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SERVICE DATA AND SPECIFICATIONS (SDS)	

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### **PRECAUTIONS**

### < PRECAUTION >

### **PRECAUTION**

### **PRECAUTIONS**

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

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

### **WARNING:**

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

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

### **WARNING:**

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery and wait at least three minutes before performing any service.

Precaution for Work

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

### **PREPARATION**

### < PREPARATION >

### PREPARATION PREPARATION Special Service Tool NFOID:000000011151149 B

The actual shape of the tools ma	y differ from those illustrated here.		
Tool number (TechMate No.) Tool name		Description	С
(J-46534) Trim Tool Set		Removing trim components	D
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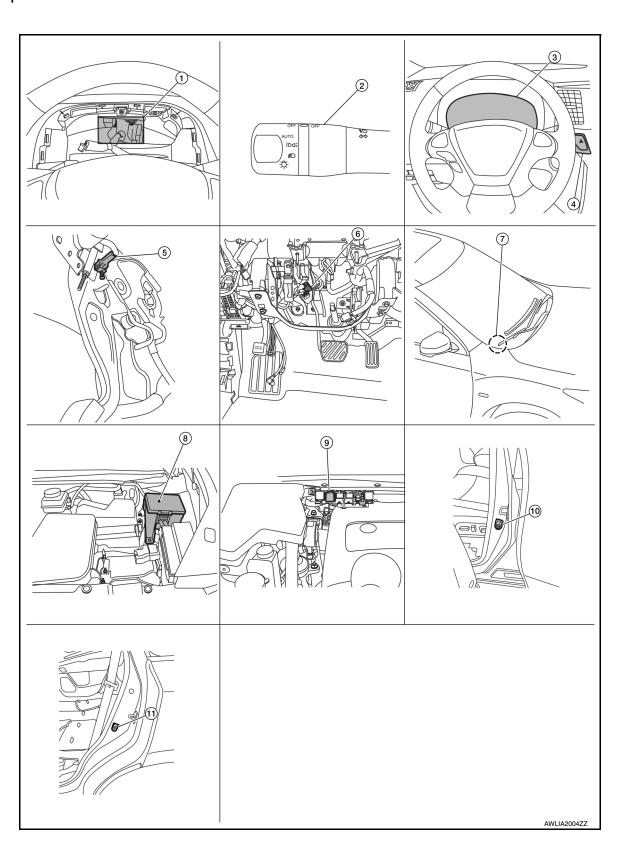
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### SYSTEM DESCRIPTION

### **COMPONENT PARTS**

**Component Parts Location** 

INFOID:0000000011151150



### **COMPONENT PARTS**

### < SYSTEM DESCRIPTION >

- BCM
  (view with combination meter removed)
- 4. Hazard switch
- 7. Optical sensor (if equipped)
- Front door switch LH (RH similar)

- 2. Combination switch (lighting and turn signal switch)
- 5. Parking brake switch
- IPDM E/R, [Headlamp high relay, Headlamp low relay, Taillamp relay, Front fog lamp relay (if equipped)]
- Rear door switch LH (RH similar)

- 3. Combination meter
- 6. Stop lamp switch
- 9. Daytime running light relay (if equipped)

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### Component Description

Part	Description				
BCM	Controls the exterior lighting system.				
Combination switch (Lighting & turn signal switch)	Refer to BCS-8, "COMBINATION SWITCH READING SYSTEM: System Description".				
IPDM E/R	Controls the integrated relays and supplies voltage to the load according to the request from the BCM via CAN communication.				
Stop lamp switch	Transmits stop lamp switch signal to BCM when the brake pedal is pressed to operate stop lamps.				
Combination meter	Refer to MWI-9, "METER SYSTEM: System Description".				
Daytime running light relay (if equipped)	Sends power to the daytime running lamp when operated by the IPDM E/R.				
Front door switch LH/RH	Transmits the deer open signal to the DCM to approte the quitelight quaters				
Rear door switch LH/RH	Transmits the door open signal to the BCM to operate the autolight system.				
Optical sensor (if equipped)	Optical sensor converts the outside brightness (lux) to voltage and transmits the optical sensor signal to BCM to operate the autolight system.				
Parking brake switch	Transmits the parking brake switch signal to the combination meter to operate the daytime running light system.				
Hazard switch	Inputs the hazard switch signal to BCM.				

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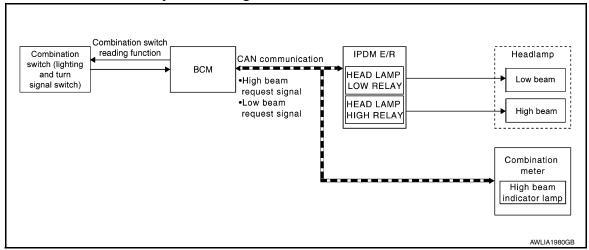
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### SYSTEM HEADLAMP SYSTEM

### **HEADLAMP SYSTEM: System Diagram**

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### **HEADLAMP SYSTEM: System Description**

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### LOW BEAM OPERATION

When the lighting switch is in the AUTO (if equipped and activated) or headlamp position, the BCM receives input requesting the headlamps to illuminate. This input is communicated to the IPDM E/R across the CAN communication lines. The CPU of the IPDM E/R controls the headlamp low relay coil which supplies power to the low beam headlamps.

### HIGH BEAM OPERATION/FLASH-TO-PASS OPERATION

With the lighting switch in the AUTO (if equipped and activated) or headlamp position and placed in HIGH position, the BCM receives input requesting the headlamp high beams to illuminate. The flash to pass feature can be used any time and also sends a signal to the BCM. This input is communicated to the IPDM E/R across the CAN communication lines. The CPU of the combination meter controls the ON/OFF status off the HIGH BEAM indicator. The CPU of the IPDM E/R controls the headlamp high relay coil which supplies power to the high beam headlamps.

The combination meter receives a high beam request signal (ON) through the CAN communication lines and turns the high beam indicator lamp ON.

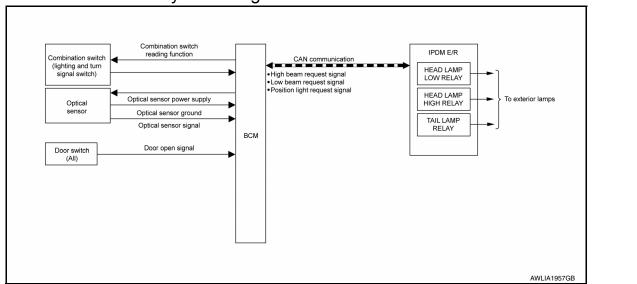
### EXTERIOR LAMP BATTERY SAVER CONTROL

With the combination switch (lighting and turn signal switch) in the AUTO (if equipped and activated) parking lamp or headlamp position and the ignition switch is turned from ON or ACC to OFF, the battery saver feature is activated.

Under this condition, the headlamps remain illuminated for 45 seconds, unless the lighting switch position is changed. If the lighting switch position is changed, then the headlamps are turned off.

### AUTO LIGHT SYSTEM

### AUTO LIGHT SYSTEM: System Diagram



### AUTO LIGHT SYSTEM: System Description

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- BCM (Body Control Module) controls auto light operation according to signals from optical sensor, lighting switch and ignition switch.
- IPDM E/R (Intelligent Power Distribution Module Engine Room) operates parking, license plate, tail, front fog lamps and headlamps according to CAN communication signals from BCM.
- · Optical sensor detects ambient brightness of 800 to 2,500 lux. And optical sensor converts light (lux) to voltage, then sends the optical sensor signal to BCM.

### OUTLINE

The auto light control system has an optical sensor that detects outside brightness.

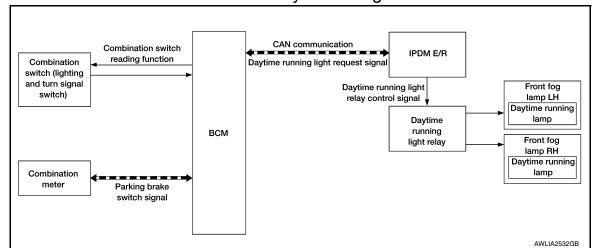
When the lighting switch is in AUTO position, it automatically turns ON/OFF the parking, license plate, tail, front fog lamps and headlamps in accordance with the ambient light. Sensitivity can be adjusted in four steps. For the details of the setting, Refer to BCS-18, "HEADLAMP: CONSULT Function (BCM - HEADLAMP)".

### WIPER LINKED AUTO LIGHTING FUNCTION (IF EQUIPPED)

With the lighting switch in the AUTO position, the BCM will turn on the exterior lamps after detecting 4 operations of the front wiper. The BCM will turn off the exterior lamps 3 seconds after the front wiper switch is turned to the OFF position.

### DAYTIME RUNNING LIGHT SYSTEM

### DAYTIME RUNNING LIGHT SYSTEM: System Diagram



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### DAYTIME RUNNING LIGHT SYSTEM: System Description

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### System Description

The daytime running light system is equipped with a daytime running light control that activates the daytime running lights within the front fog lamp assembly when the engine is operating. If the parking brake is applied, the daytime running lights will turn OFF. The daytime running lights will turn ON when the parking brake is released.

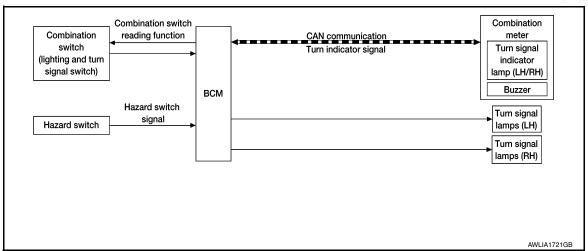
### **OPERATION**

The BCM monitors inputs from the parking brake switch and the combination switch (lighting and turn signal switch) to determine when to operate the daytime running light system. The BCM sends a daytime running light request to the IPDM E/R via the CAN communication lines. The IPDM E/R grounds the daytime running light relay which in turn, provides power to the daytime running lights.

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

### TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM: System Diagram

INFOID:0000000011151158



### TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM: System Description

INFOID:0000000011151159

### TURN SIGNAL OPERATION

When the combination switch (lighting and turn signal switch) is in LH or RH turn position with the ignition switch in the ON position, the BCM receives input requesting the turn RH or turn LH lamps to illuminate. The BCM controls the turn signal power to the respective turn signal lamp. The BCM also sends a turn indicator signal ON request via the CAN communication lines to the combination meter. The combination meter then activates the appropriate turn signal indicator and audible buzzer.

### HAZARD LAMP OPERATION

When the hazard switch is in the ON position, the BCM receives input requesting the hazard lamps illuminate. The BCM controls the turn signal power to both the LH and RH turn signal lamps. The BCM sends a hazard indicator signal ON request via the CAN communication lines to the combination meter. The combination meter then activates both the LH and RH turn signal indicators and audible buzzer.

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM
PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM: System Di-

### agram INFOID:0000000011151160 Combination switch IPDM E/R Combination reading function CAN communication switch (lighting всм Position light

and turn signal ΤΔΙΙ Ι ΔΜΡ Front parking lamps request signal switch) RELAY License plate lamps Tail lamps Front side marker lamps Rear side marker lamps ALLIA1353GB

### PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM: System Description INFOID:0000000011151161

### PARKING, LICENSE PLATE AND TAIL LAMPS OPERATION

With the lighting switch is in the AUTO (if equipped and activated) or parking lamp position, the BCM receives input requesting the parking lamps to illuminate. The BCM sends a parking light ON request via the CAN communication lines to the IPDM E/R. The IPDM E/R then activates the tail lamp relay which sends power to the parking and instrument illumination circuits.

### EXTERIOR LAMP BATTERY SAVER CONTROL

With the combination switch (lighting and turn signal switch) in the AUTO (if equipped and activated) or parking lamp position and the ignition switch is turned from ON or ACC to OFF, the battery saver feature is acti-

Under this condition, the exterior lamps remain illuminated for 45 seconds unless the lighting switch position is changed. If the lighting switch position is changed, then the exterior lamps are turned off.

### FRONT FOG LAMP SYSTEM

### FRONT FOG LAMP SYSTEM: System Diagram

INFOID:0000000011151162 Combination switch IPDM E/R Combination reading function CAN communication
Front fog lamp request signal Front switch FRONT FOG BCM fog lamp (lighting and turn LAMP RELAY signal switch)

### FRONT FOG LAMP SYSTEM: System Description

The front fog lamps are activated with the combination switch (lighting and turn signal switch). The lighting switch signal to the BCM is monitored with the BCM combination switch reading function. When the fog lamps are turned ON with the lighting switch, the BCM sends a front fog lamp request signal via CAN communication lines to the IPDM E/R. The IPDM E/R grounds the front fog lamp relay coil to activate the front fog lamps.

**EXL-11** Revision: September 2014 2015 Pathfinder

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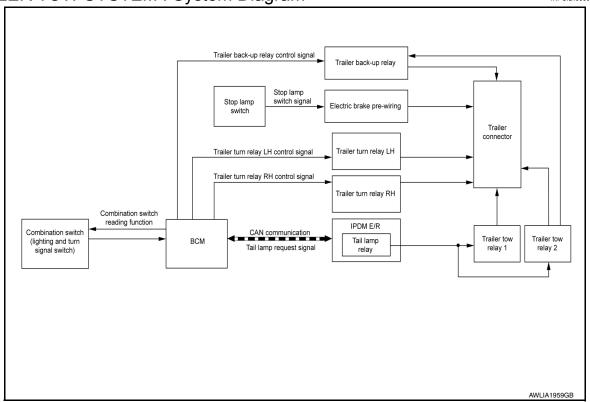
### FRONT FOG LAMP OPERATION

When the lighting switch position is in the AUTO (if equipped and activated) or headlamp, and the front fog lamp position, the BCM detects front fog lamp signal and then sends a front fog lamp request ON signal via the CAN communication lines to the IPDM E/R. The IPDM E/R then turns ON the front fog lamp relay sending power to the front fog lamps.

### TRAILER TOW SYSTEM

### TRAILER TOW SYSTEM: System Diagram

INFOID:0000000011151164



### TRAILER TOW SYSTEM: System Description

INFOID:0000000011151165

### TRAILER TAIL LAMP OPERATION

The trailer tail lamps are controlled by the trailer tow relay 1. With the combination switch (lighting and turn signal switch) in the AUTO (if equipped and activated) or parking lamp position, the BCM detects the lighting switch signal and then sends a parking light ON request via the CAN communication lines to the IPDM E/R. The IPDM E/R then activates the tail lamp relay which activates the trailer tow relay 1 and sends power to the trailer connector.

### TRAILER TURN SIGNAL LAMP OPERATION

The trailer turn signal lamps are controlled by the BCM. When the turn signal switch is in the LH or RH position with the ignition switch ON, the combination switch (lighting and turn signal switch) sends a signal to the BCM. The BCM detects the TURN RH or TURN LH ON request. The BCM sends a control signal to the respective trailer turn relay which sends power to the trailer connector.

### TRAILER HAZARD LAMP OPERATION

The trailer hazard lamps are controlled by the BCM. When the hazard switch is pressed, the BCM detects the hazard ON request. The BCM then sends a control signal to both trailer turn relays which sends power to the trailer connector.

### TRAILER BRAKE LAMP OPERATION

The trailer brake lamps operate when the brake pedal is pressed sending the stop lamp switch signal to the trailer connector.

### **DIAGNOSIS SYSTEM (BCM)**

### < SYSTEM DESCRIPTION >

### **DIAGNOSIS SYSTEM (BCM)**

**COMMON ITEM** 

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

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### **CAUTION:**

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

### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description			
Ecu Identification	The BCM part number is displayed.			
Self Diagnostic Result	The BCM self diagnostic results are displayed.			
Data Monitor	The BCM input/output data is displayed in real time.			
Active Test	The BCM activates outputs to test components.			
Work support	The settings for BCM functions can be changed.			
Configuration	The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.			
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.			

### SYSTEM APPLICATION

BCM can perform the following functions.

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

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### **DIAGNOSIS SYSTEM (BCM)**

### < SYSTEM DESCRIPTION >

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

### **HEADLAMP**

HEADLAMP: CONSULT Function (BCM - HEADLAMP)

INFOID:0000000011573718

### **CAUTION:**

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

### **DATA MONITOR**

Monitor Item [Unit]	Description					
PUSH SW [On/Off]	Indicates condition of push-button ignition switch.					
ENGINE STATE [STOP/STALL/CRANK/ RUN]	Indicates engine status received from ECM on CAN communication line.					
VEH SPEED 1 [km/h]	Indicates vehicle speed signal received from ABS on CAN communication line.					
TURN SIGNAL R [On/Off]						
TURN SIGNAL L [On/Off]						
TAIL LAMP SW [On/Off]						
HI BEAM SW [On/Off]						
HEAD LAMP SW 1 [On/Off]	Indicates condition of combination switch.					
HEAD LAMP SW 2 [On/Off]						
PASSING SW [On/Off]						
AUTO LIGHT SW [On/Off]						
FR FOG SW [On/Off]						
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.					
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.					
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.					
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.					
DOOR SW-BK [On/Off]	Indicates condition of back door switch.					
OPTI SEN (DTCT) [V]	Indicates outside brightness voltage signal from optical sensor.					
OPTI SEN (FILT) [V]	Indicates outside brightness voltage signal from optical sensor filtered by BCM.					

### **ACTIVE TEST**

Test Item	Description
FR FOG LAMP	This test is able to check front fog lamp operation [On/Off].
DAYTIME RUNNING LIGHT	This test is able to check daytime running lamp operation [On/Off].
ILL DIM SIGNAL	This test is able to check head lamp illumination dimming operation [On/Off].

### **DIAGNOSIS SYSTEM (BCM)**

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### < SYSTEM DESCRIPTION >

### **WORK SUPPORT**

Support Item	Setting	Description	
TWILIGHT On	MODE2*	Autolamp function ON.	
TWILIGHT OIL	MODE1	Autolamp function OFF.	
	MODE4	This mode is not used.	
WIPER LINK	MODE3*	Wiper link function operates in INT, LOW and HI.	
WIFER LINK	MODE2	Wiper link function operates in LOW and HI.	
	MODE1	Wiper link function OFF.	
	MODE4	Less sensitive than normal setting (turns ON later).	
CUSTOM A/LIGHT SETTING	MODE3	More sensitive than MODE2.	
COSTON A/LIGHT SETTING	MODE2	More sensitive than normal setting (turns ON earlier).	
	MODE1*	Normal setting.	
	MODE 8		
	MODE 7		
	MODE 6		
ILL DELAY SET	MODE 4	Autolama dolay timor	
ILL DELAT SET	MODE 5	Autolamp delay timer.	
	MODE 3		
	MODE 2		
	MODE 1*		

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

### **FLASHER**

FLASHER: CONSULT Function (BCM - FLASHER)

### CAUTION:

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

### DATA MONITOR

Monitor Item [Unit]	Description	
REQ SW -DR [On/Off]	Indicates condition of door request switch LH.	
REQ SW -AS [On/Off]	Indicates condition of door request switch RH.	
PUSH SW [On/Off]	Indicates condition of push-button ignition switch.	
TURN SIGNAL R [On/Off]	Indicates condition of turn signal function of combination switch.	
TURN SIGNAL L [On/Off]	indicates condition of turn signal function of combination switch.	
HAZARD SW [On/Off]	Indicates condition of hazard switch.	
RKE-LOCK [On/Off]	Indicates condition of lock signal from Intelligent Key.	
RKE-UNLOCK [On/Off]	Indicates condition of unlock signal from Intelligent Key.	
RKE-PANIC [On/Off]	Indicates condition of panic alarm signal from Intelligent Key.	

### **ACTIVE TEST**

Test Item	Description	
FLASHER	This test is able to check turn signal lamp operation [Off/LH/RH].	

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### < SYSTEM DESCRIPTION >

### DIAGNOSIS SYSTEM (IPDM E/R)

### **Diagnosis Description**

### INFOID:0000000011573751

### **AUTO ACTIVE TEST**

### Description

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

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

### Operation Procedure

### **CAUTION:**

### Do not start the engine.

### NOTE:

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

### NOTE:

- If auto active test mode cannot be actuated, check door switch system. Refer to <u>DLK-172</u>, "Component Function Check".
- When auto active test mode has to be cancelled halfway through test, turn ignition switch OFF.
- 1. Close the hood and lift the wiper arms from the windshield. (Prevent windshield damage due to wiper operation)
- 2. Turn ignition switch OFF.
- 3. Turn the ignition switch ON, and within 20 seconds, press the front door switch LH 10 times. Then turn the ignition switch OFF.
- 4. Turn the ignition switch ON within 10 seconds. After that the horn sounds once, and the auto active test starts.
- After a series of the following operations is repeated 3 times, auto active test is completed.

### Inspection in Auto Active Test Mode

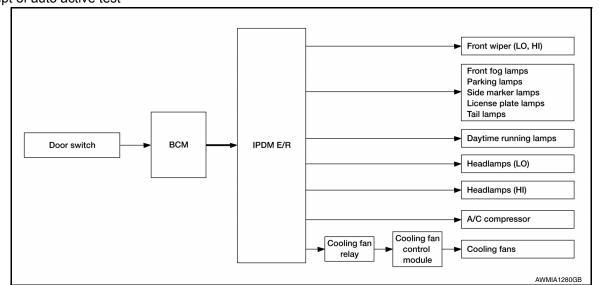
When auto active test mode is actuated, the following operation sequence is repeated 3 times.

Operation sequence	Inspection Location	Operation
1	Front wiper	LO for 3 seconds → HI for 3 seconds
2	<ul><li>Front fog lamps</li><li>Parking lamps</li><li>Side marker lamps</li><li>Tail lamps</li><li>License plate lamps</li></ul>	10 seconds
3	Daytime running lamps	10 seconds
4	Headlamps	LO ⇔ HI 5 times
5	A/C compressor	ON ⇔ OFF 5 times
6*	Cooling fans	LO for 5 seconds → HI for 5 seconds

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

### < SYSTEM DESCRIPTION >

Concept of auto active test



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

Diagnosis chart in auto active test mode

Symptom	Inspection contents		Possible cause	
Any of the following components do not operate		YES	BCM signal input circuit	
<ul> <li>Front fog lamps</li> <li>Parking lamps</li> <li>Side marker lamps</li> <li>License plate lamps</li> <li>Tail lamps</li> <li>Daytime running lamps</li> <li>Headlamp (HI, LO)</li> <li>Front wiper</li> </ul>	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	
		YES	ECM signal input circuit     CAN communication signal between ECM and IPDM E/R	
Cooling fans do not operate	Perform auto active test. Do the cooling fans operate?	NO	Cooling fans Harness or connectors between cooling fans and cooling fan control module Cooling fan control module Harness or connectors between cooling fan relay and cooling fan control module Cooling fan relay Harness or connectors between IPDM E/R and cooling fan relay IPDM E/R	

### CONSULT Function (IPDM E/R)

INFOID:0000000011573752

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### **CAUTION:**

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

### < SYSTEM DESCRIPTION >

### **APPLICATION ITEM**

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

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

### **ECU IDENTIFICATION**

The IPDM E/R part number is displayed.

### SELF DIAGNOSTIC RESULT

Refer to PCS-20, "DTC Index".

### **DATA MONITOR**

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

### < SYSTEM DESCRIPTION >

Monitor Item [Unit]	Main Signals	Description	
HORN CHIRP [On/Off]		Indicates horn reminder signal received from BCM on CAN communication line	
HOOD SW 2 [On/Off]		Indicates condition of hood switch	

### **ACTIVE TEST**

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

### CAN DIAG SUPPORT MNTR

Refer to LAN-18, "CAN Diagnostic Support Monitor".

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### BCM, IPDM E/R

### < ECU DIAGNOSIS INFORMATION >

### **ECU DIAGNOSIS INFORMATION**

BCM, IPDM E/R

List of ECU Reference

INFOID:0000000011151171

ECU	Reference
	BCS-30, "Reference Value"
всм	BCS-50, "Fail Safe"
	BCS-50, "DTC Inspection Priority Chart"
	BCS-52, "DTC Index"
	PCS-12, "Reference Value"
IPDM E/R	PCS-19, "Fail Safe"
	PCS-20, "DTC Index"

### **WIRING DIAGRAM** Α **HEADLAMP** Wiring Diagram INFOID:0000000011151172 В (VD): WITH AROUND VIEW MONITOR (VK): WITHOUT AROUND VIEW MONITOR IPDM E/R (NYELLGENT POWEL DISTRIBUTION MODULE MODULE (E119), (E121), (E217) TO CAN SYSTEM - WITH AROUND VIEW MONITOR SYSTEM STEEM - WITHOUT SYSTEM - WITHOUT SYSTEM CAN GATEWAY SYSTEM С JOINT CONNECTOR-E12 (E45) JOINT CONNECTOR-E14 (E70) D IGNITION RELAY-1 M31 ىھ Е JOINT CONNEC-TOR-E15 (E71) V68 CPU F LOW BEAM JOINT CONNECTOR-B12 (B17) JOINT CONNECTOR-B11 (B16) Ø HIGH BEAM Н 15A 36 HEADLAMP LOW RELAY FRONT COMBINATION LAMP LH (E232), (E233) ىھە 19 JOINT CONNECTOR-B05 (B103) JOINT CONNECTOR-B14 JOINT CONNECTOR-M17 (M43) J © LOW BEAM 10A HEADLAMP HIGH RELAY B102 © HIGH BEAM K 10A 35 ىلە COMBI-NATION METER (M24) FUSE BLOCK (J/B) (M3), (M4) EXL IGNITION SWITCH ON OR START 31 34 M - TI (19) BCM (BODY CONTROL MODULE) (M18), (M19), (M81) W22 Ν COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH) (M28) HI BEAM (BLUE) 0 ₽ F HEADLAMP Р E152 9 0 4 0 BATTERY

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Connector Name | BCM (BODY CONTROL MODULE)

M18

Connector No.

FUSE BLOCK (J/B)

Connector Name Connector No.

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Connector Color WHITE

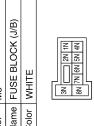
GREEN

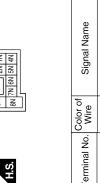
Connector Color

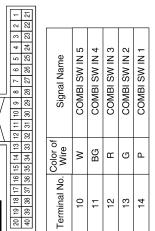
7P 6P 5P 4P 3P 1P 1P 1P 1P 8P 1P

## HEADLAMP CONNECTORS









Terminal No. Wir	10 W	11 BG	12 R	13 G	14 P
Те					
gnal Name	ı				

Signal Name	I	ı	
Color of Wire	BG	Μ	
Terminal No.	8P	13P	

Signal Name	_	
Color of Wire	W	
Terminal No.	N9	

M24	Connector Name COMBINATION METER	WHITE	
Connector No.	Connector Name	Connector Color	

Signal Name	CAN-L	CAN-H	IGN USM OUT 1	COMBI SW OUT 5	COMBI SW OUT 4	COMBI SW OUT 3	COMBI SW OUT 2	COMBI SW OUT 1
Color of Wire	۵	_	Ь	BG	۵	Œ	ŋ	Μ
erminal No.	59	09	70	75	9/	77	78	79

Signal Name

Color of Wire

Terminal No.

