SECTION EXE

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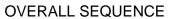
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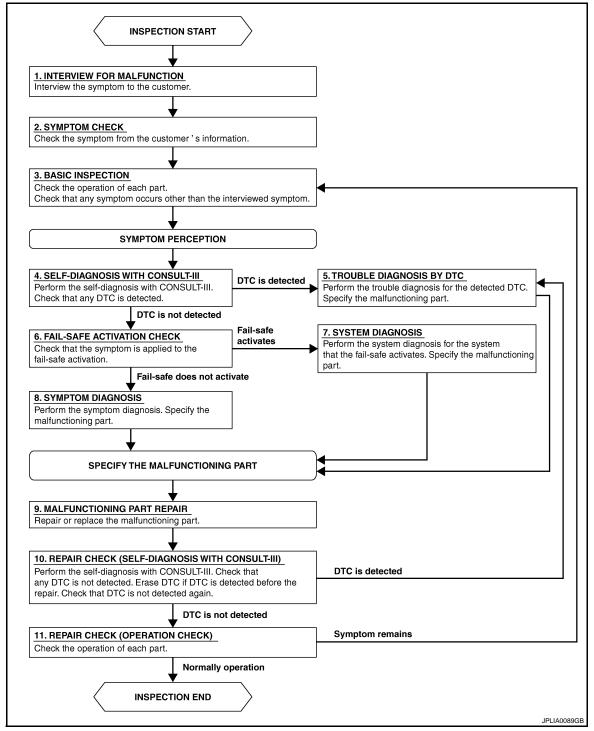
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< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORKFLOW

Work Flow





DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >	
DETAILED FLOW	А
1.INTERVIEW FOR MALFUNCTION	1
Find out what the customer's concerns are.	В
>> GO TO 2	
2.SYMPTOM CHECK	С
Verify the symptom from the customer's information.	
>> GO TO 3	D
3.BASIC INSPECTION	
Check the operation of each part. Check that any concerns occur other than those mentioned in the customer interview.	E
>> GO TO 4	F
4.self-diagnosis with consult-iii	
Perform the self diagnosis with CONSULT-III. Check that any DTC is detected.	G
<u>Is any DTC detected?</u> YES >> GO TO 5	
NO $>>$ GO TO 6	Н
5. TROUBLE DIAGNOSIS BY DTC	
Perform the trouble diagnosis for the detected DTC. Specify the malfunctioning part.	I
>> GO TO 9	
6.FAIL-SAFE ACTIVATION CHECK	J
Determine if the customer's concern is related to fail-safe activation.	
Does the fail-safe activate? YES >> GO TO 7	K
NO >> GO TO 8	
7.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	Ν
Perform the symptom diagnosis. Specify the malfunctioning part.	IN
>> GO TO 9	0
9.MALFUNCTION PART REPAIR	0
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 >> GO TO 11 NO 11. REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

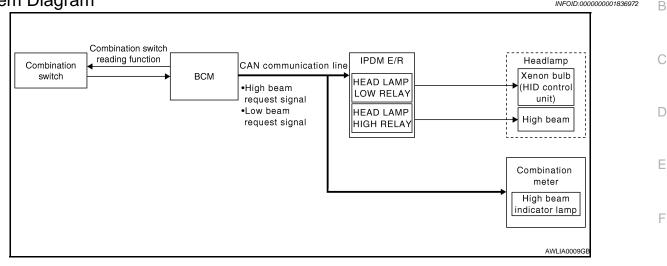
Does it operate normally?

YES >> Inspection End. NO >> GO TO 3

< FUNCTION DIAGNOSIS >

FUNCTION DIAGNOSIS HEADLAMP (XENON TYPE)

System Diagram



System Description

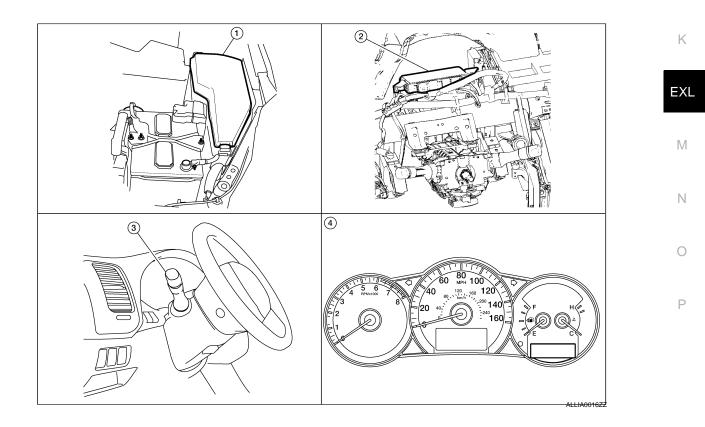
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Control of the headlamp system is dependent upon the position of the lighting switch (combination switch). Н When the lighting switch is placed in the 2nd position, the BCM (body control module) receives input requesting the headlamps and park lamps 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



А

< FUNCTION DIAGNOSIS >

instrument panel removed)

BCM M16, M17, M18, M19 (view with 3. Combination Switch M28

1. IPDM E/R E17, E18, E200

4. Combination Meter M24

Component Description

INFOID:000000001836975

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.

2.

- 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.

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.

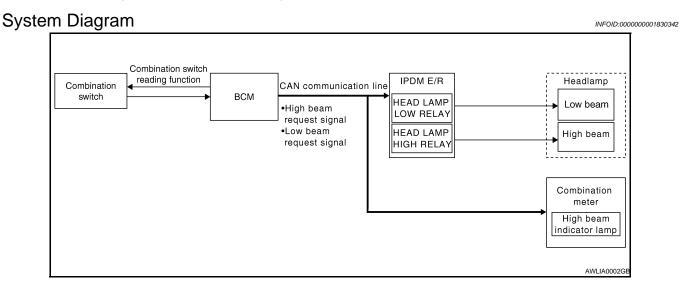
Under this condition, the headlamps remain illuminated for 5 minutes unless the lighting switch position is changed. If the lighting switch position is changed, then the headlamps are turned off.

This setting can be changed by CONSULT-III. Refer to EXL-26, "COMMON ITEM : CONSULT-III Function".

HEADLAMP (HALOGEN TYPE)

< FUNCTION DIAGNOSIS >

HEADLAMP (HALOGEN TYPE)



System Description

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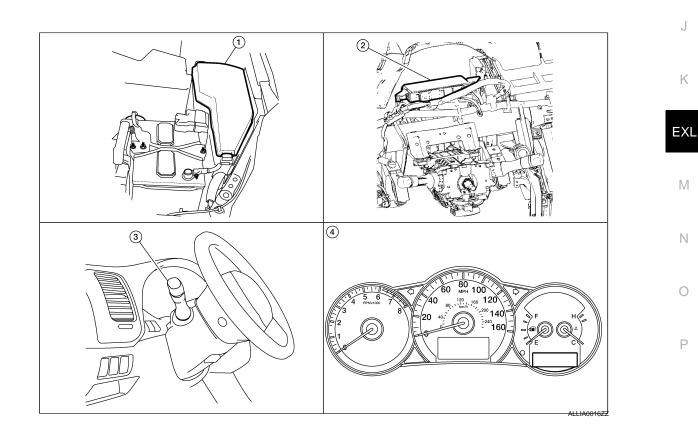
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Control of the headlamp system operation is dependent upon the position of the lighting switch (combination switch). When the lighting switch is placed in the 2nd position, the BCM (body control module) receives input requesting the headlamps and park 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



HEADLAMP (HALOGEN TYPE)

< FUNCTION DIAGNOSIS >

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

Component Description

INFOID:000000001830345

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.

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.

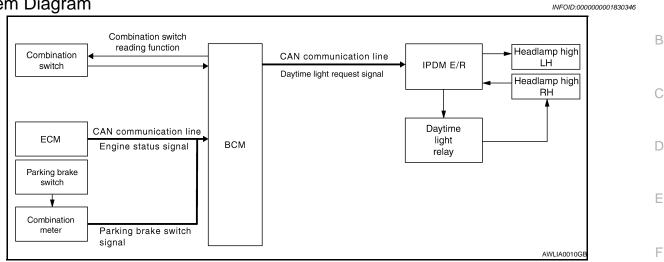
This setting can be changed by CONSULT-III. Refer to EXL-26, "COMMON ITEM : CONSULT-III Function".

DAYTIME RUNNING LIGHT SYSTEM

< FUNCTION DIAGNOSIS >

DAYTIME RUNNING LIGHT SYSTEM

System Diagram



System Description

INFOID:000000001830347

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.

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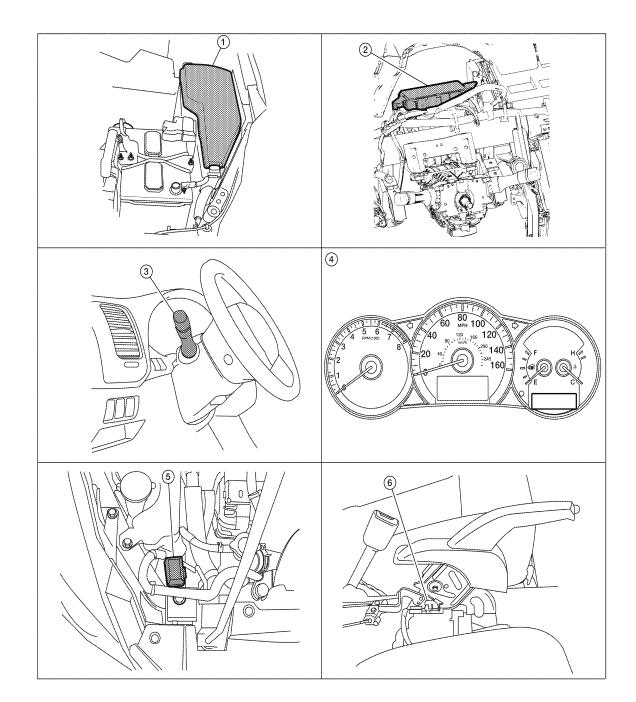
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DAYTIME RUNNING LIGHT SYSTEM

< FUNCTION DIAGNOSIS >

Component Parts Location



AWLIA0226ZZ

1. IPDM E/R E17, E18, E200, E201

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

- 4. Combination meter M24
- 5. Daytime running light relay E228
- 6. Parking brake switch M73

Component Description

INFOID:000000001830349

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.

EXL-12

< FUNCTION DIAGNOSIS >

OPERATION

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			V	/ith er	ngine	stopp	ed					V	Vith e	ngine	runni	ng		
			OFF			1ST			2ND			OFF			1ST			2ND	
Lighting switch		Hi	Lo	Ρ	Hi	Lo	Ρ	Hi	Lo	Ρ	Hi	Lo	Ρ	Hi	Lo	Ρ	Hi	Lo	Ρ
Haadlamp	High beam	-	-	_	_	-	×	×	-	×	•*	•*	×	•*	•*	×	×	-	×
Headlamp	Low beam	-	-	-	-	-	×	×	×	×	_	1	×	-	1	×	×	×	×
Tail lamp	L	-	-	Ι	×	×	×	×	×	×	-	1	-	×	×	×	×	×	×
License and instrument illumina- tion lamp		-	_	Ι	×	×	×	×	×	×	_	Ι	Ι	×	×	×	×	×	×

• Hi: "HIGH BEAM" position

• Lo: "LOW BEAM" position

P: "FLASH TO PASS" position

• ×: Lamp "ON"

• -: Lamp "OFF"

• • : 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 applied, the daytime lights will not operate.

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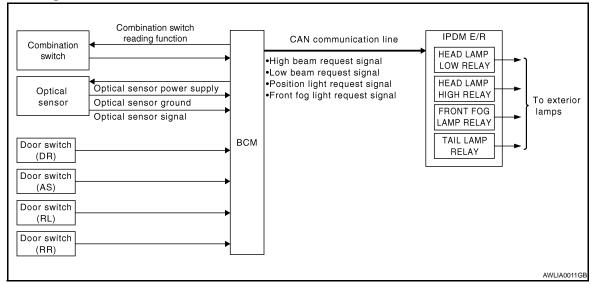
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AUTO LIGHT SYSTEM

< FUNCTION DIAGNOSIS >

AUTO LIGHT SYSTEM

System Diagram



System Description

INFOID:000000001830351

INFOID:000000001830350

- 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.

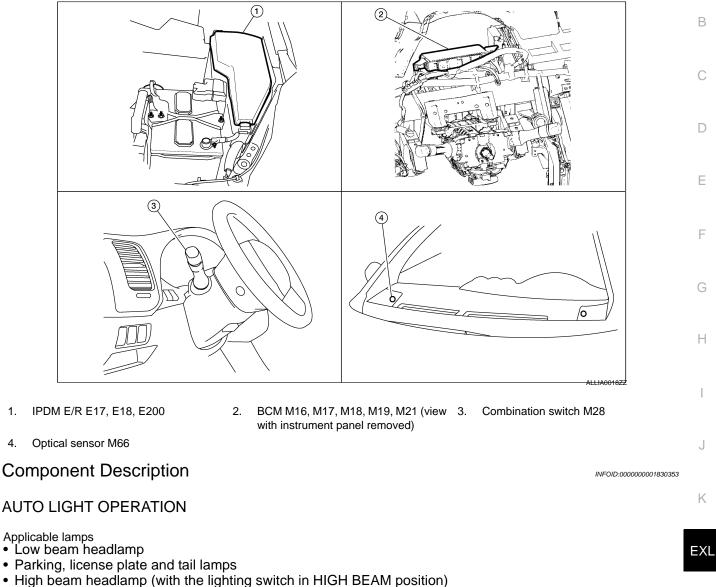
When the lighting switch is in AUTO position, it automatically turns ON/OFF the parking, license plate, tail, front fog lamps and headlamps in accordance with the ambient light. Sensitivity can be adjusted in four steps. For the details of the setting, Refer to <u>EXL-26</u>, "COMMON ITEM : CONSULT-III Function".

AUTO LIGHT SYSTEM

< FUNCTION DIAGNOSIS >

Component Parts Location

INFOID:000000001830352



• Front fog lamp (with the lighting switch in front fog lamp ON position)

Μ 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. Ν

NOTE:

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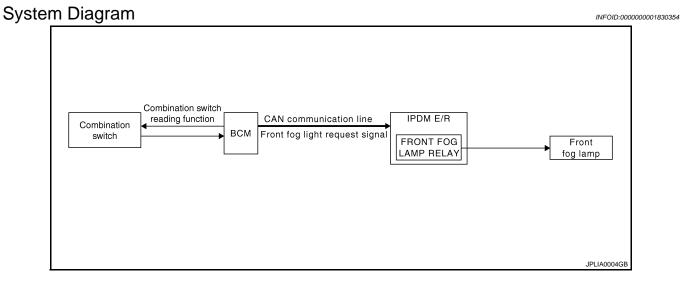
4.

Timing for when lamps turn ON/OFF can be changed by the function setting of CONSULT-III. Refer to EXL-26. "COMMON ITEM : CONSULT-III Function".

FRONT FOG LAMP

< FUNCTION DIAGNOSIS >

FRONT FOG LAMP



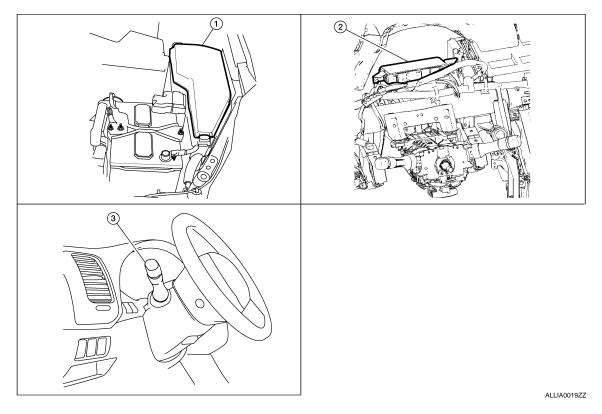
System Description

INFOID:000000001830355

- 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:000000001830356



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

EXL-16

< FUNCTION DIAGNOSIS >

Component Description

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 for CAN communication lines to the front fog indicator ON.

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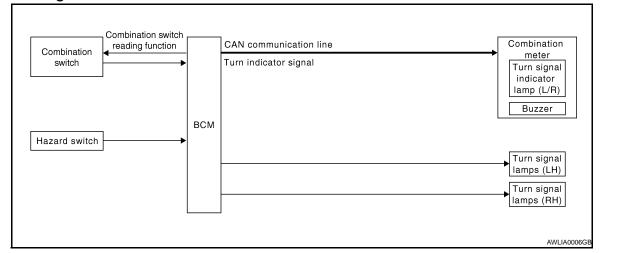
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TURN SIGNAL AND HAZARD WARNING LAMPS

< FUNCTION DIAGNOSIS >

TURN SIGNAL AND HAZARD WARNING LAMPS

System Diagram



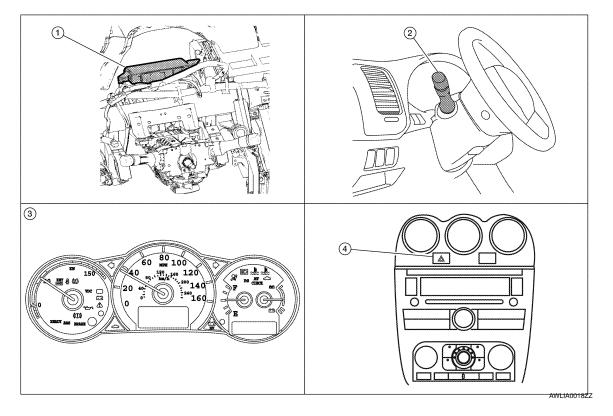
System Description

INFOID:000000001830359

INFOID:000000001830358

- 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



- 1. BCM M16, M17, M18, M19 (view with 2. Combination switch M25, M28
 3. Combination meter M24 instrument panel removed)
- 4. Hazard switch M54

TURN SIGNAL AND HAZARD WARNING LAMPS

< FUNCTION DIAGNOSIS >

Component Description

INFOID:000000001830361

А

С

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 KEYLESS ENTRY OPERATION

The remote keyless entry receiver transmits Intelligent Key signal to BCM, then BCM controls hazard lamps. E Refer to <u>SEC-22, "System Description"</u>.

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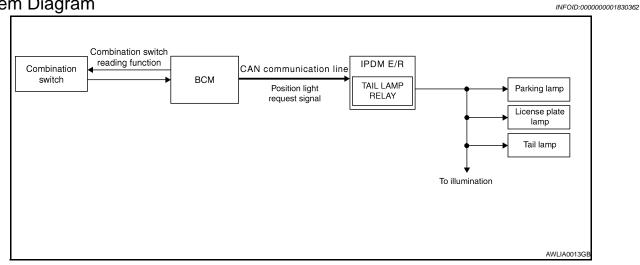
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PARKING, LICENSE PLATE AND TAIL LAMPS

< FUNCTION DIAGNOSIS >

PARKING, LICENSE PLATE AND TAIL LAMPS

System Diagram



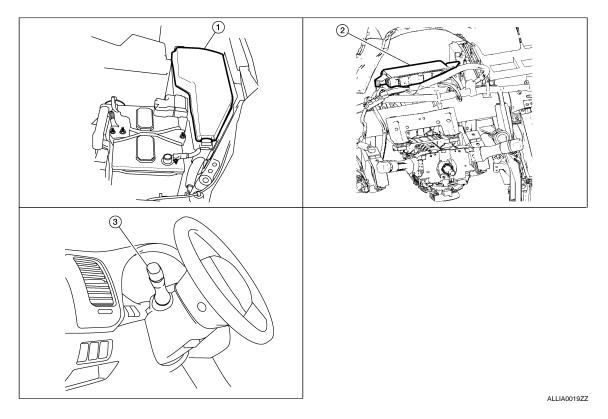
System Description

INFOID:000000001830363

- 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:000000001830364



- 1. IPDM E/R E17, E18, E201
- 2. BCM M16, M17, M18, M19 (view with 3. Combination switch M28 instrument panel removed)

EXL-20

PARKING, LICENSE PLATE AND TAIL LAMPS

< FUNCTION DIAGNOSIS >

Component Description

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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 B then activates the tail lamp relay which sends power to the parking and instrument illumination circuits.

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 EXL-26, "COMMON ITEM : CONSULT-III Function".

EXL-21

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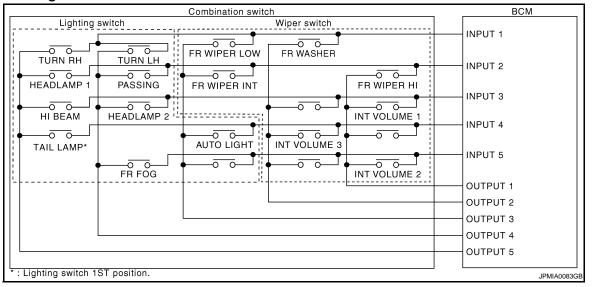
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< FUNCTION DIAGNOSIS >

COMBINATION SWITCH READING SYSTEM

System Diagram



System Description

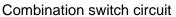
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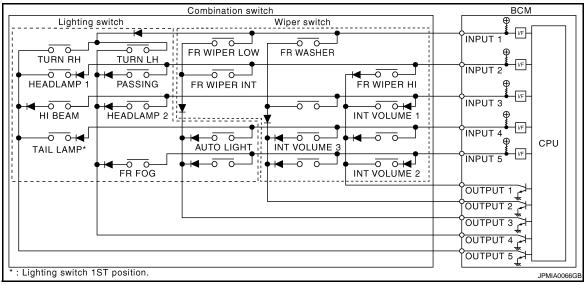
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OUTLINE

- BCM reads the status of the combination switch (light, turn signal, wiper and washer) and recognizes the status of each switch.
- BCM is a combination of 5 output terminals (OUTPUT 1 5) and 5 input terminals (INPUT 1 5). It reads a
 maximum of 20 switch status.

COMBINATION SWITCH MATRIX





Combination switch INPUT-OUTPUT system list

System	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	OUTPUT 5
INPUT 1	_	FR WASHER	FR WIPER LOW	TURN LH	TURN RH
INPUT 2	FR WIPER HI	_	FR WIPER INT	PASSING	HEADLAMP 1
INPUT 3	INT VOLUME 1		_	HEADLAMP 2	HI BEAM

< FUNCTION DIAGNOSIS >

-	System	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	OUTPUT 5	Δ
_	INPUT 4	_	INT VOLUME 3	AUTO LIGHT	—	TAIL LAMP	A
_	INPUT 5	INT VOLUME 2	_		FR FOG	—	

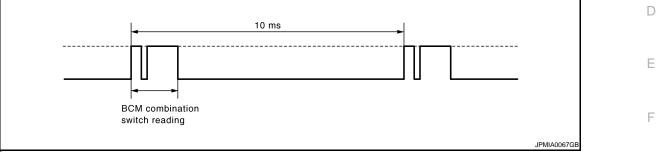
NOTE:

Headlamp has a dual system switch.

COMBINATION SWITCH READING FUNCTION

Description

• BCM reads the status of the combination switch at 10ms interval normally.



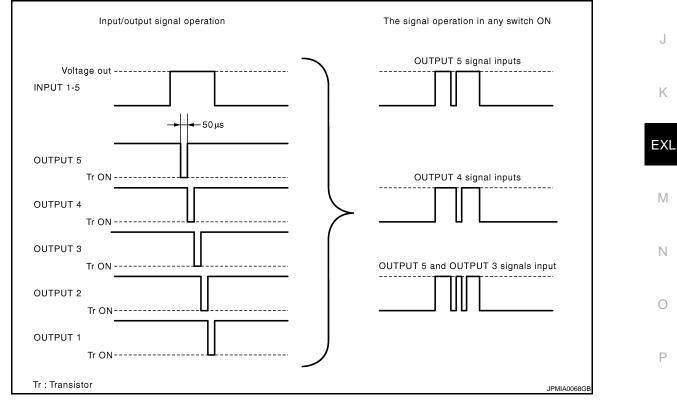
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NOTE:

BCM reads the status of the combination switch at 60ms interval when BCM is controlled at low power con-

- BCM operates as follows and judges the status of the combination switch.
- INPUT 1 5 outputs the voltage waveforms of 5 systems simultaneously.
- It operates the transistor on OUTPUT side in the following order: OUTPUT 5 \rightarrow 4 \rightarrow 3 \rightarrow 2 \rightarrow 1.
- The voltage waveform of INPUT corresponding to the formed circuit changes according to the operation of the transistor on OUTPUT side if any (1 or more) switches are ON.
- It reads this change of the voltage as the status signal of the combination switch.



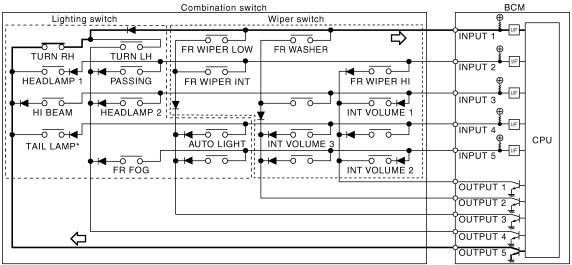
Operation Example

In the following operation example, the combination of the status signals of the combination switch is replaced as follows: INPUT 1 - 5 to "1 - 5" and OUTPUT 1 - 5 to "A - E".

Example 1: When a switch (TURN RH switch) is turned ON

< FUNCTION DIAGNOSIS >

The circuit between INPUT 1 and OUTPUT 5 is formed when the TURN RH switch is turned ON.

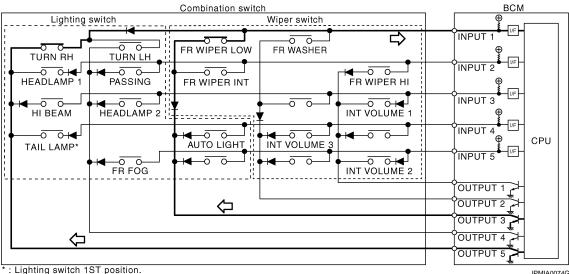


: Lighting switch 1ST position.

- JPMIA0073GB • BCM detects the combination switch status signal "1E" when the signal of OUTPUT 5 is input to INPUT 1.
- BCM judges that the TURN RH switch is ON when the signal "1E" is detected.
- Example 2: When some switches (TURN RH switch. FR WIPER LOW switch) are turned ON

Example 2: When some switches (turn RH switch, front wiper LO switch) are turned ON

• The circuits between INPUT 1 and OUTPUT 5 and between INPUT 1 and OUTPUT 3 are formed when the TURN RH switch and FR WIPER LOW switch are turned ON.



JPMIA0074GE • BCM detects the combination switch status signal "1CE" when the signals of OUTPUT 3 and OUTPUT 5 are

input to INPUT 1. • BCM judges that the TURN RH switch and FR WIPER LOW switch are ON when the signal "1CE" is detected.

WIPER INTERMITTENT DIAL POSITION SETTING (FRONT WIPER INTERMITTENT OPERATION) BCM judges the wiper intermittent dial 1 - 7 by the status of INT VOLUME 1, 2, and 3 switches.

< FUNCTION DIAGNOSIS >

Wiper intermittent dial posi-	Intermittent oper-	•					
tion	ation delay inter- val	INT VOLUME 1 switch	INT VOLUME 2 switch	INT VOLUME 3 switch			
1	Short	ON	ON	ON			
2	\uparrow	ON	ON	OFF			
3		ON	OFF	OFF			
4		OFF	OFF	OFF			
5		OFF	OFF	ON			
6	\downarrow	OFF	ON	ON			
7	Long	OFF	ON	OFF			

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< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : Diagnosis Description

BCM CONSULT-III FUNCTION

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.
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 coloction item	Diagnosis mode		
System	Sub system selection item	WORK SUPPORT	DATA MONITOR	ACTIVE TEST
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEADLAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
BCM	BCM	×		
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	

EXL-26

COMMON ITEM : CONSULT-III Function

ECU IDENTIFICATION Displays the BCM part No.

SELF-DIAG RESULT Refer to BCS-85, "DTC Index". HEADLAMP

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< FUNCTION DIAGNOSIS >

HEADLAMP : CONSULT-III Function

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WORK SUPPORT

Service item	Setting item		Setting		
BATTERY SAVER SET	ON ¹	With the exterior lamp battery saver function			
BATTERT SAVER SET	OFF	Without the exterior lamp battery saver function			
ILL DELAY SET ²	MODE 1 ¹	45 sec.			
	MODE 2	Without the func- tion			
	MODE 3	30 sec.			
	MODE 4	60 sec.	Sets delay timer function timer operation time (All doors closed)		
	MODE 5	90 sec.			
	MODE 6	120 sec.			
	MODE 7	150 sec.			
	MODE 8	180 sec.			
	MODE 1 ¹	Normal	·		
CUSTOM A/LIGHT SETTING ²	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 set	ting than normal setting (Turns ON later than normal operation.)		

1 : Initial setting

2: With auto light system

DATA MONITOR

Monitor item [Unit]	Description
PUSH SW [ON/OFF]	The switch status input from push-button ignition switch
ENGINE STATE [STOP/STALL/CRANK/RUN]	The engine status received from ECM with CAN communication
VEH SPEED 1 [km/h]	The value of the vehicle speed received from combination meter with CAN commu- nication
KEY SW-SLOT [ON/OFF]	Key switch status input from key slot

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< FUNCTION DIAGNOSIS >

Monitor item [Unit]	Description
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 ¹ [ON/OFF]	
FR FOG SW [ON/OFF]	
DOOR SW-DR [ON/OFF]	The switch status input from front door switch LH
DOOR SW-AS [ON/OFF]	The switch status input from front door switch RH
DOOR SW-RR [ON/OFF]	The switch status input from rear door switch RH
DOOR SW-RL [ON/OFF]	The switch status input from rear door switch LH
DOOR SW-BK ² [ON/OFF]	_
OPTICAL (LIGHT) SENSOR [V] ¹	The value of exterior brightness voltage input from the optical sensor

1: With auto light system.

2: The item is indicated, not monitored.

ACTIVE TEST

Test item	Operation	Description
TAIL LAMP	ON	Transmits the Position light request signal to IPDM E/R with CAN com- munication to turn the tail lamp ON.
	OFF	Stops the tail lamp request signal transmission.
	н	Transmits the high beam request signal with CAN communication to turn the headlamp (HI)
HEAD LAMP	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 com- munication to turn the front fog lamp ON.
	OFF	Stops the front fog lights request signal transmission.
DAYTIME RUNNING LIGHT*	ON	
	OFF	

< FUNCTION DIAGNOSIS >

Test item	Operation	Description	٨
	RH		A
CORNERING LAMP*	LH	_	
	OFF		В
ILL DIM SIGNAL*	ON		
	OFF		

*: The item is indicated, not monitored.

FLASHER

FLASHER : CONSULT-III Function

Work support

Service item	Setting item	Setting		
	LOCK ONLY*	Activated when locking.		
HAZARD ANSWER	UNLK ONLY	Activated when unlock- ing.	Sets the hazard warning lamp answer back activation when the door is lock/unlock with the request switch or	
BACK	LOCK/UNLK	Activated when locking/ unlocking	the key fob.	
	OFF	Not activated	-	

* : Initial setting

Data monitor

Monitor item [Unit]	Description
TURN SIGNAL R [ON/OFF]	Each switch condition that BCM judges from the combination switch reading function
TURN SIGNAL L [ON/OFF]	
HAZARD SW [ON/OFF]	The switch status input from the hazard warning switch
RKE LOCK [ON/OFF]	The lock signal status received from the keyless receiver
RKE UNLOCK [ON/OFF]	The unock signal status received from the keyless receiver
RKE PANIC [ON/OFF]	The panic alarm signal status received from the keyless receiver

Active test

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Test item	Operation	Description	
	RH	Blinks right turn signal lamp.	
FLASHER	LH	Blinks left turn signal lamp.	0
	OFF	Turns turn signal lamps (right and left) OFF.	

COMB SW

COMB SW : CONSULT-III Function

DATA MONITOR

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< FUNCTION DIAGNOSIS >

Monitor item [UNIT]	Description
FR WIPER HI [OFF/ON]	Displays the status of the FR WIPER HI switch in combination switch judged by BCM with the combination switch reading function.
FR WIPER LOW [OFF/ON]	Displays the status of the FR WIPER LOW switch in combination switch judged by BCM with the combination switch reading function.
FR WASHER SW [OFF/ON]	Displays the status of the FR WASHER switch in combination switch judged by BCM with the combination switch reading function.
FR WIPER INT [OFF/ON]	Displays the status of the FR WIPER INT switch in combination switch judged by BCM with the combination switch reading function.
FR WIPER STOP [OFF/ON]	Displays the status of the front wiper stop position signal received from IPDM E/R via CAN communication.
INT VOLUME [1 - 7]	Displays the status of wiper intermittent dial position judged by BCM with the combination switch reading function
TURN SIGNAL R [OFF/ON]	Displays the status of the TURN RH switch in combination switch judged by BCM with the combination switch reading function.
TURN SIGNAL L [OFF/ON]	Displays the status of the TURN LH switch in combination switch judged by BCM with the combination switch reading function.
TAIL LAMP SW [OFF/ON]	Displays the status of the TAIL LAMP switch in combination switch judged by BCM with the combination switch reading function.
HI BEAM SW [OFF/ON]	Displays the status of the HI BEAM switch in combination switch judged by BCM with the combination switch reading function.
HEAD LAMP SW 1 [OFF/ON]	Displays the status of the HEADLAMP 1 switch in combination switch judged by BCM with the combination switch reading function.
HEAD LAMP SW 2 [OFF/ON]	Displays the status of the HEADLAMP 2 switch in combination switch judged by BCM with the combination switch reading function.
PASSING SW [OFF/ON]	Displays the status of the PASSING switch in combination switch judged by BCM with the combination switch reading function.
AUTO LIGHT SW* [OFF/ON]	Displays the status of the AUTO LIGHT switch in combination switch judged by BCM with the combination switch reading function.
FR FOG SW [OFF/ON]	Displays the status of the FR FOG switch in combination switch judged by BCM with the combination switch reading function.

*: With autolamp system BATTERY SAVER

BATTERY SAVER : CONSULT-III Function

INFOID:000000003185324

WORK SUPPORT

Service item	Setting item		Setting	
BATTERY SAVER SET	ON*	With the e	exterior lamp battery saver function	
BATTERT SAVER SET	OFF	Without th	Without the exterior lamp battery saver function	
ROOM LAMP BAT SAV SET	ON*	With the interior room lamp battery saver function		
ROOM LAWF DAT SAV SET	OFF	Without the interior room lamp battery saver function		
ROOM LAMP TIMER SET	MODE 1*	30 min.	Sets the interior room lamp battery saver timer operating	
ROOW LAWF HIVER SET	MODE 2	60 min.	time.	

* : Initial setting

DATA MONITOR

< FUNCTION DIAGNOSIS >

Monitor item [Unit]	Description			
REQ SW-DR [ON/OFF]	The switch status input from request switch (driver side)			
REQ SW-AS [ON/OFF]	The switch status input from front request switch (passenger side)			
PUSH SW [ON/OFF]	The switch status input from push-button ignition switch			
KEY SW-SLOT [ON/OFF]	Key switch status input from key slot			
DOOR SW-DR [ON/OFF]	The switch status input from front door switch LH			
DOOR SW-AS [ON/OFF]	The switch status input from front door switch RH			
DOOR SW-RR [ON/OFF]	The switch status input from rear door switch RH			
DOOR SW-RL [ON/OFF]	The switch status input from rear door switch LH			
DOOR SW-BK [ON/OFF]	NOTE: The item is indicated, not monitored.			
CDL LOCK SW [ON/OFF]	Lock switch status received from central door lock switch by power window switch se- rial link			
CDL UNLOCK SW [ON/OFF]	Unlock switch status received from central door lock switch by power window switch serial link			
KEY CYL LK-SW [ON/OFF]	Lock switch status received from key cylinder switch by power window switch serial link			
KEY CYL UN-SW [ON/OFF]	Unlock switch status received from key cylinder switch by power window switch serial link			
TRNK/HAT MNTR [ON/OFF]	The switch status input from trunk room lamp switch			
RKE-LOCK [ON/OFF]	Lock signal status received from remote keyless entry receiver			
RKE-UNLOCK [ON/OFF]	Unlock signal status received from remote keyless entry receiver			

ACTIVE TEST

Test item	Operation	Description	
BATTERY SAVER	OFF	Cuts the interior room lamp power supply to turn interior room lamp OFF.	
DATTENT SAVER	ON	Outputs the interior room lamp power supply to turn interior room lamp ON.*	

* : Each lamp switch is in ON position.

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DIAGNOSIS SYSTEM (IPDM E/R)

CONSULT - III Function (IPDM E/R)

INFOID:000000003185335

APPLICATION ITEM

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

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

SELF DIAGNOSTIC

Refer to PCS-41, "DTC Index".

DATA MONITOR

Monitor item

Monitor Item [Unit]	MAIN SIG- NALS	Description	
RADFAN REQ [%]	×	Displays the value of the cooling fan speed signal received from ECM via CAN communication.	
AC COMP REQ [Off/On]	×	Displays the status of the A/C compressor request signal received from ECM via CAN communication.	
TAIL&CLR REQ [Off/On]	×	Displays the status of the position light request signal received from BCM via CAN communication.	
HL LO REQ [Off/On]	×	Displays the status of the low beam request signal received from BCM via CAN communication.	
HL HI REQ [Off/On]	×	Displays the status of the high beam request signal received from BCM via CAN communication.	
FR FOG REQ [Off/On]	×	Displays the status of the front fog light request signal received from BCM via CAN communication.	
FR WIP REQ [Stop/1LOW/Low/Hi]	×	Displays the status of the front wiper request signal received from BCM via CAN communication.	
WIP AUTO STOP [STOP P/ACT P]	×	Displays the status of the front wiper auto stop signal judged by IPDM E/R	
WIP PROT [Off/BLOCK]	×	Displays the status of the front wiper fail-safe operation judged by IPDM E/R.	
IGN RLY1 -REQ [Off/On]		Displays the status of the ignition switch ON signal received from BCM via CAN communication.	
IGN RLY [Off/On]	×	Displays the status of the ignition relay judged by IPDM E/R.	
PUSH SW [Off/On]		Displays the status of the push-button ignition switch judged by IPDM E/R.	
INTER/NP SW [Off/On]		Displays the status of the clutch interlock switch (M/T models) or CVT shift position (CVT models) judged by IPDM E/R.	
ST RLY CONT [Off/On]		Displays the status of the starter relay status signal received from BCM via CAN communication.	
IHBT RLY -REQ [Off/On]		Displays the status of the starter control relay signal received from BCM via CAN communication.	
ST/INHI RLY [Off/ ST /INHI]		Displays the status of the starter relay and starter control relay judged by IPDM E/R.	

DIAGNOSIS SYSTEM (IPDM E/R)

< FUNCTION DIAGNOSIS >

Monitor Item [Unit]	MAIN SIG- NALS	Description	
DETENT SW [Off/On]		Displays the status of the CVT device (detention switch) judged by IPDM E/R.	
S/L RLY -REQ [Off/On]		Displays the status of the electronic steering column lock relay request received from BCM via CAN communication.	
S/L STATE [LOCK/UNLK/UNKWN]		Displays the status of the electronic steering column lock judged by IPDM E/R.	
DTRL REQ [Off]		NOTE: This item is displayed, but cannot be monitored.	
OIL P SW [Open/Close]		Displays the status of the oil pressure switch judged by IPDM E/R.	
THFT HRN REQ [Off/On]		Displays the status of the theft warning horn request signal received from BCM via CAN communication.	
HORN CHIRP [Off/On]		Displays the status of the horn reminder signal received from BCM via CAN com munication.	
CRNRNG LMP REQ [Off]		NOTE: This item is displayed, but cannot be monitored.	

ACTIVE TEST

Test item

Test item	Operation	Description
	Off	
CORNERING LAMP	LH	NOTE: This item is displayed, but cannot be monitored.
	RH	
HORN	On	Operates horn relay 1 and horn relay 2 for 20 ms.
	Off	OFF
FRONT WIPER	Lo	Operates the front wiper relay.
	Hi	Operates the front wiper relay and front wiper high relay.
	1	OFF
	2	Outputs 50% pulse duty signal (PWM signal) to the cooling fan control module.
MOTOR FAN	3	Outputs 80% pulse duty signal (PWM signal) to the cooling fan control module.
	4	Outputs 100% pulse duty signal (PWM signal) to the cooling fan control module.
	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

1. CHECK FUSE AND FUSIBLE LINK

Check if the following BCM fuse or fusible link are blown.

Terminal No.	Signal name	Fuse and fusible link No.	
1	Battony power supply	I	
11	Battery power supply	10	

Is the fuse or fusible link blown?

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

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect BCM.
- 3. Check voltage between BCM harness connector and ground.

	Voltage			
(
B	СМ		(Approx.)	
Connector	Terminal	Ground		
M16	1	Giodina	Battery voltage	
M17	11	†	Dattery Voltage	

Is the measurement normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

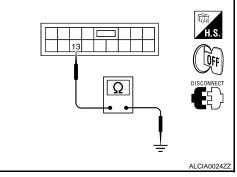
Check continuity between BCM harness connector and ground.

B	CM		Continuity	
Connector Terminal		Ground	Continuity	
M17	13	*	Yes	

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.



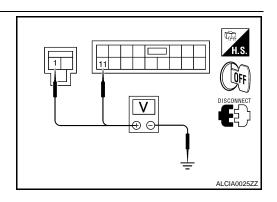
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BCM (BODY CONTROL MODULE) : Special Repair Requirement

1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to CONSULT-III Operation Manual.

>> Work end. IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)



POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

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

1. CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.	
1, 2		B, D	
	Battery power supply	42	
—		43	D

Is the fuse blown?

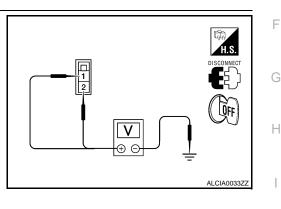
YES >> Replace the blown fuse or fusible link after repairing the affected circuit.

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

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

	Terminals			
(+)	(-)	Voltage (V)	
IPDN	IPDM E/R		(Approx.)	
Connector	Terminal			
E16	1	Ground	Battery voltage	
210	2		Dattery Voltage	



Is the measurement value normal?

YES >> GO TO 3

NO >> Repair harness or connector.

$\mathbf{3.}$ CHECK GROUND CIRCUIT

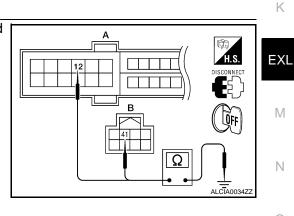
Check continuity between IPDM E/R harness connectors and ground.

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
A: E18	12	Ground	Yes
B: E17	41		165

Does continuity exist?

YES >> Inspection End.

NO >> Repair harness or connector.



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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

1.CHECK HEADLAMP (HI) OPERATION

WITHOUT CONTULT-III

- 1. Start IPDM E/R auto active test. Refer to <u>PCS-10, "Diagnosis Description"</u>.
- 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.

RCONSULT-III

- 1. 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 <u>EXL-36, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000001830378

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	10A
Headlamp HI (RH)	IPDM E/R	49	10A

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

INFOID:000000001830376

HEADLAMP (HI) CIRCUIT

< COMPONENT DIAGNOSIS >

With EXTERNAL LAMP ON, check the voltage between the 5. combination lamp connector and ground.

	(+)			Voltage
Co	nnector	Terminal	()	voliage
RH	E222	3	Ground	Pottony voltage
LH	E213	3	Giouna	Battery voltage

Is battery voltage present?

YES >> GO TO 4

NO >> GO TO 3

3.CHECK HEADLAMP (HI) CIRCUIT FOR OPEN

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

A B			Continuity		
Conr	nector	Terminal	Connector	Terminal	Continuity
RH	E200	89	E222	3	Yes
LH	E200	90	E213	3	165

Does continuity exist?

YES >> GO TO 4

NO >> Repair the harnesses or connectors.

4. CHECK FRONT COMBINATION LAMP (HI) GROUND CIRCUIT

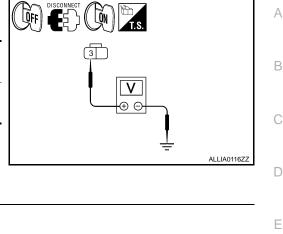
- 1. Disconnect the front combination lamp connector.
- 2. Check continuity between the front combination lamp harness connector terminal and ground.

