SECTION INL
INTERIOR LIGHTING SYSTEM

CONTENTS

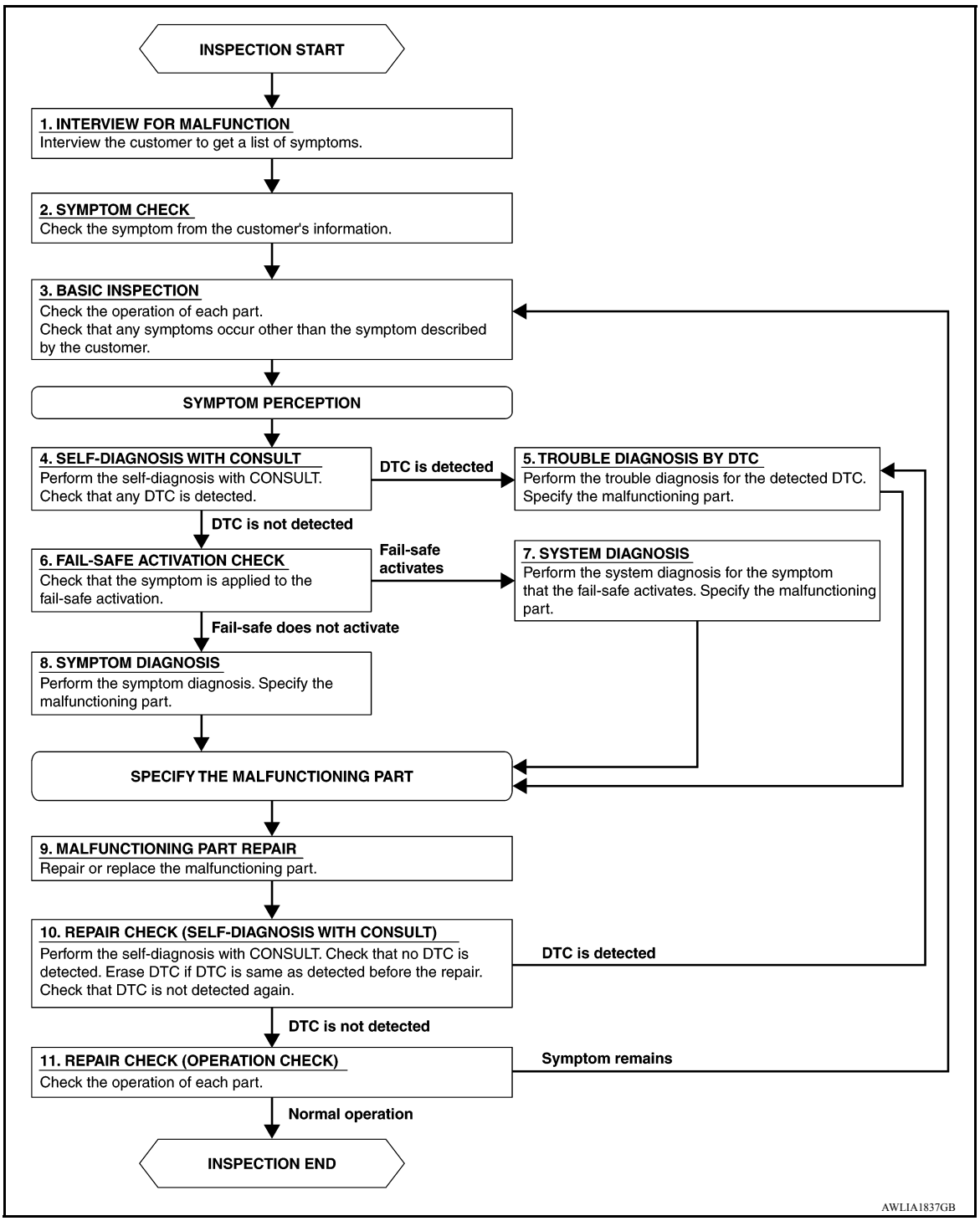
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000009878585

OVERALL SEQUENCE



DETAILED FLOW

1.INTERVIEW FOR MALFUNCTION

Find out what the customer's concerns are.

>> GO TO 2

2.SYMPTOM CHECK

Verify the symptom from the customer's information.

>> GO TO 3

3.BASIC INSPECTION

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

>> GO TO 4

4.SELF-DIAGNOSIS WITH CONSULT

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

Is any DTC detected?

YES >> GO TO 5
NO >> GO TO 6

5.TROUBLE DIAGNOSIS BY DTC

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

>> GO TO 9

6.FAIL-SAFE ACTIVATION CHECK

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

Does the fail-safe activate?

YES >> GO TO 7
NO >> GO TO 8

7.SYSTEM DIAGNOSIS

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

>> GO TO 9

8.SYMPTOM DIAGNOSIS

Perform the symptom diagnosis. Refer to INL-69, "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. Verified 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

NO >> GO TO 11

11.REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

Does it operate normally?

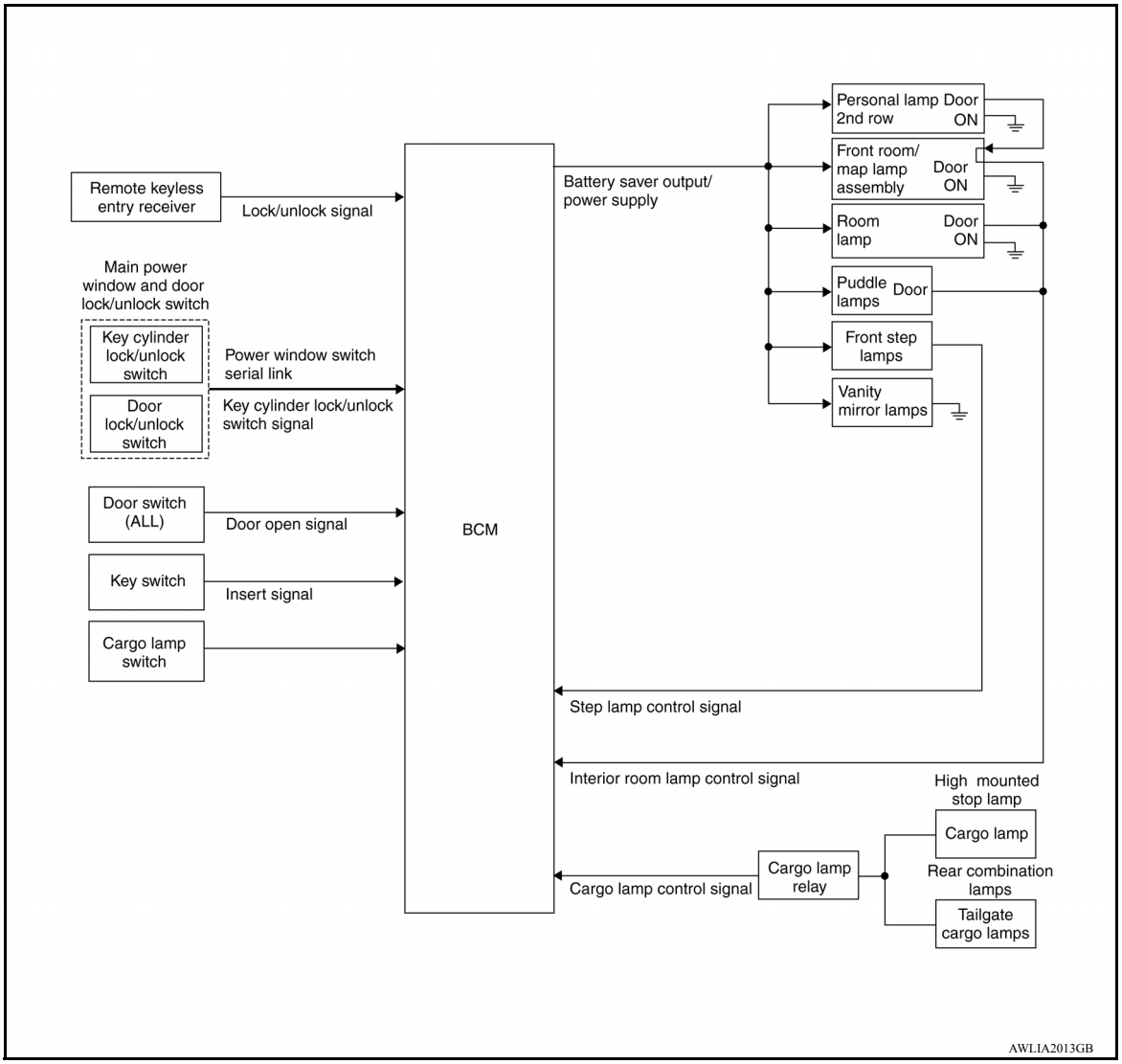
YES >> Inspection End
NO >> GO TO 3

SYSTEM DESCRIPTION

INTERIOR ROOM LAMP CONTROL SYSTEM

System Diagram

INFOID:0000000009878586



System Description

INFOID:0000000009878587

OUTLINE

- Interior room lamps* are controlled by the interior room lamp timer control function of the BCM.
  *Room lamp (if equipped), Front room/map lamp assembly (if equipped), personal lamp 2nd row (if equipped) and puddle lamps (if equipped).
- Cargo lamp and tailgate cargo lamps (if equipped) are controlled by the cargo lamp control function of the BCM.
- Step lamps* are controlled by the step lamp control function of the BCM.
  *Front step lamps (if equipped).

The timer control functions of the BCM activate based on inputs from the remote keyless entry receiver, the door switches, the key switch (column shift), the key switch and key lock solenoid (key switch) (floor shift) or the cargo lamp switch (if equipped).

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 the main power window and door lock/unlock switch, front door lock assembly (key cylinder switch)].
- When the front door LH is unlocked with the remote keyless entry system (if equipped).
- When a door opens → closes and the key is not inserted in the ignition slot.

Timer control is cancelled under the following conditions.

- When the front door LH is locked [with the main power window and door lock/unlock switch or front door lock assembly LH (key cylinder switch)]
- When the front door LH is locked with the remote keyless entry system (if equipped).
- A door is opened (door switch turns ON).
- The ignition switch is turned ON.

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

INTERIOR LAMP BATTERY SAVER CONTROL

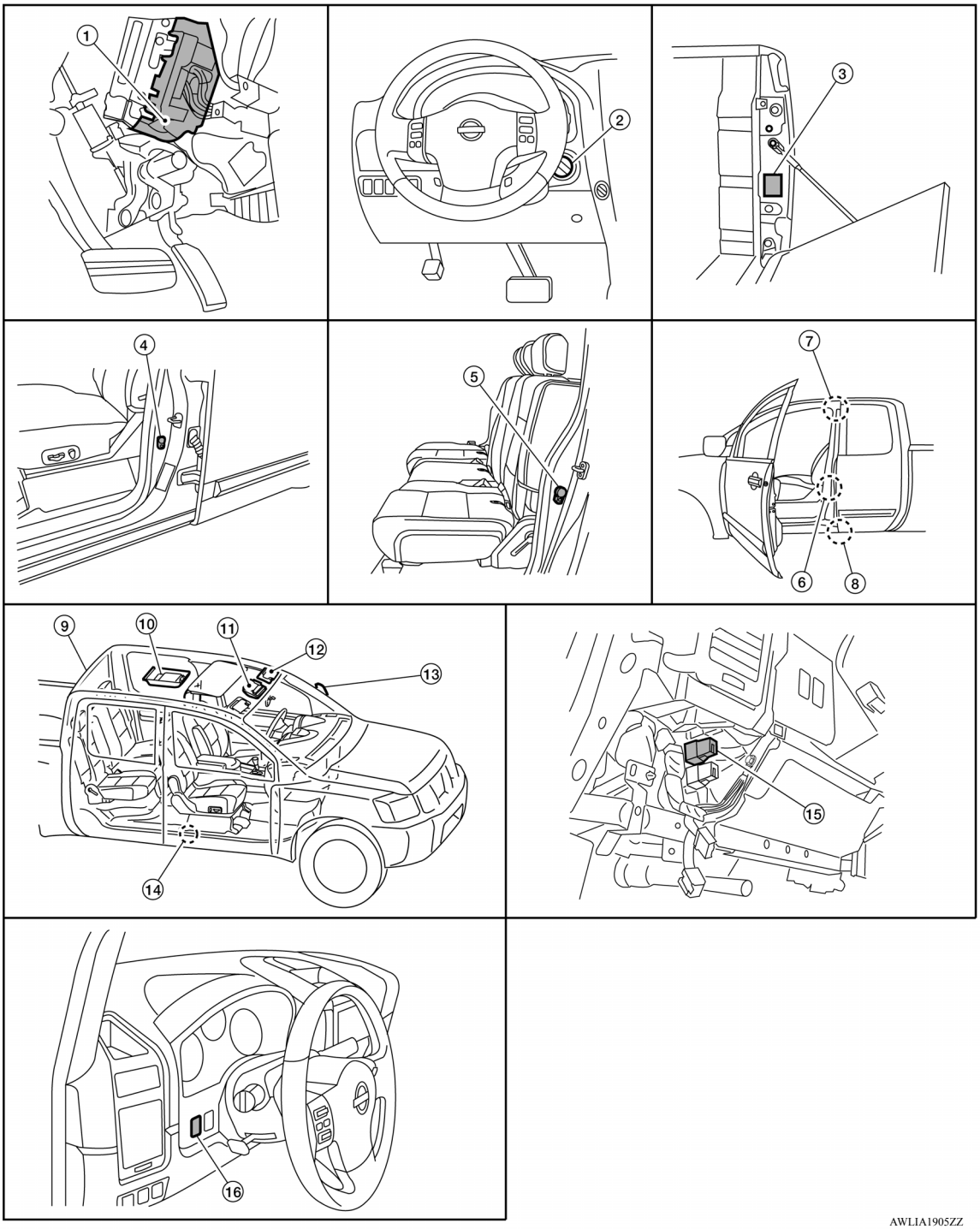
If an interior lamp is left ON and does not turn OFF even when the doors are closed, the BCM turns off power to the interior lamps automatically to save the battery 10 minutes after the ignition switch is turned OFF.
The BCM controls power and ground to all interior lamps.
After the battery saver system turns the lamps OFF, the lamps will illuminate again when

- a signal is received from the keyless entry system
- a door is opened or closed
- the 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.

Component Parts Location

INFOID:0000000009878588



1. BCM M18, M19, M20 (view with instrument panel removed)
2. Key switch M80 (column shift)
   Key switch and key lock solenoid (key switch) M27 (floor shift)
3. Tailgate cargo lamp LH C13
   Tailgate cargo lamp RH C14
4. Front door switch LH B8 (crew cab)
   Front door switch RH B108 (crew cab)
5. Rear door switch LH B18 (crew cab)
   Rear door switch RH B116 (crew cab)
6. Front door switch LH B8 (king cab)
   Front door switch RH B108 (king cab)
7. Rear door switch upper LH B73 (king cab)
   Rear door switch upper RH B156 (king cab)
8. Rear door switch lower LH B74 (king cab)
   Rear door switch lower RH B157 (king cab)
9. Cargo lamp B158

10. Room lamp (without front roof console) R10
Personal lamp 2nd row (crew cab with NAVI) R11
Personal lamp 2nd row (crew cab without NAVI) R203
11. Front room/map lamp assembly (with front roof console) R102
12. Vanity lamp LH (if equipped) R3
Vanity lamp RH (if equipped) R8
13. Puddle lamp LH (if equipped) D4 (Door mirror)
Puddle lamp RH (if equipped) D107 (Door mirror)
14. Front step lamp LH (if equipped) D11
Front step lamp RH (if equipped) D109
15. Cargo lamp relay M150 (view with lower instrument panel LH removed)
16. Cargo lamp switch (if equipped) M149

Component Description

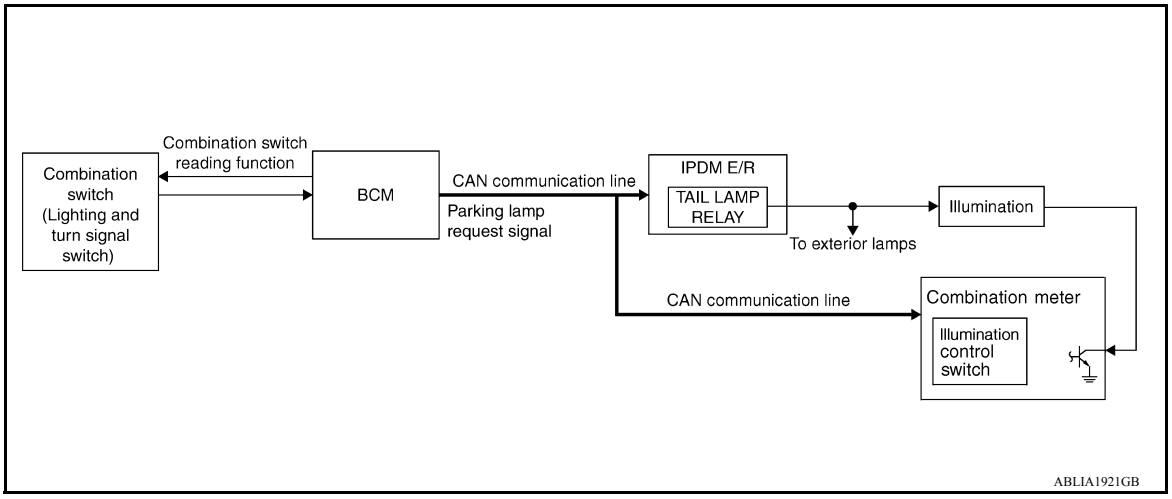
INFOID:0000000009878589

Part name	Description
BCM	Provides power and ground and controls timer functions for the interior room lamps, puddle lamps, step lamps and cargo lamp.
Key switch (column shift)	Provides key in ignition status to the BCM.
Key switch and key lock solenoid (key switch) (floor shift)	
Door switches	Provides door OPEN/CLOSED status to the BCM.
Cargo lamp switch (if equipped)	Provides cargo lamp ON/OFF request to the BCM.
Power window and door lock/unlock switch RH (if equipped)	Provides door lock/unlock position switch RH status to the BCM.
Main power window and door lock/unlock switch [front door lock assembly LH (key cylinder switch)] (if equipped)	Provides door lock/unlock position switch LH status to the BCM.

