
SECTION INTERIOR LIGHTING SYSTEM

CONTENTS

PRECAUTION
PRECAUTIONS 3 Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN-SIONER" SIONER" 3 Precaution for Procedure without Cowl Top Cover3 Precautions For Xenon Headlamp Service 3 Precautions for Removing Battery Terminal 4
SYSTEM DESCRIPTION5
COMPONENT PARTS5
INTERIOR LIGHTING SYSTEM
SYSTEM
INTERIOR ROOM LAMP CONTROL SYSTEM6 INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram
System Description
System Description
System Description6
System Description
System Description

COMMON ITEM10 COMMON ITEM : CONSULT Function (BCM -	F
COMMON ITEM)10	
INT LAMP11 INT LAMP : CONSULT Function (BCM - INT	G
LAMP)12	Н
BATTERY SAVER	
ECU DIAGNOSIS INFORMATION16	
BCM	
List of ECU Reference	J
WIRING DIAGRAM17	K
INTERIOR ROOM LAMP CONTROL SYSTEM	TX.
17 Wiring Diagram17	INL
ILLUMINATION25 Wiring Diagram25	
BASIC INSPECTION	M
DIAGNOSIS AND REPAIR WORK FLOW35	
Work Flow35	Ν
DTC/CIRCUIT DIAGNOSIS	0
	0
CIRCUIT	_
Component Function Check	Ρ
Diagnosis Procedure	
INTERIOR ROOM LAMP CONTROL CIRCUIT40	
Description40	
Component Function Check40	

D

Е

Diagnosis Procedure	40
LUGGAGE ROOM LAMP CIRCUIT Description Diagnosis Procedure	42
PUSH-BUTTON IGNITION SWITCH ILLUMI- NATION CIRCUIT Description Component Function Check Diagnosis Procedure	43 43
SYMPTOM DIAGNOSIS	45
INTERIOR LIGHTING SYSTEM SYMPTOMS Symptom Table	-
REMOVAL AND INSTALLATION	46
MAP LAMP Exploded View	

Removal and Installation Replacement	46 47
GLOVE BOX LAMP Exploded View	
Removal and Installation Replacement	48
LUGGAGE ROOM LAMP Exploded View Removal and Installation Replacement	49 49
SERVICE DATA AND SPECIFICATIONS (SDS)	
SERVICE DATA AND SPECIFICATIONS	
(SDS) Bulb Specifications	

< 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:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, 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 "SRS AIR BAG".
- Never 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:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never 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 or batteries, and wait at least 3 minutes before performing any service.

Precaution for Procedure without Cowl Top Cover

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.

er to M M N C C PIB3706J

Precautions For Xenon Headlamp Service

INFOID:0000000012964911

INFOID:000000012964910

А

В

Е

F

Н

Κ

Ρ

WARNING:

Comply with the following warnings to prevent any serious accident.

- Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.
- Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector.

PRECAUTIONS

< PRECAUTION >

- (Turning it ON outside the lamp case may cause fire or visual impairments.)
- Never touch the bulb glass immediately after turning it OFF. It is extremely hot.

CAUTION:

- Comply with the following cautions to prevent any error and malfunction.
- Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)
- Never perform HID circuit inspection with a tester.
- Never touch the xenon bulb glass with hands. Never put oil and grease on it.
- Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.
- Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).

Precautions for Removing Battery Terminal

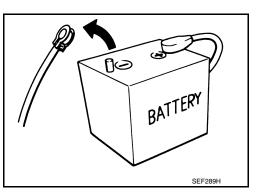
INFOID:000000012964912

When disconnecting the battery terminal, pay attention to the following.

Always use a 12V battery as power source.

- · Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- · For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

D4D engine	: 20 minutes	YS23DDT	: 4 minutes
HRA2DDT	: 12 minutes	YS23DDTT	: 4 minutes
K9K engine	: 4 minutes	ZD30DDTi	: 60 seconds
M9R engine	: 4 minutes	ZD30DDTT	: 60 seconds
R9M engine	: 4 minutes		
V9X engine	: 4 minutes		
YD25DDTi	: 2 minutes		



NOTE:

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.

NOTE:

- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
- Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
- Driving for 30 minutes or more on a steep slope.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC. ٠ NOTE:

The removal of 12V battery may cause a DTC detection error.

COMPONENT PARTS

< SYSTEM DESCRIPTION > SYSTEM DESCRIPTION А **COMPONENT PARTS** INTERIOR LIGHTING SYSTEM В **INTERIOR LIGHTING SYSTEM : Component Parts Location** INFOID:000000012196995 9 12 8 D ⑽ (13) Ε 1 D DA 6 F $(\square$ (5) (4) 3 (2) 1٩ Н JMLIA6149ZZ IPDM E/R BCM Door lock and unlock switch 1. 2. 3. Refer to PCS-5, "Component Parts Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Loca-Location" tion" 4. Front door request switch (driver 5. Front door lock assembly (driver 6. Door switch side) side) (unlock sensor) Back door switch Door key cylinder switch 7. Luggage room lamp 8. 9. 10. Remote keyless entry receiver 11. Optical sensor 12. Map lamp Κ Refer to DLK-9, "Component Parts Location" 13. Combination meter 14. Push-button ignition switch

INTERIOR LIGHTING SYSTEM : Component Description

INL

Part	Description
BCM	Controls the interior lighting system.
IPDM E/R	Controls the integrated relay according to the request signal from BCM (via CAN com munication).
Remote keyless entry receiver	Receives the lock/unlock signal form Keyfob.
Combination switch (Lighting & turn signal switch)	Refer to BCS-8, "COMBINATION SWITCH READING SYSTEM : System Description"
Door lock and unlock switchDoor request switch	Inputs the lock/unlock signal to BCM.
Door switch	Inputs the door switch signal to BCM.
Back door switch	Inputs the back door switch signal to BCM.
Unlock sensor	Detects door lock condition of driver side door.
Optical sensor	Optical sensor converts the outside brightness (lux) to voltage and transmits the optical sensor signal to BCM.

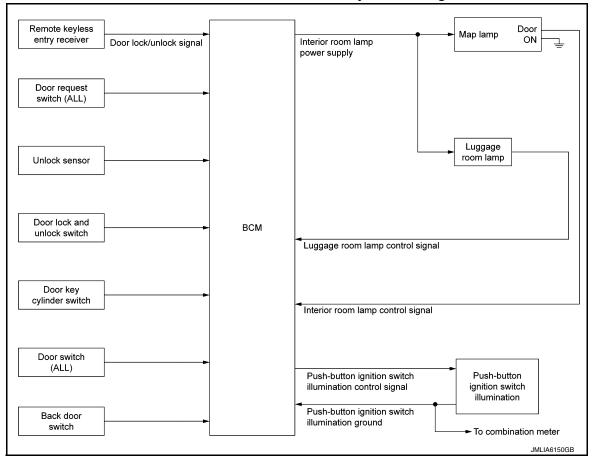
INL-5

SYSTEM

SYSTEM INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram

INFOID:000000012196997



INTERIOR ROOM LAMP CONTROL SYSTEM : System Description

INFOID:000000012196998

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).
- Luggage room lamp is controlled by luggage room 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

< SYSTEM DESCRIPTION >

Interior Room Lamp Timer Basic Operation

								А
100)% [В
	0%							С
	↓ Brightenin	g time	Timer operating tin	ne	Dimming time			D
. The interior	room lown turno			btoning and	dimming) h	JPLIA00		E
timer. • BCM judges - Ignition swit		tion with the		-	•	-		F
- Door lock/u	signal (except ba nlock signal (Ren cylinder switch)		entry receiver,	each door re	equest swite	ch, door locl	k and unlock	G
Each function Function (BC) of interior room la <u>M - INT LAMP)"</u> .	·	an be set by CO	NSULT. Refe	r to <u>INL-12</u>	<u>, "INT LAMP</u>	: CONSULT	Н
BCM always	Lamp ON Operatio s turns the interior tes the interior roc riod of time.	room lamp					or room lamp	I
Status of allIgnition swit	doors except bac cch is turned ON – c signal is detected	• OFF			ith ignition	switch OFF		J
-	tarts if new conditi	on is input d	uring the timer o	perating time				Κ
BCM stops thThe timer ofIgnition swit	Lamp OFF Operati e timer in any of th perating time is ex ch is turned OFF gnal is detected w	ne following pired → ACC/ON			room lamp	OFF.		INL
	ROOM LAMP CC ggage room lamp witch is ON		e following condi	tion is detecte	ed.			Μ
BCM turns lug • Back door s	ggage room lamp witch is OFF	OFF when th	ne following cond	dition is detec	ted.			Ν
PUSH-BUTT	ON IGNITION S	WITCH ILL	UMINATION C	ONTROL				_
-	nition Switch Illumi s the power supply		•	ion switch illu	imination O	N.		0
-			•	the following	conditions			Ρ
• Any of the fe	ollowing conditions t permission is ent		n switch OFF/AC	C				