GND1 GND2 IGN BAT

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BG

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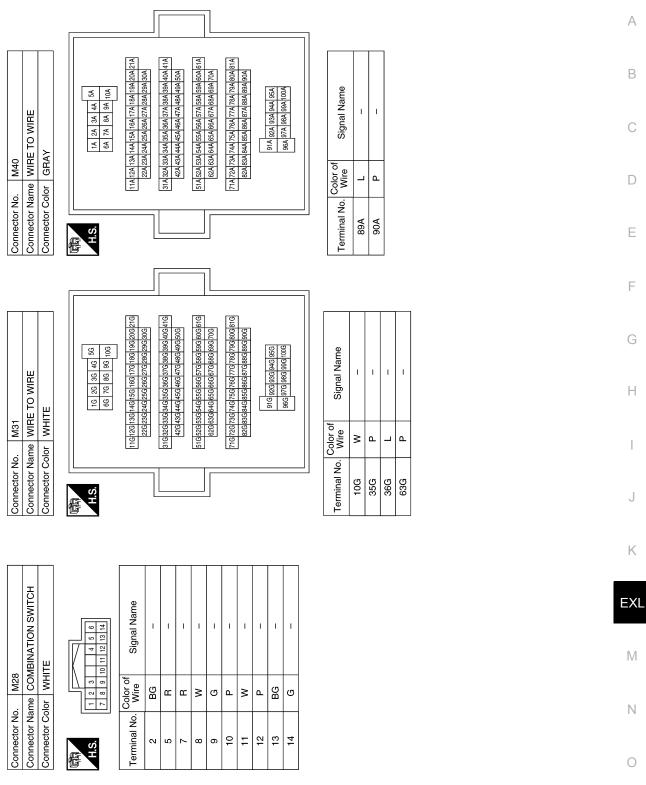
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CAN-L CAN-H

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				43	63
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	8			48	88
	>			49	69
			l IV	20	2
	BCM (BOE MODULE)	X	IN	51	7
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E M	88	В		53	73
=				54	74
	ш.	lor		53	75
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Connector No.	Connector Name   BCM (BODY CONTROL   MODULE)	Connector Color BLACK	優工	99	8

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Revision: September 2014 EXL-23 2015 Pathfinder

Signal Name

Color of Wire

Terminal No.

Signal Name

Color of Wire ≥ ≥

Terminal No.

Signal Name

Color of Wire  $\neg$ Ф

Terminal No.

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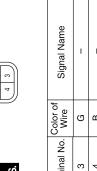
Connector No.         M43         Connector Name         MB1           Connector Name         JOINT CONNECTOR-M17         Connector Name         BCM (BODY CONTROL           Connector Color         WHITE         Connector Color         WHITE	M (BODY CONTROL DULE)
[ [ [ 12]	137   142   143   138
Signal Name Terminal No. Wire	Signal Name
- 131 W	BAT BCM FUSE
- 134 B	GND 2
139 W	BAT POWER F/L
143 B	GND 1
Signal Name	Terminal No. C 134 139 143

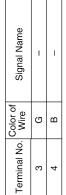
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MO (MO)	Signal Name	В
	Color of Wire Silving	D
Connector No.  Connector Name Connector Color  Terminal No.  28 29 41 43	100 100 100 100 100 100 100 100 100 100	Е
		F
TOR-E15	1G 6G 14G 13G 13G 13G 13G 13G 13G 13G 13	G
E71 JOINT CONNECTOR-E15 BLACK  or of Signal Name L L L L	## TO WIRE   170 WIRE   180	Н
	Name   WIRE	I
Connector No. Connector Name Connector Color H.S.  1 1 2	Connector No. Connector Name Connector Color H.S.  #16	J
		K
E70 JOINT CONNECTOR-E14 BLACK  Strong Signal Name	E121 IPDM E/R (INTELLIGENT MODULE ENGINE ROOM) WHITE  or of Signal Name  GND (POWER)	EXL
Color of PP	L	M
nector No nector Na nector No nector Co Co 1 1 2 2 2	nector No nector No nector No 7	N
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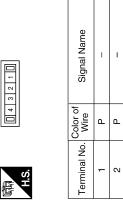
Connector No.	E233
Connector Name	Connector Name   FRONT COMBINATION   LAMP LH
Connector Color BLACK	BLACK



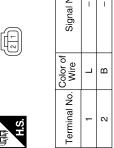






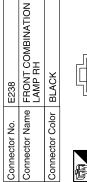


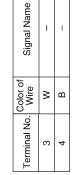
E232	Connector Name   FRONT COMBINATION   LAMP LH	BLACK
Connector No.	Connector Name	Connector Color BLACK



Signal Name	I	1
Color of Wire	٦	В
erminal No.	-	2

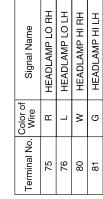
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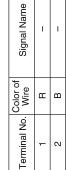
E217	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	or WHITE	
Connector No.	Sonnector Name	Connector Color WHITE	





E237	Connector Name   FRONT COMBINATION   LAMP RH	BLACK	
Connector No.	Connector Name	Connector Color BLACK	



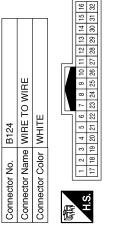




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Connector No. B17 Connector Name JOINT CONNECTOR-B12 Connector Color WHITE	043210	Signal Name	1	Signal Name	С
B17 .me JOINT (	4 3	Color of Wire		Color of Wire	D
Connector No. Connector Name Connector Color	明.S.	Terminal No.	2	Terminal No. 89A 90A	Е
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)R-B11		me		134 124 114 1234 224 1434 624 614 1434 624 1534 624 1534 624 1534 624 1534 724 714	G
CONNECTO	2 1 0	Signal Name	1	B69	Н
b. B16 JOINT (MHITE		Color of Wire	. 🗠	100 GRAY 100	I
Connector No. B16 Connector Name JOINT CONNECTOR-B11 Connector Color WHITE	E.S.	Terminal No.	-   2	Connector No.   B69	J
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Connector No. B12 Connector Name JOINT CONNECTOR-B10 Connector Color WHITE		Signal Name	1	Vame	EXI
B12 JOINT CO WHITE	4 3 2 1				M
Connector No. Connector Name Connector Color		Color of Wire		Connector Name   WIF	Ν
Connector No. Connector Nar Connector Col	H.S.	Terminal No.	·   (V)	Connector No. Connector Nam Connector Cole  Terminal No. 18 18 19	0
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Connector No. B101		Connector No. B102	B102		Connect	Connector No.	B103
Connector Name WIRE TO WIRE	ro wire	Connector Nam	e JOINT	Connector Name JOINT CONNECTOR-B14	Connect	or Name	Connector Name JOINT CONNECTOR-B05
Connector Color WHITE		Connector Color WHITE	r WHITE	ш	Connect	Connector Color WHITE	WHITE
H.S. 17 18 19 20 21 22 23	7 8 9 10 11 12 13 14 15 16 23 24 25 28 27 28 29 30 31 32	H.S.	4 3	<u>                                      </u>	H.S.		
Terminal No. Color of Wire	Signal Name	Terminal No. Wire	color of Wire	Signal Name	Termina	Terminal No. Wire	or of Signal Name
17 L	ı	-	_	1	-		ا م
18 P	ı	2	_	ı	2		ا ا



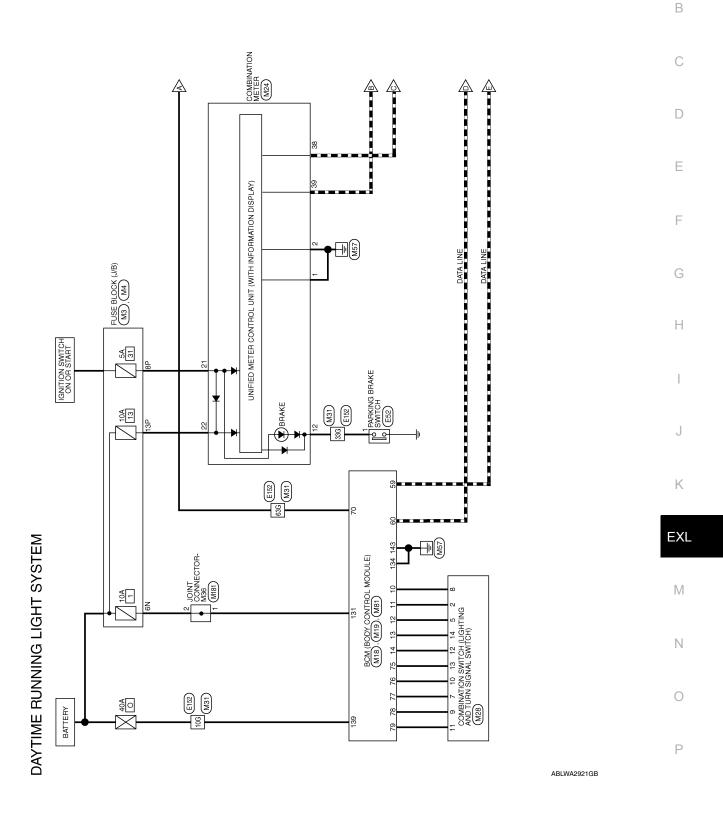
Signal Name	ı	I
Color of Wire	_	Д
Terminal No.	18	19

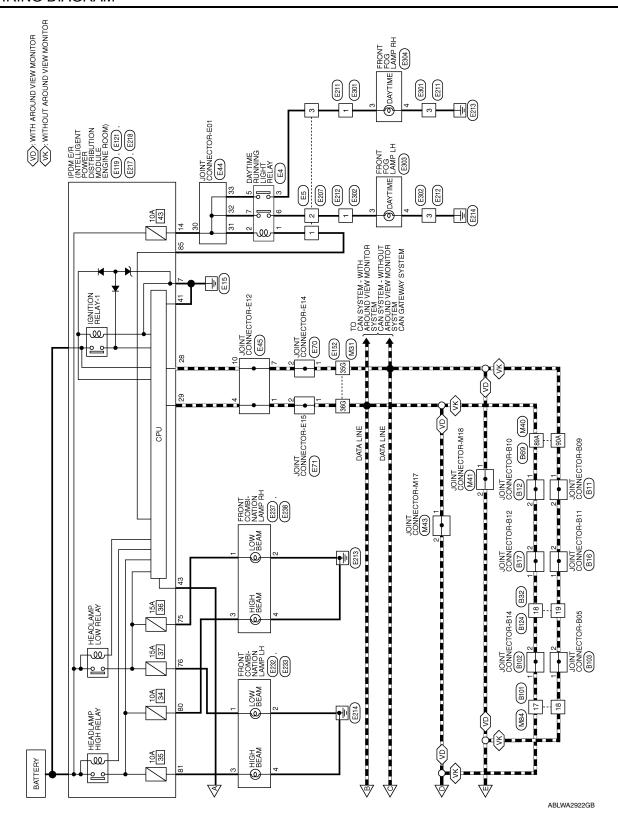
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### DAYTIME RUNNING LIGHT SYSTEM

Wiring Diagram

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BCM (BODY CONTROL MODULE)

# DAYTIME RUNNING LIGHT SYSTEM CONNECTORS

8	Connector Name BCM (BODY CON	MODULE)	EEN	H.S.  20   19   18   17   16   18   44   30   19   19   10   9   8   7   10   10   10   10   10   10   10	02   02   05   05   05	Signal Na	COMBI SW	COMBI SW
M %	me BCI	Q ∑	lor GR	15 14 13	20 %	Color of Wire	×	BG
Connector No. M18	Connector Na		Connector Color GREEN	H.S.  [20] 19 18 17 16 15 14 13 12 11 10 9  And 20 20 20 20 20 20 20 20 20 20 20 20 20	00 00 00 00	Terminal No. Wire	10	1
			7					
	Connector Name FUSE BLOCK (J/B)	ITE		7P 6P 5P 4P 6 2P 1P 8P 5P 1P 8P 5P 1P 8P 5P 1P 8P 5P 1P 5P 5P 1P 5P		Signal Name	ı	ı
<b>M</b>	me FUS	or WH		7P 6P 5P 4P 13P 14P 13P 1		Color of Wire	BG	Μ
Connector No.	Connector Nar	Connector Color   WHITE		所.S.		Terminal No. Wire	8P	13P
			7					ı
	Connector Name FUSE BLOCK (J/B)	HTE		3N SN 1N SN 1N SN 14N SN 14N		f Signal Name	ı	
. M3	ıme FU	lor WF		NE NE		Color of Wire	Μ	
Connector No.	Connector Na	Connector Color   WHITE		H.S.		Terminal No. Wire	N9	

COMBI SW IN 5 COMBI SW IN 4 COMBI SW IN 3 COMBI SW IN 2 COMBI SW IN 1

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Signal Name

Signal Name

Color of Wire

Terminal No. 29 9 02 75 9/ 77 82 62

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CAN-H CAN-L

COMBI SW OUT 3 COMBI SW OUT 4

COMBI SW OUT 2 COMBI SW OUT 1

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**EXL-31** Revision: September 2014 2015 Pathfinder

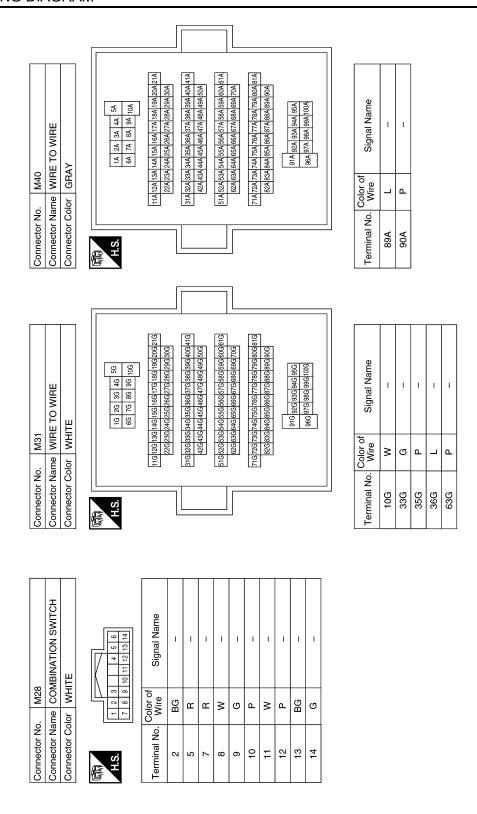
BCM (BODY CONTROL MODULE)

Connector Name Connector Color

M19

Connector No.

BLACK



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### **DAYTIME RUNNING LIGHT SYSTEM**

### < WIRING DIAGRAM >

Connector No. M81  Connector Name BCM (BODY CONTROL MODULE)	TE	137 (281   140   140   138   1	Signal Name	BAT BCM FUSE	GND 2	BAT POWER F/L	GND 1	
M81 MOL	or WHITE	143 142 1	Solor of Wire	>	В	>	В	
Connector No. Connector Nam	Connector Color	H.S.	Terminal No. Wire	131	134	139	143	
Connector No. M43  Connector Name JOINT CONNECTOR-M17		3 2 1	Signal Name	1	I			
M43	E .	4	Solor of Wire	٦				
Connector No. M43 Connector Name JOINT C		H.S.	Terminal No. Wire	1	2			
	_					1		
NT CONNECTOR-M18	<u> </u>	3 2 1	Signal Name	ı	1			
me JOIN	5	4	Color of Wire	۵	Ь			
Connector Name JOINT CONNECT		用.S.	Terminal No. Color of Wire	-	2			

	DAYTIME RUNNING LIGHT RELAY	BROWN	2 1 6 3 6 3	Signal Name	1	ı	1	1	1	I
E4				Color of Wire	У	ГG	BR	۸	SB	>
Connector No.	Connector Name	Connector Color	原动 H.S.	Terminal No.	1	7	3	9	9	2

11	JOINT CONNECTOR-M36	ITE	3210	Signal Name	1	-
. M181		lor WH	4	Color of Wire	>	8
Connector No.	Connector Name	Connector Color WHITE	刷 H.S.	Terminal No.	٦	2

		]		1			
		Ŀ	7				
		2	8				
		က	9				
		4	32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17				
		2	21		σ.		
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	7	7	23		Signal Name	١,	١,
	V	8	24		জু	l '	l '
	١	6	25		<u>.</u> <u>b</u>		
	1	10	56		ഗ		
_		Ξ	27				
		12	88		<u> </u>		$\vdash$
		15 14 13 12 11	83		5 5	١.	
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		16	32		ું		
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Revision: September 2014 EXL-33 2015 Pathfinder

Connector No. M84
Connector Name WIRE TO WIRE
Connector Color WHITE

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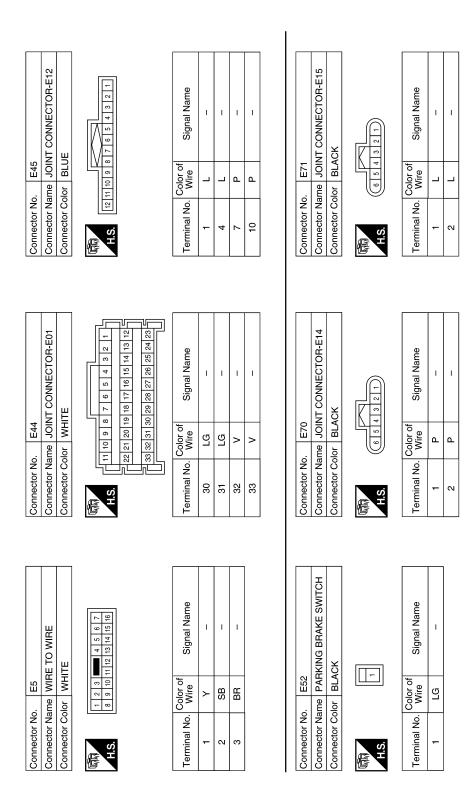
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### **DAYTIME RUNNING LIGHT SYSTEM**

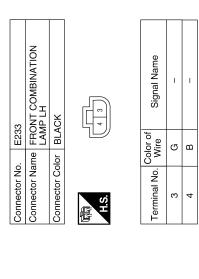


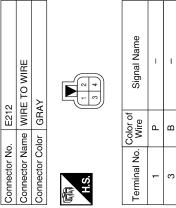
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								Connector No. E207	-	Connector Color   WHITE	[	7 6 5 4 3 2	H.S.		Terminal No.   Color of   Signal Name	- С		ع <u>ه</u>								A B C D
IGENT JTION ROOM)			ше	/ER)																						F G
E121 IPDM E/R (INTELLIGENT POWER DISTRIBUTION	WHITE	7 8 9 10 11	of Signal Name	GND (POWER)	DTRL			of Signal Name				1	1	1												Н
a E	$\overline{}$	12	Color of Wire	В	p D			Color of			3 4		_ .	_												I
Connector No. Connector Name	Connector Color	原 H.S.	Terminal No.	^	14			Terminal No.	9	200	5 6	35G	300	63G												J
		50 34									[													1		K
E119 IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODILI FENGINE BOOM)	WHITE	19 20 21 22 23 24 25 26 27 28 29 30 31 32 38 34 35 36 37 38 38 40 41 42 43 44 45 46 47 46 48 50	Signal Name	CAN-L	CAN-H	GND (SIGNAL)	IGN SIGNAL	52	Connector Name WIRE TO WIRE	WHITE			56 46 36 26 16	10G 9G 8G 7G 6G	210 200 190 180 170 160 150 140 130 120 110	9G 28G 27G 26G 25G 24G 23G 22G	416406396386376386356346336326316	50G49G48G47G46G45G44G43G42G	61 G 60 G 59 G 58 G 57 G 56 G 55 G 54 G 53 G 52 G 51 G 70 G 69 G 68 G 67 G 66 G 65 G 64 G 63 G 82 G	01-00-00-00-00-00-00-00-00-00-00-00-00-0	90G89G88G87G86G85G84G83G82G	95G 94G 93G 92G 91G 100G99G 98G 97G 9AG	5000			EX
	_	20 21 22 23 36 37 38 38	Color of Wire	۵	_	۵	_	o. E152	ame WII						2162061	30G2	41G40G3	5064	61G60GE 70G6	10000	9008					Ν
Connector No. Connector Name	Connector Color	H.S. 35	Terminal No.	28	29	41	43	Connector No.	Connector N	Connector Color		管	H.S.											]]		0
																						ABLIA	50350	зв		

Revision: September 2014 **EXL-35** 2015 Pathfinder

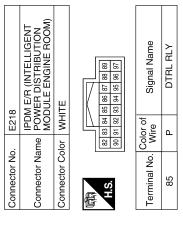
7	Connector Name POWER DISTRIBUTION MODULE ENGINE ROOM)	ITE	75 76	Signal Name	HEADLAMP LO RH	HEADLAMP LO LH	HEADLAMP HI RH	НЕАDLAMP НІ LH
E217	me PO	or WH	74	Color of Wire	œ	٦	W	g
Connector No.	Connector Nar	Connector Color WHITE	·····································	Terminal No. Wire	75	92	80	81
	ш			l Name		1		





Connector No.	. E232	2
Connector Name		FRONT COMBINATION LAMP LH
Connector Color	lor BLACK	CK
所 H.S.		
Terminal No.	Color of Wire	Signal Name
-	T	ı
C	α	ı

Connector No.	. E211	1
Connector Name	me WIF	WIRE TO WIRE
Connector Color	lor GRAY	٩Y
原 H.S.		2 4 T
Terminal No.	Color of Wire	Signal Name
-	æ	1
8	В	1



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## **DAYTIME RUNNING LIGHT SYSTEM**

## < WIRING DIAGRAM >

				lame		
П	RE TO WIRE		0√ 4 1 €	Signal Name	I	ı
. E301	me WIF	5		Color of Wire	LG	В
Connector No.	Connector Name WIRE TO WIRE		H.S.	Terminal No. Wire	-	ဇ
			I			
8	Connector Name   FRONT COMBINATION   LAMP RH	4CK	(C)	Signal Name	ı	1
E238	ne FRC	or BL/		Solor of Wire	≯	В
Connector No.	Connector Nan	Connector Color BLACK	H.S.	Terminal No. Wire	3	4
	BINATION			Signal Name	1	ı
E237	Name FRONT COMBINATION LAMP RH	Color BLACK		No. Color of Signa	æ	В
· No.	Name	Color		9		

Connector No.	E304	1
Connector Name		FRONT FOG LAMP RH
Connector Color	lor GRAY	٨.
山 H.S.		
Terminal No. Wire	Color of Wire	Signal Name
င	LG	ı
4	В	I

Connector No.	. E303	13
Connector Name		FRONT FOG LAMP LH
Connector Color	lor GRAY	AY
同 H.S.		(F)
Terminal No. Wire	Color of Wire	Signal Name
3	re	ı
4	<u>a</u>	ı

2	E TO WIRE	AY	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Signal Name	I	ı
. E302	me WIF	lor GRAY		Color of Wire	LG	В
Connector No.	Connector Name WIRE TO WIRE	Connector Color	H.S.	Terminal No.	-	8

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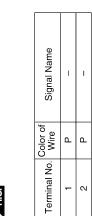
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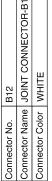
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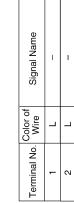
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Revision: September 2014 **EXL-37** 2015 Pathfinder



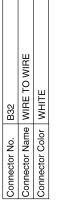


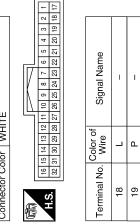




Connector No.

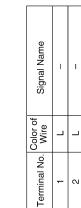
Signal Name	ı	_
Color of Wire	Ь	Ь
Terminal No.	-	2





Connector No.	B17
Connector Name	Connector Name JOINT CONNECTOR-B
Connector Color WHITE	WHITE

12



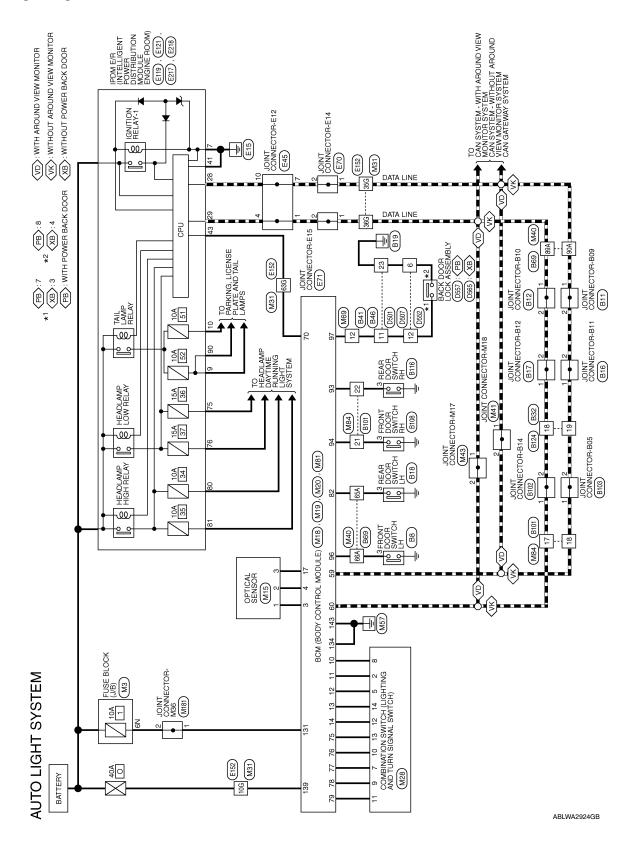
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## **DAYTIME RUNNING LIGHT SYSTEM**

Connector No.   B101	Connector No. B124  Connector Name WIRE TO WIRE  Connector Color WHITE  Title 19 20 21 22 23 24 28 28 29 30 31 32  Terminal No. Wire  Signal Name  19 P	A B C D
Signal Name	CONNECTOR-B05    2   1	G
Terminal No. Color of Wire 89A L 90A P	Connector No.   B103   Connector Name   JOINT CONNECTOR-B05   Connector Color   WHITE	I J
B69	Signal Name	EXL
Connector No. B69  Connector Name WIRE TO WIRE  Connector Color GRAY  10A 9A 8A 7A 6A  10A 9A 8A 7A 6A  10A 9A 8A 7A 6A  30A 29A 28A 37A 38A 3AA 3AA 3AA 3AA  30A 29A 28A 37A 38A 3AA 3AA 3AA 3AA  50A 49A 49A 47A 46A 47A 46A 47A 46A 67A  50A 49A 49A 47A 68A 67A 66A 67A 66A 67A 68A 67A  10A 69A 69A 69A 97A 68A 67A 67A 67A 67A 67A 67A 67A 67A 67A 67	Connector No. B102 Connector Name JOINT CONNECTOR- Connector Color   WHITE  WHITE  Terminal No. Wire Signal Name  1	M N
	ABLIA7088GB	Р

# **AUTO LIGHT SYSTEM**

Wiring Diagram



BCM (BODY CONTROL MODULE)

Connector Name Connector Color

OPTICAL SENSOR

WHITE

M18

Connector No.