ILLUMINATION CONTROL SYSTEM

System Diagram

INFOID:0000000009878590



System Description

INFOID:0000000009878591

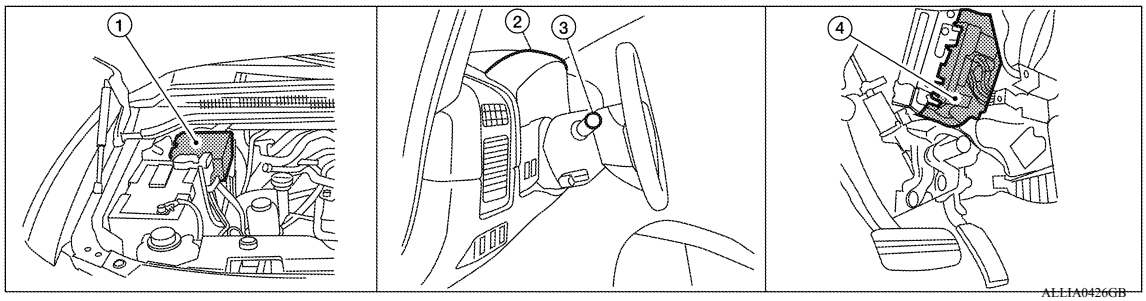
The illumination lamps operation is dependent upon the position of the combination switch (lighting and turn signal switch). When the combination switch (lighting and turn signal switch) is placed in the 1ST or 2ND position (or if the auto light system is activated) the BCM (body control module) receives 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 combination switch (lighting and turn signal 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 10 minutes unless the combination switch (lighting and turn signal switch) position is changed. If the combination switch (lighting and turn signal switch) position is changed, then the illumination lamps are turned off after a 30 second delay. When the combination switch (lighting and turn signal switch) is turned from OFF to 1ST or 2ND position (or if auto light system is activated) after illumination lamps have been turned off by the battery saver control, the illumination lamps illuminate again.

Component Parts Location

INFOID:0000000009878592



1. IPDM E/R E122, E123, E124
2. Combination meter (illumination control switch) M24, M25
3. Combination switch (lighting and turn signal switch) M28
4. BCM M18, M20 (view with instrument panel removed)

Component Description

INFOID:0000000009878593

Part name	Description
BCM	The BCM monitors the combination switch (lighting and turn signal 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 (lighting and turn signal switch) provides input to the BCM about the lighting switch position.

DIAGNOSIS SYSTEM (BCM)
COMMON ITEM
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010621040

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

SYSTEM APPLICATION
BCM can perform the following functions.

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

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:0000000010621041

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.
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.
KEYLESS LOCK [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK [On/Off]	Indicates condition of unlock signal from keyfob.

ACTIVE TEST

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

WORK SUPPORT

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

* : Initial setting

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000010621042

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.
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.
KEYLESS LOCK [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK [On/Off]	Indicates condition of unlock signal from keyfob.

ACTIVE TEST

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

WORK SUPPORT

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

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000010621043

Regarding Wiring Diagram information, refer to BCS-44, "Wiring Diagram".

1. CHECK FUSES AND FUSIBLE LINK

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

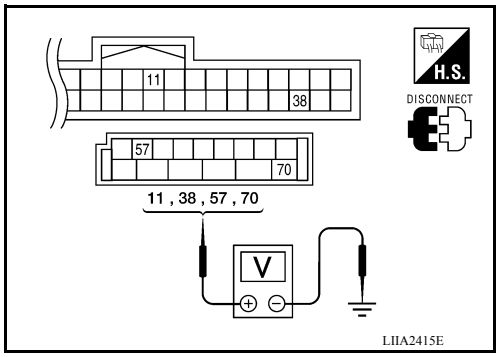
Terminal No.	Signal name	Fuses and fusible link No.
57	Battery power supply	22 (15A)
70		F (50A)
11	Ignition ACC or ON	4 (10A)
38	Ignition ON or START	59 (10A)

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.
3. Check voltage between BCM harness connector and ground.



Connector	Terminals (+)	Terminals (-)	Power source	Condition	Voltage (V) (Approx.)
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
	70	Ground	Battery power supply	Ignition switch OFF	Battery voltage

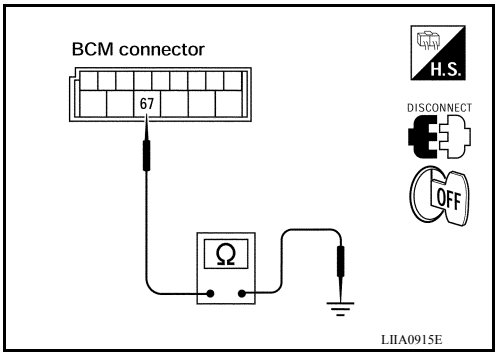
Is the measurement value normal?

YES >> GO TO 3
NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	67		Yes



Does continuity exist?

YES >> Inspection End.
NO >> Repair or replace harness.

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

Description

INFOID:0000000009878598

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

Component Function Check

INFOID:0000000009878599

1.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY FUNCTION

WITH CONSULT
1. Turn ignition switch ON.
2. Turn interior room lamp ON.
- Room lamp (if equipped)
- Front room/map lamp assembly (if equipped)
3. Select “BATTERY SAVER” of BCM (BATTERY SAVER) active test item.
4. While operating the test item, check that 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-17, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009878600

Regarding Wiring Diagram information, refer to INL-39, "Wiring Diagram".

1.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OUTPUT

WITH CONSULT
1. Turn ignition switch ON.
2. Select “BATTERY SAVER” of BCM (BATTERY SAVER) active test item.
3. While operating the test item, check voltage between BCM connector M20 terminal 56 and ground.

(+)		(-)	Test item	Voltage
Connector	Terminal		BATTERY SAVER	
M20	56	Ground	OFF	0V
			ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 2
NO >> Replace BCM after making sure the battery saver output/power supply circuit is not shorted to voltage. Refer to BCS-52, "Removal and Installation".

2.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following connectors.
- BCM M20
- Front step lamp LH (if equipped)
- Front step lamp RH (if equipped)
- Door mirror LH (with puddle lamps) (if equipped)
- Door mirror RH (with puddle lamps) (if equipped)
- Room lamp (if equipped)
- Front room/map lamp assembly (if equipped)
- Vanity lamp LH (if equipped)

- Vanity lamp RH (if equipped)
- Personal lamp 2nd row (if equipped)

3. Check continuity between BCM connector M20 terminal 56 and each interior room lamp connector.

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M20	56	Front step lamp LH (if equipped)	D11	1	Yes
		Front step lamp RH (if equipped)	D109	1	
		Door mirror LH (with puddle lamps) (if equipped)	D4	12	
		Door mirror RH (with puddle lamps) (if equipped)	D107	12	
		Room lamp (if equipped)	R10	2	
		Front room/map lamp assembly (if equipped)	R102	6	
		Vanity lamp LH (if equipped)	R3	1	
		Vanity lamp RH (if equipped)	R8	1	
		Personal lamp 2nd row (crew cab with NAVI)	R11	1	
		Personal lamp 2nd row (crew cab without NAVI)	R203	3	

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.

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:0000000009878601

Controls the following interior room lamps (ground side) by pulse width modulated signal
- Puddle lamps (with puddle lamps) (if equipped)
- Room lamp (if equipped)
- Front room/map lamp assembly (if equipped)
- Personal lamp 2nd row (if equipped)

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

Component Function Check

INFOID:0000000009878602

CAUTION:
Before performing the diagnosis, check that the following is normal.
- **Battery saver output/power supply**
- **Room lamp bulb (if equipped)**
- **Puddle lamp bulbs (if equipped)**
- **Front room/map lamp assembly bulbs (if equipped)**
- **Personal lamp 2nd row bulbs (if equipped)**

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

WITH CONSULT
1. Switch the room lamp (if equipped), or front room/map lamp assembly (if equipped) 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-19, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009878603

Regarding Wiring Diagram information, refer to INL-39, "Wiring Diagram".

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

WITH CONSULT
1. Switch the room lamp (if equipped), or front room/map lamp assembly (if equipped) 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 voltage between BCM connector M20 terminal 63 and ground.

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

Is the inspection result normal?

YES >> Interior room lamp control circuit is operating normally.
Fixed ON>>GO TO 3
Fixed OFF>> GO TO 2.

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M20, door mirror connectors (with puddle lamps) (if equipped), room lamp connector (if equipped) or front room/map lamp assembly connector (if equipped).
3. Check continuity between BCM connector M20 terminal 63 and door mirror connectors terminal 13 (with puddle lamps) (if equipped), and room lamp connector terminal 1 (if equipped) or front room/map lamp assembly connector terminal 1 (if equipped).

Connector	Terminal	Component	Connector	Terminal	Continuity
M20	63	Door mirror LH (with puddle lamps) (if equipped)	D4	13	Yes
		Door mirror RH (with puddle lamps) (if equipped)	D107	13	
		Room lamp (if equipped)	R10	1	
		Front room/map lamp assembly (if equipped)	R102	1	

4. If equipped with personal lamp 2nd row, reconnect front room/map lamp assembly connector.
5. Disconnect personal lamp 2nd row connector.
6. Check continuity between BCM connector M20 terminal 63 and personal lamp 2nd row connector R203 (crew cab without NAVI) terminal 1 or personal lamp 2nd row connector R11 (crew cab with NAVI) teminal 2 and 3.

BCM		Personal lamp 2nd row		Continuity
Connector	Terminal	Connector	Terminal	
M20	63	R11 (crew cab with NAVI)	2	Yes
			3	
		R203 (crew cab without NAVI)	1	

Is the inspection result normal?

YES >> Check interior room lamps for an open. If OK, replace BCM. Refer to BCS-52, "Removal and Installation". If NG, replace interior room lamp. Refer to INL-72, "Removal and Installation".

NO >> Repair the harness or connectors.

3.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

1. Turn ignition switch OFF.
2. **On Crew Cab models without NAVI**, disconnect BCM connector M20, door mirror connectors (with puddle lamps) (if equipped) and personal lamp 2nd row connector (if equipped).
3. Switch the front room/map lamp assembly switch to ON position.
4. Check continuity between BCM connector M20 terminal 63 and ground.

Connector	Terminal	—	Continuity
M20	63	Ground	No

5. **On models except Crew Cab without NAVI**, disconnect BCM connector M20, door mirror connectors (with puddle lamps) (if equipped), room lamp connector (if equipped) or front room/map lamp assembly connector (if equipped).
6. 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-52, "Removal and Installation". If NG, replace interior room lamp. Refer to INL-72, "Removal and Installation".

NO >> Repair the harness or connectors.

STEP LAMP CIRCUIT

Description

INFOID:0000000009878604

Controls the front and rear step lamps (ground side) to turn the lamps ON and OFF.

Component Function Check

INFOID:0000000009878605

CAUTION:
Before performing the diagnosis, check that the following is normal.
- **Battery saver output/power supply**
- **Front step lamp bulbs**

1.CHECK STEP LAMP OPERATION

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

ON : Step lamp ON
OFF : Step lamp OFF

Is the inspection result normal?

YES >> Step lamp circuit is normal.
NO >> Refer to INL-22, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009878606

Regarding Wiring Diagram information, refer to INL-39, "Wiring Diagram".

1.CHECK STEP LAMP OUTPUT

WITH CONSULT
1. Turn ignition switch ON.
2. Select “STEP LAMP TEST” of BCM (INT LAMP) active test item.
3. While operating the test item, check voltage between BCM harness connector and ground.

Connector	Terminal	—	STEP LAMP TEST	Voltage
M20	62	Ground	ON	0V
			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 BCM connector M20 and front step lamp connectors.
3. Check continuity between BCM harness connector M20 terminal 62 and step lamp connectors terminal 2.

Connector	Terminal	Connector		Terminal	Continuity
M20	62	Front step lamp LH	D11	2	Yes
		Front step lamp RH	D109	2	

Is the inspection result normal?

YES >> Check step lamp for an open. If OK, Replace BCM. Refer to BCS-52, "Removal and Installation". If NG, Replace step lamp. Refer to INL-72, "Removal and Installation".
NO >> Repair harness or connectors.

3. CHECK STEP LAMP SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector M20 and front step lamp connectors.
3. Check continuity between BCM connector M20 terminal 62 and ground.

Connector	Terminal	—	Continuity
M20	62	Ground	No

Is the inspection result normal?

YES >> Check step lamp for a short circuit. If OK, Replace BCM. Refer to BCS-52, "Removal and Installation". If NG, replace step lamp. Refer to INL-72, "Removal and Installation".
NO >> Repair the harness or connectors.

CARGO LAMP CONTROL CIRCUIT

Description

INFOID:0000000009878607

The BCM controls ground to the cargo lamp relay to turn the cargo lamp and tailgate cargo lamps (if equipped) ON and OFF.

Diagnosis Procedure

INFOID:0000000009878608

Regarding Wiring Diagram information, refer to INL-39, "Wiring Diagram".

CAUTION:
Before performing the diagnosis, check that the following is normal.
- **Fuse**
- **Cargo lamp bulbs**
- **Tailgate cargo lamp bulbs**

1.CHECK CARGO LAMP OPERATION

Check the cargo lamp and tailgate cargo lamps (if equipped) operation from the cargo lamp switch, the door switches, and a keyfob (if equipped).

Is the cargo lamp and tailgate cargo lamps (if equipped) inoperative from all of the above switches and the keyfob (if equipped)?

YES >> GO TO 4
NO >> • Inoperative from cargo lamp switch only, GO TO 2
• Inoperative from door switches only, refer to DLK-26, "KING CAB : Description" (king cab) or DLK-27, "CREW CAB : Description" (crew cab).
• Inoperative from keyfob only, refer to DLK-51, "Description".

2.CHECK CARGO LAMP SWITCH

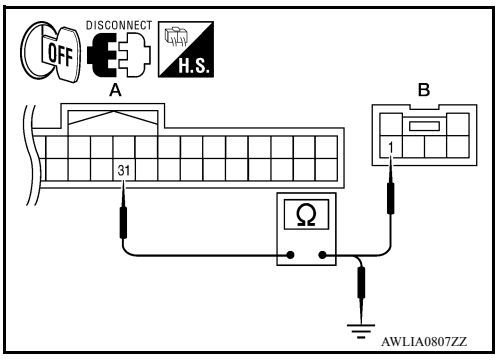
Check the cargo lamp switch. Refer to INL-26, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 3
NO >> Replace the cargo lamp switch.

3.CHECK CARGO LAMP SWITCH CIRCUIT

1. Disconnect BCM connector M18 and cargo lamp switch connector.
2. Check continuity between BCM connector M18 (A) terminal 31 and cargo lamp switch connector M149 (B) terminal 1.



