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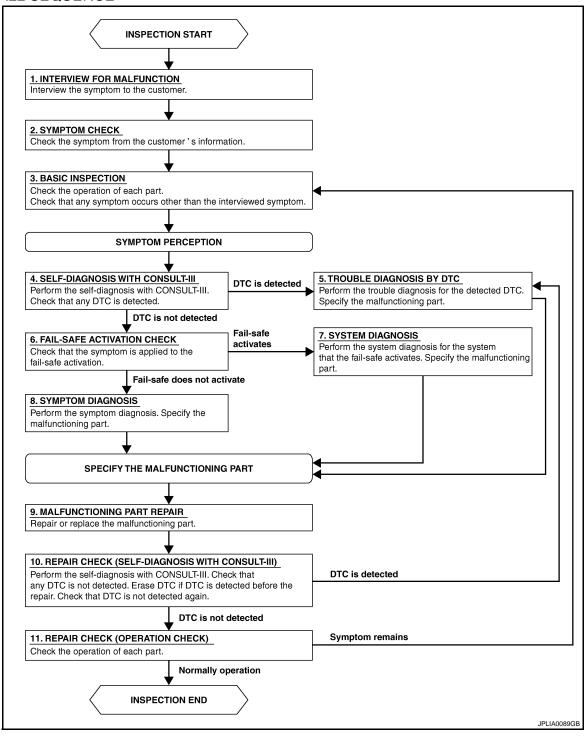
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

OVERALL SEQUENCE



DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION > **DETAILED FLOW** Α 1.INTERVIEW FOR MALFUNCTION Find out what the customer's concerns are. В >> GO TO 2.. 2.symptom check Verify the symptom from the customer's information. D >> GO TO 3.. 3.BASIC INSPECTION Check the operation of each part. Check that any concerns occur other than those mentioned in the customer interview. >> GO TO 4... F f 4.SELF-DIAGNOSIS WITH CONSULT-III Perform the self diagnosis with CONSULT-III. Check that any DTC is detected. Is any DTC detected? YES >> GO TO 5.. NO >> GO TO 6.. 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? K YES >> GO TO 7.. NO >> GO TO 8.. **1.**SYSTEM DIAGNOSIS **EXL** Perform the system diagnosis for the system in which the fail-safe activates. Specify the malfunctioning part. M >> GO TO 9... 8.SYMPTOM DIAGNOSIS Perform the symptom diagnosis. Specify the malfunctioning part. >> GO TO 9... 9.malfunction part repair Repair or replace the malfunctioning part. Р >> GO TO 11.. 10. REPAIR CHECK (SELF-DIAGNOSIS WITH CONSULT-III) Perform the self diagnosis with CONSULT-III. Verfied 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..

11. REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

Does it operate normally?

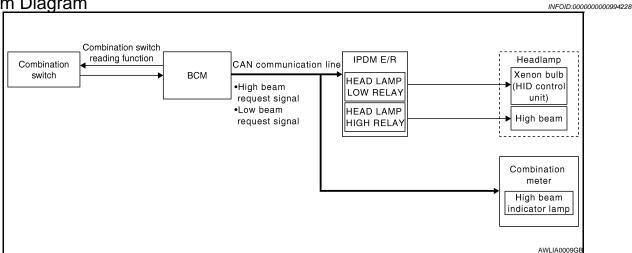
YES >> INSPECTION END

NO >> GO TO 3..

FUNCTION DIAGNOSIS

HEADLAMP (XENON TYPE)

System Diagram



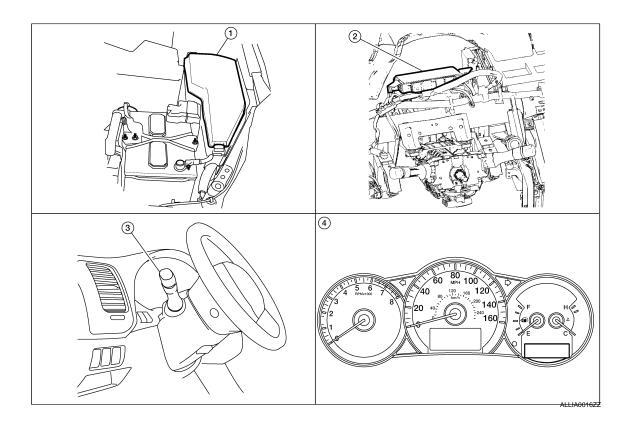
System Description

INFOID:0000000000994229

Control of the headlamp system is dependent upon the position of the lighting switch (combination switch). When the lighting switch is placed in the 2nd position, the BCM (body control module) receives input requesting the headlamps and park lamps to illuminate. This input is communicated to the IPDM E/R (intelligent power distribution module engine room) across the CAN communication lines. The CPU (central processing unit) of the IPDM E/R controls the headlamp high and headlamp low relay coils. When energized, these relays direct power to the respective headlamps, which then illuminate.

Component Parts Location

INFOID:0000000000994230



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HEADLAMP (XENON TYPE)

< FUNCTION DIAGNOSIS >

- 1. IPDM E/R E17, E18, E200
- BCM M16, M17, M18, M19, M21 (view 3. Combination Switch M28 with instrument panel removed)
- 4. Combination Meter M24

Component Description

INFOID:0000000000994231

XENON HEADLAMP

A Xenon type headlamp is adapted to the low beam headlamps. Xenon bulbs do not use a filament. Instead, they produce light when a high voltage current is passed between two tungsten electrodes through a mixture of xenon (an inert gas) and certain other metal halides. In addition to added lighting power, electronic control of the power supply gives the headlamps stable quality and tone color.

Following are some of the many advantages of the xenon type headlamp.

- The light produced by the headlamps is a white color comparable to sunlight that is easy on the eyes.
- Light output is nearly double that of halogen headlamps, affording increased area of illumination.
- The light features a high relative spectral distribution at wavelengths to which the human eye is most sensitive. This means that even in the rain, more light is reflected back from the road surface toward the vehicle, for added visibility.
- Power consumption is approximately 25 percent less than halogen headlamps, reducing battery load.

HIGH BEAM OPERATION/FLASH-TO-PASS OPERATION

With the lighting switch in the 2ND 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 directs power to the high beam headlamps.

COMBINATION SWITCH READING FUNCTION

Refer to BCS-8, "System Description".

EXTERIOR LAMP BATTERY SAVER CONTROL

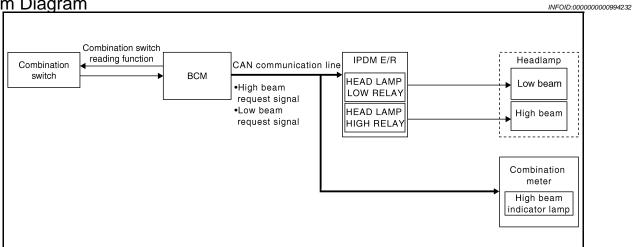
Refer to EXL-21, "System Description".

AUTO LIGHT OPERATION

Refer to EXL-14, "System Description".

HEADLAMP (HALOGEN TYPE)

System Diagram



System Description

Control of the headlamp system operation is dependent upon the position of the lighting switch (combination switch). When the lighting switch is placed in the 2nd position, the BCM (body control module) receives input requesting the headlamps and park lamps to illuminate. This input is communicated to the IPDM E/R (intelligent power distribution module engine room) across the CAN communication lines. The CPU (central processing unit) of the IPDM E/R controls the headlamp high and headlamp low relay coils. When energized, these relays direct power to the respective headlamps, which then illuminate.

Component Parts Location

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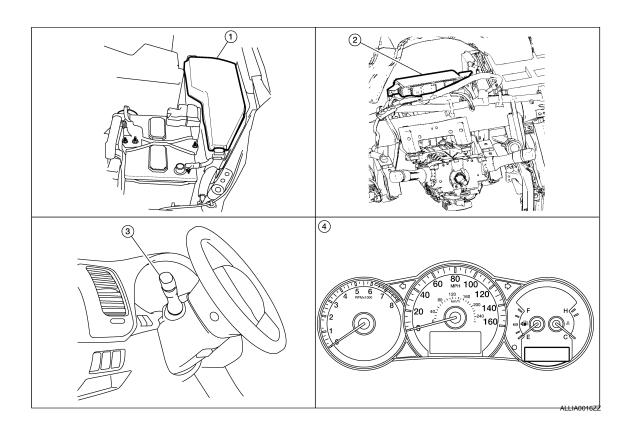
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EXL-9

HEADLAMP (HALOGEN TYPE)

< FUNCTION DIAGNOSIS >

- 1. IPDM E/R E17, E18, E200
- BCM M16,M17, M18, M19 (view with 3. Combination switch M28 instrument panel removed)
- 4. Combination meter M24

Component Description

INFOID:0000000000994235

LOW BEAM OPERATION

When the lighting switch is in 2ND 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 2ND 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.

COMBINATION SWITCH READING FUNCTION

Refer to BCS-8, "System Description".

EXTERIOR LAMP BATTERY SAVER CONTROL

Refer to EXL-21, "System Description".

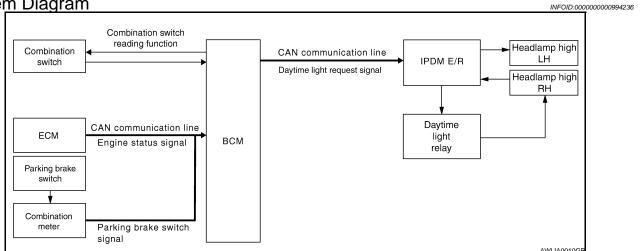
AUTO LIGHT OPERATION

Refer to EXL-14, "System Description".

DAYTIME RUNNING LIGHT SYSTEM

DAYTIME RUNNING LIGHT SYSTEM

System Diagram



System Description

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The headlamp system for Canada vehicles is equipped with a daytime light control unit that activates the high beam headlamps at approximately half illumination whenever the engine is running. If the parking brake is applied before the engine is started the daytime lights will not be illuminated. The daytime lights will illuminate once the parking brake is released. Thereafter, the daytime lights will continue to operate when the parking brake is applied.

Component Parts Location

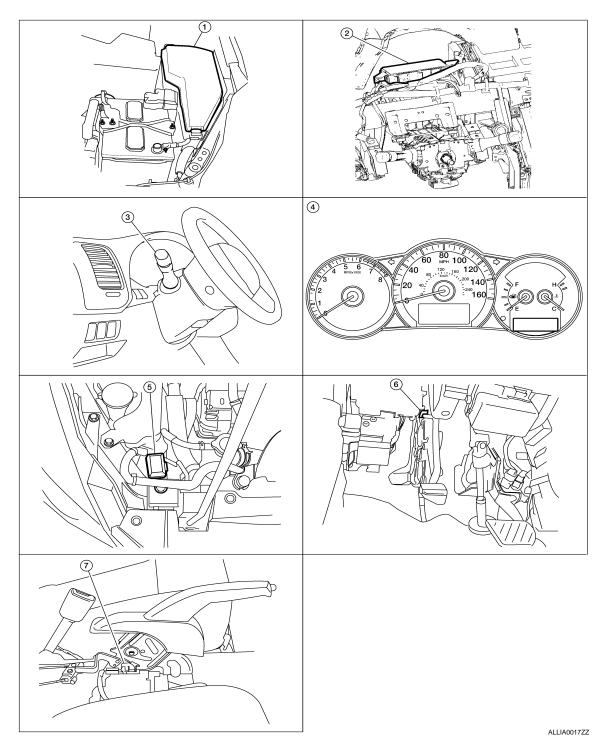
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- 1. IPDM E/R E17, E18, E200
- 4. Combination meter M24
- 7. Park brake switch E35 (M/T models)

Component Description

- 2. BCM M16,M17, M18, M19 (view with 3. instrument panel removed)
- 5. Daytime running light relay E228
- 3. Combination switch M28

Park brake switch M73 (CVT Models)

7. I alk blake switch Loo (W/T Hodels)

INFOID:0000000000994239

After starting the engine with the parking brake released and the lighting switch in the OFF or 1ST position, the headlamp high beam automatically turns on. With the lighting switch in the 2nd position or with autolamps ON, the headlamps function the same as conventional light systems.

OPERATION

DAYTIME RUNNING LIGHT SYSTEM

< FUNCTION DIAGNOSIS >

The BCM monitors inputs from the parking brake switch and the combination switch to determine when to activate the daytime light system. The BCM sends a daytime light request to the IPDM E/R via the CAN communication lines. The IPDM E/R grounds the daytime light relay which in turn, provides power to the ground side of the RH high beam lamp. Power flows backward throught the RH high beam lamp to the IPDM E/R, through the high beam fuses, through the LH high beam lamp circuit to the LH high beam lamp and on to ground. The high beam lamps are wired in series which causes them to illuminate at a reduced intensity.

Engi	ne		With engine stopped						٧	Vith e	ngine	runni	ng						
Limbato o contact		OFF 1ST 2ND		OFF			1ST			2ND									
Lighting switch		Hi	Lo	Р	Hi	Lo	Р	Hi	Lo	Р	Hi	Lo	Р	Hi	Lo	Р	Hi	Lo	Р
Headlamp High beam Low beam	High beam	_	-	-	_	-	×	×	-	×	•*	•*	×	•*	•*	×	×	-	×
	Low beam	_	-	-	_	_	×	×	×	×	_	-	×	_	-	×	×	×	×
Tail lamp		_	-	-	×	×	×	×	×	×	_	-	-	×	×	×	×	×	×
License and instru	ment illumina-	_	-	_	×	×	×	×	×	×	_	ı	_	×	×	×	×	×	×

- Hi: "HIGH BEAM" position
- Lo: "LOW BEAM" position
- · P: "FLASH TO PASS" position
- x: Lamp "ON"
- -: Lamp "OFF"
- D: Lamp dims. (Added functions)
- *: When starting the engine with the parking brake released, the daytime lights will operate.

 When starting the engine with the parking brake pulled, the daytime lights will not operate.

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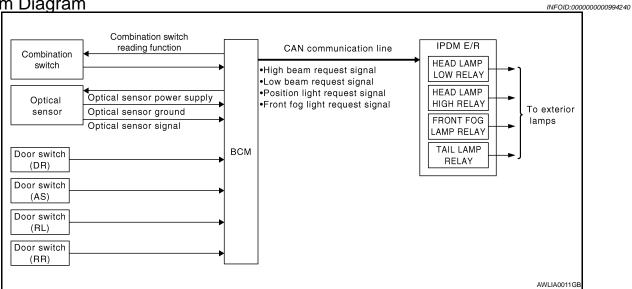
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AUTO LIGHT SYSTEM

System Diagram



System Description

INFOID:0000000000994241

- 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.

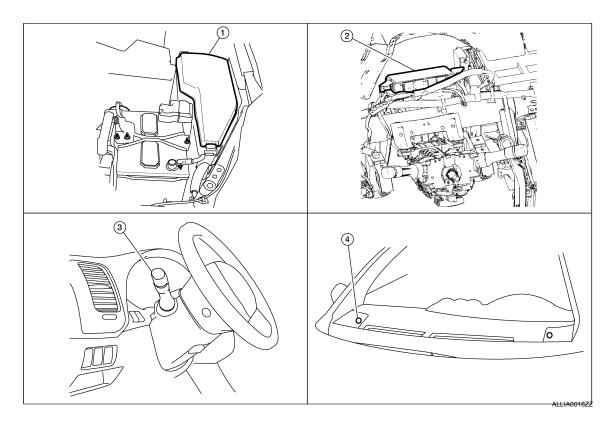
OUTLINE

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-19, "EXTERNAL LAMP: CONSULT-III Function".

Component Parts Location

INFOID:0000000000994242



- 1. IPDM E/R E17, E18, E200
- BCM M16, M17, M18, M19, M21 (view 3. Combination switch M28 with instrument panel removed)
- Optical sensor M66

Component Description

INFOID:0000000000994243

AUTO LIGHT OPERATION

Applicable lamps

- Low beam headlamp
- · Parking, license plate and tail lamps
- High beam headlamp (with the lighting switch in HIGH BEAM position)
- Front fog lamp (with the lighting switch in front fog lamp ON position)

When the lighting switch is in AUTO position with the ignition switch in ON position, BCM detects the AUTO LIGHT (ON) by BCM combination switch reading function. BCM turns automatically ON/OFF the applicable lamps according to ambient brightness depending on the following condition.

- It turns ON applicable lamps in 3 seconds when ambient brightness is less than 1250 lux.
- The lighted lamps are turned OFF in 5 seconds when ambient brightness becomes 2500 lux or higher.

Releasing Function:

- Turn ignition switch to the OFF position, or
- Change lighting switch to the OFF, 1ST, 2ND position.

NOTE:

Timing for when lamps turn ON/OFF can be changed by the function setting of CONSULT-III. Refer to <u>BCS-19</u>, "EXTERNAL LAMP: CONSULT-III Function".

COMBINATION SWITCH READING FUNCTION

Refer to BCS-8, "System Description".

HEADLAMP LOW AND HIGH OPERATION (XENON TYPE)

Refer to EXL-7, "System Description".

HEADLAMP LOW AND HIGH OPERATION (HALOGEN TYPE)

Refer to EXL-9, "System Description".

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AUTO LIGHT SYSTEM

< FUNCTION DIAGNOSIS >

FRONT FOG LAMP OPERATION

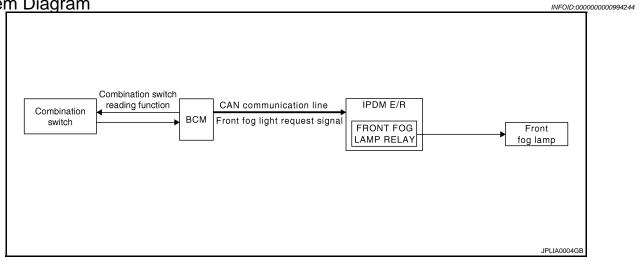
Refer to EXL-17, "System Description".

PARKING, LICENSE PLATE AND TAIL LAMPS OPERATION

Refer to EXL-21, "System Description".

FRONT FOG LAMP

System Diagram



System Description

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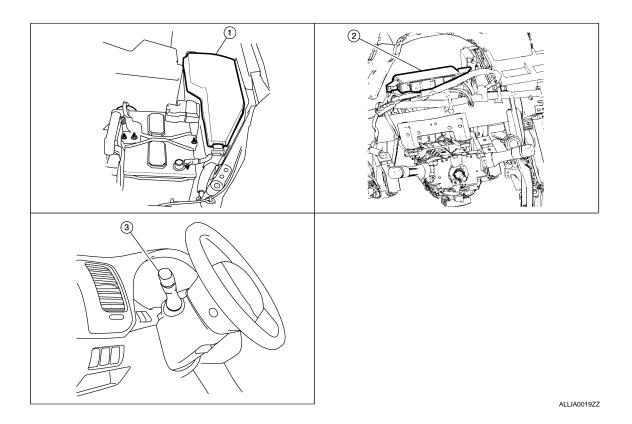
• BCM (Body Control Module) controls front fog lamp operation.

• IPDM E/R (Intelligent Power Distribution Module Engine Room) operates front fog lamp according to CAN communication signals from BCM.

• Combination meter operates front fog lamp indicator according to inputs via the CAN communication lines.

Component Parts Location

INFOID:0000000000994246



1. IPDM E/R E17, E18, E200

BCM M16, M17, M18, M19 (view with 3. Combination switch M28 instrument panel removed)

Component Description

INFOID:0000000000994247

FRONT FOG LAMP

< FUNCTION DIAGNOSIS >

FRONT FOG LAMP OPERATION

When the lighting switch is in front fog lamp ON position and also in 1ST or 2ND position or AUTO position (headlamp is ON), the BCM detects FR FOG ON and the HEAD LAMP1, 2 ON or the AUTO LIGHT ON. The BCM sends a front fog lamp request ON signal through 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.

The combination meter also receives a front fog lamp request ON signal through the CAN communication lines at which time it turns the front fog indicator ON.

COMBINATION SWITCH READING FUNCTION

Refer to BCS-8, "System Description".

EXTERIOR LAMP BATTERY SAVER CONTROL

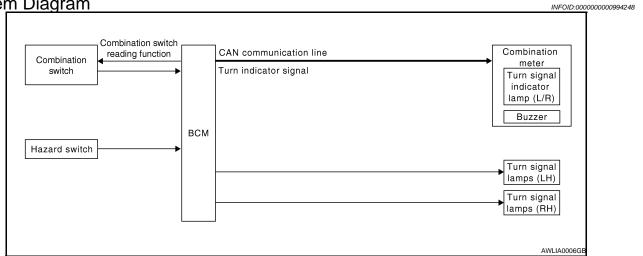
Refer to EXL-21, "System Description".

