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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

Α

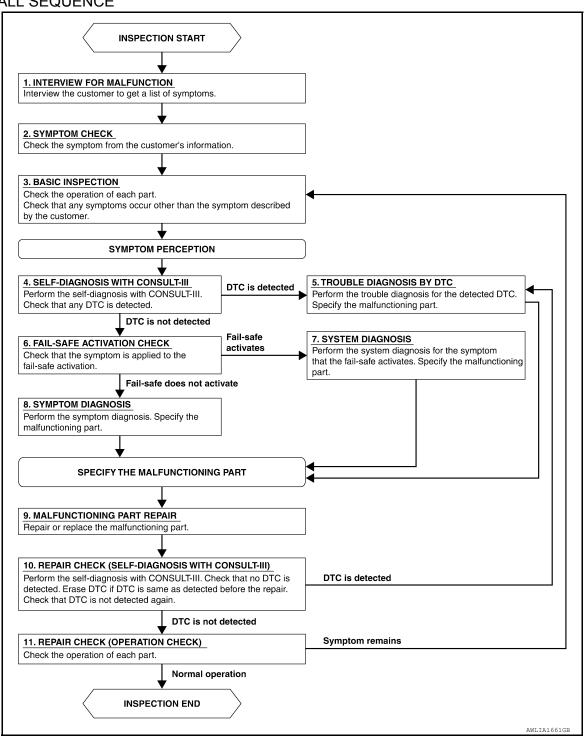
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OVERALL SEQUENCE



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-III

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

Is any DTC detected?

YES >> GO TO 5

NO >> GO TO 6

5. TROUBLE DIAGNOSIS BY DTC

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

>> GO TO 9

6. FAIL-SAFE ACTIVATION CHECK

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 fail-safe activates. Specify the malfunctioning part.

>> GO TO 9

8.SYMPTOM DIAGNOSIS

Perform the symptom diagnosis. Specify the malfunctioning part.

>> GO TO 9

9. MALFUNCTION PART REPAIR

Repair or replace the malfunctioning part.

>> GO TO 10

10. REPAIR CHECK (SELF-DIAGNOSIS WITH CONSULT-III)

Perform the self-diagnosis with CONSULT-III. 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)

Α

Check the operation of each part.

Does it operate normally?

YES >> Inspection End

NO >> GO TO 3

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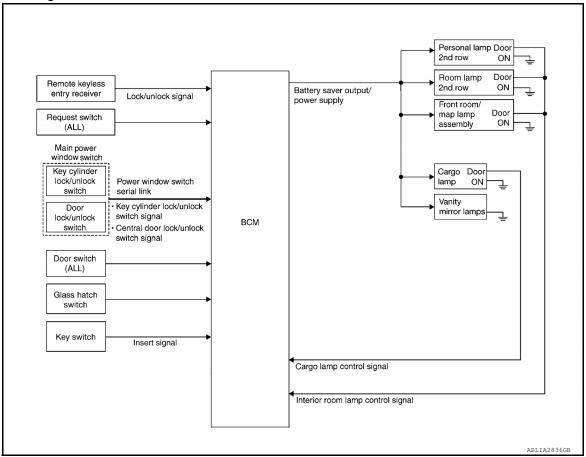
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SYSTEM DESCRIPTION

INTERIOR ROOM LAMP CONTROL SYSTEM

System Diagram

INFOID:0000000006246841



System Description

INFOID:0000000006246842

OUTLINE

- Interior room lamps* are controlled by the interior room lamp timer control function of the BCM.
 *Front room/map lamp, personal lamp 2nd row (with personal lamp 2nd row) or room lamp 2nd row (without personal lamp 2nd row).
- Cargo lamp is controlled by the cargo lamp control function of the BCM.

The timer control functions of the BCM activate based on inputs from the remote keyless entry receiver, the key cylinder lock/unlock switch, the door switches, the key switch (without Intelligent Key) or the key switch and ignition knob switch (with Intelligent Key).

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 and the Intelligent Key is not inserted in the key slot.

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).
- Intelligent Key is inserted into the key slot.

Interior lamp operational settings can be changed with the function setting of CONSULT-III.

INTERIOR ROOM LAMP CONTROL SYSTEM

< SYSTEM DESCRIPTION >

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. The BCM controls power and ground to all interior lamps.

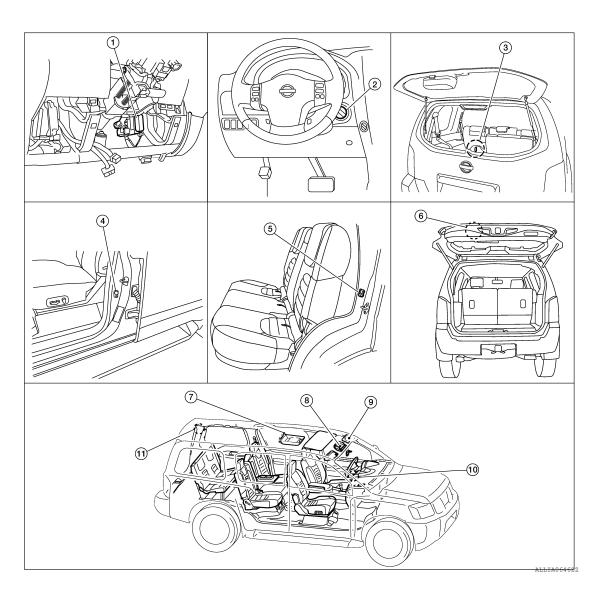
After the battery saver system turns the lamps OFF, the lamps will illuminate again when

- 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
- the Intelligent Key is removed from or inserted into the key slot.

The Interior lamp battery saver control time period can be changed with the function setting of CONSULT-III.

Component Parts Location

INFOID:0000000006246843



- BCM M18, M19, M20 (view with instru- 2. ment panel removed)
- Key switch and ignition knob switch (with Intelligent Key) M66 Key switch (without Intelligent Key) M27
- Front door switch LH B8
 Front door switch RH B108
- Rear door switch LH B18 Rear door switch RH B116
- 3. Glass hatch ajar switch D503
- 6. Back door latch (door ajar switch) D502

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INTERIOR ROOM LAMP CONTROL SYSTEM

< SYSTEM DESCRIPTION >

- Personal lamp 2nd row (with personal 8. lamp 2nd row) R10 Room lamp 2nd row (without personal lamp 2nd row) R12
- Front room/map lamp assembly R9
- Vanity lamp LH (with vanity lamps) B80
 Vanity lamp RH (with vanity lamps)
 B81

- 10. Ignition keyhole illumination M150
- 11. Cargo lamp R11

Component Description

INFOID:0000000006246844

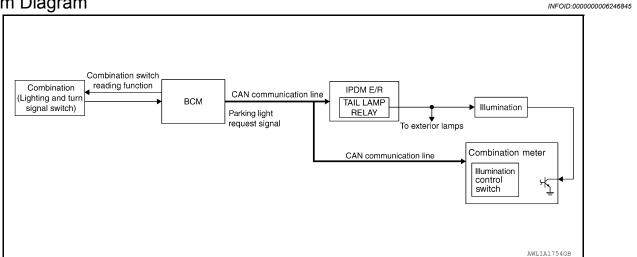
Part name	Description		
BCM	Provides power and ground and controls timer functions for the interior room lamps and cargo lamp.		
Key switch and ignition knob switch (with Intelligent Key)	Provides key is ignition status to the PCM		
Key switch (without Intelligent Key)	Provides key in ignition status to the BCM.		
Door switches	Provides door OPEN/CLOSED status to the BCM.		
Glass hatch ajar switch	Provides glass hatch OPEN/CLOSED status to the BCM.		
Back door latch (door ajar switch)	Provides back door 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 deer leek/unleek position quitab I H status to the PCM		
Front door lock assembly LH (key cylinder switch)	Provides door lock/unlock position switch LH status to the BCM.		

ILLUMINATION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

ILLUMINATION CONTROL SYSTEM

System Diagram



System Description

INFOID:0000000006246846

The illumination lamps operation is dependent upon the position of the lighting switch (combination switch). When the lighting switch is placed in the 1ST or 2ND position (or if the auto light system is activated) 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.

BATTERY SAVER CONTROL

When the lighting switch (combination switch) is in the 1ST or 2ND 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 15 minutes unless the lighting switch position is changed. If the lighting switch position is changed, then the illumination lamps are turned off after a 30 second delay. When the lighting switch is turned from OFF to 1ST or 2ND position (or if auto light system is activated) after illumination lamps have been turned off by the battery saver control, the illumination lamps illuminate again.

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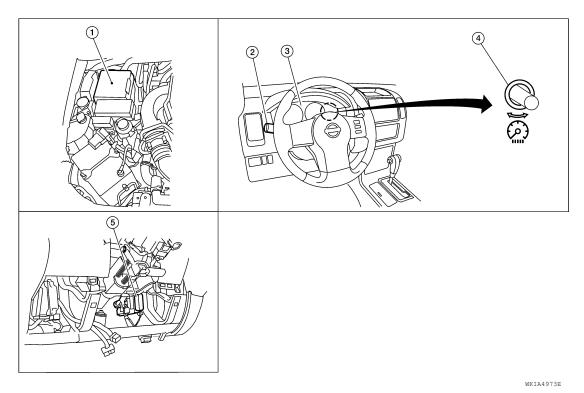
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Component Parts Location

INFOID:0000000006246847



- 1. IPDM E/R E122, E124
- 4. Illumination control switch (built into combination meter)
- Combination switch (lighting and turn 3. Combination meter M24 signal switch) M28
- BCM M18, M20 (view with instrument panel removed)

Component Description

INFOID:0000000006246848

Part name	Description			
BCM	The BCM monitors the lighting switch position with the combination switch reading function. 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 network.			
Combination meter (illumination control switch)	The illumination control switch is a part of the combination meter. The combination meter controls illumination intensity by varying ground to the illumination lamps based on the illumination control switch position.			
Combination switch (lighting and turn signal switch)	The combination switch provides input to the BCM about the lighting switch position.			

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:0000000006706718

APPLICATION ITEM

CONSULT-III 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	 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.

		Direct Diagnostic 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			×	×	×		
Remote keyless entry system	MULTI REMOTE ENT			×	×	×		
Exterior lamp	HEAD LAMP			×	×	×		
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			×	×	×		
Signal buffer system	SIGNAL BUFFER			×	×			
TPMS	AIR PRESSURE MONITOR		×	×	×	×		
Panic alarm system	PANIC ALARM				×			

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

INT LAMP

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

INFOID:0000000006706720

DATA MONITOR

Monitor Item [Unit]	Description
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.
KEY ON SW [On/Off]	Indicates condition of key switch.
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.
BACK DOOR SW [On/Off]	Indicates condition of back door 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.
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.
I-KEY LOCK* [On/Off]	Indicates condition of lock signal from Intelligent Key.
I-KEY UNLOCK* [On/Off]	Indicates condition of unlock signal from Intelligent Key.
KEYLESS LOCK** [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK** [On/Off]	Indicates condition of unlock signal from keyfob.

^{*:} with Intelligent Key

ACTIVE TEST

Test Item	Description
IGN ILLUM	This test is able to check ignition keyhole illumination operation [Off/On].
INT LAMP	This test is able to check interior room lamp operation [Off/On].
LUGGAGE LAMP TEST	This test is able to check cargo lamp operation [Off/On].