GREEN

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

Connector No.	M3
Connector Name	Connector Name   FUSE BLOCK (J/B)
Connector Color WHITE	WHITE
原列 H.S.	3N 2N 1N 8N 7N 6N 5N 4N

Signal Name	1
Color of Wire	>
Terminal No.	N9

Signal Name	A/L POWER SUPPLY 5V	A/L SIGNAL	COMBI SW IN 5	COMBI SW IN 4	COMBI SW IN 3	COMBI SW IN 2	COMBI SW IN 1	GND RF A/L	
Color of Wire	>	G	*	BG	В	ŋ	Ь	Œ	
Ferminal No.	က	4	10	11	12	13	14	17	

Signal Name	_	-	_	
Color of Wire	Μ	В	В	
erminal No.	-	2	3	

Signal Name	_	1	1	
Color of Wire	Μ	В	В	
Terminal No.	-	2	8	

Signal Name	CAN-L	CAN-H	IGN USM OUT 1	COMBI SW OUT 5	COMBI SW OUT 4	COMBI SW OUT 3	COMBI SW OUT 2	COMBI SW OUT 1
Color of Wire	Ь	Г	Ь	BG	۵	ш	g	×
Terminal No.	29	09	70	75	9/	77	78	79

Connector Name BCM (BODY CONTROL MODULE)

Connector No.

GRAY

Connector Color

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					43	æ
		١.			4	22
		ᅵᅥ			45	8
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		ĮŽ			47	29
		吕			48	88
		<del>`</del>			49	8
				l I <i>V</i>	55 54 53 52 51 50 49 48 47 46 45 44 43 42	2
		<u>ĕ</u> ∃	$ \mathbf{x} $	I IN	21	7
	6	Σď	일		22	22
	M19	BCM (BOD MODULE)	긆		8	2
	_	ш Z			54	4
		] B	5		32	52
	9	<u>a</u>	ᅙ		92	9
	ž	<u> </u>	Ιž		22	
	Connector No.	Connector Name   BCM (BODY CONTROL   MODULE)	Connector Color BLACK		58 57 56	79 78 77 76 75 74 73 72 71 70 69
	ne l	≗	≗	S. E	29	
	Ö	<u>5</u>	<u>6</u>	[ [ [ ]	99	8
	O	<u> </u>	LO		<u></u>	لت

Signal Name	CAN-L	CAN-H	IGN USM OUT 1	COMBI SW OUT 5	COMBI SW OUT 4	COMBI SW OUT 3	COMBI SW OUT 2	COMBI SW OUT 1	
Wire	۵	Г	Ь	BG	۵	Я	В	*	
Š.									

	4	æ
	45	65
	46	99
	47	29
	84	88
117	64	88
IV.	20	20
- 11	5	71
$   \rangle$	52	72
5	53	73
	54	74
	55	75
	28	9/
	57	77
76	88	78
H.S.	29	79
$\overline{}$	8	ജ

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**EXL-41** Revision: September 2014 2015 Pathfinder Α

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BACK DOOR SW AS DOOR SW DR DOOR SW

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RL DOOR SW RR DOOR SW

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Signal Name

Color of Wire

Terminal No.

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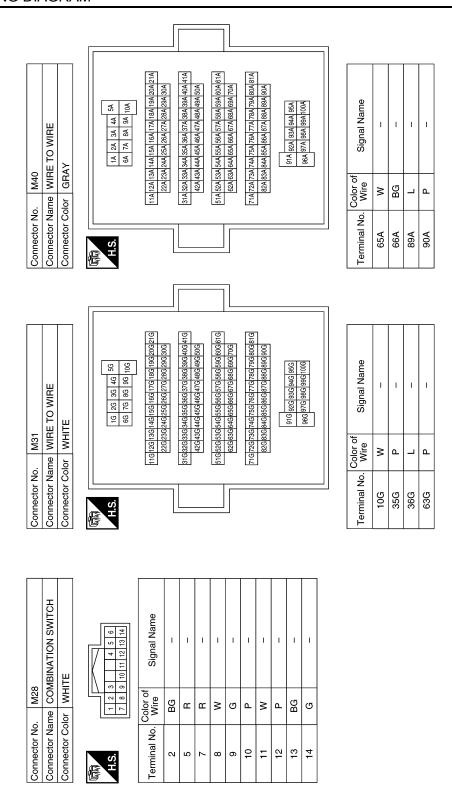
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				1 1					
	Connector Name   WIRE TO WIRE	ITE		12 11 10 9 8 7 6 5 4 3 2 1 1 1 1 2 2 2 2 2 2 2 2 1 2 1 2 1		Signal Name	-		
69W	ne WIF	or WH		14 13 30 29		Solor of Wire	W		
Connector No.	onnector Nan	Connector Color WHITE		S 32 31		Terminal No. Wire	12		
	<u> </u>				,				
	Connector Name JOINT CONNECTOR-M17	正	3 2 1			Signal Name	1	1	
M43		r WH	4			olor of Wire	٦	٦	
Connector No.	Connector Nam	Connector Color WHITE		H.S.		Terminal No. Wire	1	2	
				_	,				
	ω								
41	ctor Name JOINT CONNECTOR-M18	HITE	4 3 2 1			of Signal Name	ı	1	
. M41	ame JC	ctor Color WHITE		믜		Color of Wire	۵	Ь	
ctor No.	ctor Na	ctor Co				nal No.			

_	Connector Name JOINT CONNECTOR-M36	-	3 2 1	Signal Name	1	ı		
M181	a JOIN		4	color of Wire	>	>		
Connector No.	Connector Name JOINT (		E.S.	Terminal No. Wire	-	2		
			3 2 1 19 18 17					
	E TO WIRE	1	13 12 11 10 9 8 7 6 5 4 129 22 21 30	Signal Name	ı	ı	1	1
M84	e WIRE		30 29 28 27	color of Wire	_	۵	ŋ	œ
Connector No.	Connector Name WIRE TO WIRE		H.S. (16 15 13 14 14 15 14 15 14 15 14 15 14 15 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Terminal No. Wire	17	18	21	22
					ı	ı		
	BCM (BODY CONTROL MODULE)	TE	137 (38) (38) (38) (38) (38) (38) (48) (48) (48) (48) (48) (48) (48) (4	Signal Name	BAT BCM FUSE	GND 2	BAT POWER F/L	GND 1
M81	ne BCM MOE	or WHI	137 136 135 1	Color of Wire	>	В	>	В
Connector No.	Connector Name BCM (BODY CON-MODULE)	Connector Color WHITE	南 H.S.	Terminal No. Color of Wire	131	134	139	143

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EXL

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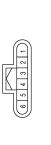
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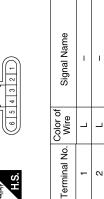
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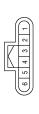
Revision: September 2014 **EXL-43** 2015 Pathfinder

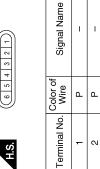
Connector No.	E71
Connector Name	onnector Name JOINT CONNECTOR-E15
Connector Color BLACK	SLACK

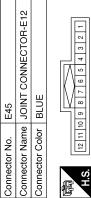


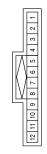






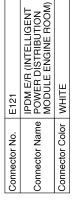








Signal Name	Ι	I	ı	Ι
Color of Wire	Γ	Т	Ь	Ь
Terminal No.	1	4	7	10



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

Connector Name Connector Color

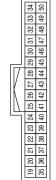
E119

Connector No.

WHITE









Signal Name	GND (POWER)	TAIL RH	TAIL LH
Color of Wire	В	ŋ	Γ
Terminal No.	7	6	10

Signal Name	CAN-L	CAN-H	GND (SIGNAL)	IGN SIGNAL
Color of Wire	Ь	٦	В	٦
Terminal No.	28	59	41	43

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		Α
Vame NP HI LH MP HI L	Vame	В
POWER DISTRIBUTION	Signal Name	С
PDM ame   PDM	Oolor Wire P	D
Connector No.  Connector Name  Connector No.  Connector No.  Connector No.  Connector No.  Connector No.	Terminal No.	Е
		F
ame MMTCH LH	lame	G
Signal Name  Signal Name	Signal Name	Н
Wire Wire P P P P P P P P P P P P P P P P P P P	Color of Wire	I
Terminal No.   Color of   Signal Name     10G   P	Terminal No.	J
		K
E152   WIRE TO WIRE   10G   4G   3G   2G   1G   1G   1G   1G   2G   4G   3G   2G   1G   1G   1G   2G   2G   2G   2	Signal Name CLEARANCE	EXI
E152		M
N Name (100 N N N N N N N N N N N N N N N N N N	No. Color of Wire LG	Ν
Connector No.  Connector No.  Connector No.  Connector No.  Connector No.	Terminal No.	0
	ABLIA7146GB	_

Revision: September 2014 **EXL-45** 2015 Pathfinder

Connector No.   B17	Connector No.   B41   Connector Name   WIRE TO WIRE   Connector Color   WHITE   Connector Color   WHITE   To   1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   19   10   12   12   13   14   15   16   18   18   18   18   18   18   18
Connector No.         B16           Connector Name         JOINT CONNECTOR-B11           Connector Color         WHITE           H.S.         Image: Terminal No. Wire         Signal Name           1         P         -           2         P         -	Connector No. B32 Connector Name WIRE TO WIRE Connector Color WHITE  Connector Color WHITE  Terminal No. Color of Signal Name  18 L
Connector No.   B12	Connector No. B18 Connector Name REAR DOOR SWITCH LH Connector Color WHITE  Terminal No. Color of Signal Name  3 SB -

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Connector Name WIRE TO WIRE  Connector Color WHITE  The state of the s	Terminal No. Oolor of Signal Name  17	Connector No. B108 Connector Name FRONT DOOR SWITCH RH Connector Color WHITE  H.S.  Terminal No. Color of Signal Name  3 LG -
Connector Name WIRE TO WIRE  Connector Color GRAY  H.S.  Told 9A 8A 7A 6A  Told 9A 8A 7A 6A		Connector No. B103  Connector Name JOINT CONNECTOR-805  Connector Color WHITE  H.S.  Terminal No. Wire  2 P  2 P
Connector Name WIRE TO WIRE  Connector Color WHITE  Connector Color WHITE  Connector To WIRE  Connector Color WHITE  Connector Color WHIT	Terminal No. Color of Wire Wire 23 GR – Terr	Connector No.   B102   Connector Name   JOINT CONNECTOR-B14   Connector Color   WHITE   Connector Color   WHITE   Connector Color of Signal Name   Terminal No.   Color of Signal Name   Terminal No.   Wire   Color of Signal Name   Terminal No.   Color of Name   Terminal Name

## **AUTO LIGHT SYSTEM**

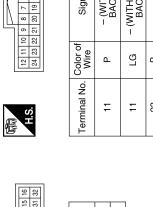
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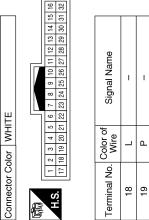


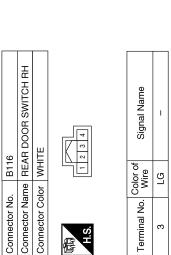
B124

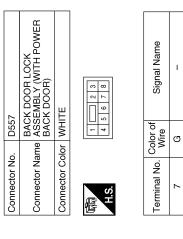
Connector No.

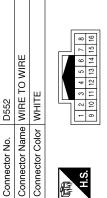
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l	-	5				<u>_</u> _	
l	2	24 23 22 21 20 19 18 17 16 15 14 13			<u> </u>	- (WITHOUT POWER BACK DOOR)	
l	က	15		<u>@</u>	밀윤	≳@	
	4	16		ar	1861		
	2	1		Signal Name	- (WITH POWER BACK DOOR)	WITHOUT POW BACK DOOR)	lт
	9	8		na	토	호关	
	7	9		Sig	Ĭ Ž Ž		
	8	20		",		<u>₹</u> "	
1	6	21				Ĭ	
l	10	22		4_			$\vdash$
l	12 11 10 9	23		5 e		(17	١
	12	24		Color of Wire	<u>а</u>	LG	В
1	٥	Ó		erminal No.	=	11	23

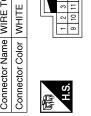








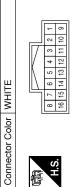




Signe			
Color of Wire	В	ŋ	
Terminal No.	9	12	

В

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Connector Name | WIRE TO WIRE

Connector No. D507

Signal Name	1	<ul><li>– (WITH POWER BACK DOOR)</li></ul>	- (WITHOUT POWER BACK DOOR)
Color of Wire	В	Ь	ГG
Terminal No. Color of Wire	9	12	12

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D565	Connector Name ASSEMBLY (WITHOUT POWER BACK DOOR)	WHITE	
Connector No.	Connector Name	Connector Color WHITE	



Signal Name	ı	ı
Color of Wire	ŋ	В
Terminal No.	က	4

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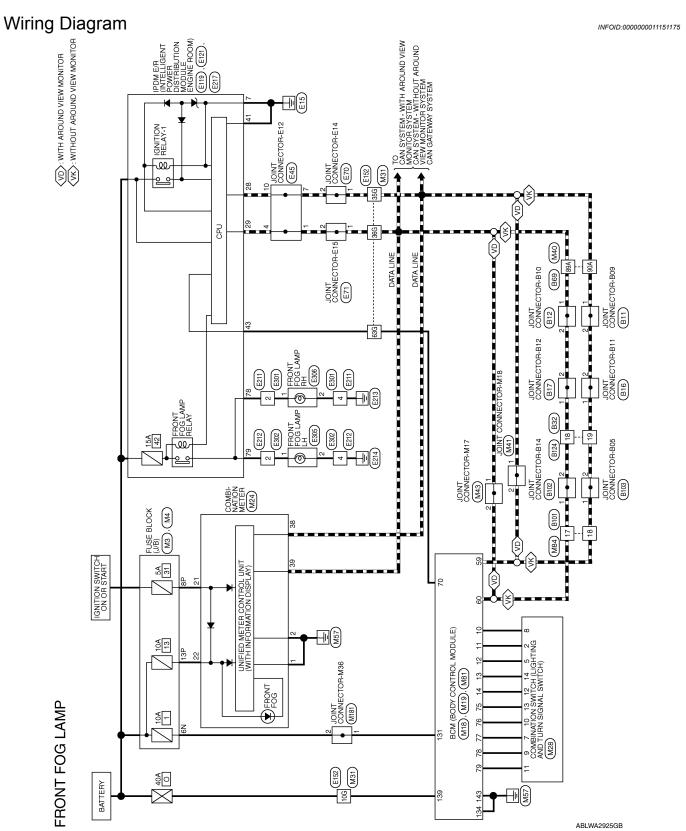
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# FRONT FOG LAMP SYSTEM



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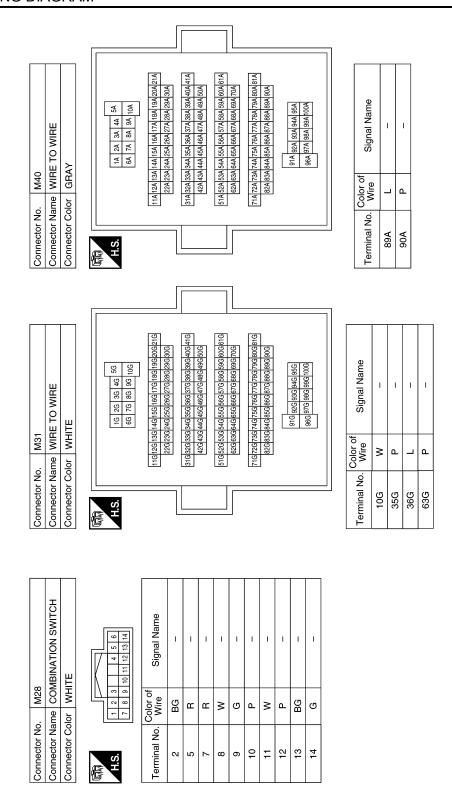
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	Connector No. M18	Connector Name BCM (BODY CONTROL	-	Connector Color   GREEN		KITCHI	H.S.	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	27 26 25 24 23 22		Terminal No. Wire Signal Name	10 W COMBI SW IN 5	11 BG COMBI SW IN 4	12 R COMBI SW IN 3	13 G COMBI SW IN 2	14 P COMBI SW IN 1	Connector No. M24	e		4		S.		20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 An 3q 38 37 36 35 34 33 39 31 30 39 39 37 38 35 24 33 29 31		Terminal No North Sirnal Name	ם ב	o @	- B	3 3	: 0	L	39 L CAN-H		
	Connector No. M4	Connector Name   FUSE BLOCK (J/B)	Connector Color WHITE		(中国) 3P 2P 1P	H.S.				- (	Terminal No. Wire Signal Name	8P BG –	13P W –				olor of	Terminal No. Wire Signal Name	59 P CAN-L	60 L CAN-H	70 P IGN USM OUT 1	75 BG COMBI SW OUT 5	۵	æ	78 G COMBI SW OUT 2	79 W COMBI SW OUT 1									
FRONT FOG LAMP CONNECTORS	Connector No. M3	Connector Name FUSE BLOCK (J/B)	Connector Color WHITE		INT IN	7N 6N 5N					Terminal No. Wire Signal Name	- N9					Connector No M40	a	MODULE)	Connector Color BLACK			H.S.		80 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41						A	ALIA	<b>A</b> 091:	3 <b>6</b> B	

Revision: September 2014 **EXL-51** 2015 Pathfinder



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## FRONT FOG LAMP SYSTEM

	Connector Name BCM (BODY CONTROL	MODULE)	TE	143   142   141   140   139   138	Signal Name	BAT BCM FUSE	GND 2	BAT POWER F/L	GND 1	
M81	DCN	J M	or WHITE	137/136/135/1:	Color of Wire	>	В	>	В	
Connector No.	Connector Nan		Connector Color		Terminal No.	131	134	139	143	
	Connector Name JOINT CONNECTOR-M17	TE		3 2 1	Signal Name	1	1			
M43	ne JOIN	Jr WHI		4	Solor of Wire	_	_			
Connector No.	Connector Nan	Connector Color WHITE		副 H.S.	Terminal No. Wire	-	2			
			7	_				1		
	<b>NT CONNECTOR-M18</b>	TE TE		3 2 1	Signal Name	I	1			
M41	ne JOIN	or WHI			Color of Wire	۵	۵			
Connector No.	Connector Name JOINT CONNE	Connector Color   WHITE		明.S.	Terminal No. Wire	-	7			

	JOINT CONNECTOR-E12	JE	7 6 5 4 3 2 1	Signal Name	1	1	-	ı
. E45		lor BLUE	12 11 10 9 8	Color of Wire	٦	Γ	Ь	Ь
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	1	4	2	10

31	JOINT CONNECTOR-M36	ITE	4 3 2 1 0	Signal Name	1	1
. M181		lor WHITE	4	Color of Wire	≥	×
Connector No.	Connector Name	Connector Color	际 H.S.	Terminal No.	1	2
			·			

_			_			
	-	17				
	2	8			_	
	6	9				
	4	32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17				
	5	21		_ m		
ᆚ	9	22		Ĕ		
- 117	7	23		Signal Name	۱,	١,
IV.	∞	24		ळ	'	l '
- IN	6	22		<u>i</u> g		
	10	56		ဟ		
	Ξ	27				
	12	78		<del>-</del>		
	14 13 12 11	59		5 5	١.	
	14	8		∺≅		۳.
	15	31		0		
	16	32		9		
	É	Ċ.	_	Terminal No. Wire	17	18

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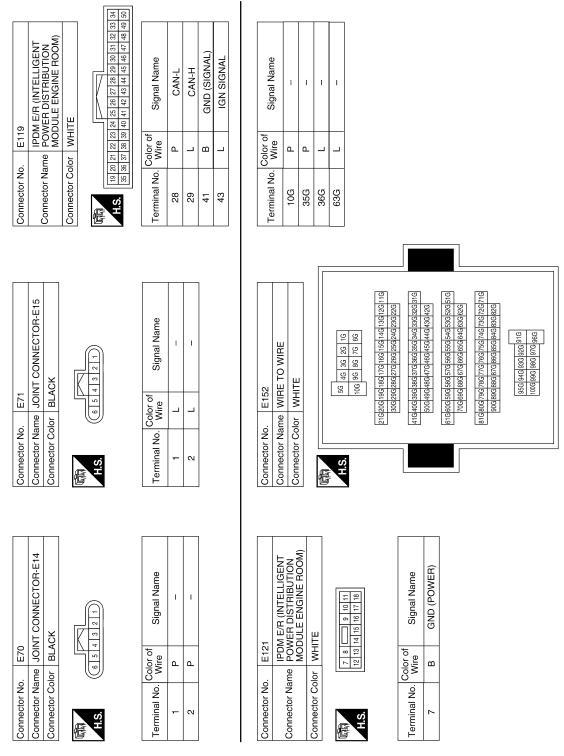
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Connector No. M84
Connector Name WIRE TO WIRE
Connector Color WHITE

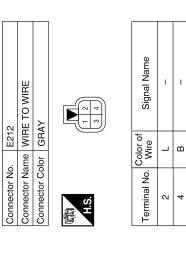


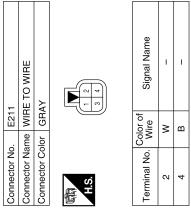
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## FRONT FOG LAMP SYSTEM

E217 IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) WHITE	Connector No. E217  Connector Name POWER DISTRIBUTION MODULE ENGINE ROOM)  Connector Color WHITE
	Connector No. Connector Name Connector Color
Connector No. Connector Name	

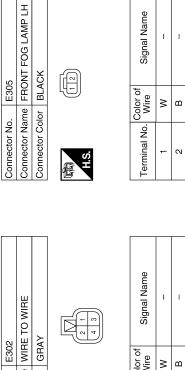
MODULE ENGINE ROOM)	ITE	77 78 79 80 81	Signal Name	FR FOG LAMP RH	FR FOG LAMP LH
28	lor WH	77 78	Color of Wire	>	Τ
	Connector Color WHITE	南 H.S.	Terminal No.	78	62







Connector No.



WIRE TO WIRE	AY	2 4	Signal N	I	
	lor GRAY		Color of Wire	≥	В
Connector Name	Connector Color	说: S:H	Terminal No.	2	7

WIRE			Signal Name	ı
WIRE TO WIRE	GRAY	2 4	Solor of Wire S	 >
ne	ō		ĕ≅	>

1	WIRE TO WI	٨Y	(0 4 4 m) (1 m) (	Sign		
E301	WIF	GRAY		Color of Wire	  >	В
ا ا	ıme	jo		ö≥		
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	2	4

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**EXL-55** Revision: September 2014 2015 Pathfinder

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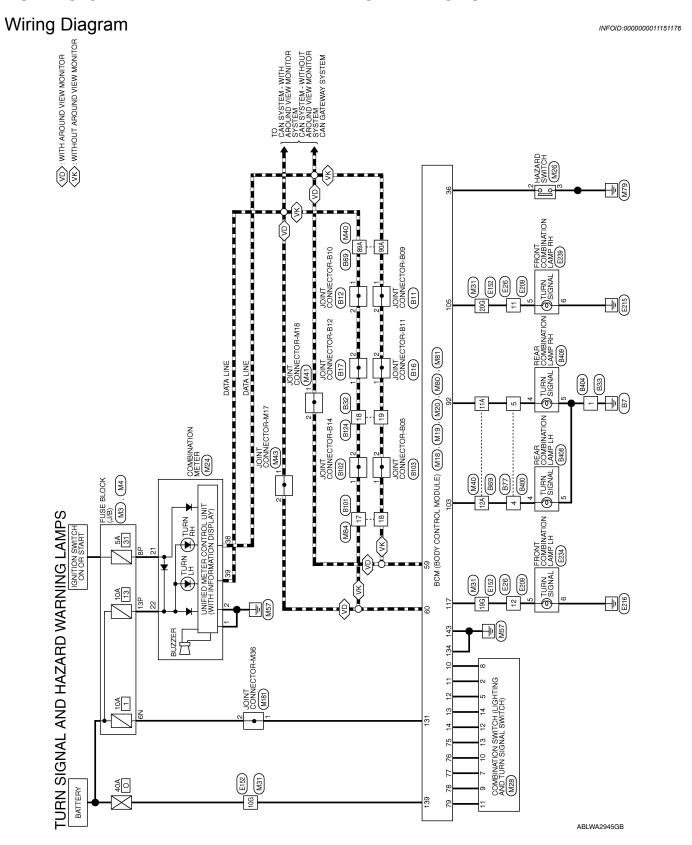
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Connector No. B12 Connector Name JOINT CONNECTOR-B10 Connector Color WHITE	H.S. Color of Signal Name	2 L		Connector No. B32 Connector Name WIRE TO WIRE	Connector Color WHITE	H.S. (16   15   14   13   12   11   10   9   8   7   6   5   4   3   2   1	Terminal No. Wire Signal Name	18 L –	19 P
Connector No. B11 Connector Name JOINT CONNECTOR-B09 Connector Color WHITE	H.S.  Terminal No.   Color of   Signal Name	2 P P		Connector No. B17 Connector Name JOINT CONNECTOR-B12	Connector Color WHITE	(1) 4 3 2 1 1 (1) H.S.	Terminal No. Wire Signal Name	1 L –	2 L –
No. E306 Name FRONT FOG LAMP RH Color BLACK	Color of Signal Name	N N 8		No. B16 Name JOINT CONNECTOR-B11	Color WHITE		No. Wire Signal Name	- П	I d

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Connector Name WIRE TO WIRE	Connector Color WHITE		Terminal No. Wire Signal Name  17 L L L L L L L L L L L L L L L L L L L	Connector No. B124	Connector Name WIRE TO WIRE Connector Color WHITE	H.S.	Terminal No. Color of Wire	18 L		
Signal Name	ı	ı			CONNECTOR-B05	2 1 1	Signal Name	1	1	
Terminal No. Wire	89A L	90A P		Connector No. B103	Connector Name JOINT CONNECTOR-B05 Connector Color WHITE	H.S.	Terminal No. Wire	-		
			A 134 124 114 A 234 224 A 334 224 314 A 534 525 114 A 534 525 114 A 534 525 114 A 538 525 114 A 538 525 114 A 538 525 114		B14		ime			F
Vo. Bog Name WIRE TO WIRE	Solor GRAY	1	10A   9A   8A   7A   6A   1A   13A   2A   1A   1A   1A   1A   1A   1A   1	No. B102	Connector Name JOINT CONNECTOR- Connector Color WHITE		o. Color of Signal Name	-	_	
Connector Name	Connector Color		SH	Connector No.	Connector N	国动 H.S.	Terminal No.	-	a	

# TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM



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HAZARD SW

# TURN SIGNAL AND HAZARD WARNING LAMPS CONNECTORS

Connector No.	o. M3		Connector No.	No. M4		Connec	Connector No. M18	M18	
Connector Name FUSE BLOG	ame FUS	E BLOCK (J/B)	Connector	Name FU	Connector Name FUSE BLOCK (J/B)	Connec	ctor Nam	e BCM (BOD	Connector Name BCM (BODY CONTROL
Connector Color   WHITE	olor WHI		Connector Color   WHITE	Color WF	HTE			Z OM	JLE)
						Connec	Connector Color GREEN	r GREE	Z.
师 H.S.	NE N8	2N 1N	H.S.	7P 6P 5P 4P 16P 15P 14P 13P	7P 6P 5P 4P ( ) 2P 1P ( ) 1P	是 H.S.			
						20 19 18 40 39 38	20 19 18 17 16 15 14 13 12 11 10 9 40 39 38 37 36 35 34 33 32 31 30 29	34 33 12	18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 8 8 3 7 8 8 3 8 3 8 3 13 8 0 8 8 2 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Terminal No. Color of Wire	Color of Wire	Signal Name	Terminal No. Color of Wire	o. Color o	Signal Name	Termin	Terminal No. Wire	olor of Wire	Signal Name
N9	*	1	8P	BG	ı	10	0	*	COMBI SW IN 5
			13P	8	ı	11	_	BG	COMBI SW IN 4
						12	2	œ	COMBI SW IN 3

