2 SW 2 The brake pedal is not depressed (M/T models) 3 SW 2 The brake pedal is depressed (M/T models) 4 The clutch pedal is depressed (M/T models) • The clutch pedal is depressed (M/T models) 5 SW 2 Selector lever in P position other than P (Except M/T models) • The clutch pedal is not depressed (M/T models) • The clutch pedal is not depressed (M/T models) • The clutch pedal is not depressed (M/T models) • The clutch pedal is not depressed (M/T models) • The clutch pedal is not depressed (M/T models) • The clutch pedal is not depressed (M/T models) • The clutch pedal is not depressed (M/T models) • The clutch pedal is not de	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1		On
BRAKE SW 2	The brake pedal is not depressed	Off
SKAKE SW 2	The brake pedal is depressed	On
		Off
DETE/CANCL SW		On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
	Steering is unlocked	Off
5/L -LOCK	N/N SW Selector lever in P or N position OCK Steering is unlocked Steering is locked Steering is locked	On
	Steering is locked	Off
S/L -UNLOCK	Steering is unlocked	On
S/L -UNLOCK	Ignition switch in OFF or ACC position	Off
5/L RELAY-F/B	The item is indicated, but not monitored.The clutch pedal is not depressedThe clutch pedal is depressedThe clutch pedal is depressed when No. 7 fuse is blownThe brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normalThe brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normalSW• Selector lever in P position (Except M/T models) • The clutch pedal is depressed (M/T models) • The clutch pedal is depressed (M/T models) • The clutch pedal is not depressed (M/T models)SW• Selector lever in any position other than P (Except M/T models) • The clutch pedal is not depressed (M/T models)Selector lever in any position other than P and N Selector lever in P or N positionSelector lever in P or N positionSteering is unlockedSteering is lockedSteering is unlockedIgnition switch in OFF or ACC position Ignition switch in OFF or ACC positionPush-button ignition switch (push-switch) is not pressedPush-button ignition switch (push-switch) is pressedIgnition switch in OFF or ACC positionIgnition switch in OFF or ACC positionIgnition switch in OFF or ACC positionIgnition switch in OFF or ACC positionSelector lever in any position other than PSelector lever in any positionPush-button ignition switch (push-switch) is pressedPush-button ignition switch (push-switch) is pressedIgnition switch in OFF or ACC positionIgnition switch in OFF or ACC positionSelector lever in any position other than PSelector lever in any position other than P<	On
REQ SW -BD/TR Trunk lid opener request switch is not pressed PUSH SW Push-button ignition switch (push switch) is not pressed PUSH SW Push-button ignition switch (push switch) is pressed IGN RLY2 -F/B Ignition switch in OFF or ACC position Ignition switch in ON position NOTE: The item is indicated, but not monitored. The clutch pedal is not depressed CLUCH SW The clutch pedal is depressed when No. 7 fuse is bill BRAKE SW 1 The brake pedal is not depressed when No. 7 fuse is bill BRAKE SW 2 The brake pedal is not depressed when No. 7 fuse is bill DETE/CANCL SW Selector lever in P position (Except M/T models) SET PN/N SW Selector lever in any position other than P (Except N/T models) S/L -LOCK Steering is unlocked S/L -LOCK Steering is unlocked S/L -LOCK Steering is locked S/L -LOCK Steering is unlocked Ignit	Driver door is unlocked	Off
JNLK 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 in OFF or ACC position	Off
GN KLY I -F/B	Ignition switch in ON position	On
	Selector lever in any position other than P	Off
	Selector lever in P position	On
		Off
אר ו דא -ודטועו		On
	Selector lever in any position other than P	Off
SFTP-MET	Selector lever in P position	On
	Selector lever in any position other than N	Off
SFIN-MEI	Selector lever in N position	On

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
	Steering is unlocked	Off
S/L LOCK-IPDM	Steering is locked	On
	Steering is locked	Off
S/L UNLK-IPDM	Steering is unlocked	On
S/L RELAY-REQ	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off
S/L RELAT-REQ	Steering lock system are not the LOCK condition or the changing condition from LOCK to UNLOCK	On
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Steering is locked	Reset
ID OK FLAG	Steering is unlocked	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The Intelligent Key is not inserted into key slot	Off
KET SW -SLUT	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency o the Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done

Revision: 2009 Novemver

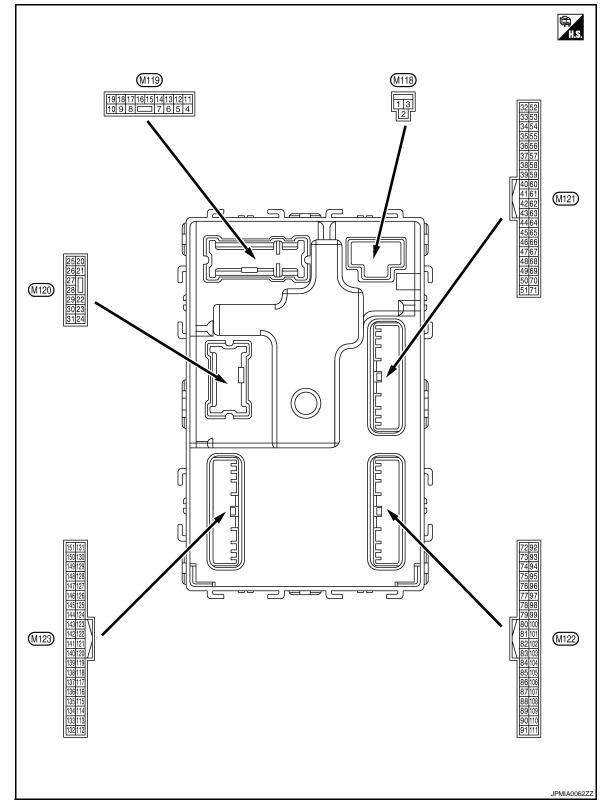
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
	The key ID that the key slot receives is not recognized by the second key ID reg- istered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
	The ID of fourth Intelligent Key is not registered to BCM	Yet
1 P 4	The ID of fourth Intelligent Key is registered to BCM The ID of third Intelligent Key is not registered to BCM The ID of third Intelligent Key is registered to BCM	Done
TD 2	D2 istered to BCM. The key ID that the key slot receives is recognized by the second key ID regitered to BCM. D1 The key ID that the key slot receives is not recognized by the first key ID regitered to BCM. The key ID that the key slot receives is recognized by the first key ID registered to BCM. The key ID of fourth Intelligent Key is not registered to BCM The ID of fourth Intelligent Key is registered to BCM The ID of third Intelligent Key is registered to BCM The ID of second Intelligent Key is registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is registered to BCM The ID of first Intelligent Key is registered to BCM The ID of first Intelligent Key is registered to BCM The ID of first Intelligent Key is registered to BCM FL Ignition switch ON (Only when the signal from the transmitter is received) FR Ignition switch ON (Only when the signal from the transmitter is received) RR ID of front LH tire transmitter is registered ID of front LH tire transmitter is not registered ID of front RH tire transmitter is not registered RR1 ID of front RH tire transmitter is registered	Yet
ONFIRM ID2 - ONFIRM ID1 - P 4 - P 3 - P 2 - P 1 - IR PRESS FL - IR PRESS FL - IR PRESS FR - IR PRESS RR - IR PRESS RR - IR PRESS RR - D REGST FL1 - D REGST FR1 - D REGST RR1 -	The ID of third Intelligent Key is registered to BCM	Done
"P 3 "P 2 "P 1 NR PRESS FL	The ID of second Intelligent Key is not registered to BCM	Yet
1	The ID of second Intelligent Key is registered to BCM	Done
TD 1	The ID of first Intelligent Key is not registered to BCM	Yet
TP 1	The ID of first Intelligent Key is registered to BCM	Done
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
$ONFIRM ID1 \qquad The key ID title tered to BCM. The key ID title to BCM. The ID of four P A The ID of four P A The ID of thi The ID of first The ID of fir$	ID of front LH tire transmitter is not registered	Yet
tered to BCM. The key ID that the key slot receives is not recognized by the first tered to BCM. The key ID that the key slot receives is recognized by the first key to BCM. The ID of fourth Intelligent Key is not registered to BCM The ID of third Intelligent Key is not registered to BCM The ID of third Intelligent Key is registered to BCM The ID of third Intelligent Key is registered to BCM The ID of second Intelligent Key is registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is not registered to BCM ID af rest Intelligent Key is registered to BCM <td>ID of front RH tire transmitter is registered</td> <td>Done</td>	ID of front RH tire transmitter is registered	Done
U REGOLERI	FLIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of tireFRIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of tireRRIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of tireRLIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of tireRLIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of tireL1ID of front LH tire transmitter is registeredDon YetR1ID of front RH tire transmitter is not registeredDon Yet	Yet
	ID of rear RH tire transmitter is registered	Done
	ID of rear RH tire transmitter is not registered	Yet
	ID of rear LH tire transmitter is registered	Done
U KEGOT KLI	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

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< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