BCM		Cargo lamp switch		Continuity
Connector	Terminal	Connector	Terminal	
M18 (A)	31	M149 (B)	1	Yes

3. Check continuity between BCM connector M18 (A) terminal 31 and ground.

Connector	Terminal	—	Continuity
M18 (A)	31	Ground	No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-52, "Removal and Installation".
NO >> Repair harness or connectors.

4.CHECK CARGO LAMP RELAY

Check the cargo lamp relay. Refer to INL-26, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace the cargo lamp relay.

5. CHECK CARGO LAMP RELAY CONTROL

While operating the cargo lamp switch, check voltage between BCM connector M19 terminal 50 and ground.

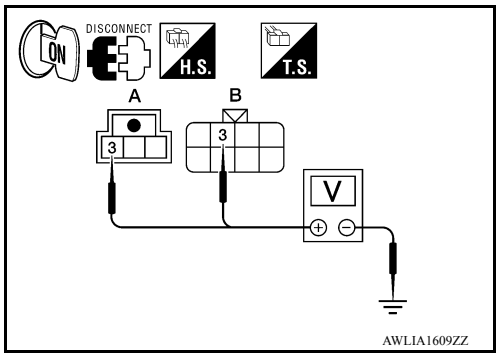
Connector	Terminal	—	Cargo lamp switch	Voltage
M19	50	Ground	ON	0V
			OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 6
NO >> GO TO 8

6. CHECK CARGO LAMP AND TAILGATE CARGO LAMPS (IF EQUIPPED) VOLTAGE

1. Disconnect the cargo lamp connector and the tailgate cargo lamp connectors (if equipped).
2. While operating the cargo lamp switch, check voltage between cargo lamp connector B158 (A) terminal 3 and ground and the tailgate cargo lamp connectors C13 (B) and C14 (B) terminal 3 and ground.



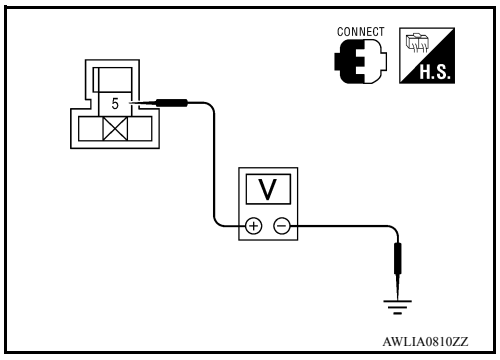
Connector	Terminal	—	Cargo lamp switch	Voltage
B158 (A)	3	Ground	ON	Battery voltage
C13 (B)	3			
C14 (B)	3			

Is the inspection result normal?

YES >> Replace cargo lamp or tailgate cargo lamp (if equipped). Refer to EXL-148, "Removal and Installation" or EXL-149, "Removal and Installation" (if equipped).
NO >> GO TO 7

7. CHECK CARGO LAMP RELAY VOLTAGE PART 1

Check voltage between cargo lamp relay connector M150 terminal 5 and ground.



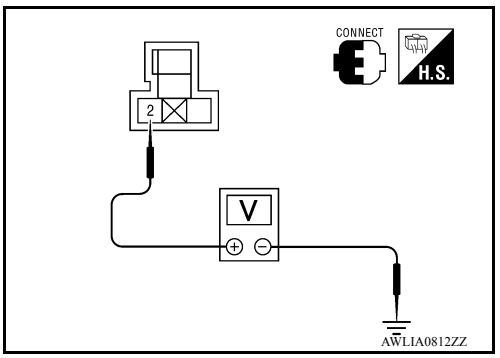
Cargo lamp relay		Ground	Voltage
Connector	Terminal		
M150	5		Battery voltage

Is the inspection result normal?

YES >> Repair harness or connectors between cargo lamp relay and cargo lamp.
NO >> Repair harness or connector between splice and cargo lamp relay.

8. CHECK CARGO LAMP RELAY VOLTAGE PART 2

Check voltage between cargo lamp relay connector M150 terminal 2 and ground.



Cargo lamp relay		Ground	Voltage
Connector	Terminal		
M150	2		Battery voltage

Is the inspection result normal?

YES >> GO TO 9
NO >> Repair harness or connectors.

9. CHECK CARGO LAMP RELAY CONTROL CIRCUIT

1. Disconnect BCM connector M19 and cargo lamp relay connector.
2. Check continuity between BCM connector M19 terminal 50 and cargo lamp relay connector M150 terminal 1.

BCM		Cargo lamp relay		Continuity
Connector	Terminal	Connector	Terminal	
M19	50	M150	1	Yes

3. Check continuity between BCM connector M19 terminal 50 and ground.

Connector	Terminal	—	Continuity
M19	50	Ground	No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-52, "Removal and Installation".
NO >> Repair harness or connectors.

Component Inspection

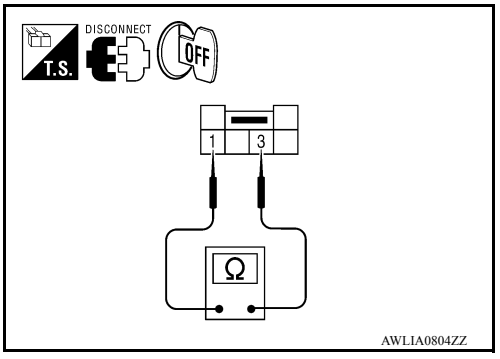
INFOID:0000000009878609

CARGO LAMP SWITCH

INSPECTION PROCEDURE

1. CHECK CARGO LAMP SWITCH

1. Turn ignition switch OFF.
2. Disconnect cargo lamp switch harness connector.
3. Check continuity between cargo lamp switch terminals.



Cargo lamp switch	Condition	Continuity
Terminal		
1 – 3	ON	Yes
	OFF	No

Is the inspection result normal?

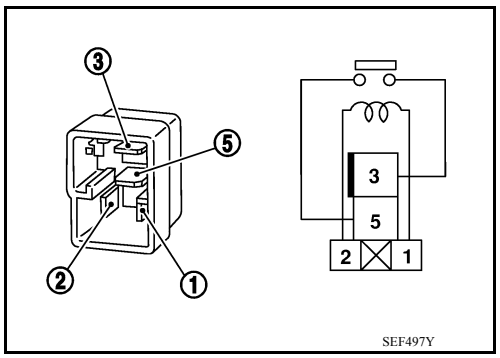
YES >> Inspection End
NO >> Replace cargo lamp switch.

CARGO LAMP RELAY

INSPECTION PROCEDURE

1. CHECK CARGO LAMP RELAY

1. Turn ignition switch OFF.
2. Disconnect cargo lamp relay harness connector.
3. Supply power to terminal 2 and ground to terminal 1 of the cargo lamp relay.
4. Check continuity between cargo lamp relay terminals 3 and 5.



Terminal		Condition	Continuity
3	5	Power and ground supplied to terminals 1 and 2	Yes
		No power and ground supplied	No

Is the inspection result normal?

YES >> Inspection End
NO >> Replace cargo lamp relay.

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000010621053

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
- Test remote keyless entry keyfob relative signal strength

VALUES ON THE DIAGNOSIS TOOL

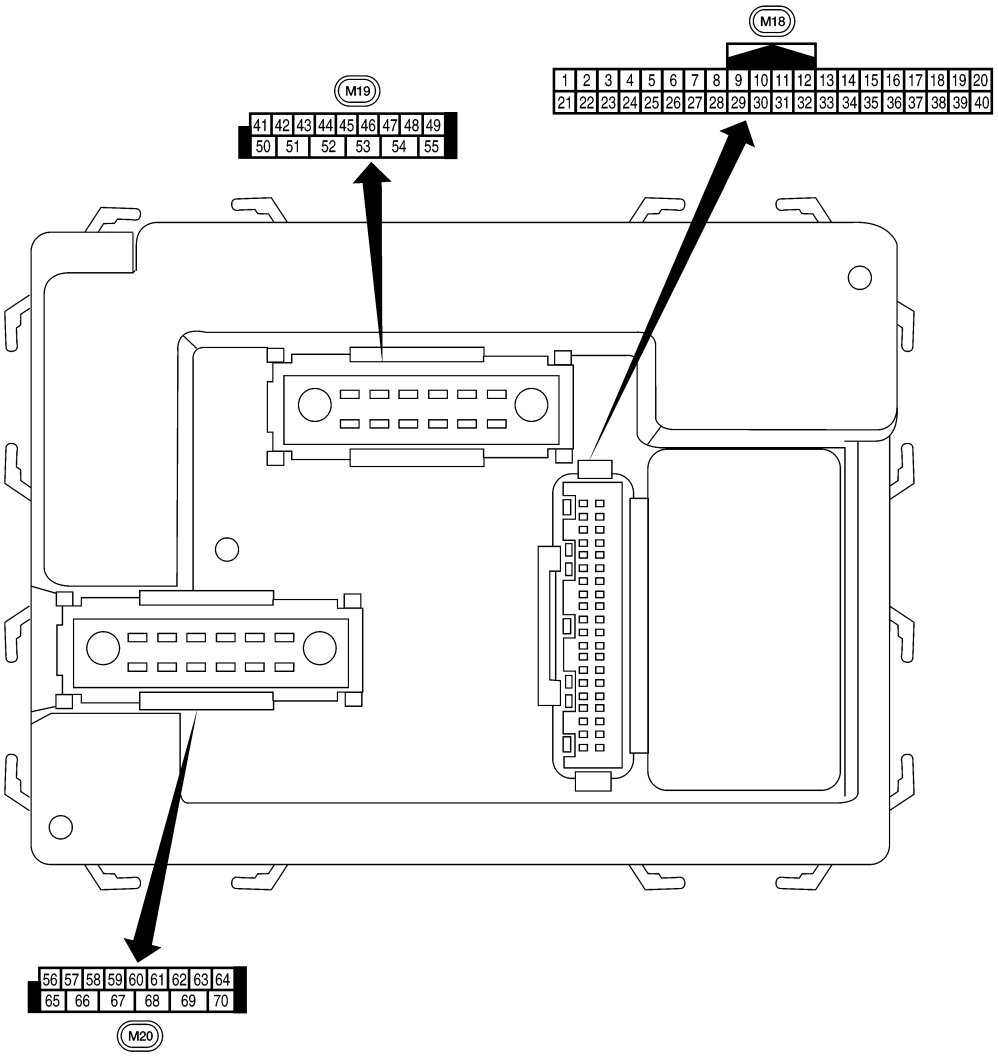
Monitor Item	Condition	Value/Status
ACC ON SW	Ignition switch OFF or ON	Off
	Ignition switch ACC	On
AIR COND SW	A/C switch OFF	Off
	A/C switch ON	On
AIR PRESS FL	Front left tire air pressure value	kPa, kg/cm^2, psi
AIR PRESS FR	Front right tire air pressure value	kPa, kg/cm^2, psi
AIR PRESS RL	Rear left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

Monitor Item	Condition	Value/Status
FAN ON SIG	Blower motor fan switch OFF	Off
	Blower motor fan switch ON	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER LOW	Front wiper switch OFF	Off
	Front wiper switch LO	On
FR WIPER HI	Front wiper switch OFF	Off
	Front wiper switch HI	On
FR WIPER INT	Front wiper switch OFF	Off
	Front wiper switch INT	On
FR WIPER STOP	Any position other than front wiper stop position	Off
	Front wiper stop position	On
HAZARD SW	When hazard switch is not pressed	Off
	When hazard switch is pressed	On
HEAD LAMP SW1	Headlamp switch OFF	Off
	Headlamp switch 1st	On
HEAD LAMP SW2	Headlamp switch OFF	Off
	Headlamp switch 1st	On
HI BEAM SW	High beam switch OFF	Off
	High beam switch HI	On
ID REGST FL1	ID registration of front left tire incomplete	YET
	ID registration of front left tire complete	DONE
ID REGST FR1	ID registration of front right tire incomplete	YET
	ID registration of front right tire complete	DONE
ID REGST RL1	ID registration of rear left tire incomplete	YET
	ID registration of rear left tire complete	DONE
ID REGST RR1	ID registration of rear right tire incomplete	YET
	ID registration of rear right tire complete	DONE
IGN ON SW	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
IGN SW CAN	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7
KEY CYL LK-SW	Door key cylinder LOCK position	Off
	Door key cylinder other than LOCK position	On
KEY CYL UN-SW	Door key cylinder UNLOCK position	Off
	Door key cylinder other than UNLOCK position	On
KEY ON SW	Mechanical key is removed from key cylinder	Off
	Mechanical key is inserted to key cylinder	On
KEYLESS LOCK	LOCK button of key fob is not pressed	Off
	LOCK button of key fob is pressed	On

Monitor Item	Condition	Value/Status
KEYLESS PANIC	PANIC button of key fob is not pressed	Off
	PANIC button of key fob is pressed	On
KEYLESS UNLOCK	UNLOCK button of key fob is not pressed	Off
	UNLOCK button of key fob is pressed	On
LIGHT SW 1ST	Lighting switch OFF	Off
	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
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TURN SIGNAL L	Turn signal switch OFF	Off
	Turn signal switch LH	On
TURN SIGNAL R	Turn signal switch OFF	Off
	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
	Low tire pressure warning lamp in combination meter ON	On

Terminal Layout

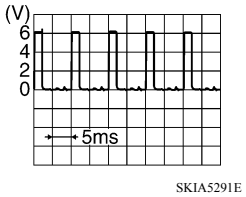
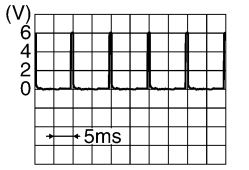
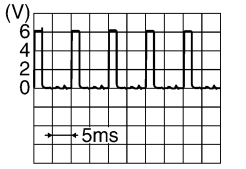
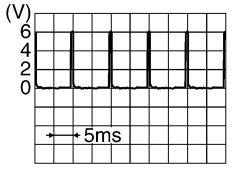
INFOID:0000000010621054

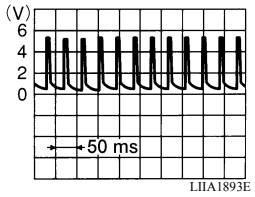
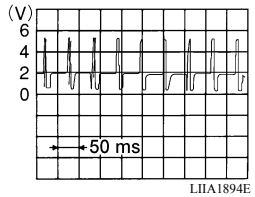
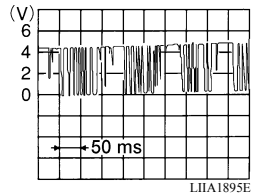
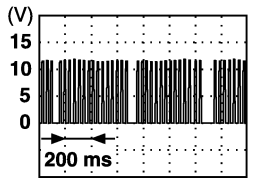


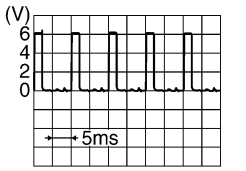
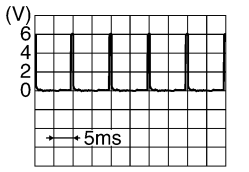
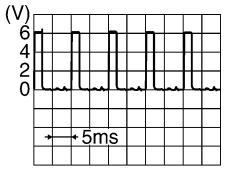
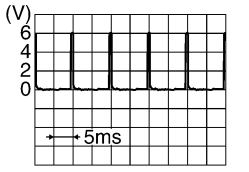
AWMIA1542ZZ

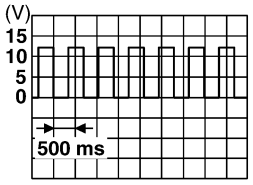
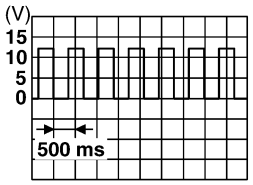
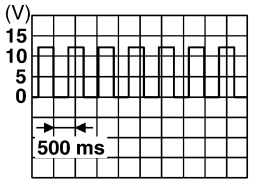
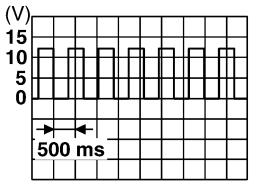
Physical Values