- Driver side door is LOCK \rightarrow UNLOCK
- Driver side door is open

SYSTEM

< SYSTEM DESCRIPTION >

Push-button Ignition Switch Illumination OFF Operation

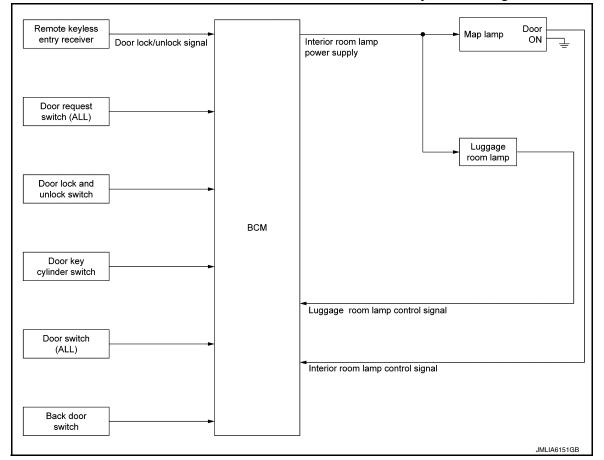
BCM turns the push-button ignition switch illumination OFF in any of the following conditions.

- The push-button ignition switch illumination ON conditions do not satisfy.
- · Any of the following conditions with ignition switch OFF.
- The push-button ignition switch illumination ON conditions do not change (15 seconds after the ignition switch OFF)
- Driver side door is UNLOCK \rightarrow LOCK

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Diagram

INFOID:000000012196999



INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Description

INFOID:000000012197000

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 neglects turning OFF the lamps.

Applicable lamps

- Map lamp
- Luggage room lamp

INTERIOR ROOM LAMP BATTERY SAVER FUNCTION

- When the ignition switch is turned to other position than ON, BCM operates the timer for a period of time to cut the interior room lamp power supply.
- BCM restarts 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 door request switch, door lock and unlock switch, key cylinder switch)

SYSTEM

< SYSTEM DESCRIPTION >

• BCM provides the interior room lamp power supply continuously when the ignition switch position is ON. **NOTE:**

Each function of interior room lamp battery saver can be set by CONSULT. Refer to <u>INL-13, "BATTERY</u> <u>SAVER : CONSULT Function (BCM - BATTERY SAVER)"</u>.

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : System Diagram



INFOID:000000012197002

А

В

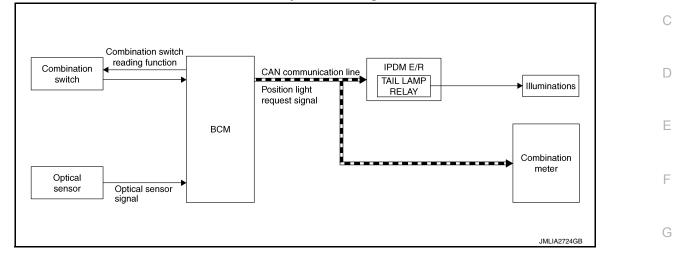
Н

Κ

INL

Μ

Ν



ILLUMINATION CONTROL SYSTEM : System Description

OUTLINE

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

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-11, "SPEEDOMETER : System Description"</u>.)

ILLUMINATION CONTROL

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits position light request signal to IPDM E/R and combination meter 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).
 - Ρ

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000012946726

APPLICATION ITEM

CONSULT 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.
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	Read and save the vehicle specification.Write the vehicle specification when replacing BCM.

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.

×: Applicable item

Custom	Cub sustem coloction item	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	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioning system	AIR CONDITONER		×	×*
Intelligent Key systemEngine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	
Theft warning alarm	THEFT ALM	×	×	×
RAP	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

NOTE:

*: For models with automatic A/C, this diagnosis mode is not used.

FREEZE FRAME DATA (FFD)

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

< SYSTEM DESCRIPTION >

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	r value) of the moment a particular DTC is detected		
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power position is "LOCK"*.)		
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power position is "OFF".)		
	LOCK>ACC		While turning power position from "LOCK"* *to "ACC"		
	ACC>ON		While turning power position from "ACC" to "IGN"		
	RUN>ACC		While turning power 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 position from "CRANKING" to "RUN" (From cranking up the engine to run it)		
	RUN>URGENT		While turning power position from "RUN" to "ACC" (Emergency stop operation)		
	ACC>OFF		While turning power position from "ACC" to "OFF"		
Vehicle Condition	OFF>LOCK		While turning power position from "OFF" to "LOCK"*		
	OFF>ACC		While turning power position from "OFF" to "ACC"		
	ON>CRANK		While turning power position from "IGN" to "CRANKING"		
	OFF>SLEEP		While turning BCM status from normal mode (Power position is "OFF".) to low power consumption mode		
	LOCK>SLEEP		While turning BCM status from normal mode (Power position is "LOCK"*.) to low power consumption mode		
	LOCK		Power position is "LOCK"*		
	OFF		Power position is "OFF" (Ignition switch OFF)		
	ACC		Power position is "ACC" (Ignition switch ACC)		
	ON	-	Power position is "IGN" (Ignition switch ON with engine stopped)		
	ENGINE RUN		Power position is "RUN" (Ignition switch ON with engine running)		
	CRANKING		Power 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. 			

*: Power position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position (A/T models and CVT models), and any of the following conditions are met.

Closing door

· Opening door

· Door is locked using door request switch

Door is locked using Intelligent Key

The power position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

INT LAMP

Ν

Ο

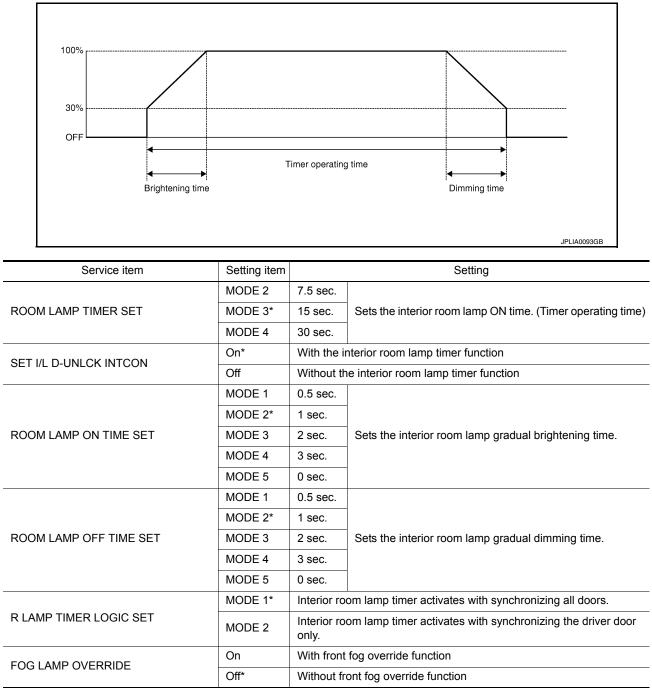
Ρ

< SYSTEM DESCRIPTION >

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:000000012197004

WORK SUPPORT



*: Factory setting

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	Indicated [On/Off] condition of door request switch (driver side)
REQ SW-AS [On/Off]	Indicated [On/Off] condition of door request switch (passenger side)
REQ SW-RR [On/Off]	NOTE: This item is displayed, but cannot be monitored
REQ SW-RL [On/Off]	NOTE: This item is displayed, but cannot be monitored
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
UNLK SEN -DR [On/Off]	Indicates [On/Off] condition of driver door UNLOCK status
DOOR SW-DR [On/Off]	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS [On/Off]	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR [On/Off]	Indicated [On/Off] condition of rear door switch RH
DOOR SW- RL [On/Off]	Indicated [On/Off] condition of rear door switch LH
DOOR SW- BK [On/Off]	Indicated [On/Off] condition of back door switch
CDL LOCK SW [On/Off]	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW [On/Off]	Indicated [On/Off] condition of unlock signal from door lock unlock switch
TRNK/HAT MNTR [On/Off]	NOTE: This item is displayed, but cannot be monitored
KEY CYL LK-SW [On/Off]	Indicated [On/Off] condition of lock signal from door key cylinder
KEY CYL UN-SW [On/Off]	Indicated [On/Off] condition of unlock signal from door key cylinder
RKE-LOCK [On/Off]	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK [On/Off]	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key

ACTIVE TEST

Test item	Operation	Description	
INT LAMP	On	Outputs the interior room lamp control signal.	_
	Off	Stops the interior room lamp control signal.	0
STEP LAMP TEST	On	NOTE:	-
	Off	This item is indicated, but can not tested	

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:000000012197005

WORK SUPPORT

< SYSTEM DESCRIPTION >

Service item	Setting item		Setting
	MODE 1	30 min.	Sets the interior room lamp battery saver timer operating
	MODE 2	60 min.	ime. NOTE:
ROOM LAMP TIMER SET	MODE 3	15 min.	The factor setting is 10 minutes. The setting cannot be re- turned to the factory setting, when the setting is changed once.
BATTERY SAVER SET	On [*]	With the e	exterior lamp battery saver function
DATIENT SAVEN SET	Off	Without th	ne exterior lamp battery saver function
	MODE 1	Without	
	MODE 2	30 min.	
IGN BATTERY SAVER SET	MODE 3*	10 min.	Sets the ignition battery saver timer operating time.
	MODE 4	5 min.	
	MODE 5	60 min.	
	MODE 1	Without	
	MODE 2*	30 min.	
ACC BATTERY SAVER SET	MODE 3	10 min.	Sets the accessory battery saver timer operating time.
	MODE 4	5 min.	
	MODE 5	60 min.	

