

INL

SECTION

INTERIOR LIGHTING SYSTEM

CONTENTS

PRECAUTION	3	INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)	13
PRECAUTIONS	3	DIAGNOSIS SYSTEM (IPDM E/R)	17
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	3	Diagnosis Description	17
Precaution for Work	3	CONSULT Function (IPDM E/R)	18
PREPARATION	4	ECU DIAGNOSIS INFORMATION	21
PREPARATION	4	BCM, IPDM E/R	21
Special Service Tool	4	List of ECU Reference	21
SYSTEM DESCRIPTION	5	WIRING DIAGRAM	22
COMPONENT PARTS	5	INTERIOR ROOM LAMP	22
Component Parts Location	5	Wiring Diagram	22
Component Description	5	ILLUMINATION	33
INTERIOR ROOM LAMP CONTROL SYSTEM	7	Wiring Diagram	33
System Diagram	7	BASIC INSPECTION	47
System Description	7	DIAGNOSIS AND REPAIR WORKFLOW	47
ILLUMINATION CONTROL SYSTEM	9	Work Flow	47
System Diagram	9	DTC/CIRCUIT DIAGNOSIS	50
System Description	9	POWER SUPPLY AND GROUND CIRCUIT	50
DIAGNOSIS SYSTEM (BCM)	11	BCM	50
COMMON ITEM	11	BCM : Diagnosis Procedure	50
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)	11	IPDM E/R	50
INT LAMP	11	IPDM E/R : Diagnosis Procedure	50
INT LAMP : CONSULT Function (BCM - INT LAMP)	12	BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT	52
BATTERY SAVER	12	Description	52
BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)	12	Component Function Check	52
INTELLIGENT KEY	13	Diagnosis Procedure	52
		INTERIOR ROOM LAMP CONTROL CIRCUIT	54
		Description	54

Component Function Check	54	VANITY MIRROR LAMP	64
Diagnosis Procedure	54	Removal and Installation	64
STEP LAMP CIRCUIT	56	Bulb or Lens Replacement	64
Description	56	GLOVE BOX LAMP	65
Component Function Check	56	Removal and Installation	65
Diagnosis Procedure	56	Bulb Replacement	65
TRUNK ROOM LAMP CIRCUIT	58	STEP LAMP	66
Description	58	Bulb or Lens Replacement	66
Component Function Check	58	PERSONAL LAMP	67
Diagnosis Procedure	58	Removal and Installation	67
PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT	60	Bulb or Lens Replacement	67
Description	60	TRUNK ROOM LAMP	68
Component Function Check	60	Removal and Installation	68
Diagnosis Procedure	60	Bulb Replacement	68
SYMPTOM DIAGNOSIS	62	ILLUMINATION CONTROL SWITCH	69
INTERIOR LIGHTING SYSTEM SYMPTOMS...	62	Removal and Installation	69
Symptom Table	62	SERVICE DATA AND SPECIFICATIONS (SDS)	70
REMOVAL AND INSTALLATION	63	SERVICE DATA AND SPECIFICATIONS (SDS)	70
FRONT ROOM/MAP LAMP	63	Bulb Specifications	70
Removal and Installation	63		
Bulb Replacement	63		

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

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The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag 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 Work

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- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:
 - Water soluble dirt:
 - Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
 - Then rub with a soft, dry cloth.
 - Oily dirt:
 - Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
 - Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
 - Then rub with a soft, dry cloth.
 - Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
 - For genuine leather seats, use a genuine leather seat cleaner.

PREPARATION

< PREPARATION >

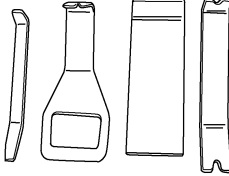
PREPARATION

PREPARATION

Special Service Tool

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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
<p>— (J-46534) Trim Tool Set</p>  <p>AWJIA04832Z</p>	Removing trim components

COMPONENT PARTS

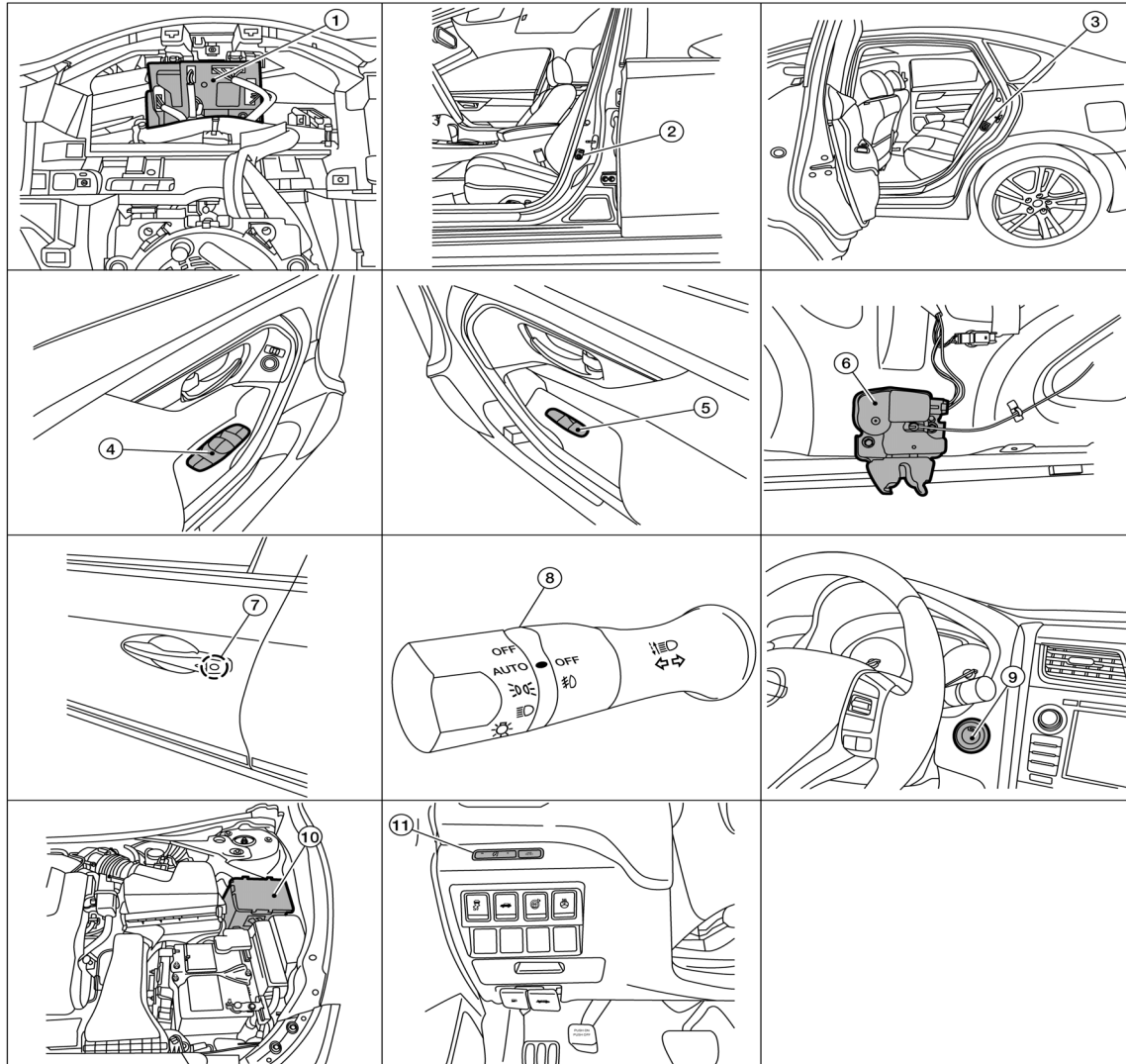
< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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- | | | |
|--|---|---|
| 1. BCM (view with combination meter removed) | 2. Front door switch LH (RH similar) | 3. Rear door switch LH (RH similar) |
| 4. Main power window and door lock/unlock switch | 5. Power window and door lock/unlock switch RH | 6. Trunk lamp switch and trunk release solenoid (Trunk lamp switch) |
| 7. Front door lock assembly LH (key cylinder switch) | 8. Combination switch (lighting and turn signal switch) | 9. Push-button ignition switch |
| 10. IPDM E/R (tail lamp relay) | 11. Meter control switch (illumination control switch) | |

Component Description

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Part name	Description
BCM	The BCM monitors the combination switch (lighting and turn signal switch) position. The BCM requests via CAN communication that the IPDM E/R activate the tail lamp relay.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

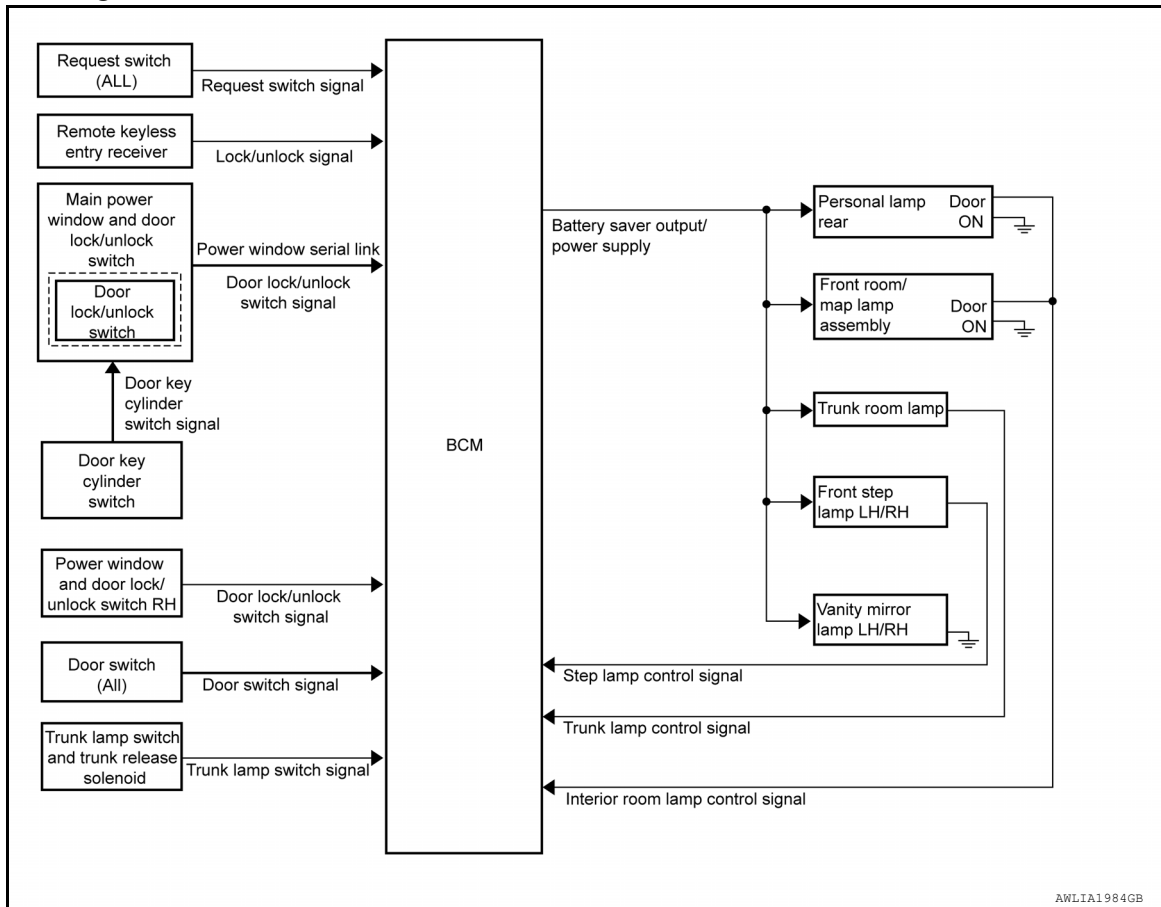
IPDM E/R	The IPDM E/R activates the tail lamp relay based on inputs received from the BCM via the CAN communication.
Push button ignition switch	Provides ignition switch status to the BCM.
Door switches	Provides door OPEN/CLOSED status to the BCM.
Combination switch (lighting and turn signal switch)	The combination switch (lighting and turn signal switch) provides input to the BCM. The BCM then sends a tail lamp relay request signal to the IPDM E/R via CAN communication to operate the illumination system.
Trunk lamp switch and release solenoid (trunk lamp switch)	Provides trunk lamp switch OPEN/CLOSED status to the BCM.
Power window and door lock/unlock switch RH	Provides door lock/unlock position switch RH status to the BCM.
Main power window and door lock/unlock switch	Provides door lock/unlock position switch LH status to the BCM.
Meter control switch (illumination control switch)	<ul style="list-style-type: none">• Adjusts the illumination system and combination meter illumination brightness (except Mexico).• Only adjusts the combination meter illumination brightness (for Mexico).
Front door lock assembly LH (key cylinder switch)	Provides front door lock assembly LH (key cylinder switch) door lock/unlock switch position status to the BCM.

INTERIOR ROOM LAMP CONTROL SYSTEM

< SYSTEM DESCRIPTION >

INTERIOR ROOM LAMP CONTROL SYSTEM

System Diagram



System Description

OUTLINE

- Front room/map lamps and personal lamps rear are controlled by the room lamp timer control function of the BCM when lamp switch is in the DOOR position.
- Front step lamps are controlled by step lamp control function of BCM.
- Trunk room lamp is controlled by trunk 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 lamps are illuminated by the welcome light function of Intelligent Key system. Refer to [DLK-32, "WELCOME LIGHT FUNCTION : System Description"](#).

