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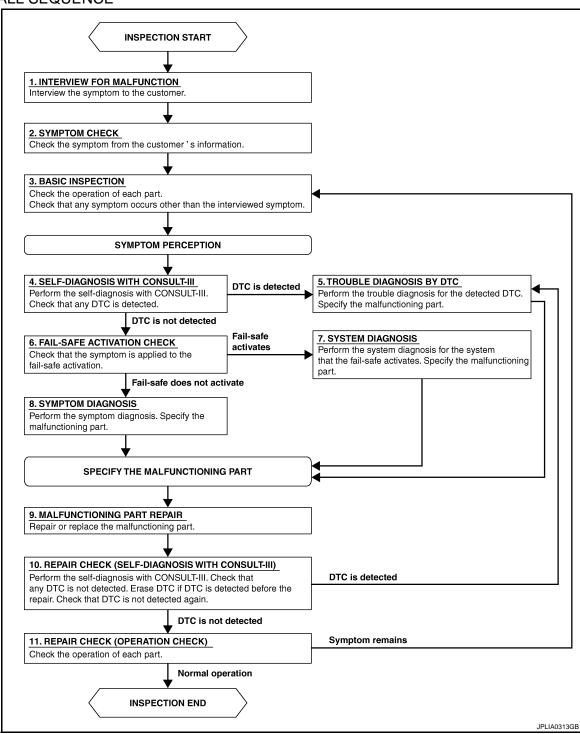
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

OVERALL SEQUENCE



DETAILED FLOW

1.INTERVIEW FOR MALFUNCTION

Interview the symptom to the customer.

DIAGNOSIS AND REPAIR WORKFLOW

DIAGNOSIS AND REPAIR WORKFLOW
< BASIC INSPECTION > [XENON TYPE]
>> GO TO 2.
2.symptom check
Check the symptom from the customer's information.
00.70.0
>> GO TO 3.
3.BASIC INSPECTION
Check the operation of each part. Check that any symptom occurs other than the interviewed symptom.
>> GO TO 4.
4.self-diagnosis with consult-iii
Perform the self-diagnosis with CONSULT-III. Check that any DTC is detected.
Is any DTC detected?
YES >> GO TO 5.
NO >> GO TO 6.
5.TROUBLE DIAGNOSIS BY DTC
Perform the trouble diagnosis for the detected DTC. Specify the malfunctioning part.
>> GO TO 9.
6. FAIL-SAFE ACTIVATION CHECK
Check that the symptom is applied to the 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 that the fail-safe activates. Specify the malfunctioning part.
>> GO TO 9.
8.SYMPTOM DIAGNOSIS
Perform the symptom diagnosis. Specify the malfunctioning part.
>> GO TO 9.
9.MALFUNCTION PART REPAIR
Repair or replace the malfunctioning part.
>> GO TO 10.
10. REPAIR CHECK (SELF-DIAGNOSIS WITH CONSULT-III)
Perform the self-diagnosis with CONSULT-III. Check that any DTC is not detected. Erase DTC if DTC is detected before the repair. Check 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.
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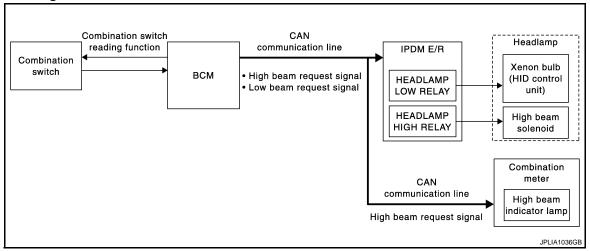
Revision: 2008 October EXL-7 2009 Murano

FUNCTION DIAGNOSIS

HEADLAMP SYSTEM

System Diagram

INFOID:0000000003261555



System Description

INFOID:0000000003261556

OUTLINE

- Mobile valve shade type is adopted. Xenon headlamp switches the high beam and the low beam with one xenon bulb each on right and left.
- Headlamp is controlled by combination switch reading function and headlamp control function of BCM, and relay control function of IPDM E/R.

HEADLAMP BASIC OPERATION

- BCM detects the combination switch condition with the combination switch reading function.
- BCM transmits the low beam request signal to IPDM E/R with CAN communication according to the headlamp ON condition.

Headlamp ON condition

- Lighting switch 2ND
- Lighting switch PASS
- Lighting switch AUTO, and the auto light function ON judgment (With auto light system)
- IPDM E/R turns the integrated headlamp low relay ON, and turns the headlamp ON according to the low beam request signal.

HEADLAMP HI/LO SWITCHING OPERATION

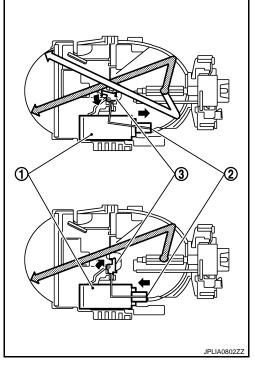
 BCM transmits the high beam request signal to IPDM E/R and the combination meter with CAN communication according to the high beam switching condition.

High beam switching condition

- Lighting switch HI with the lighting switch 2ND or AUTO (auto light function ON judgment)
- Lighting switch PASS
- Combination meter turns the high beam indicator lamp ON according to the high beam request signal.
- IPDM E/R turns the integrated headlamp high relay ON, and turns the headlamp ON according to the high beam request signal.

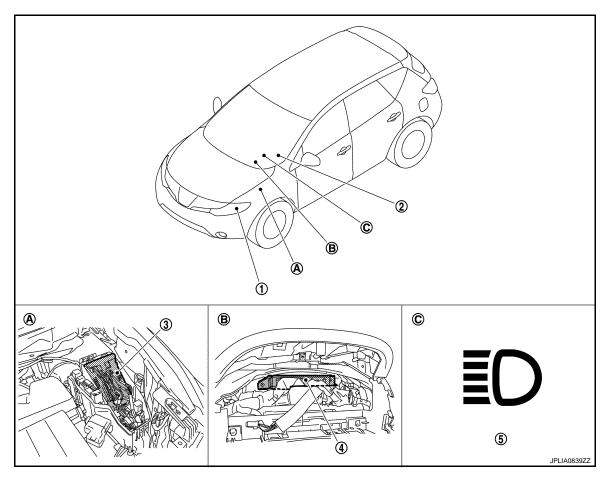
[XENON TYPE]

- When the headlamp high relay is turned ON, magnetic force is applied to the high beam solenoid (1) by a current. The mobile valve shade (3) is switched to the high beam position through the actuator rod (2).
- When the headlamp high relay is turned OFF, the current stops.
 The mobile valve shade returns to the low beam position automatically.



Component Parts Location

INFOID:0000000003261557



- Headlamp
- 4. BCM
- A. Engine room (LH)

- 2. Combination switch
- 5. High beam indicator lamp
- B. Behind the combination meter
- 3. IPDM E/R
- C. On the combination meter

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Revision: 2008 October EXL-9 2009 Murano

HEADLAMP SYSTEM

< FUNCTION DIAGNOSIS >

[XENON TYPE]

Component Description

	Part	Description
BCM		 Detects each switch condition by the combination switch reading function. Judges that the headlamp is turned ON according to the vehicle condition. Requests the headlamp relay (HI/LO) ON to IPDM E/R (with CAN communication). Requests the high beam indicator lamp ON to the combination meter (with CAN communication).
IPDM E/R		Controls the integrated relay, and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn sign	- '	Refer to BCS-9, "System Diagram".
Combination meter (High beam indicate		Turns the high beam indicator lamp ON according to the request from BCM (with CAN communication).
Headlamp assem-	HID control unit Xenon bulb	Refer to EXL-39, "Description".
bly	High beam solenoid	Refer to EXL-36, "Description".

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DAYTIME RUNNING LIGHT SYSTEM

System Diagram

INFOID:0000000003415720 Combination switch reading function IPDM E/R Combination CAN communication line FRONT FOG Front switch Front fog light request signal LAMP RELAY fog lamp CAN communication line **ECM** всм Engine status signal Combination meter Parking brake switch signal JPLIA0803GE

System Description

INFOID:0000000003415721

OUTLINE

- Turns the front fog lamp ON as the daytime running light.
- Daytime running light is controlled by daytime running light control function and combination switch reading function of BCM, and relay control function of IPDM E/R.

DAYTIME RUNNING LIGHT OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM detects the vehicle condition depending on the following signals.
- Engine condition signal (received from ECM with CAN communication)
- Parking brake switch signal (received from combination meter with CAN communication)
- BCM transmits the front fog light request signal to IPDM E/R with CAN communication according to the daytime running light ON condition.

Daytime running light ON condition

While the engine running with the parking brake released

Daytime running light OFF condition

- Engine stopped
- Headlamp ON (Passing included)
- IPDM E/R turns the integrated front fog lamp relay ON and turns the front fog lamp ON according to the front fog light request signal.

EXL

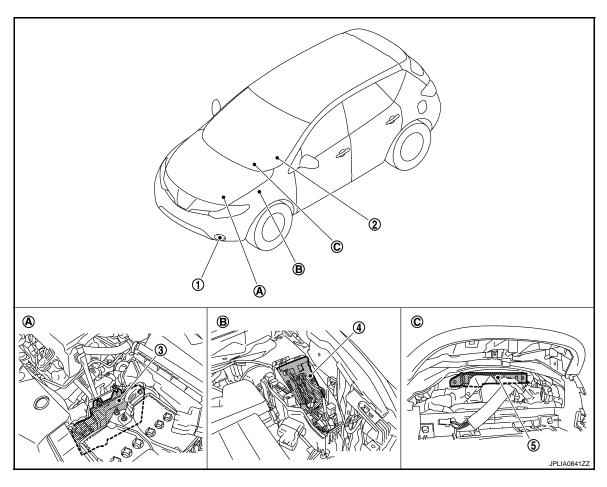
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Component Parts Location

INFOID:0000000003415722



- 1. Daytime running light (Front fog lamp) 2.
- 4. IPDM E/R
- A. Engine room (LH)

- 2. Combination switch
- 5. BCM
- B. Engine room (LH)
- 3. ECM
- C. Behind the combination meter

Component Description

Part	Description
ВСМ	 Detects each switch condition with the combination switch reading function. Judges the headlamp ON/OFF status according to the vehicle condition. Requests the front fog lamp relay ON to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".
ECM	Transmits the engine condition signal to BCM with CAN communication.
Combination meter	Transmits the parking brake switch signal to BCM with CAN communication.

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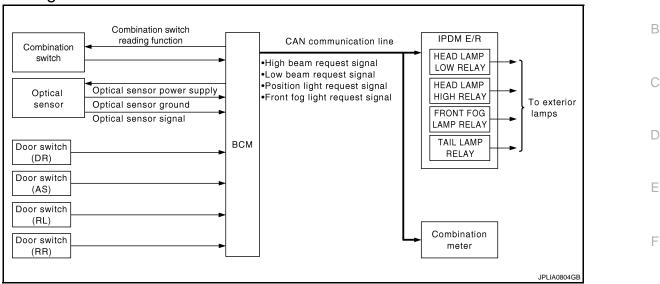
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AUTO LIGHT SYSTEM

System Diagram



System Description

INFOID:0000000003269348

OUTLINE

Auto light system is controlled by each function of BCM and IPDM E/R.

Control by BCM

- Combination switch reading function
- Headlamp control function
- Auto light function
- Delay timer function

Control by IPDM E/R

- Relay control function
- Auto light system has the auto light function and the delay timer function.
- Auto light function turns the exterior lamps* and each illumination ON/OFF automatically according to the outside brightness.
- When auto light system turns the exterior lamps ON with the ignition switch OFF, delay timer function turns the exterior lamps OFF depending on the vehicle condition with the auto light function after a certain period of time.
- *: Headlamp (LO/HI), parking lamp, tail lamp, side marker lamp and front fog lamp (Headlamp HI and front fog lamp depend on the combination switch condition.)

AUTO LIGHT FUNCTION

- BCM detects the combination switch condition with the combination switch reading function.
- BCM supplies voltage to optical sensor when the ignition switch is turned ON or ACC.
- Optical sensor converts outside brightness (lux) to voltage and transmits the optical sensor signal to BCM.
- BCM judges outside brightness from the optical sensor signal and judges ON/OFF condition of the exterior lamp and each illumination according to the outside brightness.
- BCM transmits each request signal to IPDM E/R with CAN communication according to ON/OFF condition by the auto light function.

NOTE:

ON/OFF timing differs based on the sensitivity from the setting. The setting can be set by CONSULT-III. Refer to EXL-24, "HEADLAMP: CONSULT-III Function (BCM - HEAD LAMP)".

DELAY TIMER FUNCTION

BCM turns the exterior lamp OFF depending on the vehicle condition with the auto light function when the ignition switch is turned OFF.

- Turns the exterior lamp OFF 5 minutes after detecting that any door opens (Door switch ON).
- Turns the exterior lamp OFF a certain period of time* after closing all doors (Door switch ON→OFF).

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EXL-13 Revision: 2008 October 2009 Murano

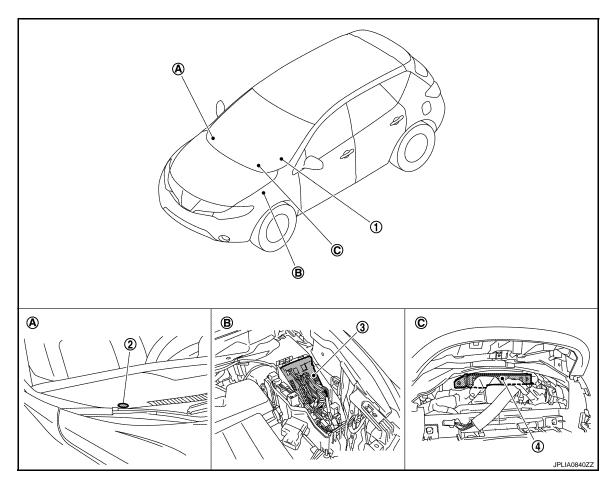
- Turns the exterior lamp OFF with the ignition switch ACC or the light switch OFF.
- *: The preset time is 45 seconds. The timer operating time can be set by CONSULT-III. Refer to <u>EXL-24</u>, <u>"HEADLAMP"</u>: CONSULT-III Function (BCM HEAD LAMP)".

NOTE:

When any position other than the light switch AUTO is set, the auto light system function switches to the exterior lamp battery saver function.

Component Parts Location

INFOID:0000000003269349



- 1. Combination switch
- 4. BCM
- A. Instrument upper panel (RH)
- 2. Optical sensor
- B. Engine room (LH)
- 3. IPDM E/R
- C. Behind the combination meter

Component Description

Part	Description
ВСМ	 Detects each switch condition by the combination switch reading function. Judges the outside brightness from the optical sensor signal. Judges the OFF timing according to the vehicle condition. Judges the ON/OFF status of the exterior lamp and each illumination according to the outside brightness and the vehicle condition. Requests ON/OFF of each relay to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay, and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".
Optical sensor	Refer to EXL-52, "Description".

[XENON TYPE]

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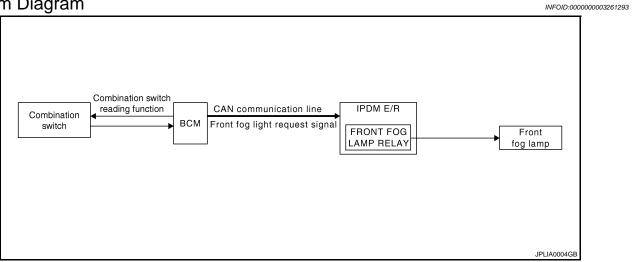
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FRONT FOG LAMP SYSTEM

System Diagram



System Description

INFOID:0000000003261294

OUTLINE

Front fog lamp is controlled by combination switch reading function and front fog lamp control function of BCM, and relay control function of IPDM E/R.

FRONT FOG LAMP OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the front fog light request signal to IPDM E/R with CAN communication according to the front fog lamp ON condition.

Front fog lamp ON condition

- Front fog lamp switch ON with headlamp ON (except for the high beam ON)
- IPDM E/R turns the integrated front fog lamp relay ON, and turns the front fog lamp ON according to the front fog light request signal.

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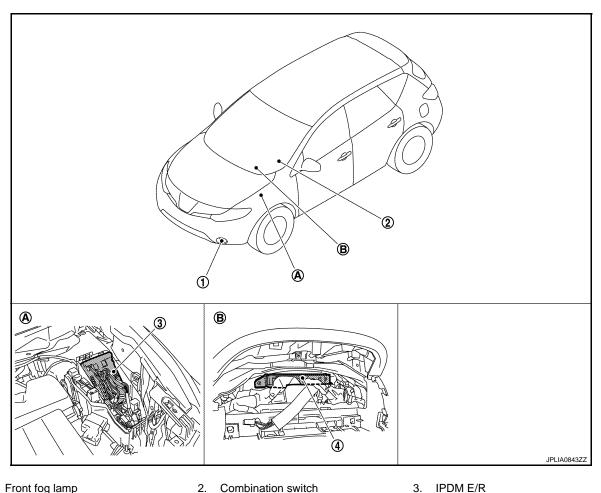
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Component Parts Location

INFOID:0000000003261295



- 1. Front fog lamp
- BCM
- A. Engine room (LH)
- 2. Combination switch
- B. Behind the combination meter

Component Description

Part	Description
BCM	 Detects each switch condition by the combination switch reading function. Judges the front fog lamp ON/OFF status according to the vehicle condition. Requests the front fog lamp relay ON to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".

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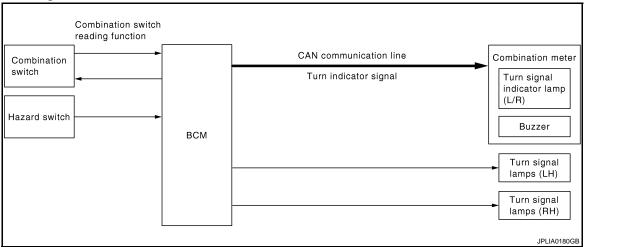
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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

System Diagram



System Description

INFOID:0000000003261298

OUTLINE

Turn signal lamp and the hazard warning lamp is controlled by combination switch reading function and the flasher control function of BCM.

TURN SIGNAL LAMP OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM supplies voltage to the right (left) turn signal lamp circuit when the ignition switch is turned ON and the turn signal switch is in the right (left) position. BCM blinks the turn signal lamp.

HAZARD WARNING LAMP OPERATION

BCM supplies voltage to both turn signal lamp circuit when the hazard switch is turned ON. BCM blinks the hazard warning lamp.

TURN SIGNAL INDICATOR LAMP AND TURN SIGNAL SOUND OPERATION

- BCM transmits the turn indicator signal to the combination meter with CAN communication while the turn signal lamp and the hazard warning lamp are operating.
- Combination meter outputs the turn signal sound with the integrated buzzer while blinking the turn signal indicator lamp according to the turn indicator signal.

HIGH FLASHER OPERATION (FAIL-SAFE)

- BCM detects the turn signal lamp circuit status by the terminal current value.
- · BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

The blinking speed is normal while operating the hazard warning lamp.

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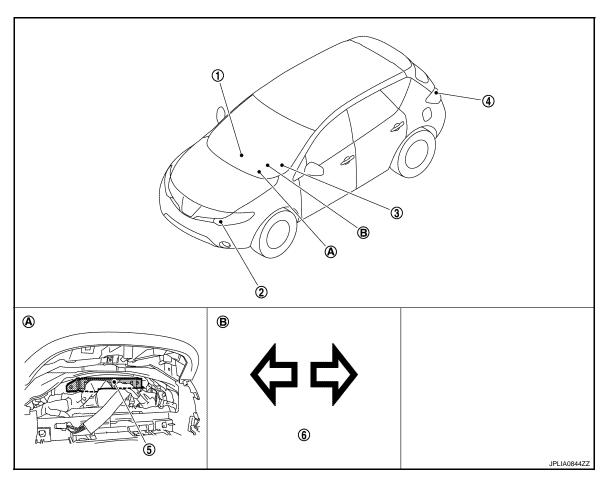
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Component Parts Location

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- 1. Hazard switch
- 4. Rear turn signal lamp
- A. Behind the combination meter
- 2. Front turn signal lamp
- 5. BCM
- B. On the combination meter
- 3. Combination switch
- 6. Turn signal indicator lamp

Component Description

Part	Description
ВСМ	 Detects each switch condition by the combination switch reading function. Judges the blinks of the turn signal lamp and the hazard warning lamp from each switch status. The applicable turn signal lamp blinks. Requests the turn signal indicator lamp blink to the combination meter (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".
Hazard switch	Inputs the hazard switch ON/OFF signal to BCM.
Combination meter (Turn signal indicator lamp & buzzer)	Blinks the turn signal indicator lamp and outputs the turn signal operating sound with integrated buzzer according to the request from BCM (with CAN communication).

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< FUNCTION DIAGNOSIS >

[XENON TYPE]

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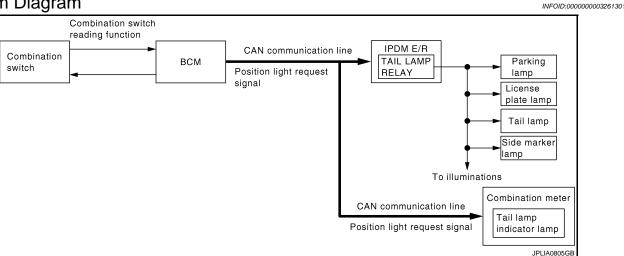
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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

System Diagram



System Description

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OUTLINE

Parking, license plate, side marker and tail lamps are controlled by combination switch reading function and headlamp control function of BCM, and relay control function of IPDM E/R.

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the position light request signal to IPDM E/R and the combination meter with CAN communication according to the ON/OFF condition of the parking, license plate, side marker and tail lamps.

Parking, license plate, side marker and tail lamps ON condition

- Lighting switch 1ST
- Lighting switch 2ND
- IPDM E/R turns the integrated tail lamp relay ON and turns the parking lamp, license plate, side marker and tail lamps ON according to the position light request signal.
- Combination meter turns the tail lamp indicator lamp ON according to the position light request signal.

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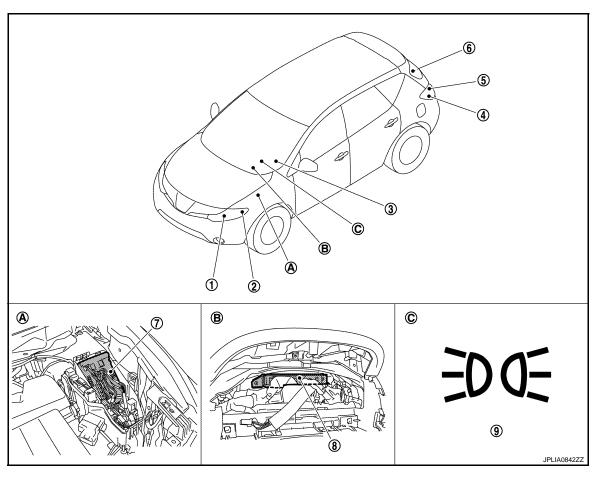
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Component Parts Location

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- 1. Parking lamp
- 4. Rear side marker lamp
- 7. IPDM E/R
- A. Engine room (LH)

- 2. Front side marker lamp
- 5. Tail lamp
- 8. BCM
- B. Behind the combination meter
- 3. Combination switch
- 6. License plate lamp
- 9. Tail lamp indicator lamp
- C. On the combination meter

Component Description

Part	Description
ВСМ	 Detects each switch condition by the combination switch reading function. Judges the ON/OFF status of the parking, license plate and tail lamps according to the vehicle condition. Requests the tail lamp relay ON to IPDM E/R (with CAN communication). Requests the tail lamp indicator lamp ON to the combination meter (with CAN communication).
IPDM E/R	Controls the integrated relay and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".
Combination meter (Tail lamp indicator lamp)	Turns the tail lamp indicator lamp ON according to the request from BCM (with CAN communication).

[XENON TYPE]

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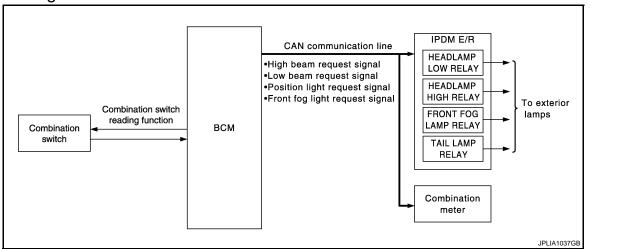
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EXTERIOR LAMP BATTERY SAVER SYSTEM

System Diagram



System Description

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OUTLINE

Exterior lamp battery saver system is controlled by each function of BCM and IPDM E/R.

Control by BCM

- Combination switch reading function
- Headlamp control function
- Exterior lamp battery saver function

Control by IPDM E/R

- Relay control function
- BCM turns the exterior lamp* OFF after a period of time to prevent the battery from over-discharge when the ignition switch is turned OFF with the exterior lamp ON.
- *: Headlamp (LO/HI), parking lamp, side marker lamp, tail lamp, license plate lamp and front fog lamp.

EXTERIOR LAMP BATTERY SAVER ACTIVATION

BCM activates the timer and turns the exterior lamp OFF 5 minutes after the ignition switch is turned from ON → OFF with the exterior lamps ON.

NOTE:

- Headlamp control function turns the exterior lamps ON normally when the ignition switch is turned ACC or the engine started (both before and after the exterior lamp battery saver is turned OFF).
- The timer starts at the time that the lighting switch is turned from OFF → 1ST or 2ND with the exterior lamp OFF.

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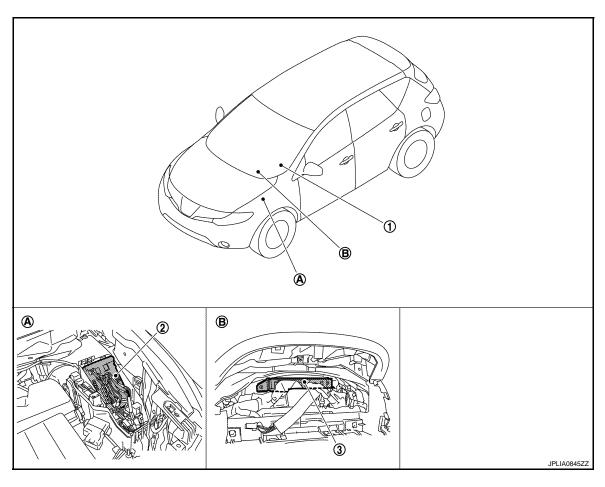
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Component Parts Location

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- 1. Combination switch
- A. Engine room (LH)
- 2. IPDM E/R
- B. Behind the combination meter

3. BCM

Component Description

Part	Description		
BCM	 Detects each switch condition by the combination switch reading function. Activates the battery saver to turn the exterior lamps OFF according to the vehicle condition. Requests each relay OFF to IPDM E/R (with CAN communication). 		
IPDM E/R	Controls the integrated relay according to the request from BCM (with CAN commun cation).		
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".		

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS > [XENON TYPE]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

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APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description	
Work Support	Changes the setting for each system function.	
Self Diagnostic Result	Displays the diagnosis results judged by BCM.	
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual.	
Data Monitor	The BCM input/output signals are displayed.	
Active Test	The signals used to activate each device are forcibly supplied from BCM.	
Ecu Identification	The BCM part number is displayed.	
Configuration	 Read and save the vehicle specification. Write the vehicle specification when replacing BCM. 	

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT*1	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×* ²	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
_	AIR CONDITONER*3			
Intelligent Key system Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door opener system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

NOTE:

- *1: At models with Intelligent Key system this item is displayed, but is not used.
- *2: At models with rain sensor this mode is displayed, but is not used.

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• *3: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

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

CONSULT screen item	Indication/Unit	Description			
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected			
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected			
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")		
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)		
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"		
	ACC>ON		While turning power supply position from "ACC" to "IGN"		
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)		
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)		
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)		
	ACC>OFF		While turning power supply position from "ACC" to "OFF"		
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"		
Vehicle Condition	OFF>ACC	Power position status of the moment a particular	While turning power supply position from "OFF" to "ACC"		
	ON>CRANK	DTC is detected	While turning power supply position from "IGN" to "CRANKING"		
_	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode		
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode		
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)		
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)		
	ACC		Power supply position is "ACC" (Ignition switch ACC)		
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)		
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)		
	CRANKING		Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	 The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 			

HEADLAMP

HEADLAMP: CONSULT-III Function (BCM - HEAD LAMP)

INFOID:0000000003420470

WORK SUPPORT

Service item	Setting item	Setting
BATTERY SAVER SET	On*	With the exterior lamp battery saver function
DATTERT GAVER SET	Off	Without the exterior lamp battery saver function

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[XENON TYPE]

Service item	Setting item	Setting		
	MODE 1*	45 sec.		
	MODE 2	Without the function		
	MODE 3	30 sec.		
ILL DELAY SET	MODE 4	60 sec.	Sets delay timer function timer operation time. (All doors closed)	
	MODE 5	90 sec.	(All doors closed)	
	MODE 6	120 sec.		
	MODE 7	150 sec.		
	MODE 8	180 sec.		
MODE 1* Normal				
CUSTOM A/LIGHT SET-	MODE 2	More sensitive setting than normal setting (Turns ON earlier than normal operation.)		
TING	MODE 3	More sensitive setting than MODE 2 (Turns ON earlier than MODE 2.)		
	MODE 4	Less sensitive setting than normal setting (Turns ON later than normal operation.)		

^{*:} Factory setting

DATA MONITOR

Monitor item [Unit]	Description		
PUSH SW [On/Off]	The switch status input from push-button ignition switch		
ENGINE STATE [Stop/Stall/Crank/Run]	The engine status received from ECM with CAN communication		
VEH SPEED 1 [km/h]	The value of the vehicle speed received from combination meter with CAN communication		
KEY SW-SLOT [On/Off]	Key switch status input from key slot		
TURN SIGNAL R [On/Off]			
TURN SIGNAL L [On/Off]			
TAIL LAMP SW [On/Off]			
HI BEAM SW [On/Off]			
HEAD LAMP SW1 [On/Off]	Each switch status that BCM detects from the combination switch reading function		
HEAD LAMP SW2 [On/Off]			
PASSING SW [On/Off]			
AUTO LIGHT SW [On/Off]			
FR FOG SW [On/Off]			
RR FOG SW [On/Off]	NOTE: The item is indicated, but not monitored.		
DOOR SW-DR [On/Off]	The switch status input from front door switch (driver side)		
DOOR SW-AS [On/Off]	The switch status input from front door switch (passenger side)		

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Monitor item [Unit]	Description
DOOR SW-RR [On/Off]	The switch status input from rear door switch RH
DOOR SW-RL [On/Off]	The switch status input from rear door switch LH
DOOR SW-BK [On/Off]	NOTE: The item is indicated, but not monitored.
OPTICAL SENSOR [V]	The value of exterior brightness voltage input from the optical sensor

ACTIVE TEST

Test item	Operation	Description	
TAIL LAMP	On	Transmits the position light request signal to IPDM E/R with CAN communication to turn the tail lamp ON.	
	Off	Stops the position light request signal transmission.	
	Hi	Transmits the high beam request signal with CAN communication to turn the headlamp (HI).	
HEAD LAMP	Low	Transmits the low beam request signal with CAN communication to turn the headlamp (LO).	
	Off	Stops the high & low beam request signal transmission.	
FR FOG LAMP	On	Transmits the front fog light request signal to IPDM E/R with CAN communication to turn the front fog lamp ON.	
	Off	Stops the front fog light request signal transmission.	
RR FOG LAMP	On	NOTE:	
	Off	The item is indicated, but cannot be tested.	
DAYTIME RUNNING LIGHT	On	NOTE:	
DAT TIME ROMNING LIGHT	Off	The item is indicated, but cannot be tested.	
	RH		
CORNERING LAMP	LH	NOTE: The item is indicated, but cannot be tested.	
	Off		
ILL DIM SIGNAL	On	NOTE:	
ILL DIIVI SIGNAL	Off	The item is indicated, but cannot be tested.	

FLASHER

FLASHER: CONSULT-III Function (BCM - FLASHER)

INFOID:0000000003420471

WORK SUPPORT

Service item	Setting item	Setting		
	Lock Only*	With locking only		
HAZARD ANSWER BACK	Unlk Only	With unlocking only	Sets the hazard warning lamp answer back function when the door is lock/unlock with the request switch or	
	Lock/Unlk	With locking/unlocking	the key fob.	
	Off	Without the function		

^{*:} Factory setting

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[XENON TYPE]

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Monitor item [Unit]	Description	
REQ SW-DR [On/Off]	The switch status input from the request switch (driver side)	
REQ SW-AS [On/Off]	The switch status input from the request switch (passenger side)	
PUSH SW [On/Off]	The switch status input from the push-button ignition switch	
TURN SIGNAL R [On/Off]	Each switch status that BCM detects from the combination switch reading function	
TURN SIGNAL L [On/Off]	Each switch status that bow detects from the combination switch reading function	
HAZARD SW [On/Off]	The switch status input from the hazard switch	
RKE-LOCK [On/Off]	Lock signal status received from the remote keyless entry receiver	
RKE-UNLOCK [On/Off]	Unlock signal status received from the remote keyless entry receiver	
RKE-PANIC [On/Off]	Panic alarm signal status received from the remote keyless entry receiver	

ACTIVE TEST

Test item	Operation	Description
	RH	Outputs the voltage to blink the right side turn signal lamps.
FLASHER	LH	Outputs the voltage to blink the left side turn signal lamps.
	Off	Stops the voltage to turn the turn signal lamps OFF.

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[XENON TYPE]

DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

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AUTO ACTIVE TEST

Description

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

- Oil pressure warning lamp
- Front wiper (LO, HI)
- Parking lamps
- License plate lamps
- Side maker lamps
- Tail lamps
- Front fog lamps
- Headlamps (LO, HI)
- A/C compressor (magnet clutch)
- Cooling fan

Operation Procedure

1. Close the hood and lift the wiper arms from the windshield. (Prevent windshield damage due to wiper operation)

NOTE:

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

- 2. Turn the ignition switch OFF.
- 3. Turn the ignition switch ON, and within 20 seconds, press the front door switch (driver side) 10 times. Then turn the ignition switch OFF.

CAUTION:

Close passenger door.

- 4. Turn the ignition switch ON within 10 seconds. After that the horn sounds once and the auto active test starts.
- 5. The oil pressure warning lamp starts blinking when the auto active test starts.
- 6. After a series of the following operations is repeated 3 times, auto active test is completed.

NOTE:

When auto active test mode has to be cancelled halfway through test, turn the ignition switch OFF. CAUTION:

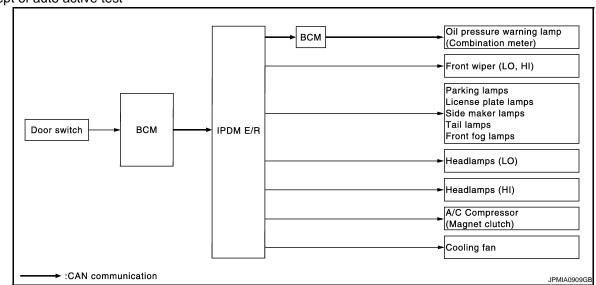
- If auto active test mode cannot be actuated, check door switch system. Refer to <u>DLK-411</u>.
 "Component Function Check".
- Do not start the engine.

Inspection in Auto Active Test Mode

When auto active test mode is actuated, the following 6 steps are repeated 3 times.

Operation sequence	Inspection location	Operation
1	Oil pressure warning lamp	Blinks continuously during operation of auto active test
2	Front wiper	LO for 5 seconds → HI for 5 seconds
3	 Parking lamps License plate lamps Side maker lamps Tail lamps Front fog lamps 	10 seconds
4	Headlamps	LO ⇔ HI 5 times
5	A/C compressor (magnet clutch)	ON ⇔ OFF 5 times
6	Cooling fan	LO for 5 seconds \rightarrow MID for 3 seconds \rightarrow HI for 2 seconds

Concept of auto active test



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

Diagnosis chart in auto active test mode

Symptom	Inspection contents		Possible cause
Any of the following components do not operate		YES	BCM signal input circuit
 Parking lamps License plate lamps Side maker lamps Tail lamps Front fog lamps Headlamp (HI, LO) Front wiper (HI, LO) 	Perform auto active test. Does the applicable system operate?	NO	Lamp or motor Lamp or motor ground circuit Harness or connector between IPDM E/R and applicable system IPDM E/R
A/C compressor does not operate	Perform auto active test. Does the magnet clutch oper-	YES	A/C amp. signal input circuit CAN communication signal between A/C amp. and ECM CAN communication signal between ECM and IPDM E/R
	ate?	NO	Magnet clutch Harness or connector between IPDM E/R and magnet clutch IPDM E/R
	Perform auto active test.	YES	Harness or connector between IPDM E/R and oil pressure switch Oil pressure switch IPDM E/R
Oil pressure warning lamp does not operate	Does the oil pressure warning lamp blink?	NO	 CAN communication signal between IPDM E/R and BCM CAN communication signal between BCM and combi- nation meter Combination meter

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DIAGNOSIS SYSTEM (IPDM E/R)

< FUNCTION DIAGNOSIS >

[XENON TYPE]

Symptom	Inspection contents		Possible cause
		YES	ECM signal input circuit CAN communication signal between ECM and IPDM E/R
Cooling fan does not operate	Perform auto active test. Does the cooling fan operate?	NO	Harness or connector between IPDM E/R and cooling fan motor Harness or connector between IPDM E/R and cooling fan relay Cooling fan motor Cooling fan relay IPDM E/R

CONSULT-III Function (IPDM E/R)

INFOID:0000000003729395

APPLICATION ITEM

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

Diagnosis mode	Description
Ecu Identification	Allows confirmation of IPDM E/R part number.
Self Diagnostic Result	Displays the diagnosis results judged by IPDM E/R.
Data Monitor	Displays the real-time input/output data from IPDM E/R input/output data.
Active Test	IPDM E/R can provide a drive signal to electronic components to check their operations.
CAN Diag Support Monitor	The results of transmit/receive diagnosis of CAN communication can be read.

SELF DIAGNOSTIC RESULT

Refer to EXL-157, "DTC Index".

DATA MONITOR

Monitor item

Monitor Item [Unit]	MAIN SIG- NALS	Description
MOTOR FAN REQ [1/2/3/4]	×	Displays the value of the cooling fan speed request signal received from ECM via CAN communication.
AC COMP REQ [Off/On]	×	Displays the status of the A/C compressor request signal received from ECM via CAN communication.
TAIL&CLR REQ [Off/On]	×	Displays the status of the position light request signal received from BCM via CAN communication.
HL LO REQ [Off/On]	×	Displays the status of the low beam request signal received from BCM via CAN communication.
HL HI REQ [Off/On]	×	Displays the status of the high beam request signal received from BCM via CAN communication.
FR FOG REQ [Off/On]	×	Displays the status of the front fog light request signal received from BCM via CAN communication.
FR WIP REQ [Stop/1LOW/Low/Hi]	×	Displays the status of the front wiper request signal received from BCM via CAN communication.
WIP AUTO STOP [STOP P/ACT P]	×	Displays the status of the front wiper auto stop signal judged by IPDM E/R.
WIP PROT [Off/BLOCK]	×	Displays the status of the front wiper fail-safe operation judged by IPDM E/R.
IGN RLY1 -REQ [Off/On]		Displays the status of the ignition switch ON signal received from BCM via CAN communication.

DIAGNOSIS SYSTEM (IPDM E/R)

< FUNCTION DIAGNOSIS >

[XENON TYPE]

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Monitor Item [Unit]	MAIN SIG- NALS	Description
IGN RLY [Off/On]	×	Displays the status of the ignition relay judged by IPDM E/R.
PUSH SW [Off/On]		Displays the status of the push-button ignition switch judged by IPDM E/R.
INTER/NP SW [Off/On]		Displays the status of the shift position judged by IPDM E/R.
ST RLY CONT [Off/On]		Displays the status of the starter relay status signal received from BCM via CAN communication.
IHBT RLY -REQ [Off/On]		Displays the status of the starter control relay signal received from BCM via CAN communication.
ST/INHI RLY [Off/ ST ON/INHI ON/UNKWN]		Displays the status of the starter relay and starter control relay judged by IPDM E/R.
DETENT SW [Off/On]		Displays the status of the control device (detention switch) judged by IPDM E/R.
S/L RLY -REQ [Off/On]		Displays the status of the steering lock relay signal received from BCM via CAN communication.
S/L STATE [LOCK/UNLOCK/UNKWN]		Displays the status of the steering lock judged by IPDM E/R.
DTRL REQ [Off/On]		NOTE: The item is indicated, but not monitored.
OIL P SW [Open/Close]		Displays the status of the oil pressure switch judged by IPDM E/R.
HOOD SW [Off/On]		NOTE: The item is indicated, but not monitored.
HL WASHER REQ [Off/On]		NOTE: The item is indicated, but not monitored.
THFT HRN REQ [Off/On]		Displays the status of the theft warning horn request signal received from BCM via CAN communication.
HORN CHIRP [Off/On]		Displays the status of the horn reminder signal received from BCM via CAN communication.
CRNRNG LMP REQ [Off/On]		NOTE: The item is indicated, but not monitored.

ACTIVE TEST

Test item

Test item	Operation	Description
	Off	
CORNERING LAMP	LH	NOTE: The item is indicated, but cannot be tested.
	RH	
HORN	On	Operates horn relay for 20 ms.
	Off	OFF
FRONT WIPER	Lo	Operates the front wiper relay.
	Hi	Operates the front wiper relay and front wiper high relay.
	1	OFF
MOTOR FAN	2	Operates the cooling fan relay-1.
MOTOR FAIN	3	Operates the cooling fan relay-2.
	4	Operates the cooling fan relay-2 and cooling fan relay-3.
HEAD LAMP WASHER	On	NOTE: The item is indicated, but cannot be tested.

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DIAGNOSIS SYSTEM (IPDM E/R)

< FUNCTION DIAGNOSIS >

[XENON TYPE]

Test item	Operation	Description
	Off	OFF
	TAIL	Operates the tail lamp relay.
EXTERNAL LAMPS	Lo	Operates the headlamp low relay.
	Hi	Operates the headlamp low relay and ON/OFF the headlamp high relay at 1 second intervals.
	Fog	Operates the front fog lamp relay.

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE): Diagnosis Procedure

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1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.	
Battery power supply	L	
Battery power suppry	10	

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

(+)	(-)	Voltage (Approx.)
В	СМ		
Connector	Connector Terminal		
M118 1		Ground	Battery voltage
M119	11		Dattery Voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Connector Terminal		Continuity	
M119	13		Existed	

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

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

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

1. CHECK FUSES AND FUSIBLE LINK

Check that the following IPDM E/R fuses or fusible links are not blown.

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POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

2009 Murano

Signal name	Fuses and fusible link No.
	E
Battery power supply	50
	51

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check voltage between IPDM E/R harness connector and the ground.

Terminals			
(+)		(-)	Voltage (Approx.)
IPDM E/R			
Connector	Terminal	Ground	
E9	1	Giodila	Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair the harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between IPDM E/R harness connectors and the ground.

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
E10	12		Existed
E11	41		

Does continuity exist?

YES >> INSPECTION END

NO >> Repair the harness or connector.

EXTERIOR LAMP FUSE

< COMPONENT DIAGNOSIS >

[XENON TYPE]

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EXTERIOR LAMP FUSE

Description INFOID:000000003261316

Fuse list

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	#54	10 A
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp LO (LH)	IPDM E/R	#56	15 A
Headlamp LO (RH)	IPDM E/R	#57	15 A
Front fog lamp	IPDM E/R	#58	15 A
Parking lamp Front side marker lamp	IPDM E/R	#52	10 A
Tail lampRear side marker lampLicense plate lampEach illumination	IPDM E/R	#53	10 A
Stop lamp	FUSE BLOCK (J/B)	#7	10 A
Back-up lamp	FUSE BLOCK (J/B)	#4	10 A

Diagnosis Procedure

1.CHECK FUSE

Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	#54	10 A
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp LO (LH)	IPDM E/R	#56	15 A
Headlamp LO (RH)	IPDM E/R	#57	15 A
Front fog lamp	IPDM E/R	#58	15 A
Parking lamp Front side marker lamp	IPDM E/R	#52	10 A
Tail lamp Rear side marker lamp License plate lamp Each illumination	IPDM E/R	#53	10 A
Stop lamp	FUSE BLOCK (J/B)	#7	10 A
Back-up lamp	FUSE BLOCK (J/B)	#4	10 A

Is the fuse fusing?

YES >> Repair the applicable circuit. And then replace the fuse.

NO >> The fuse is normal.

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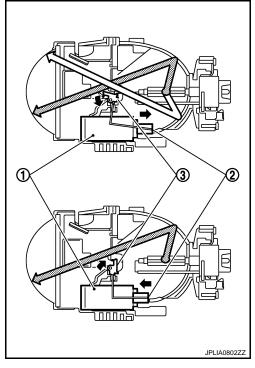
Revision: 2008 October EXL-35 2009 Murano

HEADLAMP (HI) CIRCUIT

Description INFOID:000000003261559

The high beam solenoid drives the mobile valve shade. And the mobile valve shade switches the high beam and low beam of headlamp.

- When the headlamp high relay is turned ON, magnetic force is applied to the high beam solenoid (1) by a current. The mobile valve shade (3) is switched to the high beam position through the actuator rod (2).
- When the headlamp high relay is turned OFF, the current stops.
 The mobile valve shade returns to the low beam position automatically.



Component Function Check

INFOID:0000000003261560

INFOID:0000000003261561

1. CHECK HEADLAMP (HI) OPERATION

RIPDM E/R AUTO ACTIVE TEST

- 1. Start IPDM E/R auto active test. Refer to PCS-10. "Diagnosis Description".
- Check that the headlamp switches to the high beam.

(P)CONSULT-III ACTIVE TEST

- 1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 2. With operating the test items, check that the headlamp switches to the high beam.

Hi : Headlamp switches to the high beam.

Off : Headlamp OFF

NOTE:

HI/LO is repeated 1 second each.

Does the headlamp switch to the high beam?

YES >> Headlamp (HI) circuit is normal.

NO >> Refer to EXL-36, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK HEADLAMP (HI) OUTPUT VOLTAGE

(P)CONSULT-III ACTIVE TEST

- 1. Turn the ignition switch OFF.
- 2. Disconnect the high beam solenoid connector.
- Turn the ignition switch ON.
- 4. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 5. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

Revision: 2008 October EXL-36 2009 Murano

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	Т	erminals		Test item	
(+)			(-)	rest item	Voltage
IPDM E/R				EXTERNAL	(Approx.)
Cor	nnector	Terminal		LAMPS	
RH		89	Ground	Hi	Battery voltage
	E345			Off	0 V
	L343	90		Hi	Battery voltage
				Off	0 V

Is the measurement value normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK HEADLAMP (HI) OPEN CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- Check continuity between the IPDM E/R harness connector and the high beam solenoid harness connector.

IPDM E/R		High beam	Continuity		
Conr	nector	Terminal	Connector Terminal		Continuity
RH	E345	89	E326	1	Existed
LH	L343	90	E325	1	LAISIEU

Does continuity exist?

YES >> GO TO 5.

NO >> Repair the harnesses or connectors.

3.CHECK HEADLAMP (HI) FUSE

- 1. Turn the ignition switch OFF.
- Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp HI (LH)	IPDM E/R	#54	10 A

Is the fuse fusing?

YES >> GO TO 4.

NO >> Replace IPDM E/R.

4.CHECK HEADLAMP (HI) SHORT CIRCUIT

- Disconnect IPDM E/R connector.
- 2. Check continuity between the IPDM E/R harness connector terminal and the ground.

IPDM E/R				Continuity
Connector Terminal			Ground	Continuity
RH	E345	89	Giodila	Not existed
LH	L343	90		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if the fuse is fusing again.)

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HEADLAMP (HI) CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

$5.\mathsf{CHECK}$ HEADLAMP (HI) GROUND OPEN CIRCUIT

Check continuity between the high beam solenoid harness connector and the ground.

High beam solenoid				Continuity
Connector Terminal		Ground	Continuity	
RH	E326	2	Giodila	Existed
LH	E325	2		LAISIEU

Does continuity exist?

YES >> Replace the front combination lamp.

NO >> Repair the harnesses or connectors.

HEADLAMP (LO) CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

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INFOID:0000000003261564

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HEADLAMP (LO) CIRCUIT

Description

Headlamp (LO) circuit is connected to HID control unit integrated in the headlamp. Headlamp (LO) circuit turns xenon headlamp ON.

For the details of HID control unit and the xenon headlamp, refer to EXL-41, "Description".

Component Function Check

1. CHECK HEADLAMP (LO) OPERATION

PIPDM E/R AUTO ACTIVE TEST

- 1. Start IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- 2. Check that the headlamp is turned ON.
- (P)CONSULT-III ACTIVE TEST
- 1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 2. With operating the test items, check that the headlamp (LO) is turned ON.

Lo : Headlamp (LO) ON
Off : Headlamp (LO) OFF

Is the headlamp (LO) turned ON?

YES >> Headlamp (LO) is normal.

NO >> Refer to EXL-39, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK HEADLAMP (LO) OUTPUT VOLTAGE

(P)CONSULT-III ACTIVE TEST

- 1. Turn the ignition switch OFF.
- Disconnect the headlamp connector.
- Turn the ignition switch ON.
- 4. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 5. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

	Terminals					
(+)			(-)	Test item	Voltage	
	IPDM	1 E/R		EXTERNAL	(Approx.)	
Con	nector	or Terminal		LAMPS		
RH E345		83 E345 ————————————————————————————————————	Ground	Lo	Battery voltage	
	E245			Off	0 V	
	L343			Lo	Battery voltage	
				Off	0 V	

Is the measurement value normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK HEADLAMP (LO) OPEN CIRCUIT

- Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the headlamp harness connector.

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HEADLAMP (LO) CIRCUIT

[XENON TYPE]

IPDM E/R			Headlamp		Continuity
Con	nector	Terminal	Connector Terminal		Continuity
RH	E345	83	E324	1	Existed
LH	L343	84	E323	1	LAISIGU

Does continuity exist?

YES >> GO TO 5.

NO >> Repair the harnesses or connectors.

3.CHECK HEADLAMP (LO) FUSE

- 1. Turn the ignition switch OFF.
- 2. Check that the following fuses are not fusing.

Unit	Lotion	Fuse No.	Capacity
Headlamp LO (RH)	IPDM E/R	#57	15 A
Headlamp LO (LH)	IPDM E/R	#56	15 A

Is the fuse fusing?

YES >> GO TO 4.

NO >> Replace IPDM E/R.

4. CHECK HEADLAMP (LO) SHORT CIRCUIT

- 1. Disconnect IPDM E/R connector.
- 2. Check continuity between the IPDM E/R harness connector and the ground.

IPDM E/R				Continuity	
Connector Terminal		Ground	Continuity		
RH	E345	83	Glound	Not existed	
LH	L343	84		Not existed	

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if the fuse is fusing again.)

5. CHECK HEADLAMP (LO) GROUND OPEN CIRCUIT

Check continuity between the headlamp harness connector and the ground.

Headlamp				Continuity
Connector Terminal		Ground	Continuity	
RH	E324	2	Glound	Existed
LH	E323	2		LXISIEG

Does continuity exist?

YES >> Perform the xenon headlamp diagnosis. Refer to <a>EXL-41, "Description".

NO >> Repair the harnesses or connectors.

[XENON TYPE]

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XENON HEADLAMP

Description INFOID:0000000003261323

OUTLINE

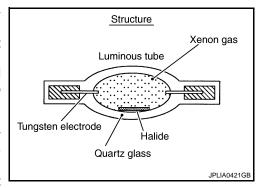
- The lamp light source is by the arch discharge by applying high voltage into the xenon gas-filled bulb instead
 of the halogen bulb filament.
- Sight becomes more natural and brighter because the amount of light are gained adequately and the color of light is sunshine-like white.
- The xenon bulb drops the amount of light, repeats blinking, and illuminates in red if the bulb reaches the service life.

ILLUMINATION PRINCIPLE

- Discharging starts in high voltage pulse between bulb electrodes.
- Xenon gas is activated by current between electrodes. Pale light is emitted.
- The luminous tube (bulb) temperature elevates. Evaporated halide is activated by discharge. The color of light changes into white.

NOTE:

- Brightness and the color of light may change slightly immediately after the headlamp turned ON until the xenon bulb becomes stable. This is not malfunction.
- Illumination time lag may occur between right and left. This is not malfunction.



PRECAUTIONS FOR TROUBLE DIAGNOSIS

Representative malfunction examples are; "Light does not turn ON", "Light blinks", and "Brightness is inadequate." The cause often be the xenon bulb. Such malfunctions, however, are occurred occasionally by HID control unit malfunction or lamp case malfunction. Specify the malfunctioning part with diagnosis procedure.

WARNING.

- Never touch the harness, HID control unit, the inside and metal part of lamp when turning the headlamp ON or operating the lighting switch.
- Never work with wet hands.

CAUTION:

- Never perform HID control unit circuit diagnosis with a circuit tester or an equivalent.
- Temporarily install the headlamps on the vehicle. Connect the battery to the connector (vehicle side) when checking ON/OFF status.
- Disconnect the battery negative terminal before disconnecting the lamp socket connector or the harness connector.
- Check for fusing of the fusible link(s), open around connector, short, disconnection if the symptom is caused by electric error.

NOTE:

- Turn the switch OFF once before turning ON, if the ON/OFF is inoperative.
- The xenon bulb drops the amount of light, repeats blinking, and illuminates in red if the bulb reaches the service life.

Diagnosis Procedure

1. CHECK XENON BULB

Install the normal bulb to the applicable headlamp. Check that the lighting switch is turned ON.

Is the headlamp turned ON?

YES >> Replace the xenon bulb.

NO >> GO TO 2.

2. CHECK HID CONTROL UNIT

Install the normal HID control unit to the applicable headlamp. Check that the lighting switch is turned ON. Is the headlamp turned ON?

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INFOID:0000000003261324

XENON HEADLAMP

< COMPONENT DIAGNOSIS >

[XENON TYPE]

YES

>> Replace HID control unit. >> Xenon headlamp is normal. Check the headlamp control system. NO

FRONT FOG LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

FRONT FOG LAMP CIRCUIT

Component Function Check

INFOID:0000000003261325

${f 1}$. CHECK FRONT FOG LAMP OPERATION

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PIPDM E/R AUTO ACTIVE TEST

- 1. Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- Check that the front fog lamp is turned ON.

PCONSULT-III ACTIVE TEST

- Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- With operating the test items, check that the front fog lamp is turned ON.

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: Front fog lamp ON Fog : Front fog lamp OFF Off

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Is the front fog lamp turned ON?

YES >> Front fog lamp circuit is normal.

>> Refer to EXL-43, "Diagnosis Procedure". NO

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Diagnosis Procedure

INFOID:0000000003261326

1. CHECK FRONT FOG LAMP FUSE

- Turn the ignition switch OFF.
- Check that the following fuse is not fusing.

Unit	Location	Fuse No.	Capacity
Front fog lamp	IPDM E/R	#58	15 A

Is the fuse fusing?

YES >> GO TO 2.

NO >> GO TO 3.

Н

2.CHECK FRONT FOG LAMP SHORT CIRCUIT

- Disconnect IPDM E/R connector and the front fog connector.
- Check continuity between the IPDM E/R harness connector and the ground.

IPDM E/R				Continuity
Connector Termina		Terminal	Ground	Continuity
RH	E345	86	Ground	Not existed
LH	E343	87		Not existed

EXL

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if the fuse is fusing again.)

3.CHECK FRONT FOG LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 4.

Revision: 2008 October

NO >> Replace the bulb.

4. CHECK FRONT FOG LAMP OUTPUT VOLTAGE

(P)CONSULT-III ACTIVE TEST

- 1. Disconnect the front fog lamp connector.
- 2. Turn the ignition switch ON.
- Select "EXTERNAL LAMPS" of IPDM E/R active test item.

FRONT FOG LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

4. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

	Terminals				
	(+)			Test item	Voltage
	IPDM E	/R		EXTERNAL	(Approx.)
Cor	nnector	Terminal		LAMPS	
RH		86	Ground	Fog	Battery voltage
	E345		Ciodila	Off	0 V
LH		87		Fog	Battery voltage
				Off	0 V

Is the measurement value normal?

YES >> GO TO 5.

NO >> Replace IPDM E/R.

5. CHECK FRONT FOG LAMP OPEN CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the front fog lamp harness connector.

IPDM E/R			Front foo	Continuity	
Conr	nector	Terminal	Connector	Terminal	Continuity
RH	E345	86	E402	1	Existed
LH	L343	87	E331	1	LXISIEU

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6.CHECK FRONT FOG LAMP GROUND CIRCUIT OPEN CIRCUIT

Check continuity between the front fog lamp harness connector and the ground.

Front fog lamp				Continuity
Conr	Connector T		Ground	Continuity
RH	E402	2	Giodila	Existed
LH	E331	2		Existed

Does continuity exist?

YES >> Replace the front fog lamp.

NO >> Repair the harnesses or connectors.

PARKING LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

PARKING LAMP CIRCUIT

Component Function Check

INFOID:0000000003261327

${f 1}$.CHECK PARKING LAMP OPERATION

PIPDM E/R AUTO ACTIVE TEST

- 1. Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- Check that the parking lamp is turned ON.

PCONSULT-III ACTIVE TEST

- Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- With operating the test items, check that the parking lamp is turned ON.

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TAIL : Parking lamp ON Off : Parking lamp OFF

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Is the parking lamp turned ON?

YES >> Parking lamp circuit is normal.

>> Refer to EXL-45, "Diagnosis Procedure". NO

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Diagnosis Procedure

1. CHECK PARKING LAMP FUSE

INFOID:0000000003261328

- Turn the ignition switch OFF.
- Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Parking lamp	IPDM E/R	#52	10 A

Is the fuse fusing?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK PARKING LAMP SHORT CIRCUIT

- Disconnect IPDM E/R connector and the parking lamp connector.
- Check continuity between the IPDM E/R harness connector and the ground.

IPDM E/R				Continuity
Conr	nector	Terminal	Ground	Continuity
RH	E346	91	Giodila	Not existed
LH	L340	92		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if fusing is found again.)

${f 3.}$ CHECK PARKING LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 4.

NO >> Replace the bulb.

- 2. Turn the ignition switch ON.
- Select "EXTERNAL LAMPS" of IPDM E/R active test item.

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(P)CONSULT-III ACTIVE TEST

Disconnect the parking lamp connector.

PARKING LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

4. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

Terminals				Test item		
(+)			(-)	Test item	Voltage	
	IPDM E/R			EXTERNAL	(Approx.)	
Coi	nnector	Terminal		LAMPS		
RH	E346	91	Ground	TAIL	Battery voltage	
			Orouna	Off TAIL Off	0 V	
LH					Battery voltage	
					0 V	

Is the measurement value normal?

YES >> GO TO 5.

NO >> Replace IPDM E/R.

5. CHECK PARKING LAMP OPEN CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the parking lamp harness connector.

IPDM E/R			Parking lamp		Continuity
Connec	ctor	Terminal	Connector	Terminal	Continuity
Н	E346	91	E330	2	Existed
1	L340	92	E329	2	LXISIEU

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6. CHECK PARKING LAMP GROUND OPEN CIRCUIT

Check continuity between the parking lamp harness connector and the ground.