*:Factory setting

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	Indicated [On/Off] condition of door request switch (driver side)
REQ SW-AS [On/Off]	Indicated [On/Off] condition of door request switch (passenger side)
REQ SW-RR [On/Off]	NOTE: This item is displayed, but cannot be monitored
REQ SW-RL [On/Off]	NOTE: This item is displayed, but cannot be monitored
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
UNLK SEN -DR [On/Off]	Indicates [On/Off] condition of driver door UNLOCK status
DOOR SW-DR [On/Off]	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS [On/Off]	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR [On/Off]	Indicated [On/Off] condition of rear door switch RH
DOOR SW- RL [On/Off]	Indicated [On/Off] condition of rear door switch LH
DOOR SW- BK [On/Off]	Indicated [On/Off] condition of back door switch
CDL LOCK SW [On/Off]	Indicated [On/Off] condition of lock signal from door lock unlock switch

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description	/
CDL UNLOCK SW [On/Off]	Indicated [On/Off] condition of unlock signal from door lock unlock switch	
TRNK/HAT MNTR [On/Off]	NOTE: This item is displayed, but cannot be monitored	ŀ
KEY CYL LK-SW [On/Off]	Indicated [On/Off] condition of lock signal from door key cylinder	(
KEY CYL UN-SW [On/Off]	Indicated [On/Off] condition of unlock signal from door key cylinder	
RKE-LOCK [On/Off]	Indicates [On/Off] condition of LOCK signal from Intelligent Key	[
RKE-UNLOCK [On/Off]	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key	-

ACTIVE TEST

Test item	Operation	Description	F
BATTERY SAVER	Off	Cuts the interior room lamp power supply.	
	On	Outputs the interior room lamp power supply.	G

Н

J

Κ

INL

M

Ν

0

Ρ

ECU DIAGNOSIS INFORMATION BCM

List of ECU Reference

INFOID:000000012197006

ECU	Reference
	BCS-39, "Reference Value"
всм	BCS-60, "Fail-safe"
	BCS-61. "DTC Inspection Priority Chart"
	BCS-62, "DTC Index"

< WIRING DIAGRAM >

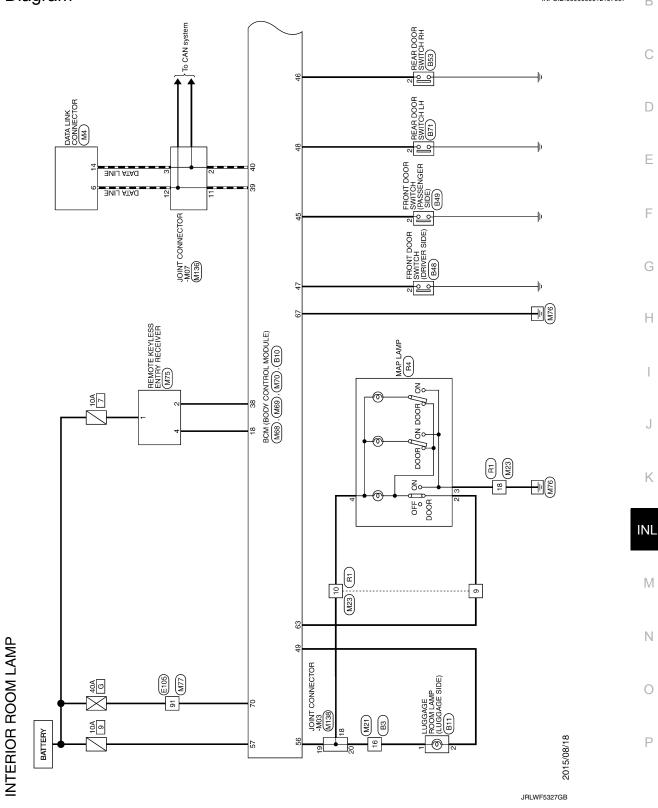
WIRING DIAGRAM

INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram

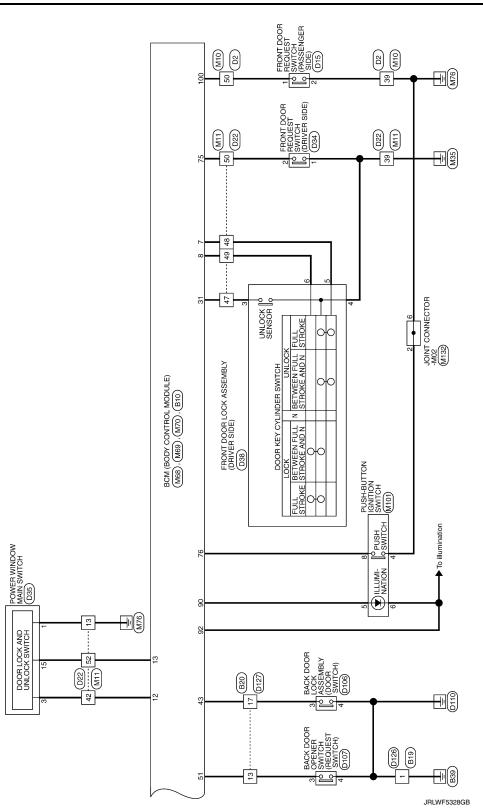
INFOID:000000012197007

А



INTERIOR ROOM LAMP CONTROL SYSTEM

< WIRING DIAGRAM >



	А
Signal Name (Specification)	В
869 1000 1000 1000 1000 1000 1000 1000 10	С
Terminal No. Connector No. 2 SB 2 SB 3 SB 4 Connector Name Connector Name Connector Name Connector Name Connector Name A Wite 2 Nine A Vite	D
peerfication] peerfication] secretication] wvcR slDt]	E
Signal Name [Specification] 820 WIR TO WIRE WIR TO WIRE MILTIDAWA Signal Name [Specification]	F
Terminal No. Color Of No. Connector Name	H
Signal Name (Specification) Signal Name (Specification) REAR WREF STOP POSITION REAR WREF STOP POSITION B10 B10 B10 B10 B10 B10 B10 B10	I
Terminal Color of Nire Sign bit A3 Vr P P A3 Vr P P A4 LG P P A5 LG P P A5 Sign LG P A5 LG N202FW-CS N202FW-CS Connector Nume N001 LG N001 D LG N002FW-CS Sign A1 Connector Nume N002FW-CS Sign A1 LG N002FW-CS Sign A1 LG MURE TO WIR NURE TO WIR A1 LG MURE TO WIR MURE TO WIR	R
AMP	INL
	Μ
INTERIOR R connector Name connector Name connector Name 10 11 12 13 14 13 14 13 14 13 14 13 14 15 15 15 15 15 15 15 15 15 15	Ν