TURN SIGNAL AND HAZARD WARNING LAMPS

< FUNCTION DIAGNOSIS >

TURN SIGNAL AND HAZARD WARNING LAMPS

System Diagram



System Description

• BCM (Body Control Module) controls turn signal lamp (RH and LH) and hazard warning lamp operation.

• Combination meter operates turn (RH and LH) indicator according to CAN communication signals from BCM.

Component Parts Location

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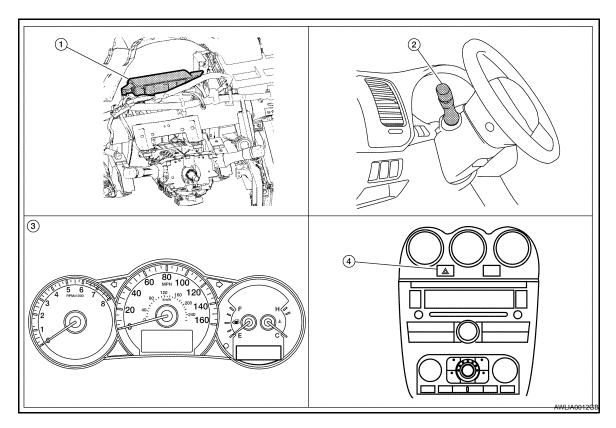
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- 1. IPDM E/R E17, E18, E201, F10
- BCM M17, M18, M19, M21 (view with 3. Combination switch M25 instrument panel removed)
- . Combination meter M24
- 5. Hazard switch

Component Description

INFOID:0000000000994251

TURN SIGNAL AND HAZARD WARNING LAMPS

< FUNCTION DIAGNOSIS >

TURN SIGNAL OPERATION

When the turn signal switch is in LH or RH position with the ignition switch in ON position, the BCM detects the TURN RH or TURN LH ON request. The BCM outputs the flasher output signal to the respective turn signal lamp. The BCM sends a turn indicator signal ON request through 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 ON position, the BCM detects the hazard switch signal ON. The BCM outputs the flasher output signal (right and left). The BCM sends a hazard indicator signal ON request through the CAN communication lines to the combination meter. The combination meter then activates the hazard indicator and audible buzzer.

REMOTE KEYLSESS ENTRY OPERATION

BCM receives the door lock/unlock signal from Intelligent Key unit through CAN communication, then BCM controls hazard lamps.

Refer to SEC-14, "System Description".

COMBINATION SWITCH READING FUNCTION

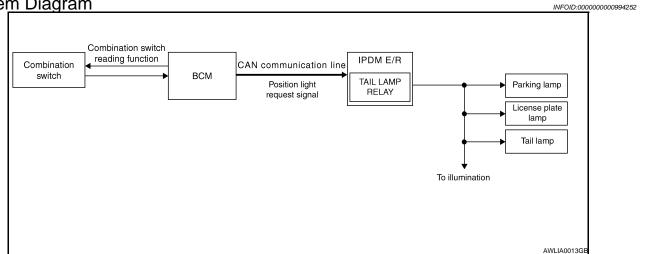
Refer to BCS-8, "System Description".

PARKING, LICENSE PLATE AND TAIL LAMPS

< FUNCTION DIAGNOSIS >

PARKING, LICENSE PLATE AND TAIL LAMPS

System Diagram



System Description

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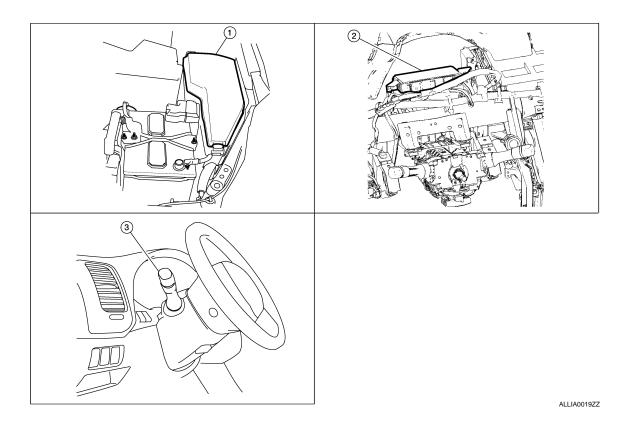
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- BCM (Body Control Module) controls parking, license plate and tail lamps operation.
- IPDM E/R (Intelligent Power Distribution Module Engine Room) operates parking, license plate and tail lamps according to CAN communication signals from BCM.

Component Parts Location

INFOID:0000000000994254



1. IPDM E/R E17, E18, E201

BCM M16, M17, M18, M19 (view with 3. Combination switch M28 instrument panel removed)

Component Description

INFOID:0000000000994255

EXL-21

PARKING, LICENSE PLATE AND TAIL LAMPS

< FUNCTION DIAGNOSIS >

PARKING, LICENCE PLATE AND TAIL LAMPS OPERATION

When the lighting switch is in 1ST position, BCM detects the LIGHTING SWITCH 1ST POSITION ON. The BCM sends a parking light ON request through 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.

COMBINATION SWITCH READING FUNCTION

Refer to BCS-8, "System Description".

EXTERIOR LAMP BATTERY SAVER CONTROL

With the lighting switch (combination switch) in the 2nd 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 5 minutes unless the lighting switch position is changed. If the lighting switch position is changed, then the headlamps are turned off.

This setting can be changed by CONSULT-III. Refer to BCS-19. "EXTERNAL LAMP: CONSULT-III Function".

COMBINATION SWITCH

< FUNCTION DIAGNOSIS >

COMBINATION SWITCH

System Description

For information regarding the combination switch, refer to <u>BCS-8</u>, "System Description".

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DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:0000000000994257

APPLICATION ITEM

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to BCS-72, "DTC Index".
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	This function is not used even though it is displayed.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

System	Sub system selection item	Diagnosis mode						
System	Sub system selection item	WORK SUPPORT	DATA MONITOR	ACTIVE TEST				
Door lock	DOOR LOCK	×	×	×				
Exterior lamp	HEAD LAMP	×	×	×				
Turn signal and hazard warning lamps	FLASHER	×	×	×				
Combination switch	COMB SW		×					
BCM	BCM	×						
RAP system	RETAINED PWR		×					

HEADLAMP

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

INFOID:0000000000994258

WORK SUPPORT

Service item	Setting item	Setting
BATTERY SAVER SET	ON*	With the exterior lamp battery saver function
DATTERT GAVER GET	OFF	Without the exterior lamp battery saver function
	MODE 1*	Normal
CUSTOM A/LIGHT SET- TING	MODE 2	More sensitive setting than normal setting (Turns ON earlier than normal operation.)
	MODE 3	More sensitive setting than MODE 2 (Turns ON earlier than MODE 2.)
	MODE 4	Less sensitive setting than normal setting (Turns ON later than normal operation.)

^{*:} Initial setting

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

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INFOID:0000000000994259

< FUNCTION DIAGNOSIS >

Monitor item [Unit]	Description
PUSH SW [ON/OFF]	The switch status input from push-button ignition switch
ENGINE STATE [STOP/STALL/CRANK/RUN]	The engine status received from ECM with CAN communication
TURN SIGNAL R [ON/OFF]	
TURN SIGNAL L [ON/OFF]	
TAIL LAMP SW [ON/OFF]	
HI BEAM SW [ON/OFF]	
HEAD LAMP SW1 [ON/OFF]	Each switch status that BCM judges from the combination switch reading function
HEAD LAMP SW2 [ON/OFF]	
PASSING SW [ON/OFF]	
AUTO LIGHT SW [ON/OFF]	
FR FOG SW [ON/OFF]	
OPTICAL SENSOR [V]	The value of exterior brightness voltage input from the optical sensor

ACTIVE TEST

Test item	Operation	Description
TAIL LAMP	ON	Transmits the position light request signal to IPDM E/R with CAN communication to turn the tail lamp ON.
	OFF	Stops the tail lamp request signal transmission.
HEAD LAMP	Н	Transmits the high beam request signal with CAN communication to turn the headlamp (HI).
	LO	Transmits the low beam request signal with CAN communication to turn the headlamp (LO).
	OFF	Stops the high & low beam request signal transmission.
FR FOG LAMP	ON	Transmits the front fog lights request signal to IPDM E/R with CAN communication to turn the front fog lamp ON.
	OFF	Stops the front fog lights request signal transmission.
DAYTIME RUNNING LIGHT	ON	NOTE:
DAT HIME ROMINING LIGHT	OFF	The item is indicated, but cannot be tested.

FLASHER

FLASHER: CONSULT-III Function (BCM - FLASHER)

WORK SUPPORT

EXL-25

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

Service item	Setting item	Setting						
HAZARD ANSWER BACK	LOCK ONLY*	With locking only						
	UNLK ONLY	With unlocking only	Sets the hazard warning lamp answer back function when the door is lock/unlock with the request switch or					
	LOCK/UNLK	With locking/unlocking	the keyfob.					
	OFF	Without the function						

^{*:} Initial setting

DATA MONITOR

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

ACTIVE TEST

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

DIAGNOSIS SYSTEM (IPDM E/R)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (IPDM E/R)

CONSULT - III Function (IPDM E/R)

INFOID:0000000000994260

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APPLICATION ITEM

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

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

DATA MONITOR

Monitor item

Monitor Item [Unit]	MAIN SIG- NALS	Description
HL LO REQ [Off/On]	×	Displays the status of the low beam request signal received from BCM via CAN communication.
HL HI REQ [Off/On]	×	Displays the status of the high beam request signal received from BCM via CAN communication.
FR FOG REQ [Off/On]	×	Displays the status of the front fog light request signal received from BCM via CAN communication.
PUSH SW [Off/On]		Displays the status of the push-button ignition switch judged by IPDM E/R.
DTRL REQ [Off]		NOTE: The item is indicated, but not monitored.

ACTIVE TEST

Test item

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

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POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE): Diagnosis Procedure

INFOID:0000000000994261

For BCM power supply and ground circuit information, refer to BCS-33. "Diagnosis Procedure".

BCM (BODY CONTROL MODULE): Special Repair Requirement

INFOID:0000000000994262

1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

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

For IPDM E/R power supply and ground circuit information, refer to

EXTERIOR LAMP FUSE

< COMPONENT DIAGNOSIS >

EXTERIOR LAMP FUSE

Description INFOID:0000000000994264

Fuse list

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	48	10 A
Headlamp HI (RH)	IPDM E/R	49	10 A
Headlamp LO (LH)	IPDM E/R	51	15 A
Headlamp LO (RH)	IPDM E/R	52	15 A
Front fog lamp	IPDM E/R	53	15 A
Parking	IPDM E/R	46	10 A
Tail lamp License plate lamp	IPDM E/R	47	10 A
Stop lamp	FUSE BLOCK (J/B)	7	10 A
Back-up lamp	FUSE BLOCK (J/B)	4	10 A

Diagnosis Procedure

1. CHECK FUSE

Check that the following fuses are not open.

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	48	10 A
Headlamp HI (RH)	IPDM E/R	49	10 A
Headlamp LO (LH)	IPDM E/R	51	15 A
Headlamp LO (RH)	IPDM E/R	52	15 A
Front fog lamp	IPDM E/R	53	15 A
Parking	IPDM E/R	46	10 A
Tail lamp License plate lamp	IPDM E/R	47	10 A
Stop lamp	FUSE BLOCK (J/B)	7	10 A
Back-up lamp	FUSE BLOCK (J/B)	4	10 A

Is the fuse open?

>> Repair the applicable circuit and replace the fuse. >> The fuse is normal. YES

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HEADLAMP (HI) CIRCUIT

< COMPONENT DIAGNOSIS >

HEADLAMP (HI) CIRCUIT

Description

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 48 and 49, located in the IPDM E/R. Power then flows to the front combination lamps to the headlamp high beam.

Component Function Check

INFOID:0000000000994267

1. CHECK HEADLAMP (HI) OPERATION

PIPDM E/R AUTO ACTIVE TEST

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

NOTE:

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

PCONSULT-III ACTIVE TEST

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

HI: Headlamp switches to the high beam.

OFF : Headlamp OFF

Does the headlamp switch to the high beam?

YES >> Headlamp (HI) circuit is normal.

NO >> Refer to EXL-30, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000000994268

1. CHECK HEADLAMP (HI) FUSES

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

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	48	10 A
Headlamp HI (RH)	IPDM E/R	49	10 A

Is the fuse open?

YES >> Repair the harness and replace the fuse...

NO >> GO TO 2.

2.CHECK HEADLAMP (HI) OUTPUT VOLTAGE

®CONSULT-III ACTIVE TEST

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

HEADLAMP (HI) CIRCUIT

< COMPONENT DIAGNOSIS >

Terminals				Condition	
(+)		(-)	Condition	Voltage	
(Combination lamp			External	voltage
Cor	nnector	Terminal		lamp	
RH	E222	3	Ground	н	Battery voltage
LH	E213	3		OFF	0 V

Is the measurement value normal?

YES >> GO TO 4..

NO >> GO TO 3..

3.check headlamp (hi) circuit for open

- 1. 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 harness connector.

IPDM E/		OM E/R Front combin		ation lamp	Continuity
Conr	nector	Terminal	Connector	Terminal	Continuity
RH	E200	89	E222	3	Existed
LH	L200	90	E213	3	LXISIEU

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4.CHECK FRONT COMBINATION LAMP (HI) GROUND CIRCUIT

- 1. Disconnect the front combination lamp connector.
- 2. Check continuity between the front combination lamp harness connector terminal and ground.

Front combination lamp			Continuity		
Conr	nector	Terminal	Ground	Continuity	
RH	E222	4	Ground	Existed	
LH	E213	4		LAISIEU	

Does continuity exist?

YES >> Inspect the headlamp bulb.

NO >> Repair the harness.

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HEADLAMP (LO) CIRCUIT

< COMPONENT DIAGNOSIS >

HEADLAMP (LO) CIRCUIT

Description

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 51 and 52, located in the IPDM E/R. Power then flows to the front combination lamps to the headlamp low beam.

Component Function Check

INFOID:0000000000994270

1. CHECK HEADLAMP (LO) OPERATION

PIPDM E/R AUTO ACTIVE TEST

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

NOTE:

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

PCONSULT-III ACTIVE TEST

- Select "EXTERNAL LAMP" of IPDM E/R active test item.
- With operating the test items, 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 EXL-32, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000000994271

1. CHECK HEADLAMP (LO) FUSES

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

Unit	Location	Fuse No.	Capacity
Headlamp LO (LH)	IPDM E/R	51	15 A
Headlamp LO (RH)	IPDM E/R	52	15 A

Is the fuse open?

YES >> Repair the harness and replace the fuse...

NO >> GO TO 2.

2.CHECK HEADLAMP (LO) OUTPUT VOLTAGE

®CONSULT-III ACTIVE TEST

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

HEADLAMP (LO) CIRCUIT

< COMPONENT DIAGNOSIS >

Terminals				Condition		
(+) (-)					Voltage	
Combination lamp			-	External lamp	vollage	
Connector Terminal						
RH	E223	1	Ground	LO	Battery voltage	
LH	E212	1		OFF	0 V	

Is the measurement value 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.
- 3. Check continuity between the IPDM E/R harness connector and the front combination lamp harness connector.

IPDM E/R		Front combin	Continuity		
Connector		Terminal	Connector	Terminal	Continuity
RH	E200	83	E223	1	Existed
LH	L200	84	E212	1	LXISIEU

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4.CHECK FRONT COMBINATION LAMP (LO) GROUND CIRCUIT

- 1. Disconnect the front combination lamp connector.
- 2. Check continuity between the front combination lamp harness connector terminal and ground.

Fro	nt combinat	ion lamp		Continuity
Connector		Terminal	Ground	Continuity
RH	E223	2	Ground	Existed
LH	E212	2		LXISIEU

Does continuity exist?

YES >> Inspect the headlamp bulb.

NO >> Repair the harness.

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FRONT FOG LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

FRONT FOG LAMP CIRCUIT

Description INFOID:0000000000994272

The IPDM E/R (intelligent power distribution module engine room) controls the front fog lamp relay based on inputs from the BCM over 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

INFOID:0000000000994273

1. CHECK FRONT FOG LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

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

(P)CONSULT-III ACTIVE TEST

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

FOG: Front fog lamp ON
OFF: Front fog lamp OFF

Is the front fog lamp turned ON?

YES >> Front fog lamp circuit is normal.

NO >> Refer to EXL-34, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000000994274

1. CHECK FRONT FOG LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
Front fog lamp	IPDM E/R	53	15 A

Is the fuse open?

YES >> Repair the harness and replace the fuse...

NO >> GO TO 2.

2.CHECK FRONT FOG LAMP OUTPUT VOLTAGE

(P)CONSULT-III ACTIVE TEST

- 1. Turn the ignition switch OFF.
- Disconnect the front fog lamp connector.
- 3. Turn the ignition switch ON.
- 4. Select "EXTERNAL LAMP" of IPDM E/R active test item.
- 5. With EXTERNAL LAMP ON, check the voltage between the fog lamp connector and ground.

Terminals				Condition		
(+)			(-)	Condition	Voltage	
Front fog lamp				Front fog lamp		
Connector Terminal						
LH	E214	1	Ground	FOG	Battery voltage	
RH	E227	1		OFF	0 V	

Is the measurement value normal?

YES >> GO TO 4..

NO >> GO TO 3...

FRONT FOG LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

$\overline{3}$.check front fog lamp open circuit

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

)	
	Continuity

IPDM E/R			Front fog lamp		Continuity
Connector		Terminal	Connector	Terminal	Continuity
RH	E200	86	E227	1	Existed
LH		87	E214	1	LAISIEU

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK FRONT FOG LAMP GROUND CIRCUIT

- 1. Disconnect the front fog lamp connector.
- 2. Check continuity between the front fog lamp harness connector terminal and ground.

Front fog lamp				Continuity
Connector Terminal		Ground	Continuity	
RH	E227	2	Giodila	Existed
LH	E214	2		Existed

Does continuity exist?

YES >> Inspect the fog lamp bulb.

NO >> Repair the harness.

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< COMPONENT DIAGNOSIS >

PARKING LAMP CIRCUIT

Description INFOID:000000000994275

The IPDM E/R (intelligent power distribution module engine room) controls the tail lamp relay based on inputs from the BCM over the CAN communication lines. When the tail lamp relay is energized, power flows through fuses 46 and 47, located in the IPDM E/R. Power then flows to the front and rear combination lamps.

Component Function Check

INFOID:0000000000994276

1. CHECK PARKING LAMP OPERATION

PIPDM E/R AUTO ACTIVE TEST

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

(P)CONSULT-III ACTIVE TEST

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

TAIL : Parking lamp ON OFF : Parking lamp OFF

Is the parking lamp turned ON?

YES >> Parking lamp circuit is normal.

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

Diagnosis Procedure

INFOID:0000000000994277

1. CHECK PARKING LAMP FUSES

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

Unit	Location	Fuse No.	Capacity
Parking lamps (front)	IPDM E/R	46	10A
Parking lamps (rear)	IPDM E/R	47	10A

Is the fuse open?

YES >> Repair the harness and replace the fuse..

NO >> GO TO 2.

2.CHECK TAIL LAMP RELAY OUTPUT (VOLTAGE)

(P)CONSULT-III ACTIVE TEST

- Turn the ignition switch OFF.
- 2. Disconnect the front combination lamp connector.
- Turn the ignition switch ON.
- 4. Select "EXTERNAL LAMP" of IPDM E/R active test item.
- 5. With EXTERNAL LAMP ON, check the voltage between the combination lamp connector and ground.

Terminals				Condition	
(+)			(-)	Condition	Voltage
Combination lamp				External lamp	
Connector Terminal					
Front	E218, E225	8	Ground	LO	Battery voltage
Rear	B30, B45	2		OFF	0 V

Is the measurement value normal?

PARKING LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

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

3.check parking lamp circuit (open)

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

	IPDM E	/R	Combination lamp		Continuity
Conr	nector	Terminal	Connector	Terminal	Continuity
Front	E201	91, 92	E218, E225	8	Existed
Rear	E18	7	B30, B45	2	EXISIEU

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK PARKING LAMP GROUND CIRCUIT

- 1. Disconnect the combination lamp connector.
- 2. Check continuity between the combination lamp harness connector terminal and ground.

	Combination la	amp		0	
Connector		Terminal	Ground	Continuity	
Front	E218, E225	9	Giodila	Existed	
Rear	B30, B45	5		Existed	

Does continuity exist?

YES >> Inspect the parking lamp bulb.

NO >> Repair the harness.

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TURN SIGNAL LAMP CIRCUIT

Description INFOID:000000000994278

The BCM monitors inputs from the combination switch to determine when to activate the turn signals. The BCM outputs voltage direction 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 open.

