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2016 Pathfinder

# **CONTENTS**

PRECAUTION3
PRECAUTIONS
PREPARATION4
PREPARATION
SYSTEM DESCRIPTION5
COMPONENT PARTS5Component Parts Location5Component Description5
SYSTEM6
INTERIOR ROOM LAMP CONTROL SYSTEM6 INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram
ILLUMINATION CONTROL SYSTEM7 ILLUMINATION CONTROL SYSTEM : System Diagram
ILLUMINATION CONTROL SYSTEM : System Description
DIAGNOSIS SYSTEM (BCM)8
COMMON ITEM
INT LAMP9 INT LAMP : CONSULT Function (BCM - INT

BATTERY SAVER
ECU DIAGNOSIS INFORMATION11
<b>BCM</b> 11 List of ECU Reference11
WIRING DIAGRAM12
INTERIOR ROOM LAMP CONTROL SYSTEM
12 Wiring Diagram12
ILLUMINATION
BASIC INSPECTION45
DIAGNOSIS AND REPAIR WORKFLOW45 Work Flow45
DTC/CIRCUIT DIAGNOSIS48
POWER SUPPLY AND GROUND CIRCUIT48
BCM : Diagnosis Procedure48
IPDM E/R (INTELLIGENT POWER DISTRIBU- TION MODULE ENGINE ROOM)48 IPDM E/R (INTELLIGENT POWER DISTRIBU- TION MODULE ENGINE ROOM) : Diagnosis Pro- cedure48
BATTERY SAVER OUTPUT/POWER SUP-
PLY CIRCUIT         50           Description         50
Component Function Check50
Diagnosis Procedure50

INTERIOR ROOM LAMP CONTROL CIRCUIT	Bulb Replacement62
<b>52</b> Description	FOOT LAMP 63
Component Function Check 52	DRIVER SIDE63
Diagnosis Procedure 52	DRIVER SIDE : Exploded View63
STEP LAMP CIRCUIT54	DRIVER SIDE : Removal and Installation 63
Description	DRIVER SIDE : Bulb Replacement63
Component Function Check	PASSENGER SIDE63
Diagnosis Procedure	PASSENGER SIDE : Exploded View
	PASSENGER SIDE : Bulb Replacement
PUSH-BUTTON IGNITION SWITCH ILLUMI-	
NATION CIRCUIT56	FRONT STEP LAMP65
Description	Exploded View65
Component Function Check	Removal and Installation65
Diagnosis Procedure 56	Bulb or Lens Replacement65
SYMPTOM DIAGNOSIS58	PERSONAL LAMP 66
	Removal and Installation66
INTERIOR LIGHTING SYSTEM SYMPTOMS 58	Bulb or Lens Replacement66
Symptom Table58	CARCOLAMR
REMOVAL AND INSTALLATION59	CARGO LAMP67
NEMOVAE AND INOTALEATION	Exploded View
FRONT ROOM/MAP LAMP ASSEMBLY 59	Removal and Installation
Exploded View59	Bulb or Lens Replacement67
Removal and Installation 59	ILLUMINATION CONTROL SWITCH 68
Bulb or Lens Replacement 60	Removal and Installation68
VANITY LAMP61	SERVICE DATA AND SPECIFICATIONS
Exploded View	
Removal and Installation	(SDS)69
Bulb or Lens Replacement	SERVICE DATA AND SPECIFICATIONS
·	(SDS)
GLOVE BOX LAMP62	Bulb Specifications
Exploded View 62	Baild Opcomoditions09

#### **PRECAUTIONS**

#### < PRECAUTION >

# **PRECAUTION**

#### **PRECAUTIONS**

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRF-TFNSIONER"

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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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see 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 Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery or batteries, and wait at least three minutes before performing any service.

Precaution for Work

- 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.

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#### **PREPARATION**

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# **PREPARATION**

# **PREPARATION**

Special Service Tool

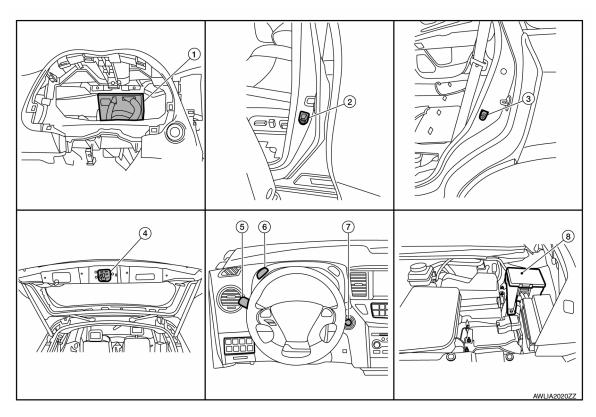
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Tool number (TechMate No.) Tool name		Description
— (J-46534) Trim Tool Set	AWJIA0483ZZ	Removing trim components

# SYSTEM DESCRIPTION

# **COMPONENT PARTS**

# **Component Parts Location**



- BCM (view with combination meter re- 2. moved)
- 4. Back door lock assembly (door ajar switch)
- 7. Push-button ignition switch
- Front door switch LH (RH similar)
- Combination switch (lighting and turn signal switch)
- 8. IPDM E/R

- Rear door switch LH (RH similar)
- 6. 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.
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 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 about the combination switch (lighting and turn signal switch) position.
Back door lock assembly (door ajar switch)	Provides back door OPEN/CLOSED status to the BCM.
Illumination control switch	Controls the meter and illumination system brightness.

Revision: November 2015 INL-5 2016 Pathfinder

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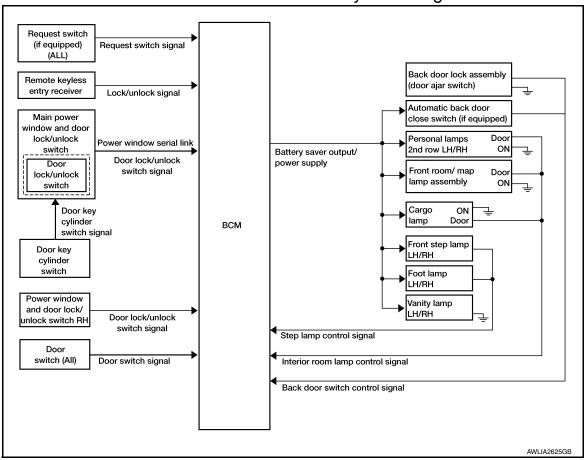
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#### SYSTEM

#### INTERIOR ROOM LAMP CONTROL SYSTEM

# INTERIOR ROOM LAMP CONTROL SYSTEM: System Diagram

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# INTERIOR ROOM LAMP CONTROL SYSTEM: System Description

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#### OUTLINE

- Front room/map lamp, personal lamps 2nd row and cargo lamp are controlled by the interior room lamp timer control function of the BCM when the lamp switch is in the DOOR position.
- Step lamps (if equipped) and foot lamps (if equipped) are controlled by the step lamp control function of the 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 <u>DLK-33</u>, <u>"WELCOME LIGHT FUNCTION: System Description"</u>.

#### 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, power window and door lock/unlock switch RH 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, power window and door lock/unlock switch RH 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

#### < SYSTEM DESCRIPTION >

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 10 minutes after the ignition switch is turned OFF. The BCM controls power or ground to all interior lamps.

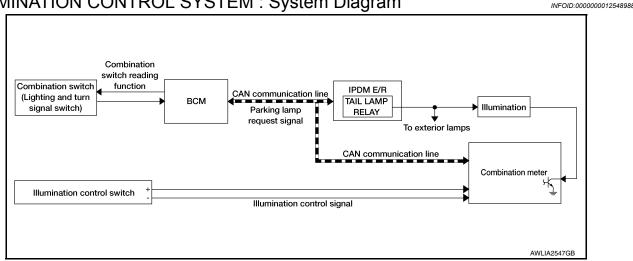
Vanity lamps (if equipped) are controlled by the battery saver control function of the BCM.

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, power window and door lock/unlock switch RH or when the front door lock assembly LH (key cylinder switch) is locked or unlocked.
- A door is opened or closed.

#### ILLUMINATION CONTROL SYSTEM

# ILLUMINATION CONTROL SYSTEM: System Diagram



# ILLUMINATION CONTROL SYSTEM: System Description

INFOID:0000000012548989

The illumination lamps operation is dependent upon the position of the combination switch (lighting and turn signal switch). When the combination switch (lighting and turn signal switch) is placed in the AUTO (if equipped) or parking lamp position the BCM (body control module) receives input requesting the parking lamps to illuminate. This input is communicated to the IPDM E/R (intelligent power distribution module engine room) via the CAN communication lines. The CPU (central processing unit) of the IPDM E/R controls the tail lamp relay coil. When energized, this relay directs power to the parking and illumination lamps, which then illuminate. The illumination brightness can be controlled by the illumination control switch.

#### BATTERY SAVER CONTROL

When the combination switch (lighting and turn signal switch) is in the AUTO (if equipped) or parking lamp position and the ignition switch is turned from ON or ACC to OFF, the battery saver control feature is activated. Under this condition, the illumination lamps remain illuminated for 45 seconds 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 lamps are turned off after a 30 seconds delay. When the combination switch (lighting and turn signal switch) is turned from OFF to AUTO (if equipped) or parking lamp position after illumination lamps have been turned off by the battery saver control, the illumination lamps illuminate again.

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# **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

# **DIAGNOSIS SYSTEM (BCM)**

**COMMON ITEM** 

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000012964831

#### CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF  $\rightarrow$  ON (for at least 5 seconds)  $\rightarrow$  OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and no-start condition.

#### 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> <li>The vehicle specification can be read and saved.</li> <li>The vehicle specification can be written when replacing BCM.</li> </ul>
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

#### SYSTEM APPLICATION

BCM can perform the following functions.

				Direct [	Diagnosti	c Mode		
System	Sub System	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			×	×	×		
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			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				

# **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

				Direct D	Diagnosti	c Mode		
System	Sub System	ECU Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Signal buffer system	SIGNAL BUFFER			×	×			
TPMS	AIR PRESSURE MONITOR		×	×	×			

# INT LAMP

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

#### INFOID:0000000012964833

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#### **CAUTION:**

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF  $\rightarrow$  ON (for at least 5 seconds)  $\rightarrow$  OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and no-start condition.

#### 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 back door 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.	
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**

#### NOTE:

The items listed below are the only applicable Work Support items for this vehicle. If other items are displayed on CONSULT, do not use or change the setting for these other items.

Revision: November 2015 INL-9 2016 Pathfinder

# **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

Support Item	Setting	Description
SCENARIO LIGHTING SETTING	On	NOTE:
SCENARIO LIGHTING SETTING	Off*	Do not use this function since interior room lamp control is changed.
SET I/L D-UNLCK INTCON	On	Interior room lamp timer function ON.
SET I/L D-UNLOR INTOON	Off*	Interior room lamp timer function OFF.
FOG LAMP OVERRIDE	On	Fog lamp override function ON.
FOG LAWIF OVERRIDE	Off*	Fog lamp override function OFF.