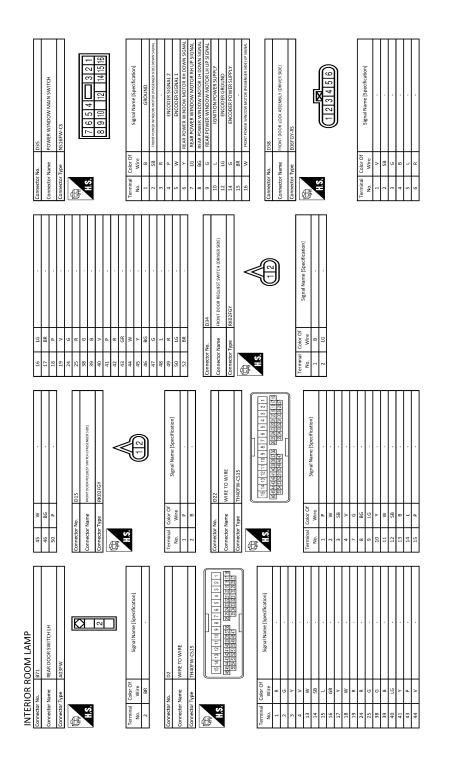
JRLWF5329GB

0

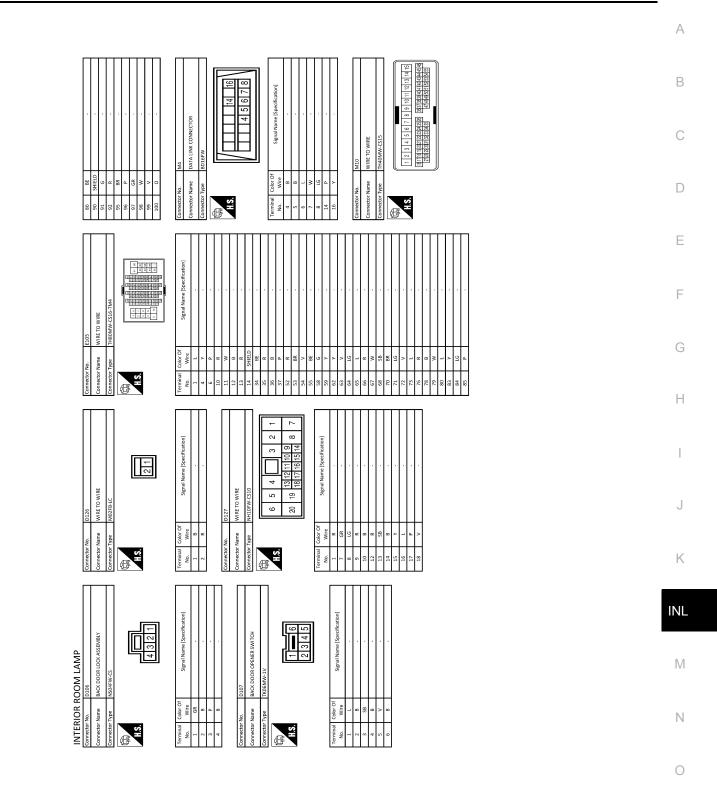
Ρ

< WIRING DIAGRAM >

INTERIOR ROOM LAMP CONTROL SYSTEM



JRLWF5330GB



JRLWF5331GB

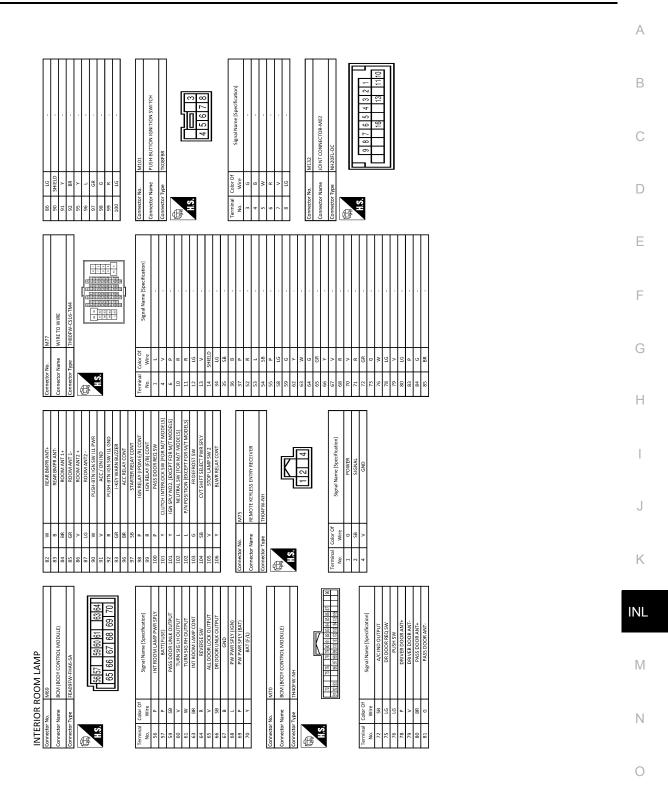
Ρ

Terminal Color O		13	8		26 R			Terminal	Color Of	C 10 10
No. Wire	Signal Name [Specification]	14	-		27 SHIELD	-		No.		Signal Name (Specifical
1 R	-	15	Ρ	-	28 V			2	L	COMBI SW INPUT 5
2 G		16	SHIELD		29 L			e	gR	COMBI SW INPUT 4
3 SB		17	8		30 16			4	BR	COMBI SW INPUT 3
4		18	8		32 W			ŝ	G	COMBI SW INPUT 2
13 GR		19	~					9	>	COMBI SW INPUT 1
-		24	BR					2	_	KEY CYL UNLOCK SW
┞		25	>		Connector No.	M23		∞	£	KEY CYL LOCK SW
16 SHIELD		38	>		:			0	æ	STOP LAMP SW 1
17 Y		39	8		Connector Name	WIRE TO WIRE		01	>	
+		40	>		Connector Type	NH10MW-CS10		12	g	DOOR LK & LINEK SW LOCK
+		2 E			add - researches			1 9	j a	DOOR IN STRUCTURE
+		Ŧ	. (đ			CT I	6	DOOR IN SECURING WILL BE
+		7#	ч		ALL ALL			+T	92	UP ILCAL SENS
25 G		43	>		U.	1 2 3 4	200	15	>	REAR WINDOW DEF SW
38 Y		44	٩		-e-II			17	7	OPTICAL SENS PWR S
39 B		45	9			9 10 11 12		18	>	RECEIVER GND
40 BR	,	46	>	,		:	19 20	21	٩	NATS ANT AMP.
41 6		47	В			/ 0		52	ď	SECURITY IND LAMP CONT
╀			-					2		DONCI E LINK
╀		e e			Terminal Calar Of				3 -	NATE ANT AND
		ţ,	-		_	Signal Name [Specification]	tion]	57	3 8	THEFT AND AND
+		R	3		╉			97	4	I REMAND AMP.
		75	ЯЯ		+			/7	~	A/CSW
50 P					4			28	9	BLOWER FAN SW
					2			29	SB	HAZARD SW
		Connector No.		M21	в 9			30	L	BK DOOR OPENER SW
Connector No.	M11	Connector Name		WIRE TO WIRE	9 BR			31	GR	DR DOOR UNLK SENS
Connector Name	WIDE TO WIDE				10 P			32	ГG	COMBI SW OUTPUT
	WINE IO WINE	Connector Type		TH32FW-NH	11 B			33	7	COMBI SW OUTPUT 4
Connector Type	TH40MW-CS15				12 SHIELD			34	>	COMBI SW OUTPUT 3
		£			13 W			35	œ	COMBI SW OUTPUT 2
Æ		Ĩ		R				36	٩	COMBI SW OUTPUT
intro-	1 2 2 4 5 6 7 8 0 10 11 10 12 14 15	N.S.H.S.	Ŀ					37	ė	DETENT SW
SH	1 0 2 10 11 12 10			16151413121110987654321				8	9	BECEIVED COMMA
	16 17 18 19 2021 22 2024 25 26 3 36 37 38 39 40 41 42 43 44 45 46			32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17	Connected No.			s e	; .	
	8		-1		CONTRACTOR NO.	M08		20		CAN-FI
					Connector Name	BCM (BODY CONTROL MODULE)		40	٩.	CAN-L
			0.11.00			TURNER ALL				
Tourise Colored		i erminal	COLOF OT	Signal Name [Specification]	connector type	IH40F6-NH				
No Wire	Signal Name [Specification]	101			Æ					
$^+$		2			ANT					
+		=	-		S i	K				
+		12	BR							
3 SB		13	N			9 10 12 13	15 17 18			
4		14	8			21 23 24 25 26 27 28 29 30 31 22 33 34 33	35 36 37 38 39 40			
7 R		15					Ĩ			
		16	٩	,						
╀		2								
م م		/T	2							
+		18	>							
11 GR		19	9							