NOTE:

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

Component Function Check

INFOID:0000000000994279

1. CHECK TURN SIGNAL LAMP

©CONSULT-III ACTIVE TEST

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

LH: Turn signal lamp LH blinkingRH: Turn signal lamp RH blinkingOFF: The turn signal lamp OFF

Does the turn signal lamp blink?

YES >> Turn signal lamp circuit is normal.

NO >> Refer to EXL-38, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000000994280

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 bulb OK?

YES >> GO TO 2..

NO >> Replace the bulb.

2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

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

	Terminals			Test item	
	(+)		(-)	iest itein	Voltage
-	BCM			FLASHER	vollage
Co	nnector	Terminal		FLASHER	
RH	M17	17	Ground	LH or RH	(V) 15 10 5 0 1 s
LH	M17	18		OFF	0 V

TURN SIGNAL LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

Is the measurement value normal?

YES >> GO TO 3..

NO >> Replace BCM.

3.check turn signal lamp circuit for open

- Turn the ignition switch OFF.
- 2. Disconnect BCM connector.
- 3. Check the continuity between the BCM harness connector and the front combination lamp, the rear combination lamp harness connector or the door mirror connector (if equipped with turn signals in mirrors).

всм			Front combination lamp Rear combination lamp Door mirror		Continuity
Connector Terminal		Terminal	Connector	Terminal	
Rear LH			B30	3	
Front LH	M17	18	E217	5	
Door mirror LH			D4	7	Existed
Rear RH			B45	3	
Front RH	M17	17	E224	5	
Door mirror RH			D107	7	

Does continuity exist?

YES >> GO TO 4..

NO >> Repair the harnesses or connectors.

4. CHECK TURN SIGNAL LAMP SHORT CIRCUIT

Check continuity between the BCM harness connector and the ground.

	BCM		Continuity	
Connector		Terminal	Ground	Continuity
LH	LH M17		Oround	Not existed
RH	IVIII	17		NOT EXISTED

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 5...

5. CHECK TURN SIGNAL LAMP GROUND CIRCUIT

Check continuity between the front combination lamp, the rear combination lamp or the door mirror and ground (if equipped with turn signals in mirrors).

Rear	combination lar combination lan Door mirror		Continuity	
Connec	ctor	Terminal	=	
Front RH	E224	7		
Front LH	E217	7	Ground	
Rear RH	B45	5		Existed
Rear LH	B30	5		
Door mirror RH	D107	8		
Door mirror LH	D4	8		

Does continuity exist?

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

NO >> Repair the harnesses or connectors.

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OPTICAL SENSOR

Description INFOID:000000000994281

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

Component Function Check

INFOID:0000000000994282

1. CHECK OPTICAL SENSOR SIGNAL BY CONSULT-III

(P)CONSULT-III DATA MONITOR

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

Monitor item	Condition	Voltage
OPTICAL SENSOR	When illuminating	3.1 V or more *
	When shutting off light	0.6 V or less

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

Is the item status normal?

YES >> Optical sensor is normal.

NO >> Refer to EXL-40, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000000994283

1. CHECK OPTICAL SENSOR POWER SUPPLY INPUT

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

(-	Voltage		
Optica	sensor		voltage
Connector	Terminal	Ground	
M66	1		5 V

Is the measurement value normal?

YES >> GO TO 2..

NO >> GO TO 4..

2.CHECK OPTICAL SENSOR GROUND INPUT

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

(-	+)	(-)	Voltage
Optical	sensor		
Connector	Terminal	Ground	
M66	3		Less than 0.2 V

Is the measurement value normal?

YES >> GO TO 3..

NO >> GO TO 6..

3. CHECK OPTICAL SENSOR SIGNAL OUTPUT

OPTICAL SENSOR

< COMPONENT DIAGNOSIS >

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

Terminals			Condition		
(+)		(-)	Condition	Valtage	
Optical sensor		Optical sensor	Voltage		
Connector	Terminal	Ground	Optical serisor		
M66	2	Ground	When illuminating	3.1 V or more *	
IVIOO	2		When shutting off light	0.6 V or less	

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

Is the measurement value normal?

YES >> GO TO 7...

NO >> Replace the optical sensor.

4. CHECK OPTICAL SENSOR POWER SUPPLY FOR OPEN CIRCUIT

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

Optical sensor		BCM		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M66	1	M18	46	Existed	

Does continuity exist?

YES >> GO TO 5..

NO >> Repair the harnesses or connectors.

5. CHECK OPTICAL SENSOR POWER SUPPLY FOR SHORT CIRCUIT

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

Optica	l sensor		Continuity
Connector	Terminal	Ground	Continuity
M66	1		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

6.CHECK OPTICAL SENSOR GROUND FOR OPEN CIRCUIT

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

Optica	sensor	В	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M66	3	M18	45	Existed	

Does continuity exist?

YES >> Replace BCM.

NO >> Repair the harnesses or connectors.

7.CHECK OPTICAL SENSOR SIGNAL FOR OPEN CIRCUIT

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

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OPTICAL SENSOR

< COMPONENT DIAGNOSIS >

Optical	sensor	В	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M66	2	M18	21	Existed

Does continuity exist?

YES >> GO TO 8..

NO >> Repair the harnesses or connectors.

$8. \mathsf{CHECK}$ OPTICAL SENSOR SIGNAL FOR SHORT CIRCUIT

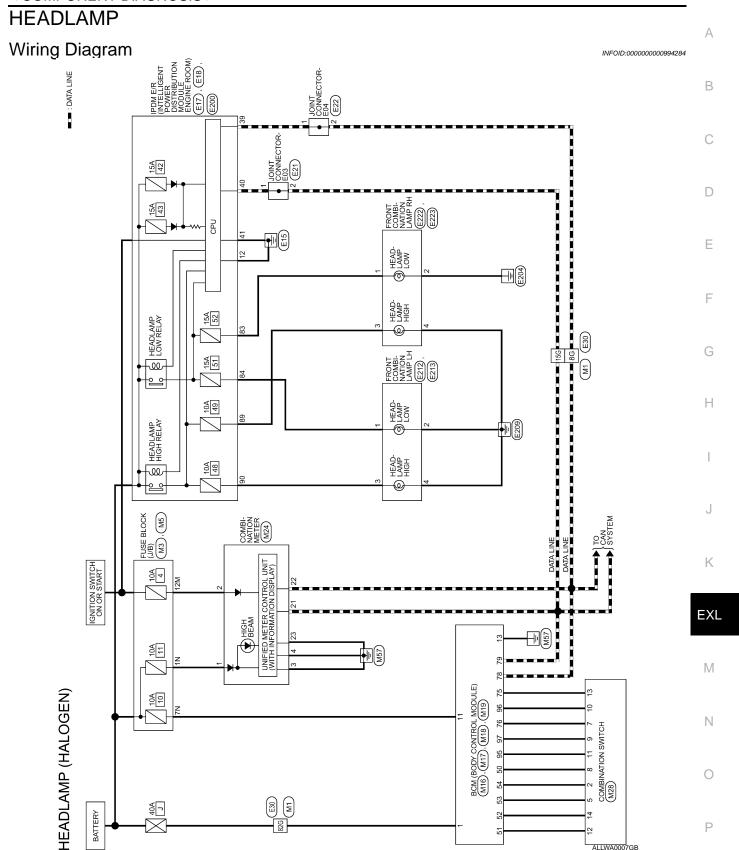
Check the continuity between the optical sensor harness connector and the ground.

Optical	sensor		Continuity	
Connector	Terminal	Ground	Continuity	
M66	2		Not existed	

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.



Connector No.

Signal Name

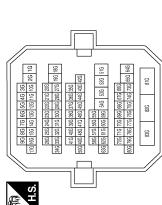
Color of Wire ۵

Terminal No.

8G 15G 82G

HEADLAMP (HALOGEN) CONNECTORS





Connector Name FUSE BLOCK (J/B)	WHITE		3N	N 6N 5N					Color of Signal Na
Connector Name	Connector Color WHITE		匠	HS					Tozimisel Nie Col
		_			3				





M16

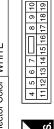
Connector No.

Connector Name FUSE BLOCK (J/B)
Connector Color WHITE

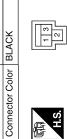
Connector No.

M17





Signal Name	BAT_BCM_FUSE	GND1
Color of Wire	Y/R	В
Terminal No.	11	13





5M 4M 3M 2M 1M 12M11M10M9M 8M 7M 6M

Signal Name		BAT_POWER_F/L
Color of	Wire	M/B
Torium T	leilliai NO.	-

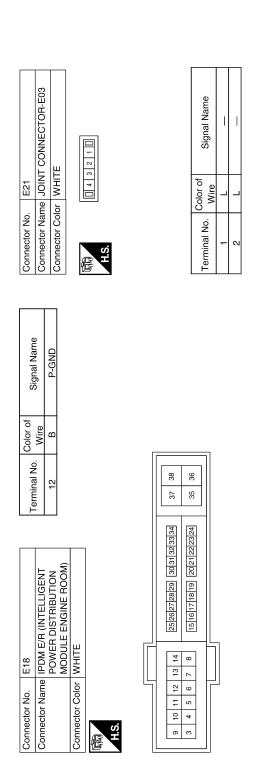
Color of	Wire	M/B
ON legimal No	cillia No.	l l
al Name		-

Signal Name	—
Color of Wire	Ь
Terminal No.	12M

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HEADLAMP

	А
HE 30 (W)	В
M24	C
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Connector Na Connector Na Connector Na Connector Connector Connector Na Connector N	F
00-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	G
Signal Nar CONTRUT OUTPUT OUTP	Н
M19 MODULE) MODULE MOD	I
Connector Name Connector Name Connector Name Connector Color LS	J
Aame VITCH VITC	К
Y CONTROL Signal Name Signal Name INPUT 5 INPUT 2 INPUT 4 INPUT 4 INPUT 4 INPUT 4 INPUT 4 INPUT 4	EXL
MA18 BCM (BOD MODULE) GREEN Or of	M
Connector No. M18 Connector Name BCM (B MODUL Connector Color GREEN H.S. Terminal No. Color of 50 LG/B 51 L/W 52 G/B 53 LG/R 54 G/Y Connector Name COMBII Connector Name COMBII Connector Color WHITE The connector Color WHITE Connector Color WHITE Connector Color WHITE Connector Color WHITE The color was a connector Color WHITE The color was a col	N
Conne Conne Conne Conne Conne	0
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Signal Mamo	Olgilai Naille	I	I	1				
Color of	Wire	۵	٦	M/B				
Torminal No Color of	GIIIIII NO.	8G	15G	82G				
Connector No. E30	Connector Name WIRE TO WIRE	Constant Color WHITE			10 200 400 500 600 700 800 800 700 800 800 700 800 800 700 800 8	929 928 919		
	Connector Name JOINT CONNECTOR-E04					Signal Name	1	ļ
). E22	me JOIN	TIHW.	I I I			Color of Wire	۵	۵
Connector No.	Connector Na	Connector Color WHITE		ſ	H.S.	Terminal No. Wire	-	2

HEADLAMP

E213	Connector Name FRONT COMBINATION	LAMP LH	BLACK
Connector No. E213	Connector Name		Connector Color BLACK

Connector Name FRONT COMBINATION LAMP LH (HALOGEN)
Connector Color BLACK

E212

Connector No.

LT LT			Signal Name	H/L_LH_HI	
LAMP LH	or BLACK	4	Color of Wire	G	
	Connector Color	H.S.	Terminal No.	3	

Signal Name	H/L_LH_LO	GND	
Color of Wire	٦	В	
Terminal No.	1	2	

GND			Connector Name FRONT COMBINATION	LAMP RH (HALOGEN)
		E223	30NT	MPF
Ш		E	芷	5
		No.	Name	
2		Connector No.	Connector	

HEADLAMP HI LH

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E223	FRONT COMB	BLACK	21
Connector No.	Connector Name FRONT COMB LAMP RH (HAI	Connector Color BLACK	(南) H.S.

Connector Name FRONT COMBINATION LAMP RH

Connector No.

Connector Color BLACK

י פ	α	٥
H/L_F	R/Y	1
Signal	Color of Wire	Terminal No.
		H.S.
CK	BLACK	Connector Color
LAMP RH (HALO	LAM S	
NT COMBIN	FRO	Connector Name FRONT COMBIN

Signal Name	IH_HR_J/H	GND (WITH DTRL)	TUOHTIW) GND	DTRL)
Color of Wire	MΠ	GR/R		В
Terminal No.	3	4		4

Connector No.	E200
Connector Name	Connector Name IPDM E/R (INTELLIGENT
	POWER DISTRIBUTION
	MODULE ENGINE ROOM)
Connector Color WHITE	WHITE
H.S.	85



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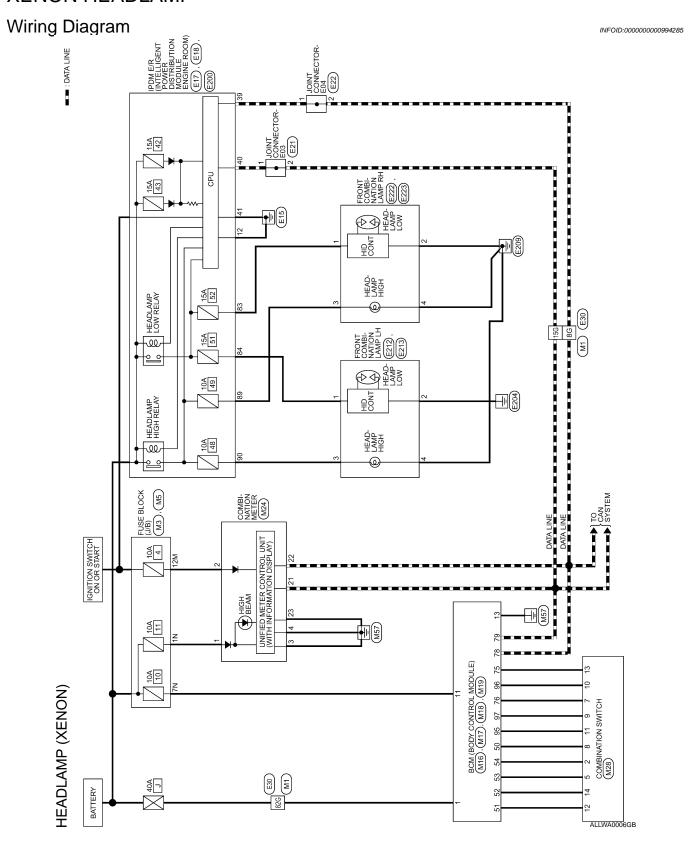
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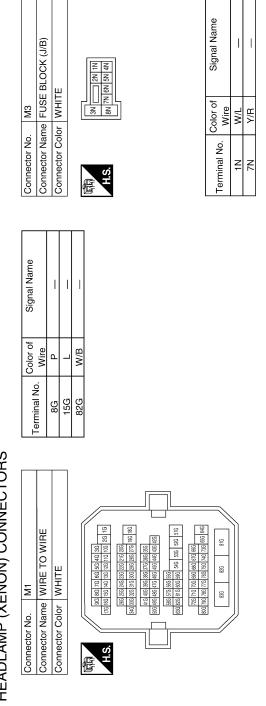
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XENON HEADLAMP



HEADLAMP (XENON) CONNECTORS



Signal Name	I	I	
Color of Wire	M/L	Y/R	
Terminal No.	1N	NZ	

Connector No.	M17
Connector Name	Connector Name BCM (BODY CONTROI
	MODULE)
Connector Color WHITE	WHITE

Connector Name BCM (BODY CONTROL MODULE)

M16

Connector No.

Connector Name FUSE BLOCK (J/B)

Connector No.

Connector Color WHITE

BLACK

Connector Color



13

5M 4M 3M 2M 1M 12M11M10M9M 8M 7M 6M

Signal Name		BAT_BCM_FU	
Color of	Wire	Y/R	
Torium I	ellilla No.	11	

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ř			L
	T		l
Signal Name		BAT_POWER_F/L	
Color of	wire	M/B	

BAT_POWER_F	M/B	1
	Wire	illilai NO.
Signal Name	Color of	Forminal No

Terminal No.

Terminal No.	Color of Wire	Signal
-	M/B	BAT_PO

Signal Name

Color of Wire

Terminal No. 12M

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Signal Name

Color of Wire

Terminal No.

OUTPUT_2

G/B ₹ ₹

INPUT 5

39 4 6

WHITE

Connector Color

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OUTPUT_5 INPUT_4 OUTPUT 1

LG/B

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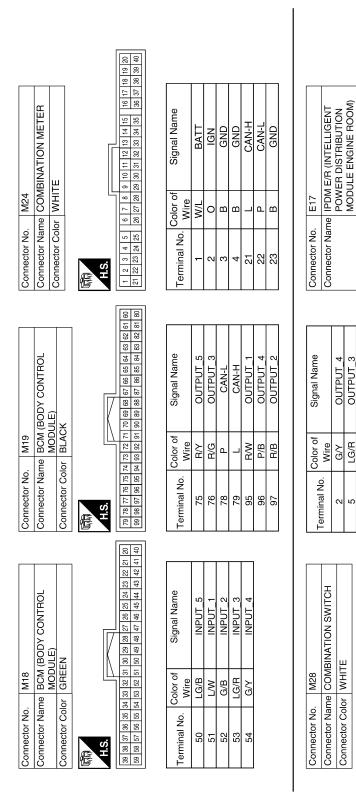
တ 유 12 13 14

R/G R/B P/B R/W

INPUT_3 INPUT 2 CAN-H S-GND

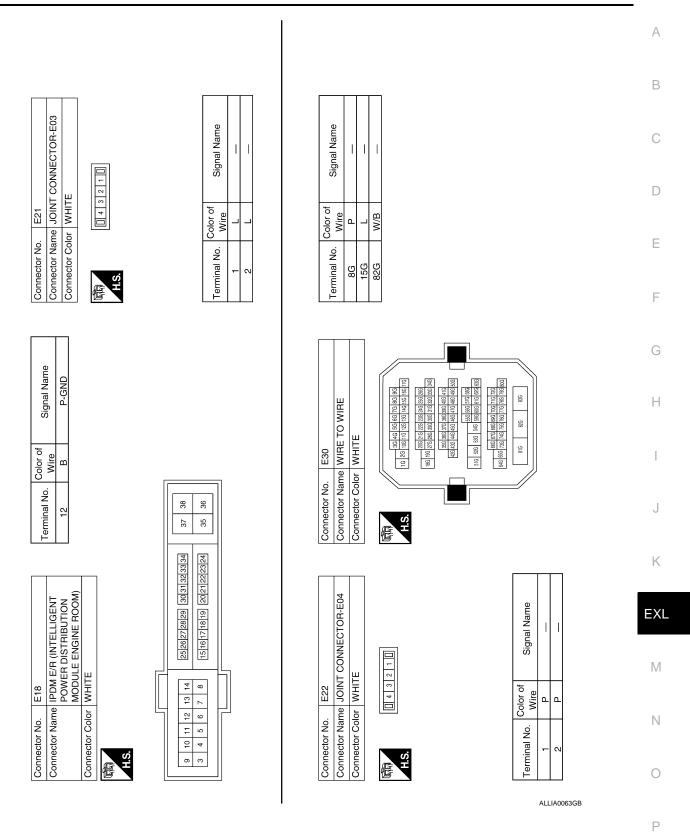
В

CAN-L



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XENON HEADLAMP



E213	Sonnector Name FRONT COMBINATION	LAMP LH	BLACK
Connector No.	Connector Name		Connector Color BLACK
	NOI		

Connector Name FRONT COMBINATION LAMP LH	Ж		Signal Name	H/L HH
ne FRONT C LAMP LH	or BLAC	4	Color of Wire	g
Connector Nan	Connector Color BLACK	引 H.S.	Terminal No.	8



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

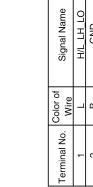
E200

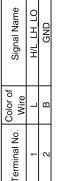
Connector No.

Connector Color WHITE

僵

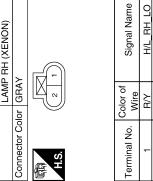
偃 H.S.





GND





F A	GR/		Color of Wire	₽	מ
Connector Name	Connector Color	(中)	Terminal No.	-	c
					_

Signal Name	HEADLAMP_LO_RH	HEADLAMP_LO_LH	HEADLAMP_HI_RH	HEADLAMP HI LH	
Color of Wire	R/Y	L	L/W	G	
rminal No.	83	84	89	06	



Connector No.