WORK SUPPORT

Support Item	Setting		Description		
SET I/L D-UNLCK INTCON	Off		Interior room lamp timer function OFF.		
SET I/E D-UNECK INTOON	On*		Interior room lamp timer function ON.		
	MODE7 0 sec.				
	MODE6	5 sec.			
	MODE5	4 sec.			
ROOM LAMP ON TIME SET	MODE4	3 sec.	Sets the interior room lamp gradual brightening time.		
	MODE3	2 sec.			
	MODE2*	1 sec.			
	MODE1	0.5 sec.			

^{** :} without Intelligent Key

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Support Item	Set	ting	Description
ROOM LAMP OFF TIME SET	MODE7	0 sec.	
	MODE6	5 sec.	
	MODE5	4 sec.	
	MODE4	3 sec.	Sets the interior room lamp gradual dimming time.
	MODE3	2 sec.	
	MODE2*	1 sec.	
	MODE1	0.5 sec.	

^{* :} Initial setting

BATTERY SAVER

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

INFOID:0000000006706721

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DATA MONITOR

Monitor Item [Unit]	Description	
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.	
KEY ON SW [On/Off]	Indicates condition of key switch.	
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.	
BACK DOOR SW [On/Off]	Indicates condition of back door 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.	
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.	
I-KEY LOCK* [On/Off]	Indicates condition of lock signal from Intelligent Key.	
I-KEY UNLOCK* [On/Off]	Indicates condition of unlock signal from Intelligent Key.	
KEYLESS LOCK** [On/Off]	Indicates condition of lock signal from keyfob.	
KEYLESS UNLOCK** [On/Off]	Indicates condition of unlock signal from keyfob.	

^{*:} with Intelligent Key

ACTIVE TEST

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

WORK SUPPORT

Support Item	Setting		Description
	MODE3	10 min	
ROOM LAMP TIMER SET	MODE2	60 min	Sets the interior room lamp battery saver timer operating time.
	MODE1*	15 min	

^{*:} Initial setting

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^{** :} without Intelligent Key

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000006706723

Regarding Wiring Diagram information, refer to BCS-48, "Wiring Diagram".

1. CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
57	Pottory newer supply	21 (10A)
70	Battery power supply	G (50A)
11	Ignition ACC or ON	4 (10A)
38	Ignition ON or START	1 (10A)

Is the fuse blown?

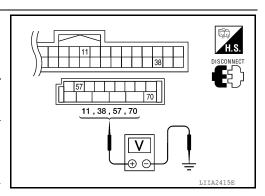
YES >> Replace the blown fuse or fusible link after repairing the affected circuit.

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

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

Connector	Term	inals	Power	Condition	Voltage (V) (Ap-	
Connector	(+)	(-)	source	Condition	prox.)	
M18	11	Ground	ACC power supply	Ignition switch ACC or ON	Battery voltage	
	38	Ground	Ignition power supply	Ignition switch ON or START	Battery voltage	
M20	57	Ground	Battery power supply	Ignition switch OFF	Battery voltage	
IVI20	70	Ground	Battery power supply	Ignition switch OFF	Battery voltage	



Is the measurement value normal?

YES >> GO TO 3

NO >> Repair or replace harness.

 $oldsymbol{3}.$ CHECK GROUND CIRCUIT

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

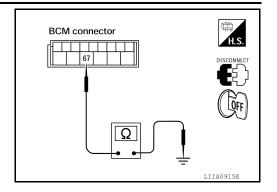
Check continuity between BCM harness connector and ground.

В	СМ		Continuity
Connector	Connector Terminal		Continuity
M20	67		Yes

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.



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BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

Description INFOID.000000006246853

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:0000000006246854

1. CHECK BATTERY SAVER OUTPUT/POWER SUPPLY FUNCTION

(P)CONSULT-III

- 1. Turn ignition switch ON.
- 2. Turn each interior room lamp ON.
- Front room/map lamp assembly
- Vanity lamps (if equipped)
- Cargo lamp
- Personal lamp 2nd row (with personal lamp 2nd row)
- Room lamp 2nd row (without personal lamp 2nd row)
- 3. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
- 4. 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 INL-16, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000006246855

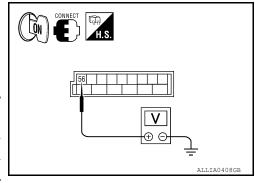
Regarding Wiring Diagram information, refer to BCS-48, "Wiring Diagram".

${f 1}.$ CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OUTPUT

CONSULT-III

- 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 M20 terminal 56 and ground.

((+)		Test item	Voltage
Connector	Terminal	(-)	BATTERY SAVER	voltage
M20	56	Ground	OFF	0V
IVIZU	50	Ground	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 <u>BCS-55</u>, "Removal and Installation".

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

- 1. Turn ignition switch OFF.
- Disconnect the following connectors.
- BCM M20
- Ignition keyhole illumination
- Front room/map lamp assembly

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BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- Vanity lamp LH (if equipped)
- Vanity lamp RH (if equipped)
- Cargo lamp
- Personal lamp 2nd row (with personal lamp 2nd row)
- Room lamp 2nd row (without personal lamp 2nd row)
- 3. Check continuity between BCM connector and each interior room lamp connector.

BC	M	Each interior room lamp			Continuity	
Connector	Terminal	Connector			Continuity	
		Ignition keyhole illumination	M150	1		
	M20 56	Front room/map lamp assembly	R9	1		
		Vanity lamp LH (if equipped)		B80	1	
M20		Vanity lamp RH (if equipped)	B81	1	Yes	
			Cargo lamp	R11	2	
	Personal lamp 2nd row (with personal lamp 2nd row)	R10	1			
		Room lamp 2nd row (without personal lamp 2nd row)	R12	2		

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair the harness or connectors.

3.check battery saver output/power supply short circuit

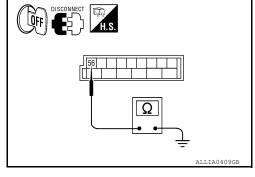
Check continuity between BCM connector M20 terminal 56 and ground.

Connector	Terminal	_	Continuity
M20	56	Ground	No

Is the inspection result normal?

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

NO >> Repair the harness or connectors.



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INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

Controls the following interior room lamps (ground side) by PWM signal

- · Front room/map lamp assembly
- Personal lamp 2nd row (with personal lamp 2nd row)
- Room lamp 2nd row (without personal lamp 2nd row)

NOTE:

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

Component Function Check

INFOID:0000000006246857

CAUTION:

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

- Battery saver output/power supply
- Front room/map lamp bulbs
- Personal lamp 2nd row bulbs (with personal lamp 2nd row)
- Room lamp 2nd row bulbs (without personal lamp 2nd row)

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

(P)CONSULT-III

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

ON : Interior room lamp gradual brightening
OFF : Interior room lamp gradual dimming

Is the inspection result normal?

YES >> Interior room lamp control circuit is normal. NO >> Refer to INL-18, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000006246858

Regarding Wiring Diagram information, refer to INL-35, "Wiring Diagram".

1. CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

(P)CONSULT-III

- 1. 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 M20 terminal 63 and ground.

(+)		(-)	INT LAMP	Voltage
Connector	Terminal	(-)	IIVI EAWII	voltage
M20	63	Ground	ON	0V
IVIZO	03	Ground	OFF	Battery voltage

CONNECT H.S. ALLIA 0410GB

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

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

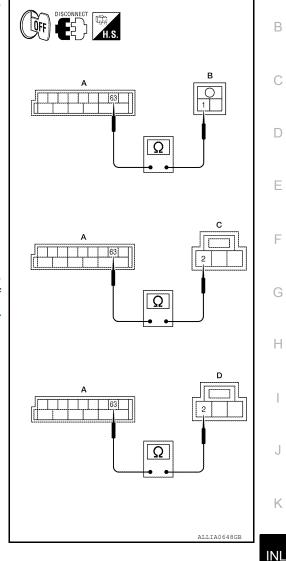
- Turn ignition switch OFF.
- 2. Disconnect BCM connector M20, personal lamp 2nd row connector (with personal lamp 2nd row) or room lamp 2nd row connector (without personal lamp 2nd row) and front room/map lamp connector.
- Check continuity between BCM connector M20 (A) terminal 63 and interior room lamp connectors.

ВС	M	Interior room lamp			Continuity
connector	Terminal	Component	Connector	Terminal	Continuity
		Room lamp 2nd row (without per- sonal lamp 2nd row)	R12 (B)	1	
M20 (A)	63	Personal lamp 2nd row (with per- sonal lamp 2nd row)	R10 (C)	2	Yes
		Front room/map lamp	R9 (D)	2	

Is the inspection result normal?

YES >> Check interior room lamps for an open. If OK, replace BCM. Refer to BCS-55, "Removal and Installation". If NG, replace interior room lamp. Refer to INL-61, "Removal and Installation".

NO >> Repair the harness or connectors.



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3.check interior room Lamp control short circuit

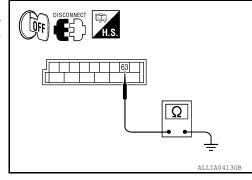
- Turn ignition switch OFF.
- Disconnect BCM connector M20, personal lamps 2nd row connector (with personal lamp 2nd row) or room lamp 2nd row connector (without personal lamp 2nd row).
- 3. Check continuity between BCM connector M20 terminal 63 and ground.

Connector	Terminal	_	Continuity
M20	63	Ground	No

Is the inspection result normal?

YES >> Check interior room lamps for a short circuit. If OK, replace BCM. Refer to BCS-55, "Removal and Installation". If NG, replace interior room lamp. Refer to INL-61, "Removal and Installation".

NO >> Repair the harness or connectors.



INL-19 Revision: March 2012 2011 Pathfinder

CARGO LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

CARGO LAMP CONTROL CIRCUIT

Description

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

Component Function Check

INFOID:0000000006246860

CAUTION:

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

- Battery saver output/power supply
- Cargo lamp bulb
- 1. CHECK CARGO LAMP OPERATION

(P)CONSULT-III

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

ON : Cargo lamp ON OFF : Cargo lamp OFF

Is the inspection result normal?

YES >> Cargo lamp circuit is normal.

NO >> Refer to INL-20, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000006246861

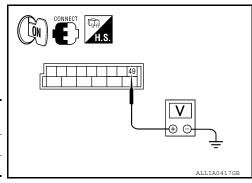
Regarding Wiring Diagram information, refer to INL-35. "Wiring Diagram".

1. CHECK CARGO LAMP OUTPUT

(P)CONSULT-III

- Turn ignition switch ON.
- 2. Select "LUGGAGE LAMP TEST" of BCM (INT LAMP) active test item.
- 3. While operating the test item, check voltage between BCM connector M19 terminal 49 and ground.

Connector	Terminal	_	LUGGAGE LAMP TEST	Voltage
M19	49	Ground	ON	0V
WITS	49	Ground	OFF	Battery voltage



Is the inspection result normal?

YES >> Cargo lamp control circuit is operating normally.

Fixed ON>>GO TO 3

Fixed OFF>>GO TO 2

2.CHECK CARGO LAMP OPEN CIRCUIT

CARGO LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- Turn ignition switch OFF.
- 2. Disconnect BCM connector M19 and cargo lamp connector.
- 3. Check continuity between BCM connector M19 (A) terminal 49 and cargo lamp connector R11 (B) terminal 1.

В	ВСМ		Cargo lamp		Cargo lamp	
Connector	Terminal	Connector	Terminal	Continuity		
M19 (A)	49	R11 (B)	1	Yes		

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Is the inspection result normal?