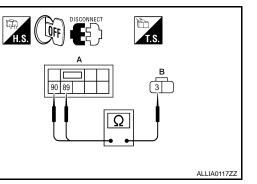
Conr	nector	Terminal		Continuity
RH	E222	4	Ground	Yes
LH	E213	4	Ground	165

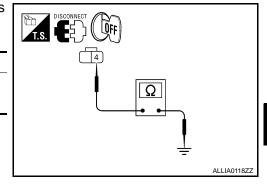
Does continuity exist?

YES >> Inspect the headlamp bulb.

NO >> Repair the harness.







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HEADLAMP (LO) CIRCUIT

HEADLAMP (HALOGEN)

HEADLAMP (HALOGEN) : 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.

HEADLAMP (HALOGEN) : Component Function Check

INFOID:000000003185343

INFOID:00000003185342

1.CHECK HEADLAMP (LO) OPERATION

WITHOUT CONSULT-III

- 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.

CONSULT-III

- 1. Select "EXTERNAL LAMP" of IPDM E/R active test item.
- 2. 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-38, "HEADLAMP (HALOGEN) : Diagnosis Procedure".

HEADLAMP (HALOGEN) : Diagnosis Procedure

INFOID:000000003185344

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	15A
Headlamp LO (RH)	IPDM E/R	52	15A

Is the fuse open?

YES >> Repair the harness and replace the fuse.

NO >> GO TO 2

2.CHECK HEADLAMP (LO) OUTPUT VOLTAGE

CONSULT-III

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

HEADLAMP (LO) CIRCUIT

< COMPONENT DIAGNOSIS >

5. With EXTERNAL LAMP ON, check the voltage between the combination lamp connector and ground.

(+)			(-)	Voltage
Cc	onnector	Terminal	(-)	voltage
RH	E223	1	Ground	Pottonyvoltago
LH	E212	1	Giouna	Battery voltage

Is battery voltage present?

YES >> GO TO 4

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.

А		В		Continuity	
Conr	nector	Terminal	Connector	Terminal	Continuity
RH	E200	83	E223	1	Yes
LH	L200	84	E212	1	163

Does continuity exist?

YES >> GO TO 4

NO >> Repair the harnesses or connectors.

4.CHECK FRONT COMBINATION LAMP (LO) GROUND CIRCUIT

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

Coni	nector	Terminal	—	Continuity
RH	E223	2	Ground	Yes
LH	E212	2	Giodila	165

Does continuity exist?

YES >> Inspect the headlamp bulb.

>> Repair the harness. NO

HEADLAMP (XENON)

HEADLAMP (XENON) : 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.

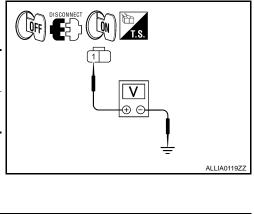
HEADLAMP (XENON) : Component Function Check

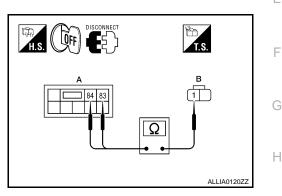
1.CHECK HEADLAMP (LO) OPERATION

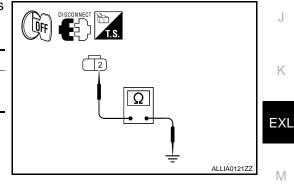
WITHOUT CONSULT-III

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

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







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EXL-39

HEADLAMP (LO) CIRCUIT

< COMPONENT DIAGNOSIS >

- 1. Select "EXTERNAL LAMP" of IPDM E/R active test item.
- 2. 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-40, "HEADLAMP (XENON) : Diagnosis Procedure".

HEADLAMP (XENON) : Diagnosis Procedure

INFOID:000000003185347

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	15A
Headlamp LO (RH)	IPDM E/R	52	15A

Is the fuse open?

YES >> Repair the harness and replace the fuse.

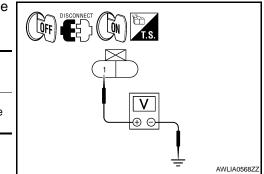
NO >> GO TO 2

2.CHECK HEADLAMP (LO) OUTPUT VOLTAGE

CONSULT-III

- 1. Turn the ignition switch OFF.
- 2. Disconnect the front combination 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 combination lamp connector and ground.

	(+)			Voltage
Co	nnector	Terminal	()	voltage
RH	E223	1	Ground	Battery voltage
LH	E212	1	Ground	Dattery voltage



Is battery voltage present?

YES >> GO TO 4

NO >> GO TO 3

3.CHECK HEADLAMP (LO) CIRCUIT FOR OPEN

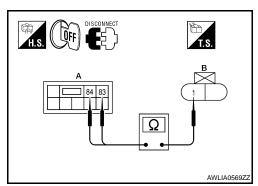
- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the front combination lamp harness connector.

А		В	Continuity		
Conr	nector	Terminal	Connector	Terminal	Continuity
RH	E200	83	E223	1	Yes
LH	E200	84	E212	1	165

Does continuity exist?

YES >> GO TO 4

NO >> Repair the harnesses or connectors.



HEADLAMP (LO) CIRCUIT

< COMPONENT DIAGNOSIS >

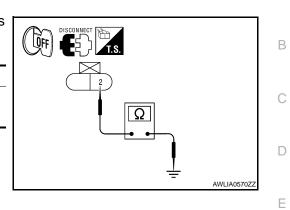
4. CHECK FRONT COMBINATION LAMP (LO) GROUND CIRCUIT

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

Conr	nector	Terminal	—	Continuity
RH	E223	2	Ground	Yes
LH	E212	2	Cround	163

Does continuity exist?

- YES >> Inspect the headlamp bulb.
- NO >> Repair the harness.



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FRONT FOG LAMP CIRCUIT

Description

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

1. CHECK FRONT FOG LAMP OPERATION

WITHOUT CONSULT-III

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

CONSULT-III

- 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-42, "Diagnosis Procedure".

Diagnosis Procedure

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	15A

Is the fuse open?

YES >> Repair the harness and replace the fuse.

NO >> GO TO 2

2. CHECK FRONT FOG LAMP OUTPUT VOLTAGE

CONSULT-III

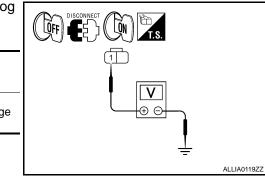
- 1. Turn the ignition switch OFF.
- 2. Disconnect the front fog lamp connector.
- 3. Turn the ignition switch ON.
- 4. Select "EXTERNAL LAMP" of IPDM E/R active test item.
- 5. With EXTERNAL LAMP ON, check the voltage between the fog lamp connector and ground.

(+)			()	Voltage	
Connector		Terminal	(-)	voitage	
LH	E214	1	Ground	Battery voltage	
RH	E227	1	Ground		

Is battery voltage present?

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

1. Turn the ignition switch OFF.



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INFOID:000000001830384

FRONT FOG LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

2. Disconnect IPDM E/R connector.

3. Check continuity between the IPDM E/R harness connector and the front fog lamp harness connector.

	А		В	Continuity	
Conr	nector	Terminal	Connector	Terminal	Continuity
RH	E200	86	E227	1	Yes
LH	L200	87	E214	1	163

Does continuity exist?

YES >> GO TO 4

NO >> Repair the harnesses or connectors.

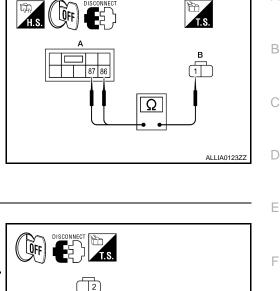
4.CHECK FRONT FOG LAMP GROUND CIRCUIT

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

Connector		Terminal	—	Continuity	
RH	E227	2	Ground	Yes	
LH	E214	2	Ground	163	

Does continuity exist?

- YES >> Inspect the fog lamp bulb.
- NO >> Repair the harness.



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PARKING LAMP CIRCUIT

Description

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INFOID:000000001830387

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

1. CHECK PARKING LAMP OPERATION

WITHOUT CONSULT-III

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

CONSULT-III

- 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-44, "Diagnosis Procedure".

Diagnosis Procedure

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)

CONSULT-III

PARKING LAMP CIRCUIT

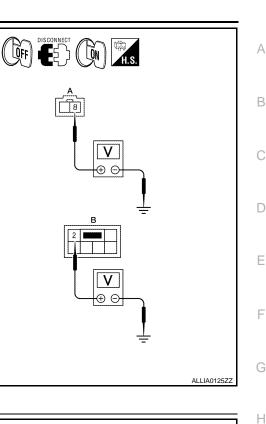
< COMPONENT DIAGNOSIS >

- 1. Turn the ignition switch OFF.
- 2. Disconnect the front and rear combination lamp connectors.
- 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 combination lamp connector and ground.

(+)			(-)	Voltage	
	Connector		(-)	vollage	
Front	A: E218, E225	8	Ground	Battery voltage	
Rear	Rear B: B30, B45		Cibulia	Dattery voltage	

Is battery voltage present?

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



3. CHECK PARKING LAMP CIRCUIT (OPEN)

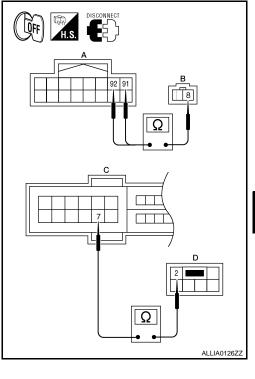
- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the combination lamp harness connector.

Connector		Terminal	Connector	Terminal	Continuity
Front	A: E201	91, 92	B: E218, E225	8	Yes
Rear	C: E18	7	D: B30, B45	2	165

Does continuity exist?

YES >> GO TO 4

NO >> Repair the harnesses or connectors.



4.CHECK PARKING LAMP GROUND CIRCUIT

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PARKING LAMP CIRCUIT

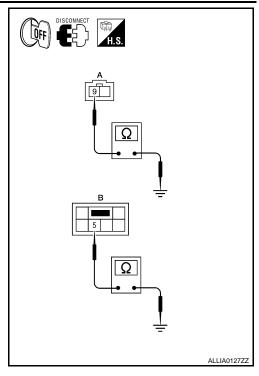
< COMPONENT DIAGNOSIS >

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

Connector		Terminal	—	Continuity	
Front	A: E218, E225	9	Ground	Yes	
Rear	B: B30, B45	5	Ground	163	

Does continuity exist?

- YES >> Inspect the parking lamp bulb.
- NO >> Repair the harness.



TURN SIGNAL LAMP CIRCUIT

< COMPONENT DIAGNOSIS > TURN SIGNAL LAMP CIRCUIT

101						
Desc	riptio	n			INFOID:000000001830388	
BCM o ard wa	outputs arning o	voltage di	rection to the	e left and right turn signals durir	ine when to activate the turn signals. The ng turn signal operation or both during haz- uest to the combination meter via the CAN	
The B open. NOTE	CM pei	rforms the		operation (fail-safe) if any bulb eed when using the hazard wa	or harness of the turn signal lamp circuit is rning lamp.	
Com	poner	nt Functi	on Check	J. J	INF0ID:000000001830389	
	•		IAL LAMP			
(P)CO	NSULT	-111				
1. Se	elect "F	LASHER"		ASHER) active test item. neck that the turn signal lamp b	links.	
	LH	: Turn	signal lam	b LH blinking		
	RH			o RH blinking		
	OFF		turn signal	amp OFF		
<u>yoes i</u> YES		<u>n signal lar</u> Turn signal	np blink? lamp circuit	is normal		
NO				nosis Procedure".		
Diagi	nosis	Procedu	ure		INFOID:000000001830390	
1.сн	IFCK T	URN SIGN	IAL LAMP B	UI B		
-	-			-	d is in use and the bulb is not open.	
	bulb O	•	•			
YES NO		GO TO 2 Replace the	a hulh			
-		•		UTPUT VOLTAGE		
		ignition sw				
	isconne mp con		nt combinati	on lamp connector, the door n	nirror connector and the rear combination	
3. Tu	urn the	ignition sw				
				vitch, check the voltage betwee d the ground.		
	(+)	1				
Con	nector	Terminal	(-)	Voltage		
RH	M17	17				
	1117	17		(V) 15 10 10 10 10 10 10 10 10 10 10 10 10 10 1		
			Ground			

Is the measurement value normal?

18

YES >> GO TO 3

M17

LH

>> Replace BCM. Refer to BCS-88, "Removal and Installation". NO

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$\overline{\mathbf{3.}}$ CHECK TURN SIGNAL LAMP CIRCUIT FOR OPEN

- 1. 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).

Connector		Terminal	Connector	Terminal	Continuity
Rear LH			B30	3	
Front LH	M17	17	E217	5	
Door mirror LH			D4	7	Yes
Rear RH			B45	3	165
Front RH	M17	18	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.

Connector		Terminal	—	Continuity	
LH	M17	18 Ground		No	
RH		17	Ground	NO	

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).

Connec	tor	Terminal	—	Continuity		
Front RH	E224	7				
Front LH	E217	7				
Rear RH	B45	5	Ground	Yes		
Rear LH	B30	5	Ground	165		
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.

OPTICAL SENSOR

< COMPONENT DIAGNOSIS >

OPTICAL SENSOR

А Description INFOID:000000001830391 The optical sensor converts the outside brightness (lux) to voltage and transmits the optical sensor signal to В the BCM. Component Function Check INFOID:000000001830392 1.CHECK OPTICAL SENSOR SIGNAL BY CONSULT-III CONSULT-III D 1. Turn the ignition switch ON. Select "OPTICAL SENSOR" of BCM (HEAD LAMP) DATA MONITOR item. 2. Turn the lighting switch to AUTO. 3. With the optical sensor illuminating, check the monitor status. 4. Monitor item Condition Voltage 3.1V or more * When illuminating **OPTICAL SENSOR** 0.6V or less When shutting off light *: 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-49, "Diagnosis Procedure". Н **Diagnosis** Procedure INFOID:000000001830393 1.CHECK OPTICAL SENSOR POWER SUPPLY INPUT 1. Turn the ignition switch ON. Turn the lighting switch to AUTO. 2. Check the voltage between the optical sensor harness connec-3. tor and ground. Κ (+) (-) Voltage Connector Terminal M66 1 Ground 5V EXL Is the voltage reading as specified? YES >> GO TO 2 NO >> GO TO 4 Μ ALLIA0130ZZ 2.CHECK OPTICAL SENSOR GROUND INPUT Check the voltage between the optical sensor harness connector Ν and ground. (DN) (+) (-) Voltage Terminal Connector M66 3 Ground Less than 0.2V Ρ Is the voltage reading as specified? YES >> GO TO 3 NO >> GO TO 6 ALLIA0131Z

3.CHECK OPTICAL SENSOR SIGNAL OUTPUT

OPTICAL SENSOR

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< COMPONENT DIAGNOSIS >

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

(+)		()	Condition	Voltage	
Connector	Terminal	(-)	Condition	vollage	
M66	2	Ground	When illuminating	3.1V or more *	
1000	Moo 2 Ground	When shutting off light	0.6V or less		

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

Is the voltage reading as specified?

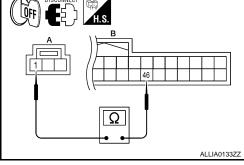
YES >> GO TO 7

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.

	4		Continuity				
Connector	Terminal	Connector	Terminal	Continuity			
M66	1	M18	46	Yes			



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.

Connector	Terminal	—	Continuity
M66	1	Ground	No

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM. Refer to <u>BCS-88, "Removal and Installa-</u> tion".

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

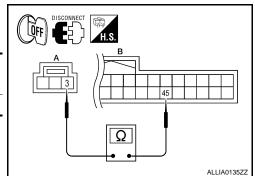
- 1. Turn the ignition switch OFF.
- 2. Disconnect the optical sensor connector and BCM connector.
- 3. Check continuity between the optical sensor harness connector and the BCM harness connector.

/	4	B Continuity							
Connector	Terminal	Connector	Continuity						
M66	3	M18	Yes						

Does continuity exist?

- YES >> Replace BCM. Refer to <u>BCS-88, "Removal and Installa-</u> tion"
- NO >> Repair the harnesses or connectors.

7.CHECK OPTICAL SENSOR SIGNAL FOR OPEN CIRCUIT



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EXL-50

OPTICAL SENSOR

< COMPONENT DIAGNOSIS >

- 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.

	A		Continuity			
Connector	Terminal	Connector	Continuity			
M66	2	M18	21	Yes		

Does continuity exist?

YES >> GO TO 8

NO >> Repair the harnesses or connectors.

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

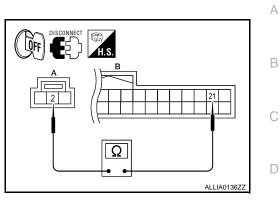
Check the continuity between the optical sensor harness connector and ground.

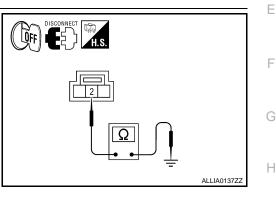
Connector	Terminal	_	Continuity
M66	2	Ground	No

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM. Refer to <u>BCS-88. "Removal and Installa-</u> tion"







EXL

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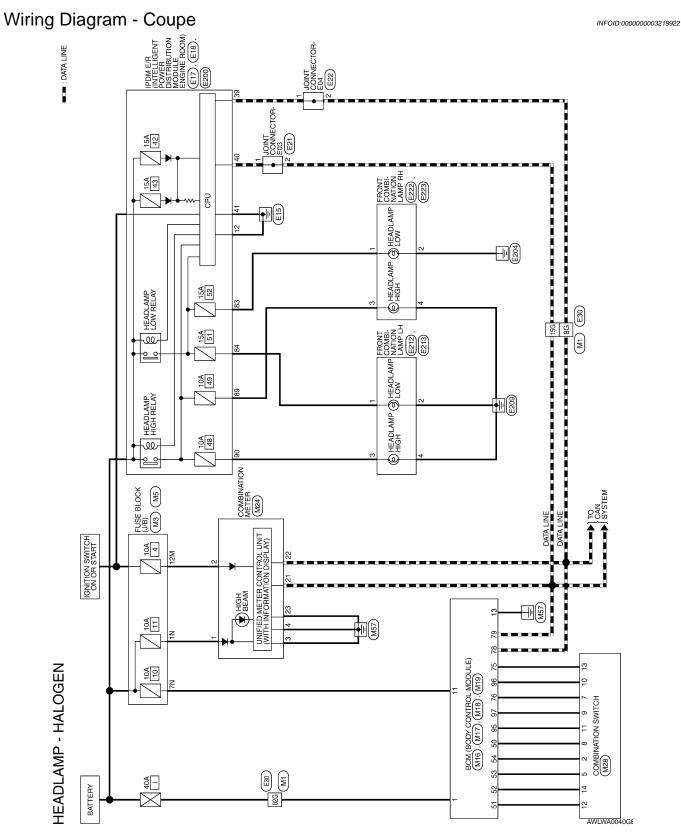
Ν

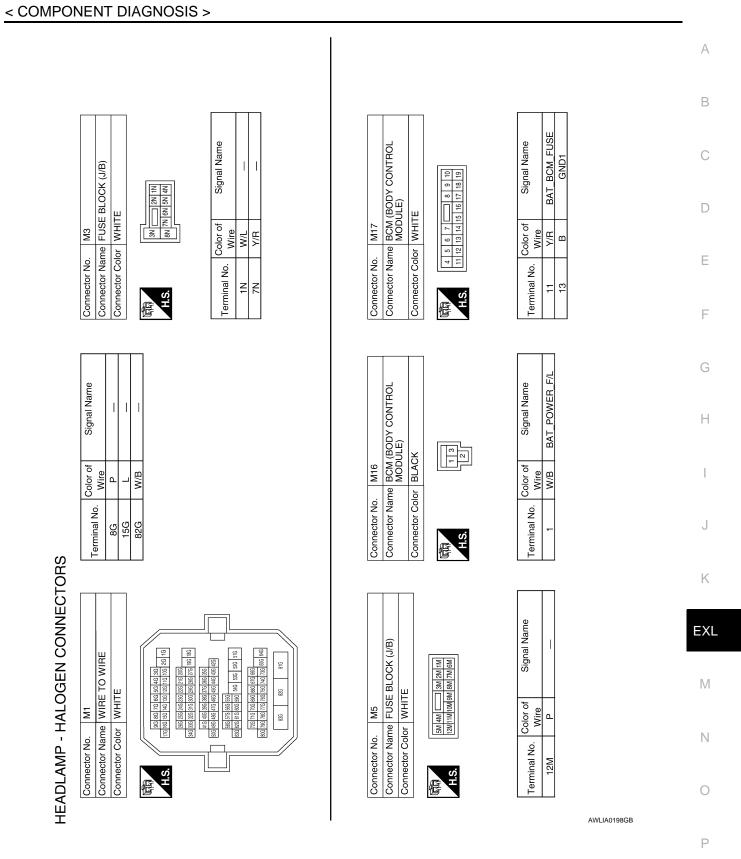
Ο

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J

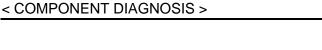
HEADLAMP (HALOGEN)

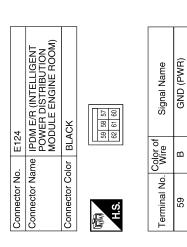


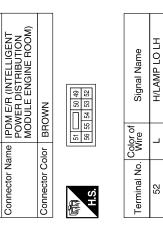


HEADLAMP (HALOGEN)

EXL-53







Connector No. E123

E122

Connector No.

Connector Name	Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE	WHITE
国 H.S.	42 41 40 39 38 37 48 47 46 45 44 43
Č	Color of

Signal Name	GND (SIG)	CAN-H	CAN-L	
Color of Wire	В	L	Ч	
Terminal No. Wire	38	39	40	

H/LAMP LO RH H/LAMP HI LH H/LAMP HI RH

RY

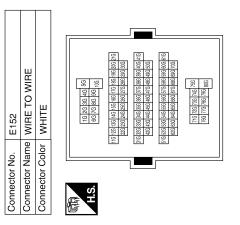
54

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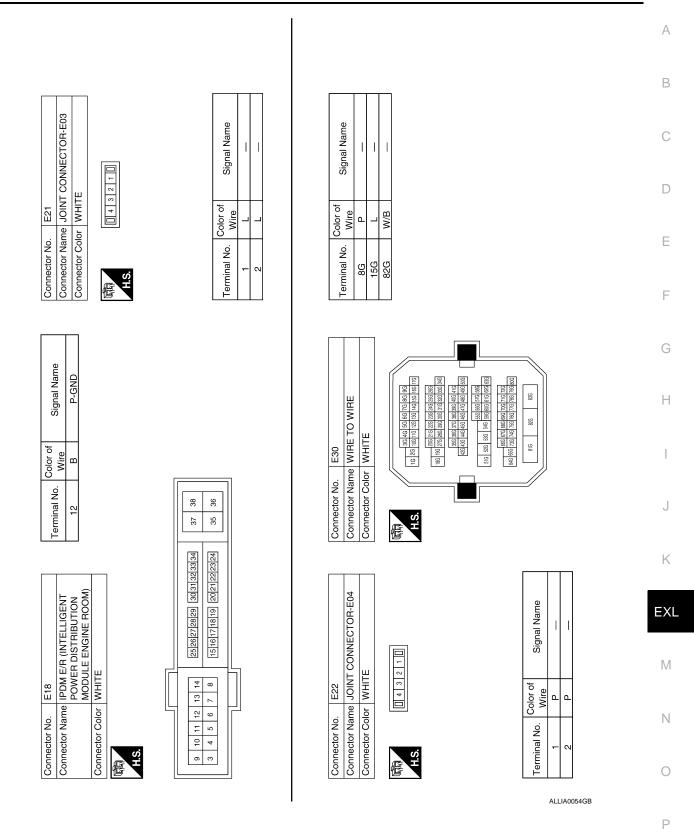
55 56

Signal Name	I	I	I	I
Color of Wire	L/W	W/B	L	Р
Terminal No.	92	10G	31G	42G



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HEADLAMP (HALOGEN)



HEADLAMP (HALOGEN)

Signal Name Connector Name FRONT COMBINATION LAMP LH H/L_LH_HI GND Connector Color BLACK 4 (4) E213 Color of Wire G В Connector No. Terminal No. ო 4 H.S. E Connector Name FRONT COMBINATION LAMP LH Signal Name H/L_LH_LO GND BLACK (F) E212 Color of Wire в Connector Color Connector No. Terminal No. N H.S. Æ HEADLAMP_LO_LH HEADLAMP_LO_RH IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) HEADLAMP HI RH HEADLAMP_H_LH Signal Name 85 84 83 90 89 88 87 86 Connector Color WHITE E200 Color of Wire Ň Ρ G _ Connector Name Connector No. Terminal No.

83 88 89 89

H.S. E

			1
E223		BLACK	
Connector No. E223	Connector Name	Connector Color BLACK	中 H.S.
E222		BLACK	
Connector No. E222	Connector Name	Connector Color BLACK	际日 H.S.

	0			
	Terminal No.	1	2	
ĺ				1
	Signal Name	H/L_RH_HI	GND	
	Color of Wire	L/W	В	
	Terminal No.	в	4	

Signal Name H/L RH LO

Color of

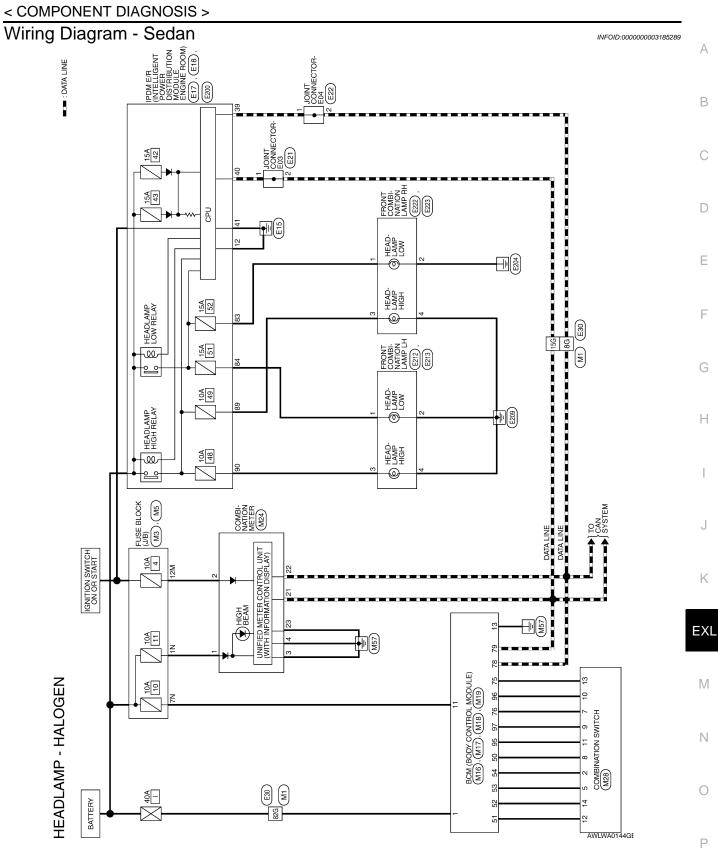
Wire R/Y

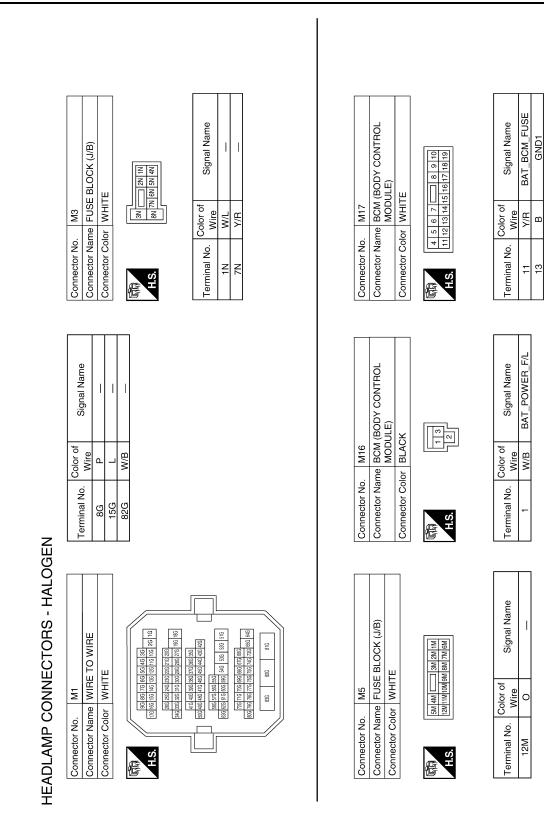
GND

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AWLIA0199GB

HEADLAMP (HALOGEN)



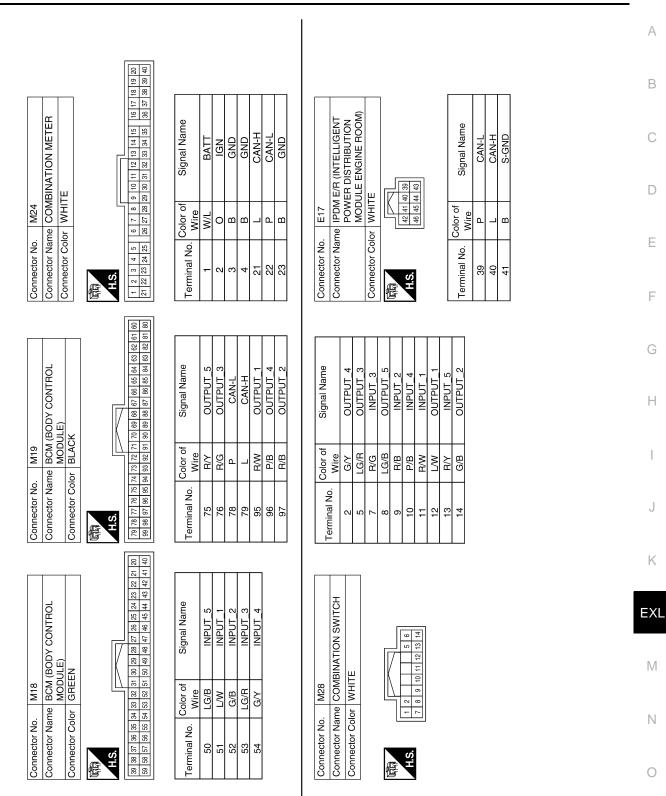


AWLIA0481GB

HEADLAMP (HALOGEN)

< COMPONENT DIAGNOSIS >

EXL-58



HEADLAMP (HALOGEN)

< COMPONENT DIAGNOSIS >

EXL-59

ALLIA0053GB

Ρ

Connector Name JOINT CONNECTOR-E03

E21

Connector No.

Signal Name P-GND

Color of Wire

Terminal No.

В

12

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

E18

Connector No.

Connector Color WHITE

H.S. E

Signal Name

Color of

Terminal No.

38 36

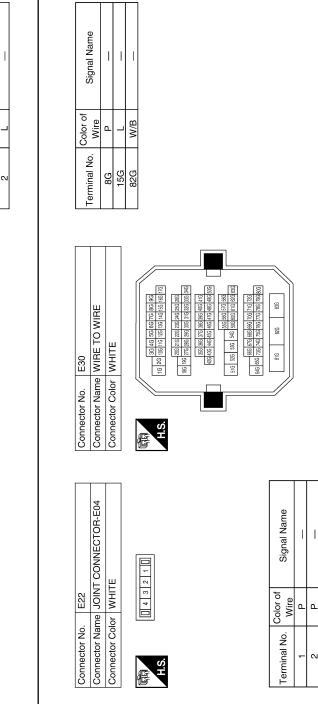
H.S.

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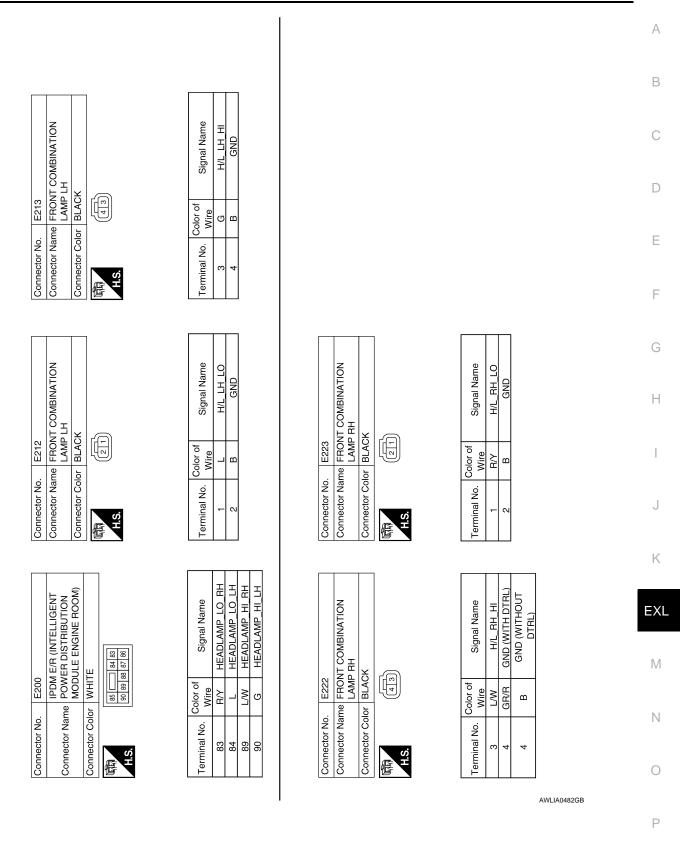
35 37

Wire

T



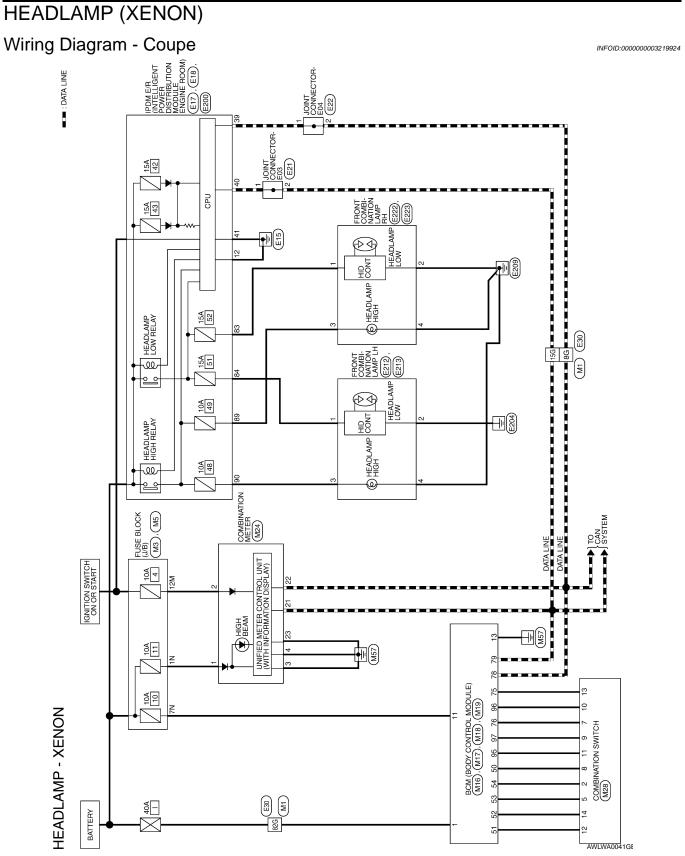
ALLIA0054GB

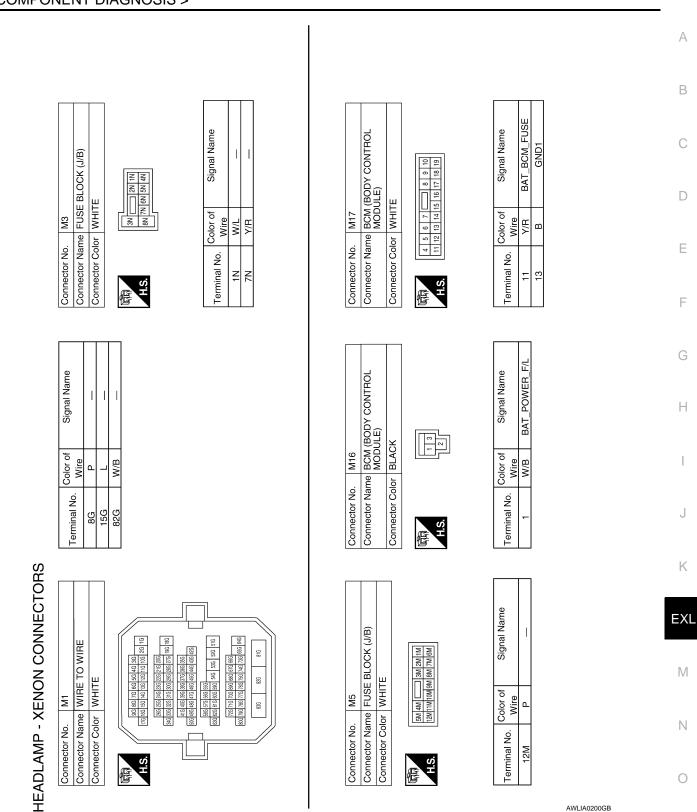


HEADLAMP (HALOGEN)

< COMPONENT DIAGNOSIS >

EXL-61





< COMPONENT DIAGNOSIS >

EXL-63

AWLIA0200GB

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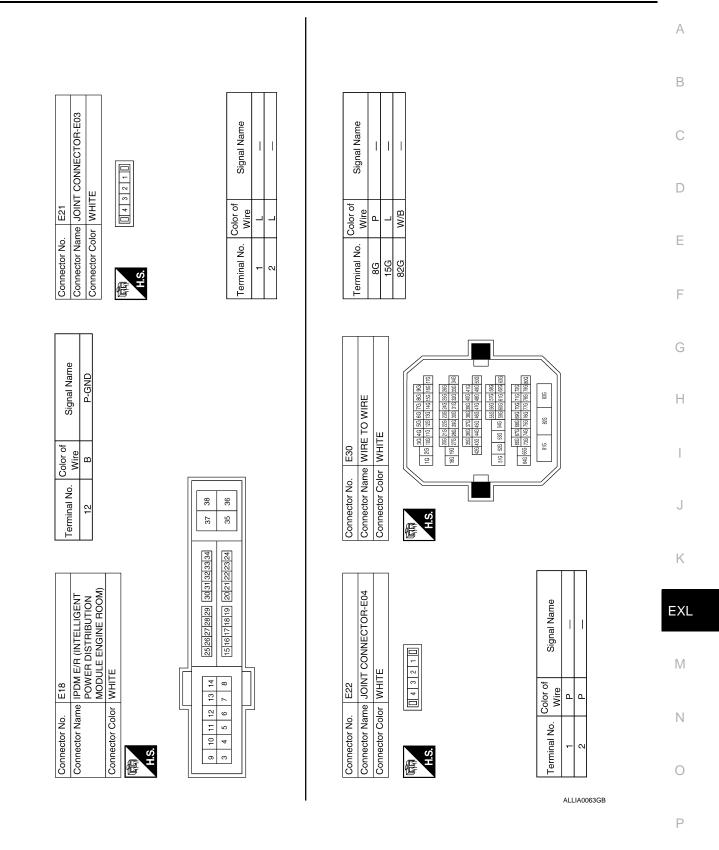
Connector No. M24 Connector Name COMBINATION METER Connector Color WHITE	HAV H.S. 1 2 3 4 25 28 27 28 29 30 31 32 33 34 35 38 37 38 39 40	Terminal No. Color of Signal Name Wrie	M/L E	0	3 B GND		a	23 B GND	Connector No. E17	Connector Name IPDM E/R (INTELLIGENT	POWER DISTRIBUTION	-	Connector Color WHITE	K		H.S.				Terminal No. Color of Signal Name		n m
Connector No. M19 Connector Name BCM (BODY CONTROL Connector Color BLACK	8 8 77 8 97 96 97 96 97 96 97 96 97 96 97 96 97 96 97 96 97 96 97 96 97 96 97 96 97 96 97 96 97 96 97 96 97 97 96 97 97 97 97 97 97 97 97 97 97 97 97 97	Terminal No. Color of Signal Name	R/Y OUTPUT	R/G OL	78 P CAN-L 20 I CAN I	R/W O	P/B		Color of Signal Name)	2 G/Y OUTPUT_4	LG/R OUTPUT 3	R/G INPUT_3	LG/B OUTPUT 5	R/B INPUT_2	P/B	11 R/W INPUT_1	12 L/W OUTPUT_1	13 R/Y INPUT 5 r	G/B OUTPUT_2		
Connector No. M18 Connector Name BCM (BODY CONTROL Connector Color GREEN	6. 8 37 36 55 54 53 22 51 50 49 48 47 46 45 44 43 42 41 40	Terminal No. Color of Signal Name T	LG/B		52 G/B INPUT 2 53 LC/D INDUT 2	G/Y G/Y	-		Connector No. M28	Connector Name COMBINATION SWITCH	Connector Color WHITE					2 0 10 10 0 0 10 11 10 10						

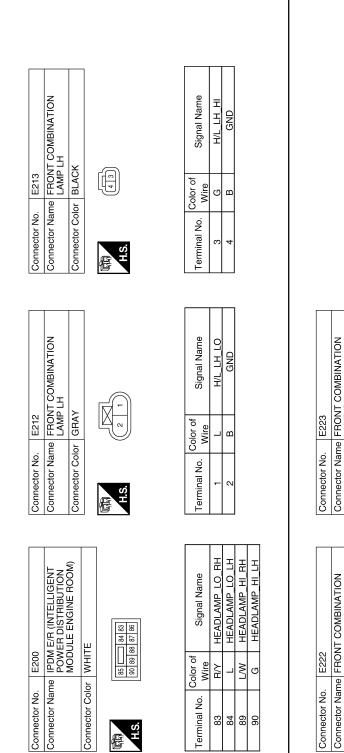
< COMPONENT DIAGNOSIS >

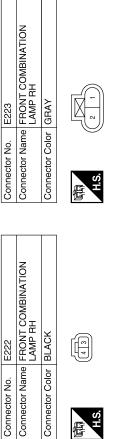
EXL-64

ALLIA0062GB

< COMPONENT DIAGNOSIS >







Terminal No.	F	2	
Signal Name	H/L_RH_HI	GND	
Color of Wire	L/W	В	

Terminal No.

ω 4

Signal Name H/L_RH_LO

Color of

Wire R/Y

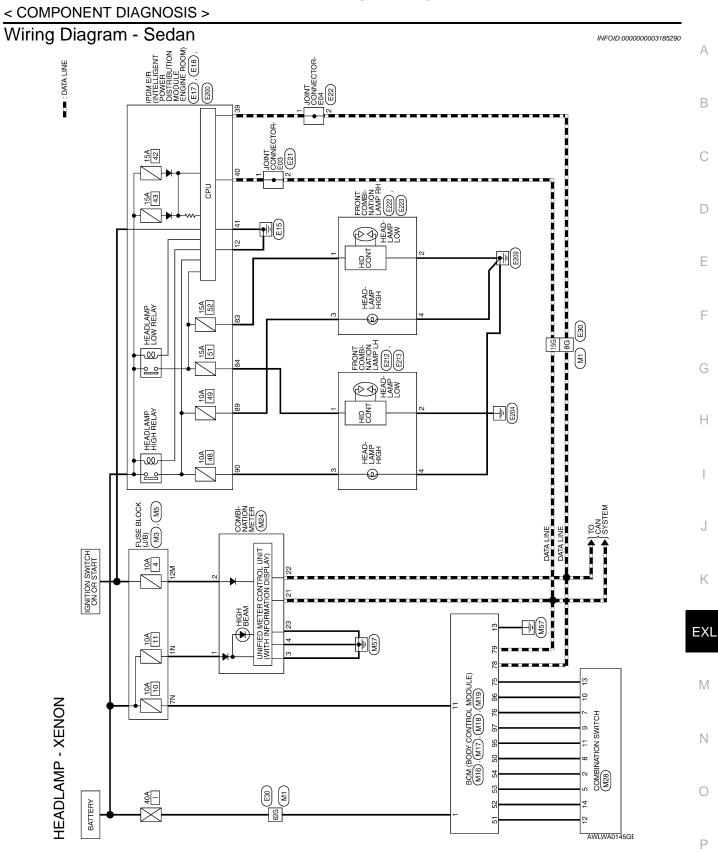
GND

ш

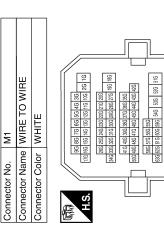
AWLIA0201GB

HEADLAMP (XENON)

< COMPONENT DIAGNOSIS >



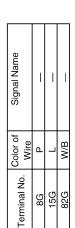
HEADLAMP CONNECTORS - XENON



816

826

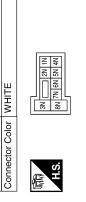
836



Connector Name FUSE BLOCK (J/B)

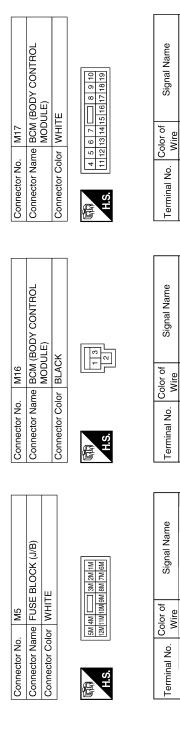
β

Connector No.