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Connector No. M24	Connector Name COMBINATION METER				20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 40 39 38 37 96 35 34 33 32 31 30 29 28 27 28 27 28 25 24 2	Terminal No. Color of Signal Name	B GND1
Connecto	Connecto		H.S.		20 19 18 17 40 39 38 37	Terminal I	-
	Connector Name BCM (BODY CONTROL MODULE)	ΑΥ			92 91 90 89 88 87 86 85 84 83 82 81 104 103 102 101 100 99 88 97 96 95 94 93	Signal Name	RR FLASHER
o. M20	ame BCN MOI	olor GR/			91 90 89 8	Color of Wire	ш
Connector No. M20	Connector N	Connector Color GRAY		Ŋ.	92	Terminal No. Color of Wire	92
				_	42 41 62 61		
6	connector Name BCM (BODY CONTROL MODULE)	OK			52 51 50 49 48 47 46 45 44 43 42 72 71 70 69 68 67 66 65 64 63 62	Signal Name	CAN-L
o. M19	ame BCN MOI	olor BLA			54 53 74 73	Color of Wire	Ь
Connector No.	Connector Na	Connector Color BLACK		H.S.	60 59 58 57 56 55 80 79 78 77 76 75	Terminal No. Wire	59

Terminal No. 29 09 75 9/

GND1 GND2

BG

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**RL FLASHER** 

103

COMBI SW OUT 5

BG

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COMBI SW OUT 2 COMBI SW OUT 3 COMBI SW OUT 4

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COMBI SW OUT 1

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CAN-L BAT ₽ NB

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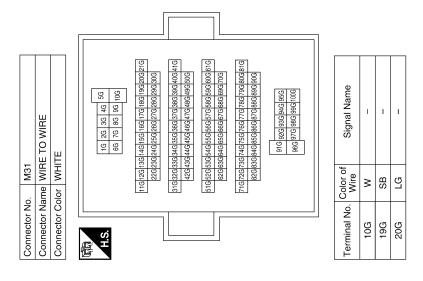
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	COMBINATION SWITCH	WHITE	2 3 3 0 1 1 1 4 5 6 0 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1		Signal Name	I	I	_	I	-	_	I	I	_	ı
M28	_			]	Color of Wire	BG	۳	Œ	8	9	Д	>	۵	BG	ច
Connector No.	Connector Name	Connector Color	H.S.		Terminal No.	2	2	7	80	6	10	11	12	13	14

Connector No.	). M26	
Connector Na	me HAZ	Connector Name HAZARD SWITCH
Connector Color WHITE	olor WH	TE TE
H.S.	4	3 2 1
Terminal No. Wire	Color of Wire	Signal Name
2	×	1
ဇ	В	ı

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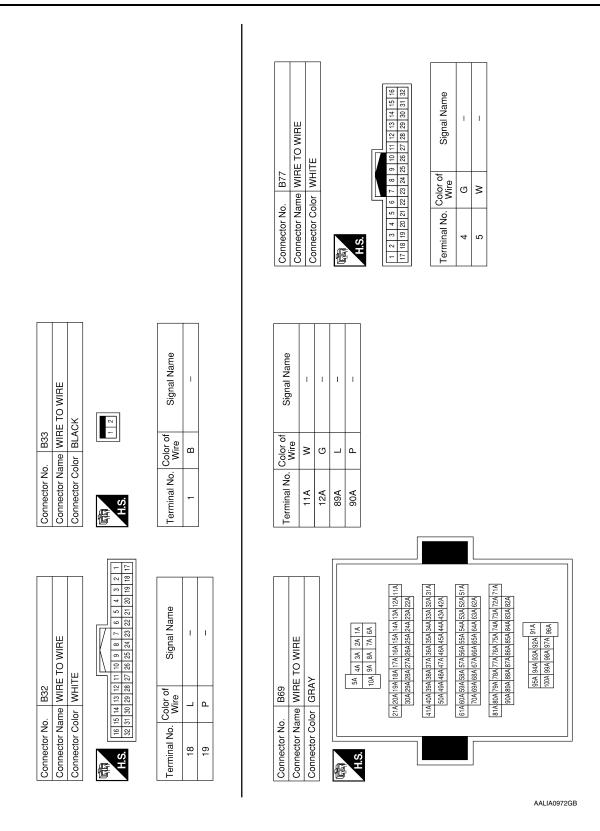
Connector No.   M41	Connector No.   M81	A B C D
Signal Name	M80  BCM (BODY CONTROL MODULE)  BLACK  4/13/12/11/10/108/108/108/108/108/108/108/108/1	G
Terminal No. Wire 11A R 12A BG 89A L 90A P	Ctor No.   Ctor Name   Ctor Color   Ctor C	I
	Conne Conne Termin Termin 10	J K
M40   C   C   C   C   C   C   C   C   C	T CONNECTOR-M17  E Signal Name	EXI
Connector No. M40  Connector Name WIRE TO WIRE  Connector Color GRAY  14 24 34 44 44 44 44 44 44 44 44 44 44 44 44	Connector No.   M43	N
	ABLIA5048GB	Р

Connector No. E26 Connector Name WIRE TO WIRE Connector Color WHITE	H.S. (13   14   15   16   17   18   19   20   21   22   23   24	No.	11 G - 12 W -	Connector No.   E209	Connector Name WIRE TO WIRE	Connector Color WHITE		1 2 11 10 0 8 7 8 8 7 8 8 7 8 8 8 1	22 21 20 19 18 17 16 15	Terminal No.   Color of   Signal Name	- SB - 11	12 Y -			
Connector No. M181  Connector Name JOINT CONNECTOR-M36  Connector Color WHITE	8 2 1 1	of Signal Name	1 1	of Signal Name		ı	1	1							
Connector No. M181 Connector Name JOINT C	H.S.	Terminal No. Wire	1 2 × W	Terminal No Color of	Wire			206 G							
Connector No. M84 Connector Name WIRE TO WIRE Connector Color WHITE	H.S.    16   15   14   13   12   11   10   9   8   7   6   5   4   3   2   1     22   31   30   29   27   28   27   28   28   24   23   22   21   20   19   18   17	Terminal No. Color of Signal Name	17 L – 18 P –	Connector No. E152	Connector Name WIRE TO WIRE	Connector Color WHITE		(	H.S. 100 46 36 26 16 100 100 86 86 76 86	21G20G19G18G17G16G15G14G13G12G11G 390G29G29G27G26G25G24G23G2C		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	61G80G59G58G57G58G55G54G53G52G51G 70G69G98G59G57G56G65G64G53G57G	81G80G79G77G77G78G77G77G77G77G77G77G 90G88G88G87G88G88G88G88G88G8AG88G	996 908 908 908 908 908 908 908 908 908 908

## TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

## < WIRING DIAGRAM >

				А
JECTOR-B09	Signal Name	VECTOR-B12	Signal Name	В
Connector No. B11 Connector Name JOINT CONNECTOR-B09 Connector Color WHITE	Color of Wire P	Connector No. B17 Connector Name JOINT CONNECTOR-B12 Connector Color WHITE	Color of Wire L	C
Connector No. Connector Color Connector Color HS.	Terminal No.	Connector No. Connector Nam Connector Cold	Terminal No.	Е
				F
E239 FRONT COMBINATION GRAY	Signal Name	Connector No. B16 Connector Name JOINT CONNECTOR-B11 Connector Color WHITE  The state of the sta	Signal Name - -	G H
r No. E239 r Name FRONT LAMP R r Color GRAY	No. Color of Wire SB SB	Connector No. B16 Connector Name JOINT CONNE Connector Color WHITE	No Color of Wire P	1
Connector No. Connector Color	Terminal No. 5	Connector No. Connector Cole	Terminal No.	J
				K
Connector No. E234 Connector Name FRONT COMBINATION LAMP LH Connector Color GRAY LS.	Signal Name	Connector No. B12 Connector Name JOINT CONNECTOR-B10 Connector Color WHITE  INS.	Signal Name	EXI
ne FRONT LAMP I or GRAY	Color of Wire Y	me JOINT C	Color of Wire	
Connector No. E234 Connector Color GRAY Connector Color GRAY H.S.	Terminal No. (6	Connector No. B12 Connector Name JOINT ( Connector Color WHITE	Terminal No. (	N
	Φ		<u> </u>	AALIA0971GB



## TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

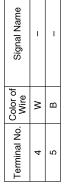
## < WIRING DIAGRAM >

				Α
TOR-B05	gara		Name	В
Connector No. B103 Connector Name JOINT CONNECTOR-B05 Connector Color WHITE  A.S.  Terminal No Color of Signal Name	סופטים ביי ביי ביי ביי ביי ביי ביי ביי ביי ב	E TO WIRE	Signal Name	С
Connector No. B103 Connector Name JOINT C Connector Color WHITE  M.S.  Terminal No Color of	Wire	Connector No. B404 Connector Name WIRE TO WIRE Connector Color BLACK	O Color of Wire B	D
Connector No. Connector Col		Connector No. Connector Name Connector Color	Terminal No.	Е
		18 17 1		F
TOR-B14	44116	22 21 20 4 9 19	Signal Name	G
Connector No. B102 Connector Name JOINT CONNECTOR-B14 Connector Color WHITE  Terminal No Color of Signal Name		Connector No. B400  Connector Name WIRE TO WIRE  Connector Color WHITE  (16   15   14   13   12   11   10   9   8   7   7   7   7   7   7   7   7   7		Н
No. B102 Name JOINT Color (MHTT	o. Wire	r No. B400 r Name WIRE TO WIRE r Color WHITE	Color of Wire	I
Connector No. B102 Connector Name JOINT ( Connector Color WHITE  M.S.  Terminal No Color of		Connector No. B400 Connector Name WIRE T Connector Color WHITE  H.S. [16 15 14 13 12 11 11 11 11 11 11 11 11 11 11 11 11	Terminal No.	J
13 14 15 16 29 31 32 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		0 1 15 16 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		K
0 11 12 6 27 28 Name		No. B124  Name WIRE TO WIRE  Color WHITE  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 113 20   21   22   24   25   26   27   28   29   30   31   32   31   32   32   32   32   33   33	Signal Name	EXL
		Connector No. B124  Connector Name WIRE TO WIRE  Connector Color WHITE  LS. 1 2 3 4 5 6 7 8 9 17 18 19 20 21 22 23 24 25 5 17 18 19 20 21 22 23 24 25 5 25 24 25 5 25 24 25 5 25 24 25 5 25 24 25 5 25 25 24 25 5 25 25 24 25 5 25 25 25 25 25 25 25 25 25 25 25 2		M
Connector No. B101 Connector Name WIRE T Connector Color WHITE  TH.S. T	Wire Nine	Connector No. B124  Connector Name WIRE T  Connector Color WHITE  THE S 4 5 6  THE S 1 1 18 1 19 20 21 22	Color Color Wire P	Ν
Connector Nan Connector Nan Connector Colc H.S. Tit 18	18	Connector No. Connector Nam Connector Colc	Terminal No.	0
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Connector No.	B409
Connector Name	Connector Name REAR COMBINATION LAMP
Connector Color GBAV	GBAV







Connector No.	B408
Connector Name	connector Name REAR COMBINATION LAMP
Connector Color GRAY	GRAY





Signal Name	1	Î
Color of Wire	В	В
Terminal No.	4	5

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### < WIRING DIAGRAM > PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM Α Wiring Diagram INFOID:0000000011151177 (VD): WITH AROUND VIEW MONITOR (VK): WITHOUT AROUND VIEW MONITOR В TO STATEM - WITH AROUND VIEW MONITOR SAYSTEM - WITHOUT SAYSTEM - WITHOUT SAYSTEM - WITHOUT SAYSTEM CAN GATEWAY SYSTEM (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) (E119) (E12), JOINT CONNECTOR-E12 JOINT CONNECTOR-E14 C M31 D DATA LINE Е JOINT CONNECTOR-E15 (E71) FRONT COMBINATION LAMP LH E235, (E236) 89A JOINT CONNECTOR-B09 (B11) JOINT CONNECTOR-B10 (S) F PARKING MARKER FRONT COMBINATION LAMP RH (E240), (E241) JOINT CONNECTOR-B11 - [2] [2] PARKING SIDE MARKER 8 Н TAIL LAMP RELAY M31 10A JOINT CONNECTOR-B05 (B103) JOINT CONNECTOR-B14 JOINT CONNECTOR-M17 (M43) 10A **⊚** w REAR COMBINATION LAMP RH (B407), (B413) SIDE MARKER J FUSE BLOCK (J/B) (M3), (E28), (B29) B40 B77 B400 PARKING, LICENSE PLATE AND TAIL LAMPS K LICENSE PLATE LAMP RH (D562) JOINT CONNECTOR-B01 (B63) EXL LICENSE PLATE LAMP LH (D561) B46 D501 D552 D502 D502 (88) <del>-</del> [1] BCM (BODY CONTROL MODULE) (M18), (M19), (M81) M COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH) (M28) Ν REAR COMBI-NATION LAMP LH B406 B412 0

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# PARKING, LICENSE PLATE AND TAIL LAMPS CONNECTORS

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

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

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

Connector Name | BCM (BODY CONTROL | MODULE) BLACK

Connector Color

M19

Connector No.

	-	21
	2	23
	3	23
	4	24
	2	34 33 32 31 30 29 28 27 26 25 24
	9	56
	7	27
	8	28
-117	6	53
W	10	98
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ш	13	33
	14	8
	15	36 35
	16	38
	17	33
	18	40 39 38
3	19	33
4	20	40

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15 14 13	35 34 33	Color of Wire	≯	BG
20 19 18 17 16 15 14 13	40 39 38 37 36 35 34 33	Terminal No.	10	11
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12 13 4

Signal Name

Signal Name	-	
Color of Wire	W	
Terminal No.	N9	

Signal Name	CAN-L	CAN-H	IGN USM OUT	COMBI SW OUT				
Color of Wire	۵	Г	Ь	BG	۵	ш	В	×
Terminal No.	69	09	20	75	9/	77	78	79

Signal Name	1	1	ı	ı	1	ı	1	1	1	1
Color of Wire	BG	æ	œ	>	В	۵	Μ	Ь	BG	១
Terminal No.	2	5	7	8	6	10	=	12	13	14

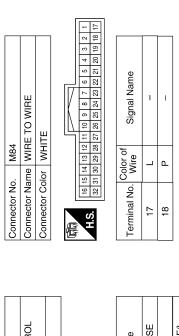
Connector No.	M28
Connector Name	Connector Name   COMBINATION SWITCH
Connector Color WHITE	WHITE
H.S.	1 2 3 4 4 5 6 8 9 10 11 12 13 14

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M41 JOINT CONNECTOR-M18 WHITE  Or of Signal Name	С
	D
Connector No. Connector Name Connector Color H.S.  1 1 2 P F	Е
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5A	G
M40   Connector Name   WIRE TO WIRE   Connector Name   WIRE TO WIRE   Connector Color   GRAY   SA   SA   SA   SA   SA   SA   SA	Н
TNO.   M40   WIRE   Color   GRAY   Color of   Color o	1
Connector No. Connector Name Connector Name Connector Color H.S.  114  114  115  116  117  117  117  117  117  117	J
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M31	EXL
WINE TO WIRE	M
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# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM



	L	
Connector No.	E34	
Connector Name WIRE TO WIRE	e WIR	RE TO WIRE
Connector Color   WHITE	r WH	ІТЕ
H.S. 24 29	12 11 10 9 8 24 23 22 21 20	24 Z3 Z2 Z1 Z0 19 18 17 16 15 14 13
Terminal No.	Color of Wire	Signal Name
22	9	ı

	BCM (BODY CONTROL MODULE)	ITE		Signal Name	BAT BCM FUSE	GND 2	BAT POWER F/L	GND 1
		lor WHITE	143 142 1	Color of Wire	>	В	>	۵
COLLIGORO NO.	Connector Name	Connector Color	H.S.	Terminal No.	131	134	139	143

	Connector Name FUSE BLOCK (J/B)		8M 770 6M 5M	Signal Name	I
. E28	me FUS	lor WH	4M 3M 10M 9M 8	Color of Wire	٦
Connector No.	Connector Na	Connector Color WHITE	H.S.	Terminal No.	W9

Connector No. M43 Connector Name JOINT CONNECTOR-M17 Connector Color WHITE  MATE

=	Connector Name JOINT CONNECTOR-M36	ITE	4 3 2 1 0	Signal Name	ı
. M181	me JOII	lor WHITE	4 3	Color of Wire	×
Connector No.	Connector Na	Connector Color	赋 H.S.	Terminal No.	٢

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# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

## < WIRING DIAGRAM >

		1		1		1	
71	Connector Name JOINT CONNECTOR-E15 Connector Color BLACK	4 9 3 2 1	Signal Name	ı	ı		
. E71	me JC lor BI	9 2	Color o	_	_		
Connector No.	Connector Name JOINT (Connector Color BLACK	原和 H.S.	Terminal No. Wire	-	2		
		]					
0	Connector Name JOINT CONNECTOR-E14 Connector Color BLACK	4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Signal Name	ı	ı		
E70	ne JO or BL	9 2	Solor of Wire	Ь	۵		
Connector No.	Connector Name JOINT (	原动 H.S.	Terminal No. Wire	-	2		
		1		1			
5	Connector Name JOINT CONNECTOR-E12 Connector Color BLUE	8 7 6 5 4 3 2 1	Signal Name	ı	ı	ı	1
. E45	Connector Name JOINT Connector Color BLUE	10 9	Color o Wire	٦	_	۵	۵
Connector No.	tor Na	H.S. 1211	Terminal No. Wire				10

21	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	WHITE	7 8 9 10 11	Signal Name	GND (POWER)	TAIL RH	TAILLH
E121		_	7 8 8 12 13	Color of Wire	В	ច	_
Connector No.	Sonnector Name	Connector Color	H.S.	Terminal No.	7	6	10

			. [	3 34					
6	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	WHITE		34 25 26 27 28 29 30 31 32 33 34 40 41 42 43 44 45 46 47 48 49 49	Signal Name	CAN-L	CAN-H	GND (SIGNAL)	IGN SIGNAL
. E119				20 21 22 23 36 37 38 39	Color of Wire	۵	٦	В	_
Connector No.	Connector Name	Connector Color		H.S. 35 3	Terminal No.	28	29	41	43

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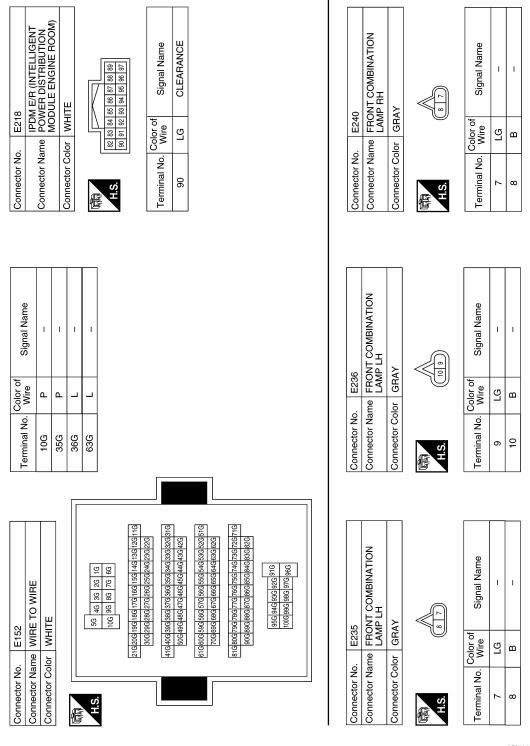
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Revision: September 2014 EXL-71 2015 Pathfinder



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# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

Signal Name

Color of Wire

Terminal No.

Signal Name

Color of Wire L

Terminal No.

Signal Name

Color of Wire P

Terminal No.

N

# < WIRING DIAGRAM >

Connector No. B12 Connector Name JOINT CONNECTOR-B10 Connector Color WHITE	(項) (1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Terminal No. Wire Signal Name	1 L –	2 L –	Connector No. B29	Connector Name FUSE BLOCK (J/B)	Connector Color WHITE	(新 <u>27 — 17</u> 67 57 47 31 H.S.
[8 8 8]		<u> </u>			Ö	ŏ	Ŏ	
Connector No. B11 Connector Name JOINT CONNECTOR-809 Connector Color WHITE	3 2 1 1	Signal Name	ı	ı		Connector Name JOINT CONNECTOR-B12	ITE	3 2 1
. B11 .me JOINT (	4 3	ઙૅ≶	۵	۵	). B17	ume JOIN	olor WHITE	4
Connector No. Connector Name Connector Color	H.S.	Terminal No.	-	2	Connector No.	Connector Na	Connector Color	说. R.S.
Connector No. E241 Connector Name FRONT COMBINATION LAMP RH Connector Color GRAY	601	Signal Name	ı	ı		T CONNECTOR-B11	1	2 1 0
E241 LAMP or GRAY		Color of Wire	re	В	B16	ne JOIN	or WHITE	4 3
Connector No. Connector Name	山 H.S.	al No.	6	10	Connector No.	Connector Name JOINT CONNECTO	Connector Color	原则 H.S.

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Revision: September 2014 **EXL-73** 2015 Pathfinder

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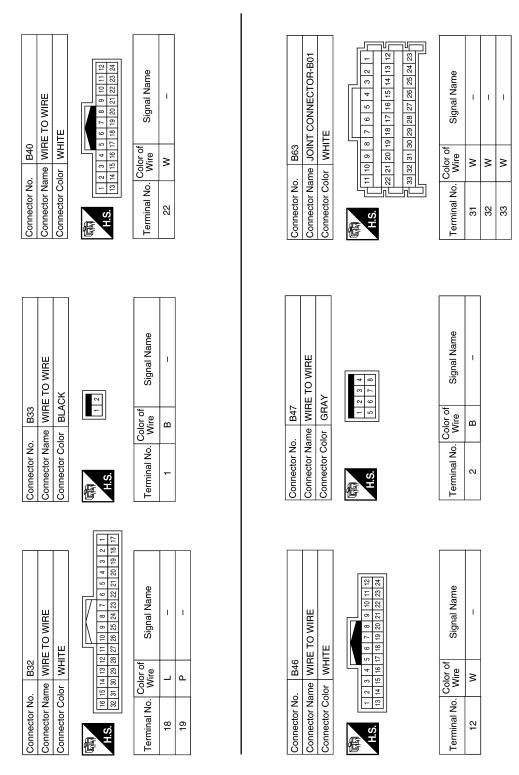
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# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

# < WIRING DIAGRAM >

Connector No. B77  Connector Name WIRE TO WIRE  Connector Color WHITE  Tile 18 19 20 21 22 23 24 25 26 27 28 29 36 31 32  Terminal No. Wire Signal Name  14 W  31 W	Connector No.   B103   Connector Name   JOINT CONNECTOR-B05   Connector Color   WHITE	A B C D
Signal Name	TT CONNECTOR-B14 TE Signal Name	F G
Color of Wire 89A L 90A P	Connector No.   B102	l J
1   1   1   1   1   1   1   1   1   1	Vame	K
SA   SA   SA   SA   SA   SA   SA   SA	B101   B101	M
	ABLIA7096GB	O P

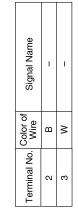
Revision: September 2014 **EXL-75** 2015 Pathfinder

Connector No. B124	). B124		Connector No. B400	. B400			Connector No.	B404	
Connector Name WIRE TO WIRE	ame WIRE	E TO WIRE	Connector Name WIRE TO WIRE	me WIRE	TO WIRE		Connector Name WIRE TO WIRE	ne WIRE	TO WIRE
Connector Color WHITE	olor WHI	TE .	Connector Color WHITE	lor WHIT	Д		Connector Color BLACK	or BLAC	X
原本 H.S.		2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 16 18 19 10 12 12 2 23 24 25 26 27 28 29 30 31 32	H.S.	15 14 13 12 11	14   13   12   11   10   9   8   7   6   5   4   3   2   1   1   1   1   1   1   1   1   1	11 11	H.S.		
Terminal No. Wire	Color of Wire	Signal Name	Terminal No. Wire	Color of Wire	Signal Name		Terminal No. Wire	Color of Wire	Signal Name
18	-	1	14	M	1		-	В	I
19	۵	1	31	Μ	1				

Connector No.	. B412	2
Connector Name		REAR COMBINATION LAMP LH
Connector Color		WHITE
原 H.S.		
Terminal No.	Color of Wire	Signal Name
9	>	I
7	α	

Connector No.	). B407	7(
Connector Name		REAR COMBINATION LAMP RH
Connector Color	olor GRAY	AY
H.S.		3 1
Terminal No.	Color of Wire	Signal Name
2	æ	ı
۳	W	-

B406	Connector Name REAR COMBINATION LAMP LH	or GRAY	
Connector No.	Connector Nan	Connector Color GRAY	Œ



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# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

# < WIRING DIAGRAM >

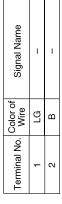
ш	Signal Name -		Signal Name	
Connector No. D502  Connector Name WIRE TO WIRE  Connector Color GRAY  H.S.  A 3 2 1 1 8 7 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Connector No. D550 Connector Name WIRE TO WIRE Connector Color WHITE		
No. D502 Name WIRE Color GRAY	Color of Wire B	No. D550 Name WIRE Color WHIT	Vo. Color of B B	
Connector Name Connector Color H.S.	Terminal No.	Connector No. Connector Name Connector Color	Terminal No.	
2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	am e		аше	
No. D501  Name WIRE TO WIRE  Color WHITE    12   11   10   9   8   7   6   5   4   3   2   1     24   25   22   21   20   19   18   17   16   15   14   13	Signal Name	D507  Ne WIRE TO WIRE  Or WHITE	Signal Name	
Connector No. D501  Connector Name WIRE TO WIRE  Connector Color WHITE  T2 11 10 9 8 7 6 5 4 1 23 23 22 21 20 119 18 17 16	Color of Wire	Connector No. D507  Connector Name WIRE TO WIRE  Connector Color WHITE  M.S.	Color of Wire	
Connector No. Connector Cold H.S.	Terminal No.	Connector No. Connector Nam Connector Cold	Terminal No.	
NOTION	Signal Name - -		Signal Name -	
B413 REAR COMBINATION LAMP RH WHITE		Connector No. D505 Connector Name WIRE TO WIRE Connector Color WHITE		
	Color of Wire W	r No. DE	Color of B B	
Connector No Connector Color Connector Color H.S.	Terminal No. 6	Connector No. Connector Color Connector Color H.S.	Terminal No.	
			ABLIA7098GB	

Connector No.	D562
Connector Name	Connector Name   LICENSE PLATE LAMP RH
Connector Color BROWN	BROWN
S I	

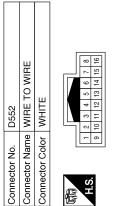












Signal Name	ı	
Color of Wire	LG	
Terminal No.	7	

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# STOP LAMP

Wiring Diagram

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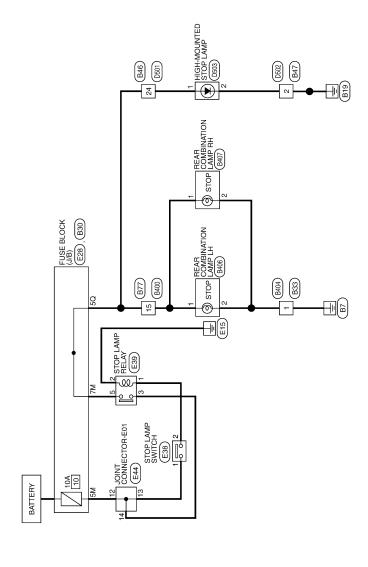
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STOP LAMP

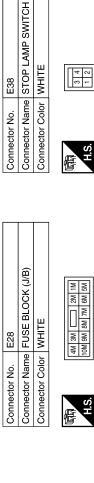
Connector Name STOP LAMP RELAY

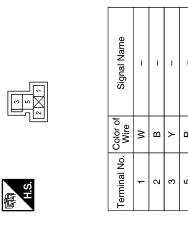
E39

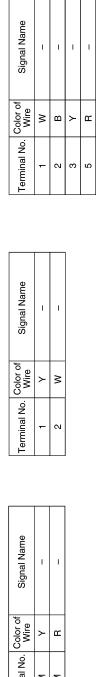
Connector No.