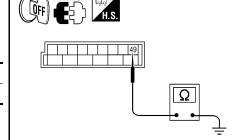
YES >> Check cargo lamp for an open. If OK, replace BCM. Refer to BCS-55, "Removal and Installation". If NG, replace cargo lamp. Refer to INL-65, "Removal and Installation".

NO >> Repair harness or connectors.

3.CHECK CARGO LAMP SHORT CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector M19 and cargo lamp connector.
- Check continuity between BCM connector M19 terminal 49 and ground.

Connector	Terminal	_	Continuity
M19	49	Ground	No



Is the inspection result normal?

YES >> Check cargo lamp for a short circuit. If OK, replace BCM. Refer to BCS-55, "Removal and Installation". If NG, replace cargo lamp. Refer to INL-65, "Removal and Installation".

NO >> Repair harness or connectors.

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INL-21 Revision: March 2012 2011 Pathfinder

IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

Description INFOID:000000006246862

Controls the ignition keyhole illumination (ground side) to turn the ignition keyhole illumination ON and OFF.

Component Function Check

INFOID:0000000006246863

CAUTION:

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

- Battery saver output/power supply circuit
- Ignition keyhole illumination bulb
- $1.\mathsf{check}$ ignition keyhole illumination operation

(P)CONSULT-III

- 1. Turn ignition switch ON.
- Select "IGN ILLUM" of BCM (INT LAMP) active test item.
- While operating the test item, check that the ignition keyhole illumination turns ON/OFF

ON : Ignition keyhole illumination ON OFF : Ignition keyhole illumination OFF

Is the inspection result normal?

YES >> Ignition keyhole illumination circuit is normal. NO >> Refer to INL-22, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000006246864

Regarding Wiring Diagram information, refer to INL-35, "Wiring Diagram".

1. CHECK IGNITION KEYHOLE OUTPUT

(P)CONSULT-III

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

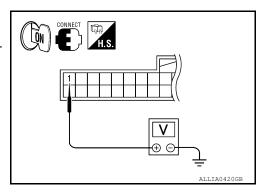
Connector	Terminal	_	IGN ILLUM	Voltage
M18	1	Ground	ON 0V	
IVITO	'	Ground	OFF	Battery voltage

Is the inspection result normal?

YES >> Ignition keyhole illumination is operating normally. Fixed ON>>GO TO 3

Fixed OFF>>GO TO 2

2.CHECK IGNITION KEYHOLE ILLUMINATION OPEN CIRCUIT

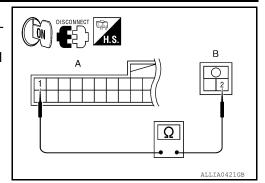


IGNITION KEYHOLE ILLUMINATION CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector M18 and ignition keyhole illumination connector.
- 3. Check continuity between BCM connector M18 (A) terminal 1 and ignition keyhole illumination connector M150 (B) terminal 2.

В	CM	Ignition keyhole illumination		Continuity	
Connector	Terminal	Connector	Connector Terminal		
M18 (A)	1	M150 (B)	2	Yes	



Is the inspection result normal?

- YES >> Check ignition keyhole illumination for an open. If OK, replace BCM. Refer to BCS-55, "Removal and Installation". If NG, replace ignition keyhole illumination.
- NO >> Repair harness or connectors.

3.check ignition keyhole illumination short circuit

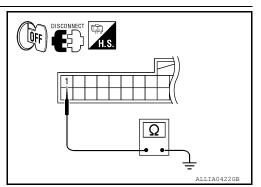
- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector M18 and ignition keyhole illumination connector.
- 3. Check continuity between BCM connector M18 terminal 1 and ground.

Connector	Terminal	_	Continuity
M18	1	Ground	No

Is the inspection result normal?

YES >> Check ignition keyhole illumination for a short circuit. If OK, replace BCM. Refer to <u>BCS-55</u>, "Removal and <u>Installation"</u>. If NG, replace ignition keyhole illumination.

NO >> Repair harness or connectors.



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Revision: March 2012 INL-23 2011 Pathfinder

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- · Activate and display TPMS transmitter IDs
- · Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- · Register TPMS transmitter IDs
- · Check Intelligent Key relative signal strength
- · Confirm vehicle Intelligent Key antenna signal strength
- · Test remote keyless entry keyfob relative signal strength

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
ACC ON CW	Ignition switch OFF or ON	Off
ACC ON SW	Ignition switch ACC	On
AIR COND SW	A/C switch OFF	Off
	A/C switch ON	On
AIR PRESS FL	Front left tire air pressure value	kPa, kg/cm², psi
AIR PRESS FR	Front right tire air pressure value	kPa, kg/cm², psi
AIR PRESS RL	Rear left tire air pressure value	kPa, kg/cm², psi
AIR PRESS RR	Rear right tire air pressure value	kPa, kg/cm ² , psi
AUTO LIGHT SW	Lighting switch OFF	Off
AUTO LIGHT SW	Lighting switch AUTO	On
DACK DOOD CW	Back door closed	Off
BACK DOOR SW	Back door opened	On
BRAKE SW	Brake pedal released	Off
	Brake pedal applied	On
BUCKLE SW	Seat belt buckle unfastened	Off
BUCKLE SW	Seat belt buckle fastened	On
BUZZER	Buzzer in combination meter OFF	Off
BUZZEK	Buzzer in combination meter ON	On
CDL LOCK SW	Door lock/unlock switch does not operate	Off
CDL LOCK SW	Press door lock/unlock switch to the LOCK side	On
CDL UNLOCK SW	Door lock/unlock switch does not operate	Off
CDL UNLOCK 3W	Press door lock/unlock switch to the UNLOCK side	On
DOOR SW-AS	Front door RH closed	Off
DOOK SW-AS	Front door RH opened	On
DOOR SW-DR	Front door LH closed	Off
DOOR SW-DR	Front door LH opened	On
DOOR SW-RL	Rear door LH closed	Off
DOON GW-RL	Rear door LH opened	On
DOOR SW-RR	Rear door RH closed	Off
DOOK GW-KK	Rear door RH opened	On

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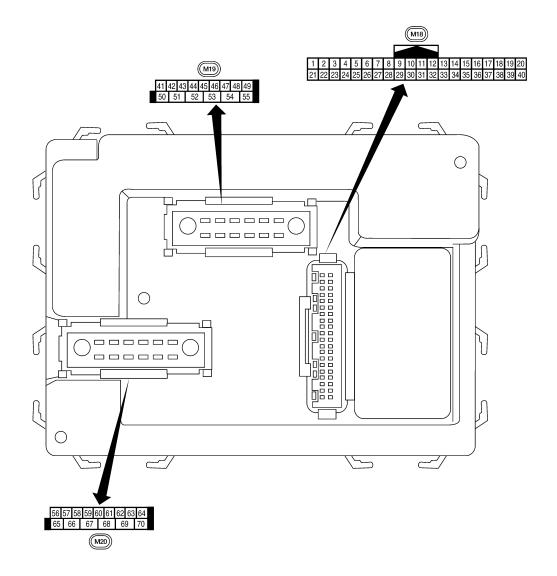
Monitor Item	Condition	Value/Status
FAN ON SIG	Blower motor fan switch OFF	Off
I AN ON SIG	Blower motor fan switch ON	On
FR FOG SW	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On
	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
	Front wiper switch OFF	Off
FR WIPER LOW	Front wiper switch LO	On
	Front wiper switch OFF	Off
FR WIPER HI	Front wiper switch HI	On
ED W//DED INIT	Front wiper switch OFF	Off
FR WIPER INT	Front wiper switch INT	On
	Any position other than front wiper stop position	Off
FR WIPER STOP	Front wiper stop position	On
	When hazard switch is not pressed	Off
HAZARD SW	When hazard switch is pressed	On
	Headlamp switch OFF	Off
HEAD LAMP SW 1	Headlamp switch 1st	On
	Headlamp switch OFF	Off
HEAD LAMP SW 2	Headlamp switch 1st	On
	High beam switch OFF	Off
HI BEAM SW	High beam switch HI	On
	ID registration of front left tire incomplete	YET
D REGST FL1	ID registration of front left tire complete	DONE
	ID registration of front right tire incomplete	YET
D REGST FR1	ID registration of front right tire complete	DONE
	ID registration of rear left tire incomplete	YET
D REGST RL1	ID registration of rear left tire complete	DONE
	ID registration of rear right tire incomplete	YET
D REGST RR1	ID registration of rear right tire complete	DONE
	Ignition switch OFF or ACC	Off
IGN ON SW	Ignition switch ON	On
	Ignition switch OFF or ACC	Off
GN SW CAN	Ignition switch ON	On
NT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7
THE VOLUME	LOCK button of Intelligent Key is not pressed	Off
-KEY LOCK ¹	LOCK button of Intelligent Key is not pressed	On
	PANIC button of Intelligent Key is not pressed	Off
-KEY PANIC ¹		
	PANIC button of Intelligent Key is pressed	On
-KEY PW DWN ¹	UNLOCK button of Intelligent Key is not pressed	Off
-VET LAA DAAIN.	UNLOCK button of Intelligent Key is pressed for greater than 3 seconds and driver's window operating in DOWN direction	On
I-KEY UNLOCK ¹	UNLOCK button of Intelligent Key is not pressed	Off
-KET UNLUCK	UNLOCK button of Intelligent Key is pressed	On

Monitor Item	Condition	Value/Status
KEY CYL LK-SW	Door key cylinder LOCK position	Off
KET CTL LK-SW	Door key cylinder other than LOCK position	On
KEY CYL UN-SW	Door key cylinder UNLOCK position	Off
KET CTL UN-SW	Door key cylinder other than UNLOCK position	On
KEY ON SW	Mechanical key is removed from key cylinder	Off
KET ON SW	Mechanical key is inserted to key cylinder	On
KEVI E00 I 00K2	LOCK button of key fob is not pressed	Off
KEYLESS LOCK ²	LOCK button of key fob is pressed	On
14574 500 BANG ²	PANIC button of key fob is not pressed	Off
KEYLESS PANIC ²	PANIC button of key fob is pressed	On
145) 41 500 LINII 0.014 ²	UNLOCK button of key fob is not pressed	Off
KEYLESS UNLOCK ²	UNLOCK button of key fob is pressed	On
LIQUE OWACE	Lighting switch OFF	Off
LIGHT SW 1ST	Lighting switch 1st	On
OIL PRESS SW	Ignition switch OFF or ACC Engine running	Off
	Ignition switch ON	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5V
	Dark outside of the vehicle	Close to 0V
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
puou ow1	Return to ignition switch to LOCK position	Off
PUSH SW ¹	Press ignition switch	On
REAR DEF SW	Rear window defogger switch OFF	Off
REAR DEF 3W	Rear window defogger switch ON	On
RR WASHER SW	Rear washer switch OFF	Off
KK WASHEK SW	Rear washer switch ON	On
RR WIPER INT	Rear wiper switch OFF	Off
KIX WIF LIX IIV I	Rear wiper switch INT	On
RR WIPER ON	Rear wiper switch OFF	Off
KK WIF LIX OIN	Rear wiper switch ON	On
RR WIPER STOP	Rear wiper stop position	Off
KK WIFER STOP	Other than rear wiper stop position	On
TURN SIGNAL L	Turn signal switch OFF	Off
TORN SIGNAL L	Turn signal switch LH	On
TURN SIGNAL R	Turn signal switch OFF	Off
I OINN SIGNAL IN	Turn signal switch RH	On
VEHICLE SPEED	While driving	Equivalent to speedometer reading
WARNING LAMP	Low tire pressure warning lamp in combination meter OFF	Off
VVARINING LAIVIP	Low tire pressure warning lamp in combination meter ON	On