INTERIOR ROOM LAMP CONTROL SYSTEM

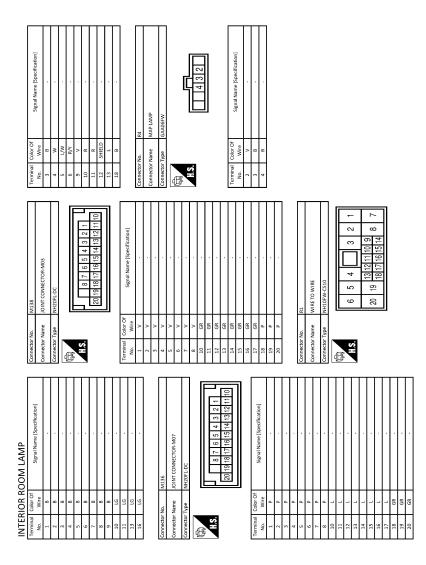
JRLWF5332GB

< WIRING DIAGRAM >



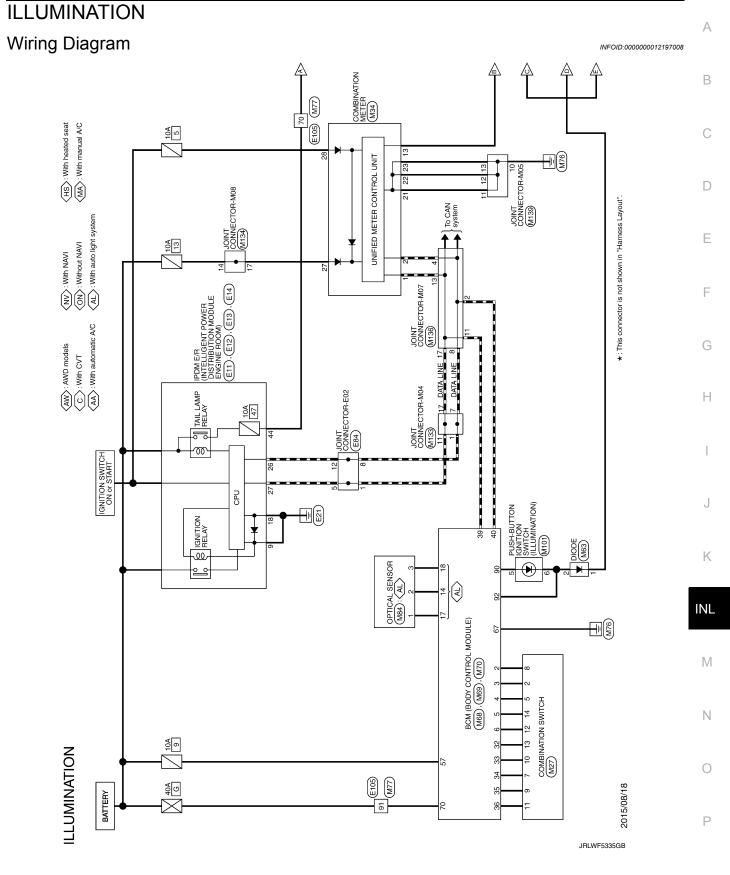
JRLWF5333GB

Р

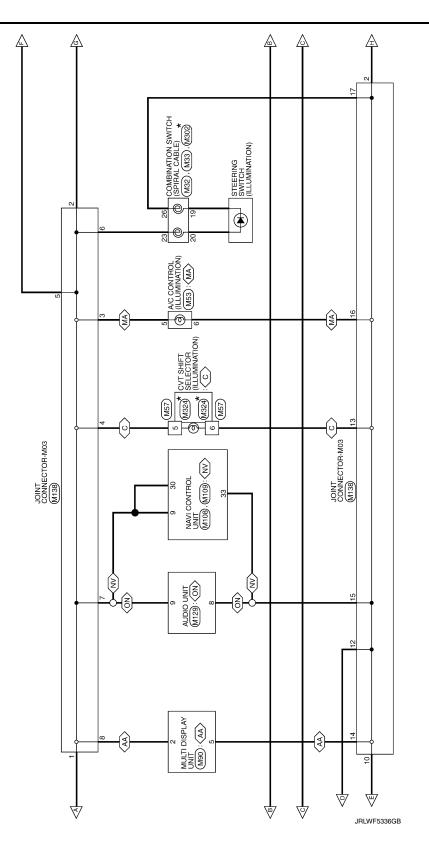


JRLWF5334GB

< WIRING DIAGRAM >

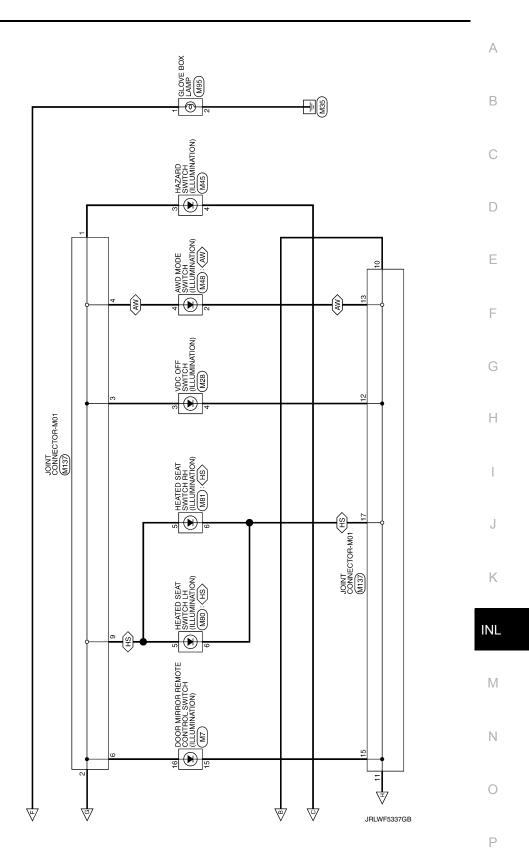


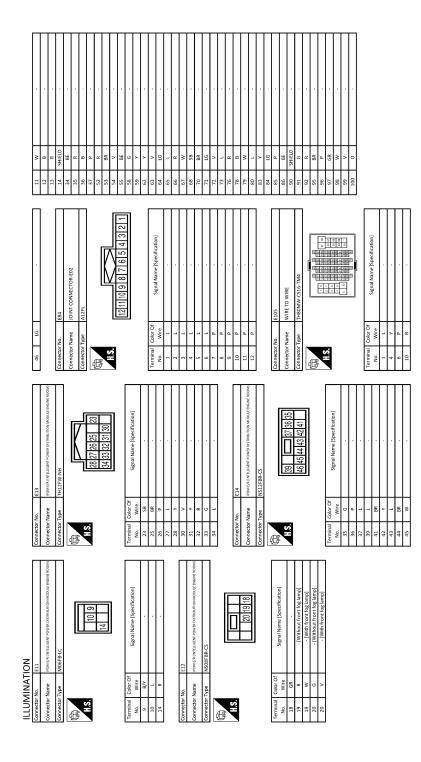
Revision: November 2015



ILLUMINATION

< WIRING DIAGRAM >





JRLWF5338GB

	А
MANUAL MODE SINT DOMINISCIANL WESTERTED TO MINISCIANL WESTERTED STORMS SIGNAL WESTERTED STORMS SIGNAL MARINET STROGG SIGNAL ARBITET STROGG SIGNAL ARBITET STROGG SIGNAL ARBITET STROGG SIGNAL ARBITET STROGG SIGNAL MADIL STRUGG SIGNAL MADIL STRUGG SIGNAL MADIL STRUGG SIGNAL MADIL STRUGG SIGNAL MANUAL MOTE SIGNAL<	В
	С
15 W 13 6 13 6 13 6 21 9 22 8 23 1 23 1 23 1 23 1 23 1 23 1 23 1 23 1 23 1 23 1 23 1 23 1 33 1 33 1 34 1 35 1 36 1 37 1 38 1 39 1 31 1 32 1 33 1 34 1 35 1 36 1 37 1	D
M93 Communities writtet (seried, c.akut) Toostered: v.l.v. Toostered: c.akut) Toostered: v.l.v. Signal Name (Specification) Signal Name (Specification)	F
Connector No. M33 Connector Name Connector Name Connector Name Connector Name Connector Name Connector Name Connector Name Connector Name Connector Name Signal Name Connector Name Connector Name Marce Signal Name Connector Name Connector Name Marce Signal Name Connector Name Connector Name Marce Signal Name Connector Name Connector Name Name Connector Name Connector Name Name Connector Name Connector Name Name Name Connector Name Name Connector Name Connector Name	G
	Η
Mail Mail Mail 00000011 Mail 00000012 Mail 00000012 Mail 00000000 Signal Name (Specification) 0000000 Signal Name (Specification) 0000000 . . .	I
11 P P 13 W MV 14 Connector No M28 Connector No M28 M01 Connector No M02 M03 Connector No M02 M03 No Wree Signal No No M32 Connector No M03 Connector No No Wree Signal No Vree Signal No Vree Signal	J
	INL
Make of a factor for the factor fa	Μ
Fremminal Connector Name M07 Connector Name 000 Margin 000 Margin Connector Name Door Margin Door Margin Connector Name 000 Margin 000 Margin 2 0 0 0 3 13 16 0 13 13 16 0 13 13 16 0 13 16 0 0 13 16 0 0 13 16 0 0 13 16 0 0 14 16 0 0	Ν