INFOID:0000000010621055

Terminal	Wire color	Signal name	Signal input/ output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
1	BR/W	Key ring output	Output	OFF	ON (driver door open)	0V
					OFF (driver door closed)	Battery voltage
2	SB	Combination switch input 5	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
3	G/Y	Combination switch input 4	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
4	Y	Combination switch input 3	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
5	G/B	Combination switch input 2	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
6	V	Combination switch input 1				
9	R/G	Brake switch	Input	ON	Brake pedal depressed	Battery voltage
					Brake pedal released	0V
11	O	Ignition switch (ACC or ON)	Input	ACC or ON	Ignition switch ACC or ON	Battery voltage
12	R/L	Front door switch RH (All)	Input	OFF	ON (open)	0V
		Rear door switch lower RH (King Cab)				
		Rear door switch upper RH (King Cab)			OFF (closed)	Battery voltage
13	GR	Rear door switch RH (Crew Cab)	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage
15	L/W	Tire pressure warning check connector	Input	OFF	—	5V
18	P	Remote keyless entry receiver and optical sensor (ground)	Output	OFF	—	0V

Terminal	Wire color	Signal name	Signal input/ output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
19	V/W	Remote keyless entry receiver (power supply)	Output	OFF	Ignition switch OFF	 LIIA1893E
20	G/W	Remote keyless entry receiver (signal)	Input	OFF	Stand-by (keyfob buttons released)	 LIIA1894E
					When remote keyless entry receiver receives signal from keyfob (keyfob buttons pressed)	 LIIA1895E
21	G	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	G	BUS	—	—	Ignition switch ON or power window timer operates	 PIIA2344E
23	G/O	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 → ON)	Just after turning ignition switch ON: Pointer of tester should move for approx. 1 second, then return to battery voltage.
27	W/R	Compressor ON signal	Input	ON	A/C switch OFF	5V
					A/C switch ON	0V
28	L/R	Front blower monitor	Input	ON	Front blower motor OFF	Battery voltage
					Front blower motor ON	0V
29	W/B	Hazard switch	Input	OFF	ON	0V
					OFF	5V
31	P/L	Cargo lamp switch	Input	OFF	Cargo lamp switch ON	0
					Cargo lamp switch OFF	Battery voltage

Terminal	Wire color	Signal name	Signal input/ output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
32	R/G	Combination switch output 5	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
33	R/Y	Combination switch output 4	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
34	L	Combination switch output 3	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
35	O/B	Combination switch output 2	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
36	R/W	Combination switch output 1				
37	B/R	Key switch and key lock solenoid	Input	OFF	Key inserted	Battery voltage
					Key removed	0V
38	W/L	Ignition switch (ON)	Input	ON	—	Battery voltage
39	L	CAN-H	—	—	—	—
40	P	CAN-L	—	—	—	—
41	Y/B	Rear defogger switch	Input	ON	Rear defogger switch ON	0V
					Rear defogger switch OFF	5V
47	SB	Front door switch LH (All)	Input	OFF	ON (open)	0V
		Rear door switch lower LH (King Cab)				
		Rear door switch upper LH (King Cab)			OFF (closed)	Battery voltage
48	R/Y	Rear door switch LH (Crew Cab)	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage
50	R/Y	Cargo bed lamp control	Output	OFF	Cargo lamp switch (ON)	0V
					Cargo lamp switch (OFF)	Battery voltage

Terminal	Wire color	Signal name	Signal input/ output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
51	Y/B	Trailer turn signal (right)	Output	ON	Turn right ON	 SKIA3009J
52	G/B	Trailer turn signal (left)	Output	ON	Turn left ON	 SKIA3009J
56	R/G	Battery saver output	Output	OFF	15 minutes after ignition switch is turned OFF	0V
				ON	—	Battery voltage
57	Y/R	Battery power supply	Input	OFF	—	Battery voltage
58	W/R	Optical sensor	Input	ON	When optical sensor is illuminated	3.1V or more
					When optical sensor is not illuminated	0.6V or less
59	G	Front door lock assembly LH actuator (unlock)	Output	OFF	OFF (neutral)	0V
					ON (unlock)	Battery voltage
60	G/B	Turn signal (left)	Output	ON	Turn left ON	 SKIA3009J
61	G/Y	Turn signal (right)	Output	ON	Turn right ON	 SKIA3009J
62	R/W	Step lamp LH and RH	Output	OFF	ON (any door open)	0V
					OFF (all doors closed)	Battery voltage
63	L	Interior room/map lamp	Output	OFF	Any door switch: ON (open)	0V
					Any door switch: OFF (closed)	Battery voltage
65	V	All door lock actuators (lock)	Output	OFF	OFF (neutral)	0V
					ON (lock)	Battery voltage
66	G/Y	Front door lock actuator RH and rear door lock actuators LH/RH (unlock)	Output	OFF	OFF (neutral)	0V
					ON (unlock)	Battery voltage

Terminal	Wire color	Signal name	Signal input/ output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
67	B	Ground	Input	ON	—	0V
68	W/L	Power window power supply (RAP)	Output	—	Ignition switch ON	Battery voltage
					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	W/R	Power window power supply	Output	—	—	Battery voltage
70	W/B	Battery power supply	Input	OFF	—	Battery voltage

Fail Safe

INFOID:0000000010621056

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:0000000010621057

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

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

Priority	DTC
3	• C1729: VHCL SPEED SIG ERR • C1735: IGNITION SIGNAL
4	• 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 • 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

INFOID:0000000010621058

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	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—
U1000: CAN COMM CIRCUIT	—	—	BCS-27
B2190: NATS ANTTENA AMP	—	—	SEC-18
B2191: DIFFERENCE OF KEY	—	—	SEC-21
B2192: ID DISCORD BCM-ECM	—	—	SEC-22
B2193: CHAIN OF BCM-ECM	—	—	SEC-24
C1708: [NO DATA] FL	—	—	WT-15
C1709: [NO DATA] FR	—	—	WT-15
C1710: [NO DATA] RR	—	—	WT-15
C1711: [NO DATA] RL	—	—	WT-15
C1712: [CHECKSUM ERR] FL	—	—	WT-17
C1713: [CHECKSUM ERR] FR	—	—	WT-17
C1714: [CHECKSUM ERR] RR	—	—	WT-17
C1715: [CHECKSUM ERR] RL	—	—	WT-17

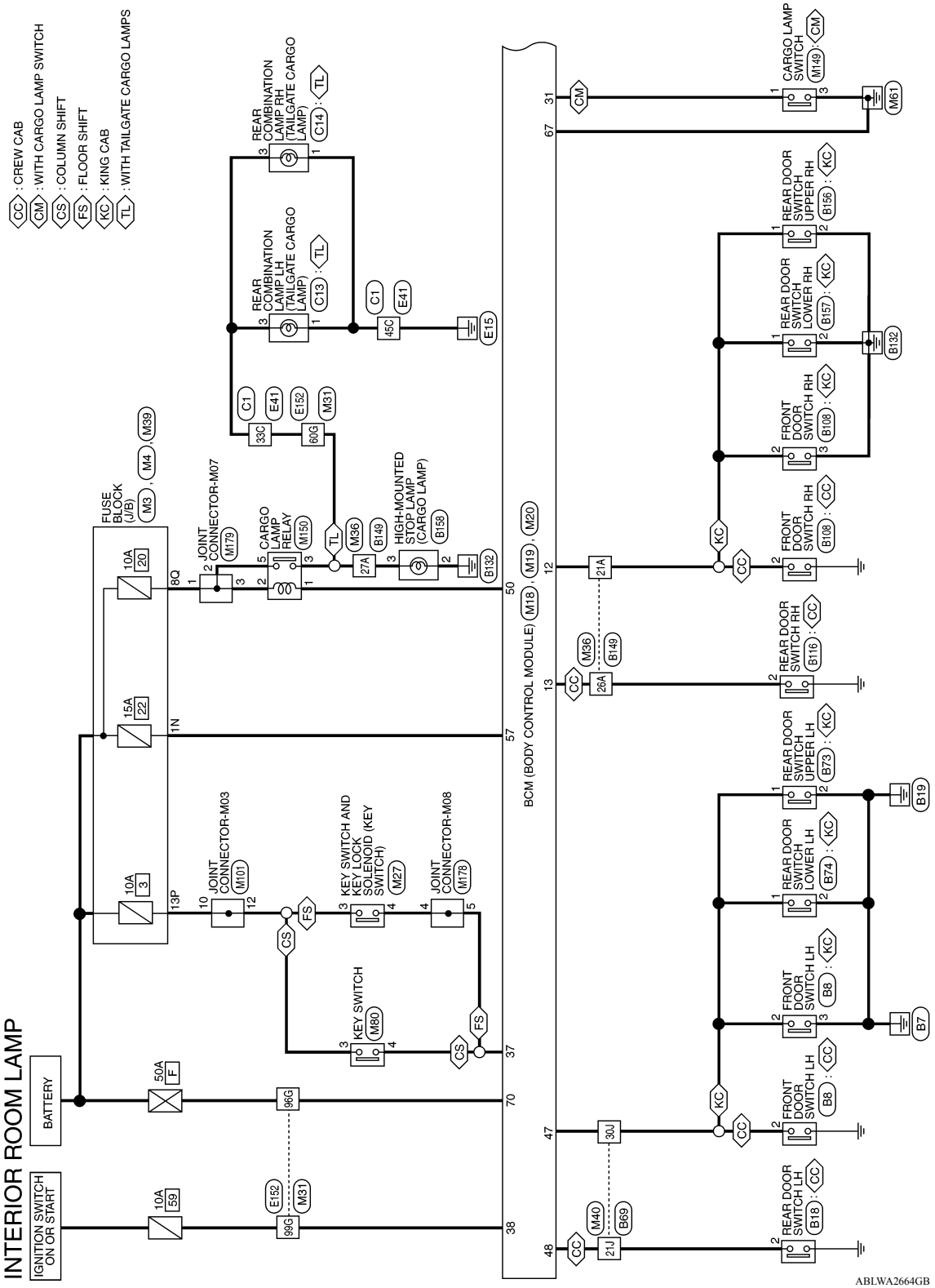
CONSULT display	Fail-safe	Tire pressure monitor warning lamp ON	Reference page
C1716: [PRESSDATA ERR] FL	—	—	WT-19
C1717: [PRESSDATA ERR] FR	—	—	WT-19
C1718: [PRESSDATA ERR] RR	—	—	WT-19
C1719: [PRESSDATA ERR] RL	—	—	WT-19
C1720: [CODE ERR] FL	—	—	WT-17
C1721: [CODE ERR] FR	—	—	WT-17
C1722: [CODE ERR] RR	—	—	WT-17
C1723: [CODE ERR] RL	—	—	WT-17
C1724: [BATT VOLT LOW] FL	—	—	WT-17
C1725: [BATT VOLT LOW] FR	—	—	WT-17
C1726: [BATT VOLT LOW] RR	—	—	WT-17
C1727: [BATT VOLT LOW] RL	—	—	WT-17
C1729: VHCL SPEED SIG ERR	—	—	WT-21
C1735: IGNITION SIGNAL	—	—	WT-22

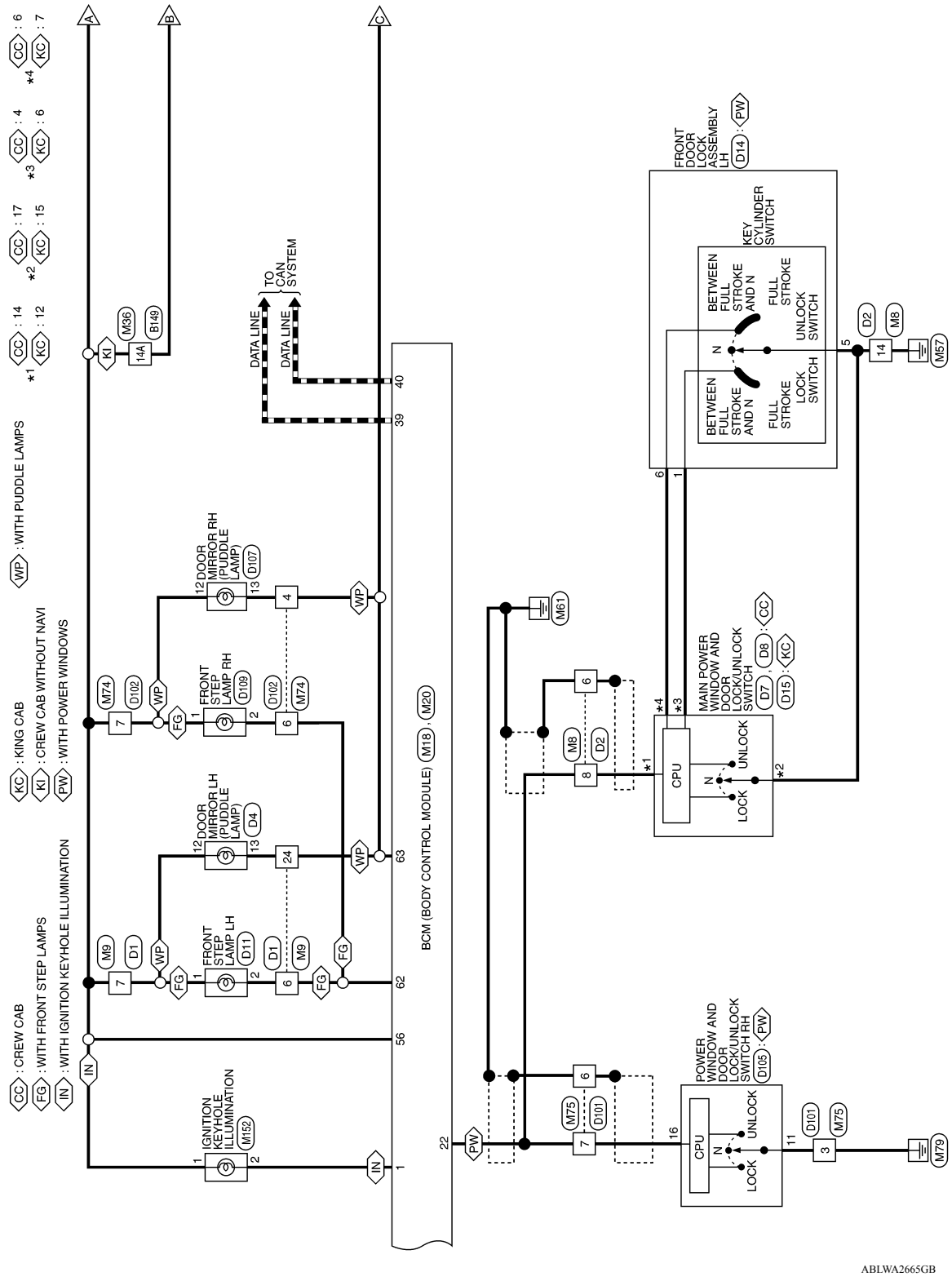
WIRING DIAGRAM

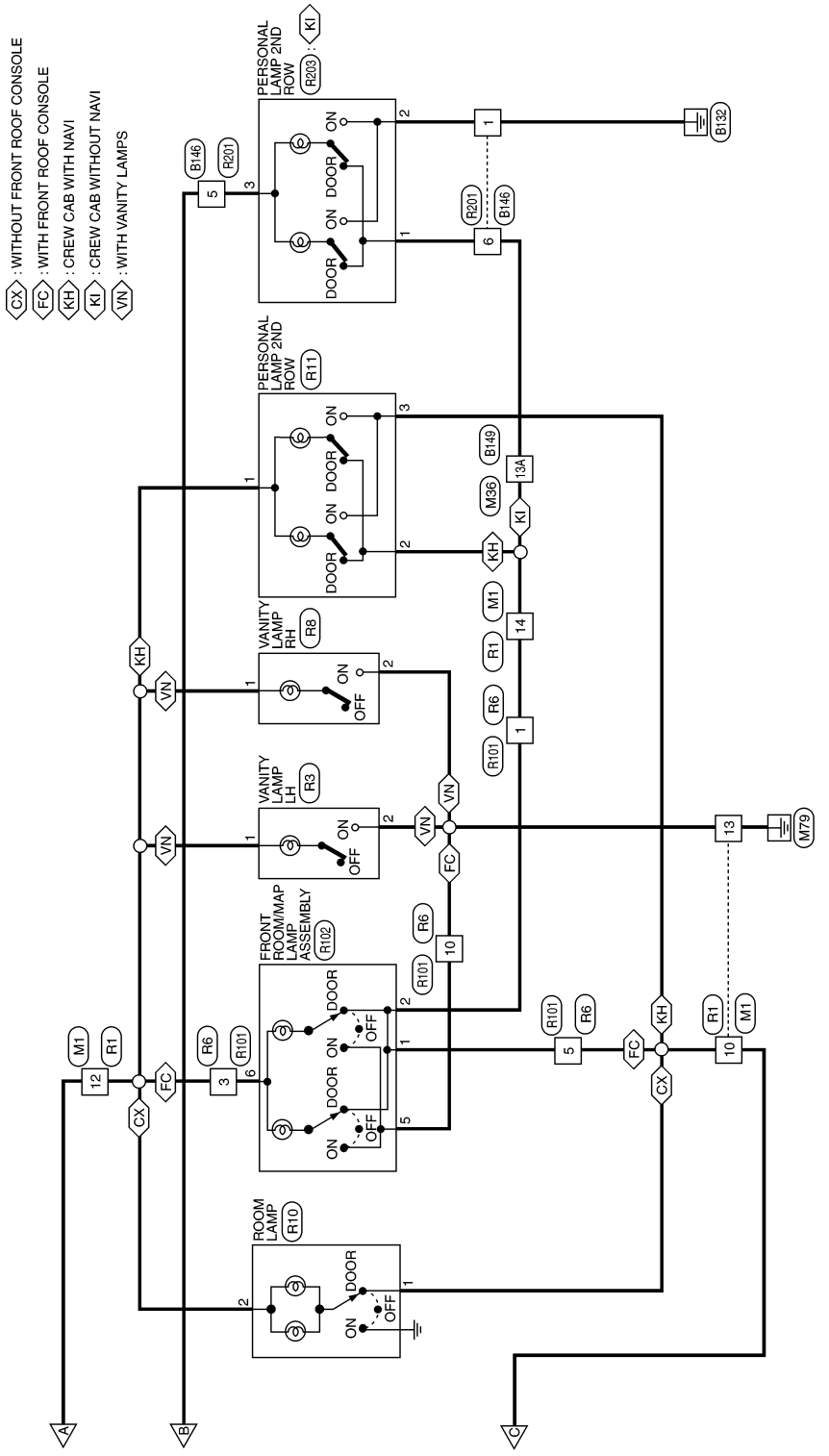
INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram

INFOID:0000000009878616




CC : CREW CAB
FG : WITH FRONT STEP LAMPS
IN : WITH IGNITION KEYHOLE ILLUMINATION
KC : KING CAB
KI : CREW CAB WITHOUT NAVI
PW : WITH POWER WINDOWS
WP : WITH PUDDLE LAMPS
*1 CC : 14 KC : 12
*2 CC : 17 KC : 15
*3 CC : 4 KC : 6
*4 CC : 6 KC : 7
DATA LINE
TO CAN SYSTEM
BCM (BODY CONTROL MODULE) (M18), (M20)
IGNITION KEYHOLE ILLUMINATION (M152)
DOOR MIRROR LH (PUDDLE LAMP) D4
DOOR MIRROR RH (PUDDLE LAMP) D107
FRONT STEP LAMP LH D11
FRONT STEP LAMP RH D109
FRONT DOOR LOCK ASSEMBLY LH D14
KEY CYLINDER SWITCH
BETWEEN FULL STROKE AND N
FULL STROKE UNLOCK SWITCH
FULL STROKE LOCK SWITCH
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D7, D8, D15
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH D105
CPU
UNLOCK
LOCK
ABLWA2665GB

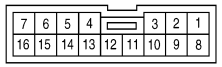


ABLWA2667GB

INTERIOR ROOM LAMP CONNECTORS

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

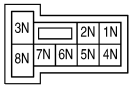
H.S.



Terminal No.	Color of Wire	Signal Name
10	L	–
12	R/G	–
13	B	–
14	R	–

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

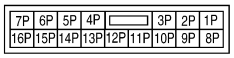
H.S.



Terminal No.	Color of Wire	Signal Name
1N	Y/R	–

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

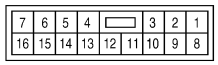
H.S.



Terminal No.	Color of Wire	Signal Name
13P	P	–

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Color	WHITE

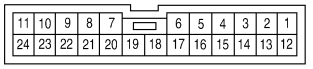
H.S.



Terminal No.	Color of Wire	Signal Name
6	SHIELD	–
8	G	–
14	B	–

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	BROWN

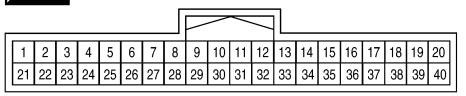
H.S.



Terminal No.	Color of Wire	Signal Name
6	R/W	–
7	R/G	–
24	L	–

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

H.S.



Terminal No.	Color of Wire	Signal Name
1	BR/W	KEY RING OUTPUT
12	R/L	DOOR SW (AS)
13	GR	DOOR SW (RR)
22	G	ANTI-PINCH SERIAL LINK (RX, TX)
31	P/L	CARGO LAMP SW
37	B/R	KEY SW
38	W/L	IGN SW
39	L	CAN-H
40	P	CAN-L

ABLIA4228GB

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

H.S.

41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			

Terminal No.	Color of Wire	Signal Name
47	SB	DOOR SW (DR)
48	R/Y	DOOR SW (RL)
50	R/Y	CARGO LAMP OUTPUT

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

H.S.

56	57	58	59	60	61	62	63	64
65		66		67		68	69	70

Terminal No.	Color of Wire	Signal Name
56	R/G	BATTERY SAVER OUTPUT
57	Y/R	BAT (FUSE)
62	R/W	STEP LAMP OUTPUT
63	L	ROOM LAMP OUTPUT
67	B	GND (POWER)
70	W/B	BAT (F/L)

Connector No.	M27
Connector Name	KEY SWITCH AND KEY LOCK SOLENOID
Connector Color	WHITE

H.S.

4	3	2	1

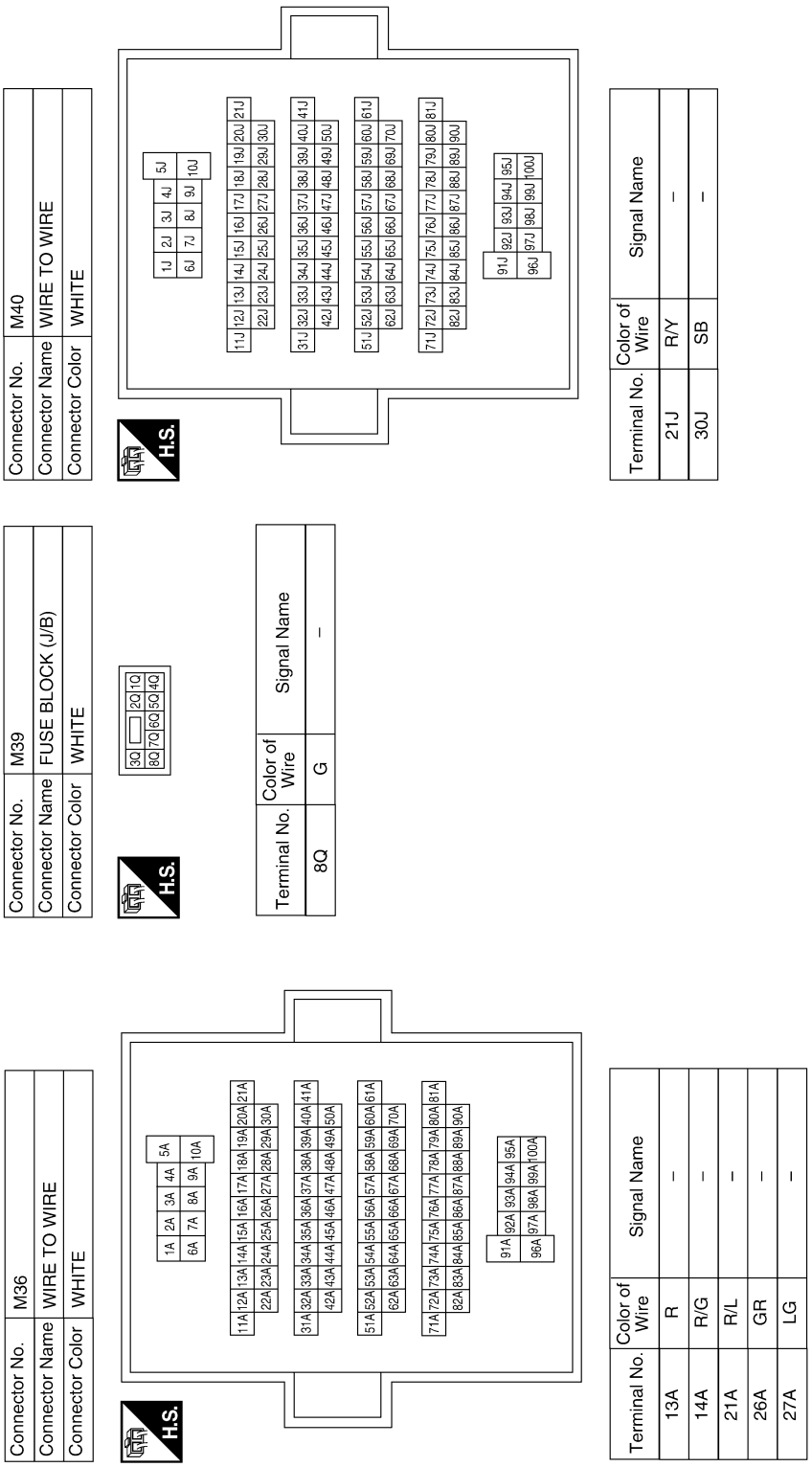
Terminal No.	Color of Wire	Signal Name
3	P	–
4	B/R	–

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
60G	LG	–
96G	W/B	–
99G	W/L	–

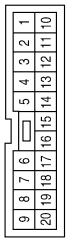
ABLIA6511GB



ABLIA4230GB

Connector No.	M74
Connector Name	WIRE TO WIRE
Connector Color	BROWN

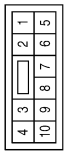
H.S.



Terminal No.	Color of Wire	Signal Name
4	L	–
6	R/W	–
7	R/G	–

Connector No.	M75
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
3	B	–
6	SHIELD	–
7	G	–

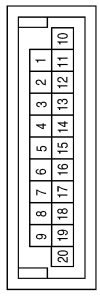
Connector No.	M80
Connector Name	KEY SWITCH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	P	–
4	B/R	–

Connector No.	M101
Connector Name	JOINT CONNECTOR-M03
Connector Color	BLUE

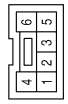
H.S.



Terminal No.	Color of Wire	Signal Name
10	P	–
12	P	–

Connector No.	M149
Connector Name	CARGO LAMP SWITCH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	P/L	–
3	B	–

Connector No.	M150
Connector Name	CARGO LAMP RELAY
Connector Color	BLUE

H.S.

Terminal No.	Color of Wire	Signal Name
1	R/Y	–
2	G	–
3	LG	–
5	G	–

ABLIA4231GB

Connector No.	M152
Connector Name	IGNITION KEYHOLE ILLUMINATION
Connector Color	WHITE

H.S.

1 2

Terminal No.	Color of Wire	Signal Name
1	R/G	–
2	BR/W	–

Connector No.	M178
Connector Name	JOINT CONNECTOR-M08
Connector Color	WHITE

H.S.

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

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

Connector No.	M179
Connector Name	JOINT CONNECTOR-M07
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	G	–
2	G	–
3	G	–

Connector No.	E41
Connector Name	WIRE TO WIRE
Connector Color	GRAY

H.S.

1C 2C 3C 4C 5C 6C 7C 8C 9C 10C 11C 12C 13C 14C 15C 16C 17C 18C 19C 20C 21C 22C 23C 24C 25C 26C 27C 28C 29C 30C 31C 32C 33C 34C 35C 36C 37C 38C 39C 40C 41C 42C 43C 44C 45C 46C 47C 48C 49C 50C 51C 52C

Terminal No.	Color of Wire	Signal Name
33C	LG	–
45C	B	–

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

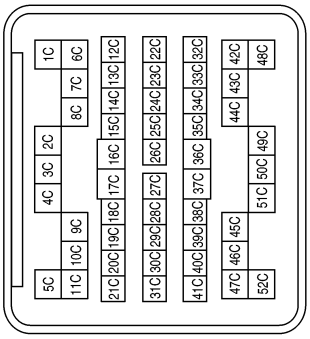
5G 4G 3G 2G 1G 10G 9G 8G 7G 6G 21G 20G 19G 18G 17G 16G 15G 14G 13G 12G 11G 30G 29G 28G 27G 26G 25G 24G 23G 22G 41G 40G 39G 38G 37G 36G 35G 34G 33G 32G 31G 50G 49G 48G 47G 46G 45G 44G 43G 42G 61G 60G 59G 58G 57G 56G 55G 54G 53G 52G 51G 70G 69G 68G 67G 66G 65G 64G 63G 62G 81G 80G 79G 78G 77G 76G 75G 74G 73G 72G 71G 90G 89G 88G 87G 86G 85G 84G 83G 82G 95G 94G 93G 92G 91G 100G 99G 98G 97G 96G

Terminal No.	Color of Wire	Signal Name
60G	LG	–
96G	W/B	–
99G	L/W	–

ABLIA6512GB

Connector No.	C1
Connector Name	WIRE TO WIRE
Connector Color	GRAY

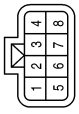
H.S.



Terminal No.	Color of Wire	Signal Name
33C	LG	–
45C	B	–

Connector No.	C13
Connector Name	REAR COMBINATION LAMP LH
Connector Color	GRAY

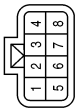
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	–
3	LG	–

Connector No.	C14
Connector Name	REAR COMBINATION LAMP RH
Connector Color	GRAY

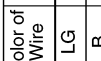
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	–
3	LG	–

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

H.S.



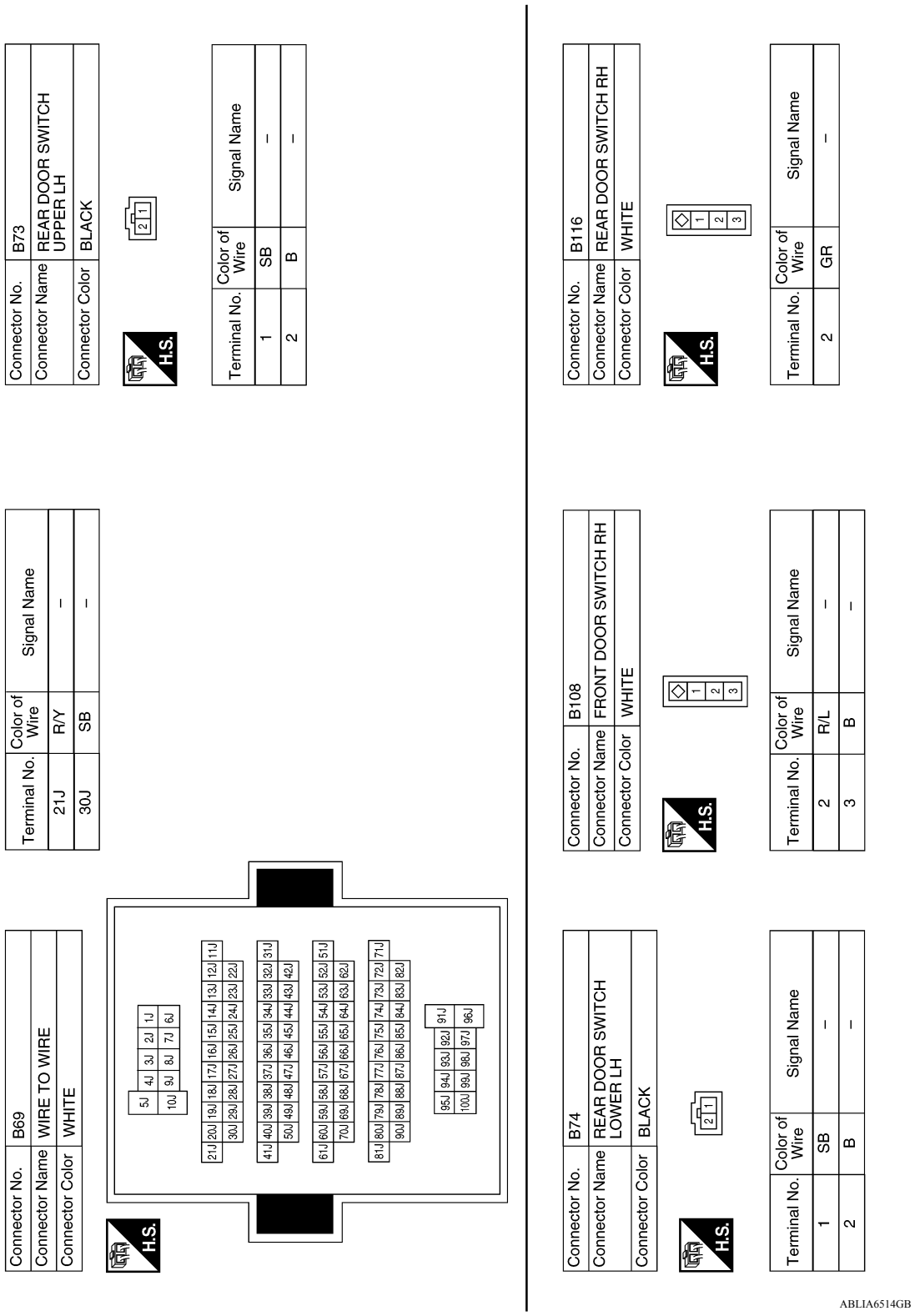
Terminal No.	Color of Wire	Signal Name
2	SB	–
3	B	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
2	R/Y	–