Parking lamp				Continuity
Coni	Connector		Ground	Continuity
RH	E330	1	Giodila	Existed
LH	E329	1		Existed

Does continuity exist?

YES >> Replace the front combination lamp.

NO >> Repair the harnesses or connectors.

FRONT SIDE MARKER LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

FRONT SIDE MARKER LAMP CIRCUIT

Component Function Check

INFOID:0000000003420380

NOTE:

Check the parking lamp circuit if the parking lamp and the front side marker lamp are not turned ON. Refer to EXL-45, "Component Function Check".

${f 1}$.CHECK FRONT SIDE MARKER LAMP OPERATION

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RIPDM E/R AUTO ACTIVE TEST

- Activate IPDM E/R auto active test. Refer to <u>PCS-10</u>, "<u>Diagnosis Description</u>".
- Check that the front side marker lamp is turned ON.

(P)CONSULT-III ACTIVE TEST

- Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- With operating the test items, check that the front side marker lamp is turned ON.

TAIL : Front side marker lamp ON Off : Front side marker lamp OFF

Is the front side marker lamp turned ON?

YES >> Front side marker lamp circuit is normal.

NO >> Refer to EXL-47, "Diagnosis Procedure".

INFOID:0000000003420405

Diagnosis Procedure

$1.\mathsf{check}$ front side marker lamp fuse

- Turn the ignition switch OFF.
- Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Front side marker lamp	IPDM E/R	#52	10 A

Is the fuse fusing?

YES >> GO TO 2. NO >> GO TO 3.

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2.check front side marker lamp short circuit

- Disconnect IPDM E/R connector and the front side marker lamp connector.
- Check continuity between the IPDM E/R harness connector and the ground.

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IPDM E/R				Continuity	
Connector		Terminal	Ground	Continuity	
RH	E346	91	Giodila	Not existed	
LH	L340	92		INOL GAISIGU	

Does continuity exist?

- YES >> Repair the harnesses or connectors. And then replace the fuse.
- NO >> Replace the fuse. (Replace IPDM E/R if fusing is found again.)

3.CHECK FRONT SIDE MARKER LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 4.

NO >> Replace the bulb.

4. CHECK FRONT SIDE MARKER LAMP OUTPUT VOLTAGE

PCONSULT-III ACTIVE TEST

Disconnect the front side marker lamp connector.

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FRONT SIDE MARKER LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

- Turn the ignition switch ON.
- 3. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 4. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

	Т	erminals	Test item		
(+)			(-)	rest item	Voltage
IPDM E/R				EXTERNAL	(Approx.)
Cor	nector	Terminal		LAMPS	
RH	E346	91	Ground	TAIL	Battery voltage
			Giodila	Off TAIL	0 V
LH		92			Battery voltage
				Off	0 V

Is the measurement value normal?

YES >> GO TO 5.

NO >> Replace IPDM E/R.

5.CHECK FRONT SIDE MARKER LAMP OPEN CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the front side marker lamp harness connector.

IPDM E/R		Front side m	arker lamp	Continuity	
Connector Terminal		Terminal	Connector	Terminal	Continuity
RH	E346	91	E315	2	Existed
LH		92	E314	2	LAISIEU

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6.CHECK FRONT SIDE MARKER LAMP GROUND OPEN CIRCUIT

Check continuity between the front side marker lamp harness connector and the ground.

Front side marker lamp			Continuity	
Connector		Terminal	Ground	Continuity
RH	E315	1	Giodila	Existed
LH	E314	1		LXISIEU

Does continuity exist?

YES >> Replace the front combination lamp.

NO >> Repair the harnesses or connectors.

TURN SIGNAL LAMP CIRCUIT [XENON TYPE] < COMPONENT DIAGNOSIS > TURN SIGNAL LAMP CIRCUIT Α Description INFOID:0000000003261329 BCM performs the high flasher operation (fail-safe) if any bulb or harness of the turn signal lamp circuit is NOTE: The turn signal lamp blinks at normal speed when using the hazard warning lamp. Component Function Check INFOID:0000000003261330 1. CHECK TURN SIGNAL LAMP D PCONSULT-III ACTIVE TEST Select "FLASHER" of BCM (FLASHER) active test item. With operating the test items, check that the turn signal lamp is turned ON. Е LH : Turn signal lamps (LH) ON RH : Turn signal lamps (RH) ON F : Turn signal lamps OFF Is the turn signal lamp turned ON? YES >> Turn signal lamp circuit is normal. NO >> Refer to EXL-49, "Diagnosis Procedure". Diagnosis Procedure INFOID:0000000003261331 1. CHECK TURN SIGNAL LAMP BULB Check the applicable lamp bulb. Is the bulb normal? YES >> GO TO 2. NO >> Replace the bulb. 2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE 1. Turn the ignition switch OFF. K 2. Disconnect the front turn signal lamp connector or the rear combination lamp connector. Turn the ignition switch ON. With operating the turn signal switch, check the voltage between the BCM harness connector and the ground.

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	Terminals			Condition	
	(+)		(-)	Condition	Voltage (Approx.)
	BCM			Turn signal	νοιίας (Αρρίολ.)
Co	nnector	Terminal		switch	
RH		17	Ground	RH	(V) 15 10 5 0 1 s
	M119	OFF	0 V		
LH	M119	18		LH	(V) 15 10 5 0 1 s
				OFF	0 V

Is the measurement value normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to BCS-96, "Exploded View".

3. CHECK TURN SIGNAL LAMP OPEN CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect BCM connector.
- Check continuity between the BCM harness connector and the front turn signal lamp or the rear combination lamp harness connector.

Front turn signal lamp

ВСМ			Front turn	Continuity	
Connector		Terminal	Connector	Terminal	Continuity
RH	M119	17	E328	1	Existed
LH	IVITIO	18	E327	'	LXISIEU

Rear turn signal lamp

ВСМ			Rear combination lamp		Continuity
Connector Terminal		Connector	Terminal	Continuity	
RH	M119	17	B59	2	Existed
LH	IVITIO	18	B80	2	LXISIEU

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK TURN SIGNAL LAMP SHORT CIRCUIT

Check continuity between the BCM harness connector and the ground.

TURN SIGNAL LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

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BCM				Continuity
Connector		Terminal	Ground	Continuity
RH	M119	17	Giouna	Not existed
LH	IVITIS	18	-	Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 5.

5. CHECK TURN SIGNAL LAMP GROUND OPEN CIRCUIT

Check continuity between the front turn signal lamp or the rear combination lamp and the ground.

Front turn signal lamp

Front turn signal lamp				Continuity	
Connector		Terminal	Ground	Continuity	
RH	E328	2	Ground	Existed	
LH	E327	2		Existed	

Rear turn signal lamp

Rear combination lamp				Continuity	
Connector		Terminal	Ground	Continuity	
RH	B59	1	Ground	Existed	
LH	B80			LAISTEG	

Does continuity exist?

YES >> Replace the front combination lamp or the rear combination lamp.

NO >> Repair the harnesses or connectors.

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[XENON TYPE]

OPTICAL SENSOR

Description INFOID:000000003420417

Optical sensor converts the outside brightness (lux) to voltage and transmits the optical sensor signal to BCM.

Component Function Check

INFOID:0000000003420418

1. CHECK OPTICAL SENSOR SIGNAL BY CONSULT-III

(P)CONSULT-III DATA MONITOR

- 1. Turn the ignition switch ON.
- 2. Select "OPTICAL SENSOR" of BCM (HEADLAMP) data monitor item.
- 3. Turn the lighting switch AUTO.
- 4. With the optical sensor illuminating, check the monitor status.

Monitor item	Condition		Voltage (Approx.)
OPTICAL SEN-	Ontical sensor	When illuminat- ing	3.1 V or more *
SOR	Optical sensor	When shutting off light	0.6 V or less

^{*:} Illuminates the optical sensor. The value may be less than the standard value if brightness is weak.

Is the item status normal?

YES >> Optical sensor is normal.

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

Diagnosis Procedure

INFOID:0000000003420419

1. CHECK OPTICAL SENSOR POWER SUPPLY INPUT

- 1. Turn the ignition switch ON.
- 2. Turn the lighting switch AUTO.
- 3. Check the voltage between the optical sensor harness connector and the ground.

(-	(-)	Voltage	
Optica	sensor		(Approx.)
Connector	Terminal	Ground	
M17	1		5 V

Is the measurement value normal?

YES >> GO TO 2. NO >> GO TO 4.

2. CHECK OPTICAL SENSOR GROUND INPUT

Check the voltage between the optical sensor harness connector and the ground.

(-	Voltage		
Optica	sensor		(Approx.)
Connector Terminal		Ground	
M17	3		0 V

Is the measurement value normal?

YES >> GO TO 3. NO >> GO TO 6.

[XENON TYPE]

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3.check optical sensor signal output

With illuminating the optical sensor, check the voltage between the optical sensor harness connector and the ground.

	Terminals	Condition			
(+)		(-)	Condition	Voltage	
Optical sensor			Optical sen-	(Approx.)	
Connector	Terminal		sor		
M17	2	Ground	When illumi- nating	3.1 V or more *	
	2		When shut- ting off light	0.6 V or less	

^{*:} Illuminate the optical sensor. The value may be less than the standard if brightness is weak.

Is the measurement value normal?

YES >> GO TO 7.

NO >> Replace the optical sensor.

4. CHECK OPTICAL SENSOR OPEN CIRCUIT

- Turn the ignition switch OFF.
- 2. Disconnect the optical sensor connector and BCM connector.
- Check continuity between the optical sensor harness connector and the BCM harness connector.

Optica	sensor	В	СМ	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M17	1	M123	138	Existed

Does continuity exist?

YES >> GO TO 5.

NO >> Repair the harnesses or connectors.

${f 5.}$ CHECK OPTICAL SENSOR SHORT CIRCUIT

Check the continuity between the optical sensor harness connector and the ground.

Optica	l sensor		Continuity
Connector	Terminal	Ground	Continuity
M17	1		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

$\mathsf{6}.$ CHECK OPTICAL SENSOR GROUND OPEN CIRCUIT

- Turn the ignition switch OFF.
- Disconnect the optical sensor connector and BCM connector. 2.
- Check continuity between the optical sensor harness connector and the BCM harness connector.

Optica	l sensor	В	CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M17	3	M123	137	Existed

Does continuity exist?

YES >> Replace BCM.

NO >> Repair the harnesses or connectors.

.CHECK OPTICAL SENSOR SIGNAL OPEN CIRCUIT

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OPTICAL SENSOR

< COMPONENT DIAGNOSIS >

[XENON TYPE]

- 1. Turn the ignition switch OFF.
- 2. Disconnect the optical sensor connector and BCM connector.
- 3. Check continuity between the optical sensor harness connector and the BCM harness connector.

Optical	sensor	В	CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M17	2	M123	113	Existed

Does continuity exist?

YES >> GO TO 8.

NO >> Repair the harnesses or connectors.

8. CHECK OPTICAL SENSOR SHORT CIRCUIT

Check the continuity between the optical sensor harness connector and the ground.

Optica	sensor		Continuity
Connector	Terminal	Ground	Continuity
M17	2		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

[XENON TYPE]

HAZARD SWITCH

Component Function Check

INFOID:0000000003261332

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©CONSULT-III DATA MONITOR

- Turn the ignition switch ON.
- Select "HAZARD SW" of BCM (FLASHER) data monitor item.
- With operating the hazard switch, check the monitor status.

1. CHECK HAZARD SWITCH SIGNAL BY CONSULT-III

Monitor item	Con	dition	Monitor status
HAZARD SW	Hazard switch	ON	On
TIAZAND SW	Tiazaiù Switch	OFF	Off

Is the item status normal?

YES >> Hazard switch circuit is normal.

NO >> Refer to EXL-55, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003261333

1. CHECK HAZARD SWITCH SIGNAL INPUT

With operating the hazard switch, check the voltage between the BCM harness connector and the ground.

	Terminals		Condition	
(-	+)	(-)	Condition	Voltage (Approx.)
В	CM		Hazard switch	Vollage (Approx.)
Connector	Terminal		Tiazara Switch	
			ON	0 V
M122	110	Ground	OFF	(V) 15 10 5 0

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Is the measurement value normal?

YES >> Replace BCM. Refer to BCS-96, "Exploded View".

NO >> GO TO 2.

2.CHECK HAZARD SWITCH SIGNAL OPEN CIRCUIT

- Turn the ignition switch OFF.
- Disconnect the hazard switch connector and BCM connector.
- Check continuity between the hazard switch harness connector and the BCM harness connector.

Hazard	d switch	В	СМ	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M45	2	M122	110	Existed

Does continuity exist?

YES >> GO TO 3.

NO >> Repair the harnesses or connectors.

3.CHECK HAZARD SWITCH SIGNAL SHORT CIRCUIT

Check continuity between the hazard switch harness connector and the ground.

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< COMPONENT DIAGNOSIS >

Hazard	d switch		Continuity
Connector	Terminal	Ground	Continuity
M45	2		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 4.

4. CHECK HAZARD SWITCH GROUND OPEN CIRCUIT

Check continuity between the hazard switch harness connector and the ground.

Hazaro	d switch		Continuity
Connector	Terminal	Ground	Continuity
M45	1		Existed

Does continuity exist?

YES >> Replace the hazard switch.

NO >> Repair the harnesses or connectors.

[XENON TYPE]

TAIL LAMP CIRCUIT

Component Function Check

INFOID:0000000003261334

NOTE:

Check the license plate lamp circuit if the tail lamp and the license plate lamp are not turned ON. Refer to <u>EXL-59</u>, "Component Function Check".

1. CHECK TAIL LAMP OPERATION

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PIPDM E/R AUTO ACTIVE TEST

- 1. Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- 2. Check that the tail lamp is turned ON.

PCONSULT-III ACTIVE TEST

- 1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 2. With operating the test items, check that the tail lamp is turned ON.

TAIL : Tail Lamp ON
Off : Tail lamp OFF

Is the tail lamp turned ON?

YES >> Tail lamp circuit is normal.

NO >> Refer to EXL-57, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003261335

1. CHECK TAIL LAMP FUSE

- Turn the ignition switch OFF.
- Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Tail lamp	IPDM E/R	#53	10 A

Is the fuse fusing?

YES >> Repair the malfunctioning part before replacing the fuse.

NO >> GO TO 2.

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2.CHECK TAIL LAMP OUTPUT VOLTAGE

©CONSULT-III ACTIVE TEST

- Disconnect the rear combination lamp connector.
- 2. Turn the ignition switch ON.
- Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 4. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

voltage

0 V

	Terminals		Test item	
(+	-)	(-)	ICSLILEIII	Voltage
IPDM	1 E/R		EXTERNAL	(Approx.)
Connector	Terminal		LAMPS	
		Ground	TAIL	Battery

Off

Is the measurement value normal?

YES >> GO TO 3.

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NO >> Replace IPDM E/R.

3.CHECK TAIL LAMP OPEN CIRCUIT

Turn the ignition switch OFF.

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TAIL LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the rear combination lamp harness connector.

IPDM E/R		Rear comb	Continuity		
Connector Termina		Terminal	Connector	Terminal	Continuity
RH	E10	7	B59	4	Existed
LH	E10	,	B80	4	Existed

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK TAIL LAMP GROUND OPEN CIRCUIT

Check continuity between the rear combination lamp harness connector and the ground.

Rear combination lamp				Continuity
Connector		Terminal	Ground	Continuity
RH	B59	1	Ground	Existed
LH	B80	1	1	Existed

Does continuity exist?

YES >> Replace the rear combination lamp.

NO >> Repair the harnesses or connectors.

LICENSE PLATE LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[XENON TYPE]

LICENSE PLATE LAMP CIRCUIT

Component Function Check

INFOID:0000000003261336

1. CHECK LICENSE PLATE LAMP OPERATION

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RIPDM E/R AUTO ACTIVE TEST

- 1. Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- Check that the license plate lamp is turned ON.

(P)CONSULT-III ACTIVE TEST

- 1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 2. With operating the lighting switch, check that the license plate lamp is turned ON.

TAIL : License plate lamp ON
Off : License plate lamp OFF

Is the license plate lamp turned ON?

YES >> License plate lamp circuit is normal.

NO >> Refer to EXL-59, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003261337

1. CHECK LICENSE PLATE LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 2.

NO >> Replace the bulb.

2.CHECK LICENSE PLATE LAMP OPEN CIRCUIT

- Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector and the license plate lamp connector.
- 3. Check continuity between the IPDM E/R harness connector and the license plate lamp harness connector.

Continuity	late lamp	License p	IPDM E/R		
Continuity	Terminal	Connector	Terminal	Connector	
Existed	1	D163	E10 7		RH
LAISIGU	1	D162	,	L 10	LH

Does continuity exist?

YES >> GO TO 3.

NO

>> Repair the harnesses or connectors.

${f 3.}$ CHECK LICENSE PLATE LAMP GROUND OPEN CIRCUIT

Check continuity between the license plate lamp harness connector and the ground.

License plate lamp				Continuity
	Connector	Terminal	Ground	Continuity
RH	D163	2	Ground	Existed
LH	D162	2		LXISIEU

Does continuity exist?

YES >> Replace the license plate lamp.

NO >> Repair the harnesses or connectors.

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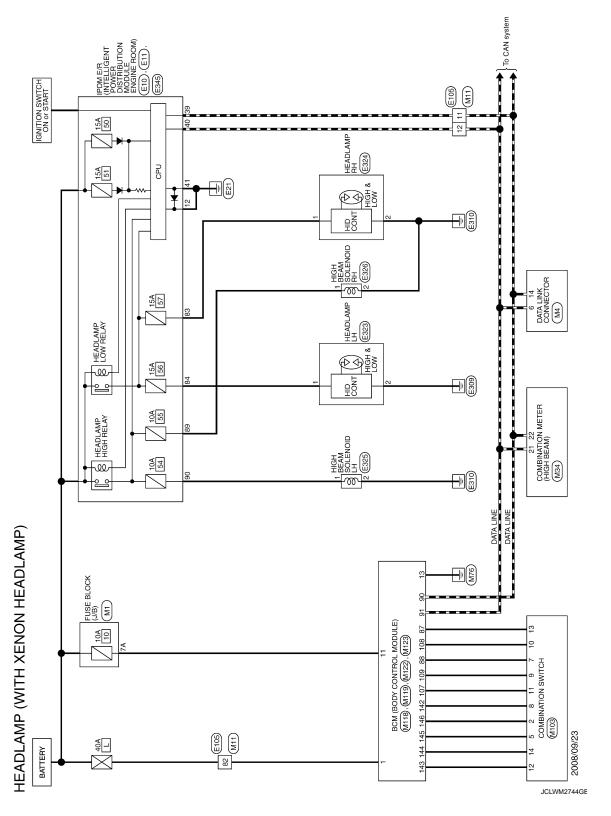
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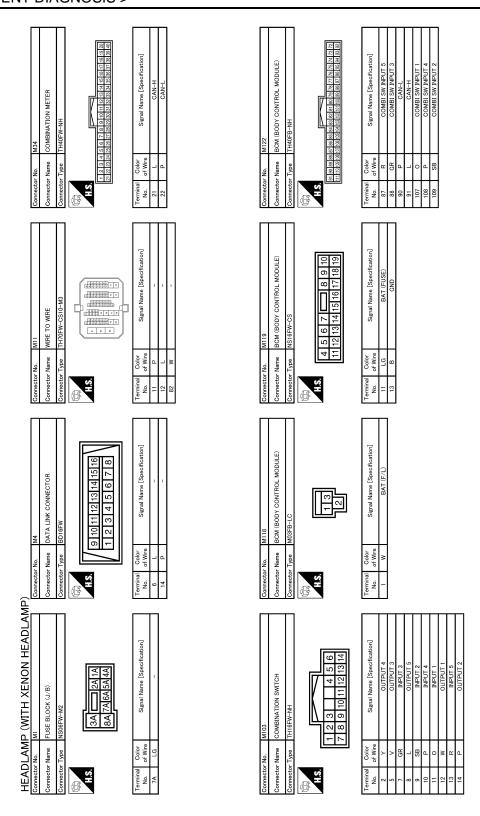
HEADLAMP SYSTEM

Wiring Diagram - HEADLAMP -



Connector No. E223 Connector Name HEADLAMP LH Connector Type EDE-GY-RS LAS. Terminal Color No. Color Signal Name [Specification] 1 L 2 B	Connector No. E345 Connector Name PDMD E/R (INTELLIGENT POWER DIST/PRIBLITION MODILE ENGINE ROOM) Connector Type NS08FW-CS	Octobr Signal Name [Specification] Octobr Signal Name [Specification] Octobr Octo	A B C
Cornector No. E105 Cornector Name WRE TO WRE Cornector Type ITH70MM-CS/10-M3 Cornector Type ITH70MM-CS/10-M3 Cornector Type ITH70MM-CS/10-M3 Terminal Color No. of Wire 11 P P	Connector No. E326 Connector Name HIGH BEAM SOLENOID RH Connector Type RS02FB LLS LLS LLS LLS LLS LLS LLS L	Terminal Color Signal Name Specification No. 01 No. 1 No	D E F
Domector No. E11 POWER	Connector No. E325 Connector Name HIGH BEAM SOLENOID LH Connector Type RS02FB	No. Color Signal Name [Specification] O'Wre Signal Name [Specification]	H I J
HEADLAMP (WITH XENON HEADLAMP) Connector Name PDM & PR (INTELLICENT POWER Connector Type TH20FW-CS12-M4-1V Connec	Connector No. E324 Connector Name HEADLAMP RH Connector Type E02FGY-RS M.S.	Terminal Color Signal Name (Specification) 1	M N O

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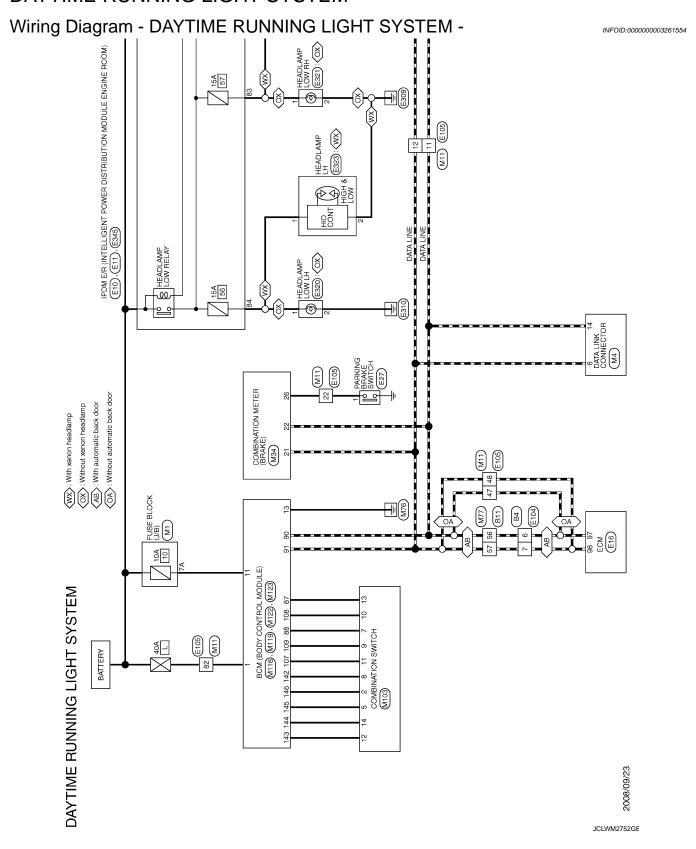
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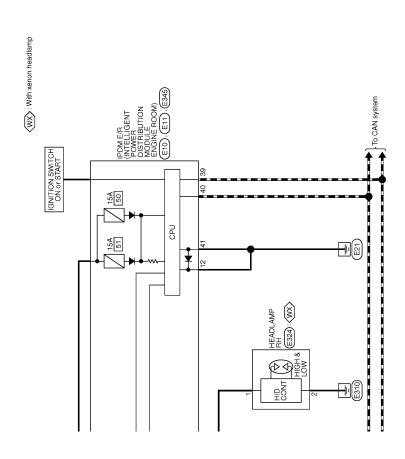
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Connector Name BCM (BODY CONTROL MODULE) Connector Type TH40FG-NH Connector Type TH40FG-NH	Connector No.	M123
П	Connector Name	BCM (BODY CONTROL MODULE)
E SH	Connector Type	TH40FG-NH
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DAYTIME RUNNING LIGHT SYSTEM





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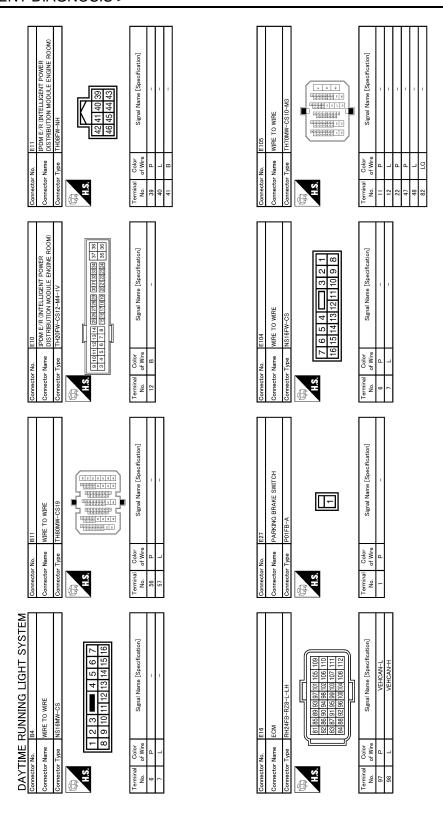
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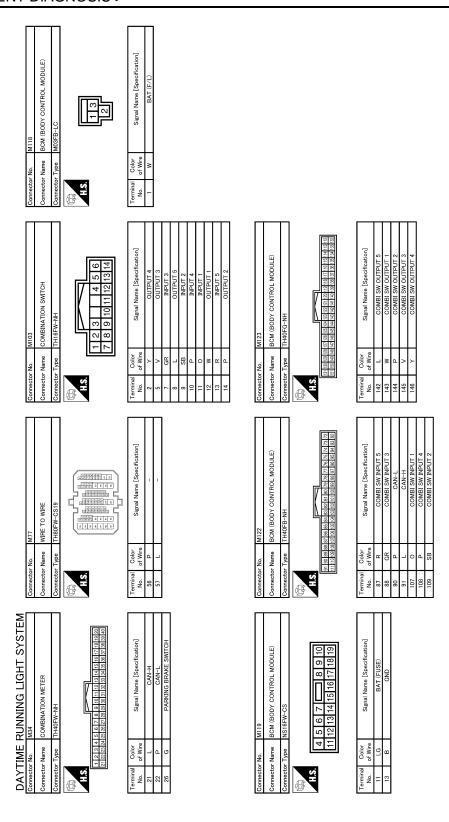
DAYTIME RUNNING LIGHT SYSTEM

< COMPONENT DIAGNOSIS >

[XENON TYPE]

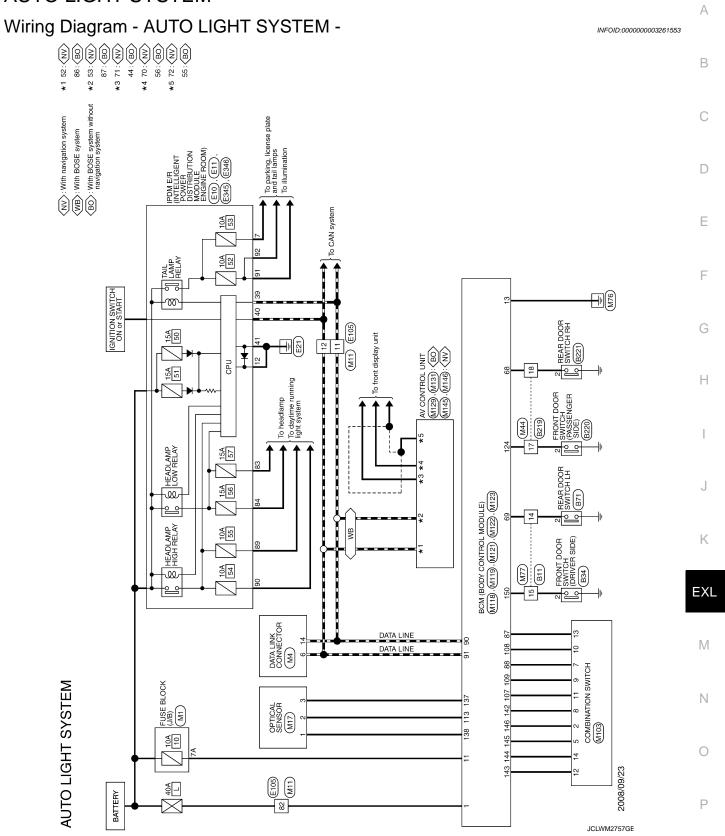
	Signal Name [Specification]	E TO WIRE OFW-CS10-M3	Signal Name (Specification)		АВ
Connector No. E324 Connector Name HEADLAMP RH Connector Type E02FGY-RS H.S.	No of Wire Si	Connector No. MII Connector Name WIRE TO WRE Connector Type THYDEW-CS10-MR H.S.	Terminal Color No. of Wire 11 P P 12 L 22 C 47 P 48 L 82 W		C
	Signal Name [Specification]	C CONNECTOR 12 13 14 15 16 1 8 1 4 5 6 7 18	Signal Name [Specification]		Е
r No. E323 HEADLAMP LH Type E02FGV-RS	Color L L L B	M4 E DATA LINI BD16FW 9 10 11 1 2 3	Color of Wing		F G
Connector No. Connector Name Connector Type H.S.	Terminal No.	Connector No. Connector Name Connector Type H.S.	Terminal No. 6 6 14		Н
HEADLAMP LOW RH FHZ0ZFB	Signal Name [Specification]	M1 FUSE BLOCK (J/B) NSUSFW-M2 3A 2A 1A 8A 7A 6A 5A 4A	Signal Name [Specification]		J
Connector No. E221 Connector Name HEAL Connector Type FHIZ H.S.	Terminal Color No. of Wire 1	Connector No. MI Connector Name FUS. Gonnector Type NSO. H.S.	Terminal Color No. of Wire 7A LG		K
DAYTIME RUNNING LIGHT SYSTEM Commerce No. E320 Commerce Name HEADLAMP LOW LH Commerce Type FHZ0ZFB H.S.	Signal Name [Specification]	PDM. F. R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) NS06FW-CS 85 84 83 90 89 88 87 86	Signal Name (Specification)		EXL M
EUNNNING LI ES20 HEADLAMP LOW LH FHZOZFB					Ν
DAYTIME Connector No. Connector Name Connector Type H.S.	Terminal Color No. of Wire 1 L L 2 B	Connector No. Connector Name Connector Type	Color Colo		0
- <u>[0] 0 0</u>				JCLWM2755GE	Р

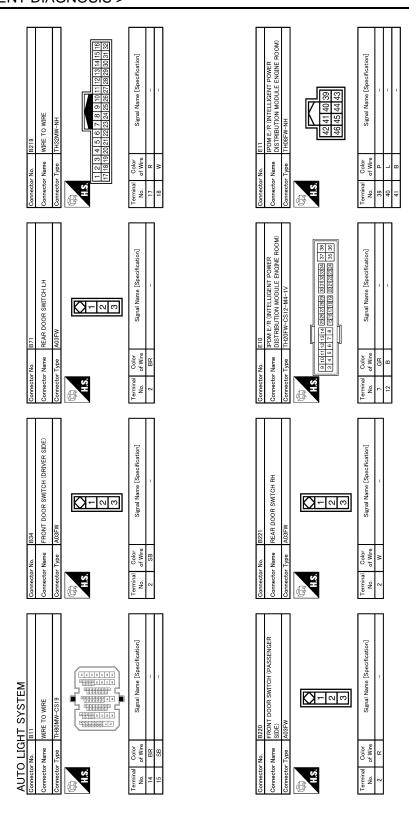
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AUTO LIGHT SYSTEM

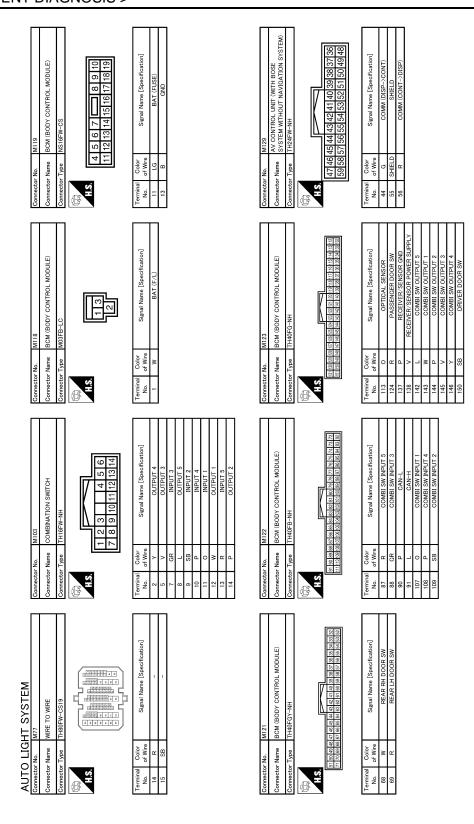




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<u> </u>	pecification]	6 6 4 3 2 1 22 2 1 20 1 9 1 8 1 7	pecification]		A
MI FUSE BLOCK (J/B) NS06FW-MZ 3A 2A 2A 8A 7A 6A 5A	Color Signal Name [Specification] LG	M44 wire TO WIRE TH32FW-NH 130 28 28 27 28 25 24 23	Color Signal Name [Specification] of Wire Signal Name [Specification] W		С
Connector No. Connector Name Connector Type H.S.	Terminal C No. of 7A	Connector No. Connector Name Connector Type H.S. H.S. 16 15 16 17 16 18 18 18 18 18 18 18 18 18 18 18 18 18	1 seminal O No. 17 17 18		D
NGINE ROOM)	cification]		offication		Е
E346 IPDM E.R. (NYTELLICENT POWER INTRIBUTTON MODULE ENGINE ROOM) THISFW-NH S	Signal Name [Specification]	M17 OPTICAL SENSOR TK03FW	Signal Name [Specification]		F
ector No. ector Type	Color Color Color	ector No. ector Type	No. of Wife No. of of wife No. of		G
Common Co		Conn	No. No. No. No. No. No. No. No. No. No		Н
E345 IPDM E.R (INTELLIGENT POWER BOSTRIBUTION MODULE ENGINE ROOM) INSUBPW-GS E5	Signal Name [Specification]	WW3	Signal Name [Specification]		I
E945 IPDM E/R (INTELL DISTRIBUTION M NS06FW-CS 85	Signa	WIRE TO WIRE THOUSE THYOFW-CSIO-M3	Signs		J
Connector No. 6 Connector Name Connector Name Connector Type H.S.	Terminal Color No. of Wire R4 C R5 R5 C R5 R5 C R5 R5	Connector Name V Connector Type T	Terminal Color No. of Wire 11 12 P P P R82 W	_	K
					EXL
SYSTEM SYSTEM STATEM STATEM	Signal Name [Specification]	M4 DATA LINK CONNECTOR BD16FW 10[11][2[13][4][5][6] 2[3] 4 5 6 7 8	Signal Name [Specification]		M
GHT SYSTEN E105 WIRE TO WIRE TH70MW-CSIO-M3					Ν
AUTO LIGHT SYSTEM Connector No. E105 Connector Name WIRE TO WIRE Connector Type TH70MW-CS10-M3 TH70MW-CS10-M3 TH70MW-CS10-M3	Terminal Color No. of Wire 11 P L 2 L 2 L 3 C C 4 C 4 C 4 C 4 C C	Connector No. Connector Type H.S.	Terminal Color No. of Wire No. of Wire		0
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AUTO LIGHT SYSTEM

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Connector Name SysTEM) Connector Type THIEFW-NH H.S. E2 64 66 68 70 72 61 63 65 67 69 71	Signal Name [Specification] COMM (CONT-DISP) COMM (DISP->CONT) SHIELD SHIELD	F
or Name 8V-STE, 8V-STE, 6D	No. of Wire No. of Wire No. of Wire No. of Wire No. of	G
	Termina No. 70 70 70 71 72 72 72 72 72 72 72 72 72 72 72 72 72	Н
AV CONTROL UNIT (WITH NAVIGATION SYSTEM) TH40FW-NH SECTION SE	Signal Name [Specification] CAN+H CAN+L	I
or Name System) Part Control UNIT (WITH NAVIGATION or Type Trype TH40FW-NH State of the State	Signal Name CO	J
Connector Name SY Connector Type Type Type Type Type Type Type Type	Color No. Color Co	К
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Connector Name	Signal Name Especification] CAN+H CAN+L	M
AV CONTROL SYSTEM WITH TH32FW-NH 089 88 87 86 84 84 86 105 105 105 105 105 105 105 105 105 105		N
Connector Nam Connector Type H.S. 9199	No. of Wire Signature Color Signature Signat	0

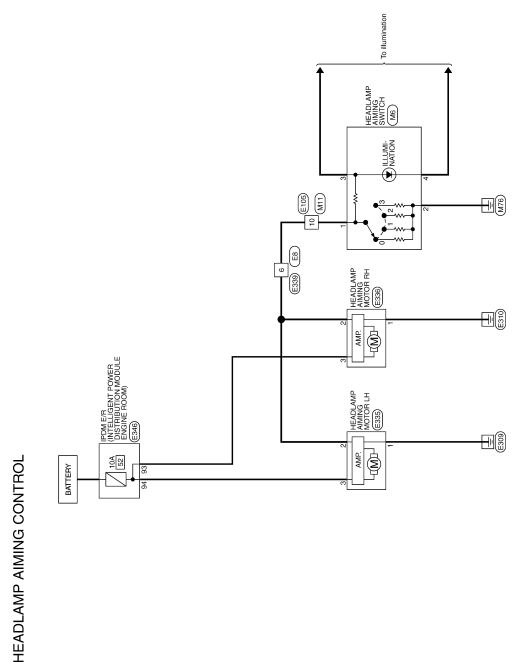
[XENON TYPE]

HEADLAMP AIMING CONTROL SYSTEM (MANUAL)

Description INFOID:000000003261339

The headlamp levelizer adjusts the headlamp light axis upward and downward with the aiming motor integrated in the front combination lamp.

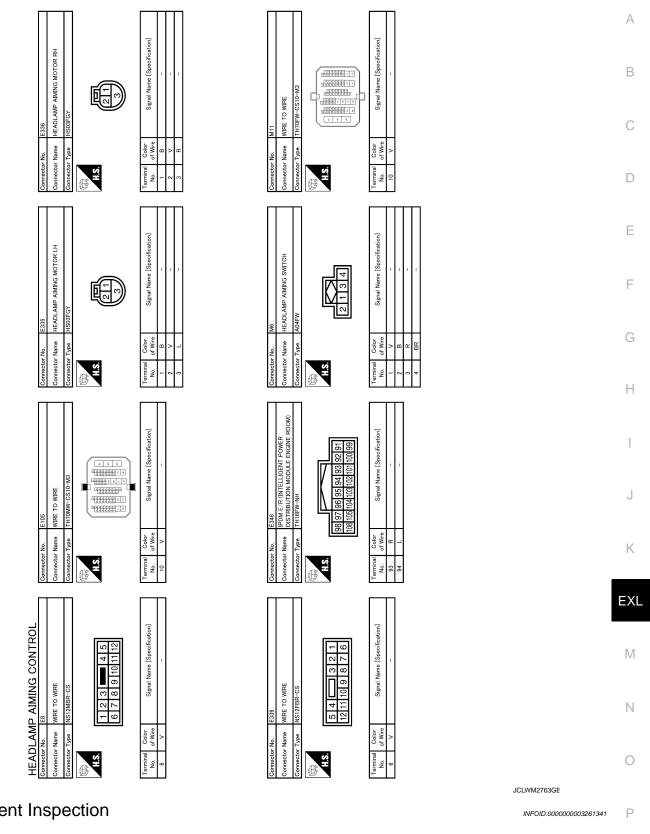
Wiring Diagram - HEADLAMP AIMING CONTROL SYSTEM (MANUAL) - INFOID:000000003261525



HEADLAMP AIMING CONTROL SYSTEM (MANUAL)

< COMPONENT DIAGNOSIS >

[XENON TYPE]



Component Inspection

1. CHECK HEADLAMP AIMING SWITCH

Remove the headlamp aiming switch.

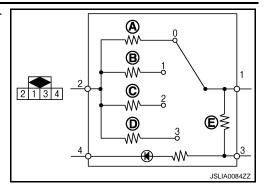
HEADLAMP AIMING CONTROL SYSTEM (MANUAL)

< COMPONENT DIAGNOSIS >

[XENON TYPE]

Check the resistance among each headlamp aiming switch terminal.

Headlamp	aiming switch	Condition	Resistance
Te	minal	Switch position	(Approx.)
		0	Α: 910 Ω
1	2	1	Β: 576 Ω
		2	C: 374 Ω
		3	D: 240 Ω
	3	_	E: 390 Ω



Is the measurement value normal?

YES >> Headlamp aiming switch is normal.

NO >> Replace the headlamp aiming switch.

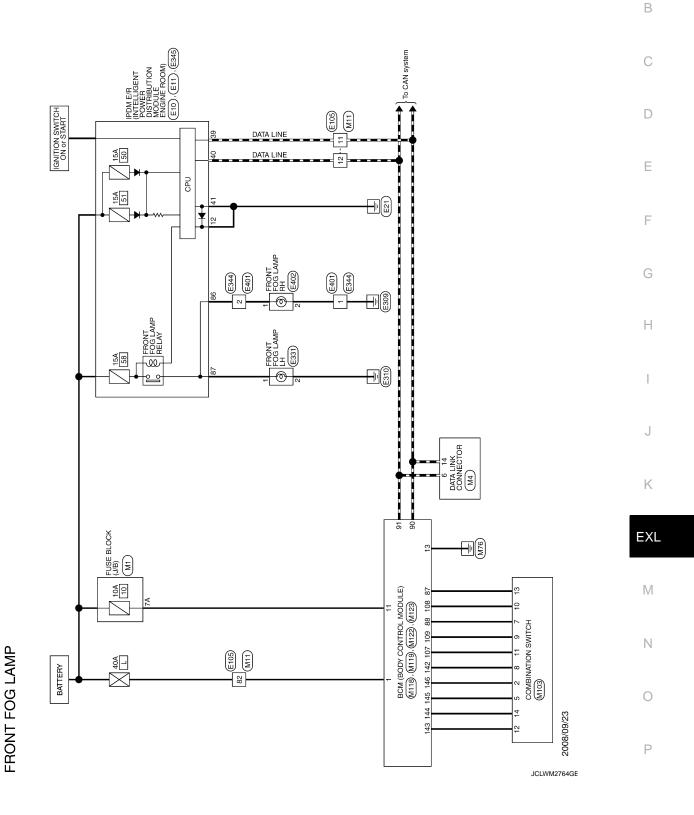
[XENON TYPE]

FRONT FOG LAMP SYSTEM

Wiring Diagram - FRONT FOG LAMP -

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FRONT FOG LAMP			
Connector No. E10	Connector No. E11	Connector No. E105	Connector No. E331
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Connector Name DISTRIBUTION MODULE ENGINE ROOM)	Connector Name WIRE TO WIRE	Connector Name FRONT FOG LAMP LH
Connector Type TH20FW-CS12-M4-1V	Connector Type TH08FW-NH	Connector Type TH70MW-CS10-M3	Connector Type FHZ02FB
11.5 11.5 12.4 5 0 1 7 10 15 0 15 0 15 0 15 0 15 0 15	42 41 40 33 46 44 43	\$\frac{1}{2}\$	#s #s
Terminal Color Signal Name [Specification] No. of Wire 12 B -	nal Color Signal Name of Wire P	of Wire Signal Name	Terminal Color Signal Name (Specification) No. of Wire Signal Name (Specification) 1 GR -
	, g	- 78	
Connector No. E344	Connector No. E345	Connector No. [E401	Connector No. E402
Connector Name WIRE TO WIRE	Connector Name DISTRIBUTION MODULE ENGINE ROOM)	Connector Name WIRE TO WIRE	Connector Name FRONT FOG LAMP RH
Connector Type RS02MGY	Connector Type NS08FW-CS	Connector Type RS02FGY	Connector Type FHZ02FB
KIS KIS	H.S. 85	#8 #8	#8 #8
Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 2 8 -	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification]	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification]	Terminal Color No of Wire Signal Name [Specification] W

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FRONT FOG LAMP SYSTEM

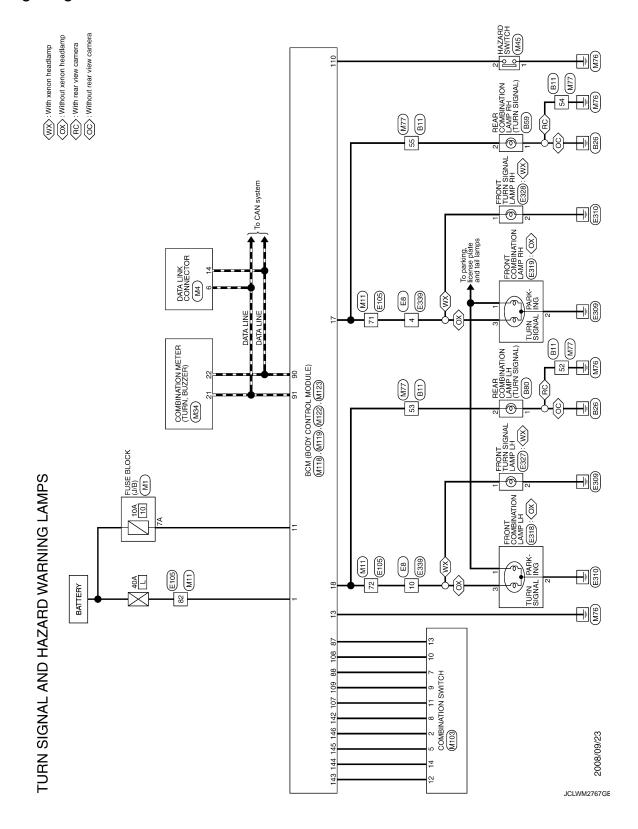
Connector No. MI03 Connector Name COMBINATION SWITCH Connector Type THISPW-NH M.S. T 2 3 10 11 12 13 14 14 15 15 15 15 16 16 16 16	Color Signal Name [Specification] Y	or No. M123 or Type BCM (BODY CONTROL MODULE) TH40FG-NH STORM CONTROL MODULE) STORM CONTROL MODULE)	Color Signal Name [Specification] of Wie COMBL SW OUTPUT 5 V COMBL SW OUTPUT 2 V COMBL SW OUTPUT 3 V COMBL SW OUTPUT 4 COMBL SW OUTPUT 5 COMBL		В
Connector No. Connector Name Connector Type H.S.	Terminal No. 2 2 2 2 2 7 7 7 9 8 8 9 9 9 11 11 11 12 12 13 13	Connector No. Connector Type H.S. FINE	Terminal No. 142 142 143 144 145 146		D
SSION NO.	Signal Name [Specification]	M122 BLOM (BODY CONTROL MODULE) TH40FB-NH ST 866 64 65 65 65 65 65 65 65 65 65 65 65 65 65	Signal Name [Specification] COMBI SWI INPUT 3 CAN-L COMBI SWI INPUT 1 COMBI SWI INPUT 1 COMBI SWI INPUT 1 COMBI SWI INPUT 1		E F
Connector No. MII Connector Name WIRE TO WIRE Connector Type THYOFV-CS10-M3 II.S	Color Color Signa	Connector No. M122 Connector Name BCM (BODY CONTR Connector Type ITHOFB—NH H.S. THOFB—NH ITHORNOON THOFB—NH ITHORNOON THORNOON	Color Signa No. Signa No. Signa No. Signa Si		G
					Н
M4 BD17A LINK CONNECTOR BD16FW 9 10 11 1 12 13 14 15 16 7 18	Signal Name [Specification]	MI19 BOM (BODY CONTROL MODULE) NS16FW-CS 5 6 7 6 9 10 12 13 14 15 16 17 18 19	Signal Name (Speoification) BAT (FUSE) GND		J
Connector No. M4 Connector Name DA1 Connector Type BD1 H.3.	Color Color No. Owner Owner	Connector No. MITIS Connector Type NSISIS H.S. H.S. H.S. H.S. H.S. H.S. H.S. H.S	Terminal Color No.	ſ	K
P ((√8)	Signal Name [Specification]	MITB BOM (BODY CONTROL MODULE) MO3FB-LC 1 3	Signal Name [Specification] BAT (F/L)		EXL M
DG LAMP MI FUSE BLOCK (J/B) NSOGFW-M2 3A		M118 BCM (BODY M03FB-LC			Ν
FRONT FOG LAMP Connector No. MI Connector Name PUSE BLOCK (Connector Type INSOFTW-NIZ M.S. 3A BA 7A 6 BA 7A	Terminal Color No. 7A LG	Connector No. Connector Name Connector Type	Terminal Color No. of Wire 1 W	IOUNINET COST	0
				JCLWM2766GE	Р

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INFOID:0000000003261529

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

Wiring Diagram - TURN AND HAZARD WARNING LAMPS -



TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< COMPONENT DIAGNOSIS >

[XENON TYPE]

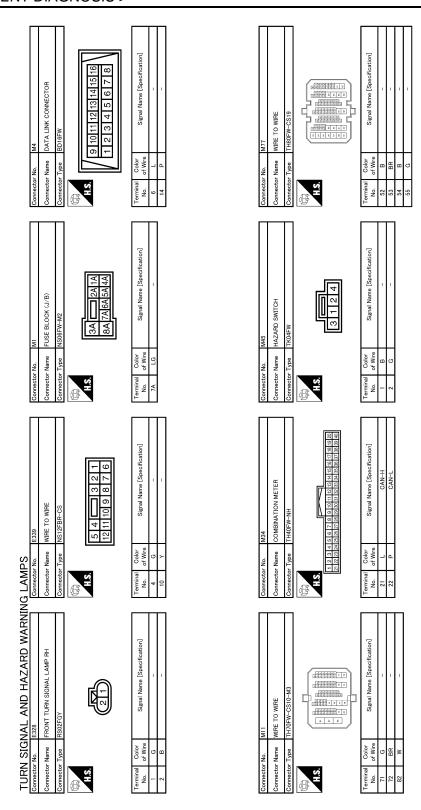
4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Signal Name [Specification]	IT TAMP LH	Signal Name [Specification]		АВ
Connector No. E8 Connector Name WIRE TO WIRE Connector Type NSI2MBR-CS LLS 1 2 3	Color SB SB	Connector No. E327 Connector Name FRONT TURN SIGNAL LAMP LH Connector Type RSUZFGY LIS	D C C C C C C C C C C C C C C C C C C C		С
Connector No. Connector Nat. Connector Typ. H.S.	Terminal No. No. 10	Connector No. Connector Typ	Terminal No. No.		D
H	offeation]	MP RH	cification]		Е
REAR COMBINATION LAMP LH INSOAMW-CS 4 3 2 1	Signal Name [Specification]	FRONT COMBINATION LAMP RHZUSFER	Signal Name (Specification)		F
9 9	Color of Wire	9 0	Color of Wire		G
Connector No. Connector Name Connector Type H.S.	Terminal No. 2	Connector No. Connector Name Connector Type	Terminal No. 2		Н
REAR COMBINATION LAMP RH INSDAMM-CS	Signal Name [Speoification] -[Without rear view camera] -[Without rear view camera]	FRONT COMBINATION LAMP LH ZUSFEIR	Signal Name [Specification]		I
ING LAMPS Connector Name REA Connector Type NSG H.S.	Color Color No. Color No. Color No. Color 1 1.0 1.0 2 BR 2 BR Color 1 1.0 Color 2 Color 1 1.0 Color 2 Color	Connector No. E318 Connector Name FROM Connector Type Z03F	Terminal Color No. of Wire Color Color Color Color		К
ARNIN					EXL
AND HAZARD WARN	Signal Name (Specification)	RR E STORY WAS	Signal Name (Specification)		M
	i i i i i i i i i i i i i i i i i i i	WIRE TO WIRE TH70MW-CSIO-N			Ν
Connector Name WIRE 1 Connector Name WIRE 1 Connector Type TH90M H.S.	Terminal Color No. Of Wire No. Of Wire S.2 Y. S.3 Y. S.4 L. C. S.5 B.R. S.5 S.5 B.R. S.5 S.5	Connector No. Connector Name Connector Type H.S.	Terminal Color No. 10 Wire 17 SB 72 Y SB 82 LG		0
				JCLWM2768GE	Р

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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< COMPONENT DIAGNOSIS >

[XENON TYPE]

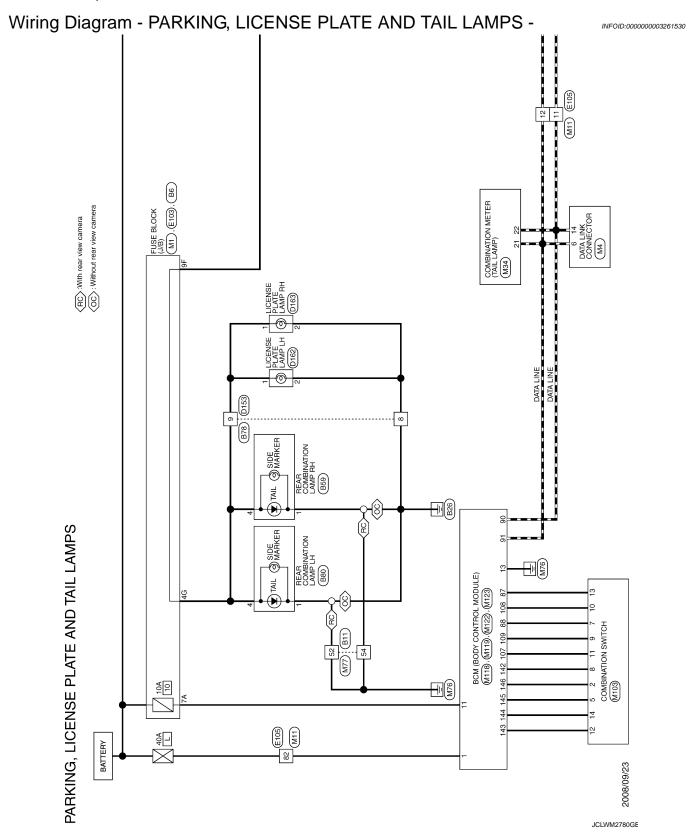


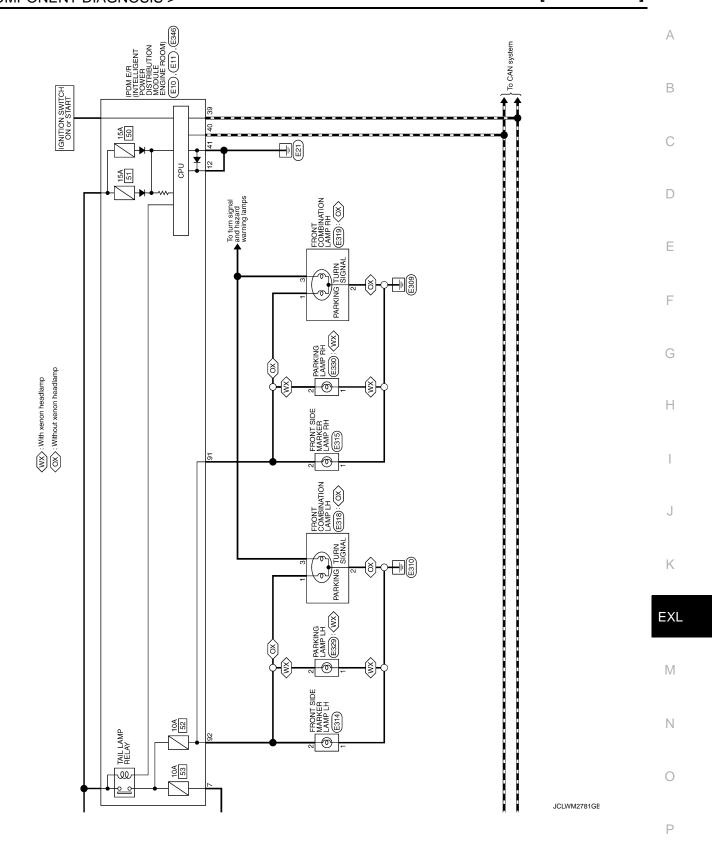
JCLWM2769GE

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< COMPONENT DIAGNOSIS >

M122 BOM (BODY CONTROL MODULE) TH40FB-NH Stoke Set sets et al my 1717 18174 1317 Stoke Set sets et al my 1817 1818 1413 171 STOKE SET SET SET SET SET SET SET SET SET SE	Signal Name (Specification) COMBI SW INPUT 5 COMBI SW INPUT 3 CAN-L CAN-L COMBI SW INPUT 1 COMBI SW INPUT 4 COMBI SW INPUT 2 HAZARD SW				АВ
Connector No. M122 Connector Name BCM (E Connector Type TH40F M.S. H.S. 19 20 20 20 20 20 20 20 20 20 20 20 20 20	Terminal Color No. of Wire 87 88 67 89 90 P 91 107 C 108 P 110 G				C
MITIS BCM (BODY CONTROL MODULE) NSIGEW-CS 5 6 7 6 7 6 10 12 13 14 15 16 17 18 19	Signal Name [Specification] BAT (FUSE) GNID TURN SIGNAL RH TURN SIGNAL LH				E
Connector No. MI19 Connector Name BCM (BODY V Connector Type NIS16FW-CS H.S. 4 5 6 7 [1112 13 14	Terminal Color S No. of Wire 11 B B 13 B B 17 B B B 17 B B B B				G
MITB BOM (BODY CONTROL MODULE) MOSTB-LC 13	Signal Name [Specification] BAT (F/L)				I
<u> </u>	Terminal Color Signal No. of Wire Signal				J K
ARD WARNING	Signal Name [Specification] OUPDUT 4 OUTPUT 3 OUTPUT 5 INPUT 2 INPUT 4 INPUT 1	OL MODULE)	Signal Name [Specification] COMBI SW OUTPUT I COMBI SW OUTPUT 2 COMBI SW OUTPUT 3 COMBI SW OUTPUT 3		EXL
TURN SIGNAL AND HAZ Connector No. M103 Connector Nyre THISPW-NH TI 2 3 4 TI 2 9 10 11 12	Odor of Wine P & W O P P SB C < Wife	Connector No. M123 Connector Name BCM (BODY CONTROL MODULE) Connector Type TH40FG-NH H.S. LINES BEIGHT BE	Color of Wire W W V V V		N
TURN S Connector No. Connector Na. Connector Typ	Terminal No. 2 5 5 5 5 9 9 9 9 11 1 1 1 1 1 1 1 1 1 1	Connector No Connector Na Connector Na Connector Ty	Terminal No. 142 142 1445 1445 1446	JCLWM2770GE	O P