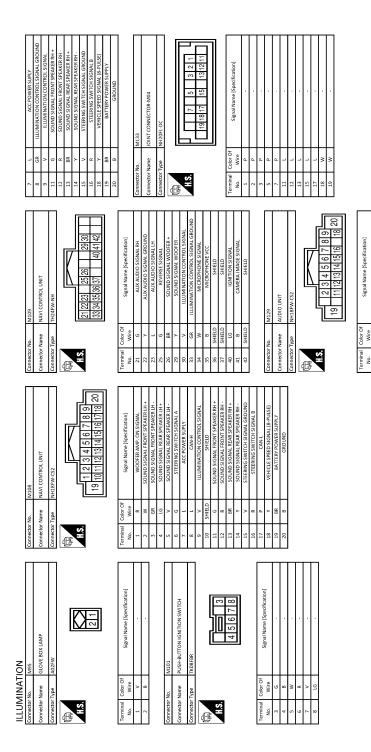
Ο

ILLUMINATION Connector No. M48	Connector No.	M57	Connector No.		M68	Connector No.		M69
Connector Name AWD MODE SWITCH	Connector Name	CVT SHIFT SELECTOR	Connector Name		BCM (BODY CONTROL MODULE)	Connector Name	· Name	BCM (BODY CONTROL MODULE)
Connector Type TK06FW-1V	Connector Type	TH16FW-NH	Connector Type		TH40FB-NH	Connector Type	Type	FEA09FW-FHA6-SA
	Æ		Æ		K	ſ		ro oo os
4	4.8	8 7 6 5 4 3 2 1 13 12 11 10 9	H.S.		2 2 4 5 6 7 8 9 10 12 10 14 15 17 18 21 23 9 25 8 2 18 9 10 12 10 14 15 17 18	H.S.		
	- H	4	1	- H			0-1-0	
lerminal color Of Signal Name [Specification] No. Wire	No. Wire	r Signal Name [Specification]	lerminal No.	Wire	Signal Name [Specification]	Ierminal No.	Wire	Signal Name [Specification]
1 W -	1 P		2	L	COMBI SW INPUT 5	56	Ρ	INT ROOM LAMP PWR SPLY
-	2 B		m	GR	COMBI SW INPUT 4	57	٦	BATT(FUSE)
+	+		4	8	COMBI SW INPUT 3	ទ	SB	PASS DOOR UNLK OUTPUT
	4 n 2 >	, ,	<u>ه</u> م	≥ ≥	COMBLSW INPUT 2 COMBLSW INPUT 1	90	~ ~	TURN SIG EH OUTPUT
╞	6 GR	,	~	-	KEY CYLUNLOCK SW	63	BR	INT ROOM LAMP CONT
	7 4		••	œ	KEY CYL LOCK SW	64	ч	REVERSE SW
	8 W		6	ч	STOP LAMP SW 1	65	^	ALL DOOR LOCK OUTPUT
Connector No. M53			10	M		99	SB	DR DOOR UNLK OUTPUT
Connector Name A/C CONTROI	10 B		12	ß	DOOR LK & UNLK SW LOCK	67	8	GND
	+		13	BR	DOOR LK & UNLK SW UNLOCK	89	٦	PW PWR SPLY (IGN)
Connector Type SEA09FB-SHA6			14	SB	OPTICAL SENS	69	٩	PW PWR SPLY (BAT)
2	13 6		5	>	REAR WINDOW DEF SW	70	٢	BAT (F/L)
			17	> :	OPTICAL SENS PWR SPLY			
H.S. 9 13 12 11 10 14	Connector No.	M63	51	> a	NATS ANT AMP.	Connector No.		M70
	Connector Name	DIODE	23	я	SECURITY IND LAMP CONT	Connector Name	Mama	BCM (BODY CONTROL MODILLE)
1001		200F	24	SB	DONGLE LINK			
	Connector Type	24335_C9900	25	ΓC	NATS ANT AMP.	Connector Type	Type	TH40FW-NH
	ą		26	ß	THERMO AMP.	ą		
lar		[27	>	A/CSW			[
No. Wire	SH	Ŕ	28	9 9	BLOWER FAN SW	SH		
		1 2	67	я.	HAZAKU SW			72 75 76 78 79 60 51 52 63 64 65 66 67 90
			<u>8</u>	_				9r 22 20 96 97 98 99 rot rot rot rot rot rot rot
+			7	5.	DA DUON UNEN SENS			
2 2			20	2 >	COMBLEW OLITELT &			
+	Terminal Color Of		n 12	- >	COMBLSW OUTPUT 3	Terminal	Color Of	
	_	Signal Name [Specification]	35	æ	COMBI SW OUTPUT 2	No.		Signal Name [Specification]
8 8	1 GR		36	٩	COMBI SW OUTPUT 1	72	SB	A/CIND OUTPUT
9 8 .	2 R		37	σ	DETENT SW	75	1G	DR DOOR REQ SW
10 W -			38	SB	RECEIVER COMM	76	ΓC	PUSH SW
11 R -			39	-	CAN-H	78	٩	DRIVER DOOR ANT+
12 Y -			40	٩	CAN+L	62	>	DRIVER DOOR ANT-
13 L -						8	ž	PASS DUOK ANT
-						10	,	

JRLWF5340GB

	А
BISOR Resort Signal Name Specification Signal Name Specification S	В
0004 001104LSI 1003FW 1012FWAR	С
Connector Name Connector Name Connector Type LS Connector Type Connector Type Connector Name Connector Name	D
AT SWITCH LH Signal Name (Specification) Signal Name (Specification) Signal Name (Specification)	E
M80 M80 M81 M81 M81 M82	Г G
Connector hame Connector hame	Н
	I
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	J K
ION EAR BANE ANT: EAR BANE ANT	INL
	M
ILLUMINATION Bit W Bit W Bit Bit Bit Bit Mit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit <	Ν

Ο



JRLWF5342GB

	А
peefication1	В
Signal Name (Specification) Si	С
Terminal No. Color Of No. No. No. No. No. No. No. 2 W 2 N 3 W 13 B 13 B <td>D</td>	D
Peecfication]	E
M138 Num Connection-Anda Amazet- DC Signal Name [Specification] Signal Name [Specification] M139 M129	F
Commettor No. Commettor Name Commettor Name Landon Cr No. Landon Cr No. Commettor Name Commettor Name Commettor Name Commettor Name Commettor Name	H
	I
	J
5 P 7 9 10 1 11 1 11 1 11 1 11 1 11 1 11 1 11 1 11 1 11 1 11 1 11 1 12 1 13 0 13 0 1 V 2 V 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	K
08 13 14 13 14 13 14 13 14 13 14 13 12 1	INL
Signal Name CTOR: Mineral Name 0 0 0	Μ
ILLUNINATION Connector Num INITIO Connector Num INITIO Connector Num INITIO Main INITION	Ν

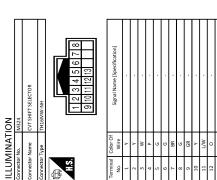
ILLUMINATION

JRLWF5343GB

Ρ

0

ILLUMINATION



JRLWF5344GB

< BASIC INSPECTION >

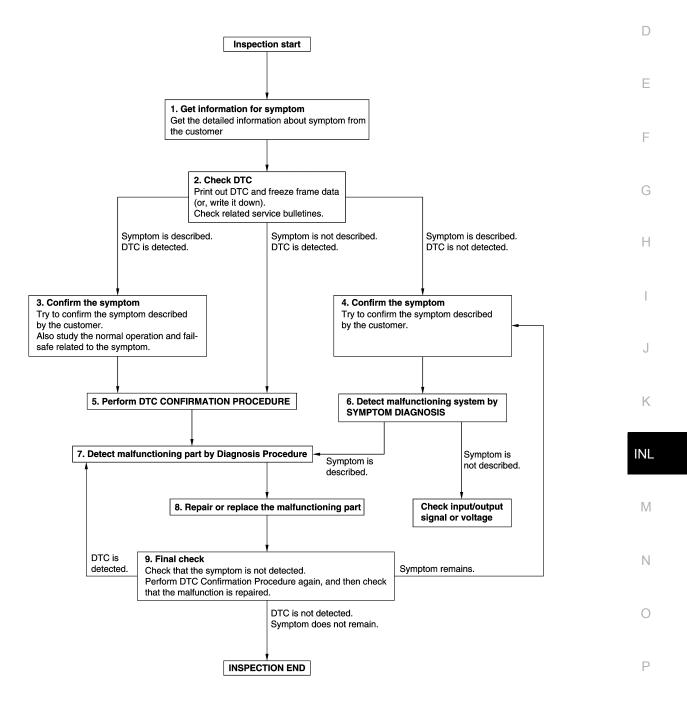
BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000012197009

А

OVERALL SEQUENCE



JMKIA8652GB

Revision: November 2015

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

- 1. Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).
- 2. Check operation condition of the function that is malfunctioning.

>> GO TO 2.

2.CHECK DTC

- 1. Check DTC.
- 2. Perform the following procedure if DTC is detected.
- Record DTC and freeze frame data (Print them out using CONSULT.)
- Erase DTC.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.
- 3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

Symptom is described, DTC is detected>>GO TO 3. Symptom is described, DTC is not detected>>GO TO 4. Symptom is not described, DTC is detected>>GO TO 5.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer. Also study the normal operation and fail-safe related to the symptom. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time. If two or more DTCs are detected, refer to DTC INSPECTION PRIORITY CHART, and determine trouble diagnosis order.