Signal Name	H/L_RH_HI	GND (WITH DTRL)	GND (WITHOUT	DTRL)
Color of Wire	MΠ	GR/R		В
Terminal No.	3	4		4

GND

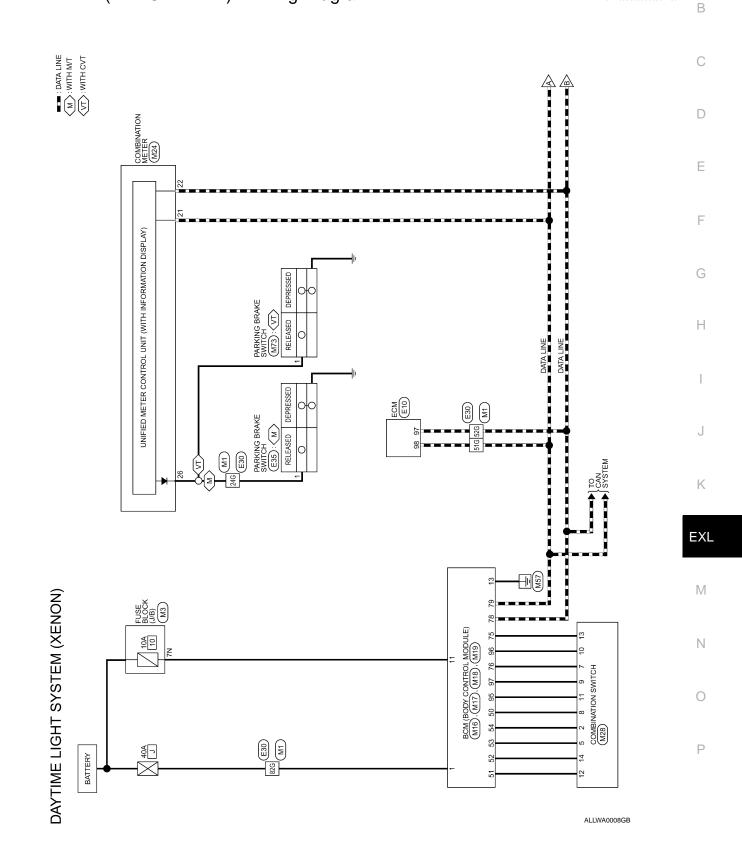
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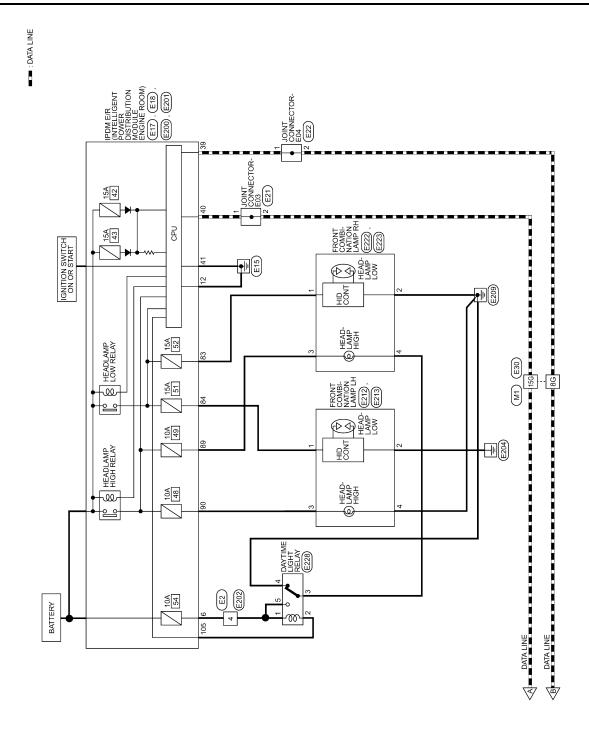
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DAYTIME RUNNING LIGHT SYSTEM HEADLAMP (XENON TYPE)

HEADLAMP (XENON TYPE): Wiring Diagram





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Connector Name FUSE BLOCK (J/B)

Connector No.

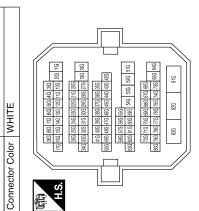
Connector Color WHITE

DAYTIME LIGHT SYSTEM CONNECTORS (XENON)

Connector No. M1
Connector Name WIRE TO WIRE

Signal Name		_	_	_	_	_
Color of Wire	Ь	7	G/R	٦	Ь	M/B
Terminal No.	8G	15G	24G	51G	52G	82G

Signal Name		1	I	1	1	1	1
Color of	Wire	Ь	٦	G/R	7	Ь	M/B
Terminal No		8G	15G	24G	51G	52G	82G



Signal Name		
Color of Wire	Y/R	
Terminal No.	NZ	

Connector No. M18	Connector Name BCM (Connector Color GREE
Connecto	Connecto	Connecto
	-ROL	

Connector No. M17

Connector Name BCM (BODY CONTROL MODULE)

M16

Connector No.

Connector Color BLACK

Connector Name BCM (BODY CONTROL MODULE) Connector Color GREEN Connector S S S S S S S S S S S S S S S S S S S							_													
Connector Color GREEN H.S. 3 88 57 58 58 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40	ပိ	Ē	ect	5	Na Na	ΙĔ	~ =	[있 응	وّ ≥ا	lĕ =	ان کا	<u>≻</u>	ဂ္ဂ	뉟	<u> </u> Ĕ	님				
H.S. 1. S. 188 57 58 555 544 53 52 51 50 49 48 47 46 45 444 43 42 41 40 40	ပိ	Ę	ect	ō	ပြ	힏	\vdash	ЗЯ	Ш	z										
39 38 37 38 57 58 54 38 32 31 30 29 28 27 28 25 27 20 27 20 5 5 5 5 5 5 5 5 5 7 5 7 5 5 5 5 5 5 5			(6								l V	17								
59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40	88	88	37	36	35	34	33	32	31	99	53	88	27	56	25	24	23	ន	21	20
	29	28	22	26	22	54	53	52	51	20	49	48	47	46	45	44	43	42	41	40

Signal Name		S_TUPUI_5	I_TUPUT_1	INPUT_2	INPUT_3	4 TUPNI
Color of	Wire	LG/B	L/W	G/B	LG/R	G/Y
Toriminal No	ellilla No.	20	51	52	53	54

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Connector Name BCM (BODY CONTRO MODULE) Connector Color WHITE	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Connector Name BCM (B MODUI	H.S.

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	ĺ	4 15 16 1		
	9	13 1		
	4 5	11 12		
L]	
	F	S		

Signal Name	BAT BCM FUSE	GND1	
Color of Wire	Y/R	В	
Terminal No.	11	13	

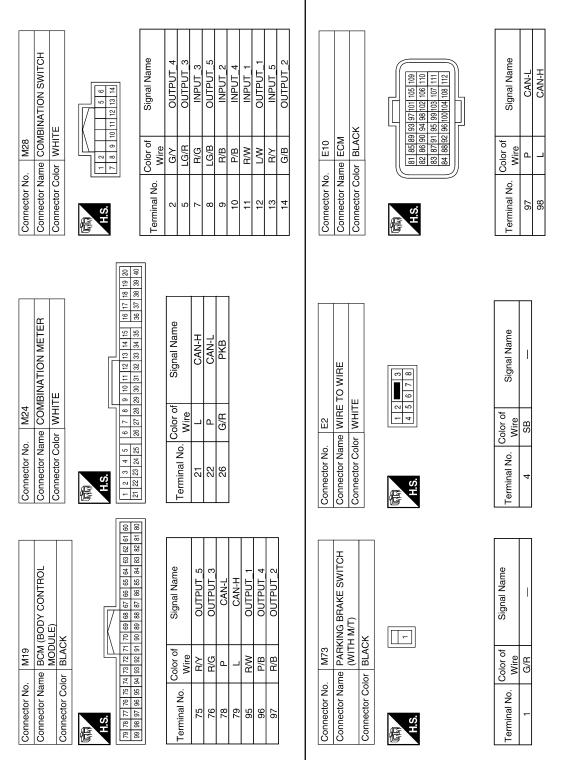
F	-		
Signal Name		BAT_POWER_F/L	
Color of	Wire	M/B	
ا ا			

Signal Name	BAT_POWER_F/L	
Color of Wire	M/B	
Terminal No.	1	

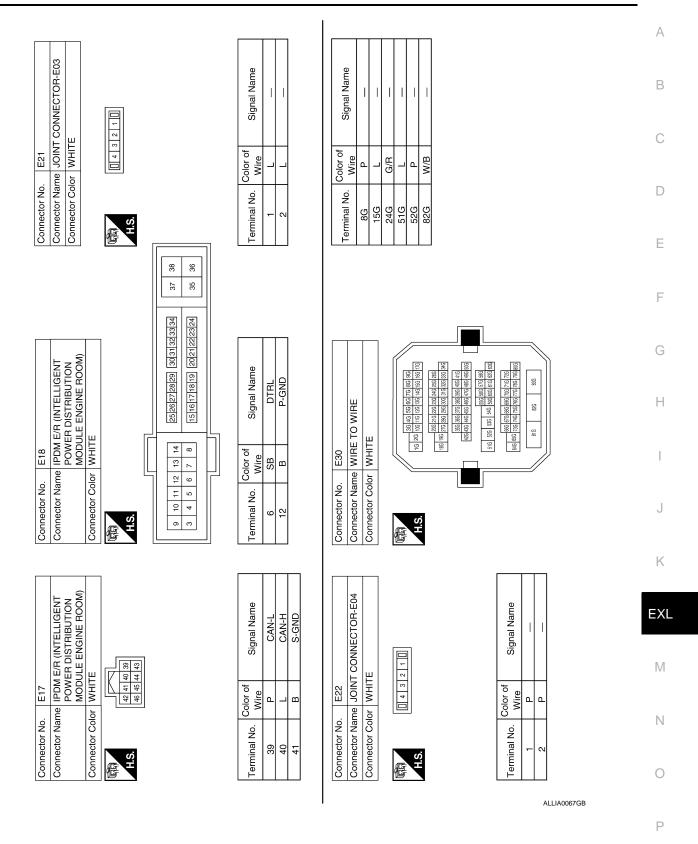
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< COMPONENT DIAGNOSIS >



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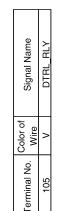
< COMPONENT DIAGNOSIS >

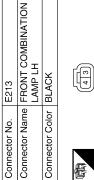


Connector No.	EZO
Connector Name	Connector Name IPDM E/R (INTELLIGENT
	POWER DISTRIBUTION
	MODULE ENGINE ROOM)
Connector Color WHITE	WHITE
86 86	97 96 95 94 93 92 91
	106 105 104 103 102 101 100 99

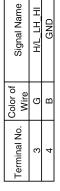


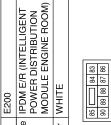
Signal Name	DTRL_RLY	
Color of Wire	^	
Terminal No.	105	











Connector Color





Signal Name	HEADLAMP_LO_RH	HEADLAMP_LO_LH	HEADLAMP_HI_RH	HEADLAMP_HI_LH
Color of Wire	R/Y	٦	M/I	G
Terminal No.	83	84	68	06

E212
connector No.





Connector No.	E35
Connector Name P	Connector Name PARKING BRAKE SWITCH
<u></u>	(WITH CVT)
Connector Color BLACK	LACK

Connector Name

Connector No.







E202	WIRE TO WIRE	WHITE	
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	





Signal Name	—	
Color of Wire	SB	
Terminal No.	4	

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< COMPONENT DIAGNOSIS >

Connector Name DAYTIME LIGHT RELAY
Connector Color BLACK E228 Connector No.

8 9 4 1	Signal Name	1	I	I	1	
	Color of Wire	SB	^	GR/R	В	GD
麻 H.S.	Terminal No.	-	2	8	4	L

E223	Connector Name FRONT COMBINATION	LAMP RH (XENON)	BLACK	
Connector No.	Connector Name		Connector Color BLACK	



Color of Wire	R/Y	В	
Terminal No.	1	2	

H/L RH LO GND Signal Name

E222	Connector Name FRONT COMBINATION	LAMP RH	BLACK	
Connector No.	Connector Name		Connector Color BLACK	



	S.
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Signal Nam	H_HA_J/H	GND (WITH DI
Color of Wire	MΠ	GR/R
Terminal No.	3	4

HEADLAMP

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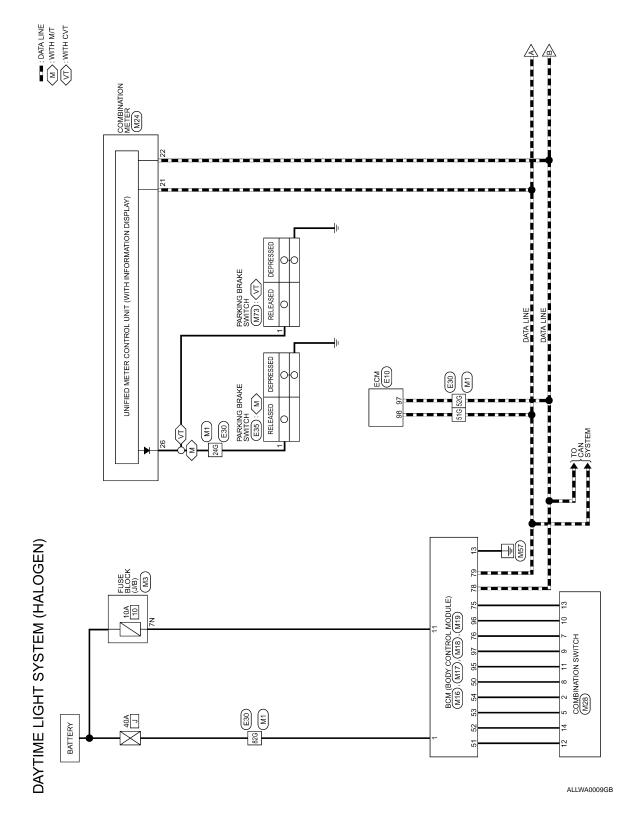
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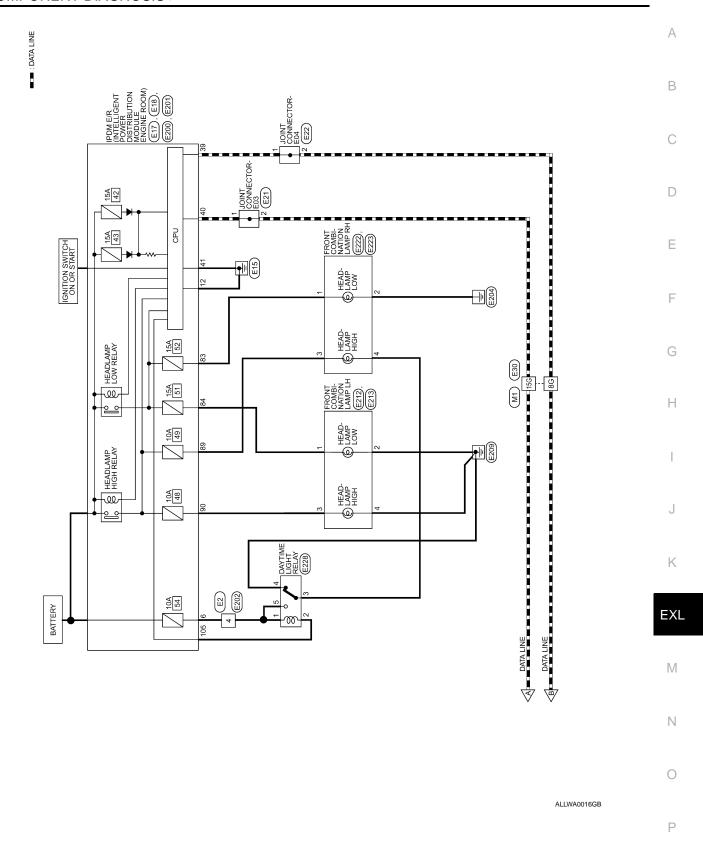
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HEADLAMP: Wiring Diagram

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Connector Name FUSE BLOCK (J/B)

M3

Connector No.

Connector Color WHITE

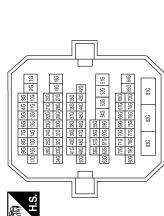
DAYTIME LIGHT SYSTEM CONNECTORS (HALOGEN)

Connector No. M1
Connector Name WIRE TO WIRE

Connector Color WHITE

Signal Name		-	-	I	I	1	1
Color of	Wire	Ь	7	B/B	7	d	M/B
Terminal No.		8G	15G	24G	51G	52G	82G
		T					

Color of Signal Name Wire		1	В —	_	
		_	G/R	٦	۵.
Terminal No.	86	15G	24G	51G	529



	Signal Name		
•	Color of	Wire	Y/R
	Toriminal Mo	i ellilliai NO.	NZ

	Connector No.	M18
DY CONTROL	Connector Name BCM (BODY C	BCM (BODY C
	Connector Color GREEN	GREEN

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				ន	42
				23	43
1				24	44
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	≥ັດ	Ш	\	33	51
19	BCM (BOI MODULE)	띪		32	52
ή,	~ _	Ë		33	53
	Ĕ	<u>ō</u>		34	54
	S	ပြ		35	25
	ō	5		36	29
1.	ğ	ξ,		37	22
	Ĕ	Į.	H.S.	38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20	58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40
1	Connector Name BCM (BODY CONTROL MODULE)	Connector Color GREEN	唇工	33	29

Signal Name	INPUT_5	INPUT_1	INPUT_2	E_TUPNI	4 TUPUI
Color of Wire	LG/B	L/W	G/B	LG/R	G/Y
Terminal No.	50	51	52	53	54

Conn	Connector Name BCM (BOD Connector Color WHITE	ame BCM (BOD MODULE) blor WHITE 4 5 6 7 8
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Connector No. M17

Connector Name BCM (BODY CONTROL MODULE)

M16

Connector No.

Connector Color BLACK

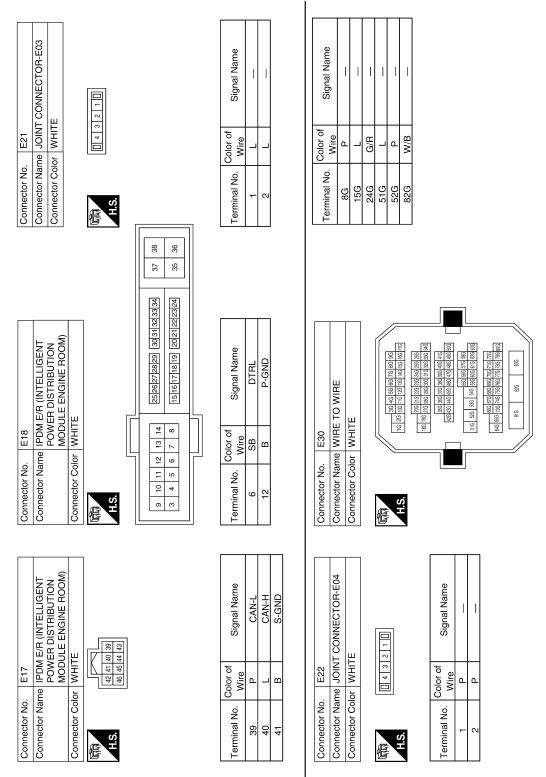
1 3

Signal Name) 	BAT BCM FUS	GND1
Color of	Wire	Y/R	В
	Terminal No.	11	13

Signal Name	BAT_POWER_F/L
Color of Wire	M/B
Terminal No.	-

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Connector No. M28 Connector Name COMBINATION SWITCH Connector Color WHITE H.S. T 8 9 10 11 12 13 14	Terminal No. Wire Color of Signal Name 2 G/Y OUTPUT 4 5 LG/R OUTPUT 3 7 R/G INPUT 3 8 LG/B OUTPUT 5 9 R/B INPUT 2 10 P/B INPUT 4 11 R/W INPUT 1 12 L/W OUTPUT 1 13 R/Y INPUT 5 14 G/B OUTPUT 2	Connector No. E10 Connector Color BLACK Connector Color BLACK 81 85 89 93 97 101 105 109 82 86 90 94 98 102 106 110 83 87 91 95 99 100 110 84 88 92 96 100 104 108 112	Terminal No. Wire Signal Name 97 P CAN-L 98 L CAN-H	A B C D
Connector No. M24 Connector Name COMBINATION METER Connector Color WHITE H.S. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 1 12 12 22 22 24 25 8 26 72 8 29 30 31 32 23 34 35 8 39 40	Terminal No. Color of Wire Signal Name 21 L CAN-H 22 P CAN-L 26 G/R PKB	Connector No. E2 Connector Color WHITE Connector Color WHITE Tolor WHITE Tolor WHITE Tolor WHITE	Terminal No. Color of Signal Name 4 SB —	F G H
Connector No. M19 Connector Name BCM (BODY CONTROL MODULE) Connector Color BLACK H.S. The property of the pr	Terminal No. Color of Nire Signal Name 75 R/Y OUTPUT 5 76 R/G OUTPUT 3 79 L CAN-L 79 L CAN-H 95 R/W OUTPUT 1 96 P/B OUTPUT 4 97 R/B OUTPUT 2	Connector No. M73 Connector Name PARKING BRAKE SWITCH (WITH M/T) Connector Color BLACK	Terminal No. Color of Signal Name Wire 1 G/R —	K EXL M N