< COMPONENT DIAGNOSIS >

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



BAT BCM FUSE

В

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BAT_POWER_F/L

W/B

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12M

GND1

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HEADLAMP (XENON)

EXL-68

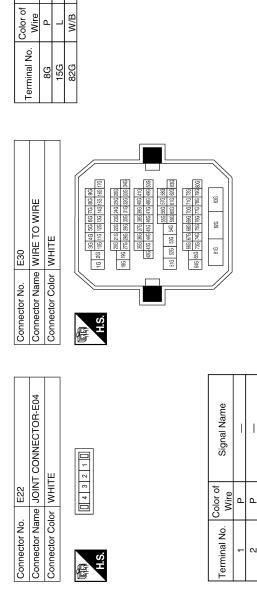
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	В
all Name all Name all Name all Name SAN-L CAN-L CAN-L CAN-L SAN-L CAN-L	С
M24 M24 COMBINATIO WHITE WHITE WILL IPDM E/R WILL IPDM E/R WHITE WILL Sign WILL WILL IPDM E/R WILL WILL WILL WHITE WODULE ENG WHITE WODULE ENG	D
Connector No. M24 Connector Name COMBI Connector Name COMBI Connector Name COMBI Connector Name COMBI Connector No. M1TE 2 0 0 0 2 0 0 0 2 1 1 0 0 1 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Е
Connector Name Connector Name Connector Name Connector Name Connector No. Connector No. Connector No. Connector Name Connector No. Connector Name 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	F
	G
M19 BCM (BODY CONTROL MODULE) BLACK BLACK MODULE) BLACK MODULE BLACK MODULE) BLACK MODULE BLACK MODULE) BLACK MODULE BL	Н
	Ι
Connector No. N Connector No. N Connector Name N N	J
	K
COPY CONTROL C ED COPY CONTROL Signal Name Signal Name INPUT 2 INPUT 3 INPUT 2 INPUT 4 INPUT 2 INPUT 2	EXL
M18 M18 mm BCM (BODULE) mm M00ULE) mm M00ULE) mm Color of L/W LG/B LG/B LG/B 1 2 1 3 1 2	
Connector No. M18 Connector Name BCM (B) Connector Name BCM (B) Connector Name BCM (B) Connector Name Connector Name S2 Color of 51 LW 53 LG/M M2BUL Connector Name Color of C/B M18 MODULIA M2BUL M18 S2 LG/M LM 51 L/M L/M 1 L/M L/M 1 <thl m<="" th=""> L/M</thl>	Ν
Connect Connect E 51 53 54 54 54 Connect	0
ALLIA0062GB	

< COMPONENT DIAGNOSIS >

EXL-69

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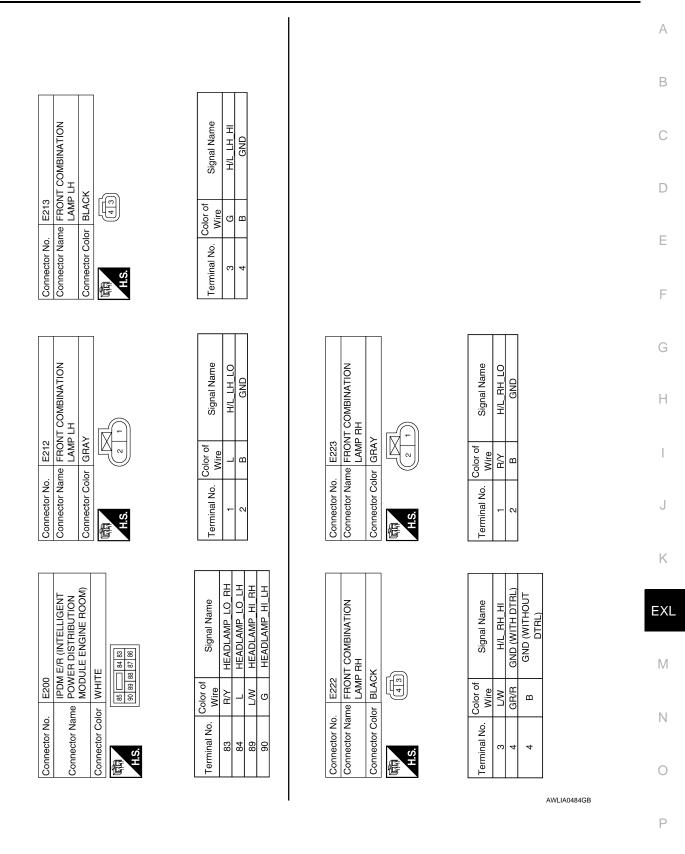
Connector Name JOINT CONNECTOR-E03 Signal Name T 1 Connector Color WHITE Color of E21 Wire Connector No. Terminal No. N H.S. E Signal Name P-GND Color of Wire В Terminal No. 38 36 12 37 35 25 26 27 28 29 30 31 32 33 34 15 16 17 18 19 20 21 22 23 24 Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) Connector Color WHITE E18 10 11 12 13 14 7 8 9 10 11 12 1 3 4 5 6 7 Connector No. H.S. Æ



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HEADLAMP (XENON)

Signal Name



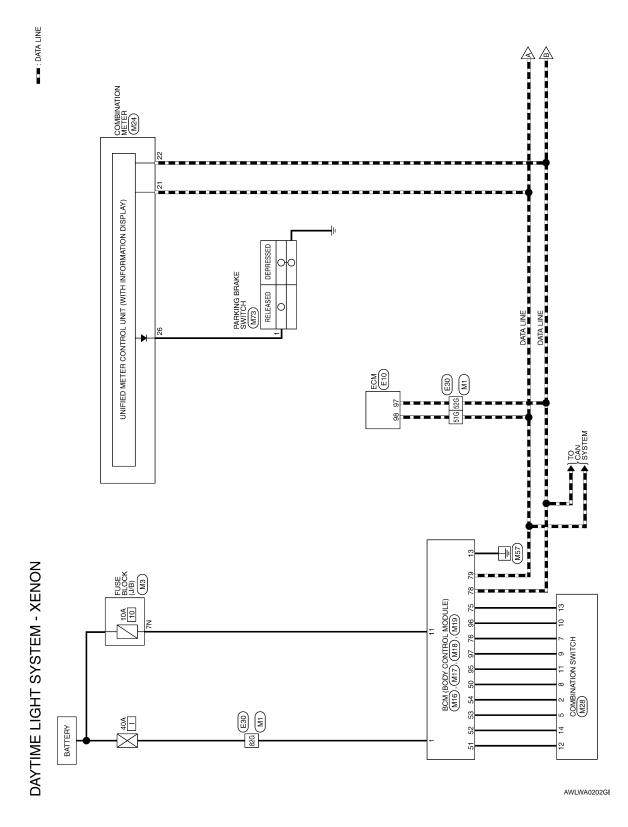
< COMPONENT DIAGNOSIS >

EXL-71

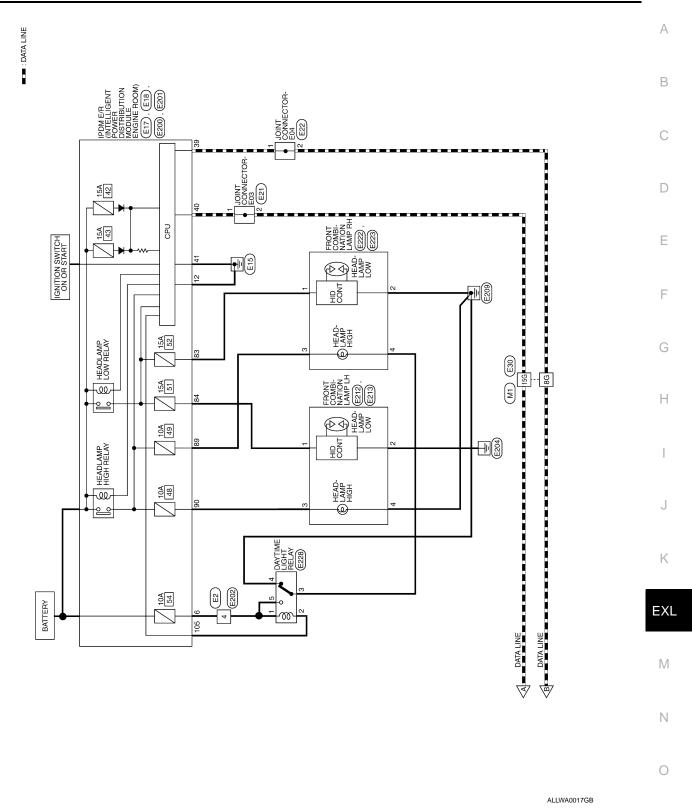
DAYTIME RUNNING LIGHT SYSTEM HEADLAMP (XENON TYPE)

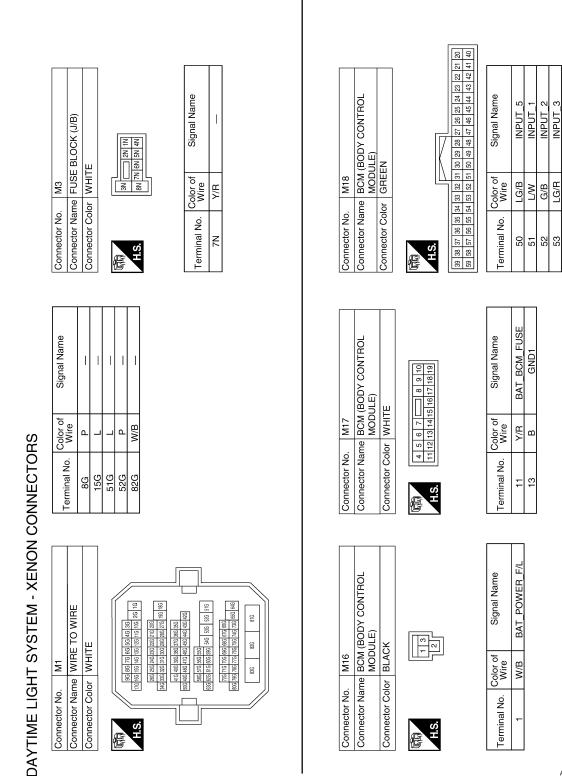
HEADLAMP (XENON TYPE) : Wiring Diagram - Coupe

INFOID:000000003219925



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H.S.H

E



DAYTIME RUNNING LIGHT SYSTEM

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-

H.S.

E

INPUT_4

G/Y

54

Connector No.M28Connector NameCOMBINATION SWITCHConnector NameCOMBINATION SWITCHConnector ColorWHITEImage: Second Se	Connector No. E10 Connector Name ECM Connector Name ECM Connector Color BLACK	Terminal No. Color of Wire Signal Name 97 P CAN-L 98 L CAN-H
Connector No. M24 Connector Name COMBINATION METER Connector Name COMBINATION METER Connector Name COMBINATION METER Connector Solor WHITE Main Connector Name Commetor Name Connector Color WHITE M24 Main Early 10 110 100 Main Early 20 20 14 16 17 18 19 20 Main Calve Signal Name Signal Name Signal Name 22 P CAN-H 26 G/R PKB PKB PKB PKB	Connector No. E2 Connector Name WIRE TO WIRE Connector Color WHITE	Terminal No. Color of Signal Name 4 SB —
Connector No. M19 Connector Name BCM (BODY CONTROL MODULE) Connector Color BLACK Terminal No. Color of Wire Signal Name Tag P CAN-L Tag P CUTPUT 3 Tag DUTPUT 2 Tag OUTPUT 2	Connector No. M73 Connector Name PARKING BRAKE SWITCH Connector Color BLACK	Terminal No. Color of Signal Name 1 G/R —

< COMPONENT DIAGNOSIS >

EXL-75

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EXL-76

TURN SIGNAL AND HAZARD WARNING LAMP CONNECTORS

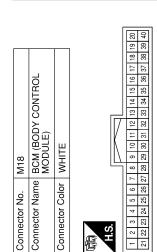
Connector No.	M4
Connector Name	Connector Name FUSE BLOCK (J/B)
Connector Color WHITE	WHITE
	6P 5P 4P 3P 2P 1P
16P1	15P14P13P12P11P10P9P 8P
H.S.	

Connector No	MO
	INIO
Connector Name	Connector Name WIRE TO WIRE
Connector Color	WHITE
E	7 6 5 4 3 2 1
	16 15 14 13 12 11 10 9 8
2	

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	3	9	
	Π	÷	
	Ш	12	
	4	13	
	5	4	
	9	15	
		9	
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Signal Name	-	
Color of Wire	O/L	
Terminal No.	5P	

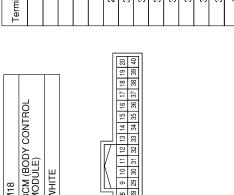
Signal Name	I	
Color of Wire	В	
Terminal No.	14	
		ļ



Signal Name	FLASHER OUTPUT (LEFT)	FLASHER OUTPUT (RIGHT)	GND (POWER)	BATT (FL)
Color of Wire	G/B	G/Y	В	W/B
Terminal No. Color of	09	61	29	20

AWLIA0067GB

	1	—												
Signal Name	INPUT-5	INPUT-4	INPUT-3	INPUT-2	INPUT-1	HAZARD_SW	OUTPUT-5	OUTPUT-4	OUTPUT-3	OUTPUT-2	OUTPUT-1	IGN SW	CAN-H	CAN-L
Color of Wire	SB	G∖Y	≻	G/B	>	W/B	R/G	R/Y	L	O/B	R/W	W/L	L	Ч
Terminal No.	2	ю	4	5	9	29	32	33	34	35	36	38	39	40



Connector Name BCM (BODY CONTROL MODULE)

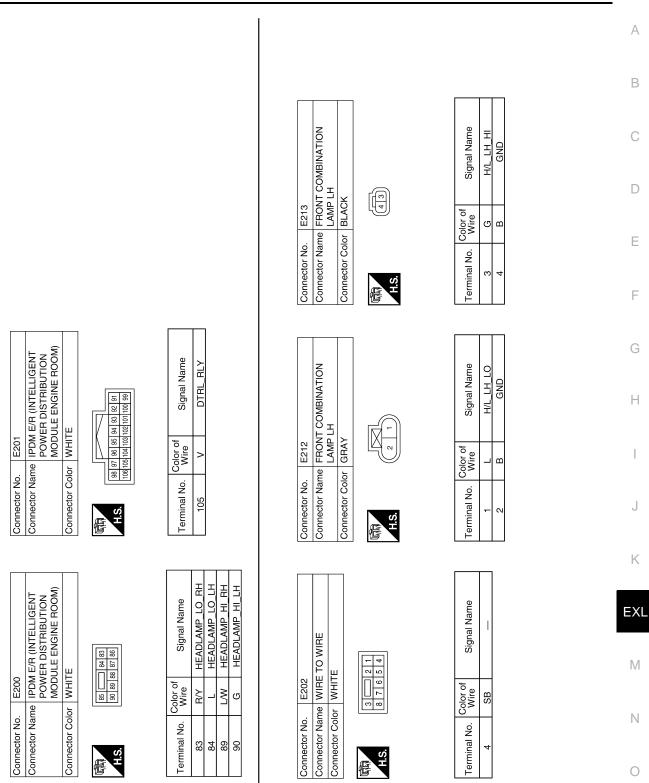
Connector No. M20

BLACK

Connector Color

H.S E

< COMPONENT DIAGNOSIS >

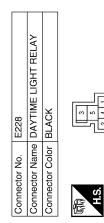


< COMPONENT DIAGNOSIS >

EXL-77

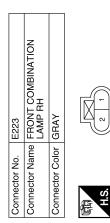
AWLIA0205GB

< COMPONENT DIAGNOSIS >



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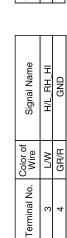
Signal Name	I	Ι	Ι	-	Η
Color of Wire	SB	٨	GR/R	В	SB
Terminal No.	-	2	e	4	5



		_	
Signal Name	H/L_RH_LO	GND	
Color of Wire	R/Y	В	
Terminal No.	1	2	

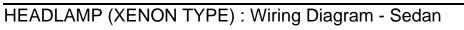
Connector No.	E222
Connector Name	Connector Name FRONT COMBINATION LAMP RH
Connector Color BLACK	BLACK
	43

H.S.

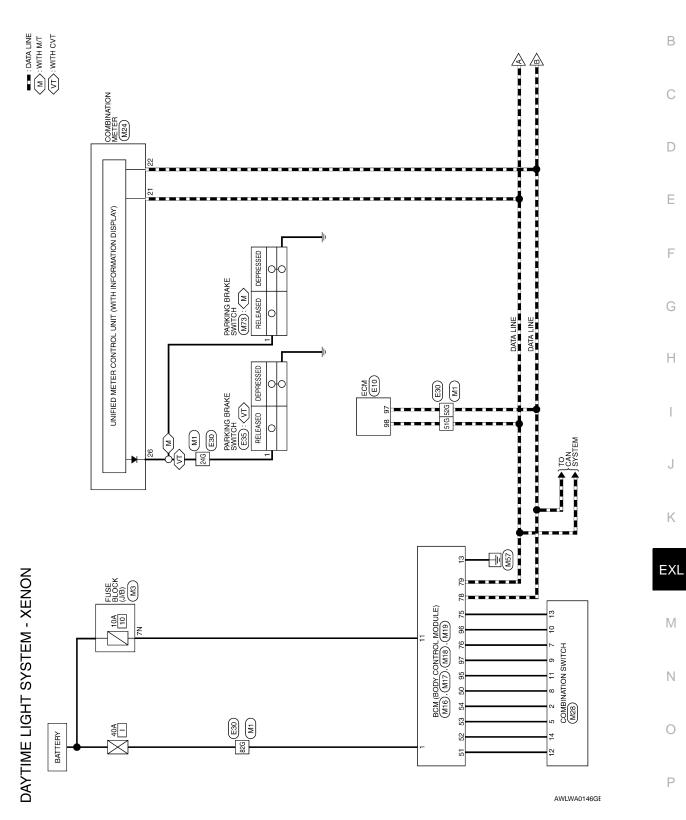


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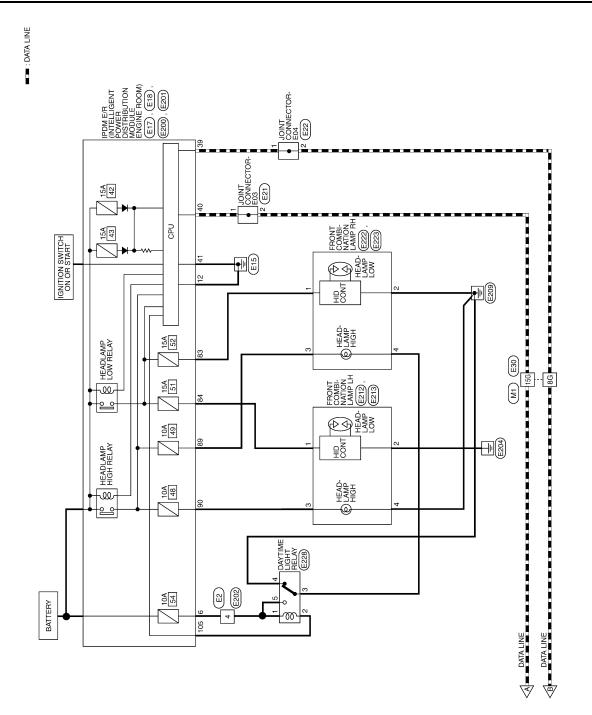
< COMPONENT DIAGNOSIS >



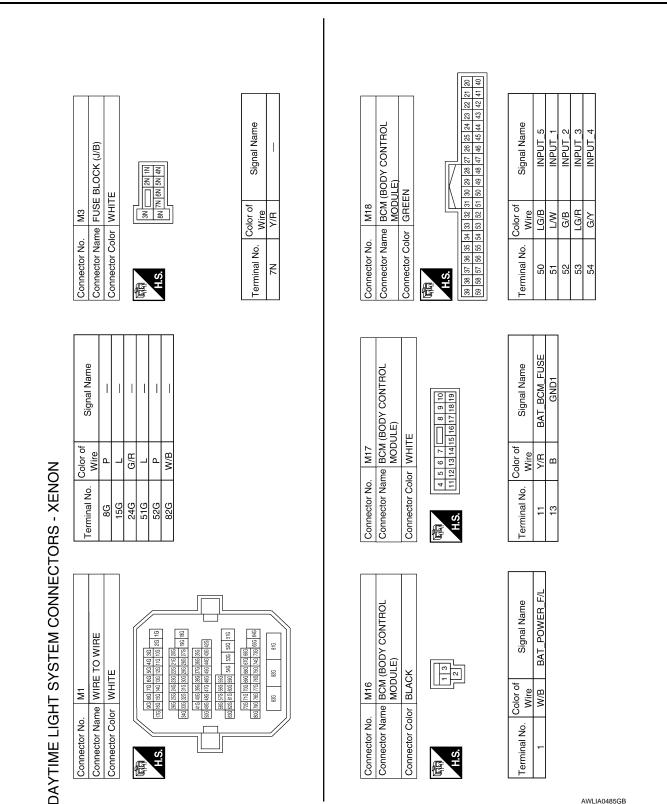
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< COMPONENT DIAGNOSIS >



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Connector No.

EXL-81

M16

Connector No.

836

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Color of W/B

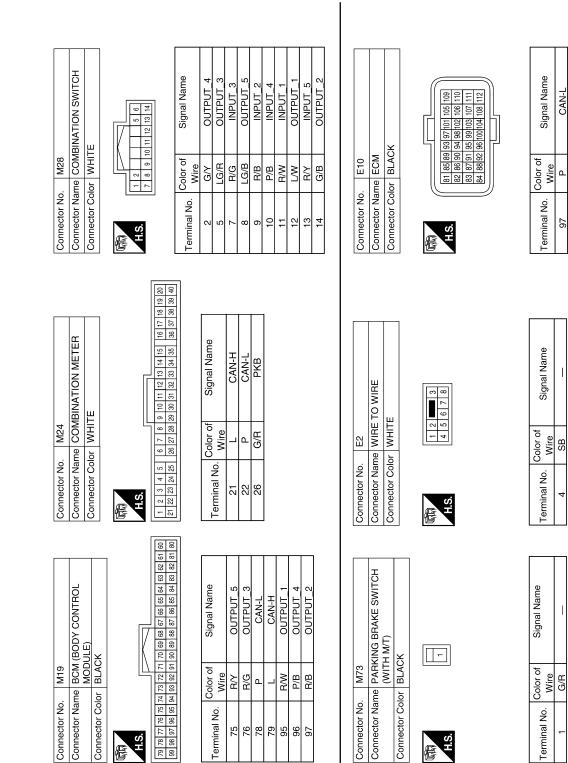
Wire

Terminal No.

AWLIA0485GB

H.S.

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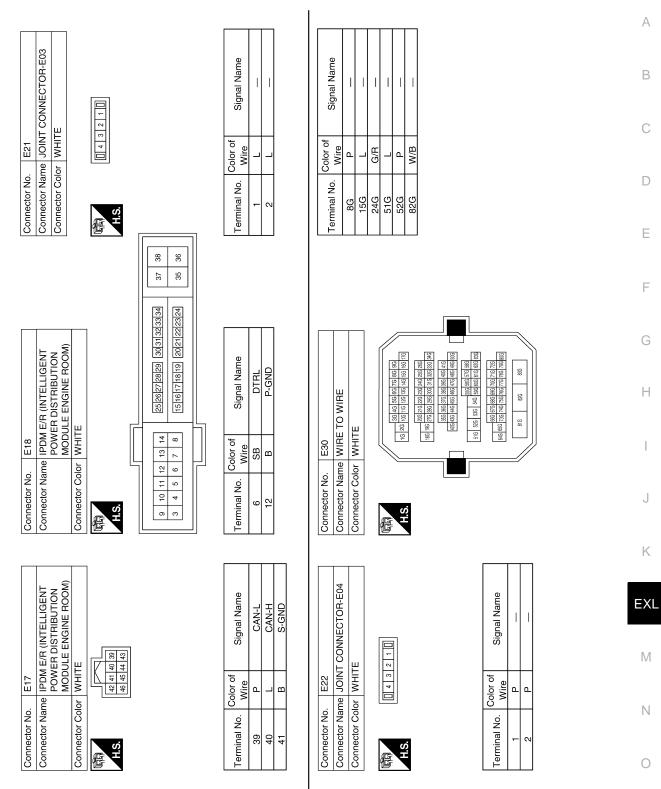
EXL-82

ALLIA0066GB

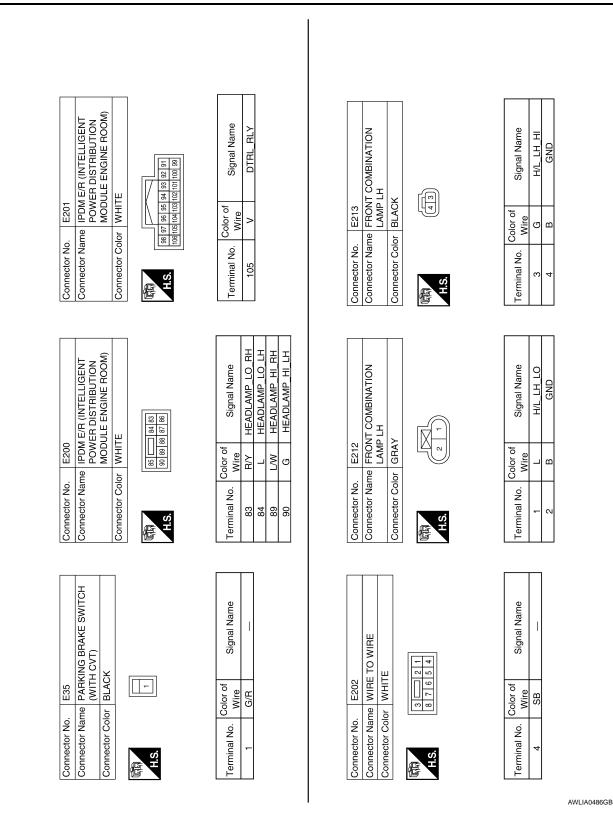
CAN-H

98

< COMPONENT DIAGNOSIS >



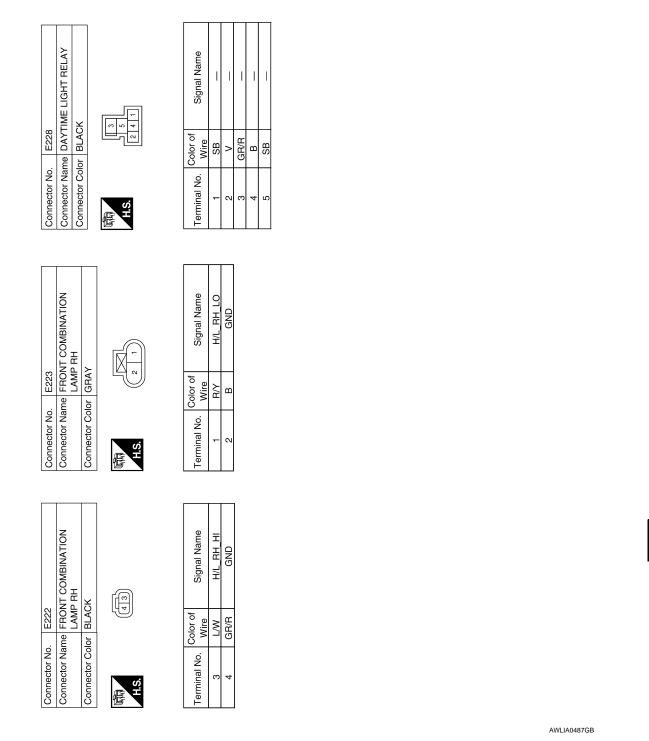
ALLIA0067GB



EXL-84

< COMPONENT DIAGNOSIS >

HEADLAMP (HALOGEN)



DAYTIME RUNNING LIGHT SYSTEM

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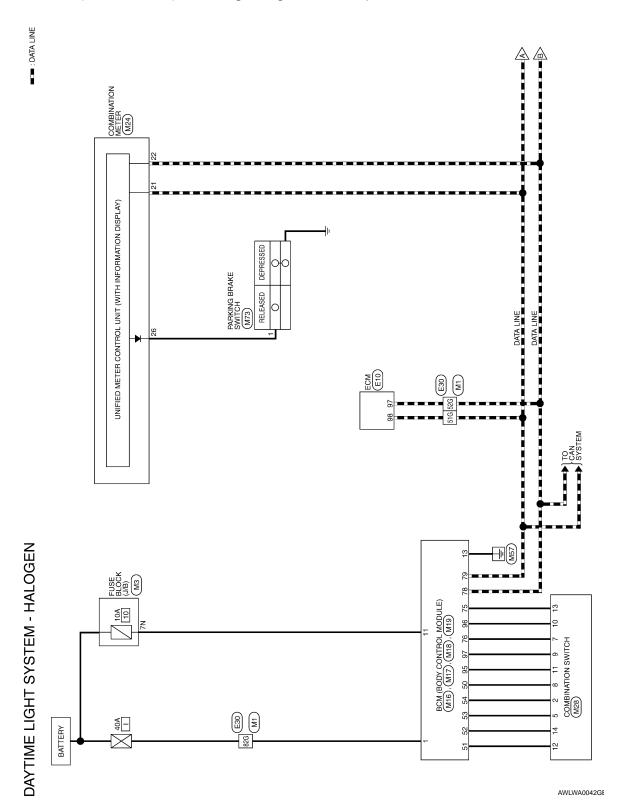
Ρ

< COMPONENT DIAGNOSIS >

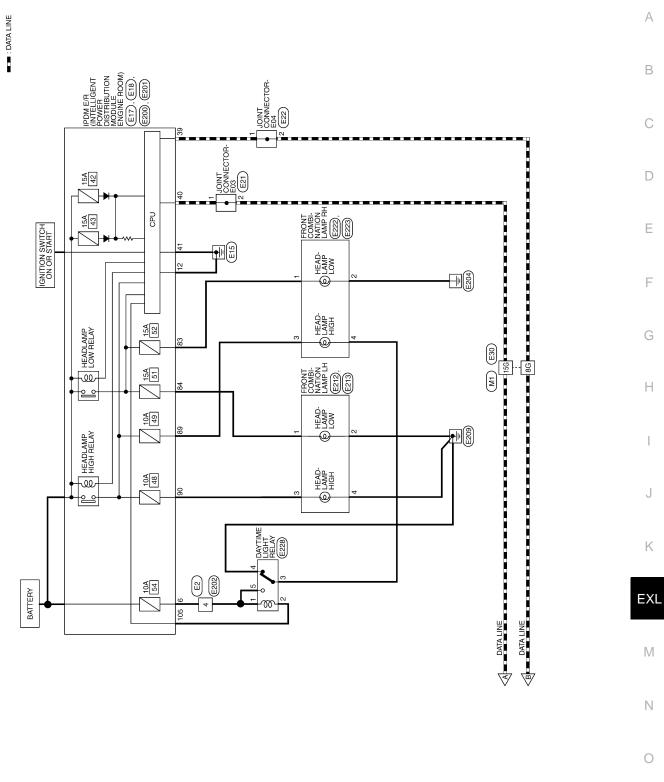
< COMPONENT DIAGNOSIS >

HEADLAMP (HALOGEN) : Wiring Diagram - Coupe

INFOID:000000003219926

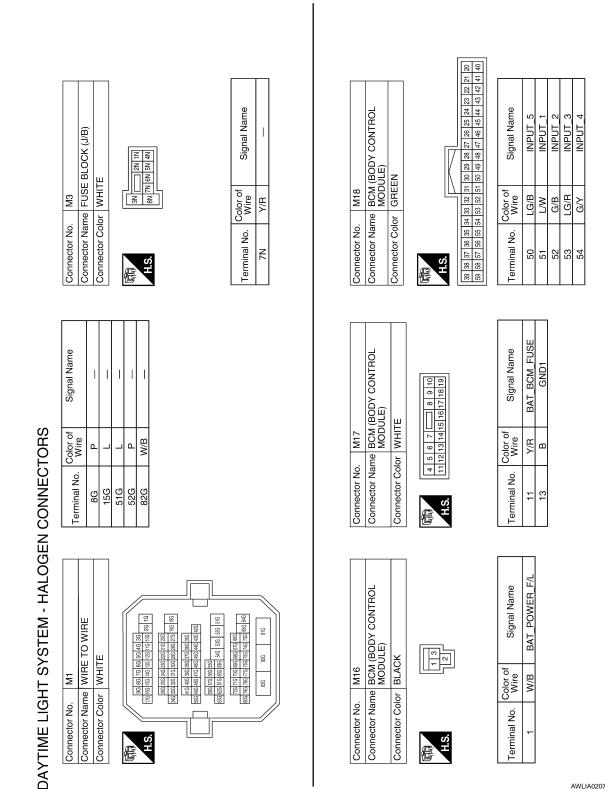


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< COMPONENT DIAGNOSIS >



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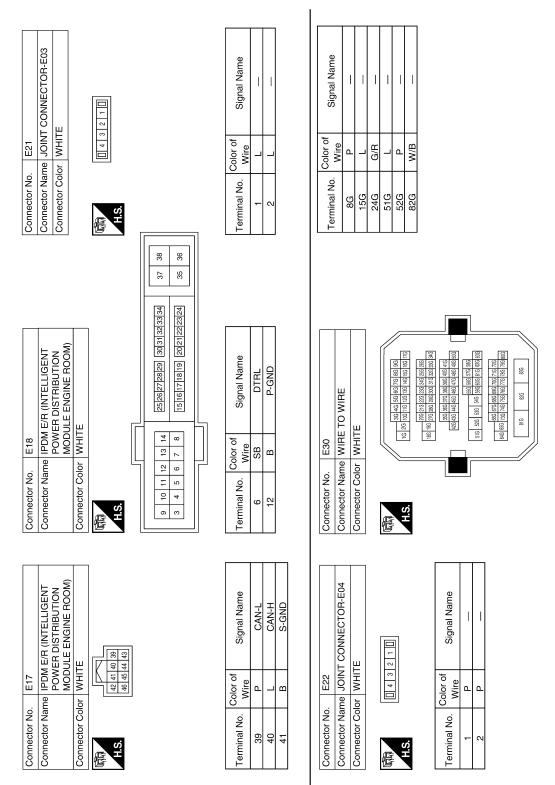
			А
E S S S S S S S S S S S S S S S S S S S	Signal Name OUTPUT 4 OUTPUT 3 INPUT 5 OUTPUT 5 OUTPUT 5 INPUT 2 INPUT 2 INPUT 2 INPUT 2 INPUT 2 INPUT 2 OUTPUT 2 INPUT	Signal Name CAN-L CAN-H	В
			С
Color V Color V Color Color Color V Co	Nire Nire G/Y LG/R LG/R R/G R/W R/Y R/W R/W	82	D
Connector No. M28 Connector Name COMBII Connector Color WHITE	Terminal No. Wire 2 G/Y 5 LG/R 7 R/G 9 R/B 10 P/B 11 R/W 13 R/Y 14 G/B Connector No. ECM Low Connector Name Low Connector Name Low Connector Name Low Connector Name Low Econ Lab B/B Lab B/B	Terminal No. 97 98	Е
9 40			F
N METER	B L L H ame		G
Image: Television Image: Television 3	2 CAN-H CAN-L PKB PKB HITE HITE HITE	Signal Name	Η
M24 M24 COMBINAT WHITE MHITE	G/H E2 G/H E2	Color of Wire SB	I
	Terminal No. Wire Signa 21 L CA 22 P CA 26 G/R P 26 CMRE TO WIRE P Connector No. E2 Connector No E2 Connector No HITE	Terminal No.	J
			Κ
CDV CONTROL E)	Signal Name OUTPUT 5 OUTPUT 3 CAN-L CAN-L CAN-H OUTPUT 4 OUTPUT 2 OUTPUT 2	Signal N	EXL M
	Terminal No. Wife Signal Narr 75 R/Y OUTPUT 78 P CAN-L 79 L CAN-H 95 R/W OUTPUT 97 L CAN-H 97 R/B OUTPUT 97 R/B OUTPUT 97 Connector No. M73 Connector Name PARKING BRAKE SW Connector Name PARKING BRAKE SW	Color of Wire G/R	N
Connector No. Connector Nar Connector Coli A.S	Terminal No. 75 78 95 95 95 97 97 00nnector No. Connector Nam	Terminal No.	0
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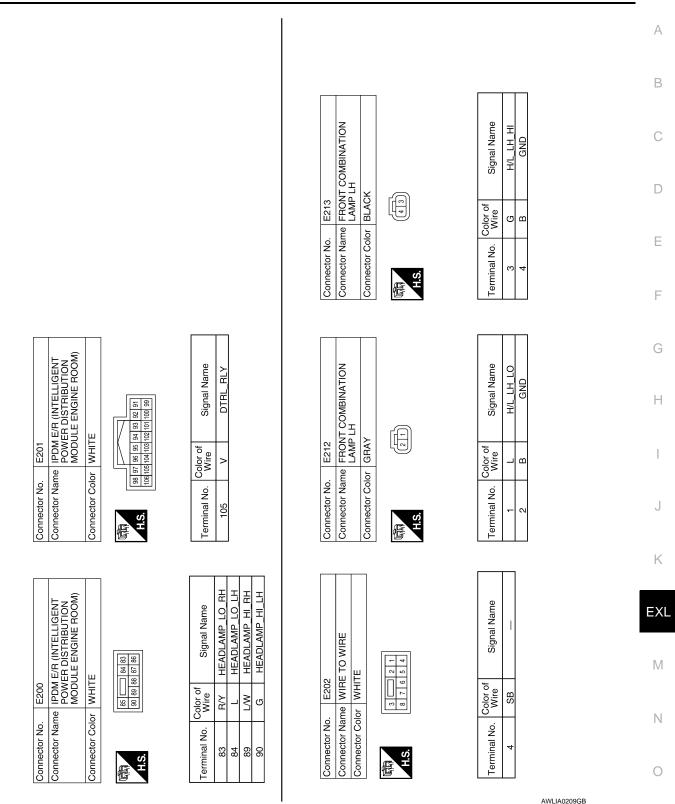
DAYTIME RUNNING LIGHT SYSTEM

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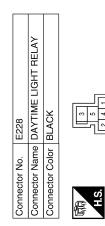
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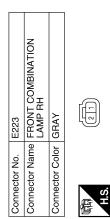
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Signal Name	I	Ι	Ι	-	Η
Color of Wire	SB	٨	GR/R	В	SB
Terminal No.	+	N	ю	4	5



Signal Name	H/L_RH_LO	GND	
Color of Wire	R/Y	В	
Terminal No.	1	2	

Connector No.	E222
Connector Name	Connector Name FRONT COMBINATION LAMP RH
Connector Color BLACK	BLACK
国 H.S.	(1]

Signal Name	H/L_RH_HI	GND
Color of Wire	L/W	GR/R
Terminal No.	3	4

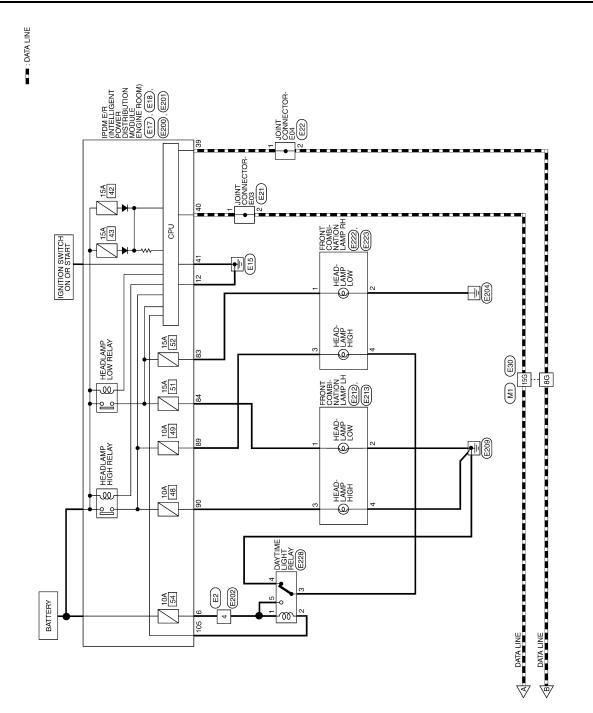
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< COMPONENT DIAGNOSIS > HEADLAMP (HALOGEN) : Wiring Diagram - Sedan INFOID:000000003185292 А ■ : DATA LINE M : WITH M/T VT : WITH CVT В COMBINATION METER M24 С D UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY) Ε DEPRESSED 7 F PARKING BRAKE SWITCH M73): M RELEASED DATA LINE G DEPRESSED Н oło M E30 PARKING BRAKE SWITCH (E35) : (VT) 52G 97 RELEASED 98 E30 M1 CAN SYSTEM [≥] Î Κ DAYTIME LIGHT SYSTEM - HALOGEN -II(§) ď M3 (J/B) EXL BCM (BODY CONTROL MODULE) (M16), (M17), (M18), (M19) 13 10A 10 9 Μ COMBINATION SWITCH σ ç ω Ν Σ N W1 E30 \$<u>-</u> BATTERY 4 22 2 ic. 0

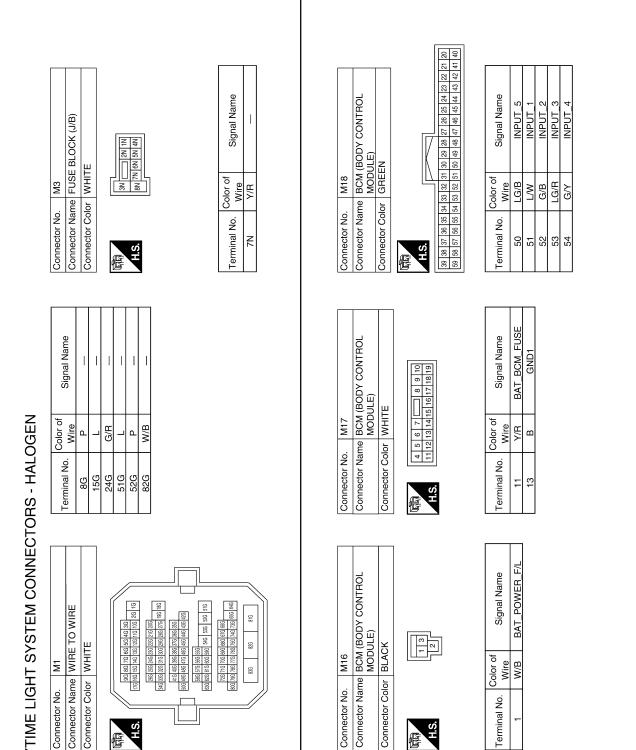
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DAYTIME LIGHT SYSTEM CONNECTORS - HALOGEN

Connector No.

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H.S.

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Terminal No.

H.S.