PHYSICAL VALUES

< ECU DIAGNOSIS INFORMATION >

	nal No. e color)	Description	1			Value		
+	-	Signal name	Input/ Output		Condition	(Approx.)		
1 (W)	Ground	Battery power supply	Input	Ignition switch (OFF	Battery voltage		
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch (OFF	12 V		
3 (BG)	Ground	P/W power supply (RAP)	Output	Ignition switch (ИС	12 V		
					mp battery saver is activated. or room lamp power supply)	0 V		
4 (LG)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- erior room lamp power sup-	12 V		
5	Ground	Passenger door UN-	Quitaut	Passenger	UNLOCK (Actuator is activated)	12 V		
(P)	Ground	LOCK	Output	door	Other than UNLOCK (Ac- tuator is not activated)	0 V		
7	Ground	Stop Jama	Outrout	Stop lama	ON	0 V		
(SB)	Ground	Step lamp	Output	utput Step lamp	OFF	12 V		
8	Ground	All doors, fuel lid	Quitout	Output	Output	All doors, fuel	LOCK (Actuator is activated)	12 V
(V) Ground LOCK		Output	lid	Other than LOCK (Actuator is not activated)	0 V			
9	Ground	Driver door, fuel lid		Driver door,	UNLOCK (Actuator is activated)	12 V		
(G)	Ground	UNLOCK	Juiput	fuel lid	Other than UNLOCK (Actuator is not activated)	0 V		
11 (GR)	Ground	Battery power supply	Input	Ignition switch (DFF	Battery voltage		
13 (B)	Ground	Ground		Ignition switch (0 V		
					OFF	0 V		
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brighten- ing/dimming level is in the neutral position.		
15 (BG)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	JSNIA0010GB		
(-)					ACC	0 V		

Revision: 2009 Novemver

Terminal No.		Description					
(Wire +	color) –	Signal name	Input/ Output		Condition	Value (Approx.)	
					Turn signal switch OFF	0 V	
17 (BR)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 0 10 10 10 10 10 10 10 10 10	
					Turn signal switch OFF	0 V	
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 0 1 s PKID0926E 6.5 V	
19	Ground	Room lamp timer	Output	Interior room	OFF	12 V	
(V)	Ciouna	control	Output	lamp	ON	0 V	
					Turn signal switch OFF	0 V	
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 0 15 15 15 15 15 15 15 15 15 15	
23	Ground	Trunk lid open	Quitout	Truck lid	OPEN (Trunk lid opener actuator is activated)	12 V	
(Y)	Ground	Trunk lid open	Output	Trunk lid	Other than OPEN (Trunk lid opener actuator is not activated)	0 V	
					Turn signal switch OFF	0 V	
25 (Y)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s 1 s 1 s 1 s 1 s 1 s 1 s 1 s	
30	Ground	Trunk room lamp	Output	Trunk room	ON	0 V	
(P)	Ground	папк тоопп аптр	Output	lamp	OFF	12 V	

	Terminal No. Description (Wire color)				Value	Λ	
(vvire +		Signal name	Input/ Output		Condition	(Approx.)	A
34	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(SB)	Ground	(-)	Output	ŎFF -	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 5 0 1 s JMKIA0063GB	E
35	25	ound Trunk room antenna (+)	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 10 5 0 1 s JMKIA0063GB	J K
38	Ground	Ground Rear bumper anten- na (-) Output		When the trunk lid opener re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M
(B)	Ground		quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	P	

Terminal No.		Description				Value	
(Wire +	color)	Signal name	Input/ Output	Condition		(Approx.)	
39	Ground	Rear bumper anten-	Output	When the trunk lid opener re- quest switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 0 1 s JMKIA0062GB	
(W)	Glouina	na (+)	Guiput		When Intelligent Key is not in the antenna detection area	(V) 15 0 1 s JMKIA0063GB	
47	Crownd	Ignition relay (IPDM	Output	Invition quitab	OFF or ACC	12 V	
(Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V	
50 (G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk lid is closed)	(V) 15 10 10 10 10 10 11.8 V	
					ON (Trunk lid is opened)	0 V	
			Output		Ignition switch ON (A/T mod-	When selector lever is in P or N position	12 V
52	Ground	Ground Starter relay control		els)	When selector lever is not in P or N position	0 V	
(BR)		,,		Ignition switch ON (M/T mod-	When the clutch pedal is depressed	Battery voltage	
				els)	When the clutch pedal is not depressed	0 V	
					ON (Pressed)	0 V	
61 (SB)	Ground	Trunk lid opener re- quest switch	Input	Trunk lid open- er request switch	OFF (Not pressed)	(V) 15 0 10 ms JPMA0016GB	
		Intelligent Kousser		Intollizant V-	Sounding	1.0 V	
64 (G)	Ground	Intelligent Key warn- ing buzzer (Engine	Output	Intelligent Key warning buzzer	Sounding	0 V	
		room)		(Engine room)	Not sounding	12 V	

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description				Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					Pressed	0 V
67 (GR) Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	
						(V) 15
		nd Room antenna 2 (-) Out		ut Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	
72	Ground		oom antenna 2 (–) enter console) Output			JMKIA0062GB
(R) Gro		(Center console)			When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0
						JMKIA0063GB
						(<u>N</u>)
		Ground Room antenna 2 (+) (Center console)			When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0
73				Ignition switch		1 s JMKIA0062GB
(G)	Ground		Output	OFF		(V)
					When Intelligent Key is not in the passenger compart- ment	
					JMKIA0063GB	

	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
74	1 Bassanger door and senger door	When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 0 1 s JMKIA0062GB		
(SB)	Ground	tenna (–)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
75		und Passenger door an- tenna (+) O		When the pas- senger door re- quest switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 0 0 1 s JMKIA0062GB
(BR)			Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
76	Ground	Driver door antenna (-)		When the driv- er door request switch is oper- ated with igni- tion switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 0 1 s JMKIA0062GB
(V)			Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

	Terminal No. Description (Wire color)				Value	А	
+	-	Signal name	Input/ Output		Condition	(Approx.)	\cap
77	Grand	Driver door antenna	0.000	When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(LG)		(+)	Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E
78		nd Room antenna 1 (–) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	G H
(Y)	Ground				When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	J K
79	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 10 50 1 s JMKIA0062GB	M
(BR)	Ground				When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	P

Terminal No.		Description				Value (Approx.)
(Wire +	color)	Signal name	Input/ Output	Condition		
80 (GR)	Ground	NATS antenna amp.	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.	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 [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC ON	0 V 12 V
83 (Y)	Ground	Remote keyless entry receiver communica- tion	Input/ Output	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB
				When operating either button on the Intelli- gent Key		(V) 15 10 5 0 1 1 ms JMKIA0065GB
87 (Y)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper volume dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V
					Front fog lamp switch ON (Wiper volume dial 4)	(V) 15 0 2 ms 1.3 V
					Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 6 • Wiper volume dial 7	(V) 15 0 2 ms JPMIA0040GB 1.3 V

Terminal No. Description Value А (Wire color) Condition Input/ (Approx.) Signal name + _ Output В (V 15 10 All switches OFF ٢ (Wiper volume dial 4) 2 ms JPMIA0041GB D 1.4 V $(\setminus$ 15 10 Ε Lighting switch HI ſ (Wiper volume dial 4) F 2 ms JPMIA0036GB 1.3 V Combination 88 Combination switch Ground Input (BG) **INPUT 3** switch $(\setminus$ 15 10 Н Lighting switch 2ND n (Wiper volume dial 4) 2 ms JPMIA0037GB 1.3 V 15 Any of the conditions be-10 low with all switches OFF 0 · Wiper volume dial 1 Κ · Wiper volume dial 2 · Wiper volume dial 3 2 ms JPMIA0040GB 1.3 V INL Push-button ig-0 V Pressed 89 Push-button ignition Ground Input nition switch (BR) switch (Push switch) Not pressed Battery voltage (push switch) Μ 90 Input/ Ground CAN-L (P) Output 91 Input/ Ν CAN-H Ground (L) Output OFF 0 V (V 15 10 Ρ 92 Key slot illumi-Ground Key slot illumination Output Blinking (LG) nation 1 s JPMIA0015GB 6.5 V ON 12 V

BCM (BODY CONTROL MODULE)

Terminal No.		Description				Value
(Wire +	color)	Signal name	Input/ Output	Condition		(Approx.)
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
(v)					ON	0 V
95 (BG)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (De- tention switch) power supply	Output		_	12 V
97 (L)	Ground	Steering lock condi- tion No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	12 V
98	Ground	Steering lock condi- tion No. 2	Input	Steering lock	LOCK status	12 V
(SB)					UNLOCK status	0 V
		Selector lever P posi-		Selector lever	P position	0 V
		tion switch			Any position other than P	12 V
99 (R)	Ground	ASCD clutch switch (M/T models without ICC)	Input	ASCD clutch switch	OFF (Clutch pedal is de- pressed)	0 V
					ON (Clutch pedal is not depressed)	12 V
		ICC clutch switch (M/ T models with ICC)		ICC clutch switch	OFF (Clutch pedal is de- pressed)	0 V
					ON (Clutch pedal is not depressed)	12 V
					ON (Pressed)	0 V
100 (Y)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 0 10 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (P)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 10 10 10 1.0 V JPMIA0016GB
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(BG)	Ground	lay control	Output	Ignition switch	ON	12 V
103 (LG)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OFF		12 V
106 (W)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	12 V
					ON	0 V