ROOM LAMP TIMER OPERATION

When the interior room lamp switch is in the DOOR position and when all conditions below are met, the BCM begins timer control (maximum 30 seconds) for interior room lamp ON/OFF.

- When the front door LH is unlocked [with Intelligent Key, main power window and door lock/unlock switch or front door lock assembly LH (key cylinder switch)].
- When a door opens → closes.

Timer control is cancelled under the following conditions:

- When the front door LH is locked [with Intelligent Key, main power window and door lock/unlock switch or front door lock assembly LH (key cylinder switch)].
- A door is opened (door switch turns ON).
- Ignition switch is turned ON.

INTERIOR LAMP BATTERY SAVER CONTROL

If an interior lamp is left ON and does not turn OFF even when the doors are closed, the BCM turns off power to the interior lamps automatically to save the battery 15 minutes after the ignition switch is turned OFF.

INTERIOR ROOM LAMP CONTROL SYSTEM

< SYSTEM DESCRIPTION >

The BCM controls the following interior lamps:

- Front step lamp LH/RH
- Front room/map lamp LH/RH
- Personal lamp rear LH/RH
- Vanity mirror lamp LH/RH (if equipped)
- Trunk room lamp

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

- A signal is received from an Intelligent Key or main power window and door lock/unlock switch or when the front door lock assembly LH (key cylinder switch) is locked or unlocked.
- A door is opened or closed.

ILLUMINATION CONTROL SYSTEM

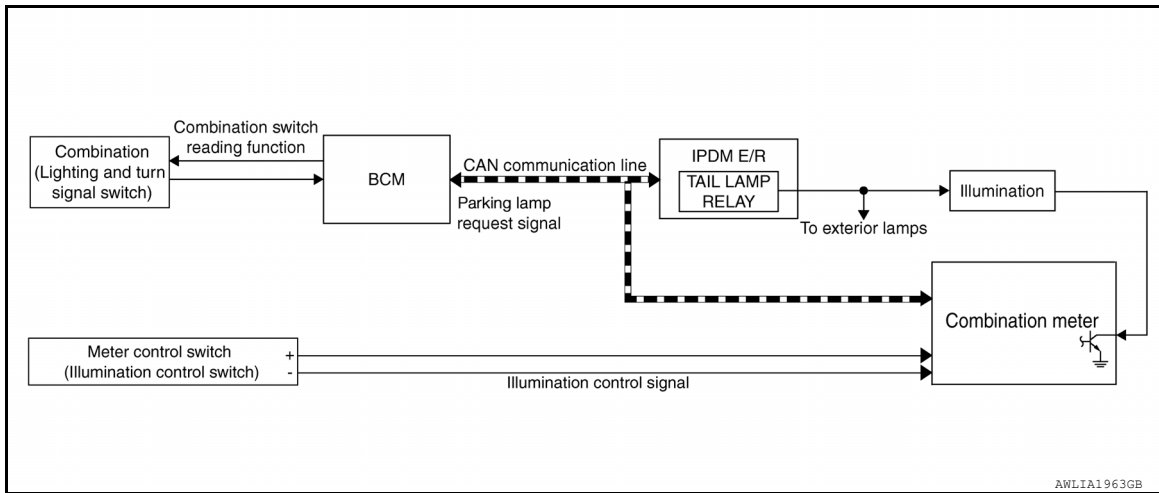
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ILLUMINATION CONTROL SYSTEM

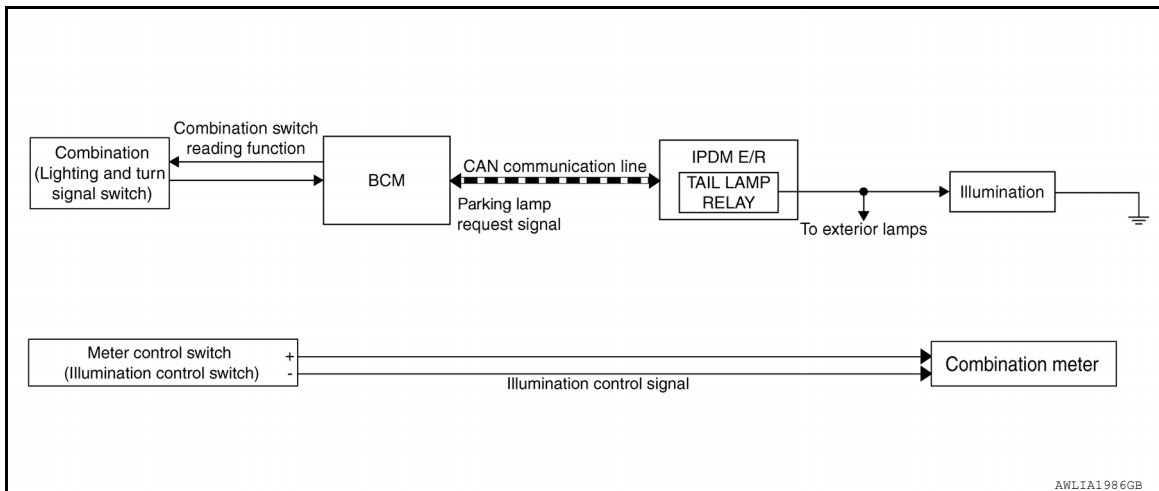
System Diagram

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EXCEPT MEXICO



FOR MEXICO



System Description

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EXCEPT MEXICO

The illumination system is activated by the combination switch (lighting and turn signal switch) when the switch is placed in the 1st or 2nd position (or if the auto light system is activated).

The illumination system and combination meter illumination brightness is adjustable using the meter control switch (illumination control switch).

- The BCM (body control module) receives the parking lamp request signal from the combination switch (lighting and turn signal switch) to turn the lights on.
- The BCM sends the parking lamp request signal to the IPDM E/R (intelligent power distribution module engine room) via CAN communication.
- IPDM E/R receives the parking lamp request signal from the BCM to activate the tail lamp relay and provide power to the illumination system.

FOR MEXICO

The illumination system is activated by the combination switch (lighting and turn signal switch) when the switch is placed in the 1st or 2nd position (or if the auto light system is activated).

Only the combination meter illumination brightness is adjustable using the meter control switch (illumination control switch).

ILLUMINATION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

- The BCM (body control module) receives the parking lamp request signal from the combination switch (lighting and turn signal switch) to turn the lights on.
- The BCM sends the parking lamp request signal to the IPDM E/R (intelligent power distribution module engine room) via CAN communication.
- IPDM E/R receives the parking lamp request signal from the BCM to activate the tail lamp relay and provide power to the illumination system.

BATTERY SAVER CONTROL

When the combination switch (lighting and turn signal switch) is in the 1st or 2nd position and the ignition switch is set from ON or ACC to OFF, the battery saver control feature is activated. Under this condition, the illumination system remains on for 15 minutes unless the combination switch (lighting and turn signal switch) position is changed. If the combination switch (lighting and turn signal switch) position is changed, then the illumination system is turned off after a 30 second delay. When the combination switch (lighting and turn signal switch) is turned from OFF to 1st or 2nd position (or if auto light system is activated) after illumination system has been turned off by the battery saver control, the illumination lights illuminate again.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

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APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
Ecu Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	<ul style="list-style-type: none"> The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×	×		
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Remote keyless entry system	MULTI REMOTE ENT			×	×	×		
Exterior lamp	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Trunk open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

INT LAMP

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:000000008681879

DATA MONITOR

Monitor Item [Unit]	Description
REQ SW -DR [On/Off]	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	Indicates condition of door request switch RH.
PUSH -SW [On/Off]	Indicates condition of push-button ignition switch.
UNLK SEN -DR [On/Off]	Indicates condition of door unlock sensor.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of trunk switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
TRNK/HAT MNTR [On/Off]	Indicates condition of trunk room lamp switch.
RKE-LOCK [On/Off]	Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]	Indicates condition of unlock signal from Intelligent Key.

ACTIVE TEST

Test Item	Description
INT LAMP	This test is able to check interior room lamp operation [On/Off].
STEP LAMP TEST	This test is able to check step lamp operation [On/Off].

WORK SUPPORT

Support Item	Setting	Description
SET I/L D-UNLCK INTCON	On	Interior room lamp timer function ON.
	Off*	Interior room lamp timer function OFF.
FOG LAMP OVERRIDE	On*	Fog lamp override function ON.
	Off	Fog lamp override function OFF.

* : Initial setting

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:000000008681880

DATA MONITOR

Monitor Item [Unit]	Description
REQ SW -DR [On/Off]	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	Indicates condition of door request switch RH.
PUSH SW [On/Off]	Indicates condition push-button ignition switch.
UNLK SEN -DR [On/Off]	Indicates condition of door unlock sensor.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	Description
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of trunk switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
TRNK/HAT MNTR [On/Off]	Indicates condition of trunk room lamp switch.
RKE-LOCK [On/Off]	Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]	Indicates condition of unlock signal from Intelligent Key.

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check battery saver operation [On/Off].

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000008681881

SELF DIAGNOSTIC RESULT

Refer to [BCS-49, "DTC Index"](#).

DATA MONITOR

Monitor Item [Unit]	Main	Description
REQ SW -DR [On/Off]	×	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	×	Indicates condition of door request switch RH.
PUSH SW [On/Off]		Indicates condition of push-button ignition switch.
SHIFTLOCK SOLENOID POWER SUPPLY [On/Off]	×	Indicates condition of power supply to shiftlock solenoid.
BRAKE SW 1 [On/Off]	×	Indicates condition of brake switch.
BRAKE SW 2 [On/Off]		Indicates condition of brake switch.
DETE/CANCL SW [On/Off]	×	Indicates condition of P (park) position.
SFT PN/N SW [On/Off]	×	Indicates condition of P (park) or N (neutral) position.
UNLK SEN -DR [On/Off]	×	Indicates condition of door unlock sensor.
PUSH SW -IPDM [On/Off]		Indicates condition of push-button ignition switch received from IPDM E/R on CAN communication line.
IGN RLY1 -F/B [On/Off]		Indicates condition of ignition relay 1 received from IPDM E/R on CAN communication line.
DETE SW -IPDM [On/Off]		Indicates condition of detent switch received from TCM on CAN communication line.
SFT PN -IPDM [On/Off]		Indicates condition of P (park) or N (neutral) position from TCM on CAN communication line.
SFT P -MET [On/Off]		Indicates condition of P (park) position from TCM on CAN communication line.
SFT N -MET [On/Off]		Indicates condition of N (neutral) position from IPDM E/R on CAN communication line.
ENGINE STATE [Stop/Start/Crank/Run]	×	Indicates condition of engine state from ECM on CAN communication line.
VEH SPEED 1 [mph/km/h]	×	Indicates condition of vehicle speed signal received from ABS on CAN communication line.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	Main	Description
VEH SPEED 2 [mph/km/h]	×	Indicates condition of vehicle speed signal received from combination meter on CAN communication line.
DOOR STAT -DR [LOCK/READY/UNLK]	×	Indicates condition of driver side door status.
DOOR STAT -AS [LOCK/READY/UNLK]	×	Indicates condition of passenger side door status.
DOOR STAT -RR [LOCK/READY/UNLK]	×	Indicates condition of rear right side door status.
DOOR STAT -RL [LOCK/READY/UNLK]	×	Indicates condition of rear left side door status.
ID OK FLAG [Set/Reset]		Indicates condition of Intelligent Key ID.
PRMT ENG STRT [Set/Reset]		Indicates condition of engine start possibility.
PRMT RKE STRT [Set/Reset]		Indicates condition of engine start possibility from Intelligent Key.
I-KEY OK FLAG [Key ON/Key OFF]	×	Indicates condition of Intelligent Key OK flag.
PRBT ENG STRT [Set/Reset]		Indicates condition of engine start prohibit.
ID VERI CANCL [STOP]		Indicates condition of Intelligent Key ID authentication.
ACC BATTERY SAVER [STOP]		Indicates condition of battery saver.
CRNK PRBT TMR [On/Off]		Indicates condition of crank prohibit timer.
AUT CRNK TMR [On/Off]		Indicates condition of automatic engine crank timer from Intelligent Key.
CRNK PRBT TME [sec]		Indicates condition of engine crank prohibit time.
AUTO CRNK TME [sec]		Indicates condition of automatic engine crank time from Intelligent Key.
CRANKING TME [sec]		Indicates condition of engine cranking time from Intelligent Key.
DETE SW PWR [On/Off]		Indicates condition of detent switch voltage.
ACC RLY -REQ [On/Off]		Indicates condition of accessory relay control request.
RKE OPE COUN1 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE OPE COUN2 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
TRNK/HAT MNTR [On/Off]		Indicates condition of trunk room lamp switch.
RKE-LOCK [On/Off]		Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]		Indicates condition of unlock signal from Intelligent Key.
RKE-TR/BD [On/Off]		Indicates condition of trunk open signal from Intelligent Key.
RKE-PANIC [On/Off]		Indicates condition of panic signal from Intelligent Key.
RKE-MODE CHG [On/Off]		Indicates condition of mode change signal from Intelligent Key.