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DAYTIME RUNNING LIGHT SYSTEM

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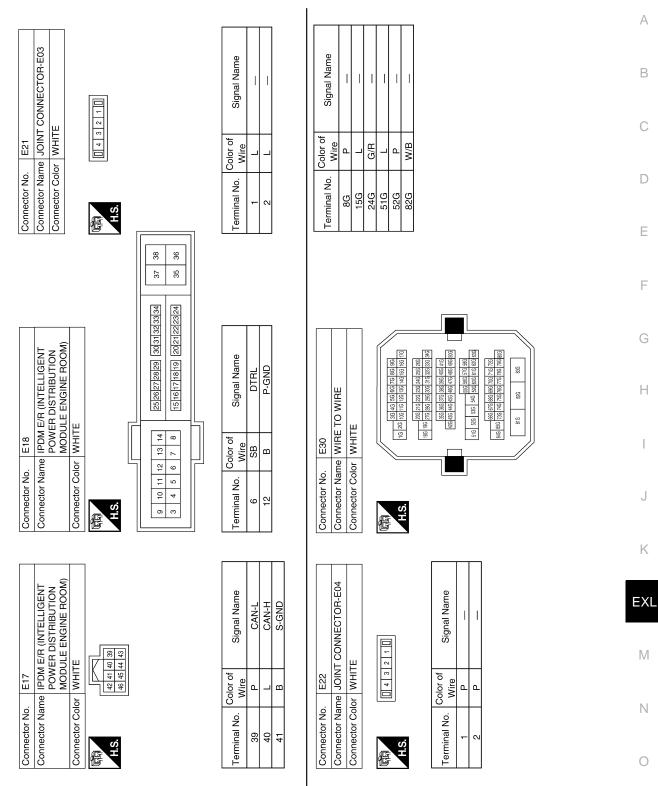
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Connector No. M28 Connector Name COMBINATION SWITCH Connector Color WHITE	H.S. 7 8 9 10111213 14	Terminal No. Color of Wire Signal Name 2 G/Y OUTPUT 4 5 LG/R OUTPUT 3	R/G INPUT L(G/B OUTPUT L(G/B OUTPUT R/B INPUT R/B INPUT R/B INPUT R/B INPUT P/B INPUT R/B INPUT R/W INPUT R/W INPUT R/W INPUT R/W INPUT R/W OUTPUT R/W INPUT	Connector No. E10 Connector Name ECM Connector Color BLACK	H.S. 81 85 89 39 701 105 109 82 85 90 99 498 002 106 110 84 88 22 96 100 104 101 111 84 88 22 96 100 104 101 112 112	Terminal No.Color of WireSignal Name97PCAN-L98LCAN-H
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 21 22 23 24 25 28 29 30 31 22 33 34 35 36 37 38 33 40	Terminal No. Color of Wire Signal Name 21 L CAN-H 22 P CAN-L	G/R	Connector No. E2 Connector Name WIRE TO WIRE Connector Color WHITE	H.S. (1 2 - 3) H.S.	Terminal No. Color of Signal Name 4 SB —
Connector No. M19 Connector Name BCM (BODY CONTROL MODULE) Connector Color BLACK	The The H.S. 13 73 77 79 55 99 95 99 85	Terminal No. Color of Nine Signal Name 75 R/Y OUTPUT 5 76 R/G OUTPUT 3	R/B R/B R/B	Connector No. M73 Connector Name PARKING BRAKE SWITCH (WITH M/T) Connector Color BLACK	H.S.	Terminal No. Color of Nire Signal Name 1 G/R -

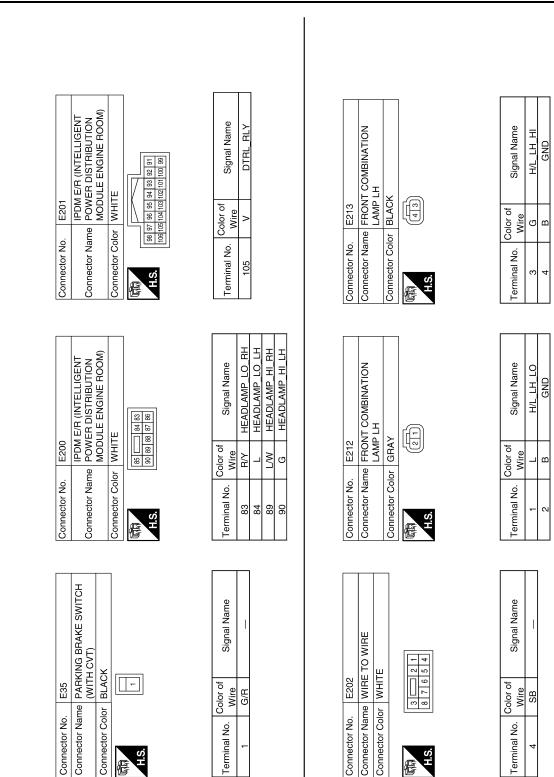
DAYTIME RUNNING LIGHT SYSTEM

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< COMPONENT DIAGNOSIS >

BLACK 1

Connector Color

H.S.H

f

Color of

Terminal No.

Wire

G/R

E35

Connector No.

AWLIA0489GB

Color of

Terminal No.

Wire

SB

E202

Connector No.

H.S.

E

А

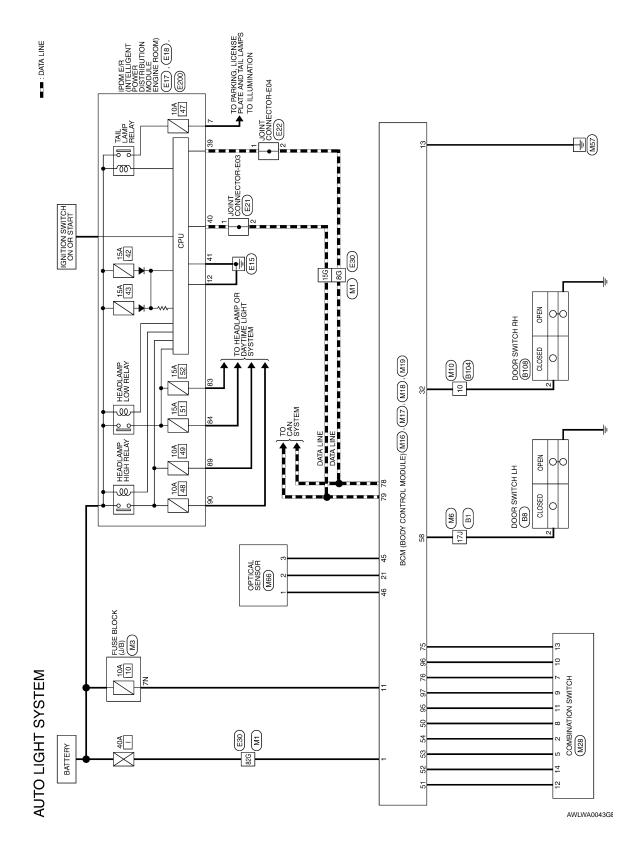
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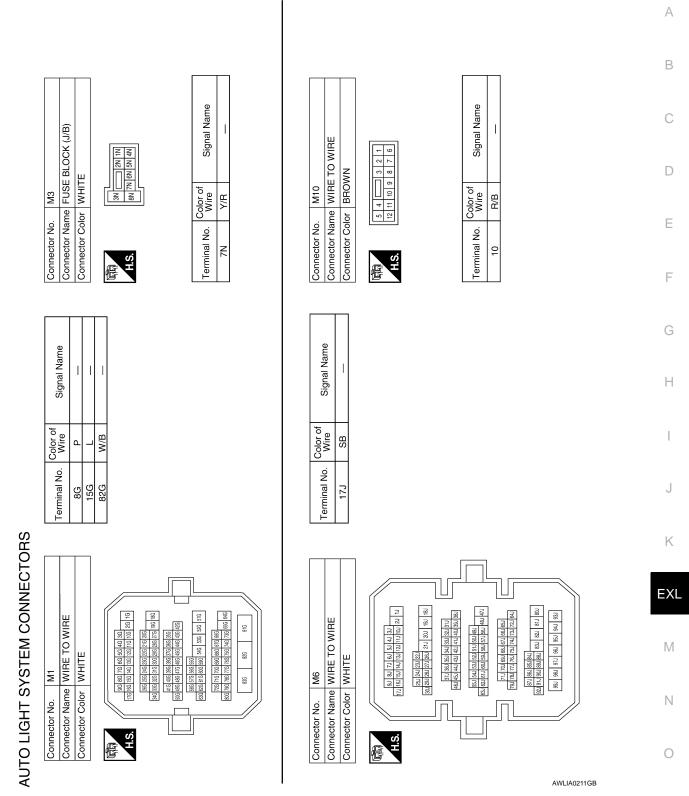
		В
HT RELAY	Signal Name	С
BLACK BLACK 2 4 1		D
tor No.	Terminal No. Color of Mire 1 SB 2 V 3 GPUR 5 B 6 B	E
Connec Connec Connec		F
NOL	D D D	G
Connector No. E223 Connector Name FRONT COMBINATION LAMP RH Connector Color GRAY	Signal Name H/L_RH_LO GND	Н
Connector No. E223 Connector Name FRON Connector Color GRAY	O Color of Wire B B	I
Connector Nor. Connector Nam Connector Colo	Terminal No.	J
		K
OMBINATION	Signal Name H/L RH HI GND	EXL
E222 EAMP RH BLACK	Color of Wire GR/R GR/R	Μ
nector No. nector Na nector Col	Terminal No. O	Ν
		0490GB

Wiring Diagram - Coupe

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< COMPONENT DIAGNOSIS >



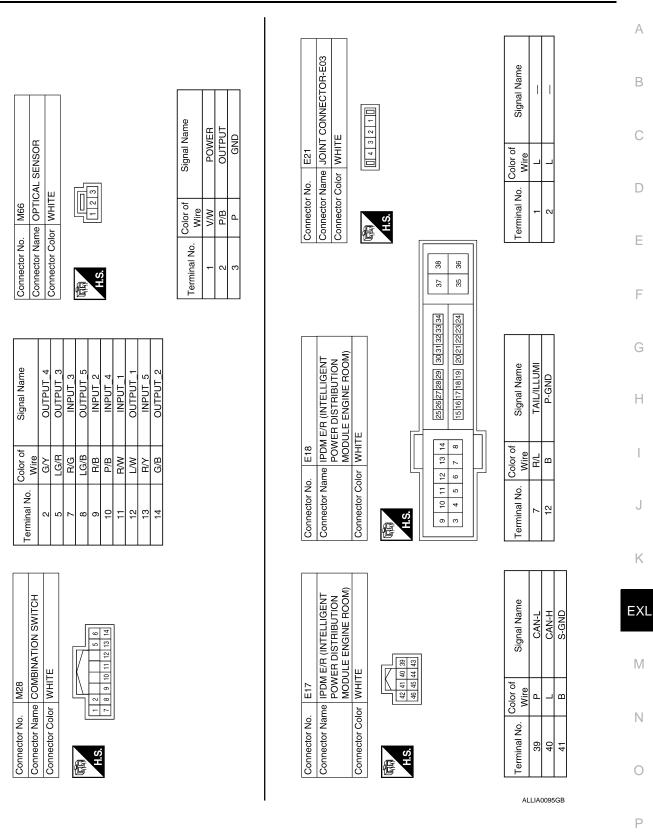
Connector No. M18 Connector Name BCM (BODY CONTROL Connector Color GEEN Connector Color GREEN Connector Color GREEN	Terminal No.Color of WireSignal Name21P/BAUTO_LIGHT_SENSO21P/BAUTO_LIGHT_SENSO32R/BAS_DOOR_SW45PGND_RF2_A/L46V/WTUNEN_POWER_46V/WTUNEN_POWER_50LG/BINPUT_551L/WINPUT_553LG/BINPUT_354G/YINPUT_358SBDR_DOOR_SW	Connector No. E22 Connector Name JOINT CONNECTOR-E04 Connector Color WHITE Connector Color WHITE Terminal No. Color of Nice Signal Name
Connector No. M17 Connector Name BCM (BODY CONTROL Connector Color WHITE Connector Color WHITE	Terminal No. Color of Wire Signal Name 11 Y/R BAT BCM FUSE 13 B GND1	Terminal No. Color of Wire Signal Name 75 R/Y OUTPUT 5 76 R/G OUTPUT 3 78 P CAN-L 79 L CAN-H 96 P/B OUTPUT 4 97 R/B OUTPUT 2
Connector No. M16 Connector Name BCM (BOPY CONTROL Connector Color BLACK	Terminal No. Color of Signal Name Wire WIR BAT_POWER_F/L	Connector No. M19 Connector No. M19 Connector Name BCM (BODY CONTROL Connector Color BLACK

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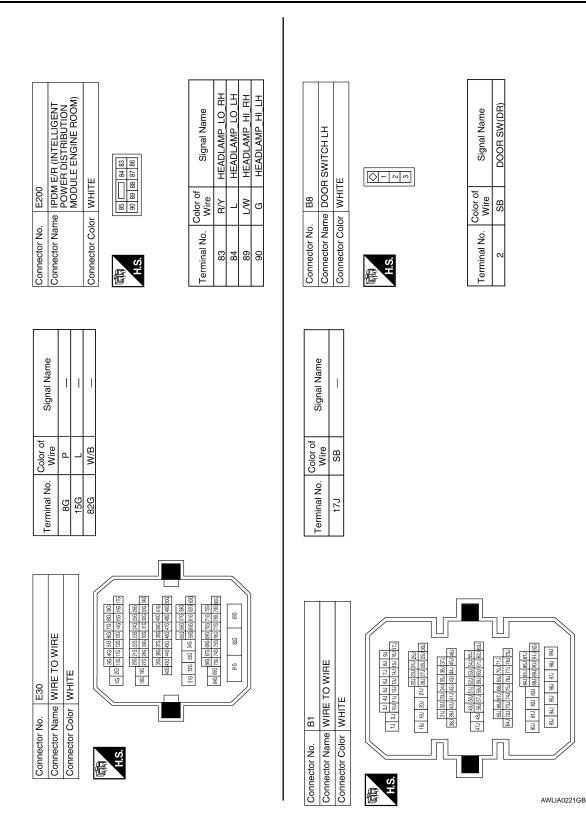
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AUTO LIGHT SYSTEM

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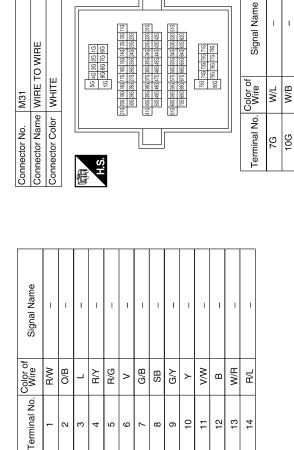
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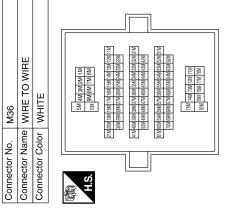
Wiring Diagram - Sedan



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



Signal Name	I	
Color of Wire	GR	
Terminal No.	55M	



Signal Name

Color of Wire

Terminal No.

H.S.

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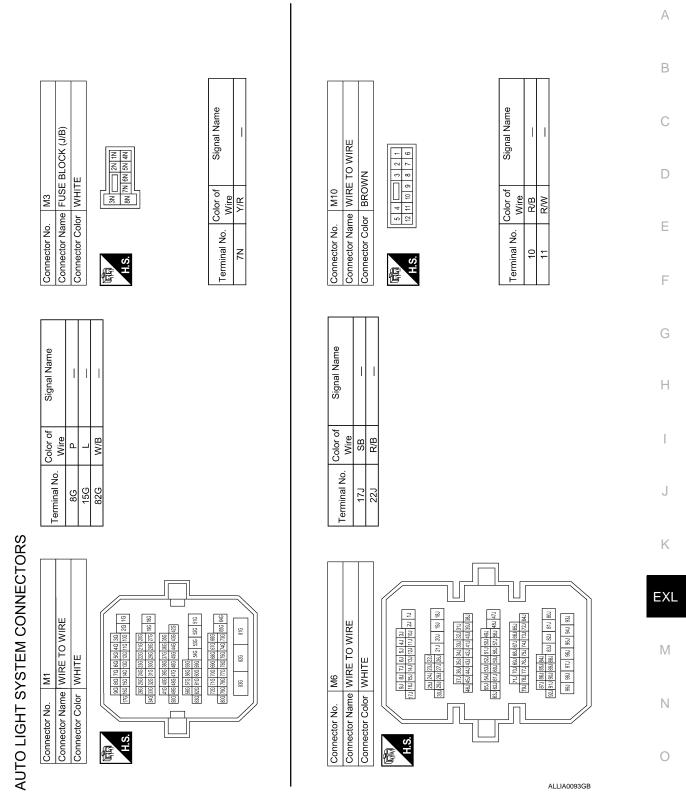
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Connector Name WIRE TO WIRE Connector Color WHITE

Connector No. M84

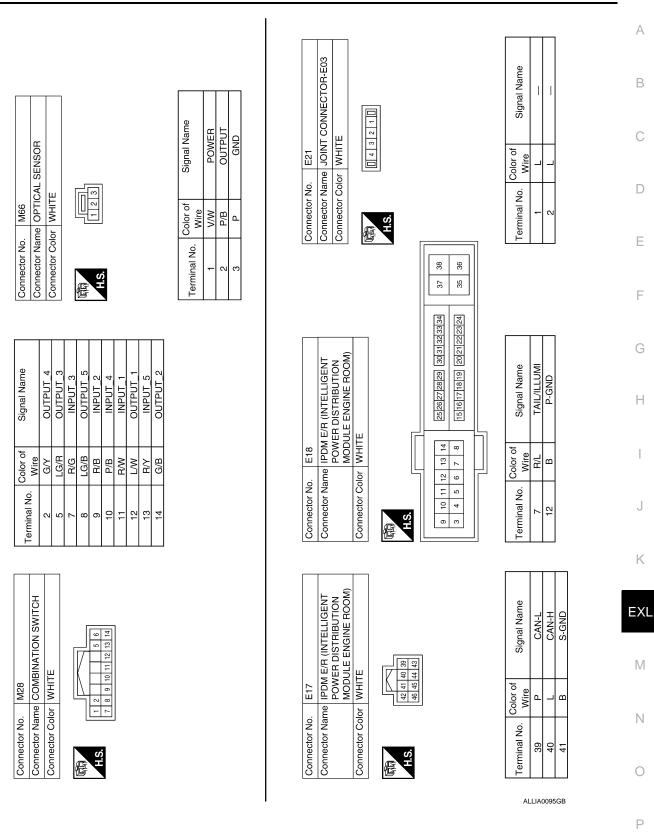
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< COMPONENT DIAGNOSIS >



Connector No. M18 Connector Name BCM (BODY CONTROL Connector Name BCM (BODY CONTROL Connector Signa MODULE) Connector Color GREEN Image: Signa Signa Signa Signa Signa Signa Signa Signa Signa Signa	Terminal No.Color of WireSignal Name21P/BAUTO_LIGHT_SENSO21P/BAUTO_LIGHT_SENSO22R/BAS_DOOR_SW45PGND_RF2_A/L46V/WTUNER_POWER_50LG/BINPUT_151L/WINPUT_253LG/AINPUT_254G/INPUT_258SBDR_DOOR_SW	Connector No. M21 Connector Name BCM (BODY CONTROL Connector Name BCM (BODY CONTROL Connector Color GRAY Connector Color GRAY Image: State of the state
Connector No. M17 Connector Name BCM (BODY CONTROL Connector Color WHITE Connector Color WHITE MODULE) 141511314151611718119	Terminal No. Color of Wire Signal Name 11 V/R BAT BCM FUSE 13 B GND1	Terminal No. Color of wire Signal Name 75 R/Y OUTPUT 5 76 R/G OUTPUT 3 78 P CAN-L 79 L CAN-L 95 R/W OUTPUT 4 97 R/B OUTPUT 2
Connector No. M16 Connector Name BCM (BODY CONTROL Connector Color BLACK Monules 113	Terminal No. Color of Signal Name Wire BAT_POWER_F/L	Connector No. M19 Connector Name BCM (BODY CONTROL Connector Name BCM (BODY CONTROL Connector Color BLACK MODULE) Mage: State Stat

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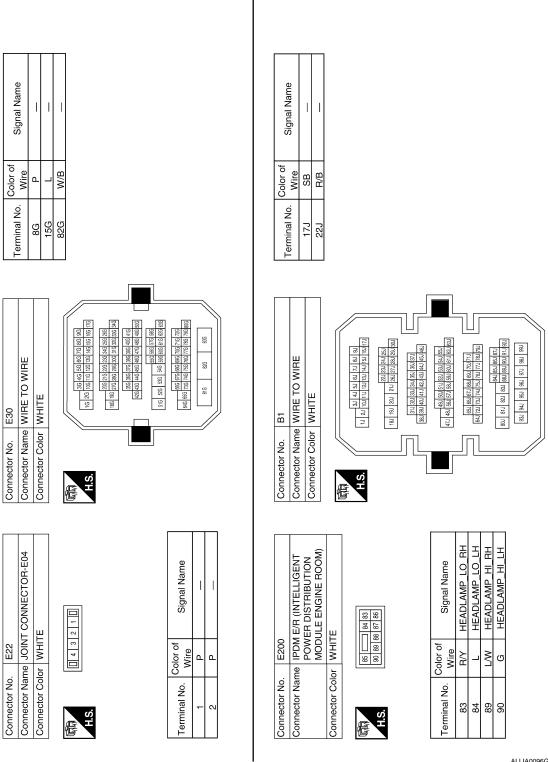
AUTO LIGHT SYSTEM

< COMPONENT DIAGNOSIS >

EXL-109

AUTO LIGHT SYSTEM

< COMPONENT DIAGNOSIS >



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AUTO LIGHT SYSTEM

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В Signal Name С T Connector Name WIRE TO WIRE 1 2 3 4 5 6 7 8 9 10 11 12 D Connector Color BROWN B104 Color of Wire R/B R/W Connector No. Ε Terminal No. 우 ÷ H.S. 佢 F G Connector Name REAR DOOR SWITCH LH Connector Name REAR DOOR SWITCH RH DOOR SW(RL) DOOR SW (RR) Signal Name Signal Name Н Connector Color WHITE Connector Color WHITE 3 5 - 0 B116 Color of B18 Color of Wire R/B Wire МN Connector No. Connector No. Terminal No. Terminal No. J N N H.S. H.S. E F Κ Connector Name FRONT DOOR SWITCH LH Connector Name FRONT DOOR SWITCH RH DOOR SW (AS) DOOR SW(DR) Signal Name Signal Name EXL Μ \bigcirc $- \sim$ \bigcirc Connector Color WHITE Connector Color WHITE $\bigcirc - \sim \circ$ B108 Color of Wire Color of Wire R/B B8 SB Connector No. Connector No. Ν Terminal No. Terminal No. N N H.S. H.S. 佢 fe 0 ALLIA0097GB

EXL-111

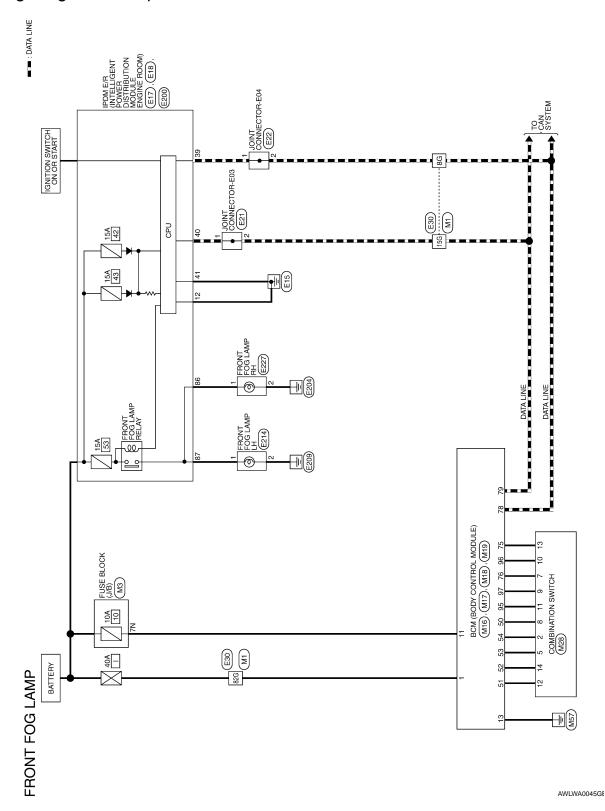
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FRONT FOG LAMP SYSTEM

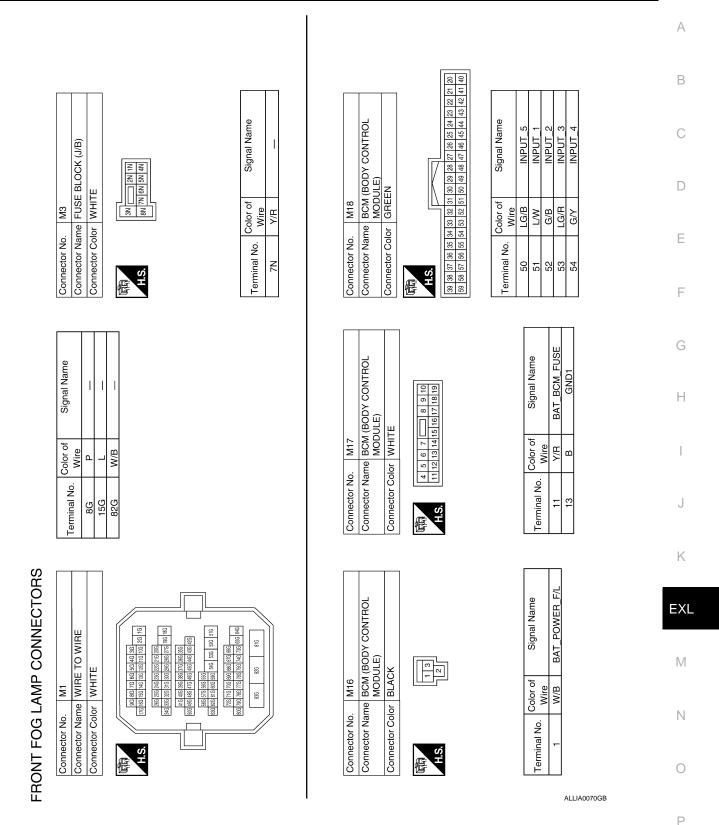
Wiring Diagram - Coupe

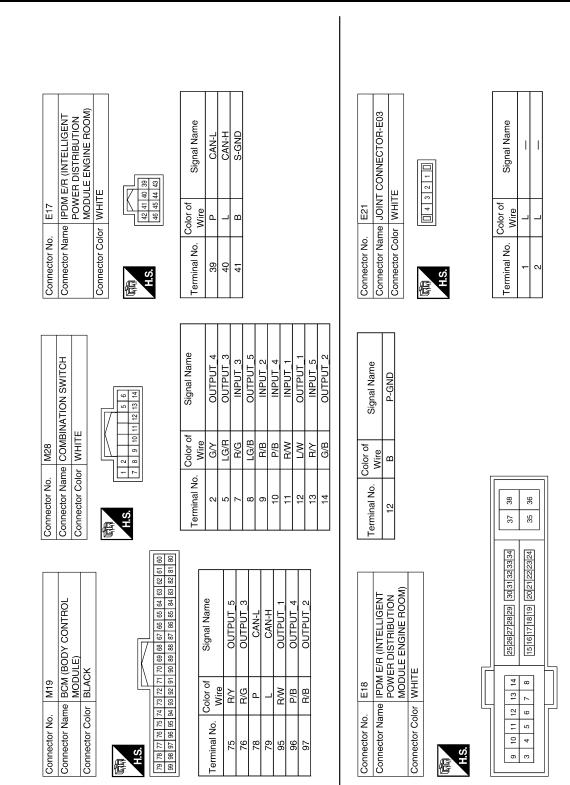
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FRONT FOG LAMP SYSTEM

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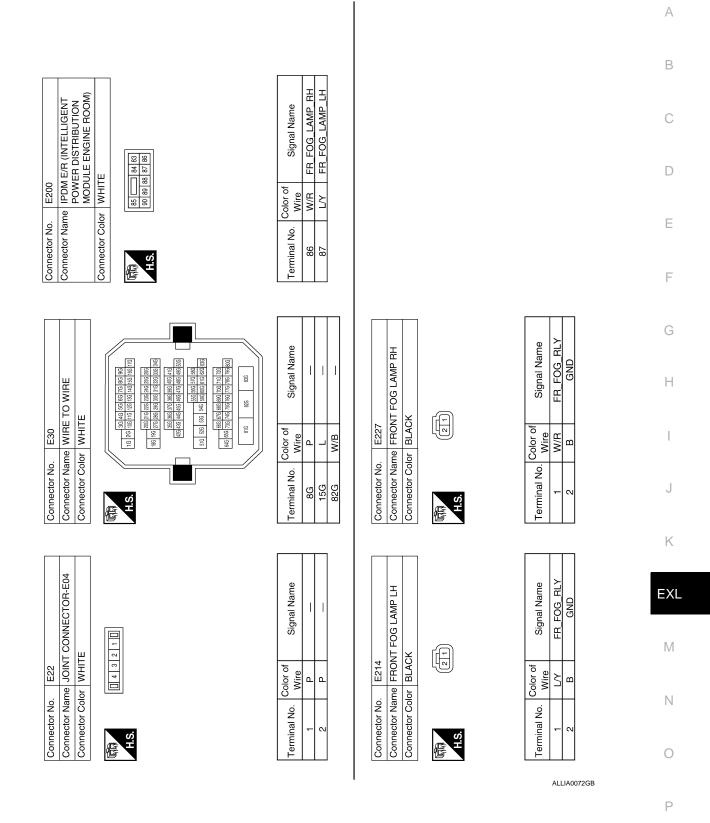
FRONT FOG LAMP SYSTEM

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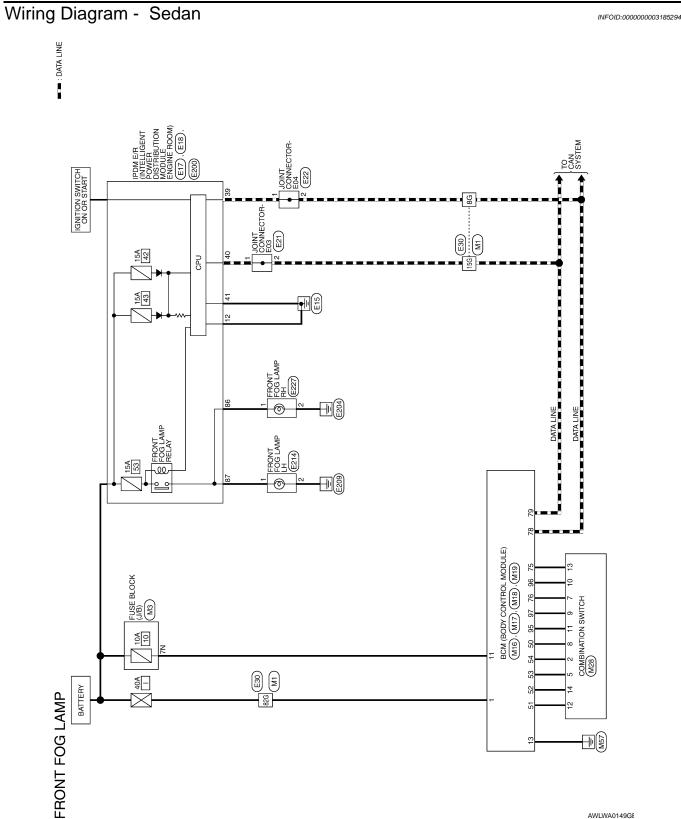
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	FRONT FOG LAMP SYSTEM
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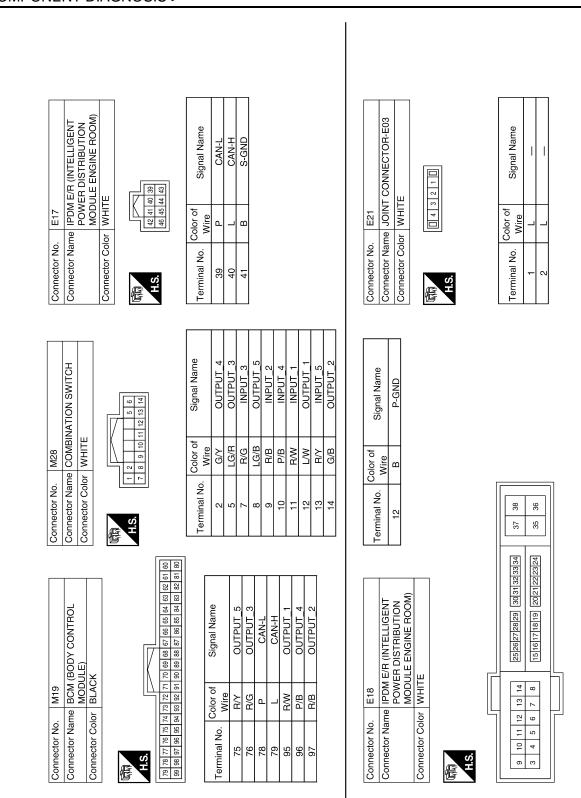


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FRONT FOG LAMP SYSTEM < COMPONENT DIAGNOSIS >

А 39 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 27 20 59 58 57 56 55 54 53 55 54 53 55 54 43 44 45 44 43 42 41 40 В Signal Name Connector Name BCM (BODY CONTROL MODULE) Connector Color GREEN Signal Name INPUT_1 INPUT_3 INPUT_5 INPUT_2 INPUT_4 С Connector Name FUSE BLOCK (J/B) 3N _____2N 1N 8N 7N 6N 5N 4N D Connector Color WHITE Color of M18 Color of LG/R ВЗ LG/B Wire Wire N Y/R G/B G∕ Connector No. Е Connector No. Terminal No. Terminal No. Z 51 52 53 54 50 H.S. H.S. 佢 悟 F BAT BCM FUSE Signal Name Connector Name BCM (BODY CONTROL MODULE) Signal Name GND1 1 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 Н Connector Color WHITE Color of M17 Color of Wire Y/R W/B Wire ш ٩ Connector No. Terminal No. Terminal No. 82G ÷ J 13 8G 15G H.S. F Κ FRONT FOG LAMP CONNECTORS BAT_POWER_F/L Signal Name Connector Name BCM (BODY CONTROL MODULE) EXL 2G 1G 266 256 246 236 226 216 205 346 356 326 316 305 256 276 196 186 586 576 566 556 546 536 546 536 526 516 72G 71G 70G 68G 68G 67G 88G 99G 79G 79G 77G 76G 74G 73G 66G 64G Connector Name WIRE TO WIRE 816 9G 8G 7G 6G 5G 4G 3G 176 166 156 146 136 126 116 105 24 41G 40G 39G 39G 37G 36G 35G 50G 49G 48G 47G 46G 45G 44G 43G Μ 5 826 Connector Color WHITE BLACK M16 Color of Wire W/B Ę 836 Connector Color Connector No. Ν Connector No. Terminal No. L H.S. H.S. E 佢 0

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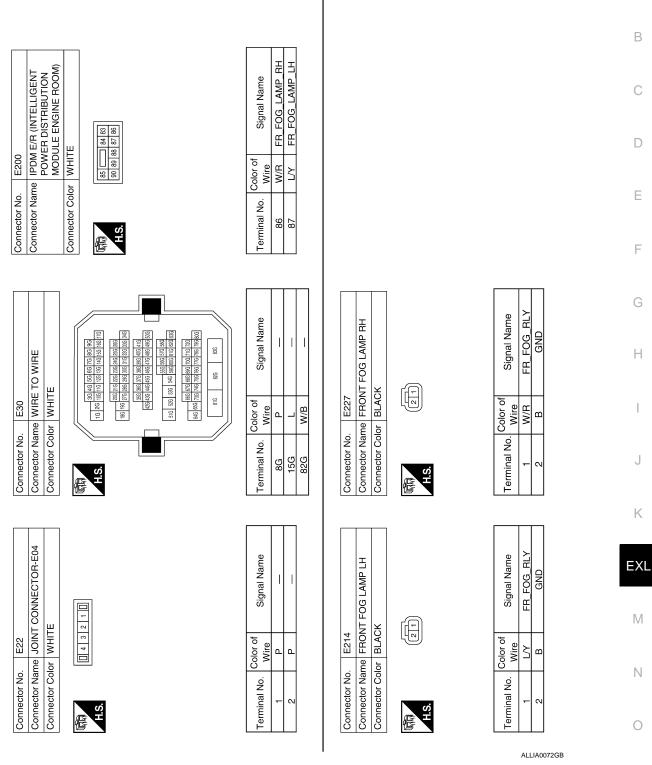


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FRONT FOG LAMP SYSTEM

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	FRONT FOG LAMP SYSTEM
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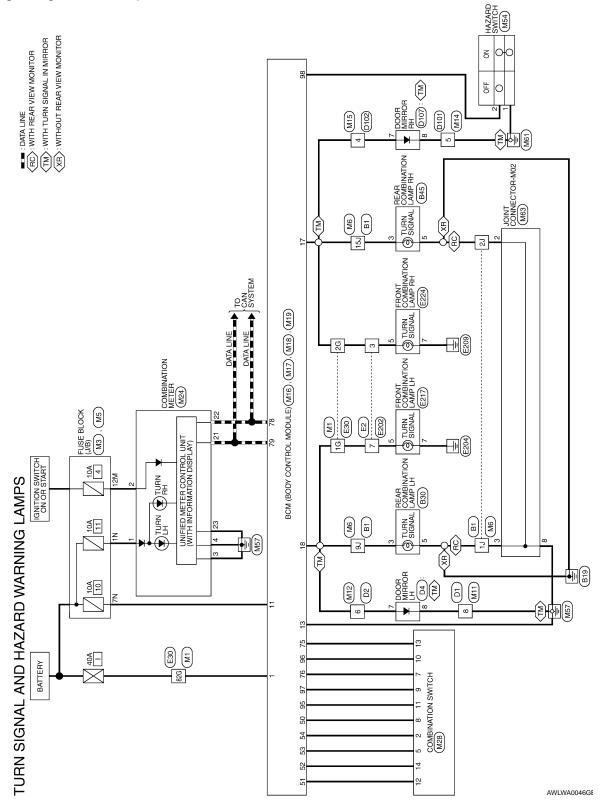
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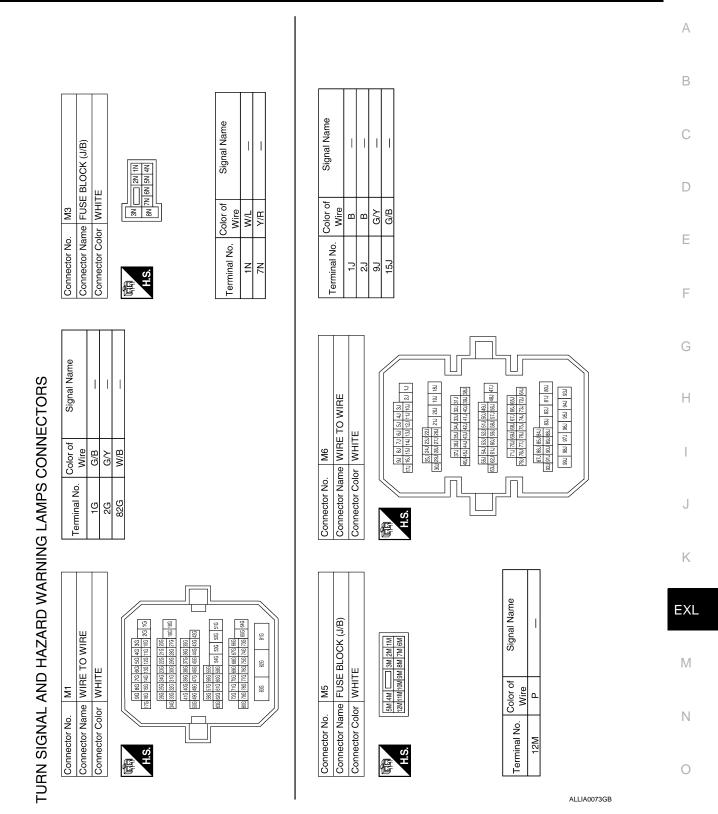
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

Wiring Diagram - Coupe

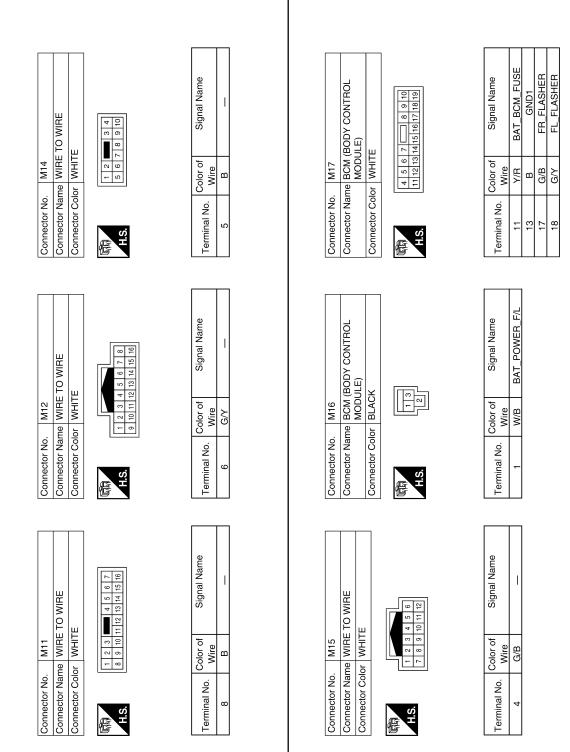




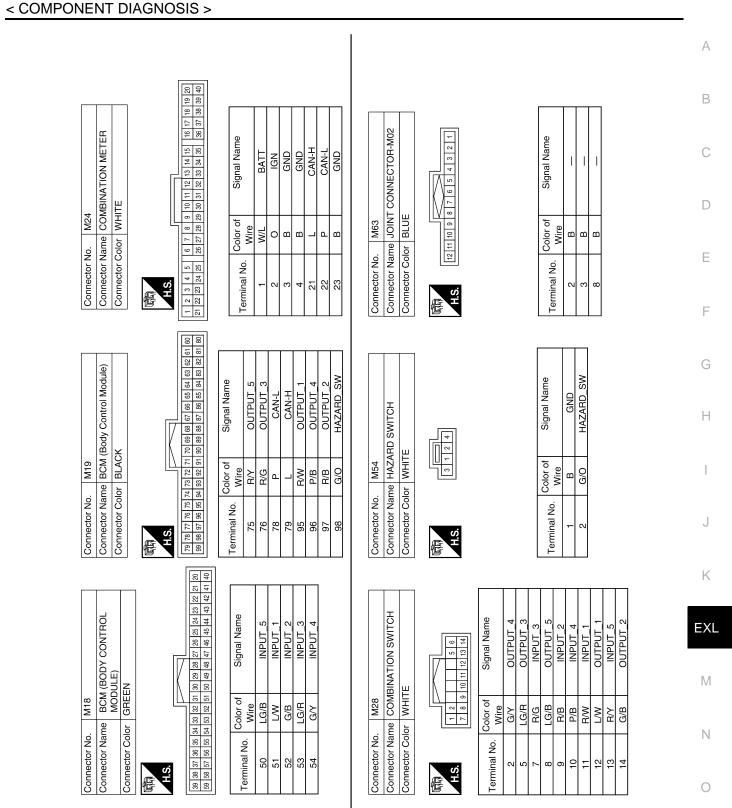
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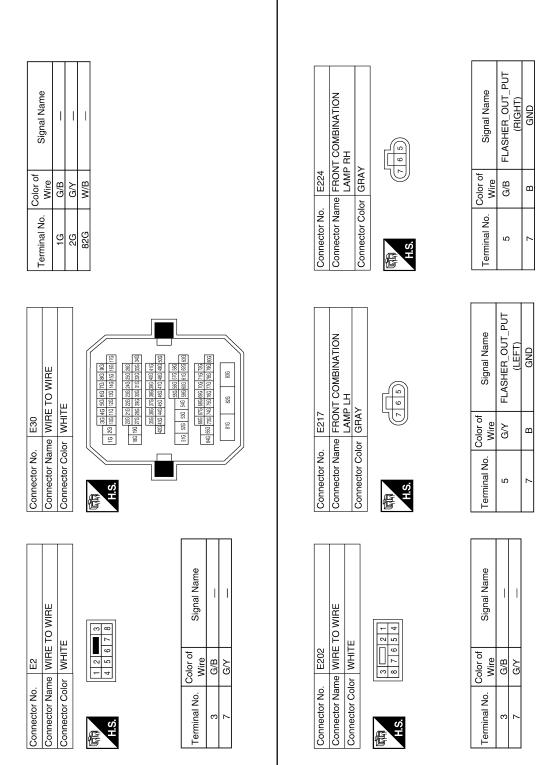