Terminal No. Description Value А (Wire color) Condition Input/ (Approx.) Signal name + _ Output В (V 15 10 Ō All switches OFF С 2 m s JPMIA0041GB D 1.4 V (V) 15 10 Ε 0 Turn signal switch LH F 2 ms JPMIA0037GB 1.3 V G (V 15 10 Combination Н 107 Combination switch switch Ground Turn signal switch RH 0 Input **INPUT 1** (LG) (Wiper volume dial 4) 2 ms JPMIA0036GB 1.3 V J (V 15 10 0 Front wiper switch LO Κ 2 ms JPMIA0038GB INL 1.3 V (V 15 Μ 10 5 0 Front washer switch ON Ν 2 ms JPMIA0039GB 1.3 V Ο

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Revision: 2009 Novemver

Terminal No. (Wire color)		Description				Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper volume dial 4)	(V) 15 10 2 ms JPMIA0038GB 1.3 V
					Lighting switch 1ST (Wiper volume dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3 V
					Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	(V) 15 0 2 ms JPMIA0039GB 1.3 V

Terminal No. Description Value А (Wire color) Condition Input/ (Approx.) Signal name + _ Output В (V 15 10 ٢ All switches OFF С 2 m s JPMIA0041GB D 1.4 V (V) 15 10 Ε C Lighting switch PASS F 2 ms JPMIA0037GB 1.3 V (V 15 10 Combination Н 109 switch Combination switch n Ground Input Lighting switch 2ND **INPUT 2** (Wiper volume (W) dial 4) 2 ms JPMIA0036GB 1.3 V J (V 15 10 Front wiper switch INT/ 0 Κ AUTO 2 ms JPMIA0038GB INL 1.3 V (V 15 Μ 10 5 Front wiper switch HI 0 Ν 2 ms JPMIA0040GB 1.3 V Ο ON 0 V Ρ 10 110 Ground Hazard switch Input Hazard switch 5 (G) ò OFF 10 ms JPMIA0012GB 1.1 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Revision: 2009 Novemver

2010 G37 Convertible

	nal No.	Description				Value
(Wire +	color)	Signal name	Input/ Output	Condition		Value (Approx.)
					LOCK status	12 V
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 50 50 ms JMKIA0066GB
					For 15 seconds after UN- LOCK	12 V
					15 seconds or later after UNLOCK	0 V
112 (BR)	Ground	Rain sensor serial link	Input/ Output	Ignition switch C	DN	(V) 15 10 5 0 0 10 10 10 10 10 10 10 10
					When bright outside of the	8.7 V
113 (G)	Ground	Clutch interlock	Input	Clutch interlock	vehicle	Close to 5 V
(0)					When dark outside of the vehicle	Close to 0 V
114	Ground		Input		OFF (Clutch pedal is not depressed)	0 V
(R)	Ground	switch		switch	ON (Clutch pedal is de- pressed)	Battery voltage
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
		Stop lamp switch 2		Stop lamp	OFF (Brake pedal is not depressed)	0 V
118	Crownd	(Without ICC)	lanut	switch	ON (Brake pedal is de- pressed)	Battery voltage
(BR)	Ground	Stop lamp switch 2	Input		h OFF (Brake pedal is not ICC brake hold relay OFF	0 V
		(With ICC)			h ON (Brake pedal is de- brake hold relay ON	Battery voltage
119 (GR)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V
				UNLOCK status (Unlock switch sensor ON)	0 V	

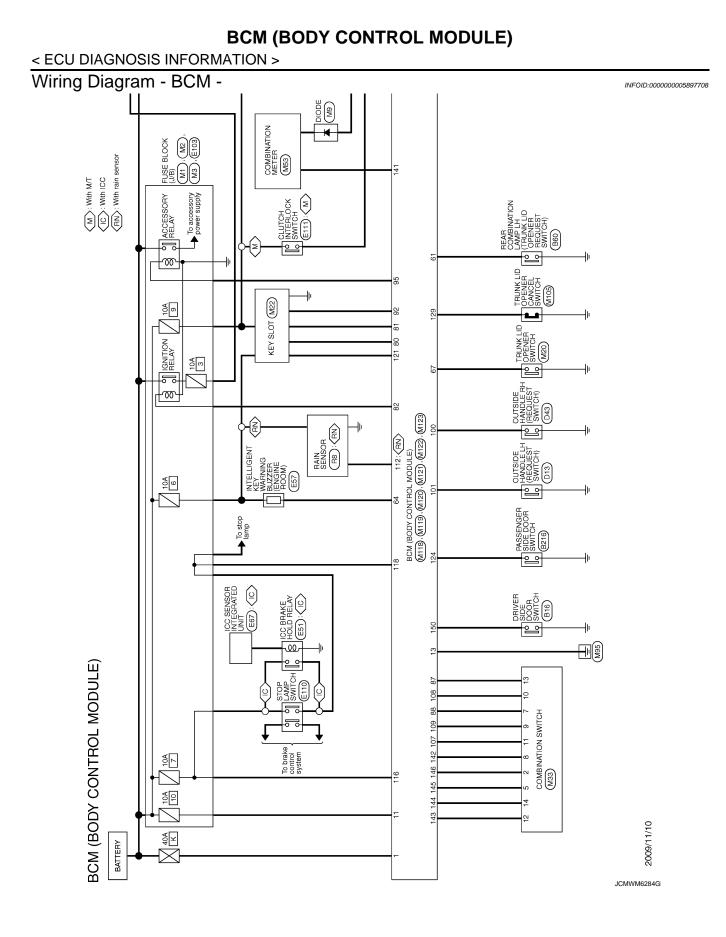
Terminal No. (Wire color)		Description				Value	
(Wire +	color) –	Signal name	Input/ Output		Condition	(Approx.)	
121	Ground	Key slot switch	Input	When the Intellion slot	gent Key is inserted into key	12 V	
(SB)	Cround	Ney slot switch	mput	When the Intellig key slot	gent Key is not inserted into	0 V	
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC ON	0 V Battery voltage	
124 (BG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 0 10 ms JPMIA0011GB 11.8 V	
					ON (Door open)	0 V	
129 (BG)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB	
					ON	1.1 V 0 V	
132 (LG)	Ground	Power window switch and R.H.T. control unit communication	Input/ Output	Ignition switch C	DN	(V) 15 10 5 0 10 ms JPMIA0013GB	
						10.2 V	
				Ignition switch C	OFF or ACC ON (Tail lamps OFF)	12 V 9.5 V	
						NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.	
133 (Y) Grou	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps ON)	(V) 15 0 0 JPMIA0159GB	
					OFF	0 V	
134 (LG)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF ON	Battery voltage	
(20) 137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch C		0 V	

	nal No.					Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(Y)	Ground	power supply	Output	Ignition switch	ACC or ON	5.0 V
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 ••• 0.2s OCC3881D
(L)		er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 2 0 + 0.2s OCC3880D
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	12 V
(GR)	0.00.00	position (A/T models)	mput		Except P and N positions	0 V
					ON	0 V
141 (R)	Ground	Security indicator lamp	Output	Security indica- tor lamp	Blinking	(V) 15 0 1 s JPMIA0014GB 11.3 V
					OFF	12 V
142 (BR)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper volume dial 4)	All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	0 V 0 V 15 10 2 ms JPMIA0031GB 10.7 V
143 (V)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper volume dial 4) Front wiper switch HI (Wiper volume dial 4) Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 • Wiper volume dial 6 • Wiper volume dial 7	0 V (V) 15 0 2 ms JPMIA0032GB 10.7 V