ABLIA6513GB


Connector No. B69
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
5J 4J 3J 2J 1J
10J 9J 8J 7J 6J
21J 20J 19J 18J 17J 16J 15J 14J 13J 12J 11J
30J 29J 28J 27J 26J 25J 24J 23J 22J
41J 40J 39J 38J 37J 36J 35J 34J 33J 32J 31J
50J 49J 48J 47J 46J 45J 44J 43J 42J
61J 60J 59J 58J 57J 56J 55J 54J 53J 52J 51J
70J 69J 68J 67J 66J 65J 64J 63J 62J
81J 80J 79J 78J 77J 76J 75J 74J 73J 72J 71J
90J 89J 88J 87J 86J 85J 84J 83J 82J
95J 94J 93J 92J 91J
100J 99J 98J 97J 96J
Terminal No. Color of Wire Signal Name
21J R/Y –
30J SB –
Connector No. B73
Connector Name REAR DOOR SWITCH UPPER LH
Connector Color BLACK
H.S.
2 1
Terminal No. Color of Wire Signal Name
1 SB –
2 B –
Connector No. B74
Connector Name REAR DOOR SWITCH LOWER LH
Connector Color BLACK
H.S.
2 1
Terminal No. Color of Wire Signal Name
1 SB –
2 B –
Connector No. B108
Connector Name FRONT DOOR SWITCH RH
Connector Color WHITE
H.S.
1 2 3
Terminal No. Color of Wire Signal Name
2 R/L –
3 B –
Connector No. B116
Connector Name REAR DOOR SWITCH RH
Connector Color WHITE
H.S.
1 2 3
Terminal No. Color of Wire Signal Name
2 GR –
ABLIA6514GB

Connector No.	B146
Connector Name	WIRE TO WIRE
Connector Color	BROWN

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

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

Connector No.	B149
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

			5A	4A	3A	2A	1A				
			10A	9A	8A	7A	6A				
21A	20A	19A	18A	17A	16A	15A	14A	13A	12A	11A	
	30A	29A	28A	27A	26A	25A	24A	23A	22A		
41A	40A	39A	38A	37A	36A	35A	34A	33A	32A	31A	
	50A	49A	48A	47A	46A	45A	44A	43A	42A		
61A	60A	59A	58A	57A	56A	55A	54A	53A	52A	51A	
	70A	69A	68A	67A	66A	65A	64A	63A	62A		
81A	80A	79A	78A	77A	76A	75A	74A	73A	72A	71A	
	90A	89A	88A	87A	86A	85A	84A	83A	82A		
			95A	94A	93A	92A	91A				
			100A	99A	98A	97A	96A				

Terminal No.	Color of Wire	Signal Name
13A	R	–
14A	R/G	–
21A	R/L	–
26A	GR	–
27A	LG	–

Connector No.	B156
Connector Name	REAR DOOR SWITCH UPPER RH
Connector Color	BLACK

H.S.

2	1

Terminal No.	Color of Wire	Signal Name
1	R/L	–
2	B	–

Connector No.	B157
Connector Name	REAR DOOR SWITCH LOWER RH
Connector Color	BLACK

H.S.

2	1

Terminal No.	Color of Wire	Signal Name
1	R/L	–
2	B	–

Connector No.	B158
Connector Name	HIGH-MOUNTED STOP LAMP
Connector Color	WHITE

H.S.

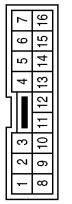
3	2	1

Terminal No.	Color of Wire	Signal Name
2	B	–
3	LG	–

ABLIA6515GB

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

H.S.



Terminal No.	Color of Wire	Signal Name
10	L	–
12	R/G	–
13	B	–
14	R	–

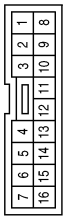
Connector No.	R3
Connector Name	VANITY LAMP LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	R/G	–
2	B	–

Connector No.	R6
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	R	–
3	R/G	–
5	L	–
10	B	–

Connector No.	R8
Connector Name	VANITY LAMP RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	R/G	–
2	B	–

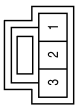
Connector No.	R10
Connector Name	ROOM LAMP
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	–
2	R/G	–

Connector No.	R11
Connector Name	PERSONAL LAMP 2ND ROW (CREW CAB WITH NAVI)
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	R/G	–
2	B	–
3	L	–

ABLIA6516GB

Connector No.	R101
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

Terminal No.	Color of Wire	Signal Name
1	R	–
3	R/G	–
5	L	–
10	B	–

Connector No.	R102
Connector Name	FRONT ROOM/MAP LAMP ASSEMBLY
Connector Color	GRAY

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	L	–
2	R	–
5	B	–
6	R/G	–

Connector No.	R201
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.

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

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

Connector No.	R203
Connector Name	PERSONAL LAMP 2ND ROW (CREW CAB WITHOUT NAVI)
Connector Color	WHITE

H.S.

3	2	1

Terminal No.	Color of Wire	Signal Name
1	R	–
2	B	–
3	R/G	–

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

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

Terminal No.	Color of Wire	Signal Name
6	R/W	–
7	R/G	–
24	L	–

Connector No.	D2
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

Terminal No.	Color of Wire	Signal Name
6	SHIELD	–
8	LG/W	–
14	B	–

ABLIA6517GB

Connector No.	D4
Connector Name	DOOR MIRROR LH (WITH AUTOMATIC DRIVE POSITIONER
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	R/G	–
13	L	–

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (CREW CAB)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	L	KEY CYLINDER LOCK
6	R	KEY CYLINDER UNLOCK
14	LG/W	COMMUNICATION

Connector No.	D8
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (CREW CAB)
Connector Color	WHITE

H.S.

17	18	19

Terminal No.	Color of Wire	Signal Name
17	B	GND

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

H.S.

2	1

Terminal No.	Color of Wire	Signal Name
1	R/G	–
2	R/W	–

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

H.S.

1	2	3	4	5	6

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

Connector No.	D15
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (KING CAB)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	L	KEY CYLINDER LOCK
7	R	KEY CYLINDER UNLOCK
12	LG/W	COMMUNICATION
15	B	GND

ABLIA6518GB

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

H.S.

1	2	3	4
5	6	7	8	9	10

Terminal No.	Color of Wire	Signal Name
3	B	–
6	SHIELD	–
7	LG/W	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	L	–
6	R/W	–
7	R/G	–

Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	B	GND
16	LG/W	COMMUNICATION

Connector No.	D107
Connector Name	DOOR MIRROR RH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	R/G	–
13	L	–

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

H.S.