^{1:} With Intelligent Key

^{2:} With remote keyless entry system

Terminal Layout



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Physical Values

			Signal		Measuring condition	
Terminal	Wire color	Signal name	input/ output	Ignition switch	Operation or condition	Reference value or waveform (Approx.)
	BR	Ignition keyhole illumi-	Outout	OFF	Door is locked (SW OFF)	Battery voltage
1	BK	nation	Output	OFF	Door is unlocked (SW ON)	0V
2	Р	Combination switch input 5	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 **5ms
3	SB	Combination switch input 4	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 **5ms SKIA5292E
4	V	Combination switch input 3	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 → • 5ms SKIA5291E
5	L	Combination switch input 2				(V)
6	R	Combination switch input 1	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	5 SKIA5292E
	.,	Rear window defogger			Rear window defogger switch ON	0V
9	Y	switch	Input	ON	Rear window defogger switch OFF	5V
11	G/B	Ignition switch (ACC or ON)	Input	ACC or ON	Ignition switch ACC or ON	Battery voltage
12	LG	Front door switch RH	Input	OFF	ON (open) OFF (closed)	0V Battery voltage
13	L	Rear door switch RH	Input	OFF	ON (open) OFF (closed)	0V Battery voltage
15	W	Tire pressure warning check connector	Input	OFF	—	5V
18	BR	Remote keyless entry receiver and optical sensor (ground)	Output	OFF	_	0V

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	\\ <i>\(\in\)</i>		Signal		Measuring condition	Defense and a service of any
Terminal	Wire color	Signal name	input/ output	Ignition switch	Operation or condition	Reference value or waveform (Approx.)
19	V	Remote keyless entry receiver (power sup- ply)	Output	OFF	Ignition switch OFF	(V) 6 4 2 0
20	G	Remote keyless entry	Input	OFF	Stand-by (keyfob buttons released)	(V) 6 4 2 0 + 50 ms
20	Ü	receiver (signal)	при	511	When remote keyless entry receiver receives signal from keyfob (keyfob buttons pressed)	(V) 6 4 2-1
21	GR	NATS antenna amp.	Input	OFF → ON	Ignition switch (OFF → ON)	Just after turning ignition switch ON: Pointer of tester should move for approx. 1 second, then return to battery voltage.
22	V	BUS	_	_	Ignition switch ON or power window timer operates	(V) 15 10 5 0 200 ms
23	G	Security indicator lamp	Output	OFF	Goes OFF → illuminates (Every 2.4 seconds)	Battery voltage → 0V
25	BR	NATS antenna amp.	Input	OFF → ON	Ignition switch (OFF \rightarrow ON)	Just after turning ignition switch ON: Pointer of tester should move for approx. 1 second, then return to battery voltage.
27	W	Compressor ON sig-	Input	ON	A/C switch OFF	5V
	V V	nal	iriput	ON	A/C switch ON	0V
28	R	Front blower monitor	Input	ON	Front blower motor OFF	Battery voltage
					Front blower motor ON ON	0V 0V
29	G	Hazard switch	Input	OFF	OFF	5V
		Back door opener		ON (open)	0V	
30 ¹	G	switch	Input	OFF	OFF (closed)	Battery voltage
30 ²	SB	Back door opener	Input	OFF	ON (open)	0V
30		switch	pat	J. 1	OFF (closed)	Battery voltage

) A C		Signal		Measuring condition	B ()
Terminal	Wire color	Signal name	input/ output	Ignition switch	Operation or condition	Reference value or waveform (Approx.)
32	0	Combination switch output 5	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 **-5ms
33	GR	Combination switch output 4	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 +-5ms SKIA5292E
34	G	Combination switch output 3	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 **-5ms
35	BR	Combination switch output 2				0.0
36	LG	Combination switch output 1	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	(V) 6 4 2 0 **5ms
37 ¹	В	Key switch and key	Input	OFF	Key inserted	Battery voltage
	_	lock solenoid			Key removed	0V
37 ²	В	Key switch and igni- tion knob switch	Input	OFF	Intelligent Key inserted Intelligent Key removed	Battery voltage 0V
38	W/R	Ignition switch (ON)	Input	ON	—	Battery voltage
39	L	CAN-H	—	_	_	—
40	Р	CAN-L		_	_	_
42	LG	Glass hatch ajar switch	Input	ON	Glass hatch open Glass hatch closed	0V Battery voltage
40	_	Dook doorlately and the	lmr4	055	ON (open)	0V
43	Р	Back door latch switch	Input	OFF	OFF (closed)	Battery voltage

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	Wire		Signal		Measuring condition	Reference value or waveform		
erminal	color	Signal name	input/ output	Ignition switch	Operation or condition	(Approx.)		
							Rise up position (rear wiper arm on stopper)	0V
				A Position (full clockwise stop position)	Battery voltage			
44	0	Rear wiper auto stop switch	Input	ON	Forward sweep (counterclockwise direction)	Fluctuating		
					B Position (full counterclockwise stop position)	0V		
					Reverse sweep (clockwise direction)	Fluctuating		
47	GR Front door switch LH	Front door switch I H	Input	OFF	ON (open)	0V		
-T/		TOTAL GOOD SWILLING	put	<u> </u>	OFF (closed)	Battery voltage		
48	Р	Rear door switch LH	Input	Input OFF	ON (open)	0V		
70		Todi dooi Switch Lil	iiiput	011	OFF (closed)	Battery voltage		
49	L	Cargo lamp	Output	OFF	Any door open (ON)	0V		
10		-argo ramp	Juipui	J. 1	All doors closed (OFF)	Battery voltage		
51	0	Trailer turn signal (right)	Output	ON	Turn right ON	(V) 15 10 5 0 500 ms		
52	LG	Trailer turn signal (left)	Output	ON	Turn left ON	(V) 15 10 5 0 500 ms		
53	L	Back door latch actua-	Output	OFF	OFF	0		
JJ	L	tor	Output	OFF	ON	Battery voltage		
55	W	Rear wiper output cir-	Output	ON	OFF	0		
55	V V	cuit 1		OIN	ON	Battery voltage		
56	R/Y	Battery saver output	Output	OFF	15 minutes after ignition switch is turned OFF	0V		
				ON	_	Battery voltage		
57	R/Y	Battery power supply	Input	OFF	_	Battery voltage		
58	W	Optical sensor	Input	ON	When optical sensor is illuminated	3.1V or more		
55		- Passa 0011001	put	014	When optical sensor is not illuminated	0.6V or less		
50	CD	Front door lock as-	Outsut	OFF	OFF (neutral)	0V		
59	GR	sembly LH actuator (unlock)	Output	OFF	ON (unlock)	Battery voltage		

< ECU DIAGNOSIS INFORMATION >

	\\/:ro		Signal	Measuring condition		Defended and a support of the second of the		
Terminal	Wire color	Signal name	input/ output	Ignition switch	Operation or condition		Reference value or waveform (Approx.)	
60	LG	Turn signal (left)	Output	ON	Turn left ON		(V) 15 10 500 ms SKIA3009J	
61	G	Turn signal (right)	Output	ON	Turn right ON		(V) 15 10 500 ms 500 ms	
63	BR	Interior room/map	Output	OFF	Any door	ON (open)	0V	
	DIX.	lamp	Odiput	011	switch	OFF (closed)	Battery voltage	
65	V	All door lock actuators	Output	OFF	OFF (neutral) ON (lock)		0V	
		(lock)	- Carpar	.			Battery voltage	
		Front door lock actua-			OFF (neutral) ON (unlock)		0V	
66	L	tor RH, rear door lock actuators LH/RH and glass hatch lock actu- ator (unlock)	Output	OFF			Battery voltage	
67	В	Ground	Input	ON	_		0V	
	0	Power window power supply (RAP)	Output	_	Ignition switch ON		Battery voltage	
68					Within 45 seconds after ignition switch OFF		Battery voltage	
					More than 45 seconds after ignition switch OFF		0V	
					When front door LH or RH is open or power window timer operates		0V	
69	L	Power window power supply	Output	_	_		Battery voltage	
70	W	Battery power supply	Input	OFF	_		Battery voltage	

^{1:} With remote keyless entry system

Fail Safe

Fail-safe index

BCM performs fail-safe control when any DTC listed below is detected.

Display contents of CONSULT	Fail-safe	Cancellation		
U1000: CAN COMM CIRCUIT	Inhibit engine cranking	When the BCM re-establishes communication with the other modules.		

DTC Inspection Priority Chart

INFOID:0000000006706743

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

^{2:} With Intelligent Key system

< ECU DIAGNOSIS INFORMATION >

Priority	DTC	
1	U1000: CAN COMM CIRCUIT	
2	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2013: STRG COMM 1 B2552: INTELLIGENT KEY B2590: NATS MALFUNCTION 	
3	C1729: VHCL SPEED SIG ERR C1735: IGNITION SIGNAL	
	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL 	
	 C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RL C1712: [CHECKSUM ERR] FL 	
4	 C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RL C1716: [PRESSDATA ERR] FL 	
	 C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL 	
	 C1720: [CODE ERR] FL C1721: [CODE ERR] FR C1722: [CODE ERR] RR C1723: [CODE ERR] RL 	
	 C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] FR C1726: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RL 	

DTC Index

NOTE:

Details of time display

CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.

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

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. Further testing may be required.	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	BCS-29
B2013: STRG COMM 1	_	_	_	SEC-30
B2190: NATS ANTENNA AMP	_	_	_	SEC-33 (with I-Key) SEC-131 (without I- Key)
B2191: DIFFERENCE OF KEY	_	_	_	SEC-36 (with I-Key) SEC-134 (without I-Key)

Revision: March 2012 INL-33 2011 Pathfinder

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CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2192: ID DISCORD BCM-ECM	_	_	_	SEC-37 (with I-Key) SEC-135 (without I- Key)
B2193: CHAIN OF BCM-ECM	_	_	_	SEC-39 (with I-Key) SEC-137 (without I- Key)
B2552: INTELLIGENT KEY	_	_	_	SEC-41
B2590: NATS MALFUNCTION	_	_	_	<u>SEC-42</u>
C1708: [NO DATA] FL	_	_	_	<u>WT-14</u>
C1709: [NO DATA] FR	_	_	_	<u>WT-14</u>
C1710: [NO DATA] RR	_	_	_	<u>WT-14</u>
C1711: [NO DATA] RL	_	_	_	<u>WT-14</u>
C1712: [CHECKSUM ERR] FL	_	_	_	<u>WT-16</u>
C1713: [CHECKSUM ERR] FR	_	_	_	<u>WT-16</u>
C1714: [CHECKSUM ERR] RR	_	_	_	<u>WT-16</u>
C1715: [CHECKSUM ERR] RL	_	_	_	<u>WT-16</u>
C1716: [PRESSDATA ERR] FL	_	_	_	<u>WT-18</u>
C1717: [PRESSDATA ERR] FR	_	_	_	<u>WT-18</u>
C1718: [PRESSDATA ERR] RR	_	_	_	<u>WT-18</u>
C1719: [PRESSDATA ERR] RL	_	_	_	<u>WT-18</u>
C1720: [CODE ERR] FL	_	_	_	<u>WT-16</u>
C1721: [CODE ERR] FR	_	_	_	<u>WT-16</u>
C1722: [CODE ERR] RR	_	_	_	<u>WT-16</u>
C1723: [CODE ERR] RL	_	_	_	<u>WT-16</u>
C1724: [BATT VOLT LOW] FL	_	_	_	<u>WT-16</u>
C1725: [BATT VOLT LOW] FR	_	_	_	<u>WT-16</u>
C1726: [BATT VOLT LOW] RR	_	_	_	<u>WT-16</u>
C1727: [BATT VOLT LOW] RL	_	_	_	<u>WT-16</u>
C1729: VHCL SPEED SIG ERR	_	_	_	<u>WT-20</u>
C1735: IGNITION SWITCH	_	_	_	_