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< COMPONENT DIAGNOSIS >

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				В
POWER DISTRIBUTION MODULE ENGINE ROOM) WHITE State State	Signal Name DTRL RLY	FRONT COMBINATION LAMP LH BLACK	Signal Name H/L LH HI GND	С
ame IPDM E/R (INTE POWER DISTR MODULE ENGIN WHITE WHITE BR ST	Color of Wire V	FRONT CON LAMP LH BLACK		D
9 Jr			No. Wire G	Е
Connector No. Connector Col	Terminal No.	Connector No. Connector Name Connector Color	Terminal No.	F
L SOO	8 HH HH H		9 0	G
E200 IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) WHITE B	Signal Name HEADLAMP_LO_RH HEADLAMP_LO_LH HEADLAMP_HI_RH HEADLAMP_HI_LH	Connector No. E212 Connector Name FRONT COMBINATION LAMP LH (HALOGEN) Connector Color BLACK	Signal Name H/L_LH_LO GND	Н
	Color of Wire R/Y L/W L/W G	S. E212 Same FRONT LAMP L Slor BLACK	Color of Wire B	I
Connector No. Connector Name Connector Color H.S.	Terminal No. 83 84 84 89 90	Connector No. Connector Name Connector Color	Terminal No.	J
				K
RAKE SWITCH	Signal Name	H H H	Signal Name	EXL
E35 PARKING B (WITH CVT) BLACK		E202 WIRE TO WIRE WHITE		M
a lo	Color of Wire G/R	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Color of Wire SB	Ν
Connector Nan Connector Col	Terminal No.	Connector No. Connector Name Connector Color	Terminal No.	0
			ALLIA0059GB	

< COMPONENT DIAGNOSIS >





Signal Name	2	1	I	ı	ı	I	
Color of	Wire	SB	^	GR/R	В	SB	
Terminal No.		1	2	3	4	5	







Signal Nam	H/L_RH_L(GND	
Color of Wire	R/Y	В	
Ferminal No.	1	2	

E222	Connector Name FRONT COMBINATIOI	LAMP RH	BLACK	
Connector No.	Connector Name		Connector Color BLACK	



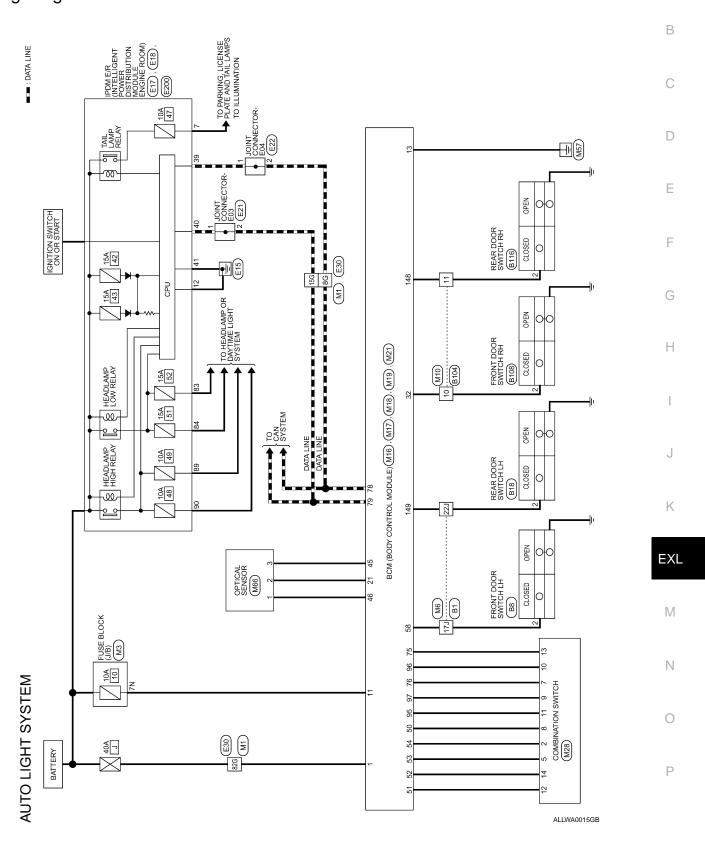


Signal Nam	HNL_RH_	GND
Color of Wire	MΠ	GR/R
Terminal No.	3	4

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AUTO LIGHT SYSTEM

Wiring Diagram



Connector No.

Signal Name

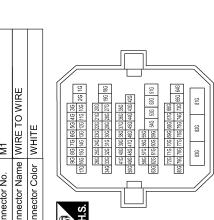
Color of Wire ۵

Terminal No.

8G 15G 82G

AUTO LIGHT SYSTEM CONNECTORS





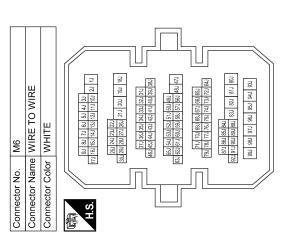
BLOCK (J/B)	Ш	7N SN SN 4N SN SN AN A	Signal Name
ne FUSE	or WHITE	NE NA	Color of Wire
Connector Name FUSE BLOCK (J/B)	Connector Color WHITE	H.S.	Terminal No.

Servinal No. Wire 7N Y/R	Signal Name		
erminal No. 7N	Color of Wire	Y/R	
<u> </u>	Terminal No.	NZ	

Connector Name WIRE TO WIRE Connector Color BROWN	Connector No.	M10
Connector Color BROWN	Connector Name	WIRE TO WIRE
	Connector Color	BROWN

Signal Name		_	_
Color of	we	R/B	R/W
Terminal No.		10	11

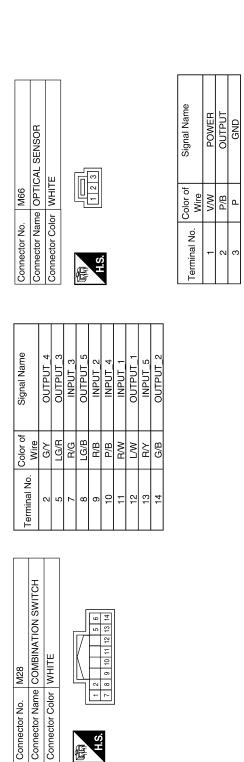
Signal Name		1
Color of Wire	SB	R/B
Terminal No.	17.1	22J



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AUTO LIGHT SYSTEM

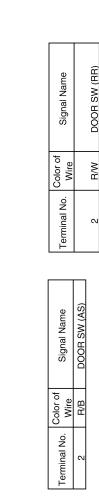
		А
2 2 3 4 1 2 3 4 4 1 2 3 4 4 1 3 4 4 1 4 1 3 4 1 4 1 4 1 4 1 4	21 12 12 12 12 12 12 12	В
M18 MODULE) GREEN SEA 30 20 20 27 26 24 20 27 120 20 14 40 40 40 47 40 40 44 40 40 47 40 40 40 47 40 40 40 47 40 40 47 40 40 47 40 40 47 40 40 47 40 40 47 40 40 47 40 40 47 40 40 47 40 40 47 40 40 47 40 40 40 47 40 40 40 47 40 40 40 40 40 40 40 40 40 40 40 40 40	M21 M22	С
M18 MODULE) GREEN GREEN GREEN Ior of S Wire AUTO ARL S ARL S WR AUTO ARL S WR AUTO ARL S WR ARL S BAS BAS ARL S ARL S ARL S ARL S BAS BAS BAS BAS BAS BAS BAS B	M21 BCM (BODY MODULE) GRAY 1	D
	Connector No. M21	Е
Connector No Conne	Connector No Connector No Connector No Connector Or Connector Connector Connector Connector No C	F
DL BE SE	9	G
M17 MODULE) WHITE	Signal Name OUTPUT 5 OUTPUT 3 CAN-L CAN-H OUTPUT 1 OUTPUT 4 OUTPUT 2	Н
	Color of Wire R/W	I
Connector No. Connector Color Terminal No. A.S. Terminal No. A.S. Torninal No. Torninal No. A.S. Torninal No. Torninal No. A.S. Torninal No. A.S. Torninal No. Torninal No.	Terminal No. 75 76 78 79 95 95 95 97 77	J
	0)L 64 63 62 61 60 84 83 82 61 80	K
Y CONTROL Signal Name T_POWER_F/L	CONTROL 67 66 64 63 62 61 67 66 66 94 83 62 81	EXL
M16 BCM (BOD MODULE) BLACK I a a a a a a a a a a a a a a a a a a	Connector No. M19 Connector Name BCM (BODY CONTRO MODULE) Connector Color BLACK H.S. 78 78 78 78 78 78 78 78 78 78 78 88 77 78 88 8	M
Connector No. Connector Name Connector Color Terminal No. M. M. M.	Connector No. Connector Name Connector Color H.S. H.S. Register 7 78 78 74 78 74 78 78 78 78 78 78 78 78 78 78 78 78 78	Ν
	ALLIA0094GB	0



Connector No. E21	Connector Name JOINT CONNECTOR-E03 Connector Color WHITE		H.S.	35 36	Terminal No. Color of Signal Name	1	
	Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	ITE		25 26 27 28 29 30 31 32 33 34 15 16 17 18 19 20 21 22 23 24	Signal Name	TAIL/ILLUMI	
Connector No. E18	Connector Name IPD POY	Connector Color WHITE	原 H.S.	9 10 11 12 13 1	Terminal No. Wire	7 R/L	
	Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	IITE	41 40 39 45 44 43		f Signal Name	CAN-L	
E17	9 P P	Connector Color WHITE	42 41		Color of Wire	┛	

		А
		В
Signal Name	Signal Name	С
		D
Color of Wire Wire Wire 15G L 82G W/B	Color of Wire 17J SB 22J R/B	Е
		F
		G
TE	WHE TO WIRE WHITE WHE TO WIRE WHITE State St	Н
E30 WIRE TO WIRE WHITE WHIT	18 19 20 14 15 15 15 15 15 15 15 15 15 15 15 15 15	I
Connector No. E30 Connector Name WIRE T Connector Color WHITE H.S. Storage St	Connector No. B1	J
		K
NNECTOR-E04	POWER DISTRIBUTION WODULE ENGINE ROOM) WHITE SIGNED SIGNED SIGNED NAME SIGNED NAME AND HEADLAMP LO LH L HEADLAMP LO LH WHEADLAMP HI RH G HEADLAMP HI LH G HEADLAMP HI LH G HEADLAMP HI LH	EXL
E22	POWER DIS WITE Color of Color	M
nector No.	Connector No. Connector Name Connector Color H.S. H.S. R.3 R.4 R.4 R.5 R.5 R.5 R.5 R.7 R.5 R.7 R.7	N
Con		0
		P

TO WIRE	9 10 12 8	Signal Name	_	1				
B104 WIRE BROW	1 2 3 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Color of Wire	R/B	W/A				
Connector No. B104 Connector Name WIRE TO WIRE Connector Color BROWN	H.S.	Terminal No.	10	1				
Connector No. B18 Connector Name REAR DOOR SWITCH LH Connector Color WHITE		Signal Name	DOOR SW(RL)				Connector Name REAR DOOR SWITCH RH	
B18 REAR WHITE	0 0 0	Color of Wire	R/B			B116	REAR	WHITE
Connector No. B18 Connector Name REAR I Connector Color WHITE	H.S.	Terminal No.	2			Connector No.	Connector Name	Connector Color WHITE
Connector No. B8 Connector Name FRONT DOOR SWITCH LH Connector Color WHITE		Signal Name	DOOR SW(DR)				Connector Name FRONT DOOR SWITCH RH	
B8 FRONI		Color of Wire	SB			B108	FRON	WHITE
or No.						or No.	or Name	or Color
Connector No. B8 Connector Name FRONT Connector Color WHITE	所 H.S.	Terminal No.	2			Connector No.	Connect	Connector Color WHITE



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Q - 0 0

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FRONT FOG LAMP SYSTEM Α Wiring Diagram INFOID:0000000000994289 ■ : DATA LINE В C D IGNITION SWITCH ON OR START ЭИІЛ АТАО Е 156 E30 15A 42 CPU F 15A 43 G Н J Κ BCM (BODY CONTROL MODULE) (M16), (M17), (M18), (M19) FUSE BLOCK (J/B) (M3) EXL 5 2 8 11 9 7 COMBINATION SWITCH (M28) \mathbb{N} 40t 10A 82G M1 4040 BATTERY Ν FRONT FOG LAMP 0

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Connector No.

Signal Name

Color of Wire

FRONT FOG LAMP CONNECTORS

Tormina		86	15G	82G				
. M1	Connector Name WIRE TO WIRE	WHITE	1		96 86 76 86 56 46 36	176 166 156 146 136 126 116 106 26 16	260 250 240 240 220 270 270 200 200 240 240 240 240 240 240 240 24	
Connector No.	Connector Nar	Coppector Color WHITE			E	H.S.		=

916

826

936

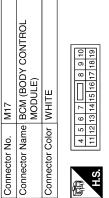
L W/B ۵

_		1				
FUSE BLOCK (J/B)) 	00 7N 6N 5N 4N	Signal Name		-	
FUS!		<u> </u>	Color of	Wire	Y/R	
Connector Name	Connector Color	H.S.)	emma No.	NZ	

	of Signal Name		_	
•	Color of	Wire Wire	7N Y/R	

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

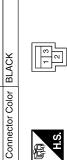
Signal Name		INPUT_5	INPUT_1	INPUT_2	INPUT_3	NPUT 4
Color of	Wire	LG/B	L/W	G/B	LG/R	G/Y
Terminal No		20	51	52	53	54



Signal Name		BAT_BCM_FUSE	GND1
Color of	Wire	Y/R	æ
Toriminal No	מוווומו אס.	11	13

M16
Connector No.

Connector Name BCM (BODY CONTROL MODULE)

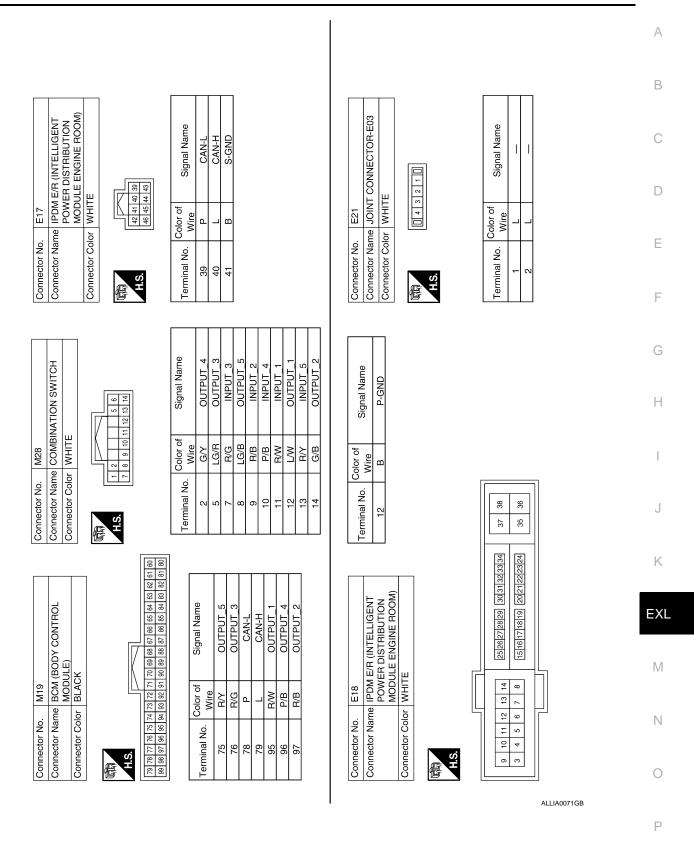


Signal Name		BAT_POWER_F/L	
Color of	Wire	M/B	
orminal No		1	

Signal Name		BAT POWER E/I
Color of	Wire	M/R
old locionac T	ם ש	,

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FRONT FOG LAMP SYSTEM



onnector No. E30	E30	Connector No. E200	E200
onnector Name	onnector Name WIRE TO WIRE	Connector Name	Sonnector Name IPDM E/R (INTELLIGENT
onnector Color WHITE	WHITE		POWER DISTRIBUTION MODULE ENGINE ROOM)
		Connector Color WHITE	WHITE
IETEL THE	36 46 56 66 76 86 96 16 26 106 116 128 139 146 158 186 176		20 70
	200 216 226 236 246 256 286		90 88 87 86

Connector Name JOINT CONNECTOR-E04

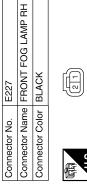
E22

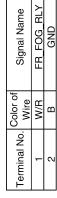
Connector No.

Connector Color WHITE

TE	Signal Name	FR_FOG_LAMP_RH	FR FOG LAMP LH		
MHI NO TO	Color of Wire	W/R	∖		
Schwector Color WHITE Schwerz WHITE Schwerz WHITE Schwerz WHITE Schwerz WHITE Schwerz WHITE Schwerz Schwerz	Terminal No. Wire	86	87		
10 20 140 55 160 170 80 90 90 90 90 90 90 90 90 90 90 90 90 90	Signal Name	I	1	I	
01 02 00 00 00 00 00 00 00 00 00 00 00 00	Color of Wire	Ь		M/B	
H.S.	Terminal No. Wire	8G	15G	82G	
2 10	Signal Name	1	1		
	Color of Wire	Ь	۵		
H.S.	Terminal No. Wire	-	2		

Terminal No. Wire	Color of Wire	Signal Name	Terminal No. Wire	Color of Wire	Signal Name	Term	Terminal No. Color of Wire	Color of Wire	Signal Name
-	Ь	1	8G	Ь			86	W/R	W/R FR_FOG_LAMP_
2	Д	I	15G		I		87	₹	FR_FOG_LAMP
			82G	M/B	1				
Connector No. E214	, E214		Connector No. E227	E227					









Connector Name FRONT FOG LAMP LH
Connector Color BLACK



GND	В	2
FR_FOG_RI	Λ	1
oigilai Nail	Wire	ellilla No.
M loanio	Color of	- Indiana

ALLIA0072GB

< COMPONENT DIAGNOSIS > TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM Α Wiring Diagram INFOID:0000000000994290 HAZARD SWITCH (M54) $\begin{array}{c} \blacksquare \bullet \blacksquare : DATA LINE \\ \overline{\langle RC \rangle} : with Rear view monitor \\ \overline{\langle TM \rangle} : with turn signal in Mirror \\ \overline{\langle xR \rangle} : without rear view monitor \\ \hline \end{array}$ В 8 C H DOOR MIRROR RH (D107): < D101 M15 D REAR COMBINATION LAMP RH (B45) JOINT CONNECTOR-M02 (M63) Е TURN SIGNAL M6 B1 F DATA LINE SYSTEM G BCM (BODY CONTROL MODULE) (M16), (M17), (M18), (M19) TURN SIGNAL DATA LINE Н FRONT COMBINATION LAMP LH (E217) COMBINATION METER (M24) FUSE BLOCK (J/B) (M3), (M5) TURN E39 E2 E202 J REAR COMBINATION LAMP LH UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY) IGNITION SWITCH ON OR START 4 4 4 TURN TURN TURN SIGNAL AND HAZARD WARNING LAMPS Κ TURN SIGNAL M6 [81] 9 ₹<u></u> EXL P DOOR MIRROR M11 D1 ₫ 9 M12 [2] M M4 BATTERY Ν COMBINATION SWITCH (M28) 0

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Signal Name

Color of

Terminal No. 1N 7N

Wire W/L Y/R

Connector Name FUSE BLOCK (J/B)

M3

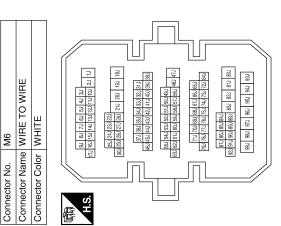
Connector No.

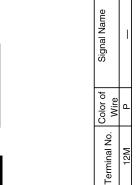
Connector Color WHITE

TURN SIGNAL AND HAZARD WARNING LAMPS CONNECTORS

Connector No. M1 Connector Name WIRE TO WIRE Connector Color WHITE Trajes los no los so 40 30 10 10 10 10 10 10 10 10 10 10 10 10 10	Terminal No. Color of Signal N	Wire	1G G/B					[F		ī		
Connection of the state of the	Connector No. M1	Connector Name WIRE TO WIRE	ctor Color WHITE			286 236 246 236 226 216 206	346 336 326 316 306 236 286 276 194 184	41G 40G 39G 37G 36G 35G	506 496 486 476 466 456 446 436 426		72G 71G 70G 69G 69G 61G 61G 69G 84G 87G 80G 87G 80G 84G	836 826 816

Signal Name	-	_	1	_
Color of Wire	В	В	G/Y	G/B
Terminal No.	1.1	57	ſ6	15J





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Connector Name FUSE BLOCK (J/B)

Connector No.