ACTIVE TEST

Test Item	Description
INTELLIGENT KEY LINK (CAN)	This test is able to check Intelligent Key identification number [Off/ID No1/ID No2/ID No3/ID No4/ID No5].
INT LAMP	This test is able to check interior room lamp operation [On/Off].
FLASHER	This test is able to check hazard lamp operation [LH/RH/Off].
HORN	This test is able to check horn operation [On].
BATTERY SAVER	This test is able to check battery saver operation [On/Off].
TRUNK/BACK DOOR	This test is able to check trunk actuator operation [Open].
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation [On/Off].
INSIDE BUZZER	This test is able to check combination meter warning chime operation [Take Out/Knob/Key/Off].
INDICATOR	This test is able to check combination meter warning lamp operation [KEY ON/KEY IND/Off].
IGN CONT2	This test is able to check ignition relay-2 control operation [On/Off].
ENGINE SW ILLUMI	This test is able to check push-button ignition switch START indicator operation [On/Off].

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Test Item	Description
PUSH SWITCH INDICATOR	This test is able to check push-button ignition switch indicator operation [On/Off].
ACC CONT	This test is able to check accessory relay control operation [On/Off].
IGN CONT1	This test is able to check ignition relay-1 control operation [On/Off].
ST CONT LOW	This test is able to check starter control relay operation [On/Off].
IGNITION RELAY	This test is able to ignition relay operation [On/Off].
REVERSE LAMP TEST	This test is able to check reverse lamp illumination operation [On/Off].
TRUNK/LUGGAGE LAMP TEST	This test is able to check cargo lamp illumination operation [On/Off].
KEYFOB PW TEST	This test is able to check power window operation using the Intelligent Key [Off/DOWN/UP].
SHIFTLOCK SOLENOID TEST	This test is able to check shift lock solenoid operation [On/Off].

WORK SUPPORT

Support Item	Setting	Description
IGN/ACC BATTERY SAVER	On*	Battery saver function ON.
	Off	Battery saver function OFF.
REMOTE ENGINE STARTER	On*	Remote engine start function ON.
	Off	Remote engine start function OFF.
ANSWERBACK I-KEY LOCK UNLOCK	BUZZER	Buzzer reminder function by door lock/unlock request switch ON.
	HORN	Horn chirp reminder function by door lock request switch ON.
	Off*	No reminder function by door lock/unlock request switch.
	INVALID	This mode is not used.
ANSWERBACK KEYLESS LOCK UNLOCK	On	Buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.
	Off*	No buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.
ANSWER BACK	On*	Horn chirp reminder when doors are locked with Intelligent Key.
	Off	No horn chirp reminder when doors are locked with Intelligent Key.
RETRACTABLE MIRROR SET	On	Retractable mirror set ON.
	Off*	Retractable mirror set OFF.
LOCK/UNLOCK BY I-KEY	On*	Door lock/unlock function from Intelligent Key ON.
	Off	Door lock/unlock function from Intelligent Key OFF.
ENGINE START BY I-KEY	On*	Engine start function from Intelligent Key ON.
	Off	Engine start function from Intelligent Key OFF.
INTELLIGENT KEY LINK SET	On	Intelligent Key link set ON.
	Off*	Intelligent Key link set OFF.
SHORT CRANKING OUTPUT	Start	70 msec
		100 msec
		200 msec
	End	—
INSIDE ANT DIAGNOSIS	—	This function allows inside key antenna self-diagnosis.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Support Item	Setting		Description
AUTO LOCK SET	MODE7	5 min	Auto door lock time can be set in this mode.
	MODE6	4 min	
	MODE5	3 min	
	MODE4	2 min	
	MODE3*	1 min	
	MODE2	30 sec	
	MODE1	Off	

*: Initial Setting

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

INFOID:0000000008681876

AUTO ACTIVE TEST

Description

In auto active test mode, the IPDM E/R sends a drive signal to the following systems to check their operation.

- Front wiper (LO, HI)
- Front fog lamps
- Parking lamps
- Side marker lamps
- Tail lamps
- License plate lamps
- Daytime running lamps
- Headlamps (LO, HI)
- A/C compressor
- Cooling fans (LO, HI)

Operation Procedure

CAUTION:

Do not start the engine.

NOTE:

When auto active test is performed with hood opened, sprinkle water on windshield before hand.

NOTE:

- If auto active test mode cannot be actuated, check door switch system. Refer to [DLK-101, "Component Inspection"](#).
 - When auto active test mode has to be cancelled halfway through test, turn ignition switch OFF.
1. Close the hood and lift the wiper arms from the windshield. (Prevent windshield damage due to wiper operation)
 2. Turn ignition switch OFF.
 3. Turn the ignition switch ON, and within 20 seconds, press the front door switch LH 10 times. Then turn the ignition switch OFF.
 4. Turn the ignition switch ON within 10 seconds. After that the horn sounds once, and the auto active test starts.
 5. After a series of the following operations is repeated 3 times, auto active test is completed.

Inspection in Auto Active Test Mode

When auto active test mode is actuated, the following operation sequence is repeated 3 times.

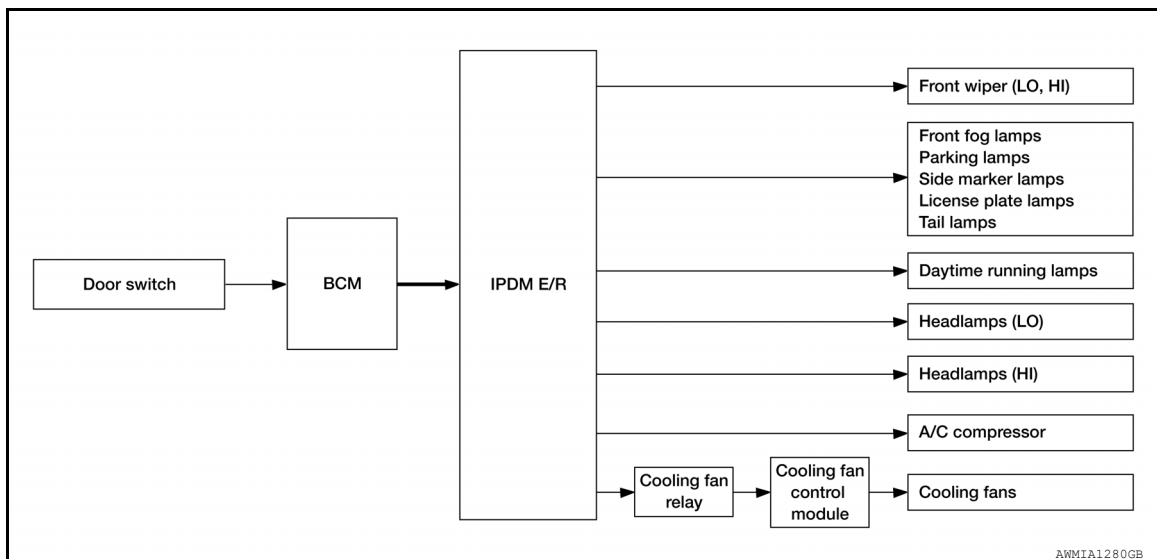
Operation sequence	Inspection Location	Operation
1	Front wiper	LO for 3 seconds → HI for 3 seconds
2	<ul style="list-style-type: none">• Front fog lamps• Parking lamps• Side marker lamps• Tail lamps• License plate lamps	10 seconds
3	Daytime running lamps	10 seconds
4	Headlamps	LO ⇄ HI 5 times
5	A/C compressor	ON ⇄ OFF 5 times
6*	Cooling fans	LO for 5 seconds → HI for 5 seconds

*: Outputs duty ratio of 50% for 5 seconds → duty ratio of 100% for 5 seconds on the cooling fan control module.

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

Concept of auto active test



- IPDM E/R starts the auto active test with the door switch signals transmitted by BCM via CAN communication. Therefore, the CAN communication line between IPDM E/R and BCM is considered normal if the auto active test starts successfully.
- The auto active test facilitates troubleshooting if any systems controlled by IPDM E/R cannot be operated.

Diagnosis chart in auto active test mode

Symptom	Inspection contents		Possible cause
Any of the following components do not operate <ul style="list-style-type: none"> • Front fog lamps • Parking lamps • Side marker lamps • License plate lamps • Tail lamps • Daytime running lamps • Headlamp (HI, LO) • Front wiper 	Perform auto active test. Does the applicable system operate?	YES	BCM signal input circuit
		NO	<ul style="list-style-type: none"> • Lamp or motor • Lamp or motor ground circuit • Harness or connector between IPDM E/R and applicable system • IPDM E/R
Cooling fans do not operate	Perform auto active test. Do the cooling fans operate?	YES	<ul style="list-style-type: none"> • ECM signal input circuit • CAN communication signal between ECM and IPDM E/R
		NO	<ul style="list-style-type: none"> • Cooling fans • Harness or connectors between cooling fans and cooling fan control module • Cooling fan control module • Harness or connectors between cooling fan relay and cooling fan control module • Cooling fan relay • Harness or connectors between IPDM E/R and cooling fan relay • IPDM E/R

CONSULT Function (IPDM E/R)

INFOID:000000008681877

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with IPDM E/R.

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

Direct Diagnostic Mode	Description
Ecu Identification	The IPDM E/R part number is displayed.
Self Diagnostic Result	The IPDM E/R self diagnostic results are displayed.
Data Monitor	The IPDM E/R input/output data is displayed in real time.
Active Test	The IPDM E/R activates outputs to test components.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

ECU IDENTIFICATION

The IPDM E/R part number is displayed.

SELF DIAGNOSTIC RESULT

Refer to [PCS-20, "DTC Index"](#).

DATA MONITOR

Monitor Item [Unit]	Main Signals	Description
MOTOR FAN REQ [%]	×	Indicates cooling fan speed signal received from ECM on CAN communication line
AC COMP REQ [On/Off]	×	Indicates A/C compressor request signal received from ECM on CAN communication line
TAIL&CLR REQ [On/Off]	×	Indicates position light request signal received from BCM on CAN communication line
HL LO REQ [On/Off]	×	Indicates low beam request signal received from BCM on CAN communication line
HL HI REQ [On/Off]	×	Indicates high beam request signal received from BCM on CAN communication line
FR FOG REQ [On/Off]	×	Indicates front fog light request signal received from BCM on CAN communication line
FR WIP REQ [Stop/1LOW/Low/Hi]	×	Indicates front wiper request signal received from BCM on CAN communication line
WIP AUTO STOP [STOP P/ACT P]	×	Indicates condition of front wiper auto stop signal
WIP PROT [Off/BLOCK]	×	Indicates condition of front wiper fail-safe operation
IGN RLY1 -REQ [On/Off]		Indicates ignition switch ON signal received from BCM on CAN communication line
IGN RLY [On/Off]	×	Indicates condition of ignition relay
PUSH SW [On/Off]		Indicates condition of push-button ignition switch
INTER/NP SW [On/Off]		Indicates condition of CVT shift position
ST RLY CONT [On/Off]		Indicates starter relay status signal received from BCM on CAN communication line
IHBT RLY -REQ [On/Off]		Indicates starter control relay signal received from BCM on CAN communication line
ST/INH RLY [Off/ ST /INH]		Indicates condition of starter relay and starter control relay
DETENT SW [On/Off]		Indicates condition of CVT shift selector (park position switch)
DTRL REQ [Off]		Indicates daytime light request signal received from BCM on CAN communication line
HOOD SW [On/Off]		Indicates condition of hood switch
THFT HRN REQ [On/Off]		Indicates theft warning horn request signal received from BCM on CAN communication line
HORN CHIRP [On/Off]		Indicates horn reminder signal received from BCM on CAN communication line
HOOD SW 2 [On/Off]		Indicates condition of hood switch 2

ACTIVE TEST

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

Test item	Description
HORN	This test is able to check horn operation [On].
FRONT WIPER	This test is able to check wiper motor operation [Hi/Lo/Off].
MOTOR FAN	This test is able to check cooling fan operation [4/3/2/1].
EXTERNAL LAMPS	This test is able to check external lamp operation [Fog/Hi/Lo/TAIL/Off].

CAN DIAG SUPPORT MNTR

Refer to [LAN-15, "CAN Diagnostic Support Monitor"](#).

