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CONTENTS

BASIC INSPECTION	4 Component Description19
DIAGNOSIS AND REPAIR WORKFLOW Work Flow	. LAMPS
FUNCTION DIAGNOSIS	System Diagram20 7 System Description20
HEADLAMP (XENON TYPE)	CONDUIGNED 636 IDUON
System Description	
Component Parts Location	8 System Diagram22
HEADLAMP (HALOGEN TYPE)	9 System Description22
System Diagram System Description	9
Component Parts Location	O COMMON ITEM : Diagnosis Description26 COMMON ITEM : CONSULT-III Function26
DAYTIME RUNNING LIGHT SYSTEM1	
System Diagram	1 HEADLAMP : CONSULT-III Function27 EX
Component Parts Location	FLASHER : CONSULT-III Function29
AUTO LIGHT SYSTEM1 System Diagram1	
System Description1 Component Parts Location	4
Component Description	
FRONT FOG LAMP	6 Diagnosis Description32
System Description	6 COMPONENT DIA CNOSIO
TURN SIGNAL AND HAZARD WARNING	POWER SUPPLY AND GROUND CIRCUIT38
LAMPS	8 BCM (BODY CONTROL MODULE) : Diagnosis 8 Procedure 38

BCM (BODY CONTROL MODULE): Special Re-		HEADLAMP (XENON TYPE): Wiring Diagram -	
pair Requirement	. 38	Sedan	83
IPDM E/R (INTELLIGENT POWER DISTRIBU-		HEADLAMP (HALOGEN)	89
TION MODULE ENGINE ROOM)	. 38	HEADLAMP (HALOGEN) : Wiring Diagram -	00
IPDM E/R (INTELLIGENT POWER DISTRIBU-		Coupe	90
TION MODULE ENGINE ROOM): Diagnosis Pro-		HEADLAMP (HALOGEN) : Wiring Diagram - Se-	
cedure	. 39	dan	
LICADI AMD (III) CIDCILIT	40	ALITO LICUT SYSTEM	404
HEADLAMP (HI) CIRCUIT		AUTO LIGHT SYSTEM	
Description		Wiring Diagram - Coupe	
Component Function Check Diagnosis Procedure		Wiring Diagram - Sedan	110
Diagnosis Flocedule	. 40	FRONT FOG LAMP SYSTEM	116
HEADLAMP (LO) CIRCUIT	. 42	Wiring Diagram - Coupe	116
		Wiring Diagram - Sedan	
HEADLAMP (HALOGEN)			
HEADLAMP (HALOGEN): Description	. 42	TURN SIGNAL AND HAZARD WARNING	
HEADLAMP (HALOGEN) : Component Function	40	LAMP SYSTEM	
Check HEADLAMP (HALOGEN) : Diagnosis Procedure		Wiring Diagram - Coupe	
HEADLAMP (HALOGEN) . Diagnosis Procedure	. 42	Wiring Diagram - Sedan	. 132
HEADLAMP (XENON)	. 43	PARKING, LICENSE PLATE AND TAIL	
HEADLAMP (XENON): Description		LAMPS SYSTEM	140
HEADLAMP (XENON) : Component Function		Wiring Diagram - Coupe	
Check		Wiring Diagram - Sedan	
HEADLAMP (XENON) : Diagnosis Procedure	. 44		
FRONT FOG LAMP CIRCUIT	16	STOP LAMP	
Description		Wiring Diagram - Coupe	
Component Function Check		Wiring Diagram - Sedan	157
Diagnosis Procedure		BACK-UP LAMP	161
		Wiring Diagram - Coupe	
PARKING LAMP CIRCUIT		Wiring Diagram - Sedan	
Description			
Component Function Check		ECU DIAGNOSIS	171
Diagnosis Procedure	. 48	DCM (BODY CONTROL MODULE)	474
TURN SIGNAL LAMP CIRCUIT	-51	BCM (BODY CONTROL MODULE)	
Description		Terminal Layout	
Component Function Check		Physical Values	
Diagnosis Procedure		Wiring Diagram-Coupe	
		Wiring Diagram-Sedan	
OPTICAL SENSOR		Fail Safe	
Description		DTC Inspection Priority Chart	
Component Function Check		DTC Index	
Diagnosis Procedure	. 53		
HEADLAMP (HALOGEN)	. 56	IPDM E/R (INTELLIGENT POWER DISTRI-	
Wiring Diagram - Coupe		BUTION MODULE ENGINE ROOM)	
Wiring Diagram - Sedan		Reference Value	
g		Wiring Diagram — Coupe	
HEADLAMP (XENON)		Wiring Diagram — Sedan	
Wiring Diagram - Coupe		Fail Safe	
Wiring Diagram - Sedan	. 71	DTC Index	239
DAYTIME RUNNING LIGHT SYSTEM	. 76	SYMPTOM DIAGNOSIS	240
		EVTEDIOD I IGUTING SVSTEM SVMDTOMS	
HEADLAMP (XENON TYPE)	. 76	EXTERIOR LIGHTING SYSTEM SYMPTOMS	
HEADLAMP (XENON TYPE): Wiring Diagram -	76	Symptom Table	∠40
Coupe	. 70	NORMAL OPERATING CONDITION	242
		Description	040

BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM	
Description Diagnosis Procedure	. 243
BOTH SIDE HEADLAMPS (LO) ARE NOT	
TURNED ON Description Diagnosis Procedure	. 244
PARKING, LICENSE PLATE AND TAIL	. 244
LAMPS ARE NOT TURNED ON	. 245
Description	. 245
Diagnosis Procedure	
BOTH SIDE FRONT FOG LAMPS ARE NOT	
TURNED ON	. 246
Description	. 246
Diagnosis Procedure	. 246
PRECAUTION	. 247
PRECAUTIONS Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	. 247
SIONER"	
General precautions for service operations	. 247
ON-VEHICLE MAINTENANCE	248
HEADLAMP	. 248
Aiming Adjustment	
Description	
Aiming Adjustment Procedure	
FRONT FOG LAMP	. 252
Aiming Adjustment	

ON-VEHICLE REPAIR253	
HEADLAMP253Bulb Replacement253Removal and Installation253Disassembly and Assembly254	
FRONT FOG LAMP256Bulb Replacement256Removal and Installation256	
STOP LAMP257Bulb Replacement257Removal and Installation257	
BACK-UP LAMP	
LICENSE PLATE LAMP259Bulb Replacement259Removal and Installation259	
REAR COMBINATION LAMP260Bulb Replacement260Removal and Installation260	
LIGHTING AND TURN SIGNAL SWITCH 262 Removal and Installation262	
HAZARD SWITCH	
SERVICE DATA AND SPECIFICATIONS (SDS)264	
SERVICE DATA AND SPECIFICATIONS (SDS) 264 Headlamp 264 Exterior Lamp 264	

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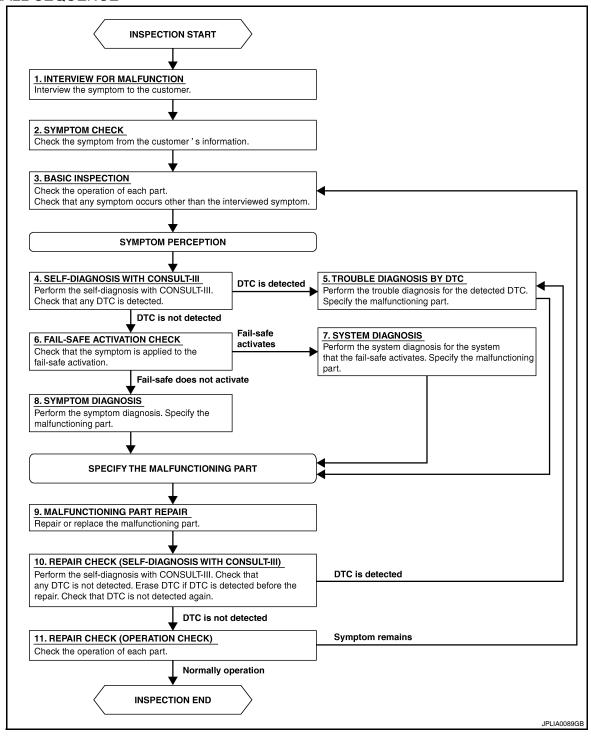
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