< ECU DIAGNOSIS INFORMATION >

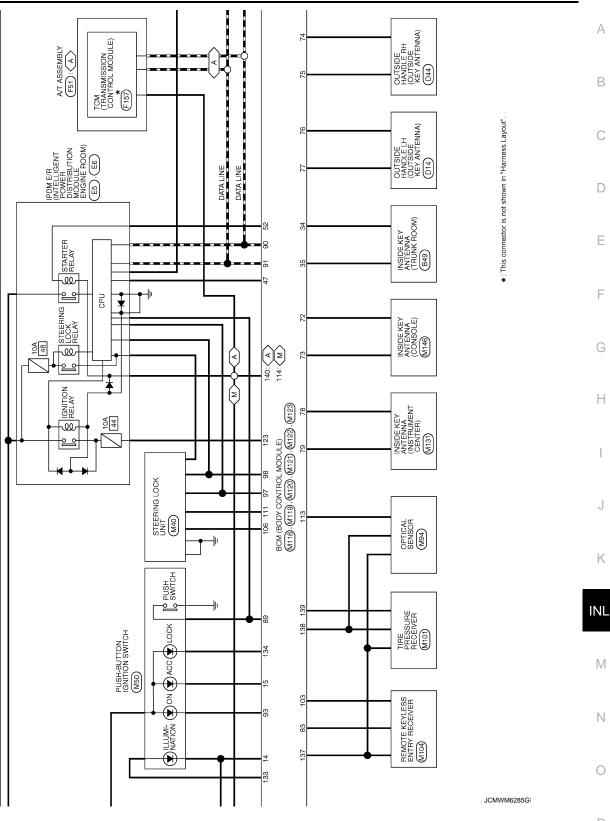
Terminal No. (Wire color)		Description				Value	
+	-	Signal name	Input/ Output	Condition		(Approx.)	
					All switches OFF (Wiper volume dial 4)	0 V	
					Front washer switch ON (Wiper volume dial 4)	(<u>v</u>)	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	15 0 2 ms 10 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
					All switches OFF	0 V	
					Front wiper switch INT/ AUTO	(V)	
145		Combination switch		Combination switch	Front wiper switch LO		
(L)	Ground	OUTPUT 3	Output	(Wiper volume dial 4)	Lighting switch AUTO	5 2 ms JPMIA0034GB 10.7 V	
					All switches OFF	0 V	
		Combination switch			Front fog lamp switch ON		
				Combination	Lighting switch 2ND	(V) 15	
146	Ground		Output	switch	Lighting switch PASS		
(SB)	Giodila	OUTPUT 4	Output	(Wiper volume dial 4)	Turn signal switch LH	0 2 ms JPMIA0035GB 10.7 V	
149 (W)	Ground	Tire pressure warning check switch	Input		_	12 V	
150 (R)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 10 10 10 10 11.8 V	
					ON (Door open)	0 V	
151	Ground	Rear window defog-	Output	Rear window	Active	0 V	
(G)	C. 54114	ger relay control	put	defogger	Not activated	Battery voltage	

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< ECU DIAGNOSIS INFORMATION >





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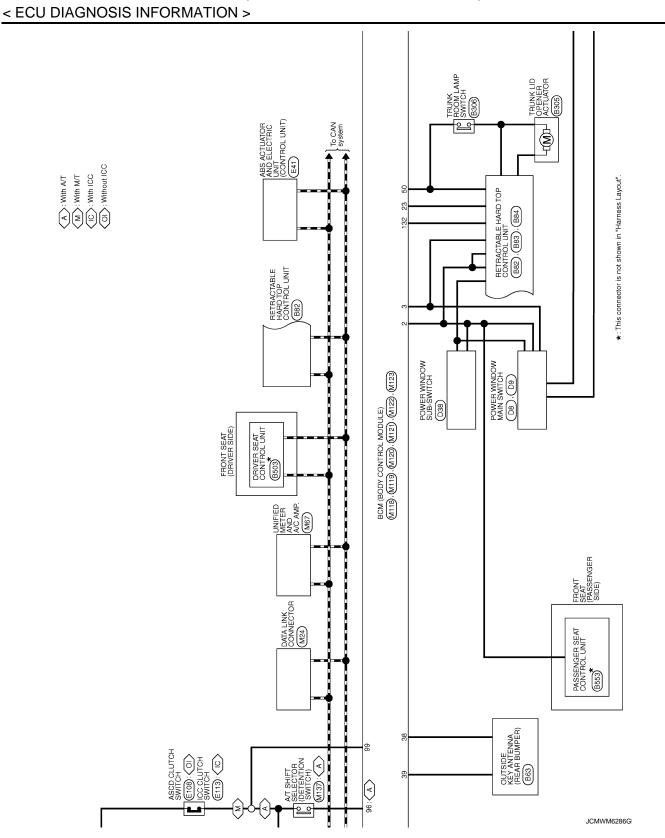
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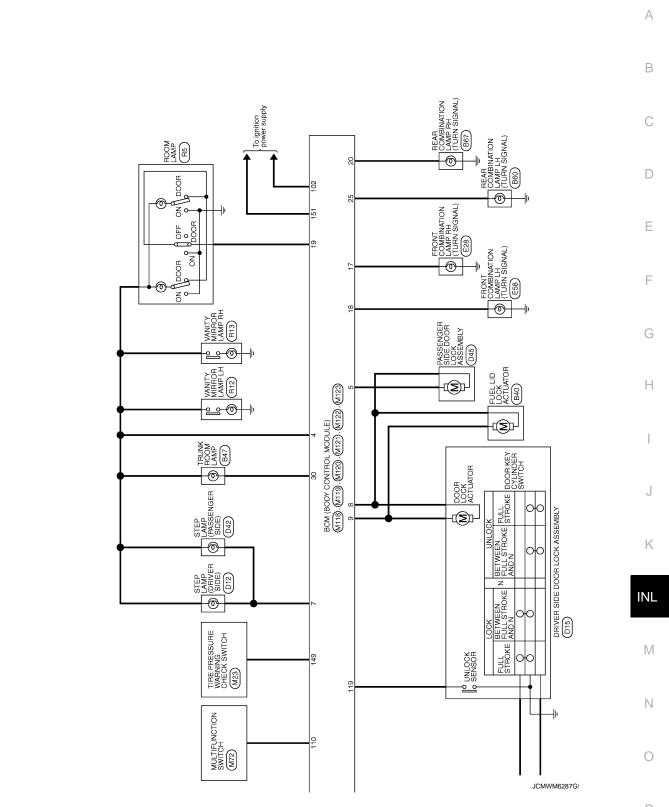
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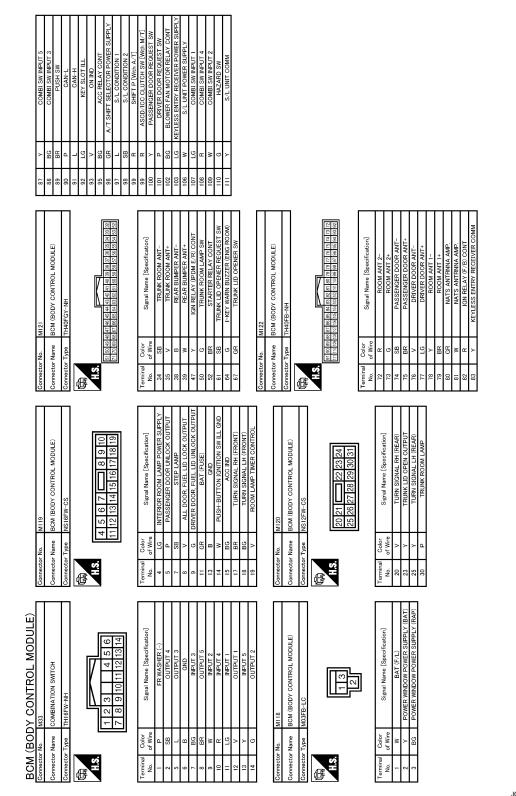
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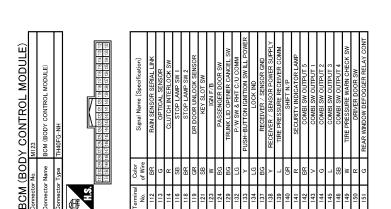


< ECU DIAGNOSIS INFORMATION >



JCMWM6288G

< ECU DIAGNOSIS INFORMATION >



Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

F G Н J Κ INL Μ Ν Ο JCMWM6289G Ρ INFOID:000000005897709

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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 ANTENNA AMP	Inhibit engine cranking	Erase DTC
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
B2195: ANTI-SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actua- tor and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status be- comes consistentStarter control relay signalStarter relay status signal
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 (12 V) Vehicle speed: 4 km/h (2.5 MPH) 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 (12 V) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP/CLUTCH SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (12 V) 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/CLUTCH SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position 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 (12 V) PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status becomes 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 becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)

< ECU DIAGNOSIS INFORMATION >

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 (12 V) 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 are fulfilledPower position changes to ACCReceives engine status signal (CAN)
B2612: S/L STATUS	 Inhibit engine cranking Inhibit steering lock 	 When any of the following conditions are 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: BCM	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
B26E8: CLUTCH SW	Inhibit engine cranking	 When any of the following BCM recognition conditions are fulfilled Status 1 Clutch switch signal (CAN from ECM): ON Clutch interlock switch signal: OFF (0 V) Status 2 Clutch switch signal (CAN from ECM): OFF Clutch interlock switch signal: ON (Battery voltage)
B26E9: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled Steering condition No. 1 signal: LOCK (0 V) Steering condition No. 2 signal: LOCK (12 V)

DTC Inspection Priority Chart

INFOID:000000005897710

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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	
2	U1000: CAN COMM U1010: CONTROL UNIT (CAN)	
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI-SCANNING 	

< ECU DIAGNOSIS INFORMATION >

Priority	DTC
4	 B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2555: IGNITION RELAY B2556: FUSH-BTN IGN SW B2556: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSITION B2604: PNP/CLUTCH SW B2605: S/L RELAY B2606: S/L RELAY B2606: S/L RELAY B2606: S/L RELAY B2607: S/L RELAY B2608: STARTER RELAY B2609: S/L STATUS B2600: S/L STATUS B2601: IGNITION RELAY B2600: S/L STATUS B2601: ISDITION RELAY B2600: S/L STATUS B2601: ISDITION RELAY B2601: ISDICK UNIT B2601: STEERING LOCK UNIT B2601: STEERING LOCK UNIT B2601: STEERING LOCK UNIT B2601: SCM B2614: BCM B2616: BCM B2616: BCM B2616: BCM B2616: BCM B2616: BCM B2619: S/L STATUS B2619: BCM B2619: BCM B2619: S/L STATUS B2628: CLUTCH SW B2629: S/L STATUS B2629: S/L STATUS
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1734: CONTROL UNIT
6	B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA

DTC Index

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>INL-12, "COM-MON ITEM : CONSULT-III Function (BCM - COMMON ITEM)"</u>.