<sup>\*:</sup> Initial setting

# **BATTERY SAVER**

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

INFOID:0000000012964834

#### **CAUTION:**

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF  $\rightarrow$  ON (for at least 5 seconds)  $\rightarrow$  OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and no-start condition.

#### **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.
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 back door 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.
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].	

# **ECU DIAGNOSIS INFORMATION**

# **BCM**

List of ECU Reference

INFOID:0000000012548003	

ECU	Reference
	BCS-31, "Reference Value"
BCM	BCS-50, "Fail Safe"
BCIVI	BCS-51, "DTC Inspection Priority Chart"
	BCS-52, "DTC Index"

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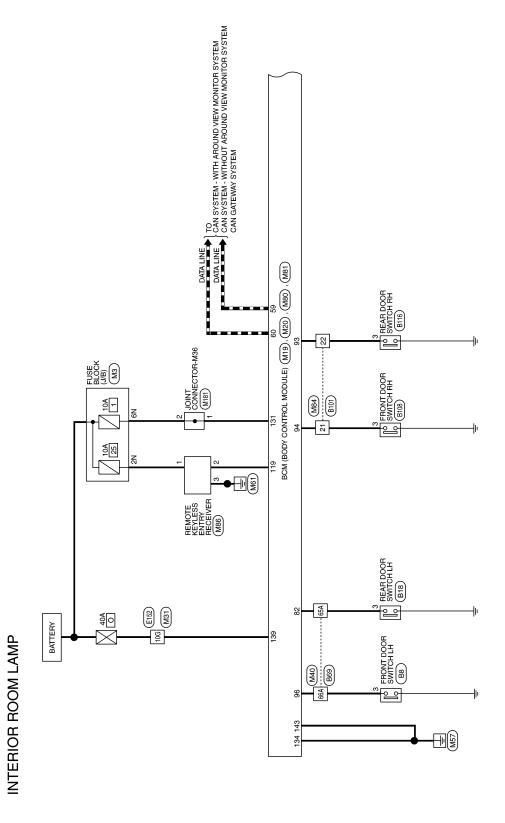
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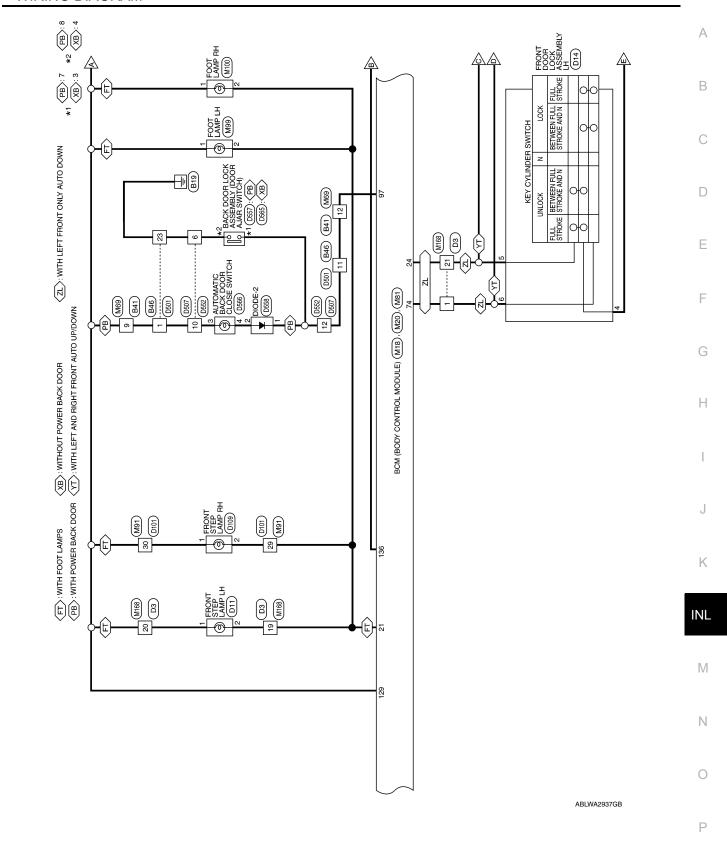
# **WIRING DIAGRAM**

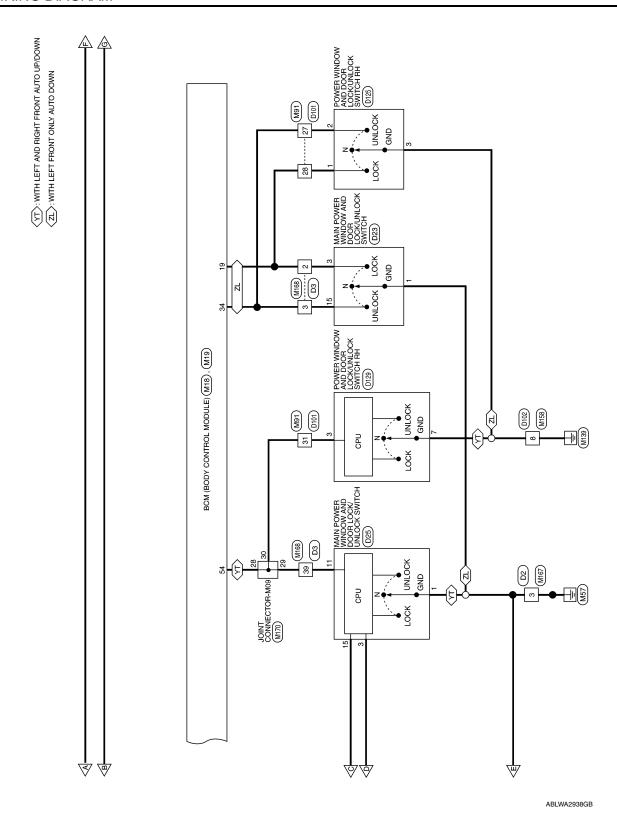
# INTERIOR ROOM LAMP CONTROL SYSTEM

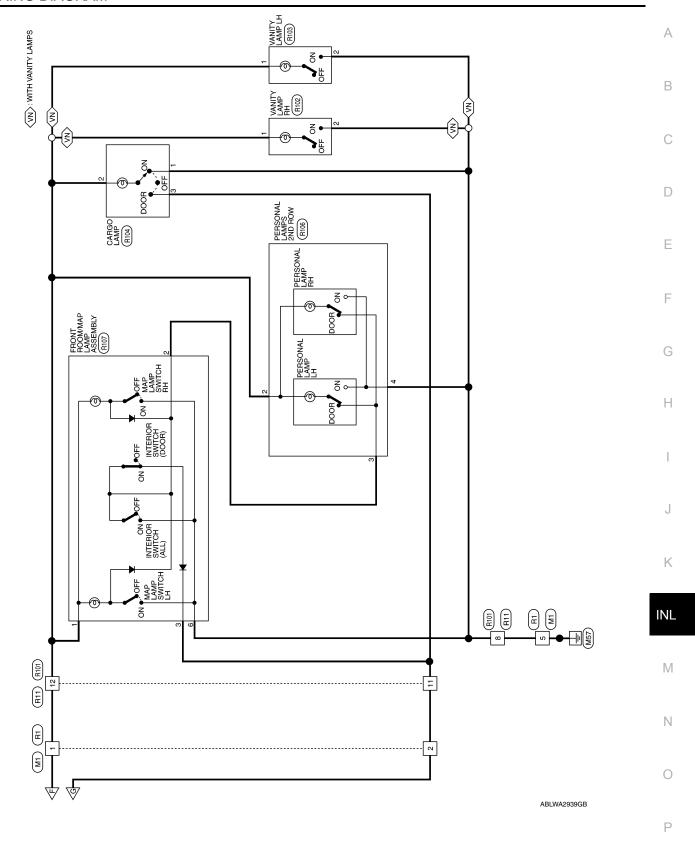
Wiring Diagram



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# INTERIOR ROOM LAMP CONNECTORS

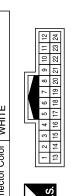
Connector No.	M1
Connector Name WIRE TO WIRE	WIRE TO WIRE
Connector Color WHITE	WHITE

Connector Name FUSE BLOCK (J/B)

M3

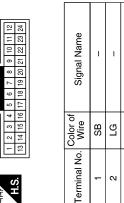
Connector No.

Connector Color WHITE



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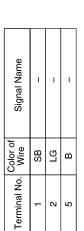
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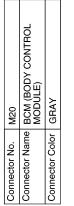
Color of Wire

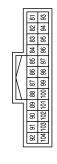
Terminal No.

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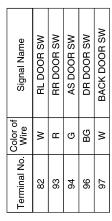
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Connector No.	M19
Connector Name	Connector Name   BCM (BODY CONTROL MODULE)
Connector Color BLACK	BLACK

BCM (BODY CONTROL MODULE)

Connector Name Connector Color

M18

Connector No.

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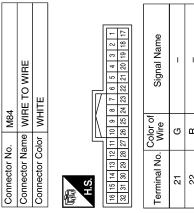
Signal Name	CENTRAL DOOR LOCK SW	STEP LAMP CONT	DOOR KEY/C UNLOCK SW	CENTRAL DOOR
Color of Wire	٨	Μ	SB	BB
Color of Wire	19	21	24	34

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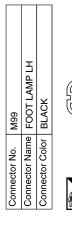
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11A   12A   12A   12A   12B	
Connector Name Connector Name Terminal No. With 668A W 666A By	
WHITE   WIRE TO WIRE   WHITE	
WHITE TO WIRE TO WIR	
MIST	
Connector Name Connector Name Connector Name [116]  Terminal No. (Col. 10G)  Total No. (W. W. W	
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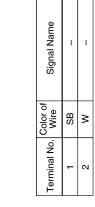
Revision: November 2015 INL-17 2016 Pathfinder

#### < WIRING DIAGRAM >

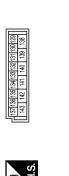


Signal Name	1	_	
Color of Wire	ŋ	ш	
Terminal No.	21	22	



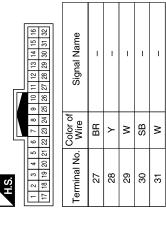


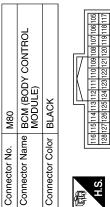




Signal Name	BATTERY SAVER OUT	BAT BCM FUSE	GND 2	ROOM LAMP CONT	BAT POWER F/L	GND 1
Color of Wire	SB	Μ	В	LG	Μ	В
Terminal No.	129	131	134	136	139	143

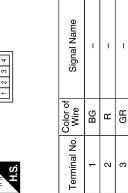
M91	WIRE TO WIRE	WHITE
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE







Connector Color BLACK	Connector Name REMOTE KEYLESS ENTRY RECEIVER	Connector No. M86
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#### < WIRING DIAGRAM >

Revision: November 2015 INL-19 2016 Pathfinder

Connector No. B8 Connector Name FRONT DOOR SWITCH LH Connector Color WHITE  Terminal No. Wire Signal Name  3 L -	Connector No.   B46   Connector Name   WIRE TO WIRE   Connector Color   WHITE   Connector Color   WHITE   Connector Color   WHITE   Connector Color   Color of   Co
Terminal No. Wire Signal Name Con 10G P – Con	Connector No.   B41   Connector Name   WIRE TO WIRE   Connector Color   WHITE   Connector Color   WHITE   Connector Color   WHITE   Connector Color   Connector Color   Connector Color   Connector Color
Connector No.   E152   Connector Name   WIRE TO WIRE	Connector No. B18 Connector Name REAR DOOR SWITCH LH Connector Color WHITE  Terminal No. Color of Signal Name  3 SB -