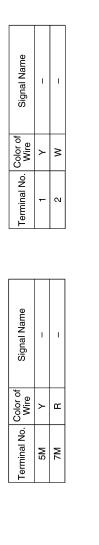
Connector Color BLUE

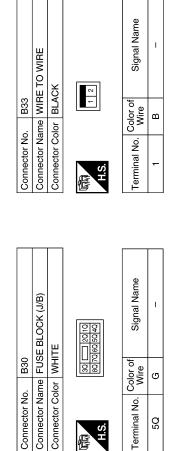
# STOP LAMP CONNECTORS

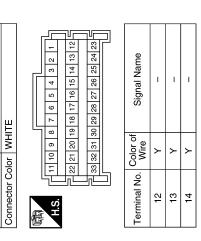












Connector Name | JOINT CONNECTOR-E01

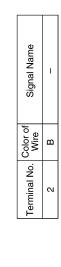
E44

Connector No.

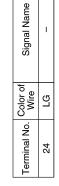
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9 28			А
Connector No.   B77   Connector Name   WIRE TO WIRE   Connector Color   WHITE   Connector Color   WHITE		Signal Name	В
TE TO WIRE	3 1		С
No. B77  Name WIRE T  Color WHITE  Color WHITE  1 2 3 4 5 6 17 18 19 20 21 22 21 22  No. Wire  G  No. B406  Name REAR C	Color GRAY	Color of Wire	m D
Connector No.   B77	Connector Color H.S.	Terminal No.	E
	1 -		F
WIRE		Signal Name	G
Signal Si		Signal	Н
Connector No. B47  Connector Name WIRE TO WIRE  Connector Color GRAY  Terminal No. Color of Signal  Z B B Signal  Connector No. B404  Connector Name WIRE TO WIRE  Connector Name WIRE TO WIRE  Connector Color BLACK		Color of Wire	I
Connector No. Connector Color H.S. Terminal No. W. 2 Connector No. Connector No. Connector No. Connector No.	H.S.	Terminal No.	J
	181 17 1		K
WIRE  WIRE  WIRE	25 24 23 22 21 20 19 1	Signal Name -	EXL
	27 26		М
ctor P ctor C ct		Terminal No. Color of Wire	N
Conne Conne Conne Conne Conne Conne Conne	E.S.	Term	ABLIA5030GB
			ABLIA5U3UGB

Connector No.   D501	D501	Connector No. D502	D502
Connector Name	Connector Name WIRE TO WIRE	Connector Name	Connector Name WIRE TO WIRE
Connector Color WHITE	WHITE	Connector Color GRAY	GRAY
121	11 10 9 8 7 6 5 4 3 2 1		4 3 2 1
S. N	24 23 22 21 20 19 18 17 16 15 14 13	H.S.	8 7 6 5



D501	· Name WIRE TO WIRE	Color WHITE	12 11 10 9 8 7 6 5 4 3 2 1	24 23 22 21 20 19 18 17 16 15 14 13	
No.	. Name	Color	122	24	



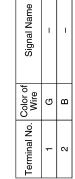


Connector Name REAR COMBINATION LAMP
RH
Connector Color GRAY

B407

Connector No.

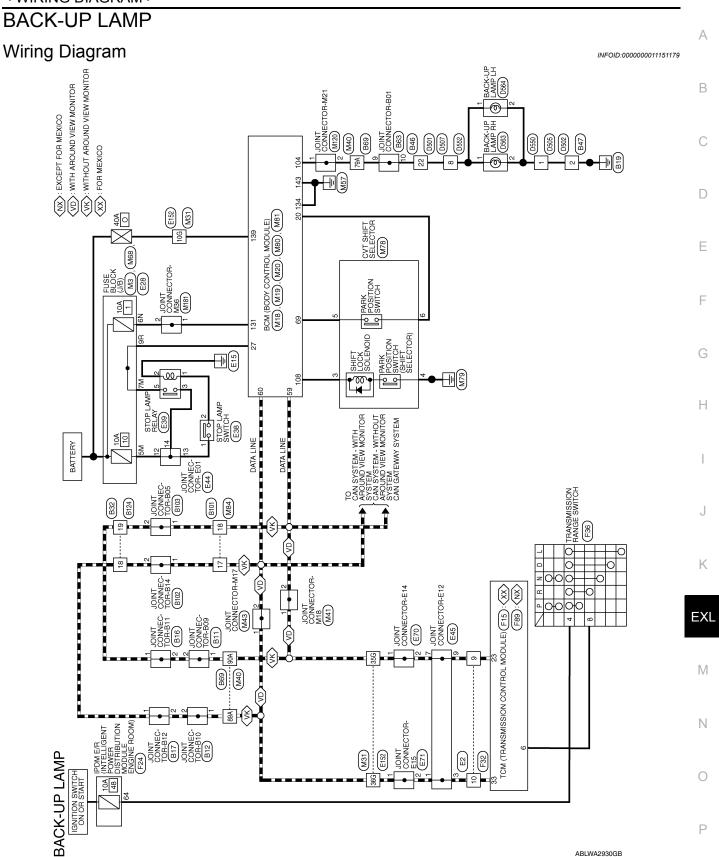
Signal Name	1	_
Color of Wire	9	В
rminal No.	1	2



D503	Connector Name HIGH-MOUNTED STOP LAMP	BROWN
Connector No.	Connector Name	Connector Color   BROWN

Signal Name	1	ı	
Color of Wire	FG	В	
Terminal No.	1	2	

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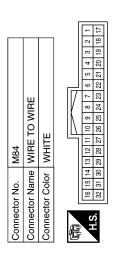
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#### 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 81 81 80 79 78 77 76 75 74 77 70 69 68 67 66 65 64 63 64 65 61 61 AT DEVICE OUT BCM (BODY CONTROL MODULE) Signal Name Signal Name CAN-H CAN-L 1 BLACK M19 Color of Wire Color of Wire Ф ≥ Ф Connector Name Connector Color Connector No. Terminal No. Terminal No. 35G 36G 10G 59 9 69 H.S. 6 20 19 18 17 16 14 13 12 11 10 9 8 7 6 5 4 3 2 1 40 39 38 37 36 38 32 31 30 29 20 27 26 28 27 28 22 21 31G32G33G34G35G36G37G38G39G40G41G 42G43G44G45G47G48G49G50G 51G 52G 53G 54G 55G 56G 57G 58G 59G 60G 61G 62G 63G 64G 65G 66G 67G 68G 66G 70G 71G72G73G74G75G77G77G79G89G81G 82G83G84G85G86G87G88G89G90G 11G12G13G14G15G16G17G18G19G20G21G 22G23G24G25G28G27G28G29G30G BRAKE SW LAMP 16 26 36 46 <sup>56</sup> 66 76 86 96 106 91G 92G 93G 94G 95G 96G 97G 98G 99G 100G BCM (BODY CONTROL MODULE) Signal Name SHIFT P Connector No. M31 Connector Name WIRE TO WIRE Connector Color | WHITE GREEN M18 Color of Wire ≥ $\Omega$ Connector Name Connector Color Connector No. Terminal No. H.S. 20 27 僵 REVERSE LAMP OUT BACK-UP LAMP CONNECTORS 96 95 94 93 Connector Name | BCM (BODY CONTROL | MODULE) Signal Name Signal Name Connector Name FUSE BLOCK (J/B) 7N 6N 5N 4N 88 87 86 85 100 100 99 98 97 9 Connector Color | WHITE GRAY M20 ₩ ₩ Color of Wire Color of Wire МЗ 92 91 90 89 8 104 103 102 101 11 r P ≥ Connector Color Connector No. Connector No. Terminal No. Terminal No. 104 N9 H.S. 偃

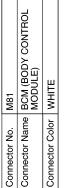
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M41 JOINT CONNECTOR-M18 WHITE  Or of Signal Name	FT SELECTOR Signal Name	В
	M78 CVT SHI WHITE Incorof Incorof M W W W W W W W W W W W W W W W W W W	C
Connector No. Connector Name Connector Color H.S.  1 F	Connector No. Connector Color Connector Color  H.S.  3 Color 5 6 7	Е
		F
Signal Name	OCK (J/B)  OCK (J/B)  Signal Name	G
	NWN BI	Н
Color of Wire of LG	No. Mea FUS Color BRG RESERVATION OF COLOR BRG STEER S	
794 894 904	Connector No. Connector Name Connector Color Terminal No. W 9R	J
		K
M40   WIRE TO WIRE   GRAY   GRAY   14   24   34   44   54   54   104	ONNECTC Signal Nar	EXL
Connector No.   M40	No. M43 Name JOINT C Color WHITE  Color of L L L	Ν
Connector No Connector Name Connector Color H.S.	Connector No. Connector Name Connector Color Terminal No. W	0
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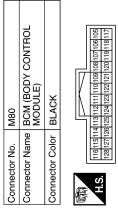
Revision: September 2014 **EXL-85** 2015 Pathfinder

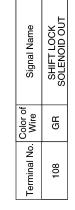


Signal Name	1	1
Color of Wire S	٦	Ь
Terminal No.	17	18



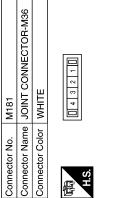






Connector No.	). E2	
Connector Name WIRE TO WIRE	me WIRE	TO WIRE
Connector Color WHITE	olor WHITE	111
原列 H.S.	9 10 11 12 13	2 3 4 5 6 7 8 10 11 12 13 14 15 16
Terminal No.	Color of Wire	Signal Name
6	۵	ı

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Connector Name JOINT CONNECTOR-N	ITE	4 3 2 1 0	Signal Name	-	-
me JOII	lor WHITE		Color of Wire	M	*
Connector Na	Connector Color	副 H.S.	Terminal No.	1	6

0.	JOINT CONNECTOR-M21	<u> </u>	4 3 2 1 1	Signal Name	1	1
. M120		lor WHITE	4	Color of Wire	P	5 D
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	-	2

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Connector No. E39 Connector Name STOP LAMP RELAY Connector Color BLUE	Terminal No. Color of Signal Name  1	Connector No. F70 Connector Name JOINT CONNECTOR-E14 Connector Color BLACK  Terminal No. Color of Signal Name  1 P 2 P
Connector No. E38 Connector Name STOP LAMP SWITCH Connector Color WHITE	Terminal No. Color of Wire Signal Name  1 Y	Connector No.   E45   Connector Name   JOINT CONNECTOR-E12   Connector Color   BLUE
Connector No.   E28  Connector Name   FUSE BLOCK (J/B)  Connector Color   WHITE	Terminal No. Color of Signal Name  5M Y -  7M R R -	Connector No. E44  Connector Name JOINT CONNECTOR-E01  Connector Color   WHITE    11   10   9   8   7   6   5   4   3   2   1

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Signal Name	ı	1	1										TO WIRE		12 14 3 2 1		Signal Name	1	1	
o. Wire	۵	۵	_									NO. F3Z	Connector Name WIRE TO WIRE Connector Color WHITE		8 7 6	2	Color of Wire	۵		
Terminal No.	10G	35G	36G									Connector No.	Connector Name Connector Color		H.S.		Terminal No.	6	10	
			F								]									
E152 WIRE TO WIRE	1 1 1 1 1 1 1 1	1		56 46 36 26 16 106 96 86 76 66	21G20G19G18G17G16G15G14G13G12G11G 30G29G28G27G26G25G24G23G22G	416 406 396 386 376 366 356 346 336 326 316	50G 49G 48G 47G 46G 45G 44G 43G 42G	61G60G59G58G57G56G55G54G53G52G51G 70C695G68G67G66G55G64G63G62G	81G 80G 79G 77G 76G 75G 74G 73G 72G 71G  90G 89G 88G 87G 86G 85G 84G 83G 82G	95G 94G 93G 92G 91G			IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	TE		63 64 65 66 67 69 70 71 72 73	Signal Name	START IG EGI		
٩	.	_			216206190	416 406 390	50G 490	61G60G590 70G690	81G80G79 90G89	[0] <u>+</u>		1		Color WHITE		88 88	Jo. Color of Wire	ΓG		
Connector No.	Connector Color		<b>E</b>	H.S.								Confinector No.	Connector Name	Connector Color		H.S.	Terminal No.	64		
		7					$\neg$													
Connector No. E71 Connector Name : IOINT CONNECTOR-E15	×	1		3 2 1	Signal Name	1	I						TCM (TRANSMISSION CONTROL MODULE) (FOR MEXICO)	X		26 27 28 29 40 47 48 26 27 28 29 30 45 46 16 17 18 19 20 43 44 6 7 8 9 10 41 42	Signal Name	R RANGE SW	CAN-L	CAN-H
o. E71	olor BLACK			6 5 4	Color of Wire	<b>_</b>	_						ame CON (FOR	olor BLACK		21 22 23 34 25 36 37 28 39 37 28 39 37 28 39 37 38 39 37 38 39 37 38 39 37 38 39 37 38 39 37 38 39 37 38 39 39 39 39 39 39 39 39 39 39 39 39 39	Color of Wire	BR	Ь	7
Connector No.	Connector Color			H.S.	Terminal No.	- 0	N					Corinector No.	Connector Name	Connector Color		øj.	Terminal No.	9	23	33
010	. 10											<u>ا ر</u>		ΓΟ				ABLIA	71000	 ЭВ

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Connector No. B11 Connector Color WHITE  TH.S.	Signal Name -	Connector No. B17 Connector Name JOINT CONNECTOR-B12 Connector Color WHITE  [	Signal Name	В
OINT CONNE		B17 JOINT CONNE WHITE		С
Connector No. B11 Connector Color WHITE  H.S.	Color of Wire	Connector No. B17 Connector Name JOINT ( Connector Color WHITE	Io. Color of Wire L	D
Connector Na. Connector Cole	Terminal No.	Connector No. Connector Cold	Terminal No.	Е
				F
MISSION DDULE) R MEXICO) 39 40 47 48 19 20 45 44 9 10 41 42	Signal Name RANGE SW CAN-L CAN-H	TOR-811	Signal Name	G
24NS OL MG OL MG 17 FOI	Signal Name R RANGE SW CAN-L CAN-H	B16 JONIT CONNEC WHITE		Н
	Color of Wire BR BR	to. B16 lame JONITC	Color of Wire	I
Connector No.  Connector Name Connector Color	Terminal No. 6 6 23 33	Connector No. B16 Connector Name JONIT CONNECTOR-B11 Connector Color WHITE	Terminal No.	J
				K
N RANGE	Signal Name	TOR-810	Signal Name	EXL
F36 SWITCH BLACK  5 4 3 2 1	Signa	TTE		M
	o. Wire LG BR	Connector No. B12 Connector Name JOINT CONNECTOI Connector Color WHITE	Oolor of Wire L	Ν
Connector No. Connector Color H.S.	Terminal No. 4	Connector No. Connector Color Connector Color	Terminal No.	0
			ABLIA7101GB	

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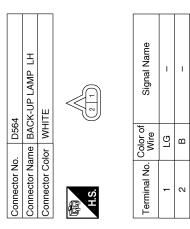
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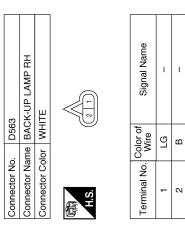
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E TO WIRE  1.Y  2 3 4 4 6 7 8	Signal Name -	Signal Name	1	1 1					
me WIRE or GRAY	Color of Wire B	Color of Wire	BB		_				
Connector No. B47 Connector Name WIRE TO WIRE Connector Color GRAY  H.S. The state of the state	Terminal No.	Terminal No.		89A 90A					
Connector No. B46  Connector Name WIRE TO WIRE  Connector Color WHITE  M.S.  T 2 3 4 5 6 7 8 9 10 11 12  T 3 14 15 16 17 18 19 20 21 22 23 24	Terminal No. Color of Signal Name  22 BR –	Connector No. B69	Connector Name WIHE IO WIHE Connector Color GRAY		214	304 454) 454 454 454 457 4554 454 457 4554 554 5	70A 69A 68A 67A 66A 65A 64A 63A 62A	81A 80A 72A 72A 77A 77A 75A 77A 77A 77A 77A 77A 77A 77	95A   94A   95A   95A   96A   97A   96A
30. B32  ame WIRE TO WIRE  blor WHITE    11   12   11   10   9   8   7   11   10   9   8   7   11   10   9   8   7   11   10   11   10   10   10   10	Terminal No. Color of Signal Name  18 L –  19 P –	Connector No. B63	Connector Name JUIN I CONNECT OR-B01 Connector Color WHITE		H.S.  (11 10 9 8 7 6 5 4 3 2 1 1 2 2 2 2 1 2 0 1 9 1 8 1 7 1 6 1 5 1 4 1 3 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Terminal No. Wire Signal Name		10 BR –	
									ABLIA7102GB

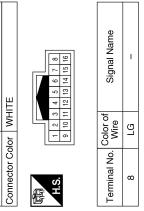
Revision: September 2014 **EXL-90** 2015 Pathfinder

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OR-B05		аше	В
Connector No.   B103	502 VIRE TO WIRE 3RAY 4 3 2 1 8 7 6 5	Signal Name	С
No. B103 Name JOINT ( Color WHITE  Color of Wire P P		Color of Wire B	D
Connector No. Connector Name Connector Color H.S.  1 2	Connector No. Connector Name Connector Color	Terminal No.	Е
			F
TOR-B14	16 14 13 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Name	G
Connector No.         B102           Connector Name         JOINT CONNECTOR-B14           Connector Color         WHITE           H.S.	TO WIR	Signal Name	Н
r No. B102 r Name JOIN7 r Color of Wire		No. Color of LG LG LG	I
Connector No. Connector Name Connector Color H.S.  1 1 2	Connector No. Connector Name Connector Color H.S.	Terminal No.	J
20 00 11 12 15 15 15 15 15 15 15 15 15 15 15 15 15	14   15   16   18   19		K
Name	No. B124  Name WIRE TO WIRE  Color WHITE  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 119 120 21 12 23 24 25 26 27 28 29 39 31 32	Signal Name	EXL
B101	WHE TO WII WHITE		М
		Color of Wire P	N
Connector No Conne	Connec Connec Connec	Terminal No.	0
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20	RE TO WIRE	IITE	8 B 2 B	Signal Name	ı
D56	ne WIF	Jr WH	- m	Solor of Wire	В
Connector No. D550	Connector Name WIRE TO WIRE	Connector Color WHITE	H.S.	Terminal No. Wire	-
70	RE TO WIRE	ІТЕ	2 1 2 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	Signal Name	ı
D20	ne WIF	or WH	8 7 8 9 7 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1	Solor of Wire	LG
Connector No. D507	Connector Name WIRE TO WIRE	Connector Color WHITE	刷 H.S.	Terminal No. Wire	8
10	E TO WIRE	TE	8 9	Signal Name	ı
D505	e WIR	r WHI	[N   O	color of Wire	В
Connector No.	Connector Name   WIRE TO WIRE	Connector Color WHITE	H.S.	Terminal No. Wire	-







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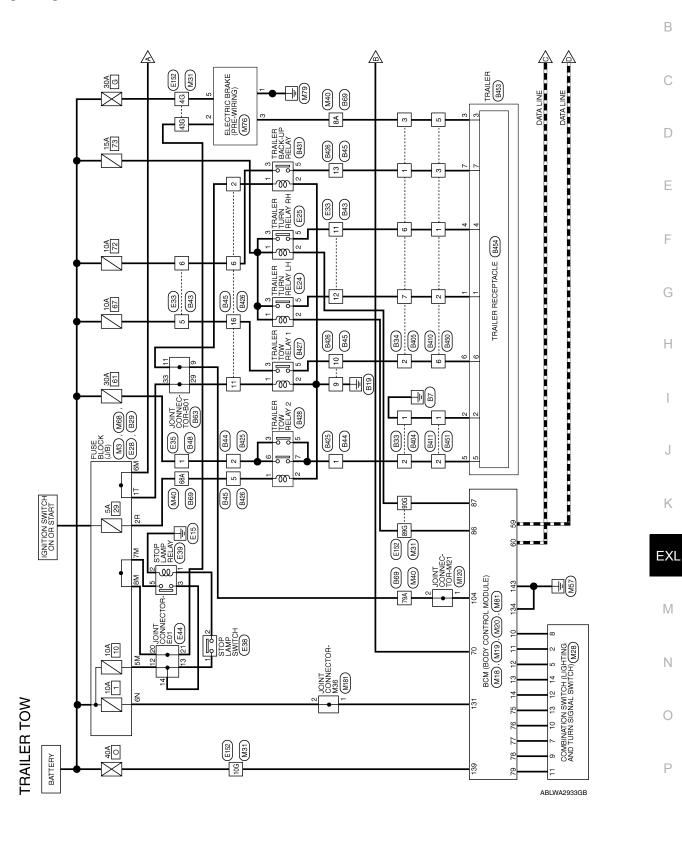
Connector Name WIRE TO WIRE

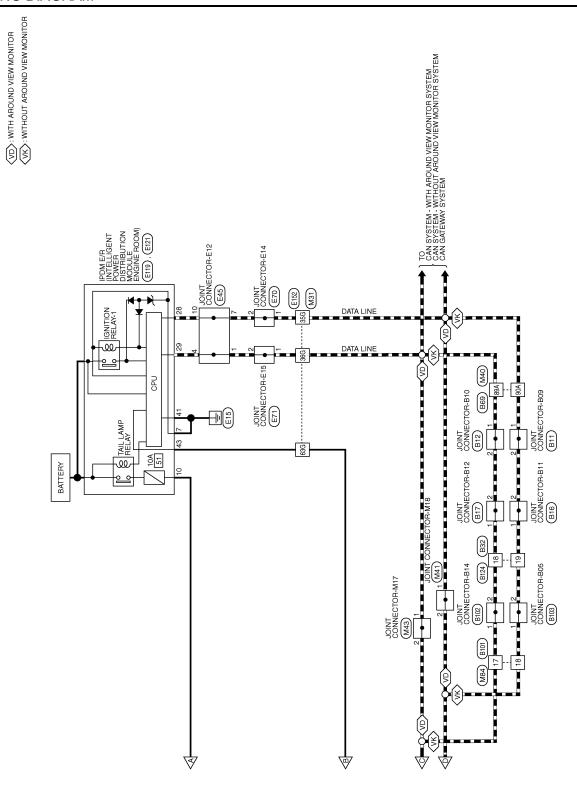
Connector No. D552

# TRAILER TOW

Wiring Diagram

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Connector Name | BCM (BODY CONTROL | MODULE)

M19

Connector No.

BLACK

Connector Color

# TRAILER TOW CONNECTORS

M18	connector Name BCM (BODY CONTROL	MODULE)	141100	GREEN
Connector No. N	Connector Name		"" ""	Corrector Color   GREEN
M3	Connector Name FUSE BLOCK (J/B)	WHITE		
Connector No. M3	Connector Name	Connector Color   WHITE		

	IMS	
аше	ame FUSE BLOCK (J/B)	
olor	olor WHITE	
	3N	

Signal Name	1	
Color of Wire	W	
Terminal No.	N9	

Signal Name	CAN-L	CAN-H	IGN USM OUT 1	COMBI SW OUT 5	COMBI SW OUT 4	COMBI SW OUT 3	COMBI SW OUT 2	COMBI SW OUT 1
Color of Wire	Ь	٦	Ь	BG	Ь	В	Э	Μ
Terminal No.	29	09	20	75	9/	77	78	62

Signal Name	COMBI SW IN 5	COMBI SW IN 4	COMBI SW IN 3	COMBI SW IN 2	COMBI SW IN 1
Color of Wire	M	BG	œ	G	Ь
rminal No.	10	11	12	13	14

Signal Name	COMBI SW IN 5	COMBI SW IN 4	COMBI SW IN 3	COMBI SW IN 2	COMBI SW IN 1
Color of	<b>S</b>	BG	œ	В	۵
Terminal No. Color of	10	=	12	13	14

l			
	M28	Connector Name COMBINATION SWITCH	WHITE
	Connector No.	Connector Name	Connector Color WHITE

Signal Name

Color of Wire

Terminal No.

BG

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ω 6 Q

Connector Name CC	Connector Color Wi	S.
Connect	Connect	H.S.

Connector Name BCM (BODY CONTROL MODULE)

M20

Connector No.

GRAY

Connector Color

H.S.	