INFOID:000000005897711

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM		_	_	_	BCS-34
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-35
U0415: VEHICLE SPEED	_	_	_	_	BCS-36
B2013: ID DISCORD BCM-S/L	×	×	_	_	<u>SEC-46</u>
B2014: CHAIN OF S/L-BCM	×	×	_	_	<u>SEC-47</u>
B2190: NATS ANTENNA AMP	×		_		<u>SEC-38</u>
B2191: DIFFERENCE OF KEY	×		_	_	<u>SEC-41</u>
B2192: ID DISCORD BCM-ECM	×	_	_	_	<u>SEC-42</u>
B2193: CHAIN OF BCM-ECM	×	_	_	_	<u>SEC-44</u>
B2195: ANTI-SCANNING	×	_	_	_	<u>SEC-45</u>
B2553: IGNITION RELAY	_	×	_	_	PCS-48
B2555: STOP LAMP	_	×	_	_	<u>SEC-50</u>
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-52
B2557: VEHICLE SPEED	×	×	×	_	<u>SEC-54</u>
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-55</u>
B2562: LOW VOLTAGE	_	×	_		BCS-37
B2601: SHIFT POSITION	×	×	×		<u>SEC-56</u>
B2602: SHIFT POSITION	×	×	×		SEC-59
B2603: SHIFT POSI STATUS	×	×	×		SEC-61
B2604: PNP/CLUTCH SW	×	×	×	_	<u>SEC-64</u>
B2605: PNP/CLUTCH SW	×	×	×	_	<u>SEC-66</u>
B2606: S/L RELAY	×	×	×	_	SEC-68
B2607: S/L RELAY	×	×	×	_	<u>SEC-69</u>
B2608: STARTER RELAY	×	×	×	_	<u>SEC-71</u>
B2609: S/L STATUS	×	×	×	_	SEC-73
B260A: IGNITION RELAY	×	×	×	_	PCS-50
B260B: STEERING LOCK UNIT	_	×	×	_	SEC-77
B260C: STEERING LOCK UNIT	_	×	×	_	SEC-78
B260D: STEERING LOCK UNIT	_	×	×	_	SEC-79
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-80</u>
B2612: S/L STATUS	×	×	×	_	<u>SEC-85</u>
B2614: BCM	_	×	×	_	PCS-52
B2615: BCM		×	×		PCS-55
B2616: BCM		×	×		PCS-58
B2617: BCM	×	×	×		<u>SEC-89</u>
B2618: BCM	×	×	×		PCS-61
B2619: BCM	×	×	×		<u>SEC-91</u>
B261A: PUSH-BTN IGN SW		×	×		PCS-62
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-92</u>

Revision: 2009 Novemver

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
B2621: INSIDE ANTENNA	—	×	—	—	<u>DLK-61</u>
B2622: INSIDE ANTENNA	_	×	_	_	DLK-63
B2623: INSIDE ANTENNA	—	×	_	_	DLK-65
B26E8: CLUTCH SW	×	×	×	_	<u>SEC-81</u>
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-83</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-84</u>
C1704: LOW PRESSURE FL	_	—	_	×	
C1705: LOW PRESSURE FR	_	—	_	×	
C1706: LOW PRESSURE RR	—	—	—	×	<u>WT-26</u>
C1707: LOW PRESSURE RL	—	—	—	×	-
C1708: [NO DATA] FL	_	—	_	×	
C1709: [NO DATA] FR	_	—	—	×	
C1710: [NO DATA] RR	_	—	_	×	<u>WT-28</u>
C1711: [NO DATA] RL	—	—	_	×	
C1716: [PRESSDATA ERR] FL	_	—	_	×	
C1717: [PRESSDATA ERR] FR	—	-	—	×	WT-31
C1718: [PRESSDATA ERR] RR	—	—	—	×	<u></u>
C1719: [PRESSDATA ERR] RL	—	—	—	×	1
C1729: VHCL SPEED SIG ERR	—	—	—	×	<u>WT-33</u>
C1734: CONTROL UNIT		—		×	<u>WT-35</u>

< ECU DIAGNOSIS INFORMATION >

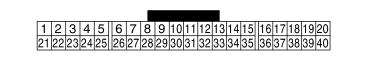
COMBINATION METER

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Refer to MWI-81, "Reference Value".

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No. e color)	Description			Condition	Value	G
+	-	Signal name	Input/ Output		Condition	(Approx.)	Н
1 (V)	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 4 2 0 4 2 0 4 2 0 4 2 0 4 2 0 4 2 0 4 2 0 4 2 0 4 2 0 4 2 0 4 2 0 4 2 0 4 2 0 4 4 4 4 4 4 4 4 4 4 4 4 4	J
3 (GR)	Ground	Communication signal (AMP.→ METER)	Input	Ignition switch ON		(V) 6 4 2 0 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	INL M
5 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	Ν
6				Ignition	Charge warning lamp ON	0 V	0
(W)	Ground	Alternator signal	Input	switch ON	Charge warning lamp OFF	12 V	0
7				Ignition	Air bag warning lamp ON	4 V	
(LG)	Ground	Air bag signal	Input	switch ON	Air bag warning lamp OFF	0 V	Ρ
10				Ignition	Security warning lamp ON	0 V	
(R)	Ground	Security signal	Input	switch OFF	Security warning lamp OFF	12 V	
15 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	

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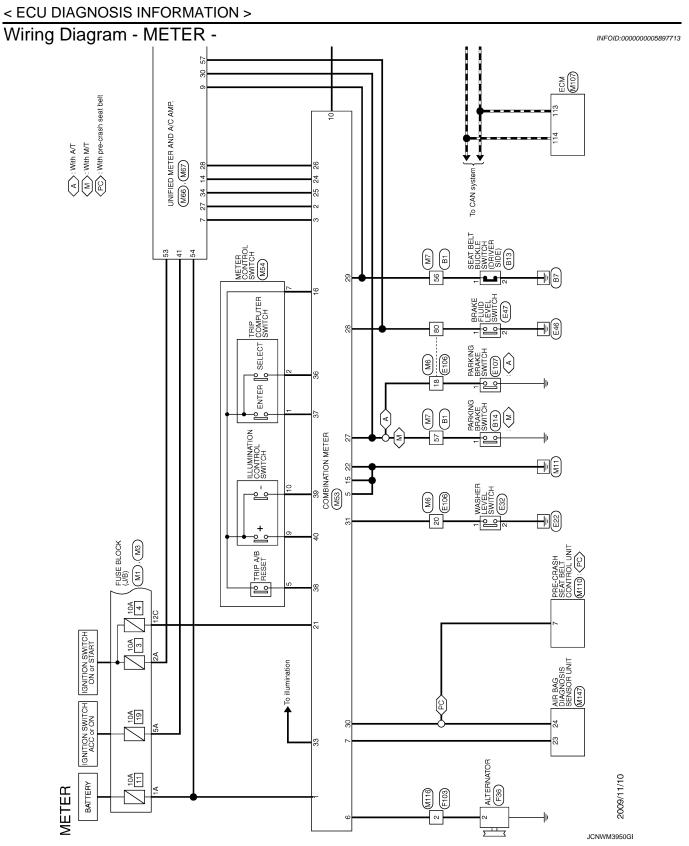
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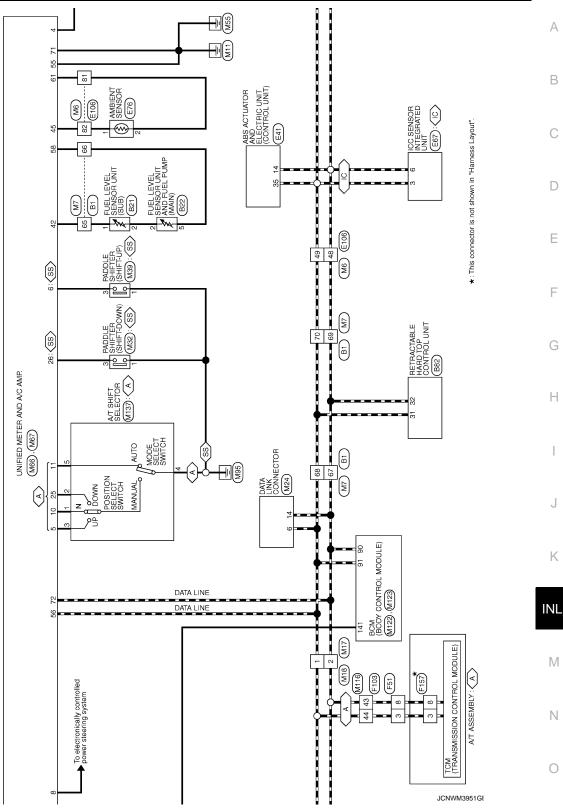
	nal No. color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
16 (B)	Ground	Meter control switch ground		Ignition switch ON	_	0 V
21 (R)	Ground	Ignition signal	Input	Ignition switch ON	_	12 V
22 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
24 (SB)	Ground	Communication signal (LCD→ AMP.)	Output	Ignition switch ON	_	(V) 15 10 5 0 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
25 (B)	Ground	Communication signal (AMP. \rightarrow LCD)	Input	lgnition switch ON	_	(V) 6 2 0 2 2 0 2 2 0 2 0 2 0 0 4 2 0 0 4 2 0 0 7 5 7 5 7 5 7 5 7 7 7 7 7 7 7 7 7 7
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 depending on the specification (destination unit).
					Parking brake applied	0 V
27 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake released	(V) 8 4 0 10 ms JSNIA0007GB
28 (SB)	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