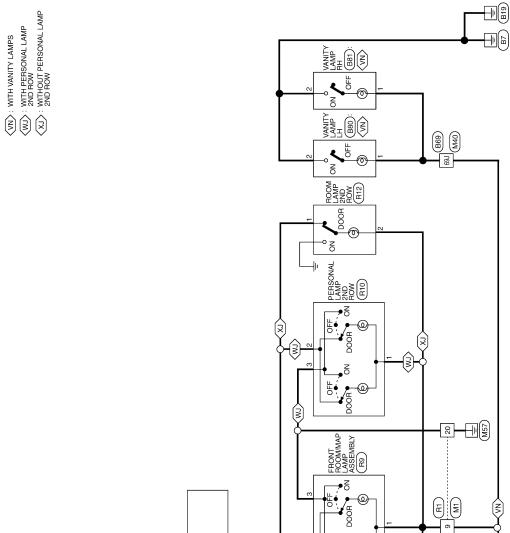
BATTERY

< WIRING DIAGRAM > WIRING DIAGRAM Α INTERIOR ROOM LAMP Wiring Diagram INFOID:0000000006534924 В $\langle \text{IK} \rangle$: WITH INTELLIGENT KEY SYSTEM $\langle \text{OK} \rangle$: WITHOUT INTELLIGENT KEY SYSTEM W57 TO CAN SYSTEM С D MAIN POWER WINDOW WINDOW DOOR LOCKUNLOCK SWITCH D7), D8 CLOSED FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH) (D14) Е F MA4 FUSE BLOCK (J/B) (M3), (M4) S. FRONT DOOR (B108) SWITCH RH UNLOCK [2] (8M) **E** <u>[a]</u> IGNITION SWITCH ON OR START M36 10A Н (M20) POWER WINDOW MINDOW DOOR LOCK/UNLOCK SWITCH RH (D105) 10A (et M) (M18) BCM (BODY CONTROL MODULE) J REAR DOOR (B18) SWITCH I H K D505 D404 INL OPEN 10A M WITCH) WITCH) BACK DOOR LATCH KEY SWITCH (M27) CLOSED Ν 61) INTERIOR ROOM LAMP REMOVED M31 0 CLOSED GLASS HATCH (D503) Р M6 OPEN

M40 698 D201

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ABLWA1205GB



M20

(M19)

E

BCM (BODY CONTROL MODULE) (M18),

INL-36 2011 Pathfinder Revision: March 2012

< WIRING DIAGRAM >

Signal Name Name

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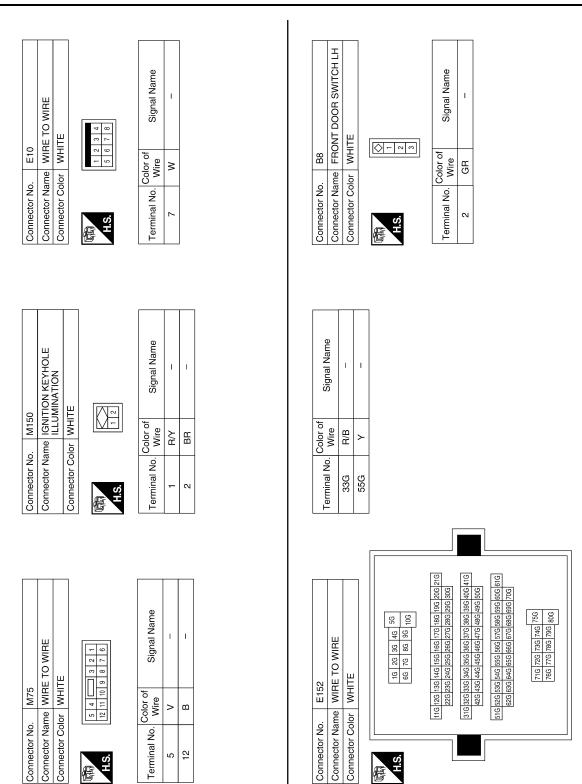
Revision: March 2012 INL-37 2011 Pathfinder

M20 BCM (BODY CONTROL MODULE) BLACK	56 57 56 59 60 61 62 53 64 65 66 67 68 69 70	Signal Name	BAT SAVER OUTPUT	BOOM I AMP	GND (POWER)	BAT (F/L)				Signal Name	***************************************	and.					
	S6[57]58[5 [65] 66 (6	Color of Wire	<u>~</u>	¥ RB	ш	3				Color of Wire	R/B	>					
Connector No. Connector Name Connector Color	(南) H.S.	No.	56	57	29	70				Terminal No.	33G	55G					
												Г					
Connector No. M19 Connector Name BCM (BODY CONTROL MODULE) Connector Color WHITE	(1) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Terminal No. Wire Signal Name	9 97	43 P BACK DOOR SW	5 0	49 L LUGGAGE LAMP				Connector No. M31		$\neg \Pi$	66 46 36 26 16 106 96 86 76 66 2162x65h96f86f76f86f86f46f136f28f116	306 296 286 276 266 256 246 236 226	41/6 40/6 (39/G) 38/G (37/G) 36/G (35/G) 34/G (33/G) 32/G (31/G) 36/G (31/G) 41/G (41/G) 44/G (43/G) 42/G		766 746 736 726 716 806 786 776 786
nector No. M18 nector Name BCM (BODY CONTROL MODULE) nector Color WHITE	H.S. H.S.	Terminal No. Wire Signal Name Te	BB X	12 LG DOOR SW (AS)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	> m	38 W/R IGN SW	-	40 P CAN-L	Connector No. M27 Connector No			H.S.	Terminal No. Color of Signal Name		- X	

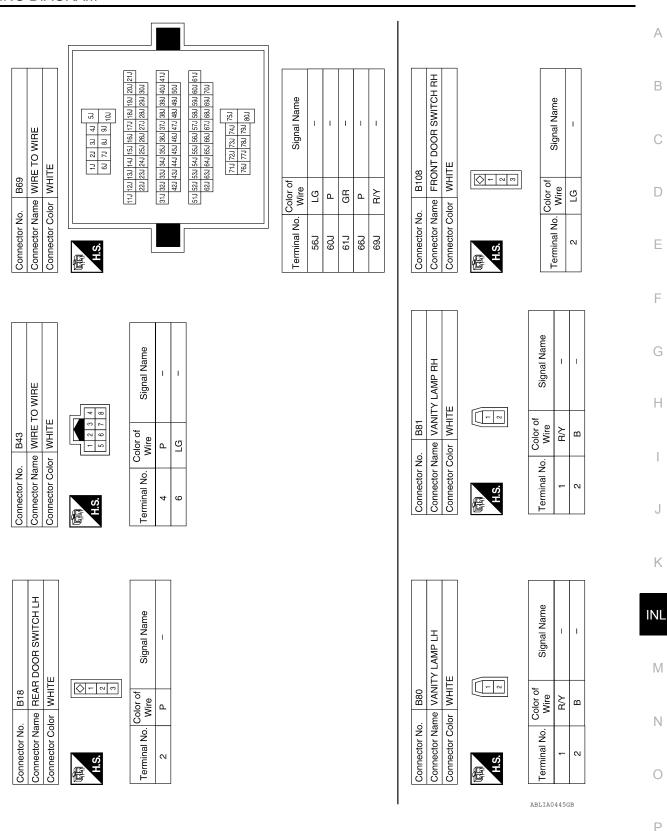
Revision: March 2012 INL-38 2011 Pathfinder

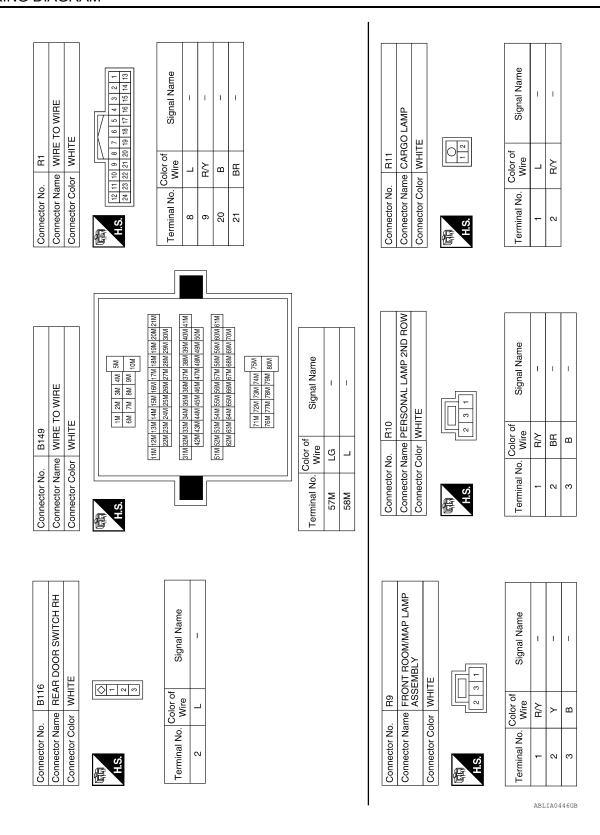
ABLIA1656GB

	Connector No. M66 Connector Name KEY SWITCH AND IGNITION KNOB SWITCH KNOB SWITCH KNOB SWITCH Tonnector Color of GRAY Terminal No. Color of Signal Name 3 R/B - 4 SB - 4 SB -	A B C D
<u> </u>		F
Signal Name	Signal Name	G H
Color of Wire LG	Color of Wire LG R P P P RYX	
57M 58M	56J 60J 61J 68J 69J	J
		K
11M 14M 15M 17M 14M 15M 17M 14M 15M 15M 15M	233 222 11.1 23 23.3 22.2 11.1 23.1 23.1	INL
Connector No. M36 Connector Name WIRE TO WIRE Connector Color WHITE SM 4M 3M 2M 1M	M40 WIRE TO WIRE	M
or Name Or Color V	Connector No. Connector Name Connector Color Liu 20 21/2 20	N
Connector No. Connector Name Connector Color H.S.	Connector No. Connector Name Connector Color H.S.	0
	ABLIA0443GB	Р



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< WIRING DIAGRAM >

	Connector No.	<u>0</u>		Connector No.	D2	
MP 2ND ROW	Connector Name	WIRE TO	WIRE	Connector Na	me WIRE	TO WIRE
	Connector Color	WHITE		Connector Co	lor BROW	N,
	H.S.	4 5 6 7 16 17 18 19	8 9 10 11 12 20 21 22 23 24	S.H	1 2 3	9 10 11 12
Signal Name	Terminal No. W	or of fire	Signal Name	Terminal No.	Color of Wire	Signal Name
***	21		-	6	8	****
ı		,				
	Connector Name ROOM LAMP 2ND ROW Connector Color WHITE H.S. Terminal No. Color of Signal Name 1 BR — 1 BR —	Connecto Connecto Terminal	Connecto Connecto Terminal	Connector Name WIRE TO	Connector Name WIRE TO WIRE	Connector Name WIRE TO WIRE Connector Name WIRE