NOTE:

- · Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.

If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIR-MATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.

NO >> Check according to <u>GI-45. "Intermittent Incident"</u>.

6. Detect malfunctioning system by symptom diagnosis

Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

Is the symptom described?

YES >> GO TO 7.

NO >> Monitor input data from related sensors or check voltage of related module terminals using CON-SULT.

7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >	
Inspect according to Diagnosis Procedure of the system.	
Is malfunctioning part detected?	А
YES >> GO TO 8.	
NO >> Check according to <u>GI-45, "Intermittent Incident"</u> .	В
8.REPAIR OR REPLACE THE MALFUNCTIONING PART	D
1. Repair or replace the malfunctioning part.	
 Reconnect parts or connectors disconnected during Diagnosis Procedure again after repair and replace- ment. 	С
3. Check DTC. If DTC is detected, erase it.	
	D
>> GO TO 9.	D
9.FINAL CHECK	
When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.	Ε
When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the	
symptom is not detected.	F
Is DTC detected and does symptom remain?	
YES-1 >> DTC is detected: GO TO 7.	
YES-2 >> Symptom remains: GO TO 4. NO >> Before returning the vehicle to the customer, always erase DTC.	G
NO >> Delote returning the vehicle to the customer, always clase DTC.	
	Н

INL

Κ

J

Μ

Ν

0

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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 saver activating.

Component Function Check

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

CONSULT ACTIVE TEST

- 1. Turn ignition switch ON.
- 2. Turn each interior room lamp ON.
- Map lamp
- Luggage room lamp
- 3. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
- 4. With operating the test items, check that each interior room lamp turns ON/OFF.

Off : Interior room lamp OFF

On : Interior room lamp ON

Does each interior room lamp turn ON/OFF?

- YES >> Interior room lamp power supply circuit is normal.
- NO >> Refer to <u>INL-38, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000012197012

1. CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

CONSULT ACTIVE TEST

- 1. Turn ignition switch OFF.
- 2. Disconnect the following connectors.
- Map lamp
- Luggage room lamp
- 3. Turn ignition switch ON.
- 4. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
- 5. With operating the test item, check voltage between BCM harness connector and ground.

B	CM					
(+)	()	Test	item	Voltage (Approx.)	
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
M69	56	Ground	BATTERY SAVER	Off	0 V	
MOS	50	Ground	DATTERT SAVER	On	12 V	

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.

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

INFOID:000000012197011

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

	CM	E	Each interior room lamp			
Connector	Terminal	Со	nnector		Terminal	Continuity
M69	56	Map lamp Luggage room lamp		R4 B11	4	- Existed
S >> Cheo >> Repa CHECK INTE Turn ignition	air or replace RIOR ROOM	short circuit of each int harnesses. LAMP POWER SUPP		·		
	nuity between	BCM harness connect	or and grou	und.		
	BCM					Continuity
Conne M69		Terminal 56		Ground		Not existed
) >> Repa	air or replace l	narnesses.				

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

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

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

Component Function Check

NOTE:

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

- Interior room lamp power supply
- Map lamp bulb

1. CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT ACTIVE TEST

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

On : Interior room lamp gradual brightening

Off : Interior room lamp gradual dimming

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

YES >> Interior room lamp control circuit is normal.

NO >> Refer to INL-40, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000012197015

1. CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT ACTIVE TEST

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

B	BCM		Test	item	Continuity
Connector	Terminal	Ground	Test		Continuity
M69	63	Ground	INT LAMP	On	Existed
W09	03			Off	Not existed

Is the inspection result normal?

YES >> GO TO 2.

NO- >> Continuity exists and remains unchanged: GO TO 3.

NO- >> Continuity does not exist and remains unchanged: Replace BCM. Refer to <u>BCS-94, "Removal and</u> <u>Installation"</u>.

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect BCM connector, map lamp connector.
- 3. Check continuity between BCM harness connector and map lamp harness connector.

B	BCM		Map lamp		
Connector	Terminal	Connector	Terminal	Continuity	
M69	63	R4	2	Existed	

INFOID:000000012197013

INTERIOR ROOM LAMP CONTROL CIRCUIT

DTC/CIRCUIT DIAGNOS	SIS >			
the inspection result norm	al?			
	mp.Refer to INL-46, "Remo	oval and Installation".		
NO >> Repair or replac				
CHECK INTERIOR ROOM	M LAMP CONTROL SHO	RT CIRCUIT		
. Turn ignition switch OFF				
	ctor and map lamp connected on BCM harness connector			
Check continuity betwee		anu grounu.		
В	СМ		Continuity	-
Connector	Terminal	Ground	Continuity	
M69	63		Not existed	
	Refer to <u>BCS-94, "Remova</u> e harnesses.	l and Installation".		
		<u>I and Installation"</u> .		
		<u>I and Installation"</u> .		

Κ

INL

M

Ν

Ο

< DTC/CIRCUIT DIAGNOSIS >

LUGGAGE ROOM LAMP CIRCUIT

Description

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

Diagnosis Procedure

NOTE:

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

- Interior room lamp power supply
- Luggage room lamp bulb

1.CHECK LUGGAGE ROOM LAMP OUTPUT

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

B	BCM		Co	adition	Continuity
Connector	Terminal	Ground	Ground	Condition Co	Continuity
B10	40	Ground		Open	Existed
ы	49	Back door	Closed	Not existed	

Is the inspection result normal?

- YES >> GO TO 2.
- NO-1 >> Continuity exists and remains unchanged: GO TO 3.
- NO-2 >> Continuity does not exist and remains unchanged: Replace BCM. Refer to <u>BCS-94. "Removal and</u> <u>Installation"</u>.

2. CHECK LUGGAGE ROOM LAMP OPEN CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM harness connector and luggage room lamp harness connector.

BCM		Luggage	Continuity	
Connector	Terminal	ninal Connector Terminal		Continuity
B10	49	B11	2	Existed

Is the inspection result normal?

- YES >> Replace luggage room lamp.
- NO >> Repair or replace harnesses.

${\it 3.}$ CHECK LUGGAGE ROOM LAMP SHORT CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and ground.

BC	CM		Continuity	
Connector	Connector Terminal		Continuity	
B10	49		Not existed	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-94. "Removal and Installation"</u>.

NO >> Repair or replace harnesses.

INFOID:000000012197016

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT	
< DTC/CIRCUIT DIAGNOSIS >	
PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT	
Description	0000012197018
Provides the power supply and the ground to control the push-button ignition switch illumination.	
Component Function Check	0000012197019
1. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION	
 CONSULT ACTIVE TEST Turn the ignition switch ON. Select "ENGINE SW ILLUMI" of BCM (INTELLIGENT KEY) active test item. With operating the test items, check that the push-button ignition switch illumination turns ON/OFF On : Push-button ignition switch illumination ON Off : Push-button ignition switch illumination OFF 	
Does the push-button ignition switch illumination turn ON/OFF?YES>> Push-button ignition switch illumination circuit is normal.NO>> Refer to INL-43, "Diagnosis Procedure".	
Diagnosis Procedure	0000012197020
1. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OUTPUT	
 CONSULT ACTIVE TEST Turn ignition switch ON. Select ENGINE SW ILLUMI of BCM (INTELLIGENT KEY) active test item. With operating the test item, check voltage between BCM harness connector and ground. 	

	(+)					
	ЗСМ	(–)	Condition		Voltage	J
Connector	Terminal					
MZO	00	Ground	ENGINE SW ILLUMI	On	12 V	17
WI7 O	M70 90	Ground		Off	0 V	K

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace BCM. Refer to BCS-94, "Removal and Installation".

2.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND

©CONSULT ACTIVE TEST

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

BCM			Test	itom	Continuity	Ν		
Connector	Terminal			Test item		Cont		
M70	92	Ground	Ground ENGINE SW ILLUMI	On	Existed	0		
M70	92			Off	Not existed	0		

Is the inspection result normal?

YES >> GO TO 3.

NO-1 >> Continuity exists and remains unchanged: GO TO 4.

NO-2 >> Continuity does not exist and remains unchanged: Replace BCM. Refer to BCS-94, "Removal and Installation".

$\mathbf{3}$.check push-button ignition switch illumination circuit

1. Turn ignition switch OFF.

2. Disconnect BCM connector and push-button ignition switch connector. А

В

D

Е

F

Н

INL

Μ

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between BCM harness connector and push-button ignition switch harness connector.

Continuity	Push-button ignition switch		BCM	
- Continuity	Terminal	Connector	Terminal	Connector
Existed	5	M101	90	M70
1		1		
	gnition switch	Push-button ig	M	BC
Continuity	gnition switch Terminal	Push-button ig Connector	M Terminal	BC

Is the inspection result normal?

YES >> Replace push-button ignition switch.