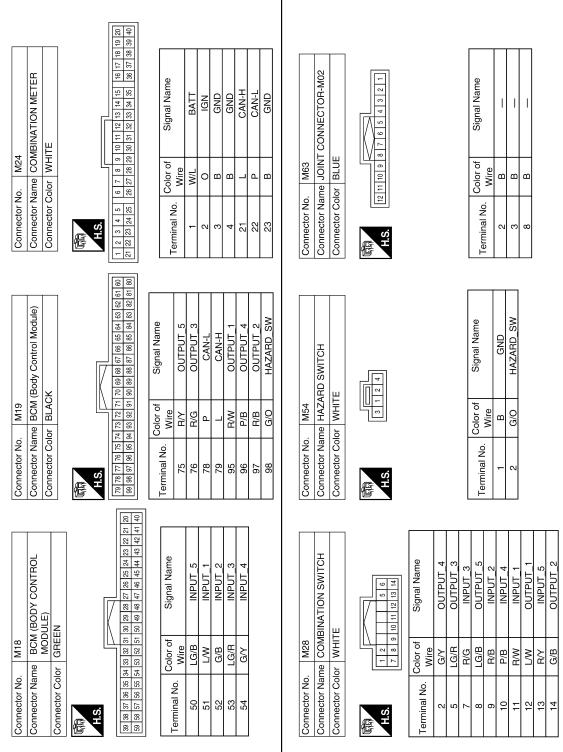
Connector Color WHITE

5M 4M 3M 2M 1M 12M11M10M9M 8M 7M 6M

< COMPONENT DIAGNOSIS >

				А
				В
HH 401	Signal Name	M17 B BCM (BODY CONTROL MODULE) WHITE 4 5 6 7 8 9 10	Signal Name BAT_BCM_FUSE GND1 FR_FLASHER FL_ASHER	С
# TE TO WIRI		M17 BCM (BODY MODULE) WHITE		D
Connector No. M14 Connector Name WIRE TO WIRE Connector Color WHITE T 2	No. Color of Wire B	Connector No. M17 Connector Name BCM (BODY CONTROL MODULE) Connector Color WHITE	No. Color of V/R Y/R G/B G/Y	Е
Connector Nam Connector Cold	Terminal No.	Connector No. Connector Color H.S.	Terminal No. 11 13 13 17 18	F
				G
TO WIRE 15 16 16 16 16 16 16 16 16 16 16 16 16 16	Signal Name	Connector No. M16 Connector Name BCM (BODY CONTROL MODULE) Connector Color BLACK H.S.	Signal Name BAT_POWER_F/L	Н
M12 WHIRE T WHIRE T 1 2 3 4 4 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1	Wire G/Y	M16 BCM (B MODUL	Color of Wire W/B	I
Connector No. M12 Connector Name WIRE TO WIRE Connector Color WHITE To 1 2 3 4 5 6 7 1 1 2 3 4 5 6 7 1 1 1 2 3 4 1 5 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Terminal No. 6	Connector No. Connector Color Connector Color	Terminal No.	J
				K
WIRE 13 14 15 16	Signal Name	WIRE	Signal Name	EXL
11 HITE 3 11 12 12	jo 0	WHRE TO V WHITE	<u>p</u>	M
No. MHI Color WHI 1 2 3 110	lo. Color of Wire B	Name WI Name I No.	Color of Wire G/B	N
Connector No. M11 Connector Name WIRE TO WIRE Connector Color WHITE	Terminal No.	Connector No. M15 Connector Name WIRE TO WIRE Connector Color WHITE T 2 3 4 5 6 T 8 9 10 11 12	Terminal No.	0
			ALLIA0074GB	Р

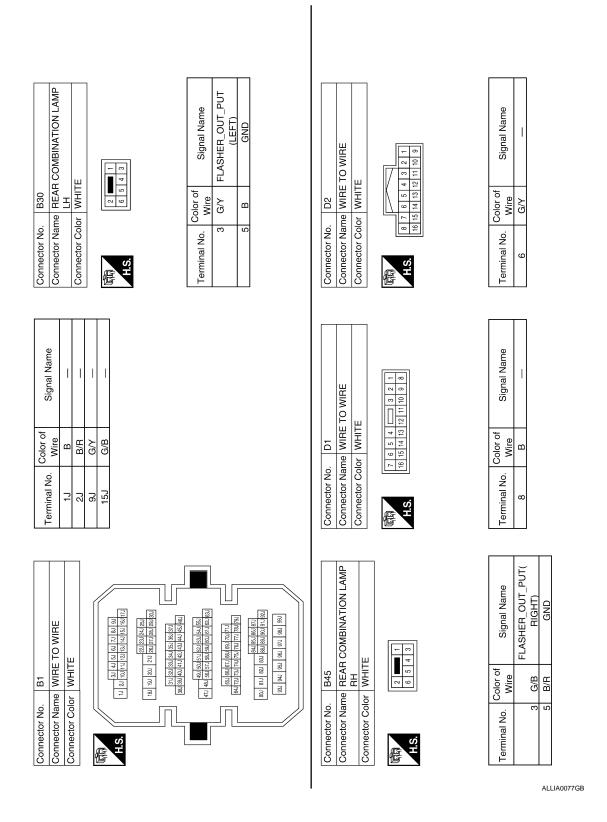
< COMPONENT DIAGNOSIS >



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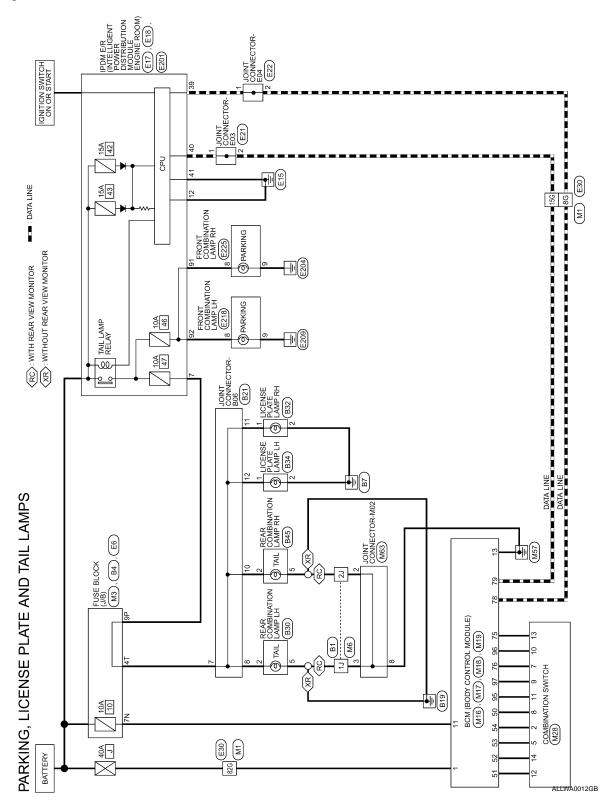
Signal Name — — — — — — — — — — — — — — — — — — —	INATION	Signal Name FLASHER_OUT_PUT (RIGHT) GND	A B
Terminal No. Color of Sign. 1G G/B 2G G/Y 82G W/B	Connector No. E224 Connector Name FRONT COMBINATION LAMP RH Connector Color GRAY	Terminal No. Color of Sign Wire 5 G/B FLASHEI 7 B (F. A.S.)	D E F
Connector No. E30 Connector Name WIRE TO WIRE Connector Color WHITE 1.0 20 100 100 100 100 100 100 100 100 100	Connector No. E217 Connector Name FRONT COMBINATION LAMP LH Connector Color GRAY A.S.	Terminal No. Color of Wire 5 G/Y FLASHER_OUT_PUT 7 B GND	G H I
al Name		Signal Name Tern — — — — — — — — — — — — — — — — — — —	K EXI
Connector No. E2 Connector Name WIRE TO WIRE Connector Color WHITE H.S. A S G S S G S S G S S G S S G S S G S S G S S G S S G S S G S S G S S G S S G S S G S S G S S G S S G S S G S S G S G S G S G	Connector No. E202 Connector Name WIRE TO WIRE Connector Color WHITE 3	Terminal No. Wire 3 G/B 7 7 G/B 4 ATTION OF THE STATE OF	N O
·		ALLIA00/6GB	Р



< COMPONENT DIAGNOSIS >

				А
				В
	Signal Name			С
D102 WIRE TO WIRE WHITE 6 5 4 3 2 1 12 11 10 9 8 7				D
	Color of Wire G/B			E
Connector No. Connector Col	Terminal No.			F
	<u> </u>			G
O WIRE	Signal Name			Н
D101 NMIRE TO WIF	Color of Wire B			I
Connector No. D101 Connector Name WIRE TO WIRE Connector Color WHITE T 2	Terminal No.			J
Col				K
H H H	Signal Name TURN(+) TURN(-)	퓬	Signal Name TURN(+) TURN(-)	EXL
HITE NIRRO		07 00R MIRRO 41TE		M
9 7 W W D D D	Color of Wire G/Y G/Y	Connector No. D107 Connector Name DOOR MIRROR RH Connector Color WHITE A 3 2 1 A 3 2 1 A 3 2 1	Color of Wire G/B G/B B	N
Connector No. Connector Col	Terminal No.	Connector No. Connector Colc	Terminal No.	0
			ALLIA0078GB	Р

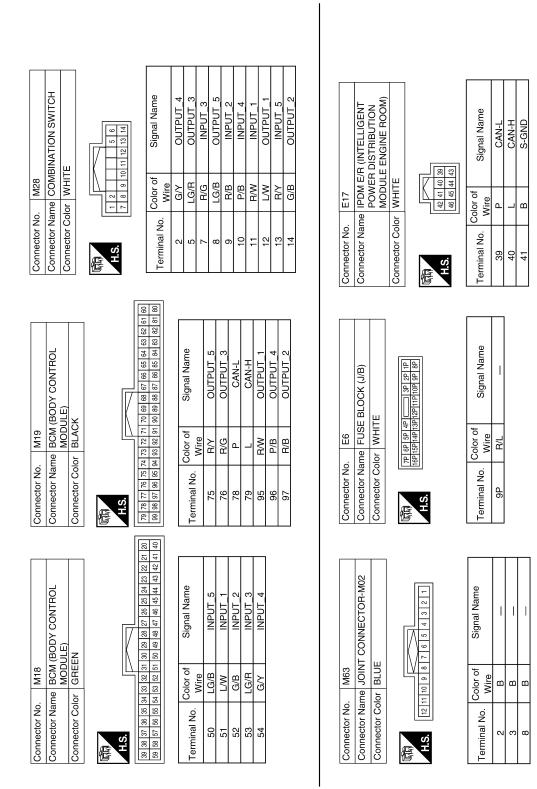
Wiring Diagram



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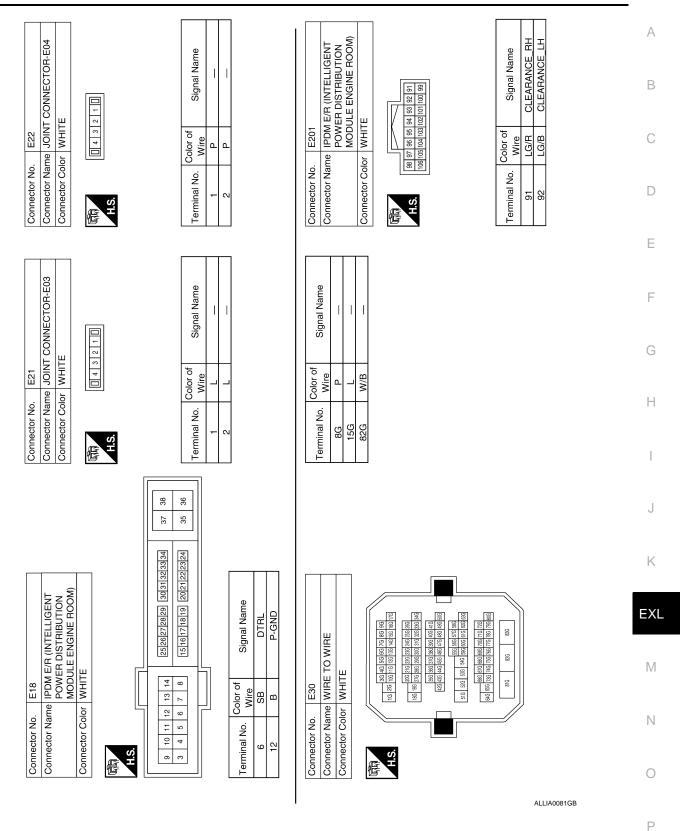
В Signal Name C 1 25J 24J 23J 22J 30J 25J 28J 27J 28J 21J 20J 15J 18J 55J 54J 53J 52J 51J 50J 49J 63J 62J 61J 60J 59J 58J 57J 56J 48J 47J 87.1 86.1 85.1 84.1 92.1 91.1 90.1 83.1 88.1 82.1 81.1 80.1 37.1 36.1 35.1 34.1 33.1 32.1 31.1 46.1 45.1 44.1 43.1 42.1 41.1 40.1 39.1 38.1 99J 98J 97J 96J 95J 94J 93J Connector Name | WIRE TO WIRE 73. | 73. | 69. | 68. | 67. | 67. | 67. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | 79. | D Connector Color WHITE Color of <u>M</u> Wire ш В Connector No. Е Terminal No. 7 2 H.S. 偃 F G BAT_BCM_FUSE GND1 Signal Name Signal Name Connector Name BCM (BODY CONTROL MODULE) Connector Name FUSE BLOCK (J/B) 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 Н 3N 2N 1N 8N 7N 6N 5N 4N PARKING, LICENSE PLATE AND TAIL LAMP CONNECTORS WHITE Connector Color WHITE Color of M17 Color of Wire ₩ B Wire Connector Color Connector No. Connector No. Terminal No. Terminal No. J 13 1 H.S. Œ E K BAT POWER F/L Signal Name Signal Name Connector Name BCM (BODY CONTROL MODULE) EXL 58G 57G 56G 55G 83G 82G 81G 80G 89G 54G 53G 52G 51G Connector Name WIRE TO WIRE 916 M 12 820 Connector Color WHITE BLACK Color of Wire M16 Color of W/B Ξ Wire W/B 936 ۵ Connector Color Ν Connector No. Connector No. Terminal No. Terminal No. 8G 15G 82G H.S. 0 ALLIA0079GB Ρ

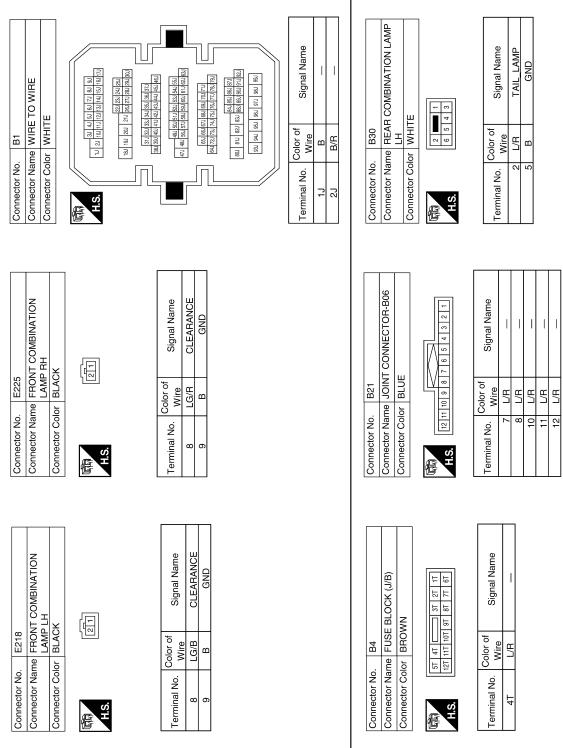
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B45 REAR COMBINATION LAMP RH WHITE		Signal Name TAIL_LAMP GND
B45 REAR COMB RH WHITE	5 6 5 4 4 3 1 1	
Connector No. Connector Name F		Color of Color of Wire 2 L/R 5 B/R
Conne	H.S.	Termin
MP LH		ıme
E PLATE LA		Signal Name TAIL_LAMP GND
b. B34 ame LICENSE alor BROWN	2	Color of Wire L/R
Connector No. B34 Connector Name LICENSE PLATE LAMP LH Connector Color BROWN	H.S.	Terminal No.
Connector No. B32 Connector Name LICENSE PLATE LAMP RH Connector Color BROWN		Signal Name TAIL_LAMP GND
B32 LICENSE PLAT BROWN	[
Connector No. B3 Connector Name LIC Connector Color BF	_	Color of Wire 1 L/R 2 B
Connector No. Connector Nam	H.S.	Terminal No.

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< COMPONENT DIAGNOSIS > STOP LAMP Α Wiring Diagram INFOID:0000000000994292 (GS): WITH DOUT REAR SPOILER (RC): WITH REAR VIEW MONITOR (SP): WITH REAR SPOILER (XR): WITHOUT REAR VIEW MONITOR В С D JOINT CONNECTOR-B06 (B21) Е F Фзтор 2 2 G FUSE BLOCK (J/B) (E6), (B4) Н 쏑 B27 M57 REAR COMBINATION LAMP LH J M6 B1 Κ XRX NRC NRC EXL \mathbb{N} Ν

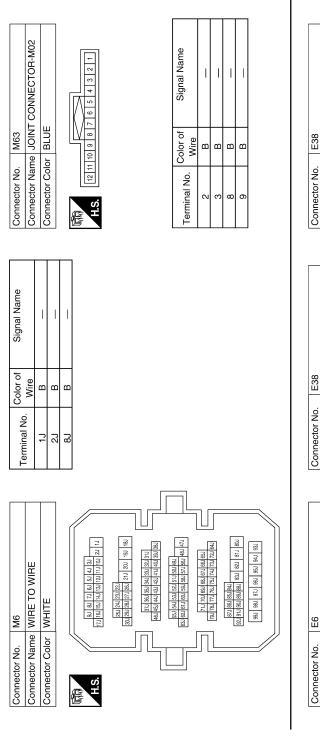
STOP LAMP

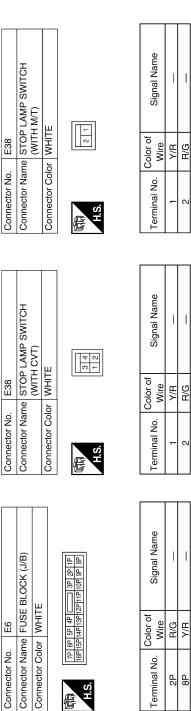
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STOP LAMP CONNECTOR





R/G

B/G

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2P 8P

			А
			В
Signal Name		Signal Name	С
	27 JIRE TO WI		D
ctor Ni	ctor No. B	Terminal No. Wire 1 O 2 B B	Е
Conne Termii	Conne	Term	F
lame	PR-B08	e e e e e e e e e e e e e e e e e e e	G
Signal Name	CONNECTC	Signal Name	Н
Color of Wire B/R B/B B/B	B23 or WHITE	Mire B B B B B B B B B B B B B B B B B B B	I
Terminal No. 20 88	Connector No. B23 Connector Name JOINT CONNECTOR-B08 Connector Color WHITE MAINE A.S. (1 1 1 1 1 1 1 1 1 1	Terminal No.	J
			K
2) WIRE 10 12 13 14 15 15 15 15 15 15 15	NNECTOR-B06	Signal Name	EXL
WHRE TO WIRE	B21 JOINT CON BLUE		M
nector No. nector Color nector Color S.	Connector No. B21 Connector Name JOINT CONNECTOR-B06 Connector Color BLUE	Color of Wire Wire Wire Wire O O O O O O O O O	Ν
Conne			0
	I	ALLIA0086GB	Р

onnector No.	B30		Connector No.). B37		Conne	Connector No.	B45	
Name	e REAR LH	Connector Name REAR COMBINATION LAMP	Connector Na	ame HIGH	Connector Name HIGH MOUNTED STOP LAMP	Conne	ector Nam	e REAR (Connector Name REAR COMBINATION LAMP
Color	Connector Color WHITE			סבים וסוכ	NA	Conne	ector Colo	Connector Color WHITE	
	0 0	<u>■</u> 4	南南 H.S.			是 H.S.		2 9 4 4	<u> </u>
-	ŀ						-		
No.	Terminal No. Wire	Signal Name	Terminal No.	Color of Wire	Signal Name	Termi	nal No.	Terminal No. Wire	Signal Name
1	0	STOP_LAMP	-	0	STOP_LAMP		1	0	STOP_LAMP
5	В	GND	2	В	GND		22	B/B	GND