	Connector Name FRONT DOOR LOCK ASSEMBLY LH	١٧		3 2 1		Signal Name	1	I	ŀ
D14	ne FRO ASS	or GRA	<u>لا</u>	6 5 4		Solor of Wire	B/W	В	SB
Connector No.	Connector Nan	Connector Color GRAY	9	H.S.	J	Terminal No. Wire	3	4	5
			· <u></u>						
	Š	T					T]	

	×				
	Connector Name AND DOOR LOCK/UNLOCK	411	61 81	Signal Name	GND
80	me AND DOC SWITCH	lor WHITE	174	Color of Wire	മ
Connector No.	Connector Na	Connector Color WHITE	H.S.	Terminal No.	17

						>	
	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH	TE	2 3 4 5 6 7 9 10 11 12 13 14 15 16	Signal Name	KEY CYL LOCK SW	KEY CYL UNLOCK SW	POWER WINDOW SERIAL LINK
<u>`</u>		or WH	1	Color of Wire	SB	R/W	>
COLLINECTOR INC.	Connector Name	Connector Color WHITE	H.S.	Terminal No.	4	9	14

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Revision: March 2012 INL-43 2011 Pathfinder

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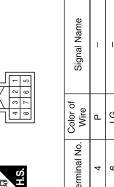
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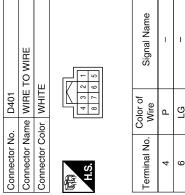
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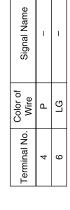
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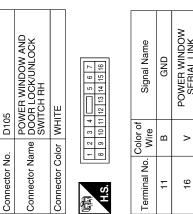
D401	Connector Name WIRE TO WIRE	r WHITE	
Connector No.	nnector Nam	Connector Color WHITE	

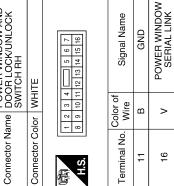


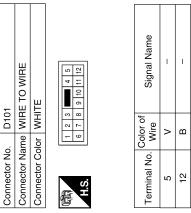


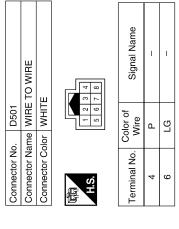


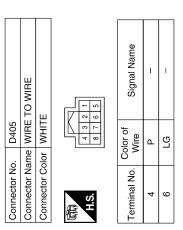


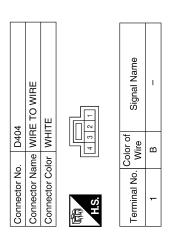












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< WIRING DIAGRAM >

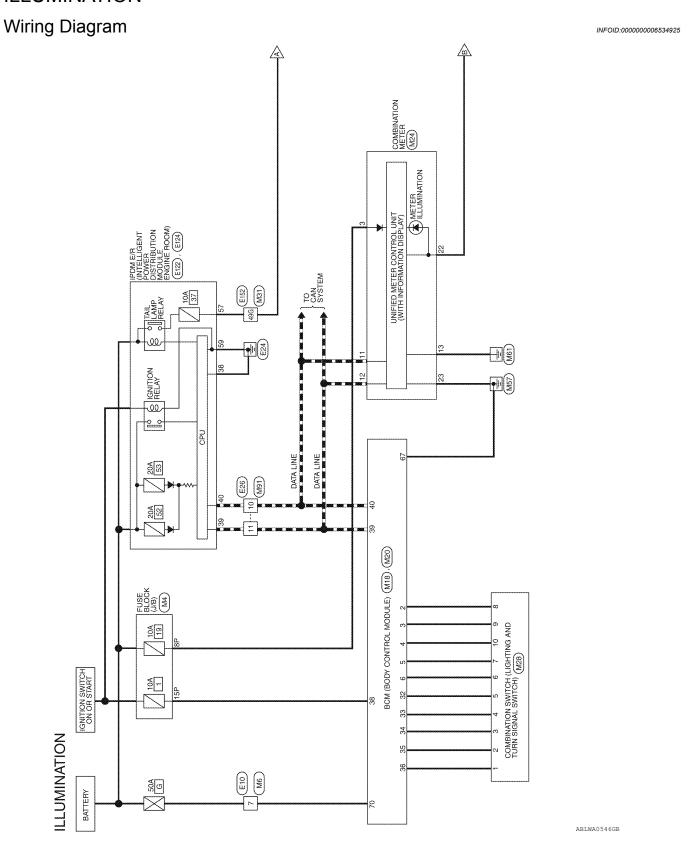
Connector No.). D505	J5
Connector Name WIRE TO WIRE	me WIF	RE TO WIRE
Connector Color WHITE	lor WF	<u> </u>
H.S.	1-	4
Terminal No. Wire	Color of Wire	Signal Name
-	В	I

Connector No.	D503)3
Connector Name	1	GLASS HATCH AJAR SWITCH
Connector Color BLACK	olor BL/	ACK
H.S.	<u> </u>	
Terminal No. Wire	Color of Wire	Signal Name
-	57	ı

***************************************	DOOR LATCH		2	Signal Name	ı	ı
D502	e BACK	r WHITE	4	Color of Wire	Ь	BR
Connector No.	Connector Name BACK DOOR LATCH	Connector Color WHITE	H.S.	Terminal No.	8	4

USUS WIRE TO WIRE	WHITE	1 2 3 4	r of Signal Name	1	
Connector Name WIRE TO WIRE	Connector Color WHITE	A.S.	Terminal No. Wire	- B	
GLASS HATCH AJAR	SWITCH	ş <u>—</u>	Signal Name	ı	
Connector No. D503 Connector Name GLAS	SW SW		Color of Wire	1 LG	
				-	
Connector No. D502 Connector Name BACK DOOR LATCH			Signal Name	i	
). D502 ame BACK D	olor WHITE	4 3 2	Color of Wire	a	
Connector No.	Connector Color WHITE	H.S.	Terminal No.	3	4
					ABLIA1658GB

INL-45 Revision: March 2012 2011 Pathfinder



NG DIAGRAM >		
HEEL SYSTEM F POSITIONER	ANC AUTO AMMP (M449)	А
(MA⟩: WITHOUT AUTO A/C ⟨FI]: PART TIME 4WD SYSTEM ⟨SW⟩: WITH HEATED STEERING WHEEL ⟨WD⟩: WITH DVD ENTERTAINMENT SYSTEM ⟨XA⟩: WITHOUT AUTOMATIC DRIVE POSITIONER	Mega Mega Mega Mega Mega Mega Mega Mega	В
(MA): WITHOUT AUTO A/C (PT): PART TIME 4WD SYSTEM (SW): WITH HEATED STEERING (WD): WITH DVD ENTERTAINMEI (XA): WITHOUT AUTOMATIC DR	FRONT AIR WISS	С
		D
L DRIVE TIC DRIVE POSITI TO SYSTEM AUDIO SYSTEM AUDIO SYSTEM	A SWITCH (MISS)	Е
4W): WITH 4-WHEEL DRIVE (AD): WITH AUTO A/C (AD): WITH AUTOMATIC DRIVE POSITIONER (AM): ALL-MODE 4WD SYSTEM (BA): WITH BASE AUDIO SYSTEM (EB): EXCEPT BASE AUDIO SYSTEM	15 DOOR REMOTE CONTROL SWITCH (MISS) : (AD)	F
(a) (a) (a) (a)	GAN HA	G
		Н
	STEERING WHEEL WHEEL SWITCH SWITCH	I
	AVS AND HAZARD SWITCH S	J
	RNESS LAYOUT	K
	HAZARD SWITCH (MSS) HOWN IN 'HAR	INL
	BELY S SWA	M
	HIS CONNECTOR IS N	N
		0
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(AB): WITH AUTO A/C
(AD): WITH AUTOMATIC DRIVE POSITIONER
(AM): WITH ADJUSTABLE PEDALS
(BN): WITH BOSE AUDIO SYSTEM, WITHOUT NAVI
(BO): WITH BOSE AUDIO SYSTEM, WITH NAVI
(EB): EXCEPT BASE AUDIO SYSTEM
(HF): WITH FRONT HEATED SEATS
(MM): WITH MANUAL, MODE SWITCH
(MM): WITHOUT MANUAL, MODE SWITCH
(MM): WITHOUT MANUAL MODE SWITCH
(MM): WITHOUT AUTOMATIC DRIVE POSITIONER

WITH BOSE AUDIO SYSTEM, WITHOUT NAVI

: WITHOUT AUTOMATIC DRIVE POSITIONER

REAR AIR CONTROL (REAR) (M208): (AA) AV CONTROL UNIT (M39): (BO), (M42): (BN), GLOVE BOX LAMP (M59)

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Connector Name | HEATED STEERING WHEEL | SWITCH

Connector No. M7

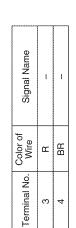
Connector Color WHITE

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Connector No. M6	Connector Name WIRE TO WIRE	Connector Color WHITE	
Connector No.	Connector Name	Connector Color WHITE	
Connector No. M4	onnector Name FUSE BLOCK (J/B)	Connector Color WHITE	
Connector No.	Connector Name	Connector Color WHITE	



ame			
Signal Name	*	1	
Color of Wire	R/Y	W/R	
Terminal No. Wire	8P	15P	



Signal Name	1	
Color of Wire	≯	
nal No.	7	

-	W	7
Signal Name	Color of Wire	Terminal No.

<u>a</u>	BR -		M20	BCM (BODY CONTRO!	MODULE)
9	4		Connector No. M20	Connector Name	
****			Cional Mama		INPUT 1
3			Color of	wire	œ
7			Terminal No Color of		9

Terminal No.	Color of Wire	Signal Name
9	Œ	INPUT 1
32	0	OUTPUT 5
33	GR	OUTPUT 4
34	g	OUTPUT 3
35	BR	OUTPUT 2
36	FG	OUTPUT 1
38	W/R	IGN SW
39	٦	CAN-H
40	۵	CAN-L

Connector Color BLACK

GND (POWER)

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BAT (F/L)

Signal Name

Color of Wire

Terminal No.