#### < WIRING DIAGRAM >

Connector No.   B101	Connector No.   R1   Connector Name   WIRE TO WIRE   Connector Color   WHITE   Connector Color   WHITE   Connector Color   WHITE   Connector Color   WHITE   Color of   Color of   Signal Name   Color of   Signal Name   Color of   Signal Name   Color of   Color o	A B C D
Signal Name	B116 REAR DOOR SWITCH RH WHITE  I 2 3 4  or of Signal Name  G	F G
Terminal No. Color of Wire 65A SB 66A L	Connector No. B116 Connector Name REAR I Connector Color WHITE H.S.  3 LG	H
E	OOR SWITCH RH  Signal Name	K
Connector No.   B69	nector No. B108 nector Name FRONT D nector Color WHITE  S. Color of 3 LG	M N
	ABLIA7126GB	О Р

Revision: November 2015 INL-21 2016 Pathfinder

#### < WIRING DIAGRAM >

Connector No. Connector Name	. R11 me WIRE TO WIRE	Connector No. R101 Connector Name WIRE TO WIRE Connector Color WHITE	Connector No. R102 Connector Name VANITY LAMP RH Connector Color WHITE
H.S.	2 3 4 5 6 7 8 9 10 11 12 3 14 15 16 17 18 19 20 21 22 23 24	H.S. (12   11   10   9   8   7   6   5   4   3   2   1	H.S.
Terminal No.	Color of Wire Signal Name B –	Terminal No. Wire Signal Name 8 B –	Terminal No. Wire Signal Name
-	я 1		2 B
12	5	5 21	
Connector No.	. R103	Connector No. R104	Connector No. R106
Connector Name VANITY Connector Color WHITE	Connector Name VANITY LAMP LH Connector Color WHITE	Connector Name CARGO LAMP Connector Color WHITE	Connector Name PERSONAL LAMPS 2ND ROW
		<b>€</b>	Connector Color WHITE
HS	1-	H.S.	H.S.
Terminal No.	Color of Signal Name	Terminal No. Wire Signal Name	Terminal No. Wire Signal Name

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#### < WIRING DIAGRAM >

	23 22 1		X Z		А
TO WIRE	10 9 8 7 6 5 4 30 29 28 27 28 25 24 24	Signal Name	D23 MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (WITH LEFT FRONT ONLY AUTO DOWN) WHITE  6 5 4	Signal Name GND LOCK CDL UNLOCK CDL	В
me WIRE Tailor WHITE	77 16 15 14 13 12 11 12 11 13 37 38 38 38 38 31 31	Color of Wire BR P Y Y SB SB Y	MAIN PA SWITCH SWITCH FRONT FRONT [2   5   4   C   8   9   10   11   11   11   11   11   11	Color of Wire BR 4 BR	
Connector No. D3  Connector Name WIRE TO WIRE  Connector Color WHITE	H.S.  20 19 18 17 16  40 39 38 37 38	Terminal No. 2 2 3 3 20 20 21 39 39	Connector No.  Connector Color  Connector Color	7 1 3 3 15 15 15 15 15 15 15 15 15 15 15 15 15	D
					E F
		e E	X X	9 8	
D2 WIRE TO WIRE WHITE	12 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Signal Name	D14 FRONT DOOR LOCK ASSEMBLY LH GRAY  2 3 4 5 6	Signal Name	G H
	7 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	Color of Wire B		Color of Wire BR BB BR	11
Connector No. Connector Name Connector Color	是 S:H	Terminal No.	Connector No. Connector Color Connector Color	Terminal No.	1
					J K
		0			
OOM/MAP SEMBLY	8 2	Signal Name	Connector No. D11 Connector Name FRONT STEP LAMP LH Connector Color WHITE	Signal Name	INL
R107 EAMP AS:	2 8 4 5	Color of Wire B B B B B B B B B B B B B B B B B B B	P FRONT S WHITE	Color of Wire Color of A	M
Connector No. R107 Connector Name FRONT ROOM/MAP LAMP ASSEMBLY Connector Color WHITE	φ; • φ;	7 Con	Connector No. Connector Color Connector Color	Terminal No. Co	N
	E T	Ten		ABLIA7128GB	0
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Revision: November 2015 INL-23 2016 Pathfinder

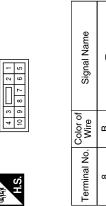
#### < WIRING DIAGRAM >



MAIN POWER WINDOW
AND DOOR LOCK/UNLOCK
SWITCH (WITH LEFT AND
RIGHT FRONT AUTO
UP/DOWN)

Connector Name

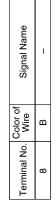
Connector No.

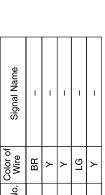


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WHITE

Connector Color





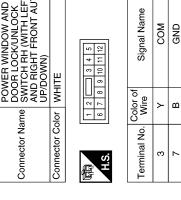
Signal Name	ı	1	ı	ı	-
Color of Wire	BR	У	Υ	ГG	У
Terminal No.	27	28	59	30	31

Signal Name	GND	KEY CYL LOCK	COM	UNLOCK CDL	
Color of Wire	В	BR	٨	as	
No.					

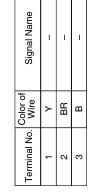
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**Terminal** 

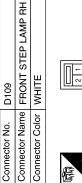


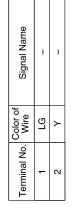


D125	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEF FRONT ONLY AUTO DOWN)	/HITE	
Connector No. D	Connector Name S F F	Connector Color WHITE	



Connector No.







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#### < WIRING DIAGRAM >

Connector No. D552 Connector Name WIRE TO WIRE Connector Color WHITE	Ool	Terminal No. Wire Signal Name 6 B -	10 P - 12 G - 1		Connector No. D565  BACK DOOR LOCK Connector Name ASSEMBLY (WITHOUT POWER BACK DOOR) Connector Color WHITE	Terminal No. Wire Signal Name	3 G
D507 WIRE TO WIRE WHITE	15 14 15	Wire Signal Name  B	BR – (WITHOUT POWER BACK DOOR)	P – (WITH POWER BACK DOOR)	D558 DIODE-2 BLACK	Color of Signal Name	BB
Connector No. Connector Color	v;	Terminal No. W	10 B 12 L	12	Connector No. Connector Color	Terminal No. With	- °
	16 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Signal Name	– (WITHOUT POWER BACK DOOR)	- -	OCK ITH POWER	Signal Name	1 1
Connector No. D501 Connector Name WIRE TO WIRE Connector Color WHITE	24 23 22 21 20 19	Terminal No. Wire Signs	'	B	Connector No. D557  BACK DOOR LOCK Connector Name ASSEMBLY (WITH POWER BACK DOOR)  Connector Color WHITE  TITT 2 3  H.S.	Terminal No. Wire Signa	<b>Б</b> п

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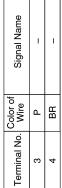
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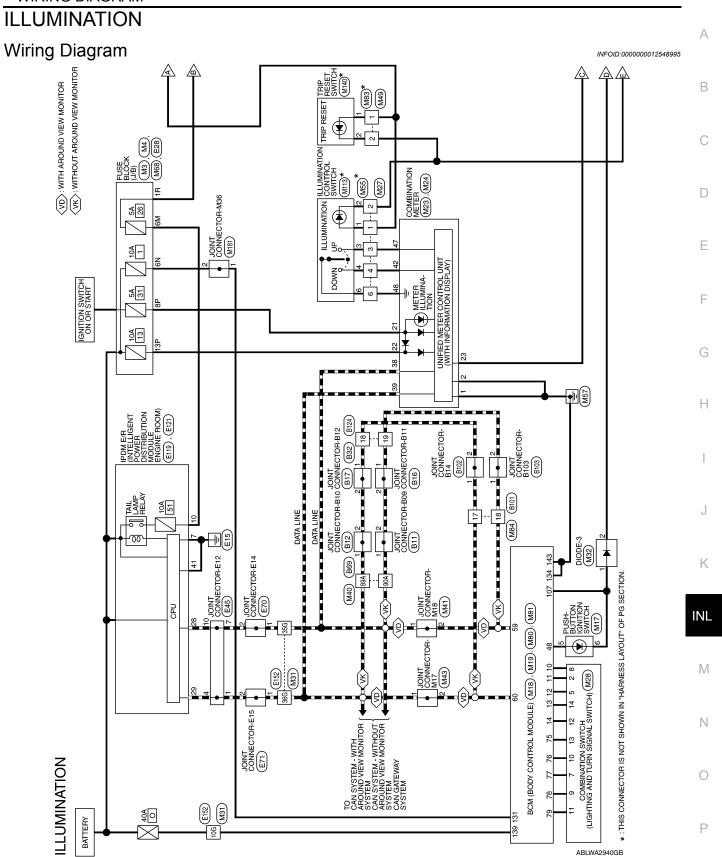
D566	Connector Name AUTOMATIC BACK DOOR CLOSE SWITCH	GREEN
Connector No.	Connector Name	Connector Color GREEN