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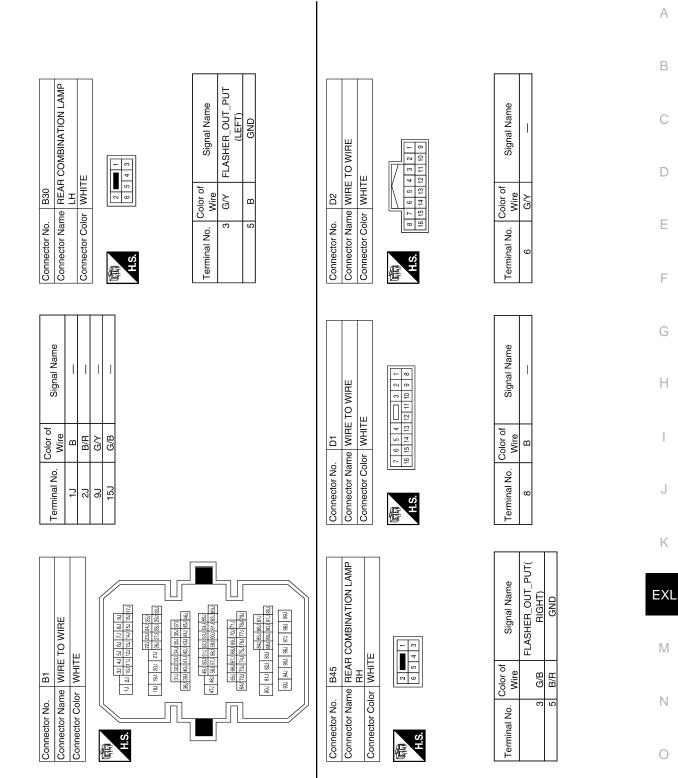
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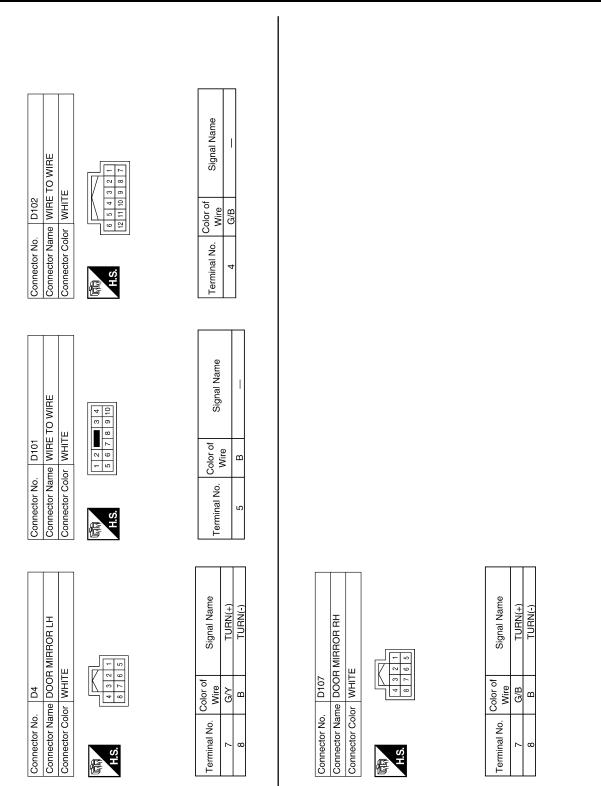
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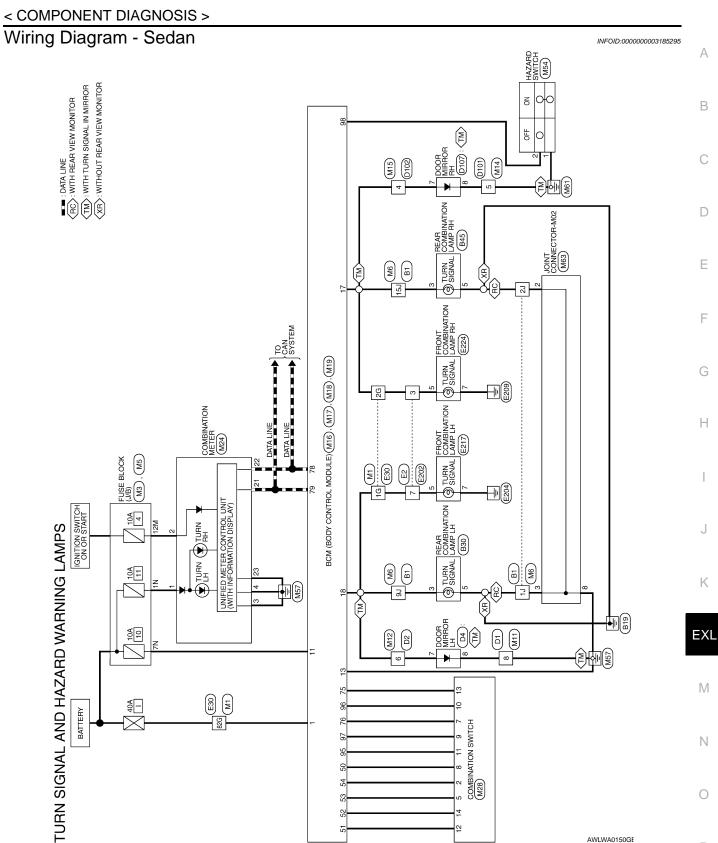


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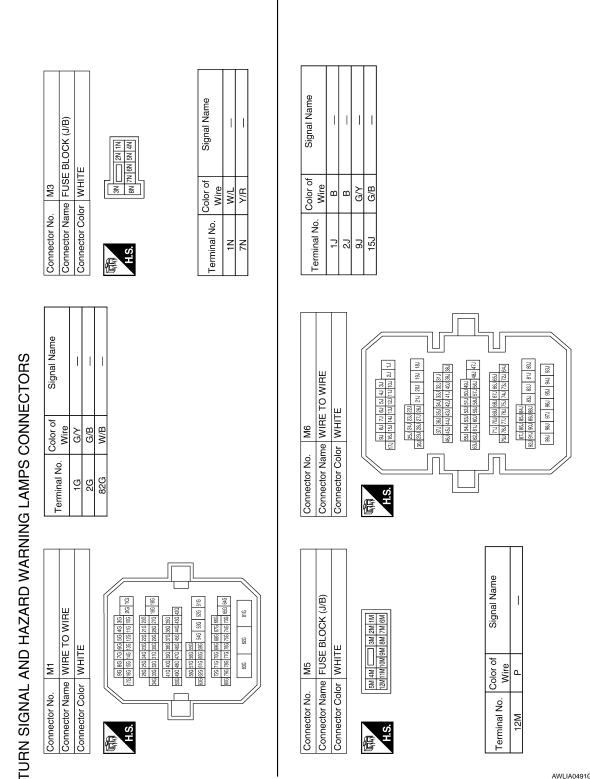
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< COMPONENT DIAGNOSIS > BAT_BCM_FUSE FR_FLASHER Signal Name Signal Name Connector Name BCM (BODY CONTROL MODULE) 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 GND1 Connector Name WIRE TO WIRE 1 2 3 4 5 6 7 8 9 10 Connector Color WHITE Connector Color WHITE Color of Wire M14 M17 Color of Wire ΎЛ G/B ш В Connector No. Connector No. Terminal No. Terminal No. ÷ 13 17 2 H.S. H.S. 佢 E BAT_POWER_F/L Signal Name Signal Name Connector Name BCM (BODY CONTROL MODULE) 8 16 Connector Name WIRE TO WIRE 15 14 10 11 12 13 BLACK 5 Connector Color WHITE M12 M16 Color of Color of W/B Wire Wire G/Υ - 0 Connector Color Connector No. Connector No. Terminal No. Terminal No. 9 -H.S. H.S. E E Signal Name Signal Name 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 1 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE 8 9 10 11 12 Connector Color WHITE Connector Color WHITE Color of Wire Color of Wire M15 M11 G/B ш Connector No. Connector No. Terminal No. Terminal No.

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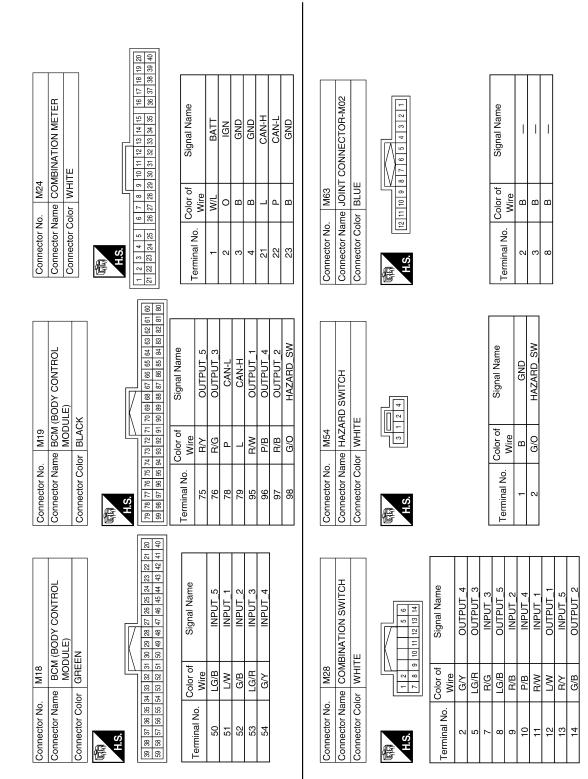
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< COMPONENT DIAGNOSIS >



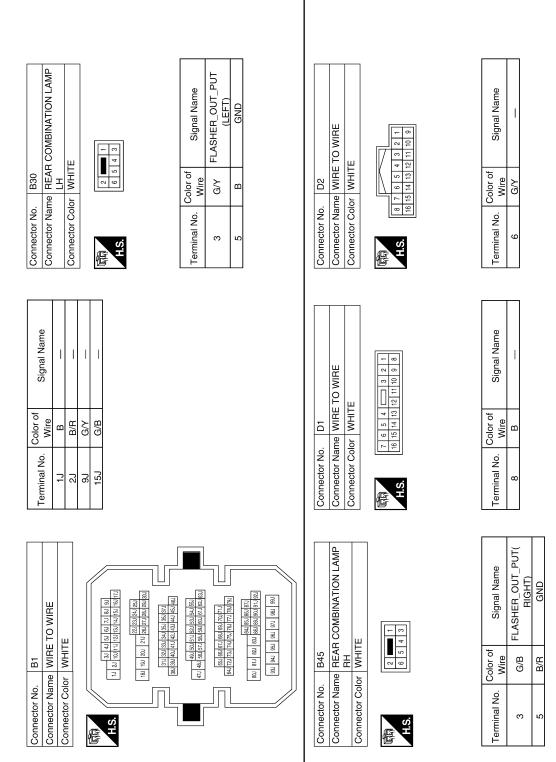
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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM < COMPONENT DIAGNOSIS >

А В FLASHER_OUT_PUT Signal Name Signal Name Connector Name FRONT COMBINATION LAMP RH (RIGHT) С GND 1 49 D Connector Color GRAY E224 Color of Wire Color of G/B Wire W/B G/B В Connector No. Ε Terminal No. Terminal No. 2G 82G ģ ß H.S. E F FLASHER_OUT_PUT G Signal Name Connector Name FRONT COMBINATION LAMP LH (LEFT) GND 50G 556 556 556 556 556 556 550 580 516 526 536 546 596 616 526 Н Connector Name WIRE TO WIRE 8 356 366 376 386 396 406 4 426 436 446 456 466 476 486 4 3G 4G 5G 6G 7G 8G 1G 2G 106 116 126 136 146 156 200 216 226 236 246 256 136 146 256 246 256 246 256 64G 55G 77G 74G 75G 75G 77G 7 49 82G Connector Color WHITE E217 Connector Color GRAY E30 Color of 81G Wire Ч ш Connector No. Connector No. Terminal No. J ß \sim H.S. A.S. F E Κ Signal Name Signal Name EXL I 1 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE 1 2 3 4 5 6 7 3 2 1 8 7 6 5 4 Μ Connector Color WHITE Connector Color WHITE E202 Color of Wire Color of G/B G/Y Wire Ы G/B β Connector No. Connector No. Ν Terminal No. Terminal No. ო ო H.S. H.S. 佢 E 0

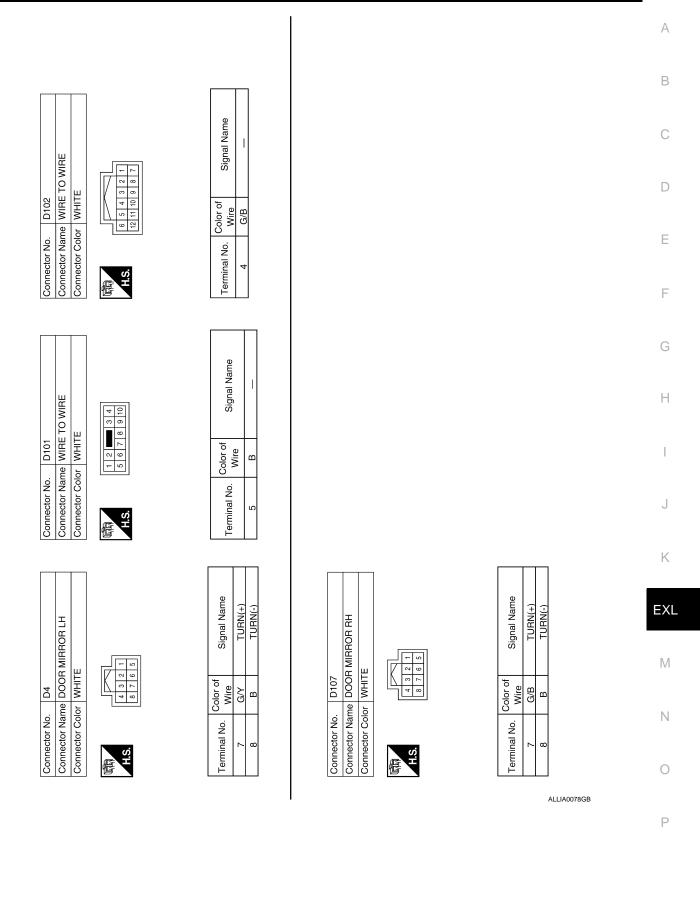
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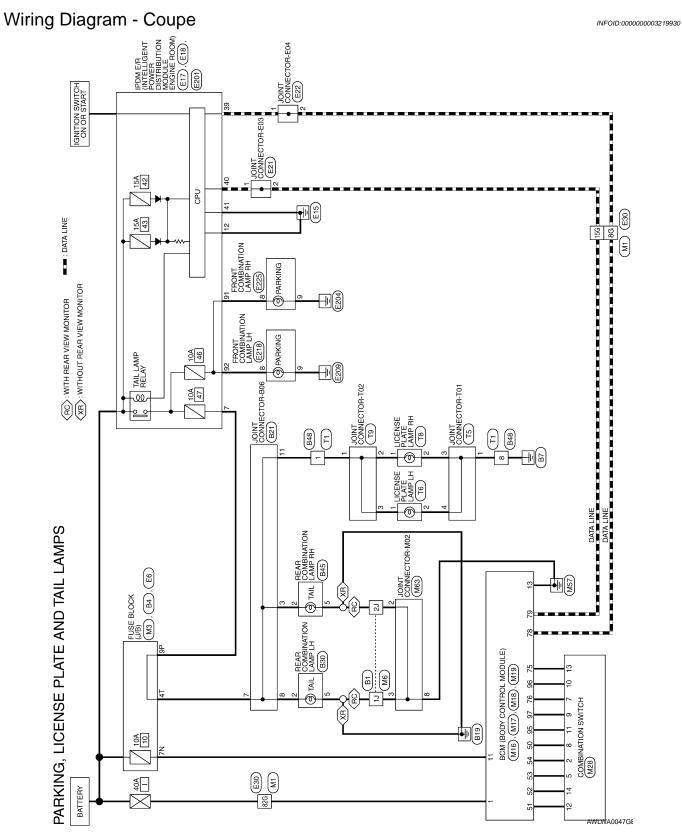
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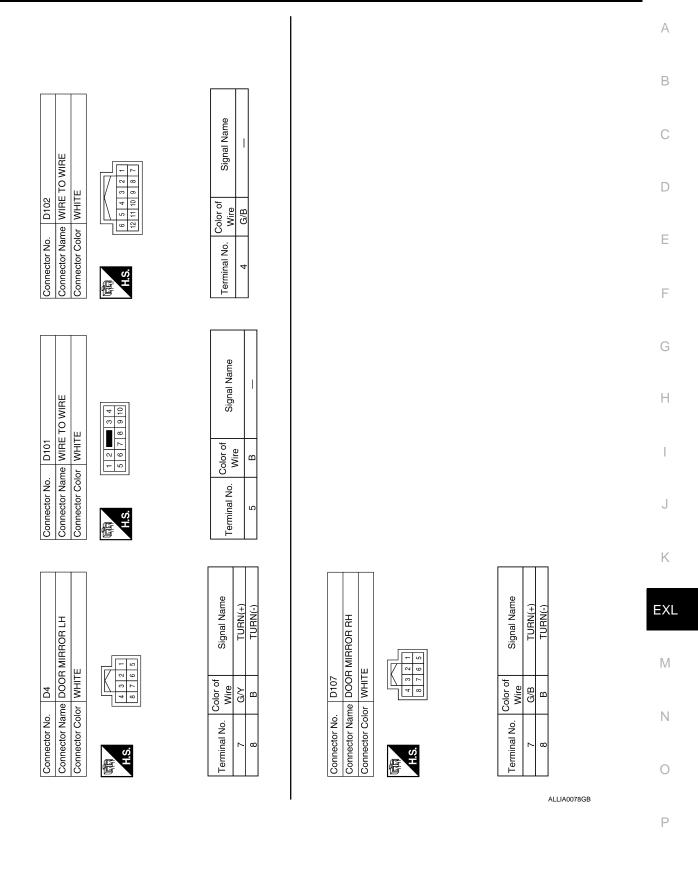


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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

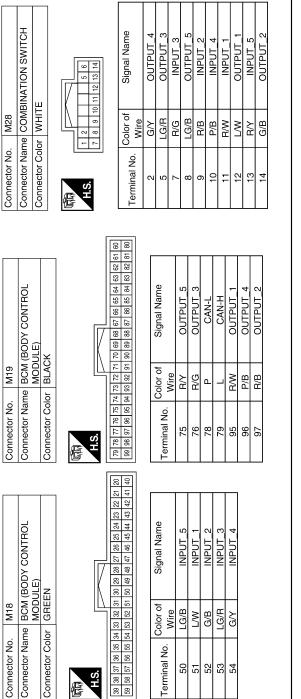


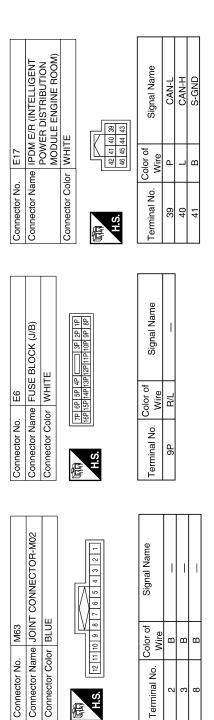
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< COMPONENT DIAGNOSIS >





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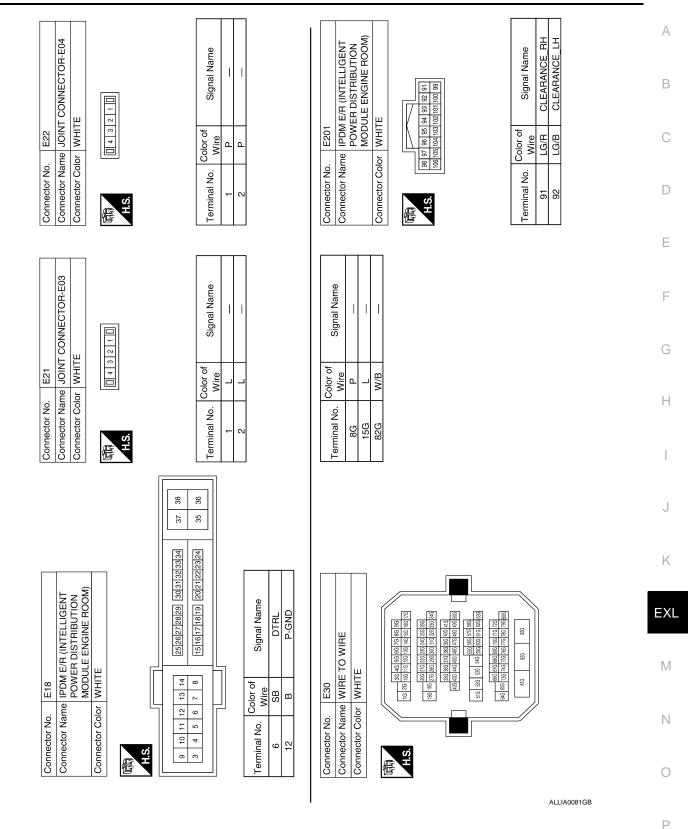
H.S.

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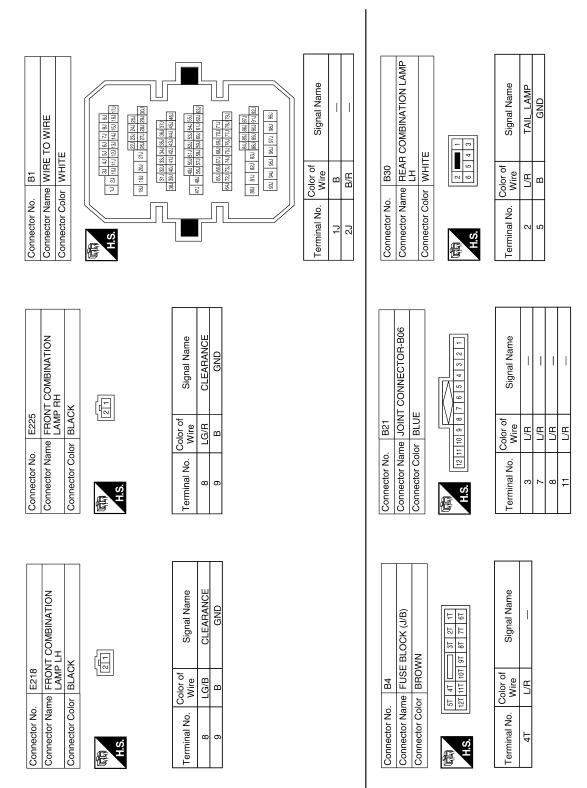
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EXL-137

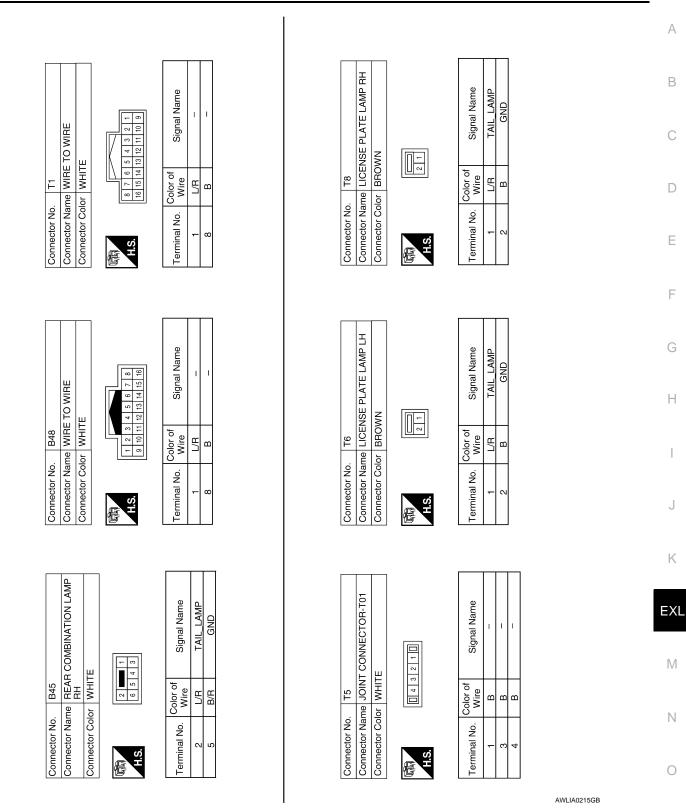






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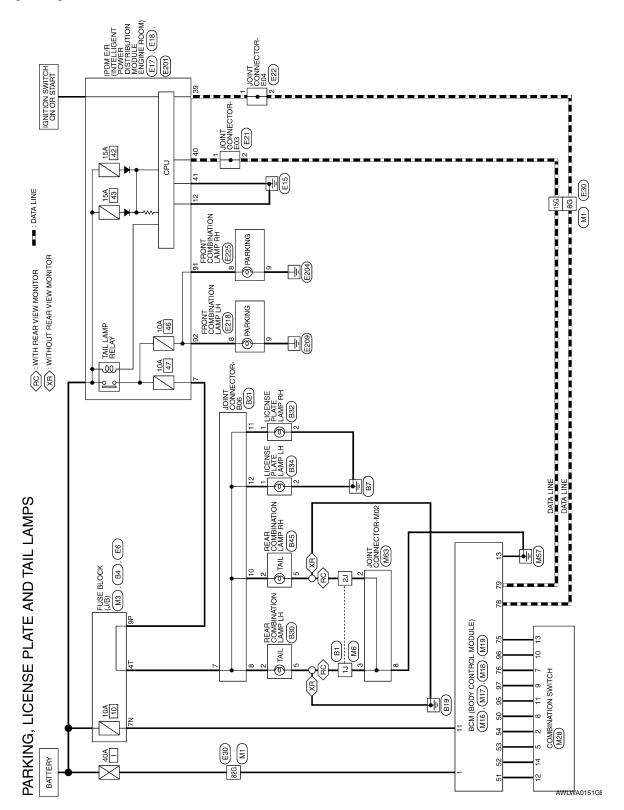
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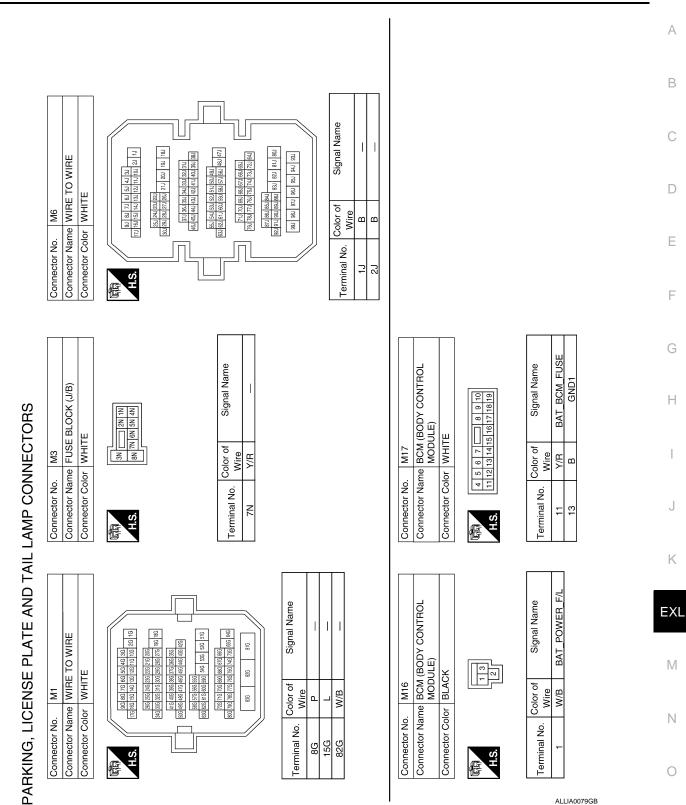


< COMPONENT DIAGNOSIS >

Wiring Diagram - Sedan

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EXL-141

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< COMPONENT DIAGNOSIS >

M28

Connector No.

M19

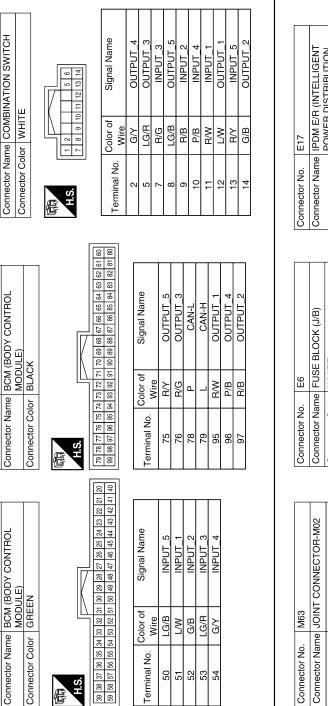
Connector No.

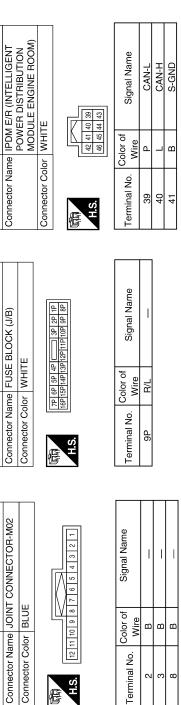
M18

Connector No.

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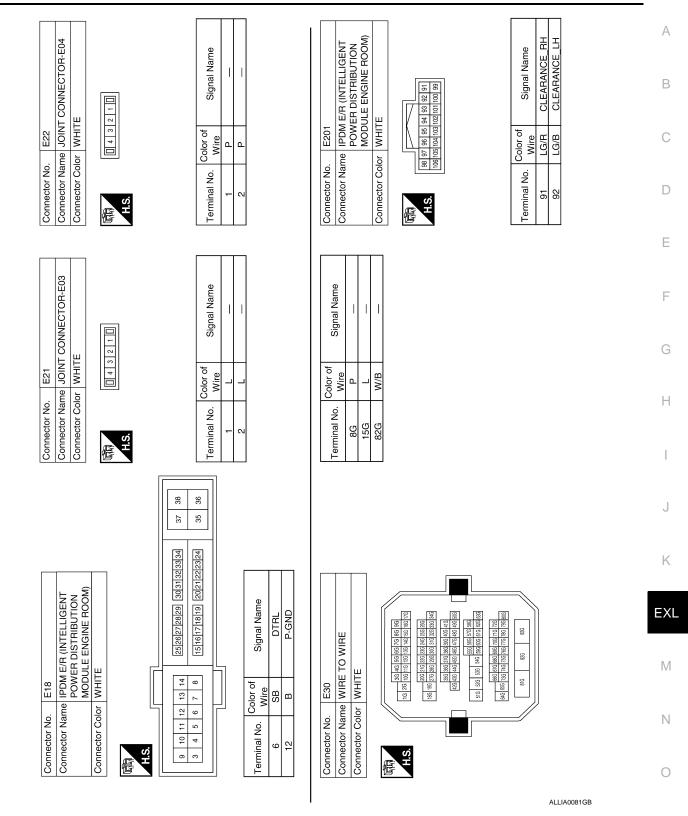
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EXL-143

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O WIRE 이 WIRE 이 VIRE 이 VIRE	Signal Name	COMBINATION LAMP	Signal Name TAIL_LAMP GND

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM < COMPONENT DIAGNOSIS >

Connector No. B1 Connector Name WIRE TO WIRE Connector Color WHITE	H.S. H.S. H.S. 14 20 40 50 72 80 50 18 130 20 20 20 20 20 20 20 20 20 20 20 20 20	333 (30) HADI 141 HADI 452 HADI 452 HADI 471 480 (550) 51 (55) (564) (551) (562) (552) (562) (552)	Terminal No.Color of WireSignal Name1JB2JB/R	Connector No. B30 Connector Name REAR COMBINATION LAMP Connector Color WHITE
Connector No. E225 Connector Name FRONT COMBINATION LAMP RH Connector Color BLACK	H.S.	Terminal No. Color of Wire Signal Name 8 LG/R CLEARANCE 9 B GND		Connector No. B21 Connector Name JOINT CONNECTOR-B06 Connector Color BLUE
Connector No. E218 Connector Name FRONT COMBINATION LAMP LH Connector Color BLACK	H.S.	Terminal No.Color of WireSignal Name8LG/BCLEARANCE9BGND		Connector No. B4 Connector Name FUSE BLOCK (J/B) Connector Color BROWN

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Color of Wire L/R B/R

Terminal No. 2 5

Signal Name

Color of Wire

Terminal No.

Signal Name

Color of Wire L/R

Terminal No. 4T

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM < COMPONENT DIAGNOSIS >

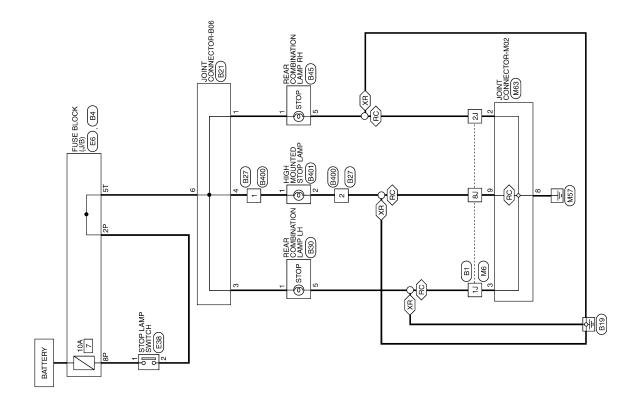
PLATE LAWP RH Connector Name [LICENSE PLATE LAWP LH] Omeetor Color BROWN Signati Name Tall_LAWP QND	VIBINATION LAMP	Signal Name TAIL LAMP GND	
PLATE LAWP RH Connector Name [LICENSE PLATE LAWP LH] Onnector Color BROWN Signati Name TAIL LAMP Ono QND	Connector Name REAR CON RH Connector Color WHITE	Color of Wire B/R	
Signal Name GND GND	Conne	Termi	
Signal Name TAIL LAMP GND	PLATE LAMP LH	Signal Name TAIL_LAMP GND	
Signal Name TAIL LAMP GND	Connector Name LICENSE Connector Color BROWN		
Connector Name LICENSE PLATE LAMP RH Connector Color BROWN Image: State of the state of	Conne	Termir	
Connector Name LICENSE Connector Color BROWN Terminal No. Color of Wire 2 B	E PLATE LAMP RH	Signal Name TAIL LAMP GND	
	ector Name LICENSE sctor Color BROWN		
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Wiring Diagram - Coupe

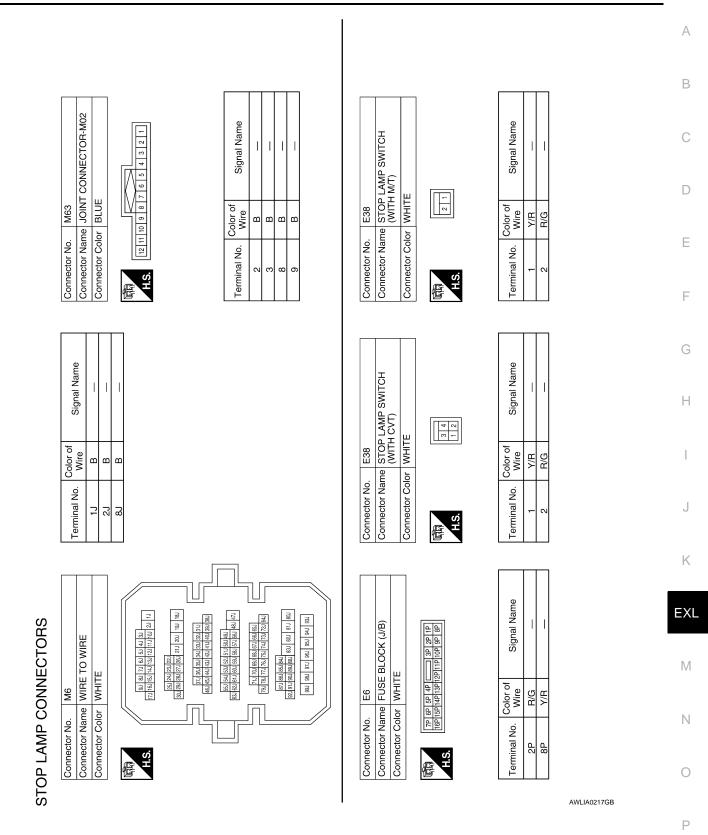
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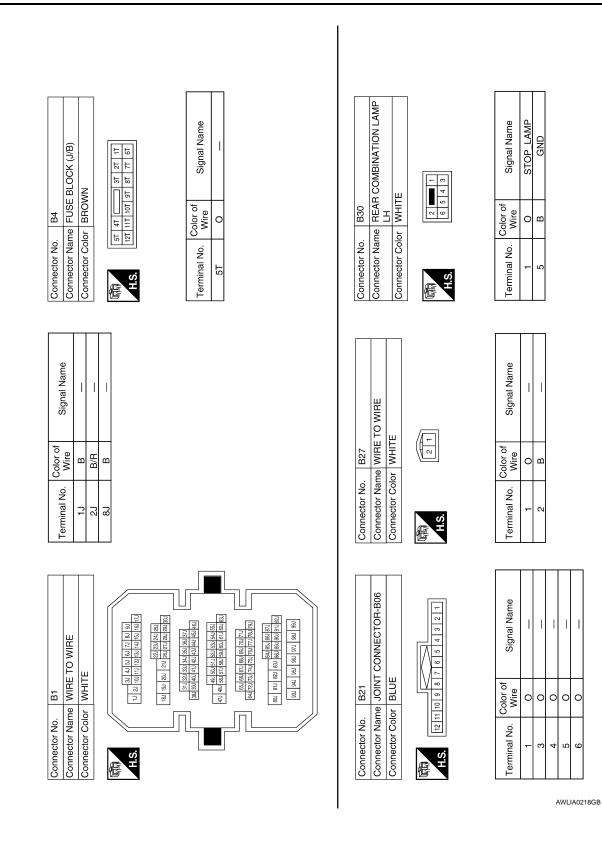


STOP LAMP

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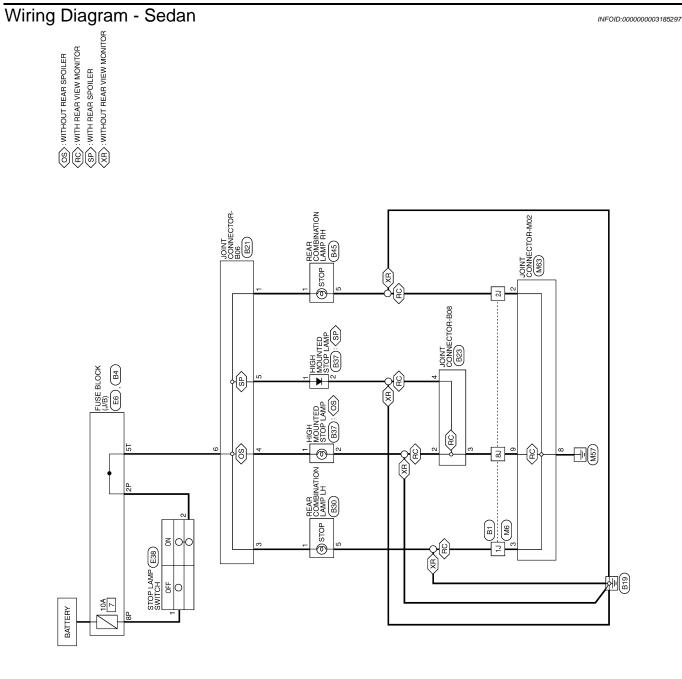
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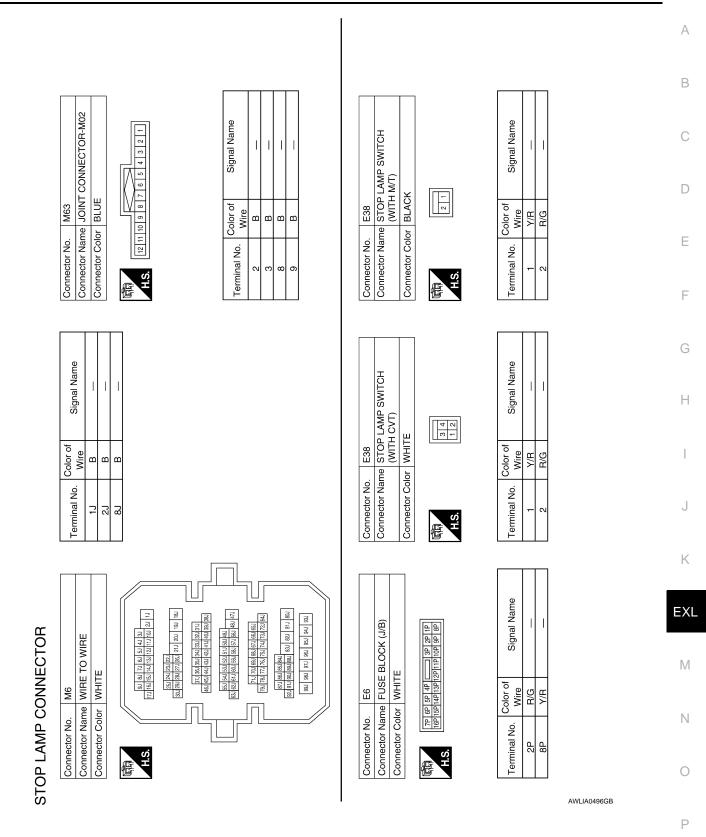
DIVENT DIAGNOOIS		
B45 REAR COMBINATION LAMP RH WHITE 6 5 4 3	Signal Name STOP_LAMP GND	
B45 REAR COM RH WHITE		
ctor No.	Terminal No. Color of Wire 5 B/R	
Conne Conne H.S.		
Connector No. B37 Connector Name HIGH MOUNTED STOP LAMP (WITH REAR SPOILER) Connector Color BROWN	Signal Name STOP_LAMP GND	
	signe STOF	
0. B37 ame HIGH MO (WITH RE Nor BROWN	Mire B O	
Connector No. Connector Name Connector Color	Terminal No.	
Connector No. B37 Connector Name HIGH MOUNTED STOP LAMP (WITHOUT REAR SPOILER) Connector Color BROWN	Signal Name STOP LAMP GND	E
B37 HIGH MO (WITHOU BROWN	2010r of Mire B/B	
No. E Name H Color E		
Connector No. Connector Name Connector Color	2 1 No.	