88 87 86 85 84 83 82 81	100 99 98 97 96 95 94 93	Signal Name	TRAILER FLASHER RL	TRAILER FLASHER RR	REVERSE LAMP OUT
91 90 89	103 102 101	Color of Wire	Œ	Ь	FG
92	1041	Terminal No.	98	87	104

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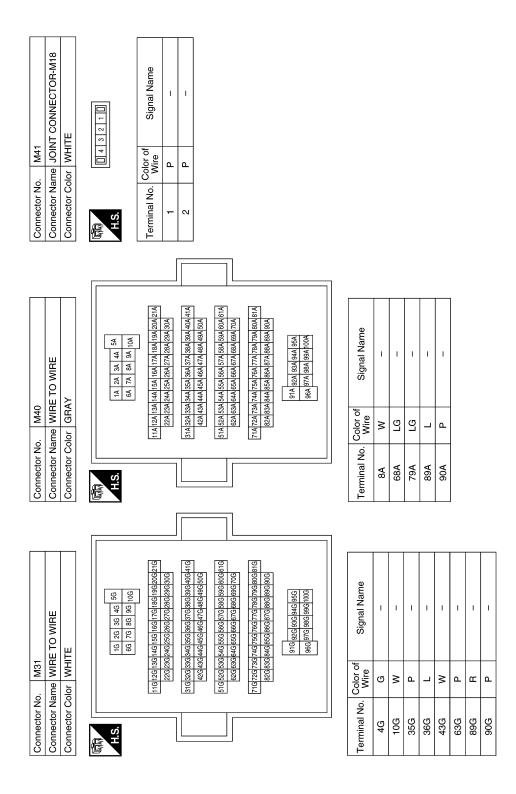
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	ı			ı							
	Connector Name ELECTRIC BRAKE	(PRE-WIRING)	E		φ (C)	Signal Name	1	ı	1	1	
M76	ne ELEC	7 H	or WHI	2	6	Solor of Wire	В	>	۸	ŋ	
Connector No.	Connector Nan		Connector Color WHITE		H.S.	Terminal No. Wire	1	2	8	2	
			7					]			
	E BLOCK (J/B)	NW		7R 6R 5R 4R 3R 2R 1R 16R 15R 14R 13R 12R 11R 10R 9R 8R		Signal Name	1				
M68	ne FUSE	or BRO		7R 6F 16R 15F		Solor of Wire	ГG				
Connector No.	Connector Name FUSE BLOCK (J/B)	Connector Color BROWN			H.S.	Terminal No. Wire	2R				
			_		_						
	T CONNECTOR-M17	31		3 2 1		Signal Name	ı	1			
M43	ne JOIN	JI WHI		4		Solor of Wire	٦	_			
Connector No.	Connector Name JOINT CONNECT	Connector Color   WHITE			H.S.	Terminal No. Color of Wire	1	2			

Connector No. M120	Connector Name JOINT CONNECTOR-M21	Connector Color WHITE	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Terminal No.   Color of   Signal Name   Wire	1 LG -
			2 1 18 17		
M84	Connector Name WIRE TO WIRE	Connector Color WHITE	16   15   14   13   12   11   10   9   8   7   6   5   4   3   2   2   3   3   3   3   3   3   3	Terminal No. Color of Wire Signal Name	ı

Signal Name	BAT BCM FUSE	GND 2	BAT POWER F/L	GND 1	
Color of Wire	×	В	Μ	В	
Terminal No. Wire	131	134	139	143	

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Connector No. M81
Connector Name BCM (BODY CONTROL MODULE)

Connector Color WHITE

									_		_		_		
Connector No. E25 Connector Name TRAILER TURN RELAY RH Connector Color BLUE		Signal Name	_	-	_	I		TO WIRE			Signal Name	ı			
. E25 me TRAIL lor BLUE	N   N   N   N   N   N   N   N   N   N	Color of Wire	Ь	٦	Ь	5	. E35	me WIRE			Color of Wire	>			
Connector No. Connector Name Connector Color	H.S.	Terminal No.	1	2	3	5	Connector No.	Connector Name WIRE TO WIRE		是 H.S.	Terminal No.	-			
LH LH															
Connector No. E24  Connector Name TRAILER TURN RELAY LH  Connector Color BLUE		Signal Name	-	1	ı	ı		TO WIRE		10 9 8 7 6	Signal Name	ı	ı	_	1
E24 me TRAIL lor BLUE	20 20 20	Color of Wire	Д	Œ	۵	M	. E33	me WIRE T		2 2 1 4 1 1 1	Color of Wire	œ	_	В	M
Connector No. Connector Name	国 H.S.	Terminal No.	1	2	3	5	Connector No.	Connector Name WIRE TO WIRE		E.S.	Terminal No.	2	9	11	12
Connector No. M181 Connector Name JOINT CONNECTOR-M36 Connector Color WHITE	3 2 1 1	Signal Name	ı	ı				Connector Name FUSE BLOCK (J/B)	L	44M 34M C	Signal Name	1	1	1	ı
M181 ame JOIN	4	87	>	>			). E28	ame FUSE E		4M 3M 100 100 100 100 100 100 100 100 100 10	Color of Wire	>	_	н	œ
Connector No. M181 Connector Name JOINT C	原动 H.S.	Terminal No.	-	2			Connector No.	Connector Name		H.S.	Terminal No.	5M	W9	7M	8M

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	Connector Name JOINT CONNECTOR-E01 Connector Color WHITE	11 10 9 8 7 6 5 4 3 2 1 22 21 20 19 18 17 16 15 14 13 12 33 32 31 30 29 28 27 26 25 24 23	Signal Name	ı	ı	ı	ı	I			Connector Name JOINT CONNECTOR-E15
E44	me JOI lor WF	22 21 20 19 33 32 31 30	Color of Wire	>	>	>	۳	Œ		. E71	me JOI
Connector No.	Connector Name Connector Color	H.S.	Terminal No.	12	13	41	20	21		Connector No.	Connector Na
	Connector Name STOP LAMP RELAY Connector Color BLUE		Signal Name	I	I	_	_				Connector Name JOINT CONNECTOR-E14
E39	ne STOP or BLUE		Color of Wire	≥	В	Υ	В			E70	ne JOII
Connector No.	Connector Name Connector Color	H.S.	Terminal No.	-	2	3	5			Connector No.	Connector Nan
	OP LAMP SWITCH	(a) (b) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	Signal Name	I	I						Connector Name JOINT CONNECTOR-E12
E38	ne STC		Color of Wire	>	>					E45	JOI et
Connector No.	Connector Name STOP LAMP SWIT Connector Color WHITE	H.S.	Terminal No.	-	2					Connector No.	Connector Nan

				_			
	Connector Name JOINT CONNECTOR-E15	X	5 4 3 2 2 1		Signal Name	_	1
E71	ne JOIN	or BLA(		-	Solor of Wire	٦	_
Connector No.	Connector Nar	Connector Color BLACK	H.S.	-	Terminal No. Color of Wire	1	2
	Connector Name JOINT CONNECTOR-E14	\ \	4 3 2 1		Signal Name	1	1
Connector No. E70	JOINT	Connector Color BLACK	9 2	-	Terminal No. Wire	Д.	Ь
	۱E	Ö		}	<u>.</u>		

r of Signal Name	-	ı	ı	-
Color	٦	٦	_	Ь
Terminal No. Wire	1	4	7	10

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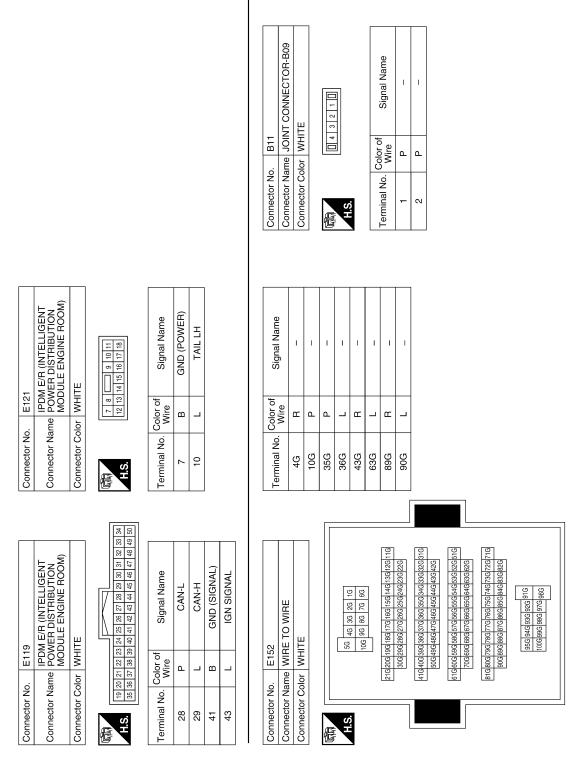
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Connector Color BLUE



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Connector No. B17  Connector Name JOINT CONNECTOR-B12  Connector Color WHITE		Color of Signal Name Wire	Connector No. B33  Connector Name WIRE TO WIRE  Connector Color BLACK	- T	Color of Signal Name Wire B	
Connector Nan Connector Nan Connector Cold	原 H.S.	Terminal No.	Connector No. Connector Name Connector Color	H.S.	Terminal No.	
T CONNECTOR-B11	2 1	Signal Name – – – – – – – – – – – – – – – – – – –	TO WIRE	11 10 9 8 7 6 5 4 3 2 11	Signal Name	
Connector Name JOINT CONNECTOR-B11 Connector Color WHITE	H.S.	Terminal No. Color of Wire 1 P 2 P	Connector No. B32 Connector Name WIRE TO WIRE Connector Color WHITE	H.S. (32 31 30 29 28 27	Terminal No. Color of Wire 18 L 19 P	
CONNECTOR-B10	2 1 1	Signal Name -	LOCK (J/B)	<u> </u>	Signal Name	
Connector No. B12  Connector Name JOINT CONNECTC  Connector Color WHITE	(1) 4 3 2 H.S.	Terminal No. Color of Wire 1 L 2 L	Connector No.   B29  Connector Name FUSE BLOCK (J/B)  Connector Color   WHITE	ET ST 4T S.	Terminal No. Color of Wire	

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Connector No.	No. B34	4	Connector No.	. B43		Connector No.	lo. B44	
Connector Name WIRE T	Name WII	Connector Name   WIRE TO WIRE Connector Color   WHITE	Connector Name WIRE TO WIRE Connector Color WHITE	me WIRE	TO WIRE	Connector Name WIRE TO WIRE Connector Color BLACK	ame WIRE T	RE TO WIRE
H.S.	- 4	2	所 H.S.	6 1 8 8	9 10 11 12	(京) H.S.	-	
Terminal No.	Color of Wire	of Signal Name	Terminal No.	Color of Wire	Signal Name	Terminal No.	Color of Wire	Signal Name
-	>	I	2	œ	1	-	>	ı
2	8	ı	9	_	ı	2	*	ı
ဇ	ŋ	ı	11	ŋ	ı			
9	တ	ı	12	>	ı			
7	8	ı						
Connector No.	No. B45	22	Connector No.	. B48		Connector No.	o. B63	
Connector N	Vame WIF	Connector Name WIRE TO WIRE	Connector Name WIRE TO WIRE	ıme WIRE	TO WIRE	Connector Na	ame JOII	Connector Name JOINT CONNECTOR-B01
Connector Color WHITE	Color WF	HTE	Connector Color	lor GRAY		Connector Color	olor WHITE	ITE
所.S.	2 8 2 6	2 3 mm 4 5 6 7 0 10 11 12 13 14 15 16	E S.H	-		H.S.	11 10 9 8	9 8 7 6 5 4 3 2 11 20 19 18 17 16 15 14 13 12
Terminal No.	Color of Wire	f Signal Name	Terminal No.	Color of Wire	Signal Name		33 32 31 3	30 29 28 27 26 25 24 23
2	BB	ı	-	>	1		_	
5	۵	1				Terminal No	Color of	Signal Name
9	T	1						
6	GR	ı				σ	BB	I
10	۸	ı				=	BB	1
11	۸	1				59	>	I
13	>	ı				33	>	ı
16	Œ	ı						

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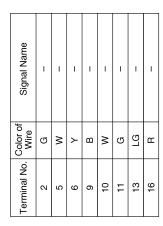
a	112	17 18 19 20 21 22 23 24	Terminal No. Color of Wire Signal Name 17 L – 18 P –	Connector No. B124	Connector Name WIRE TO WIRE Connector Color WHITE	H.S.	Terminal No. Color of Wire Signal Name	18 L –	19 P
1 1	1	1			CONNECTOR-B05	210	Signal Name	1	1
L 88		۵		. B103	me JOINT	1 4 3	Color of Wire	۵	۵
79A	89A	90A		Connector No	Connector Na Connector Co	原 H.S.	Terminal No.	-	0
		4A 3A 2A 1A 9A 8A 7A 6A	177 164 154 154 154 174 154 174 154 154 154 154 154 154 154 154 154 15		CONNECTOR-B14		Signal Name	1	1
		¥6 Ç	21 A 200 A 194 RE 300 A 294 RE 200 A 294 RE 200 A 294 RE 200 A 295	. B102	me JOINT lor WHITE		Color of Wire	_	_
4		Ņ.		Connector No.	Connector Na Connector Col	顾 H.S.		-	a
1	79A BR –	79A BR R9A B8 R9A L R9A L	S. S. 44 34 24 14 14 14 14 14 14 14 14 14 14 14 14 14	SA   4A   3A   2A   1A	Sh   4n   4n   4n   4n   4n   4n   4n   4	SA   4A   3A   2A   1A	T9A   BR	T9A   BR	124   14   14   15   16   16   16   16   16   16   16

Connector No.	B405	Connector No. B410	B410
Connector Name WIRE TO WIRE	WIRE TO WIRE	Connector Name	Connector Name WIRE TO WIRE
Connector Color WHITE	WHITE	Connector Color GRAY	GRAY

Signal Name	1	1	1	1	1
Color of Wire	g	×	Υ	g	Μ
Terminal No.   Color of	-	2	3	5	9



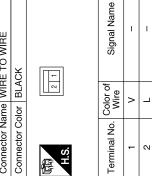
B426	WIRE TO WIRE	WHITE	
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	





Signal Name	_	I	ı	I	I	
Color of Wire	У	8	ŋ	G	8	
Terminal No.   Color of Wire	1	2	က	9	7	

B425	Connector Name WIRE TO WIRE	BLACK
Connector No.	Connector Name	Connector Color BLACK

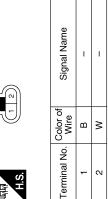


	IRE	
B404	WIRE TO W	BLACK
Connector No.	Connector Name WIRE TO WIRE	Connector Color BLACK



Signal Name	-	ı	
Color of Wire	В	Μ	
Terminal No.	1	2	

B411	Connector Name WIRE TO WIRE	BLACK	
Connector No.	Connector Name	Connector Color BLACK	



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Connector No.	B428		Connector No.	B431	
lame	TRAI	Connector Name TRAILER TOW RELAY 2	Connector Nan	ne TRAI	Connector Name TRAILER BACK-UP RELAY
olor	Connector Color BROWN	WN	Connector Color BLUE	or BLUE	111
		2   9   9   9   9   9   9   9   9   9	顾 H.S.	ركا	2 2 1
కి>	Terminal No. Wire	Signal Name	Terminal No. Color of Wire	Solor of Wire	Signal Name
	*	1	-	ŋ	ı
	В	1	2	В	I
	_	1	က	>	1
	>	ı	2	LG	ı
	_	1			
-					

Signal Name

Color of Wire

Terminal No.

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Connector Name TRAILER TOW RELAY 1

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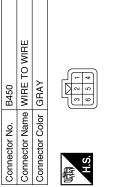
Connector No.

Connector Color BLUE

3	TRAILER	CK		Signal Name	I	1	I	I	1	I
. B453		lor BLACK		Color of Wire	>	В	9	ŋ	8	8
Connector No.	Connector Name	Connector Color	原。 H.S.	Terminal No.	-	2	ဇ	4	5	9

	E TO WIRE	CK		Signal Name	1	ı
. B451	me WIR	lor BLA		Color of Wire	В	8
Connector No.	Connector Name WIRE TO WIRE	Connector Color BLACK	S.H	Terminal No.	-	2

**→**|>



Signal Name	-	ı	ı	I	I	
Color of Wire	Э	Μ	>	В	Μ	
Terminal No. Wire	1	2	3	2	9	

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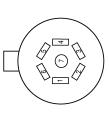
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	Signal Name	STOP/TURN LP	GROUND	ELECTRIC BRAK	STOP/TURN RE	BATTERY	RUNNING LAMP
	Color of Wire	1	1	ı	1	1	ı
į	erminal No.	-	2	ဗ	4	5	9

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# **BASIC INSPECTION**

# DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

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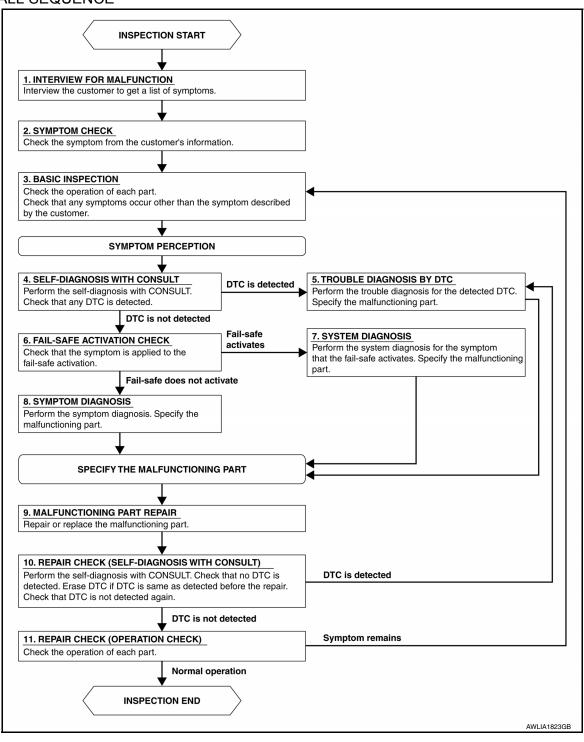
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#### **OVERALL SEQUENCE**



## **DIAGNOSIS AND REPAIR WORKFLOW**

#### < BASIC INSPECTION >

#### **DETAILED FLOW**

# 1.INTERVIEW FOR MALFUNCTION

Find out what the customer's concerns are.

>> GO TO 2.

# 2.SYMPTOM CHECK

Verify the symptom from the customer's information.

>> GO TO 3.

# 3.BASIC INSPECTION

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

>> GO TO 4.

### 4. SELF-DIAGNOSIS WITH CONSULT

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

#### Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 6.

# 5. TROUBLE DIAGNOSIS BY DTC

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

>> GO TO 9.

# 6. FAIL-SAFE ACTIVATION CHECK

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

#### Does the fail-safe activate?

YES >> GO TO 7.

NO >> GO TO 8.

# 7. SYSTEM DIAGNOSIS

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

>> GO TO 9.

## 8.SYMPTOM DIAGNOSIS

Perform the symptom diagnosis. Refer to EXL-133, "Symptom Table".

>> GO TO 9.

## 9. MALFUNCTION PART REPAIR

Repair or replace the malfunctioning part.

>> GO TO 10.

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

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

Is any DTC detected?

## **DIAGNOSIS AND REPAIR WORKFLOW** < BASIC INSPECTION > YES >> GO TO 5. NO >> GO TO 11. Α 11. REPAIR CHECK (OPERATION CHECK) Check the operation of each part. В Does it operate normally? >> Inspection End. YES >> GO TO 3. NO С $\mathsf{D}$ Е F G Н J Κ

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#### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

## DTC/CIRCUIT DIAGNOSIS

# POWER SUPPLY AND GROUND CIRCUIT BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE): Diagnosis Procedure

INFOID:0000000011573759

Regarding Wiring Diagram information, refer to BCS-55, "Wiring Diagram".

## 1. CHECK FUSE AND FUSIBLE LINK

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

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

#### Is the fuse or fusible link blown?

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

NO >> GO TO 2

## 2. CHECK POWER SUPPLY CIRCUIT

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

ВСМ		Ground	Voltage	
Connector	Terminal	Ordana	(Approx.)	
M81	131	Battery volta		
IVIO I	139	_	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

### 3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M81 terminals 134, 143 and ground.

BCM		Ground	Continuity	
Connector	Terminal	Ground	Continuity	
M81	134		Voc	
IVIO I	143	_	Yes	

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

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

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

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

#### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

## 1. CHECK FUSIBLE LINKS

Check that the following fusible links are not blown.

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

#### Is the fusible link blown?

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

NO >> GO TO 2

## 2. CHECK POWER SUPPLY CIRCUIT

- 1. Disconnect IPDM E/R connectors E118 and E120.
- 2. Check voltage between IPDM E/R connectors and ground.

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

#### Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

## 3. CHECK GROUND CIRCUIT

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

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

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

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Revision: September 2014 EXL-111 2015 Pathfinder

### **HEADLAMP (HI) CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

## HEADLAMP (HI) CIRCUIT

Description INFOID:0000000011151184

The IPDM E/R (intelligent power distribution module engine room) controls the headlamp high relay based on inputs from the BCM over the CAN communication lines. When the headlamp high relay is energized, power flows through fuses 34 and 35, located in the IPDM E/R. Power then flows to the front combination lamps to the headlamp high beam.

### Component Function Check

INFOID:0000000011151185

## 1. CHECK HEADLAMP (HI) OPERATION

#### **NWITHOUT CONSULT**

- 1. Start IPDM E/R auto active test. Refer to PCS-8, "Diagnosis Description".
- 2. Check that the headlamp switches to the high beam.

#### **WITH CONSULT**

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

HI: Headlamp switches to the high beam.

OFF : Headlamp OFF

#### Does the headlamp switch to the high beam?

YES >> Headlamp (HI) circuit is normal.

NO >> Refer to <u>EXL-112</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:0000000011151186

Regarding Wiring Diagram - Refer to EXL-21, "Wiring Diagram".

## 1. CHECK HEADLAMP (HI) FUSES

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

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	35	10A
Headlamp HI (RH)	IPDM E/R	34	10A

#### Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

## 2.CHECK HEADLAMP (HI) OUTPUT VOLTAGE

#### **®CONSULT ACTIVE TEST**

- 1. Turn the ignition switch OFF.
- Disconnect the front combination lamp harness connector E233 or E238.
- Turn the ignition switch ON.
- Select EXTERNAL LAMPS of IPDM E/R active test item.
- With EXTERNAL LAMP ON, check the voltage between the combination lamp harness connector and ground.

(+)			(-)	Voltage
	Connector		(-)	voltage
RH	E238	2	Ground	Ratteny voltage
LH	E233	3	Ground	Battery voltage

### **HEADLAMP (HI) CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

## 3.CHECK HEADLAMP (HI) CIRCUIT FOR OPEN

- Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R harness connector E217.
- 3. Check continuity between the IPDM E/R harness connector E217 and the front combination lamp harness connector.

	IPDM E/R	2	Front combination lamp		Continuity
Conr	nector	Terminal	Connector	Terminal	Continuity
RH	E217	80	E238	3	Yes
LH	EZII	81	E233	3	res

#### Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace the harness or connector.

## 4. CHECK FRONT COMBINATION LAMP (HI) GROUND CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Check continuity between the front combination lamp harness connector terminal 4 and ground.

	Connector	Terminal	_	Continuity
RH	E238	4	Ground	Yes
LH	E233	4	Ground	163

#### Is the inspection result normal?

YES >> Replace the headlamp bulb.

NO >> Repair or replace the harness or connector.

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### **HEADLAMP (LO) CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

## HEADLAMP (LO) CIRCUIT

Description INFOID:0000000011151187

The IPDM E/R (intelligent power distribution module engine room) controls the headlamp low relay based on inputs from the BCM over the CAN communication lines. When the headlamp low relay is energized, power flows through fuses 36 and 37, located in the IPDM E/R. Power then flows to the front combination lamps to the headlamp low beam.

### Component Function Check

INFOID:0000000011151188

## 1. CHECK HEADLAMP (LO) OPERATION

#### **NWITHOUT CONSULT**

- 1. Start IPDM E/R auto active test. Refer to PCS-8, "Diagnosis Description".
- 2. Check that the headlamp is turned ON.

#### NOTE:

HI/LO is repeated 1 second each when using the IPDM E/R auto active test.

#### CONSULT

- Select EXTERNAL LAMPS of IPDM E/R active test item.
- 2. While operating the test item, check that the headlamp is turned ON.

LO : Headlamp ON OFF : Headlamp OFF

#### Is the headlamp turned ON?

YES >> Headlamp (LO) is normal.

NO >> Refer to <u>EXL-114</u>, "<u>Diagnosis Procedure</u>".

#### Diagnosis Procedure

INFOID:0000000011151189

Regarding Wiring Diagram information - Refer to EXL-21, "Wiring Diagram".

## 1. CHECK HEADLAMP (LO) FUSES

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

Unit	Location	Fuse No.	Capacity
Headlamp LO (LH)	IPDM E/R	37	15A
Headlamp LO (RH)	IPDM E/R	36	15A

#### Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

## 2.CHECK HEADLAMP (LO) OUTPUT VOLTAGE

#### (P)CONSULT

- 1. Turn the ignition switch OFF.
- Disconnect the front combination lamp harness connector E232 or E237.
- Turn the ignition switch ON.
- 4. Select EXTERNAL LAMPS of IPDM E/R active test item.
- With EXTERNAL LAMP ON, check the voltage between the front combination lamp harness connector E232 or E237 terminal 1 and ground.

(+)		(-)	Voltage
Connector	Terminal	(-)	voltage

## **HEADLAMP (LO) CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

RH	E237	1	Ground	Battery voltage
LH	E232	,	Ground	Battery Voltage

#### Is the inspection result normal?

YES >> GO TO 4. NO >> GO TO 3.

3. CHECK HEADLAMP (LO) CIRCUIT FOR OPEN

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector E217.
- 3. Check continuity between the IPDM E/R harness connector and the front combination lamp harness connector E232 or E237.

	IPDM E/R		Front combination lamp		Continuity
Con	nector	Terminal	Connector	Terminal	Continuity
RH	E217	75	E237	1	Yes
LH	LZ17	76	E232		162

#### Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace the harness or connector.

## 4. CHECK FRONT COMBINATION LAMP (LO) GROUND CIRCUIT

Turn the ignition switch OFF.

2. Check continuity between the front combination lamp harness connector E232 or E237 terminal 2 and ground.

Coni	nector	Terminal	_	Continuity
RH	E237	2	Ground	Yes
LH	E232	2	Ground	165

#### Is the inspection result normal?

YES >> Replace the headlamp bulb.

NO >> Repair or replace the harness or connector.

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#### DAYTIME RUNNING LIGHT RELAY CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

#### DAYTIME RUNNING LIGHT RELAY CIRCUIT

Description INFOID:0000000011151190

The BCM sends a daytime running light request to the IPDM E/R via the CAN communication lines. The power flows through fuse 43 located in IPDM E/R to the daytime running light relay coil. When the IPDM E/R operates the daytime running light relay, power is sent to the daytime running lamps.

#### Diagnosis Procedure

INFOID:0000000011151191

Regarding Wiring Diagram information, refer to EXL-29, "Wiring Diagram".

## 1. CHECK DAYTIME RUNNING LIGHT RELAY VOLTAGE SUPPLY

- Turn the ignition switch OFF.
- 2. Disconnect the daytime running light relay harness connector E4.
- 3. Turn the ignition switch ON.
- 4. Check the voltage between the following daytime running light relay harness connector E4 terminals and ground.

(+)		( )	Voltago	
Connector	Terminal	(-)	Voltage	
	2			
E4	5	Ground	Battery voltage	
	7			

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK DAYTIME RUNNING LIGHT RELAY CIRCUIT

- Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R harness connector E121.
- Check continuity between the IPDM E/R harness connector E121 and the daytime running light relay harness connector E4.

Daytime r	unning light relay	IPDM E/R		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
	2				
E4	5	E121	14	Yes	
	7				

Check continuity between the IPDM E/R harness connector E121 and ground.

Connector	Terminal	(—)	Continuity
E121	14	Ground	No

#### Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace the harness or connector.

## 3.CHECK DAYTIME RUNNING LAMP RELAY COIL CIRCUIT

1. Check continuity between the IPDM E/R harness connector E218 and daytime running light relay harness connector E4.

#### DAYTIME RUNNING LIGHT RELAY CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

IPDM	I E/R	Daytime running light relay  Connector Terminal		Continuity	
Connector	Terminal				
E218	85	E4	1	Yes	

2. Check continuity between the IPDM E/R harness connector E218 and ground.

Connector	Terminal	Ground	Continuity
E218	85	Clound	No

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the harness or connector.

## 4. CHECK DAYTIME RUNNING LIGHT RELAY

Check the daytime running light relay. Refer to EXL-117, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace relay.

### CHECK DAYTIME RUNNING LAMP CIRCUIT FOR OPEN

Turn the ignition switch OFF.