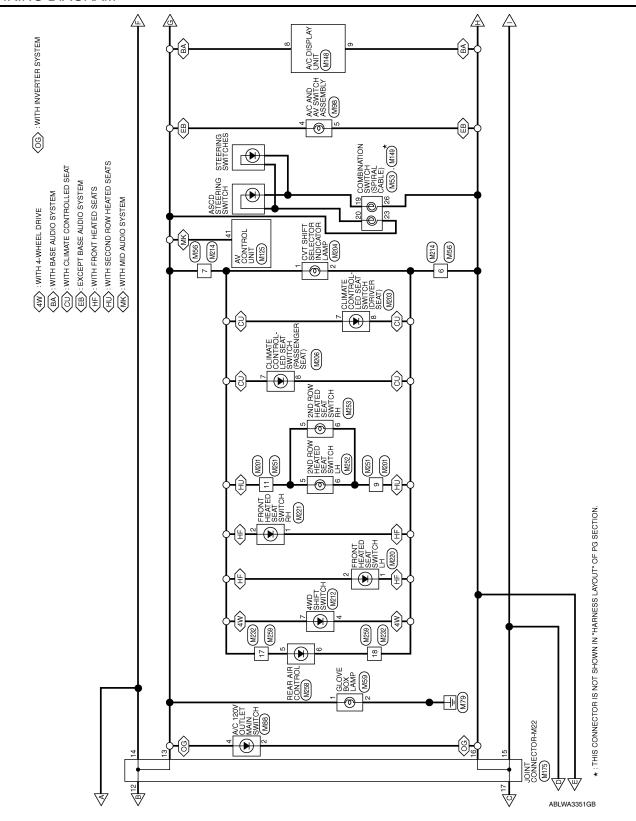


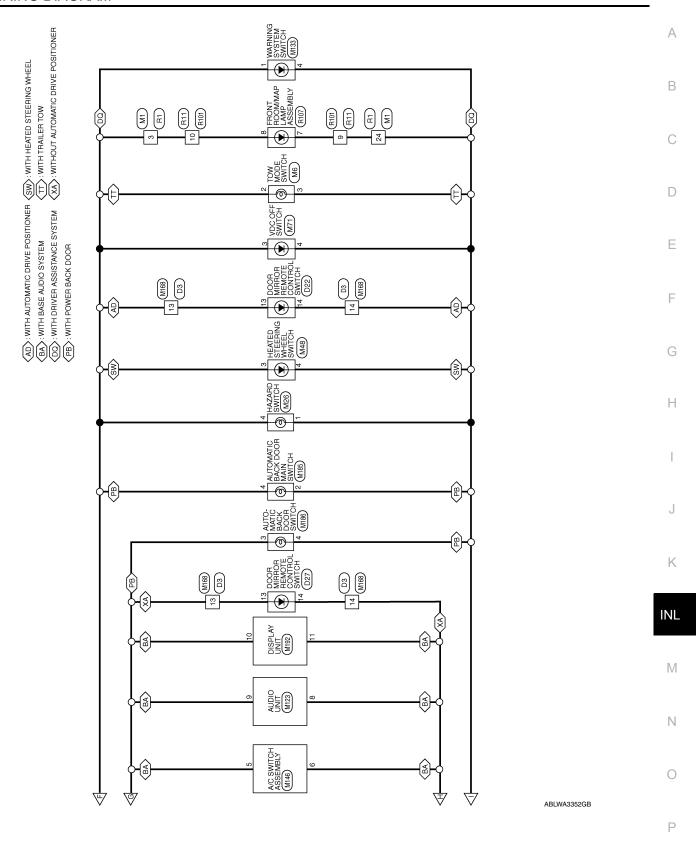


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4 2	Color of Wire	Ь	
H.S.	erminal No.	3	

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Connector Name FUSE BLOCK (J/B)

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Connector No.

Connector Color WHITE

# ILLUMINATION CONNECTORS

IRE

Connector No. M1 Connector Name WIRE TO WIRE	o. ame	Z Z	=   \frac{1}{2}	پيز ا	12	>	⊑	- liii				Connec
J.	Connector Color WHITE	_	٨H	빌	l l							Connec
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	13 14 15 16 17 18 19 20 21 22 23 24	12	16	17	8	6	ಜ	72	ដ	33	54	2

5 6 7 8 9 10 11 12	13 14 15 16 17 18 19 20 21 22 23 24	Signal Name	ı	1
2 3 4	3 14 15 16	Color of Wire	æ	В
	ς ξ	Color of Terminal No. Wire	က	24

Signal Name	-	-	
Color of Wire	BG	M	
Terminal No.	8P	13P	

Signal Name

Color of Wire ≥

Terminal No. N9

7N 6N 5N 4N

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)	BG	Μ		M18
	8P	13P		Connector No.
			•	

M17	PUSH-BUTTON IGNITION SWITCH	WHITE	

Connector Name BCM (BODY CONTROL MODULE)

GREEN

Connector Color



Signal Name	-	ı	
Color of Wire	В	W	
Terminal No.	5	9	

COMBI SW IN 5

Signal Name

Color of Wire

Terminal No. 9 COMBI SW IN 3 COMBI SW IN 2

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COMBI SW IN 1

COMBI SW IN 4

BG ≥

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Connector Name TOW MODE SWITCH

9W

Connector No.

Connector Color GRAY



Signal Name	1	1	
Color of Wire	ш	В	
Terminal No.	2	3	

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	Connector Name COMBINATION METER	ITE	22 51 50 49 48 47	Signal Name	ILLUMI DOWN SW	ILLUMI UP SW	GND MS
. M23	me CO	lor WHITE	46 45	Color of Wire	>	BB	១
Connector No.	Connector Na	Connector Color	所 H.S.	Terminal No.	42	47	48

		_	_		_	_		$\overline{}$
Signal Name	HIGH SIDE START SW LED	CAN-L	CAN-H	COMBI SW OUT 5	COMBI SW OUT 4	COMBI SW OUT 3	COMBI SW OUT 2	COMBI SW OUT 1
Color of Wire	ш	Ь	Τ	BG	Ь	н	В	W
Terminal No.	48	59	09	75	92	77	78	79

				41	61
			1	43 42	62
				43	63
				4	64
	7			45	65 64 63 62
	ΙΉ			59 58 57 56 55 54 53 52 51 50 49 48 47 46 45	99
	Ż			47	67
	8			48	89
	≿		l 17	49	69
			I IV	20	70
	BCM (BOE MODULE)	X	IN	51	71
6	≅ <u>Q</u>	AC		52	72
M19	B M M	BLACK		53	73
	(I)	_		54	74
	Ē	ᅙ		55	75
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ō	Ö	ō		57	77
ect	ect	ect	- 6	28	78
n I	lu	n	H.S.	59	80 79 78 77 76 75 74 73 72 71 70 69 68 67 66
Connector No.	Connector Name   BCM (BODY CONTROL   MODULE)	Connector Color	E T	99	80

	HAZARD SWITCH	WHITE	4 3 2 1	Signal Name	-	1
. M26	me HA			Color of Wire	В	æ
Connector No.	Connector Name	Connector Color	明.S.	Terminal No.	1	4

Signal Name	GND 1	GND 2	NSI	ВАТ	ILLUMI CONT OUT	CAN-L	CAN-H	
Color of Wire	В	В	BG	>	В	Ь	_	
Terminal No.	-	2	21	22	23	38	39	

Connector No.	É	ect	ō	ž		_	M24	4												
Connector Name COMBINATION METER	É	ect	or	ž	m	(I)	8	⅀	둞	₹	$\cong$	Z	₹	툐	H					
Connector Color	É	ect	ō	ပြ	olo	-	≶	WHITE	ш											
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4	H.S.	46					L					_								
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20	19	18	19 18 17 16 15 14 13 12 11 10	16	15	4	13	12	Ξ	9	6	8	7	9	2	4	က	2	-	
40	39	38	40 39 38 37 36 35 34 33 32 31 30 29 28	36	35	34	33	32	31	30	29	28	27 26 25 24	26	25	24	23	22	21	
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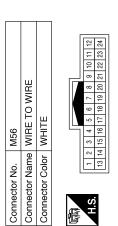
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**INL-31** Revision: November 2015 2016 Pathfinder

Connector No.	lo. M27	Connector No. M27 Connector Name WIRE TO WIRE		Connector No.	o. M28	Connector No. M28 Connector Name COMBINATION SWITCH	Terminal No.	Color of Wire	Signal Name	
Connector Color	olor	WHITE		Connector Color	olor WHITE		10	Ь	1	
	-				_	1	11	M	1	
							12	۵	ı	
		4 3 2 1			1 2	3 4 5 6	13	BG	1	
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Terminal No.	Color of Wire	Signal Name		Terminal No.	Color of Wire	Signal Name				
F	ш	1		2	BG	1				
2	В	ı		5	œ	ı				
ო	ВВ	ı		7	œ	ı				
4	>	ı		8	8	1				
9	ŋ	ı		6	ŋ	1				
Connector No.				Terminal No.	Color of Wire	Signal Name	Connector No.			
Connector Name		WIRE TO WIRE		106	>		Connector Name		)E-3	Τ
Connector Color	-	WHITE		35.6	۵ ۵		Connector Color	olor BLACK	X	
			_	5	-	ı		l		
				36G	_	ı	管			
H.S.		1G 2G 3G 4G 5G 6G 7G 8G 9G 10G					H.S.		- 1	
	11G12G13	116126136146156166176186196206216					- C	Color of		
	22G20	3G 24G 25G 26G 27G 28G 29G 30G					l erminal No	. Wire	Signal Name	1
	31G32G33	31G32G33G34G35G36G37G38G39G40G41G					-	>	ı	
	426 43	3G 44G 45G 46G 47G 48G 49G 50G					2	В	ı	
	51G 52G 53	51G52G53G54G55G56G57G58G59G60G61G								
	0570	novinsa noonvanoonca nada								
	71G72G73	71G72G73G74G75G77G77G78G79G80G81G 82G83G84G85G86G87G88G89G90G								
		91G 92G 93G 94G 95G 96G 97G 98G 99G 100G								

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			А
	Signal Name -	1	В
Connector No. M41  Connector Color of Signal 1  Terminal No. Wire Signal 1  Connector Name WIRE TO WIRE Connector Color of M49  Connector Name WIRE TO WIRE Connector Color of M41  Connector Color of M49	Terminal No. Wire	B B	D
Conne Conne Conne La	Term		Е
			F
M48 HEATED STEERING WHEEL SWITCH BLUE	Signal Name	1	G
	Color of Wire R	Δ	Н
Connector No. Connector No. Connector Color Connector Color Connector Color	Terminal No.	4	I
			J K
M40   Connector Name   WIRE TO WIRE   Connector Name   WIRE TO WIRE   Connector Color   GRAY   SA   A   A   A   A   A   A   A   A	Signal Name	1	INL
M40   GRAY   G	Color of Wire	_	N
Connector No.   M40	Terminal No.	2	0
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Connector Name | WIRE TO WIRE

Connector Name | COMBINATION SWITCH (SPIRAL CABLE)

M53

Connector No.

YELLOW

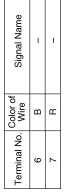
Connector Color

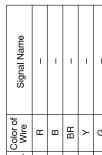
Connector No. M55

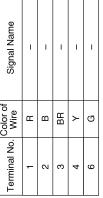
Connector Color WHITE

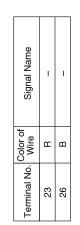
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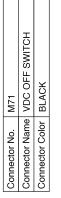
Signal Name	-	1
Color of Wire	В	В
Terminal No.	9	7

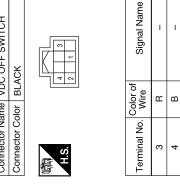


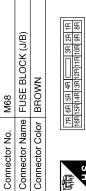


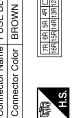












Signal Name	ı
Color of Wire	Œ
Terminal No.	1B

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	VE BOX LAMP	TE	
M59	GLC	MH	\
Connector No.	Connector Name   GLOVE BOX LAMP	Connector Color WHITE	H.S.