BCM, IPDM E/R

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM, IPDM E/R

List of ECU Reference

INFOID:0000000008638180

ECU	Reference
BCM	BCS-28, "Reference Value"
	BCS-47, "Fail Safe"
	BCS-47, "DTC Inspection Priority Chart"
	BCS-49, "DTC Index"
IPDM E/R	PCS-12, "Reference Value"
	PCS-19, "Fail Safe"
	PCS-20, "DTC Index"

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INTERIOR ROOM LAMP

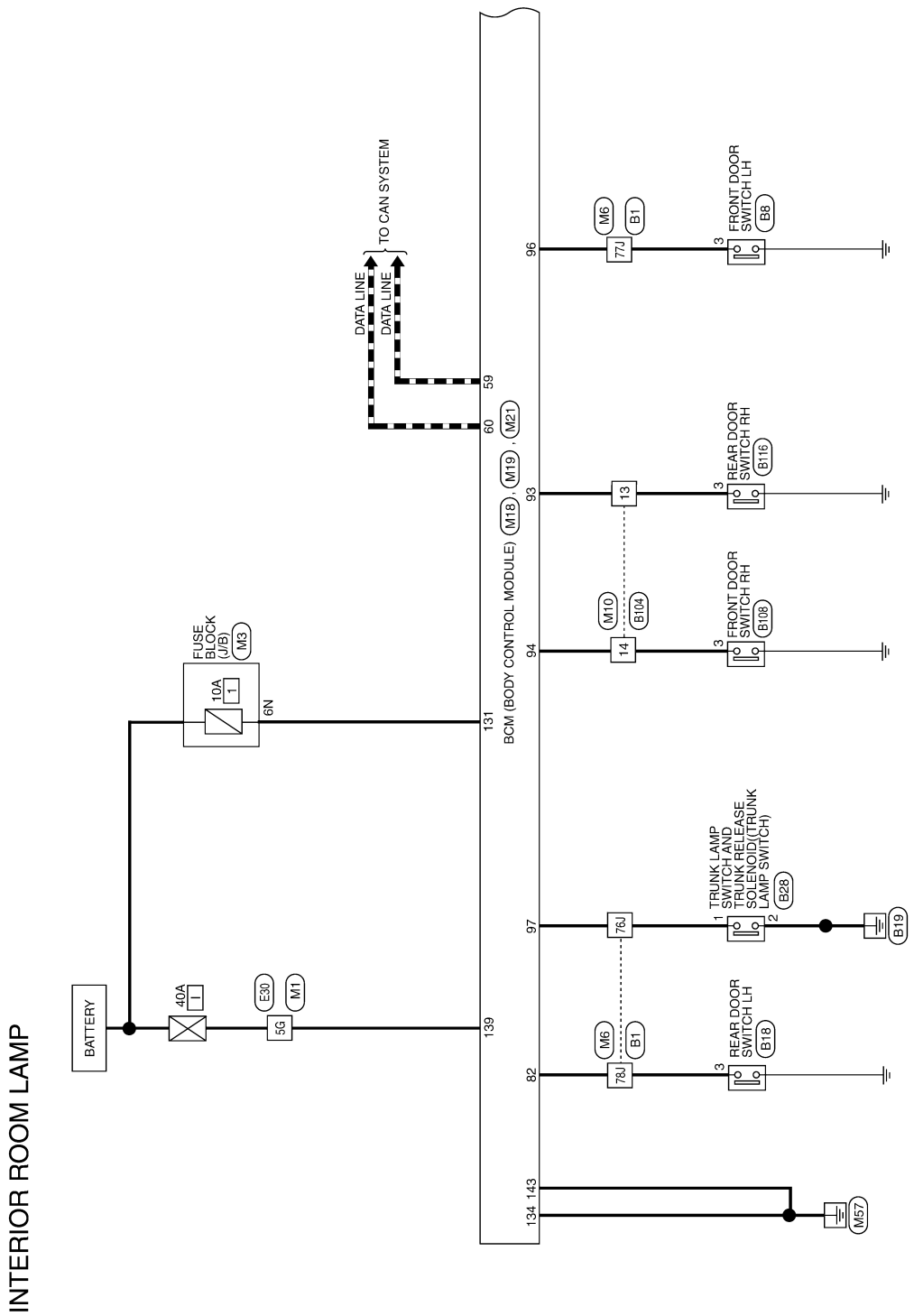
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WIRING DIAGRAM

INTERIOR ROOM LAMP

Wiring Diagram

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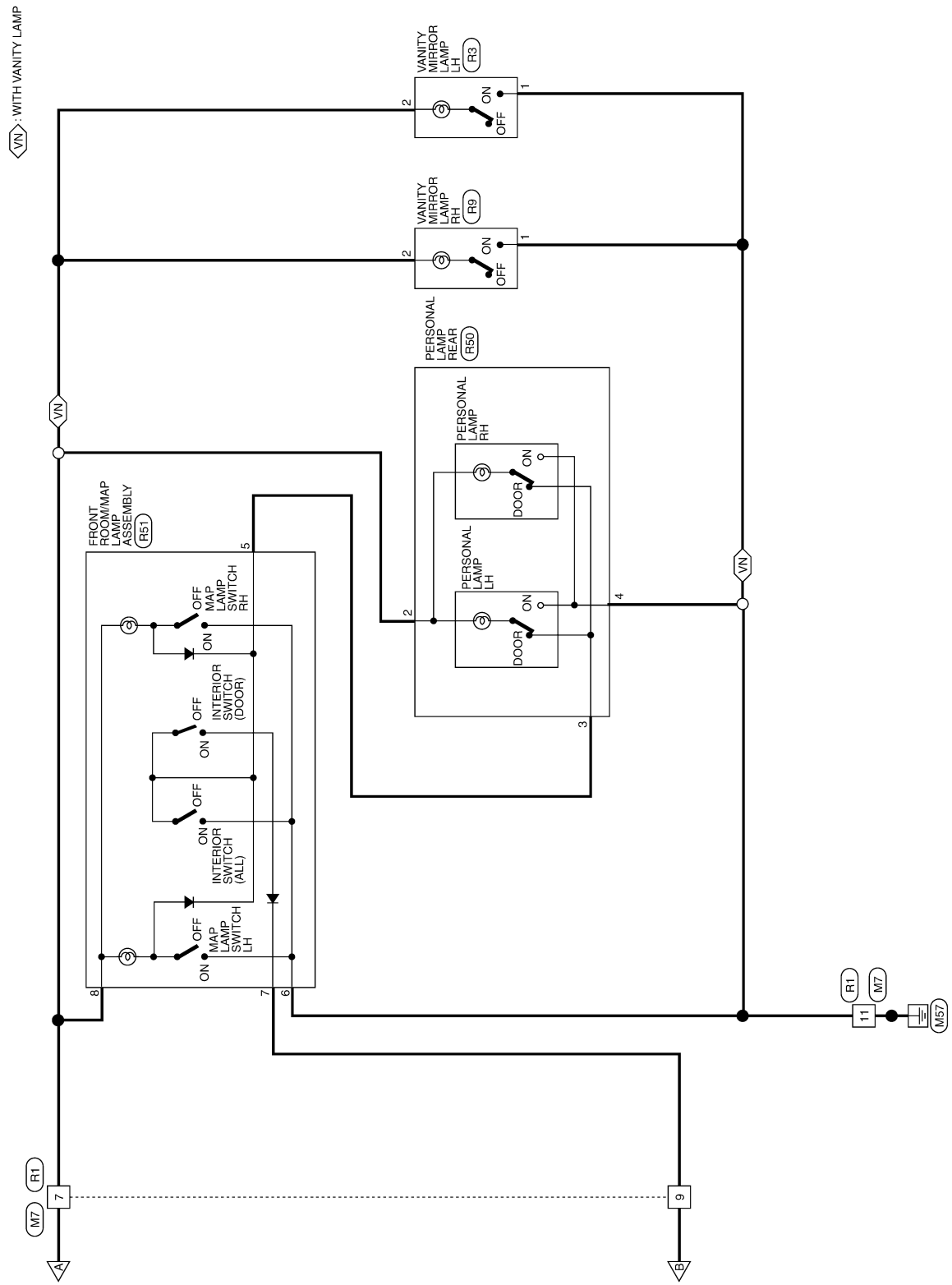
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INTERIOR ROOM LAMP

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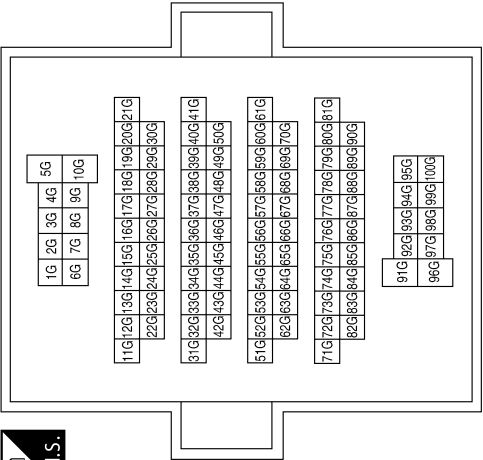
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INTERIOR ROOM LAMP

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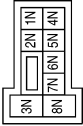
INTERIOR ROOM LAMP CONNECTORS

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



Terminal No.	5G
Color of Wire	W
Signal Name	-

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



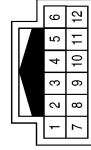
Terminal No.	6N
Color of Wire	W
Signal Name	-

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INTERIOR ROOM LAMP

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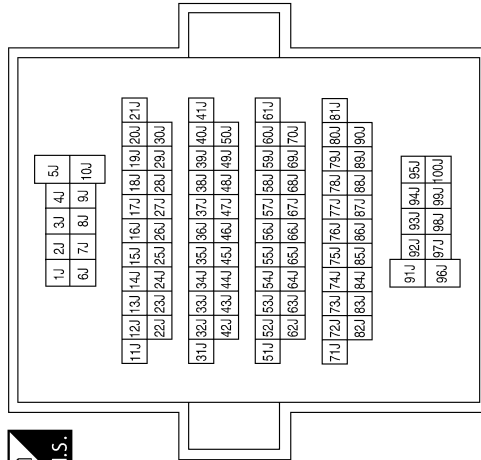
Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	G	-
9	P	-
11	GR	-

Terminal No.	Color of Wire	Signal Name
74J	G	-
75J	BG	-
76J	SB	-
77J	BR	-
78J	Y	-

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

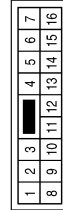


Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Color	WHITE



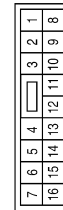
Terminal No.	Color of Wire	Signal Name
4	GR	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	R	-
4	G	-
8	B	-

Connector No.	M10
Connector Name	WIRE TO WIRE
Connector Color	BROWN



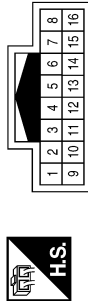
Terminal No.	Color of Wire	Signal Name
13	V	-
14	SB	-

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INTERIOR ROOM LAMP

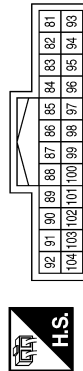
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Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE



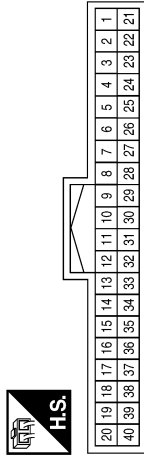
Terminal No.	Color of Wire	Signal Name
7	W	-
8	G	-
11	P	-
12	BG	-
13	G	-

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



Terminal No.	Color of Wire	Signal Name
82	Y	RL DOOR SW
85	BG	TRUNK LAMP CONT
93	V	RR DOOR SW
94	SB	AS DOOR SW
96	BR	DR DOOR SW
97	SB	TRUNK SW

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



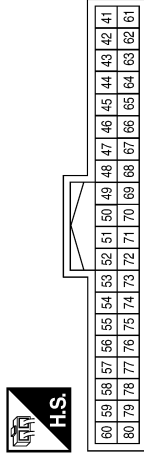
Terminal No.	Color of Wire	Signal Name
19	G	CENTRAL DOOR LOCK SW
21	W	STEP LAMP CONT
24	G	DOOR KEY/C UNLOCK SW
34	BG	CENTRAL DOOR UNLOCK SW

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



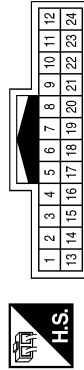
Terminal No.	Color of Wire	Signal Name
129	G	BATTERY SAVER QUT
131	W	BAT BCM FUSE
134	B	GND2
136	P	ROOM LAMP CONT
139	W	BAT POWER F/L
143	B	GND1

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



Terminal No.	Color of Wire	Signal Name
54	P	PW LIN
59	P	CAN-L
60	L	CAN-H
74	P	DOOR KEY/C LOCK SW

Connector No.	M112
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	G	-
4	P	-
11	W	-
12	G	-
17	P	-
18	B	-

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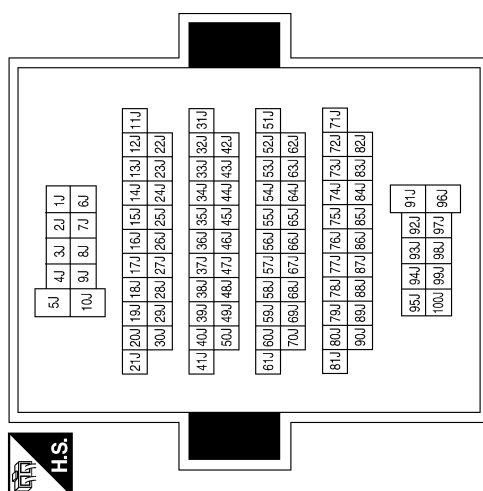
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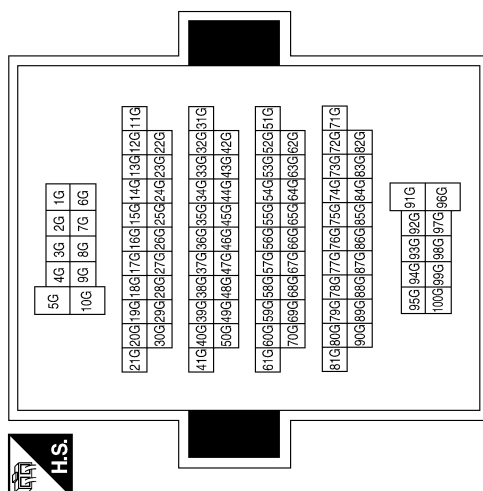
< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
74J	P	-
75J	BG	-
76J	W	-
77J	L	-
78J	LG	-

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	GRAY



Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE



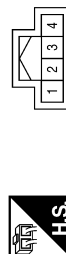
Terminal No.	Color of Wire	Signal Name
5G	P	-