2. Disconnect the front fog lamp harness connector E303 or E304 in question.

3. Check continuity between the daytime running light relay harness connector E4 and the front fog lamp harness connector E303 or E304.

Front fo	Front fog lamp		Daytime running light relay		
Connector	Terminal	Connector	Terminal	Continuity	
LH E303	2	E4	6	Yes	
RH E304	3	C <del>4</del>	3	165	

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the harness or connector.

## 6.CHECK DAYTIME RUNNING LAMP GOUND CIRCUIT FOR OPEN

1. Disconnect front fog lamp harness connector E303 or E304 in question.

2. Check continuity between the front fog lamp harness connector E303 or E304 terminal 4 and ground.

Connector	Terminal	(-)	Continuity
LH E303	1	Ground	Yes
RH E304	7	Olouliu	163

#### Is the inspection result normal?

YES >> Check the daytime running light system relay. Refer to EXL-117, "Component Inspection".

NO >> Repair or replace the harness or connector.

#### Component Inspection

## 1. CHECK DAYTIME RUNNING LIGHT RELAY CONTINUITY

Turn ignition switch OFF.

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- 2. Remove daytime running light relay.
- 3. Apply 12V direct current between daytime running light relay terminals and check continuity.

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**EXL-117** 

#### **DAYTIME RUNNING LIGHT RELAY CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

Terminal	Condition	Continuity
3 - 5	12V direct current applied between terminals 1 and 2.	Yes
6 - 7	No current applied.	No

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace daytime running light relay.

#### FRONT FOG LAMP CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

#### FRONT FOG LAMP CIRCUIT

Description INFOID:0000000011151193

The IPDM E/R (intelligent power distribution module engine room) controls the front fog lamp relay based on inputs from the BCM via the CAN communication lines. When the front fog lamp relay is energized, power flows from the front fog lamp relay in the IPDM E/R to the front fog lamps.

## Component Function Check

## 1. CHECK FRONT FOG LAMP OPERATION

## ®WITHOUT CONSULT

- 1. Activate IPDM E/R auto active test. Refer to PCS-8, "Diagnosis Description".
- Check that the front fog lamp is turned ON.

#### (P)WITH CONSULT

- Select EXTERNAL LAMPS of IPDM E/R active test item.
- 2. While 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-119, "Diagnosis Procedure".

### Diagnosis Procedure

Regarding Wiring Diagram information, refer to EXL-50, "Wiring Diagram".

## 1. CHECK FRONT FOG LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
Front fog lamp	IPDM E/R	42	15A

#### Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

## 2.CHECK FRONT FOG LAMP OUTPUT VOLTAGE

- 1. Turn the ignition switch OFF.
- Disconnect the front fog lamp harness connector E305 or E306.
- 3. Turn the ignition switch ON.
- Turn the front fog lamps ON.
- 5. Check the voltage between the fog lamp harness connector E305 or E306 terminal 1 and ground.

(+)		(-)	Voltage		
С	onnector	Terminal	(-)	(Approx.)	
LH	E305	1	Ground	Pattony voltago	
RH	E306	ı	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

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#### FRONT FOG LAMP CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

## 3.CHECK FRONT FOG LAMP OPEN CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R harness connector E217.
- 3. Check continuity between the IPDM E/R harness connector E217 and the front fog lamp harness connector E305 or E306.

	IPDM E/R		Front fog	Continuity	
Conr	nector	Terminal	Connector	Connector Terminal	
LH	E217	79	E305	1	Yes
RH	EZII	78	E306	1	165

#### Is the inspection result normal?

YES >> Replace IDPM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace the harness or connector.

## 4. CHECK FRONT FOG LAMP GROUND CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Check continuity between the front fog lamp harness connector E305 or E306 terminal 2 and ground.

Connector		Terminal	_	Continuity
LH	E305	2	Ground	Yes
RH	E306	2	Ground	

#### Is the inspection result normal?

YES >> Inspect the fog lamp bulb.

NO >> Repair or replace the harness or connector.

#### < DTC/CIRCUIT DIAGNOSIS >

#### PARKING LAMP CIRCUIT

Description INFOID:0000000011151196

The IPDM E/R (intelligent power distribution module engine room) controls the tail lamp relay based on inputs from the BCM via the CAN communication lines. When the tail lamp relay is energized, power flows through fuse 51 and 52, located in the IPDM E/R. Power then flows to the front combination lamps, rear combination lamps and license plate lamps.

## Component Function Check

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### 1. CHECK PARKING LAMP OPERATION

#### **NWITHOUT CONSULT**

1. Activate IPDM E/R auto active test. Refer to PCS-8, "Diagnosis Description".

Check that the parking lamp is turned ON.

#### (P)WITH CONSULT

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

2. While 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.

>> Refer to EXL-121, "Diagnosis Procedure". NO

### Diagnosis Procedure

INFOID:0000000011151198

Regarding Wiring Diagram information, refer to EXL-67, "Wiring Diagram".

## 1. CHECK PARKING LAMP FUSES

Turn the ignition switch OFF.

Check that the following fuses are not blown.

Unit	Location	Fuse No.	Capacity
Parking lamps	IPDM E/R	51	10A
	IF DIVI L/IX	52	10A

#### Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

## 2.CHECK TAIL LAMP RELAY OUTPUT (VOLTAGE)

- Disconnect the front or rear combination lamp connector or license plate lamp connector in question.
- Turn the ignition switch ON.
- Turn the parking lamps ON.
- With the parking lamps ON, check voltage between the front combination lamp (parking) connector and ground.

Front combination lamp (parking)			( )	Voltage	
Connector		Terminal	(-)	(Approx.)	
LH	E235	7	Ground	Battery voltage	
RH	E240	ľ	Ground	battery voitage	

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#### < DTC/CIRCUIT DIAGNOSIS >

5. With the parking lamps ON, check voltage between the front combination lamp (side marker) connector and ground.

Front combination lamp (side marker)			(-)	Voltage	
	Connector	Terminal	(-)	(Approx.)	
LH	E236	0	Ground	Battery voltage	
RH	E241	9	Ground	Dattery Voltage	

6. With the parking lamps ON, check voltage between the rear combination lamp (tail) connector and ground.

Rear c	ombination lamp (tail)		(-)	Voltage	
	Connector	Terminal		(Approx.)	
LH	B406	3	Ground	Battery voltage	
RH	B407	3	Ground	Battery Voltage	

7. With the parking lamps ON, check voltage between the rear combination lamp (side marker) connector and ground.

Rear comb	Rear combination lamp (side marker)		(-)	Voltage	
	Connector	Terminal	( )	(Approx.)	
LH	B412	6	Ground	Pattery veltage	
RH	B413	О	Ground	Battery voltage	

8. With the parking lamps ON, check voltage between the license plate lamp connector and ground

License plate lamp		License plate lamp		Voltage	
	Connector	Terminal	(-)	(Approx.)	
LH	D561	1	Ground	Pattory voltage	
RH	D562	<b>1</b>	Gloulia	Battery voltage	

#### Are the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

## 3.CHECK PARKING LAMP CIRCUIT (OPEN)

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

	IPDM E/R	M E/R Front combination lamp (parking)  Continuit		Front combination lamp (parking)	
Conne	ector	Terminal	Connector	Terminal	Continuity
LH	E218	90	E235	7	Yes
RH	LZIO	90	E240	,	163

4. Check continuity between the IPDM E/R harness connector and the front combination lamp (side marker) harness connector.

IPDM E/R	Front combination lamp (side marker)			
Connector	Terminal	Connector	Terminal	

#### < DTC/CIRCUIT DIAGNOSIS >

LH	<b>⊏</b> 210	00	E236	0	Voc
RH	LZIO	90	E241	9	Yes

5. Check continuity between the IPDM E/R harness connector and the rear combination lamp (tail) harness connector.

Continuity	n lamp (tail)	Rear combination	IPDM E/R		
Continuity	Terminal	Connector	Terminal	ector	Conne
Yes	2	B406	10	E121	LH
ies	3	B407	9	E121	RH

6. Check continuity between the IPDM E/R harness connector and the rear combination lamp (side marker) harness connector.

IPDM E/R		Rear	combination lamp (side	marker)	
Co	nnector	Terminal	Connector	Terminal	
LH	E121	10	B412	6	Yes
RH	LIZI	9	B413		165

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

IPDM E/R		IPDM E/R License plate lamp		Continuity	
-	Connector	Terminal	Connector	Terminal	Continuity
LH	E121	10	D561	1	Yes
RH	E 12 I	10	D562	<b>'</b>	165

#### Are the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace the harness or connector.

## 4. CHECK PARKING LAMP GROUND CIRCUITS

1. Turn the ignition switch OFF.

2. Check continuity between the front combination lamp (parking) harness connector and ground.

	Front combination lamp (parking)			Continuity
	Connector	Terminal	(-)	Continuity
LH	E235	8	Ground	Yes
RH	E240		Ground	165

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

	Front combination lamp (side marker)			Continuity	
Connector		Terminal	(-)	Continuity	
LH	E236	10	Ground	Yes	
RH	E241	10	Ground	165	

4. Check continuity between the rear combination lamp (tail) harness connector and ground.

Rear combination lamp (tail)		(-)	Continuity
Connector	Terminal	(-)	Continuity

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#### < DTC/CIRCUIT DIAGNOSIS >

LH	B406	2	Cround	Voc
RH	B407	2	Ground	res

5. Check continuity between the rear combination lamp (side marker) harness connector and ground.

Rear combination lamp (side marker)			( )	Continuity
	Connector Terminal		(-)	Continuity
LH	B412	7	Ground	Yes
RH	B413		Giouria	

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

License plate lamp			( )	Continuity
Connector		Terminal	(-)	Continuity
LH	D561	2	Cround	Yes
RH	D562		Ground	

#### Are the inspection result normal?

YES >> Inspect the parking, side marker or license plate lamp bulb.

NO >> Repair or replace the harness or connector.

#### TURN SIGNAL LAMP CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

## TURN SIGNAL LAMP CIRCUIT

Description INFOID:0000000011151199

The BCM monitors inputs from the combination switch (lighting and turn signal switch) to determine when to activate the turn signals. The BCM outputs voltage to the left and right turn signals during turn signal operation or both during hazard warning operation. The BCM sends a turn signal indicator request to the combination meter via the CAN communication lines.

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

#### NOTE:

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

### Component Function Check

## 1. CHECK TURN SIGNAL LAMP

#### (P)CONSULT

1. Select FLASHER of BCM (FLASHER) active test item.

2. While operating the test items, check that the turn signal lamp blinks.

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

#### Is the inspection result normal?

YES >> Turn signal lamp circuit is normal.

>> Refer to EXL-125, "Diagnosis Procedure". NO

### Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a>EXL-58</a>, "Wiring Diagram".

## 1. CHECK TURN SIGNAL LAMP BULB

Check the applicable lamp bulb to be sure the proper bulb standard is in use and the bulb is not open.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the bulb.

## 2.check turn signal lamp output voltage

Turn the ignition switch OFF.

- 2. Disconnect the front or rear combination lamp harness connector in question.
- 3. Turn the ignition switch ON.
- Operate the turn signal switch.

5. While the turn signal is operating, check the voltage between the front combination lamp harness connector and ground.

(+)		(-)	Voltage
Connector	Terminal	(-)	(Approx.)

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#### **TURN SIGNAL LAMP CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

RH	E239			
LH	E234	5	Ground	(V) 15 10 5 0 1 s

While the turn signal is operating, check the voltage between the rear combination lamp harness connector and ground.

	(+)		(-)	Voltage (Approx.)
	Connector	Terminal	(-)	(Approx.)
RH	B409			
LH	B408	4	Ground	(V) 15 10 5 0 1 s

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 3.

## 3.CHECK TURN SIGNAL LAMP CIRCUIT FOR OPEN

- 1. Turn the ignition switch OFF.
- 2. Disconnect BCM harness connector M20 or M80.
- 3. Check continuity between the BCM harness connector M80 and the front combination lamp harness connector.

ВСМ		Front combination lamp		Continuity		
Cor	nnector	Terminal	Connector	Terminal	Continuity	
LH	M80	117	E234	5	Yes	
RH	IVIOO	105	E239	3	165	

4. Check continuity between the BCM harness connector M20 and the rear combination lamp harness connector.

	BCM Rear combina		ination lamp	Continuity	
Cor	nnector	Terminal	Connector	Terminal	Continuity
LH	M20	103	B408	4	Yes
RH	IVIZU	92	B409	4	165

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the harness or connector.

## 4. CHECK TURN SIGNAL LAMP SHORT CIRCUIT

1. Check continuity between the BCM harness connector M80 and ground.

#### **TURN SIGNAL LAMP CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

	ВСМ			Continuity	
Cor	nnector	Terminal	Ground	Continuity	
LH	MOO	117	Giodila	No	
RH	M80	105		INO	

2. Check continuity between the BCM harness connector M20 and ground.

	BCM			Continuity
Cor	nnector	Terminal	Cround	Continuity
LH	M20	103	Ground	No
RH	IVIZU	92		INU

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".

NO >> Repair or replace the harness or connector.

## 5. CHECK TURN SIGNAL LAMP GROUND CIRCUIT

1. Turn the ignition switch OFF.

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

Front combination lamp			( )	Continuity	
Connec	Connector		(-)	Continuity	
LH	E234	6	Ground	Yes	
RH	E239	O	Giouna	165	

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

Rear combination lamp			(_)	Continuity
Connec	ctor	Terminal	(-)	Continuity
LH	B408	5	Ground	Yes
RH	B409	5	Giouna	165

#### Is the inspection result normal?

YES >> Replace the malfunctioning lamp.

NO >> Repair or replace the harness or connector.

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### **OPTICAL SENSOR**

Description INFOID:0000000011151202

The optical sensor measures ambient light and transmits the optical sensor signal to the BCM.

### Component Function Check

INFOID:0000000011151203

## 1. CHECK OPTICAL SENSOR SIGNAL TO BCM

#### (P)CONSULT

- 1. Turn the ignition switch ON.
- Select OPTI SEN (DTCT) of BCM (HEAD LAMP) DATA MONITOR item.
- Turn the lighting switch to AUTO.

Monitor item	Condition	Voltage (Approx.)
OPTI SEN (DTCT)	When outside of vehicle is bright	3.1 V or more *
OF IT SEN (DTCT)	When outside of vehicle is dark	0.6 V or less

<sup>\*:</sup>Outside light varies. The value may be less than the standard value if brightness is weak.

#### Is the inspection result normal?

YES >> Optical sensor is normal.

NO >> Refer to <u>EXL-128</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:0000000011151204

Regarding Wiring Diagram information, refer to <u>EXL-40, "Wiring Diagram"</u>.

## 1. CHECK OPTICAL SENSOR POWER SUPPLY INPUT

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

Ontion	(+)	( )	Voltage	
Optical sensor  Connector Terminal		(-)	Voltage (Approx.)	
M15	1	Ground	5 V	

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 4.

## 2.CHECK OPTICAL SENSOR GROUND INPUT

Check voltage between optical sensor harness connector and ground.

	(+)			
Optio	al sensor	(–)	Voltage (Approx.)	
Connector	Terminal		( FF - )	
M15	3	Ground	0 V	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 6.

### 3. CHECK OPTICAL SENSOR SIGNAL OUTPUT

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

#### **OPTICAL SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

(+ Optical	<u></u>	(-)	Condition		Voltage (Approx.)
Connector	Terminal				( FF - )
M15	2	Cround	Ontical concer	When illuminating	3.1 V or more *
IVI I O	2	Ground Optical se	Optical Serisor	When shutting off light	0.6 V or less

<sup>\*:</sup> Illuminate the optical sensor. The value may be less than the standard if brightness is weak.

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace the optical sensor. Refer to EXL-150, "Removal and Installation".

### 4. CHECK OPTICAL SENSOR OPEN CIRCUIT

1. Turn ignition switch OFF.

Disconnect optical sensor connector and BCM connector.

3. Check continuity between optical sensor harness connector and BCM harness connector.

Optica	Optical sensor		ВСМ	
Connector	Terminal	Connector	Terminal	Continuity
M15	1	M18	3	Yes

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the harness or connector.

#### CHECK OPTICAL SENSOR SHORT CIRCUIT

Check continuity between optical sensor harness connector and ground.

Optica	l sensor		Continuity
Connector	Terminal	Ground	Continuity
M15	1		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".

NO >> Repair or replace the harness or connector.

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

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

Optica	l sensor	BCM		BCM Continuity		Continuity
Connector	Terminal	Connector	Terminal	Continuity		
M15	3	M18	17	Yes		

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".

NO >> Repair or replace the harness or connector.

### .CHECK OPTICAL SENSOR SIGNAL OPEN CIRCUIT

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

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#### **OPTICAL SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

Optical	sensor	BCM		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M15	2	M18	4	Yes

#### Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace the harness or connector.

## 8.CHECK OPTICAL SENSOR SHORT CIRCUIT

Check continuity between optical sensor harness connector and ground.

Optical sensor			Continuity
Connector	Terminal	Ground	Continuity
M15	2		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

NO >> Repair or replace the harness or connector.

#### **HAZARD SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

### HAZARD SWITCH

## Component Function Check

#### INFOID:0000000011151205

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## 1. CHECK HAZARD SWITCH SIGNAL BY CONSULT

## (E)CONSULT DATA MONITOR

- Turn ignition switch ON.
- Select HAZARD SW of BCM (FLASHER) DATA MONITOR item.
- While operating the hazard switch, check the monitor status.

Monitor item	Condition		Monitor status
HAZARD SW	Hazard switch	ON	On
HAZAKO OW	riazaru switch	OFF	Off

#### Is the inspection result normal?

YES >> Hazard switch circuit is normal.

NO >> Refer to EXL-131, "Diagnosis Procedure".

### Diagnosis Procedure

INFOID:0000000011151206

Regarding Wiring Diagram information, refer to EXL-58, "Wiring Diagram".

## 1. CHECK HAZARD SWITCH SIGNAL INPUT

- Turn ignition switch OFF.
- 2. Disconnect hazard switch harness connector M26.
- Turn ignition switch ON.
- Check voltage between hazard switch harness connector M26 and ground.

Hazaro	+) I switch	(-)	Voltage (Approx.)
Connector	Terminal		
M26	2	Ground	(V) 15 10 5 0 → ←10ms JPMIA0154GB

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

## 2.check hazard switch signal open circuit

- Turn ignition switch OFF.
- 2. Disconnect BCM harness connector M18.
- Check continuity between hazard switch harness connector and BCM harness connector.

Hazard	Hazard switch		ВСМ	
Connector	Terminal	Connector	Terminal	Continuity
M26	2	M18	36	Yes

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the harness or connector.

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#### **HAZARD SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

## 3. CHECK HAZARD SWITCH SIGNAL SHORT CIRCUIT

Check continuity between hazard switch harness connector and ground.

Hazard switch			Continuity
Connector	Terminal	Ground	Continuity
M26	2		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".

NO >> Repair or replace the harness or connector.

## 4. CHECK HAZARD SWITCH GROUND OPEN CIRCUIT

Check continuity between hazard switch harness connector and ground.

Hazard switch			Continuity
Connector	Terminal	Ground	Continuity
M26	3		Yes

#### Is the inspection result normal?

YES >> Replace hazard switch. Refer to <a href="EXL-152">EXL-152</a>, "Removal and Installation".

NO >> Repair or replace the harness or connectors.

#### **EXTERIOR LIGHTING SYSTEM SYMPTOMS**

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

## **EXTERIOR LIGHTING SYSTEM SYMPTOMS**

Symptom Table

#### **CAUTION:**

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

Sym	otom	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     Harness between the front combination lamp and ground	Headlamp (HI) circuit Refer to <u>EXL-112</u> .
switch to the high beam.	Both sides	_	Symptom diagnosis BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM Refer to EXL-136.
High beam indicator lamp lamp switched to the high		BCM     Combination meter	Combination meter     Data monitor HI-BEAM IND     BCM (HEAD LAMP)     Active test "HEADLAMP"
Headlamp does not switch	to the low beam.	Combination switch (lighting and turn signal switch) Harness between the combination switch and BCM BCM IPDM E/R	Combination switch (lighting and turn signal switch) Refer to BCS-79.
		High beam request signal BCM IPDM E/R	IPDM E/R Data monitorHL HI REQ
Headlamp does not turn ON.	One side	Fuse     Harness between IPDM E/R and the front combination lamp     Front combination lamp     Harness between the front combination lamp and ground	Headlamp (LO) circuit Refer to <u>EXL-114</u> .
	Both sides	_	Symptom diagnosis BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON Refer to EXL-137.
Llandlawa daga saktura	When the ignition switch is turned ON	BCM     Combination switch (lighting and turn signal switch)	Combination switch (lighting and turn signal switch) Refer to BCS-79.
Headlamp does not turn OFF.	The ignition switch is turned OFF (After activating the battery saver).	IPDM E/R	_
Headlamp is not turned ON/OFF with lighting switch AUTO.		Combination switch (lighting and turn signal switch) Harness between combination switch and BCM BCM	Combination switch Refer to BCS-79.
		Optical sensor     Harness between optical sensor and BCM     BCM	Optical sensor Refer to <u>EXL-128</u> .

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## **EXTERIOR LIGHTING SYSTEM SYMPTOMS**

## < SYMPTOM DIAGNOSIS >

Symp	otom	Possible cause	Inspection item
Daytime running light system does not activate. (if equipped)		Fuse     Harness between IPDM E/R and the daytime running light relay     Harness between daytime running light relay and the daytime running lamp     Harness between the daytime running lamp and ground     Daytime running light bulb     IPDM E/R     Daytime running light relay     BCM	Symptom diagnosis  Daytime running light system inoperative.  Refer to EXL-140.
Front fog lamp is not turned ON.	One side	Front fog lamp bulb Harness between IPDM E/R and front fog lamp Front fog lamp IPDM E/R	Front fog lamp circuit Refer to <u>EXL-119</u> .
turned ON.	Both sides	_	Symptom diagnosis BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON Refer to EXL-139.
Parking lamp is not turned ON.	One side	Parking lamp bulb     Harness between IPDM E/R and front/rear combination lamp     Harness between front/rear combination lamp and ground     Front/rear combination lamp     IPDM E/R	Parking lamp circuit Refer to EXL-121.
	Both sides	_	Symptom diagnosis PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON Refer to EXL-138.
Turn signal lamp does not blink.	Indicator lamp is normal. (The applicable side performs the high flasher activation).	Hazard BCM and each turn signal lamp     Turn signal lamp bulb	Turn signal lamp circuit Refer to EXL-125.
	One side	Combination meter	_
Turn signal indicator lamp	Both sides (Always)	Turn signal indicator lamp signal BCM Combination meter	Combination meter     Data monitor TURN IND     BCM (FLASHER)     Active test FLASHER
does not blink.	Both sides (Does blink when activating hazard warning lamp with the ignition switch OFF)	Combination meter power supply and ground circuit     Combination meter	Combination meter Power supply and ground circuit Refer to MWI-61.
<ul> <li>Hazard warning lamp do</li> <li>Hazard warning lamp co signal is normal).</li> </ul>		Hazard switch     Harness between the hazard switch and BCM     BCM	Hazard switch Refer to <u>EXL-131</u> .

#### NORMAL OPERATING CONDITION

#### < SYMPTOM DIAGNOSIS >

## NORMAL OPERATING CONDITION

Description A

#### **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 for the control difference. This is normal.

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#### BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

< SYMPTOM DIAGNOSIS >

#### BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

Description INFOID:00000001115120S

The headlamps (both sides) do not switch to high beam when the lighting switch is in the HI or PASS setting.

### Diagnosis Procedure

INFOID:0000000011151210

## 1.combination switch (Lighting and turn signal switch) inspection

Check the combination switch (lighting and turn signal switch). Refer to <u>BCS-79</u>, "Symptom Table". Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK HEADLAMP (HI) REQUEST SIGNAL INPUT

### **©CONSULT DATA MONITOR**

- 1. Select HL HI REQ of IPDM E/R DATA MONITOR item.
- 2. While operating the lighting switch, check the monitor status.

Monitor item	Con	Monitor status	
HL HI REQ	Lighting switch position	HI or PASS	ON
HEHINEQ	Lighting switch position	Except for HI or PASS	OFF

#### Is the inspection results normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check the headlamp (HI) circuit. Refer to EXL-112, "Diagnosis Procedure".

#### Is the inspection results normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

## **BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON**

#### < SYMPTOM DIAGNOSIS >

## BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

Description INFOID:0000000011151211

The headlamps (both sides) do not turn ON in any lighting switch setting.

## Diagnosis Procedure

INFOID:0000000011151212

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## 1. CHECK COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)

Check the combination switch (lighting and turn signal switch). Refer to BCS-79, "Symptom Table".

#### Is the inspection results normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

## 2.CHECK HEADLAMP (LO) REQUEST SIGNAL INPUT

#### ©CONSULT DATA MONITOR

- 1. Select HL LO REQ of IPDM E/R DATA MONITOR item.
- 2. While operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
HL LO REQ	Lighting switch position	Headlamp	ON
TIL LO NEQ	Lighting switch position	OFF	OFF

#### Is the inspection results normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to <u>BCS-80</u>, "Removal and Installation".

## 3.HEADLAMP (LO) CIRCUIT INSPECTION

Check the headlamp (LO) circuit. Refer to EXL-114, "Diagnosis Procedure".

#### Is the inspection results normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

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## PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS ARE NOT TURNED ON

#### < SYMPTOM DIAGNOSIS >

# PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS ARE NOT TURNED ON

Description INFOID:0000000011151213

The parking, license plate, tail lamps and side marker lamps do not turn ON with the combination switch in any setting.

#### Diagnosis Procedure

INFOID:0000000011151214

## 1. COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH) INSPECTION

Check the combination switch (lighting and turn signal switch). Refer to BCS-79. "Symptom Table".

#### Is the inspection results normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

## 2.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT

#### (P)CONSULT DATA MONITOR

- 1. Select TAIL & CLR REQ of IPDM E/R DATA MONITOR item.
- 2. While operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
TAIL&CLR REQ	Lighting switch position	Parking lamp	ON
		OFF	OFF

#### Is the inspection results normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

### 3.PARK LAMP CIRCUIT INSPECTION

Check the parking lamp circuit. Refer to EXL-121. "Diagnosis Procedure".

#### Is the inspection results normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

#### BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

### BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

Description INFOID:0000000011151215

The front fog lamps do not turn ON in any setting.

Diagnosis Procedure

INFOID:0000000011151216

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## 1. COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH) INSPECTION

Check the combination switch (lighting and turn signal switch). Refer to BCS-79, "Symptom Table".

Is the inspection results normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT

#### (P)WITH CONSULT DATA MONITOR

- 1. Select FR FOG REQ of IPDM E/R DATA MONITOR item.
- 2. While operating the front fog lamp switch, check the monitor status.

Monitor item	Condition		Monitor status
FR FOG REQ	Lighting switch position	Front fog lamp and Headlamp	ON
		OFF	OFF

#### Is the inspection results normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

## 3. FRONT FOG LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to EXL-119, "Diagnosis Procedure".

#### Is the inspection results normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

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#### **DAYTIME LIGHT SYSTEM INOPERATIVE**

#### < SYMPTOM DIAGNOSIS >

### DAYTIME LIGHT SYSTEM INOPERATIVE

Description INFOID:0000000011151217

The daytime running light system is inoperative even though the combination switch (lighting and turn signal switch) and parking brake switch are in the normal setting, also whenever the engine is operating.