2	1

Terminal No.	Color of Wire	Signal Name
1	R/G	–
2	R/W	–

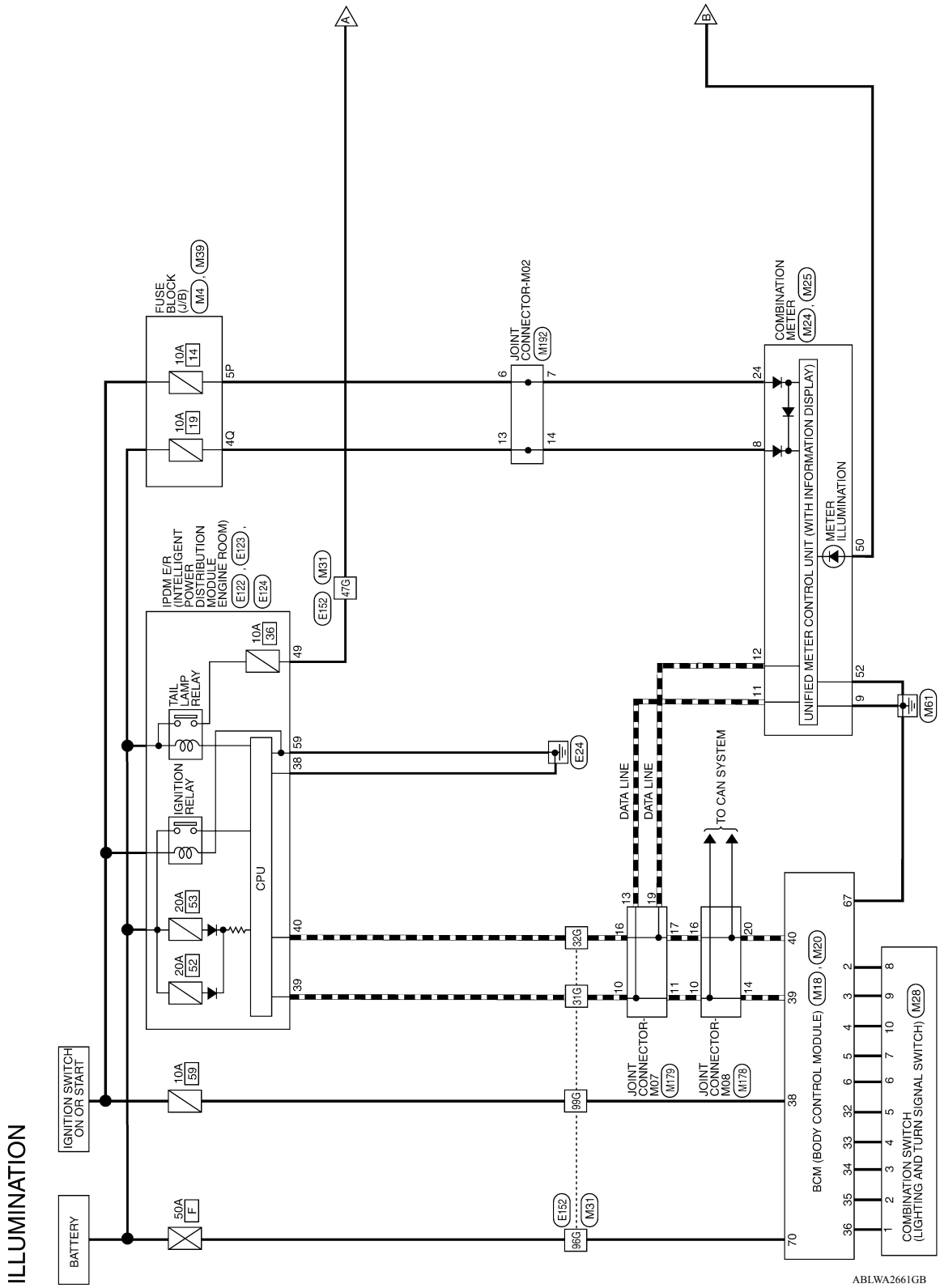
ABLIA6519GB

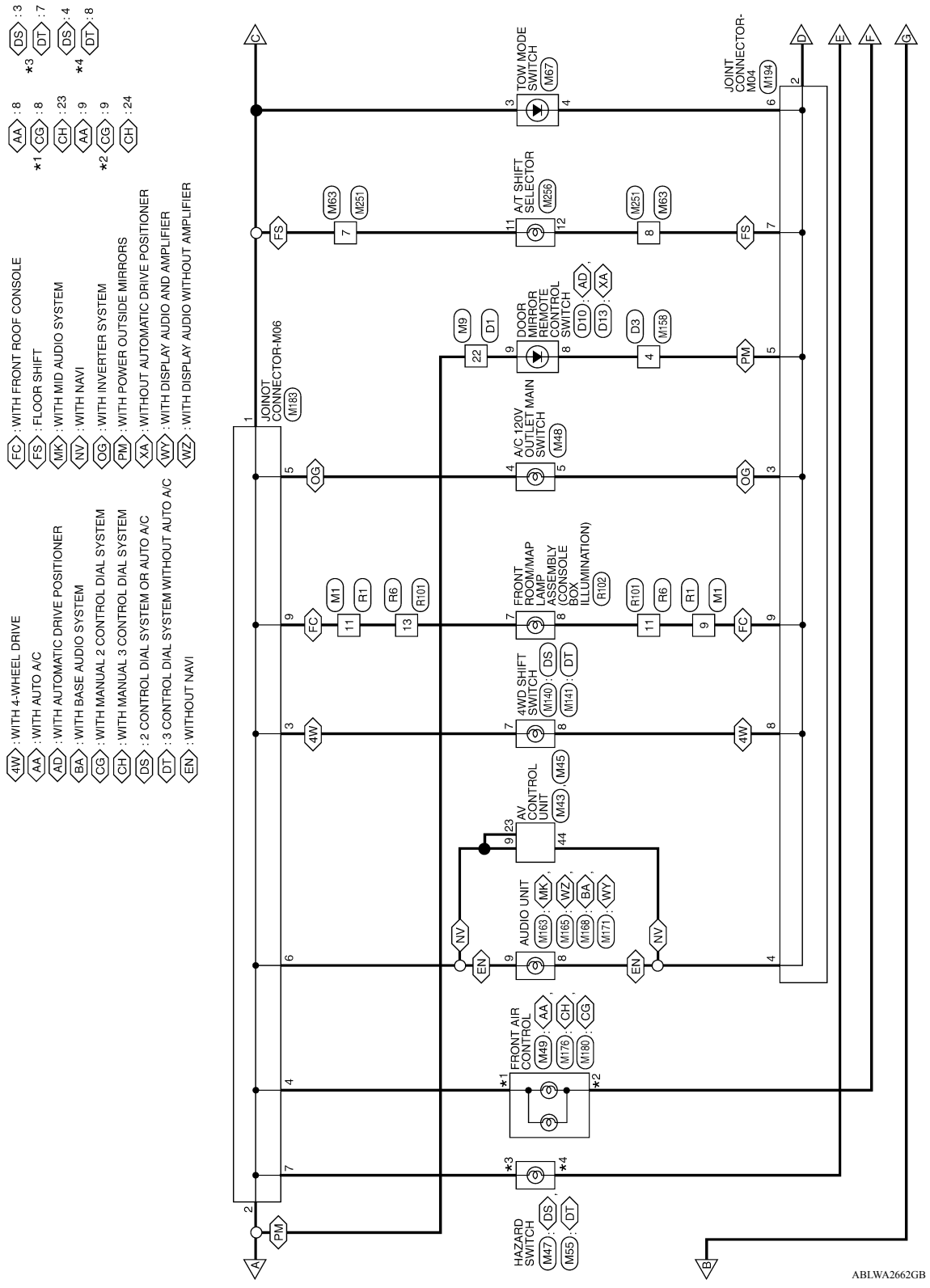
< WIRING DIAGRAM >

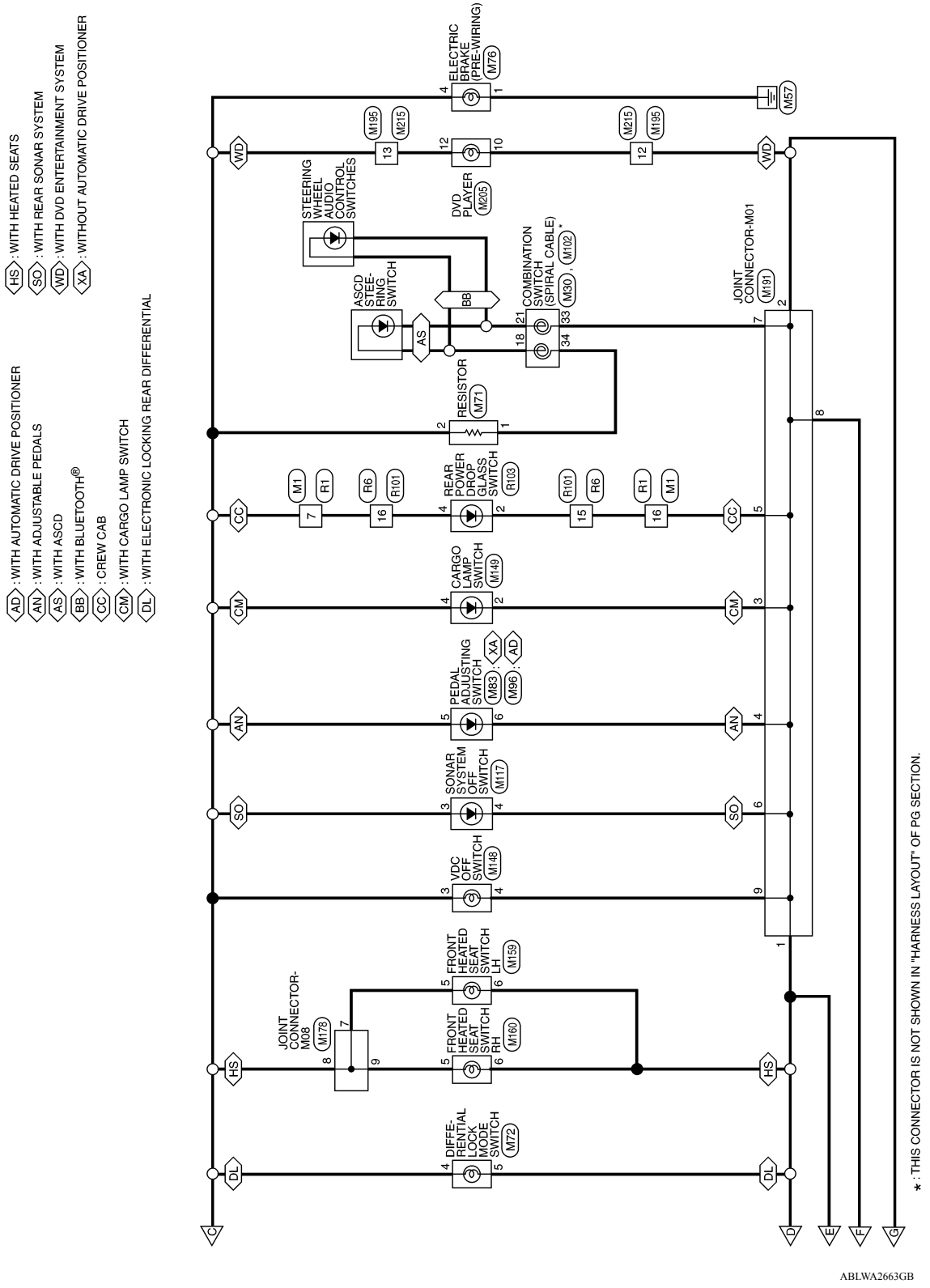
ILLUMINATION

Wiring Diagram

INFOID:0000000009878617




4W : WITH 4-WHEEL DRIVE
AA : WITH AUTO A/C
AD : WITH AUTOMATIC DRIVE POSITIONER
BA : WITH BASE AUDIO SYSTEM
CG : WITH MANUAL 2 CONTROL DIAL SYSTEM
CH : WITH MANUAL 3 CONTROL DIAL SYSTEM
DS : 2 CONTROL DIAL SYSTEM OR AUTO A/C
DT : 3 CONTROL DIAL SYSTEM WITHOUT AUTO A/C
EN : WITHOUT NAVI
FC : WITH FRONT ROOF CONSOLE
FS : FLOOR SHIFT
MK : WITH MID AUDIO SYSTEM
NV : WITH NAVI
OG : WITH INVERTER SYSTEM
PM : WITH POWER OUTSIDE MIRRORS
XA : WITHOUT AUTOMATIC DRIVE POSITIONER
WY : WITH DISPLAY AUDIO AND AMPLIFIER
WZ : WITH DISPLAY AUDIO WITHOUT AMPLIFIER
JOINT CONNECTOR-M06
JOINT CONNECTOR-M04
TOW MODE SWITCH
A/T SHIFT SELECTOR
DOOR MIRROR REMOTE CONTROL SWITCH
A/C 120V OUTLET MAIN SWITCH
FRONT ROOM/MAP LAMP ASSEMBLY (CONSOLE BOX ILLUMINATION)
4WD SHIFT SWITCH
AV CONTROL UNIT
AUDIO UNIT
FRONT AIR CONTROL
HAZARD SWITCH
ABLWA2662GB


HS : WITH HEATED SEATS
SO : WITH REAR SONAR SYSTEM
WD : WITH DVD ENTERTAINMENT SYSTEM
XA : WITHOUT AUTOMATIC DRIVE POSITIONER
AD : WITH AUTOMATIC DRIVE POSITIONER
AN : WITH ADJUSTABLE PEDALS
AS : WITH ASCD
BB : WITH BLUETOOTH®
CC : CREW CAB
CM : WITH CARGO LAMP SWITCH
DL : WITH ELECTRONIC LOCKING REAR DIFFERENTIAL
ELECTRIC BRAKE (PRE-WIRING) M76
M57
STEERING WHEEL AUDIO CONTROL SWITCHES
DVD PLAYER M205
ASCD STEE-RING SWITCH
COMBINATION SWITCH (SPIRAL CABLE) M102 M30
JOINT CONNECTOR-M01 M191
RESISTOR M71
REAR POWER DROP GLASS SWITCH R103
CARGO LAMP SWITCH M149
PEDAL ADJUSTING SWITCH M83 M96
SONAR SYSTEM OFF SWITCH M117
VDC OFF SWITCH M148
FRONT HEATED SEAT SWITCH LH M159
FRONT HEATED SEAT SWITCH RH M160
JOINT CONNECTOR-M08 M178
DIFFE-RENTIAL LOCK MODE SWITCH M72
★ : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.
ABLWA2663GB

ILLUMINATION CONNECTORS

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
7	R/L	–
9	BR	–
11	R/L	–
16	BR	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
5P	O/L	–

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
22	R/L	–

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
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	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
2	SB	INPUT 5
3	G/Y	INPUT 4
4	Y	INPUT 3
5	G/B	INPUT 2
6	V	INPUT 1
32	R/G	OUTPUT 5
33	R/Y	OUTPUT 4
34	L	OUTPUT 3
35	O/B	OUTPUT 2
36	R/W	OUTPUT 1
38	W/L	IGN SW
39	L	CAN-H
40	P	CAN-L

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

H.S.

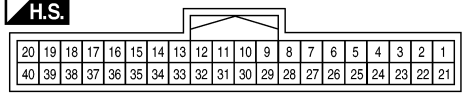
56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name
67	B	GND (POWER)
70	W/B	BAT (F/L)

ABLIA6503GB

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

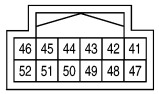
H.S.



Terminal No.	Color of Wire	Signal Name
8	Y/R	BATTERY
9	B	GND
11	L	CAN-H
12	P	CAN-L
24	O/L	RUN/START

Connector No.	M25
Connector Name	COMBINATION METER
Connector Color	WHITE

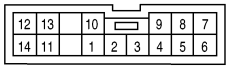
H.S.



Terminal No.	Color of Wire	Signal Name
50	BR	ILL LED CON OUTPUT
52	B	ILL GND

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

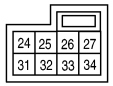
H.S.



Terminal No.	Color of Wire	Signal Name
1	R/W	–
2	O/B	–
3	L	–
4	R/Y	–
5	R/G	–
6	V	–
7	G/B	–
8	SB	–
9	G/Y	–
10	Y	–

Connector No.	M30
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
33	BR	–
34	Y	–

ABLIA6504GB

Connector No.	M39
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

3Q		2Q	1Q
8Q	7Q	6Q	5Q	4Q

Terminal No.	Color of Wire	Signal Name
4Q	Y/R	–

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

11G	12G	13G	14G	15G	16G	17G	18G	19G	20G	21G
22G	23G	24G	25G	26G	27G	28G	29G	30G		

31G	32G	33G	34G	35G	36G	37G	38G	39G	40G	41G
42G	43G	44G	45G	46G	47G	48G	49G	50G		

51G	52G	53G	54G	55G	56G	57G	58G	59G	60G	61G
62G	63G	64G	65G	66G	67G	68G	69G	70G		

71G	72G	73G	74G	75G	76G	77G	78G	79G	80G	81G
82G	83G	84G	85G	86G	87G	88G	89G	90G		

91G	92G	93G	94G	95G
96G	97G	98G	99G	100G

Terminal No.	Color of Wire	Signal Name
31G	L	–
32G	P	–
47G	R/L	–
96G	W/B	–
99G	W/L	–

Connector No.	M47
Connector Name	HAZARD SWITCH (WITH 2 CONTROL DIAL SYSTEM OR AUTO A/C)
Connector Color	WHITE

H.S.

3	1	2	4

Terminal No.	Color of Wire	Signal Name
3	R/L	–
4	BR	–

Connector No.	M45
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM)
Connector Color	WHITE

H.S.

32	31	30	29	28	27	26	25	24	23	22	21
44	43	42	41	40	39	38	37	36	35	34	33

Terminal No.	Color of Wire	Signal Name
23	SB	MR OUTPUT (WITHOUT REAR ENTERTAINMENT SYSTEM)
23	R/L	MR OUTPUT (WITH REAR ENTERTAINMENT SYSTEM)
44	BR	ILL (-)

Connector No.	M43
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
9	R/L	ILL (+), LIGHT SW

ABLIA6520GB

Connector No.	M48
Connector Name	A/C 120V OUTLET MAIN SWITCH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	V	–
5	BR	–

Connector No.	M49
Connector Name	FRONT AIR CONTROL (WITH AUTO A/C)
Connector Color	BLACK

H.S.

13	12	11	10	9	8	7	6	5	4	3	2	1
26	25	24	23	22	21	20	19	18	17	16	15	14

Terminal No.	Color of Wire	Signal Name
8	R/L	ILLUM +
9	BR	ILLUM -

Connector No.	M55
Connector Name	HAZARD SWITCH (WITH 3 CONTROL DIAL SYSTEM WITHOUT AUTO A/C)
Connector Color	WHITE

H.S.

5			4
		7	8

Terminal No.	Color of Wire	Signal Name
7	R/L	–
8	BR	–

Connector No.	M63
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
7	R/L	–
8	BR	–

Connector No.	M67
Connector Name	TOW MODE SWITCH
Connector Color	GRAY

H.S.

6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
3	R/L	–
4	BR	–

Connector No.	M71
Connector Name	RESISTOR
Connector Color	BLACK

H.S.

1	2

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	R/L	–

ABLIA6521GB

Connector No.	M72
Connector Name	DIFFERENTIAL LOCK MODE SWITCH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
4	R/L	–
5	BR	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–
4	R/L	–

Connector No.	M83
Connector Name	PEDAL ADJUSTING SWITCH (WITHOUT AUTOMATIC DRIVE POSITIONER)
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
5	R/L	–
6	BR	–

Connector No.	M96
Connector Name	PEDAL ADJUSTING SWITCH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
5	R/L	–
6	BR	–

Connector No.	M102
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
18	BR	–
21	L	–

Connector No.	M117
Connector Name	SONAR SYSTEM OFF SWITCH
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
3	R/L	–
4	BR	–

ABLIA6505GB

Connector No.	M140
Connector Name	4WD SHIFT SWITCH (2 CONTROL DIAL SYSTEM OR AUTO A/C)
Connector Color	GRAY

H.S.

1 2 3 4 5 6 7 8

Terminal No.	Color of Wire	Signal Name
7	R/L	–
8	BR	–

Connector No.	M141
Connector Name	4WD SHIFT SWITCH (3 CONTROL DIAL SYSTEM WITHOUT AUTO A/C)
Connector Color	WHITE

H.S.

7 6 5 4 3 1 2 8

Terminal No.	Color of Wire	Signal Name
7	R/L	–
8	BR	–

Connector No.	M148
Connector Name	VDC OFF SWITCH
Connector Color	GRAY

H.S.

6 5 4 3 2 1

Terminal No.	Color of Wire	Signal Name
3	R/L	–
4	BR	–

Connector No.	M149
Connector Name	CARGO LAMP SWITCH
Connector Color	WHITE

H.S.

4 5 6
1 2 3

Terminal No.	Color of Wire	Signal Name
2	BR	–
4	R/L	–

Connector No.	M158
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

4 3 2 1
10 9 8 7 6 5

Terminal No.	Color of Wire	Signal Name
4	BR	–

Connector No.	M159
Connector Name	FRONT HEATED SEAT SWITCH LH
Connector Color	WHITE

H.S.

5 6
4 2 1 3

Terminal No.	Color of Wire	Signal Name
5	R/L	–
6	BR	–

ABLIA4245GB

Connector No.	M160
Connector Name	FRONT HEATED SEAT SWITCH RH
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
5	R/L	–
6	BR	–

Connector No.	M163
Connector Name	AUDIO UNIT (WITH MID AUDIO SYSTEM)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
8	BR	ILL CONT
9	R/L	LIGHT SW

Connector No.	M165
Connector Name	AUDIO UNIT (WITH DISPLAY AUDIO WITHOUT AMPLIFIER)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
8	BR	ILL (-)
9	R/L	ILL (+), LIGHT SW

Connector No.	M168
Connector Name	AUDIO UNIT (WITH BASE AUDIO SYSTEM)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
8	BR	–
9	R/L	–

Connector No.	M171
Connector Name	AUDIO UNIT (WITH DISPLAY AUDIO WITH AMPLIFIER)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
8	BR	ILL (-)
9	R/L	ILL (+), LIGHT SW

Connector No.	M176
Connector Name	FRONT AIR CONTROL (WITH MANUAL 3 CONTROL DIAL SYSTEM)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
23	R/L	ILLUM +
24	BR	ILLUM -

ABLIA6506GB

Connector No.	M178
Connector Name	JOINT CONNECTOR-M08
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
7	R/L	–
8	R/L	–
9	R/L	–
10	L	–
14	L	–
16	P	–
20	P	–

Connector No.	M179
Connector Name	JOINT CONNECTOR-M07
Connector Color	WHITE

H.S.

9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11	10
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Terminal No.	Color of Wire	Signal Name
10	L	–
11	L	–
13	L	–
16	P	–
17	P	–
19	P	–

Connector No.	M180
Connector Name	FRONT AIR CONTROL (WITH MANUAL 2 CONTROL DIAL SYSTEM)
Connector Color	BLACK

H.S.

13	12	11	10	9	8	7	6	5	4	3	2	1
26	25	24	23	22	21	20	19	18	17	16	15	14

Terminal No.	Color of Wire	Signal Name
8	R/L	ILLUM +
9	BR	ILLUM -

Connector No.	M183
Connector Name	JOINT CONNECTOR-M06
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	R/L	–
2	R/L	–
3	R/L	–
4	R/L	–
5	R/L	–
6	R/L	–
7	R/L	–
9	R/L	–

Connector No.	M191
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	BR	–
2	BR	–
3	BR	–
4	BR	–
5	BR	–
6	BR	–
7	BR	–
8	BR	–
9	BR	–

Connector No.	M192
Connector Name	JOINT CONNECTOR-M02
Connector Color	GREEN

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	O/L	–
7	O/L	–
13	Y/R	–
14	Y/R	–

ABLIA6522GB

Connector No.	M205
Connector Name	DVD PLAYER
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
10	BR	ILL-
12	R/L	LIGHTING SW

Connector No.	M195
Connector Name	WIRE TO WIRE
Connector Color	BROWN

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

Terminal No.	Color of Wire	Signal Name
12	BR	–
13	R/L	–

Connector No.	M256
Connector Name	A/T SHIFT SELECTOR (FLOOR SHIFT)
Connector Color	BLACK

H.S.

11	12

Terminal No.	Color of Wire	Signal Name
11	R/L	–
12	BR	–

Connector No.	M194
Connector Name	JOINT CONNECTOR-M04
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	BR	–
3	BR	–
4	BR	–
5	BR	–
6	BR	–
7	BR	–
8	BR	–
9	BR	–

Connector No.	M251
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
7	R/L	–
8	BR	–

Connector No.	M215
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	BR	–
13	R/L	–

ABLIA6507GB

Connector No.	E122
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

42	41	40	39	38	37
48	47	46	45	44	43

Terminal No.	Color of Wire	Signal Name
38	B	GND (SIGNAL)
39	L	CAN-H
40	P	CAN-L

Connector No.	E123
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN

H.S.