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



Terminal No.	Color of Wire	Signal Name
3	L	-

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



Terminal No.	Color of Wire	Signal Name
3	LG	-

Connector No.	B28
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	W	-
2	GR	-

INTERIOR ROOM LAMP

< WIRING DIAGRAM >

Connector No.	B36
Connector Name	TRUNK ROOM LAMP
Connector Color	WHITE



1	2
---	---

Terminal No.	Color of Wire	Signal Name
1	P	-
2	BG	-

Connector No.	B104
Connector Name	WIRE TO WIRE
Connector Color	BROWN



1	2	3	4	5	6	7		
8	9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
13	V	-
14	L	-

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



1	2	3	4
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Terminal No.	Color of Wire	Signal Name
3	L	-

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



1	2	3	4
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Terminal No.	Color of Wire	Signal Name
3	V	-

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



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

Terminal No.	Color of Wire	Signal Name
7	G	-
9	P	-
11	GR	-

Connector No.	R3
Connector Name	VANITY MIRROR LAMP LH
Connector Color	WHITE



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

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INTERIOR ROOM LAMP

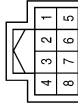
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Connector No.	R9
Connector Name	VANITY MIRROR LAMP RH
Connector Color	WHITE



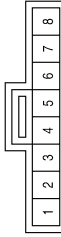
Terminal No.	Color of Wire	Signal Name
1	B	-
2	R	-

Connector No.	R50
Connector Name	PERSONAL LAMP REAR
Connector Color	WHITE



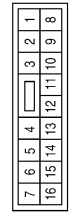
Terminal No.	Color of Wire	Signal Name
2	G	-
3	L	-
4	B	-

Connector No.	R51
Connector Name	FRONT ROOM/MAP LAMP ASSEMBLY
Connector Color	GRAY

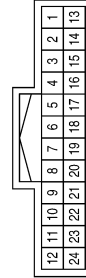


Terminal No.	Color of Wire	Signal Name
5	L	-
6	B	-
7	R	-
8	G	-

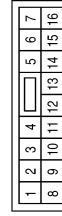
Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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



Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	R	-
4	G	-
8	B	-

Terminal No.	Color of Wire	Signal Name
3	G	-
4	P	-
11	G	-
12	W	-
17	P	-
18	B	-

Terminal No.	Color of Wire	Signal Name
1	B	GND
3	P	LOCK
11	P	COM
15	G	UNLOCK

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INTERIOR ROOM LAMP

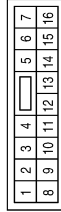
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Connector No.	D11
Connector Name	FRONT STEP LAMP LH
Connector Color	WHITE



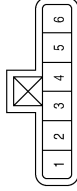
Terminal No.	Color of Wire	Signal Name
1	W	-
2	G	-

Connector No.	D12
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color	WHITE



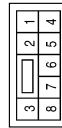
Terminal No.	Color of Wire	Signal Name
1	B	GND
3	G	LOCK SW
15	R	UNLOCK SW

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



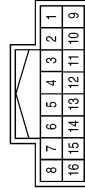
Terminal No.	Color of Wire	Signal Name
4	B	-
5	G	-
6	P	-

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



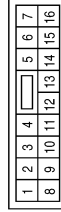
Terminal No.	Color of Wire	Signal Name
4	B	-

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



Terminal No.	Color of Wire	Signal Name
7	G	-
8	W	-
11	P	-
12	BG	-
13	G	-

Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	P	COM
7	B	GND



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INTERIOR ROOM LAMP

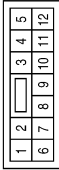

< WIRING DIAGRAM >

Connector No.	D109	
Connector Name	FRONT STEP LAMP RH	
Connector Color	WHITE	



Terminal No.	Color of Wire	Signal Name
1	W	-
2	G	-

Connector No.	D110	
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT POWER WINDOW ANTI-PINCH SYSTEM)	
Connector Color	WHITE	



Terminal No.	Color of Wire	Signal Name
1	G	LOCK
2	BG	UNLOCK
3	B	GND

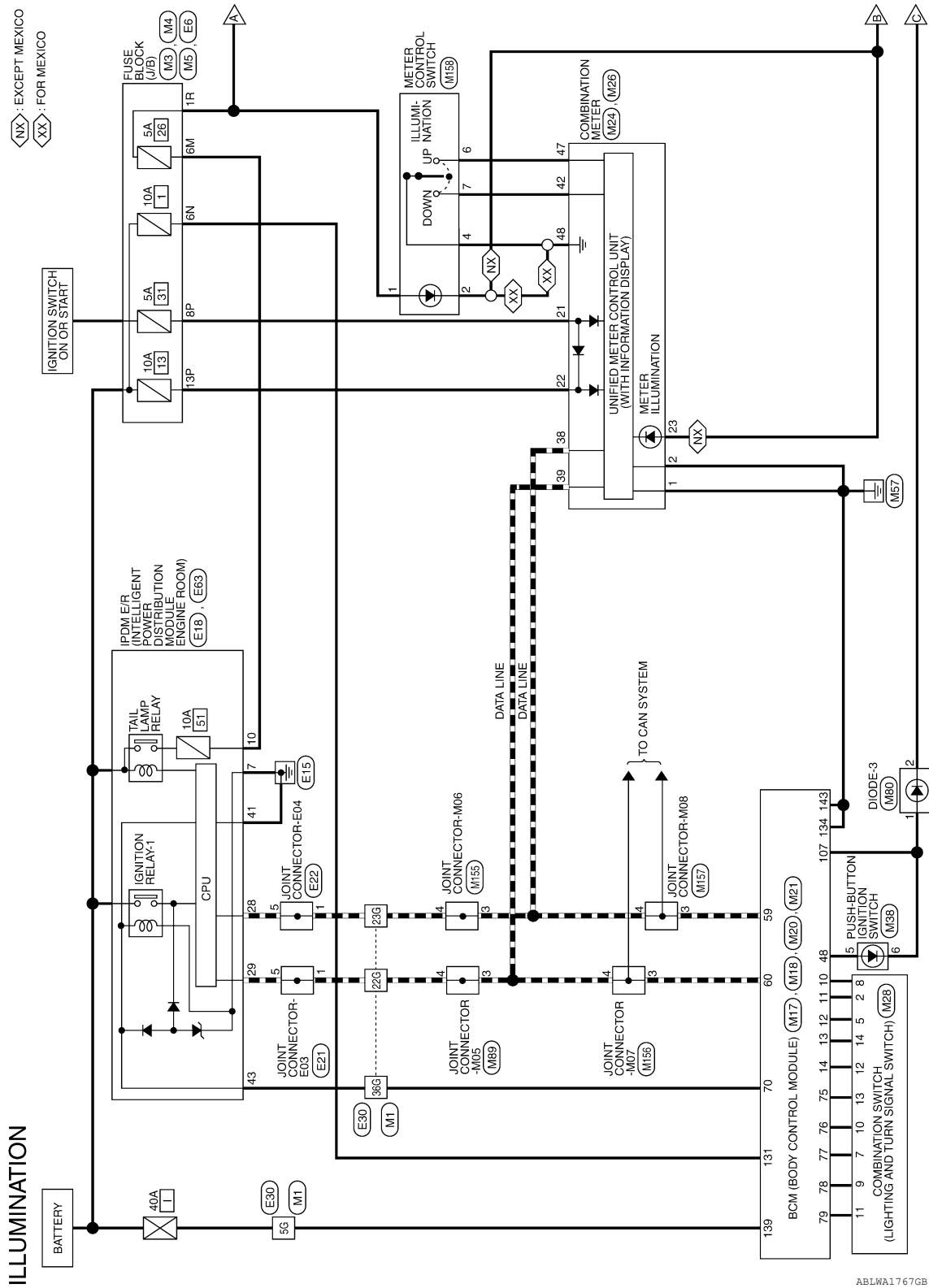
ILLUMINATION

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ILLUMINATION

Wiring Diagram

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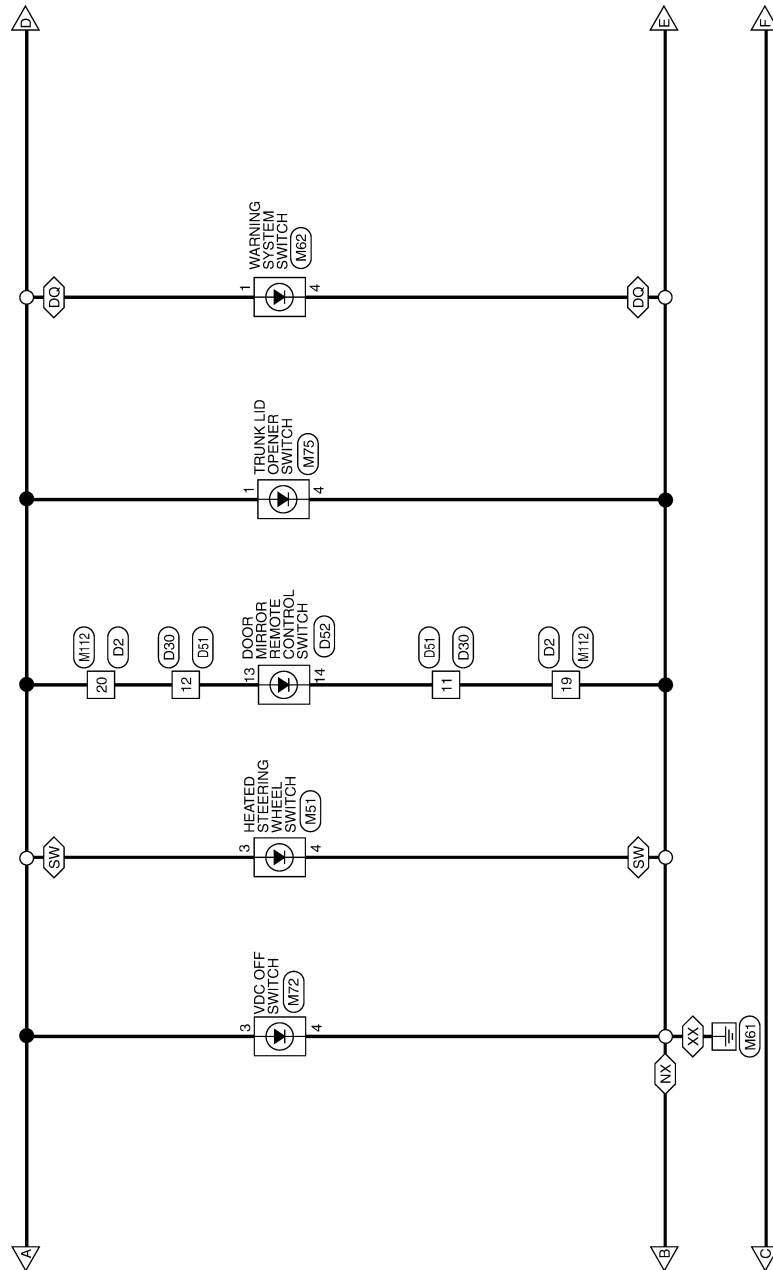


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ILLUMINATION

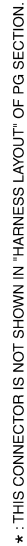
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(DQ) : WITH DRIVE ASSISTANCE SYSTEM
 (NX) : EXCEPT MEXICO
 (SW) : WITH HEATED STEERING WHEEL
 (XX) : FOR MEXICO



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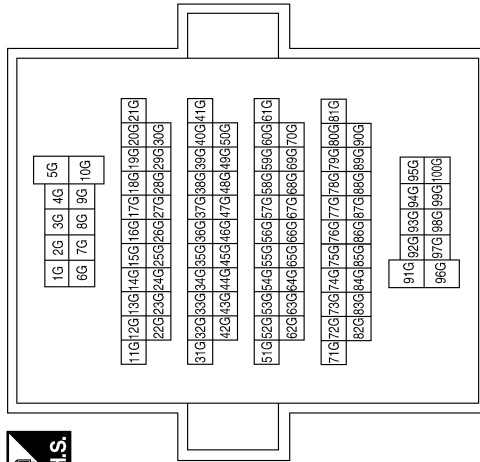
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ILLUMINATION CONNECTORS

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



Terminal No.	Color of Wire	Signal Name
5G	W	-
22G	L	-
23G	P	-
36G	G	-

Connector No.	M2
Connector Name	JOINT CONNECTOR-M02
Connector Color	WHITE



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

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



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



Terminal No.	Color of Wire	Signal Name
6N	W	-

Connector No.	M5
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
8P	BR	-
13P	G	-

ILLUMINATION

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
12	W	COMBI SW IN 3
13	G	COMBI SW IN 2
14	P	COMBI SW IN 1

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21

Terminal No.	Color of Wire	Signal Name
10	W	COMBI SW IN 5
11	BG	COMBI SW IN 4

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



Terminal No.	Color of Wire	Signal Name
8	B	-
10	R	-

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



116	115	114	113	112	111	110	109	108	107	106	105
128	127	126	125	124	123	122	121	120	119	118	117

Terminal No.	Color of Wire	Signal Name
107	W	LOW SIDE START SW LED

Terminal No.	Color of Wire	Signal Name
48	BR	HIGH SIDE START SW LED
59	P	CAN-L
60	L	CAN-H
70	G	IGN USM OUT 1
75	BG	COMBI SW OUT 5
76	W	COMBI SW OUT 4
77	R	COMBI SW OUT 3
78	P	COMBI SW OUT 2
79	G	COMBI SW OUT 1