< COMPONENT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL Connector No. 86	LAMPS Connector No. B11	Connector No. B59	Connector No. B78
Connector Name FUSE BLOCK (J/B) Connector Tune NS19FRP-CS	Connector Name WIRE TO WIRE Connector Type TH8RMW-CS19	Connector Name REAR COMBINATION LAMP RH	Connector Name WIRE TO WIRE Connector Type NSTBMW-CS
	1		-
Terminal Color No. of Wire Signal Name [Specification] 4G L	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] S S B -	Terminal Color Signal Name [Specification] 1 LG -[With out rear view camera] 1 B/W -[Without rear view camera] 4 L	Terminal Color No. of Wire Signal Name (Specification) 8 B B
Connector No. B80 Connector Name REAR COMBINATION LAMP LH	Connector No. D153 Connector Name WIRE TO WIRE	Connector Nane LICENSE PLATE LAMP LH	Connector No. D163
Connector Type NS04MW-CS	Connector Type NS16FW-CS	Connector Type TK02FBR	Connector Type TK02FBR
4.S. [4.3]	H.S. 7 6 5 4 1 3 2 1 1 16 15 14 13 12 11 10 9 8	H.S.	#S.
No. of Wire Signal Name [Specification] 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E E	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 8 B 9 L -	Terminal Color Signal Name Specification Of Wire	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 1 L 1 L - 1 L - -

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< COMPONENT DIAGNOSIS >

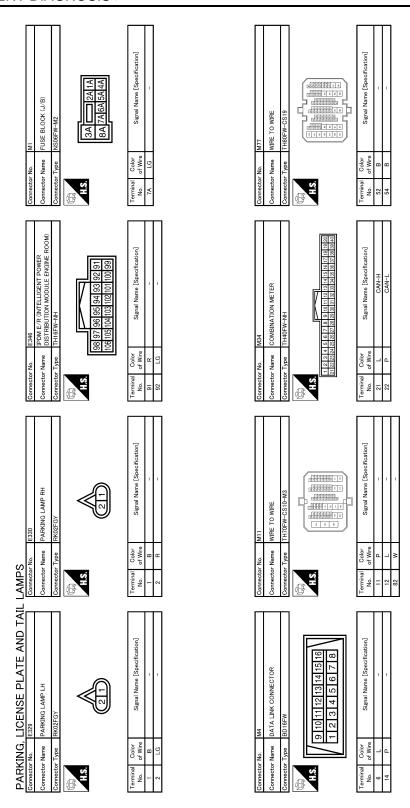
[XENON TYPE]

	Signal Nane [Specification]	DN LAMP RH	Signal Name [Specification]		A B
WIRE TO TH70MW	Odor Signal Name P L L	No. E319 Name FRONT COMBINATION LAMP RH. Type ZU3FBR	Oolor O'signal Name O Oolor O Wire O O		С
Connector No. Connector Name Connector Type	Terminal To. O.	Connector Name Connector Type H.S.	Terminal No. 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		D
2F 8F 8F	eoification]	н н	ocification]		Е
1	Signal Name [Specification]	E318 Z03FBR 32 11	Signal Name (Specification)		F
7F No.	Terminal Octoor Color Co	Connector No. E318 Connector Type 2005 M.S. H.S.	Color Colo		G
					Н
PDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) THOSFW-NH 42 41 40 39 46 45 44 43	Signal Name [Specification]	FRONT SIDE MARKER LAMP RHI RROZFGY	Signal Name [Specification]		1
E11 IDENTAL STRIBUTION THOSEW-NH 42 41	Sign.	FRONT SIDE RROZFGY	Si em		J
No. Name	Ferminal Color No. Color No. Color	Connector No.	Terminal Color No. of Wire 1 2 B B Color 2 Dolor Color		K
D TAIL					EXL
PARKING, LICENSE PLATE AND TAIL Connector No. POM E 10	Signal Name [Specification]	FRONT SIDE MARKER LAMP LH RROZFGY	Signal Name [Specification]		M
LICEN: E10 IPDM E/R: DISTRIBUTI TH20FW-C5 E13		F314 FRONT SIDE			Ν
PARKING, Connector No. Connector Type Connector Type I.S.	Terminal Color	Connector No. Connector Type L.S. L.S.	Terminal Color No. of Wire 1 B 2 LG		0
				JCLWM2783GE	Р
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< COMPONENT DIAGNOSIS >

[XENON TYPE]



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< COMPONENT DIAGNOSIS > [XENON TYPE]

(c)	[loi]				А
MIZZ BCM (BODY CONTROL MODULE) TH40FB-NH FROM BEIGH BE	Signal Name [Specification] COMBI SW INDUT 5 COMBI SW INDUT 3 CANI-UT 3 CANI-UT CANI-UT COMBI SW INDUT 1 COMBI SW INDUT 2 COMBI SW INDUT 2				В
	Color of Wire Sign				С
Connector No. Connector Name Connector Type 1.3. 1.3. 1.101000000000000000000000000	No. ol				D
ODULE) 9 10 18 19	offeation)				Е
ITROL M	Signal Name [Specification] EAT (FUSE) GND				F
e e e e e e e e e e e e e e e e e e e	of Wire LG				G
Connector No Connector Na Connector Na Connector Na H.S.	Terminal No. 11 11 13 113				Н
n MODULE)	Signal Name [Specification] BAT (F/L)				I
MIIB BCM (BODY CONTROL MODULE) MOSFB-LC	Signal Name				J
Connector No. M. Connector Name Bl. Connector Type M. H.S.	Terminal Color No. of Wire 1 W				K
		21 (20) (21) (21) (21) (21) (21) (21) (21) (21			EXL
LICENSE PLATE AND TAIL MIDS COMBINATION SWITCH THIGFW-NH 1 2 3 1 4 5 6 7 8 9 10 11 12 13 14	Signal Name Especification) OUTPUT 4 OUTPUT 3 OUTPUT 5 INPUT 3 OUTPUT 6 INPUT 1 INPUT 1 INPUT 1 INPUT 1 INPUT 1 INPUT 1 INPUT 5 OUTPUT 1	M123 BOM (BODY CONTROL MODULE) TH40FG-NH TH20FG-NH	Signal Name [Specification] COMBI SW OUTPUT 5 COMBI SW OUTPUT 5 COMBI SW OUTPUT 3 COMBI SW OUTPUT 3 COMBI SW OUTPUT 3		M
		8 9			Ν
PARKING, Gonnector No Connector Name Connector Type H.S.	Terminal Codor	Connector Name BC Connector Type TH	Color No. Color No. Color No. Color No. Color Colo		0
				JCLWM2785GE	Р

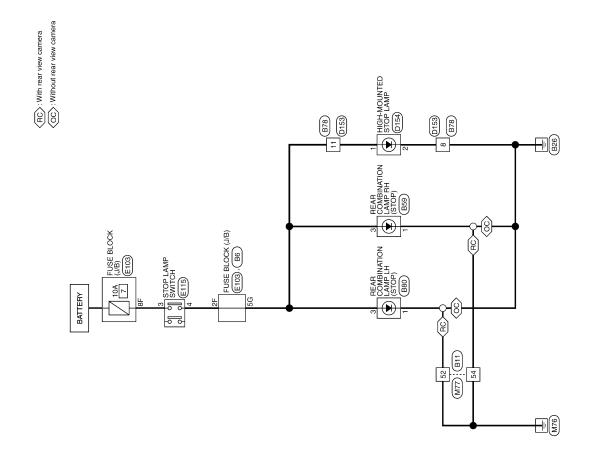
Revision: 2008 October EXL-89 2009 Murano

INFOID:0000000003261531

STOP LAMP

Wiring Diagram - STOP LAMP -

Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)



STOP LAMP (TYPE A)

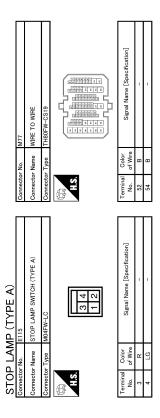
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CS. 11 12 13 14 15 16 7 11 12 13 14 15 16 7 11 12 13 14 15 16 7 11 12 13 14 15 16 15 15 15 15 15 15 15 15 15 15 15 15 15	OOK (J/B) -CS	АВ
No. B78 Name WRE TO Type NS16MW 8 9 10 P P P P P P P P P P P P P P P P P P P	Name F103 F103 F104 F105 F105	С
Ocumental Commental Commental No.	Ocumenton Ocumenton No. No. Ser. Ser. Ser. Ser.	D
RH ifeation]	AP infection	Е
REAR COMBINATION LAMP RH NS04MW-CS A 3 2 1 Signal Name [Specification] -[Without rear view camera] -[Without rear view camera]	PI54 HIGH-MOUNTED STOP LAMP VZK 7323-1324-F Signal Name [Specification]	F
	S Vire	G
Connector No. Connector Type Connector Type H.S. Terminal Color No. 1 E.M. 1 B.W. 3 P	Connector No. Connector Type Connector Type Terminal Color No. of Wife Terminal Color 1 0 1 0 2 B	Н
HBOWN-CS19 HBOWN-CS19 Signal Name (Specification)	-CSS 4	I J
Connector No. B11	Connector No. D153	К
		EXL
FPE A) OCK (J/B) -CS GGG/BG/GG/GG GGG/GG/GG/GG/GG/GG/GG/GG/GG/GG/	REAR COMBINATION LAMP LH NS04MW-CS Signal Name [Specification]	M
AP (TYPE A Be Be Be FUSE BLOCK (J/B) NS12FBR-CS SC BC	BB0 NSO4MW	N
STOP LAMP (TYPE A)	Connector No. Connector Name Connector Type Terminal Ocior No. of Wire 1 B 3 P	0
		JCLWM2772GE

Revision: 2008 October EXL-91 2009 Murano

JCLWM2773GE



From VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001(EXCEPT FOR MEXICO),

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JN8AZ18U*9W710001, JN8AZ18W*9W810001(FOR MEXICO)

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STOP LAMP (TYPE B)

EXL

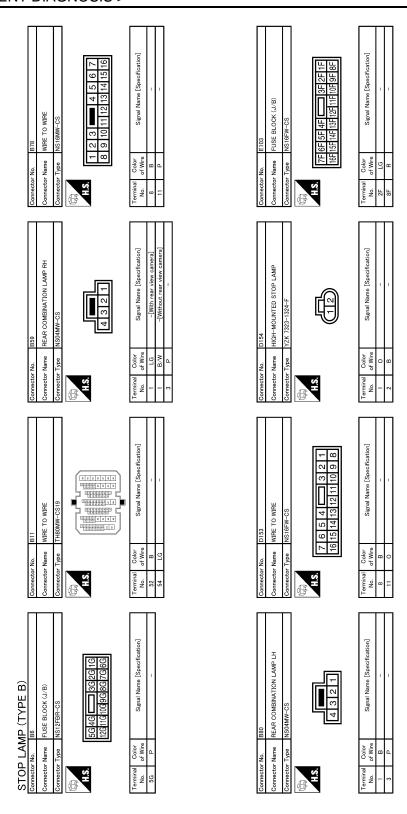
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	Connector No. M77	Connector Name WIRE TO WIRE	Connector Type TH80FW-CS19	(#####################################	inal Color Signal Name [Specification]				
	Conne	Conne	Conne	H.S.	Terminal No.	52	54		
STOP LAMP (TYPE B)	E116	Connector Name STOP LAMP SWITCH (TYPE B)	M04FW-LC	121	Signal Name [Specification]	-	-	-	-
P LA	or No.	or Name	Connector Type		Color of Wire	۳	ΓC	5	λ
STO	Connector No.	Connecto	Connecto	H.S.	Terminal No.	-	2	3	4

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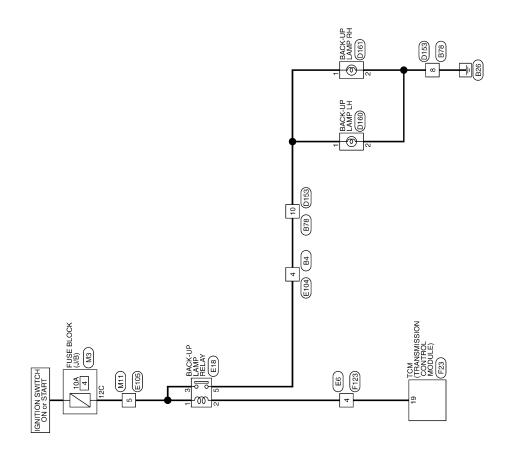
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BACK-UP LAMP

Wiring Diagram - BACK-UP LAMP -

INFOID:0000000003261532

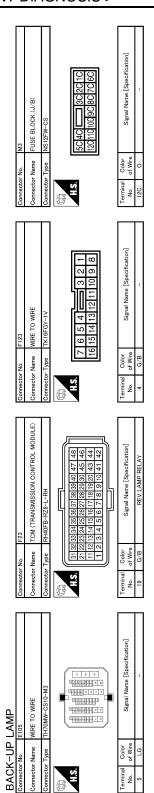


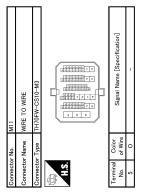
BACK-UP LAMP



LAMP LH	Signal Name (Specification)	-CS 4 — 3 2 1 13 12 11 10 9 8 Signal Name [Specification]		АВ
Connector No. D160 Connector Name BACK-UP LAMP LH Connector Type NSO2MW-CS H.S.	Terminal Color Sign	Connector No. E104 Connector Name WIRE TO WIRE Connector Type NS16PW-CS 14.5 Terminal Color No. of Wire 4 R		C
WRE 32 1 3 2 1 3 2 1 3 2 1 3 2 1 3 3 2 1 3 3 2 1 3 3 3 2 1 3 3 3 3	Signal Name [Specification]	BAOK-UP LAMP RELAY MS02FL-M2-LC MS02FL-M2-LC Signal Name [Specification]		E
Connector No. D153 Connector Name WIRE TO WIRE Connector Type NS16FW-CS H.S. T 6 5 4 1	Terminal Color No. of Wire 8 B B 10 R	Connector No. E18		G
-cs -ds 	Signal Name [Specification] -	E6 WIRE TO WIRE TX15MGY-1V		I J
Connector No. 878 Connector Name WIRE TO WIRE Connector Type INSTBMW-CS H.S. 1 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Terminal Color No. of Wire 8 B Wire 10 R	Connector No. E6		K
IRE SS T 1 2 13 14 15 16	Signal Name [Specification]	O LAMP RH OS Signal Name [Specification]		M
BACK-UP LAMP Commetter No. 84 Commetter Name WIRE TO WIRE Commetter Type NST6MW-CS	Terminal Color Si	Corrector No. D161 Corrector Name BACK-UP LAMP RH Corrector Type NSD2MW-OS HS. HS. Terminal Color No. Signal Nam 1 R 2 B 2 B		N O
			JCLWM2778GE	Р

Revision: 2008 October EXL-97 2009 Murano





JCLWM2779GE

[XENON TYPE] < ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value INFOID:0000000003729398 В

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VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
ED WIDED III	Other than front wiper switch HI	Off
FR WIPER HI	Front wiper switch HI	On
ED WIDED LOW	Other than front wiper switch LO	Off
FR WIPER LOW	Front wiper switch LO	On
ED 14/4 OLIED O.4/	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
RR WIPER ON RR WIPER INT RR WASHER SW	Other than front wiper switch INT/AUTO	Off
	Front wiper switch INT/AUTO	On
ED 144DED 070D	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
DD WIDED ON	Other than rear wiper switch ON	Off
KK WIPEK UN	Rear wiper switch ON	On
	Other than rear wiper switch INT	Off
RR WIPER IN I	Rear wiper switch INT	On
FR WIPER LOW FR WASHER SW FR WIPER INT FR WIPER STOP FR WIPER STOP FR WIPER ON FR WIPER STOP F	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
TUDN 010N141 D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI OLONIAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL AND OW	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
LU DE AM OW	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DA COINO CITI	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LIQUET CITY	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOD CW DD	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
DOOD OW AC	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
DOOR SW-RR	Rear RH door opened	On
DOOD SW DI	Rear LH door closed	Off
DOOR SW-RL	Rear LH door opened	On
DOOD OW DIX	Back door closed	Off
DOOR SW-BK	Back door opened	On
CDL LOCK CW	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
KEN ONLIK OM	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
KEY OVELIN OW	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
LIAZADD CW	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW NOTE:	Rear window defogger switch OFF	Off
At model with BOSE audio system this item is not monitored.	Rear window defogger switch ON	On
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
TIVIDI OF LIN SW	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
DKE LOCK	LOCK button of the key is not pressed	Off
RKE-LOCK	LOCK button of the key is pressed	On
DIZE LINII OCIZ	UNLOCK button of the key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the key is pressed	On
RKE-TR/BD	BACK DOOR OPEN button of the key is not pressed	Off
NNE-I N/DU	BACK DOOR OPEN button of the key is pressed	On
DICE DANIC	PANIC button of the key is not pressed	Off
RKE-PANIC	PANIC button of the key is pressed	On
DKE DWY ODEN	UNLOCK button of the key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of the key is pressed and held	On

< ECU DIAGNOSIS > [XENON TYPE]

Monitor Item	Condition	Value/Status
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
KKE-WODE CHG	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
DE FICAL SENSOR	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	On
DEO SW. AS	Passenger door request switch is not pressed	Off
REQ SW -AS	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
YE'S OVV -DD/ I K	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
- USH SVV	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
SNARL SW 2	Stop lamp switch 1 signal circuit is normal	On
DETE/CANCL SW	Selector lever in P position	Off
DETE/CANCL SW	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
DI I FIN/IN OVV	Selector lever in P or N position	On
S/I -I OCK	Steering is unlocked	Off
S/L -LOCK	Steering is locked	On
S/L -UNLOCK	Steering is locked	Off
J/L -UNLOUR	Steering is unlocked	On
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off
DIL INLLAI*F/D	Ignition switch in ON position	On
JNLK SEN -DR	Driver door is unlocked	Off
JINLN JEIN -DK	Driver door is locked	On
	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
CNIDIVA E/D	Ignition switch in OFF or ACC position	Off
IGN RLY1 -F/B	Ignition switch in ON position	On
DETE OW IDDA	Selector lever in any position other than P	Off
DETE SW -IPDM	Selector lever in P position	On

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< ECU DIAGNOSIS >

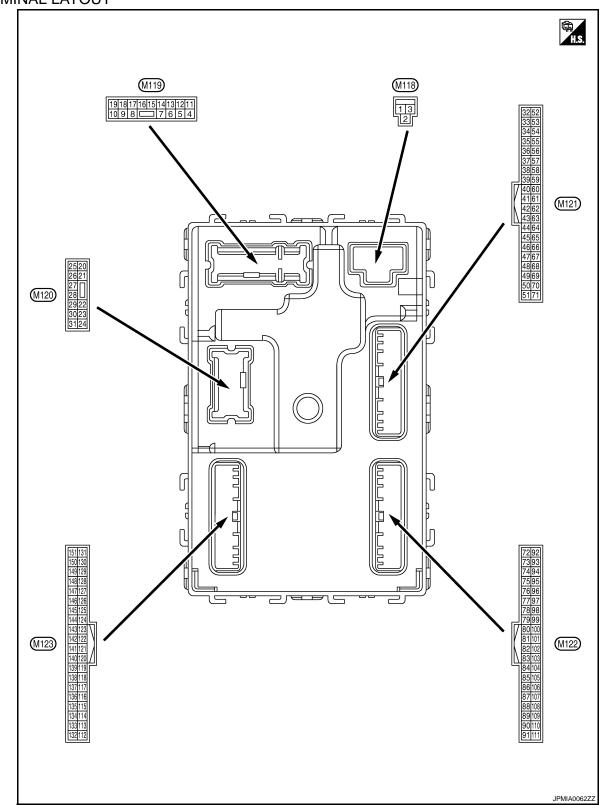
Monitor Item	Condition	Value/Status
CET DN IDDM	Selector lever in any position other than P and N	Off
SFT PN -IPDM	Selector lever in P or N position	On
OFT D. MET	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
OFT N. MET	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
C/L L CCK IDDM	Steering is unlocked	Off
S/L LOCK-IPDM	Steering is locked	On
C/L LINIL IZ IDDM	Steering is locked	Off
S/L UNLK-IPDM	Steering is unlocked	On
0/L DELAY DE0	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK.	Off
S/L RELAY-REQ	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK.	On
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK ELAC	Steering is locked	Reset
ID OK FLAG	Steering is unlocked	Set
DDMT ENG CTDT	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
1/EV 0W 01 0T	The key is not inserted into key slot	Off
KEY SW -SLOT	The key is inserted into key slot	On
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONEDITIO	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
CONFRM ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIDATE 4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done

< ECU DIAGNOSIS > [XENON TYPE]

Monitor Item	Condition	Value/Status	
CONFIDM ID2	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet	
CONFIRM ID3	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done	
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet	-
CONFINIVI IDZ	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done	-
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet	-
CONFIRM IDT	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done	
TD 4	The ID of fourth key is not registered to BCM	Yet	
The ID of fourth key is registered to BCM The ID of third key is not registered to BCM		Done	
The ID of third key is not registered to BCM		Yet	
TP 3	The ID of third key is registered to BCM	Done	
TD 0	The ID of second key is not registered to BCM	Yet	
IP 2	The ID of second key is registered to BCM	Done	
	The ID of first key is not registered to BCM	Yet	
TP 1	The ID of first key is registered to BCM	Done	
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire	
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire	
ID DECOT EL 4	ID of front LH tire transmitter is registered	Done	
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet	
ID DECOT ED4	ID of front RH tire transmitter is registered	Done	_
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet	-
ID DECOT DD4	ID of rear RH tire transmitter is registered	Done	
D REGST RR1	ID of rear RH tire transmitter is not registered	Yet	_
D DECCE DI 4	ID of rear LH tire transmitter is registered	Done	
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet	
AVA DANIALO LA AZZO	Tire pressure indicator OFF	Off	
WARNING LAMP	Tire pressure indicator ON	On	_
D1177ED	Tire pressure warning alarm is not sounding	Off	
BUZZER	Tire pressure warning alarm is sounding	On	

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TERMINAL LAYOUT



PHYSICAL VALUES

< ECU DIAGNOSIS > [XENON TYPE]

	inal No.	Description				Value				
+	e color)	Signal name	Input/ Output	Condition		(Approx.)				
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage				
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OFI	F	Battery voltage				
3 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage				
4		Interior room lamp			battery saver is activated. com lamp power supply)	0 V				
4 (P)	Ground	Interior room lamp power supply	Output	ed.	battery saver is not activat- or room lamp power supply)	Battery voltage				
5	Cround	Passenger door UN-	Outrut	December door	UNLOCK (Actuator is activated)	Battery voltage				
(G)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V				
7	Ground	Stop Jamp	Output	Stop Jamp	ON	0 V				
(W)	Ground	Step lamp	Output	Step lamp	OFF	Battery voltage				
8	8 (V) Ground All doors LOG	Ground All	All deers LOCK	All deers LOCK	aund All doors LOCK	All de ore LOCK	Output	Output All doors	LOCK (Actuator is activated)	Battery voltage
(V)		All doors Look	Output	74ii doors	Other than LOCK (Actuator is not activated)	0 V				
9	Ground	Driver door UNLOCK	Output	Output Driver door	UNLOCK (Actuator is activated)	Battery voltage				
(G)	Ground	Dilver door oncook	Output	Dilver door	Other than UNLOCK (Actuator is not activated)	0 V				
10	Ground	Rear RH door and rear LH door UN-	Output	. Rear RH door	UNLOCK (Actuator is activated)	Battery voltage				
(P)	Ground	LOCK	Output	and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V				
11 (LG)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage				
13 (B)	Ground	Ground	_	Ignition switch ON		0 V				
								OFF	0 V	
14		Push-button ignition switch illumination ground	Push-button ignition				NOTE: When the illumination brightening/dimming level is in the neutral position			
(O)	Ground		Output Tail lamp ON	ON	10 0 2 ms					
					OFF	Battery voltage				
15	Ground	ACC indicator lamp	Output	Ignition switch	ACC	0.2 V				
(L) Ground	ACC indicator lamp	Jaiput		ON	0 V					

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	inal No.	Description				Value	
(Wire	e color)	Signal name	Input/ Output		Condition	Value (Approx.)	
					Turn signal switch OFF	0 V	
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V	
					Turn signal switch OFF	0 V	
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V	
19		Room lamp timer		Interior room	OFF	Battery voltage	
(Y)	Ground	control	Output	lamp	ON	0 V	
22	Ground	Back door open		Output Back door	OPEN (Back door opener actuator is activated)	Battery voltage	
23 (BR)			Output		Other than OPEN (Back door opener actuator is not activated)	0 V	
26	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V	
(G)	Orodria	rteal wiper	Output	real wiper	ON (Operated)	Battery voltage	
34* ¹	Ground		Luggage room anten-	Qutput	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(B)			OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB		

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description				Value	
(Wire	e color) –	Signal name	Input/ Output		Condition	(Approx.)	
35* ¹		Luggage room anten-		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
(W)	Ground	na (+)	Output	ÖFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	
38* ¹ (L) Ground	Poor humper enten	Rear bumper anten-	Output Output Output Output When the back door request switch is operated with ignition switch OFF When Intelligent Mean and the control of the antenna detection of the antenna detection.	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB		
	Grouna	na (-)		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB		
39* ¹	Ground	Rear bumper anten-	Output	When the back door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
(BR)	Giouna	na (+)	switch is operated with ignition switch OFF		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	
47 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage	

< ECU DIAGNOSIS >

Terminal No. Description							
	inai ivo. e color)	Input/		Condition		Value	
+	_	Signal name	Input/ Output		- Condition	(Approx.)	
50		ound Starter relay control		Ignition switch	When selector lever is in P or N position	Battery voltage	
52 (R)	Ground		Output	ON	When selector lever is not in P or N position	0.3 V	
				Ignition switch OF	F	0 V	
61* ¹ (R)	Ground	Back door request switch	Input	Back door request switch	ON (Pressed) OFF (Not pressed)	0 V (V) 15 10 10 ms JPMIA0016GB 1.0 V	
64* ¹	Craund	Marsing burner	0454	Morning burner	Sounding	0 V	
(GR)	Ground	Warning buzzer	Output	Warning buzzer	Not sounding	Battery voltage	
65 (O)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V	
					Not in stop position	0 V	
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (When back door opens)	0 V	
					Pressed	0 V	
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB	

[XENON TYPE] < ECU DIAGNOSIS >

	ninal No.	Description				Value	
(Wir	e color)	Signal name	Input/ Output		Condition	(Approx.)	
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (When rear RH door opens)	0 V	
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (When rear LH door opens)	0 V	
72* ¹		Room antenna 2 (-)		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	
(B)	Ground	(Center console)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	

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< ECU DIAGNOSIS >

[XENON TYPE]

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	inal No. e color)	Description	Innut/		Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
73* ¹	Ground	Room antenna 2 (+)		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(W)	Glound	(Center console)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
74* ¹	Ground	Passenger door antenna (-)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(Y)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
75* ¹	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(LG)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB

< ECU DIAGNOSIS >

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
76* ¹	Ground	Driver door antenna	Outout	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(V)	Glound	(-)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
* 1	Ground Driver door antenna (+) Output When the driver door request switch is operated with ignition switch OFF				When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(P)		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB			
78* ¹	Constitution	Room antenna 1 (-)	0.45	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(R)	Ground	(Instrument panel)	Output	ÖFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s

< ECU DIAGNOSIS >

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
79* ¹	Ground	Room antenna 1 (+)	oom antenna 1 (+) strument panel) Output OFF	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(G)	Godina	(Instrument panel)		OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 1 s JMKIA0063GB
80 (SB)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (BR)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V Battery voltage
83	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting		(V) 15 0 5 0 1 ms JMKIA0064GB
(P)	Glound			When operating e	ither button on the key	(V) 15 10 5 1 ms JMKIA006SGB

[XENON TYPE] < ECU DIAGNOSIS >

Terminal (Wire co		Description	T			Value
+	– –	Signal name	Input/ Output		Condition	(Approx.)
				Front fog lamp switch OI	All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
					Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms
87 (R) G	Ground	Combination switch INPUT 5	Input	Combination switch		1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	15 10 5 0 2 ms
						JPMIA0040GB 1.3 V

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< ECU DIAGNOSIS >

Term	inal No.	Description				
	e color)	Signal name	Input/ Output		Condition	Value (Approx.)
		Combination switch INPUT 3	Input		All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB
88 (GR)	Ground			Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button ignition switch (push switch)	Pressed Not pressed	0 V Battery voltage
90 (P)	Ground	CAN - L	Input/ Output		_	_
91 (L)	Ground	CAN - H	Input/ Output		_	_

[XENON TYPE] < ECU DIAGNOSIS >

	inal No.	Description				Value
(Wire	e color) –	Signal name	Input/ Output		Condition	(Approx.)
92 (R)* ¹ (L)* ²	Ground	Key slot illumination	Output	Key slot illumina- tion	OFF	0 V (V) 15 10 1 S JPMIA0015GB
					ON	6.5 V Battery voltage
93 (L)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC ACC ON	Battery voltage 0.2 V 0 V
95 (L)	Ground	ACC relay control	Output	Ignition switch	OFF ACC or ON	0 V Battery voltage
96 (Y)	Ground	Control device (detention switch) power supply	Output		_	Battery voltage
97 (O)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status UNLOCK status	0 V Battery voltage
98 (L)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status UNLOCK status	Battery voltage 0 V
99 (V)	Ground	Selector lever P position switch	Input	Selector lever	P position Any position other than P	0 V Battery voltage
100* ¹ (P)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed) OFF (Not pressed) ON (Pressed)	0 V (V) 15 10 10 10 ms JPMIA0016GB 1.0 V 0 V
101* ¹ (W)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
102 (Y)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF or ACC	0 V Battery voltage
103 (L)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OF	F	Battery voltage

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< ECU DIAGNOSIS >

	inal No.	Description				Value
+ (VVir	e color)	Signal name	Input/ Output		Condition	(Approx.)
106	Cround	Steering lock unit	Outrout	lanition quitab	OFF or ACC	Battery voltage
(Y)	Ground	power supply	Output	Ignition switch	ON	0 V
		Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Turn signal switch LH	(V) 15 10 2 ms JPMIA0037GB
107 (O)	Ground				Turn signal switch RH	(V) 15 10 2 ms JPMIA0036GB
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB

< ECU DIAGNOSIS > [XENON TYPE]

Terminal No. (Wire color) Description		O and distant		Value		
+ –	Signal name	Input/ Output		Condition	(Approx.)	1
				All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	
				Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	
108 (P) Ground	Combination switch INPUT 4	Input	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	
				Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0040GB	E
				Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	

< ECU DIAGNOSIS >

	inal No. e color)	Description	ı			Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB
					Front wiper switch INT/ AUTO	(V) 15 10 5 0 2 ms JPMIA0038GB
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V

< ECU DIAGNOSIS > [XENON TYPE]

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	inal No.	Description				Valua	Α
+ (Wire	e color)	Signal name	Input/ Output		Condition	Value (Approx.)	А
					LOCK status	Battery voltage	В
111	Ground	Steering lock unit	ring lock unit Input/		LOCK or UNLOCK	(V) 15 10 5 0	С
(LG)	Ordana	communication	Output	Steering lock		JMKIA0066GB	D
					For 15 seconds after UN- LOCK	Battery voltage	Е
					15 seconds or later after UNLOCK	0 V	F
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0	G
						JPMIA0156GB 8.7 V	Н
113*3	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V	I
(O)	Oround	Optical serisor	при	ON	When dark outside of the vehicle	Close to 0 V	J
116 (GR)	Ground	Stop lamp switch 1	Input		_	Battery voltage	J
118	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V	K
(L)					ON (Brake pedal is depressed)	Battery voltage	EX
119* ¹ (W)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sensor switch OFF)	15 10 5 0	M
		(0.11001.001.001.)				JPMIA0012GB 1.1 V	Ν
					UNLOCK status (unlock sensor switch ON)	0 V	0
121 (Y)	Ground	Key slot switch	Input	-	nserted into key slot	Battery voltage	
				When the key is n	ot inserted into key slot	0 V	Р
122 (R)	Ground	ACC feedback	Input	Ignition switch	OFF ACC or ON	0 V Battery voltage	
-					OFF or ACC	0 V	
123 (G)	Ground	IGN feedback	Input	Ignition switch	ON	Battery voltage	

< ECU DIAGNOSIS >

	inal No.	Description				Value
+ (vvire	e color) –	Signal name	Input/ Output		Condition	(Approx.)
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When passenger door opens)	0 V
130* ⁴ (BR)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 10 5 0 10 ms JPMIA0012GB
					Rear window defogger switch ON	0 V
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0013GB
				Ignition switch OFI	F or ACC	Battery voltage
					ON (When tail lamps OFF)	9.5 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level. (V) 15 10 5 UPMIA0159GB
					OFF	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(V)		power supply	'		ACC or ON	5.0 V

< ECU DIAGNOSIS >

	inal No.	Description			Condition Value (Approx.)		
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	
139* ⁵		Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 + 0.2s	
(O)	Ground	er communication	Output	ŎN	When receiving the signal from the transmitter	(V) 6 4 2 0 	
140		Selector lever P/N			P or N position	Battery voltage	(
(GR)	Ground	position	Input	Selector lever	Except P and N positions	0 V	
					ON	0 V	
141 (O)	Ground	Security indicator	Output	Security indicator	Blinking	(V) 15 10 5 0 1 1 s JPMIA0014GB	
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	OFF All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	Battery voltage 0 V (V) 15 10 2 ms JPMIA0031GB	
143 (W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4) Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 3 Wiper intermittent dial 6 Wiper intermittent dial 7	0 V (V) 15 10 2 ms JPMIA0032GB 10.7 V	

< ECU DIAGNOSIS >

	inal No. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4) Front washer switch ON	0 V
					(Wiper intermittent dial 4) Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15
144 (P)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Rear washer switch ON (Wiper intermittent dial 4)	10 5 0
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	2 ms JPMIA0033GB
					All switches OFF	0 V
					Front wiper switch INT/ AUTO	(V)
145 (V)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	Front wiper switch LO	15 10 5 0
				,	Lighting switch AUTO	2 ms JPMIA0034GB
					All switches OFF	0 V
					Front fog lamp switch ON	• • • • • • • • • • • • • • • • • • • •
					Lighting switch 2ND	(V) 15
146 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit-	Lighting switch PASS	10
(')				tent dial 4)	Turn signal switch LH	2 ms
						10.7 V
149* ⁵ (W)	Ground	Tire pressure warning check switch	Input	Ignition switch ON	ı	(V) 15 10 5 0 10 ms JPMIA0011GB
						11.8 V
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	(V) 15 10 5 0 10 ms 10 ms JPMIA0011GB
					ON (When driver door opens)	0 V

< ECU DIAGNOSIS > [XENON TYPE]

	inal No.	Description				Value
(Wire	e color)	Signal name Input/			Condition	(Approx.)
151	Ground	Rear window defog-	'	Rear window de-	Active	0 V
(G)	Ground	round Output .	fogger	Not activated	Battery voltage	

NOTE:

- *1: With Intelligent Key system
- *2: Without Intelligent Key system
- *3: With auto light system
- *4: Without BOSE audio system
- *5: With TPMS

Wiring Diagram - BCM -

UP TO VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO),

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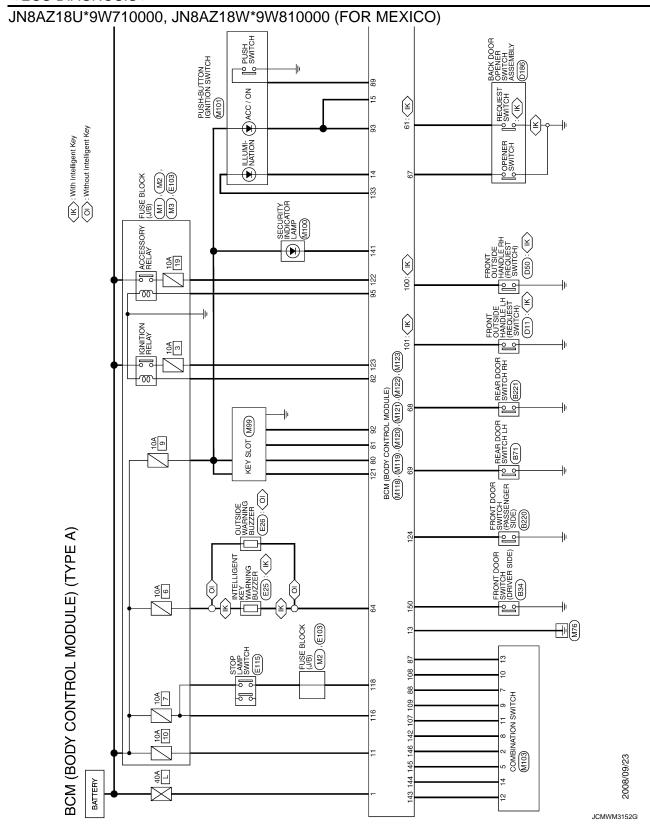
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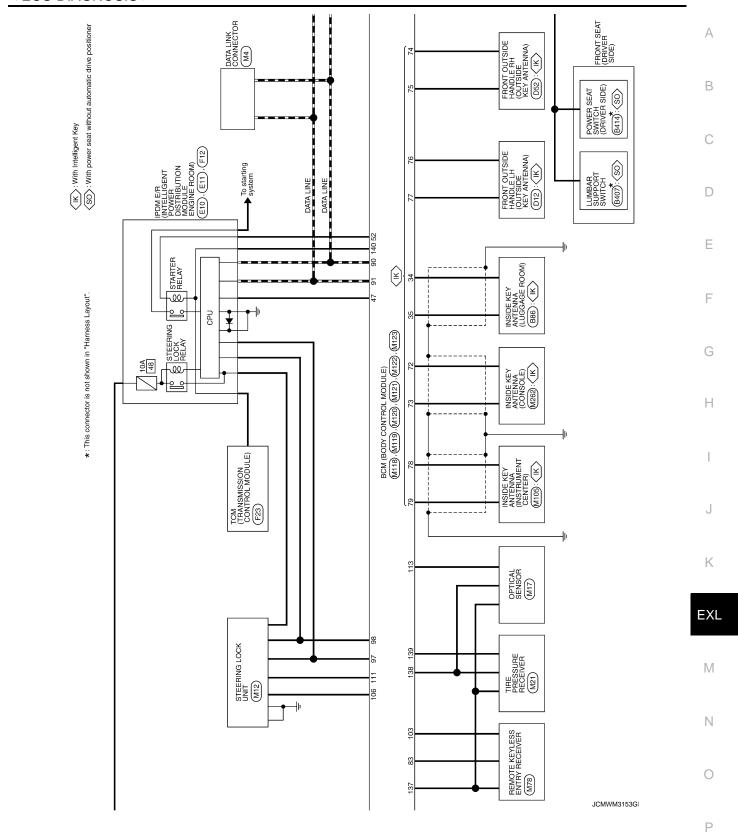
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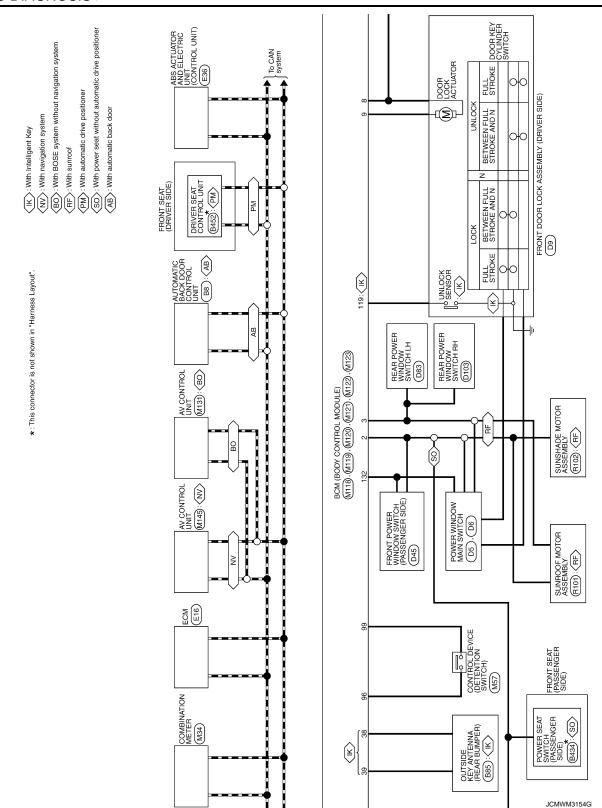
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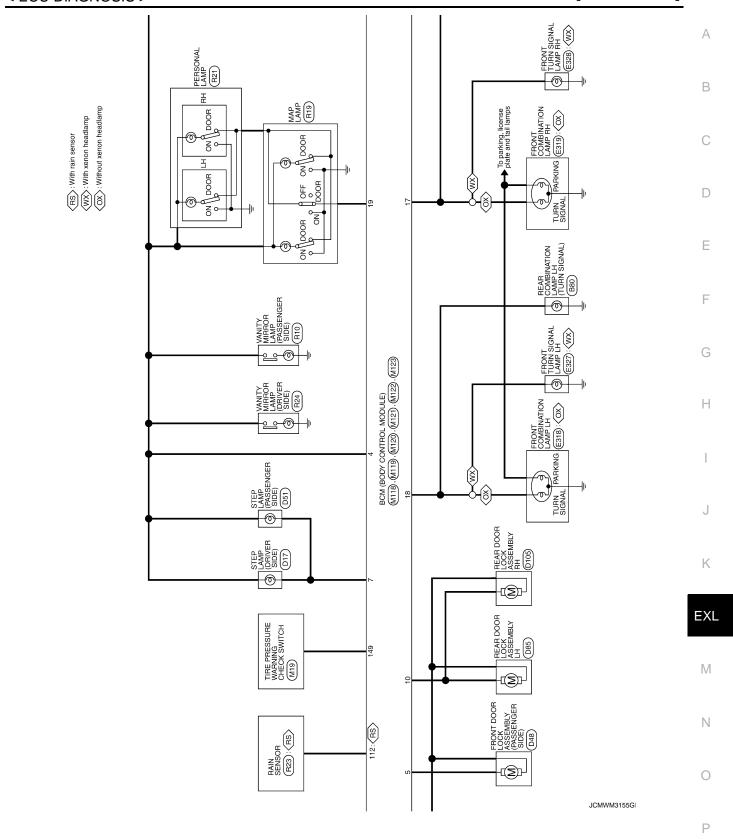
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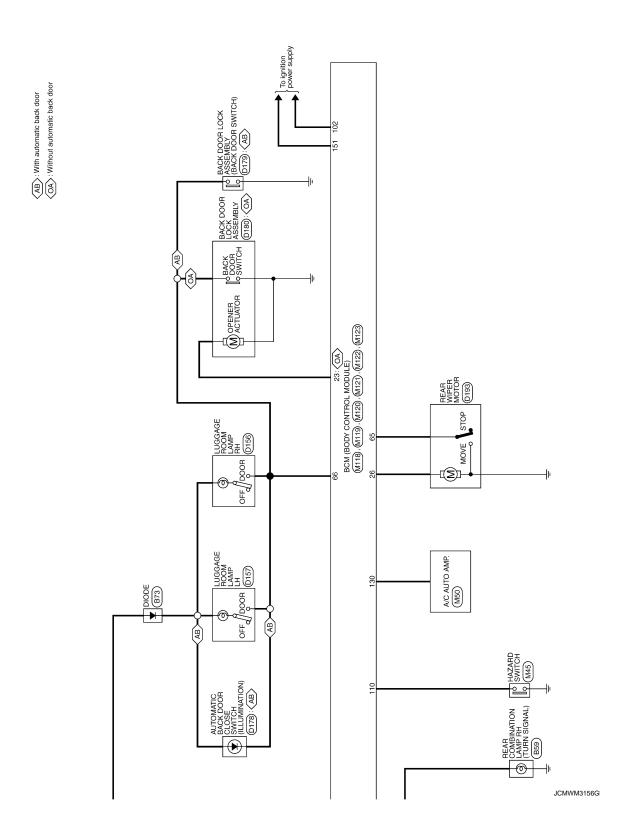
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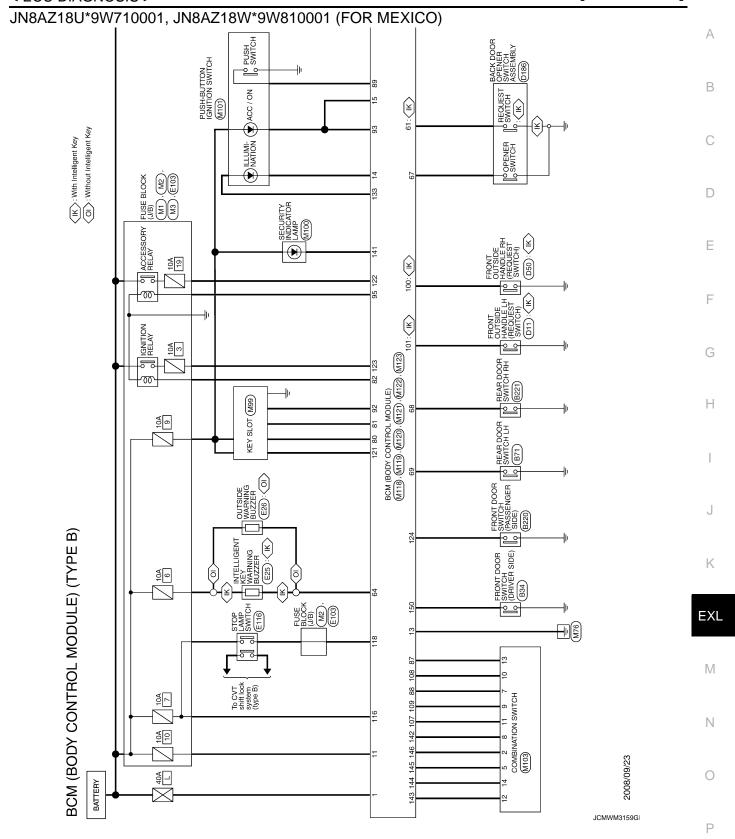
TURN SIGNAL LH ROOM LAMP TIMER CONTROL					АВ
<u>₩</u> >					С
		Ш			D
(obuLE)	feation] OWER SUPPLY OOK OUTPUT THUT NLOCK OUTPUT NLOCK OUTPUT OUTPUT OUTPUT OUTPUT NEW ILL GND	3 SW 3 SW			Е
MI19 BGM (BODY CONTROL MODULE) NS16FW-GS 5 6 7 6 9 10 12 13 14 15 16 17 18 19	Signal Name [Specification] INTERIOR ROOM LAMP POWER SUPPLY PASSENGER BOOR UNLOCK OUTPUT ALL BOOR FUEL LID LICK OUTPUT DRIVER DOOR FUEL LID LINGOKO OUTPUT REAR DOOR FUEL LID MILOCK OUTPUT REAR DOOR UNICOK OUTPUT BAT (FUSE) GND PUSH-BUTTON IGNITION SW I.L GND ACC IND ACC IND TURN SIGNAL RH	REAR LH DOOR SW REAR LH DOOR SW			F
r No. r Type	Color of Wire P V V V C C C C C C C C C C C C C C C C	≥ α			G
Connect Connect	Terminal No. No. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	99 09			Н
MITIB BCM (BODY CONTROL MODULE) M03FB-LC 13	Signal Name [Specification] POWER WINDOW POWER SUPPLY (BAT) POWER WINDOW POWER SUPPLY (RAP)	MI21 TH40FGY-NH TH40FGY-NH TH66FGH 61/26 41 40 30 30 57 66 56 50 30 20 57 66 56 50 50 50 50 50 50 50 50 50 50 50 50 50	Signal Name [Specification] LUGGAGE ROOM ANTT- LUGGAGE ROOM ANTT- LUGGAGE ROOM ANTT- REAR BUMPER ANT- REAR BUMPER ANT- IGN RELAY POW E.R. CONT STATTER RELAY CONT STATTER RELAY CONT BACK DOOR OPENER SUBJESTER RECUEST SW BUZZER RECH STOP POSITION BACK DOOR SW BACK DOOR SW BACK DOOR SW		I
MI18 BEM (BODY CONT M03FB-LC	Signal h POWER WINDC POWER WINDC	or No. M121 Or Type BCM (BODY CON Type TH40FGV-NH G150 let let 151 let	Signal h LUGG, LUGG, REAI REAI IGN REL STAR BACK DOOF REQ WITHER BACK BOOF REAI REAI WITHER BACK I		J
(TYPE A) Connector No. M Connector Type M LS.	Terminal Color No. of Wire 1 W 2 GR 3 L	Cornector No. M Connector Name BR Cornector Type Tr Signature BR Signa	Terminal Color No. Color N		K
			2 5		EXL
ICH MODU	Signal Name [Specification] OUTPUT 4 OUTPUT 3 OUTPUT 3 OUTPUT 5 INPUT 4 INPUT 1 INPUT 1 INPUT 1 INPUT 1 INPUT 2 INPUT 1 INPUT 2 INPUT 2 INPUT 1	(OL MODULE)	Signal Name [Specification] BACK DOOR OPEN OUTPUT REAR WIPER OUTPUT		M
MIUGA CONTROL MIUGA COMBINATION SWITCH THISEW-NH TI 2 3 4 4 7 8 9 10 11 12 12 7 8 9 10 11 12 12 12 12 12 13 12 13 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Signal Nam	MI20 BGM (BODY CONTROL MODULE) NSIZPW-GS 20 21 22 23 24 25 26 27 28 29 30 31	Signal Nam BACK DOOI REAR W		N
	O O O O D D S B C O O O D D D D D D D D D D D D D D D D		Color of Wire BR G		IN
BCM (BO Connector No. Connector Name Connector Type	Terminal No. o. o	Connector No. Connector Type	Terminal No. 23 23 26 26		0
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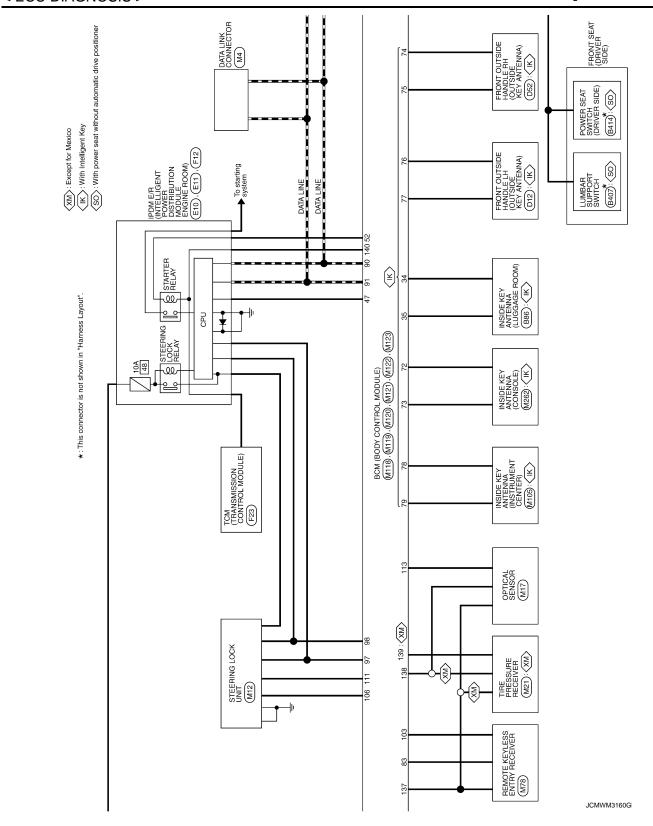
EXL-129 Revision: 2008 October 2009 Murano

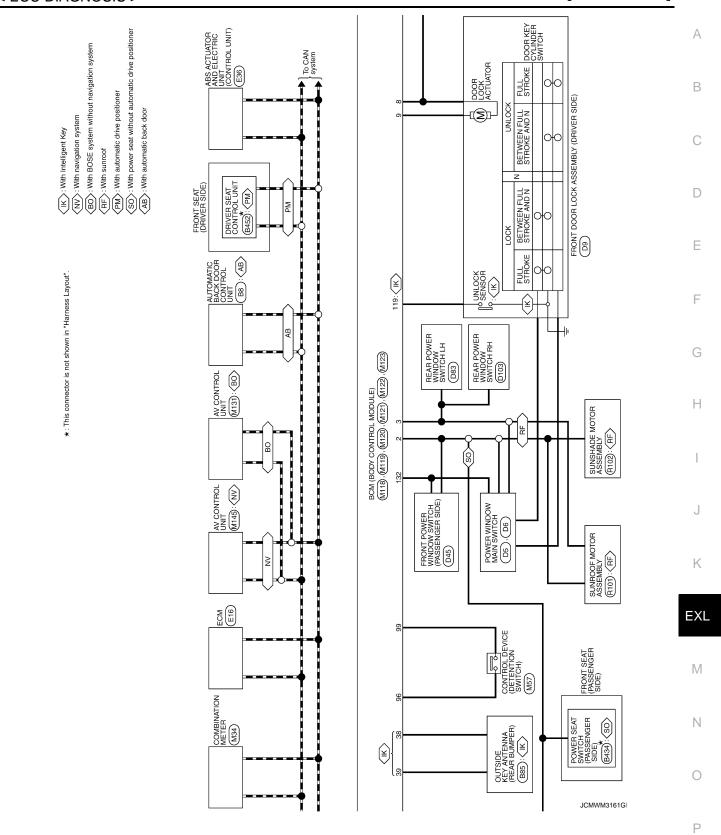
•	-								
nector No. M122	83	۵	KEYLESS ENTRY RECEIVER SIGNAL	Connector		123	133	м	PUSH-BUTTON IGNITION SW ILL POWER
	87	ď	COMBI SW INPUT 5			CA (BODY CONTROL MODILE)	137	Ь	RECEIVER/SENSOR GND
	88	GR	COMBI SW INPUT 3	Collifector		OM (BOD I CONTROL MODOLE)	138	٨	RECEIVER/SENSOR POWER SUPPLY
nector Type TH40FB-NH	68	BR	PUSH SW	Connector		H40FG-NH	139	0	TIRE PRESS RECEIVER SIGNAL
	06	۵	CAN-L	4			140	GR	SHIFT N/P
	91	_	CAN-H	F			141	0	SECURITY INDICATOR OUTPUT
	95	œ	KEY SLOT ILL[With Intelligent Key]	\ \frac{1}{2}			142	٦	COMBI SW OUTPUT 5
	95	_	KEY SLOT ILL[Without Intelligent Key]			<u> </u>	143	۸	COMBI SW OUTPUT 1
90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72	93	_	ON IND	13	130 129 128 12	126 125 125 123 122 121 120 119 118 117 116 115 114 113 112	144	۵	COMBI SW OUTPUT 2
1110 108 108 109 109 103 105 105 105 105 105 105 105 105 105 105 105 105 105	92	_	ACC RELAY CONT	2	1 150 149 148 14	146 [145 [144 [143 [142 [141 [140 [139 [138 [137 [136 [135 [134 [133 [132]	145	>	COMBI SW OUTPUT 3
	96	>-	A/T DEVICE POWER SUPPLY				146	>	COMBI SW OUTPUT 4
	97	0	S/L CONDITION 1				149	*	TIRE PRESS WARNING CHECK SW
Color	86	_	S/L CONDITION 2	Terminal	Color	9	120	SB	DRIVER DOOR SW
of Wire Signal Name Specification	66	>	SHIFT P	Š	of Wire	olgnai Name [opecinication]	151	5	REAR WINDOW DEFOGGER RELAY
B ROOM ANT2-	100	Ь	PASSENGER DOOR REQUEST SW	112	œ	RAIN SENSOR SERIAL LINK			
W ROOM ANT2+	101	>	DRIVER DOOR REQUEST SW	113	0	OPTICAL SENSOR			
Y PASSENGER DOOR ANT-	102	>	BLOWER FAN MOTOR RELAY CONT	116	GR	FUSE CHECK			
LG PASSENGER DOOR ANT+	103	7	KEYLESS ENTRY RECEIVER POWER SUPPLY	118	7	STOP LAMP SW			
V DRIVER DOOR ANT-	106	Υ	S/L POWER SUPPLY	119	W	DR DOOR UNLOCK SENSOR			
P DRIVER DOOR ANT+	107	0	COMBI SW INPUT 1	121	٨	KEY SLOT SW			
R ROOM ANT1-	108	Ь	COMBI SW INPUT 4	122	ď	ACC F/B			
G ROOM ANT1+	109	SB	COMBI SW INPUT 2	123	g	IGN F/B			
SB IMMOBI ANTENNA CONTROL	110	9	HAZARD SW	124	Я	PASSENGER DOOR SW			
O IMMOBI ANTENNA SIGNAL	111	57	S/L COMM	130	BR	REAR DEFOGGER SW			
BR IGN RELAY (F/B) CONT				132	9	POWER WINDOW SW COMM			
	M122	1	88 88 88 88 88 88 88 88 88 88 88 88 88	88 88 88 88 88 88 88 88 88 88 88 88 88	83 P KEYLESS ENTRY RECEIVER SIGNAL Connection 88 GR	MIT22 BCM (BODY CONTROL MODULE) 83 P KEYLESS ENTTRY RECEIVER SIGNAL BCMM (BODY CONTROL MODULE) 89 BR COMBIS SIN INPUT 3 Connecton BCM (BODY CONTROL MODULE) 89 BR COMBIS SIN INPUT 3 Connecton BCM (BODY CONTROL MODULE) BCM (BCM (BCM (BCM (BCM (BCM (BCM (BCM	Signature Commentor Name Commentor Name Commentor Name Committee Commentor Name Committee Commentor Name Co	MIN MIN	133 134 135 137 138 138 139

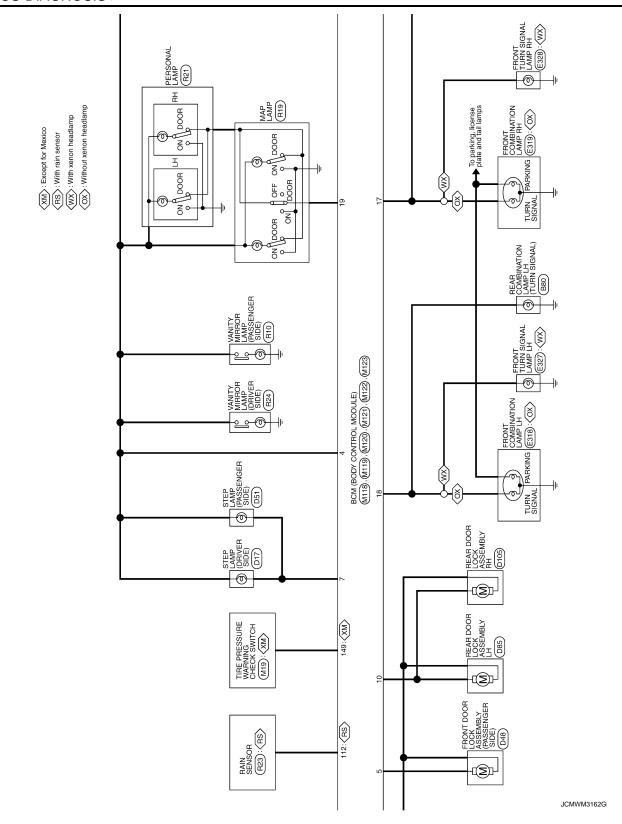
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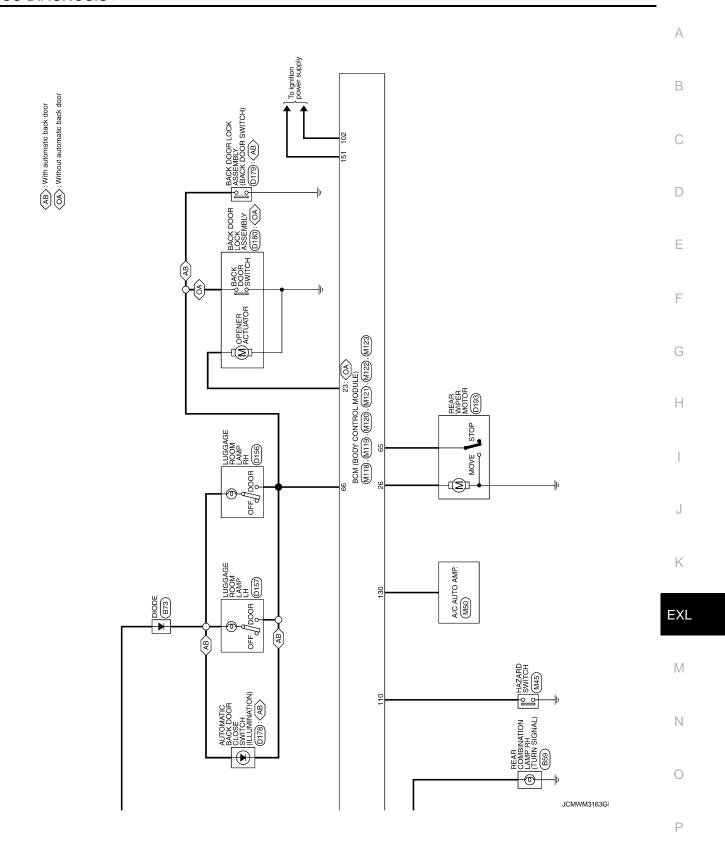
FROM VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO),











BCM (BODY CONTROL MODULE) (TY Connector No. Milis	(TYPE B)	Connector No. M119	18 BB TIRN SIGNAL H
9 9	me me	Connector Name BCM (BODY CONTROL MODULE) Connector Type NS16FW-CS	Y ROOM
1 2 3 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1] 4 =	
Signal Na	Terminal Color Signal Name [Shee/fication] No. of Wire Signal Name [Shee/fication] W BAT (F/L) 2 GR POWER WINDOW POWER SUPPLY (BAT) 3 L POWER WINDOW POWER SUPPLY (RAP)	Terminal Color Signal Name [Specification] A P INTERIOR ROOM LAMP POWER SUPPLY S G PASSENDER DOOR UNLOOK OUTPUT S W ALL DOOR FUEL LID LOOK OUTPUT S V ALL DOOR FUEL LID LOOK OUTPUT S C ALL DOOR FUEL LID LOOK OUTPUT S G DRIVER ROOMS, TUEL LID NILLOOK OUTPUT S G DRIVER ROOMS, TUEL LID NILLOOK OUTPUT S DRIVER ROOMS, TUEL LID	
10 P INPUT 4		10 P REAR DOOR UNLOCK OUTPUT 11 LG BAT (FUSE) 13 B BAT (FUSE) 14 O PUSH-BUTTON IGATION SWILL GND 15 L ACC IND ACC	
Connector No. M120 Connector Name BOM (BODY CONTROL MODULE) Connector Type NS12PW-CS	Connector No. M121 Connector Name BCM (BODY CONTROL MODULE) Connector Type TH40FGY-NH	68 W REAR PH DOOR SW 69 R REAR LH DOOR SW	
H.S. 20121	14.5. 15 to leg to 15 to 16		
Terminal Color Signal Name [Specification] No. of Wire 29 BACK DOOD OBEN OF TELLY	Terminal Color Signal Name [Specification] No. of Wire 24 11/100AGE DOOM ANT1-		
Н	2 × → Q		
	2 - R		
	R BACK		
	0 >		
	67 LG BACK DOOR OPENER SW		

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< ECU DIAGNOSIS >	XENON TYPE]
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Commendary Name BOAM (BOOY CONTROL MODULE) 89 CR COMBIS SWI MEUT 15 Commendator Type THARFG-NH THARFG-NH THARFG-NH THARFG-NH THARFG-N
The color The
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The property of the property
Signal Name Specification Name
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Signal Name Specification 99 V SHIFT P No of Wire Signal Name Specification 151 G
B ROOM ANT2- 100 P PASSENGER DOOR REQUEST SW 112 R RAIN SENSOR SERIAL LINK 101 W DRIVER BOOR REQUEST SW 113 O OPTICAL SENSOR SENSOR 113 O OPTICAL SENSOR SENSOR 114 C OPTICAL SENSOR 115 OPTICAL SENSOR
W PASSENGER DOOR ANT2+ 101 W DRIVER DOOR REQUEST SW 113 0
Y PASSENGER DOOR ANT- 102 Y BLOWER FAM MOTOR RELAY CONT 116 GR CR LG PASSENGER DOOR ANT- 103 L KEYLESS BHITRE RECHER SUIPERTY 118 L L V DRIVER DOOR ANT- 106 Y S.L. POWER SUIPERTY 119 W P DRIVER DOOR ANT- 109 DRIVER DOOR ANT- 109 SB COMBIS SWI INPUT 4 122 R G RAMOBI ANTIENNA CONTROL 110 G RAZARDS SW 124 R O IMMOBI ANTIENNA CONTROL 111 LG S.L. COMM
LG PASSENGER DOOR ANT+ 103 L KFYLESS BRITKY RECEIVER POWER SUPPLY 118 L L V DRIVER DOOR ANT+ 107 C COMBIS WINPUT 1 121 Y Y R POMMATI- 107 O COMBIS WINPUT 1 121 Y R G FROOM ANTTI- 108 P COMBIS WINPUT 2 122 R R G FROOM ANTTI- 110 SB COMBIS WINPUT 2 122 R R G FROOM ANTTI- 110 SB COMBIS WINPUT 2 122 R R G FROOM ANTTI- 110 SB COMBIS WINPUT 2 122 R G D O IMMOBIL ANTERINA CONTROL 110 L K-LOOMM 122 R R G
V DRIVER DOOR ANT- DRIVER DOOR ANT- SB 106 Y S.f. POWER SUPPLY 119 W R P DRIVER DOOR ANT- TOR 107 O COMBIS WINPUT 1 122 R R ROOM ANTI- TOR 109 SB COMBIS SW INPUT 2 122 R S ROOM ANTI- TOR 110 SB COMBIS SW INPUT 2 123 G D N N N N T R R D N N N N N R R R D N N N N N N R R R
P DRIVER DOOR ANT+ 107 O COMBIS SW INPUT 122 Y R ROOM ANT1+ 108 SB COMBIS SW INPUT 122 R G ROOM ANT1+ 108 SB COMBIS SW INPUT 122 R SB IMMOBI ANTIFINAL CONTROL 110 G HAZARD SW 124 R O IMMOBI ANTIFINAL SIGNAL 111 LG S\true COMM
R ROOM ANTI- 108 P COMBI SW INVIT4 122 R G FROOM ANTI- 109 SB COMBI SW INPUT 2 123 G SB IMMOBILANTENNA CONTROL 110 G HAZARDS SW 134 R O IMMOBILANTENNA SIGNAL 111 LG S/L COMM 130 BR
G RODAD ANTIH 109 SB COMBISWINDUT 123 G SB IMMOBILANTENNA CONTROL 110 G HAZARDSW 124 R O IMMOBILANTENNA SIGNAL 111 LG S.L.COMM 130 BR
SB IMMOBI ANTENNA CONTROL 110 G HAZARD SW 124 R 0 IMMOBI ANTENNA SIGNAL 111 LG S/L COMM 130 BR
O IMMOBI ANTENNA SIGNAL 111 LG S/L COMM 130 BR
DD 10N DELAY (E/D) CONIT
IGN RELAY (F/B) CON
BR IGN RELAY (F/B) CONI
U IMMUBI ANI ENNA SIGNAL III EG S/L COMM ISO BR
10N DEL AV (E/B) CONT

Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

EXL-137 Revision: 2008 October 2009 Murano

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Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (battery voltage) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

[XENON TYPE] < ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B2609: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When any of the following conditions are fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled • Steering condition No. 1 signal: LOCK (0V) • Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

The blinking speed is normal while activating the hazard warning lamp.