	ONTROL			13 14 15 16 17 18 19 20 33 34 35 36 37 38 39 40	Signal Name	INPUT 5	, High
M18	BCM (BODY CONTROL MODULE)	WHITE		6 7 8 9 10 11 12 13 26 27 28 29 30 31 32 33			
	Vame	Color		5 6 7 25 26 27	Color of Wire	<u> </u>	ď
Connector No.	Connector Name	Connector Color WHITE	原勤 H.S.	1 2 3 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Terminal No.	2	c

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INPUT 3 INPUT 2

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Connector No.	do. M24	Connector No. M24 Connector Name COMBINATION METER	Connector No.	No. M28 Name COM	Connector No. M28 Connector Name COMBINATION SWITCH	Terminal No.		Color of Wire	Signal Name	
Connector Color WHITE	Color WH		Connector	Connector Color WHITE		6		SB	OUTPUT 4	
	_			-		10		^	OUTPUT 3	
H.S.	ᄕ		是 H.S.	12 13 1	10 0 8 7 1 2 3 4 5 6					
20 19 18 17 16 40 39 38 37 36	15 14 13 35 34 33	12 11 10 9 8 7 6 5 4 3 2 1 32 31 30 29 28 7 2 8 2 5 24 23 22 21	Terminal No.	Color of Wire	Signal Name					
	Color of		-	9	INPUT 1					
lerminal No.	o. Wire	Signal	2	BB	INPUT 2					
က	Β/Y	ВАТТЕЯУ	က	g	INPUT 3					
-	۵	CAN-L	4	GR	INPUT 4					
12	٦	CAN-H	S	0	INPUT 5					
13	GR	GROUND	9	Œ	OUTPUT 1					
22	BR	ILLUMINATION CONTROL	7		OUTPUT 2					
23	В	POWER GND	8	۵.	OUTPUT 5					
Connector No.	No. M30	0	Connector No.	No. M31		F	8	Color of		Г
Connector	Name CO	Connector Name COMBINATION SWITCH	Connector Name	Name Wif	WIRE TO WIRE	lemma No.	NO.	Vire	oigilai Nairie	Т
Connector Color	Color GRAY	AY	Connector Color	 	WHITE	49G		>	1	\neg
q			臣							
H.S.	24 25	24 25 26 27 31 39 38 34	H.S.		56 46 36 26 16 106 96 86 76 66					
				216/206/1	216/206/196/186/176/166/156/146/136/126/116					
Terminal No.	Color of Wire	Signal Name			30G 29G 28G 27G 26G 25G 24G 23G 22G					
26	Œ	+77		41G 40G	41G 40G 39G 38G 37G 36G 35G 34G 33G 32G 31G					
27	5	1								
				7066	70G 69G 68G 67G 56G 65G 54G 63G 62G					
ABLIA165					75G 74G 77G 77G 76G 80G 79G 78G 77G 76G					
Saci										

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Connector No. M38	o. M38		Connector No.	M39		Connector No.	M42
Connector Name AUDIO UNIT	lame AUDI olor WHIT	O UNIT	Connector Na	AV CC ME BOSE	Connector Name BOSE AUDIO SYSTEM, WITH NAVI)	Connector Name	Connector Name BOSE AUDIO SYSTEM, WITHOUT NAVI)
Æ	Ľ		Connector Color WHITE	or WHITE		Connector Color WHITE	WHITE
H.S.	19 10 11 12 1	13 14 15 16 17 18 20	斯 H.S.	19 10 11 12 1	3 4 5 6 7 8 9 12 13 14 15 16 17 18 20	H.S.	2 3 4 5 6 7 8 9 9 11 11 12 13 14 15 16 17 18
Terminal No. Wire	Color of Wire	Signal Name	Terminal No. Wire	Color of Wire	Signal Name	Terminal No Wire	ilor of Signal Name
80	GR	ILL CONT OUT	6	>	+	6	V
6	æ	TAIL/ILL BLY					***************************************

	RD SWITCH	ш	4	Signal Name	I	ŀ
M55	ne HAZA	or WHIT	16	Color of Wire	α	ВВ
Connector No.	Connector Name HAZARD SWITCH	Connector Color WHITE	所 H.S.	Terminal No. Wire	8	4
	NT AIR CONTROL	×	2 22 20 19 18 17 16 15 14	Signal Name	Į	1
Connector No. M52	Connector Name FRONT AIR CONTROL	Connector Color BLACK	7 6 5 4 20 19 18 17	Terminal No. Wire Signal Name	- 5	- BB

A/C AUTO AMP. BLACK	7 6 5 4 3 2 1 20 19 18 17 16 15 14	Signal Name	ł	1
	25 24 23 22 21	Color of Wire	9	BR
Connector Name Connector Color	H.S. 28 28 28 28 28 28 28 28 28 28 28 28 28	Terminal No.	8	6

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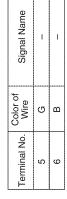
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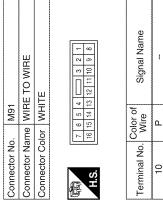
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Revision: March 2012 INL-51 2011 Pathfinder

	Connector No.	M64
	Connector Name WIRE TO WIRE	Connector Name WIRE TO WIRE
	Connector Color WHITE	Connector Color WHITE

Signal Name	I	I
Color of Wire	ŋ	В
rminal No.	5	9







TE	6 5 4	Signal Name	l	ı
lor WHI	7 6 5 15 14 1	Color of Wire	Д	J
Connector Color WHITE	麻 H.S.	Terminal No.	10	11
			•	

		Jolor of

Signal N	ı	ala a
Color of Wire	œ	В
Terminal No.	-	2

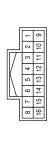
Connector No.	M84
Connector Name	PEDAL ADJUSTING SWITCH Connector Name (WITHOUT AUTOMATIC DRIVE POSITIONER)
Connector Color BROWN	BROWN

Connector Name (WITHOUT AUTOMAT DRIVE POSITIONER)	N	13	Signal Nam	**	I
1 N N N N N N N N N N N N N N N N N N N	BROWN	5 4 2	Color of Wire	Œ	BR
me	oc		ŏ_		
Connector Na	Connector Color	H.S.	Terminal No.	5	9

M56	Connector Name WIRE TO WIRE	WHITE	
Connector No.	Connector Name	Connector Color	

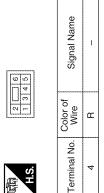
Connector No. M59
Connector Name GLOVE BOX LAMP

Connector Color BROWN



Signal Nam	I	
Color of Wire	ВВ	SB
Terminal No.	14	15

Connector No.	M76
Connector Name	Connector Name ELECTRIC BRAKE (PRE-WIRING)
Connector Color WHITE	WHITE
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< WIRING DIAGRAM >

			А
Connector No. M102 Connector Name COMBINATION SWITCH Connector Color GRAY [415]	Signal Name	Connector No. M141 Connector Name (ALL-MODE 4WD SYSTEM) Connector Color GRAY H.S.	В
M102 COMBINATION GRAY IHIGIBITIBIBIDE	Color of Wire B	M141 me 4WD SHI (ALL-MO) or GRAY Color of Wire R BR	С
Connector No. Connector Color Connector Color	ON NO N	Connector No. Connector Color Connector Color H.S. Terminal No. 7 7	D
Connector No. Connector Col	Terminal No. 18 21	Connector No. Connector Col Connector Col Terminal No. 7	E
			F
M98 A/C AND AV SWITCH A/SSEMBLY WHITE 6 8 10 12 14 16 5 7 9 11 13 15	Signal Name ILL ILL CONT GND	Connector No. M138 Connector Name 4WD SHIFT SWITCH (PART TIME 4WD SYSTEM) Connector Color GRAY Tarminal No. Color of Wire Signal Name 7 R 8 BR	G
M98 A/C AND A ASSEMBL WHITE		M138 4WD SHIFT (PART TIMI GRAY I 2 3 4 1 I 2 8 4 1 I BR	Н
	Color of Wire LG BR	No. M136 Name 4W/D (PAR) Color GRA Color of Nire R BR	1
Connector No. Connector Color Connector Color H.S.	Terminal No.	Connector No. Connector Name Connector Color H.S. Terminal No. 7	J
			K
Connector No. M96 Connector Name (WITH AUTOMATIC DRIVE POSITIONER) Connector Color BROWN	Signal Name - -	OL UNIT (WITH SYSTEM) SYSTEM) IS 18 9 20 IS 18 11 118 20 ILL+	INL
AL ADJUS H AUTOM TIONER)	ÖÖ	Sig	M
M96 PEDAL AD POSITION Ior BROWN	Color of Wire R BR	M131 AV COT MND AUTE MND	N
Connector No. Connector Name Connector Color	Terminal No. 5	Connector No. M131 Connector Name MID AUDIO SYSTEM Connector Color WHITE To 1 2 3 4 5 6 7 8 9 7 10 11 12 13 14 15 16 17 18 18 10 11 12 13 14 15 16 17 18 10 11 12 13 14 15 16 17 18 10 11 12 13 14 15 16 17 18 10 17 18 18 18 18 18 18 18 18 18 18 18 18 18	1.4
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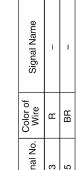
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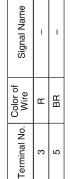
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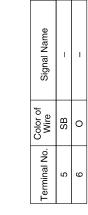
AT SHIFT SELECT Connector Name SWITCH, WITHOU INTELLIGENT KEY	Connector No. M157
Connector Color WHITE	AT SHIFT SELECTOR (WITH MANUAL MODE SWITCH, WITHOUT INTELLIGENT KEY SYSTEM)
	r Color WHITE





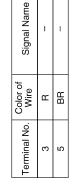






M156	Connector Name (WITHOUT MANUAL MODE SWITCH)	НТЕ	
Connector No. N	Connector Name (N	Connector Color WHITE	





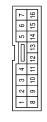
M159
Connector No.

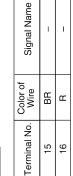
DOOR MIRROR REMOTE
CONTROL SWITCH
(WITHOUT AUTOMATIC
DRIVE POSITIONER)

Connector Name

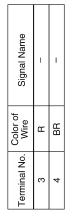
WHITE

Connector Color



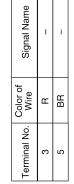






Connector No.	M158
Connector Name	Connector Name (WITH MANUAL MODE SWITCH AND INTELLIGENT KEY SYSTEM)
Connector Color WHITE	WHITE





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< WIRING DIAGRAM >

Connector No. M163 Connector Name Connector Name CONTROL SWITCH CONTROL SWITCH CONTROL SWITCH CONNector Color WHITE Connector Color BROWN Connector Color BROWN Connector Color BROWN 2 8 9 11 12 13 14 15 16	Signal Name Color of Wire Signal Name Terminal No. Wire Signal Name - 15 BR - 14 BR - 16 R - 15 SB -	Connector No. M205 Connector No. M208 Connector Name PEAR AIR CONTROL (REAR) Connector Name Connector Name Connector Name Connector Name Connector Color BLACK Connector Color BLACK Connector Color BLACK Connector Color Connector	Signal Name Terminal No. Wire Color of Wire Signal Name - 6 BR ILL- - 10 G ILL+
ATED SE		22 NE TO WIRE TTE TE TE	Signal Nam
Connector No. M1 Connector Color Sy Connector Color W1 H.S.	Color of Wire 5 R BR	Connector No. M202 Connector Name WIRE TO WIRE Connector Color WHITE	Terminal No. Wire 5 G G B

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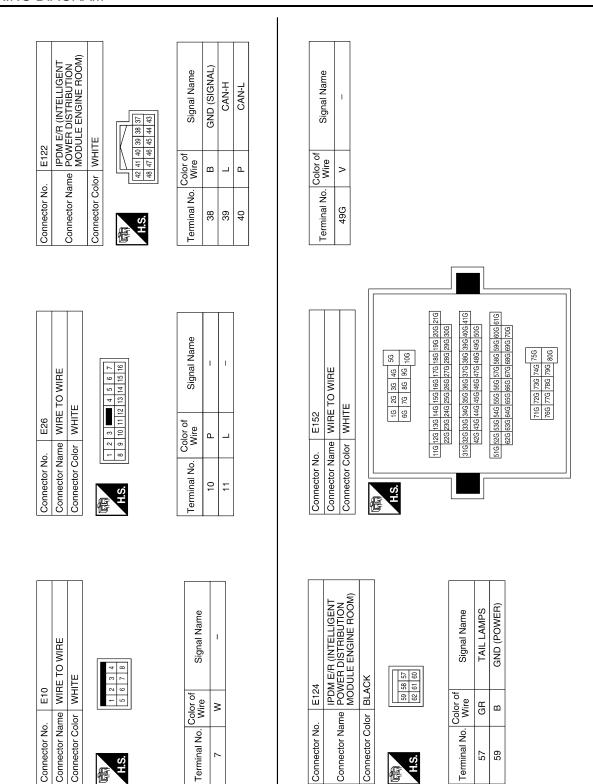
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INTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