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



60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

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ILLUMINATION

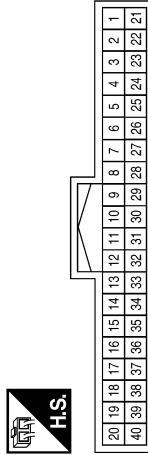
< WIRING DIAGRAM >

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



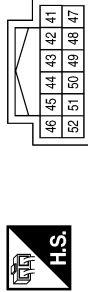
Terminal No.	Color of Wire	Signal Name
131	W	BAT BCM FUSE
134	B	GND2
139	W	BAT POWER F/L
143	B	GND1

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



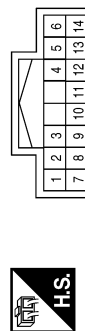
Terminal No.	Color of Wire	Signal Name
1	B	GND1
2	B	GND2
21	BR	IGN
22	G	BAT
23	GR	ILLUMI CONT OUT
38	P	CAN-L
39	L	CAN-H

Connector No.	M26
Connector Name	COMBINATION METER
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
42	SB	ILLUMI DOWN SW
47	Y	ILLUMI UP SW
48	G	SW GND

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	BG	OUTPUT 4
5	W	OUTPUT 3
7	R	INPUT 3
8	W	OUTPUT 5

Terminal No.	Color of Wire	Signal Name
9	P	INPUT 2
10	W	INPUT 4
11	G	INPUT 1
12	P	OUTPUT 1
13	BG	INPUT 5
14	G	OUTPUT 2

Connector No.	M29
Connector Name	COMBINATION SWITCH
Connector Color	YELLOW

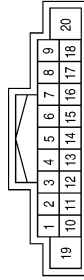


Terminal No.	Color of Wire	Signal Name
23	R	ILL+
26	B	ILL-

ILLUMINATION

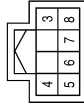
< WIRING DIAGRAM >

Connector No.	M43
Connector Name	AV CONTROL UNIT (WITH DISPLAY AUDIO SYSTEM WITHOUT BOSE)
Connector Color	WHITE



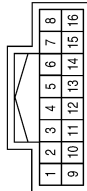
Terminal No.	Color of Wire	Signal Name
8	GR	ILL-
9	R	ILL+

Connector No.	M38
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	WHITE



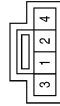
Terminal No.	Color of Wire	Signal Name
5	BR	-
6	W	-

Connector No.	M37
Connector Name	FRONT AIR CONTROL (WITHOUT AUTO A/C)
Connector Color	WHITE



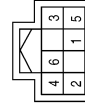
Terminal No.	Color of Wire	Signal Name
5	R	ILL+
6	GR	ILL-

Connector No.	M54
Connector Name	HAZARD SWITCH
Connector Color	WHITE



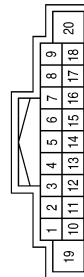
Terminal No.	Color of Wire	Signal Name
3	R	-
4	GR	-

Connector No.	M51
Connector Name	HEATED STEERING WHEEL SWITCH
Connector Color	BLUE



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

Connector No.	M45
Connector Name	AV CONTROL UNIT (WITH DISPLAY AUDIO SYSTEM WITH BOSE)
Connector Color	WHITE



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

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ILLUMINATION

< WIRING DIAGRAM >

Connector No.	M68
Connector Name	GLOVE BOX LAMP
Connector Color	WHITE



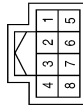
Terminal No.	Color of Wire	Signal Name
1	R	—
2	GR	—

Connector No.	M64
Connector Name	JOINT CONNECTOR-M01
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	R	—
2	R	—
3	R	—
4	R	—

Connector No.	M62
Connector Name	WARNING SYSTEM SWITCH
Connector Color	WHITE



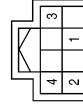
Terminal No.	Color of Wire	Signal Name
1	R	—
4	B	—

Connector No.	M73
Connector Name	USB INTERFACE LAMP
Connector Color	WHITE



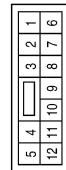
Terminal No.	Color of Wire	Signal Name
1	R	—
2	GR	—

Connector No.	M72
Connector Name	VDC OFF SWITCH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
3	R	—
4	B	—

Connector No.	M71
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	GR	—
4	R	—

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ILLUMINATION

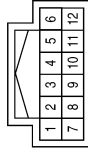
< WIRING DIAGRAM >

Connector No.	M80
Connector Name	DIODE-3
Connector Color	BLACK



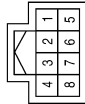
Terminal No.	Color of Wire	Signal Name
1	W	-
2	GR	-

Connector No.	M79
Connector Name	A/C SWITCH ASSEMBLY
Connector Color	WHITE



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

Connector No.	M75
Connector Name	TRUNK LID OPENER SWITCH
Connector Color	GREEN



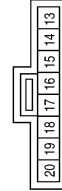
Terminal No.	Color of Wire	Signal Name
1	R	-
4	B	-

Connector No.	M89
Connector Name	JOINT CONNECTOR-M05
Connector Color	WHITE



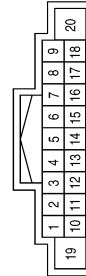
Terminal No.	Color of Wire	Signal Name
3	L	-
4	L	-

Connector No.	M88
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
19	Y	- ILL
20	W	+ ILL

Connector No.	M85
Connector Name	AUDIO UNIT (WITH BASE AUDIO SYSTEM)
Connector Color	WHITE





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

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ILLUMINATION


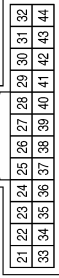
< WIRING DIAGRAM >

Connector No.	M112
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
19	GR	—
20	R	—

Connector No.	M97
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM WITHOUT BOSE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
33	GR	ILL-

Connector No.	M96
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM WITHOUT BOSE)
Connector Color	WHITE


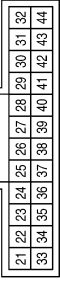
Terminal No.	Color of Wire	Signal Name
9	R	ILL+

Connector No.	M155
Connector Name	JOINT CONNECTOR-M06
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	P	—
4	P	—

Connector No.	M153
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM WITH BOSE)
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
33	GR	ILL-

Connector No.	M151
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM WITH BOSE)
Connector Color	WHITE

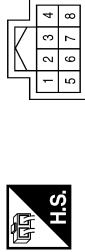
Terminal No.	Color of Wire	Signal Name
9	R	ILL+

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ILLUMINATION

< WIRING DIAGRAM >

Connector No.	M158
Connector Name	METER CONTROL SWITCH
Connector Color	WHITE



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

Connector No.	M157
Connector Name	JOINT CONNECTOR-M08
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	P	-
4	P	-

Connector No.	M156
Connector Name	JOINT CONNECTOR-M07
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	L	-
4	L	-

Connector No.	M202
Connector Name	FRONT HEATED SEAT SWITCH RH
Connector Color	BROWN



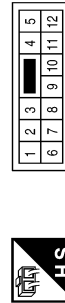
Terminal No.	Color of Wire	Signal Name
5	R	-
6	B	-

Connector No.	M201
Connector Name	FRONT HEATED SEAT SWITCH LH
Connector Color	WHITE



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

Connector No.	M200
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

ABLIA3696GB

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ILLUMINATION

< WIRING DIAGRAM >

Connector No.	E18
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



7	8	<div></div>		9	10	11
12	13	14	15	16	17	18

Terminal No.	Color of Wire	Signal Name
7	B	GND (POWER)
10	V	TAIL LH

Connector No.	E6
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
6M	V	–

Connector No.	M204
Connector Name	CVT SHIFT SELECTOR
Connector Color	BROWN



5	6
---	---

Terminal No.	Color of Wire	Signal Name
5	R	–
6	B	–

Connector No.	E22
Connector Name	JOINT CONNECTOR-E04
Connector Color	GRAY



6	5	4	3	2	1
---	---	---	---	---	---

Terminal No.	Color of Wire	Signal Name
1	P	–
5	P	–

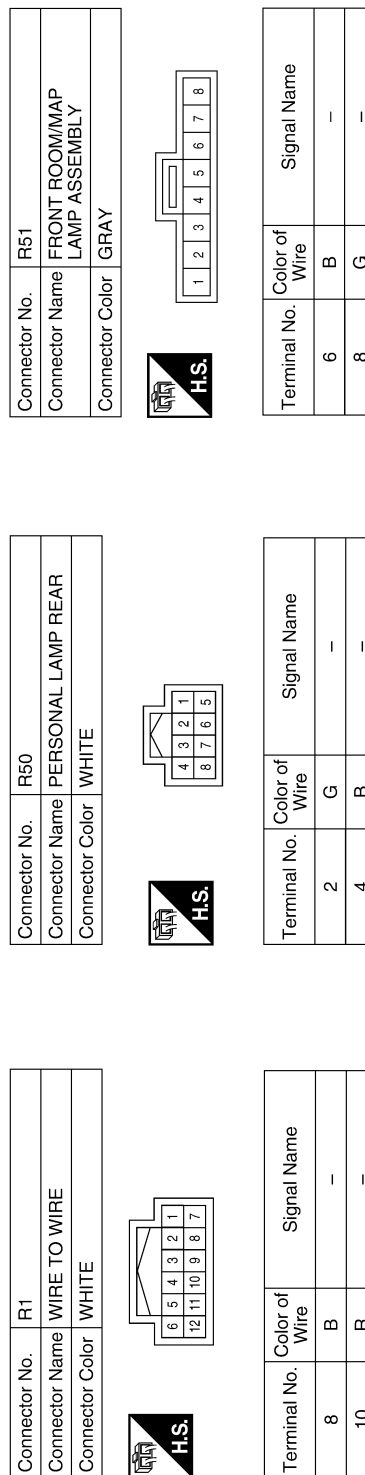
Connector No.	E21
Connector Name	JOINT CONNECTOR-E03
Connector Color	GRAY



6	5	4	3	2	1
---	---	---	---	---	---

Terminal No.	Color of Wire	Signal Name
1	L	–
5	L	–

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ILLUMINATION

< WIRING DIAGRAM >

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
11	R	—
12	G	—

Connector No.	D30
Connector Name	WIRE TO WIRE
Connector Color	WHITE



8	7	6	5	4	3	2	1
16	15	14	13	12	11	10	9

Terminal No.	Color of Wire	Signal Name
11	R	—
12	G	—

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



12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
19	R	—
20	G	—

Connector No.	D52
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH
Connector Color	WHITE



1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
13	G	—
14	R	—

ABLIA3768GB

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

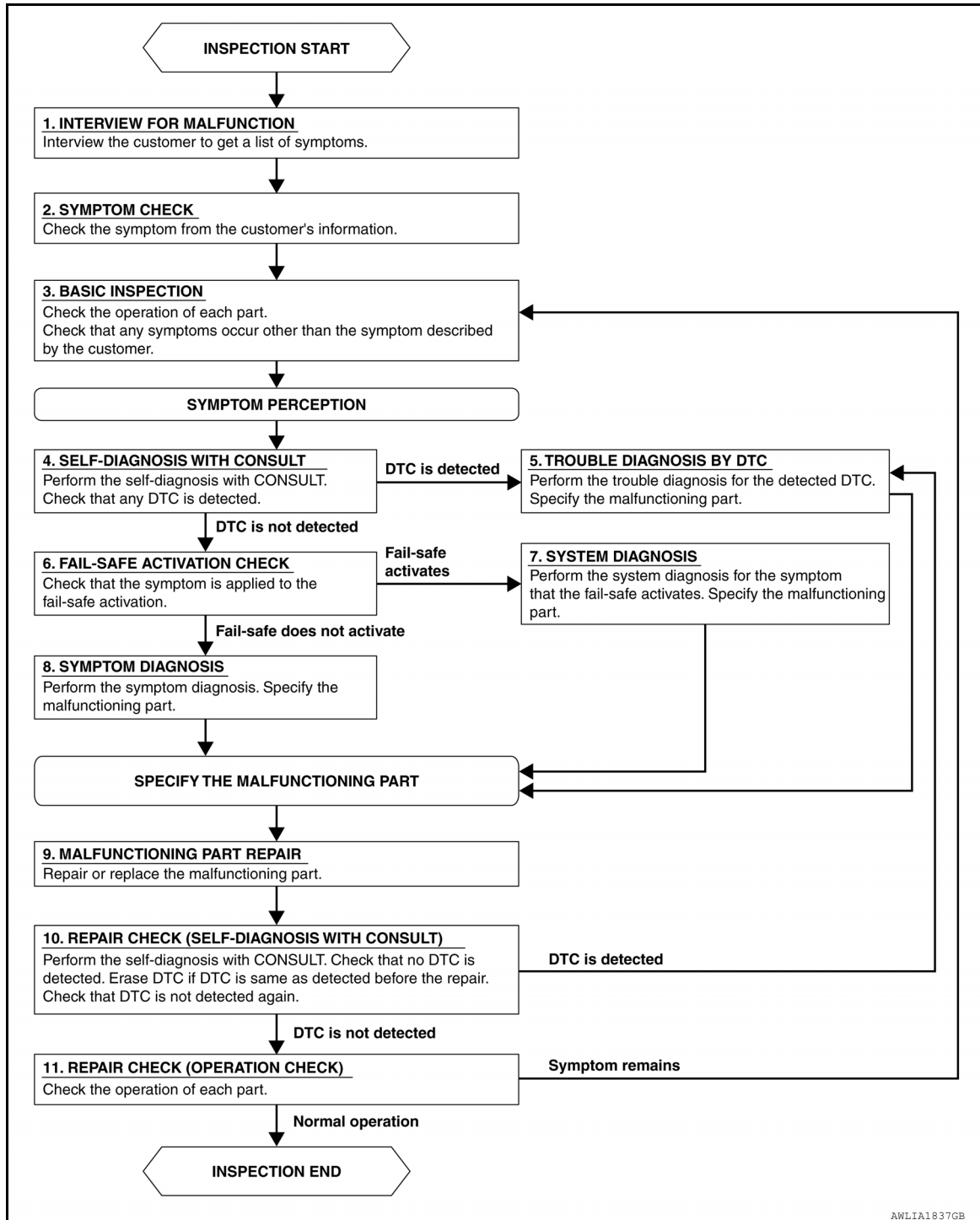
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000007986918

OVERALL SEQUENCE



AWLIA1837GB

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

DETAILED FLOW

1. INTERVIEW FOR MALFUNCTION

Find out what the customer's concerns are.