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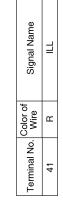
Connector No. M80 Connector Name BCM (BODY CONTROL MODULE) Connector Color BLACK	Connector No. M81 Connector Name BCM (BODY CONTROL MODULE) Connector Color WHITE	Connector No. M83 Connector Name WIRE TO WIRE Connector Color WHITE
(116) 118   114   118	[[148] [148] [14] [140] [188] [188] [188] [188]	H.S.
Terminal No. Color of Signal Name  LOW SIDE  START SW LED	Terminal No.         Color of Wire         Signal Name           131         W         BAT BCM FUSE           134         B         GND 2           139         W         BAT POWER F/L           143         B         GND 1	Terminal No. Wire Signal Name
Connector No. M84  Connector Name WIRE TO WIRE  Connector Color WHITE  H.S.  16 15 14 13 12 11 10 10 9 8 7 6 5 4 3 2 11  28 31 30 29 28 27 26 25 24 23 22 120 19 18 17	Connector No. M88 Connector Name A/C 120V OUTLET MAIN SWITCH Connector Color BLACK	Connector No. M98  Connector Name A/C AND AV SWITCH ASSEMBLY Connector Color WHITE  ##S.   2   4   6   8   10   12   14   16   13   5   7   9   11   13   15   15   15   15   15   15
Terminal No. Color of Signal Name  17 L –  18 P –	Terminal No. Wire Signal Name 2 B - 4 R	Terminal No. Color of Signal Name 4 R - 5 B
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Signal Name

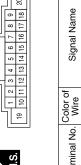
Terminal No. ω 6

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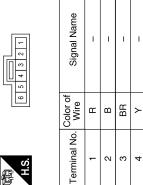


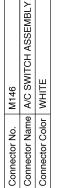
Connector No. M123



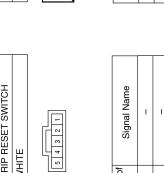


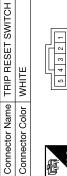
Connector Color WHITE	Connector No.	Connector No.  Connector Name ILLUMINATION CONTROL SWITCH
	Connector Color	WHITE
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Connector No. M140

M133

Connector No.

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Sig		
Color of Wire	Я	В
Terminal No.	1	2

Signal Name

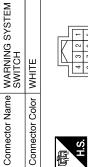
Terminal No.

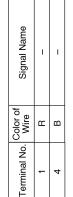
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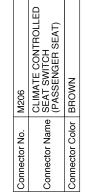
Connector No. M168 Connector Name WIRE TO WIRE Connector Color WHITE  H.S.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 39 31 32 23 34 35 37 38 39 40 21 21 22 23 24 25 26 27 28 29 39 31 32 23 34 35 37 38 39 40 21 21 21 22 23 24 25 26 27 28 29 39 31 32 23 34 35 37 38 39 40 21 21 21 21 23 24 25 26 27 28 29 39 31 32 23 34 35 37 38 39 40 21 21 21 21 23 24 25 26 27 28 29 39 31 32 23 34 35 37 38 39 40 21 21 21 21 21 21 21 21 21 21 21 21 21	Connector No. M185 Connector Name AUTOMATIC BACK DOOR MAIN SWITCH Connector Color WHITE	al No. Color of Wire Signa B	π 1
Connector No. M149 Connector Name COMBINATION SWITCH (SPIRAL CABLE) Connector Color GRAY  LAS.   Zeligiti is 14 13  Terminal No. Wire Signal Name  19 Y -  20 W -	Connector No. M181 Connector Name JOINT CONNECTOR-M36 Connector Color WHITE  MATE  A.S.  M181  Connector Name JOINT CONNECTOR-M36  Connector Color M181  M18	al No. Color of Signal Name W -	M N
Connector No. M148 Connector Name A/C DISPLAY UNIT Connector Color BLACK  H.S. Freminal No. Color of Signal Name  8 R -  9 B -  9 B -	Connector No. M175  Connector Name JOINT CONNECTOR-W22  Connector Color WHITE  M.S.	Color of Signa Wire Signa R	13 H

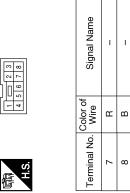
Revision: November 2015 INL-37 2016 Pathfinder

Connector Name WIRE TO WIRE Connector Color WHITE	Connector No.	M201
Connector Color WHITE	Connector Name	WIRE TO WIRE
	Connector Color	WHITE

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	7	16		
	9	13 14 15 16		
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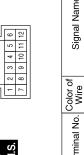
Signal Name	ı	1
Color of Wire	В	В
Terminal No.	6	11





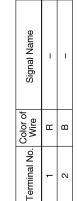


Connector No.	M192
Connector Name	Connector Name DISPLAY UNIT (WITH AUDIO SYSTEM)
Connector Color WHITE	WHITE
SH	1 2 3 4 5 6



Signal Name	ILL+	ILL-	
Color of Wire	В	В	
Terminal No.	10	1	

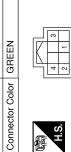
M204	Connector Name CVT SHIFT SELECTOR INDICATOR LAMP	BROWN	
Connector No.	Connector Name	Connector Color BROWN	





M186

Connector No.



Signal Name	1	1
Color of Wire	В	В
Terminal No.	3	4

M203	Connector Name SEAT SWITCH (DRIVER SEAT)	Sonnector Color WHITE	
Connector No.	ector Nar	ector Col	





Signal Name	I	-
Color of Wire	ш	В
Terminal No.	7	80

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	Connector No. M214	lo. M21	4	Connector No.	. M220	
Connector Name 4WD SHIFT SWITCH	Connector Name WIRE TO WIRE	lame WIR	E TO WIRE	Connector Na	me FRON	Connector Name FRONT HEATED SEAT
	Connector Color WHITE	Solor WHI	正		SWIT	SWITCH LH
				Connector Color WHITE	lor WHIT	Е
<u>∞</u> 4	H.S.	24 23 22 21	20 19 18 17 16 15 14 13	是 H.S.		6 2 6 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Signal Name	Terminal No. Wire	Color of Wire	Signal Name	Terminal No. Wire	Color of Wire	Signal Name
1	9	В	1	-	В	ı
1	2	æ	1	2	Œ	1

or No.	Connector No.   M251							
TO WIRE    Signal Name   Signa	Connector No.   M232	51	E TO WIRE	ПЕ	13   10   10   10   10   10   10   10		-	-
TO WIRE    Signal Name   Signa	Connector No.   M232	M2	me WIF	lor WH	16 15 14	Color of Wire	В	ш
Signal	Connector No.   M232	Connector No	Connector Na	Connector Co	同 H.S.	Terminal No.	6	11
	SEAT ame	Connector No. M232	Connector Name WIRE TO WIRE	Connector Color WHITE	S			α

5	FRONT HEATED SEAT SWITCH RH	BROWN	0   4   0	Signal Name	ı	ı
. M221			[0]	Color of Wire	В	ш
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	-	2

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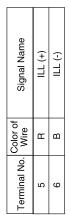
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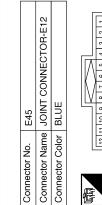
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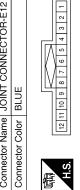
Revision: November 2015 INL-39 2016 Pathfinder



8 5 7 8 8 1 1 2 9 1 1 1 2 9 1 1 1 1 1 1 1 1 1 1 1	Signal Name	(+) IFF (+)	(-)
	Color of Wire	В	В
S.H	erminal No. Wire	5	9



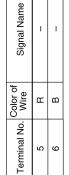




Signal Name	1	ı	ı	I
Color of Wire	7	7	۵	Ь
Terminal No. Wire	1	4	7	10

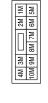


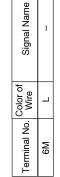




ı	_	
r	В	
Ω	9	

Connector No.	E28
Connector Name	Connector Name FUSE BLOCK (J/B)
Connector Color	WHITE
	4M 3M 7 2M 1M

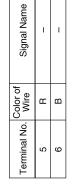




	HEATED TCH LH		
M252	2ND ROW H SEAT SWIT	WHITE	
Connector No.	Connector Name 2ND ROW HEATED SEAT SWITCH LH	Connector Color WHITE	







Connector No. M259 Connector Name WIRE TO WIRE Connector Color WHITE		.   발   호			M259 WIRE WHIT	<u> </u>	1 161 1 1/						
Ę	12	12 11 10 9	9	0	∞	7	9	5	4	က	2	-	
ίς	24	24 23 22 21 20 19 18 17 16 15 14 13	22	21	20	19	8	17	19	15	4	5	

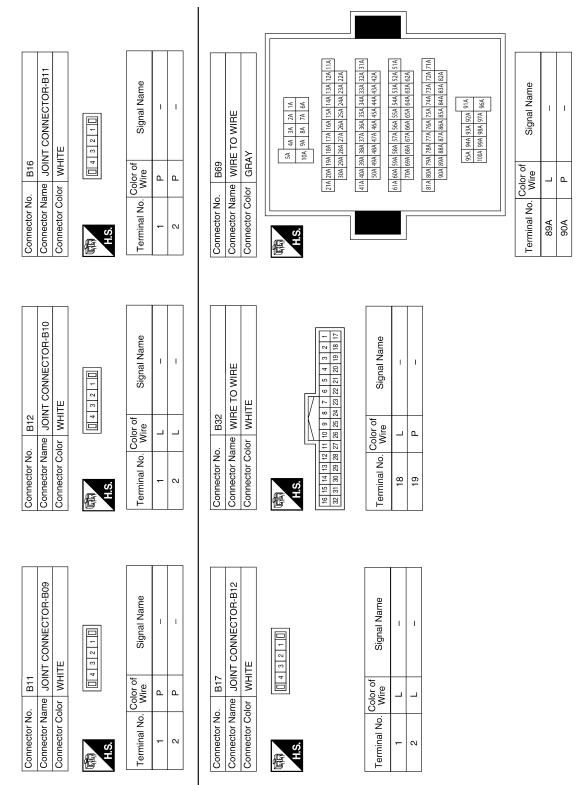
Signal Name	ı	_	
Color of Wire	ш	В	
Terminal No.	17	18	

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# < WIRING DIAGRAM >

No. E119  IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)  Color WHITE    20   21   22   23   24   25   26   27   28   29   31   32   33   34   34   42   43   44   45   46   49   50   30   34   34   35   37   38   39   40   41   42   43   44   45   46   40   50   30   34   35   35   37   38   39   40   41   42   43   44   45   46   40   50   30   34   35   35   37   38   39   40   41   42   43   44   45   46   49   50   30   34   35   35   37   38   39   40   41   42   43   44   45   46   40   50   30   34   35   35   35   37   38   39   40   41   42   43   44   45   46   40   50   50   30   30   30   30   30   3	Signal Name CAN-L CAN-H GAND (SIGNAL)	Signal Name	АВ
Connector No. E119  Connector Name POWER MODUL  Connector Color WHITE  (19 20 21 22 23 24 24 14)  H.S. (19 20 21 22 23 24 14)	Terminal No. Wire  28 P 29 L 41 B	Terminal No. Wire 10G P 35G P 36G L	C D
			E F
Vo. E71  Name JOINT CONNECTOR-E15  Solor BLACK  6 5 4 3 2 1	Color of Signal Name L L	NO.   E152   Solor   WHITE TO WIRE   Solor   WHITE   Solor   WHITE   Solor   WHITE   Solor   WHITE   Solor	G H
Connector No. Connector Color	Terminal No.	Connector No. Connector Name Connector Color H.S.	J
ONNECTOR-E14	Signal Name	PDM E'R (INTELLIGENT POWER DISTRIBUTION) WHITE  To a control of co	INL
Connector No. E70 Connector Name JOINT CONNECTOR-E14 Connector Color BLACK  H.S.	Terminal No. Wire  1 P 2 P	mector Name mector Color  Minal No. Will  7 E E  10 L	N
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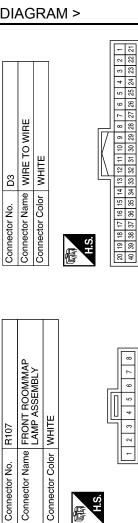
Revision: November 2015 INL-41 2016 Pathfinder