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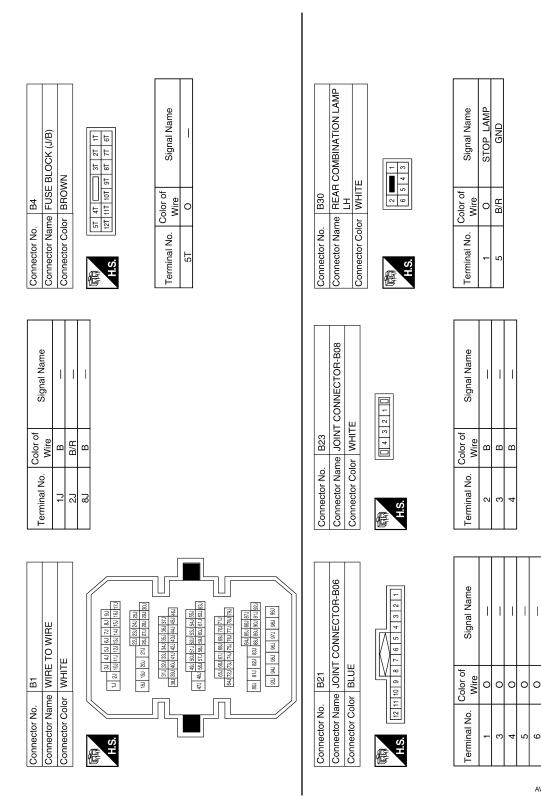




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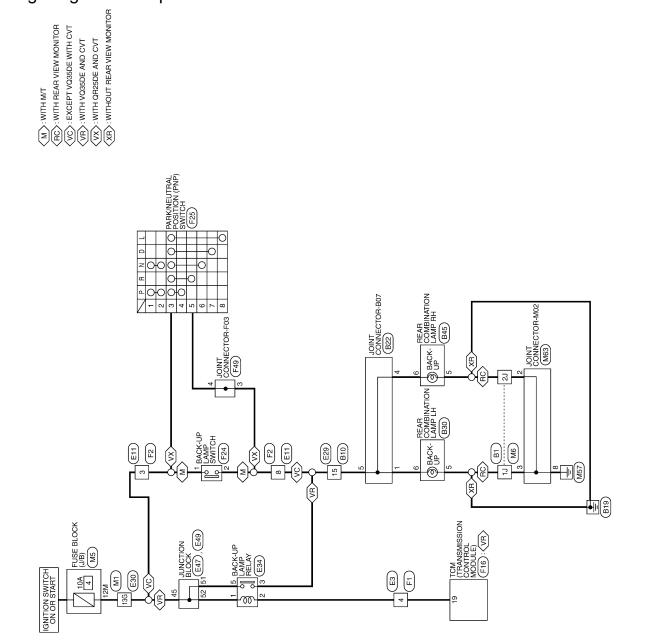
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Connector No. B45 Connector Name REAR COMBINATION LAMP RH Connector Color WHITE	Signal Name STOP_LAMP GND	
B45 REAR COW WHITE ² ■ 1 ⁶ 5 4 3		
or No.	No. Color of B/R B/R	
Connector No. Connector Name Connector Color	Terminal No.	
Connector No. B37 Connector Name HIGH MOUNTED STOP LAMP (WITH REAR SPOILER) Connector Color BROWN	Signal Name STOP_LAMP GND	
	Mire B B	
Connector No. Connector Name Connector Color	Terminal No. 2	
Connector No. B37 Connector Name HIGH MOUNTED STOP LAMP (WITHOUT REAR SPOILER) Connector Color BROWN	Name LAMP	
	Signal Name STOP LAMP GND	
	Color of B/R B/R	
Connector No. Connector Name Connector Color	Terminal No.	
Conne Conne Conne H.S.	Termi	
		AWLIA0503GB

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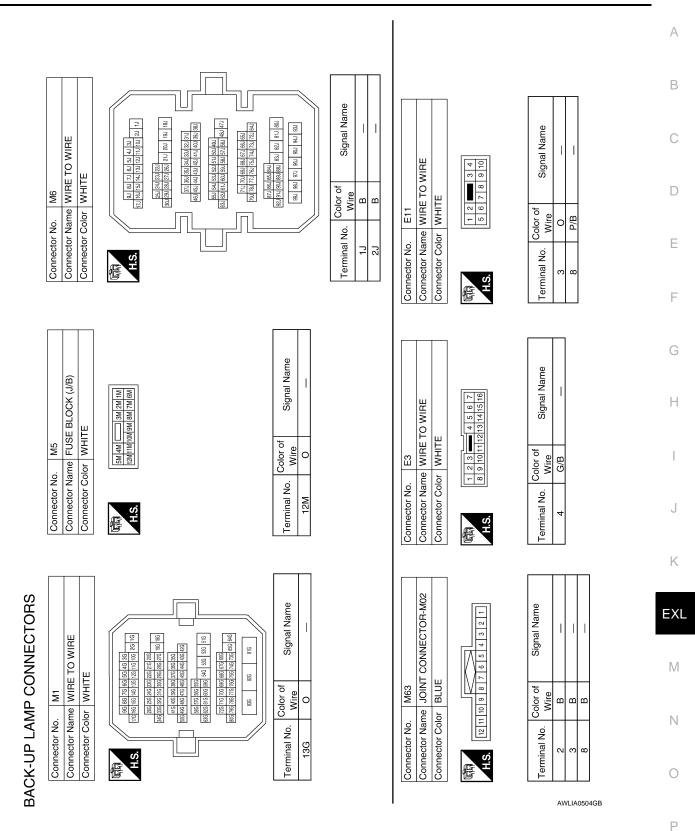
Wiring Diagram - Coupe

INFOID:000000003219932



BACK-UP LAMP

AWLWA0048GE



< COMPONENT DIAGNOSIS >

Connector No. E34 Connector Name BACK-UP LAMP RELAY Connector Color BLUE Image: Second sector Color BLUE Image: Second sector Color of signal Name Image: Second sector second second sector second seco	Connector No. F1 Connector Name WIRE TO WIRE Connector Color WHITE Image: State of the	Terminal No. Color of Signal Name 4 G/B —
Connector No. E30 Connector Name WIRE TO WIRE Connector Color WHITE Connector Color WHITE Connector Color WHITE 10 10 10 10 10 10 10 10 10 10 10 10 10	Connector No. E49 Connector Name JUNCTION BLOCK Connector Color BROWN Image: State	Terminal No. Color of Wire Signal Name 51 O — 52 O/B —
Connector No. E29 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Color WHITE Time Time Time Time Time Signal Name 15 P/B	Connector No. E47 Connector Name JUNCTION BLOCK Connector Color WHITE Milet def def	Terminal No. Color of Wire Signal Name 45 0 -

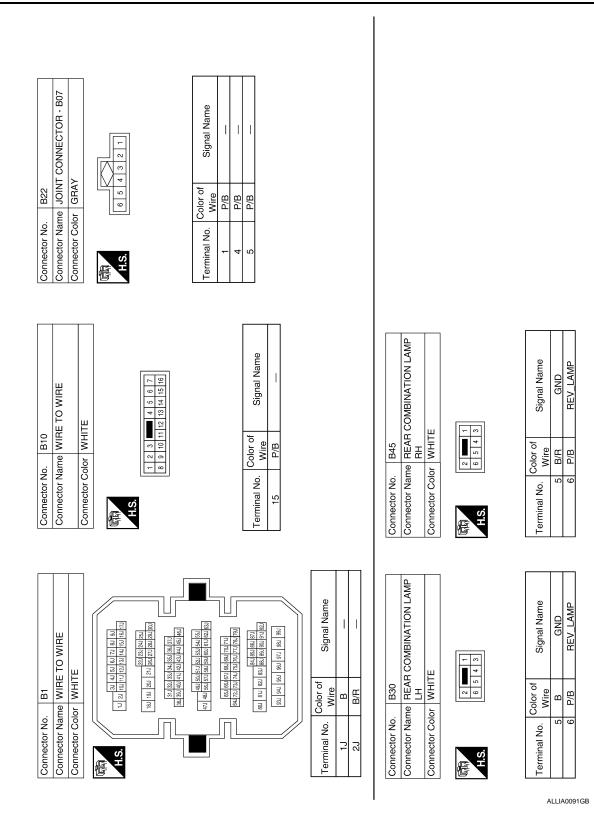
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Connector No. F24 Connector Name BACK-UP LAMP SWITCH Connector Color BLACK	Signal Name			С
F24 or BLACK-U	Color of Wire P/B			D
Connector No. Connector Name Connector Color	Terminal No. 2			E
	ĽĚ			F
EDN	Vame IP RLY	OR-F03	Name I I Name	G
Connector No. F16 Connector Name TCM (TRANSMISSION CONTROL MODULE) Connector Color BLACK	Signal Name REV LAMP RLY	Connector No. F49 Connector Name JOINT CONNECTOR-F03 Connector Color BLACK	Signal Name	Н
No. F16 Vame TCM (TR, Vame) Vame TCM (TR, Vame) Contract BLACK Zolor BLACK 2012 22 33 34 35 26 21 2 3 4 5 6	. Color of Wire G/B	Connector No. F49 Connector Name JOINT Connector Color BLACK	o. Color of G/W P/B	I
Connector No. Connector Name Connector Color	Terminal No. 19	Connector No. Connector Nam Connector Cold	Terminal No.	J
		Z		K
	Signal Name	RAL POSITIC CH DE CVT)	Signal Name IGN R_OUTPUT	EXL
F2 WHRE TO WII 0 9 8 7 6 4		F25 PARK/NEUTRAL POS (PNP) SWITCH (WITH QR25DE CVT) BLACK		Μ
Connector No. F2 Connector Name WIRE TO WIRE Connector Color WHITE	al No. Color of Wire O	ctor Name	Terminal No. Color of Wire 3 0 Mire 5 P/B	Ν
Connec Connec H.S	Terminal No. 3 8	Connee Connee H.S.		0

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BACK-UP LAMP

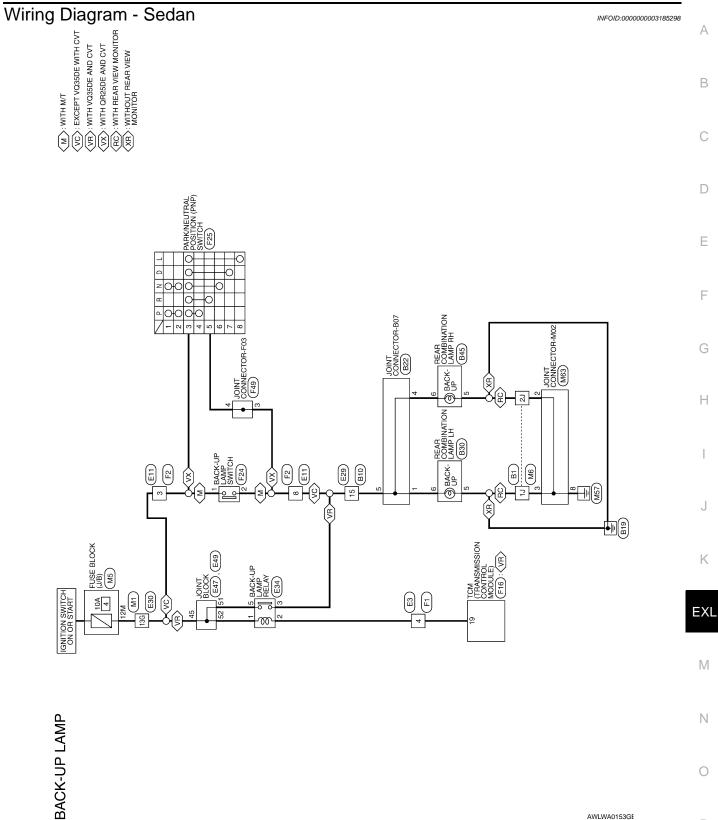
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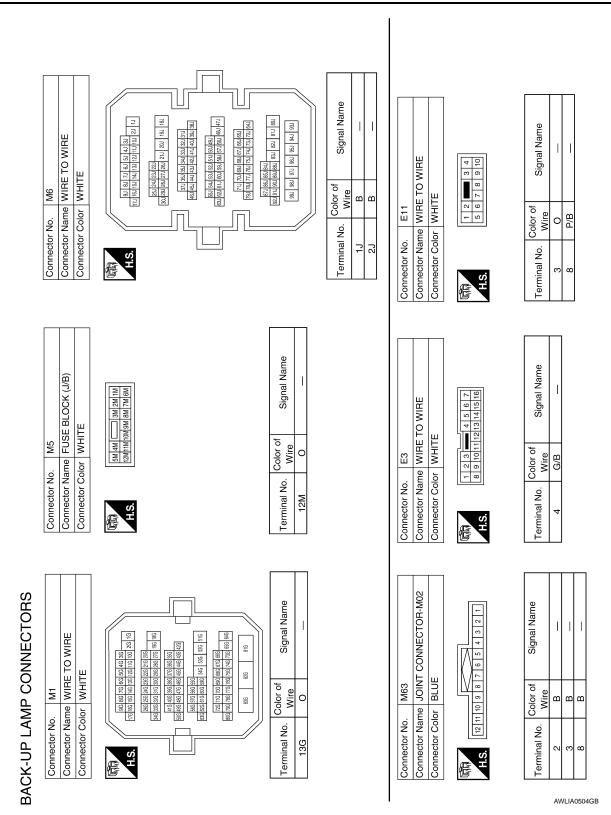
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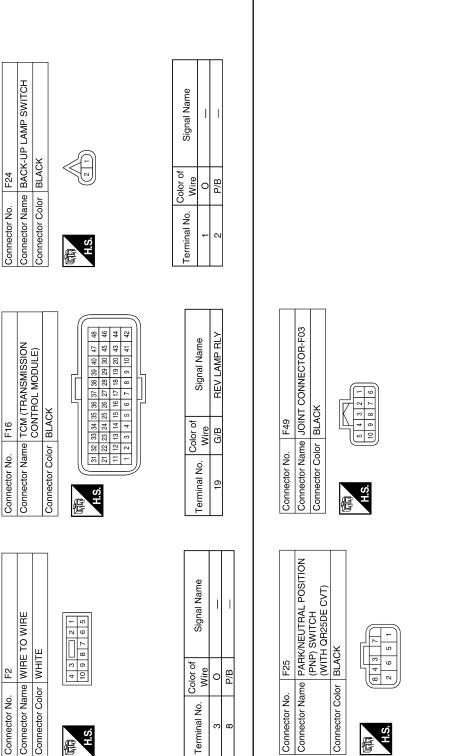
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ame	VIRE 3 2 1 10 9 8 10 10 10 10 10 10 10 10 10 10	A B C
Connector No. E34 Connector Name BACK-UP LAMP RELAY Connector Color BLUE Image: Signal Name Image: Signal Name 1 O/B 2 G/B 3 P/B 0 Image: Signal Name	Connector No. F1 Connector Name WIRE TO WIRE Connector Nor WILTE Connector Color WHITE Isi 14 Terminal No. Color of A G/B	D E F
Connector No. E30 Connector Name WIRE TO WIRE Connector Name Wire Mine Mine Mine Mine	Connector No. E49 Connector Name JUNCTION BLOCK Connector Color BROWN Image: Signal Name Signal Name 51 O 52 OB	G H J
Connector No. E29 Connector Name WIRE TO WIRE Connector Color WHITE Connector Color WHITE Time Time Time Color of Wire Signal Name To P/B L	Connector No. E47 Connector Name JUNCTION BLOCK Connector Name JUNCTION BLOCK Connector Name JUNCTION BLOCK Mine Mine 45 Mine 10 Mine	EXL M N O

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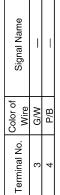


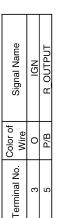
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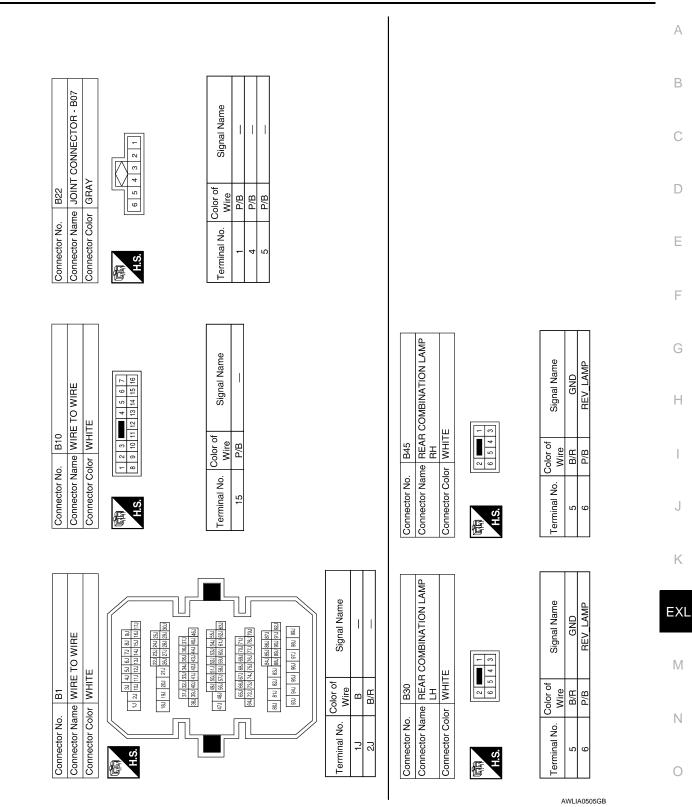


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< ECU DIAGNOSIS >

ECU DIAGNOSIS BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000003188064

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
	Other than front wiper switch HI	OFF
FR WIPER HI	Front wiper switch HI	ON
	Other than front wiper switch LO	OFF
FR WIPER LOW	Front wiper switch LO	ON
	Front washer switch OFF	OFF
FR WASHER SW	Front washer switch ON	ON
	Other than front wiper switch INT	OFF
FR WIPER INT	Front wiper switch INT	ON
	Front wiper is not in STOP position	OFF
FR WIPER STOP	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
	Other than turn signal switch RH	OFF
TURN SIGNAL R	Turn signal switch RH	ON
	Other than turn signal switch LH	OFF
TURN SIGNAL L	Turn signal switch LH	ON
	Other than lighting switch 1ST and 2ND	OFF
TAIL LAMP SW	Lighting switch 1ST or 2ND	ON
	Other than lighting switch HI	OFF
HI BEAM SW	Lighting switch HI	ON
	Other than lighting switch 2ND	OFF
HEAD LAMP SW 1	Lighting switch 2ND	ON
	Other than lighting switch 2ND	OFF
HEAD LAMP SW 2	Lighting switch 2ND	ON
	Other than lighting switch PASS	OFF
PASSING SW	Lighting switch PASS	ON
AUTO LIGHT SW	Other than lighting switch AUTO	OFF
AUTO LIGHT SW	Lighting switch AUTO	ON
	Front fog lamp switch OFF	OFF
FR FOG SW	Front fog lamp switch ON	ON
	Driver door closed	OFF
DOOR SW-DR	Driver door opened	ON
	Passenger door closed	OFF
DOOR SW-AS	Passenger door opened	ON
	Rear door RH closed	OFF
DOOR SW-RR	Rear door RH opened	ON
	Rear door LH closed	OFF
DOOR SW-RL	Rear door LH opened	ON

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status	
DOOR SW-BK	NOTE: This item is displayed, but cannot be monitored.	OFF	
	Other than power door lock switch LOCK	OFF	
CDL LOCK SW	Power door lock switch LOCK	ON	
	Other than power door lock switch UNLOCK	OFF	
CDL UNLOCK SW	Power door lock switch UNLOCK	ON	
	Other than driver door key cylinder LOCK position	OFF	
KEY CYL LK-SW	Driver door key cylinder LOCK position	ON	
	Other than driver door key cylinder UNLOCK position	OFF	
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	ON	
KEY CYL SW-TR	NOTE: This item is displayed, but cannot be monitored.	OFF	
AZARD SW	When hazard switch is not pressed	OFF	
	When hazard switch is pressed	ON	
REAR DEF SW	When rear window defogger switch is pressed	ON	
FAN ON SIG	When AUTO switch or fan switch is pressed	ON	
AIR COND SW	When A/C switch is pressed	ON	
	Trunk lid opener cancel switch OFF	OFF	
TR CANCEL SW	Trunk lid opener cancel switch ON	ON	
	Trunk lid opener switch OFF	OFF	
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	ON	
	Trunk lid closed	OFF	
TRNK/HAT MNTR	Trunk lid opened	ON	
	When LOCK button of Intelligent Key is not pressed	OFF	
RKE-LOCK	When LOCK button of Intelligent Key is pressed	ON	
	When UNLOCK button of Intelligent Key is not pressed	OFF	
RKE-UNLOCK	When UNLOCK button of Intelligent Key is pressed	ON	
	When TRUNK OPEN button of Intelligent Key is not pressed	OFF	
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is pressed	ON	-1
	When PANIC button of Intelligent Key is not pressed	OFF	-
RKE-PANIC	When PANIC button of Intelligent Key is pressed	ON	
	When UNLOCK button of Intelligent Key is not pressed and held	OFF	
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is pressed and held	ON	
	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF	_
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON	
OPTICAL (LIGHT) SEN-	When outside of the vehicle is bright	Close to 5 V	
SOR	When outside of the vehicle is dark	Close to 0 V	
	When driver door request switch is not pressed	OFF	
REQ SW-DR	When driver door request switch is pressed	ON	
	When passenger door request switch is not pressed	OFF	
REQ SW-AS	When passenger door request switch is pressed	ON	
	When trunk request switch is not pressed	OFF	
REQ SW-BD/TR	When trunk request switch is pressed	ON	

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
PUSH SW	When engine switch (push switch) is not pressed	OFF
F03H 3W	When engine switch (push switch) is pressed	ON
IGN RLY-F/B	Ignition switch OFF or ACC	OFF
IGN RLI-F/D	Ignition switch ON	ON
	Ignition switch OFF	OFF
ACC RLY-F/B	Ignition switch ACC or ON	ON
	When the clutch pedal is not depressed	OFF
CLUTCH SW	When the clutch pedal is depressed	ON
	When the brake pedal is not depressed	ON
BRAKE SW 1	When the brake pedal is depressed	OFF
	When selector lever is in P position	OFF
DETE/CANCL SW	When selector lever is in any position other than P	ON
	When selector lever is in any position other than P or N	OFF
SFT PN/N SW	When selector lever is in P or N position	ON
0 //	Electronic steering column lock LOCK status	OFF
S/L-LOCK	Electronic steering column lock UNLOCK status	ON
	Electronic steering column lock UNLOCK status	OFF
S/L-UNLOCK	Electronic steering column lock LOCK status	ON
	Ignition switch OFF or ACC	OFF
S/L RELAY-F/B	Ignition switch ON	ON
	Driver door UNLOCK status	OFF
UNLK SEN-DR	Driver door LOCK status	ON
	When engine switch (push switch) is not pressed	OFF
PUSH SW-IPDM	When engine switch (push switch) is pressed	ON
	Ignition switch OFF or ACC	OFF
IGN RLY1 F/B	Ignition switch ON	ON
	When selector lever is in P position	OFF
DETE SW -IPDM	When selector lever is in any position other than P	ON
	When selector lever is in any position other than P or N	OFF
SFT PN -IPDM	When selector lever is in P or N position	ON
	When selector lever is in any position other than P	OFF
SFT P-MET	When selector lever is in P position	ON
	When selector lever is in any position other than N	OFF
SFT N-MET	When selector lever is in N position	ON
	Engine stopped	STOP
	While the engine stalls	STALL
ENGINE STATE	At engine cranking	CRANK
	Engine running	RUN
	Electronic steering column lock LOCK status	OFF
S/L LOCK-IPDM	Electronic steering column lock UNLOCK status	ON
	Electronic steering column lock UNLOCK status	OFF
S/L UNLCK-IPDM	Electronic steering column lock LOCK status	ON
	LIGGTOTIC STEELING COUTIN TOOK LOOK STATUS	
	Ignition switch OFF or ACC	OFF

< ECU DIAGNOSIS >

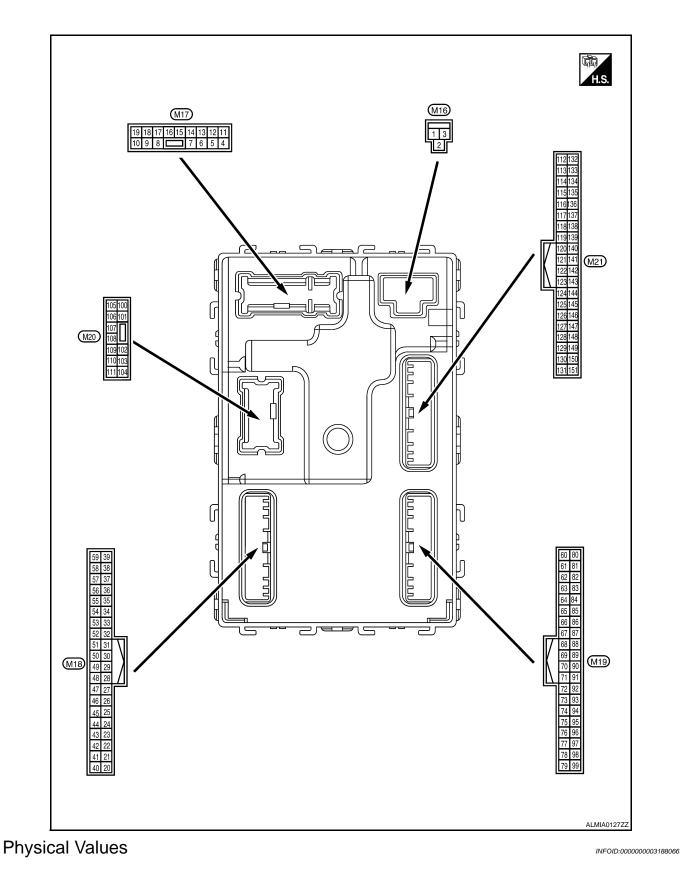
Monitor Item	Condition	Value/Status	Λ
VEH SPEED 1	While driving	Equivalent to speedometer reading	А
VEH SPEED 2	While driving	Equivalent to speedometer reading	
	Driver door LOCK status	LOCK	В
DR DOOR STATE	Wait with selective UNLOCK operation (5 seconds)	READY	
	Driver door UNLOCK status	UNLK	
	Passenger door LOCK status	LOCK	С
AS DOOR STATE	Wait with selective UNLOCK operation (5 seconds)	READY	
	Passenger door UNLOCK status	UNLK	D
	Ignition switch ACC or ON	RESET	D
ID OK FLAG	Ignition switch OFF	SET	
	When the engine start is prohibited	RESET	Ε
PRMT ENG STAT	When the engine start is permitted	SET	
PRMT RKE STAT	NOTE: This item is displayed, but cannot be monitored.	RESET	F
	When Intelligent Key is not inserted into key slot	OFF	
KEY SW -SLOT	When Intelligent Key is inserted into key slot	ON	G
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key	0
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored.	Operation frequency of Intelligent Key	Н
AIR PRESS FL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front LH tire	
AIR PRESS FR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front RH tire	
AIR PRESS RR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear RH tire	J
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire	0
	When ID of front LH tire transmitter is registered	DONE	K
ID REGST FL1	When ID of front LH tire transmitter is not registered	YET	
	When ID of front RH tire transmitter is registered	DONE	
ID REGST FR1	When ID of front RH tire transmitter is not registered	YET	ΕX
	When ID of rear RH tire transmitter is registered	DONE	
ID REGST RR1	When ID of rear RH tire transmitter is not registered	YET	M
	When ID of rear LH tire transmitter is registered	DONE	IV
ID REGST RL1	When ID of rear LH tire transmitter is not registered	YET	
	Tire pressure indicator OFF	OFF	Ν
WARNING LAMP	Tire pressure indicator ON	ON	

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< ECU DIAGNOSIS >

Terminal Layout

INFOID:000000003188065



Terminal No. (Wire color)		Description				Value
(VVire (+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OF	F	Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage
4	Ground	Interior room lamp	Quitout	After passing the ir er operation time	nterior room lamp battery sav-	0V
(P/W)	Ground	power supply	Output	Any other time after lamp battery save	er passing the interior room r operation time	Battery voltage
5	Crownd	Front door RH UN-	Output	Front door DLL	UNLOCK (actuator is activated)	Battery voltage
(G/Y)	Ground	LOCK	Output	Front door RH	Other than UNLOCK (actuator is not activated)	0V
7	Ground	Step lamp	Output	Step lamp	ON	0V
(R/W)	Ground		Juiput		OFF	Battery voltage
8	Ground	All doors LOCK	Output	All doors	LOCK (actuator is activat- ed)	Battery voltage
(V)	Ground	All doors LOCK	Output		Other than LOCK (actuator is not activated)	0V
9	Ground	Front door LH UN-	Output	Front door LH	UNLOCK (actuator is activated)	Battery voltage
(G)	Ground	LOCK	Output		Other than UNLOCK (actuator is not activated)	٥V
10 ¹	Ground	Rear door RH and rear door LH UN-	Output	Rear door RH	UNLOCK (actuator is activated)	Battery voltage
(G/Y)	Ground	LOCK	Output	and rear door LH	Other than UNLOCK (actu- ator is not activated)	0V
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch ON	I	0V
					OFF	0V
14 (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	ON	NOTE: When the illumination brighten- ing/dimming level is in the neutral position (V) 10 0 0 10 0 10 0 10 0 10 0 10 0 10 0
15	0		0.1	1	OFF	Battery voltage
(Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	ACC or ON	0V

< ECU DIAGNOSIS >

Terminal No.		Description				Velue
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	Value (Approx.)
					Turn signal switch OFF	0V
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
					Turn signal switch OFF	0V
18 (G/Y)	Ground	Turn signal (LH)	Output	lgnition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s 1 s PKID0926E 6.5 V
19	Ground	Room lamp timer	Output	Interior room	OFF	Battery voltage
(Y)	Ground	control	Output	lamp	ON	0V
21 (P/B)	Ground	Optical sensor signal	Input	Ignition switch ON	When outside of the vehi- cle is bright When outside of the vehi-	Close to 5V
· · /				-	cle is dark	Close to 0V
22	Ground	Clutch interlock	Input	Clutch interlock	OFF (clutch pedal is not depressed)	0V
(R/Y)		switch		switch	ON (clutch pedal is de- pressed)	Battery voltage
24 (R/W)	Ground	Stop lamp switch 1	Input		_	Battery voltage
				Stop lamp switch	OFF (brake pedal is not de- pressed)	0V
26 (O/L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	ON (brake pedal is de- pressed)	Battery voltage
				ICC brake hold	OFF	0V
				relay (with ICC)	ON	Battery voltage
27 (G/W)	Ground	Front door lock as- sembly LH (unlock sensor)	Input	Front door LH	LOCK status	(V) 15 10 5 10 10 ms JPMIA0011GB 11.8V
					UNLOCK status	OV
29	_			When Intelligent K	ey is inserted into key slot	Battery voltage
(Y)	Ground	Key slot switch	Input		ey is not inserted into key slot	0V

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description				Value
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)
	(-)		Output		OFF	0
30 (V/Y)	Ground	ACC feedback signal	Input	Ignition switch	ACC or ON	Battery voltage
31		Rear window defog-		Rear window de-	OFF	0V
(G)	Ground	ger feedback signal	Input	fogger switch	ON	Battery voltage
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes) ON (when front door RH	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					opens)	٥V
33	Ground	Compressor ON sig-	Input	A/C switch	OFF	5V
(SB)	Ground	nal	Input		ON	0V
34 ²	0	Front door lock as-	les es d	Front door lock	OFF (neutral)	5V
(L/R)	Ground	sembly LH (key cylin- der switch) (unlock)	Input	assembly LH (key cylinder switch)	ON (unlock)	0V
36 ²	Ground	Lock switch signal	Input	Door lock/unlock	Lock	Battery voltage
(GR)	Cround		mput	switch	Unlock	0V
37 (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid opener cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1V
					ON	OV
38 (GR/	Ground	Rear window defog-	Input	Rear window de-	OFF	5V
(GR/ W)	Ground	ger ON signal	mput	fogger switch	ON	0V
39 ²				Door lock/unlock	Unlock	Battery voltage
(GR/ R)	Ground	Unlock switch signal	Input	switch	Lock	0V
40 ³ (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 10 10 10 10 10 10 10 10
				Ignition switch OF	F or ACC	0V
				_	ON	5.5V
41	Ground	Engine switch (push	Output	Engine switch (push switch) illu-		
(W) GIU		switch) illumination	-	mination	OFF	0V

	inal No. e color)	Description	• • • •		Condition	Value
(+)	(-)	Signal name	Input/ Output			(Approx.)
42 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON OFF	0V Battery voltage
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V
46 (V/W)	Ground	Receiver & sensor power supply output	Output	Ignition switch	OFF ACC or ON	0V 5.0V
47	Ground	Tire pressure receiv- er signal	Input/	Ignition switch t ON	Standby state	(V) 6 2 0 ••• 0.2s OCC3881D
(G/O)	Ground		Output		When receiving the signal from the transmitter	(V) 4 0 • • 0.2s CCC3880D
48 (R/G)	Ground	Selector lever P/N position signal	Input	Selector lever	P or N position Except P and N positions	12.0V 0V
					ON	0V
49 (L/O)	Ground	Security indicator sig- nal	Output	Security indicator	Blinking	(V) 15 10 5 0 1 s JPMIA0014GB 11.3V
					OFF	Battery voltage
					All switch OFF	OV
					Lighting switch 1ST	00
50		Combination switch	_	Combination switch	Lighting switch high-beam Lighting switch 2ND	(V) 15 10
(LG/ B)	Ground	d OUTPUT 5 Output	Output	(Wiper intermit- tent dial 4)	Turn signal switch RH	5 0 2 ms 10.7V

Terminal No. (Wire color)		Description		Condition		Value	
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF (Wiper intermittent dial 4)	0V	
E 1		Combination switch		Combination	Front wiper switch HI (Wiper intermittent dial 4) Any of the conditions below	(V) 15	
51 (L/W) Ground	Ground	OUTPUT 1	Output	switch	 Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 3 Wiper intermittent dial 6 Wiper intermittent dial 7 	10 0 2.ms. JPMIA0032GB 10.7V	
					All switch OFF (Wiper intermittent dial 4)	٥V	
					Front washer switch ON (Wiper intermittent dial 4)	(V) 15	
52 (G/B)	Ground	d Combination switch OUTPUT 2		Combination switch	Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 5 • Wiper intermittent dial 6	10 50 2 ms JPMIA0033GE	
					All switch OFF	10.7V	
					Front wiper switch INT		
53 (LG/	Ground	Combination switch	Quitout	Combination switch	Front wiper switch LO		
(LG/ R)	Ground	OUTPUT 3	Output	(Wiper intermit- tent dial 4)	Lighting switch AUTO	0 2 ms	
						10.7V	
					All switch OFF	0V	
					Front fog lamp switch ON	(V)	
54		Combination owitch		Combination	Lighting switch 2ND Lighting switch flash-to-	15 15	
54 (G/Y)	Ground	Combination switch OUTPUT 4	Output	switch (Wiper intermit- tent dial 4)	pass		
					Turn signal switch LH	2 ms JPMIA0035GB	
55			1		ON	Battery voltage	
(BR/ W)	Ground	Front blower monitor	Input	Front blower mo- tor switch	OFF	0V	
56 ²		Front door lock as-		Front door lock	OFF (neutral)	5V	
56 (L/B)	Ground	sembly LH (key cylin- der switch) (lock)	Input	assembly LH (key cylinder switch)	ON (lock)	٥V	
57 (W)	Ground	Tire pressure warn- ing check switch	Input		_	5V	

	inal No.	Description				Value	
(Wire (+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)	
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	(V) 15 10 10 10 ms JPMIA0011GB 11.8V	
					ON (front door LH OPEN)	0V	
59	Ground	Rear window defog-	Output	Rear window de-	Active	Battery voltage	
(G/R)	Ground	ger relay	Output	fogger	Not activated	OV	
60 (B/R)	Ground	Front console anten- na 2 (-)	Output	lgnition switch OFF	When Intelligent Key is in the passenger compart- ment When Intelligent Key is not in the passenger compart- ment	(V) 15 10 15 10 15 10 15 15 15 15 15 15 15 15 15 15	
61 (W/R)	Ground	Center console an- tenna 2 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s 	
					When Intelligent Key is not in the passenger compart- ment	(V) 10 0 1 s JMKIA0063GB	

< ECU DIAGNOSIS >

Terminal No.		Description				Value	
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	Value (Approx.)	A
62	Orenard	Front outside handle	0.444	When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(B/Y)	Ground	RH antenna (-)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E
63	Ground	Front outside handle	Output	Output When the front door RH request switch is operat- ed with ignition switch OFF (V) When Intelligent Key is not 10	(V) 15 0 1 s JMKIA0062GB	G H I	
(LG)	Ground	RH antenna (+)			in the antenna detection	(V) 15 10 5 0 1 s JMKIA0063GB	J K EXL
64	Ground	Front outside handle LH antenna (-)		When the front door LH request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M
(V)	Ground		Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	P

	inal No.	Description		0		Value
(+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)
65	Ground	Front outside handle	Output	When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 0 1 1 1 1 J J J J J J J J J J J J J
(P)	Ground	LH antenna (+)	Guiput	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
66	Ground	Instrument panel an- tenna (-)	Output	t Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 0 5 0 1 s JMKIA0062GB
(R)	Ground				When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB
67	Ground	d Instrument panel an- tenna (+)		lgnition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(G)	Ground		Output		When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB

< ECU DIAGNOSIS >

	inal No.	Description					
	e color)	Signal name	Input/		Condition	Value (Approx.)	А
(+) 68 (G/O)	(-) Ground	NATS antenna amp (built in key slot)	Output Input/ Output	During waiting buring waiting buring waiting buring waiting buring burin		Just after pressing ignition switch. Pointer of tester should	В
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	move. Just after pressing ignition switch. Pointer of tester should move.	С
70	Ground	Ignition relay-2 con-	Output	Ignition switch	OFF or ACC	0V	
(R/B)	Giouna	trol	Output	Ignition switch	ON	Battery voltage	D
71		Remote keyless entry	loput/	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB	E
71 (L/O)	Ground	receiver signal	Input/ Output				G
		J		When operating ei	ither button on Intelligent Key	(V) 10 5 0 1 ms JMKIA0065GB	Η
		Combination switch INPUT 5	Input		All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4V	J K
75 (R/Y)	Ground			Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3V	M
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 10 5 0 2 ms JPMIA0040GB 1.3V	P

< ECU DIAGNOSIS >

	inal No.	Description				Value
(+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)
	Ground				All switch OFF (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0041GB 1.4V
76		Combination switch	Input	Combination switch	Lighting switch high-beam (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3V
(R/G)		INPUT 3			Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3V
77 (BR)	Ground	Engine switch (push switch)	Input	Engine switch (push switch)	Pressed	0V
(BR) 	Oroursi	CAN-L	Input/		Not pressed	Battery voltage
(P) 79	Ground Ground	CAN-L	Output Input/		_	
(L)			Output		OFF	0V
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 10 15 15 15 15 15 15 15 15 15 15
					ON	Battery voltage

< ECU DIAGNOSIS >

Terminal No.		Description				Value
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)
81			0	Institute a little	OFF or ACC	0V
(LG)	Ground	ON indicator lamp	Output	Ignition switch	ON	Battery voltage
83	Orrestored		0	lesities entitele	OFF	OV
(L)	Ground	ACC relay control	Output	Ignition switch	ACC or ON	Battery voltage
84 (Y/R)	Ground	A/T device	Output			Battery voltage
85	<u> </u>	Electronic steering	-	Electronic steer-	Lock status	0V
(L/O)	Ground	column lock condition No. 1	Input	ing column lock	Unlock status	Battery voltage
86		Electronic steering		Electronic steer-	Lock status	Battery voltage
(G/R)	Ground	column lock condition No. 2	Input	ing column lock	Unlock status	0V
87	0	Selector lever P posi-	las: 1	O a la atau la su	P position	0V
(G/B)	Ground	tion switch	Input	Selector lever	Any position other than P	Battery voltage
					ON (pressed)	0V
88 (P/L)	Ground	Front door RH re- quest switch	Input	Front door RH re- quest switch	OFF (not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0V
					ON (pressed)	0V
89 (B/W)	Ground	Front door LH re- quest switch	Input	Front door LH re- quest switch	OFF (not pressed)	(V) 15 10 5 10 10 ms JPMIA0016GB 1.0V
90	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0V
(Y)	Ground	lay control	Output		ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OFI	F	Battery voltage
94	Ground	Steering wheel lock	Output	Ignition switch	OFF or ACC	Battery voltage
(G/Y)	Ground	unit power supply	Cuipui	ignition switch	ON	0V

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	inal No.	Description				Value	
(Wire (+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)	
					All switch OFF	(V) 15 10 0 2 ms JPMIA0041GB 1.4V	
					Turn signal switch LH	(V) 15 0 2 ms 1.3V	
95 (R/W)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 0 2 ms JPMIA0036GB 1.3V	
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3V	
					Front washer switch ON	(V) 15 10 2 ms JPMIA0039GB 1.3V	

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	inal No.	Description				Value	٨
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switch OFF (Wiper intermittent dial 4)	(V) 15 0 2.ms JPMIA0041GB 1.4V	B C D
96	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0038GB 1.3V	F
(P/B)	Clound	INPUT 4	input	switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3V	G H I
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms	J
						јрміа0039GB 1.3V	EXL

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	inal No.	Description				Value
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF	(V) 15 10 0 2 ms JPMIA0041GB 1.4V
					Lighting switch flash-to- pass	(V) 15 0 2 ms JPMIA0037GB 1.3V
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3V
					Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3V
					Front wiper switch HI	(V) 15 0 2 ms JPMIA0040GB 1.3V
					Pressed	0 V
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Not pressed	(V) 15 10 5 10 10 ms JPMIA0012GB 1.1V

< ECU DIAGNOSIS >

	inal No.	Description				Value	^
(VVire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)	А
					LOCK status	Battery voltage	В
99 (L/Y)	Ground	Electronic steering column lock unit com- munication	Input/ Output	Electronic steer- ing column lock	LOCK or UNLOCK	(V) 15 10 50 50 ms JMKIA0066GB	C
					For 15 seconds after UN- LOCK	Battery voltage	Е
					15 seconds or later after UNLOCK	0V	_
103	Ground	Trunk lid opening.	Output	Trunk lid	Open (trunk lid opener ac- tuator is activated)	Battery voltage	F
(V)	Ground	Trunk lid openling.	Output		Close (trunk lid opener ac- tuator is not activated)	0V	G
110	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0V	
(V/W)	Ground	Indik room lamp	Output	Hunk room lamp	OFF	Battery voltage	Н
114		Trunk room antenna		Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0062GB	l J
114 (B)	Ground	Trunk room antenna 1 (-)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	K EXL M

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	inal No.	Description				Value
(+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)
115	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(W)		1 (+)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 5 0 1 s JMKIA0063GB
118	Ground	Rear bumper anten-	Output	When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(L/O)		na (-)		is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s JMKIA0063GB
119 (BR/	Ground	Rear bumper anten-	Output	When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 0 1 s JMKIA0062GB
(BK/ W)	Ground	na (+)	Output	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB

< ECU DIAGNOSIS >

	inal No.	Description				Value
(VVire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)
127 (BR/	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	Battery voltage
(BR/ W)	Ground	E/R) control	Juiput		ON	0V
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	(V) 15 10 10 10 11.8V
					ON (trunk is open)	0V
				Ignition switch OFF (M/T vehi-	When the clutch pedal is depressed	Battery voltage
				cle)	When the clutch pedal is not depressed	0V
132 (R)	Ground	Starter motor relay control	Output	Ignition switch ON (other than M/	When selector lever is in P or N position and the brake is depressed	Battery voltage
				T vehicle)	When selector lever is in P or N position and the brake is not depressed	0V
					ON (pressed)	0V
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	OFF (not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
4.4.4		Deguaat autob bu		Demuest switch	Sounding	1.0V
144 (GR)	Ground	Request switch buzz- er	Output	Request switch buzzer	Not sounding	Battery voltage
					Pressed	0V
147 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8V

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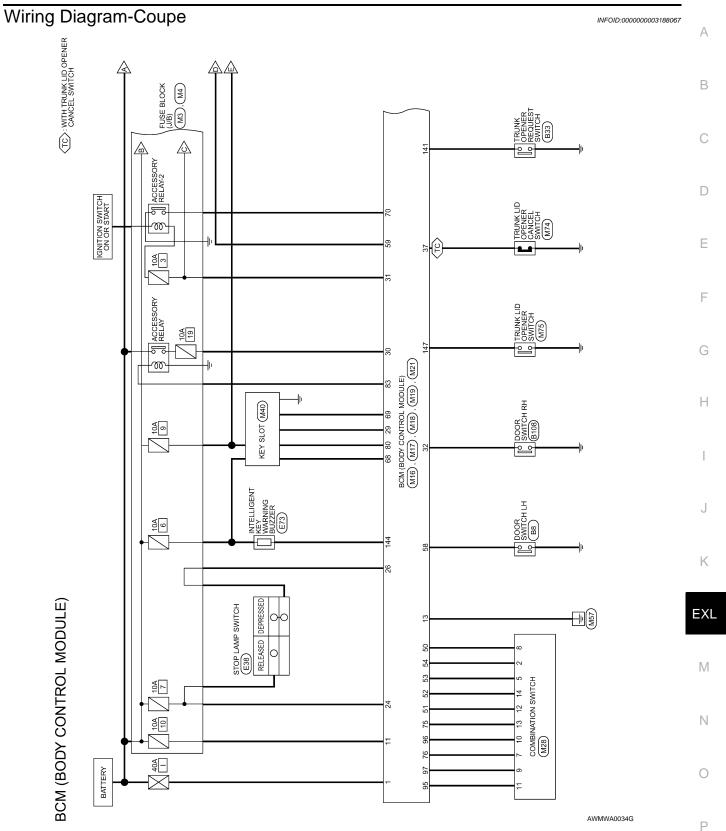
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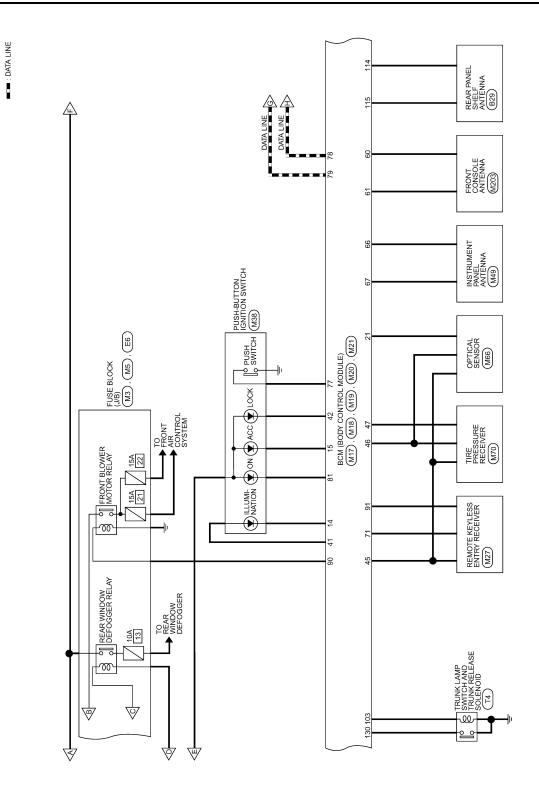
	inal No.	Description				Value
(VVire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)
148 ¹ (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8V
					ON (when rear door RH opens)	OV
149 ¹ (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8V
					ON (when rear door LH opens)	OV

1: Sedan only

2: With LH front window anti-pinch

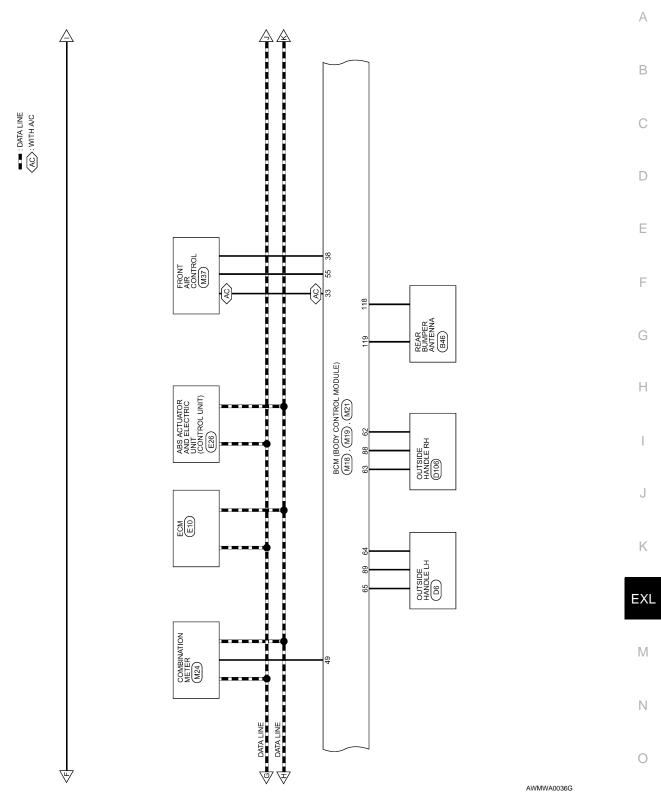
3: With LH and RH front window anti-pinch



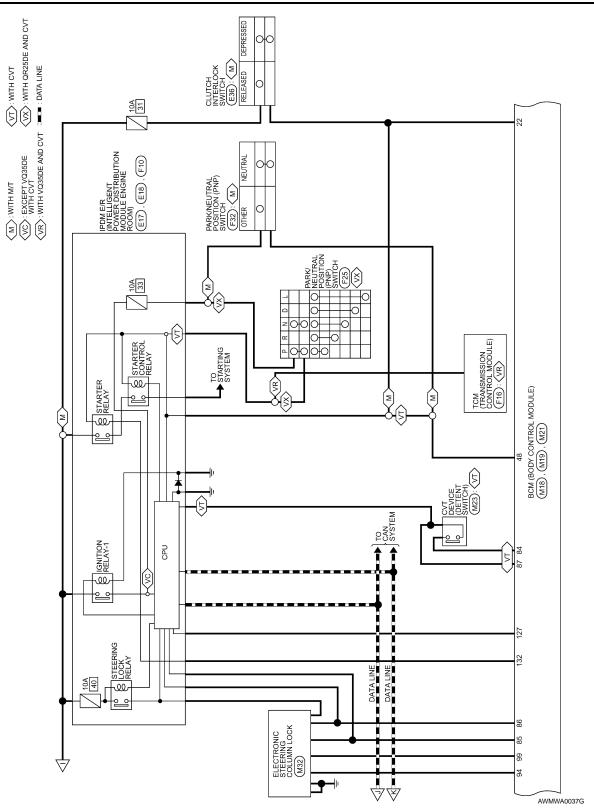


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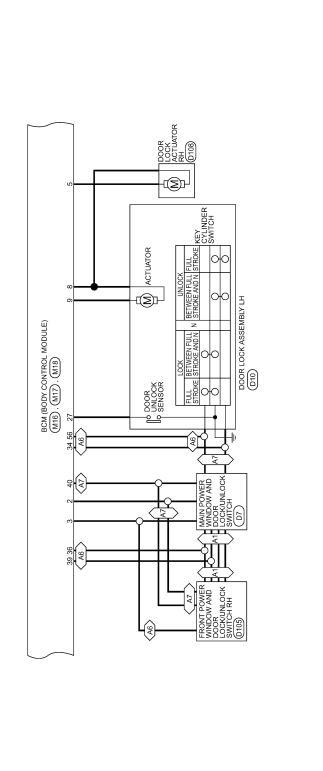
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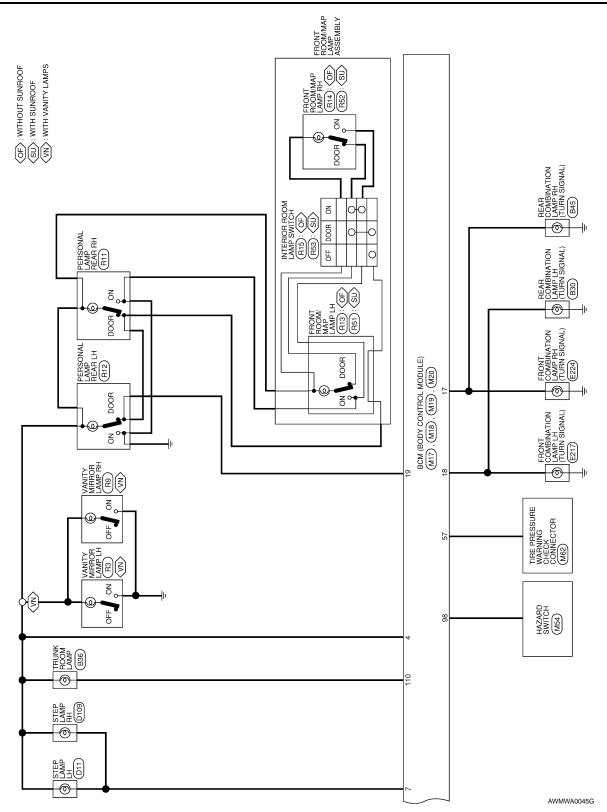
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Connector Name BCM (BODY CONTROL MODULE) Connector No. ပို Connector Name BCM (BODY CONTROL MODULE) BLACK M16

Connector Color

f

Connector No.