>> GO TO 2.

2. SYMPTOM CHECK

Verify the symptom from the customer's information.

>> GO TO 3.

3. BASIC INSPECTION

Check the operation of each part. Check that any concerns occur other than those mentioned in the customer interview.

>> GO TO 4.

4. SELF-DIAGNOSIS WITH CONSULT

Perform the self-diagnosis with CONSULT. Check that any DTC is detected.

Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 6.

5. TROUBLE DIAGNOSIS BY DTC

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

>> GO TO 9.

6. FAIL-SAFE ACTIVATION CHECK

Determine if the customer's concern is related to fail-safe activation.

Does the fail-safe activate?

YES >> GO TO 7.

NO >> GO TO 8.

7. SYSTEM DIAGNOSIS

Perform the system diagnosis for the system in which the fail-safe activates. Specify the malfunctioning part.

>> GO TO 9.

8. SYMPTOM DIAGNOSIS

Perform the symptom diagnosis, refer to [INL-62. "Symptom Table"](#). 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)

Perform the self-diagnosis with CONSULT. Verify that no DTCs are detected. Erase all DTCs detected prior to the repair. Verify that DTC is not detected again.

Is any DTC detected?

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

YES >> GO TO 5.

NO >> GO TO 11.

11. REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

Does it operate normally?

YES >> Inspection End

NO >> GO TO 3.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000008681882

Regarding Wiring Diagram information, refer to [BCS-52, "Wiring Diagram"](#).

1. CHECK FUSE AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuse and fusible link No.
139	Fusible link battery power	I (40A)
131	BCM battery fuse	1 (10A)

Is the fuse or fusible link blown?

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

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M21.

2. Check voltage between BCM connector M21 terminals 131, 139 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M21	131	—	Battery voltage
	139		

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M21 terminals 134, 143 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M21	134	—	Yes
	143		

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

IPDM E/R

IPDM E/R : Diagnosis Procedure

INFOID:0000000008681875

Regarding Wiring Diagram information, refer to [PCS-21, "Wiring Diagram"](#).

1. CHECK FUSIBLE LINKS

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Check that the following fusible links are not blown.

Terminal No.	Signal name	Fusible link No.
1	Fusible link main	E (80A)
2	Fusible link IPDM E/R	A (250A), C (80A)
3	Fusible link ignition switch	A (250A), B (100A), M (40A)

Is the fusible link blown?

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

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect IPDM E/R connectors E16 and E17.
2. Check voltage between IPDM E/R connectors and ground.

IPDM E/R		Ground	Voltage (Approx.)
Connector	Terminal		
E16	1	—	Battery voltage
	2		
E17	3		

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

1. Disconnect IPDM E/R connectors E18 and E63.
2. Check continuity between IPDM E/R connectors and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E18	7	—	Yes
E63	41		

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

Description

INFOID:000000007986934

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

Component Function Check

INFOID:000000007986935

1.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY FUNCTION

CONSULT

1. Turn ignition switch ON.
2. Turn each interior room lamp ON.
 - Front room/map lamps
 - Personal lamps rear
 - Front step lamps
 - Vanity mirror lamps (if equipped)
 - Trunk room lamp
3. Open the driver door to turn ON the front step lamps.
4. Select BATTERY SAVER of BCM (BATTERY SAVER) active test item.
5. While operating the test item, check that each interior room lamp turn ON/OFF.

OFF : Interior room lamp OFF

ON : Interior room lamp ON

Is the inspection result normal?

YES >> Interior room lamp power supply circuit is normal.

NO >> Refer to [INL-52, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000007986936

Regarding Wiring Diagram information, refer to [INL-22, "Wiring Diagram"](#).

1.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OUTPUT

CONSULT

1. Turn ignition switch ON.
2. Select BATTERY SAVER of BCM (BATTERY SAVER) active test item.
3. While operating the test item, check voltage between BCM connector M21 terminal 129 and ground.

(+)		(-)	Test item	Voltage (Approx.)
Connector	Terminal		BATTERY SAVER	
M21	129	Ground	OFF	0V
			ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace BCM after making sure battery saver output/power supply circuit is not shorted to voltage. Refer to [BCS-77, "Removal and Installation"](#).

2.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following connectors.
 - BCM M21
 - Front step lamp LH D11
 - Front step lamp RH D109
 - Front room/map lamp assembly R51

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- Vanity mirror lamp LH (if equipped) R3
 - Vanity mirror lamp RH (if equipped) R9
 - Trunk room lamp B36
 - Personal lamp rear R50
3. Check continuity between BCM connector M21 terminal 129 and each interior room lamp connector.

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M21	129	Front step lamp LH	D11	1	Yes
		Front step lamp RH	D109	1	
		Front room/map lamp assembly	R51	8	
		Vanity mirror lamp LH	R3	2	
		Vanity mirror lamp RH	R9	2	
		Trunk room lamp	B36	1	
		Personal lamp rear	R50	2	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connectors.

3.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM connector M21 terminal 129 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M21	129		No

Is the inspection result normal?

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

NO >> Repair or replace harness or connectors.

INL

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:000000007986937

Controls the room lamp control circuit (ground side) to turn the room lamps ON and OFF.

Component Function Check

INFOID:000000007986938

CAUTION:

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

- Battery saver output/power supply
- Front room/map lamp assembly bulbs
- Personal lamp bulbs

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT

1. Switch the front room/map lamp assembly switch to DOOR.
2. Turn ignition switch ON.
3. Select INT LAMP of BCM (INT LAMP) active test item.
4. While operating the test item, check that each interior room lamp turn ON/OFF.

ON : Interior room lamp ON

OFF : Interior room lamp OFF

Is the inspection result normal?

YES >> Interior room lamp control circuit is normal.

NO >> Refer to [INL-54, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000007986939

Regarding Wiring Diagram information, refer to [INL-22, "Wiring Diagram"](#).

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT

1. Turn ignition switch ON.
2. Select INT LAMP of BCM (INT LAMP) active test item.
3. While operating the test item, check voltage between BCM connector M21 terminal 136 and ground.

BCM		Ground	Test item	Voltage
Connector	Terminal		INT LAMP	
M21	136		ON	0V
			OFF	Battery voltage

Is the inspection result normal?

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

Fixed ON>>GO TO 3.

Fixed OFF>>GO TO 2.

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM harness connector M21, front room/map lamp harness connector R51.
3. Check continuity between BCM harness connector M21 terminal 136 and front room/map lamp assembly harness connector R51 terminal 7.

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

BCM		Front room/map lamp		Continuity
Connector	Terminal	Connector	Terminal	
M21	136	R51	7	Yes

- Reconnect the front room/map lamp assembly harness connector.
- Check continuity between BCM harness connector M21 terminal 136 and personal lamp rear harness connector R50 terminal 3.

BCM		Personal lamp rear		Continuity
Connector	Terminal	Connector	Terminal	
M21	136	R50	3	Yes

Is the inspection result normal?

YES >> Check interior room lamps for an open. If NG, replace lamp in question. Refer to [INL-63, "Removal and Installation"](#) (front room/map lamp assmbly) or refer to [INL-67, "Removal and Installation"](#) (personal lamp rear). If OK, replace BCM. Refer to [BCS-77, "Removal and Installation"](#).

NO >> Repair or replace harness or connectors.

3.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

- Turn ignition switch OFF.
- Disconnect BCM harness connector M21 and front room/map lamp harness connector R51 lamp harness.
- Check continuity between BCM harness connector M21 terminal 136 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M21	136		No

Is the inspection result normal?

YES >> Check the interior room lamps for a short circuit. If NG, replace the interior room lamp. Refer to [INL-63, "Removal and Installation"](#) (front room/map lamp assmbly) or refer to [INL-67, "Removal and Installation"](#) (personal lamp rear). If OK, replace BCM. Refer to [BCS-77, "Removal and Installation"](#).

NO >> Repair or replace the harness or connectors.

INL

STEP LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

STEP LAMP CIRCUIT

Description

INFOID:000000007986940

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

Component Function Check

INFOID:000000007986941

CAUTION:

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

- Battery saver output/power supply
- Step lamp bulbs

1.CHECK STEP LAMP OPERATION

CONSULT

1. Turn ignition switch ON.
2. Select STEP LAMP of BCM (INT LAMP) active test item.
3. While operating the test item, check that step lamps turn ON/OFF.

ON : Step lamp ON

OFF : Step lamp OFF

Is the inspection result normal?

- YES >> Step lamp circuit is normal.
NO >> Refer to [INL-56, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000007986942

Regarding Wiring Diagram information, refer to [INL-22, "Wiring Diagram"](#).

1.CHECK STEP LAMP OUTPUT

CONSULT

1. Turn ignition switch ON.
2. Select STEP LAMP TEST of BCM (INT LAMP) active test item.
3. While operating the test item, check voltage between BCM connector M17 terminal 21 and ground.

BCM		Ground	Test item	Voltage
Connector	Terminal		STEP LAMP TEST	
M17	21		ON	0V
			OFF	Battery voltage

Is the inspection result normal?

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

2.CHECK STEP LAMP OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M17 and step lamp LH and RH connectors.
3. Check continuity between BCM connector M17 terminal 21 and step lamp connector terminal 2.

BCM		Step lamp			Continuity
Connector	Terminal	Connector		Terminal	
M17	21	LH	D11	2	Yes
		RH	D109		

STEP LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Check the step lamps for an open. If OK, replace BCM. Refer to [BCS-77, "Removal and Installation"](#). If NG, replace the step lamp. Refer to [INL-66, "Bulb or Lens Replacement"](#).
- NO >> Repair or replace harness or connectors.

3.CHECK STEP LAMP SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M17 and step lamp LH and RH connectors.
3. Check continuity between BCM connector M17 terminal 21 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M17	21		No

Is the inspection result normal?

- YES >> Check the step lamps for a short circuit. If OK, replace BCM. Refer to [BCS-77, "Removal and Installation"](#). If NG, replace the interior room lamp. Refer to [INL-66, "Bulb or Lens Replacement"](#).
- NO >> Repair or replace harness or connectors.

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INL

TRUNK ROOM LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TRUNK ROOM LAMP CIRCUIT

Description

INFOID:000000007986943

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

Component Function Check

INFOID:000000007986944

CAUTION:

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

- Battery saver output/power supply
- Trunk room lamp bulb

1.CHECK TRUNK ROOM LAMP OPERATION

CONSULT

1. Turn ignition switch ON.
2. Select TRUNK/LUGAGE LAMP TEST of BCM (INTELLIGENT KEY) active test item.
3. While operating the test item, check that the trunk room lamp turns ON/OFF.

ON : Trunk room lamp ON

OFF : Trunk room lamp OFF

Is the inspection result normal?

YES >> Trunk room lamp circuit is normal.

NO >> Refer to [INL-58, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000007986945

Regarding Wiring Diagram information, refer to [INL-22, "Wiring Diagram"](#).

1.CHECK TRUNK ROOM LAMP OUTPUT

CONSULT

1. Turn ignition switch ON.
2. Select TRUNK/LUGAGE LAMP TEST of BCM (INTELLIGENT KEY) active test item.
3. While operating the test item, check voltage between BCM connector M19 terminal 85 and ground.

BCM		Ground	Test item	Voltage
Connector	Terminal		TRUNK/LUGGAGE LAMP TEST	
M19	85		ON	0V
			OFF	Battery voltage

Is the inspection result normal?

YES >> Trunk room lamp circuit is operating normally.

Fixed ON>>GO TO 3.

Fixed OFF>>GO TO 2.

2.CHECK TRUNK ROOM LAMP OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M19 and trunk room lamp connector.
3. Check continuity between BCM connector M19 terminal 85 and trunk room lamp connector B36 terminal 2.

BCM		Trunk room lamp		Continuity
Connector	Terminal	Connector	Terminal	
M19	85	B36	2	Yes

TRUNK ROOM LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Check the trunk room lamp for an open. If OK, replace BCM. Refer to [BCS-77, "Removal and Installation"](#). If NG, replace the trunk room lamp. Refer to [INL-68, "Removal and Installation"](#).
- NO >> Repair or replace harness or connectors.

3.CHECK TRUNK ROOM LAMP SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M19 and trunk room lamp connector.
3. Check continuity between BCM connector M19 terminal 85 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	85		No

Is the inspection result normal?