CAUTION:

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

Symptom	Possible cause	Inspection item
All of the following lamps do not turn ON Front room/map lamp assembly Personal lamp 2nd row (with personal lamp 2nd row) Room lamp 2nd row (without personal lamp 2nd row) Cargo room lamp Vanity mirror lamps (if equipped) Ignition keyhole illumination	Harness between BCM and each interior room lamp Harness between BCM and each door switch BCM	Battery saver output/power supply circuit Refer to INL-16.
Some or all of the following interior room lamps do not turn ON/OFF • Front room/map lamp assembly • Personal lamp 2nd row (with personal lamp 2nd row)	Harness between BCM and each interior room lamp BCM	Door switch circuit Refer to DLK-56 (with Intelligent Key system) or DLK-228 (without Intelligent Key system). Interior room lamp control circuit
 Room lamp 2nd row (without personal lamp 2nd row) 		Refer to INL-18.
Cargo lamp does not turn ON/OFF	Harness between BCM and cargo lamp BCM	Cargo lamp circuit Refer to INL-20.
Ignition keyhole illumination does not turn ON/OFF	Harness between BCM and cargo lamp BCM	Ignition keyhole illumination circuit Refer to INL-22
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	_	Check the interior room lamp setting. Refer to INL-12.
Interior room lamp battery saver does not activate.	_	Check the interior room lamp battery saver setting. Refer to INL-13.

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the 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 Necessary for Steering Wheel Rotation After Battery Disconnect

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NOTE:

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYS-TEM).
- Remove and install all control units after disconnecting both battery cables with the ignition knob in the "LOCK" position.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnostic results.

For models equipped with the Intelligent Key system and NATS, an electrically controlled steering lock mechanism is adopted on the key cylinder.

For this reason, if the battery is disconnected or if the battery is discharged, the steering wheel will lock and steering wheel rotation will become impossible.

If steering wheel rotation is required when battery power is interrupted, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

- 2. Use the Intelligent Key or mechanical key to turn the ignition switch to the "ACC" position. At this time, the steering lock will be released.
- Disconnect both battery cables. The steering lock will remain released and the steering wheel can be rotated.
- 4. Perform the necessary repair operation.

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PRECAUTIONS

< PRECAUTION >

- 5. When the repair work is completed, return the ignition switch to the "LOCK" position before connecting the battery cables. (At this time, the steering lock mechanism will engage.)
- 6. Perform a self-diagnosis check of all control units using CONSULT-III.

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 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, and wring the water out of the cloth to wipe the dirty area.
 - Then rub with a soft and 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, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and 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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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
(J-46534) Trim tool set	AWJIA0483ZZ	For removing trim

REMOVAL AND INSTALLATION

INTERIOR ROOM LAMP

Removal and Installation

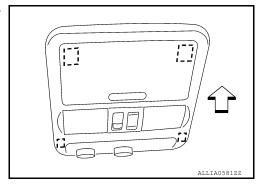
FRONT ROOM/MAP LAMP ASSEMBLY

Removal

The front room/map lamp assembly is replaced as part of the overhead console assembly. Refer to INT-22, "Removal and Installation".

: Metal clip

∀: Vehicle front



Installation

Installation is in the reverse order of removal.

Bulb or Lens Replacement

1. Remove the front room/map lamp RH and/or LH lenses (1) as necessary using a suitable tool.

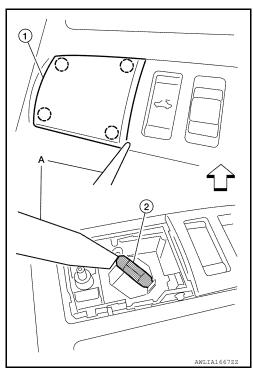
: Vehicle front

(): Pawl

CAUTION:

Wrap a cloth around suitable tool to protect components from damage.

2. Release one side of the bulb (2) from the tab using a suitable tool, then pull straight downward to remove.



Install the new bulb into the socket tabs.

Front room/map lamp assembly bulb : 12V - 8W

Install the front room/map lamp RH and/or LH lenses as necessary. **CAUTION:**

Use care when installing to protect components from damage.

VANITY MIRROR LAMP (if equipped)

Removal

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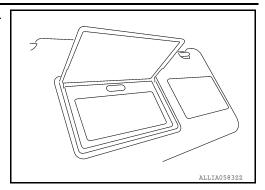
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< REMOVAL AND INSTALLATION >

The vanity mirror lamp is replaced as part of the sun visor assembly. Refer to INT-22, "Removal and Installation".



Installation

Installation is in the reverse order of removal.

Bulb Replacement

The vanity mirror lamp bulb is replaced as part of the sun visor assembly. Refer to INT-22, "Removal and Installation".

PERSONAL LAMP (if equipped)

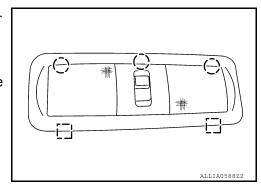
Removal

1. Release the clips and remove personal lamp from headlining. Refer to INT-22, "Removal and Installation".

(): Pawl

[]: Metal clip

2. Disconnect personal lamp electrical connector, then remove from overhead console.



Installation

Installation is in the reverse order of removal.

Bulb Replacement

- 1. Remove personal lamp.
- Release the pawls and remove personal lamp lens (1) using a suitable tool (A).

CAUTION:

Wrap a cloth around suitable tool to protect the housing and lens.

3. Release one side of the bulb (2) from the tab, then pull straight downward to remove.

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Personal lamp bulb : 12V - 8W

ROOM LAMP (if equipped)

Removal

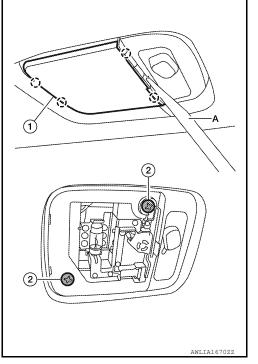
< REMOVAL AND INSTALLATION >

1. Release the pawls and remove the room lamp lens (1) using a suitable tool (A).

(): Pawl CAUTION:

Wrap a cloth around suitable tool to protect the housing and lens.

- 2. Remove room lamp screws (2).
- 3. Disconnect the connector, then remove room lamp.



Installation

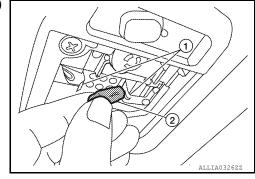
Installation is in the reverse order of removal.

Bulb or Lens Replacement

Release the pawls and remove the room lamp lens using a suitable tool.

Wrap a cloth around suitable tool to protect components from damage.

2. Release the room lamp bulb retainers (1), then pull bulb (2) straight out to remove.



3. Install the bulb (2) securely into the room lamp bulb retainers (1).

Room lamp bulb : 12V - 8W

4. Install the room lamp lens.

CARGO LAMP

Removal

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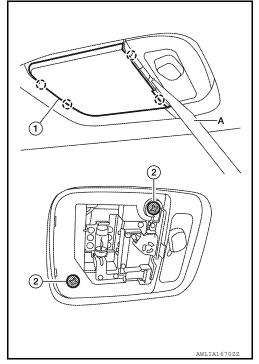
< REMOVAL AND INSTALLATION >

1. Release the pawls and remove the cargo lamp lens (1) using a suitable tool (A).

(): Pawl CAUTION:

Wrap a cloth around suitable tool to protect the housing and lens.

- 2. Remove cargo lamp screws (2).
- 3. Disconnect the connector, then remove cargo lamp.

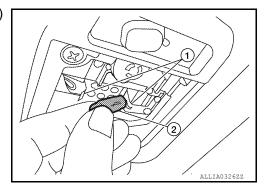


Installation

Installation is in the reverse order of removal.

Bulb Replacement

- 1. Release the pawls and remove the cargo lamp lens using a suitable tool.
- 2. Release the cargo lamp bulb retainers (1), then pull bulb (2) straight out to remove.



3. Install the bulb (2) securely into the cargo lamp bulb retainers (1).

Cargo lamp bulb : 12V - 8W

4. Install the cargo lamp lens.

Removal and Installation

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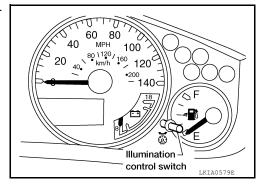
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ILLUMINATION CONTROL SWITCH

Removal

The illumination control switch (1) is replaced as a part of the combination meter. Refer to MWI-88, "Removal and Installation".



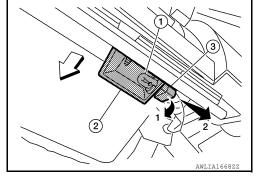
Installation

Installation is in the reverse order of removal.

GLOVE BOX LAMP

Removal

- 1. Remove instrument lower panel RH and glove box. Refer to IP-19, "Removal and Installation".
- 2. Rotate glove box lamp socket (3) with bulb (1) counterclockwise, then pull away from lamp shield (2) on steering member to remove.

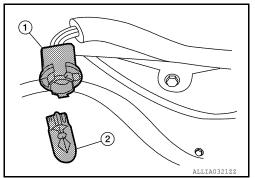


Installation

Installation is in the reverse order of removal.

Bulb Replacement

- Remove the glove box lamp. Follow the GLOVE BOX LAMP REMOVAL AND INSTALLATION procedure in this section.
- 2. Pull bulb (2) straight out from glove box lamp socket (1) to remove.



Install the new bulb into the socket.

Glove box lamp bulb : 12V - 3.4W

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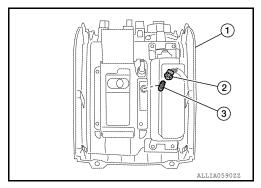
< REMOVAL AND INSTALLATION >

4. Install the glove box lamp. Refer to GLOVE BOX LAMP REMOVAL AND INSTALLATION procedure in this section.

AT FINISHER LAMP

Removal

- Remove AT finisher from center console. Refer to IP-20, "Removal and Installation".
- 2. Rotate AT finisher lamp socket (2) with bulb (3) counterclockwise, then pull away from finisher (1).

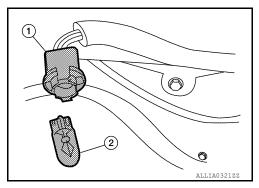


Installation

Installation is in the reverse order of removal.

Bulb Replacement

- 1. Remove A/T finisher from center console. Refer to IP-20, "Removal and Installation".
- 2. Remove A/T finisher lamp socket (1), then pull bulb (2) straight out away from socket.



3. Install the bulb (2) into the A/T finisher lamp socket (1).

AT finisher lamp bulb : 12V - 3W

4. Install A/T finisher in center console. Refer to IP-20, "Removal and Installation".

BULB SPECIFICATIONS

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

BULB SPECIFICATIONS

Interior Lamp/Illumination

Glove box lamp

A/T finisher lamp

Item	Wattage (W)*
Front room/map lamp	8
Vanity lamp (if equipped)	*
Personal lamp (if equipped)	8
Room lamp (if equipped)	8
Cargo lamp	8

^{*:} Always check with the Parts Department for the latest parts information.

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