Terminal No. (Wire color)		Description		0		Value
+	_	Signal name	Input/ Output	Condition		(Approx.)
29 (L)	Ground	Seat belt buckle switch sig- nal (driver side)	Input	Ignition switch ON	When driver seat belt is fas- tened	12 V
	Giouna				When driver seat belt is un- fastened	0 V
30 (G)	Ground	Seat belt buckle switch sig- nal (passenger side)	Input	Ignition switch ON	When getting in the passenger seatWhen passenger seat belt is fastened	12 V
					When getting in the passenger seatWhen passenger seat belt is unfastened	0 V
31	Ground	Washer level switch signal	Input	Ignition switch	Washer level switch ON	0 V
(L)	Giouna		input	ON	Washer level switch OFF	5 V
					 Lighting switch 1ST When meter illumination is maximum 	(V) 15 0 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1
33 (R)	Ground	Illumination control signal	Output	Ignition switch ON	 Lighting switch 1ST When meter illumination is step 12 	(V) 15 0 2.5 ms JPNIA1362GB
					 Lighting switch 1ST When meter illumination is minimum 	10 V
36	16	Select switch signal	Input	Ignition switch	When is pressed	0 V
(LG)	(B)		mput	ON	Other than the above	5 V
37 (SB)	16 (B)	Enter switch signal	Input	Ignition switch ON	When 🖵 is pressed	0 V
					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
. /				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 (BG)	16 (B)	Illumination control switch signal (+)	Input	Ignition switch	When 🕅 + switch is pressed	0 V
(20)	(=)			ON	Other than the above	5 V



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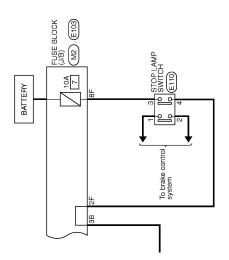
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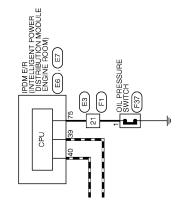
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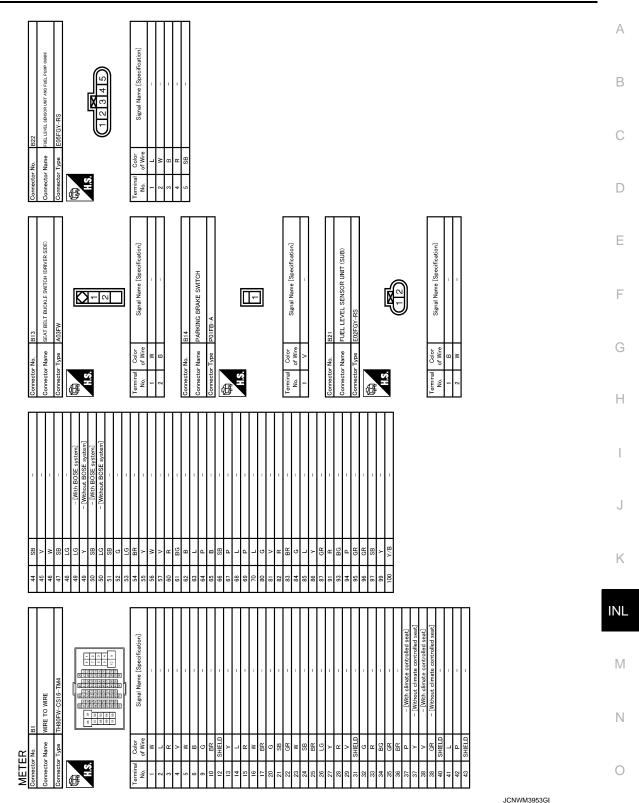
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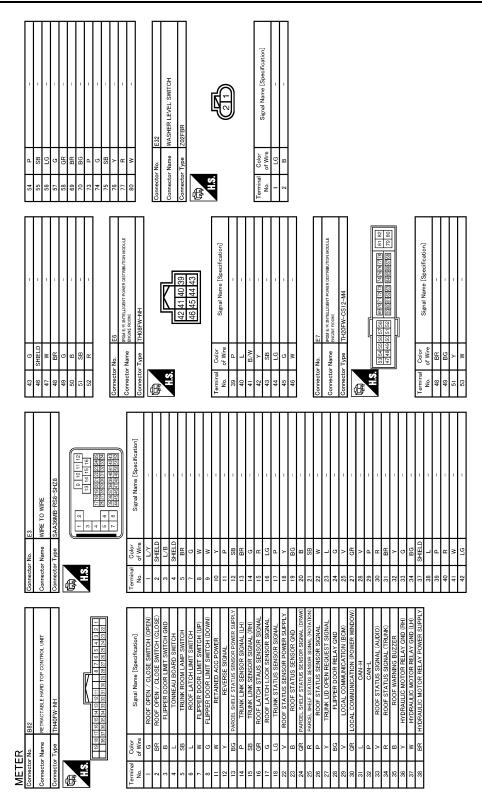
JCNWM3952GI