#### Diagnosis Procedure

INFOID:0000000011151218

## 1. CHECK DAYTIME RUNNING LIGHT OPERATION

- Perform BCM(HEADLAMP) DAYTIME RUNNING LIGHT active test. Refer to <u>BCS-18</u>, "HEADLAMP : <u>CONSULT Function (BCM - HEADLAMP)"</u>.
- 2. Check that the daytime running lights turn on.

#### Is the inspection results normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".

NO >> GO TO 2.

## 2.CHECK DAYTIME RUNNING LIGHT RELAY FUSE

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

Unit	Fuse No.	Capacity
Daytime running light	43	10 A

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace the blown fuse after repairing the affected circuit.

## 3.CHECK DAYTIME RUNNING LIGHT BULBS

Check that the daytime running light bulbs are not open.

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace the bulbs.

## 4. PERFORM DAYTIME RUNNING LIGHT CIRCUIT INSPECTION

Check the daytime running light circuit. Refer to EXL-116, "Diagnosis Procedure".

#### Is the inspection results normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

## PERIODIC MAINTENANCE

#### **HEADLAMP**

Inspection B

#### PREPARATION BEFORE ADJUSTING

Before performing aiming adjustment, check the following:

- Ensure all tires are inflated to correct pressure.
- Place vehicle and screen on level surface.
- Ensure there is no load in vehicle other than the driver (or equivalent weight placed in driver's position).
- Coolant and engine oil filled to correct level, and fuel tank full.
- Remove cargo and/or luggage to maintain an unloaded vehicle condition.
- · Confirm spare tire, jack and tools are properly stowed.
- Carefully wipe off any dirt from headlamp lens.

#### **CAUTION:**

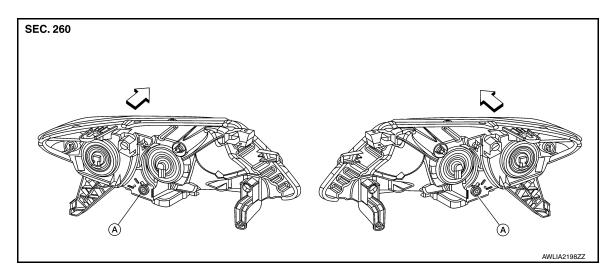
#### Do not use organic solvent (thinner, gasoline etc.)

- Place a driver or equivalent weight of 68.5 kg (150 lb) on the driver seat.
- By hand, bounce the front and rear of the vehicle to settle the suspension and eliminate any static load.
- Place the front tires in the straight ahead position.
- Aim each headlamp individually and ensure other headlamp beam pattern is blocked from screen.

#### NOTE:

- For headlamp aiming details, refer to regulations in your area.
- By regulation, no means for horizontal aim adjustment is provided from the factory; only vertical aim is adjustable.
- · Use adjusting screw to perform aiming adjustment.
- · Perform headlamp aiming if:
- The vehicle front body has been repaired.
- The front combination lamp has been removed or replaced.
- Any outfitting has been installed.
- The vehicle's standard load condition has been substantially increased.

#### AIMING ADJUSTMENT SCREW



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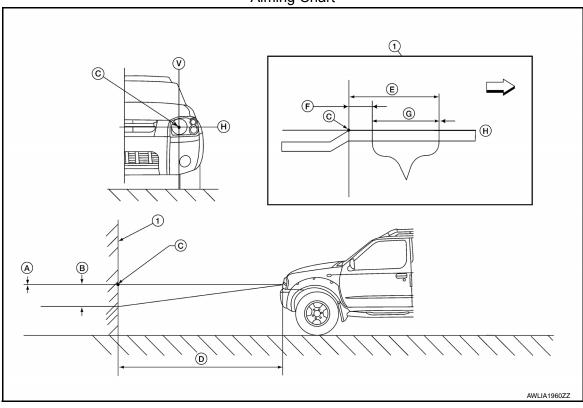
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### Aiming Adjustment Procedure

INFOID:0000000011151220

#### **Aiming Chart**



- 1. Adjustment screen
- C. Headlamp bulb center (H-V point)
- F. Minimum aim evaluation distance from vertical center on aiming screen 133 mm (1°R)
- V. Vertical aiming evaluation line
- A. Highest cutoff line height

Aim evaluation area

- D. Distance of headlamp aiming screen from vehicle 7.62 m (25 ft)
- B. Lowest cutoff line height

0.1° up

0.4° down

- Maximum aim evaluation distance from vertical center on aiming screen 399 mm (3°R)
- H. Horizontal aiming evaluation line
- A (Highest cutoff line height)

  -13.3 mm (-0.5 in)

  B (Lowest cutoff line height)

  53.2 mm (2.1 in)

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#### LOW BEAM AND HIGH BEAM

#### NOTE:

- Basic illuminating area for evaluation and/or adjustment should be within range shown on aiming chart.
- 1. Use adjustment screw to perform aiming adjustment.
  - · Ensure fog lamps (if equipped) are turned off.
- Block the opposite headlamp from projecting a beam pattern onto the adjustment screen, using a suitable object. Aim each headlamp individually.

#### **CAUTION:**

Do not cover the lens surface with tape etc. The lens is made of resin.

Place the screen on the same level and flat surface as the vehicle. NOTE:

- Surface should be free of any debris that would cause a difference between the headlamp center and the adjustment screen.
- Face the front of the vehicle to the screen and measure distance between the headlamp center and the screen surface.

#### **HEADLAMP**

#### Distance (D) between the headlamp center and the screen : 7.62 m (25 ft)

- 5. Start the engine and turn the headlamp on.
- 6. Determine the preferred vertical aim range dimensions, using the aiming chart.
- 7. Measure the projected beam within the aim evaluation segment on the screen.
- 8. Adjust the beam pattern of each headlamp until the aim evaluation segment (the area relative to both the highest and lowest cutoff line height) is positioned within the vertical aim range dimensions shown on the aiming chart.

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#### FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

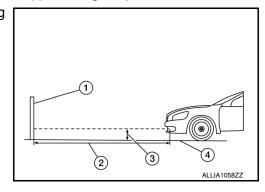
#### FRONT FOG LAMP AIMING ADJUSTMENT

#### Aiming Adjustment

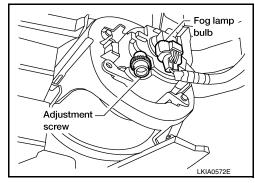
#### NOTE:

Check the following conditions before performing the aiming adjustment.

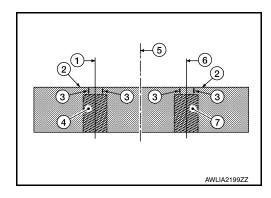
- Keep all tires inflated to correct pressure.
- · Place vehicle on level ground.
- See that vehicle is unloaded (except for full levels of coolant, engine oil and fuel, and spare tire, jack, and tools). Have the driver or equivalent weight placed in driver seat.
- When performing adjustment, if necessary, cover the headlamps and opposite fog lamp.
- 1. Set the distance between the screen and the center of the fog lamp lens as shown.
  - (1) Aiming screen or a matte white surface
  - (2) 7.62 m (25 ft)
  - (3) Floor to center of fog lamp lens
  - (4) Floor



- 2. Turn front fog lamps ON.
- 3. Access adjustment screw from underneath front bumper. Use a suitable tool to adjust. Turn screw clockwise to raise pattern and counterclockwise to lower pattern. Adjust front fog lamps using adjusting screw so that the top edge of the high intensity zone is 100 mm (4 in) below the height of the fog lamp centers as shown.



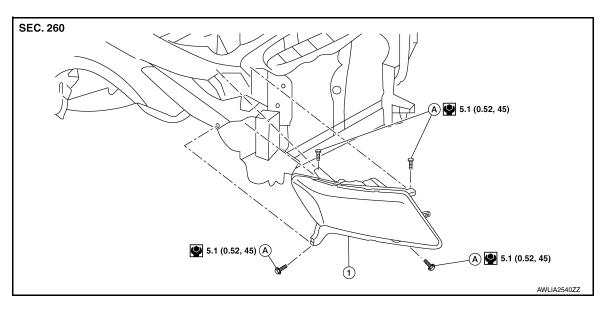
- (1) Vertical center line of left fog lamp.
- (2) Lamp center above ground.
- (3) 100 mm (4 in) (0.76 deg) below lamp center above ground.
- (4) Left fog lamp high intensity area.
- (5) Vehicle center axis.
- (6) Vertical center line of right fog lamp.
- (7) Right fog lamp high intensity area.



# REMOVAL AND INSTALLATION

## FRONT COMBINATION LAMP

**Exploded View** 



1. Front combination lamp

Bolt

## Removal and Installation

### FRONT COMBINATION LAMP

Removal

- Disconnect the battery negative terminal. Refer to PG-95, "Removal and Installation".
- 2. Release the clips and pawls using a suitable tool and remove hoodledge finisher.
- Release front under cover clips and remove front under cover.
- 4. Remove front bumper fascia. Refer to EXT-17, "Removal and Installation".
- 5. Remove washer tank. Refer to <u>WW-54, "Removal and Installation"</u>.
- 6. Remove front combination lamp bolts.
- Pull front combination lamp forward.
- Disconnect the harness connectors from the front combination lamp.

### Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, perform headlamp aiming adjustment. Refer to EXL-142, "Aiming Adjustment Procedure".

## HALOGEN BULB (LOW BEAM)

### WARNING:

Do not touch bulb by hand while it is lit or right after being turned off. Burning may result. **CAUTION:** 

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

## Removal

Rotate low beam bulb counterclockwise and remove.

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### FRONT COMBINATION LAMP

### < REMOVAL AND INSTALLATION >

Disconnect the harness connector from the low beam bulb.

#### Installation

Installation is in the reverse order of removal.

### HALOGEN BULB (HIGH BEAM)

#### WARNING:

Do not touch bulb by hand while it is lit or right after being turned off. Burning may result. CAUTION:

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

#### Removal

- 1. Rotate high beam bulb counterclockwise and remove.
- Disconnect the harness connector from the high beam bulb.

#### Installation

Installation is in the reverse order of removal.

## PARKING LAMP BULB

#### **WARNING:**

Do not touch bulb by hand while it is lit or right after being turned off. Burning may result. CAUTION:

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

### Removal

- Release the clips and pawls using a suitable tool and remove hoodledge finisher.
- 2. Remove washer tank. Refer to <a href="https://www.semoval.gov/www.semova.gov/www.semova.gov/www.semova.gov/www.semova.gov/www.semova.gov/www.semova.gov/www.semova.gov/www.semova.gov/www.g
- 3. Rotate parking lamp socket counterclockwise and remove.
- Remove parking lamp bulb from the bulb socket.

#### Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

After installing, be sure to install the bulb socket securely to ensure watertightness.

### FRONT TURN SIGNAL LAMP BULB

## **WARNING:**

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

#### **CAUTION:**

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

### Removal

- Release the clips and pawls using a suitable tool and remove hoodledge finisher.
- 2. Rotate front turn signal lamp socket counterclockwise and remove.
- 3. Remove front turn signal lamp bulb from the bulb socket.

### Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

After installing, be sure to install the bulb socket securely to ensure watertightness.

## FRONT SIDE MARKER LAMP BULB

#### **WARNING:**

## FRONT COMBINATION LAMP

### < REMOVAL AND INSTALLATION >

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

## **CAUTION:**

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

Removal

- 1. Release the clips and pawls using a suitable tool and remove hoodledge finisher.
- 2. Remove washer tank. Refer to WW-54, "Removal and Installation".
- 3. Rotate front side marker lamp socket counterclockwise and remove.
- 4. Remove front side marker lamp bulb from the bulb socket.

Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

After installing, be sure to install the bulb socket securely to ensure watertightness.

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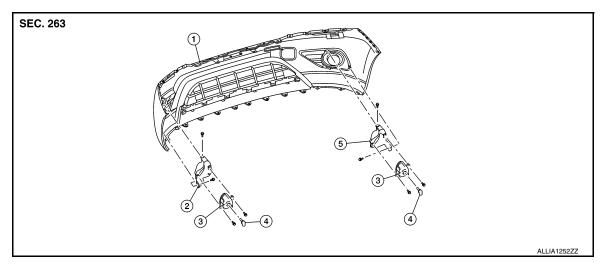
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## FRONT FOG LAMP

Exploded View



- 1. Front bumper fascia
- 4. Front fog lamp bulb
- 2. Front fog lamp bracket (LH)
- 3. Front fog lamp (LH/RH)
- 5. Front fog lamp bracket (RH)
- A. Bolts

### Removal and Installation

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### FRONT FOG LAMP

### Removal

- 1. Partially remove the fender protector. Refer to <u>EXT-28</u>, "FENDER PROTECTOR: Removal and Installation".
- 2. Disconnect the harness connector(s) from the front fog lamp and daytime running lamp (if equipped).
- 3. Remove bolts and front fog lamp.

### Installation

Installation in the reverse order of removal.

#### **CAUTION:**

After installation, perform fog lamp aiming adjustment. Refer to EXL-144, "Aiming Adjustment".

## FRONT FOG LAMP BULB

### **WARNING:**

Do not touch bulb by hand while it is lit or right after being turned off. Burning may result. CAUTION:

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

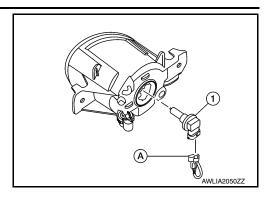
## Removal

1. Partially remove the front fender protector. Refer to <u>EXT-28</u>, "FENDER PROTECTOR: Removal and Installation".

## FRONT FOG LAMP

### < REMOVAL AND INSTALLATION >

- 2. Disconnect the harness connector (A) from the front fog lamp.
- 3. Rotate bulb (1) counterclockwise and remove.



Installation

Installation is in the reverse order of removal.

## DAYTIME LAMP BULB (CANADA ONLY)

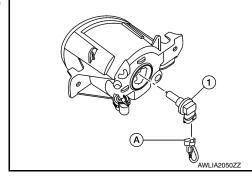
### **WARNING:**

Do not touch bulb by hand while it is lit or right after being turned off. Burning may result. CAUTION:

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

#### Removal

- 1. Partially remove the front fender protector. Refer to <u>EXT-28</u>, "FENDER PROTECTOR: Removal and <u>Installation"</u>.
- 2. Disconnect the harness connector (A) from the daytime lamp bulb (1).
- 3. Rotate bulb (1) counterclockwise and remove.



Installation

Installation is in the reverse order of removal.

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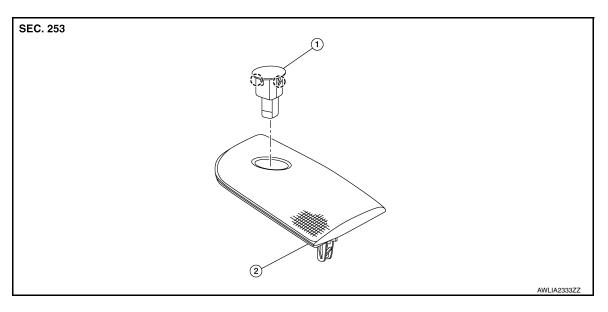
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# OPTICAL SENSOR

Exploded View



- 1. Optical sensor
- 2. Instrument panel tweeter grille (RH) ( Pawl

## Removal and Installation

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## **REMOVAL**

- 1. Remove the instrument panel tweeter grille (RH) using a suitable tool.
- 2. Disconnect the harness connector from the optical sensor.
- 3. Release pawls and remove the optical sensor from the instrument panel tweeter grille (RH).

## **INSTALLATION**

## **LIGHTING & TURN SIGNAL SWITCH**

## < REMOVAL AND INSTALLATION >

## **LIGHTING & TURN SIGNAL SWITCH**

# Removal and Installation

The lighting and turn signal switch is integrated into the combination switch and is replaced as an assembly. Refer to <u>BCS-81</u>, "Removal and Installation".

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## **HAZARD SWITCH**

## < REMOVAL AND INSTALLATION >

## **HAZARD SWITCH**

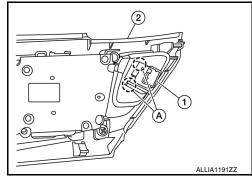
## Removal and Installation

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## **REMOVAL**

- 1. Remove cluster lid C. Refer to IP-22, "CLUSTER LID C: Removal and Installation".
- 2. Release the pawls (A) and remove the hazard switch (1) from cluster lid C (2).

(]):Pawl



## **INSTALLATION**

## REAR COMBINATION LAMP

## **Exploded View**

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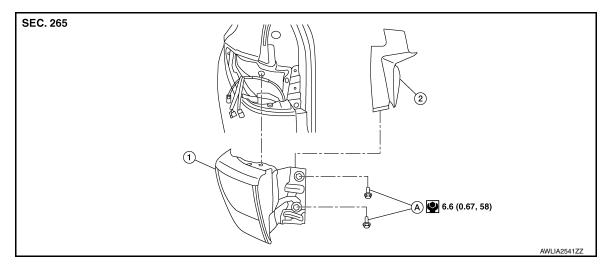
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1. Rear combination lamp

2. Rear combination lamp bolt cover A. Bolt

## Removal and Installation

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## REAR COMBINATION LAMP

#### Removal

- Release clips using a suitable tool and remove rear combination lamp bolt cover.
- Remove rear combination lamp bolts.
- Pull rear combination lamp rearward.
- 4. Disconnect the harness connector from the rear combination lamp and remove.

#### Installation

Installation is in the reverse order of removal.

### REAR TURN SIGNAL LAMP BULB

#### WARNING:

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

- **CAUTION:**
- · Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

#### Removal

- Remove the rear combination lamp. Refer to EXL-153, "Removal and Installation"
- Rotate the rear turn signal lamp socket counterclockwise and remove. 2.
- 3. Remove the bulb from rear turn signal bulb socket.

#### Installation

Installation is in the reverse order of removal.

## STOP/TAIL LAMP BULB

## **WARNING:**

Do not touch bulb by hand while it is lit or right after being turned OFF. Burning may result. **CAUTION:** 

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

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## REAR COMBINATION LAMP

### < REMOVAL AND INSTALLATION >

• Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

### Removal

- Remove the rear combination lamp. Refer to <u>EXL-153</u>, "Removal and Installation"
- 2. Rotate the stop/tail lamp socket counterclockwise and remove.
- Remove the bulb from stop/tail lamp bulb socket.

#### Installation

Installation is in the reverse order of removal.

### SIDE MARKER LAMP BULB

#### **WARNING:**

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

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

#### Removal

- Remove the rear combination lamp. Refer to <u>EXL-153</u>, "Removal and Installation"
- 2. Rotate the side marker lamp socket counterclockwise and remove.
- Remove the bulb from side marker bulb socket.

### Installation

## **HIGH-MOUNTED STOP LAMP**

## < REMOVAL AND INSTALLATION >

## HIGH-MOUNTED STOP LAMP

## Removal and Installation

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**REMOVAL** 

1. Remove rear spoiler. Refer to EXT-41, "Removal and Installation".

### **INSTALLATION**

Installation is in the reverse order of removal.

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## HIGH-MOUNTED STOP LAMP BULB

The high-mounted stop lamp bulb is LED and is serviced as part of the high-mounted stop lamp. Refer to <u>EXL-155</u>, "Removal and Installation"

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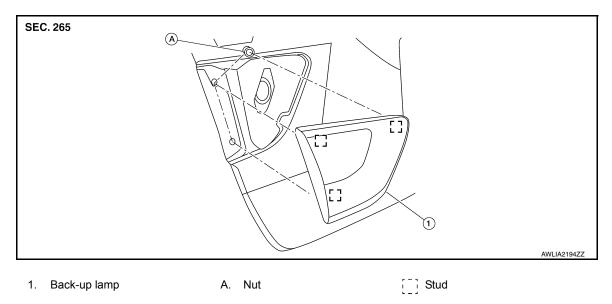
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## **BACK-UP LAMP**

Exploded View



### Removal and Installation

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### **BACK-UP LAMP**

#### Removal

- Remove back door lower finisher. Refer to <u>INT-35</u>, "BACK DOOR LOWER FINISHER: Removal and <u>Installation</u>".
- 2. Disconnect the harness connector from the back-up lamp.
- 3. Remove back-up lamp nuts and remove.

#### Installation

Installation is in the reverse order of removal.

### **BACK-UP LAMP BULB**

#### **WARNING:**

Do not touch bulb by hand while it is lit or right after being turned off. Burning may result. CAUTION:

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

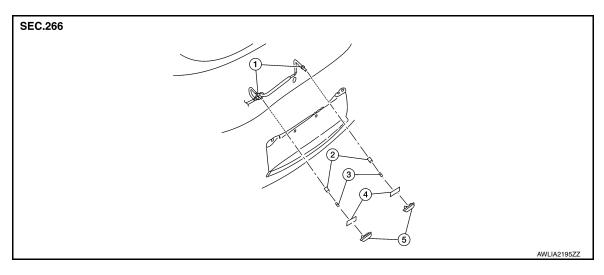
#### Removal

- 1. Remove back door trim access panel.
- 2. Rotate back-up lamp socket counterclockwise and remove.
- 3. Remove back-up lamp bulb from bulb socket.

## Installation

## LICENSE PLATE LAMP

Exploded View



- 1. License plate lamp harness
- 4. License plate lamp gasket
- 2. License plate lamp socket
- 5. License plate lamp
- 3. License plate lamp bulb

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Removal and Installation

LICENSE PLATE LAMP

Removal

- 1. Remove back door outer finisher. Refer to EXT-43, "Removal and Installation".
- 2. Release pawls using a suitable tool and remove license plate lamp.

Installation

Installation is in the reverse order of removal.

## LICENSE PLATE LAMP BULB

Removal

## **WARNING:**

Do not touch bulb by hand while it is lit or right after being turned off. Burning may result. CAUTION:

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.
- 1. Remove back door lower finisher. Refer to <a href="INT-35">INT-35</a>, "BACK DOOR LOWER FINISHER: Removal and <a href="Installation"</a>.
- 2. Disconnect the harness connector from the license plate lamp.

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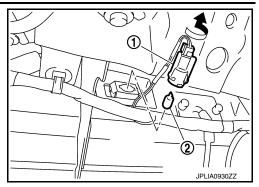
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## LICENSE PLATE LAMP

## < REMOVAL AND INSTALLATION >

- 3. Rotate license plate lamp socket (1) counterclockwise and remove.
- 4. Remove license plate lamp bulb (2) from bulb socket.

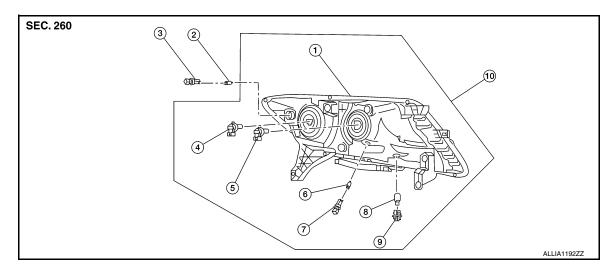


Installation

## UNIT DISASSEMBLY AND ASSEMBLY

## FRONT COMBINATION LAMP

Exploded View



- 1. Front combination lamp
- 4. Halogen lamp bulb (low beam)
- 7. Parking lamp bulb socket
- 10. Front combination lamp assembly
- 2. Side marker lamp bulb
- 5. Halogen lamp bulb (high beam) 6.
- 8. Parking lamp bulb
- Side marker bulb socket
- 6. Front turn signal lamp bulb
- Front turn signal bulb socket

Disassembly and Assembly

**WARNING:** 

Do not touch bulb by hand while it is lit or right after being turned off. Burning may result. CAUTION:

- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not leave the bulb out of the lamp reflector for a long time because dust, moisture, smoke, etc. may affect the performance of the lamp.

### DISASSEMBLY

- Remove the front combination lamp. Refer to EXL-145, "Removal and Installation".
- 2. Rotate the halogen lamp bulb (low beam) counterclockwise and remove.
- 3. Rotate the halogen lamp bulb (high beam) counterclockwise and remove.
- 4. Rotate parking lamp socket counterclockwise and remove.
- 5. Remove parking lamp bulb from parking bulb socket.
- 6. Rotate front turn signal lamp socket counterclockwise and remove.
- 7. Remove front turn signal lamp bulb from front turn signal bulb socket.
- 8. Rotate side marker lamp socket counterclockwise and remove.
- 9. Remove side marker lamp bulb from side marker bulb socket.

#### **ASSEMBLY**

Assembly is in the reverse order of disassembly.

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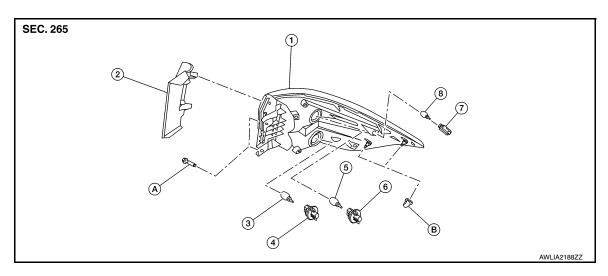
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Revision: September 2014 EXL-159 2015 Pathfinder

## REAR COMBINATION LAMP

Exploded View



- 1. Rear combination lamp
- 4. Rear turn signal bulb socket
- 7. Side marker bulb socket
- B. Locator pin

- 2. Rear combination lamp bolt cover 3.
- 5. Stop/Tail lamp bulb
- 8. Side marker lamp bulb
- Rear turn signal lamp bulb
- 6. Stop/Tail bulb socket
- A. Bolt

## Disassembly and Assembly

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## **WARNING:**

Do not touch bulb by hand while it is lit or right after being turned off. Burning may result. **CAUTION**:

- After installing, be sure to install the bulb sockets securely to ensure watertightness.
- Do not touch glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.
- Do not 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.

### DISASSEMBLY

- 1. Remove rear combination lamp. Refer to EXL-153, "Removal and Installation"
- Rotate rear turn signal lamp bulb socket counterclockwise and remove.
- Remove rear turn signal bulb from bulb socket.
- 4. Rotate stop/tail lamp bulb socket counterclockwise and remove.
- 5. Remove stop/tail bulb from bulb socket.
- Rotate side marker lamp bulb socket counterclockwise and remove.
- 7. Remove side marker bulb from bulb socket.

### **ASSEMBLY**

Assembly is in the reverse order of disassembly.

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

< SERVICE DATA AND SPECIFICATIONS (SDS)

# SERVICE DATA AND SPECIFICATIONS (SDS)

# SERVICE DATA AND SPECIFICATIONS (SDS)

## **Bulb Specifications**

	Item	Wattage (W) *
	High beam	60
	Low beam	55
Front combination lamp	Front turn signal lamp	21
	Parking lamp	5
	Side marker lamp	5
Front fog lamp	Fog lamp (if equipped)	55
Daytime running lamp built-in fog lamp (Canada only)		19
Rear combination lamp	Stop/Tail lamp	21/5
	Turn signal lamp	21
	Side marker lamp	5
Back-up lamp		12
License plate lamp		5
High-mounted stop lamp		_

<sup>\*:</sup> Always check with the Parts Department for the latest parts info.

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