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:

If rain sensor malfunction is detected when ignition switch is turned OFF \Rightarrow ON and front wiper switch is INT/ AUTO position, BCM operates a fail-safe control.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

More than 1 minute is passed after the rear wiper stop.

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< ECU DIAGNOSIS > [XENON TYPE]

- Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING
4	 B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2553: IGNITION RELAY B2555: STOP LAMP B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2605: PNP SW B2606: S/L RELAY B2606: S/L RELAY B2607: S/L RELAY B2609: S/L STATUS B2609: S/L STATUS B2600: STEERING LOCK UNIT B2600: STEERING LOCK UNIT B2600: STEERING LOCK UNIT B2601: SNEERING LOCK UNIT B2602: SNESTATUS B2612: S/L STATUS B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2619: BCM B2614: PUSH-BTN IGN SW B2615: VEHICLE TYPE B2661: VEHICLE TYPE B2662: VEHICLE TYPE B2663: KEY REGISTRATION C 1729: VHCL SPEED SIG ERR III0415: VEHICLE SPEED SIG ERR III0415: VEHICLE SPEED SIG
4	 B2604: PNP SW B2605: PNP SW B2606: S/L RELAY B2607: S/L RELAY B2608: STARTER RELAY B2609: S/L STATUS B2608: IGNITION RELAY B260B: STEERING LOCK UNIT B260C: STEERING LOCK UNIT B260D: STEERING LOCK UNIT B260F: ENG STATE SIG LOST B2612: S/L STATUS B2612: S/L STATUS B2615: BLOWER RELAY CIRC B2615: BLOWER RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2619: BCM B2619: BCM B2614: VEHICLE TYPE B2659: S/L STATUS B2668: KEY REGISTRATION

< ECU DIAGNOSIS > [XENON TYPE]

Priority	DTC	_
	C1704: LOW PRESSURE FL	- A
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR	
	C1707: LOW PRESSURE RL	В
	C1708: [NO DATA] FL	
	C1709: [NO DATA] FR	
	C1710: [NO DATA] RR	
	C1711: [NO DATA] RL	С
	C1712: [CHECKSUM ERR] FL	
	C1713: [CHECKSUM ERR] FR	
	C1714: [CHECKSUM ERR] RR	
	C1715: [CHECKSUM ERR] RL	D
5	C1716: [PRESSDATA ERR] FL	
	C1717: [PRESSDATA ERR] FR	
	C1718: [PRESSDATA ERR] RR	Е
	C1719: [PRESSDATA ERR] RL	
	C1720: [CODE ERR] FL	
	C1721: [CODE ERR] FR	
	C1722: [CODE ERR] RR	F
	C1723: [CODE ERR] RL	1
	C1724: [BATT VOLT LOW] FL	
	C1725: [BATT VOLT LOW] FR	
	C1726: [BATT VOLT LOW] RR	G
	C1727: [BATT VOLT LOW] RL	
	C1734: CONTROL UNIT	
	B2621: INSIDE ANTENNA	Н
6	B2622: INSIDE ANTENNA	
	B2623: INSIDE ANTENNA	

DTC Index

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>EXL-23</u>, "<u>COM-MON ITEM</u>: CONSULT-III Function (<u>BCM - COMMON ITEM</u>)".

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	_	BCS-40
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-41
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-42
B2013: ID DISCORD BCM-S/L	×	×	_	_	SEC-55
B2014: CHAIN OF S/L-BCM	×	×	_	_	SEC-56
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-47
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-50
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-51
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-53
B2195: ANTI SCANNING	×	_	_	_	<u>SEC-54</u>
B2553: IGNITION RELAY	_	×	_	_	PCS-49

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CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2555: STOP LAMP	_	×	_	_	SEC-59
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-61
B2557: VEHICLE SPEED	×	×	×	_	SEC-63
B2560: STARTER CONT RELAY	×	×	×		SEC-64
B2562: LOW VOLTAGE	_	×	_	_	BCS-43
B2601: SHIFT POSITION	×	×	×	_	SEC-65
B2602: SHIFT POSITION	×	×	×	_	SEC-68
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-70
B2604: PNP SW	×	×	×	_	SEC-73
B2605: PNP SW	×	×	×	_	SEC-75
B2606: S/L RELAY	×	×	×	_	SEC-77
B2607: S/L RELAY	×	×	×	_	SEC-78
B2608: STARTER RELAY	×	×	×	_	SEC-80
B2609: S/L STATUS	×	×	×	_	SEC-82
B260A: IGNITION RELAY	×	×	×	_	PCS-51
B260B: STEERING LOCK UNIT	_	×	×	_	SEC-86
B260C: STEERING LOCK UNIT	_	×	×	_	SEC-87
B260D: STEERING LOCK UNIT	_	×	×	_	SEC-88
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-89</u>
B2612: S/L STATUS	×	×	×	_	<u>SEC-92</u>
B2614: ACC RELAY CIRC	_	×	×	_	PCS-53
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-56
B2616: IGN RELAY CIRC	_	×	×	_	PCS-59
B2617: STARTER RELAY CIRC	×	×	×	_	<u>SEC-96</u>
B2618: BCM	×	×	×	_	PCS-62
B2619: BCM	×	×	×	_	SEC-98
B261A: PUSH-BTN IGN SW	_	×	×	_	SEC-99
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-102
B2621: INSIDE ANTENNA	_	×	_	_	<u>DLK-95</u>
B2622: INSIDE ANTENNA	_	×	_	_	DLK-97
B2623: INSIDE ANTENNA	_	×	_	_	DLK-99
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-90</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-91
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	\A/T 46
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-16</u>
C1707: LOW PRESSURE RL	_	_	_	×	

< ECU DIAGNOSIS > [XENON TYPE]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	
C1708: [NO DATA] FL	_	_	_	×		
C1709: [NO DATA] FR	_	_	_	×	WT 10	
C1710: [NO DATA] RR	_	_	_	×	<u>WT-18</u>	
C1711: [NO DATA] RL	_	_	_	×		
C1712: [CHECKSUM ERR] FL	_	_	_	×		
C1713: [CHECKSUM ERR] FR	_	_	_	×	WT 04	
C1714: [CHECKSUM ERR] RR	_	_	_	×	<u>WT-21</u>	
C1715: [CHECKSUM ERR] RL	_	_	_	×	ı	
C1716: [PRESSDATA ERR] FL	_	_	_	×		
C1717: [PRESSDATA ERR] FR	_	_	_	×	WT 04	
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>WT-24</u>	
C1719: [PRESSDATA ERR] RL	_	_	_	×		
C1720: [CODE ERR] FL	_	_	_	×		
C1721: [CODE ERR] FR	_	_	_	×	W/T OC	
C1722: [CODE ERR] RR	_	_	_	×	<u>WT-26</u>	
C1723: [CODE ERR] RL	_	_	_	×		
C1724: [BATT VOLT LOW] FL	_	_	_	×		
C1725: [BATT VOLT LOW] FR	_	_	_	×	W/T 20	
C1726: [BATT VOLT LOW] RR	_	_	_	×	<u>WT-29</u>	
C1727: [BATT VOLT LOW] RL	_	_	_	×		
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-32</u>	
C1734: CONTROL UNIT	_	_	_	×	WT-33	

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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) < ECU DIAGNOSIS > [XENON TYPE]

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

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item		Value/Status			
MOTOR FAN REQ	TOR FAN REQ Engine idle speed Changes de coolant temp operation st etc.		1/2/3/4		
		A/C switch OFF	Off		
AC COMP REQ	Engine running	A/C switch ON (Compressor is operating)	On		
TAIL OOLD DEO	Lighting switch OFF	Lighting switch OFF			
TAIL&CLR REQ	Lighting switch 1ST, 2ND, HI or	Lighting switch 1ST, 2ND, HI or AUTO (Light is illuminated)			
UI 10 BEO	Lighting switch OFF		Off		
HL LO REQ	Lighting switch 2ND HI or AUTO	On			
DEO	Lighting switch OFF		Off		
HL HI REQ	Lighting switch HI	Lighting switch HI			
FR FOG REQ		Front fog lamp switch OFF	Off		
	Lighting switch 2ND or AUTO (Light is illuminated)	Front fog lamp switch ONDaytime running light activated (Only for Canada)	On		
FR WIP REQ		Front wiper switch OFF	Stop		
	1	Front wiper switch INT			
	Ignition switch ON	Front wiper switch LO	Low		
		Front wiper switch HI	Hi		
WIP AUTO STOP	Ignition switch ON	Front wiper stop position	STOP P		
		Any position other than front wiper stop position	ACT P		
WIP PROT		Front wiper operates normally	Off		
	Ignition switch ON	Front wiper stops at fail-safe operation	BLOCK		
Ignition switch OFF or ACC			Off		
IGN RLY1 -REQ	Ignition switch ON	Ignition switch ON			
IGN RLY	Ignition switch OFF or ACC	Off			
	Ignition switch ON	On			
DI ICH CW	Release the push-button ignition	n switch	Off		
PUSH SW	Press the push-button ignition s	On			
INTER/NP SW	Ignition switch ON	Selector lever in any position other than P or N	Off		
		Selector lever in P or N position	On		
CT DLV CONT	Ignition switch ON	Off			
ST RLY CONT At engine cranking			On		
IUDT DLV DEO	Ignition switch ON	Off			
IHBT RLY -REQ	At engine cranking	On			

< ECU DIAGNOSIS > [XENON TYPE]

Monitor Item		Value/Status	
	Ignition switch ON	Off	
	At engine cranking		INHI ON \rightarrow ST ON
ST/INHI RLY		arter control relay cannot be recognized by a, etc. when the starter relay is ON and the	UNKWN
DETENT SW	Ignition switch ON	Press the selector button with selector lever in P position Selector lever in any position other than P	Off
	Release the selector button wi	th selector lever in P position	On
	None of the conditions below a	are present	Off
S/L RLY -REQ	Open the driver door after the seconds) Press the push-button ignition ed	On	
	Steering lock is activated		LOCK
S/L STATE	Steering lock is deactivated		UNLOCK
	[DTC: B210A] is detected	UNKWN	
DTRL REQ	NOTE: The item is indicated, but not r	Off	
OIL P SW	Ignition switch OFF, ACC or er	Open	
OIL P SVV	Ignition switch ON		Close
HOOD SW	NOTE: The item is indicated, but not r	Off	
HL WASHER REQ	NOTE: The item is indicated, but not r	nonitored.	Off
	Not operating	Off	
THFT HRN REQ	Panic alarm is activated Horn is activated with VEHIC TEM	On	
	Not operating	Off	
HORN CHIRP	Door locking with IntelligentDoor locking with key fob (h	On	
CRNRNG LMP REQ	NOTE: The item is indicated, but not r	Off	

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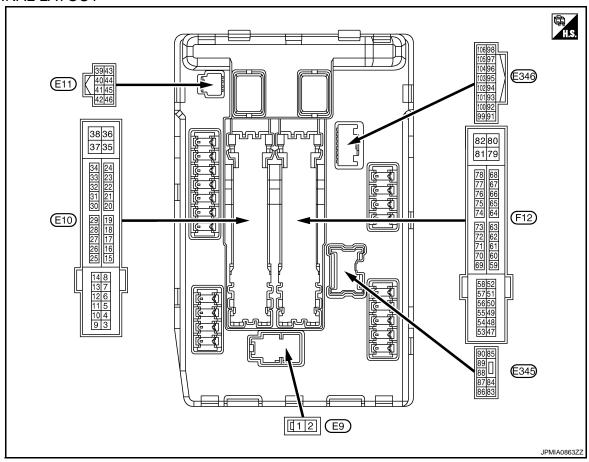
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< ECU DIAGNOSIS > [XENON TYPE]

TERMINAL LAYOUT



PHYSICAL VALUES

	inal No.	Description				Value	
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	
1 (R)	Ground	Battery power supply	Input	Ignition swi	itch OFF	Battery voltage	
2 (L)	Ground	Battery power supply	Input	Ignition swi	itch OFF	Battery voltage	
4	Ground	Front winer LO	Output	Ignition	Front wiper switch OFF	0 V	
(LG)	Ground	Front wiper LO	Output	switch ON	Front wiper switch LO	Battery voltage	
5	Craund	Frant win or III	Output Ignition switch ON	Front wiper switch OFF	0 V		
(Y)	Ground	Front wiper HI		switch ON	Front wiper switch HI	Battery voltage	
7	Ground	Tail, license plate lamps &	Outrout	Ignition	Lighting switch OFF	0 V	
(GR)	Ground	illuminations	Output	switch ON	Lighting switch 1ST	Battery voltage	
10				Ignition swi (More than ignition swi	a few seconds after turning	0 V	
(BR)	Ground	ECM relay power supply	Output	 Ignition switch ON Ignition switch OFF (For a few seconds after turning ignition switch OFF) 		Battery voltage	

[XENON TYPE] < ECU DIAGNOSIS >

Terminal No. Descrip (Wire color)		Description			0 1111	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
11				Ignition switch OFF	A few seconds after opening the driver door	Battery voltage
(P)	Ground	Steering lock unit power supply	Output	Ignition switch LOCK	Press the push-button ig- nition switch	Battery voltage
				Ignition sw	itch ACC or ON	0 V
12 (B)	Ground	Ground	_	Ignition sw	itch ON	0 V
13					tely 1 second or more after ignition switch ON	0 V
(SB)	Ground	Fuel pump power supply	Output		nately 1 second after turning on switch ON unning	Battery voltage
15	Ground	Ignition relay power supply	Output	Ignition sw	itch OFF	0 V
(W)	Cround	ignition relay power supply	Juipui	Ignition sw	itch ON	Battery voltage
16		_		Ignition	Front wiper stop position	0 V
(L/Y)	Ground	Front wiper auto stop	Input	switch ON	Any position other than front wiper stop position	Battery voltage
19	Ground	Ignition relay power supply	Output	Ignition sw	itch OFF	0 V
(Y)	Ciound	igination rotal power supply	Calput	Ignition switch ON		Battery voltage
20 (L)	Ground	Ambient sensor ground	Output	Ignition sw	itch ON	0 V
21 (O)	Ground	Ambient sensor	Input	Ignition switch ON NOTE: Changes depending to ambient temperature		(V) 4 3 2 1 0 -10 0 10 20 30 40 [*c] (14) (32) (50) (68) (88) (104) [*F] JSNIA0014G
22 (SB)	Ground	Refrigerant pressure sensor ground	Output	Engine running	Warm-up condition Idle speed	0 V
23 (GR)	Ground	Refrigerant pressure sensor	Output	Engine running	Warm-up condition Both A/C switch and blower fan motor switch ON (Compressor operates)	1.0 - 4.0 V
24	Ground	Refrigerant pressure sen-	Input	Ignition sw	itch OFF	0 V
(G)	Cround	sor power supply	прис	Ignition sw	itch ON	5.0 V
25	Ground	Ignition relay power supply	Output	Ignition sw		0 V
(GR)	2.00110	5 Sia, politor dappry		Ignition sw		Battery voltage
26*	Ground	Ignition relay power supply	Output	Ignition sw		0 V
(Y)		2 -71	- 1. 4.	Ignition sw		Battery voltage
27	Ground	Ignition relay monitor	Input	_	itch OFF or ACC	Battery voltage
(W)		5 ,	L ***	Ignition sw		0 V
28	Ground	Push-button ignition	Input		oush-button ignition switch	0 V
(SB) Ground		switch		Release th	e push-button ignition switch	Battery voltage

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[XENON TYPE] < ECU DIAGNOSIS >

	inal No. e color)	Description			O a madistic m	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
30 (BR)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N Selector lever P or N	0 V Battery voltage
20		Ota anima da alcumita a mali		Steering Io	ck is activated	0 V
32 (V)	Ground	Steering lock unit condition-1	Input		ck is deactivated	Battery voltage
33		Steering lock unit condi-			ck is activated	Battery voltage
(G)	Ground	tion-2	Input		ck is deactivated	0 V
34				Cooling far	n stopped	Battery voltage
(O)	Ground	Cooling fan relay-3 control	Input	Cooling far	at HI operation	0 V
35	Ground	Cooling fan relay-1 power	Input	Cooling far	stopped	Battery voltage
(P)	Giodila	supply	при	Cooling far	at LO operation	6.0 V
36 (G)	Ground	Battery power supply	Input	Ignition sw	itch OFF	Battery voltage
38	Ground	Cooling fan relay-1 power	Output	Cooling far	not operating	0 V
(GR)	Giound	supply		Cooling far	at LO operation	6.0 V
39 (P)	_	CAN-L	Input/ Output		_	_
40 (L)	_	CAN-H	Input/ Output		_	_
41 (B)	Ground	Ground	_	Ignition sw	itch ON	0 V
42				Cooling fan stopped		Battery voltage
(SB)	Ground	Cooling fan relay-2 control	Input		an MID operating an HI operating	0 V
					Press the selector button (selector lever P)	Battery voltage
43 (Y)	Ground	Control device (Detention switch)	Input	Ignition switch ON	Selector lever in any position other than P Release the selector button (selector lever P)	0 V
44	Ground	Horn relay control	Input	The horn is	deactivated	Battery voltage
(W)	Glodila	Tiom relay control	Прис	The horn is	activated	0 V
45	Ground	Horn switch	Input	The horn is	deactivated	Battery voltage
(O)				The horn is		0 V
46 (BR)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
(5.1)				owner or	Selector lever P or N	Battery voltage
40				En -i	A/C switch OFF	0 V
48 (W)	Ground	A/C relay power supply	Output	Engine running	A/C switch ON (A/C compressor is operating)	Battery voltage
49				ignition swi	a few seconds after turning tch OFF)	0 V
(R/B)	Ground	ECM relay power supply	Output	Ignition sIgnition s(For a fe tion switch	witch OFF w seconds after turning igni-	Battery voltage

< ECU DIAGNOSIS > [XENON TYPE]

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	inal No.	Description				Value
(Wire	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)
51	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V
(LG)	Ground	ignition relay power supply	Output	Ignition swi	tch ON	Battery voltage
52	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V
(Y/G)	Ground	ignition relay power supply	Output	Ignition swi	tch ON	Battery voltage
53				Ignition swi (More than ignition swi	a few seconds after turning	0 V
(R/W)	Ground	ECM relay power supply	Output	 Ignition s Ignition s (For a fertion switch 	witch OFF w seconds after turning igni-	Battery voltage
54		Throttle control motor re-		Ignition swi (More than ignition swi	a few seconds after turning	0 V
(G/W)	Ground	lay power supply	Output	Ignition s Ignition s (For a fertion switch)	witch OFF w seconds after turning igni-	Battery voltage
55 (W/L)	Ground	ECM power supply	Output	Ignition swi	tch OFF	Battery voltage
56	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V
(R/Y)	Ground	ignition relay power supply	Output	Ignition swi	tch ON	Battery voltage
57	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V
(O)	Cround	ignition roley power supply	Output	Ignition swi	tch ON	Battery voltage
58	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V
(Y)	2.300	5 po cappiy		Ignition swi	tch ON	Battery voltage
69			Output	Ignition swi (More than ignition swi	a few seconds after turning	Battery voltage
(W/B)	Ground	ECM relay control		 Ignition s Ignition s (For a fertion switch 	witch OFF w seconds after turning igni-	0 - 1.5 V
						0 -1.0 V
70 (O)		Throttle control motor re- lay control	Output	Ignition swi	tch ON → OFF	↓ Battery voltage ↓
(0)		iay control				0 V
				Ignition switch ON		0 - 1.0 V
72 (R/B)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
(17/0)				SWILCH ON	Selector lever P or N	Battery voltage
75	Ground	Oil pressure switch	Input	Ignition	Engine stopped	0 V
(LG)	2.34.14	2 p. 0000.0 0111011		switch ON	Engine running	Battery voltage

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< ECU DIAGNOSIS > [XENON TYPE]

	inal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					tch ON	(V) 6 4 2 0 2 2ms JPMIA0001GB
76 (SB)	Ground	Power generation command signal	Output		on "ACTIVE TEST", "AL- R DUTY" of "ENGINE"	(V) 6 4 2 0 2 ms JPMIA0002GB 3.8 V
					80% is set on "ACTIVE TEST", "AL- TERNATOR DUTY" of "ENGINE" (V) 6 4 2 0 1.4 V	
77 (GR)	Ground	Fuel pump relay control	Output	the ignition the Engine re	nately 1 second after turning on switch ON unning tely 1 second or more after	0 - 1.5 V
					ignition switch ON	Battery voltage
80 (B)	Ground	Starter motor	Output	At engine of	ranking	Battery voltage
83	Ground	Headlamp LO (RH)	Output	Ignition	Lighting switch OFF	0 V
(Y)	0.000			switch ON	Lighting switch 2ND	Battery voltage
84 (L)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
(L)				SWILCH ON	Lighting switch 2ND	Battery voltage
86 (SB)	Ground	Front fog lamp (RH)	Output	Lighting switch 2ND	 Front fog lamp switch OFF Front fog lamp switch ON Daytime running light activated (Only for Canada) 	0 V Battery voltage
					Front fog lamp switch OFF	0 V
87 (GR)	Ground	Front fog lamp (LH)	Output	Lighting switch 2ND	 Front fog lamp switch ON Daytime running light activated (Only for Canada) 	Battery voltage
88 (W)	Ground	Washer pump power supply	Output	Ignition swi	tch ON	Battery voltage

[XENON TYPE] < ECU DIAGNOSIS >

	inal No.	Description				Value
+ (VVir	e color)	Signal name	Input/ Output		Condition	(Approx.)
89				Ignition	Lighting switch OFF	0 V
(L)	Ground	Headlamp HI (RH)	Output	switch ON	Lighting switch HI Lighting switch PASS	Battery voltage
90				Ignition	Lighting switch OFF	0 V
(G)	Ground	Headlamp HI (LH)	Output	switch ON	Lighting switch HI Lighting switch PASS	Battery voltage
91	Ground	Parking lamp (RH)	Output	Ignition	Lighting switch OFF	0 V
(R)	Ground	Parking lamp (KH)	Output	switch ON	Lighting switch 1ST	Battery voltage
92	Ground	Parking lamp (LH)	Output	Ignition	Lighting switch OFF	0 V
(LG)	Giodila	raiking lamp (LH)	Output	switch ON	Lighting switch 1ST	Battery voltage
93	Ground	Headlamp aiming motor	Output	Ignition	Lighting switch OFF	0 V
(R)	Giodila	(RH)	Output	switch ON	Lighting switch 1ST	Battery voltage
94	Ground	Headlamp aiming motor	Output	Ignition	Lighting switch OFF	0 V
(L)	Giodila	(LH)	Output	switch ON	Lighting switch 1ST	Battery voltage
99 (BR)	Ground	Ambient sensor ground	Input	Ignition sw	itch ON	0 V
100 (SB)	Ground	Ambient sensor	Output	Ignition switch ON NOTE: Changes depending to ambient temperature		(V) 3 2 1 0 -10 (14) (32) (50) (68) (86) (104) (7F) JSNIA0014GB
101 (L)	Ground	Refrigerant pressure sensor ground	Input	Engine running	Warm-up condition Idle speed	0 V
102 (B)	Ground	Refrigerant pressure sensor	Input	Engine running	Warm-up condition Both A/C switch and blower fan motor switch ON (Compressor operates)	1.0 - 4.0 V
103	Ground	Refrigerant pressure sen-	Output	Ignition sw	itch OFF	0 V
(P)	Giouila	sor power supply	Output	Ignition sw	itch ON	5.0 V

^{*:} AWD models only

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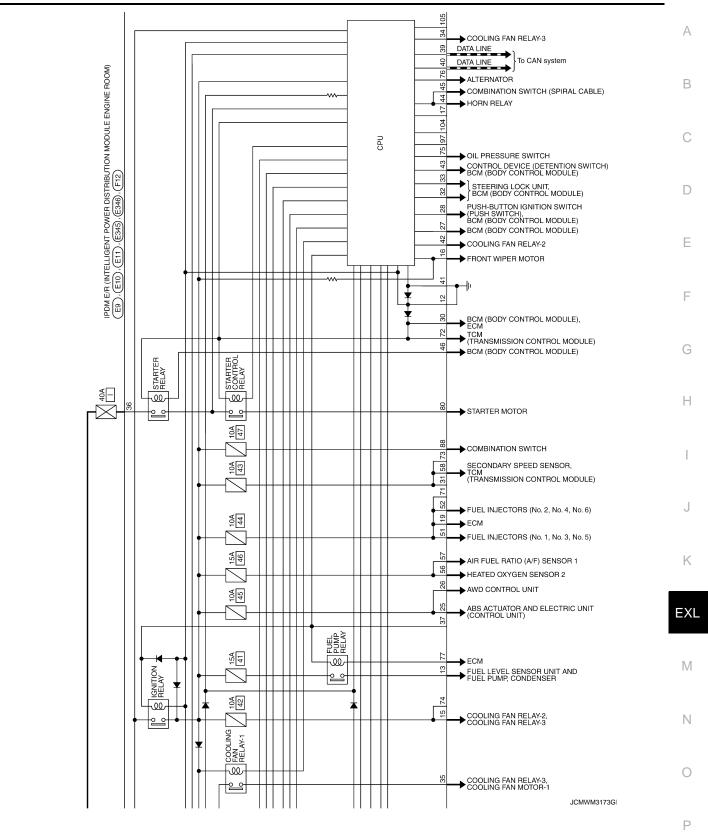
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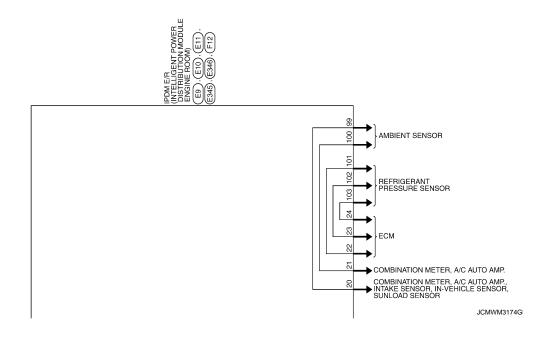
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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) < ECU DIAGNOSIS > [XENON TYPE]

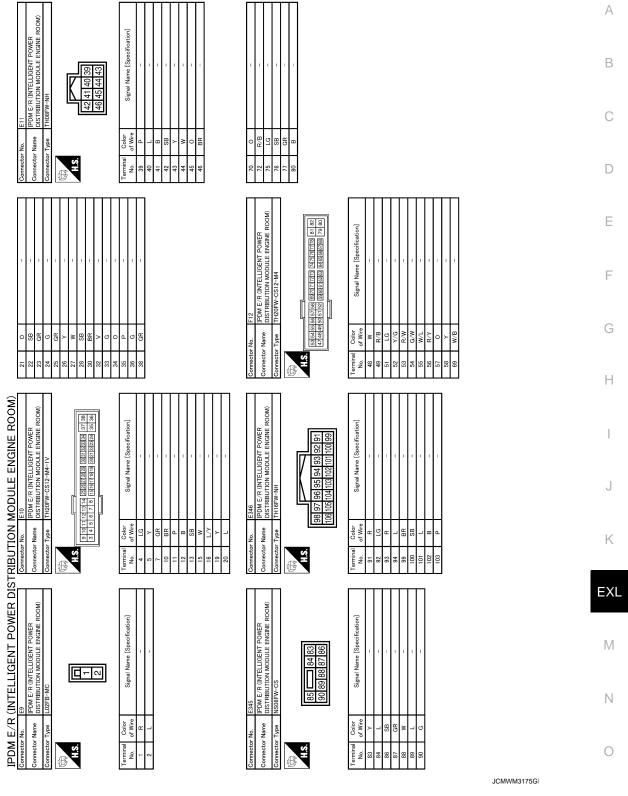
Wiring Diagram - IPDM E/R -INFOID:0000000003729404 COOLING FAN RELAY-3, COOLING FAN MOTOR-2 2 ECM 15A 51 Lee 10A Section 1 → STEERING LOCK UNIT A/C RELAY ىلە **→** COMPRESSOR 69 **►**ECM ECM RELAY EVAP CANISTER VENT CONTROL VALVE, VIAS CONTROL SOLENOID VALVES, INTAKE VALVE TIMING CONTROL SOLENOID VALVES PDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) 80A E 15A 50 W → CONDENSER, IGNITION COILS ECM, EVAP CANISTER PURGE VOLUME CONTROL SOLENOID VALVE, MASS AIR FLOW SENSOR 90 A 80 B W w FRONT WIPER MOTOR 10A IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) (E9) (E10) (E11) (E34§) (E34§) (F12) ► HEADLAMP AIMING MOTOR LH HEADLAMP AIMING MOTOR RH FRONT COMBINATION LAMP LH (PARKING), PARKING LAMP LH, FRONT SIDE MARKER LAMP LH TAIL LAMP RELAY 10A FRONT COMBINATION LAMP RH (PARKING), PARKING LAMP RH, FRONT SIDE MARKER LAMP RH 10A ىك → FUSE BLOCK (J/B) HEADLAMP LOW RELAY 15A 57 → HEADLAMP LOW RH, HEADLAMP RH 15A 56 ىلە → HEADLAMP LOW LH, HEADLAMP LH 10A → HEADLAMP HIGH RH, HIGH BEAM SOLENOID RH 10A W ► HEADLAMP HIGH LH, HIGH BEAM SOLENOID LH FOONT LAMP RELAY 2008/09/23 FRONT FOG LAMP LH 00A 15A 58 w BATTERY FRONT FOG LAMP RH JCMWM3172G

[XENON TYPE] < ECU DIAGNOSIS >





[XENON TYPE] < ECU DIAGNOSIS >



Fail-safe INFOID:0000000003729405

CAN COMMUNICATION CONTROL

When CAN communication with ECM and BCM is impossible, IPDM E/R performs fail-safe control. After CAN communication recovers normally, it also returns to normal control.

If No CAN Communication Is Available With ECM

[XENON TYPE] < ECU DIAGNOSIS >

Control part	Fail-safe operation
Cooling fan	 Turns ON the cooling fan relay-2 and the cooling fan relay-3 when ignition switch is turned ON (Cooling fan operates at HI) Turns OFF the cooling fan relay-1, the cooling fan relay-2 and the cooling fan relay-3 when the ignition switch is turned OFF (Cooling fan does not operate)
A/C compressor	A/C relay OFF
Alternator	Outputs the power generation command signal (PWM signal) 0%

If No CAN Communication Is Available With BCM

Control part	Fail-safe operation
Headlamp	 Turns ON the headlamp low relay when the ignition switch is turned ON Turns OFF the headlamp low relay when the ignition switch is turned OFF Headlamp high relay OFF
Parking lampsLicense plate lampsSide maker lampsIlluminationsTail lamps	 Turns ON the tail lamp relay when the ignition switch is turned ON Turns OFF the tail lamp relay when the ignition switch is turned OFF
Front wiper	 The status just before activation of fail-safe control is maintained until the ignition switch is turned OFF while the front wiper is operating at LO or HI speed. The wiper is operated at LO speed until the ignition switch is turned OFF if the fail-safe control is activated while the front wiper is set in the INT/AUTO mode and the front wiper motor is operating.
Front fog lamps	Front fog lamp relay OFF
Horn	Horn OFF
Ignition relay	The status just before activation of fail-safe is maintained.
Starter motor	Starter control relay OFF
Steering lock unit	Steering lock relay OFF

IGNITION RELAY MALFUNCTION DETECTION FUNCTION

- IPDM E/R monitors the voltage at the contact circuit and excitation coil circuit of the ignition relay inside it.
- IPDM E/R judges the ignition relay error if the voltage differs between the contact circuit and the excitation
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay for 10 minutes to alert the user to the ignition relay malfunction when the ignition switch is turned OFF.

Voltage	judgment		
Ignition relay contact side	Ignition relay excitation coil side	IPDM E/R judgment	Operation
ON	ON	Ignition relay ON normal	_
OFF	OFF	Ignition relay OFF normal	_
ON	OFF	Ignition relay ON stuck	Detects DTC "B2098: IGN RELAY ON" Turns ON the tail lamp relay for 10 minutes
OFF	ON	Ignition relay OFF stuck	Detects DTC "B2099: IGN RELAY OFF"

FRONT WIPER CONTROL

IPDM E/R detects front wiper stop position by a front wiper auto stop signal.

When a front wiper stop position signal is in the conditions listed below, IPDM E/R stops power supply to wiper after repeating a front wiper 10 seconds activation and 20 seconds stop five times.

< ECU DIAGNOSIS > [XENON TYPE]

Ignition switch	Front wiper switch	Front wiper stop position signal
ON	OFF	The front wiper stop position signal (stop position) cannot be input for 10 seconds.
ON	ON	The front wiper auto stop signal does not change for 10 seconds.

NOTE:

This operation status can be confirmed on the IPDM E/R "Data Monitor" that displays "BLOCK" for the item "WIP PROT" while the wiper is stopped.

STARTER MOTOR PROTECTION FUNCTION

IPDM E/R turns OFF the starter control relay to protect the starter motor when the starter control relay remains active for 90 seconds.

DTC Index

NOTE:

- The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.
- IGN counter is displayed on FFD (Freeze Frame data).
- The number is 0 when is detected now.

Revision: 2008 October

- The number increases like 1 \rightarrow 2 \cdots 38 \rightarrow 39 after returning to the normal condition whenever IGN OFF \rightarrow ON.
- The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

		×: Applicable
CONSULT display	Fail-safe	Refer to
No DTC is detected. further testing may be required.	_	_
U1000: CAN COMM CIRCUIT	×	PCS-15
B2098: IGN RELAY ON	×	PCS-16
B2099: IGN RELAY OFF	_	PCS-17
B2108: STRG LCK RELAY ON	_	SEC-103
B2109: STRG LCK RELAY OFF	_	<u>SEC-104</u>
B210A: STRG LCK STATE SW	_	<u>SEC-105</u>
B210B: START CONT RLY ON	_	SEC-109
B210C: START CONT RLY OFF	_	SEC-110
B210D: STARTER RELAY ON	_	<u>SEC-111</u>
B210E: STARTER RELAY OFF	-	SEC-112
B210F: INTRLCK/PNP SW ON	_	<u>SEC-114</u>
B2110: INTRLCK/PNP SW OFF	_	SEC-116

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[XENON TYPE]

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

CAUTION:

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

Symptom		Possible cause	Inspection item
Headlamp does not switch to the high beam.	One side	Fuse Harness between IPDM E/R and the front combination lamp Front combination lamp (High beam solenoid) IPDM E/R	Headlamp (HI) circuit Refer to <u>EXL-36</u> .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM" Refer to EXL-162.	
High beam indicator lamp (The headlamp switches to		Combination meter	Combination meter Data monitor "HI-BEAM IND" BCM (HEAD LAMP) Active test "HEADLAMP"
	One side	Front combination lamp (High beam solenoid)	_
Headlamp does not switch to the low beam.	Both sides	Combination switch Harness between the combination switch and BCM BCM	Combination switch Refer to BCS-94.
		High beam request signal BCM IPDM E/R	IPDM E/R Data monitor "HL HI REQ"
		IPDM E/R	_
Headlamp is not turned ON.	One side	Fuse Xenon bulb Harness between IPDM E/R and the front combination lamp Front combination lamp (xenon headlamp) IPDM E/R	Headlamp (LO) circuit Refer to EXL-39.
	Both sides	Symptom diagnosis	
When ignition switterned Urrned ON		"BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-162.	
OFF.	Ignition switch is turned OFF.	IPDM E/R	_
Headlamp is not turned ON/OFF with the lighting switch AUTO.		Combination switch Harness between the combination switch and BCM BCM	Combination switch Refer to BCS-94.
		Optical sensor Harness between the optical sensor and BCM BCM	Optical sensor Refer to <u>EXL-52</u> .

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

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Symptom		Possible cause	Inspection item	
Front fog lamp is not turned ON.	One side	Front fog lamp bulb Harness between IPDM E/R and the front fog lamp Front fog lamp IPDM E/R	Front fog lamp circuit Refer to EXL-43.	
	Both side	Symptom diagnosis		
Front fog lamp is not turned ON.		"BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-165.		
Parking lamp is not turned ON.		Parking lamp bulb Harness between IPDM E/R and the parking lamp IPDM E/R	Parking lamp circuit Refer to <u>EXL-45</u> .	
Front side marker lamp is	not turned ON.	Front side marker lamp bulb Harness between IPDM E/R and the front side marker lamp IPDM E/R	Front side marker lamp circuit Refer to EXL-47.	
Parking lamp and front side marker lamp are not turned ON.		Fuse Harness between IPDM E/R and the front combination lamp IPDM E/R	Parking lamp circuit Refer to EXL-45.	
Tail lamp is not turned ON.		Harness between IPDM E/R and the rear combination lamp Rear combination lamp	Tail lamp circuit Refer to EXL-57.	
License plate lamp is not turned ON.		License plate lamp bulb Harness between IPDM E/R and the license plate lamp License plate lamp	License plate lamp circuit Refer to EXL-59.	
Tail lamp and license plate lamp are not turned ON.		Fuse Harness between IPDM E/R and the rear combination lamp IPDM E/R	License plate lamp circuit Refer to EXL-59.	
 Parking lamp, tail lamp, side marker lamp and license plate lamp are not turned ON. Parking lamp, tail lamp, side marker lamp and license plate lamp are not turned OFF. (Each illumination is turned ON/OFF.) 		Symptom diagnosis "PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON" Refer to EXL-164.		
Turn signal lamp does not	Indicator lamp is normal. (Applicable side performs the high flasher activation.)	Harness between BCM and each turn signal lamp Turn signal lamp bulb	Turn signal lamp circuit Refer to EXL-49.	
blink.	Indicator lamp is included	Combination switch Harness between the combination switch and BCM	Combination switch Refer to BCS-94.	

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EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

Symptom		Possible cause	Inspection item
	One side	Combination meter	_
Turn signal indicator lamp does not blink.	Both sides (Always)	Turn indicator signal Combination meter BCM Combination meter	Combination meter Data monitor "TURN IND" BCM (FLASHER) Active test "FLASHER"
(Turn signal indicator lamp is normal.)	Both sides (Only when activating hazard warning lamp with the ignition switch OFF)	Combination meter power supply and the ground circuit Combination meter	Combination meter Power supply and the ground circuit Refer to MWI-43.
 Hazard warning lamp does not activate. Hazard warning lamp continues activating. (Turn signal is normal.) 		Hazard switch Harness between the hazard switch and BCM BCM	Hazard switch Refer to <u>EXL-55</u> .

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS > [XENON TYPE]

NORMAL OPERATING CONDITION

Description A

XENON HEADLAMP

- Brightness and the color of light may change slightly immediately after turning the headlamp ON until the xenon bulb becomes stable. This is normal.
- Illumination time lag may occur between right and left. This is normal.

AUTO LIGHT SYSTEM

The headlamp may not be turned ON/OFF immediately after passing dark area or bright area (short tunnel, sky bridge, shadowed area etc.) while using the auto light system. This causes the control difference. This is normal.

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BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

Description INFOID.000000003261565

The headlamp (both sides) does not switch to the high beam when setting to the lighting switch HI or PASS.

Diagnosis Procedure

INFOID:0000000003261566

1. COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to BCS-94, "Symptom Table".

Is the combination switch normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK HEADLAMP (HI) REQUEST SIGNAL INPUT

(P)CONSULT-III DATA MONITOR

- 1. Select "HL HI REQ" of IPDM E/R data monitor item.
- 2. With operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
	Lighting switch	HI or PASS	ON
HL HI REQ	(2ND)	Except for HI or PASS	OFF

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to BCS-96, "Exploded View"

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check the headlamp (HI) circuit. Refer to EXL-36, "Component Function Check".

Is the headlamp (HI) circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON [XENON TYPE] < SYMPTOM DIAGNOSIS > BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON Α Description INFOID:0000000003261567 Both side headlamps (LO) are not turned ON in any condition. В Diagnosis Procedure INFOID:0000000003261568 1.COMBINATION SWITCH INSPECTION Check the combination switch. Refer to BCS-94, "Symptom Table". Is the combination switch normal? D YES >> GO TO 2. NO >> Repair or replace the malfunctioning part. 2.CHECK HEADLAMP (LO) REQUEST SIGNAL INPUT Е **©CONSULT-III DATA MONITOR** Select "HL LO REQ" of IPDM E/R data monitor item. With operating the lighting switch, check the monitor status. F Monitor item Condition Monitor status 2ND ON **HL LO REQ** Lighting switch OFF OFF Is the item status normal? Н YES >> GO TO 3. NO >> Replace BCM. Refer to BCS-96, "Exploded View". 3.HEADLAMP (LO) CIRCUIT INSPECTION Check the headlamp (LO) circuit. Refer to EXL-39, "Component Function Check". Is the headlamp (LO) circuit normal?

YES

NO

>> Replace IPDM E/R.

>> Repair or replace the malfunctioning part.

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PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

Description INFOID:000000003261362

The parking, license plate, side marker, tail lamps and each illumination are not turned ON in any condition.

Diagnosis Procedure

INFOID:0000000003261363

1. CHECK FUSE

Check that the following fuse is fusing.

Unit	Location	Fuse No.	Capacity
Parking lamp Front side marker lamp		#52	10 A
Tail lamp License plate lamp Rear side marker lamp	IPDM E/R	#53	10 A

Is the fuse fusing?

YES >> Repair the applicable circuit. And then replace the fuse.

NO >> GO TO 2.

2.combination switch inspection

Check the combination switch. Refer to BCS-94, "Symptom Table".

Is the combination switch normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning part.

3.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT

(P)CONSULT-III DATA MONITOR

- 1. Select "TAIL & CLR REQ" of IPDM E/R data monitor item.
- 2. With operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
TAIL & CLR	Lighting switch	1ST	On
REQ	Lighting Switch	OFF	Off

Is the item status normal?

YES >> GO TO 4.

NO >> Replace BCM. Refer to BCS-96, "Exploded View".

4. TAIL LAMP CIRCUIT INSPECTION

Check the tail lamp circuit. Refer to EXL-57, "Component Function Check".

Is the tail lamp circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON [XENON TYPE] < SYMPTOM DIAGNOSIS > BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON Α Description INFOID:0000000003261364 The front fog lamps are not turned ON in any condition. В Diagnosis Procedure INFOID:0000000003261365 1. CHECK FUSE Check that the following fuse is fusing. D Unit Location Fuse No. Capacity IPDM E/R Front fog lamp #58 15 A Is the fuse fusing? Е >> Repair the applicable circuit. And then replace the fuse. NO >> GO TO 2. 2.combination switch inspection F Check the combination switch. Refer to BCS-94, "Symptom Table". Is the combination switch normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning part. 3.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT Н CONSULT-III DATA MONITOR Select "FR FOG REQ" of IPDM E/R data monitor item. With operating the front fog lamp switch, check the monitor status. Monitor item Condition Monitor status ON On Front fog lamp switch FR FOG REQ (With lighting switch 1ST) OFF Off Is the item status normal? K YES >> GO TO 4. NO >> Replace BCM. Refer to BCS-96, "Exploded View". 4.FRONT FOG LAMP CIRCUIT INSPECTION EXL Check the front fog lamp circuit. Refer to EXL-43, "Component Function Check". Is the front fog lamp circuit normal? M YES >> Replace IPDM E/R. NO >> Repair or replace the malfunctioning part. Ν

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PRECAUTIONS

< PRECAUTION > [XENON TYPE]

PRECAUTION

PRECAUTIONS FOR USA AND CANADA

FOR USA AND CANADA: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" 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 "SRS AIRBAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury.

When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

FOR MEXICO

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

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

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- 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 "SRS AIRBAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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PRECAUTIONS

[XENON TYPE] < PRECAUTION >

When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

Precautions For Xenon Headlamp Service

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WARNING:

Comply with the following warnings to prevent any serious accident.

- Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.
- Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector. (Turning it ON outside the lamp case may cause fire or visual impairments.)
- Never touch the bulb glass immediately after turning it OFF. It is extremely hot.

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

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

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EXL

ON-VEHICLE MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Description INFOID:0000000003261370

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the front combination lamp assembly has been replaced.

Before performing aiming adjustment, check the following.

• Adjust the tire pressure to the specification.

- Fill with fuel, engine coolant and each oil.
- · Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

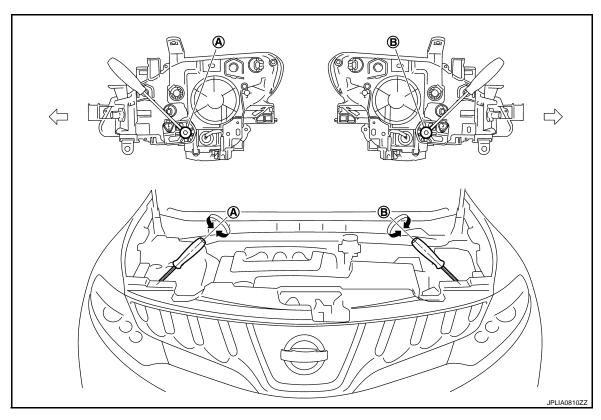
Wipe out dirt on the headlamp.

CAUTION:

Never use organic solvent (thinner, gasoline etc.)

- Ride alone on the driver seat.
- · Headlamp aiming switch sets to "0".

AIMING ADJUSTMENT SCREW



- A. Headlamp RH (UP/DOWN) adjustment screw
- B. Headlamp LH (UP/DOWN) adjustment screw

∀ : Vehicle center

Adjustment screw		Screw driver rotation	Facing direction
	Headlamp RH (UP/DOWN)	Clockwise	DOWN
A Headlamp RH (UP/I	neadiamp Kn (OF/DOWN)	Counterclockwise	UP
D. Headlews III (IID/DOM/A	Headlema I.H. (LID/DOM/NI)	Clockwise	DOWN
В	Headlamp LH (UP/DOWN)	Counterclockwise	UP

Aiming Adjustment Procedure

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1. Place the screen.

NOTE:

- · Stop the vehicle facing the wall.
- Place the board on a plain road vertically.
- 2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the headlamp bulb center and the screen.
- 3. Start the engine. Turn the headlamp (LO) ON.

NOTE:

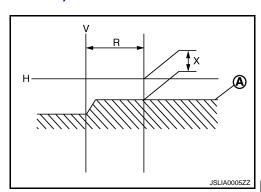
Shut off the headlamp light with the board to prevent from illuminating the adjustment screen. **CAUTION:**

Never cover the lens surface with a tape etc. The lens is made of resin.

4. Measure the distance (X) between the horizontal center line of headlamp (H) and the cutoff line (A) within the light axis measurement range (R) from the vertical center line ahead of headlamp (V).

Light axis measurement range (R) : 350 \pm 175 mm (13.78 \pm 6.89 in)

Low beam distribution on the screen

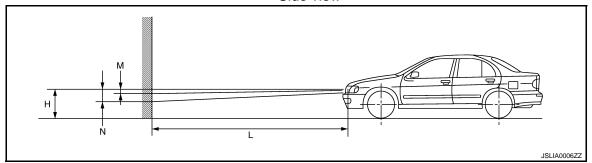


5. Adjust the cutoff line height (X) with the aiming adjustment screw so as to enter in the adjustment range (M–N) according to the horizontal center line of headlamp (H).

unit: mm (in)

Horizontal center line of headlamp (H)	Highest cutoff line height (M)	Lowest cutoff line height (N)
700 (27.56) or less	4 (0.16)	30 (1.18)
701(27.60) – 800 (31.50)	4 (0.16)	30 (1.18)
801 (31.54) or more	17 (0.67)	44 (1.73)

Side view



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HEADLAMP AIMING ADJUSTMENT

[XENON TYPE]

Distance between the headlamp center and the screen (L)

: 10 m (32.8 ft)

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FRONT FOG LAMP AIMING ADJUSTMENT

Description INFOID:0000000003261372

PREPARATION BEFORE ADJUSTING

NOTE:

For details, refer to the regulations in your own country.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

Wipe out dirt on the headlamp.

CAUTION:

Never use organic solvent (thinner, gasoline etc.)

· Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW

Turn the aiming adjusting screw for adjustment.

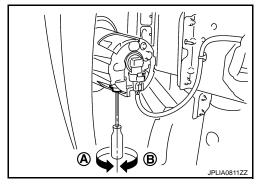
A: UP

B: DOWN

 For the position and direction of the adjusting screw, refer to the figure.

NOTE:

A screwdriver or hexagonal wrench [6 mm (0.24 in)] can be used for adjustment.



INFOID:0000000003261373

Aiming Adjustment Procedure

1. Place the screen.

NOTE:

- · Stop the vehicle facing the wall.
- Place the board on a plain road vertically.
- 2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the front fog lamp center and the screen.

3. Start the engine. Illuminate the front fog lamp.

CAUTION:

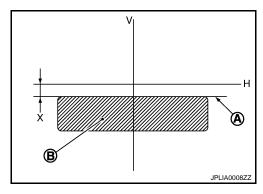
Never cover the lens surface with a tape etc. The lens is made of resin.

NOTE:

Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.

4. Adjust the cutoff line height (A) with the aiming adjustment screw so that the distance (X) between the horizontal center line of front fog lamp (H) and (A) becomes 200 mm (7.87 in).

Front fog lamp light distribution on the screen



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Revision: 2008 October EXL-171 2009 Murano

FRONT FOG LAMP AIMING ADJUSTMENT

< ON-VEHICLE MAINTENANCE >

[XENON TYPE]

A : Cutoff line

B : High illuminance area

H : Horizontal center line of front fog lampV : Vertical center line of front fog lamp

X : Cutoff line height

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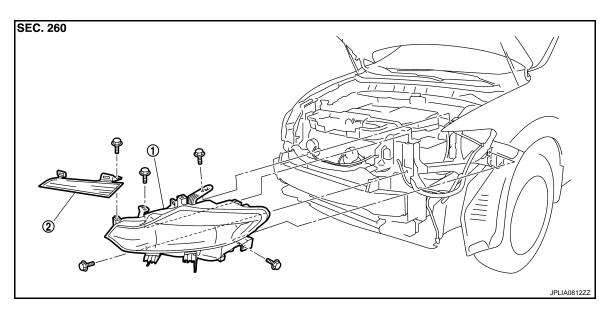
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ON-VEHICLE REPAIR

FRONT COMBINATION LAMP

Exploded View INFOID:0000000003261374

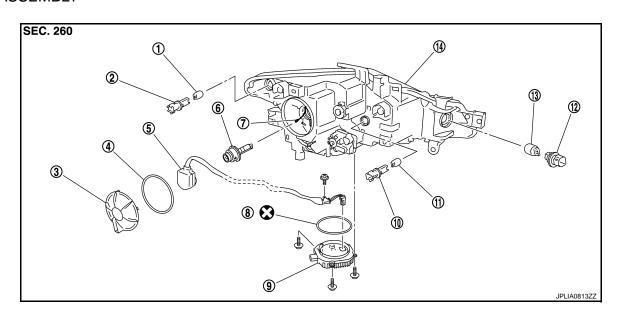
REMOVAL



Front combination lamp

2. Headlamp extension panel

DISASSEMBLY



- 1. Front side marker lamp bulb
- 4. Seal packing
- 7. Retaining spring
- Parking lamp bulb socket 10.
- 13. Front turn signal lamp bulb
- 2. Front side marker lamp bulb socket
- Xenon bulb socket (Starter) 5.
- 8. Seal packing
- 11. Parking lamp bulb
- 14. Headlamp housing assembly
- Refer to GI-4, "Components" for symbols in the figure.