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	Connector No. B101		Connector No.	. B102			Connector No.	o. B103			
			Connector Na	me JOINT CO	Connector Name JOINT CONNECTOR-B14		Connector Name		T CONNEC	JOINT CONNECTOR-B05	
	Connector Color   WHITE		Connector Color   WHITE	or WHITE			Connector Color	olor WHITE	ш		
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	Terminal No. Wire Signal Name		Terminal No.	Color of Wire	Signal Name		Terminal No.	Color of Wire	Signa	Signal Name	
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	-		1	_ _		7	1	-			7
	Connector No. B124		Connector No.	Æ			Connector No.	o. R11			
	-		Connector Na	-	WIRE		Connector Name WIRE TO WIRE	ame WIRE	TO WIRE		
	Connector Color WHITE		Connector Color	lor WHITE			Connector Color	olor WHITE	ш		_
	E										
		ſ	Σί	[			i i				
	11         2         3         4         5         6         7         8         9         10         11         12         13         14         15         16         16         15         21         22         23         24         25         26         27         28         29         30         31         32           17         18         19         20         21         22         23         24         25         26         27         28         29         30         31         32	32	12 11 10 9 8 24 23 22 21 20	7 6 5 4 3 2 19 18 17 16 15 14	2 1 14 13		1 2 3 4 5 13 14 15 16 17	6 7 8 9 18 19 20 21	10 11 12 22 23 24		
	Terminal No. Color of Wire Signal Name		Terminal No.	Color of Wire	Signal Name		Terminal No.	Color of Wire	Signal	Signal Name	
А			က	M	1	П	6	<b>a</b>			
BLIA71	19 P		24	В	ı		10	*			
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	M N	Κ	J	Н	G	F	D E		С	В	Α

Revision: November 2015 INL-43 2016 Pathfinder



WHITE

Connector Color

Connector No. R107

Signal Name	1	1	
Color of Wire	۸	BR	
Color of Terminal No. Wire	13	14	

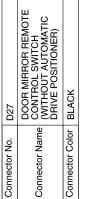
Signal Name

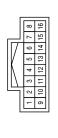
Color of Wire

Terminal No.

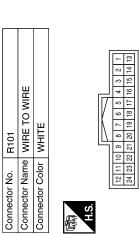
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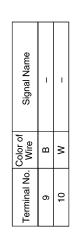
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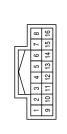


Signal Name	ı	ı	
Color of Wire	^	BR	
Terminal No.	13	14	





D22	DOOR MIRROR REMOTE CONTROL SWITCH (WITH AUTOMATIC DRIVE POSITIONER)	GRAY
Connector No.	Connector Name	Connector Color GRAY



Signal Name	-	-
Color of Wire	۸	BR
Terminal No.	13	14

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# **BASIC INSPECTION**

# DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

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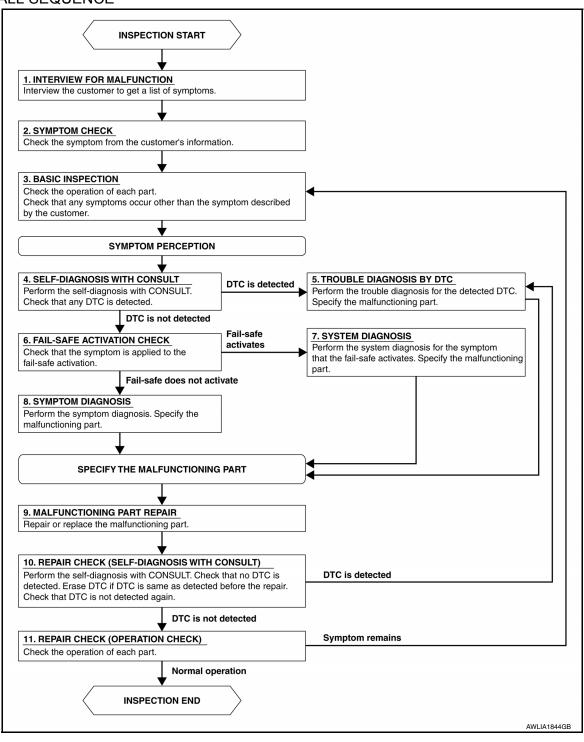
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#### **OVERALL SEQUENCE**



### **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 <a href="INL-58">INL-58</a>, "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?

YES >> GO TO 5.

# **DIAGNOSIS AND REPAIR WORKFLOW**

# < BASIC INSPECTION >

NO >> GO TO 11. 11. REPAIR CHECK (OPERATION CHECK) Check the operation of each part.

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Does it operate normally?

В YES >> Inspection End. >> GO TO 3. NO

**INL-47** Revision: November 2015 2016 Pathfinder

### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

# DTC/CIRCUIT DIAGNOSIS

# POWER SUPPLY AND GROUND CIRCUIT

**BCM** 

BCM : Diagnosis Procedure

INFOID:0000000012964836

Regarding Wiring Diagram information, refer to BCS-55, "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	O (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

- Disconnect BCM connector M81.
- 2. Check voltage between BCM connector M81 terminals 131, 139 and ground.

В	CM	Ground	Voltage (Approx.)	
Connector Terminal		Ground	(Approx.)	
M81	131		Pottory voltago	
	139	<del>_</del>	Battery voltage	

#### 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 M81 terminals 134, 143 and ground.

BCM		Ground	Continuity	
Connector	Terminal	Ground	Continuity	
M81	134	— Yes	Voc	
	143	_	165	

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) : Diagnosis Procedure

Regarding Wiring Diagram information, refer to PCS-21, "Wiring Diagram".

### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

# 1. CHECK FUSIBLE LINKS

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), K (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 E118 and E120.
- 2. Check voltage between IPDM E/R connectors and ground.

IPD	M E/R	Ground	Voltage (Approx.)	
Connector	Terminal	Giodila		
E118	1			
E110	2	_	Battery voltage	
E120	3			

#### Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

# 3. CHECK GROUND CIRCUIT

- Disconnect IPDM E/R connectors E119 and E121.
- 2. Check continuity between IPDM E/R connectors and ground.

IPDM E.	./R	Ground	Continuity	
Connector	Terminal	Glound		
E121	7	Ye.		
E119	41	_	165	

# Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

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### **BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

# BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

Description INFOID.000000012548999

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

# Component Function Check

INFOID:0000000012549000

# 1. CHECK BATTERY SAVER OUTPUT/POWER SUPPLY FUNCTION

#### (P)CONSULT

- Turn ignition switch ON.
- 2. Turn each interior room lamp ON:
- Front room/map lamp assembly
- Vanity lamps (if equipped)
- Personal lamps 2nd row
- Cargo lamp
- 3. Open the driver door to turn ON the following lamps:
- Front step lamps (if equipped)
- Foot lamps (if equipped)
- 4. Select BATTERY SAVER of BCM(BATTERY SAVER) active test item.
- While operating the test item, check that each interior room lamp turns ON/OFF.

OFF : Interior room lamp OFF
ON : Interior room lamp ON

#### Is the inspection result normal?

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

NO >> Refer to <u>INL-50</u>, "<u>Diagnosis Procedure</u>".

# Diagnosis Procedure

INFOID:0000000012549001

Regarding Wiring Diagram information, refer to <a href="INL-12">INL-12</a>. "Wiring Diagram".

# 1. CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OUTPUT

#### (P)CONSULT

- 1. Turn ignition switch ON.
- Select BATTERY SAVER of BCM(BATTERY SAVER) active test item.
- 3. While operating the test item, check voltage between BCM connector M81 terminal 129 and ground.

(+)		()	Test item	Voltage	
Connector	Terminal	(-)	BATTERY SAVER	(Approx.)	
M94 120		81 129 Ground	OFF	0V	
IVIO I	M81 129		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 <a href="BCS-81">BCS-81</a>, "Removal and Installation".

# $2.\mathsf{CHECK}$ BATTERY SAVER OUTPUT/POWER SUPPLY OPEN CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect the following connectors:
- BCM M81
- Front step lamp LH D11(if equipped)
- Front step lamp RH D109 (if equipped)

Revision: November 2015 INL-50 2016 Pathfinder

#### BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

- Foot lamp LH M99 (if equipped)
- Foot lamp RH M100 (if equipped)
- Front room/map lamp assembly R107
- Vanity lamp LH R103 (if equipped)
- Vanity lamp RH R102 (if equipped)
- Cargo lamp R104
- Personal lamps 2nd row R106
- 3. Check continuity between BCM connector M81 terminal 129 and interior room lamp connector terminal in question.

BCI	М	Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	Continuity
		Front step lamp LH (if equipped)	D11	1	
		Front step lamp RH (if equipped)	D109	1	
		Foot lamp LH (if equipped)	M99	1	
	M81 129	Foot lamp RH (if equipped)	M100	1	
M81		Front room/map lamp assembly	R107	1	Yes
		Vanity lamp LH (if equipped)	R103	1	
		Vanity lamp RH (if equipped)	R102	1	
		Cargo lamp	R104	2	
		Personal lamps 2nd row	R106	2	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

# 3.check battery saver output/power supply short circuit

Check continuity between BCM connector M81 terminal 129 and ground.

Connector	Terminal	_	Continuity
M81	129	Ground	No

#### Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

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#### INTERIOR ROOM LAMP CONTROL CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

# INTERIOR ROOM LAMP CONTROL CIRCUIT

Description INFOID:000000012549002

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

# Component Function Check

INFOID:0000000012549003

#### **CAUTION:**

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

- Battery saver output/power supply
- Front room/map lamp bulb
- Personal lamps 2nd row bulb
- Cargo lamp bulb

# ${f 1}.$ CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

#### (P)CONSULT

- 1. Set the front room/map lamp switch, personal lamps 2nd row switch and cargo lamp switch to DOOR.
- 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

#### Does the interior room lamp turn ON/OFF?

YES >> Interior room lamp control circuit is normal.

NO >> Refer to INL-52, "Diagnosis Procedure".

# Diagnosis Procedure

INFOID:0000000012549004

Regarding Wiring Diagram information, refer to <a href="INL-12">INL-12</a>, "Wiring Diagram".

# 1. CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

#### CONSULT

- Turn ignition switch ON.
- Select INT LAMP of BCM(INT LAMP) active test item.
- 3. While operating the test item, check voltage between BCM harness connector M81 terminal 136 and ground.

ВСМ			Test item		Voltage
Connector	Terminal	Ground	1650	. item	(Approx.)
M81	136	Ground	On	0V	
WO 1	130		INT LAMP		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 M81, front room/map lamp assembly harness connector R107 and cargo lamp harness connector R104.
- Check continuity between BCM harness connector M81 terminal 136 and front room/map lamp assembly harness connector R107 terminal 3 and cargo lamp harness connector R104 terminal 3.