M17

H.S.		13
Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L
2	R/Y	P/W_POWER_SUPPL Y_PERM
3	٣٧	POWER_ WINDOW_ POWER_ SUPPLY (RAP)

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

DOOR_LOCK_STATUS

Signal Name

Color of Wire G/W

Terminal No.

27

	20	40
	21	41
	23	42
	35 34 33 32 31 30 29 28 27 26 25 24 23 22 21	50 49 48 47 46 45 44 43 42 41
	24	44
	25	45
	26	46
	27	47
17	28	48
	29	49
	30	50
	33	51
L	32	54 53 52
	33	53
	34	54
	35	55
	36	56
16	5	57
	38	58
偕、	39	59

	Signal Name	1	AUTO_LIGHT_SENSO B_INPLIT1	CLUTCH_SW	Т	STOP_LAMP_LOW_SW	I	STOP_LAMP_HIGH_SW
	Color of		P/B	R/Y	I	M/A	I	O/L
	Terminal No.	20	21	22	23	24	25	26

	FOB IN SW 1	ACC F/B	IGN F/B	AS_DOOR_SW	AIRCON SW	DOOR_KEY/C_ UNLOCK_SW	1	CENTRAL_UNLOCK_SW	TRUNK_CANCEL_SW	REAR_DEFOGGER_SW	CENTRAL_UNLOCK_SW	PW_K-LINE	PUSH_LED	S/L_LOCK_LED	1	1	GND_RF2_A/L	A/L_SENS_KEYLESS_ TUNER_POWER_SUP PLY
1	≻	٨٧	σ	R/B	SB	L/R	Т	GR	0	GR/W	GR/R	γ/G	Μ	н	I	I	Р	M/N
00	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46

Torminal No	Color of	Signal Name
	Wire	
6	G	CDL_DR/FL
10	G/Y	CDL_RR_RL_BACK
11	Y/R	BAT_BCM_FUSE
12	I	I
13	В	GND1
Ť		LOW_SIDE_PUSH_LE
±		D_OUTPUT
15	۲/L	ACC_LED
16	I	I
17	G/B	FR_FLASHER
18	G/Y	FL_FLASHER
19	≻	ROOM_LAMP_OUTPUT

1								-	_	_				
	Signal Name	KEYLESS_TUNER_SI	SHIFT_N/P		INPUT_5		INPUT_2	INPUT_3	INPUT_4	BLOWER_FAN_SW	DOOR_KEY/C_LOCK_	TPMS_MODE_TRIGG ER_SW	DR_DOOR_SW	REAR_DEFOGGER_ RLY
	Color of Wire	G/O	R/G	Р/О	LG/B	ΓW	G/B	LG/R	G/Y	BR/W	L/B	Μ	SB	G/R
	Terminal No.	47	48	49	50	51	52	53	54	55	56	57	58	59

BCM (BODY CONTROL MODULE)

6 - - 7 R/W STEP_LAMP_OUTPUT 8 V CDL_COMMON	Connector Color WHITE H.S. [4] 5 [6] 7 [1] Terminal No. Color of Wire 5 G/Y	Or WHI1 4 5 6 7 1112131 11122131 Color of Wire P/W	or WHITE 4 5 6 7 1 8 9 10 112 13 14 15 16 17 18 19 Color of Signal Name Wire ROOM_LAMP_BAT_ P/W ROOM_LAMP_BAT_ G/Y CDL_AS
×A ∧	9	Ι	-
>	7	R/W	STEP_LAMP_OUTPUT
	8	^	CDL_COMMON

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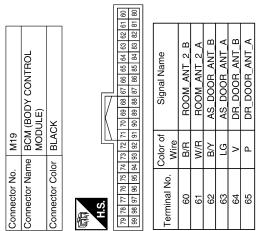
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Signal Name	-	ACC_CONT	AT_DEVICE_OUT	S/L_CONDITION_1	S/L_CONDITION_2	SHIFT_P	AS_REQUEST SWITCH	DR_REQUEST SWITCH	IGN2_CONT	RF1_POWER_SUPPLY	1	I	S/L_POWER_SUPPLY_ 12V		OUTPUT_4	OUTPUT_2
Color of Wire	I	Γ	Y/R	L/0	G/R	G/B	Ъ/Г	B/W	۲	L/R	I	I	G/Y	R/W	P/B	R/B
Terminal No.	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97

	_	_	_	_	_		_	_	_	_	_	_	_	_	_		_
Signal Name	MS_DAZARD_SW	S/L_K-LINE	ROOM_ANT_1_B	ROOM ANT 1 A	FOB_READER_CLOCK	FOB_READER_DATA	IGN_ELEC_CONT	RF1_TUNER_SIGNAL	I	I	OUTPUT_5	OUTPUT_3	ENG_START_SW	CAN-L	CAN-H	FOB_SLOT_ ILLUMINATION	IGN_ON_LED
Color of Wire	G/O	۲٧	В	G	G/O	0	R/B	L/0	I	I	R/Y	R/G	BR	Р	L	R/L	ГG
Terminal No.	98	66	66	67	68	69	70	71	72	73	75	76	77	78	79	80	81

Signal Name	Т	I	I	CDL_BACK_TRUNK	I	I	I	1	I	I	TRUNK_LAMP_OUTPUT	I	
Color of Wire	-	-	-	٨	-	I	Ι	I	I	Ι	V/W	I	
Terminal No.	100	101	102	103	104	105	106	107	108	109	110	111	



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Connector No. M20	Connector Name BCM (BODY CONTROL MODULE)	Connector Color WHITE	Connector No. M Connector Name B M Connector Color W	A20 SCM (BODY CONTROL AODULE) WHITE
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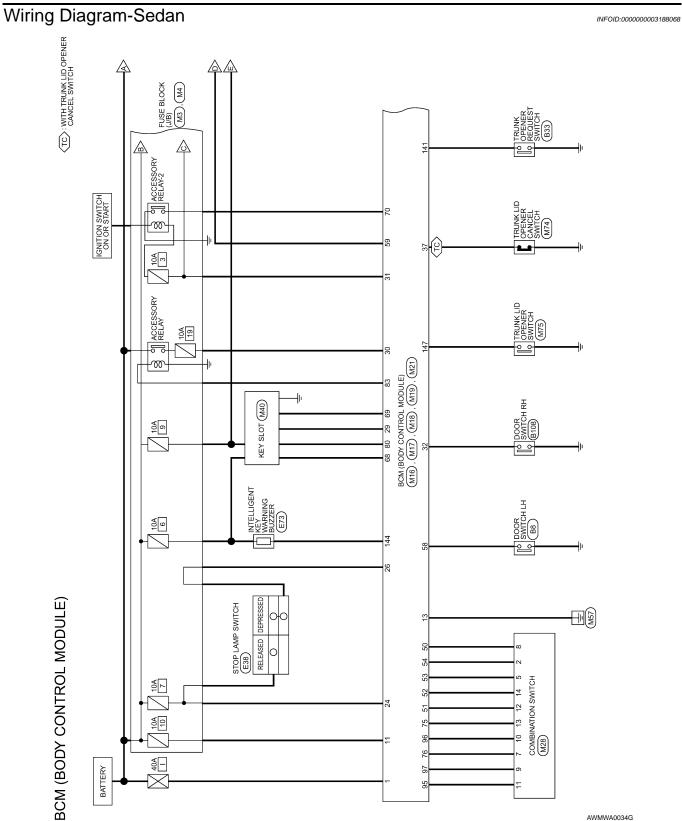


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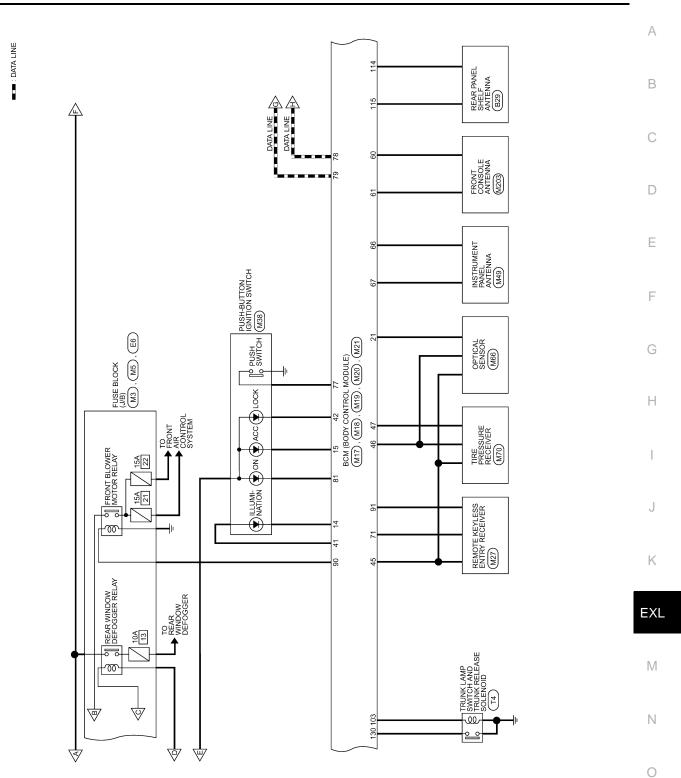
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TION SWITCH IION	В
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No. No. M28 Name COMBI Color WHITE Color WHITE Color of R/B R/B R/B R/M R/B R/M R/B R/M R/B R/M R/B R/M R/B R/M R/M R/M R/M R/M R/M R/M R/M R/M R/M	D
Connector No. Connector Name Connector Name Connector Name Terminal No. Connector Color 1 1 1 1 1 1 1 1 1 1 1 1 1	E
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Signal Name BACK DOOR ANT A 	G
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Y CONTROL X CONTROL 3 0 119 119 119 119 119 119 119 119 119 1	EXL
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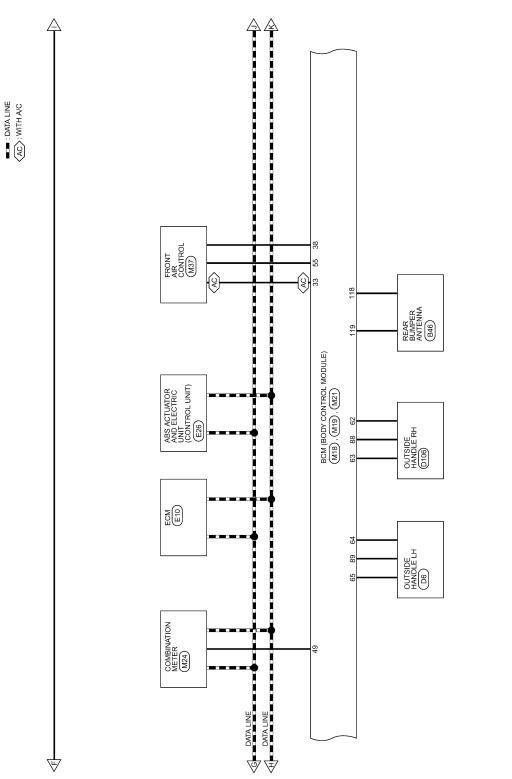


BCM (BODY CONTROL MODULE)

AWMWA0035G

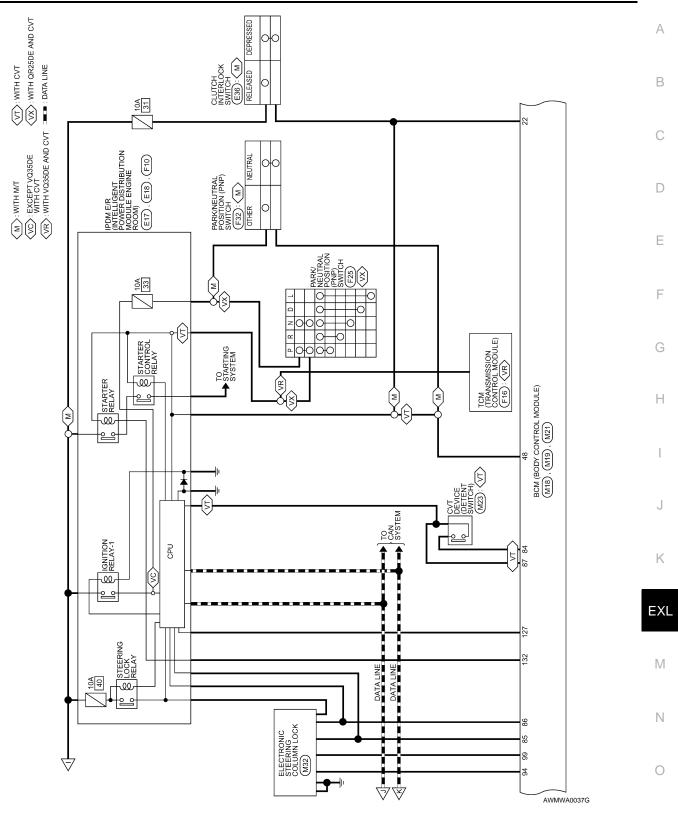
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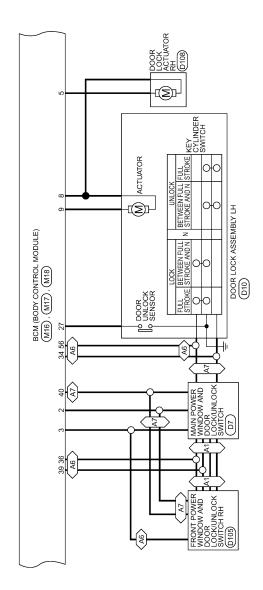


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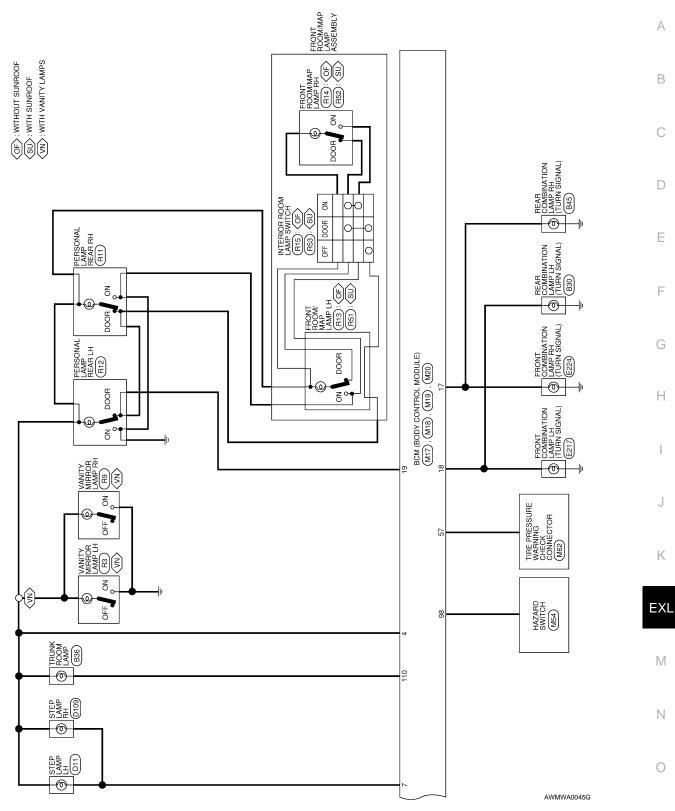
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AWMWA0038G

BCM (BODY CONTROL MODULE)

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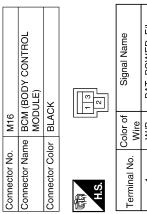
BCM (BODY	CONTROL	MODULE)
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Signal Name	CDL_DR/FL	CDL_RR_RL_BACK	BAT_BCM_FUSE	-	GND1	LOW_SIDE_PUSH_LE D_OUTPUT	ACC_LED	-	FR_FLASHER	FL_FLASHER	ROOM_LAMP_OUTPUT
Color of Wire	IJ	Ъ/Ю	Н/Y	T	В	B R/Y		Т	G/B	6/۲	≻
Terminal No.	6	10	11	12	13	14	15	16	17	18	19

_														
č	Signal Name	KEYLESS_TUNER_SI	SHIFT_N/P	IMMO_LED	INPUT_5		INPUT_2	INPUT_3	INPUT_4	BLOWER_FAN_SW	SW SW	TPMS_MODE_TRIGG ER_SW	DR_DOOR_SW	REAR_DEFOGGER_ RLY
	Color of Wire	G/O	R/G	L/O	LG/B	L/W	G/B	LG/R	G/Y	BR/W	L/B	Μ	SB	G/R
	Terminal No.	47	48	49	50	51	52	53	54	55	56	57	58	59

	BCM (BODY CONTROL MODULE)	TE	7 8 9 10 4 15 16 17 18 19	Signal Name		ROOM_LAMP_BAT_ SAVER	CDL_AS	-	STEP_LAMP_OUTPUT	CDL_COMMON
M17		or WHITE	4 5 6 7 <u></u> 11 12 13 14 15	Color of	Wire	P/W	G/Y	I	R/W	^
Connector No.	Connector Name	Connector Color	H.S.	Torminal No		4	5	9	7	8

CDL_COMMON	Signal Name	DOOR_LOCK_STATUS	-	FOB_IN_SW_1	ACC_F/B	IGN_F/B	AS_DOOR_SW	AIRCON_SW	UNLOCK_SW DOOR_KEY/C_	-	CENTRAL_UNLOCK_SW	TRUNK_CANCEL_SW	REAR_DEFOGGER_SW	CENTRAL_UNLOCK_SW	PW_K-LINE	PUSH_LED	S/L_LOCK_LED	I	I	GND_RF2_A/L	A/L_SENS_KEYLESS_ TUNER_POWER_SUP DI V	
>	Color of Wire	G/W	I	۲	V/Y	ŋ	R/B	SB	H/J	Т	GR	0	GR/W	GR/R	γ/G	Μ	щ	I	I	Ч	M/N	
8	Terminal No.	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	



P/W_POWER_SUPPL Y_PERM POWER_WINDOW_ POWER_SUPPLY (RAP)	N N	
POWER_WINDOW_ POWER_SUPPLY (RAP)	٦	
P/W_POWER_SUPPL Y_PERM	R/Y	
BAT_POWER_F/L	W/B	
•	Wire	
signal Name		_

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



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	51	4		
	22	42		
	53	43		
	24	4		e l
	25	45		lan
	26	46		Signal Name
	27	47		l uf
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V	29	49		
Ν	30	50		
\square	31	51		Ŧ
	32	52		Color of
	33	53		1 S
	34	54		0
	35	55		4
	36	56		
	37	57		
	39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20	59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40		
	39	59		Torminal No.

Signal Name	-	AUTO_LIGHT_SENSO R_INPUT1	CLUTCH_SW	1	STOP_LAMP_LOW_SW	I	STOP_LAMP_HIGH_SW
Color of Wire	-	B/A	R/Y	I	M/A	I	0/L
Terminal No.	20	21	22	23	24	25	26

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	me NT OUT P SUPPLY SUPPLY SUPPLY	
Mis Terminal No. Terminal	me NT OUT SUPPLY SUPPLY SUPPLY	
M19 biologono Terminal No. M10 biologono Fight Name biologono Biologono Signal Name biologono	Signal Na Signal Na ACC_CO ACC_CO AT_DEVICE S/L_CONDITI S/L_CONDI S/L_CONDITI S/L_CONDITI S/L_CONDITI S/L_CONDITI	
M19 EXM BODY CONTROL BLACK M19 EXM BODY CONTROL BLACK Exm BoDY CONTROL BLACK Exm BoDY CONTROL BLACK Exm BoDM ANT 1 A BLACK Exm BoDM ANT 1 B BLACK Exm BoDM ANT 1 B BLACK Exm BoDM ANT 1 A BLACK Exm BoDM ANT 1 A BLACK Exm BoDM ANT 2 B BLACK E	Color of Wire Color of Color	
M19 ECM (BODY CONTROL BCM (BODY CONTROL BLACK Terminal No. Color of GOD BLACK ELACK EGM (BODY CONTROL BLACK EGM (BODY CONTROL BLACK BLACK EGM (BODY CONTROL BLACK EGM (BODY CONTROL FILL EGM (BODY CONTROL FILL Display algoing of the fill of going of the fill of the fill of the fill of the fill of going of the fill of the fill of the fill of going of the fill of going of the fill of going of the fill of the fi	Terminal No. 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98	
M19 BEM (BODY CONTROL BEM (BODY CONTROL BLACK Terminal No. Color of mine BEM (BODY CONTROL BLACK EM Eminal No. Color of mine BLACK EM EG E BLACK E E E BLA E E E	Signal Name HAZARD_SW S/L_K-LINE ROOM ANT 1 B ROOM ANT 1 A FOB_READER_CLOCK FOB_READER_LOCK FOB_READER_LOCK FOB_READER_DATA IGN ELEC_CONT RF1_TUNER_SIGNAL 	
M19 Terminal No. BCM (BODY CONTROL BCM (BODY CONTROL BCM (BODY CONTROL BCM (BODY CONTROL BLACK BCM (BODY CONTROL BLA BCM (BODY CONTROL Mire Coord Mire Signal Name Mire Coord Mire BCM (BODY CONTROL Mire BCM (BODY CONTROL Mire Coord MODULE MODULE M		
M19 BLACK MODULE) BLACK BCM (BODY CONTROL MODULE) BLACK BLACK BLACK Signal Name Mire Mire Mire Mire Mire Mire MoDULE) WIR ROOM ANT 2 B BV AS DOOR ANT 2 B DR DOOR ANT 2 B DR DOOR ANT 2 B MODULE) WHITE WHIT		
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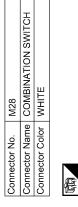
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OUTPUT 5 OUTPUT 2 INPUT_1

L/W G/B

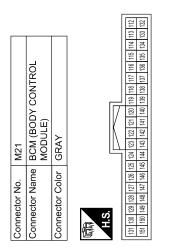
13 13 13 14



H.S.

10 11 12 13 14	Signal Name	INPUT 4	INPUT 3	OUTPUT_3	INPUT_5	OUTPUT_2	OUTPUT_4	OUTPUT_1	
7 8 9 10	Color of Wire	λ/9	LG/R	R/G	LG/B	R/B	P/B	R/W	
	Terminal No.	2	5	7	8	6	10	11	

Terminal No.	Color of Wire	Signal Name
119	BR/W	BACK DOOR ANT A
120	-	T
121	-	Ι
122	Т	I
123	I	I
124	-	-
125	Т	I
126	I	I
127	BR/W	IGN_USM_CONT1
128	1	I
129	I	-
130	λ/G	TRUNK_SW
131	-	-
132	Я	ST_CONT_USM
133	I	1
134	I	I
135	I	I
136	T	I
137	I	I
138	I	I
139	I	I
140	I	I
141	G/R	TRUNK_REQUEST_SW
142	-	-
143	I	I
144	GR	BUZZER
145	I	I
146	I	I
147	L/R	BACK_TRUNK_ OPENER
148	I	1
149	I	I
150	I	I
151	I	I



Fail Safe

AWMIA0077GB

INFOID:000000003188069

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTTENA AMP	Inhibit engine cranking	Erase DTC

< ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Erase DTC
B2557: VEHICLE SPEED	Inhibit electronic steering column lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistentStarter control relay signalStarter relay status signal
B2562: LO VOLTAGE	 Inhibit engine cranking Inhibit electronic steering column lock 	100 ms after the power supply voltage increases to more than 8.8 V
B2563: HI VOLTAGE	 Inhibit engine cranking Inhibit electronic steering column lock 	500 ms after the power supply voltage decreases to less than 18 V
B2601: SHIFT POSITION	Inhibit electronic steering column lock	 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN)
B2602: SHIFT POSITION	Inhibit electronic steering column lock	 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Vehicle speed: 4 /h or more
B2603: SHIFT POSI STATUS	Inhibit electronic steering column lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit electronic steering column lock	 500 ms after any of the following BCM recognition conditions is fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (battery voltage) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit electronic steering column lock	 500 ms after any of the following BCM recognition conditions is fulfilled Ignition switch is in the ON position Power position: IGN Selector lever P/N position signal: Except P and N positions (0 V) Interlock/PNP switch signal (CAN): OFF Status 2 Ignition switch is in the ON position Selector lever P/N position signal: P or N position (battery voltage) PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has become consistent Electronic steering column lock relay signal (Request signal) Electronic steering column lock relay signal (Condition signal)

< ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has become consistent Electronic steering column lock relay signal (Request signal) Electronic steering column lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B2609: S/L STATUS	 Inhibit engine cranking Inhibit electronic steering column lock 	 When the following electronic steering column lock conditions agree BCM electronic steering column lock control status Electronic steering column lock condition No. 1 signal status Electronic steering column lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilledPower position changes to ACCReceives engine status signal (CAN)
B2612: S/L STATUS	 Inhibit engine cranking Inhibit electronic steering column lock 	 When any of the following conditions is fulfilled Electronic steering column lock unit status signal (CAN) is received normally The BCM electronic steering column lock control status matches the electronic steering column lock status recognized by the electronic steering column lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM be- comes normal
B2619: BCM	Inhibit engine cranking	1 second after the electronic steering column lock unit power sup- ply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilledPower position changes to ACCReceives engine status signal (CAN)

DTC Inspection Priority Chart

INFOID:000000003188070

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

Priority	DTC
1	B2562: LOW VOLTAGE B2563: HI VOLTAGE B261E: VEHICLE TYPE
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
3	 B2190: NATS ANTTENA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM

< ECU DIAGNOSIS >

Priority	DTC	
	B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM	A
	 B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW 	В
	 B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION 	С
	 B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW 	D
4	 B2606: S/L RELAY B2607: S/L RELAY B2608: STARTER RELAY B2609: S/L STATUS B260A: IGNITION RELAY 	Е
·	 B260B: STEERING LOCK UNIT B260C: STEERING LOCK UNIT B260D: STEERING LOCK UNIT B260F: ENG STATE SIG LOST 	F
	 B2611: ACC RELAY B2612: S/L STATUS B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC 	G
	 B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2619: BCM 	Н
	 B261A: PUSH-BTN IGN SW B26E1: ENG STATE NO RECIV C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG 	I
	C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR	J
	 C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR 	K
	 C1711: [NO DATA] RL C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR 	EXL
5	 C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR 	Μ
	 C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1720: [CODE ERR] FL 	Ν
	 C1721: [CODE ERR] FR C1722: [CODE ERR] RR C1723: [CODE ERR] RL C1724: [BATT VOLT LOW] FL 	0
	 C1725: [BATT VOLT LOW] FR C1726: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RL C1734: CONTROL UNIT 	Ρ
6	B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA	

< ECU DIAGNOSIS >

DTC Index

INFOID:000000003188071

NOTE:

Details of time display

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

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	PCS-54
U1010: CONTROL UNIT (CAN)	_	_	_	PCS-55
U0415: VEHICLE SPEED SIG	_		_	<u>BCS-33</u>
B2013: ID DISCORD BCM-S/L	×		_	<u>SEC-41</u>
B2014: CHAIN OF S/L-BCM	×		_	<u>SEC-42</u>
B2190: NATS ANTTENA AMP	×		_	<u>SEC-34</u>
B2191: DIFFERENCE OF KEY	×		_	<u>SEC-38</u>
B2192: ID DISCORD BCM-ECM	×		_	<u>SEC-39</u>
B2193: CHAIN OF BCM-ECM	×	_	_	<u>SEC-40</u>
B2553: IGNITION RELAY				PCS-56
B2555: STOP LAMP				<u>SEC-46</u>
B2556: PUSH-BTN IGN SW		×	_	<u>SEC-49</u>
B2557: VEHICLE SPEED	×	×		<u>SEC-51</u>
B2560: STARTER CONT RELAY	×	×	_	<u>SEC-52</u>
B2562: LOW VOLTAGE				BCS-34
B2563: HI VOLTAGE	×	×		BCS-35
B2601: SHIFT POSITION	×	×		<u>SEC-53</u>
B2602: SHIFT POSITION	×	×	_	<u>SEC-57</u>
B2603: SHIFT POSI STATUS	×	×	_	<u>SEC-60</u>
B2604: PNP SW	×	×		<u>SEC-64</u>
B2605: PNP SW	×	×		<u>SEC-66</u>
B2606: S/L RELAY	×	×		<u>SEC-68</u>
B2607: S/L RELAY	×	×	_	<u>SEC-69</u>
B2608: STARTER RELAY	×	×	_	<u>SEC-71</u>
B2609: S/L STATUS	×	×	_	<u>SEC-73</u>
B260A: IGNITION RELAY	×	×	_	PCS-58
B260B: STEERING LOCK UNIT		×	_	<u>SEC-78</u>
B260C: STEERING LOCK UNIT		×	_	<u>SEC-79</u>
B260D: STEERING LOCK UNIT		×	_	<u>SEC-80</u>
B260F: ENG STATE SIG LOST	×	×	_	<u>SEC-81</u>
B2611: ACC RELAY			_	PCS-59
B2612: S/L STATUS	×	×	_	<u>SEC-83</u>

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning Iamp ON	Reference page	1
B2614: ACC RELAY CIRC	_	×	_	PCS-61	•
B2615: BLOWER RELAY CIRC	—	×		PCS-64	
B2616: IGN RELAY CIRC	_	×		PCS-67	•
B2617: STARTER RELAY CIRC	×	×		<u>SEC-88</u>	(
B2618: BCM	×	×		PCS-70	
B2619: BCM	×	×		<u>SEC-90</u>	•
B261A: PUSH-BTN IGN SW	_	×		<u>SEC-91</u>	
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	_	<u>SEC-94</u>	
B2621: INSIDE ANTENNA	—	—	—	<u>DLK-44</u>	
B2622: INSIDE ANTENNA	_	—	—	<u>DLK-47</u>	•
B2623: INSIDE ANTENNA	—	—		<u>DLK-50</u>	
B26E1: ENG STATE NO RES	×	×		<u>SEC-82</u>	•
C1704: LOW PRESSURE FL	—	—	×	<u>WT-23</u>	•
C1705: LOW PRESSURE FR	_	_	×	<u>WT-23</u>	(
C1706: LOW PRESSURE RR	—	_	×	<u>WT-23</u>	•
C1707: LOW PRESSURE RL	_	—	×	<u>WT-23</u>	
C1708: [NO DATA] FL	_	_	×	<u>WT-13</u>	-
C1709: [NO DATA] FR	—	_	×	<u>WT-13</u>	•
C1710: [NO DATA] RR	—	—	×	<u>WT-13</u>	•
C1711: [NO DATA] RL	—	_	×	<u>WT-13</u>	•
C1712: [CHECKSUM ERR] FL	_	_	×	<u>WT-14</u>	•
C1713: [CHECKSUM ERR] FR	—	_	×	<u>WT-14</u>	•
C1714: [CHECKSUM ERR] RR	_	_	×	<u>WT-14</u>	
C1715: [CHECKSUM ERR] RL	_	_	×	<u>WT-14</u>	-
C1716: [PRESSDATA ERR] FL	_	_	×	<u>WT-15</u>	
C1717: [PRESSDATA ERR] FR	_	_	×	<u>WT-15</u>	
C1718: [PRESSDATA ERR] RR	—	_	×	<u>WT-15</u>	E
C1719: [PRESSDATA ERR] RL	_	_	×	<u>WT-15</u>	•
C1720: [CODE ERR] FL	-	—	×	<u>WT-14</u>	-
C1721: [CODE ERR] FR	-	—	×	<u>WT-14</u>	. 1
C1722: [CODE ERR] RR	_	—	×	<u>WT-14</u>	•
C1723: [CODE ERR] RL	_	_	×	<u>WT-14</u>	-
C1724: [BATT VOLT LOW] FL			×	<u>WT-14</u>	•
C1725: [BATT VOLT LOW] FR			×	<u>WT-14</u>	•
C1726: [BATT VOLT LOW] RR		—	×	<u>WT-14</u>	-
C1727: [BATT VOLT LOW] RL		_	×	<u>WT-14</u>	
C1729: VHCL SPEED SIG ERR		_	×	<u>WT-16</u>	-

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

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

Reference Value

INFOID:000000003188072

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	(Condition	Value/Status
RADFAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	0 - 100 %
		A/C switch OFF	Off
AC COMP REQ	Engine running	A/C switch ON (Compressor is operating)	On
TAIL&CLR REQ	Lighting switch OFF		Off
TAILOULK REQ	Lighting switch 1ST, 2ND, HI or	AUTO (Light is illuminated)	On
	Lighting switch OFF		Off
HL LO REQ	Lighting switch 2ND HI or AUTC	(Light is illuminated)	On
	Lighting switch OFF		Off
HL HI REQ	Lighting switch HI		On
		Front fog lamp switch OFF	Off
FR FOG REQ	Lighting switch 2ND or AUTO (Light is illuminated)	 Front fog lamp switch ON Daytime running light activated (Only for Canada models) 	On
		Front wiper switch OFF	STOP
	Ignition switch ON	Front wiper switch INT	1LOW
FR WIP REQ		Front wiper switch LO	Low
		Front wiper switch HI	Hi
		Front wiper stop position	STOP P
WIP AUTO STOP	Ignition switch ON	Any position other than front wiper stop position	ACT P
		Front wiper operates normally	Off
WIP PROT	Ignition switch ON	Front wiper stops at fail-safe opera- tion	BLOCK
	Ignition switch OFF or ACC		Off
IGN RLY1 -REQ	Ignition switch ON		On
	Ignition switch OFF or ACC		Off
IGN RLY	Ignition switch ON	On	
	Release the push-button ignition	a switch	Off
PUSH SW	Press the push-button ignition sy	witch	On
	Ignition switch ON	CVT selector lever in any position other than P or N (CVT models)	
	-	Release clutch pedal (M/T models)	
INTER/NP SW	Ignition switch ON	CVT selector lever in P or N posi- tion (CVT models) Depress clutch pedal (M/T models)	On
	Ignition switch ON		Off
ST RLY CONT	At engine cranking		On

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
	Ignition switch ON	Off
IHBT RLY -REQ	At engine cranking	On
	Ignition switch ON	Off
	At engine cranking	ST →INHI
ST/INHI RLY	The status of starter relay or starter control relay cannot be recognized by the battery voltage malfunction, etc. when the starter relay is ON and the starter control relay is OFF	UNKWN
DETENT SW	Ignition switch ON • Press the selector button with CVT selector lever in P position • CVT selector lever in P position • CVT selector lever in any position other than P	Off
	Release the CVT selector button with CVT selector lever in P position NOTE: The lever is fixed ON for M/T	On
	None of the conditions below are present	Off
S/L RLY -REQ	 Open the driver door after the ignition switch is turned OFF (for a few seconds) Press the push-button ignition switch when the steering lock is activated Depress the clutch pedal when the steering lock is activated 	On
	Steering lock is activated	LOCK
S/L STATE	Steering lock is deactivated	UNLK
	[DTC B210A] is detected	UNKWN
DTRL REQ	NOTE: This item is displayed, but cannot be monitored.	Off
	Ignition switch OFF, ACC or engine running	Open
OIL P SW	Ignition switch ON	Close
	Not operated	Off
THFT HRN REQ	 Panic alarm is activated Horn is activated with VEHICLE SECURITY (THEFT WARNING) SYSTEM 	On
	Not operated	Off
HORN CHIRP	Door locking with Intelligent Key (horn chirp mode)	On
CRNRNG LMP REQ	NOTE: This item is displayed, but cannot be monitored.	Off

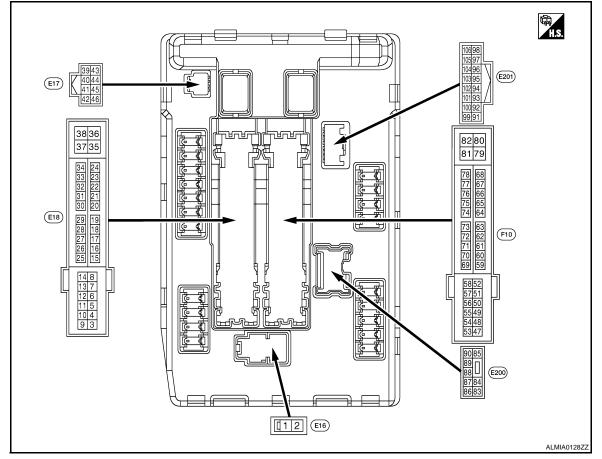
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< ECU DIAGNOSIS >

TERMINAL LAYOUT



PHYSICAL VALUES

	inal No.	Description				Value
(VVire +	e color)	Signal name	Input/ Output		Condition	(Approx.)
1 (R)	Ground	Battery power supply	Input	Ignition swi	tch OFF	Battery voltage
2 (B/Y)	Ground	Battery power supply	Input	Ignition swi	tch OFF	Battery voltage
4	Ground	Front wiper LO	Output	Ignition	Front wiper switch OFF	0 V
(L/R)	Ground		Output	switch ON	Front wiper switch LO	Battery voltage
5	Ground	Front wiper HI	Output	Ignition	Front wiper switch OFF	0 V
(L/B)	Ground		Output	switch ON	Front wiper switch HI	Battery voltage
6 (SB)	Ground	Daytime light relay power supply (Canada models only)	Output	Ignition swi	tch OFF	Battery voltage
7	Ground	Tail, license plate lamps &	Output	Ignition	Lighting switch OFF	0 V
(R/L)	Giouna	interior lamps	Output	switch ON	Lighting switch 1ST	Battery voltage
10				Ignition switch OFF (For a few seconds after turning ignition switch OFF)		0 V
(R/B)	Ground ECM relay power supply Output		Output	 Ignition switch ON Ignition switch OFF (More than a few seconds after turn- ing ignition switch OFF) 		Battery voltage