- Resin cap
- Xenon bulb
- HID control unit (Inverter)
- 12. Front turn signal lamp bulb socket

FRONT COMBINATION LAMP

< ON-VEHICLE REPAIR >

[XENON TYPE]

Removal and Installation

INFOID:0000000003261375

REMOVAL

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

- Remove the front grille. Refer to <u>EXT-18, "Exploded View"</u>.
- 2. Remove the headlamp extension panel.
- 3. Remove the front bumper fascia. Refer to EXT-12, "Exploded View".
- 4. Remove the headlamp mounting bolts.
- 5. Remove the harness clips from headlamp housing assembly.
- 6. Pull out the headlamp assembly forward the vehicle.
- 7. Disconnect the connector before removing the headlamp assembly.

INSTALLATION

Install in the reverse order of removal.

NOTE:

After installation, perform aiming adjustment. Refer to EXL-168, "Description".

Replacement INFOID:000000003261376

CAUTION:

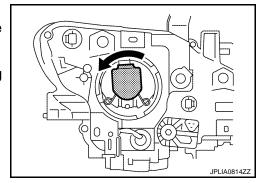
- Disconnect the battery negative terminal or remove the fuse.
- After installing the bulb, install the resin cap and the bulb socket securely for watertightness.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

HEADLAMP BULB

- 1. Remove the fender rubber protector in engine room.
- 2. Rotate the resin cap counterclockwise and unlock it.
- 3. Rotate the bulb socket counterclockwise and unlock it.
- Unlock the retaining spring. And then remove the bulb from the headlamp housing assembly.

CAUTION:

Never break the xenon bulb ceramic tube when replacing the bulb.



PARKING LAMP BULB

- Rotate the bulb socket counterclockwise and unlock it.
- 2. Remove the bulb from the bulb socket.

FRONT TURN SIGNAL LAMP BULB

- 1. Remove the front grille.
- 2. Rotate the bulb socket counterclockwise and unlock it.
- 3. Remove the bulb from the bulb socket.

FRONT SIDE MARKER LAMP BULB

- Remove the fender rubber protector in engine room.
- 2. Rotate the bulb socket counterclockwise and unlock it.
- Remove the bulb from the bulb socket.

FRONT COMBINATION LAMP [XENON TYPE] < ON-VEHICLE REPAIR > Disassembly and Assembly INFOID:0000000003261377 Α DISASSEMBLY 1. Rotate the resin cap counterclockwise and unlock it. В Rotate the xenon bulb socket counterclockwise and unlock it. 3. Unlock the retaining spring. And then remove the xenon bulb. Remove the HID control unit installation screw. Remove the screw. And then disconnect the connector from HID control unit. 6. Remove the xenon bulb socket from headlamp housing assembly. 7. Rotate the parking lamp bulb socket counterclockwise and unlock it. D 8. Remove the bulb from parking lamp bulb socket. 9. Rotate the front turn signal lamp bulb socket counterclockwise and unlock it. Е 10. Remove the bulb from front turn signal lamp bulb socket. 11. Rotate the front side marker lamp bulb socket counterclockwise and unlock it. 12. Remove the bulb from front side marker lamp bulb socket. F **ASSEMBLY** Assemble in the reverse order of disassembly. **CAUTION:** Install HID control unit securely. • After installing the bulb, install the resin cap and the bulb socket securely for watertightness. Н K

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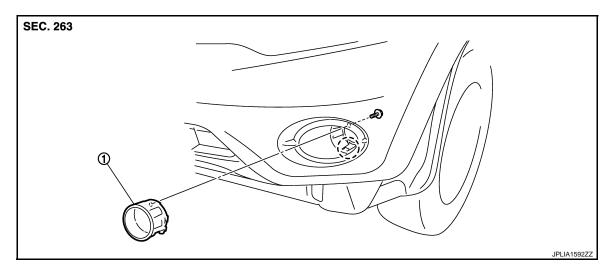
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EXL-175 Revision: 2008 October 2009 Murano

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FRONT FOG LAMP

Exploded View



1. Front fog lamp

() : Pawl

Removal and Installation

INFOID:0000000003261379

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

- Remove the front fender protector. Keep a service area. Refer to <u>EXT-23</u>, "<u>FENDER PROTECTOR</u>: Exploded View".
- Remove the front fog lamp connector.
- 3. Remove the screw.
- 4. Disengage the pawl. And then remove the front fog lamp.

INSTALLATION

Installation is the reverse order of removal.

NOTE:

After installation, perform aiming adjustment. Refer to EXL-171, "Description"

Replacement

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

FRONT FOG LAMP BULB

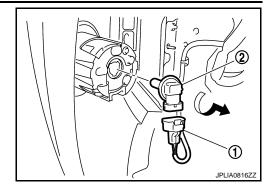
Remove the front fender protector. Keep the service area. Refer to <u>EXT-23</u>, "<u>FENDER PROTECTOR</u>: <u>Exploded View</u>".

FRONT FOG LAMP

< ON-VEHICLE REPAIR >

[XENON TYPE]

- 2. Remove the front fog lamp bulb connector (1).
- 3. Rotate the bulb (2) counterclockwise and unlock it.



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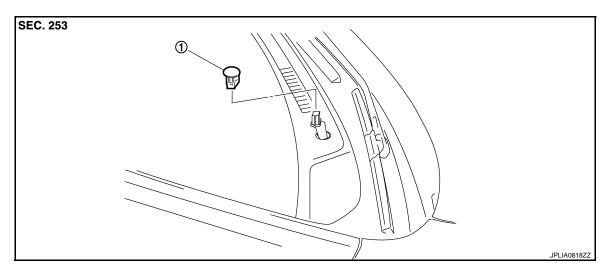
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OPTICAL SENSOR

Exploded View



1. Optical sensor

Removal and Installation

INFOID:0000000003269353

REMOVAL

- Insert an appropriate tool between the optical sensor and the instrument upper panel. Pull out the optical sensor upward.
- 2. Disconnect the optical sensor connector. And then remove the optical sensor.

INSTALLATION

Install in the reverse order of removal.

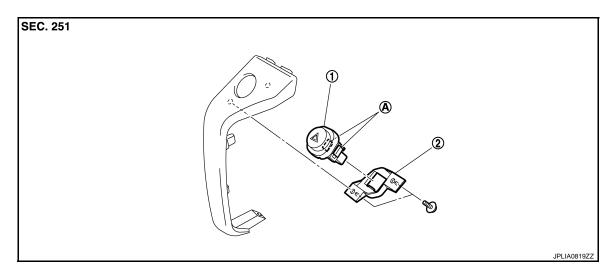
LIGHTING & TURN SIGNAL SWITCH

[XENON TYPE] < ON-VEHICLE REPAIR > **LIGHTING & TURN SIGNAL SWITCH** Α **Exploded View** INFOID:0000000003261381 Removal and Installation В INFOID:0000000003261382 Lighting & turn signal switch is integrated in the combination switch. Refer to BCS-97, "Exploded View". С D Е F Н Κ **EXL** M Ν 0

EXL-179 Revision: 2008 October 2009 Murano

HAZARD SWITCH

Exploded View



1. Hazard switch

2. Switch bracket

A. Pawls

Removal and Installation

INFOID:0000000003261384

REMOVAL

- 1. Remove the instrument stay cover (RH). Refer to IP-11, "Exploded View".
- 2. Remove the screws. And then remove the switch bracket from the instrument stay cover.
- 3. Remove the hazard switch.

INSTALLATION

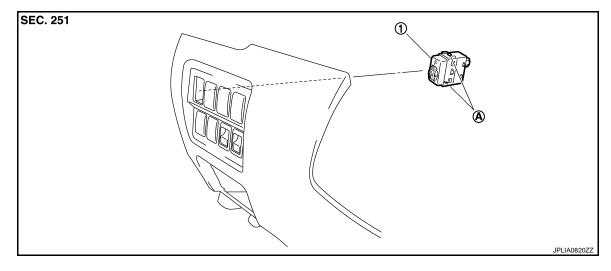
Install in the reverse order of removal.

[XENON TYPE]

INFOID:0000000003261385

HEADLAMP AIMING SWITCH

Exploded View



- Headlamp aiming switch
- Pawls

Removal and Installation

REMOVAL

- Remove the instrument driver lower panel. Refer to IP-11, "Exploded View".
- Disengage the pawls. And remove the headlamp aiming switch.

INSTALLATION

Install in the reverse order of removal.

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EXL-181 2009 Murano Revision: 2008 October

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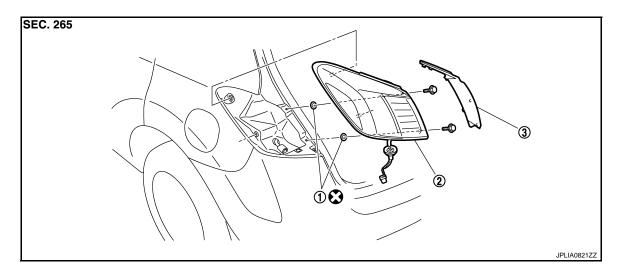
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REAR COMBINATION LAMP

Exploded View

REMOVAL

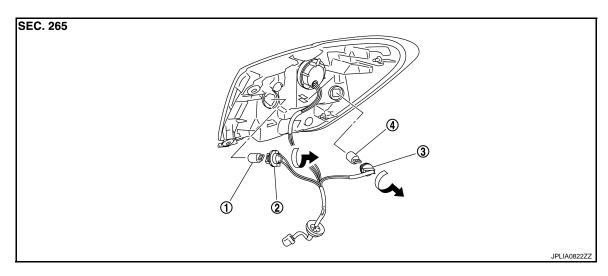


Seal packing

Refer to GI-4, "Components" for symbols in the figure.

- 2. Rear combination lamp
- 3. Rear combination lamp finisher

DISASSEMBLY



- 1. Rear turn signal lamp bulb
- 2. Rear turn signal lamp bulb socket
- 3. Rear side marker lamp bulb socket

4. Rear side marker lamp bulb

Removal and Installation

INFOID:0000000003261388

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

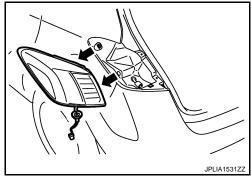
REMOVAL

- 1. Remove the rear combination lamp finisher.
- 2. Remove the rear combination lamp mounting bolts.

REAR COMBINATION LAMP

[XENON TYPE] < ON-VEHICLE REPAIR >

- Pull the rear combination lamp toward outside of the vehicle (\(\bigsir)\). Remove the rear combination lamp.
- 4. Disconnect the rear combination lamp connector.



INSTALLATION

Install in the reverse order of removal.

Replacement Е INFOID:0000000003261389

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- · Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

STOP/TAIL LAMP

Replacement integral with rear combination lamp. Refer to EXL-182, "Exploded View".

REAR SIDE MARKER LAMP BULB

- Remove the rear combination lamp. Refer to EXL-182, "Exploded View".
- Rotate the rear side marker lamp bulb socket counterclockwise, and unlock it.
- 3. Remove the bulb from the rear side marker lamp bulb socket.

REAR TURN SIGNAL LAMP BULB

- Remove the rear combination lamp. Refer to <u>EXL-182</u>, "<u>Exploded View</u>".
- Rotate the rear turn signal lamp bulb socket counterclockwise, and unlock it. 2.
- Remove the bulb from the rear turn signal lamp bulb socket.

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EXL-183 Revision: 2008 October 2009 Murano

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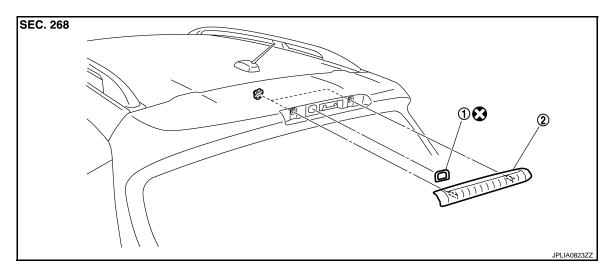
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HIGH-MOUNTED STOP LAMP

Exploded View



1. Seal packing

2. High-mounted stop lamp

Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

INFOID:0000000003261391

CAUTION:

Disconnect battery negative terminal or remove the fuse.

REMOVAL

- 1. Remove the back door plate. Refer to INT-37, "Exploded View".
- 2. Remove the high-mounted stop lamp mounting nuts and connector.
- 3. Pull the high-mounted stop lamp toward rear of the vehicle. Remove the rear washer tube.
- 4. Disconnect the high-mounted stop lamp connector.

INSTALLATION

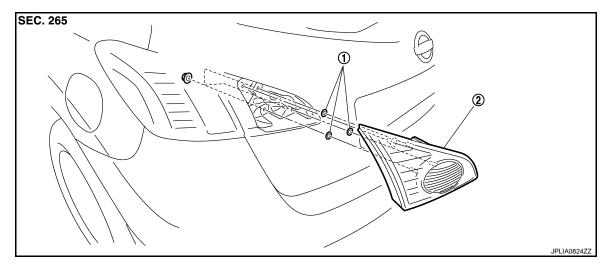
Install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

BACK-UP LAMP

Exploded View INFOID:0000000003261392



Seal packing

Back-up lamp

Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

- Remove the back door finisher inner. Refer to INT-37, "Exploded View".
- Remove the back-up lamp mounting nuts and clip.
- Disconnect the back-up lamp connector. And then remove the back-up lamp.

INSTALLATION

Replacement

Install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- · Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

EXL-185

BACK-UP LAMP BULB

Remove the back-up lamp. Refer to EXL-185, "Exploded View".

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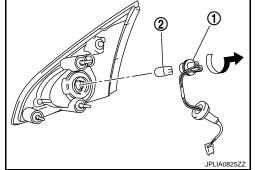
2009 Murano

BACK-UP LAMP

< ON-VEHICLE REPAIR > [XENON TYPE]

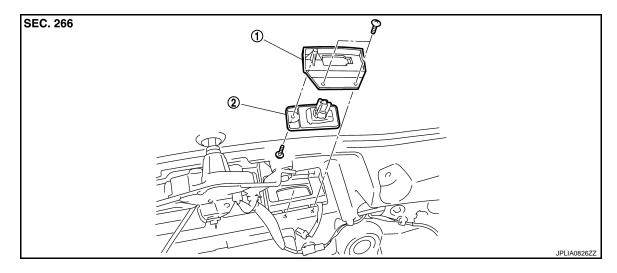
 Disconnect the connector, rotate the back-up lamp bulb socket (1) counterclockwise and unlock it.

3. Remove the bulb (2) from the back-up lamp bulb socket.



LICENSE PLATE LAMP

Exploded View



1. License plate lamp bracket

2. License plate lamp

Removal and Installation

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

- Remove the back door finisher inner. Refer to <u>INT-37</u>, "Exploded View".
- 2. Remove the screw. And then disconnect the license plate lamp connector.
- 3. Remove the license plate lamp.
- 4. Remove the screw. And then remove the license plate lamp bracket.

INSTALLATION

Install in the reverse order of removal.

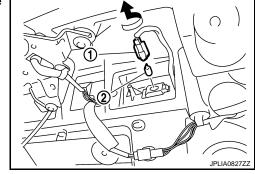
Replacement

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- · Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

LICENSE PLATE LAMP BULB

- 1. Remove the back door finisher inner. Refer to INT-37, "Exploded View".
- Turn the license plate lamp bulb socket (1) counterclockwise and unlock it.
- 3. Remove the bulb (2) from the license plate lamp bulb socket.



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INFOID:0000000003261396

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SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

[XENON TYPE]

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

Item		Туре	Wattage (W)
F	Headlamp (HI/LO)	D2S (Xenon)	35
	Front turn signal lamp	WY21W (Amber)	21
Front combination lamp	Parking lamp	W5W	5
	Front side marker lamp	WY5W (Amber)	5
Front fog lamp		H8	35
	Stop lamp	LED	_
Deer combination laws	Tail lamp	LED	_
Rear combination lamp	Rear turn signal lamp	W21W	21
	Rear side marker lamp	W5W	5
Back-up lamp		W16W	16
License plate lamp		W5W	5
High-mounted stop lamp		LED	_

[HALOGEN TYPE] < BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow INFOID:0000000003261399 В

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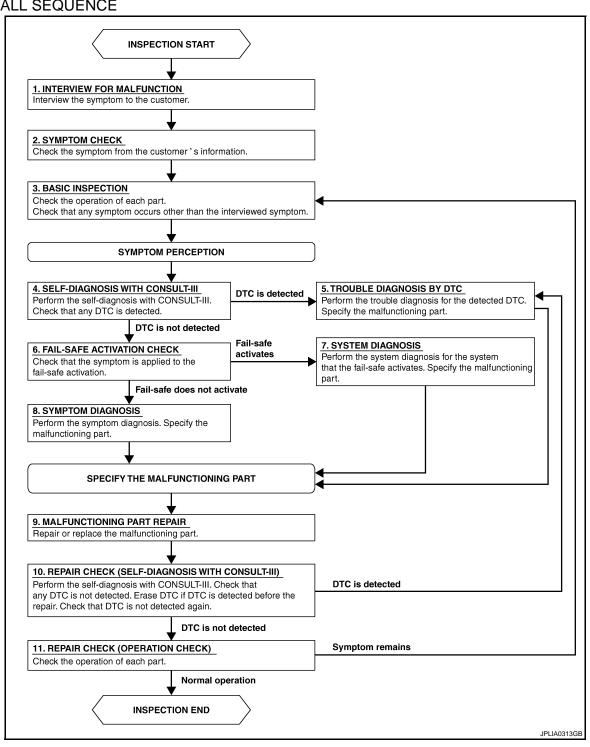
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OVERALL SEQUENCE



DETAILED FLOW

1.INTERVIEW FOR MALFUNCTION

Interview the symptom to the customer.

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[HALOGEN TYPE]

>> GO TO 2.

2.SYMPTOM CHECK

Check the symptom from the customer's information.

>> GO TO 3.

3.BASIC INSPECTION

Check the operation of each part. Check that any symptom occurs other than the interviewed symptom.

>> GO TO 4.

4. SELF-DIAGNOSIS WITH CONSULT-III

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

Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 6.

5. TROUBLE DIAGNOSIS BY DTC

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

>> GO TO 9.

6. FAIL-SAFE ACTIVATION CHECK

Check that the symptom is applied to the 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 that the fail-safe activates. Specify the malfunctioning part.

>> GO TO 9.

8. SYMPTOM DIAGNOSIS

Perform the symptom diagnosis. Specify the malfunctioning part.

>> GO TO 9.

9. MALFUNCTION PART REPAIR

Repair or replace the malfunctioning part.

>> GO TO 10.

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

Perform the self-diagnosis with CONSULT-III. Check that any DTC is not detected. Erase DTC if DTC is detected before the repair. Check 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.

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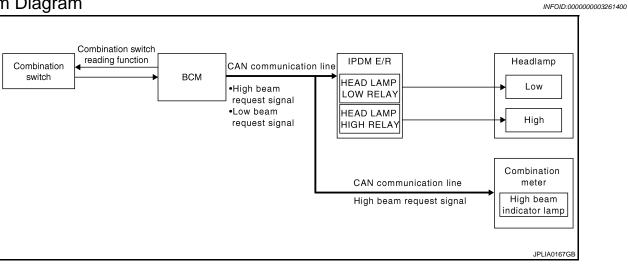
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FUNCTION DIAGNOSIS

HEADLAMP SYSTEM

System Diagram



System Description

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OUTLINE

Headlamp is controlled by combination switch reading function and headlamp control function of BCM, and relay control function of IPDM E/R.

HEADLAMP (LO) OPERATION

- BCM detects the combination switch condition with the combination switch reading function.
- BCM transmits the low beam request signal to IPDM E/R with CAN communication according to the headlamp (LO) ON condition.

Headlamp (LO) ON condition

- Lighting switch 2ND
- IPDM E/R turns the integrated headlamp low relay ON, and turns the headlamp ON according to the low beam request signal.

HEADLAMP (HI) OPERATION

 BCM transmits the high beam request signal to IPDM E/R and the combination meter with CAN communication according to the headlamp (HI) ON condition.

Headlamp (HI) ON condition

- Lighting switch HI with the lighting switch 2ND
- Lighting switch PASS
- Combination meter turns the high beam indicator lamp ON according to the high beam request signal.
- IPDM E/R turns the integrated headlamp high relay ON, and turns the headlamp ON according to the high beam request signal.

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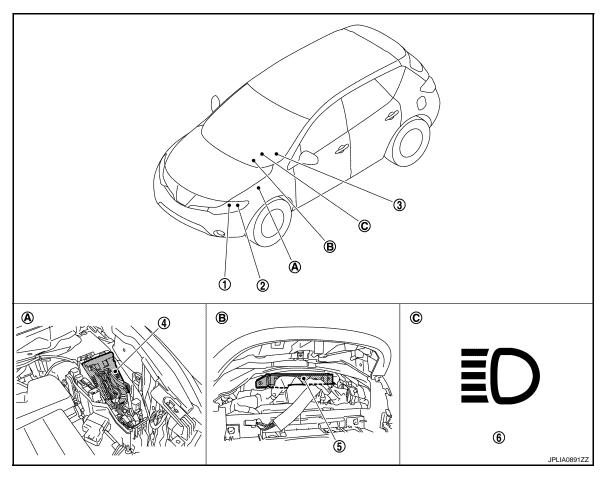
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Component Parts Location

INFOID:0000000003261402



- 1. Headlamp (HI)
- 4. IPDM E/R
- A. Engine room (LH)
- 2. Headlamp (LO)
- 5. BCM
- B. Behind the combination meter
- 3. Combination switch
- 6. High beam indicator lamp
- C. On the combination meter

Component Description

Part	Description	
ВСМ	 Detects each switch condition by the combination switch reading function. Judges that the headlamp is turned ON according to the vehicle condition. Requests the headlamp relay (HI/LO) ON to IPDM E/R (with CAN communication). Requests the high beam indicator lamp ON to the combination meter (with CAN communication). 	
IPDM E/R	Controls the integrated relay, and supplies voltage to the load according to the request from BCM (with CAN communication).	
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".	
Combination meter (High beam indicator lamp)	Turns the high beam indicator lamp ON according to the request from BCM (with CA communication).	

[HALOGEN TYPE]

INFOID:0000000003729407

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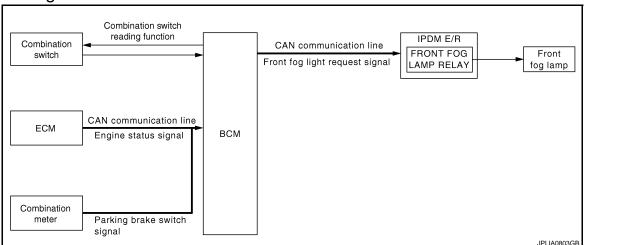
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DAYTIME RUNNING LIGHT SYSTEM

System Diagram



System Description

INFOID:0000000003729408

OUTLINE

Turns the front fog lamp ON as the daytime running light.

 Daytime running light is controlled by daytime running light control function and combination switch reading function of BCM, and relay control function of IPDM E/R.

DAYTIME RUNNING LIGHT OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM detects the vehicle condition depending on the following signals.
- Engine condition signal (received from ECM with CAN communication)
- Parking brake switch signal (received from combination meter with CAN communication)
- BCM transmits the front fog light request signal to IPDM E/R with CAN communication according to the daytime running light ON condition.

Daytime running light ON condition

While the engine running with the parking brake released

Daytime running light OFF condition

- Engine stopped
- Headlamp ON (Passing included)
- IPDM E/R turns the integrated front fog lamp relay ON and turns the front fog lamp ON according to the front fog light request signal.

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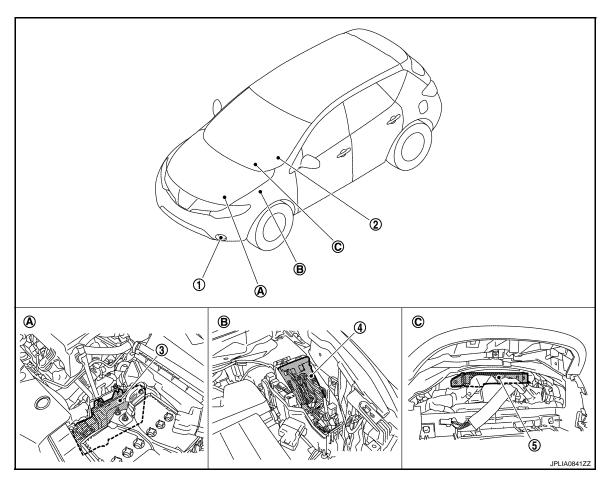
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Component Parts Location

INFOID:0000000003729409



- 1. Daytime running light (Front fog lamp) 2.
- 4. IPDM E/R
- A. Engine room (LH)

- 2. Combination switch
- 5. BCM
- B. Engine room (LH)
- 3. ECM
- C. Behind the combination meter

Component Description

Part	Description		
ВСМ	 Detects each switch condition with the combination switch reading function. Judges the headlamp ON/OFF status according to the vehicle condition. Requests the front fog lamp relay ON to IPDM E/R (with CAN communication). 		
IPDM E/R	Controls the integrated relay and supplies voltage to the load according to the request from BCM (with CAN communication).		
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".		
ECM	Transmits the engine condition signal to BCM with CAN communication.		
Combination meter	Transmits the parking brake switch signal to BCM with CAN communication.		

[HALOGEN TYPE]

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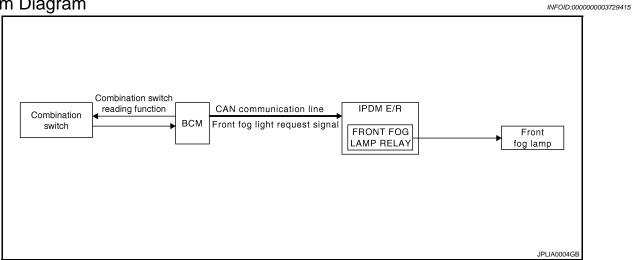
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FRONT FOG LAMP SYSTEM

System Diagram



System Description

INFOID:0000000003729416

OUTLINE

Front fog lamp is controlled by combination switch reading function and front fog lamp control function of BCM, and relay control function of IPDM E/R.

FRONT FOG LAMP OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the front fog light request signal to IPDM E/R with CAN communication according to the front fog lamp ON condition.

Front fog lamp ON condition

- Front fog lamp switch ON with headlamp ON (except for the high beam ON)
- IPDM E/R turns the integrated front fog lamp relay ON, and turns the front fog lamp ON according to the front fog light request signal.

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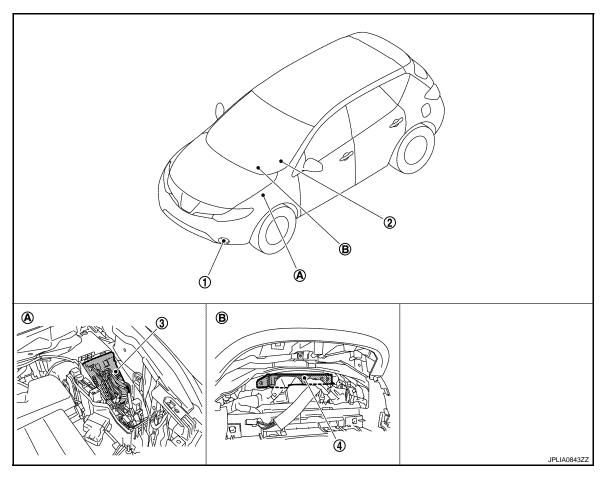
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Component Parts Location

INFOID:0000000003729417



- 1. Front fog lamp
- 4. BCM
- A. Engine room (LH)
- 2. Combination switch
- 3. IPDM E/R
- B. Behind the combination meter

Component Description

Part	Description	
Detects each switch condition by the combination switch reading fursions. Judges the front fog lamp ON/OFF status according to the vehicle of Requests the front fog lamp relay ON to IPDM E/R (with CAN communications).		
IPDM E/R	Controls the integrated relay and supplies voltage to the load according to the requirem BCM (with CAN communication).	
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".	

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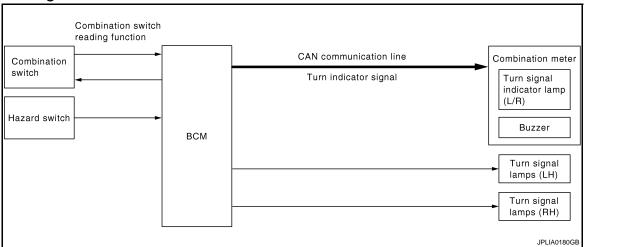
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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

System Diagram



System Description

INFOID:0000000003729420

OUTLINE

Turn signal lamp and the hazard warning lamp is controlled by combination switch reading function and the flasher control function of BCM.

TURN SIGNAL LAMP OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM supplies voltage to the right (left) turn signal lamp circuit when the ignition switch is turned ON and the turn signal switch is in the right (left) position. BCM blinks the turn signal lamp.

HAZARD WARNING LAMP OPERATION

BCM supplies voltage to both turn signal lamp circuit when the hazard switch is turned ON. BCM blinks the hazard warning lamp.

TURN SIGNAL INDICATOR LAMP AND TURN SIGNAL SOUND OPERATION

- BCM transmits the turn indicator signal to the combination meter with CAN communication while the turn signal lamp and the hazard warning lamp are operating.
- Combination meter outputs the turn signal sound with the integrated buzzer while blinking the turn signal indicator lamp according to the turn indicator signal.

HIGH FLASHER OPERATION (FAIL-SAFE)

- BCM detects the turn signal lamp circuit status by the terminal current value.
- · BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

The blinking speed is normal while operating the hazard warning lamp.

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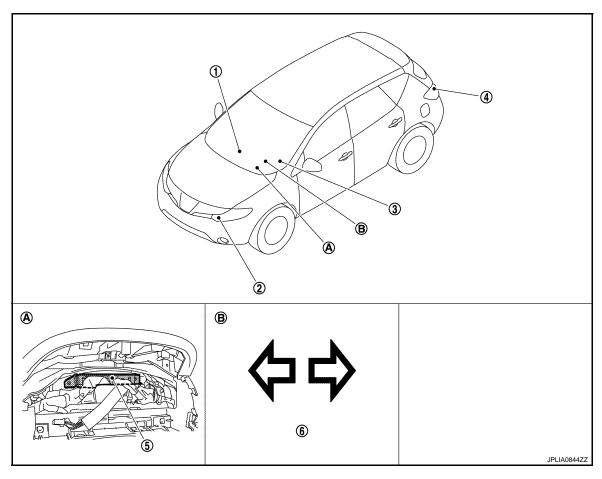
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Component Parts Location

INFOID:0000000003729421



- 1. Hazard switch
- 4. Rear turn signal lamp
- A. Behind the combination meter
- 2. Front turn signal lamp
- 5. BCM
- B. On the combination meter
- 3. Combination switch
- 6. Turn signal indicator lamp

Component Description

Part	Description		
ВСМ	 Detects each switch condition by the combination switch reading function. Judges the blinks of the turn signal lamp and the hazard warning lamp from each switch status. The applicable turn signal lamp blinks. Requests the turn signal indicator lamp blink to the combination meter (with CAN communication). 		
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".		
Hazard switch	Inputs the hazard switch ON/OFF signal to BCM.		
Combination meter (Turn signal indicator lamp & buzzer)	Blinks the turn signal indicator lamp and outputs the turn signal operating sound with integrated buzzer according to the request from BCM (with CAN communication).		

[HALOGEN TYPE]

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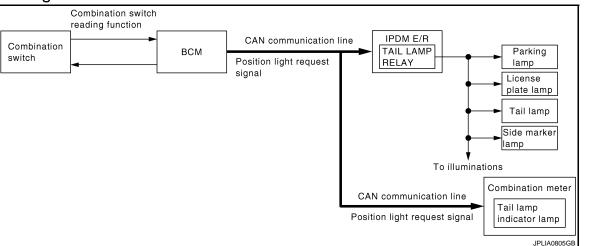
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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

System Diagram



System Description

INFOID:0000000003468480

OUTLINE

Parking, license plate, side marker and tail lamps are controlled by combination switch reading function and headlamp control function of BCM, and relay control function of IPDM E/R.

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the position light request signal to IPDM E/R and the combination meter with CAN communication according to the ON/OFF condition of the parking, license plate, side marker and tail lamps.

Parking, license plate, side marker and tail lamps ON condition

- Lighting switch 1ST
- Lighting switch 2ND
- IPDM E/R turns the integrated tail lamp relay ON and turns the parking lamp, license plate, side marker and tail lamps ON according to the position light request signal.
- Combination meter turns the tail lamp indicator lamp ON according to the position light request signal.

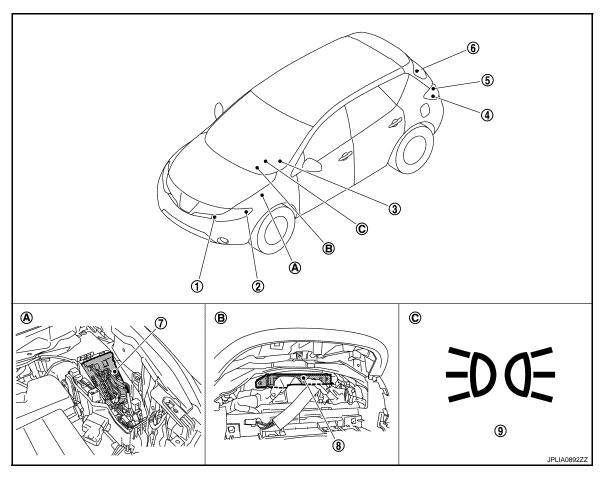
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Component Parts Location

INFOID:0000000003468481



- 1. Parking lamp
- 4. Rear side marker lamp
- 7. IPDM E/R
- A. Engine room (LH)

- 2. Front side marker lamp
- 5. Tail lamp
- 8. BCM
- B. Behind the combination meter
- 3. Combination switch
- 6. License plate lamp
- 9. Tail lamp indicator lamp
- C. On the combination meter

Component Description

Part	Description		
ВСМ	 Detects each switch condition by the combination switch reading function. Judges the ON/OFF status of the parking, license plate and tail lamps according to the vehicle condition. Requests the tail lamp relay ON to IPDM E/R (with CAN communication). Requests the tail lamp indicator lamp ON to the combination meter (with CAN communication). 		
IPDM E/R	Controls the integrated relay and supplies voltage to the load according to the requestrom BCM (with CAN communication).		
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".		
Combination meter (Tail lamp indicator lamp)	Turns the tail lamp indicator lamp ON according to the request from BCM (with CAN communication).		

EXTERIOR LAMP BATTERY SAVER SYSTEM

< FUNCTION DIAGNOSIS >

[HALOGEN TYPE]

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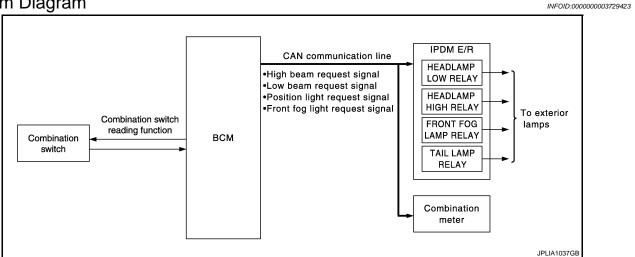
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EXTERIOR LAMP BATTERY SAVER SYSTEM

System Diagram



System Description

INFOID:0000000003729424

OUTLINE

Exterior lamp battery saver system is controlled by each function of BCM and IPDM E/R.

Control by BCM

- Combination switch reading function
- Headlamp control function
- Exterior lamp battery saver function

Control by IPDM E/R

- Relay control function
- BCM turns the exterior lamp* OFF after a period of time to prevent the battery from over-discharge when the ignition switch is turned OFF with the exterior lamp ON.
- *: Headlamp (LO/HI), parking lamp, side marker lamp, tail lamp, license plate lamp and front fog lamp.

EXTERIOR LAMP BATTERY SAVER ACTIVATION

BCM activates the timer and turns the exterior lamp OFF 5 minutes after the ignition switch is turned from ON → OFF with the exterior lamps ON.

NOTE:

- Headlamp control function turns the exterior lamps ON normally when the ignition switch is turned ACC or the engine started (both before and after the exterior lamp battery saver is turned OFF).
- The timer starts at the time that the lighting switch is turned from OFF → 1ST or 2ND with the exterior lamp OFF.

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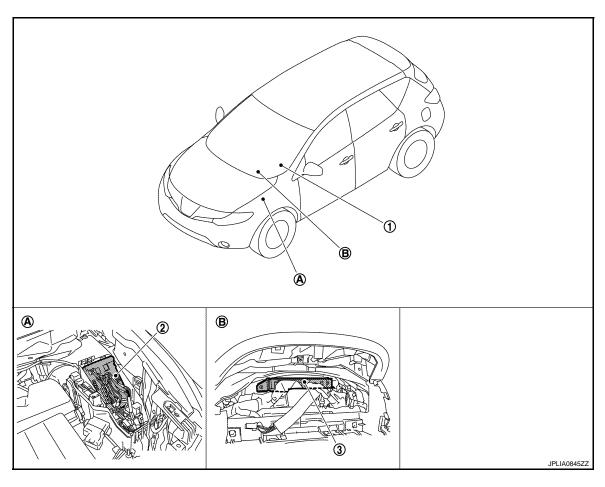
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Component Parts Location

INFOID:0000000003729425



- 1. Combination switch
- A. Engine room (LH)
- 2. IPDM E/R
- B. Behind the combination meter

3. BCM

Component Description

Part	Description		
BCM	 Detects each switch condition by the combination switch reading function. Activates the battery saver to turn the exterior lamps OFF according to the vehicle condition. Requests each relay OFF to IPDM E/R (with CAN communication). 		
IPDM E/R	Controls the integrated relay according to the request from BCM (with CAN communication).		
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Diagram".		

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[HALOGEN TYPE]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

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APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description	
Work Support	Changes the setting for each system function.	
Self Diagnostic Result	Displays the diagnosis results judged by BCM.	
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual.	
Data Monitor	The BCM input/output signals are displayed.	
Active Test	The signals used to activate each device are forcibly supplied from BCM.	
Ecu Identification	The BCM part number is displayed.	
Configuration	 Read and save the vehicle specification. Write the vehicle specification when replacing BCM. 	

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
System	Work Support		Data Monitor	Active Test
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*1	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×* ²	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
_	AIR CONDITONER*3			
Intelligent Key systemEngine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	ВСМ	×		
NVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door opener system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

NOTE:

- *1: At models with Intelligent Key system this item is displayed, but is not used.
- *2: At models with rain sensor this mode is displayed, but is not used.

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FREEZE FRAME DATA (FFD)

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

CONSULT screen item	Indication/Unit	Description		
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected		
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected		
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")	
·	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)	
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"	
	ACC>ON		While turning power supply position from "ACC" to "IGN"	
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)	
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)	
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)	
	ACC>OFF		While turning power supply position from "ACC" to "OFF"	
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"	
Vehicle Condition	OFF>ACC	Power position status of the moment a particular	While turning power supply position from "OFF" to "ACC"	
	ON>CRANK	DTC is detected	While turning power supply position from "IGN" to "CRANKING"	
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode	
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode	
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)	
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)	
	ACC		Power supply position is "ACC" (Ignition switch ACC)	
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)	
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	
	CRANKING		Power supply position is "CRANKING" (At engine cranking)	
IGN Counter	0 - 39	 The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 		

HEADLAMP

HEADLAMP: CONSULT-III Function (BCM - HEAD LAMP)

INFOID:0000000003729564

WORK SUPPORT

Service item	Setting item	Setting	
BATTERY SAVER SET	On*	With the exterior lamp battery saver function	
	Off	Without the exterior lamp battery saver function	

^{• *3:} This item is displayed, but is not used.

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[HALOGEN TYPE]

Service item	Setting item	Setting		
	MODE 1*	45 sec.		
	MODE 2	Without the function		
	MODE 3	30 sec.		
ILL DELAY SET	MODE 4	60 sec.	Sets delay timer function timer operation time. (All doors closed)	
	MODE 5	90 sec.	(All doors closed)	
	MODE 6	120 sec.		
	MODE 7	150 sec.		
	MODE 8	180 sec.		
	MODE 1*	Normal		
CUSTOM A/LIGHT SET- TING	MODE 2	More sensitive setting than normal setting (Turns ON earlier than normal operation.)		
	MODE 3	More sensitive setting than MODE 2 (Turns ON earlier than MODE 2.)		
	MODE 4	Less sensitive setting than normal setting (Turns ON later than normal operation.)		

^{*:} Factory setting

DATA MONITOR

Monitor item [Unit]	Description
PUSH SW [On/Off]	The switch status input from push-button ignition switch
ENGINE STATE [Stop/Stall/Crank/Run]	The engine status received from ECM with CAN communication
VEH SPEED 1 [km/h]	The value of the vehicle speed received from combination meter with CAN communication
KEY SW-SLOT [On/Off]	Key switch status input from key slot
TURN SIGNAL R [On/Off]	
TURN SIGNAL L [On/Off]	
TAIL LAMP SW [On/Off]	
HI BEAM SW [On/Off]	
HEAD LAMP SW1 [On/Off]	Each switch status that BCM detects from the combination switch reading function
HEAD LAMP SW2 [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW [On/Off]	
FR FOG SW [On/Off]	
RR FOG SW [On/Off]	NOTE: The item is indicated, but not monitored.
DOOR SW-DR [On/Off]	The switch status input from front door switch (driver side)
DOOR SW-AS [On/Off]	The switch status input from front door switch (passenger side)

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Monitor item [Unit]	Description
DOOR SW-RR [On/Off]	The switch status input from rear door switch RH
DOOR SW-RL [On/Off]	The switch status input from rear door switch LH
DOOR SW-BK [On/Off]	NOTE: The item is indicated, but not monitored.
OPTICAL SENSOR [V]	The value of exterior brightness voltage input from the optical sensor

ACTIVE TEST

Test item	Operation	Description
TAIL LAMP	On	Transmits the position light request signal to IPDM E/R with CAN communication to turn the tail lamp ON.
	Off	Stops the position light request signal transmission.
	Hi	Transmits the high beam request signal with CAN communication to turn the headlamp (HI).
HEAD LAMP	Low	Transmits the low beam request signal with CAN communication to turn the headlamp (LO).
	Off	Stops the high & low beam request signal transmission.
FR FOG LAMP	On	Transmits the front fog light request signal to IPDM E/R with CAN communication to turn the front fog lamp ON.
	Off	Stops the front fog light request signal transmission.
RR FOG LAMP	On	NOTE:
RR FOG LAWIF	Off	The item is indicated, but cannot be tested.
DAYTIME RUNNING LIGHT	On	NOTE:
DAT TIME ROMNING LIGHT	Off	The item is indicated, but cannot be tested.
	RH	
CORNERING LAMP	LH	NOTE: The item is indicated, but cannot be tested.
	Off	
ILL DIM SIGNAL	On	NOTE:
ILL DIW SIGNAL	Off	The item is indicated, but cannot be tested.

FLASHER

FLASHER: CONSULT-III Function (BCM - FLASHER)

INFOID:0000000003729565

WORK SUPPORT

Service item	Setting item	Setting		
	Lock Only*	With locking only		
HAZARD ANSWER	Unlk Only	With unlocking only	Sets the hazard warning lamp answer back function when the door is lock/unlock with the request switch or	
BACK	Lock/Unlk	With locking/unlocking	the key fob.	
	Off	Without the function		

^{*:} Factory setting

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

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Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from the request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from the request switch (passenger side)
PUSH SW [On/Off]	The switch status input from the push-button ignition switch
TURN SIGNAL R [On/Off]	Fach quitable status that DCM dataste from the combination quitable reading function
TURN SIGNAL L [On/Off]	Each switch status that BCM detects from the combination switch reading function
HAZARD SW [On/Off]	The switch status input from the hazard switch
RKE-LOCK [On/Off]	Lock signal status received from the remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from the remote keyless entry receiver
RKE-PANIC [On/Off]	Panic alarm signal status received from the remote keyless entry receiver

ACTIVE TEST

Test item	Operation Description	
	RH	Outputs the voltage to blink the right side turn signal lamps.
FLASHER	LH	Outputs the voltage to blink the left side turn signal lamps.
	Off	Stops the voltage to turn the turn signal lamps OFF.

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[HALOGEN TYPE]

DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

INFOID:0000000003729566

AUTO ACTIVE TEST

Description

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

- Oil pressure warning lamp
- Front wiper (LO, HI)
- Parking lamps
- License plate lamps
- Side maker lamps
- Tail lamps
- Front fog lamps
- Headlamps (LO, HI)
- A/C compressor (magnet clutch)
- Cooling fan

Operation Procedure

1. Close the hood and lift the wiper arms from the windshield. (Prevent windshield damage due to wiper operation)

NOTE:

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

- 2. Turn the ignition switch OFF.
- 3. Turn the ignition switch ON, and within 20 seconds, press the front door switch (driver side) 10 times. Then turn the ignition switch OFF.

CAUTION:

Close passenger door.

- 4. Turn the ignition switch ON within 10 seconds. After that the horn sounds once and the auto active test starts.
- 5. The oil pressure warning lamp starts blinking when the auto active test starts.
- 6. After a series of the following operations is repeated 3 times, auto active test is completed.

NOTE:

When auto active test mode has to be cancelled halfway through test, turn the ignition switch OFF. CAUTION:

- If auto active test mode cannot be actuated, check door switch system. Refer to <u>DLK-411</u>, <u>"Component Function Check"</u>.
- Do not start the engine.

Inspection in Auto Active Test Mode

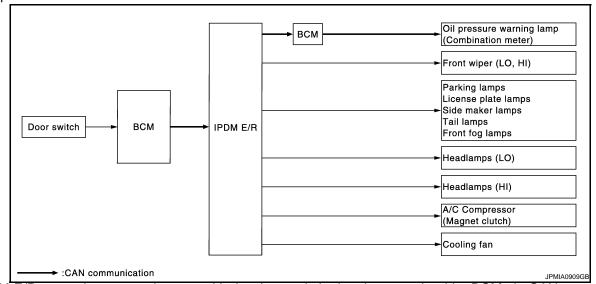
When auto active test mode is actuated, the following 6 steps are repeated 3 times.

Operation sequence	Inspection location	Operation
1	Oil pressure warning lamp	Blinks continuously during operation of auto active test
2	Front wiper	LO for 5 seconds → HI for 5 seconds
3	 Parking lamps License plate lamps Side maker lamps Tail lamps Front fog lamps 	10 seconds
4	Headlamps	LO ⇔ HI 5 times
5	A/C compressor (magnet clutch)	ON ⇔ OFF 5 times
6	Cooling fan	LO for 5 seconds \rightarrow MID for 3 seconds \rightarrow HI for 2 seconds

< FUNCTION DIAGNOSIS >

[HALOGEN TYPE]

Concept of auto active test



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

Diagnosis chart in auto active test mode

Symptom	Inspection contents		Possible cause	
Any of the following compensate do not energic			BCM signal input circuit	
Any of the following components do not operate Parking lamps License plate lamps Side maker lamps Tail lamps Front fog lamps Headlamp (HI, LO) Front wiper (HI, LO)	Perform auto active test. Does the applicable system operate?	NO	Lamp or motor Lamp or motor ground circuit Harness or connector between IPDM E/R and applicable system IPDM E/R	
A/C compressor does not operate	Perform auto active test. Does the magnet clutch operate?	YES	A/C amp. signal input circuit CAN communication signal between A/C amp. and ECM CAN communication signal between ECM and IPDM E/R	
		NO	Magnet clutch Harness or connector between IPDM E/R and magnet clutch IPDM E/R	
	Perform auto active test.	YES	Harness or connector between IPDM E/R and oil pressure switch Oil pressure switch IPDM E/R	
Oil pressure warning lamp does not operate	Does the oil pressure warning lamp blink?	NO	CAN communication signal between IPDM E/R and BCM CAN communication signal between BCM and combination meter Combination meter	

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< FUNCTION DIAGNOSIS >

[HALOGEN TYPE]

Symptom	Inspection contents		Possible cause
		YES	ECM signal input circuit CAN communication signal between ECM and IPDM E/R
Cooling fan does not operate	Perform auto active test. Does the cooling fan operate?	NO	Harness or connector between IPDM E/R and cooling fan motor Harness or connector between IPDM E/R and cooling fan relay Cooling fan motor Cooling fan relay IPDM E/R

CONSULT-III Function (IPDM E/R)

INFOID:0000000003729567

APPLICATION ITEM

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

Diagnosis mode	Description
Ecu Identification	Allows confirmation of IPDM E/R part number.
Self Diagnostic Result	Displays the diagnosis results judged by IPDM E/R.
Data Monitor	Displays the real-time input/output data from IPDM E/R input/output data.
Active Test	IPDM E/R can provide a drive signal to electronic components to check their operations.
CAN Diag Support Monitor	The results of transmit/receive diagnosis of CAN communication can be read.

SELF DIAGNOSTIC RESULT

Refer to EXL-323, "DTC Index".

DATA MONITOR

Monitor item

Monitor Item [Unit]	MAIN SIG- NALS	Description
MOTOR FAN REQ [1/2/3/4]	×	Displays the value of the cooling fan speed request signal received from ECM via CAN communication.
AC COMP REQ [Off/On]	×	Displays the status of the A/C compressor request signal received from ECM via CAN communication.
TAIL&CLR REQ [Off/On]	×	Displays the status of the position light request signal received from BCM via CAN communication.
HL LO REQ [Off/On]	×	Displays the status of the low beam request signal received from BCM via CAN communication.
HL HI REQ [Off/On]	×	Displays the status of the high beam request signal received from BCM via CAN communication.
FR FOG REQ [Off/On]	×	Displays the status of the front fog light request signal received from BCM via CAN communication.
FR WIP REQ [Stop/1LOW/Low/Hi]	×	Displays the status of the front wiper request signal received from BCM via CAN communication.
WIP AUTO STOP [STOP P/ACT P]	×	Displays the status of the front wiper auto stop signal judged by IPDM E/R.
WIP PROT [Off/BLOCK]	×	Displays the status of the front wiper fail-safe operation judged by IPDM E/R.
IGN RLY1 -REQ [Off/On]		Displays the status of the ignition switch ON signal received from BCM via CAN communication.

< FUNCTION DIAGNOSIS >

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Monitor Item [Unit]	MAIN SIG- NALS	Description
IGN RLY [Off/On]	×	Displays the status of the ignition relay judged by IPDM E/R.
PUSH SW [Off/On]		Displays the status of the push-button ignition switch judged by IPDM E/R.
INTER/NP SW [Off/On]		Displays the status of the shift position judged by IPDM E/R.
ST RLY CONT [Off/On]		Displays the status of the starter relay status signal received from BCM via CAN communication.
IHBT RLY -REQ [Off/On]		Displays the status of the starter control relay signal received from BCM via CAN communication.
ST/INHI RLY [Off/ ST ON/INHI ON/UNKWN]		Displays the status of the starter relay and starter control relay judged by IPDM E/R.
DETENT SW [Off/On]		Displays the status of the control device (detention switch) judged by IPDM E/R.
S/L RLY -REQ [Off/On]		Displays the status of the steering lock relay signal received from BCM via CAN communication.
S/L STATE [LOCK/UNLOCK/UNKWN]		Displays the status of the steering lock judged by IPDM E/R.
DTRL REQ [Off/On]		NOTE: The item is indicated, but not monitored.
OIL P SW [Open/Close]		Displays the status of the oil pressure switch judged by IPDM E/R.
HOOD SW [Off/On]		NOTE: The item is indicated, but not monitored.
HL WASHER REQ [Off/On]		NOTE: The item is indicated, but not monitored.
THFT HRN REQ [Off/On]		Displays the status of the theft warning horn request signal received from BCM via CAN communication.
HORN CHIRP [Off/On]		Displays the status of the horn reminder signal received from BCM via CAN communication.
CRNRNG LMP REQ [Off/On]		NOTE: The item is indicated, but not monitored.

ACTIVE TEST

Test item

Test item	Operation	Description	
	Off		
CORNERING LAMP	LH	NOTE: The item is indicated, but cannot be tested.	
	RH		
HORN	On	Operates horn relay for 20 ms.	
	Off	OFF	
FRONT WIPER	Lo	Operates the front wiper relay.	
	Hi	Operates the front wiper relay and front wiper high relay.	
	1	OFF	
MOTOD FANI	2	Operates the cooling fan relay-1.	
MOTOR FAN	3	Operates the cooling fan relay-2.	
	4	Operates the cooling fan relay-2 and cooling fan relay-3.	
HEAD LAMP WASHER	On	NOTE: The item is indicated, but cannot be tested.	

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< FUNCTION DIAGNOSIS >

[HALOGEN TYPE]

Test item	Operation	Description		
	Off	OFF		
	TAIL	Operates the tail lamp relay.		
EXTERNAL LAMPS	Lo	Operates the headlamp low relay.		
	Hi	Operates the headlamp low relay and ON/OFF the headlamp high relay at 1 second intervals.		
	Fog	Operates the front fog lamp relay.		

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE): Diagnosis Procedure

INFOID:0000000003737072

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1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.	
Battery power supply	L	
battery power suppry	10	

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

(Voltage		
В	СМ		(Approx.)
Connector	Connector Terminal		
M118 1		Ground	Battery voltage
M119	11		Dattery Voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector Terminal		Ground	Continuity	
M119	13		Existed	

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

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

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

1. CHECK FUSES AND FUSIBLE LINK

Check that the following IPDM E/R fuses or fusible links are not blown.

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POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

2009 Murano

Signal name	Fuses and fusible link No.	
	E	
Battery power supply	50	
	51	

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check voltage between IPDM E/R harness connector and the ground.

(+)	(-)	Voltage
IPDM E/R		()	(Approx.)
Connector Terminal		Ground	
E9	1	Giodila	Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair the harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between IPDM E/R harness connectors and the ground.

IPDM E/R			Continuity	
Connector Terminal		Ground	Continuity	
E10	12	Giodila	Existed	
E11	41		LXISIEU	

Does continuity exist?

YES >> INSPECTION END

NO >> Repair the harness or connector.

EXTERIOR LAMP FUSE

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

EXTERIOR LAMP FUSE

Description INFOID:000000003261431

Fuse list

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	#54	10 A
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp LO (LH)	IPDM E/R	#56	15 A
Headlamp LO (RH)	IPDM E/R	#57	15 A
Front fog lamp	IPDM E/R	#58	15 A
Parking lamp Front side marker lamp	IPDM E/R	#52	10 A
Tail lampRear side marker lampLicense plate lampEach illumination	IPDM E/R	#53	10 A
Stop lamp	FUSE BLOCK (J/B)	#7	10 A
Back-up lamp	FUSE BLOCK (J/B)	#4	10 A

Diagnosis Procedure

1.CHECK FUSE

Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	#54	10 A
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp LO (LH)	IPDM E/R	#56	15 A
Headlamp LO (RH)	IPDM E/R	#57	15 A
Front fog lamp	IPDM E/R	#58	15 A
Parking lamp Front side marker lamp	IPDM E/R	#52	10 A
Tail lamp Rear side marker lamp License plate lamp Each illumination	IPDM E/R	#53	10 A
Stop lamp	FUSE BLOCK (J/B)	#7	10 A
Back-up lamp	FUSE BLOCK (J/B)	#4	10 A

Is the fuse fusing?

YES >> Repair the applicable circuit. And then replace the fuse.

NO >> The fuse is normal.

INFOID:0000000003261432

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HEADLAMP (HI) CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

HEADLAMP (HI) CIRCUIT

Component Function Check

INFOID:0000000003261433

1. CHECK HEADLAMP (HI) OPERATION

RIPDM E/R AUTO ACTIVE TEST

- 1. Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- Check that the headlamp switches to the high beam.

(P)CONSULT-III ACTIVE TEST

- 1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 2. With operating the test items, check that the headlamp (HI) is turned ON.

Hi : Headlamp (HI) ON
Off : Headlamp (HI) OFF

NOTE:

ON/OFF is repeated 1 second each.

Is the headlamp (HI) turned ON?

YES >> Headlamp (HI) circuit is normal.

NO >> Refer to EXL-216, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003261434

1. CHECK HEADLAMP (HI) OUTPUT VOLTAGE

(P)CONSULT-III ACTIVE TEST

- 1. Turn the ignition switch OFF.
- 2. Disconnect the headlamp high connector.
- 3. Turn the ignition switch ON.
- 4. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 5. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

Terminals				Test item	
(+)			(-)	iest item	Voltage (Approx.)
IPDM E/R				EXTERNAL LAMPS	
Connector Terminal					
RH		89	Ground	Hi	Battery voltage
	E345			Off	0 V
LH	L343			Hi	Battery voltage
				Off	0 V

Is the measurement value normal?

YES >> GO TO 2. NO >> GO TO 3.

2.CHECK HEADLAMP (HI) OPEN CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the headlamp high harness connector.

HEADLAMP (HI) CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

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IPDM E/R		Headlamp high		Continuity	
Conr	nector	Terminal	Connector	Terminal	Continuity
RH	E345	89	E317	1	Existed
LH	E345	90	E316	1	LAISIEU

Does continuity exist?

YES >> GO TO 5.

NO >> Repair the harnesses or connectors.

3.CHECK HEADLAMP (HI) FUSE

- 1. Turn the ignition switch OFF.
- 2. Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp HI (LH)	IPDM E/R	#54	10 A

Is the fuse fusing?

YES >> GO TO 4.

NO >> Replace IPDM E/R.

4.CHECK HEADLAMP HIGH (HI) SHORT CIRCUIT

- 1. Disconnect IPDM E/R connector.
- 2. Check continuity between the IPDM E/R harness connector terminal and the ground.

IPDM E/R				Continuity
Conr	nector	Terminal	Ground	Continuity
RH	E345	89	Ground	Not existed
LH	⊏345	90		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if the fuse is fusing again.)

5.check headlamp (HI) ground open circuit

Turn the ignition switch OFF.

- 2. Disconnect the headlamp high connector.
- Check continuity between the headlamp high harness connector and ground.

	Headlamp	high		Continuity
Coni	nector	Terminal	Ground	Continuity
RH	E317	2	Ground	Existed
LH	E316	2		Existed

Does continuity exist?

YES >> Replace the headlamp (HI) bulb. (Bulb socket is abnormally.)

NO >> Repair the harnesses or connectors.

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[HALOGEN TYPE]

HEADLAMP (LO) CIRCUIT

Component Function Check

INFOID:0000000003261435

1. CHECK HEADLAMP (LO) OPERATION

RIPDM E/R AUTO ACTIVE TEST

- 1. Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- Check that the headlamp is turned ON.

(P)CONSULT-III ACTIVE TEST

- 1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 2. With operating the test items, check that the headlamp (LO) is turned ON.