	TO WIRE	E		Signal Name	
B401	WIRE	WHIT	(Color of Wire	С
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	H.S.	Terminal No.	-
			<u>. </u>		
	TO WIRE	Ξ.		Signal Name	I
B400	e WIRE	r WHIT		Color of Wire	С
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	H.S.	Terminal No.	-

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< COMPONENT DIAGNOSIS > **BACK-UP LAMP** Α Wiring Diagram INFOID:0000000000994293 M → WITH MIT VC → EXCEPT VQ35DE WITH CVT VR → WITH VQ35DE AND CVT VR → WITH QR25DE AND CVT В С D Е F JOINT CONNECTOR-B07 (B22) G Н REAR COMBINATION LAMP LH (B30) (E29) (B10) M6 M6 J Κ FUSE BLOCK (J/B) (M5) EXL (F) \mathbb{N} Ν **BACK-UP LAMP** 0

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Wire P/B o

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G/B

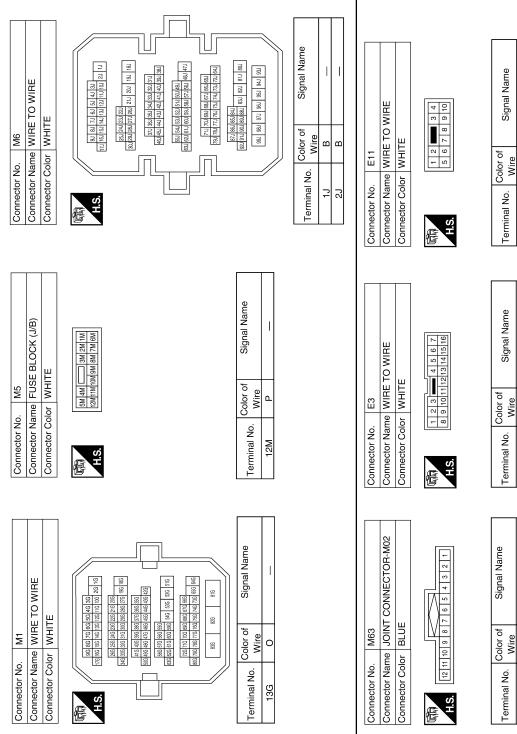
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Wire

В m m

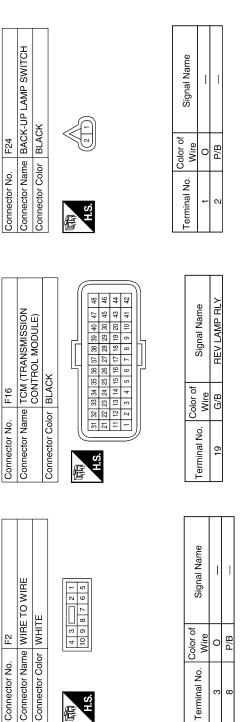
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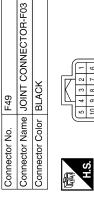
BACK-UP LAMP



BACK-UP LAMP

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E34 BACK-UP LAMP RELAY BLUE Signal Name Signal Name	Signal Name	С
E34	F1	D
mector No. minal No. 5 5 5	Connector No. F1 Connector Name WIRE TO WIRE Connector Color WHITE	Е
		F
game	ame	G
Number N	ON BLOCK Signal Name	Н
E30	Mare O/B	I
Connector No. E30 Connector Name WIRE TO WIRE Connector Color WHITE Connector Color WHITE 10 20 100 110 120 120 120 120 120 120 12	Connector No. E49 Connector Name JUNCTION BLOCK Connector Color BROWN Terminal No. Wire Signal N 52 O/B — —	J
		K
VIRE Signal Name	BLOCK Signal Name	EXL
	WHITE WHITE WORLD Sign Or of Sign Oo of Sign Nire	M
Connector No. E29 Connector Name WIRE TO WIRE Connector Color WHITE	1889	Ν
Connector No. Connector Cold Connector Cold H.S. Terminal No.	Connector No. Connector Name Connector Color H.S. A.S. A.S.	0
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		Р



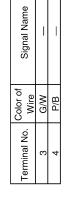


Connector Name PARK/NEUTRAL POSITION (PNP) SWITCH (WITH QR25DE CVT)

Connector No.

BLACK

Connector Color



Signal Name	IGN	R_OUTPUT	
Color of Wire	0	P/B	
Terminal No.	3	5	

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BACK-UP LAMP

		А
BO7		В
Signal Name		С
Color of Wire P/B		D
nector No. minal No.		Е
		F
WIRE	ON LAMP	G
0 4 5 1	Connector No. B45 Connector Name REAR COMBINATION LAMP RH Connector Color WHITE Terminal No. Color of Signal Name 5 B/R GND 6 P/B REV LAMP	Н
0 o B B O D D D D D D D D D D D D D D D D D	No. B45 Name REAR C Solor of RH Color of 6 5 4 3 Wire 5 B/R 6 P/B	I
Connector No. Connector Cold	Connector No. Connector Name Connector Color H.S. Connector Color Connector Color Connector No. Conn	J
		K
VIRE VIRE VIRE VISITATION VISITATION VIRITALISM VIRITALISM	ABINATION LA Signal Name GND REV_LAMP	EXL
B1	Rear Comme REAR COMM LLH or WHITE Color of B B B B B B B B B B	M
ctor No.	ctor No.	N
Conne Conne Termir	ALLIA0091GB	0
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Description

REFERENCE VALUES FOR BCM

For BCM reference values, refer to BCS-38, "Reference Value".

TERMINAL LAYOUT FOR BCM

For the terminal layout for the BCM, refer to BCS-41, "Terminal Layout".

PHYSICAL VALUES FOR BCM

For physical values for the BCM, refer to BCS-42, "Physical Values".

WIRING DIAGRAM - BCM

For the BCM wiring diagram, refer to BCS-61, "Wiring Diagram".

FAIL SAFE - BCM

For BCM fail safe information, refer to BCS-69, "Fail Safe".

DTC INSPECTION PRIORITY CHART - BCM

For the BCM DTC inspection priority chart, refer to BCS-71, "DTC Inspection Priority Chart".

DTC INDEX - BCM

For the BCM DTC index, refer to BCS-72, "DTC Index".

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

< ECU DIAGNOSIS > IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE)	
ROOM)	Α
Description INFOID:00000000994295	В
REFERENCE VALUES FOR IPDM E/R For IPDM E/R reference values, refer to PCS-19, "Reference Value".	С
TERMINAL LAYOUT FOR IPDM E/R For the terminal layout for the IPDM E/R, refer to BCS-41, "Terminal Layout".	D
PHYSICAL VALUES FOR IPDM E/R For physical values for the IPDM E/R, refer to <u>BCS-42, "Physical Values"</u> .	Е
WIRING DIAGRAM - IPDM E/R For the IPDM E/R wiring diagram, refer to PCS-27, "Wiring Diagram".	F
FAIL SAFE - IPDM E/R For IPDM E/R fail safe information, refer to PCS-32, "Fail Safe".	G
DTC INSPECTION PRIORITY CHART - IPDM E/R For the IPDM E/R DTC inspection priority chart, refer to	Н
DTC INDEX - IPDM E/R For the IPDM E/R DTC index, refer to PCS-34, "DTC Index".	I
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EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

CAUTION:

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

Symptom		Possible cause	Inspection item	
Headlamp does not switch to the high beam.	One side	Fuse Harness between IPDM E/R and the front combination lamp Front combination lamp (High beam relay) IPDM E/R	Headlamp (HI) circuit Refer to EXL-30.	
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAI Refer to EXL-105.		
High beam indicator lamp is not turned ON. (Headlamp switches to the high beam.)		Combination meter BCM	Combination meter. Data monitor "HI-BEAM IND" BCM (HEAD LAMP) Active test "HEADLAMP"	
	One side	Front combination lamp (Low beam relay)	_	
Headlamp does not switch to the low beam.		Combination switch Harness between the combination switch and BCM BCM	Combination switch Refer to <u>BCS-8</u> .	
		High beam request signal BCM IPDM E/R	IPDM E/R Data monitor "HL HI REQ"	
		IPDM E/R	_	
Headlamp does not turn ON.	One side	Fuse Bulb Harness between IPDM E/R and the front combination lamp Front combination lamp IPDM E/R	Headlamp (LO) circuit Refer to <u>EXL-32</u> .	
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-106, "Description".		
	When the ignition switch is turned ON	BCM Combination switch	Combination switch Refer to BCS-8.	
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 the lighting switch AUTO.		Combination switch Harness between the combination switch and BCM BCM	Combination switch Refer to <u>BCS-8</u> .	
		Optical sensor Harness between the optical sensor and BCM BCM	Optical sensor Refer to <u>EXL-40</u> .	

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

Symptom		Possible cause	Inspection item	
Daytime light system does not activate.		Either high beam bulb Park brake switch Combination switch BCM IPDM E/R Daytime light relay Harness between IPDM E/R and daytime light relay.	Daytime light system description. Refer to EXL-11, "System Description".	
Front fog lamp is not turned ON.	One side	Front fog lamp bulb Harness between IPDM E/R and the front combination lamp Front combination lamp IPDM E/R	Front fog lamp circuit Refer to EXL-34.	
	Both side	Symptom diagnosis "BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-108.		
Parking lamp is not turned ON.	One side	Fuse Parking lamp bulb Harness between IPDM E/R and the front/rear combination lamp Front/rear combination lamp IPDM E/R	Parking lamp circuit Refer to <u>EXL-36</u> .	
	Both sides	Symptom diagnosis "PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON" Refer to EXL-107.		
Turn signal lamp does not blink.	Indicator lamp is normal. (The applicable side performs the high flasher activation).	Harness between BCM and each turn signal lamp Turn signal lamp bulb Door mirror (if equipped with turn signals in the door mirrors)	Turn signal lamp circuit Refer to EXL-38.	
	One side	Combination meter	_	
Turn signal indicator lamp	Both sides (Always)	Turn signal indicator lamp signal Combination meter BCM	Combination meter. Data monitor "TURN IND" BCM (FLASHER) Active test "FLASHER"	
does not blink.	Both sides (Does blink when activating the hazard warning lamp with the ignition switch OFF)	The combination meter power supply and the ground circuit Combination meter	Combination meter Power supply and the ground circuit Refer to MWI-22, "COMBINATION METER: Diagnosis Procedure".	

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NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

XENON HEADLAMP

- The brightness and color of the light may vary slightly immediately after turning the headlamp ON. This condition will remain until the xenon bulb becomes stable. This is normal.
- Illumination time lag may occur between right and left. This is normal.

AUTO LIGHT SYSTEM

The auto light system may not turn the headlamp ON/OFF immediately after passing a dark area or a bright area (short tunnel, sky bridge, shadowed area etc.). This is normal.

BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

< SYMPTOM DIAGNOSIS >

BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

Description INFOID:000000000994298

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

Diagnosis Procedure

1. COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to BCS-34, "Diagnosis Procedure".

Is the combination switch normal?

YES >> GO TO 2...

NO >> Repair or replace the malfunctioning part.

2.CHECK HEADLAMP (HI) REQUEST SIGNAL INPUT

©CONSULT-III DATA MONITOR

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

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

Is the item status normal?

YES >> GO TO 3..

NO >> Replace BCM.

3. HEADLAMP (HI) CIRCUIT INSPECTION

Check the headlamp (HI) circuit. Refer to EXL-30, "Description".

Is the headlamp (HI) circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

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BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

Description

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

Diagnosis Procedure

INFOID:0000000000994301

1. CHECK COMBINATION SWITCH

Check the combination switch. Refer to BCS-8, "System Description".

Is the combination switch normal?

YES >> GO TO 2...

NO >> Repair or replace the malfunctioning part.

2.CHECK HEADLAMP (LO) REQUEST SIGNAL INPUT

(E)CONSULT-III DATA MONITOR

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

Monitor item	Condition		Monitor status
HL LO REQ	Lighting switch	2ND	ON
TIE EO NEQ	Lighting Switch	OFF	OFF

Is the item status normal?

YES >> GO TO 3..

NO >> Replace BCM.

3.HEADLAMP (LO) CIRCUIT INSPECTION

Check the headlamp (LO) circuit. Refer to EXL-32, "Description".

Is the headlamp (LO) circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS > PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON Α Description INFOID:0000000000994302 The parking, license plate and tail lamps do not turn ON in with any lighting switch setting. В Diagnosis Procedure INFOID:0000000000994303 1.COMBINATION SWITCH INSPECTION C Check the combination switch. Refer to BCS-8, "System Description". Is the combination switch normal? D YES >> GO TO 2.. NO >> Repair or replace the malfunctioning part. 2.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT Е PCONSULT-III DATA MONITOR Select "TAIL & CLR REQ" of IPDM E/R DATA MONITOR item. With operating the lighting switch, check the monitor status. F Monitor item Condition Monitor status 1ST ON TAIL & CLR Lighting switch REQ OFF OFF Is the item status normal? Н YES >> GO TO 3.. NO >> Replace BCM. 3.PARK LAMP CIRCUIT INSPECTION Check the parking lamp circuit. Refer to EXL-36, "Description". Is the tail lamp circuit normal? YES >> Replace IPDM E/R. NO >> Repair or replace the malfunctioning part. K

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BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

Description

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

Diagnosis Procedure

INFOID:0000000000994305

1. COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to BCS-8, "System Description".

Is the combination switch normal?

YES >> GO TO 2..

NO >> Repair or replace the malfunctioning part.

2.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT

(P)CONSULT-III DATA MONITOR

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

Monitor item	Condition	Monitor status	
FR FOG REQ	Front fog lamp switch	ON	ON
TRTOGREQ	(Lighting switch 2ND)	OFF	OFF

Is the item status normal?

YES >> GO TO 3..

NO >> Replace BCM.

3.FRONT FOG LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to EXL-34, "Description".

Is the front fog lamp circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

PRECAUTION

PRECAUTIONS

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

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

General precautions for service operations

Never work with wet hands.

- The xenon headlamp system includes a high voltage generating part. Be sure to disconnect battery negative cable (negative terminal) or power fuse before removing, installing, or touching the xenon headlamp (including lamp bulb).
- Turn the lighting switch OFF before disconnecting and connecting the connector.
- When turning the xenon headlamp on and while it is illuminated, never touch the harness, bulb, and socket of the headlamp.
- When checking the headlamp on/off operation, check it on vehicle and with the power connected to the vehicle-side connector.
- Do not touch the headlamp bulb glass surface with bare hands or allow oil or grease to get on it. Do not touch the headlamp bulb just after the headlamp is turned off, because it is very hot.
- Install the xenon headlamp bulb socket correctly. If it is installed improperly, high-voltage leak or corona discharge may occur that can melt the bulb, connector, and housing. Do not illuminate the xenon headlamp bulb out of the headlamp housing. Doing so can cause fire and harm your eyes.
- When the bulb has burned out, wrap it in a thick vinyl bag and discard. Do not break the bulb.
- Leaving the bulb removed from the headlamp housing for a long period of time can deteriorate the performance of the lens and reflector (dirt, clouding). Always prepare a new bulb and have it on hand when replacing the bulb.
- When adjusting the headlamp aiming, turn the aiming adjustment screw only in the tightening direction. (If it is necessary to loosen the screw, first fully loosen the screw, and then turn it in the tightening direction.)
- Do not use organic solvent (paint thinner or gasoline) to clean lamps and to remove old sealant.



▲ WARNING

XENON LAMP BALLAST parts no.SCB26

DOT

高電圧

LIGHT SOURCE: D2S - D2R 2000Hr INPUT VOLTAGE: DC13.5V OUTPUT VOLTAGE. POWER: 85V.35W OPEN CIRCUIT VOLTAGE: 400V (Vpeak:25.000volts)

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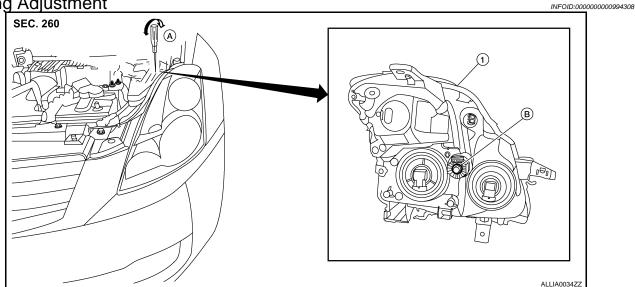
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ON-VEHICLE MAINTENANCE

HEADLAMP (HALOGEN TYPE)

Aiming Adjustment



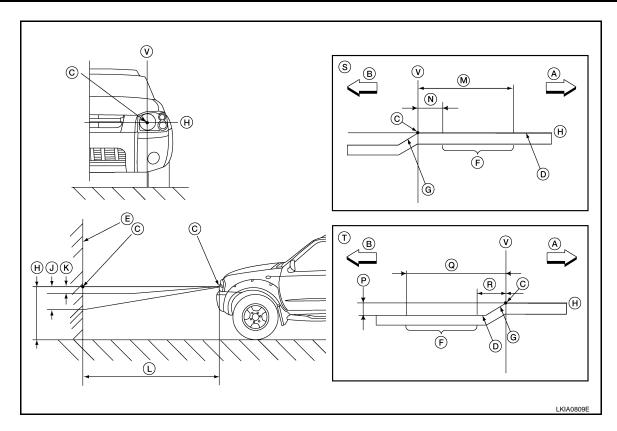
For details, refer to the regulations in your area.

Headlamp Aiming

NOTE:

- If the vehicle front body has been repaired and/or the headlamp assembly has been replaced, check headlamp aiming.
- Before performing headlamp aiming adjustment, check the following:
- Confirm which type of headlamp is in vehicle.
- 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).
- Ensure engine coolant and engine oil are filled to correct level and fuel tank is full.
- Confirm spare tire, jack and tools are properly stowed.

AIMING ADJUSTMENT



- Right A.
- D. Cutoff line
- G. Step
- K. RH: -13.3 mm (-0.52 in) LH: 13.3 mm (0.52 in)
- 133 mm (5.24 in) N.
- 200 mm (7.87 in)

- B. Left
- E. Screen
- Horizontal center line of headlamp
- 7.62 m (25 ft)
- P. 53.2 mm (2.09 in)
- S. RH headlamp aiming screen

- Center of headlamp bulb (H-V point)
- Aim evaluation segment
- RH: 53.2 mm (2.09 in) LH: 93.1 mm (3.67 in)
- M. 399 mm (15.71 in)
- Q. 466 mm (18.35 in)
- Basic illuminating area for adjustment should be within the range shown on the aiming chart. Adjust headlamps accordingly.
- First loosen the adjusting screw all the way and then make adjustment by tightening the screw.
- Turn headlamp low beam on. 1.
- Use adjusting screws to perform aiming adjustment.

LH headlamp aiming screen

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FRONT FOG LAMP

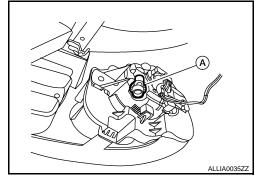
Aiming Adjustment

ALL EXCEPT SE-R MODELS

The fog lamp is a semi-sealed beam type which uses a replaceable halogen bulb. Before performing aiming adjustment, make sure of the following.

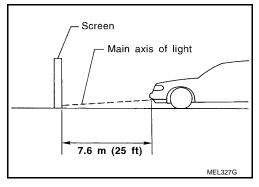
- Keep all tires inflated to correct pressure.
- Place vehicle on level ground.
- See that vehicle is unloaded (except for full levels of coolant, engine oil and fuel, and spare tire, jack, and tools). Have the driver or equivalent weight placed in driver seat.

Adjust aiming in the vertical direction by turning the adjusting screw (A).

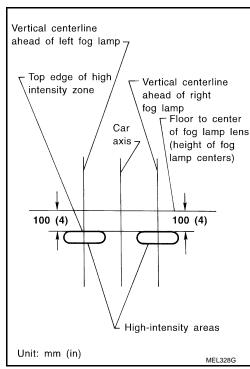


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- 1. Set the distance between the screen and the center of the fog lamp lens as shown.
- 2. Turn front fog lamps ON.



- 3. 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.
- When performing adjustment, if necessary, cover the headlamps and opposite fog lamp.



SE-R MODELS

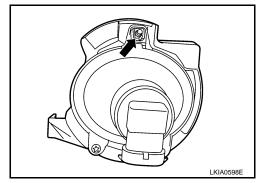
FRONT FOG LAMP

< ON-VEHICLE MAINTENANCE >

The fog lamp is a semi-sealed beam type which uses a replaceable halogen bulb. Before performing aiming adjustment, make sure of the following.

- · 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.

Adjust aiming in the vertical direction by turning the adjusting screw.