Terminal No.		Description					
(Wire +	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)	
				Ignition switch OFF	A few seconds after open- ing the driver door	Battery voltage	
11 (P/L)	Ground	Steering lock unit power supply	Output	Ignition switch LOCK	Press the push-button ig- nition switch	Battery voltage	
				Ignition swi	itch ACC or ON	0 V	
12 (B)	Ground	Ground	_	Ignition swi	itch ON	0 V	
40					tely 1 second or more after ignition switch ON	0 V	
13 (W)	Ground	Fuel pump power supply	Output		nately 1 second after turning on switch ON unning	Battery voltage	
15	Ground	Ignition relay-1 power sup-	Output	Ignition swi	itch OFF	0 V	
(G/W)	Ground	ply	Output	Ignition swi	itch ON	Battery voltage	
16				Ignition	Front wiper stop position	0 V	
(L/Y)	Ground	Front wiper auto stop	Input	switch ON	Any position other than front wiper stop position	Battery voltage	
19	Ground	Ignition relay-1 power sup-	Output	Ignition swi	itch OFF	0 V	
(L/Y)	Ground	ply	Output	Ignition swi	itch ON	Battery voltage	
20 (B/Y)	Ground	Ambient sensor ground	_	Ignition swi	itch ON	0V	
21 (O/B)	Ground	Ambient sensor	—	Ignition swi	itch ON	5V	
22 (W/R)	Ground	Refrigerent pressure sen- sor ground	_	Ignition swi	itch ON	OV	
23 (B/R)	Ground	Refrigerent pressure sen- sor	_	Both A/C	witch ON (READY) switch and blower motor N (electric compressor oper-	1.0 - 4.0V	
24 (BR/ W)	Ground	Refrigerent pressure sen- sor power supply		Ignition swi	itch ON	5V	
25	Ground	Ignition relay-1 power sup-	Output	Ignition swi	itch OFF	0 V	
(GR)	Cround	ply	Sulput	Ignition swi	itch ON	Battery voltage	
27 (PP/	Ground	Ignition relay manitor	Inn4	Ignition swi	itch OFF or ACC	Battery voltage	
(BR/ W)	Ground	Ignition relay monitor	Input	Ignition switch ON		0 V	
28	0	Push-button ignition	Jan 10	Press the push-button ignition switch		0 V	
(BR)	Ground	switch	Input	Release the push-button ignition switch		Battery voltage	
				CVT mod- els	CVT selector lever in any position other than P or N (ignition switch ON)	0 V	
30 (R/B)	Ground	Starter relay control	Input		CVT selector lever P or N (ignition switch ON)	Battery voltage	
				M/T mod- els	Release the clutch pedal	0 V	
				010	Depress the clutch pedal	Battery voltage	

< ECU DIAGNOSIS >

	nal No.	Description				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
32	0	Electronic steering column		Electronic steering column lock is activated		0 V
(L/O)	Ground	lock unit condition-1	Input	Electronic s tivated	steering column lock is deac-	Battery voltage
33	Cround	Electronic steering column	lanut	Electronic s	steering column lock is acti-	Battery voltage
(G/R)	Ground	lock unit condition-2	Input	Electronic s tivated	steering column lock is deac-	0 V
34	Cround	Cooling for roley 2 control	الم معال	Ignition swi	tch OFF or ACC	0 V
(O/L)	Ground	Cooling fan relay-3 control	Input	Ignition swi	tch ON	0.7 V
35	Onessed		Outrast	Ignition swi	tch OFF or ACC	0 V
(L/B)	Ground	Cooling fan motor control	Output	Ignition swi	tch ON	0.7 V
36 (G)	Ground	Battery power supply	Input	Ignition swi	tch OFF	Battery voltage
38	Cround	Cooling for motor control	Quitout	Ignition swi	tch OFF or ACC	0 V
(R/W)	Ground	Cooling fan motor control	Output	Ignition swi	tch ON	0.7 V
39 (P)	—	CAN - L	Input/ Output		_	_
40 (L)		CAN - H	Input/ Output		_	_
41 (B)	Ground	Ground	_	Ignition swi	tch ON	0 V
42	Ground	Cooling fan relay-2 control	Input	Ignition swi	tch OFF or ACC	0 V
(SB)	Giouna	Cooling lan relay-2 control	input	Ignition swi	tch ON	0.7 V
					Press the CVT selector button (CVT selector lever P)	Battery voltage
43 (G/B)	Ground	CVT device (Detention switch)	Input	Ignition switch ON	 CVT selector lever in any position other than P Release the CVT selec- tor button (CVT selector lever P) 	0 V
44	Ground	Horn relay control	Input	The horn is	deactivated	Battery voltage
(G/W)	Cround	Hom relay control	mput	The horn is	activated	0 V
45	Ground	Anti theft horn relay control	Input	The horn is	deactivated	Battery voltage
(L/O)	Ground	And their non relay control	mput	The horn is	activated	0 V
				CVT mod- els	CVT selector lever in any position other than P or N (ignition switch ON)	0 V
46 (R)	Ground	Starter relay control	Input		CVT selector lever P or N (ignition switch ON)	Battery voltage
				M/T mod-	Release the clutch pedal	0 V
				els	Depress the clutch pedal	Battery voltage
					A/C switch OFF	0 V
48 (Y/R)	Ground	A/C relay power supply	Output	Engine running	A/C switch ON (A/C compressor is oper- ating)	Battery voltage

Terminal No.		Description			Value	
(Wire +	e color) _	Signal name	Input/ Output	Condition	Value (Approx.)	
49 (R/B) (with VQ35				Ignition switch OFF (For a few seconds after turning ignition switch OFF)	0 V	
DE) (B/R) (with- out VQ35 DE)	Ground	ECM relay power supply	Output	 Ignition switch ON Ignition switch OFF (More than a few seconds after turn- ing ignition switch OFF) 	Battery voltage	
51 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF Ignition switch ON	0 V Battery voltage	
				Ignition switch OFF	0 V	
52 (Y/G)	Ground	Ignition relay power supply	Output	Ignition switch ON	Battery voltage	
50				Ignition switch OFF (For a few seconds after turning ignition switch OFF)	0 V	
53 (R/B)	Ground	ECM relay power supply	Output	 Ignition switch ON Ignition switch OFF (More than a few seconds after turn- ing ignition switch OFF) 	Battery voltage	
54		Throttle control motor re-		Ignition switch OFF (For a few seconds after turning ignition switch OFF)	0 V	
(G/W)	Ground	lay power supply	Output	 Ignition switch ON Ignition switch OFF (More than a few seconds after turn- ing ignition switch OFF) 	Battery voltage	
55 (W/L)	Ground	ECM power supply	Output	Ignition switch OFF	Battery voltage	
56	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V	
(R/Y)	Ground		Output	Ignition switch ON	Battery voltage	
57	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V	
(O)	oround	iginiter relay power suppry	Output	Ignition switch ON	Battery voltage	
58	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V	
(Y)	0.00.00	.g	o aip ai	Ignition switch ON	Battery voltage	
69				Ignition switch OFF (For a few seconds after turning ignition switch OFF)	Battery voltage	
(W/B)	Ground	ECM relay control	Output	 Ignition switch ON Ignition switch OFF (More than a few seconds after turn- ing ignition switch OFF) 	0 - 1.5 V	
70 (O)	Ground	Throttle control motor re- lay control	Output	Ignition switch $ON \rightarrow OFF$	0 -1.0 V ↓ Battery voltage ↓ 0 V	
					-	

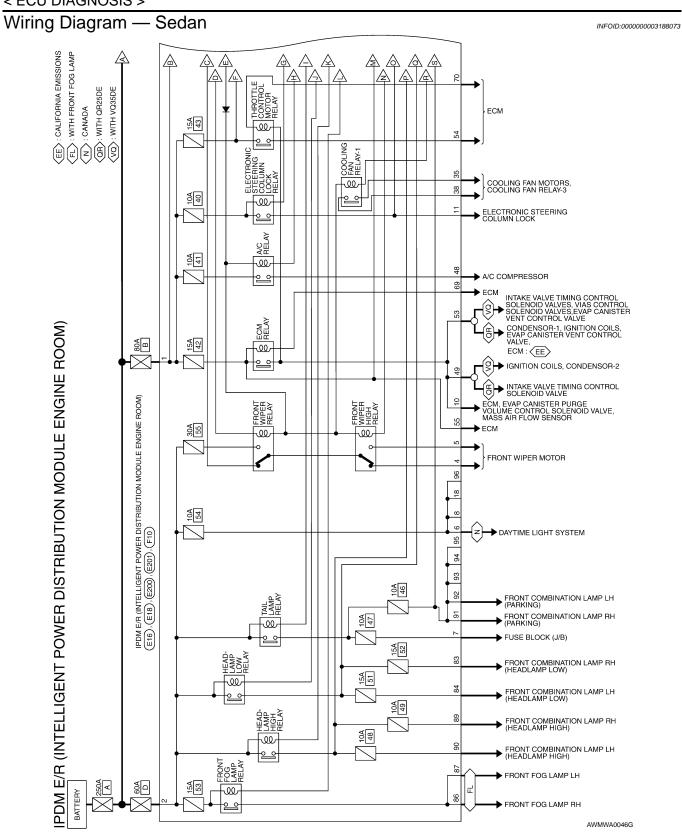
Terminal No.		Description				Value	
(Wire +	e color) _	Signal name	Input/ Output		Condition	Value (Approx.)	
72 (R/B)	Ground	PNP switch signal	Input	Ignition switch ON	CVT selector lever in P or N position CVT selector lever in any position other than P or N	Battery voltage	
74 (Y)	Ground	Ignition relay power supply	Output	Ignition swi	position tch OFF	0 V	
(1)				Ignition swi		Battery voltage	
75 (P/L)	Ground	Oil pressure switch	Input	Ignition switch ON	Engine stopped Engine running	0 V Battery voltage	
				Ignition swi	itch ON	(V) 6 4 2 0 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	
76 (GR)	Ground	Power generation com- mand signal	Output		on "Active test", "ALTERNA- /" of "ENGINE"	(V) 6 4 0 1 4 2 m 4 2 m 5 1 1 1 1 1 1 1 1 1 1 1 1 1	
					on "Active test", "ALTERNA- " of "ENGINE"	(V) 6 2 0 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	
77 (B/R)	Ground	Fuel pump relay control	Output	the ignition • Engine re Approximation	nately 1 second after turning on switch ON unning tely 1 second or more after ignition switch ON	0 - 1.0 V Battery voltage	
80 (B/W)	Ground	Starter motor	Output	At engine cranking		Battery voltage	
83 (R/Y)	Ground	Headlamp LO (RH)	Output	Ignition switch ON	Lighting switch OFF Lighting switch 2ND	0 V Battery voltage	
84 (L)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V Battery voltage	
86 (W/R)	Ground	Front fog lamp (RH)	Output	Lighting switch 2ND	 Front fog lamp switch ON Daytime running light activated (Only for Can- ada models) Front fog lamp switch OFF 	Battery voltage	

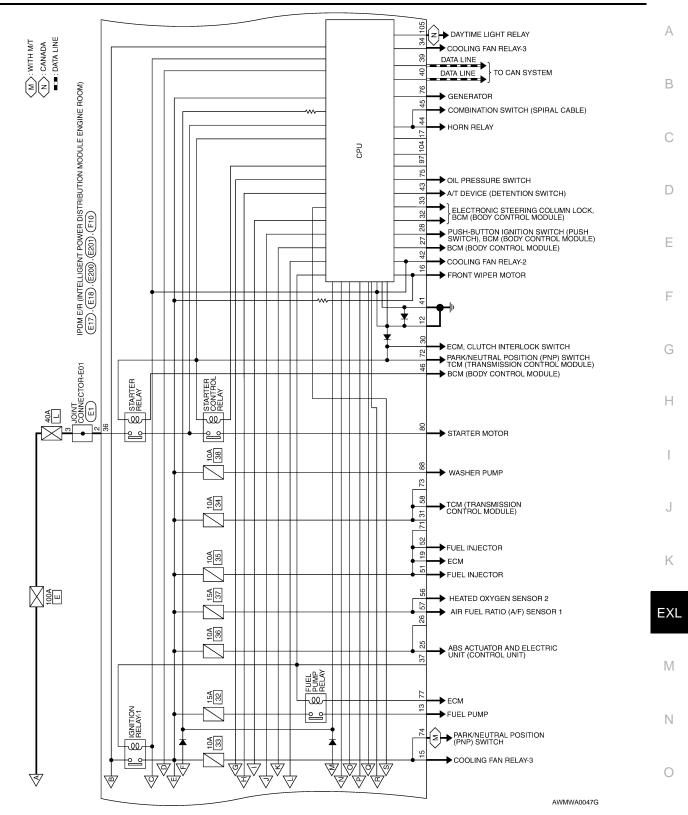
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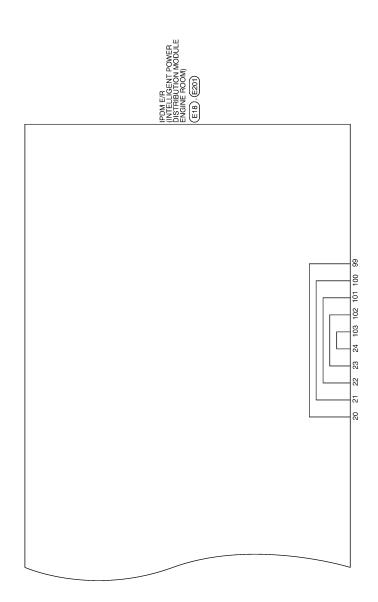
	inal No.	Description				Value	_
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
87 (L/Y)	Ground	Front fog lamp (LH)	Output	Lighting switch 2ND	 Front fog lamp switch ON Daytime running light activated (Only for Can- ada models) 	Battery voltage	E
					Front fog lamp switch OFF	0 V	_ (
88 (R/W)	Ground	Washer pump power sup- ply	Output	Ignition swi	itch ON	Battery voltage	
89	Ground	Headlamp HI (RH)	Output	Ignition	Lighting switch HIlighting switch PASS	Battery voltage	-
(L/W)				switch ON	Lighting switch OFF	0 V	E
90 (G)	Ground	Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch HILighting switch PASS	Battery voltage	-
(G)				Switch ON	Lighting switch OFF	0 V	F
91	Onerrow		Outrout	Ignition	Lighting switch 1ST	Battery voltage	_
(LG/ R)	Ground	Parking lamp (RH)	Output	switch ON	Lighting switch OFF	0 V	(
92				Ignition	Lighting switch 1ST	Battery voltage	
(LG/ B)	Ground	Parking lamp (LH)	Output	switch ON	Lighting switch OFF	0 V	_
99 (BR/ W)	Ground	Ambient sensor ground	_	Ignition swi	itch ON	0V	
100 (SB)	Ground	Ambient sensor	—	Ignition swi	itch ON	5V	_
101 (O/L)	Ground	Refrigerent pressure sen- sor ground	—	Ignition swi	itch ON	0V	_
102 (R/B)	Ground	Refrigerent pressure sen- sor	_	Both A/C	witch ON (READY) switch and blower motor N (electric compressor oper-	1.0 - 4.0V	ŀ
103 (P)	Ground	Refrigerent pressure sen- sor power supply	_	Ignition swi	itch ON	5V	E
105	Ground	Daytime light relay control	Output	Ignition switch ON	Daytime light system ac- tive	Battery voltage	
(V)	Giound	Daytime light relay control	Output	Ignition switch ON	Daytime light system inac- tive	0 V	N

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< ECU DIAGNOSIS >

													ЭС	SIG-E/R	WR-E/R	ECU		GNAL	RT_SW		I/L_SW	F NOIT	TION 2	I RLY HI	AN_LO	NSM		IR FAN	1	
	POWER DISTRIBUTION MODULE ENGINE ROOM)			Name	CAN-L	CAN-H	S-GND	MOTOR_FAN_RLY_MID	DETENT_SW	HORN_RLY	HORN_SW	START_CONT	Signal Name	PD_SENS_SIG-E/R	PD_SENS PWR-E/R	ABS_ECU	I	IGN_SIGNAL	PUSH_START_SW	I			SL CONDITION	MOTOR FAN RLY HI	MOTOR_FAN_LO	F/L_IGNSW	I	F/L MOTOR FAN		
	VER DISTR VER DISTR DULE ENGI	Ξ	41 40 39 45 44 43	Signal Name	Ŭ	Û	Υ.	MOTOR_F.	DETE	НОВ	НОН	STAR	Color of Wire	B/B	BR/W	GR	I	BR/W	BR	ı	R/B	<u>ا</u>	g/B	OL	ЦВ	σ		RМ	-	
		Color WHITE	42 4	D. Color of Wire	٩	Г	в	ß	G/B	G/V	9	æ	Terminal No.	23	24	25	26	27	28	29	30	31	33 %	34	35	36	37	38		
Connector No.		Connector Color	日 H.S.	Terminal No.	39	40	41	42	43	44	45	46				AB			MP		E/B	STOP		MS	ND-E/R	- E/B				
													Signal Name	I	I	ECM_VB	ESCL	P-GND	FUEL_PUMP	1	START_IG-E/R	WIPER_AUTOSTOP	1	RCM IGNISW	AMB SENS GND-E/R	AMR SFNS SIG-F/R	PD SENS GND-E/B			
	IBUTION NE ROOM)			Name	AAIN	NSU							Color of Wire	1	1	R/B	P/L	В	3	I	G/V	5	1	2	- 7	, a	N/B	1 1 / A A		
	IPDM E/R (IN I ELLIGEN I POWER DISTRIBUTION MODULE ENGINE ROOM)	CK		Signal Name	F/L_MAIN	F/L_USM							Terminal No.	8	6	10	11	12	13	14	15	16	18	e e	500	3 5	2 6	3		
		olor BLACK		Color of Wire	В	B/Υ									I	I			8	36						_				
Connector No.		Connector Color	和 H.S.	Terminal No.	-	5													37	35										
																			30 31 32 33 34	20 21 22 23 24										
	ECTOR-E01			Signal Name	1	1							TELLIGENT						25	15 16 17 18 19			Signal Name	-	FR_WIPER_LO	FR_WIPER_HI	DTRL	TAIL/ILLUMI		
	JOINT CONNECTOR- WHITE		2 5										18 DM E/B (IN	OWER DIS	MUUUULE EN				12 13	6 7 8					FR	FR		Γ		
ю. Е1	Color W	q	e w	D. Color of Wire	σ	U							l le			_			9	3 4 5			D. Wire	I	L/R	L/B	SB	R/L		
Connector No.	Connector Name Connector Color		H.S.	Terminal No.	2	e							Connector No. Connector Name		Connector Color				ю. П				Terminal No.	ю	4	5	9	7		
																										AW	/MIAC	0890	GB	

Connector No.	. E200	00
Connector Name		IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color		WHITE
品.S.H	<u>90</u>	84 83 89 88 87 86
Terminal No.	Color of Wire	Signal Name
83	R/Υ	HEADLAMP_LO_RH
84	_	HEADLAMP_LO_LH
85	I	-
86	W/R	FR_FOG_LAMP_RH
87	≤	FR_FOG_LAMP_LH
88	ΜM	WASHER_MTR
89	Γ	HEADLAMP_HI_RH
06	თ	HEADLAMP_HI_LH

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< ECU DIAGNOSIS >

										SW					OR			7
Signal Name	1	I	1	1	SSOF	MOTRLY	I	NPSW		OIL_PRESSURE_SW	ALT_C	FPR	I	I	STARTER_MOTOR	I	I	
Color of Wire	1	1	1	1	W/B	0	I	R/B	1 3	P/L	GR	B/R	ı	1	B/W	1	I	-
Terminal No.	65	66	67	68	69	70	71	72	73	75	76	17	78	62	80	81	82	
Signal Name	1	INJECTOR_#1	INJECTOR_#2	IGN_SOL	(WITH VQ35DE)	ENG_SOL (WITH VQ35DE)	ETC	ECM_BAT	O2_SENS_#1	02_SENS_#2	AI_EUU	1 1	1	1	1	1		
Color of Wire	1	ГG	γ/G	B/B	!	B/B	GW	W/L	Rγ	0 ;	>		1	1	1	1		
Terminal No.	50	51	52	53		53	54	55	56	57	8	59	8 5	62	63	64		
			-			81 82	79 80											
						73 74 75 76 77 78	63 64 65 66 67 68		Г									
	UTION	E ROOM)				69 70 71 72 73	59 60 61 62 63			lame	1	A/C_COMP	(WITHOUT	IGN_SOL (WITH	5DE)			
	POWER DISTRIBUTION	JLE ENGIN	ш			56 57 58	50 51 52			Signal Name		A/C	ENG_SOL (WITH	IGN_SO	VQ3			
		-	or WHITE			54 55	48 49			Color of Wire	ı		R/B	R/B				
Connector No.	JONNECTOR INAL		Connector Color	6		H.S.	47			Terminal No.	47	48	49	49				
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CAN COMMUNICATION CONTROL

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

If No CAN Communication Is Available With ECM

EXL-223

< ECU DIAGNOSIS >

Control part	Fail-safe in operation
Cooling fan	 Signals cooling fans ON when the ignition switch is turned ON Signals cooling fans OFF when the ignition switch is turned OFF
A/C compressor	A/C relay OFF
Generator	Outputs the power generation command signal (PWM signal) 0%

If No CAN Communication Is Available With BCM

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

IGNITION RELAY MALFUNCTION DETECTION FUNCTION

• IPDM E/R monitors the voltage at the contact circuit and excitation coil circuit of the ignition relay inside it.

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

DTC	Ignition switch	Ignition relay	Tail lamp relay
_	ON	ON	—
_	OFF	OFF	_
B2098: IGN RELAY ON	OFF	ON	ON (10 minutes)
B2099: IGN RELAY OFF	ON	OFF	—

NOTE:

The tail lamp turns OFF when the ignition switch is turned ON.

FRONT WIPER CONTROL

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

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

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

NOTE:

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

EXL-224

< ECU DIAGNOSIS >

STARTER MOTOR PROTECTION FUNCTION

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

DTC Index

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CONSULT-III display	Fail-safe	TIMI	NOTE	Refer to	
No DTC is detected. further testing may be required.	_	_	_	_	
U1000: CAN COMM CIRCUIT	×	CRNT	1 – 39	PCS-16	
B2098: IGN RELAY ON	×	CRNT	1 – 39	PCS-17	
B2099: IGN RELAY OFF	—	CRNT	1 – 39	PCS-18	
B2108: STRG LCK RELAY ON	_	CRNT	1 – 39	<u>SEC-95</u>	
B2109: STRG LCK RELAY OFF	_	CRNT	1 – 39	<u>SEC-96</u>	
B210A: STRG LCK STATE SW	_	CRNT	1 – 39	<u>SEC-97</u>	_
B210B: START CONT RLY ON	_	CRNT	1 – 39	<u>SEC-102</u>	_
B210C: START CONT RLY OFF	_	CRNT	1 – 39	<u>SEC-103</u>	_
B210D: STARTER RELAY ON	_	CRNT	1 – 39	<u>SEC-104</u>	
B210E: STARTER RELAY OFF	_	CRNT	1 – 39	<u>SEC-106</u>	
B210F: INTRLCK/PNP SW ON	—	CRNT	1 – 39	<u>SEC-109</u>	
B2110: INTRLCK/PNP SW OFF	_	CRNT	1 – 39	<u>SEC-115</u>	

NOTE:

The details of TIME display are as follows.

CRNT: The malfunctions that are detected now

1 - 39: The number is indicated when it is normal at present and a malfunction was detected in the past. It increases like 0 → 1 → 2 · · · 38 → 39 after returning to the normal condition whenever IGN OFF → ON. It is fixed to 39 until the self-diagnosis results are erased if it is over 39. It returns to 0 when a malfunction is detected again in the process.

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EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:000000001830404

CAUTION:

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

Sym	otom	Possible cause	Inspection item					
Headlamp does not switch to the high beam.	One side	 Fuse Harness between IPDM E/R and the front combination lamp Front combination lamp (High beam relay) IPDM E/R 	Headlamp (HI) circuit Refer to <u>EXL-36</u> .					
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS DO N Refer to <u>EXL-229</u> .	OT SWITCH TO HIGH BEAM"					
High beam indicator lamp (Headlamp switches to the		Combination meterBCM	 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> .					
	Both sides	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 Hallogen, refer to <u>EXL-38</u> . Xenon, refer to <u>EXL-40</u>					
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to <u>EXL-230, "Description"</u> .						
	When the ignition switch is turned ON	BCM Combination switch	Combination switch Refer to <u>BCS-8</u> .					
Headlamp does not turn OFF.	The ignition switch is turned OFF (After acti- vating the battery sav- er).	IPDM E/R	_					
Headlamp is not turned Ol	N/OFF with the lighting	 Combination switch Harness between the combination switch and BCM BCM 	Combination switch Refer to <u>BCS-8</u> .					
switch AUTO.		 Optical sensor Harness between the optical sensor and BCM BCM 	Optical sensor Refer to <u>EXL-49</u> .					

EXL-226

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

Symp	otom	Possible cause	Inspection item						
Daytime light system does	not activate.	 Either high beam bulb Parking 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 <u>EXL-11, "System Descrip-</u> tion".						
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 <u>EXL-42</u> .						
	Both side	Symptom diagnosis "BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-232.							
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-44</u> .						
	Both sides	Symptom diagnosis "PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON" Refer to <u>EXL-231</u> .							
Turn signal lamp does not blink.	Indicator lamp is nor- mal. (The applicable side performs the high flash- er 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 <u>EXL-47</u> .						
	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 acti- vating the hazard warn- ing lamp with the ignition switch OFF)	The combination meter power supply and the ground circuitCombination meter	Combination meter Power supply and the ground circuit Refer to <u>MWI-43</u> .						

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< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

INFOID:000000001836976

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

А Description INFOID:000000001830406 The headlamps (both sides) do not switch to high beam when the lighting switch is in the HI or PASS setting. В **Diagnosis** Procedure INFOID:000000001830407 **1**.COMBINATION SWITCH INSPECTION С 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 HEADLAMP (HI) REQUEST SIGNAL INPUT Ε CONSULT-III DATA MONITOR Select "HL HI REQ" of IPDM E/R DATA MONITOR item. 1. 2. With operating the lighting switch, check the monitor status. F Monitor item Condition Monitor status HI or PASS ON Lighting switch HL HI REQ Except for HI or (2ND) OFF PASS Н Is the item status normal? YES >> GO TO 3 NO >> Replace BCM. Refer to BCS-88, "Removal and Installation" . $\mathbf{3.}$ HEADLAMP (HI) CIRCUIT INSPECTION Check the headlamp (HI) circuit. Refer to EXL-36, "Description". Is the headlamp (HI) circuit normal? YES >> Replace IPDM E/R. Refer to PCS-43, "Removal and Installation" . NO >> Repair or replace the malfunctioning part. Κ

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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

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
		OFF	OFF

Is the item status normal?

YES >> GO TO 3

NO >> Replace BCM. Refer to <u>BCS-88, "Removal and Installation"</u>.

 ${f 3.}$ HEADLAMP (LO) CIRCUIT INSPECTION

Check the headlamp (LO) circuit. For Halogen headlamps, refer to <u>EXL-38</u>, "<u>HEADLAMP (HALOGEN)</u> : <u>Diagnosis Procedure</u>". For Xenon headlamps, refer to <u>EXL-40</u>, "<u>HEADLAMP (XENON)</u> : <u>Diagnosis Procedure</u>". Is the headlamp (LO) circuit normal?

YES >> Replace IPDM E/R. Refer to <u>PCS-43, "Removal and Installation"</u>.

NO >> Repair or replace the malfunctioning part.

INFOID:000000001830408

INFOID:000000001830409

PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON < SYMPTOM DIAGNOSIS >

PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON А Description INFOID:000000001830410 The parking, license plate and tail lamps do not turn ON in with any lighting switch setting. В **Diagnosis** Procedure INFOID:000000001830411 **1**.COMBINATION SWITCH INSPECTION С 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 Ε (P)CONSULT-III DATA MONITOR Select "TAIL & CLR REQ" of IPDM E/R DATA MONITOR item. 1. 2. 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. Refer to BCS-88, "Removal and Installation". ${f 3.}$ PARK LAMP CIRCUIT INSPECTION Check the parking lamp circuit. Refer to EXL-44, "Description". Is the tail lamp circuit normal? YES >> Replace IPDM E/R. Refer to PCS-43, "Removal and Installation". NO >> Repair or replace the malfunctioning part. Κ

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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

INFOID:000000001830412

INFOID:000000001830413

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

Diagnosis Procedure

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

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 (Lighting switch 2ND)	ON	ON
		OFF	OFF

Is the item status normal?

YES >> GO TO 3

NO >> Replace BCM. Refer to <u>BCS-88, "Removal and Installation"</u>.

 ${f 3.}$ FRONT FOG LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to EXL-42, "Description".

Is the front fog lamp circuit normal?

YES >> Replace IPDM E/R. Refer to <u>PCS-43, "Removal and Installation"</u>.

NO >> Repair or replace the malfunctioning part.

< PRECAUTION > PRECAUTION PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" INFOID:000000001345702

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

WARNING:

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

General precautions for service operations

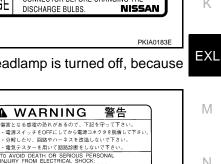
- Never work with wet hands.
- The xenon headlamp system includes a high voltage generating part. Be sure to disconnect battery negative cable (negative terminal) or power fuse before removing, installing, or touching the xenon headlamp (including lamp bulb).
- Turn the lighting switch OFF before disconnecting 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.)

EXL-233

Do not use organic solvent (paint thinner or gasoline) to clean lamps and to remove old sealant.







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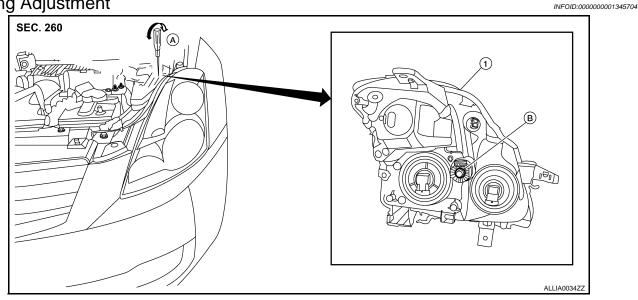
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INFOID:000000001345703

< ON-VEHICLE MAINTENANCE > **ON-VEHICLE MAINTENANCE HEADLAMP**

Aiming Adjustment



For details, refer to the regulations in your area.

Headlamp Aiming

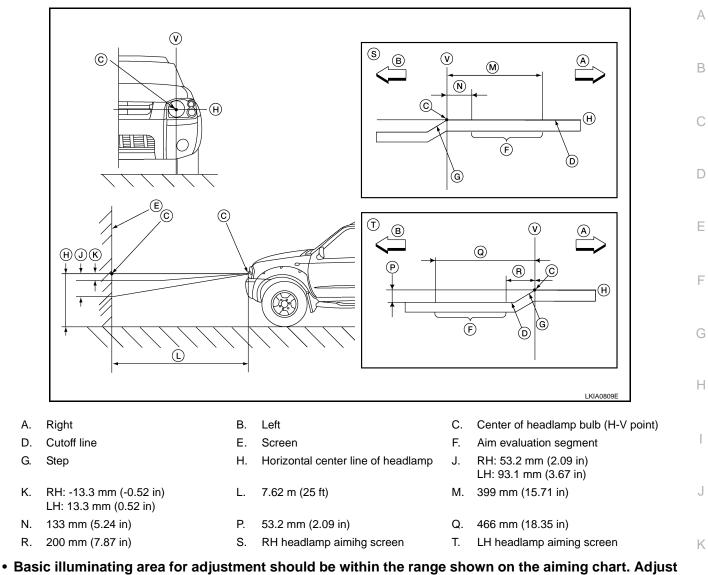
NOTE:

- 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

HEADLAMP

< ON-VEHICLE MAINTENANCE >



- Basic infuminating area for adjustment should be within the range shown on the alming chart. Adjust headlamps accordingly.
 First loosen the adjusting screw all the way and then make adjustment by tightening the screw.
- 1. Turn headlamp low beam on.
- 2. Use adjusting screws to perform aiming adjustment.

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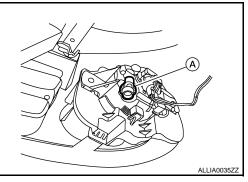
< ON-VEHICLE MAINTENANCE >

FRONT FOG LAMP

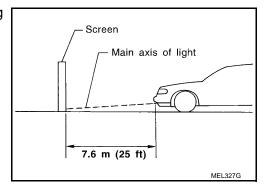
Aiming Adjustment

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

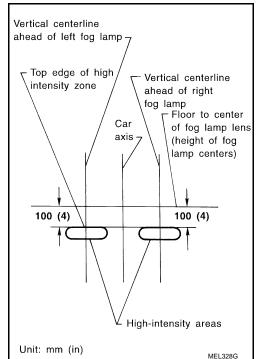
- Keep all tires inflated to correct pressure.
- Place vehicle on level ground.
- See that vehicle is unloaded (except for full levels of coolant, engine oil and fuel, and spare tire, jack, and tools). Have the driver or equivalent weight placed in driver seat.
- Adjust aiming in the vertical direction by turning the adjusting screw (A).
- When performing adjustment, if necessary, cover the headlamps and opposite fog lamp.



1. Set the distance between the screen and the center of the fog lamp lens as shown.



- 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.



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< ON-VEHICLE REPAIR > **ON-VEHICLE REPAIR** HEADLAMP

Bu	Ib Replacement	В
CA • D b	ADLAMP UTION: 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 per-	С
	ormance of fog lamp.	D
Rer	moval	
1.	Disconnect negative battery cable.	E
2.	Position the fender protector aside. Refer to <u>EXT-19, "Removal and Installation"</u>	
3. 4.	Turn the headlamp bulb sockets counterclockwise to unlock and remove them (halogen). Remove the plastic cover, disconnect the ignitor, unlock the retaining spring to unlock and remove the bulb (xenon only).	F
5.	Turn the high beam lamp bulb socket counterclockwise to unlock and remove it.	
Inst	tallation	G
Aft	UTION: er installing the bulb, be sure to install the plastic cap securely to ensure watertightness. tallation is in the reverse order of removal.	Н
FR	ONT TURN SIGNAL LAMP	
Rer	moval	I
1.	Turn the bulb socket counterclockwise to unlock it.	
2.	Pull the bulb to remove it.	
	tallation	J
	tallation is in the reverse order of removal.	
-	er installing a headlamp bulb, be sure to install the bulb socket securely to ensure watertightness.	K
Re	emoval and Installation	
СС	MBINATION LAMP	EXL
Rer	moval	
1.	1. Disconnect battery negative terminal.	
2.	Remove the front bumper fascia. Refer to EXT-13, "Removal and Installation - Coupe".	
3.	Ensure lighting switch is OFF.	b. I
4.	Remove the headlamp bolts (A).	Ν
5.	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.	0

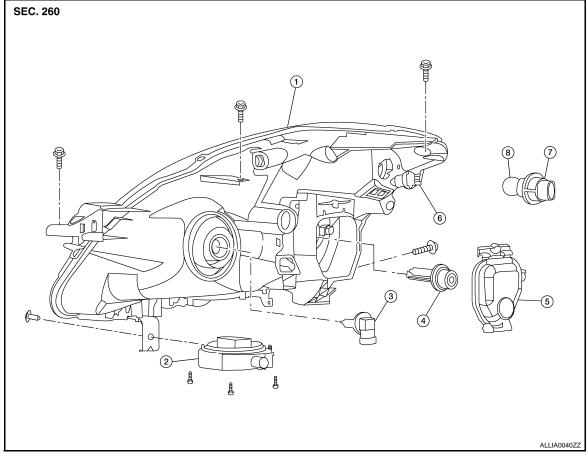
Installation Installation is in the reverse order of removal. NOTE:

Confirm headlamp aiming adjustment. Refer to EXL-234, "Aiming Adjustment".

Disassembly and Assembly

INFOID:000000001345708

COMBINATION LAMP - XENON TYPE



- 1. Headlamp assembly
- 2. Ballast

4. Xenon bulb

- 5. Plastic cover
- 7. Front turn signal lamp bulb socket 8. Front turn signal lamp bulb
- 3. Halogen bulb (high beam)
- 6. 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.
- 1. 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.
- 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.

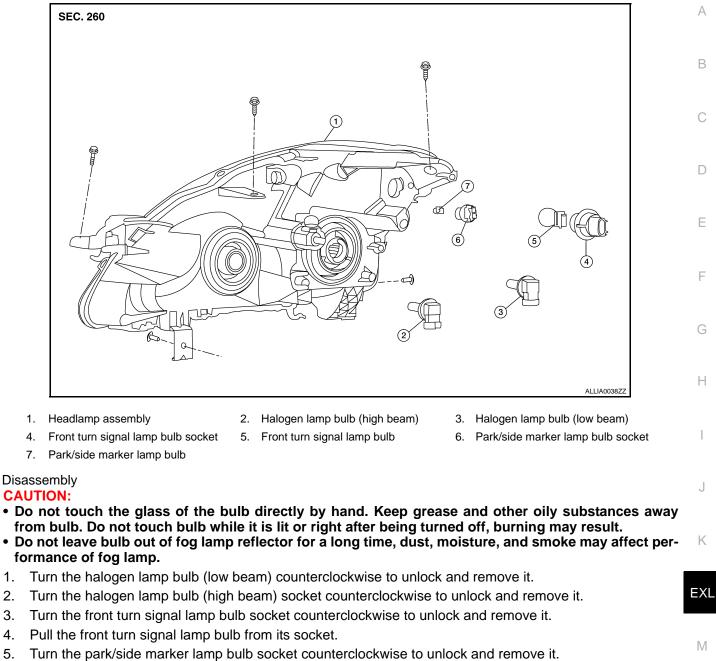
CAUTION:

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

EXL-238

< ON-VEHICLE REPAIR >

COMBINATION LAMP - HALOGEN



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6. Pull the park/side marker lamp bulb from its socket.

Assembly

1.

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3. 4.

5.

Assembly is in the reverse order of disassembly.

FRONT FOG LAMP

< ON-VEHICLE REPAIR >

FRONT FOG LAMP

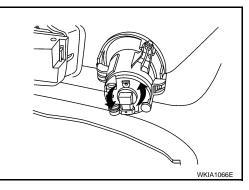
Bulb Replacement

INFOID:000000001345711

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-19, "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.

Removal and Installation

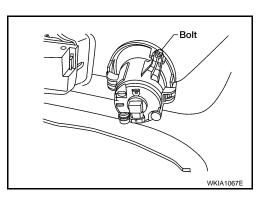
INFOID:000000001345712

REMOVAL

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

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-19, "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 <u>EXL-236</u>, "Aiming Adjustment".

EXL-240

STOP LAMP

< ON-VEHICLE REPAIR >

STOP LAMP

Bulb Replacement

HIGH MOUNTED STOP LAMP

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.

STOP LAMP

Removal

- 1. Remove rear combination lamp. Refer to EXL-241, "Removal and Installation".
- 2. Turn bulb socket counterclockwise to unlock and remove from combination lamp assembly.
- 3. Turn bulb counterclockwise to remove from bulb socket.

Installation

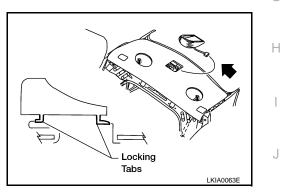
Installation is in the reverse order of removal.

Removal and Installation

HIGH-MOUNTED STOP LAMP

Removal

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



Installation Installation is in the reverse order of removal.

REAR COMBINATION LAMP

Removal

- 1. Remove the trunk side finisher. Refer to INT-22, "Removal and Installation".
- 2. From inside the trunk, remove the rear combination lamp assembly nuts.
- 3. Disconnect the connectors and remove the rear combination lamp assembly.

Installation

Installation is in the reverse order of removal.

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INFOID:000000001345715

INFOID:000000001345716

BACK-UP LAMP

Bulb Replacement

INFOID:000000001345717

Removal

- 1. Remove the rear combination lamp. Refer to EXL-244, "Removal and Installation".
- Turn back-up lamp bulb socket counterclockwise to unlock and remove. Pull back-up lamp bulb from socket to remove. 2.
- 3.

Installation

Installation is in the reverse order of removal.

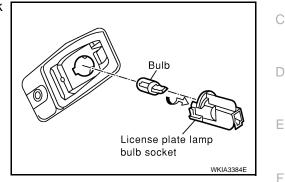
< ON-VEHICLE REPAIR >

LICENSE PLATE LAMP

Bulb Replacement

REMOVAL

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

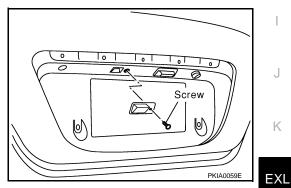


INSTALLATION Installation is in the reverse order of removal.

Removal and Installation

REMOVAL

- 1. Remove the license lamp finisher. Refer to EXT-23, "Removal and Installation".
- 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.

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INFOID:000000001345720

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REAR COMBINATION LAMP

Bulb Replacement

REAR TURN SIGNAL LAMP

Removal

- 1. Remove the rear combination lamp. Refer to EXL-244, "Removal and Installation".
- 2. Turn the rear turn signal lamp bulb socket counterclockwise and remove it.
- 3. Remove the rear turn signal lamp bulb.

Installation

Installation is in the reverse order of removal.

STOP/TAIL LAMP

Removal

- 1. Remove the rear combination lamp. Refer to EXL-244, "Removal and Installation".
- 2. Turn the stop/tail lamp bulb socket counterclockwise and remove it.
- 3. Remove the stop/tail lamp bulb.

Installation

Installation is in the reverse order of removal.

BACK-UP LAMP

Removal

- 1. Remove the rear combination lamp. Refer to EXL-244, "Removal and Installation".
- 2. Turn the back-up lamp bulb socket counterclockwise and remove it.
- 3. Remove the back-up lamp bulb.

Installation

Installation is in the reverse order of removal.

SIDE MARKER LAMP

Removal

- 1. Remove the rear combination lamp. Refer to EXL-244, "Removal and Installation".
- 2. Turn the side marker lamp bulb socket counterclockwise and remove it.
- 3. Remove the side marker lamp bulb.

Installation

Installation is in the reverse order of removal.

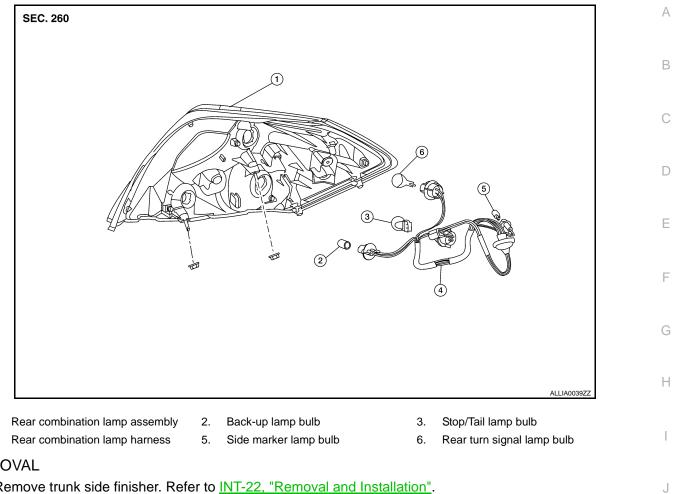
Removal and Installation

INFOID:000000001345722

COMPONENTS

INFOID:000000001345721

REAR COMBINATION LAMP



REMOVAL

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- 1. Remove trunk side finisher. Refer to INT-22, "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

Removal and Installation

INFOID:000000001345723

Removal

- 1. Remove the spiral cable. Refer to <u>SR-6, "Removal and Installation"</u>
- 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.

HAZARD SWITCH

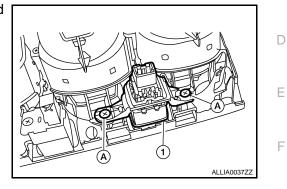
< ON-VEHICLE REPAIR >

HAZARD SWITCH

Removal and Installation

Removal

- 1. Remove the cluster lid C. Refer to IP-11, "Removal and Installation".
- 2. Remove CVT finisher or M/T finisher. Refer to <u>TM-250, "Removal and Installation"</u> or <u>TM-21, "Removal and Installation"</u>.
- 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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Headlamp

INFOID:000000001345728

Item	Wattage (W)*
Low (halogen)	55
Low (xenon)	35
High	65

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

Exterior Lamp

INFOID:000000001345729

Item		Wattage (W)*	
Front combination lamp	Park/Turn signal lamp	28 (amber)	
	Side marker lamp	5	
Rear combination lamp	Stop/Tail lamp	27/8	
	Turn signal lamp	27	
	Back-up lamp	13	
	Side marker lamp	5	
Fog lamp		55	
License plate lamp		5	
High-mounted stop lamp		LED	

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