#### INTERIOR ROOM LAMP CONTROL CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

В	СМ	Interior room lamp		Continuity	
Connector	Terminal	Connector		Terminal	Continuity
M01	126	Front room/map lamp	R107	3	Yes
M81 136		Cargo lamp	R104	3	165

- 4. Reconnect the front room/map lamp assembly harness connector.
- 5. Check continuity between BCM harness connector M81 terminal 136 and personal lamps 2nd row harness connector R106 terminal 3.

BCM		Personal lamps 2nd row		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M81	136	R106	3	Yes	

#### Is the inspection result normal?

YES >> Check interior room lamps for an open. If NG, replace lamp in question. Refer to <a href="INL-59">INL-59</a>, "Removal and Installation" (front room/map lamp assembly) or <a href="INL-66">INL-66</a>, "Removal and Installation" (cargo lamp). If OK, replace BCM. Refer to <a href="BCS-81">BCS-81</a>, "Removal and Installation".

NO >> Repair or replace harness or connector.

# 3.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM harness connector M81, front room/map lamp assembly harness connector R107 and cargo lamp harness connector R104.
- 3. Check continuity between BCM harness connector M81 terminal 136 and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M81	136		No

#### Is the inspection result normal?

YES >> Check interior room lamps for an open. If NG, replace lamp in question. Refer to <a href="INL-59">INL-59</a>, "Removal and Installation" (front room/map lamp assembly) or <a href="INL-66">INL-66</a>, "Removal and Installation" (personal lamps 2nd row) or <a href="INL-67">INL-67</a>, "Removal and Installation" (cargo lamp). If OK, replace BCM. Refer to <a href="BCS-81">BCS-81</a>, "Removal and Installation".

NO >> Repair or replace harness or connector.

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#### STEP LAMP CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

### STEP LAMP CIRCUIT

Description INFOID:000000012549005

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

# Component Function Check

INFOID:0000000012549006

#### **CAUTION:**

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

- Battery saver output/power supply
- Front step lamp bulb (if equipped)
- Foot lamp bulb (if equipped)

# 1. CHECK STEP LAMP OPERATION

#### (P)CONSULT

- Turn ignition switch ON.
- Select STEP LAMP TEST of BCM(INT LAMP) active test item.
- While operating the test items, check that front step lamp (if equipped) and foot lamp (if equipped) turns ON/OFF.

On : Step lamp and foot lamp ON
Off : Step lamp and foot lamp OFF

#### Is the inspection result normal?

YES >> Step lamp circuit is normal.

NO >> Refer to INL-54, "Diagnosis Procedure".

### Diagnosis Procedure

INFOID:0000000012549007

Regarding Wiring Diagram information, refer to <a href="INL-12">INL-12</a>, "Wiring Diagram".

# 1. CHECK STEP LAMP OUTPUT

### CONSULT

- 1. Turn ignition switch ON.
- Select STEP LAMP TEST of BCM (INT LAMP) active test item.
- While operating the test item, check voltage between BCM harness connector M18 terminal 21 and ground.

ВСМ			STEP LAMP TEST	Voltage
Connector	Terminal	Ground	OTEL EXIVIT TEOT	(Approx.)
M18 21	21	Ground	On	0V
W18 21			Off	Battery voltage

#### Is the inspection result normal?

YES >> Step lamp control 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 the following harness connectors:
- BCM M18
- Front step lamp LH D11(if equipped)
- Front step lamp RH D109 (if equipped)
- Foot lamp LH M99 (if equipped)
- Foot lamp RH M100 (if equipped)

### STEP LAMP CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between BCM harness connector M18 terminal 21 and the following lamp harness connector terminal.

ВС	CM	Step lamp		Continuity	
Connector	Terminal	Connector		Terminal	Continuity
		Front step lamp LH (if equipped)	D11		
M18	M18 21	Front step lamp RH (if equipped)	D109	2	Yes
WHO ZI	Foot lamp LH (if equipped)	M99	2	165	
		Foot lamp RH (if equipped)	M100		

#### Is the inspection result normal?

YES >> Check front step lamp (if equipped) or foot lamp (if equipped) for an open. If NG, replace lamp in question. Refer to <a href="INL-65">INL-65</a>, "Removal and Installation" (step lamp) (if equipped) or <a href="INL-63">INL-63</a>, "DRIVER SIDE: Removal and Installation" (foot lamp) (if equipped). If OK, replace BCM. Refer to BCS-81, "Removal and Installation".

NO >> Repair or replace harness or connector.

# 3.CHECK STEP LAMP SHORT CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect the following harness connectors:
- BCM M18
- Front step lamp LH D11(if equipped)
- Front step lamp RH D109 (if equipped)
- Foot lamp LH M99 (if equipped)
- Foot lamp RH M100 (if equipped)
- 3. Check continuity between BCM harness connector M18 terminal 21 and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M18	21		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-81, "Removal and Installation".

NO >> Repair or replace harness or connector.

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#### PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

# PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description INFOID:000000012549008

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

# Component Function Check

INFOID:0000000012549009

# 1. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

#### CONSULT

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

On : Push-button ignition switch illumination ON
Off : Push-button ignition switch illumination OFF

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

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

NO >> Refer to INL-56, "Diagnosis Procedure".

# Diagnosis Procedure

INFOID:0000000012549010

Regarding Wiring Diagram information, refer to INL-27, "Wiring Diagram".

# 1. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

# CONSULT

- 1. Turn the ignition switch ON.
- 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 M17 terminal 5 and ground.

	Terminals		Test item		
	(+)		rest item	Voltage (Approx.)	
Push-button	Push-button ignition switch		ENGINE SW ILLUMI		
Connector	Terminal	Ground	ENGINE SWILLOWII		
M17			ON	5 V	
IVI I /	5		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 harness connector M19 and the push-button ignition switch harness connector M17.
- 3. Check continuity between BCM harness connector M19 terminal 48 and the push-button ignition switch harness connector M17 terminal 5.

ВСМ		Push-button ignition switch		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M19	48	M17	5	Yes	

#### Is the inspection result normal?

YES >> GO TO 3.

### **PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

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

Check continuity between BCM harness connector M19 terminal 48 and ground.

В	CM		Continuity
Connector	Connector Terminal		Continuity
M19	48		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-81, "Removal and Installation".

NO >> Repair or replace harness or connector.

# 4.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT

- Turn the ignition switch OFF.
- 2. Disconnect push-button ignition switch harness connector M17.
- 3. Check continuity between push-button ignition switch harness connector M17 terminal 6 and ground.

Push-button	ignition switch		Continuity
Connector	Connector Terminal		Continuity
M17	6		Yes

#### Is the inspection result normal?

YES >> Replace push-button ignition switch. Refer to SEC-153, "Removal and Installation".

NO >> GO TO 5.

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

- Disconnect BCM harness connector M80.
- 2. Check continuity between BCM harness connector M80 terminal 107 and push-button ignition switch harness connector M17 terminal 6.

Push-button ignition switch		ВСМ		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M17	6	M80	107	Yes

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-81, "Removal and Installation".

NO >> Repair or replace harness or connectors.

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Revision: November 2015 INL-57 2016 Pathfinder

# **INTERIOR LIGHTING SYSTEM SYMPTOMS**

< SYMPTOM DIAGNOSIS >

# SYMPTOM DIAGNOSIS

# INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

#### **CAUTION:**

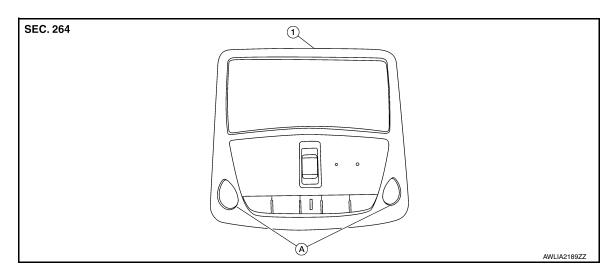
Perform the self-diagnosis with CONSULT before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

Symptom	Possible cause	Inspection item
All the following lamps do not turn ON: Front room/map lamp Personal lamps 2nd row Foot lamp LH/RH (if equipped) Step lamp LH/RH (if equipped) Cargo lamp Vanity lamp LH/RH (if equipped)	Harness between BCM and each interior room lamp     BCM	Battery saver output/power supply circuit Refer to INL-50.
<ul> <li>Interior room lamp does not turn ON even though the door is open.</li> <li>(It turns ON when turning the interior room lamp ON.)</li> </ul>	Harness between BCM and each door switch     Harness between BCM and each interior room lamp.	Door switch circuit Refer to DLK-168.  Interior room lamp control circuit
<ul> <li>Interior room lamp does not turn OFF even though the door is closed.</li> </ul>	interior room lamp • BCM	Refer to INL-52.
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-18.
Step lamps (if equipped) and foot lamps (if equipped) do not turn ON even though the door	Harness between BCM and each	Door switch circuit Refer to <u>DLK-168</u> .
<ul> <li>is open.</li> <li>Step lamps (if equipped) and foot lamps (if equipped) do not turn OFF even though the door is closed.</li> </ul>	step lamp (if equipped) or foot lamp (if equipped)  BCM	Step lamp circuit Refer to INL-54.
Push-button ignition switch illumination does not illuminate.	Harness between BCM and push- button ignition switch     BCM	Push-button ignition switch illumination circuit Refer to INL-56.
Interior room lamp battery saver does not activate.	BCM	Replace BCM. Refer to BCS-81.

# REMOVAL AND INSTALLATION

# FRONT ROOM/MAP LAMP ASSEMBLY

Exploded View



1. Front room/map lamp assembly A. LED

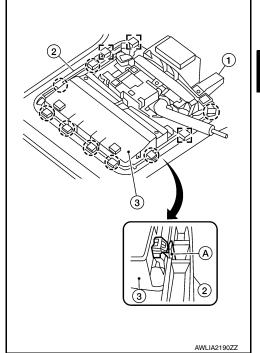
#### Removal and Installation

**CAUTION:** 

Do not attempt to separate the front room/map lamp assembly from the headlining prior to removing headlining, or damage to the components may occur.

#### REMOVAL

- 1. Remove the headlining. Refer to INT-27, "Removal and Installation".
- Remove the bracket screws, then remove front room/map lamp assembly bracket (1) from front room/map assembly (3) and position aside.
- 3. Disconnect the harness connectors from front room/map lamp assembly (3).
- 4. Release the front room/map lamp assembly back plate (2) metal clips and remove from headlining.
  - []: Metal clip
- 5. Release the back plate pawls (A) using a suitable tool and remove the front room/map lamp assembly (3).
  - ( ): Pawl



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#### **INSTALLATION**

Installation is in the reverse order of removal.

**CAUTION:** 

Revision: November 2015 INL-59 2016 Pathfinder

### FRONT ROOM/MAP LAMP ASSEMBLY

#### < REMOVAL AND INSTALLATION >

Visually check the metal clips and pawls for deformation and damage during installation. Replace with new ones if necessary.