NO >> Repair or replace harnesses.

4. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION SHORT CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect BCM connector and push-button ignition switch connector.

3. Check continuity between BCM harness connector and ground.

Push-button	Push-button ignition switch		Continuity
Connector	Terminal	Ground	Continuity
M70	92		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-94, "Removal and Installation"</u>.

NO >> Repair or replace harnesses.

INTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:000000012197021

А

С

NOTE:

Perform the self-diagnosis with CONSULT 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 • Luggage room lamp	 Harness between BCM and each interior room lamp BCM 	Interior room lamp power supply cir- cuit Refer to <u>INL-38</u> .
Interior room lamp does not turn ON even though the door is open. (It turns ON when turning the interior room	Harness between BCM and each door switch	Door switch circuit Refer to <u>DLK-77</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 <u>INL-40</u> .
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	_	Check the interior room lamp setting. Refer to <u>DLK-77</u> .
Luggage room lamp does not turn ON even though the back door is open.	Harness between BCM and back door switch	Back door switch circuit Refer to <u>DLK-77</u> .
• Luggage room lamp does not turn OFF even though the back door is closed.	 Harness between BCM and lug- gage room lamp BCM 	Luggage room lamp circuit Refer to <u>INL-42</u> .
Push-button ignition switch illumination does not illuminate.	 Harness between BCM and push- button ignition switch BCM 	Push-button ignition switch illumina- tion circuit Refer to <u>INL-43</u> .
Interior room lamp battery saver does not activate.	ВСМ	Replace BCM. Refer to <u>BCS-94</u> .

Κ

INL

Μ

Ν

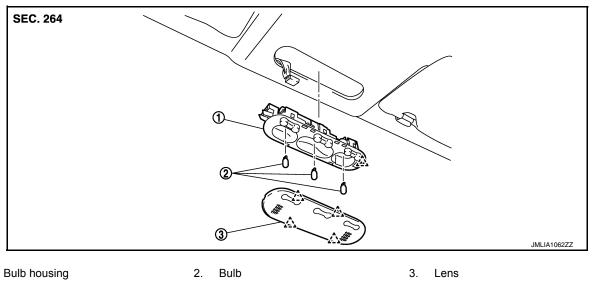
Ο

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION MAP LAMP

Exploded View

INFOID:000000012197022



Pawl زړ_

1.

Removal and Installation

INFOID:000000012197023

REMOVAL

CAUTION:

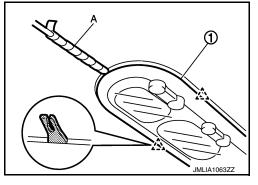
Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage.

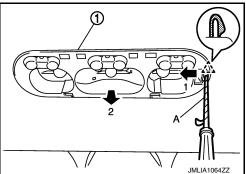
- 1. Disengage lens fixing pawls using a remover tool (A), and then remove lens (1).
 - CAUTION:
 - Use a remover tool wrapped in tape.
 - Insert a remover tool into the gap between bulb housing and lens.

Disengage bulb housing (1) fixing pawl using a remover tool (A) according to numerical order 1→2 indicated by the arrows as shown in the figure.
 CAUTION:

Use a remover tool wrapped in tape.

2 : Pawl





3. Disconnect map lamp harness connector, and then remove bulb housing.

کے : Pawl

< REMOVAL AND INSTALLATION >

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000012197024

А

В

D

Ε

CAUTION:

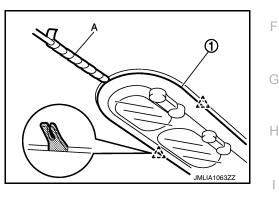
- Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage.
- Never touch the glass surface of the bulb with bare hands or allow oil or grease to get on it for preventing damage to the bulb.
- The surface of the bulb is very hot just after the lamp is turned OFF. Never touch the glass surface of the bulb with bare hands for preventing burns.
- Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (due to dirt or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.

MAP LAMP BULB

- Disengage lens fixing pawls using a remover tool (A), and then remove lens (1).
 CAUTION:
 - Use a remover tool wrapped in tape.
 - Insert a remover tool into the gap between bulb housing and lens.

2 : Pawl

2. Remove bulb.



Μ

Ν

Ο

Ρ

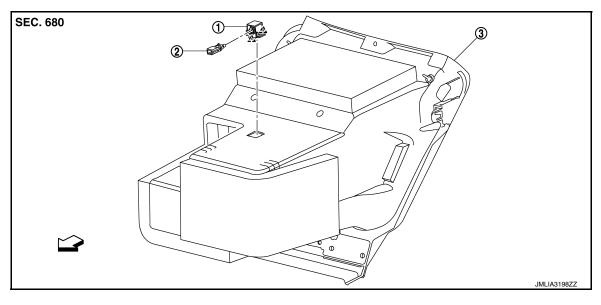
Κ

< REMOVAL AND INSTALLATION >

GLOVE BOX LAMP

Exploded View

INFOID:000000012197025



Bulb & socket assembly

3.

Glove box assembly

1. Bulb housing

🛆 : Pawl

Removal and Installation

INFOID:000000012197026

INFOID:000000012197027

Replacement

CAUTION:

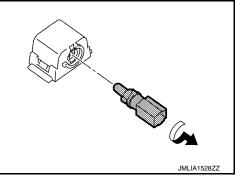
- Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage.
- Never touch the glass surface of the bulb with bare hands or allow oil or grease to get on it for preventing damage to the bulb.
- The surface of the bulb is very hot just after the lamp is turned OFF. Never touch the glass surface of the bulb with bare hands for preventing burns.
- Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (due to dirt or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.

GLOVE BOX LAMP BULB

1. Remove glove box assembly. Refer to IP-13, "Removal and Installation".

2.

2. Rotate the bulb & socket assembly counterclockwise and unlock it, and then remove bulb & socket assembly.



LUGGAGE ROOM LAMP

< REMOVAL AND INSTALLATION >

LUGGAGE ROOM LAMP

Exploded View

INFOID:000000012197028

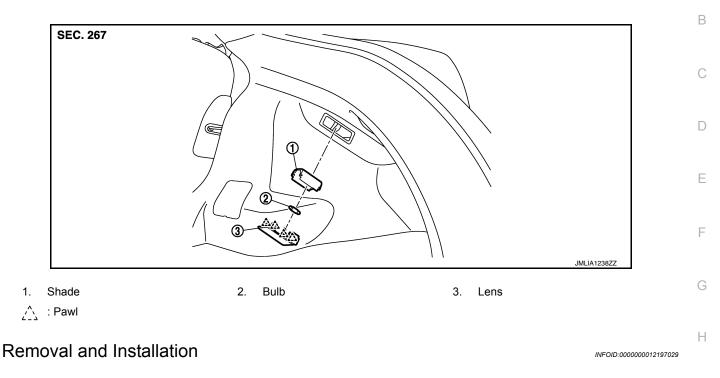
А

Κ

Μ

Ν

Ρ



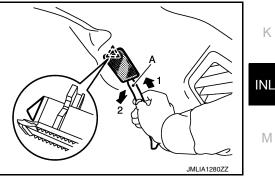
REMOVAL

CAUTION:

- · Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage.
- When removing, always use a remover tool that is made of plastic to prevent damage to the parts.
- 1. Disengage luggage room lamp fixing pawl using a remover tool (A) according to numerical order $1 \rightarrow 2$ indicated by the arrows as shown in the figure. CAUTION:

Insert a remover tool into the gap between luggage room lamp and luggage side lower finisher RH.





2. Disconnect luggage room lamp harness connector, and then remove luggage room lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

CAUTION:

- Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage.
- Never touch the glass surface of the bulb with bare hands or allow oil or grease to get on it for preventing damage to the bulb.
- The surface of the bulb is very hot just after the lamp is turned OFF. Never touch the glass surface of the bulb with bare hands for preventing burns.

INL-49

LUGGAGE ROOM LAMP

< REMOVAL AND INSTALLATION >

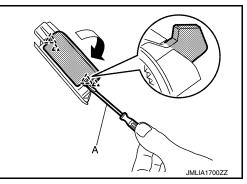
• Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (due to dirt or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.

LUGGAGE ROOM LAMP BULB

- 1. Remove luggage room lamp. Refer to INL-49. "Removal and Installation".
- Disengage shade fixing pawls using a remover tool (A) according to the direction indicated by the arrow as shown in the figure.
 CAUTION:

Use remover tool wrapped in tape.

کے : Pawl



3. Remove shade, and then remove bulb.

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

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

Bulb Specifications

INFOID:000000012197031

А

Е

F

Н

J

Κ

Item	Туре	Wattage (W)	(
Push-button ignition switch illumination*	LED	-	
Map lamp	W5W	5	
Glove box lamp	_	1.4	
Luggage room lamp	_	5	

*: With Intelligent Key

INL

Μ

Ν

Ο