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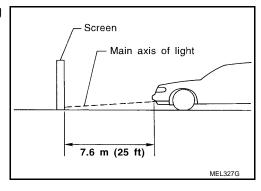
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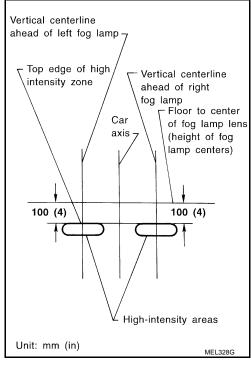
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- Set the distance between the screen and the center of the fog lamp lens as shown.
- Turn front fog lamps ON.



- 3. 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.
- When performing adjustment, if necessary, cover the headlamps and opposite fog lamp.



EXL-113

ON-VEHICLE REPAIR

HEADLAMP (FOR USA)

Bulb Replacement

HEADLAMP

CAUTION:

- Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb. Do not touch bulb by hand while it is lit or right after being turned off, burning may result.
- Do not leave bulb out of fog lamp reflector for a long time, dust, moisture, and smoke may affect performance of fog lamp.

Removal

- Disconnect negative battery cable.
- 2. Position the fender protector aside. Refer to EXT-18, "Removal and Installation"
- 3. Turn the headlamp bulb sockets counterclockwise to unlock and remove them (halogen).
- 4. Remove the plastic cover, disconnect the ignitor, unlock the retaining spring to unlock and remove the bulb (xenon only).
- 5. Turn the high beam lamp bulb socket counterclockwise to unlock and remove it.

Installation

CAUTION:

After installing the bulb, be sure to install the plastic cap securely to ensure watertightness. Installation is in the reverse order of removal.

FRONT TURN SIGNAL LAMP

Removal

- Turn the bulb socket counterclockwise to unlock it.
- Pull the bulb to remove it.

Installation

Installation is in the reverse order of removal.

CAUTION:

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

Removal and Installation

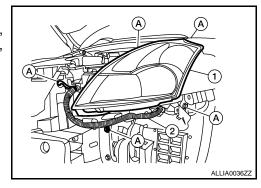
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COMBINATION LAMP

Removal

- Disconnect battery negative terminal.
- Remove the front bumper fascia. Refer to <u>EXT-12</u>, "Removal and Installation".
- 3. Ensure lighting switch is OFF.
- 4. Disconnect the negative battery cable (xenon only).
- 5. Remove the headlamp bolts (A).
- 6. Pull the headlamp assembly (1) toward the front of the vehicle, detach the headlamp harness (2) from the headlamp assembly, disconnect the bulb connectors and remove.



Installation

Installation is in the reverse order of removal.

NOTE:

Confirm headlamp aiming adjustment. Refer to <a>EXL-110, "Aiming Adjustment".

Disassembly and Assembly

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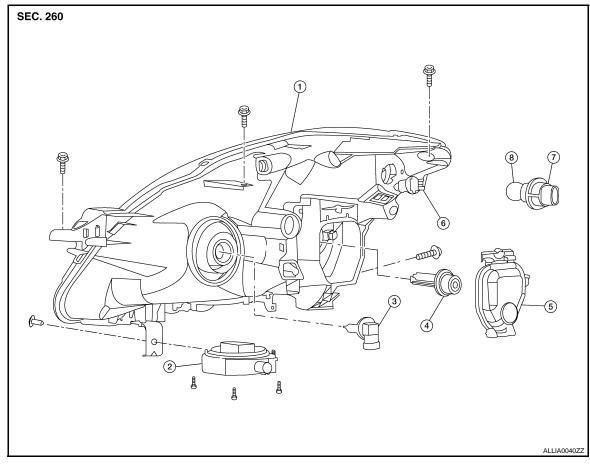
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COMBINATION LAMP - XENON TYPE



- Headlamp assembly
- Xenon bulb
- Front turn signal lamp bulb socket 7.
- **Ballast**
- Plastic cover 5.
- Front turn signal lamp bulb
- Halogen bulb (high beam)
- Park/side marker lamp bulb

Disassembly

CAUTION:

- Do not touch the glass of the bulb directly by hand. Keep grease and other oily substances away from bulb. Do not touch bulb while it is lit or right after being turned off, burning may result.
- Do not leave bulb out of fog lamp reflector for a long time, dust, moisture, and smoke may affect performance of fog lamp.
- Remove the plastic cover, disconnect the xenon bulb connector, unlock the retaining spring to remove the xenon bulb.
- 2. Turn the halogen bulb (high beam) lamp socket counterclockwise to unlock and remove it.
- 3. Turn the front turn signal lamp bulb socket counterclockwise to unlock and remove it.
- 4. Pull the front turn signal lamp bulb from its socket.
- Turn the park/side marker lamp bulb socket counterclockwise to unlock and remove it. 5.
- Pull the park/side marker lamp bulb from its socket.

Assembly

Assembly is in the reverse order of disassembly.

CAUTION:

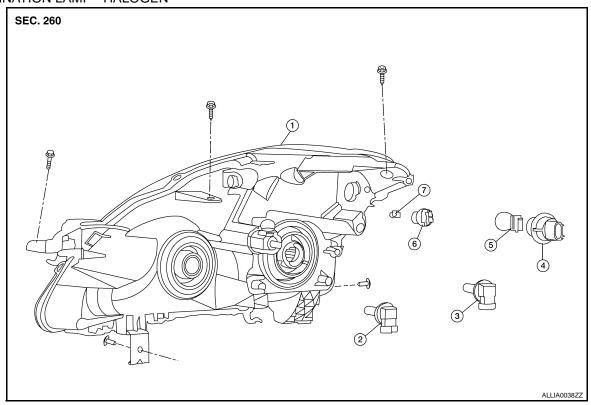
After installing the xenon bulb, be sure to install plastic cover securely to ensure watertightness.

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COMBINATION LAMP - HALOGEN



- 1. Headlamp assembly
- 4. Front turn signal lamp bulb socket
- 7. Park/side marker lamp bulb
- 2. Halogen lamp bulb (high beam)
- 5. Front turn signal lamp bulb
- 3. Halogen lamp bulb (low beam)
- 6. Park/side marker lamp bulb socket

Disassembly

CAUTION:

- Do not touch the glass of the bulb directly by hand. Keep grease and other oily substances away from bulb. Do not touch bulb while it is lit or right after being turned off, burning may result.
- Do not leave bulb out of fog lamp reflector for a long time, dust, moisture, and smoke may affect performance of fog lamp.
- 1. Turn the halogen lamp bulb (low beam) counterclockwise to unlock and remove it.
- 2. Turn the halogen lamp bulb (high beam) socket counterclockwise to unlock and remove it.
- 3. Turn the front turn signal lamp bulb socket counterclockwise to unlock and remove it.
- Pull the front turn signal lamp bulb from its socket.
- 5. Turn the park/side marker lamp bulb socket counterclockwise to unlock and remove it.
- 6. Pull the park/side marker lamp bulb from its socket.

Assembly

Assembly is in the reverse order of disassembly.

HEADLAMP (FOR CANADA) - DAYTIME LIGHT SYSTEM -< ON-VEHICLE REPAIR > HEADLAMP (FOR CANADA) - DAYTIME LIGHT SYSTEM -Α **Bulb Replacement** INFOID:0000000000994313 Refer to EXL-114, "Bulb Replacement". В Disassembly and Assembly INFOID:0000000000994314 Refer to EXL-115, "Disassembly and Assembly". С D Е F

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FRONT FOG LAMP

Bulb Replacement

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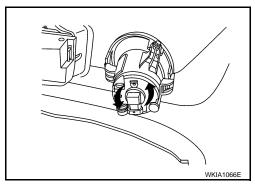
ALL EXCEPT SE-R MODELS

Removal

The fog lamp is a semi-sealed beam type which uses a replaceable halogen bulb.

CAUTION:

- Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from it.
 Do not touch bulb by hand while it is lit or right after being turned off. Burning may result.
- Do not leave bulb out of fog lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of fog lamp. When replacing bulb, be sure to replace it with new one.
- 1. Position the front fender protector aside. Refer to EXT-18, "Removal and Installation".
- 2. Disconnect the fog lamp electrical connector.
- 3. Turn the fog lamp bulb counterclockwise to remove it.



Installation

Installation is in the reverse order of removal.

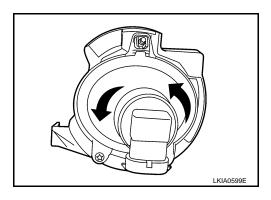
SE-R MODELS

Removal

The fog lamp is a semi-sealed beam type which uses a replaceable halogen bulb.

CAUTION:

- Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from it.
 Do not touch bulb by hand while it is lit or right after being turned off. Burning may result.
- Do not leave bulb out of fog lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of fog lamp. When replacing bulb, be sure to replace it with new one.
- 1. Remove the engine undercover using power tools.
- 2. Disconnect the fog lamp electrical connector.
- 3. Turn the fog lamp bulb counterclockwise to remove it.



Installation

Installation is in the reverse order of removal.

Removal and Installation

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ALL EXCEPT SE-R MODELS

Removal

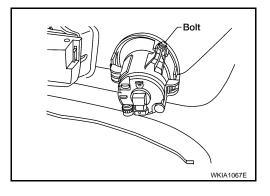
The fog lamp is a semi-sealed beam type which uses a replaceable halogen bulb.

FRONT FOG LAMP

< ON-VEHICLE REPAIR >

CAUTION:

- Do not leave fog lamp assembly without bulb for a long period of time. Dust, moisture, smoke, etc. entering the fog lamp body may affect the performance. Remove the bulb from the headlamp assembly just before replacement bulb is installed.
- Grasp only the plastic base when handling the bulb. Never touch the glass envelope. Touching the glass could significantly affect the bulb life and/or fog lamp performance.
- 1. Remove inner splash shield.
- 2. Position the fender protector aside. Refer to EXT-18, "Removal and Installation".
- 3. Disconnect the fog lamp electrical connector.
- 4. Remove bolt from top of fog lamp.
- 5. Remove fog lamp.



Installation

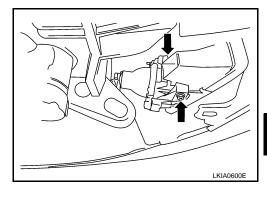
Installation is in the reverse order of removal.

Check fog lamp aiming adjustment. Refer to EXL-110, "Aiming Adjustment".

SE-R MODELS

Removal

- 1. Remove the engine under cover using power tools.
- 2. Disconnect the fog lamp electrical connector.
- 3. Remove the fog lamp bolts from top and bottom of fog lamp.
- 4. Remove fog lamp.



Installation

Installation is in the reverse order of removal.

Check fog lamp aiming adjustment. Refer to EXL-110, "Aiming Adjustment".

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TURN SIGNAL AND HAZARD WARNING LAMPS

< ON-VEHICLE REPAIR >

TURN SIGNAL AND HAZARD WARNING LAMPS

Bulb Replacement

FRONT TURN SIGNAL LAMP

Refer to EXL-120, "Bulb Replacement".

REAR TURN SIGNAL LAMP

Refer to EXL-126, "Removal and Installation".

Removal and Installation

INFOID:0000000000994318

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FRONT TURN SIGNAL LAMP

Refer to EXL-120, "Bulb Replacement".

REAR TURN SIGNAL LAMP

Refer to EXL-126, "Removal and Installation".

STOP LAMP

< ON-VEHICLE REPAIR >

STOP LAMP

Bulb Replacement

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HIGH MOUNTED STOP LAMP

With Rear Air Spoiler

When this vehicle is equipped with a rear air spoiler, the high-mounted stop lamp uses an LED circuit board instead of a bulb. The LED circuit board is not serviceable and the high-mounted stop lamp must be replaced as an assembly.

Without Rear Air Spoiler

- Remove high-mounted stop lamp assembly. Refer to EXL-121, "Removal and Installation".
- Turn bulb socket counterclockwise to unlock and remove from lamp assembly.
- Pull bulb from socket to remove.
- Installation is in the reverse order of removal.

STOP LAMP

Removal

- 1. Remove rear combination lamp. Refer to EXL-121, "Removal and Installation".
- Turn bulb socket counterclockwise to unlock and remove from combination lamp assembly.
- Turn bulb counterclockwise to remove from bulb socket.

Installation

Installation is in the reverse order of removal.

Removal and Installation

INFOID:0000000000994320

HIGH-MOUNTED STOP LAMP - WITH REAR SPOILER

Removal

- Remove the rear air spoiler. Refer to <u>EXT-25</u>, "Removal and Installation".
- 2. Remove the two screws and remove high mounted stop lamp from the rear air spoiler.

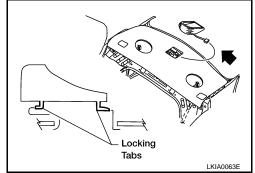
Installation

Installation is in the reverse order of removal.

HIGH-MOUNTED STOP LAMP - WITHOUT REAR AIR SPOILER

Removal

- Slide high-mounted stop lamp assembly rearward on parcel shelf to give clearance to front tabs.
- Lift front of lamp assembly up and bring forward to give clearance to rear tabs.
- Disconnect the high-mounted connector and remove.



Installation

Installation is in the reverse order of removal.

REAR COMBINATION LAMP

Removal

- Remove the trunk side finisher. Refer to <u>INT-23</u>, "Removal and Installation".
- 2. From trunk, remove the rear combination lamp assembly nuts.

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STOP LAMP

< ON-VEHICLE REPAIR >

3. Disconnect connectors and remove rear combination lamp assembly.

Installation

Installation is in the reverse order of removal.

BACK-UP LAMP

< ON-VEHICLE REPAIR >

BACK-UP LAMP

Bulb Replacement

Removal

- 1. Remove rear combination lamp. Refer to EXL-126. "Removal and Installation".
- 2. Turn back-up bulb socket counterclockwise to unlock and remove.
- 3. Pull back-up bulb from socket to remove.

Installation

Installation is in the reverse order of removal.

Removal and Installation

Refer to EXL-123, "Removal and Installation".

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PARKING, LICENSE PLATE AND TAIL LAMPS

< ON-VEHICLE REPAIR >

PARKING, LICENSE PLATE AND TAIL LAMPS

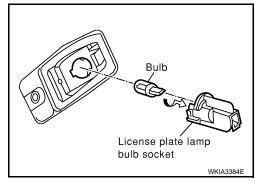
Bulb Replacement

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LICENSE PLATE LAMP

Removal

- 1. Position trunk lid finisher aside.
- Turn license plate lamp bulb socket counterclockwise to unlock and remove.
- 3. Pull license plate lamp bulb to remove from socket.



Installation

Installation is in the reverse order of removal.

FRONT TURN SIGNAL (PARKING) LAMP

For bulb replacement, refer to EXL-120, "Removal and Installation".

TAIL LAMP

Removal

- 1. Remove rear combination lamp. Refer to EXL-126, "Removal and Installation".
- 2. Turn stop/tail lamp bulb socket counterclockwise to unlock and remove.
- 3. Pull stop/tail lamp bulb to remove from socket.

Installation

Installation is in the reverse order of removal.

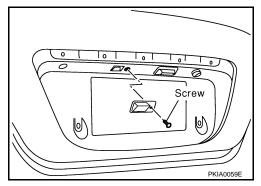
Removal and Installation

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LICENSE PLATE LAMP

Removal

- Remove the license plate finisher. Refer to <u>EXL-124, "Removal and Installation"</u>.
- 2. Disconnect the license plate lamp connector.
- 3. Remove the license plate lamp screw and remove the license plate lamp.



Installation

Installation is in the reverse order of removal.

FRONT TURN SIGNAL (PARKING) LAMP

For front turn signal (parking) lamp removal and installation procedures, refer to <u>EXL-120</u>, "Removal and <u>Installation"</u>.

PARKING, LICENSE PLATE AND TAIL LAMPS

< ON-VEHICLE REPAIR >

REAR COMBINATION LAMP

For rear combination lamp removal and installation procedures, refer to EXL-126, "Removal and Installation".

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REAR COMBINATION LAMP

< ON-VEHICLE REPAIR >

REAR COMBINATION LAMP

Bulb Replacement

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REAR TURN SIGNAL LAMP

- 1. Remove the rear combination lamp. Refer to EXL-126, "Removal and Installation".
- 2. Turn the rear turn signal lamp bulb socket counterclockwise and remove it.
- 3. Remove the rear turn signal lamp bulb.
- 4. Installation is in the reverse order of removal.

STOP/TAIL LAMP

- 1. Remove the rear combination lamp. Refer to EXL-126, "Removal and Installation".
- 2. Turn the stop/tail lamp bulb socket counterclockwise and remove it.
- 3. Remove the stop/tail lamp bulb.
- 4. Installation is in the reverse order of removal.

BACK-UP LAMP

- 1. Remove the rear combination lamp. Refer to EXL-126, "Removal and Installation".
- 2. Turn the back-up lamp bulb socket counterclockwise and remove it.
- 3. Remove the back-up lamp bulb.
- 4. Installation is in the reverse order of removal.

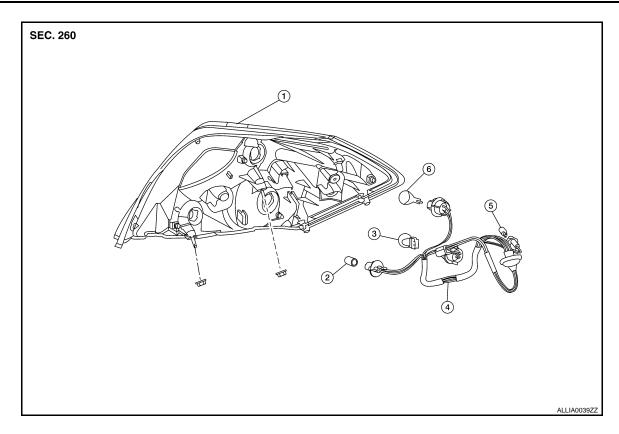
SIDE MARKER LAMP

- 1. Remove the rear combination lamp. Refer to EXL-126, "Removal and Installation".
- 2. Turn the side marker lamp bulb socket counterclockwise and remove it.
- 3. Remove the side marker lamp bulb.
- 4. Installation is in the reverse order of removal.

Removal and Installation

INFOID:0000000000994325

COMPONENTS



- 1. Rear combination lamp assembly
 - Rear combination lamp harness
- 2. Back-up lamp bulb
- 5. Side marker lamp bulb
- 3. Stop/Tail lamp bulb
- 6. Rear turn signal lamp bulb

REMOVAL

- 1. Remove trunk side finisher. Refer to INT-23, "Removal and Installation".
- 2. Remove the rear combination lamp nuts.
- 3. Pull the rear combination lamp assembly toward rear of the vehicle and remove.

INSTALLATION

Installation is the reverse order of removal.

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LIGHTING AND TURN SIGNAL SWITCH

< ON-VEHICLE REPAIR >

LIGHTING AND TURN SIGNAL SWITCH

Removal and Installation

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Removal

- 1. Remove the spiral cable. Refer to SRS-6, "Removal and Installation"
- 2. Disconnect the lighting and turn signal switch connector and remove the lighting and turn signal switch.

Installation

Installation is in the reverse order of removal.

Switch Circuit Inspection

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Refer to EXL-130, "Switch Circuit Inspection".

HAZARD SWITCH

< ON-VEHICLE REPAIR >

HAZARD SWITCH

Removal and Installation

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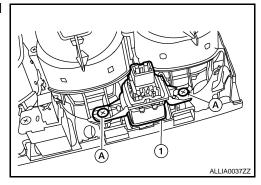
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Removal

- 1. Remove the center ventilator grilles. Refer to IP-11, "Removal and Installation".
- 2. Remove CVT finisher or M/T finisher. Refer to TM-229, "Removal and Installation" or TM-21, "Removal and Installation".
- 3. Remove the hazard switch screws (A) and remove the hazard switch. (1).



Installation

Installation is in the reverse order of removal.

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COMBINATION SWITCH

< ON-VEHICLE REPAIR >

COMBINATION SWITCH

Removal and Installation

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For details, refer to EXL-128, "Removal and Installation".

Switch Circuit Inspection

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For details, refer to EXL-130, "Switch Circuit Inspection".

SERVICE DATA AND SPECIFICATIONS (SDS)

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SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Headlamp

Item	Wattage (W)*
Low (halogen)	55 (H1)
Low (xenon)	35 (D2R)
High	60W (HB3)

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

Exterior Lamp

Item Wattage (W)* Turn signal lamp lamp 27 (amber) Front combination lamp Park/side marker lamp 8 Stop/Tail lamp 27/8 27 Turn signal lamp Rear combination lamp 13 Back-up lamp Side marker lamp 5 Fog lamp 55 (H11) 5 License plate lamp High-mounted stop lamp (parcel shelf mount) 18 High-mounted stop lamp (rear air spoiler mount) LED

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