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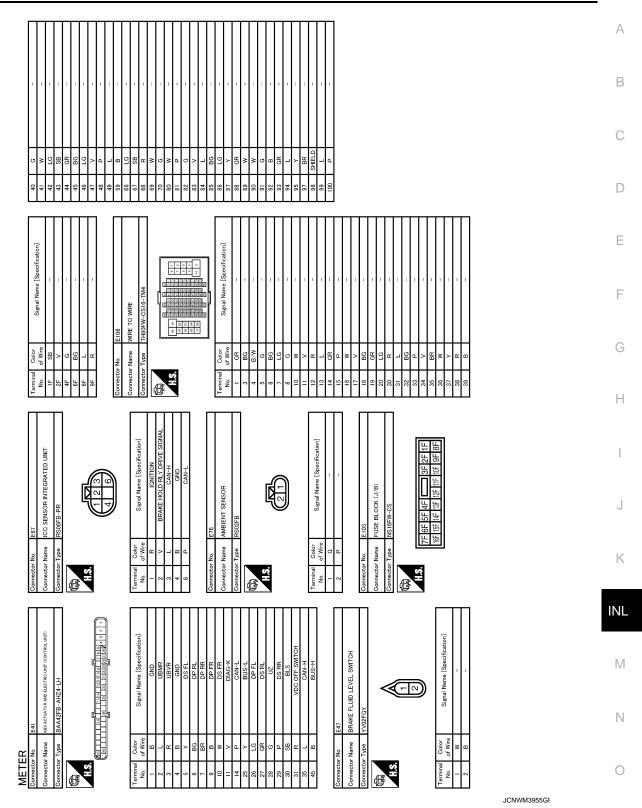
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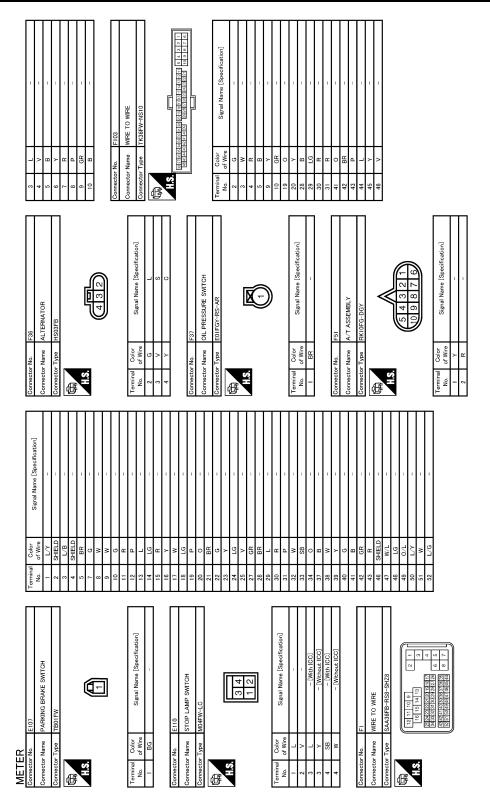
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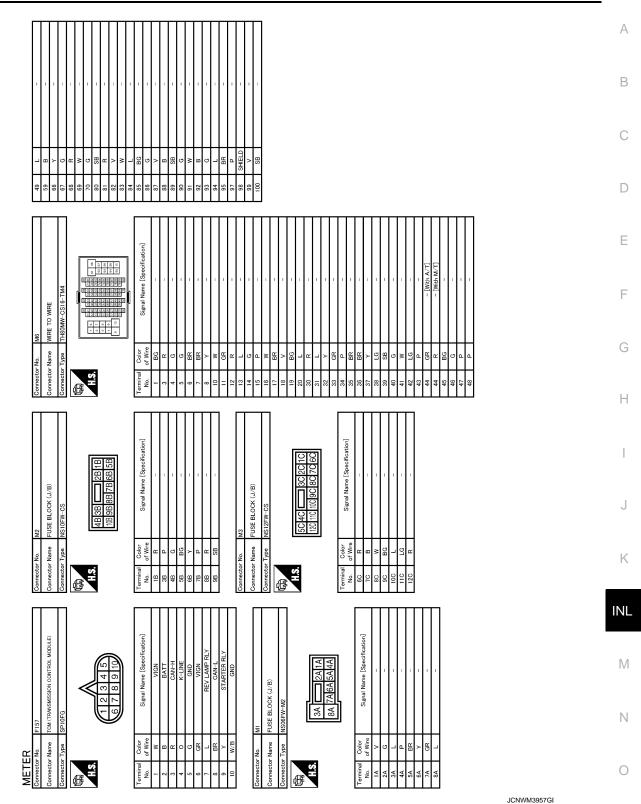
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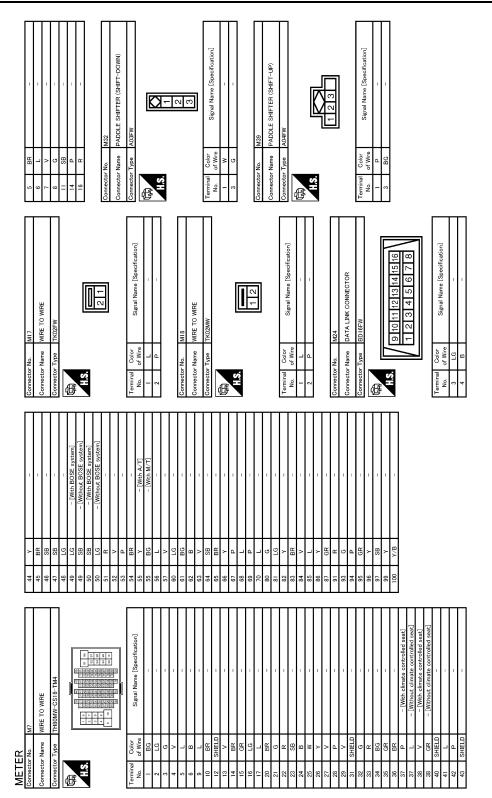
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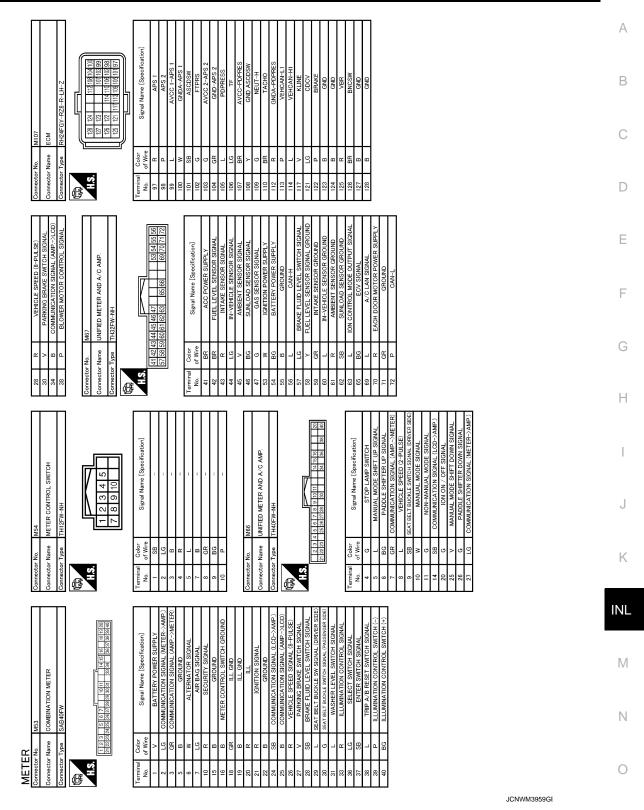
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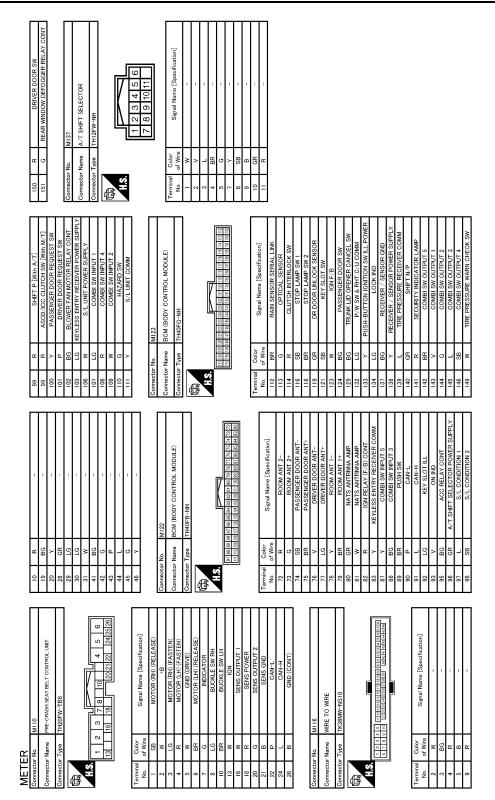
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JCNWM3960GI

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	MI47 AIR BAG DIAGNOSIS SENSOR UNIT IN126FY-EX DIAGON Signal Name [Specification] Signal Name [Specification] CIRC (-) CIRC (-) CI	M
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	METER Connector Name Connector Name Connector Type Connector Type	JCNWM3961GI
Fail-safe		Р
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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.

< ECU DIAGNOSIS INFORMATION >

	Function	Specifications	
Speedometer		Reset to zero by suspending communication.	
Tachometer			
Fuel gauge			
Engine coolant temperatur	e 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	The lower turns on hu successful communication	
	Brake warning lamp	 The lamp turns on by suspending communication. 	
	CRUISE warning lamp		
	Malfunction indicator lamp		
	High beam indicator		
Warning lamp/indicator	Turn signal indicator lamp		
lamp	Oil pressure warning lamp		
	A/T CHECK warning lamp		
	Low tire pressure warning lamp		
	Key warning lamp	- The lamp turns off by suspending communication.	
	AFS OFF indicator lamp		
	Master warning lamp		
	Tail lamp indicator lamp		
	Front fog lamp indicator lamp		

DTC Index

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Refer to <u>MWI-102, "DTC Index"</u>.

INTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

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CAUTION:

Perform the self-diagnosis with CONSULT-III before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

Symptom	Possible cause	Inspection item	
All the following lamps do not turn ON. • Map lamp • Trunk room lamp • Step lamp • Vanity mirror lamp	 Harness between BCM and each interior room lamp BCM 	Interior room lamp power supply circuit Refer to INL-19.	
Interior room lamp does not turn ON even though the door is open.	Harness between BCM and each door switch	Door switch circuit Refer to <u>DLK-70</u> .	
(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 interior room lamp BCM 	Interior room lamp control circuit Refer to INL-21.	
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	_	Check the interior room lamp setting. Refer to INL-14.	
Step lamps (driver side and passenger side) do not turn ON. (Map lamp is turned ON.)	Harness between BCM and each step lamp	Step lamp circuit Refer to <u>INL-23</u> .	
Step lamps (driver side and passenger side) do not turn OFF. (Map lamp is turned OFF.)	• BCM		
Trunk room lamp does not turn ON.	Harness between BCM and trunk room lamp switch	Trunk room lamp switch circuit Refer to <u>DLK-81</u> .	
(Bulb is normal.)Trunk room lamp does not turn OFF.	Harness between BCM and trunk room lampBCM	Trunk room lamp circuit Refer to <u>INL-25</u> .	
Push-button ignition switch illumination does not illuminate.	 Harness between BCM and push- button ignition switch BCM 	Push-button ignition switch illumination circuit Refer to INL-27.	
Interior room lamp battery saver does not activate.	_	Check the interior room lamp battery saver setting. Refer to INL-15.	