Lo : Headlamp (LO) ON
Off : Headlamp (LO) OFF

Is the headlamp (LO) turned ON?

YES >> Headlamp (LO) is normal.

NO >> Refer to EXL-218, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003261436

1. CHECK HEADLAMP (LO) OUTPUT VOLTAGE

(P)CONSULT-III ACTIVE TEST

- 1. Turn the ignition switch OFF.
- 2. Disconnect the headlamp low connector.
- 3. Turn the ignition switch ON.
- 4. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 5. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

	Terminals				
(+)		(-)	Test item	Voltage	
IPDM E/R			EXTERNAL	(Approx.)	
Con	nector Terminal			LAMPS	
RH		83	Ground	Lo	Battery voltage
E345		Oround	Off	0 V	
LH	2040	84		Lo	Battery voltage
				Off	0 V

Is the measurement value normal?

YES >> GO TO 2. NO >> GO TO 3.

2. CHECK HEADLAMP (LO) OPEN CIRCUIT

- Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the headlamp low harness connector.

Connector Terminal Connector Terminal RH 83 E321 1	IPDM E/R	
	Conn	Continuity
	RH	Existed
LH 84 E320 1	LH	Existed

Does continuity exist?

HEADLAMP (LO) CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

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YES >> GO TO 5.

NO >> Repair the harnesses or connectors.

3.CHECK HEADLAMP (LO) FUSE

- Turn the ignition switch OFF.
- 2. Check that the following fuses are not fusing.

Unit	Lotion	Fuse No.	Capacity
Headlamp LO (RH)	IPDM E/R	#57	15 A
Headlamp LO (LH)	IPDM E/R	#56	15 A

Is the fuse fusing?

YES >> GO TO 4.

NO >> Replace IPDM E/R.

4. CHECK HEADLAMP (LO) SHORT CIRCUIT

- Disconnect IPDM E/R connector.
- 2. Check continuity between the IPDM E/R harness connector and the ground.

IPDM E/R				Continuity
Conr	nector	Terminal	Ground	Continuity
RH	E345	83	Glound	Not existed
LH	E343	84		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if the fuse is fusing again.)

5. CHECK HEADLAMP (LO) GROUND OPEN CIRCUIT

- Turn the ignition switch OFF.
- Disconnect the headlamp low connector. 2.
- Check continuity between the headlamp low harness connector and ground.

Headlamp low				Continuity	
Coni	nector	Terminal	Ground	Continuity	
RH	E321	2	Glound	Existed	
LH	E320	2		EXISTEC	

Does continuity exist?

YES >> Replace the headlamp (LO) bulb. (Bulb socket is abnormally.)

NO >> Repair the harnesses or connectors.

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FRONT FOG LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

FRONT FOG LAMP CIRCUIT

Component Function Check

INFOID:0000000003729570

1. CHECK FRONT FOG LAMP OPERATION

®IPDM E/R AUTO ACTIVE TEST

- Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- Check that the front fog lamp is turned ON.

(P)CONSULT-III ACTIVE TEST

- 1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 2. With operating the test items, check that the front fog lamp is turned ON.

Fog : Front fog lamp ON
Off : Front fog lamp OFF

Is the front fog lamp turned ON?

YES >> Front fog lamp circuit is normal.

NO >> Refer to EXL-220, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003729571

1. CHECK FRONT FOG LAMP FUSE

- 1. Turn the ignition switch OFF.
- 2. Check that the following fuse is not fusing.

Unit	Location	Fuse No.	Capacity
Front fog lamp	IPDM E/R	#58	15 A

Is the fuse fusing?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK FRONT FOG LAMP SHORT CIRCUIT

- Disconnect IPDM E/R connector and the front fog connector.
- 2. Check continuity between the IPDM E/R harness connector and the ground.

IPDM E/R				Continuity
Conr	nector	Terminal	Ground	Continuity
RH	E345	86	Giodila	Not existed
LH	E345	87	-	INOL EXISTED

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if the fuse is fusing again.)

3.CHECK FRONT FOG LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 4.

NO >> Replace the bulb.

4. CHECK FRONT FOG LAMP OUTPUT VOLTAGE

(P)CONSULT-III ACTIVE TEST

- Disconnect the front fog lamp connector.
- Turn the ignition switch ON.
- Select "EXTERNAL LAMPS" of IPDM E/R active test item.

FRONT FOG LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

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With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

	Terminals			Test item		
(+)		(-)	iest item	Voltage		
IPDM E/R			EXTERNAL	(Approx.)		
Connector		Terminal		LAMPS		
RH E345	86	Ground	Fog	Battery voltage		
	F3/15		Glound	Off	0 V	
	E343	87		Fog	Battery voltage	
				Off	0 V	

Is the measurement value normal?

YES >> GO TO 5.

NO >> Replace IPDM E/R.

5. CHECK FRONT FOG LAMP OPEN CIRCUIT

- Turn the ignition switch OFF.
- Disconnect IPDM E/R connector. 2.
- Check continuity between the IPDM E/R harness connector and the front fog lamp harness connector.

Continuity	g lamp	Front fog	IPDM E/R		
Continuity	Terminal	Connector Termina		nector	Conr
Existed	1	E402	86	E345	RH
LAISIEU	1	E331	87	L345	LH

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6.CHECK FRONT FOG LAMP GROUND CIRCUIT OPEN CIRCUIT

Check continuity between the front fog lamp harness connector and the ground.

Front fog lamp				Continuity
Conr	nector	Terminal	Ground	
RH	E402	2	Giodila	Existed
LH	E331	2		Existed

Does continuity exist?

YES >> Replace the front fog lamp.

NO >> Repair the harnesses or connectors. **EXL**

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EXL-221 Revision: 2008 October 2009 Murano

PARKING LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

PARKING LAMP CIRCUIT

Component Function Check

INFOID:0000000003425060

1. CHECK PARKING LAMP OPERATION

RIPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".

Check that the parking lamp is turned ON.

(P)CONSULT-III ACTIVE TEST

1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.

2. With operating the test items, check that the parking lamp is turned ON.

TAIL : Parking lamp ON
Off : Parking lamp OFF

Is the parking lamp turned ON?

YES >> Parking lamp circuit is normal.

NO >> Refer to EXL-222, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003425061

1. CHECK PARKING LAMP FUSE

- 1. Turn the ignition switch OFF.
- Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Parking lamp	IPDM E/R	#52	10 A

Is the fuse fusing?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK PARKING LAMP SHORT CIRCUIT

- 1. Disconnect IPDM E/R connector and the front combination lamp connector.
- 2. Check continuity between the IPDM E/R harness connector and the ground.

	IPDM E/	'R		Continuity
Conr	nector	Terminal	Ground	Continuity
RH	E346	91	Gloulia	Not existed
LH	E340	92		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if fusing is found again.)

3.CHECK PARKING LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 4.

NO >> Replace the bulb.

4. CHECK PARKING LAMP OUTPUT VOLTAGE

(P)CONSULT-III ACTIVE TEST

- 1. Disconnect the front combination lamp connector.
- Turn the ignition switch ON.
- 3. Select "EXTERNAL LAMPS" of IPDM E/R active test item.

PARKING LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

4. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

	Т	erminals	Test item				
	(+)		(+)		(-)	iest itemi	Voltage
	IPDM E	/R		EXTERNAL	(Approx.)		
Cor	nnector	Terminal		LAMPS			
RH E346		91	91 Ground 92	TAIL	Battery voltage		
	E346			Off	0 V		
	L340	92		TAIL	Battery voltage		
				Off	0 V		

Is the measurement value normal?

YES >> GO TO 5.

NO >> Replace IPDM E/R.

5. CHECK PARKING LAMP OPEN CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the front combination lamp harness connector.

IPDM E/R		Front combin	ation lamp	Continuity	
Conr	nnector Terminal		Connector	Terminal	Continuity
RH	E346	91	E319	1	Existed
LH	L340	92	E318	1	LXISIEU

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6.CHECK PARKING LAMP GROUND OPEN CIRCUIT

Check continuity between the front combination lamp harness connector and the ground.

Front combination lamp				Continuity
Conr	nector	Terminal	Ground	Continuity
RH	E319	2	Giouria	Existed
LH	E318	2		EXISTECT

Does continuity exist?

YES >> Replace the front combination lamp.

NO >> Repair the harnesses or connectors.

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FRONT SIDE MARKER LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

INFOID:0000000003729572

FRONT SIDE MARKER LAMP CIRCUIT

Component Function Check

NOTE:

Check the parking lamp circuit if the parking lamp and the front side marker lamp are not turned ON. Refer to EXL-45, "Component Function Check".

$1.\mathsf{CHECK}$ FRONT SIDE MARKER LAMP OPERATION

PIPDM E/R AUTO ACTIVE TEST

- 1. Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- 2. Check that the front side marker lamp is turned ON.

(P)CONSULT-III ACTIVE TEST

- 1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 2. With operating the test items, check that the front side marker lamp is turned ON.

TAIL : Front side marker lamp ON
Off : Front side marker lamp OFF

Is the front side marker lamp turned ON?

YES >> Front side marker lamp circuit is normal. NO >> Refer to EXL-224, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003729573

1. CHECK FRONT SIDE MARKER LAMP FUSE

- 1. Turn the ignition switch OFF.
- Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Front side marker lamp	IPDM E/R	#52	10 A

Is the fuse fusing?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK FRONT SIDE MARKER LAMP SHORT CIRCUIT

- Disconnect IPDM E/R connector and the front side marker lamp connector.
- 2. Check continuity between the IPDM E/R harness connector and the ground.

	IPDM E/	'R		Continuity
Conr	nector	Terminal	Ground	Continuity
RH	E346	91	Giodila	Not existed
LH		92		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if fusing is found again.)

3.CHECK FRONT SIDE MARKER LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 4.

NO >> Replace the bulb.

4. CHECK FRONT SIDE MARKER LAMP OUTPUT VOLTAGE

(P)CONSULT-III ACTIVE TEST

1. Disconnect the front side marker lamp connector.

FRONT SIDE MARKER LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

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- Turn the ignition switch ON.
- 3. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 4. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

	Т	erminals	Test item		
	(+)			163t Itelli	Voltage
	IPDM E	/R		EXTERNAL	(Approx.)
Connector		nector Terminal		LAMPS	
RH		91	Ground	TAIL	Battery voltage
	E346		Ground	Off	0 V
LH LS40	92		TAIL	Battery voltage	
				Off	0 V

Is the measurement value normal?

YES >> GO TO 5.

NO >> Replace IPDM E/R.

5. CHECK FRONT SIDE MARKER LAMP OPEN CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the front side marker lamp harness connector.

IPDM E/R			Front side marker lan		Continuity
Conr	nector	Terminal	Connector Terminal		Continuity
RH	E346	91	E315	2	Existed
LH	E346	92	E314	2	LAISIEU

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6.CHECK FRONT SIDE MARKER LAMP GROUND OPEN CIRCUIT

Check continuity between the front side marker lamp harness connector and the ground.

Front side marker lamp				Continuity
Conr	nector	Terminal	Ground	Continuity
RH	E315	1	Giodila	Existed
LH	E314	1		Existed

Does continuity exist?

YES >> Replace the front combination lamp.

NO >> Repair the harnesses or connectors.

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TURN SIGNAL LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL LAMP CIRCUIT

Description INFOID.000000003425062

BCM performs the high flasher operation (fail-safe) if any bulb or harness of the turn signal lamp circuit is open.

NOTE:

The turn signal lamp blinks at normal speed when using the hazard warning lamp.

Component Function Check

INFOID:0000000003425063

1. CHECK TURN SIGNAL LAMP

(P)CONSULT-III ACTIVE TEST

- 1. Select "FLASHER" of BCM (FLASHER) active test item.
- 2. With operating the test items, check that the turn signal lamp is turned ON.

LH : Turn signal lamps (LH) ON
RH : Turn signal lamps (RH) ON
Off : Turn signal lamps OFF

Is the turn signal lamp turned ON?

YES >> Turn signal lamp circuit is normal.

NO >> Refer to <u>EXL-226</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000003425064

1. CHECK TURN SIGNAL LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 2.

NO >> Replace the bulb.

2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

- 1. Turn the ignition switch OFF.
- 2. Disconnect the front combination lamp connector or the rear combination lamp connector.
- 3. Turn the ignition switch ON.
- 4. With operating the turn signal switch, check the voltage between the BCM harness connector and the ground.

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	Te	rminals		Condition	
	(+)		(-)	Condition	Voltage (Approx.)
	BCM			Turn signal	vollage (Approx.)
Co	nnector	Terminal		switch	
RH		17	Ground	RH	(V) 15 10 5 0 1 s
	M119			OFF	0 V
LH	WIIIS	18		LH	(V) 15 10 5 0 1 s PKID0926E
				OFF	0 V

Is the measurement value normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to BCS-96, "Exploded View".

3.check turn signal lamp open circuit

- 1. Turn the ignition switch OFF.
- 2. Disconnect BCM connector.
- Check continuity between the BCM harness connector and the front combination lamp, or the rear combination lamp harness connector.

Front turn signal lamp

ВСМ		Front combination lamp		Continuity	
Co	nnector	Terminal	Connector	Terminal	Continuity
RH	M119	17	E319	3	Existed
LH	IVIII	18	E318	3	LXISIEU

Rear turn signal lamp

ВСМ		Rear combination lamp		Continuity	
Co	nnector	Terminal	Connector	Terminal	Continuity
RH	M119	17	B59	2	Existed
LH	WITTS	18	B80	2	LXISIEU

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK TURN SIGNAL LAMP SHORT CIRCUIT

Check continuity between the BCM harness connector and the ground.

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TURN SIGNAL LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

	ВСМ		Continuity	
Conr	nector	Terminal	Ground	Continuity
RH	M119	17	Giouna	Not existed
LH	IVITIE	18		NOI EXISTED

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 5.

5. CHECK TURN SIGNAL LAMP GROUND OPEN CIRCUIT

Check continuity between the front combination lamp, or the rear combination lamp and the ground.

Front turn signal lamp

Front combination lamp				Continuity
	Connector Terminal		Ground	Continuity
RH	E319	2	Glound	Existed
LH	E318	2		Existed

Rear turn signal lamp

Rear combination lamp				Continuity
	Connector Terminal		Ground	Continuity
RH	B59	1	Giodila	Existed
LH	B80	•		LXISIEU

Does continuity exist?

YES >> Replace the front combination lamp or the rear combination lamp.

NO >> Repair the harnesses or connectors.

[HALOGEN TYPE]

INFOID:0000000003729574

HAZARD SWITCH

Component Function Check

1. CHECK HAZARD SWITCH SIGNAL BY CONSULT-III

©CONSULT-III DATA MONITOR

- Turn the ignition switch ON.
- 2. Select "HAZARD SW" of BCM (FLASHER) data monitor item.
- 3. With operating the hazard switch, check the monitor status.

Monitor item	Con	Monitor status	
HAZARD SW	Hazard switch	ON	On
HAZARD SW	nazaru switch	OFF	Off

Is the item status normal?

YES >> Hazard switch circuit is normal.

NO >> Refer to <u>EXL-229</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK HAZARD SWITCH SIGNAL INPUT

With operating the hazard switch, check the voltage between the BCM harness connector and the ground.

Terminals			Condition		
(+)		(-)	Condition	\\altaga \(\Ammaga \)	
ВС	ВСМ		Hazard switch	Voltage (Approx.)	
Connector	Terminal		Tiazaid Switch		
			ON	0 V	
M122	110	Ground	OFF	(V) 15 10 5 0 10ms JPMIA0154GB	

Is the measurement value normal?

YES >> Replace BCM. Refer to BCS-96, "Exploded View".

NO >> GO TO 2.

2.CHECK HAZARD SWITCH SIGNAL OPEN CIRCUIT

- Turn the ignition switch OFF.
- 2. Disconnect the hazard switch connector and BCM connector.
- Check continuity between the hazard switch harness connector and the BCM harness connector.

Hazard switch		В	Continuity	
Connector	Terminal	Connector Terminal		Continuity
M45	2	M122	110	Existed

Does continuity exist?

YES >> GO TO 3.

NO >> Repair the harnesses or connectors.

3.CHECK HAZARD SWITCH SIGNAL SHORT CIRCUIT

Check continuity between the hazard switch harness connector and the ground.

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Hazard	d switch		Continuity
Connector	Terminal	Ground	Continuity
M45	2		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 4.

4. CHECK HAZARD SWITCH GROUND OPEN CIRCUIT

Check continuity between the hazard switch harness connector and the ground.

Hazaro	d switch		Continuity
Connector	Connector Terminal		Continuity
M45	1		Existed

Does continuity exist?

YES >> Replace the hazard switch.

NO >> Repair the harnesses or connectors.

[HALOGEN TYPE]

TAIL LAMP CIRCUIT

Component Function Check

INFOID:0000000003729576

NOTE:

Check the license plate lamp circuit if the tail lamp and the license plate lamp are not turned ON. Refer to <u>EXL-233</u>, "Component Function Check".

1. CHECK TAIL LAMP OPERATION

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®IPDM E/R AUTO ACTIVE TEST

- 1. Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- 2. Check that the tail lamp is turned ON.

(P)CONSULT-III ACTIVE TEST

- 1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 2. With operating the test items, check that the tail lamp is turned ON.

TAIL : Tail Lamp ON
Off : Tail lamp OFF

Is the tail lamp turned ON?

YES >> Tail lamp circuit is normal.

NO >> Refer to EXL-231, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003729577

1. CHECK TAIL LAMP FUSE

- Turn the ignition switch OFF.
- Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Tail lamp	IPDM E/R	#53	10 A

Is the fuse fusing?

YES >> Repair the malfunctioning part before replacing the fuse.

NO >> GO TO 2.

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2.CHECK TAIL LAMP OUTPUT VOLTAGE

©CONSULT-III ACTIVE TEST

- Disconnect the rear combination lamp connector.
- 2. Turn the ignition switch ON.
- Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 4. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

Terminals			Test item		
(+)		(–)	iest item	Voltage	
IPDM	1 E/R		EXTERNAL	(Approx.)	
Connector	Terminal		LAMPS		
E10	7	Ground	TAIL	Battery voltage	
			Off	0 V	
` <u> </u>					

Is the measurement value normal?

YES >> GO TO 3.

NO >> Replace IPDM E/R.

3.CHECK TAIL LAMP OPEN CIRCUIT

1. Turn the ignition switch OFF.

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TAIL LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

- 2. Disconnect IPDM E/R connector.
- Check continuity between the IPDM E/R harness connector and the rear combination lamp harness connector.

Continuity	ination lamp	Rear comb	IPDM E/R Connector Terminal		
Continuity	Terminal	Connector			С
Existed	4	B59	7	E10	RH
LAISIEU	4	B80	,	LH E10	

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK TAIL LAMP GROUND OPEN CIRCUIT

Check continuity between the rear combination lamp harness connector and the ground.

Rear combination lamp				Continuity
Connector		Terminal	Ground	Continuity
RH	B59	1	Ground	Existed
LH	B80	1	1	Existed

Does continuity exist?

YES >> Replace the rear combination lamp.

NO >> Repair the harnesses or connectors.

LICENSE PLATE LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

LICENSE PLATE LAMP CIRCUIT

Component Function Check

INFOID:0000000003729578

1. CHECK LICENSE PLATE LAMP OPERATION

®IPDM E/R AUTO ACTIVE TEST

- 1. Activate IPDM E/R auto active test. Refer to PCS-10, "Diagnosis Description".
- Check that the license plate lamp is turned ON.

(P)CONSULT-III ACTIVE TEST

- 1. Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 2. With operating the lighting switch, check that the license plate lamp is turned ON.

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TAIL : License plate lamp ON
Off : License plate lamp OFF

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Is the license plate lamp turned ON?

YES >> License plate lamp circuit is normal.

NO >> Refer to EXL-233, "Diagnosis Procedure".

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Diagnosis Procedure

INFOID:0000000003729579

1. CHECK LICENSE PLATE LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 2.

NO >> Replace the bulb.

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2.CHECK LICENSE PLATE LAMP OPEN CIRCUIT

1. Turn the ignition switch OFF.

IDDM E/D

2. Disconnect IPDM E/R connector and the license plate lamp connector.

License plate lamp

3. Check continuity between the IPDM E/R harness connector and the license plate lamp harness connector.

k	(

Connector Terminal		Licerise p	Continuity		
		Terminal	Connector	Terminal	Continuity
RH	E10	7	D163	1	Existed
LH	LIU	,	D162	1	LXISIEU

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Does continuity exist?

YES >> GO TO 3.

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NO >> Repair the harnesses or connectors.

${f 3.}$ CHECK LICENSE PLATE LAMP GROUND OPEN CIRCUIT

Check continuity between the license plate lamp harness connector and the ground.

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	License plate		Continuity		
Connector		Terminal	Ground	Continuity	
RH	D163	2	Ground	Existed	
LH	D162	2		LXISIEU	

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Does continuity exist?

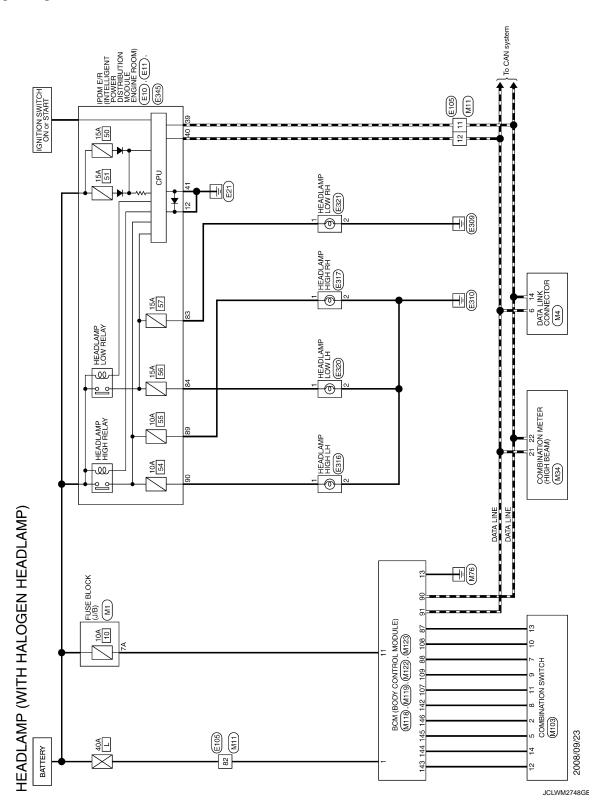
YES >> Replace the license plate lamp.

NO >> Repair the harnesses or connectors.

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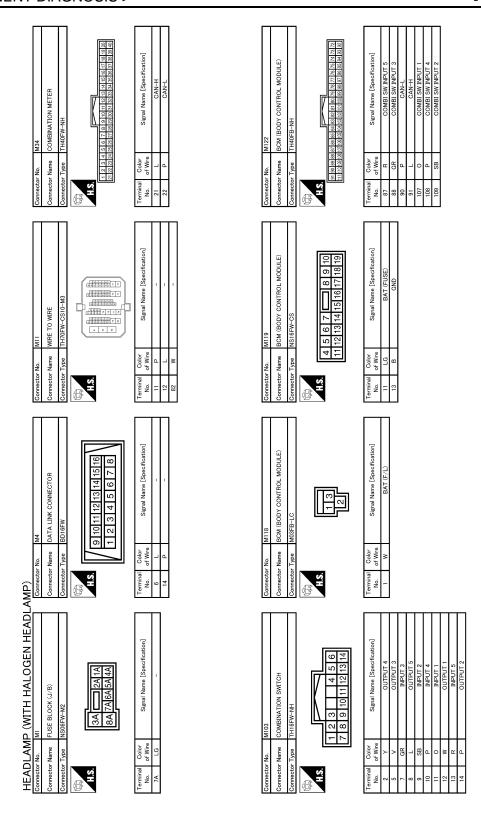
HEADLAMP SYSTEM

Wiring Diagram - HEADLAMP -



E316 me HEADLAN pe U02FB	of Wire Signal Name (Specification) G B -	Connector No. E345	of Wre Signal Name [Specification] Y L L - G		A B C
Gornector No Connector TN Conne	A Co.	Connector Na Connector Typ	Terminal No. 83. 84 84 89 89 89		D
	ecification]		ocification)		Е
P W (1	Signal Name (Specification)	ES21 HEADLAMP LOW RH FHZ02FB	Signal Name [Specification]		F
me WIR	Color Color	9 p	October of Wire P V Vire		G
	0 Mminal 12 11 11 12 13 82 82 82 82 82 82 82 82 82 82 82 82 83 83 83 83 83 83 83 83 83 83 83 83 83	Connector No. Connector Name Connector Type	Terminal No.		Н
FEI PDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) THOSFW-NH 42 41 40 39 46 45 44 43	Signal Name [Specification]	FEZORE FHZOZFB	Signal Name [Speoffcation]		J
	Color Colo	Connector No. Connector Type	Color Colo	_	K
					EXL
HEADLAMP (WITH HALOGEN HEADI Connector No. E10 Connector No. E10 Connector No. E10 Connector No. E10 Connector Type TH2DFW-CS12-M4-1V CST TH2DFW-CS12-M4-1	Signal Name [Specification]	нюн вн	Signal Name [Specification]	_	M
P (WIT E10 E	Ш	E317 HEADLAMP HIGH RH U02FB			Ν
HEADLAN Gometor Nam Connector Name Connector Type H.S. BIGE BIGE BIGE BIGE BIGE BIGE BIGE BIGE	Nerminal Oslor Nerminal Oslor Nerminal Oslor Nerminal Oslor	Connector None Connector Type H.S.	Color Colo		0
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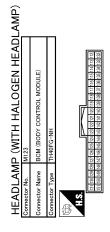
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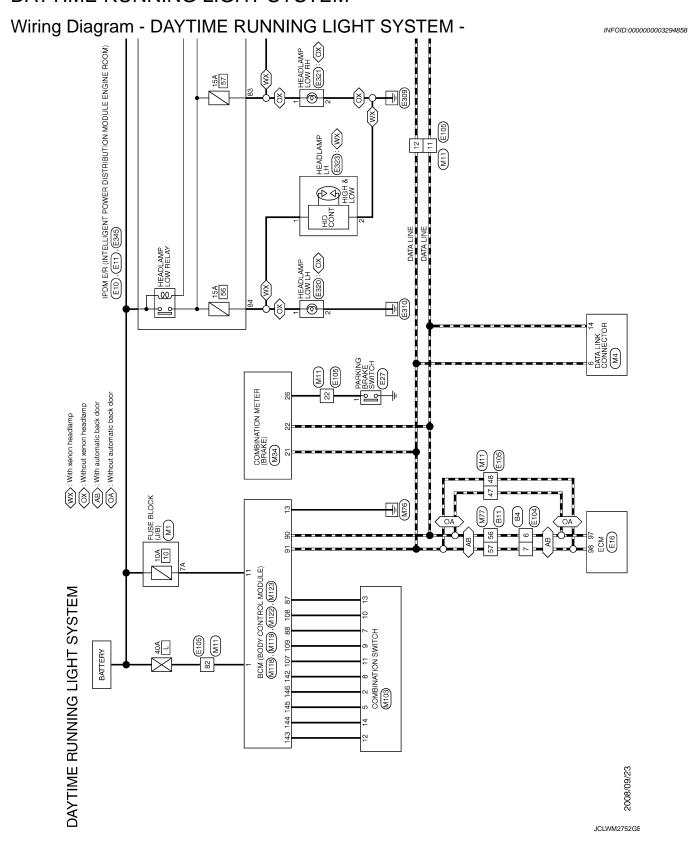
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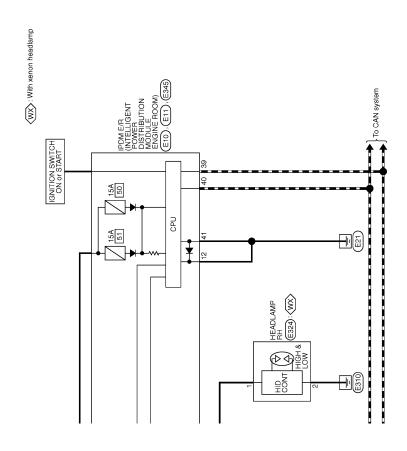
JCLWM2751GE



Color Signal Name [Specification]	L COMBI SW OUTPUT 5	W COMBI SW OUTPUT 1	P COMBI SW OUTPUT 2	V COMBI SW OUTPUT 3	r minument into the control of
Terminal No.	142	143	144	145	977

DAYTIME RUNNING LIGHT SYSTEM





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Connector No. B4	Connector No. B11	Connector No. E10	Connector No. E11
Connector Name WIRE TO WIRE	Connector Name WIRE TO WIRE	Connector Name DISTRIBUTION MODULE ENGINE ROOM)	Connector Name DISTRIBUTION MODULE ENGINE ROOM)
Connector Type NS16MW-CS	Connector Type TH80MW-CS19	Connector Type TH20FW-CS12-M4-1V	Connector Type TH08FW-NH
H.S. 1 2 3	S. A.	(1.5) (9) (1.4) (2.6) (7.1) (1.4) (1	1.S. 42 41 40 33
Terminal Oolor Signal Name [Specification]	12	Terminal Color Signal Name [Specification] No. of Wire Signal Name Specification Signal Name Specification No. of Wire Superior Signal Name Specification No. of Wire Signal Name Specification No. of Wire Signal Name Specification No. of Wire Signal Name Signal Name Signal Name Specification No. of Wire Signal Name	F) Holis
6 P	56 P –	12 B -	Н
			η 2
Connector No. E16	Connector No. E27	Connector No. E104	Connector No. E105
Connector Name ECM Connector Type RH24FB-RZ8-L-LH	Connector Name PARKING BRAKE SWITCH Connector Type P01FB-A	Connector Name WIRE TO WIRE Connector Type NSI 6FW-OS	Connector Name WIRE TO WIRE Connector Type TH70MW-CS:10-M3
1 ì	1		1
H.S. 81 85 89 83 97 for 105 109 89 89 89 80 80 105 110 89 89 89 80 80 80 80 111 80 80 89 80 80 80 80 80 80 80 80 80 80 80 80 80	H.S.	7 6 5 4 1 3 2 1 16 15 14 13 12 11 10 9 8	
ı.	- 1		
nal Color Signal I	Terminal Golor Signal Name [Specification] No. of Wire	Terminal Color Signal Name [Specification] No.	Terminal Color Signal Name [Specification] No.
۵	1 P =	- d 9	
98 L VEHCAN-H		7 L L	12 L – – – – – – – – – – – – – – – – – –
			47 P –
			48 L =
			2

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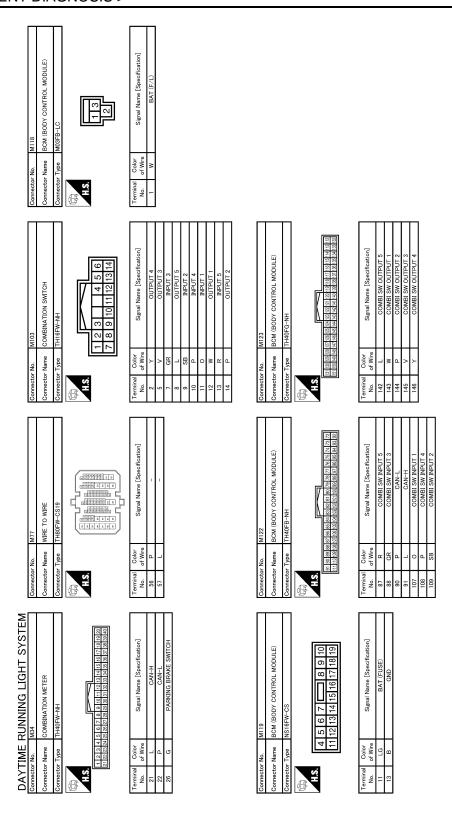
DAYTIME RUNNING LIGHT SYSTEM

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

	cation	cation]		А
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Signal Name [Specification] -	Signal Name (Specification)		В
Connector No. E224 Connector Name HEADLAMP RH Connector Type E02FGY-RS H.S.	O O O O O O O O O O O O O O O O O O O	MIII NA WIRE TO NOW WIRE TO NOW WIRE TO NOW WIRE TO NOW NOW NOW NOW NOW NOW NOW NOW NOW NO	a → ≥	С
Connector No. Connector Type	Terminal No. No. 2	Connector No. Connector Name Connector Type No. of W. No. of W. 11 P 12 C 22 G	44 82 82	D
	Specification	15 16 7 8 P		Е
E223 HEADLAMP LH E02FGY-RS	Signal Name (Specification)	M4 DATA LINK CONNECTOR BD16FW 9 10 11 12 13 14 15 16 1 2 3 4 5 6 7 8 Signal Name [Specification]		F
Connector No. ES Connector Type EE HIS	of Wire B	r Name		G
Comm	Terminal No. 1 1 2 2 2 2	Commetto Commetto No. No. No. 14		Н
	Signal Name [Specification]	M2 M2 74645A44 Signal Name [Specification]		I
HEADLAMP LOW RH PHZ02FB	Signal N	3A 8A 8A		J
Connector No. E. Connector Type F. H.S.	Terminal Color No. Of Wire 1 Y 2 B	Connector No. MI Connector Type NS Connector Type NS H.S. H.S. Terminal Color No. of Wire 7A LG		K
SYSTEM	2	ROOM)		EXL
	Signal Name [Specification] -	(INTELLIGENT POWER CS CS B9 88 87 86 CS Signal Name [Specification]		M
AUNNING LI E320 HEADLAMP LOW LH FHZ02FB	Signal Na			Ν
TIME I INO.	of Wire L L B	No. Name Type Color of Wire Y		_
DAY Connect Connect Connect Connect H.S.	Terminal No.	Connector Connector Connector Connector R.S. H.S. 88	JCLWM2755GE	0
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FRONT FOG LAMP

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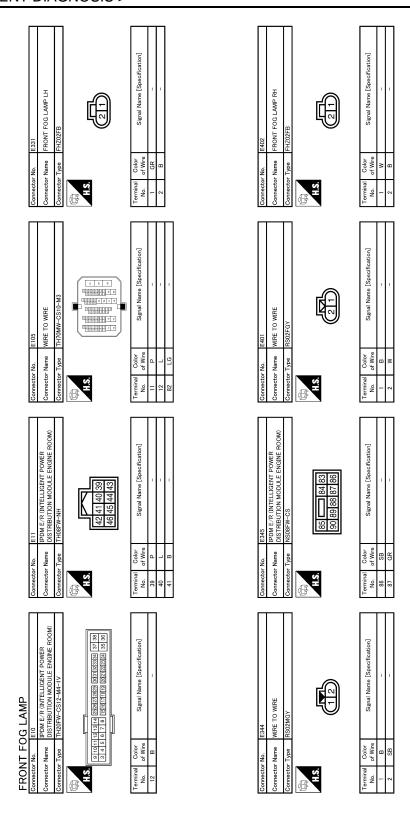
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FRONT FOG LAMP SYSTEM

Wiring Diagram - FRONT FOG LAMP -

C D IGNITION SWITCH ON or START E105 M11 15A 50 Е CPU 15A 51 F G Н FRONT FOG LAMP LH E331 J 6 14 DATA LINK CONNECTOR | Κ 91 FUSE BLOCK (J/B) EXL W76 10A M BCM (BODY CONTROL MODULE) (M113), (M123), (M123) COMBINATION SWITCH Ν M11) 40A BATTERY 0 2008/09/23 Р



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FRONT FOG LAMP SYSTEM

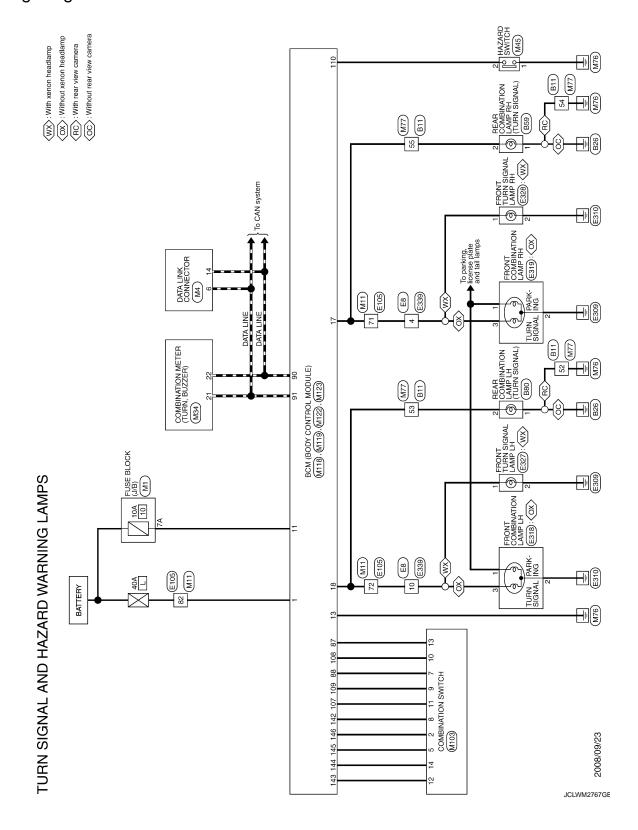
MID3 COMBINATION SWITCH THISPW-NH 2 3 4 5 6 7 8 9 10 11 12 13 14	Signal Name [Specification] OUTPUT 4 OUTPUT 3 OUTPUT 5 INPUT 2 INPUT 1 INPUT 1 INPUT 1 INPUT 1 INPUT 1 OUTPUT 1 INPUT 1 OUTPUT 1	M123 BOM (BODY CONTROL MODULE) TH40FG-NH TH40FG-NH THEAGRAPH T	Signal Name (Specification) COMBIS SW OUTPUT 5 COMBIS SW OUTPUT 2 COMBIS WOUTPUT 2 COMBIS WOUTPUT 2 COMBIS WOUTPUT 3		АВ
Connector No. MIGG Connector Name COMBINATIC Connector Type THIGFW-NH	Terminal Color No. of Wire Color V Color Color	Connector Name BOM (BODY Connector Type TH40FCP-NH A.S. H.S. Connector Type TH40FCP-NH A.S. CONNECTOR CONN	Terminal Color No. 142 L. 143 L. 144 P. 146 V. V. 146 V. V. 146 V. V. V. V. V. V. V. V		C
g (4444411)	Signal Name [Specification]	ROL MODULE)	Signal Name [Specification] COMBI SW INPUT 3 COMBI SW INPUT 3 CAN-L CAN-L COMBI SW INPUT 1 COMBI SW INPUT 4 COMBI SW INPUT 2		E
MIII me WIRE TO WIRE THYORW-CSIO-M	Color of Wire W	or No. M122 or Type BCM (BODY CONTROL MODULE) or Type TH40FB-NH file (Big 18) (Big 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		F G
Connector No. Connector Name Connector Type H.S.	Terminal No. 11 12 82	Connector No. Connector Name Connector Type H.S. H.S. Eligible	Terminal No. 87 88 89 90 91 107 109 109		Н
M4 DATA LINK CONNECTOR BD16FW 10 11 12 13 14 15 16 1 2 3 4 5 6 7 8	Signal Name [Specification]	MIT9 BGM (BODY CONTROL MODULE) NSIGFW-CS 5 6 7	Signal Name (Specification) BAT (FUSE) GND		J
Connector No. MA Connector Name DATA II Connector Type BD16FW H.S. FILE S	Terminal Color No. of Wire 6 L 14 P	Connector No. M119	Terminal Color No. of Wire 11 LG 13 B		K
LAMP SEW-WZ SEW-WZ SEW-WZ SEW-WZ SEW-WZ SAM-MZ SAM	Signal Name [Specification]	MI18 BOM (BODY CONTROL MODULE) M03FB-LC	Signal Name [Specification] BAT (F/L)		EXL
NSO NSO NSO	Ш				Ν
FRONT FOG LAMP Connector No. MI Connector Name FUSE BLOCK (Connector Type NSOGFW-NZ MAS. 3A BA7A6	Terminal Color No. of Wire 7A LG	Connector No. Connector Name Connector Type H.S.	Terminal Color No. of Wire 1	JCLWM2766GE	0
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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

Wiring Diagram - TURN AND HAZARD WARNING LAMPS -



TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< COMPONENT DIAGNOSIS >

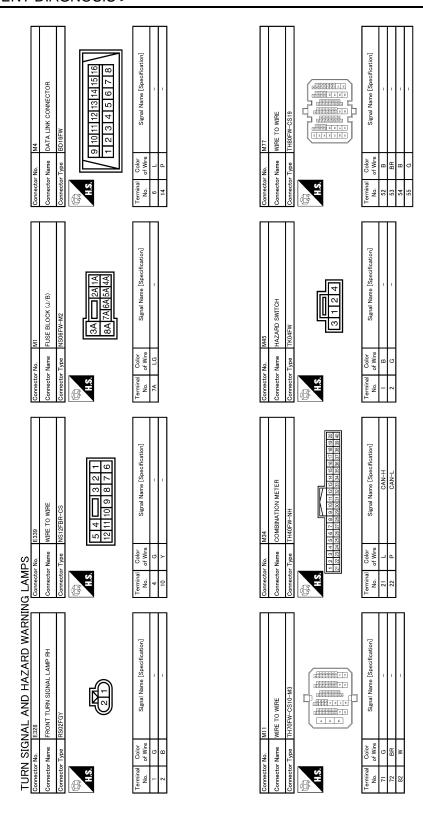
[HALOGEN TYPE]

4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Signal Name [Specification]	IT TAMP LH	Signal Name [Specification]		АВ
Connector No. E8 Connector Name WIRE TO WIRE Connector Type NSI2MBR-CS LLS 1 2 3	Color SB SB	Connector No. E327 Connector Name FRONT TURN SIGNAL LAMP LH Connector Type RSUZFGY LIS	D C C C C C C C C C C C C C C C C C C C		С
Connector No. Connector Nat. Connector Typ. H.S.	Terminal No. No. 10	Connector No. Connector Typ	Terminal No. No.		D
H	offeation]	MP RH	cification]		Е
REAR COMBINATION LAMP LH INSOAMW-CS 4 3 2 1	Signal Name [Specification]	FRONT COMBINATION LAMP RHZUSFER	Signal Name (Specification)		F
9 9	Color of Wire	9 0	Color of Wire		G
Connector No. Connector Name Connector Type H.S.	Terminal No.	Connector No. Connector Name Connector Type	Terminal No. 2		Н
REAR COMBINATION LAMP RH INSDAMM-CS	Signal Name [Speoification] -[Without rear view camera] -[Without rear view camera]	FRONT COMBINATION LAMP LH ZUSFEIR	Signal Name [Specification]		I
ING LAMPS Connector Name REA Connector Type NSG H.S.	Color Color No. Color No. Color No. Color 1 1.0 1.0 2 BR 2 BR Color 1 1.0 Color 2 Color 1 1.0 Color 2 Color	Connector No. E318 Connector Name FROM Connector Type Z03F	Terminal Color No. of Wire Color Color Color Color		К
ARNING					EXL
AND HAZARD WARN	Signal Name (Specification)	RR E STORY WAS	Signal Name (Specification)		M
	\vec{o}	WIRE TO WIRE TH70MW-CSIO-N			Ν
Connector Name WIRE 1 Connector Name WIRE 1 Connector Type TH90M H.S.	Terminal Color No. Of Wire No. Of Wire S.2 Y. S.3 Y. S.4 L. C. S.5 B.R. C. S.5 C. S.5 C. S.5 C. S.5 S. S. S. S. S. S.	Connector No. Connector Name Connector Type H.S.	Terminal Color No. 10 Wire 17 SB 72 Y SB 82 LG		0
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Revision: 2008 October EXL-247 2009 Murano

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

[HALOGEN TYPE]



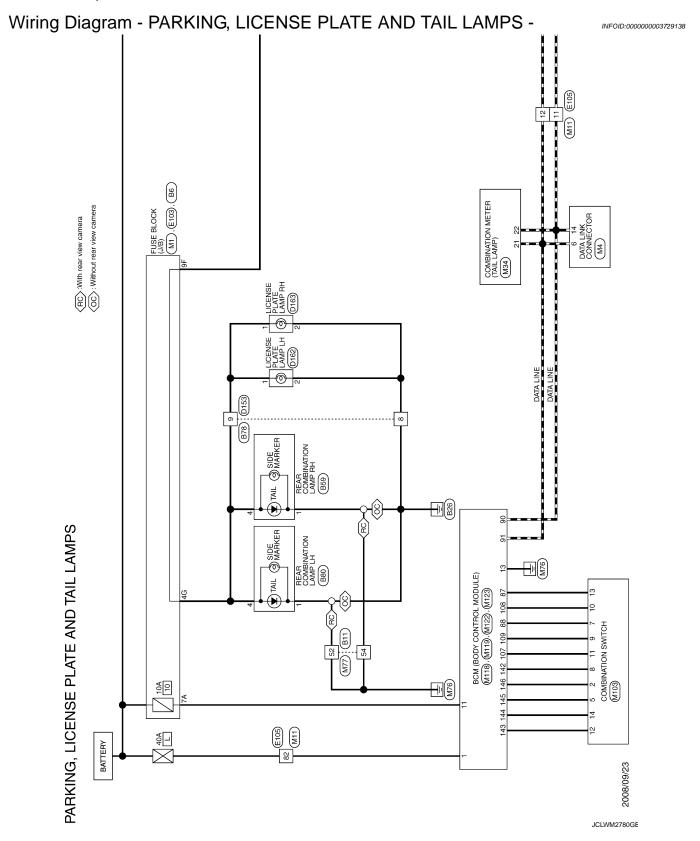
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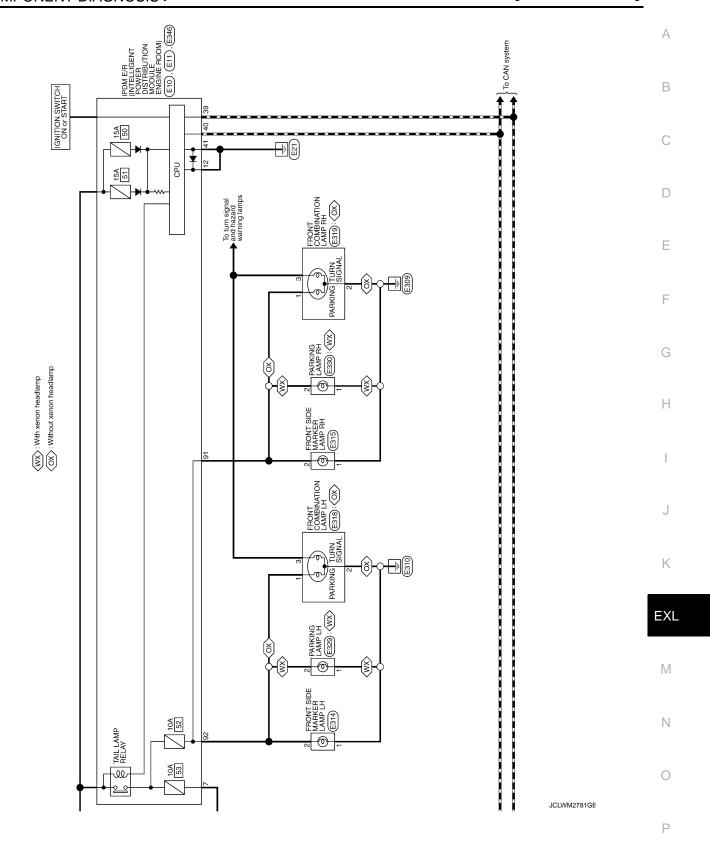
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

[HALOGEN TYPE]

	ROL MODULE)	Signal Name [Specification] COMBI SW INPUT 5 COMBI SW INPUT 3 CAN-L CAN-L CAN-L CAN-H COMBI SW INPUT 1 COMBI SW INPUT 2 HAZARD SW				АВ
	Cornector No. M122 Cornector Type TH40FB-NH Cornector Type TH40FB-NH HS. The cornector Type TH40FB-NH TH5 TH50FB-NH TH5 TH50FB-NH TH50FB-NH	Color Of Wire Color Of St.				С
	Connecto Connecto H.S.	Terminal No. 87 88 88 90 91 91 107 1109 1109 110				D
	MODULE) 9 10 118 19	pecification] USE) NAL RH NAL LH				Е
	MITS BCM (BODY CONTROL MODULE) NSTIEFW-CS 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Signal Name [Specification] BAT (FUSE) GND TURN SIGNAL RH TURN SIGNAL LH				F
	nector No.	Color Colo				G
	Conr					Н
	ROL MODULE)	Signal Nane [Specification] BAT (F/L)				I
	MITS BOM (BODY CONTROL MODULE) M03FB-LC	Signal Ma				J
ODMALONI		No. of Wire				K
ADMINI			[2] [2]			EXL
MADN SICNAL AND HAZABN	ION SWITCH	Signal Nane [Specification] OUTPUT 4 OUTPUT 3 OUTPUT 5 INPUT 2 INPUT 1 INPUT 1 OUTPUT 1 OUTPUT 1 OUTPUT 1 OUTPUT 1	MI23 TH40FG-NH TH40FG-NH THE ENERGY PROPERTY OF THE ENERGY	Signal Name (Specification) COMBIS SW OUTPUT 5 COMBIS SW OUTPUT 2 COMBIS SW OUTPUT 3 COMBIS SW OUTPUT 3		M
NA IAIAOI	Connector No. MIGS Connector Type THISFW-NH Connector Type THISFW-NH TAS TAS TAS TAS TAS TAS TAS TAS	O O O O O O O O O O O O O O O O O O O	8 3	Oolor Color Virginia Sign		N
2 NOLLE	Connector No. Connector Name Connector Type	A Control of W No. 1	Connector No. Connector Name Connector Type HS ESTEROR	Terminal Col		0
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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM





PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

Connector No. 878 Connector Name WIRE TO WIRE Connector Type NS16MW-CS H.S. 1 2 3	Terminal Color No. of Wire Signal Name [Specification]	Connector No. D163 Connector Name LICENSE PLATE LAMP RH Connector Type TK02FBR H.S.	Terminal Color Signal Name [Specification]
Connector No. 859 Connector Name REAR COMBINATION LAMP RH Connector Type NS04MW-CS H.S.	Terminal Color Signal Name Specification No. of Wire Signal Name Specification 1	Connector No. D162 Connector Name LICENSE PLATE LAMP LH Connector Type TK02FBR H.S.	Terminal Color Signal Name [Specification]
Connector No. Connector Name WIRE TO WIRE Connector Type TH80MW-CS19	Terminal Color Signal Name [Specification]	3 E TO WIRE 6FW-CS	7 6 5 4 3 2 1
PARKING, LICENSE PLATE AND TAIL	Terminal Color No. of Wee Signal Name [Specification] 4G L	Connector No. B80 Connector Name REAR COMBINATION LAMP LH Connector Type NSO4MW-CS H.S.	Terminal Oolor Signal Name [Specification]

JCLWM2782GE

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< COMPONENT DIAGNOSIS >

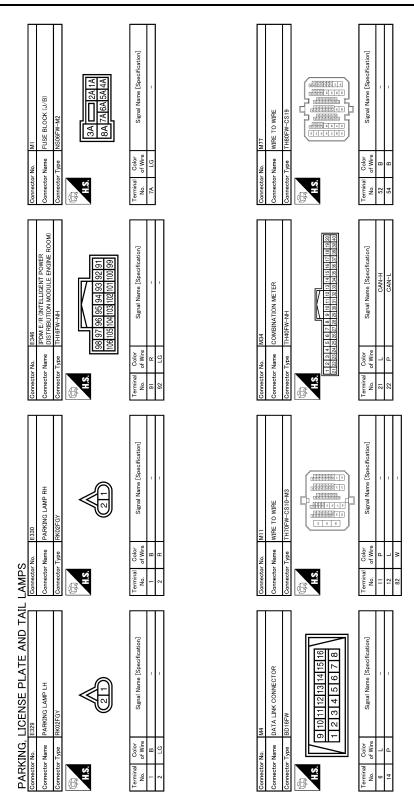
[HALOGEN TYPE]

WRE CS10-M3 Signal Name [Specification]	FRONT COMBINATION LAMP RH ZUSTERR Signal Name [Specification]		A B
Connector No. E105 Connector Name WIRE TO WIRE Connector Type TH70MM-CSIC-M3 H.S. H.S. E105 Terminal Color No. of Wire No. of Wire 12 L C 82 LG	Connector No. E319 Connector Name FRONT COMBIN Connector Type 203FBR 1		
2F 1F 9F 8F pe officertion 1	AMP LH	E	Ε
E103 NS16FW-GS NS16FW-GS 15F 14F	FRONT COMBINATION LAMP LH ZUSTER Signal Name [Specification]		F
Connector No. Connector Name Connector Type H.S. Terminal Color No. of Wire 9F GR	Connector No. Connector Name Connector Type Terminal Color No. of Wire 1 LG 2 BG 3 Y		G H
Y (INTELLIGENT POWER TITON MODULE ENGINE ROOM) NH 41 40 39 45 44 43 Signal Name [Specification]	DE MARKER LAMP RH 2 1 1 Signal Name [Specification]		I
E11 IPDM E/A INDSFRUE THOSEW-	FRONT SIDE MARKER LAMP RH RKQZFGY Signal Name [Specificat		J
Commetter No. Commetter Type Commetter Type Commetter Type Commetter Type No. of Wire 39 P 40 L 40 L	Connector No. Connector Name Connector Type Terminal Color No. of Wire 1 B 2 R	ŀ	K
TE AND TAIL POWER ENGINE ROOM) W W W W W W W W W W W W W W W W W W W	MP LH vecification]		XL VI
PARKING, LICENSE PLATE AND TAI Connector No. E10 Connector Name DISTRIBUTION MODULE ENGINE ROOM) Connector Type TH2DFW-CS12-M4-1V TH2DFW-CS12-M4-1V Terminal Color No. of Wire No. of Wire Signal Name [Specification] 7 GR	FRONT SIDE MARKER LAMP LH RKOZFGY Signal Name [Specification]		VI
PARKING, L Connector Name DI Connector Type TI Service Type TI Terminal Color No. of Wire T GR 12 B	Connector No. 67 Connector Name FF Connector Type R FF Connector T	(Э
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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

[HALOGEN TYPE]



JCLWM2784GE

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< COMPONENT DIAGNOSIS >

[HALOGEN TYPE]

. MODULE)	Specification] VINDUT 5 VINDUT 3 +-1 VINDUT 1 VINDUT 1 VINDUT 4 VINDUT 2				A B
MIZZ BCM (BODY CONTROL MODULE) TH40FB-NH TH40FB-NH BBB BB	Signal Name [Specification] Signal Name [Specification] State Specification] State Specification] Specification Specification				С
Connector No. Connector Name Connector Type H.S. H.S. HINDIRE	Terminal Color No. of Wire ST R R ST				D
(ooule)	Diffication]				Е
CONTROL M	Signal Name (Specification) BAT (FUSE) GNID				F
e e e 4 = 4 = 1	al Color LG B				G
Connector No Connector Na Connector Ty	Terminal No. 13				Н
OL MODULE)	Signal Name [Specification] BAT (F/L)				I
MIIB BCM (BODY CONTROL MODULE) MOSFB-LC	Signal Nam				J
Connector No. M. Connector Name BC Connector Type M. Connector Typ	Terminal Color No. of Wire				K
	2		2		EXL
PARKING, LICENSE PLATE AND TAIL Connector Name COMBINATION SWITCH Connector Type THISFY-NH CONNECTOR THISFY-NH TI 2 3 1 4 5 6 7 8 9 10 11 12 31 4 5 6 7 8 9 10 11 12 31 4 5 6 7 8 9 10 11 12 31 4 5 6 7 8 9 10 11 12 31 4 5 6 7 8 9 10 11 12 31 4 5 6 7 8 9 10 11 12 31 4 7 8 9 10 11 12 31 4 7 8 9 10 11 12 31 4 7 8 9 10 11 12 31 4 8 8 9 10 11 12 31 4 8 9 10 11 12 31 4 8 9 10 11 12 31 4 8 9 10 11 12 31 4 8 9 10 11 12 31 4 8 9 10 11 12 31 4 8 9 10 11 12 31 9 9 9 9 9 9 9 9 9	Signal Name [Specification] OUTBUT 4 OUTBUT 3 OUTBUT 3 OUTBUT 5 INPUT 2 INPUT 1 OUTBUT 1 OUTBUT 1 INPUT 5 OUTBUT 1 INPUT 5 OUTBUT 1	M123 BCM (BODY CONTROL MODULE) TH40FG-14H TH20FG-14H TRIBE CREATER TO THE	Signal Name [Specification] COMBI SW OUTPUT 5 COMBI SW OUTPUT 5 COMBI SW OUTPUT 2 COMBI SW OUTPUT 3 COMBI SW OUTPUT 3		M
ALICENSE PLA MIGG COMBINATION SWITCH THISFW-NH		20 20			N
PARKING Connector Nam Connector Type H.S.	Color Colo	Connector No. Connector Name Connector Type H.S. Eligible 201	Terminal Color No. 142 L L L L L L L L L		0
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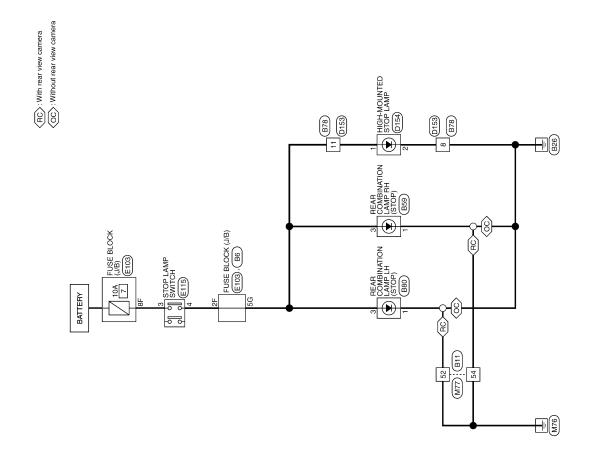
Revision: 2008 October EXL-255 2009 Murano

INFOID:0000000003294873

STOP LAMP

Wiring Diagram - STOP LAMP -

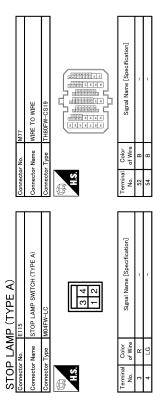
Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)



STOP LAMP (TYPE A)