- YES >> Check the trunk room lamp for a short circuit. If OK, replace BCM. Refer to [BCS-77, "Removal and Installation"](#). If NG, replace the trunk room lamp. Refer to [INL-68, "Removal and Installation"](#).
- NO >> Repair or replace harness or connectors.

INL

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description

INFOID:000000007986946

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

Component Function Check

INFOID:000000007986947

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT

1. Turn the ignition switch ON.
2. Select ENGINE SW ILLUMI of BCM (INTELLIGENT KEY) active test item.
3. While operating the test item, 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

Is the inspection result normal?

YES >> Push-button ignition switch illumination circuit is normal.

NO >> Refer to [INL-60, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000007986948

Regarding Wiring Diagram information, refer to [INL-33, "Wiring Diagram"](#).

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT

1. Turn the ignition switch ON.
2. Select ENGINE SW ILLUMI of BCM (INTELLIGENT KEY) active test item.
3. While operating the test item, check voltage between push-button ignition switch connector M38 terminal 5 and ground.

Terminals		Test item	Voltage
(+)	(-)		
Push-button ignition switch		ENGINE SW ILLUMI	
Connector	Terminal		
M38	5	ON	5 V
		OFF	0 V

Is the inspection result normal?

YES >> GO TO 4

NO >> GO TO 2

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

1. Turn the ignition switch OFF.
2. Disconnect BCM connector M18 and push-button ignition switch connector.
3. Check continuity between BCM connector M18 terminal 48 and push-button ignition switch connector M38 terminal 5.

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M18	48	M38	5	Yes

Is the inspection result normal?

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- YES >> GO TO 3
NO >> Repair or replace the harness or connectors.

3.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM connector M18 terminal 48 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M18	48		No

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-77, "Removal and Installation"](#).
NO >> Repair or replace the harness or connectors.

4.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT

1. Turn the ignition switch OFF
2. Disconnect push-button ignition switch connector.
3. Check continuity between push-button ignition switch connector M38 terminal 6 and ground.

Push-button ignition switch		Ground	Continuity
Connector	Terminal		
M38	6		Yes

Is the inspection result normal?

- YES >> Replace push-button ignition switch.
NO >> GO TO 5

5.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND OPEN CIRCUIT

1. Disconnect BCM connector M20.
2. Check continuity between BCM connector M20 terminal 107 and push-button ignition switch connector M38 terminal 6.

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M20	107	M38	6	Yes

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-77, "Removal and Installation"](#).
NO >> Repair or replace the harness or connectors.

INTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:000000007986959

CAUTION:

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. • Front room/map lamp LH/RH • Personal lamp rear LH/ RH • Trunk room lamp • Front step lamp LH/RH • Vanity mirror lamp LH/RH (if equipped)	• Harness between BCM and each interior room lamp • BCM	Battery saver output/power supply circuit Refer to INL-52 .
• Interior room lamp does not turn ON even though the door is open. (It turns ON when turning the interior room lamp ON.) • Interior room lamp does not turn OFF even though the door is closed.	• Harness between BCM and each door switch • Harness between BCM and each interior room lamp • BCM	Door switch circuit Refer to DLK-99 . Interior room lamp control circuit Refer to INL-54 .
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	—	Check the interior room lamp setting. Refer to BCS-16 .
Front step lamps do not turn ON. (The front room/map lamps and the personal lamps turn ON.) Front step lamps do not turn OFF. (The front room/map lamps and the personal lamps turn OFF.)	• Harness between BCM and each step lamp • BCM	Step lamp circuit Refer to INL-56 .
• Trunk room lamp does not turn ON. (The bulb is normal.) • Trunk room lamp does not turn OFF.	• Harness between BCM and trunk room lamp switch • Harness between BCM and trunk room lamp • BCM	Trunk room lamp switch circuit Refer to DLK-125 . Trunk room lamp circuit Refer to INL-58 .
• Push-button ignition switch illumination does not turn ON. • Push-button ignition switch illumination does not turn OFF.	• Harness between BCM and combination switch (lighting and turn signal switch) • Harness between BCM and push-button ignition switch • BCM	Combination switch (lighting and turn signal switch) input circuit Refer to BCS-76 . Push-button ignition switch illumination circuit Refer to INL-60 .
Interior room lamp battery saver does not activate.	—	Check the interior room lamp battery saver setting. Refer to BCS-25 .

FRONT ROOM/MAP LAMP

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

FRONT ROOM/MAP LAMP


Removal and Installation

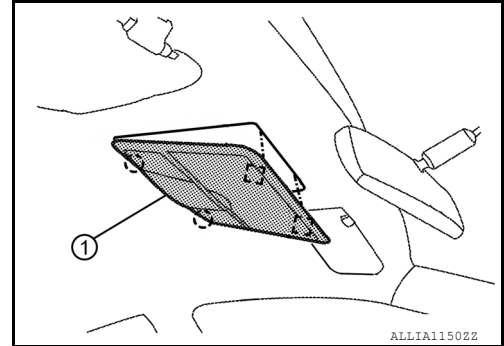
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REMOVAL

1. Lower front edge of front room/map lamp assembly (1) down from the headlining by releasing the metal clips, then slide forward to clear pawls at rear.

 Metal clip

 Pawl



2. Disconnect the harness connectors from the front room/map lamp assembly and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000008748326

The front room/map lamp LED bulbs are serviced as an assembly. Refer to [INL-63, "Removal and Installation"](#).

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VANITY MIRROR LAMP

< REMOVAL AND INSTALLATION >

VANITY MIRROR LAMP

Removal and Installation

INFOID:000000008748310

CAUTION:

Do not attempt to separate the vanity mirror lamp from the sun visor or damage to the components may occur.

The vanity mirror lamp is replaced as part of the sun visor. Refer to [INT-30. "Removal and Installation"](#).

Bulb or Lens Replacement

INFOID:000000008748311

WARNING:

Do not touch bulb while it is lit or right after being turned OFF. Burning may result.

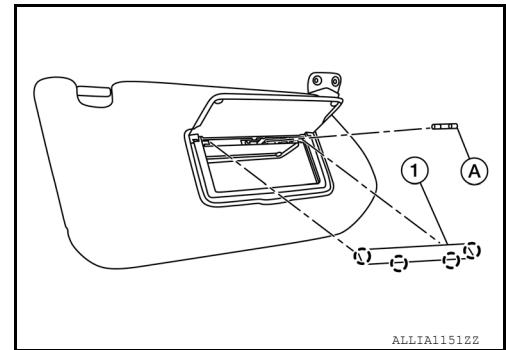
CAUTION:

- Do not attempt to separate the vanity mirror lamp from the sun visor or damage to the components may occur.
- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.

1. Release the pawls on the vanity mirror lamp lens (1) using a suitable tool.

○: Pawl

2. Remove the bulb (A) using a suitable tool.



3. Install bulb to vanity mirror lamp.
4. Install the vanity mirror lamp lens.

GLOVE BOX LAMP

< REMOVAL AND INSTALLATION >

GLOVE BOX LAMP

Removal and Installation

INFOID:000000008748313

WARNING:

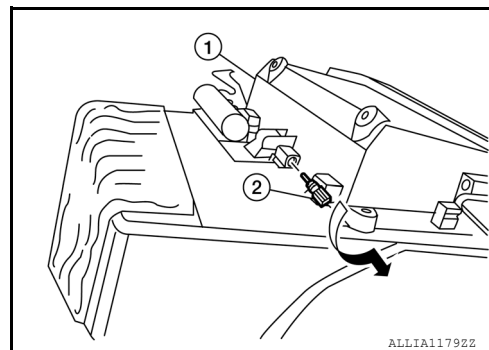
Do not touch bulb while it is lit or right after being turned OFF. Burning may result.

CAUTION:

Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.

REMOVAL

1. Remove the glove box assembly (1). Refer to [IP-22, "Removal and Installation"](#).
2. Rotate the glove box lamp socket assembly (2) counterclockwise and remove.



INSTALLATION

1. Insert bulb socket into glove box assembly and rotate clockwise to lock in position.
2. Install glove box assembly. Refer to [IP-22, "Removal and Installation"](#).

Bulb Replacement

INFOID:000000008769732

The glove box lamp bulb is serviced as part of the glove box lamp socket. Refer to [INL-65, "Removal and Installation"](#).

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STEP LAMP

< REMOVAL AND INSTALLATION >

STEP LAMP

Bulb or Lens Replacement

INFOID:000000008748315

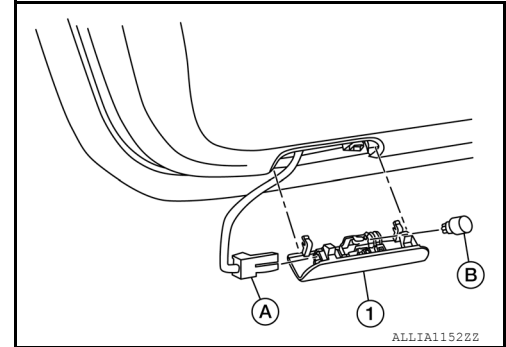
WARNING:

Do not touch bulb while it is lit or right after being turned OFF. Burning may result.

CAUTION:

Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.

1. Release the front step lamp pawls using a suitable tool and remove.
2. Disconnect the harness connector (A) from the front step lamp (1).
3. Remove front step lamp bulb (B).



4. Install the front step lamp bulb.
5. Connect the harness connector to the front step lamp.
6. Install the front step lamp.

PERSONAL LAMP

< REMOVAL AND INSTALLATION >

PERSONAL LAMP

Removal and Installation

INFOID:000000008748318

CAUTION:

Do not attempt to separate the personal lamp rear from the headlining or damage to the components may occur.

The personal lamp rear is replaced as part of the headlining. Refer to [INT-30. "Removal and Installation"](#).

Bulb or Lens Replacement

INFOID:000000008748319

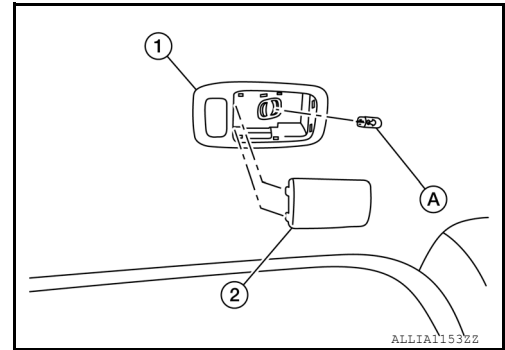
WARNING:

Do not touch bulb while it is lit or right after being turned OFF. Burning may result.

CAUTION:

Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.

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



3. Install personal lamp bulb to personal lamp rear.
4. Install the personal lamp rear lens.

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TRUNK ROOM LAMP

< REMOVAL AND INSTALLATION >

TRUNK ROOM LAMP

Removal and Installation

INFOID:000000008748321

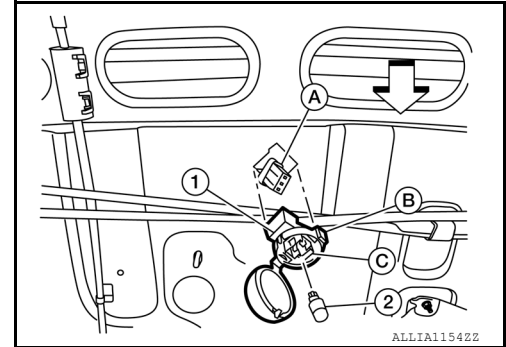
WARNING:

Do not touch bulb while it is lit or right after being turned OFF. Burning may result.

CAUTION:

Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.

1. Release the tab (B) to open the lens.
⇐: Front
2. Remove the trunk room bulb (2).
3. Release tab (C), then pull trunk room lamp (1) down to remove.
4. Disconnect the harness connector (A) from the trunk room lamp and remove.



INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:000000008748322

WARNING:

Do not touch bulb while it is lit or right after being turned OFF. Burning may result.

CAUTION:

Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.

1. Release the tab to open the lens.
2. Remove bulb from trunk room lamp.
3. Install bulb to trunk room lamp.
4. Close lens.

ILLUMINATION CONTROL SWITCH

< REMOVAL AND INSTALLATION >

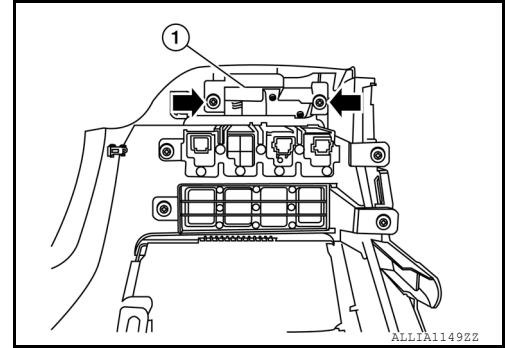
ILLUMINATION CONTROL SWITCH

Removal and Installation

INFOID:000000008748323

REMOVAL

1. Remove the instrument lower panel LH. Refer to [IP-21. "Removal and Installation"](#).
2. Remove screws (➡) and remove illumination control (1).



INSTALLATION

Installation is in the reverse order of removal.

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SERVICE DATA AND SPECIFICATIONS (SDS)

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SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000007986965

Item	Wattage (W)*
Front room/map lamp	LED
Vanity mirror lamp	1.8
Glove box lamp	-
Front step lamp	3.8
Personal lamp rear	8
Trunk room lamp	3.4

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