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< PRECAUTION >

PRECAUTION PRECAUTIONS

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

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 AIR BAG" and "SEAT BELT" 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 AIR BAG".
- 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.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precaution for Battery Service

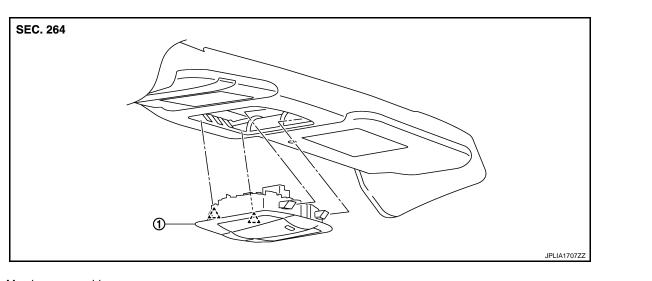
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Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

< REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION MAP LAMP

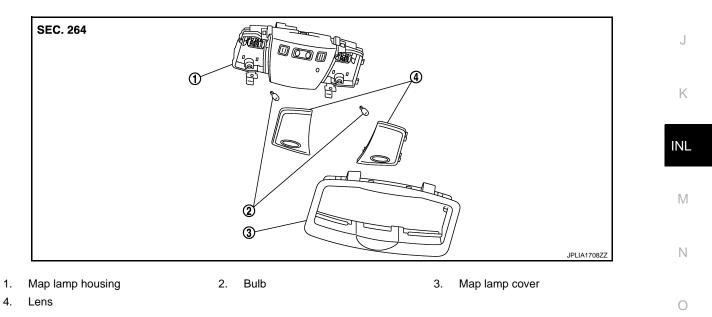
Exploded View

REMOVAL



- 1. Map lamp assembly
- ,^ Metal clip

DISASSEMBLY



Removal and Installation

REMOVAL

1. Insert any appropriate tool the gap between the map lamp and the roof front finisher.

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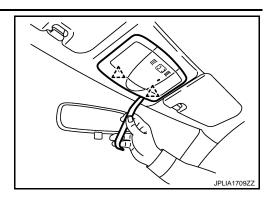
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: Metal clip



2. Disconnect the connector. Remove the map lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

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CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

MAP LAMP BULB

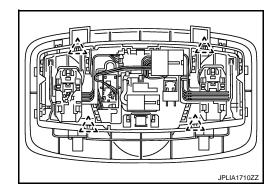
- 1. Insert any appropriate tool into the gap between the lens. Remove the lens.
- 2. Remove the bulb.

Disassembly and Assembly

DISASSEMBLY

1. Disengage pawls.

2 : Pawl



- 2. Remove the map lamp housing.
- 3. Remove the lens.
- 4. Remove the bulb.

ASSEMBLY

Assemble in the reverse order of disassembly.

VANITY MIRROR LAMP

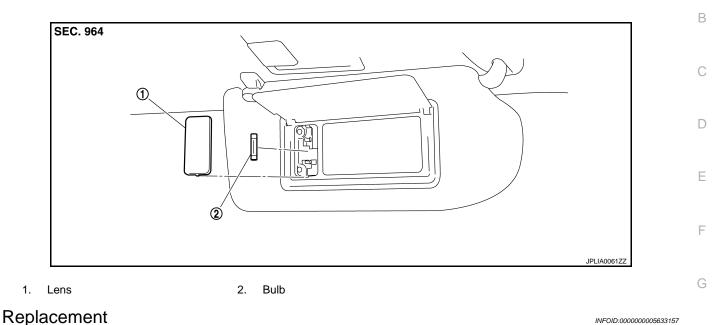
< REMOVAL AND INSTALLATION >

VANITY MIRROR LAMP

Exploded View

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CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

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

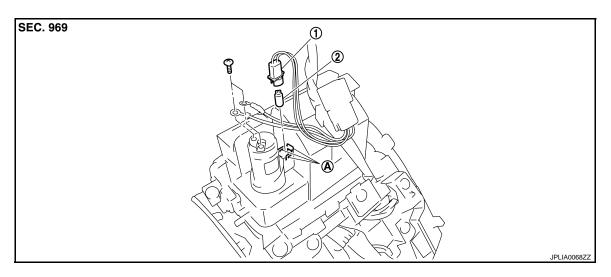
< REMOVAL AND INSTALLATION >

CIGARETTE LIGHTER ILLUMINATION

Exploded View

INFOID:000000005633158

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1. Bulb socket

2. Bulb (Share with the ashtray illumination)

A Hook

Replacement

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

CIGARETTE LIGHTER ILLUMINATION BULB

- Remove the console finisher. Refer to <u>IP-34, "A/T MODELS : Removal and Installation"</u>. (A/T models) Refer to <u>IP-38, "M/T MODELS : Removal and Installation"</u>. (M/T models)
- 2. Insert any appropriate tool into the gap of the bulb socket. Widen the hook and remove the bulb socket.
- 3. Remove the bulb.

GLOVE BOX LAMP

Exploded View

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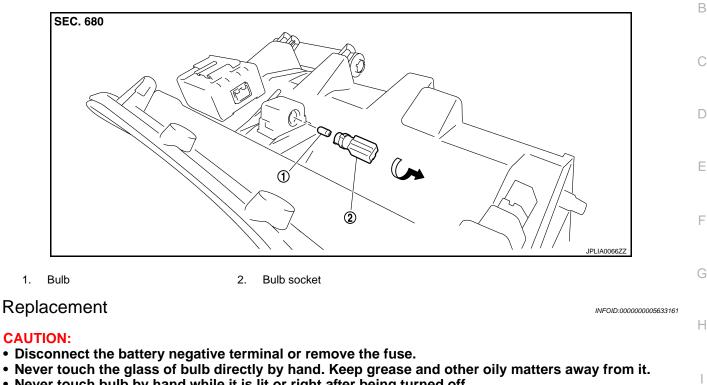
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- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

GLOVE BOX LAMP BULB

- 1. Remove the instrument lower panel RH. Refer to <u>IP-12, "A/T MODELS : Exploded View"</u>. (A/T models) Refer to <u>IP-22, "M/T MODELS : Exploded View"</u>. (M/T models)
- 2. Rotate the bulb socket counterclockwise and unlock it.
- 3. Remove the bulb.

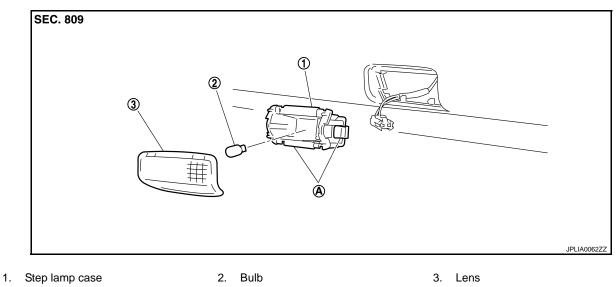
STEP LAMP

Exploded View

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INFOID:000000005633163

INFOID:000000005633164



A Metal clip

Removal and Installation

CAUTION:

Disconnect the battery negative terminal or remove 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 remove the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

STEP LAMP BULB

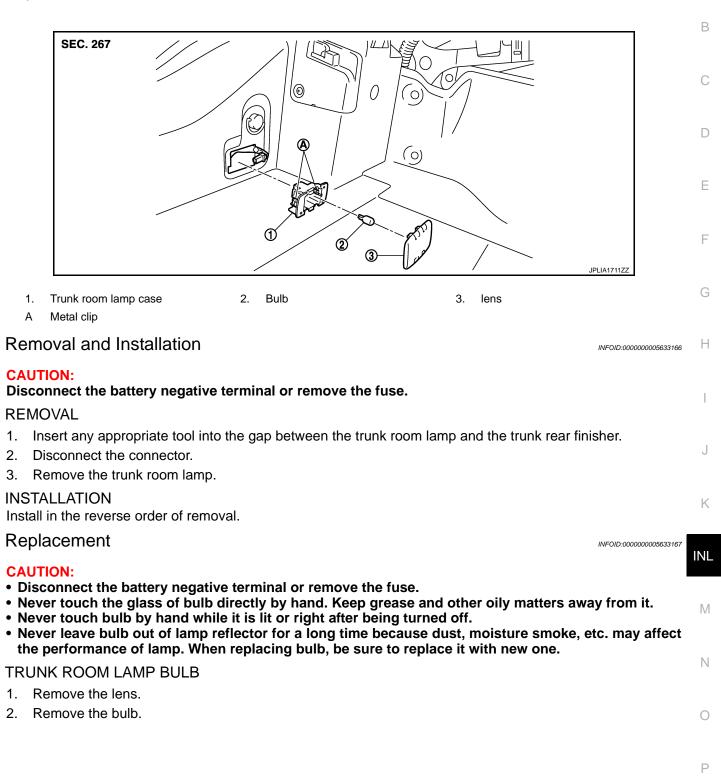
- 1. Remove the step lamp. Refer to INL-112, "Exploded View".
- 2. Remove the lens.
- 3. Remove the bulb.

TRUNK ROOM LAMP

Exploded View

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SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

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

Bulb Specifications

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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	
Trunk room lamp	Wedge	5	