5 7 8 7 16 16 ation)	if it is it		Α
B78 NS16MW-CS NS16MW-CS Signal Name [Specification]	E103		В
Connector No. B78 Connector Name WIRI Connector Type NST H.S. H.S. Terminal Color 8 8 11 P P	Connector No. E103		D
P RH (inflication) commera]	MP Coffeation]		Е
AWW-CS AWW-CS Signal Name (Speriment) -[Without rear view-	VZK 7323–1324-F Signal Name [Specification]		F
Connector No. B59 Connector Name REA Connector Type NSS No. of Wire No. of Wire 1 B.W. 3 P.P.	Connector No. D154 Connector Name HIGH Connector Type YZK7 H.S. H.S. 1 0 0 Wire 1 0 0 2 B		G
			Н
WIRE CS19 Signal Name (Specification)	WIPE 53 13 11 10 9 8 13 13 11 10 9 8 14 15 11 10 9 8 15 15 15 15 15 15 15 1		I
WIRE TO WIRE THBOWN-CSI9 Signal Name (Spec	MYRE TO WIRE NISIERW-CS NISIERW-CS Signal IV Signal IV		J
Connector No. E Connector No. Connector Type 1 Coornector Type 1 Coornector Type 2 C	Connector No. Connector Type P. T. Terminal Color No. of Wire No.	_	K
			EXL
COCK (J/B) -CS	NSO4MW-CS Signal Name [Specification]		M
MP (TYPE A) B6 FUSE BLOCK (J/B) NS12FBR-CS SG 4G 13C 12C 11G 10G 9C 9C Signal Nam	NSO4MW		Ν
STOP LAMP (TYPE A) Connector No. B6 Connector Name PLSE BLOCK (J/B) Connector Type NS12FBR-CS Connector Type	Connector No. Connector Name Connector Type H.S. H.S. 1		0
		JCLWM2772GE	
			Р

Revision: 2008 October EXL-257 2009 Murano



From VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001(EXCEPT FOR MEXICO),

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JN8AZ18U*9W710001, JN8AZ18W*9W810001(FOR MEXICO)

The correction of the connect of the

STOP LAMP (TYPE B)

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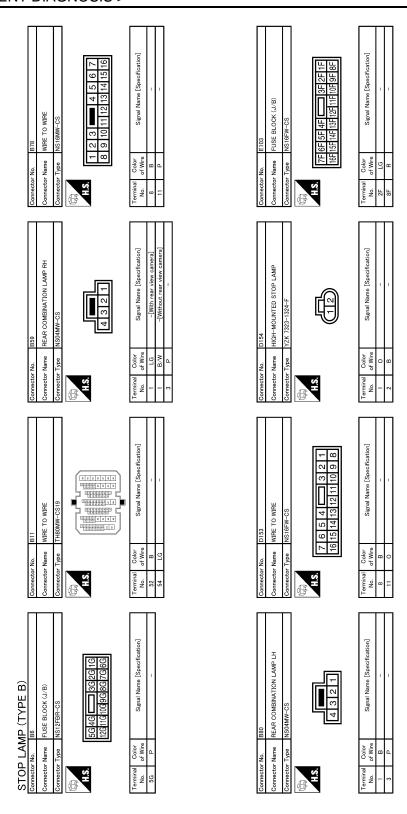
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JCLWM2775GE

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| Connector No. | E116 | Connector No. | M77 | Connector No. | M77 | Connector No. | M77 | Connector Name | Stop LAMP SWITCH (TYPE B) | Connector Name | WIRE TO WIRE | Connector Type | TH80FW+CS19 | Connector Type | Connector Type | TH80FW+CS19 | C

Revision: 2008 October

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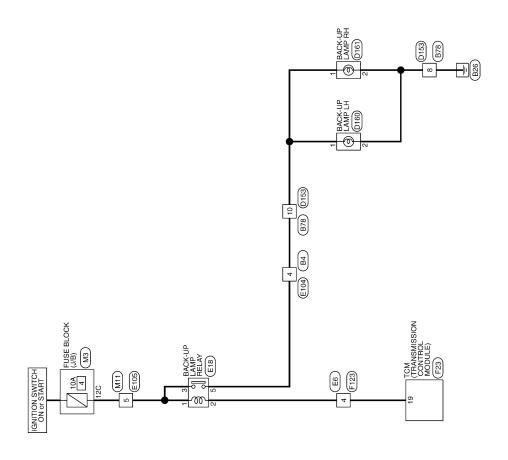
EXL-261

JCLWM2776GE

BACK-UP LAMP

Wiring Diagram - BACK-UP LAMP -

INFOID:0000000003294875

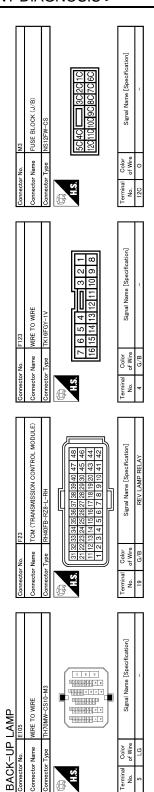


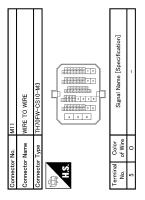
BACK-UP LAMP



Name WISE TO WIFE	
Cornector No. STB Cornector No. Stgral Name Specification Colorector No. Cornector Name No. Of Wire Of Wire	
BACK-UP LAMP	

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JCLWM2779GE

[HALOGEN TYPE] < ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value INFOID:0000000003729580 В

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VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
-D WIDED III	Other than front wiper switch HI	Off
FR WIPER HI	Front wiper switch HI	On
-D WIDED I OW	Other than front wiper switch LO	Off
FR WIPER LOW	Front wiper switch LO	On
	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
ED WIDED INT	Other than front wiper switch INT/AUTO	Off
FR WIPER INT	Front wiper switch INT/AUTO	On
ED WIDED OTOD	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
NT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
DD WIDED ON	Other than rear wiper switch ON	Off
RR WIPER ON	Rear wiper switch ON	On
	Other than rear wiper switch INT	Off
RR WIPER INT	Rear wiper switch INT	On
	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
DD WIDED CTOD	Rear wiper is in STOP position	Off
RR WIPER STOP	Rear wiper is not in STOP position	On
TUDNI CIONAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI CICNIAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAMD CVV	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
LI DEAM CVA	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
HEAD LAMP SW 4	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
HEAD LAMB CW 2	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DARRING CVV	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LICLIT CW	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
ED EOC 8/4/	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOD SW DD	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
DOOK SW-KK	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
DOOK SW-KL	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
DOOK SW-BK	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
NET CIL LN-SW	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
RET CTL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
NOTE: At model with BOSE audio system this item is not monitored.	Rear window defogger switch ON	On
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
TIVOD OF LIN SW	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
DKE LOCK	LOCK button of the key is not pressed	Off
RKE-LOCK	LOCK button of the key is pressed	On
DIVE LINII OOK	UNLOCK button of the key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the key is pressed	On
DVE TD/DD	BACK DOOR OPEN button of the key is not pressed	Off
RKE-TR/BD	BACK DOOR OPEN button of the key is pressed	On
DIVE DANIO	PANIC button of the key is not pressed	Off
RKE-PANIC	PANIC button of the key is pressed	On
DIVE DAM OPEN	UNLOCK button of the key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of the key is pressed and held	On

< ECU DIAGNOSIS >

[HALOGEN TYPE]

Monitor Item	Condition	Value/Status
DIVE MODE OUG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
RKE-MODE CHG	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
ODTIONI OFNIOOD	Bright outside of the vehicle	Close to 5 V
OPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V
DEO CW. DD	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
NEQ 3W -A3	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
NEW OW -DU/TK	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
OSI I SVV	Push-button ignition switch (push switch) is pressed	On
GN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
ON INCIZ -1/D	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
SNANE SW Z	Stop lamp switch 1 signal circuit is normal	On
DETE/CANCL SW	Selector lever in P position	Off
DETE/CANCE SW	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
JI I FIN/IN JVV	Selector lever in P or N position	On
S/L -LOCK	Steering is unlocked	Off
	Steering is locked	On
S/L -UNLOCK	Steering is locked	Off
D, L -UNLOUN	Steering is unlocked	On
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off
J, L I\LLI\I-I / D	Ignition switch in ON position	On
JNLK SEN -DR	Driver door is unlocked	Off
OHER OLIN-DIX	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
GN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
OH INCH I FI /D	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On

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< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status			
CET DN IDDM	Selector lever in any position other than P and N	Off			
SFT PN -IPDM	Selector lever in P or N position	On			
OET D. MET	Selector lever in any position other than P	Off			
SFT P -MET	Selector lever in P position	On			
OFT N. MET	Selector lever in any position other than N	Off			
SFT N -MET	Selector lever in N position	On			
	Engine stopped	Stop			
ENGINE CTATE	While the engine stalls	Stall			
ENGINE STATE	At engine cranking	Crank			
	Engine running	Run			
0/1.1.001/.10014	Steering is unlocked	Off			
S/L LOCK-IPDM	Steering is locked	On			
0/1.1101111/10014	Steering is locked	Off			
S/L UNLK-IPDM	Steering is unlocked	On			
	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK.	Off			
S/L RELAY-REQ	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK.	On			
VEH SPEED 1					
VEH SPEED 2	Equivalent to speedometer reading				
	Driver door is locked	LOCK			
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY			
	Driver door is unlocked	UNLOCK			
	Passenger door is locked	LOCK			
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY			
	Passenger door is unlocked	UNLOCK			
	Steering is locked	Reset			
ID OK FLAG	Steering is unlocked	Set			
	The engine start is prohibited	Reset			
PRMT ENG STRT	The engine start is permitted	Set			
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset			
	The key is not inserted into key slot	Off			
KEY SW -SLOT	The key is inserted into key slot	On			
RKE OPE COUN1	During the operation of the key	Operation frequency of the key			
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_			
0011501115	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet			
CONFRM ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done			
CONFIDM ID 4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet			
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done			

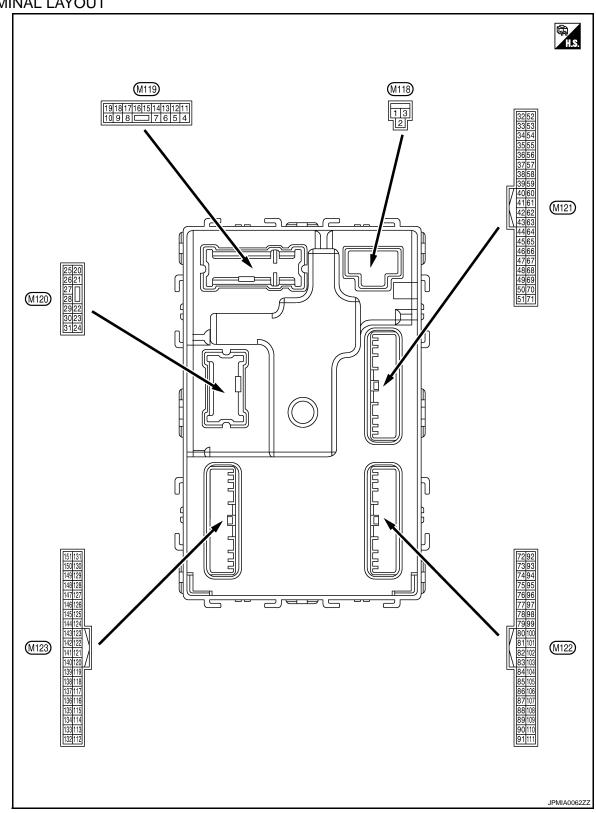
< ECU DIAGNOSIS >

[HALOGEN TYPE]

Monitor Item	Condition	Value/Status
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
CONFIRM ID3	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
CONFINIVI IDZ	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
CONTINUIDI	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth key is not registered to BCM	Yet
174	The ID of fourth key is registered to BCM	Done
TP 3	The ID of third key is not registered to BCM	Yet
	The ID of third key is registered to BCM	Done
TP 2	The ID of second key is not registered to BCM	Yet
1	The ID of second key is registered to BCM	Done
TP 1	The ID of first key is not registered to BCM	Yet
	The ID of first key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
ID NEGOT FET	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
ID NEGOT FRI	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
ID REGOT AIRT	ID of rear RH tire transmitter is not registered	Yet
ID REGST RL1	ID of rear LH tire transmitter is registered	Done
ID REGOT RET	ID of rear LH tire transmitter is not registered	Yet
WARNING LAMP	Tire pressure indicator OFF	Off
VV/ (IXIVIIAO LAIVIE	Tire pressure indicator ON	On
BUZZER	Tire pressure warning alarm is not sounding	Off
DOZZEN	Tire pressure warning alarm is sounding	On

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TERMINAL LAYOUT



PHYSICAL VALUES

[HALOGEN TYPE] < ECU DIAGNOSIS >

Тажа	inal Na	Description						
	inal No. e color)	Description	Input/		Condition	Value	Α	
+	_	Signal name	Output			(Approx.)		
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage	В	
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage	С	
3 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON	ı	Battery voltage		
4		Interior room lamp			battery saver is activated.	0 V		
4 (P)	Ground	Interior room lamp power supply	Output	ed.	battery saver is not activat- or room lamp power supply)	Battery voltage	Е	
5	0	Passenger door UN-	0	December	UNLOCK (Actuator is activated)	Battery voltage		
(G)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V	F	
7	Ground	Ston lamp	Output	Stan Jama	ON	0 V	G	
(W)	Glouria	Step lamp	Output	Step lamp	OFF	Battery voltage		
8	Ground	All doors LOCK	Output Al	Outtook	All doors	LOCK (Actuator is activated)	Battery voltage	
(V)	Giodila	All doors LOCK	Output	out All doors	Other than LOCK (Actuator is not activated)	0 V		
9	Ground	Driver door UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage		
(G)	Oloulia		Output	Dilver door	Other than UNLOCK (Actuator is not activated)	0 V		
10	Ground	Rear RH door and rear LH door UN-LOCK	()) If the lift	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage		
(P)	Ground			and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V		
11 (LG)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage	E	
13 (B)	Ground	Ground	_	Ignition switch ON		0 V		
					OFF	0 V	ľ	
14 (O)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position	. 1	
						0 2 ms JSNIA0010GB		
45					OFF	Battery voltage		
15 (L)	Ground	ACC indicator lamp	Output	t Ignition switch	ACC	0.2 V		
					ON	0 V		

< ECU DIAGNOSIS > [HALOGEN TYPE]

		10010 >				
	inal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E
						6.5 V
					Turn signal switch OFF	0 V
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
19	0	Room lamp timer	0 1 1	Interior room	OFF	Battery voltage
(Y)	Ground	control	Output	lamp	ON	0 V
23					OPEN (Back door opener actuator is activated)	Battery voltage
(BR)	Ground	Back door open	Output	Back door	Other than OPEN (Back door opener actuator is not activated)	0 V
26	Ground	Dearwiner	Outrot	Dearwiner	OFF (Stopped)	0 V
(G)	Ground	Rear wiper	Output	Rear wiper	ON (Operated)	Battery voltage
34* ¹	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(B)	Giouria	na (-)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB

< ECU DIAGNOSIS >

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	value (Approx.)
35* ¹		Luggage room anten-		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(W)	Ground	na (+)	Output	ÖFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
38* ¹	nt Dankur	Rear bumper anten-		When the back door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(L)	Ground	na (-)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
39* ¹	Ground	Rear bumper anten-	Output	When the back door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(BR)	Giodila	na (+)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
		Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	Battery voltage
47 (L)	Ground	E/R) control	(): :+m::+			

< ECU DIAGNOSIS > [HALOGEN TYPE]

<u> </u>	יוטאוטי	10010 >				<u> </u>
	inal No. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output			(Approx.)
F0.				Ignition switch	When selector lever is in P or N position	Battery voltage
52 (R)	Ground	Starter relay control	Output	ON	When selector lever is not in P or N position	0.3 V
				Ignition switch OF	F	0 V
					ON (Pressed)	0 V
61* ¹ (R)	Ground	Back door request switch	Input	Back door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
64* ¹	_		_		Sounding	0 V
(GR)	Ground	Warning buzzer	Output	Warning buzzer	Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
					Not in stop position	0 V
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When back door opens)	0 V
					Pressed	0 V
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB

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< ECU DIAGNOSIS > [HALOGEN TYPE]

	ninal No.	Description				Value	
(Wir	e color)	Signal name	Input/ Output		Condition	(Approx.)	
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (When rear RH door opens)	0 V	
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (When rear LH door opens)	0 V	
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
72* ¹ (B)	Ground	Room antenna 2 (-) (Center console)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 1 s JMKIA0063GB	

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< ECU DIAGNOSIS >

	inal No. e color)	Description	Innut/		Condition	Value
+	_	Signal name	Input/ Output			(Approx.)
73* ¹	Ground	Room antenna 2 (+)		Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(W)	Glound	(Center console)	Output		When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
74* ¹	Ground	Passenger door antenna (-)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(Y)					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
75* ¹	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(LG)					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB

< ECU DIAGNOSIS >

	ninal No.	Description				Value
(Wir	e color)	Signal name	Input/ Output		Condition	(Approx.)
76* ¹	Crown	Driver door antenna	Outout	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(V)	Ground	(-)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
77* ¹ Ground			When the driver	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s	
	Ground	Driver door antenna (+)	Output	door request switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
78* ¹	Ground	Room antenna 1 (-)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB
(R)	Glound	(Instrument panel)		OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB

< ECU DIAGNOSIS >

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
79* ¹		Room antenna 1 (+)	Outout	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(G)		OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB		
80 (SB)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (BR)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V Battery voltage
83	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting		(V) 15 10 1 ms JMKIA0064GB
(P)	Sibula			When operating e	ither button on the key	(V) 15 10 5 0 1 ms JMKIA0065GB

< ECU DIAGNOSIS > [HALOGEN TYPE]

	ninal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
0.7		Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
					Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB
87 (R)	Ground				Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB

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< ECU DIAGNOSIS >

	inal No.	Description				Value
(Wire	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB
88 (GR)	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB
89	0	Push-button ignition	la : 1	Push-button igni-	Pressed	0 V
(BR)	Ground	switch (push switch)	Input	tion switch (push switch)	Not pressed	Battery voltage
90 (P)	Ground	CAN - L	Input/ Output		_	_
91 (L)	Ground	CAN - H	Input/ Output		_	_

[HALOGEN TYPE] < ECU DIAGNOSIS >

Torm	inal No.	Dogorintics				
	inai No. e color)	Description	Input/		Condition	Value
+	_	Signal name	Output		2	(Approx.)
					OFF	0 V
92 (R)* ¹ (L)* ²	Ground	Key slot illumination	Output	Key slot illumination	Blinking	(V) 15 10 5 0 1 s JPMIA0015GB
					ON	Battery voltage
					OFF or ACC	Battery voltage
93	Ground	ON indicator lamp	Output	Ignition switch	ACC	0.2 V
(L)		•			ON	0 V
95					OFF	0 V
(L)	Ground	ACC relay control	Output	Ignition switch	ACC or ON	Battery voltage
96 (Y)	Ground	Control device (detention switch) power supply	Output		_	Battery voltage
97	Cra	Steering lock condi-	lmm:-4	Stooring In -1-	LOCK status	0 V
(O)	Ground	tion No. 1	Input	Steering lock	UNLOCK status	Battery voltage
98	Steering lock condi-	la · ·	Ota-adica to t	LOCK status	Battery voltage	
(L)	Ground	tion No. 2	Input	Steering lock	UNLOCK status	0 V
99	99 Selector lever P p	Selector lever P posi-	lan i	Colonton	P position	0 V
(V)	Ground	tion switch	Input	Selector lever	Any position other than P	Battery voltage
100* ¹ (P)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed) OFF (Not pressed)	0 V (V) 15 10 5 0 JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101* ¹ (W)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(Y)		lay control	-		ON	Battery voltage
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	F	Battery voltage

< ECU DIAGNOSIS > [HALOGEN TYPE]

	inal No. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
106	Ground	Steering lock unit	Output	Ignition switch	OFF or ACC	Battery voltage
(Y)		power supply			ON	0 V
					All switches OFF	(V) 15 10 0 2 ms JPMIA0041GB
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

< ECU DIAGNOSIS > [HALOGEN TYPE]

< =00	ECO DIAGNOSIS >								
	inal No.	Description				Value			
+ (vvir	e color)	Signal name	Input/ Output		Condition	(Approx.)			
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0041GB			
					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB			
108 (P)	Ground	Combination switch INPUT 4	Input	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB			
					Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0040GB			
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB			
						1.3 V			

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< ECU DIAGNOSIS >

	inal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
		Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Lighting switch PASS	(V) 15 10 5 2 ms JPMIA0037GB 1.3 V
109 (SB)	Ground				Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB
					Front wiper switch INT/ AUTO	(V) 15 10 0 2 ms JPMIA0038GB
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 10 ms JPMIA0012GB

< ECU DIAGNOSIS > [HALOGEN TYPE]

Terminal No. Description (Wire color)					Value		
+ (Wire	e color) –	Signal name	Input/ Output	Condition		(Approx.)	
111 (LG)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status LOCK or UNLOCK	Battery voltage (V) 15 10 50 ms JMKIA0066GE	
					For 15 seconds after UN- LOCK 15 seconds or later after UNLOCK	Battery voltage	
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10ms 10ms 10ms 10ms 10ms 10ms 10ms 10	
113* ³ (O)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle When dark outside of the vehicle	Close to 5 V Close to 0 V	
116 (GR)	Ground	Stop lamp switch 1	Input		_	Battery voltage	
118 (L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed) ON (Brake pedal is depressed)	0 V Battery voltage	
119* ¹ (W)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GE	
					UNLOCK status (unlock sensor switch ON)	0 V	
121 (Y)	Ground	Key slot switch	Input		serted into key slot	Battery voltage	
(Y)		ACC feedback		When the key is not	ot inserted into key slot OFF	0 V	
122 (R)	Ground		Input		ACC or ON	0 V Battery voltage	
123					OFF or ACC	0 V	
123	Ground	IGN feedback	Input	Ignition switch	ON	Battery voltage	

< ECU DIAGNOSIS >

	Terminal No. Description (Wire color)					Value	
(Wire	e color) –	Signal name	Input/ Output	Condition		(Approx.)	
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (When passenger door opens)	0 V	
130* ⁴ (BR)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 10 5 0 10 ms JPMIA0012GB	
					Rear window defogger switch ON	0 V	
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0013GB	
				Innition	- or ACC	10.2 V	
				Ignition switch OF	ON (When tail lamps OFF)	Battery voltage 9.5 V	
				Push-button igni-		NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.	
133 (W)	Ground	Push-button ignition switch illumination	Output	tion switch illumination	ON (When tail lamps ON)	15 10 5 0 JPMIA0159GB	
					OFF	0 V	
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V	
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V	
(V)	Ciodila	power supply	Caiput	- Simuon Switch	ACC or ON	5.0 V	

< ECU DIAGNOSIS >

nal No.	Description				Value	
color)	Signal name	Input/ Output		Condition	(Approx.)	Α
	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 * 0.2s	С
Ground	er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0 	F
Ground	Selector lever P/N	Input	Selector lever	P or N position	Battery voltage	G
Siduriu	position	mput	Solootol IEVEI	Except P and N positions	0 V	
	Security indicator	Output	Security indicator	ON	0 V	-
Ground				Blinking	(V) 15 10 5 0 11.3 V	J
				OFF	Battery voltage	K
Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	0 V (V) 15 10 2 ms JPMIA0031GB	EX M
Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4) Any of the conditions below with all switches OFF Wiper intermittent dial 1	0 V	C
	Ground Ground Ground	Ground Selector lever P/N position Ground Security indicator Ground Combination switch OUTPUT 5 Cround Combination switch	Ground Selector lever P/N position Input Ground Security indicator Output Combination switch Output Cround Combination switch Output	Ground Selector lever P/N position Ground Security indicator Output Security indicator Ground OUTPUT 5 Ground Combination switch Output Combination switch OUTPUT 5 Ground Combination switch Output Combination switch Output Combination switch OUTPUT 5 Ground Combination switch Output Combination Switch OUTPUT 5	Ground Selector lever P/N position Ground Combination switch OUTPUT 5 Ground Combination switch OUTPUT 1 Final paper Selector lever P/N	Ground From Pressure receiver communication of the pressure receiver communication of the pressure receiver and the property of the pressure receiver of communication of the pressure receiver of the pressure of th

< ECU DIAGNOSIS > [HALOGEN TYPE]

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	Terminal No. Descri (Wire color)				Condition	Value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
					All switches OFF (Wiper intermittent dial 4)	0 V	
					Front washer switch ON (Wiper intermittent dial 4)		
144		Combination switch	0.1.1	Combination	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15	
(P)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper intermittent dial 4)	10 5 0	
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	2 ms JPMIA0033GB	
					All switches OFF	0 V	
		Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	Front wiper switch INT/ AUTO	(V)	
145	Ground				Front wiper switch LO	15	
(V)					Lighting switch AUTO	2 ms	
-					All 11 055	10.7 V	
	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF Front fog lamp switch ON	0 V	
					Lighting switch 2ND	(V)	
146					Lighting switch PASS	15	
(Y)					Turn signal switch LH	0	
149* ⁵ (W)	Ground	Tire pressure warning check switch	Input	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0011GB	
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	(V) 15 10 5 0 10 ms 11.8 V	
					ON (When driver door opens)	0 V	

< ECU DIAGNOSIS > [HALOGEN TYPE]

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/		Condition	(Approx.)
+	_	9.9.16.116	Output			
151	Ground	Rear window defog-	Output	Rear window de-	Active	0 V
(G)	Ground	ger relay control	Output	fogger	Not activated	Battery voltage

NOTE:

- *1: With Intelligent Key system
- *2: Without Intelligent Key system
- *3: With auto light system
- *4: Without BOSE audio system
- *5: With TPMS

Wiring Diagram - BCM -

UP TO VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO),

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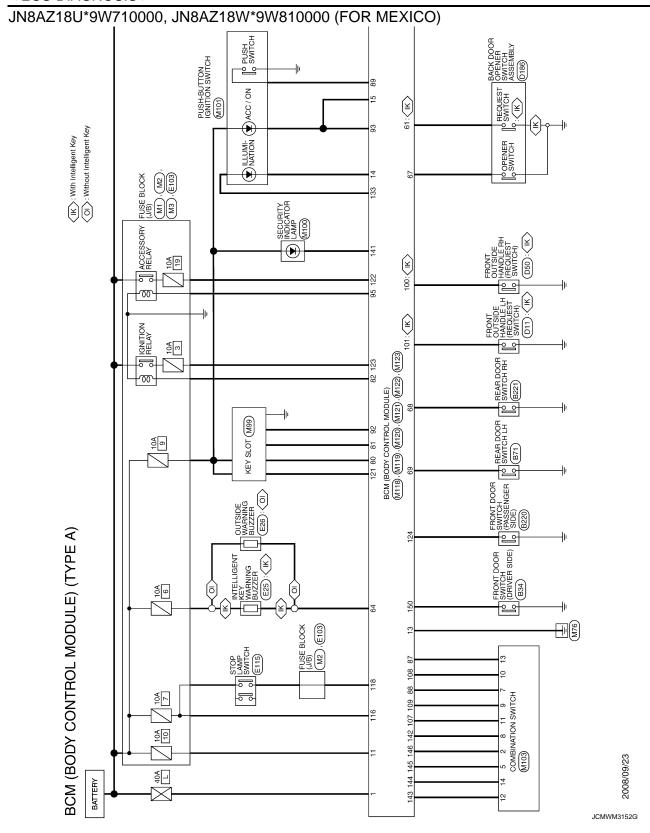
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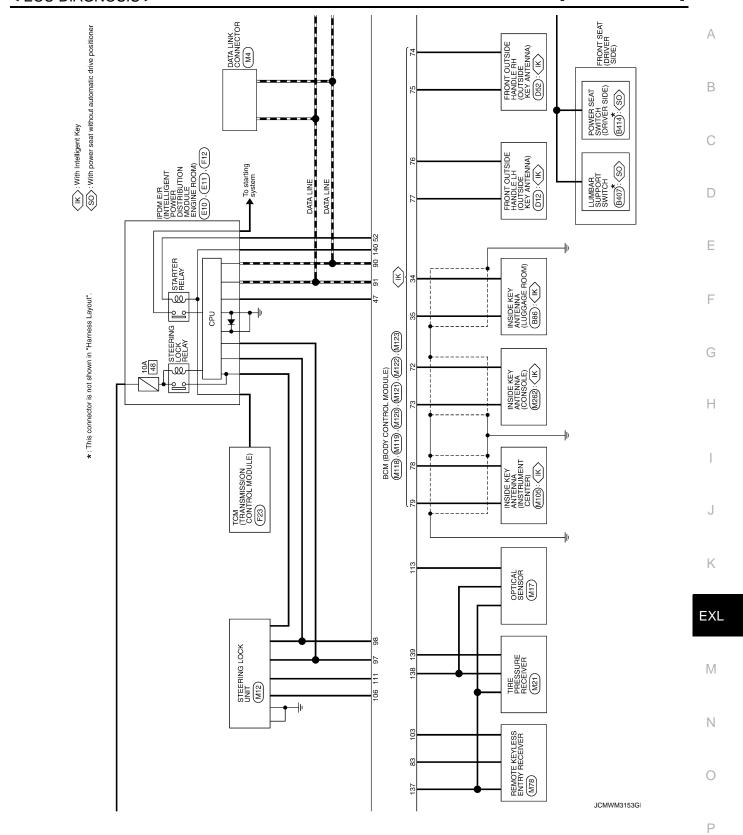
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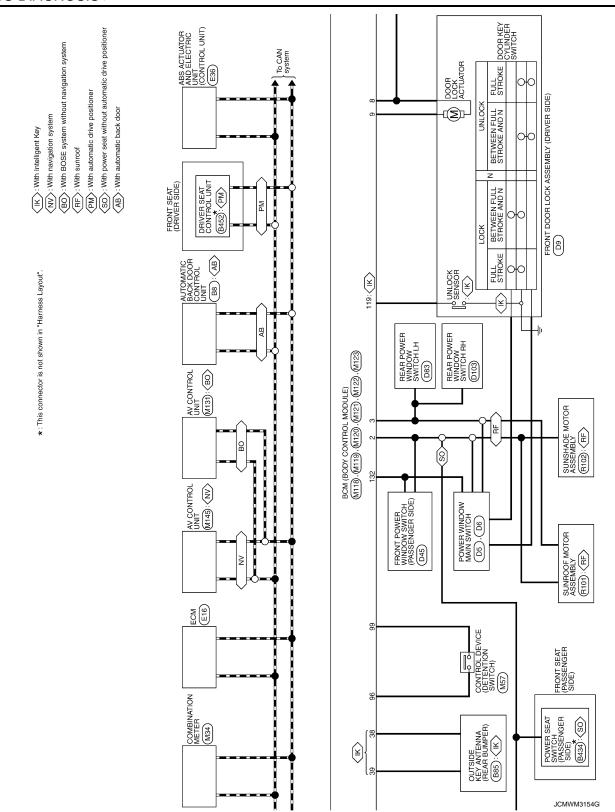
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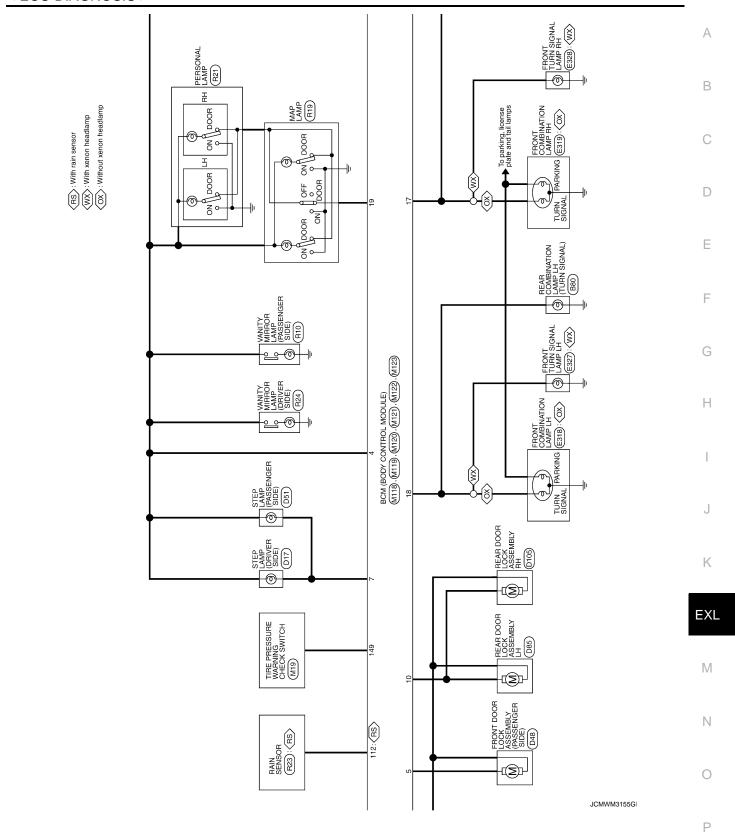
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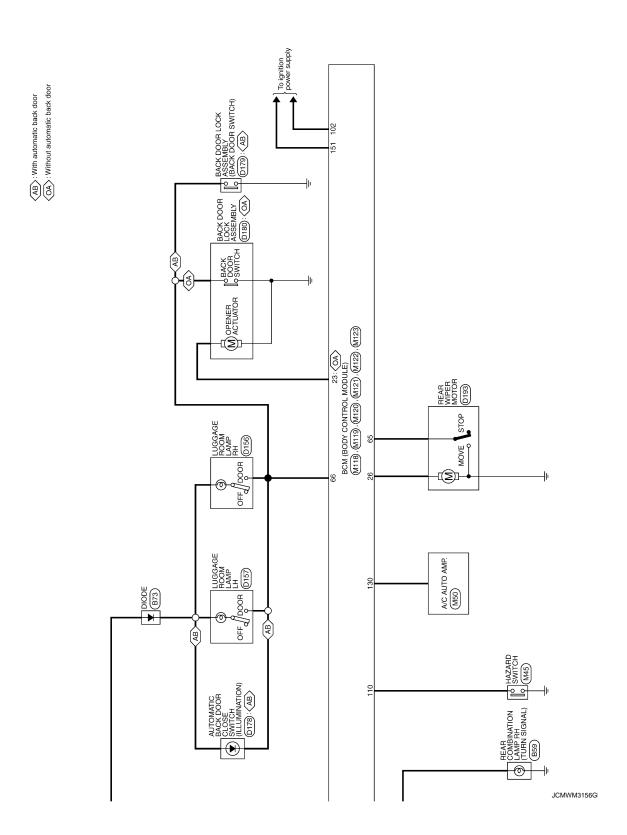
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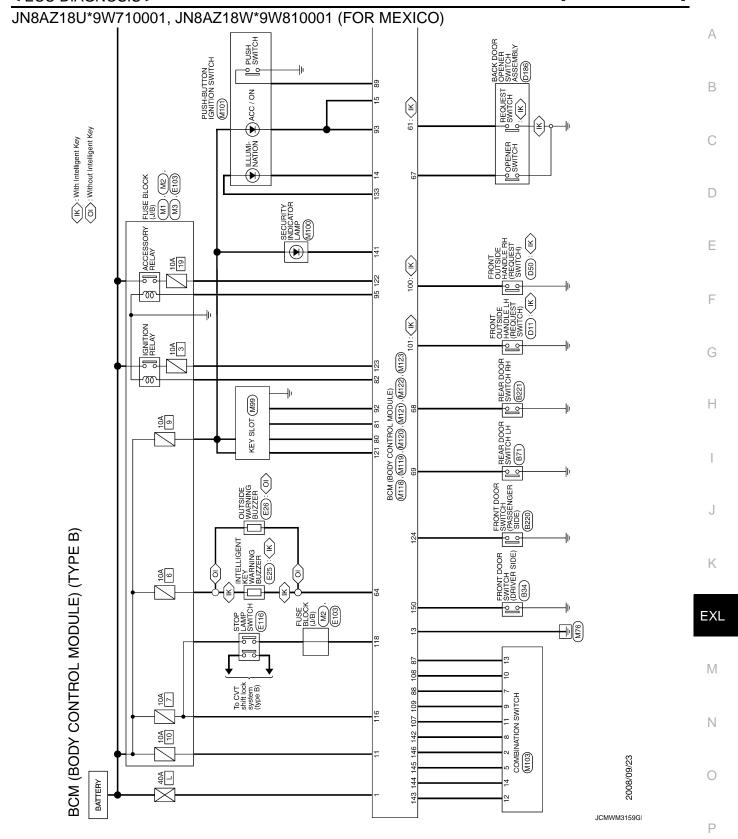
BR TURN SIGNAL LH Y ROOM LAMP TIMER CONTROL						В
19 61						D
(ODULE)	9 10 18 10	Signal Name [Specification] PASSENGER ROOM LAMP POWER SUPPLY PASSENGER DOOR UNLOCK OUTPUT STEP LAMP OUTPUT ALL DOOR FUEL LID LOCK OUTPUT BEAR DOOR FUEL LID LOCK OUTPUT REAR DOOR FUEL LID LOCK OUTPUT BEAR DOOR PLIEL LID WINCOK OUTPUT BAT FUSE) AND AND AND AND TURN SIGNAL RH TURN SIGNAL RH	IOR SW			Е
MI19 BCM (BODY CONTROL MODULE) NS16FW-CS	7 8 8 14 15 16 17	Signal Name (Specification) SSENGER DOOM LAMP POWER SUE SSENGER DOOR LINLOCK OUTT STEP LIDLOCK OUTT RE DOOR FUEL LID LINLOCK OUTPUT REAR DOOR FUEL LIDLOCK OUTPUT AND TO THE SUEL CONTROL AND	REAR RH DOOR SW REAR LH DOOR SW			F
Connector No. M119 Connector Name BCM (BODY Connector Type NS16FW-CS	4 5 6 112 13	Color Color	68 88 88 88 88			G
				MS		Н
M118 BCM (BODY CONTROL MODULE) M03FB-LC		Signal Name [Specification] BAT (F/L) POWER WINDOW POWER SUPPLY (RAP) POWER WINDOW POWER SUPPLY (RAP)	MA21 HAGEGY-NH THAGEGY-NH THAGEGY-NH THE SECTION OF	Signal Name [Specification] LUGGAGE ROOM ANT1+ LUGGAGE ROOM ANT1+ REAR BUMPER ANT1- REAR BUMPER ANT1- REAR BUMPER ANT1- IGN RELAY FOM ET STOP STARTER RELAY CONT BACK DOOR OPENER REQUEST SW REQUEST SW BUZZER REA WIPSE STOP POSITION BACK DOOR SW BACK DOOR SW BACK DOOR SW		J
(TYPE A) Connector No. M118 Connector Name BCM (BOD Connector Type M03FB-LC		Terminal Color	Connector No. M121 Connector Name BCM (BODY of Connector Type TH40FGY-NH TH S. STORES OF STORES	Color Color No. Of Wire S4 B B S4 B S4 S4 B S4 S4		K
MODULE)	13 14	Signal Nane [Specification] OUTPUT 4 OUTPUT 3 OUTPUT 5 INPUT 2 INPUT 1 OUTPUT 1 INPUT 1 OUTPUT 1	30 31	Signal Name [Specification] AACK DOOR OPEN OUTPUT REAR WIPER OUTPUT		EXL M
NY CONTROL M103 COMBINATION SWITCH THISFW-NH	9 10 11 12	Signal Name (Specif OUTPUT 3 NIPUT 3 NIPUT 2 NIPUT 4 NIPUT 4 NIPUT 4 NIPUT 4 NIPUT 3 NIPUT 5 NIPUT 3 NIPUT 3	22 28 29 29 29	Signal Name (Spee/fication) BACK DOOR OPEN OUTPUT REAR WIPER OUTPUT		
BCM (BODY CON Connector No. M103 Connector Name COMBINATI Connector Type TH16FW-NH	128	0 Color 0 Wire 0 D D B C < ≺ Wire 0 D D B C C C C C C C C C C C C C C C C C		Color of Wire G		Ν
BCM (BO Connector No. Connector Name Connector Type	H.S.	Terminal No. 2 2 5 7 7 7 11 11 11 11 11 11	Connector No. Connector Name Connector Type H.S.	Terminal No. 23 26 26		0
					JCMWM3157GI	Р

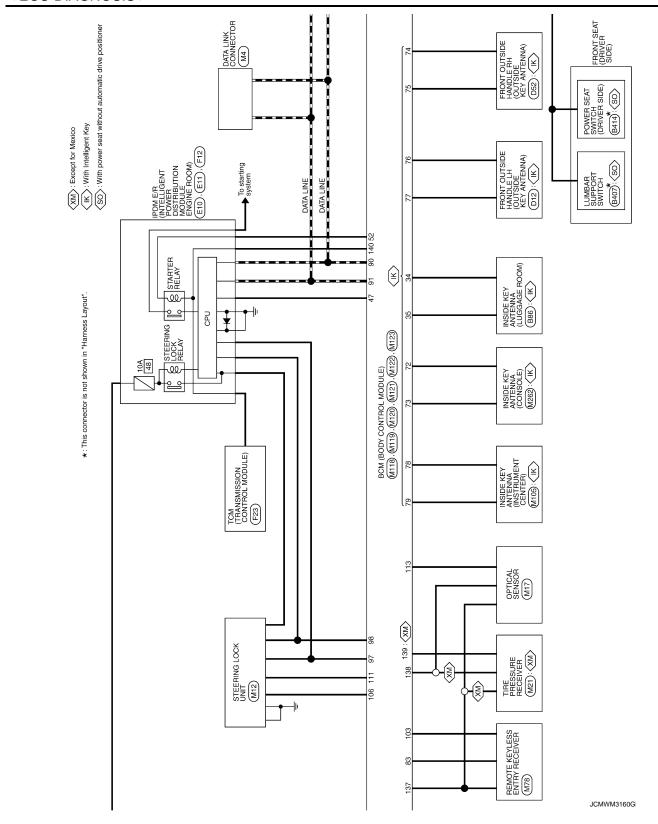
Revision: 2008 October EXL-295 2009 Murano

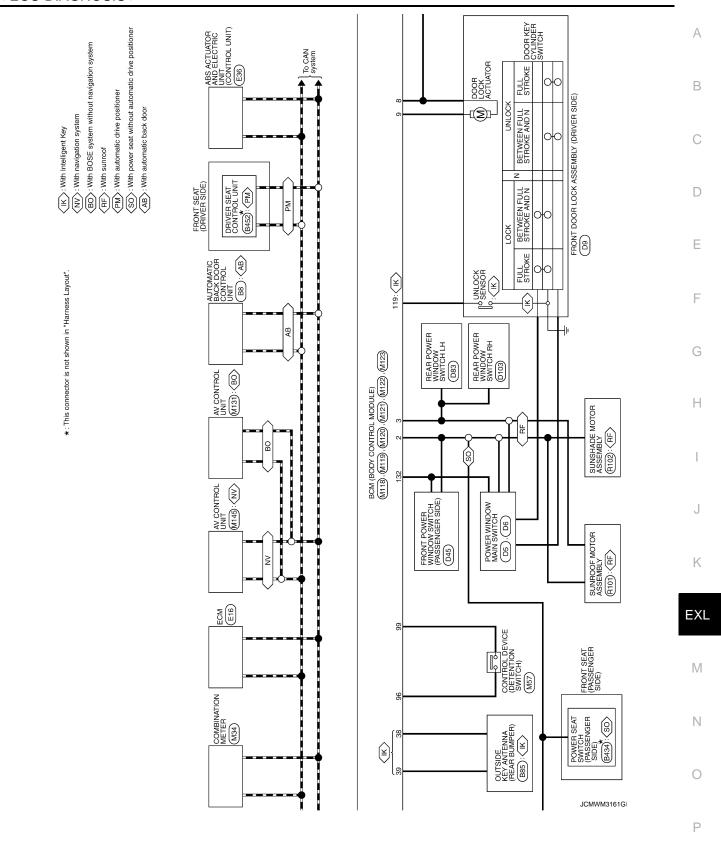
BCM	(BOD)	BCM (BODY CONTROL MODULE) (T)	TYPE A	$\overline{}$							
Connector No.		M122	83	Ь	KEYLESS ENTRY RECEIVER SIGNAL	Connector No.	. M123		133	М	PUSH-BUTTON IGNITION SW ILL POWER
	N	(SILIDON CONTROL MOBILE)	87	2	COMBI SW INPUT 5	-		(3 IIIdOW TOBEROO AGOB) MOB	137	d	RECEIVER/SENSOR GND
Collinect	or Indition	BOM (BOD) CONTROL MODOLE)	88	GR	COMBI SW INPUT 3	COLLINGTON INSING		BOD I CONTROL MODOLE)	138	۸	RECEIVER/SENSOR POWER SUPPLY
Connector Type		TH40FB-NH	88	BR	WS HSM	Connector Type		TH40FG-NH	139	0	TIRE PRESS RECEIVER SIGNAL
ģ			06	Ь	CAN-L	4			140	ЯĐ	SHIFT N/P
B			91	٦	CAN-H	F			141	0	SECURITY INDICATOR OUTPUT
SH/			95	۲	KEY SLOT ILL[With Intelligent Key]	N.			142	٦	COMBI SW OUTPUT 5
		<u> </u>	95	7	KEY SLOT ILL[Without Intelligent Key]	_		7	143	М	COMBI SW OUTPUT 1
	91 90 89 88 8	90 89 88 87 86 65 84 83 82 81 80 79 78 77 76 75 74 73 72	93	7	ONI NO	131 130	130 129 128 127 126 12	126 125 124 123 122 121 120 119 118 117 116 115 114 113 112	144	d	COMBI SW OUTPUT 2
_	111111111111111111111111111111111111111	11 11 UP (08 108 107 108 108 109 109 108 107 108 108 108 108 108 108 108 108	92	7	ACC RELAY CONT	1911191	149 148 147 146 14	[35][48][48][47][48][47][48][48][48][48][48][48][48][38][38][38][38][38][38][38][38]	145	۸	COMBI SW OUTPUT 3
			96	Υ	A/T DEVICE POWER SUPPLY				146	٨	COMBI SW OUTPUT 4
			6	0	S/L CONDITION 1				149	М	TIRE PRESS WARNING CHECK SW
Terminal	Color	Simol Name (Sacciffeedian)	86	٦	S/L CONDITION 2	Terminal	Color	Signal Money Consideration	120	BS	DRIVER DOOR SW
No.	of Wire	oighal name [obecincation]	66	^	SHIFT P	No. of	of Wire	oignai ivanie Lopecincauorij	151	5	REAR WINDOW DEFOGGER RELAY
72	В	ROOM ANT2-	100	Ь (PASSENGER DOOR REQUEST SW	112	В	RAIN SENSOR SERIAL LINK			
73	М	ROOM ANT2+	101	М	DRIVER DOOR REQUEST SW	113	0	OPTICAL SENSOR			
74	γ	PASSENGER DOOR ANT-	102	Υ .	BLOWER FAN MOTOR RELAY CONT	116	GR	FUSE CHECK			
75	57	PASSENGER DOOR ANT+	103	٦ ا	KEYLESS ENTRY RECEIVER POWER SUPPLY	118	٦	STOP LAMP SW			
9/	۸	DRIVER DOOR ANT-	106	Υ .	S/L POWER SUPPLY	119	W	DR DOOR UNLOCK SENSOR			
7.7	Ь	DRIVER DOOR ANT+	107	0 /	COMBI SW INPUT 1	121	٨	KEY SLOT SW			
78	~	ROOM ANT1-	108	3 P	COMBI SW INPUT 4	122	ч	ACC F/B			
79	9	ROOM ANT1+	109	BS 6	COMBI SW INPUT 2	123	9	IGN F/B			
80	SB	IMMOBI ANTENNA CONTROL	110	0	HAZARD SW	124	Я	PASSENGER DOOR SW			
81	0	IMMOBI ANTENNA SIGNAL	111	D7	S/L COMM	130 E	BR	REAR DEFOGGER SW			
82	BR	IGN RELAY (F/B) CONT				132	5	POWER WINDOW SW COMM			

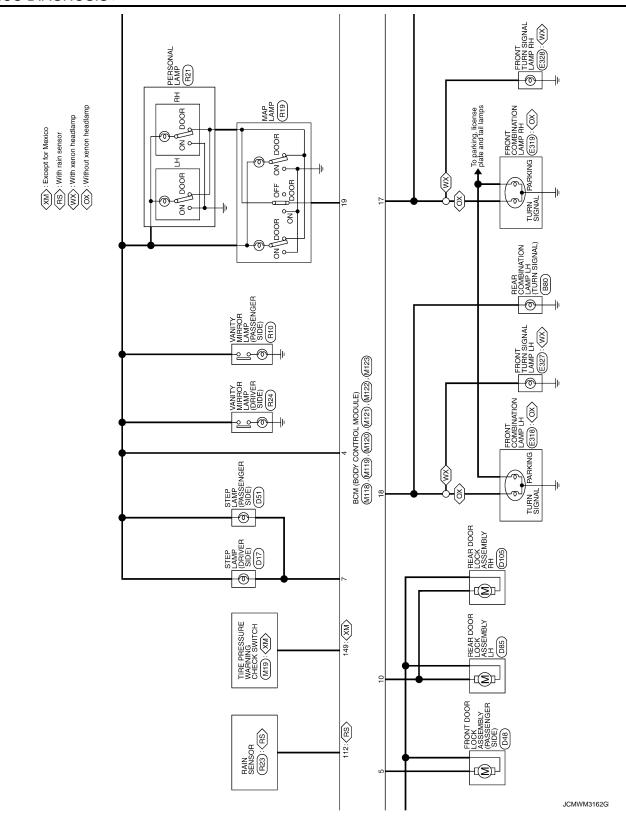
JCMWM3158G

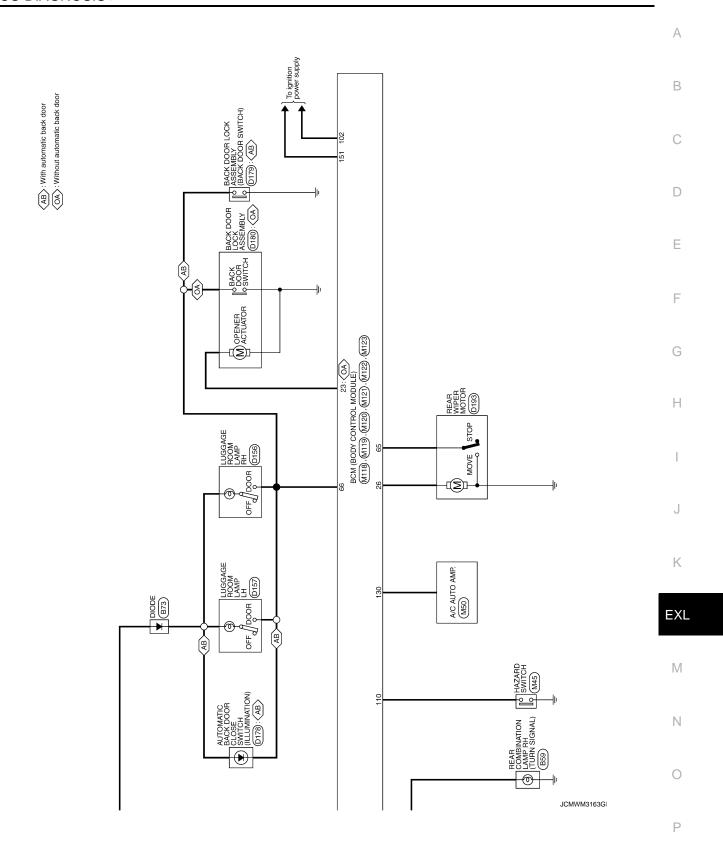
FROM VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO),











BCM (BODY CONTROL MODULE) (TY Connector No. Mili3	(TYPE B) M118	Connector No. M119	18 BR TIIRN SIGNAL I H
Connector Name COMBINATION SWITCH Connector Type THISFW-NH	Connector Name BCM (BODY CONTROL MODULE) Connector Type MO3FB-LC	Connector Name BCM (BODY CONTROL MODULE) Connector Type NS16FW-CS	Y ROOM
12 3 1011121314 7 8 9 10111121314	H.S.	4567 8910 111213141516171819	
Terminal Color Signal Name [Specification] Color V Courpour 4	Terminal Color Signal Name [Specification] No. of Wire 1	Terminal Color Signal Name [Specification] Color Col	
Connector No. MI 20 Connector Name BCM (BODY CONTROL MODULE) Connector Type NSIZFW-CS Connector Type NSIZFW-CS	Connector No. M121 Connector Name BCM (BODY CONTROL MODULE) Connector Type TH40FGY-NH Line Section of the Sect	69 W REAR HI DOOR SW 69 R REAR LH DOOR SW	
Terminal Color Signal Name Specification Color No. of Wire 23 BR BACK DOOR OPEN OUTPUT 26 G REAR WIPER OUTPUT	Perminal Color Signal Name [Speoification] 14		

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BCM (BODY CONTROL MODULE) (TY Connector No. M122	TYPE B)	۵	KEYLESS ENTRY RECEIVER SIGNAL	Connector No.		M123	133	*	PUSH-BUTTON IGNITION SWILL POWER
BCM (BODY CONTROL MODILIE)	87	Я	COMBI SW INPUT 5	Connector Name		BCM (BODY CONTROL MODILLE)	137	Д	RECEIVER/SENSOR GND
CC MODOLE)	88	GR	COMBI SW INPUT 3			SOM (BOD) SOMITION MODOLE/	138	^	RECEIVER/SENSOR POWER SUPPLY
	68	BR	PUSH SW	Connector Type		TH40FG-NH	139	0	TIRE PRESS RECEIVER SIGNAL
	06	d	CAN-L	4			140	GR	SHIFT N/P
	91	٦	CAN-H	F			141	0	SECURITY INDICATOR OUTPUT
[92	Я	KEY SLOT ILL[With Intelligent Key]	У. Т			142	٦	COMBI SW OUTPUT 5
	92	7	KEY SLOT ILL[Without Intelligent Key]				143	W	COMBI SW OUTPUT 1
91 90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72	93	٦	ON IND		31 130 129 128 13	130 128 128 127 126 125 124 123 122 121 120 119 118 117 116 115 114 113 112	144	Ь	COMBI SW OUTPUT 2
110 [109] 109 [105] 104 [105] 105 [101] 110 [101] 136 [37] 136 [35] 134 [35] 135	92	٦	ACC RELAY CONT	ᆀ	51 150 149 148 14	51 (55) (48) (48) (47) (45) (44) (45) (48) (43) (41) (41) (43) (58) (57) (58) (58) (58) (58)	145	۸	COMBI SW OUTPUT 3
	96	٨	A/T DEVICE POWER SUPPLY				146	У	COMBI SW OUTPUT 4
	97	0	S/L CONDITION 1				149	W	TIRE PRESS WARNING CHECK SW
Simol Momo [Secondino]	86	٦	S/L CONDITION 2	Terminal	Color	Simol Name Consideration	120	SB	DRIVER DOOR SW
dame [Specification]	66	۸	SHIFT P	No.	of Wire	olgilai Naille Lopecilication	151	g	REAR WINDOW DEFOGGER RELAY
ROOM ANT2-	100	Ь	PASSENGER DOOR REQUEST SW	112	ď	RAIN SENSOR SERIAL LINK			
ROOM ANT2+	101	М	DRIVER DOOR REQUEST SW	113	0	OPTICAL SENSOR			
PASSENGER DOOR ANT-	102	\	BLOWER FAN MOTOR RELAY CONT	116	GR	FUSE CHECK			
PASSENGER DOOR ANT+	103	_	KEYLESS ENTRY RECEIVER POWER SUPPLY	118	٦	STOP LAMP SW			
DRIVER DOOR ANT-	106	Υ	S/L POWER SUPPLY	119	W	DR DOOR UNLOCK SENSOR			
DRIVER DOOR ANT+	107	0	COMBI SW INPUT 1	121	Υ	KEY SLOT SW			
ROOM ANT1-	108	Ь	COMBI SW INPUT 4	122	ď	ACC F/B			
ROOM ANT1+	109	SB	COMBI SW INPUT 2	123	g	IGN F/B			
IMMOBI ANTENNA CONTROL	110	9	HAZARD SW	124	œ	PASSENGER DOOR SW			
MMOBI ANTENNA SIGNAL	111	LG	S/L COMM	130	BR	REAR DEFOGGER SW			
IGN RELAY (F/B) CONT				132	5	POWER WINDOW SW COMM			

Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

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INFOID:0000000003729582

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (battery voltage) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

[HALOGEN TYPE] < ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B2609: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When any of the following conditions are fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled • Steering condition No. 1 signal: LOCK (0V) • Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

The blinking speed is normal while activating the hazard warning lamp.

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:

If rain sensor malfunction is detected when ignition switch is turned OFF \Rightarrow ON and front wiper switch is INT/ AUTO position, BCM operates a fail-safe control.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

More than 1 minute is passed after the rear wiper stop.