51		50	49
56	55	54	53	52

Terminal No.	Color of Wire	Signal Name
49	R/L	ILLUMINATION

Connector No.	E124
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK

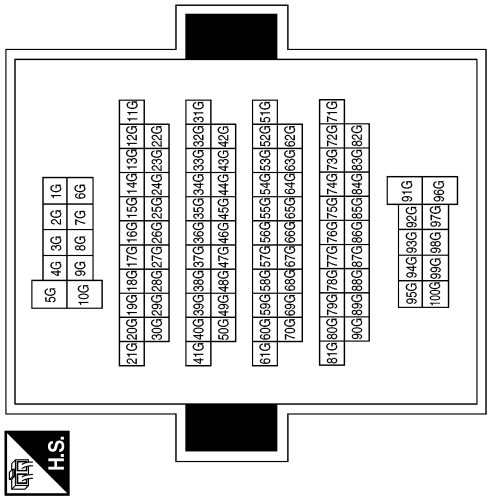
H.S.

59	58	57
62	61	60

Terminal No.	Color of Wire	Signal Name
59	B	GND (POWER)

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
31G	L	–
32G	P	–
47G	R/L	–
96G	W/B	–
99G	L/W	–

Connector No.	R1
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

Terminal No.	Color of Wire	Signal Name
7	R/L	–
9	BR	–
11	R/L	–
16	BR	–

ABLIA6508GB

Connector No.	R6
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	BR	–
13	R/L	–
15	BR	–
16	R/L	–

Connector No.	R101
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

Terminal No.	Color of Wire	Signal Name
11	BR	–
13	R/L	–
15	BR	–
16	R/L	–

Connector No.	R102
Connector Name	FRONT ROOM/MAP LAMP ASSEMBLY
Connector Color	GRAY

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
7	R/L	–
8	BR	–

Connector No.	R103
Connector Name	REAR POWER DROP GLASS SWITCH
Connector Color	WHITE

H.S.

4	5
1	2	3	6

Terminal No.	Color of Wire	Signal Name
2	BR	–
4	R/L	–

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

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

Terminal No.	Color of Wire	Signal Name
22	R/L	–

Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4
5	6	7	8	9	10

Terminal No.	Color of Wire	Signal Name
4	BR	–

ABLIA6509GB

Connector No.	D10
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	BR	–
9	R/L	–

Connector No.	D13
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH (WITHOUT AUTOMATIC DRIVE POSITIONER)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	BR	–
9	R/L	–

ABLIA6510GB

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000009878618

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 of the following lamps do not turn ON • Room lamp (if equipped) • Front room/map lamp assembly (if equipped) • Personal lamp 2nd row (if equipped) • Vanity lamps (if equipped) • Front step lamps (if equipped) • Puddle lamps (if equipped)	• Harness between BCM and each interior room lamp • BCM	Battery saver output/power supply circuit. Refer toINL-17.
Some or all of the following interior room lamps do not turn ON/OFF • Room lamp (if equipped) • Puddle lamps (if equipped) • Front room/map lamp assembly (if equipped) • Personal lamp 2nd row (if equipped)	• Harness between BCM and each door switch • Harness between BCM and each interior room lamp • BCM	Door switch circuit Refer to DLK-26 (king cab) or DLK-28 (crew cab). Interior room lamp control circuit. Refer to INL-19.
Some or all of the following lamps do not turn ON/OFF • Front step lamps	• Harness between BCM and step lamps • BCM	Step lamp circuit. Refer to INL-22.
Cargo lamp and tailgate cargo lamps (if equipped) do not turn ON/OFF	• Harness between BCM and cargo lamp relay • Harness between cargo lamp relay and cargo lamps • BCM • Cargo lamp relay	Cargo lamp control circuit. Refer to INL-24.
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-17.
Interior room lamp battery saver does not activate.	—	Check the interior room lamp battery saver setting. Refer to BCS-23.

PRECAUTION

PRECAUTIONS

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

INFOID:0000000010588295

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 three minutes before performing any service.**

Precaution for Work

INFOID:0000000009878620

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:

- Water soluble dirt:

- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.

- Oily dirt:

- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.

- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

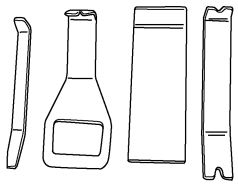
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000009878621

The actual shape of the tools may differ from those illustrated here.

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

REMOVAL AND INSTALLATION

INTERIOR ROOM LAMP

Removal and Installation

INFOID:0000000009878622

FRONT ROOM/MAP LAMP (IF EQUIPPED)

Removal

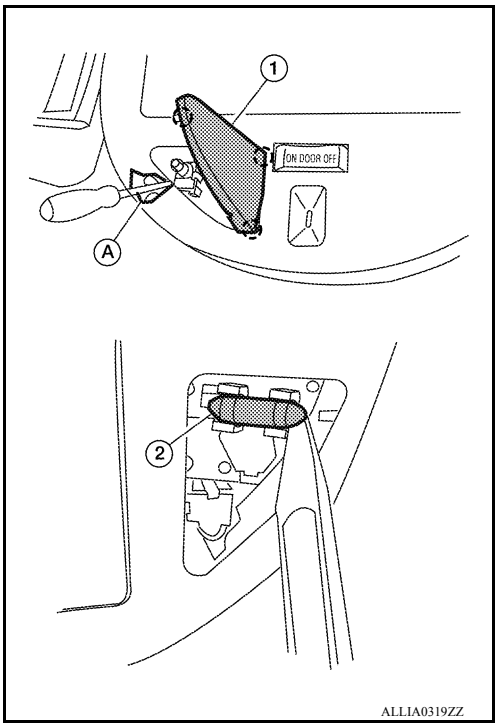
The front room/map lamp is replaced as part of the front roof console. Refer to INT-21, "Removal and Installation".

Installation

Installation is in the reverse order of removal.

Bulb or Lens Replacement

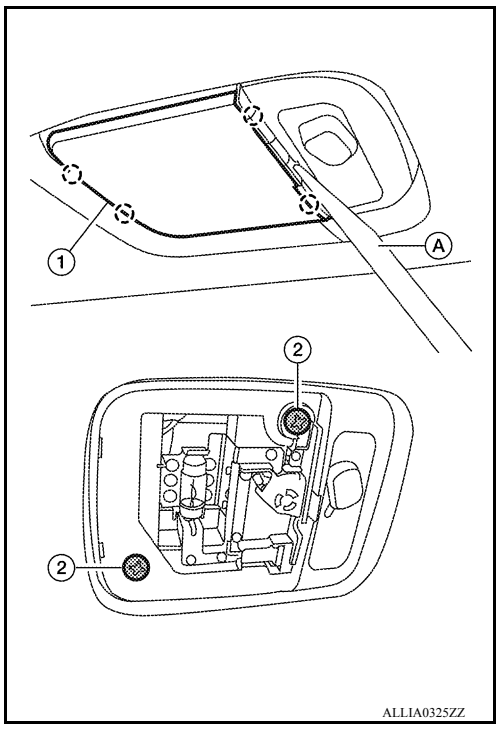
1. Using a suitable tool (A), remove front room/map lamp lens (1).
   ( ): Pawl
2. Release one side of the bulb (2) from the tab, then pull straight downward to remove.



ROOM LAMP (IF EQUIPPED)

Removal

1. Using a suitable tool (A), release the pawls and remove the room lamp lens (1).
   ◌: Pawl
2. Remove room lamp screws (2).
3. Disconnect the connector, then remove the room lamp.

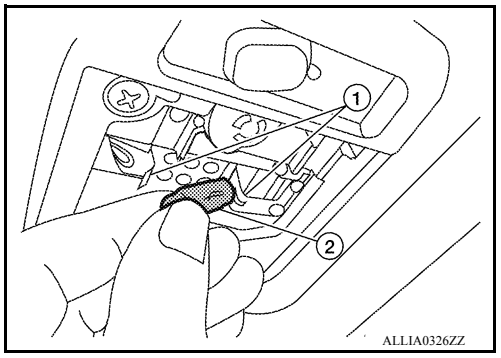


Installation

Installation is in the reverse order of removal.

Bulb or Lens Replacement

1. Using a suitable tool, release the pawls and remove the room lamp lens.
2. Release the room lamp bulb retainers (1), then pull bulb (2) straight out to remove.



VANITY LAMP (IF EQUIPPED)

Removal

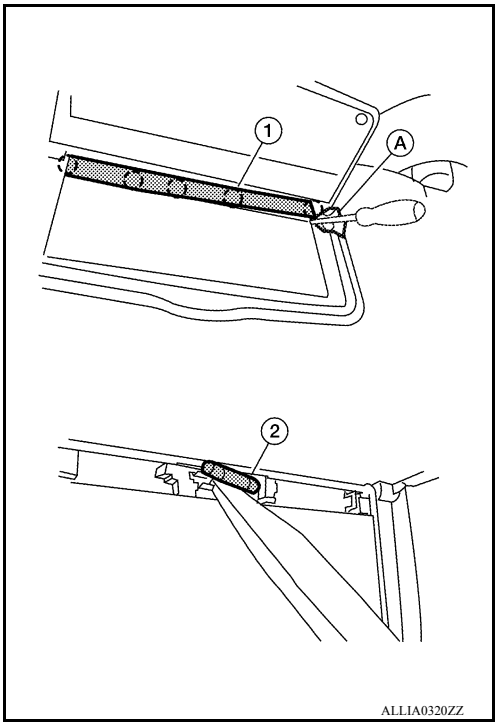
The vanity lamp is replaced as part of the sun visor assembly. Refer to INT-21, "Removal and Installation".

Installation

Installation is in the reverse order of removal.

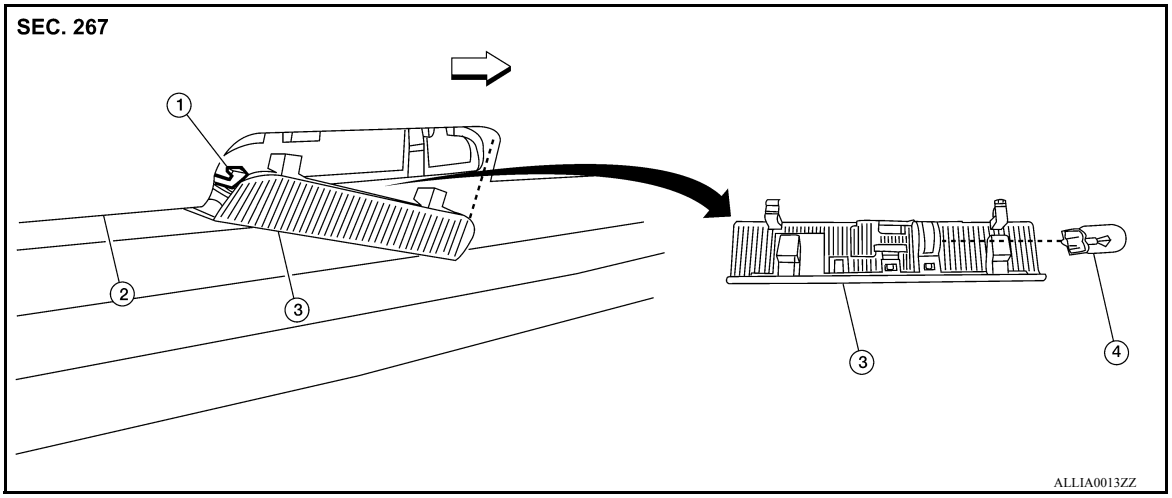
Bulb or Lens Replacement

1. Using a suitable tool (A), release the tabs and remove the vanity lamp lens (1).
   ◌: Pawl
2. Release one side of the bulb (2) from the tab, then pull straight out to remove.



STEP LAMP (IF EQUIPPED)

Removal



1. Step lamp connector
2. Door finisher
3. Step lamp lens/socket
4. Step lamp bulb
⇦ Front

1. Insert a suitable tool between door finisher and step lamp lens/socket to release the pawls.
2. Disconnect the step lamp connector, then remove step lamp.

Installation
Installation is in the reverse order of removal.

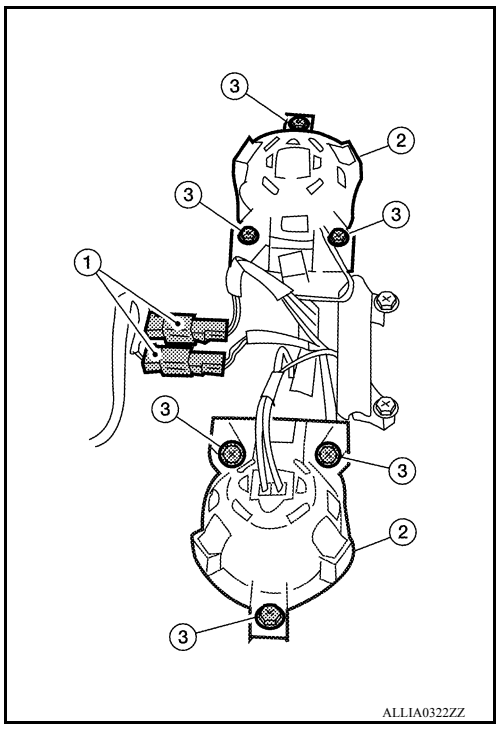
Bulb Replacement

1. Remove the step lamp lens/socket.
2. Pull the bulb straight out to remove.

PERSONAL LAMP (IF EQUIPPED)

Removal

1. Remove the rear roof console. Refer to INT-21, "Removal and Installation".
2. Remove personal lamp screws (3).
3. Disconnect personal lamp harness connectors (1), then remove personal lamp (2) from the rear roof console.

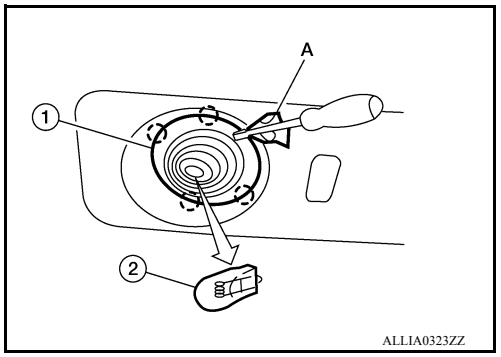


Installation

Installation is in the reverse order of removal.

Bulb Replacement

1. Using a suitable tool (A), release the pawls and remove personal lamp lens (1).
   ( ): Pawl
2. Pull bulb (2) straight out to remove.



ILLUMINATION

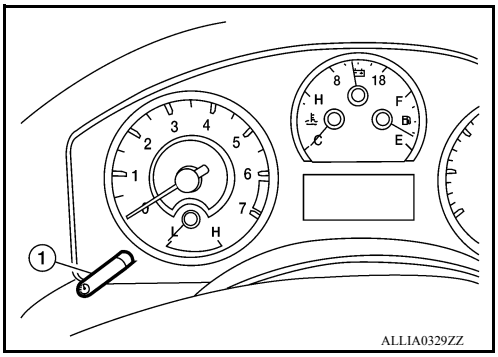
Removal and Installation

INFOID:0000000009878623

ILLUMINATION CONTROL SWITCH

Removal

The illumination control switch (1) is replaced as a part of the combination meter assembly. Refer to MWI-95, "Removal and Installation".



Installation

Installation is in the reverse order of removal.

CONSOLE ILLUMINATION LAMP (IF EQUIPPED)

Removal

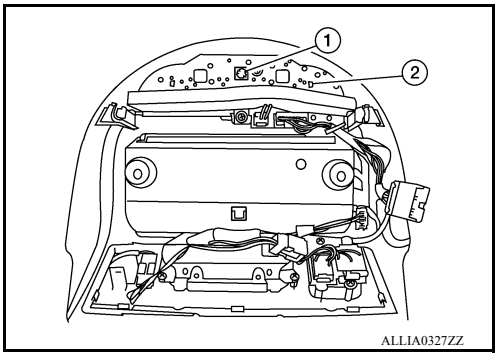
The console illumination lamp is replaced as part of the front roof console assembly. Refer to INT-21, "Removal and Installation".

Installation

Installation is in the reverse order of removal.

Bulb Replacement

1. Remove front roof console. Refer to INT-21, "Removal and Installation".
2. Rotate console illumination lamp bulb (1) counterclockwise, then pull straight out away from room/map lamp assembly (2) to remove.



SERVICE DATA AND SPECIFICATIONS (SDS)

BULB SPECIFICATIONS

Bulb Specifications

INFOID:0000000009878624

Item	Wattage (W)*
Front room/map lamp (if equipped)	6
Room lamp (if equipped)	-
Vanity lamp (if equipped)	1.8
Step lamp (if equipped)	3.8
Personal lamp (if equipped)	8
Console illumination lamp (if equipped)	-

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