**Bulb or Lens Replacement** 

INFOID:0000000012549014

#### **WARNING:**

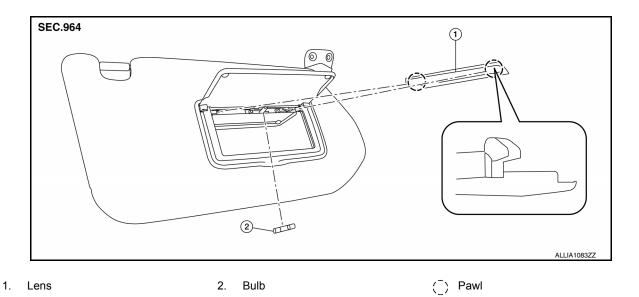
Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns. CAUTION:

Do not attempt to seperate the LED bulb from the front room/map lamp assembly or damage to the components may occur

The LED bulb is replaced as part of the front room/map lamp assembly. Refer to <a href="INL-59">INL-59</a>, "Removal and Installation"

### **VANITY LAMP**

#### **Exploded View** INFOID:0000000012549015



#### Removal and Installation

**CAUTION:** 

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

The vanity lamp is replaced as part of the sun visor. Refer to INT-27, "Removal and Installation".

# Bulb or Lens Replacement

WARNING:

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns. **CAUTION:** 

- Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.
- Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.
- Do not attempt to separate the vanity lamp from the sun visor or damage to the components may occur.
- Insert a suitable tool into the gap between the lens and vanity lamp, then gently release the lens pawls and remove.
- 2. Grasp the bulb and pull straight out of the vanity lamp to remove.
- 3. Install vanity lamp bulb to vanity lamp.
- Install the vanity lamp lens.

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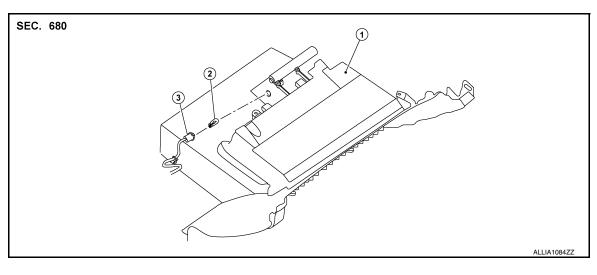
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# **GLOVE BOX LAMP**

Exploded View



Glove box assembly

Bulb

Bulb socket

# **Bulb Replacement**

INFOID:0000000012549019

#### **WARNING:**

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns. CAUTION:

- Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.
- Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.
- 1. Remove glove box. Refer to IP-26, "Removal and Installation".
- 2. Rotate the bulb socket counterclockwise and remove.
- 3. Grasp the bulb and pull straight out of the bulb socket to remove.
- 4. Install glove box lamp bulb to bulb socket.
- 5. Insert bulb socket into glove box and rotate clockwise to lock in position.
- Install glove box. Refer to <u>IP-26, "Removal and Installation".</u>

# FOOT LAMP

**DRIVER SIDE** 

DRIVER SIDE : Exploded View

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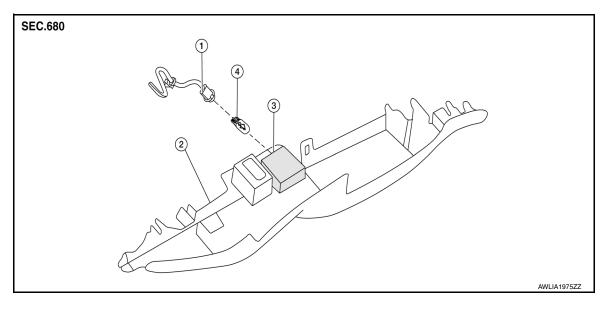
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- 1. Bulb socket
- 1. Bulb

- 2. Instrument lower panel LH
- 3. Foot lamp housing

### DRIVER SIDE: Removal and Installation

The foot lamp housing is replaced as part of the instrument lower panel LH. Refer to <u>IP-25, "Removal and Installation"</u>.

### DRIVER SIDE: Bulb Replacement

INFOID:0000000012549022

INFOID:0000000012549021

#### **WARNING:**

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns. CAUTION:

- Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.
- Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.
- 1. Remove instrument lower panel LH. Refer to IP-25, "Removal and Installation".
- 2. Rotate the bulb socket counterclockwise and remove.
- 3. Grasp the bulb and pull straight out of the bulb socket to remove.
- 4. Install foot lamp bulb to bulb socket.
- 5. Insert bulb socket into foot lamp housing and rotate clockwise to lock in position.
- Install the instrument lower panel LH. Refer to IP-25, "Removal and Installation".

#### PASSENGER SIDE

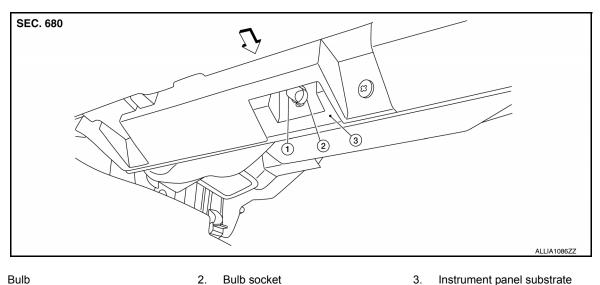
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PASSENGER SIDE: Exploded View

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1. < → Front Bulb socket

Instrument panel substrate

PASSENGER SIDE : Bulb Replacement

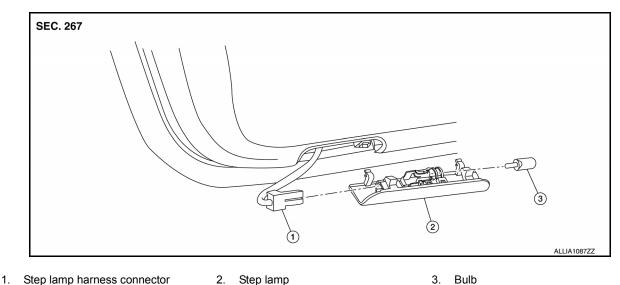
#### **WARNING:**

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns. **CAUTION:** 

- . Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.
- Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.
- 1. Reach under instrument panel on RH side, locate foot lamp socket, rotate the bulb socket and remove.
- Grasp the bulb and pull straight out of the bulb socket to remove.
- 3. Install foot lamp bulb to bulb socket.
- Insert bulb socket into instrument panel substrate and rotate to lock in position.

### FRONT STEP LAMP

# **Exploded View**



2. Step lamp

3. Bulb

#### Removal and Installation

**REMOVAL** 

- Insert a suitable tool into the gap between the front step lamp and front door finisher and gently release the pawls and the front step lamp.
- Disconnect the harness connector from the front step lamp and remove.

#### **INSTALLATION**

Installation is in the reverse order of removal.

# **Bulb or Lens Replacement**

INFOID:0000000012549027

INFOID:0000000012549026

#### **WARNING:**

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns. **CAUTION:** 

- Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.
- · Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.
- 1. Remove the front step lamp. Refer to <a href="INL-65">INL-65</a>, "Removal and Installation".
- 2. Grasp the bulb and pull straight out from the front step lamp to remove.
- 3. Install the front step lamp bulb to front step lamp.
- Install the front step lamp. Refer to INL-65, "Removal and Installation"

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#### PERSONAL LAMP

#### < REMOVAL AND INSTALLATION >

### PERSONAL LAMP

### Removal and Installation

INFOID:0000000012549028

#### **REMOVAL**

The personal lamp is serviced as part of headlining. Refer to INT-27, "Removal and Installation"

# **Bulb or Lens Replacement**

INFOID:0000000012549029

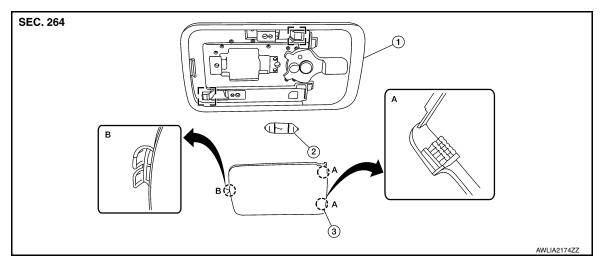
#### **WARNING:**

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns. CAUTION:

- Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.
- Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.
- Do not attempt to separate the personal lamp from the headlining or damage may occur.
- 1. Insert a suitable tool into the gap between the lens and personal lamp, then gently release the lens pawls and remove.
- 2. Grasp the bulb and pull straight out from its socket to remove.
- 3. Install personal lamp bulb to personal lamp.
- 4. Install the personal lamp lens.

# **CARGO LAMP**

# **Exploded View**



- Cargo lamp

Lens

- Pawls to release first for lens re- B. moval
- Pawl to install first for lens installation

Metal clip

#### Removal and Installation

#### **REMOVAL**

- Insert a suitable tool into the gap between the headlining and cargo lamp and gently release the metal clips and remove.
- Disconnect the harness connector from cargo lamp.

#### INSTALLATION

Installation is in the reverse order of removal.

# Bulb or Lens Replacement

INFOID:0000000012549032

INFOID:0000000012549031

#### **WARNING:**

Do not touch the glass surface of a bulb while it is lit or right after being turned OFF to prevent burns. **CAUTION:** 

- Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb surface.
- Do not leave bulb out of lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of lamp.
- Release and insert pawl as indicated in exploded view or damage may occur.
- Beginning at the switch end, insert a suitable tool into the gap between the lens and cargo lamp, then gently release the lens pawls and remove.
- Push the tab to release one bulb end, then grasp the bulb and pull out the second end from its socket to remove.
- Install cargo lamp bulb to cargo lamp.
- Insert pawl at the end opposite the switch first, then insert the remaining two pawls to lock the lens in position.

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### **ILLUMINATION CONTROL SWITCH**

# < REMOVAL AND INSTALLATION >

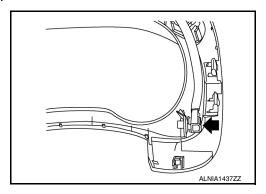
# **ILLUMINATION CONTROL SWITCH**

### Removal and Installation

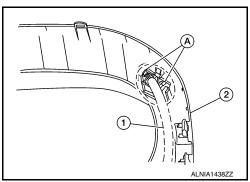
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#### Removal

- 1. Remove cluster lid A. Refer to IP-21, "Removal and Installation".
- 2. Release the harness connector from cluster lid A.



3. Release the pawls (A) and remove illumination control switch (1) through the front of cluster lid A (2).



#### **INSTALLATION**

Installation is in the reverse order of removal.

# **SERVICE DATA AND SPECIFICATIONS (SDS)**

< SERVICE DATA AND SPECIFICATIONS (SDS)

# SERVICE DATA AND SPECIFICATIONS (SDS)

# SERVICE DATA AND SPECIFICATIONS (SDS)

**Bulb Specifications** 

Item	Wattage (W)*
Front room/map lamp	LED
Illumination control switch	_
Vanity lamp (if equipped)	_
Glove box lamp	3.4
Foot lamp (if equipped)	3.4
Step lamp (If equipped)	3.8
Personal lamp	8
Cargo lamp	8

<sup>\*:</sup>Always check with the parts department for the latest parts information.

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