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- 2. Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:0000000003729583

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING
4	B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2553: IGNITION RELAY B2555: STOP LAMP B2555: STOP LAMP B2555: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2603: SHIFT POSI STATUS B2605: PNP SW B2605: PNP SW B2606: S/L RELAY B2607: S/L RELAY B2607: S/L RELAY B2608: STARTER RELAY B2608: STARTER RELAY B2608: STERING LOCK UNIT B2600: STEERING LOCK UNIT B2600: STEERING LOCK UNIT B2607: STEERING LOCK UNIT B2607: STEERING LOCK UNIT B2607: STATE SIG LOST B2612: S/L STATUS B2617: S/L STATUS B2617: S/L STATUS B2618: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2618: PUSH-BTN IGN SW B2618: VEHICLE TYPE B2619: S/L STATUS B2628: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG

< ECU DIAGNOSIS > [HALOGEN TYPE]

Priority	DTC	
	C1704: LOW PRESSURE FL	
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR	
	C1707: LOW PRESSURE RL	E
	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	
5	C1716: [PRESSDATA ERR] FL	
	C1717: [PRESSDATA ERR] FR	
	C1718: [PRESSDATA ERR] RR	E
	C1719: [PRESSDATA ERR] RL	L
	C1720: [CODE ERR] FL	
	C1721: [CODE ERR] FR	
	C1722: [CODE ERR] RR	F
	C1723: [CODE ERR] RL	
	C1724: [BATT VOLT LOW] FL	
	C1725: [BATT VOLT LOW] FR	
	C1726: [BATT VOLT LOW] RR	
	C1727: [BATT VOLT LOW] RL	
	C1734: CONTROL UNIT	
	B2621: INSIDE ANTENNA	-
6	B2622: INSIDE ANTENNA	
	B2623: INSIDE ANTENNA	

DTC Index

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to EXL-203, "COM-MON ITEM: CONSULT-III Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	_	BCS-40
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-41
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-42
B2013: ID DISCORD BCM-S/L	×	×	_	_	SEC-55
B2014: CHAIN OF S/L-BCM	×	×	_	_	SEC-56
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-47
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-50
B2192: ID DISCORD BCM-ECM	×	_	_	_	<u>SEC-51</u>
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-53
B2195: ANTI SCANNING	×	_	_	_	SEC-54
B2553: IGNITION RELAY	_	×	_	_	PCS-49

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[HALOGEN TYPE]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2555: STOP LAMP	_	×	_	_	SEC-59
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-61
B2557: VEHICLE SPEED	×	×	×	_	SEC-63
B2560: STARTER CONT RELAY	×	×	×	_	SEC-64
B2562: LOW VOLTAGE		×	_	_	BCS-43
B2601: SHIFT POSITION	×	×	×	_	SEC-65
B2602: SHIFT POSITION	×	×	×	_	SEC-68
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-70
B2604: PNP SW	×	×	×	_	SEC-73
B2605: PNP SW	×	×	×	_	SEC-75
B2606: S/L RELAY	×	×	×	_	SEC-77
B2607: S/L RELAY	×	×	×	_	SEC-78
B2608: STARTER RELAY	×	×	×	_	SEC-80
B2609: S/L STATUS	×	×	×	_	SEC-82
B260A: IGNITION RELAY	×	×	×	_	PCS-51
B260B: STEERING LOCK UNIT	_	×	×	_	SEC-86
B260C: STEERING LOCK UNIT	_	×	×	_	SEC-87
B260D: STEERING LOCK UNIT	_	×	×	_	SEC-88
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-89
B2612: S/L STATUS	×	×	×	_	SEC-92
B2614: ACC RELAY CIRC	_	×	×	_	PCS-53
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-56
B2616: IGN RELAY CIRC	_	×	×	_	PCS-59
B2617: STARTER RELAY CIRC	×	×	×	_	SEC-96
B2618: BCM	×	×	×	_	PCS-62
B2619: BCM	×	×	×	_	SEC-98
B261A: PUSH-BTN IGN SW	_	×	×	_	SEC-99
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-102
B2621: INSIDE ANTENNA	_	×	_	_	DLK-95
B2622: INSIDE ANTENNA	_	×	_	_	DLK-97
B2623: INSIDE ANTENNA	_	×	_	_	DLK-99
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-90</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-91</u>
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	\A/T 40
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-16</u>
C1707: LOW PRESSURE RL	_	_	_	×	

< ECU DIAGNOSIS > [HALOGEN TYPE]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	,
C1708: [NO DATA] FL	_	_	_	×		
C1709: [NO DATA] FR	_	_	_	×	W/T 40	
C1710: [NO DATA] RR	_	_	_	×	<u>WT-18</u>	
C1711: [NO DATA] RL	_	_	_	×		
C1712: [CHECKSUM ERR] FL	_	_	_	×		
C1713: [CHECKSUM ERR] FR	_	_	_	×	W/T O4	
C1714: [CHECKSUM ERR] RR	_	_	_	×	<u>WT-21</u>	
C1715: [CHECKSUM ERR] RL	_	_	_	×		
C1716: [PRESSDATA ERR] FL	_	_	_	×		
C1717: [PRESSDATA ERR] FR	_	_	_	×	M/T O 4	
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>WT-24</u>	
C1719: [PRESSDATA ERR] RL	_	_	_	×		
C1720: [CODE ERR] FL	_	_	_	×		
C1721: [CODE ERR] FR	_	_	_	×	W/T OC	
C1722: [CODE ERR] RR	_	_	_	×	<u>WT-26</u>	
C1723: [CODE ERR] RL	_	_	_	×		
C1724: [BATT VOLT LOW] FL	_	_	_	×		
C1725: [BATT VOLT LOW] FR	_	_	_	×	W/T 20	
C1726: [BATT VOLT LOW] RR	_	_	_	×	<u>WT-29</u>	
C1727: [BATT VOLT LOW] RL	_	_	_	×		
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-32</u>	
C1734: CONTROL UNIT	_	_	_	×	WT-33	

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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) < ECU DIAGNOSIS > [HALOGEN TYPE]

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

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item		Condition			
MOTOR FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	1/2/3/4		
		A/C switch OFF	Off		
AC COMP REQ	Engine running	A/C switch ON (Compressor is operating)	On		
TAIL OOLD DEO	Lighting switch OFF		Off		
TAIL&CLR REQ	Lighting switch 1ST, 2ND, HI or	AUTO (Light is illuminated)	On		
UI 10 BEO	Lighting switch OFF		Off		
HL LO REQ	Lighting switch 2ND HI or AUTO) (Light is illuminated)	On		
	Lighting switch OFF		Off		
HL HI REQ	Lighting switch HI		On		
		Front fog lamp switch OFF	Off		
FR FOG REQ	Lighting switch 2ND or AUTO (Light is illuminated)	Front fog lamp switch ONDaytime running light activated (Only for Canada)	On		
	Ignition switch ON	Front wiper switch OFF	Stop		
ED WID DEO		Front wiper switch INT		1LOW	
FR WIP REQ		Front wiper switch LO	Low		
		Front wiper switch HI	Hi		
		Front wiper stop position	STOP P		
WIP AUTO STOP	Ignition switch ON	Any position other than front wiper stop position	ACT P		
		Front wiper operates normally	Off		
WIP PROT	Ignition switch ON	Front wiper stops at fail-safe operation	BLOCK		
ION DIVA DEO	Ignition switch OFF or ACC		Off		
IGN RLY1 -REQ	Ignition switch ON		On		
ION DLV	Ignition switch OFF or ACC		Off		
IGN RLY	Ignition switch ON		On		
DUCH CW	Release the push-button ignition	n switch	Off		
PUSH SW	Press the push-button ignition s	witch	On		
INTER/NP SW	Ignition switch ON	Selector lever in any position other than P or N	Off		
	-	Selector lever in P or N position	On		
CT DLV CONT	Ignition switch ON		Off		
ST RLY CONT	At engine cranking		On		
IUDT DLV DEO	Ignition switch ON		Off		
IHBT RLY -REQ	At engine cranking		On		

< ECU DIAGNOSIS > [HALOGEN TYPE]

Monitor Item		Value/Status			
	Ignition switch ON	Off			
	At engine cranking		INHI ON \rightarrow ST ON		
ST/INHI RLY		ter control relay cannot be recognized by etc. when the starter relay is ON and the	UNKWN		
DETENT SW	Ignition switch ON	 Press the selector button with selector lever in P position Selector lever in any position other than P 	Off		
	Release the selector button with	selector lever in P position	On		
	None of the conditions below are	e present	Off		
S/L RLY -REQ	seconds)	Press the push-button ignition switch when the steering lock is activat-			
	Steering lock is activated	LOCK			
S/L STATE	Steering lock is deactivated	UNLOCK			
	[DTC: B210A] is detected		UNKWN		
DTRL REQ	NOTE: The item is indicated, but not mo	Off			
OIL P SW	Ignition switch OFF, ACC or eng	ine running	Open		
OIL P SW	Ignition switch ON		Close		
HOOD SW	NOTE: The item is indicated, but not mo	onitored.	Off		
HL WASHER REQ	NOTE: The item is indicated, but not mo	onitored.	Off		
	Not operating		Off		
THFT HRN REQ	Panic alarm is activated Horn is activated with VEHICL TEM	On			
	Not operating	Off			
HORN CHIRP	Door locking with Intelligent KDoor locking with key fob (hor	On			
CRNRNG LMP REQ	NOTE: The item is indicated, but not mo	onitored.	Off		

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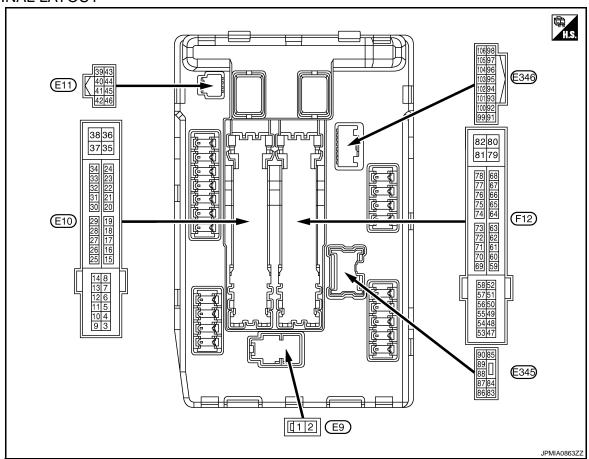
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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) [HALOGEN TYPE]

< ECU DIAGNOSIS >

TERMINAL LAYOUT



PHYSICAL VALUES

	inal No.	Description				Value	
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	
1 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage	
2 (L)	Ground	Battery power supply	Input	Ignition swi	tch OFF	Battery voltage	
4	Cround	Front winer I O	Output	Ignition	Front wiper switch OFF	0 V	
(LG)	Ground	Front wiper LO	Output	switch ON	Front wiper switch LO	Battery voltage	
5	Ground	Front winer III	Output	Ignition	Front wiper switch OFF	0 V	
(Y)	Ground	Front wiper HI	Output	switch ON	Front wiper switch HI	Battery voltage	
7	Ground	Tail, license plate lamps &	Output	Ignition	Lighting switch OFF	0 V	
(GR)	Ground	illuminations	Output	switch ON	Lighting switch 1ST	Battery voltage	
40				Ignition swi (More than ignition swi	a few seconds after turning	0 V	
10 (BR) Gro	Ground	Ground ECM relay power supply	Output	Ignition switch ON Ignition switch OFF (For a few seconds after turning ignition switch OFF)		Battery voltage	

[HALOGEN TYPE] < ECU DIAGNOSIS >

	inal No. e color)	Description			0 1111	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
11		Steering look unit power		Ignition switch OFF	A few seconds after opening the driver door	Battery voltage
(P)	Ground	Steering lock unit power supply	Output	Ignition switch LOCK	Press the push-button ig- nition switch	Battery voltage
				Ignition sw	itch ACC or ON	0 V
12 (B)	Ground	Ground	_	Ignition sw	itch ON	0 V
13					tely 1 second or more after ignition switch ON	0 V
(SB)	Ground	Fuel pump power supply	Output		nately 1 second after turning on switch ON unning	Battery voltage
15	Ground	Ignition relay power supply	Output	Ignition sw	itch OFF	0 V
(W)	Ground	ignition relay power supply	Juipui	Ignition sw	itch ON	Battery voltage
16				Ignition	Front wiper stop position	0 V
(L/Y)	Ground	Front wiper auto stop	Input	switch ON	Any position other than front wiper stop position	Battery voltage
19	Ground	Ignition relay power supply	Output	Ignition sw	itch OFF	0 V
(Y)	Cround	igililloit foldy power supply	Output	Ignition switch ON		Battery voltage
20 (L)	Ground	Ambient sensor ground	Output	Ignition switch ON		0 V
21 (O)	Ground	Ambient sensor	Input	Ignition switch ON NOTE: Changes depending to ambient temperature		(V) 4 3 2 1 0 -10 0 10 20 30 40 [°C] (14) (32) (50) (68) (86) (104) [°F] JSNIA0014G
22 (SB)	Ground	Refrigerant pressure sensor ground	Output	Engine running	Warm-up condition Idle speed	0 V
23 (GR)	Ground	Refrigerant pressure sensor	Output	Engine running	Warm-up condition Both A/C switch and blower fan motor switch ON (Compressor operates)	1.0 - 4.0 V
24	Ground	Refrigerant pressure sen-	Input	Ignition sw	itch OFF	0 V
(G)	Cround	sor power supply	mput	Ignition sw	itch ON	5.0 V
25	Ground	Ignition relay power supply	Output	Ignition sw	itch OFF	0 V
(GR)	Cidana	.gorriola, power ouppry	Calput	Ignition sw		Battery voltage
26*	Ground	Ignition relay power supply	Output	Ignition sw	itch OFF	0 V
(Y)	2.00110	G Sia, Fortor oakbry		Ignition sw		Battery voltage
27	Ground	Ignition relay monitor	Input	Ignition sw	itch OFF or ACC	Battery voltage
(W)		G		Ignition sw		0 V
28	Ground	Push-button ignition	Input		oush-button ignition switch	0 V
(SB)				Release the push-button ignition switch		Battery voltage

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[HALOGEN TYPE] < ECU DIAGNOSIS >

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	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
30 (BR)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
(DIV)				SWILCH OIV	Selector lever P or N	Battery voltage
32	Ground	Steering lock unit condi-	Input	Steering lo	ck is activated	0 V
(V)	Giodila	tion-1	при	Steering lo	ck is deactivated	Battery voltage
33	Ground	Steering lock unit condi-	Input	Steering lo	ck is activated	Battery voltage
(G)	Cround	tion-2	трис	Steering lo	ck is deactivated	0 V
34	Ground	Cooling fan relay-3 control	Input	Cooling far	stopped	Battery voltage
(O)	Cround	Cooming fair roley o control	трис	Cooling far	at HI operation	0 V
35	Ground	Cooling fan relay-1 power	Input	Cooling far	stopped	Battery voltage
(P)	Oroana	supply	mpat	Cooling far	at LO operation	6.0 V
36 (G)	Ground	Battery power supply	Input	Ignition sw	itch OFF	Battery voltage
38	Ground	Cooling fan relay-1 power	Output	Cooling far	n not operating	0 V
(GR)	Siddild	supply	Japan	Cooling far	at LO operation	6.0 V
39 (P)	_	CAN-L	Input/ Output		_	_
40 (L)	_	CAN-H	Input/ Output		_	_
41 (B)	Ground	Ground	_	Ignition sw	itch ON	0 V
42				Cooling far	stopped	Battery voltage
(SB)	Ground	Cooling fan relay-2 control	Input	Cooling fan MID operatingCooling fan HI operating		0 V
					Press the selector button (selector lever P)	Battery voltage
43 (Y)	Ground	Control device (Detention switch)	Input	Ignition switch ON	Selector lever in any position other than P Release the selector button (selector lever P)	0 V
44	Ground	Horn relay control	Input	The horn is	deactivated	Battery voltage
(W)	Ground	Tiom relay control	при	The horn is	activated	0 V
45	Ground	Horn switch	Input	The horn is	deactivated	Battery voltage
(O)	Ground	TIOTH SWILOT	Прис	The horn is	activated	0 V
46 (BR)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
(DIV)				SWILCH OIL	Selector lever P or N	Battery voltage
					A/C switch OFF	0 V
48 (W)	Ground	A/C relay power supply	Output	Engine running	A/C switch ON (A/C compressor is operating)	Battery voltage
49				Ignition swi (More than ignition swi	a few seconds after turning	0 V
49 (R/B)	Ground	ECM relay power supply	Output	Ignition s	w seconds after turning igni-	Battery voltage

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[HALOGEN TYPE] < ECU DIAGNOSIS >

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Terminal No. Description				Value					
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)			
51	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V			
(LG)	Ground	ignition relay power supply	Output	Ignition swi	tch ON	Battery voltage			
52	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V			
(Y/G)	Orodria	ignition relay power supply	Output	Ignition swi	tch ON	Battery voltage			
53				Ignition swi (More than ignition swi	a few seconds after turning	0 V			
(R/W)	Ground	ECM relay power supply	Output	 Ignition s Ignition s (For a few tion switch 	witch OFF w seconds after turning igni-	Battery voltage			
54		Throttle control motor re-		Ignition swi (More than ignition swi	a few seconds after turning	0 V			
(G/W)	Ground	lay power supply	Output	Ignition s Ignition s (For a fertion switch)	witch OFF w seconds after turning igni-	Battery voltage			
55 (W/L)	Ground	ECM power supply	Output	Ignition swi	tch OFF	Battery voltage			
56	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V			
(R/Y)	Orodria	ignition relay power supply	Output	Ignition swi	tch ON	Battery voltage			
57	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V			
(O)	Orodria	ignition roley power supply	Output	Ignition swi	tch ON	Battery voltage			
58	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V			
(Y)	Orodina	igilia on rolay power eappry	Carpar	Ignition swi	tch ON	Battery voltage			
69		ECM relay control					Ignition swi (More than ignition swi	a few seconds after turning	Battery voltage
(W/B)	Ground		Output	 Ignition s Ignition s (For a fertion switch 	witch OFF w seconds after turning igni-	0 - 1.5 V			
						0 -1.0 V ↓			
70 (O) Ground	Throttle control motor re-	Output	Ignition swi	tch ON → OFF	Battery voltage ↓				
(0)		lay control				0 V			
				Ignition swi	tch ON	0 - 1.0 V			
72 (R/B)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V			
(IVD)				SWILCH ON	Selector lever P or N	Battery voltage			
75	Ground	Oil pressure switch	Input	Ignition	Engine stopped	0 V			
(LG)	Cround	on procedure switch	input	switch ON	Engine running	Battery voltage			

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[HALOGEN TYPE] < ECU DIAGNOSIS >

	inal No.	Description	Description			Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
				Ignition switch ON		(V) 6 4 2 0 2ms JPMIA0001GB
76 (SB)	Ground	Power generation command signal	Output	40% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		(V) 6 4 2 0 2 2 ms JPMIA0002GB 3.8 V
				80% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		(V) 6 4 2 0 2ms JPMIA0003GB
77 (GR)	Ground	Fuel pump relay control	Output	 Approximately 1 second after turning the ignition switch ON Engine running Approximately 1 second or more after 		0 - 1.5 V
				turning the	ignition switch ON	Battery voltage
80 (B)	Ground	Starter motor	Output	At engine of	ranking	Battery voltage
83	Ground	Headlamp LO (RH)	Output	Ignition	Lighting switch OFF	0 V
(Y)	0.000			switch ON	Lighting switch 2ND	Battery voltage
84	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
(L)				SWILCH OIN	Lighting switch 2ND	Battery voltage
86 (SB)	Ground	Front fog lamp (RH)	Output	Lighting switch 2ND	 Front fog lamp switch OFF Front fog lamp switch ON Daytime running light activated (Only for Canada) 	0 V Battery voltage
					Front fog lamp switch OFF	0 V
87 (GR)	Ground Front fog lamp (LH) Output swite	Lighting switch 2ND	 Front fog lamp switch ON Daytime running light activated (Only for Canada) 	Battery voltage		
88 (W)	Ground	Washer pump power supply	Output	Ignition swi	tch ON	Battery voltage

[HALOGEN TYPE] < ECU DIAGNOSIS >

	inal No. e color)	Description				Value
+	-	Signal name	Input/ Output	Condition		(Approx.)
89				Ignition	Lighting switch OFF	0 V
(L)	Ground	Headlamp HI (RH)	Output	switch ON	Lighting switch HILighting switch PASS	Battery voltage
90				Ignition	Lighting switch OFF	0 V
(G)	Ground	Headlamp HI (LH)	Output	switch ON	Lighting switch HILighting switch PASS	Battery voltage
91	Ground	Parking lamp (RH)	Output	Ignition	Lighting switch OFF	0 V
(R)	Ground	Tarking lamp (IXII)	Odiput	switch ON	Lighting switch 1ST	Battery voltage
92	Ground	Parking lamp (LH)	Output	Ignition	Lighting switch OFF	0 V
(LG)	Ground	Tarking lamp (Lin)	Odiput	switch ON	Lighting switch 1ST	Battery voltage
93	Ground	Headlamp aiming motor	Output	Ignition	Lighting switch OFF	0 V
(R)	Ground	(RH)	Odipui	switch ON	Lighting switch 1ST	Battery voltage
94	Ground	Headlamp aiming motor	Output	Ignition	Lighting switch OFF	0 V
(L)	Ground	(LH)	Odipui	switch ON	Lighting switch 1ST	Battery voltage
99 (BR)	Ground	Ambient sensor ground	Input	Ignition swi	tch ON	0 V
100 (SB)	Ground	Ambient sensor	Output	Ignition switch ON NOTE: Changes depending to ambient temperature		(V) 3 2 1 0 -10 0 10 20 30 40 CC (14) (32) (50) (68) (86) (104) ("F) JSNIA0014GB
101 (L)	Ground	Refrigerant pressure sensor ground	Input	Engine running	Warm-up conditionIdle speed	0 V
102 (B)	Ground	Refrigerant pressure sensor	Input	Engine running	Warm-up condition Both A/C switch and blower fan motor switch ON (Compressor operates)	1.0 - 4.0 V
103	Ground	Refrigerant pressure sen-	Outsut	Ignition swi	tch OFF	0 V
(P)	Ground	sor power supply	Output	Ignition swi	tch ON	5.0 V

^{*:} AWD models only

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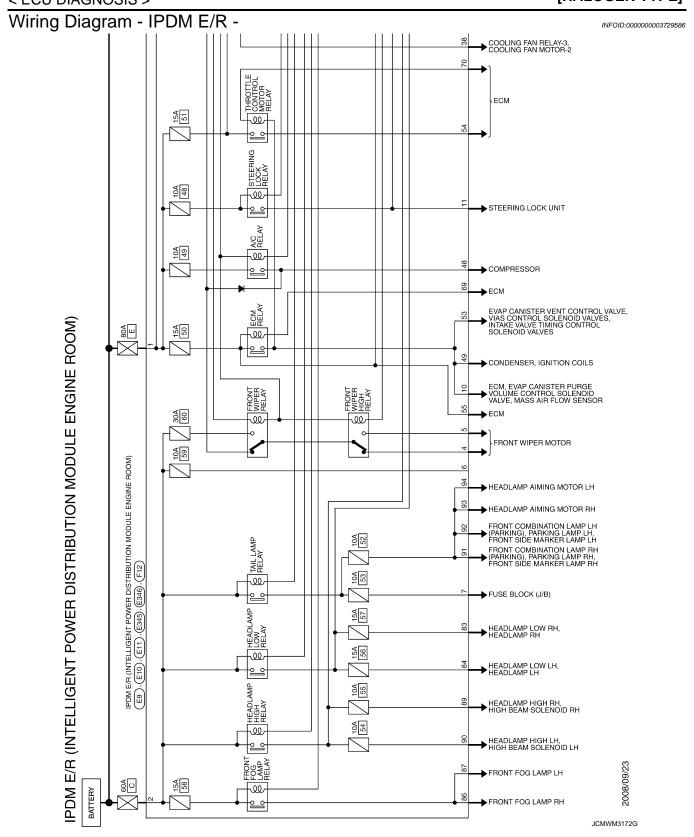
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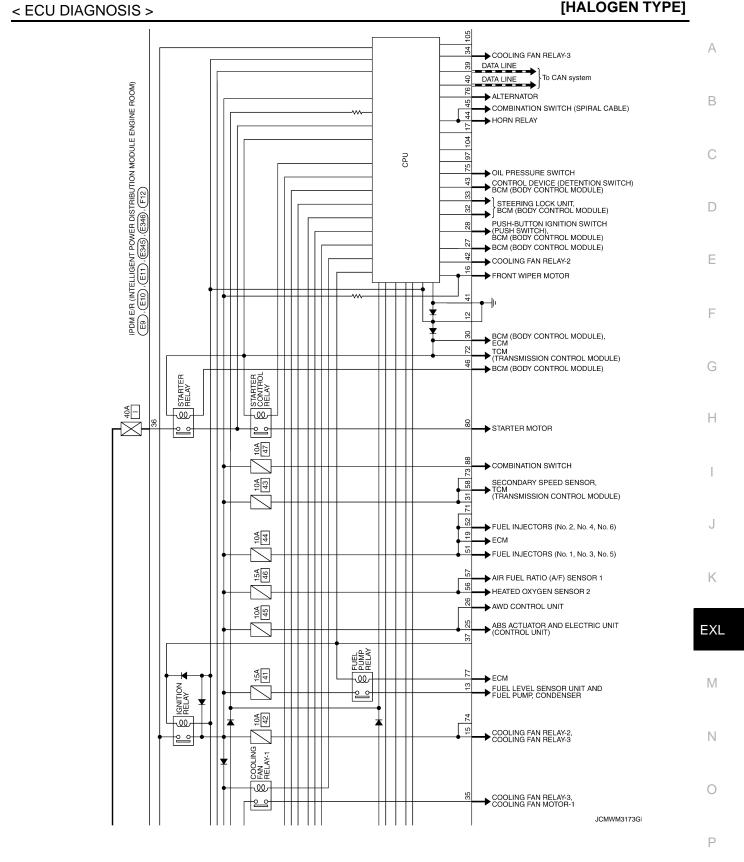
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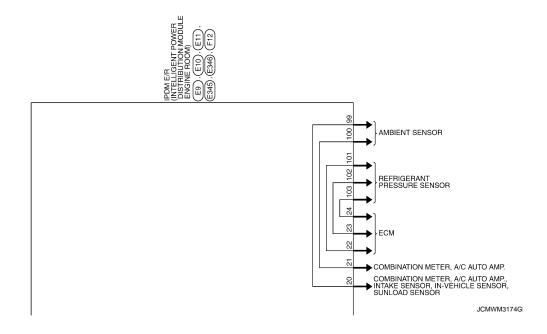
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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) < ECU DIAGNOSIS > [HALOGEN TYPE]

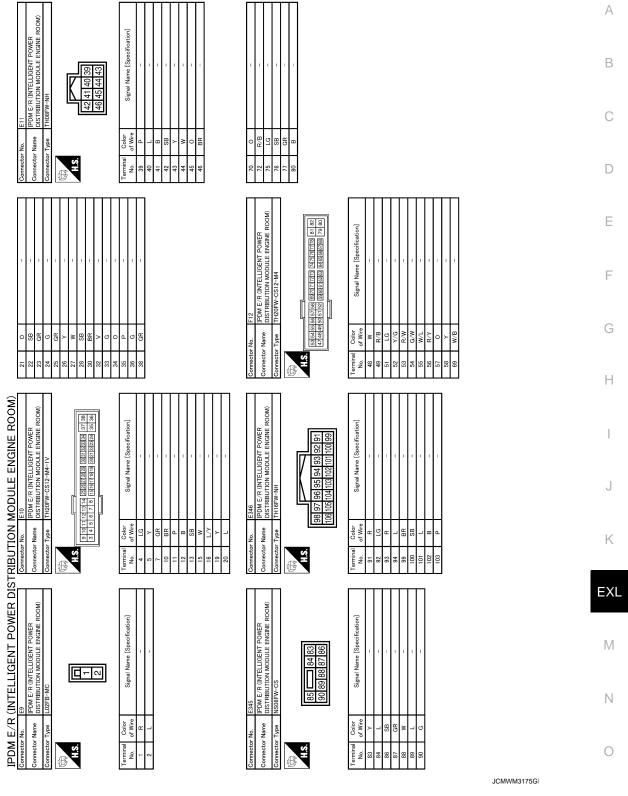


IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) =CU DIAGNOSIS > [HALOGEN TYPE]





[HALOGEN TYPE] < ECU DIAGNOSIS >



Fail-safe INFOID:0000000003729587

CAN COMMUNICATION CONTROL

When CAN communication with ECM and BCM is impossible, IPDM E/R performs fail-safe control. After CAN communication recovers normally, it also returns to normal control.

If No CAN Communication Is Available With ECM

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) [HALOGEN TYPE]

< ECU DIAGNOSIS >

Control part	Fail-safe operation
Cooling fan	 Turns ON the cooling fan relay-2 and the cooling fan relay-3 when ignition switch is turned ON (Cooling fan operates at HI) Turns OFF the cooling fan relay-1, the cooling fan relay-2 and the cooling fan relay-3 when the ignition switch is turned OFF (Cooling fan does not operate)
A/C compressor	A/C relay OFF
Alternator	Outputs the power generation command signal (PWM signal) 0%

If No CAN Communication Is Available With BCM

Control part	Fail-safe operation
Headlamp	 Turns ON the headlamp low relay when the ignition switch is turned ON Turns OFF the headlamp low relay when the ignition switch is turned OFF Headlamp high relay OFF
Parking lampsLicense plate lampsSide maker lampsIlluminationsTail lamps	 Turns ON the tail lamp relay when the ignition switch is turned ON Turns OFF the tail lamp relay when the ignition switch is turned OFF
Front wiper	 The status just before activation of fail-safe control is maintained until the ignition switch is turned OFF while the front wiper is operating at LO or HI speed. The wiper is operated at LO speed until the ignition switch is turned OFF if the fail-safe control is activated while the front wiper is set in the INT/AUTO mode and the front wiper motor is operating.
Front fog lamps	Front fog lamp relay OFF
Horn	Horn OFF
Ignition relay	The status just before activation of fail-safe is maintained.
Starter motor	Starter control relay OFF
Steering lock unit	Steering lock relay OFF

IGNITION RELAY MALFUNCTION DETECTION FUNCTION

- IPDM E/R monitors the voltage at the contact circuit and excitation coil circuit of the ignition relay inside it.
- IPDM E/R judges the ignition relay error if the voltage differs between the contact circuit and the excitation
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay for 10 minutes to alert the user to the ignition relay malfunction when the ignition switch is turned OFF.

Voltage	judgment			
Ignition relay contact side	Ignition relay excitation coil side	IPDM E/R judgment	Operation	
ON	ON	Ignition relay ON normal	_	
OFF	OFF	Ignition relay OFF normal	_	
ON	OFF	Ignition relay ON stuck	Detects DTC "B2098: IGN RELAY ON" Turns ON the tail lamp relay for 10 minutes	
OFF	ON	Ignition relay OFF stuck	Detects DTC "B2099: IGN RELAY OFF"	

FRONT WIPER CONTROL

IPDM E/R detects front wiper stop position by a front wiper auto stop signal.

When a front wiper stop position signal is in the conditions listed below, IPDM E/R stops power supply to wiper after repeating a front wiper 10 seconds activation and 20 seconds stop five times.

< ECU DIAGNOSIS > [HALOGEN TYPE]

Ignition switch	Front wiper switch	Front wiper stop position signal
ON	OFF	The front wiper stop position signal (stop position) cannot be input for 10 seconds.
	ON	The front wiper auto stop signal does not change for 10 seconds.

NOTE:

This operation status can be confirmed on the IPDM E/R "Data Monitor" that displays "BLOCK" for the item "WIP PROT" while the wiper is stopped.

STARTER MOTOR PROTECTION FUNCTION

IPDM E/R turns OFF the starter control relay to protect the starter motor when the starter control relay remains active for 90 seconds.

DTC Index

NOTE:

- The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.
- IGN counter is displayed on FFD (Freeze Frame data).
- The number is 0 when is detected now.

Revision: 2008 October

- The number increases like 1 \rightarrow 2 \cdots 38 \rightarrow 39 after returning to the normal condition whenever IGN OFF \rightarrow ON.
- The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

	×: Applicable	
CONSULT display	Fail-safe	Refer to
No DTC is detected. further testing may be required.	_	_
U1000: CAN COMM CIRCUIT	×	PCS-15
B2098: IGN RELAY ON	×	PCS-16
B2099: IGN RELAY OFF	_	PCS-17
B2108: STRG LCK RELAY ON	_	SEC-103
B2109: STRG LCK RELAY OFF	_	<u>SEC-104</u>
B210A: STRG LCK STATE SW	_	<u>SEC-105</u>
B210B: START CONT RLY ON	_	SEC-109
B210C: START CONT RLY OFF	_	SEC-110
B210D: STARTER RELAY ON	_	<u>SEC-111</u>
B210E: STARTER RELAY OFF	_	SEC-112
B210F: INTRLCK/PNP SW ON	_	SEC-114
B2110: INTRLCK/PNP SW OFF	_	<u>SEC-116</u>

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EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[HALOGEN TYPE]

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

CAUTION:

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

Symptom		Possible cause	Inspection item
Headlamp (HI) is not turned ON.	One side	Fuse Halogen bulb (HI) Harness between IPDM E/R and the headlamp high IPDM E/R	Headlamp (HI) circuit Refer to EXL-216.
	Both sides	Symptom diagnosis	
Headlamp (HI) is not turned OFF.	When ignition switch is turned ON.	"BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON" Refer to EXL-326.	
	When ignition switch is turned OFF.	IPDM E/R	_
High beam indicator lamp is not turned ON. [The headlamp (HI) is turned ON.]		Combination meter	Combination meter Data monitor "HI-BEAM IND" BCM (HEAD LAMP) Active test "HEADLAMP"
Headlamp (LO) is not turned ON.	One side	Fuse Halogen bulb (LO) Harness between IPDM E/R and the headlamp low IPDM E/R	Headlamp (LO) circuit Refer to EXL-218.
	Both sides	Symptom diagnosis	
Headlamp (LO) is not turned OFF.	When ignition switch is turned ON.	"BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-327.	
	When ignition switch is turned OFF.	IPDM E/R	_
Front fog lamp is not turned ON.	One side	Front fog lamp bulb Harness between IPDM E/R and the front fog lamp Front fog lamp IPDM E/R	Front fog lamp circuit Refer to EXL-220.
	Both sides	Symptom diagnosis	
Front fog lamp is not turned ON.		"BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to <u>EXL-329</u> .	
Parking lamp is not turned ON.		Parking lamp bulb Harness between IPDM E/R and the front combination lamp Front combination lamp IPDM E/R	Parking lamp circuit Refer to EXL-222.
Front side marker lamp is not turned ON.		Front side marker lamp bulb Harness between IPDM E/R and the front side marker lamp IPDM E/R	Front side marker lamp circuit Refer to EXL-224.
Parking lamp and front side marker lamp are not turned ON.		Fuse Harness between IPDM E/R and the front combination lamp IPDM E/R	Parking lamp circuit Refer to EXL-222.

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

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Symptom		Possible cause	Inspection item
Tail lamp is not turned ON.		Harness between IPDM E/R and the rear combination lamp Rear combination lamp	Tail lamp circuit Refer to EXL-231.
License plate lamp is not turned ON.		License plate lamp bulb Harness between IPDM E/R and the license plate lamp License plate lamp	License plate lamp circuit Refer to EXL-233.
Tail lamp and the license p ON.	late lamp are not turned	Fuse Harness between IPDM E/R and the rear combination lamp IPDM E/R	License plate lamp circuit Refer to EXL-233.
 Parking lamp, tail lamp, side marker lamp and license plate lamp are not turned ON. Parking lamp, tail lamp, side marker lamp and license plate lamp are not turned OFF. (Each illumination is turned ON/OFF.) 		Symptom diagnosis "PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON" Refer to EXL-328.	
Tail lamp indicator is not turned ON. (Parking, tail lamps are turned ON.)		Combination meter	Combination meter Data monitor "LIGHT IND" BCM (HEAD LAMP) Active test "TAIL LAMP"
Turn signal lamp does not	Indicator lamp is normal. (Applicable side performs the high flasher activation.)	Harness between BCM and each turn signal lamp Turn signal lamp bulb	Turn signal circuit Refer to EXL-226.
blink.	Indicator lamp is included.	Combination switch Harness between the combination switch and BCM BCM	Combination switch Refer to BCS-45.
	One side	Combination meter	_
Turn signal indicator lamp does not blink.	Both sides (Always)	Turn indicator signal BCM Combination meter	Combination meter Data monitor "TURN IND" BCM (FLASHER) Active test "FLASHER"
(Turn signal indicator lamp is normal.)	Both sides (Only when activating hazard warning lamp with the ignition switch OFF)	Combination meter power supply and the ground circuit Combination meter	Combination meter Power supply and the ground circuit Refer to MWI-43.
Hazard warning lamp does not activate. Hazard warning lamp continues activating. (Turn signal is normal.)		Hazard switch Harness between the hazard switch and BCM BCM	Hazard switch Refer to EXL-229.

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BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

[HALOGEN TYPE]

BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

Description INFOID:000000003261470

Both side headlamps (HI) are not turned ON when setting to the lighting switch HI or PASS.

Diagnosis Procedure

INFOID:0000000003261471

1. COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to BCS-94, "Symptom Table".

Is the combination switch normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK HEADLAMP (HI) REQUEST SIGNAL INPUT

(P)CONSULT-III DATA MONITOR

- 1. Select "HL HI REQ" of IPDM E/R data monitor item.
- 2. With operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
HL HI REQ	Lighting switch	HI or PASS	On
TILTITINEQ	(2ND)	LO	Off

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to BCS-96, "Exploded View".

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check the headlamp (HI) circuit. Refer to EXL-216, "Component Function Check".

Is the headlamp (HI) circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

[HALOGEN TYPE] < SYMPTOM DIAGNOSIS >

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

Description INFOID:0000000003261472

Both side headlamps (LO) are not turned ON in any condition.

Diagnosis Procedure

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to BCS-94, "Symptom Table".

Is the combination switch normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK HEADLAMP (LO) REQUEST SIGNAL INPUT

©CONSULT-III DATA MONITOR

- Select "HL LO REQ" of IPDM E/R data monitor item.
- With operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
HL LO REQ	Lighting switch	2ND	On
	Lighting Switch	OFF	Off

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to BCS-96, "Exploded View".

3.HEADLAMP (LO) CIRCUIT INSPECTION

Check the headlamp (LO) circuit. Refer to EXL-218, "Component Function Check".

Is the headlamp (LO) circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

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EXL-327 Revision: 2008 October 2009 Murano

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INFOID:0000000003261473

PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON [HALOGEN TYPE]

< SYMPTOM DIAGNOSIS >

PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

Description INFOID:0000000003729589

The parking, license plate, side marker, tail lamps and each illumination are not turned ON in any condition.

Diagnosis Procedure

INFOID:0000000003729590

1.CHECK FUSE

Check that the following fuse is fusing.

Unit	Location	Fuse No.	Capacity
Parking lamp Front side marker lamp		#52	10 A
Tail lamp License plate lamp Rear side marker lamp	IPDM E/R	#53	10 A

Is the fuse fusing?

YES >> Repair the applicable circuit. And then replace the fuse.

NO >> GO TO 2.

2.combination switch inspection

Check the combination switch. Refer to BCS-94, "Symptom Table".

Is the combination switch normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning part.

3.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT

(R)CONSULT-III DATA MONITOR

- Select "TAIL & CLR REQ" of IPDM E/R data monitor item.
- With operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
TAIL & CLR	Lighting switch	1ST	On
REQ		OFF	Off

Is the item status normal?

YES >> GO TO 4.

>> Replace BCM. Refer to BCS-96, "Exploded View". NO

4. TAIL LAMP CIRCUIT INSPECTION

Check the tail lamp circuit. Refer to EXL-231, "Component Function Check".

Is the tail lamp circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

[HALOGEN TYPE] < SYMPTOM DIAGNOSIS >

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

Description INFOID:0000000003729591

The front fog lamps are not turned ON in any condition.

Diagnosis Procedure

1.CHECK FUSE

Check that the following fuse is fusing.

Unit	Location	Fuse No.	Capacity
Front fog lamp	IPDM E/R	#58	15 A

Is the fuse fusing?

>> Repair the applicable circuit. And then replace the fuse.

NO >> GO TO 2.

2.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to BCS-94, "Symptom Table".

Is the combination switch normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning part.

3.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT

CONSULT-III DATA MONITOR

Select "FR FOG REQ" of IPDM E/R data monitor item.

2. With operating the front fog lamp switch, check the monitor status.

Monitor item	Condition		Monitor status
FR FOG REQ	Front fog lamp switch ON		On
	(With lighting switch 1ST)	OFF	Off

Is the item status normal?

YES >> GO TO 4.

NO >> Replace BCM. Refer to BCS-96, "Exploded View".

4.FRONT FOG LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to EXL-220, "Component Function Check".

Is the front fog lamp circuit normal?

YES >> Replace IPDM E/R.

>> Repair or replace the malfunctioning part. NO

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PRECAUTIONS

< PRECAUTION > [HALOGEN TYPE]

PRECAUTION

PRECAUTIONS FOR USA AND CANADA

FOR USA AND CANADA: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" 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 "SRS AIRBAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury.

When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

FOR MEXICO

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" 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 "SRS AIRBAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury.

PRECAUTIONS

< PRECAUTION > [HALOGEN TYPE]

When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

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ON-VEHICLE MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Description INFOID:0000000003261480

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the front combination lamp assembly has been replaced.

Before performing aiming adjustment, check the following.

• Adjust the tire pressure to the specification.

- Fill with fuel, engine coolant and each oil.
- · Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

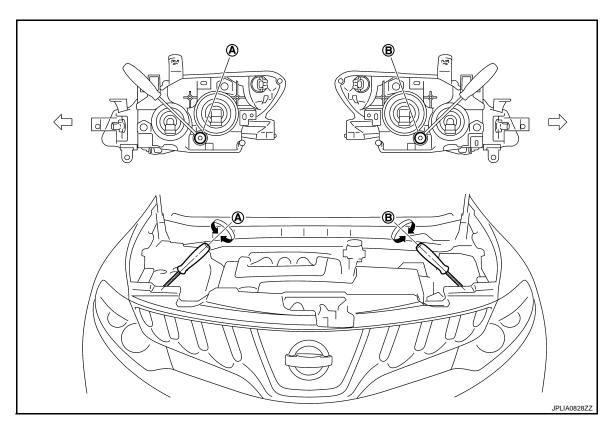
Wipe out dirt on the headlamp.

CAUTION:

Never use organic solvent (thinner, gasoline etc.)

Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW



- A. Headlamp RH (UP/DOWN) adjustment screw
- B. Headlamp LH (UP/DOWN) adjustment screw

HEADLAMP AIMING ADJUSTMENT

< ON-VEHICLE MAINTENANCE >

[HALOGEN TYPE]

	Adjustment screw	Screw driver rotation	Facing direction
A Hoodlown DH (HD/DOWN)		Clockwise	DOWN
A Headlamp RH (UP/DO)	Headlamp RH (UP/DOWN)	Counterclockwise	UP
В	Lie adleren III (IID/DOWN)	Clockwise	DOWN
B Headlamp LH (UP/DOWN)		Counterclockwise	UP

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INFOID:0000000003261481

Aiming Adjustment Procedure

1. Place the screen.

NOTE:

- Stop the vehicle facing the wall.
- Place the board on a plain road vertically.
- 2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the headlamp bulb center and the screen.
- 3. Start the engine. Turn the headlamp (LO) ON.

NOTE:

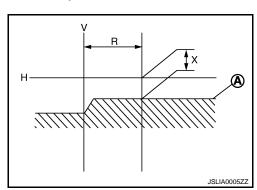
Shut off the headlamp light with the board to prevent from illuminating the adjustment screen. **CAUTION:**

Never cover the lens surface with a tape etc. The lens is made of resin.

4. Measure the distance (X) between the horizontal center line of headlamp (H) and the cutoff line (A) within the light axis measurement range (R) from the vertical center line ahead of headlamp (V).

Light axis measurement range (R) : 350 \pm 175 mm (13.78 \pm 6.89 in)

Low beam distribution on the screen

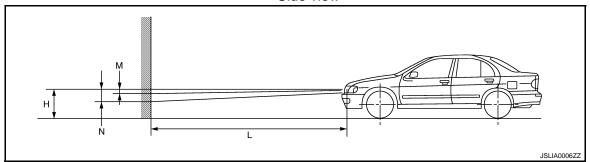


 Adjust the cutoff line height (X) with the aiming adjustment screw so as to enter in the adjustment range (M–N) according to the horizontal center line of headlamp (H).

unit: mm (in)

Horizontal center line of headlamp (H)	Highest cutoff line height (M)	Lowest cutoff line height (N)
700 (27.56) or less	4 (0.16)	30 (1.18)
701(27.60) – 800 (31.50)	4 (0.16)	30 (1.18)
801 (31.54) or more	17 (0.67)	44 (1.73)

Side view



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HEADLAMP AIMING ADJUSTMENT

[HALOGEN TYPE]

Distance between the headlamp : 10 m (32.8 ft)

center and the screen (L)

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FRONT FOG LAMP AIMING ADJUSTMENT

Description

PREPARATION BEFORE ADJUSTING

NOTE:

For details, refer to the regulations in your own country.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

• Wipe out dirt on the headlamp.

CAUTION:

Never use organic solvent (thinner, gasoline etc.)

· Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW

Turn the aiming adjusting screw for adjustment.

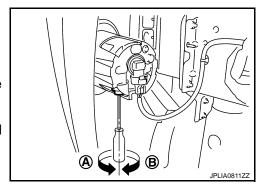
A: UP

B: DOWN

 For the position and direction of the adjusting screw, refer to the figure.

NOTE:

A screwdriver or hexagonal wrench [6 mm (0.24 in)] can be used for adjustment.



INFOID:0000000003729594

Aiming Adjustment Procedure

1. Place the screen.

NOTE:

- · Stop the vehicle facing the wall.
- Place the board on a plain road vertically.
- 2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the front fog lamp center and the screen.
- 3. Start the engine. Illuminate the front fog lamp.

CAUTION:

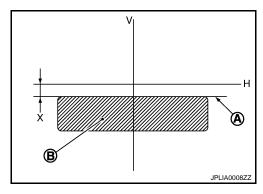
Never cover the lens surface with a tape etc. The lens is made of resin.

NOTE:

Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.

4. Adjust the cutoff line height (A) with the aiming adjustment screw so that the distance (X) between the horizontal center line of front fog lamp (H) and (A) becomes 200 mm (7.87 in).

Front fog lamp light distribution on the screen



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FRONT FOG LAMP AIMING ADJUSTMENT

< ON-VEHICLE MAINTENANCE >

[HALOGEN TYPE]

A : Cutoff line

B : High illuminance area

H : Horizontal center line of front fog lampV : Vertical center line of front fog lamp

X : Cutoff line height

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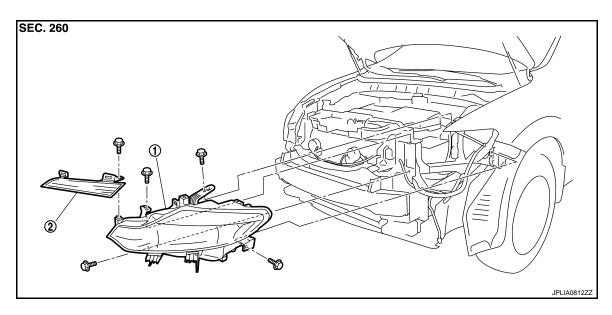
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ON-VEHICLE REPAIR

FRONT COMBINATION LAMP

Exploded View

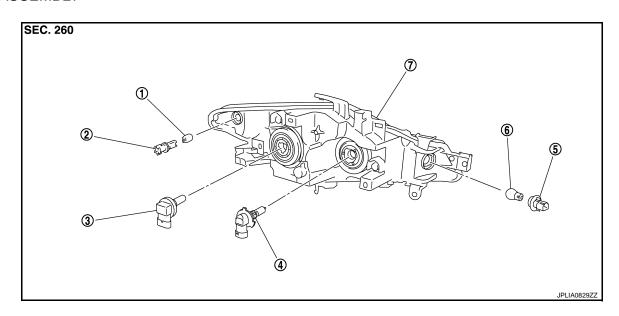
REMOVAL



1. Front combination lamp

2. Headlamp extension panel

DISASSEMBLY



- 1. Front side marker lamp bulb
- 4. Halogen bulb (HI)
- 7. Headlamp housing assembly
- 2. Front side marker lamp bulb socket
- 5. Front turn signal/parking lamp bulb socket 6.
- 3. Halogen bulb (LO)
- 6. Front turn signal/parking lamp bulb

Removal and Installation

INFOID:0000000003261485

REMOVAL

Disconnect the battery negative terminal or remove the fuse.

FRONT COMBINATION LAMP

< ON-VEHICLE REPAIR > [HALOGEN TYPE]

- Remove the front grille. Refer to <u>EXT-18</u>, "<u>Exploded View</u>".
- 2. Remove the headlamp extension panel.
- 3. Remove the front bumper fascia. Refer to EXT-12, "Exploded View".
- 4. Remove the headlamp mounting bolts.
- Remove the harness clips from the headlamp housing.
- 6. Pull out the headlamp assembly forward the vehicle.
- 7. Disconnect the connector before removing the headlamp assembly.

INSTALLATION

Install in the reverse order of removal.

NOTE:

After installation, perform aiming adjustment. Refer to <a>EXL-332, "Description".

Replacement INFOID:000000003261486

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- After installing the bulb, install the resin cap and the bulb socket securely for watertightness.
- . Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- · Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

HEADLAMP BULB (LO)

- 1. Remove the fender rubber protector in the engine room.
- 2. Rotate the bulb counterclockwise and unlock it.
- 3. Disconnect the headlamp bulb connector.
- 4. Remove the bulb from the headlamp housing assembly.

HEADLAMP BULB (HI)

- 1. Rotate the bulb counterclockwise and unlock it.
- 2. Disconnect the headlamp bulb connector.
- 3. Remove the bulb from the headlamp housing assembly.

FRONT TURN SIGNAL/PARKING LAMP BULB

- Remove the front grille. Refer to <u>EXT-18</u>, "<u>Exploded View</u>".
- 2. Rotate the front turn signal/parking lamp bulb socket counterclockwise and unlock it.
- 3. Remove the bulb from the front turn signal/parking lamp bulb socket.

FRONT SIDE MARKER LAMP BULB

- 1. Remove the fender rubber protector in the engine room.
- Rotate the front side marker lamp bulb socket counterclockwise and unlock it.
- 3. Remove the bulb from the front side marker lamp bulb socket.

Disassembly and Assembly

DISASSEMBLY

- 1. Rotate the headlamp bulb (LO) counterclockwise and unlock it
- Disconnect the headlamp bulb (LO) connector. And remove the bulb from the headlamp housing assembly.

INFOID:0000000003261487

- 3. Rotate the headlamp bulb (HI) counterclockwise and unlock it
- Disconnect the headlamp bulb (HI) connector. And remove the bulb from the headlamp housing assembly.
- 5. Rotate the front turn signal/parking lamp bulb socket counterclockwise and unlock it.
- Remove the bulb from the front turn signal/parking lamp bulb socket.
- 7. Rotate the front side marker lamp bulb socket counterclockwise and unlock it.

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FRONT COMBINATION LAMP

< ON-VEHICLE REPAIR > [HALOGEN TYPE]

8. Remove the bulb from the front side marker lamp bulb socket.

ASSEMBLY

Assemble in the reverse order of disassembly.

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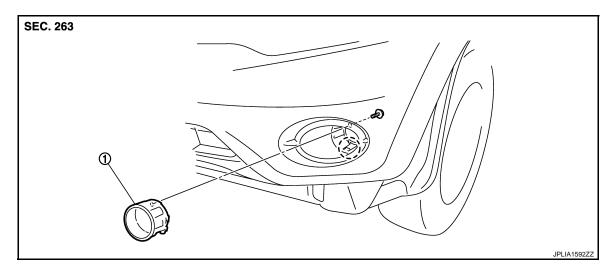
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[HALOGEN TYPE]

FRONT FOG LAMP

Exploded View



1. Front fog lamp

() : Pawl

Removal and Installation

INFOID:0000000003729596

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

- Remove the front fender protector. Keep a service area. Refer to <u>EXT-23</u>, "<u>FENDER PROTECTOR</u>: Exploded View".
- 2. Remove the front fog lamp connector.
- 3. Remove the screw.
- 4. Disengage the pawl. And then remove the front fog lamp.

INSTALLATION

Installation is the reverse order of removal.

NOTE:

After installation, perform aiming adjustment. Refer to EXL-335, "Description"

Replacement

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

FRONT FOG LAMP BULB

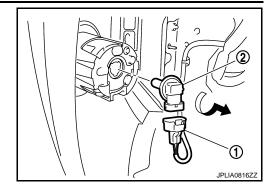
Remove the front fender protector. Keep the service area. Refer to <u>EXT-23</u>, "<u>FENDER PROTECTOR</u>: <u>Exploded View</u>".

FRONT FOG LAMP

< ON-VEHICLE REPAIR >

[HALOGEN TYPE]

- 2. Remove the front fog lamp bulb connector (1).
- 3. Rotate the bulb (2) counterclockwise and unlock it.



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LIGHTING & TURN SIGNAL SWITCH

< ON-VEHICLE REPAIR > **LIGHTING & TURN SIGNAL SWITCH**

Exploded View

Removal and Installation

INFOID:0000000003729599

INFOID:0000000003729598

[HALOGEN TYPE]

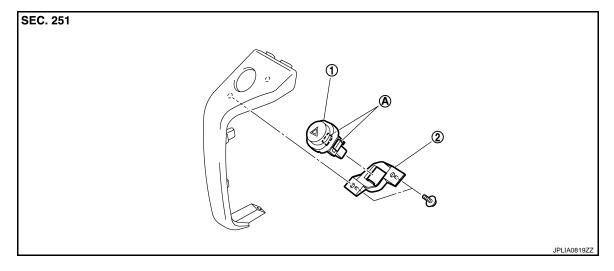
Lighting & turn signal switch is integrated in the combination switch. Refer to BCS-97, "Exploded View".

[HALOGEN TYPE]

INFOID:0000000003729600

HAZARD SWITCH

Exploded View



- Hazard switch
- Pawls

2. Switch bracket

Removal and Installation

REMOVAL

- 1. Remove the instrument stay cover (RH). Refer to IP-11, "Exploded View".
- 2. Remove the screws. And then remove the switch bracket from the instrument stay cover.
- 3. Remove the hazard switch.

INSTALLATION

Install in the reverse order of removal.

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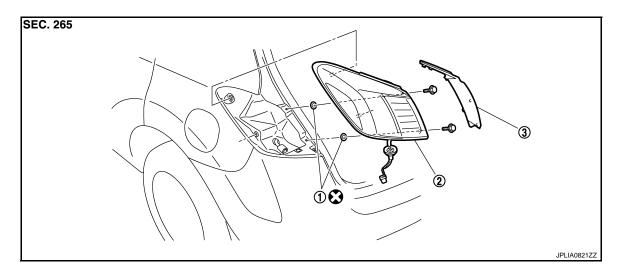
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INFOID:0000000003729601

REAR COMBINATION LAMP

Exploded View

REMOVAL

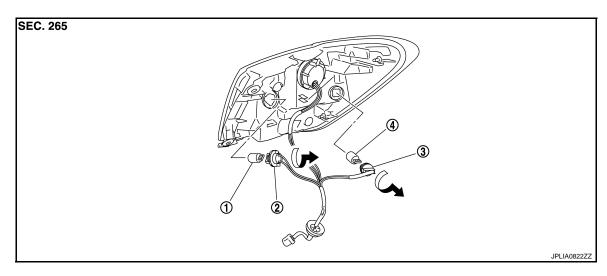


Seal packing

Refer to GI-4, "Components" for symbols in the figure.

- 2. Rear combination lamp
- 3. Rear combination lamp finisher

DISASSEMBLY



Rear turn signal lamp bulb

Rear side marker lamp bulb

- 2. Rear turn signal lamp bulb socket
- 3. Rear side marker lamp bulb socket

Removal and Installation

INFOID:0000000003729603

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

- 1. Remove the rear combination lamp finisher.
- 2. Remove the rear combination lamp mounting bolts.

REAR COMBINATION LAMP

< ON-VEHICLE REPAIR > [HALOGEN TYPE]

3. Pull the rear combination lamp toward outside of the vehicle (←). Remove the rear combination lamp.

4. Disconnect the rear combination lamp connector.



INSTALLATION

Install in the reverse order of removal.

Replacement Enfold: 0000000003729604

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- · Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

STOP/TAIL LAMP

Replacement integral with rear combination lamp. Refer to EXL-344, "Exploded View".

REAR SIDE MARKER LAMP BULB

- 1. Remove the rear combination lamp. Refer to EXL-344, "Exploded View".
- 2. Rotate the rear side marker lamp bulb socket counterclockwise, and unlock it.
- 3. Remove the bulb from the rear side marker lamp bulb socket.

REAR TURN SIGNAL LAMP BULB

- Remove the rear combination lamp. Refer to <u>EXL-344</u>, "<u>Exploded View</u>".
- 2. Rotate the rear turn signal lamp bulb socket counterclockwise, and unlock it.
- Remove the bulb from the rear turn signal lamp bulb socket.

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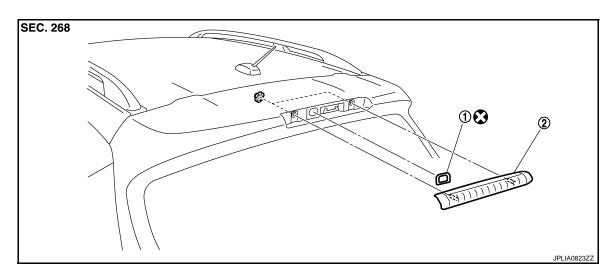
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Revision: 2008 October EXL-345 2009 Murano

HIGH-MOUNTED STOP LAMP

Exploded View



1. Seal packing

2. High-mounted stop lamp

Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

INFOID:0000000003729606

CAUTION:

Disconnect battery negative terminal or remove the fuse.

REMOVAL

- 1. Remove the back door plate. Refer to INT-37, "Exploded View".
- 2. Remove the high-mounted stop lamp mounting nuts and connector.
- 3. Pull the high-mounted stop lamp toward rear of the vehicle. Remove the rear washer tube.
- 4. Disconnect the high-mounted stop lamp connector.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

[HALOGEN TYPE]

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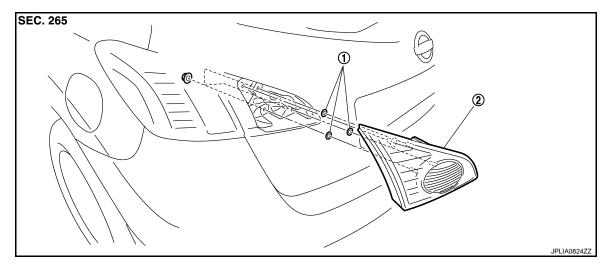
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BACK-UP LAMP

Exploded View



1. Seal packing

2. Back-up lamp

Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

- Remove the back door finisher inner. Refer to INT-37, "Exploded View".
- 2. Remove the back-up lamp mounting nuts and clip.
- Disconnect the back-up lamp connector. And then remove the back-up lamp.

INSTALLATION

Replacement

Install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

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CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- · Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

BACK-UP LAMP BULB

Remove the back-up lamp. Refer to EXL-347, "Exploded View".

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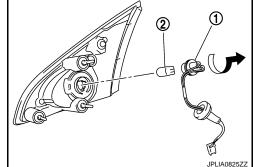
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BACK-UP LAMP

< ON-VEHICLE REPAIR >

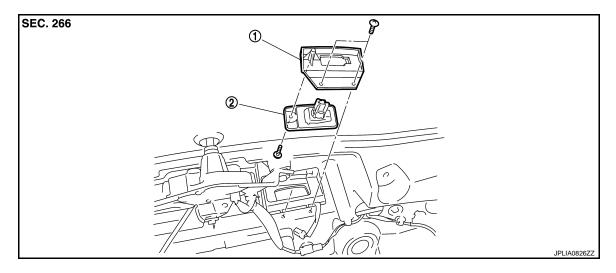
[HALOGEN TYPE]

- Disconnect the connector, rotate the back-up lamp bulb socket
 counterclockwise and unlock it.
- 3. Remove the bulb (2) from the back-up lamp bulb socket.



LICENSE PLATE LAMP

Exploded View



1. License plate lamp bracket

License plate lamp

Removal and Installation

INFOID:0000000003729611

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the back door finisher inner. Refer to INT-37, "Exploded View".

- 1. Remove the back door imistie inner. Refer to invitor, Exploded view.
- 2. Remove the screw. And then disconnect the license plate lamp connector.
- 3. Remove the license plate lamp.
- 4. Remove the screw. And then remove the license plate lamp bracket.

INSTALLATION

Install in the reverse order of removal.

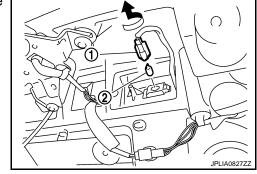
Replacement

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- · Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

LICENSE PLATE LAMP BULB

- 1. Remove the back door finisher inner. Refer to INT-37, "Exploded View".
- Turn the license plate lamp bulb socket (1) counterclockwise and unlock it.
- Remove the bulb (2) from the license plate lamp bulb socket.



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Bulb Specifications

Wattage (W) Item Type Headlamp (HI) HB3 65 Headlamp (LO) H11 55 Front combination lamp Front turn signal/parking lamp 1157NA (Amber) 27/8 WY5W (Amber) Front side marker lamp 5 Front fog lamp Н8 35 Stop lamp LED LED Tail lamp Rear combination lamp Rear turn signal lamp W21W 21 Rear side marker lamp W5W 5 Back-up lamp W16W 16 License plate lamp W5W 5 LED High-mounted stop lamp