OVERALL SEQUENCE



DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION > **DETAILED FLOW** Α 1.INTERVIEW FOR MALFUNCTION Find out what the customer's concerns are. В >> GO TO 2 2.SYMPTOM CHECK Verify the symptom from the customer's information. D >> GO TO 3 3.BASIC INSPECTION Check the operation of each part. Check that any concerns occur other than those mentioned in the customer interview. >> GO TO 4 F f 4 .SELF-DIAGNOSIS WITH CONSULT-III Perform the self diagnosis with CONSULT-III. Check that any DTC is detected. Is any DTC detected? YES >> GO TO 5 NO >> GO TO 6 $oldsymbol{5}$. TROUBLE DIAGNOSIS BY DTC Perform the trouble diagnosis for the detected DTC. Specify the malfunctioning part. >> GO TO 9 6. FAIL-SAFE ACTIVATION CHECK Determine if the customer's concern is related to fail-safe activation. Does the fail-safe activate? K YES >> GO TO 7 NO >> GO TO 8 **1.**SYSTEM DIAGNOSIS **EXL** Perform the system diagnosis for the system in which the fail-safe activates. Specify the malfunctioning part. M >> GO TO 9 8.SYMPTOM DIAGNOSIS Perform the symptom diagnosis. Specify the malfunctioning part. >> GO TO 9 0 9.malfunction part repair Repair or replace the malfunctioning part. Р >> GO TO 10 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

EXL-5

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.

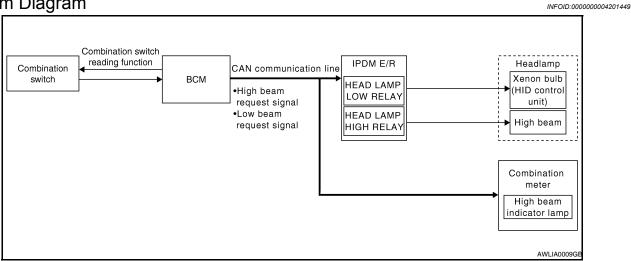
Does it operate normally?

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

FUNCTION DIAGNOSIS

HEADLAMP (XENON TYPE)

System Diagram



System Description

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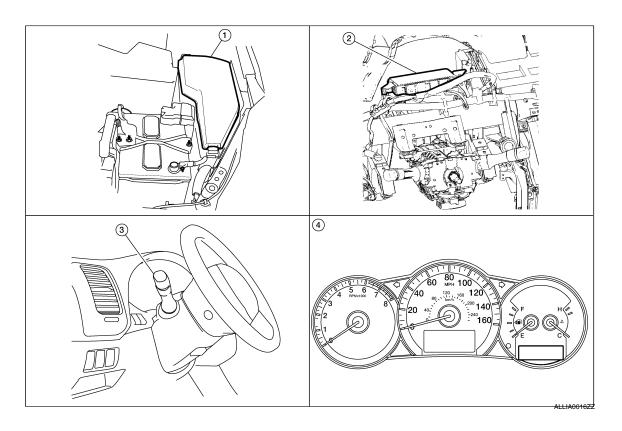
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Р

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

Component Parts Location

INFOID:0000000004201451



EXL-7

HEADLAMP (XENON 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)
- Combination Meter M24

Component Description

INFOID:0000000004201452

XENON HEADLAMP

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

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

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

HIGH BEAM OPERATION/FLASH-TO-PASS OPERATION

With the lighting switch in the 2ND position and placed in HIGH position, the BCM receives input requesting the headlamp high beams to illuminate. The flash to pass feature can be used any time and also sends a signal to the BCM. This input is communicated to the IPDM E/R across the CAN communication lines. The CPU of the combination meter controls the ON/OFF status off the HIGH BEAM indicator. The CPU of the IPDM E/R controls the headlamp high relay coil which directs power to the high beam headlamps.

EXTERIOR LAMP BATTERY SAVER CONTROL

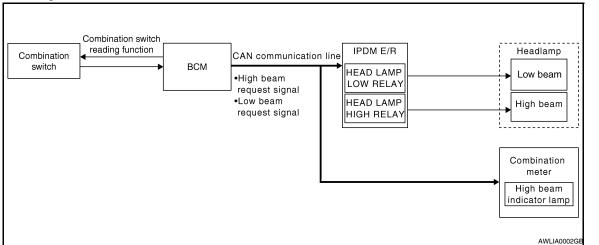
With the lighting switch (combination switch) in the 2nd position and the ignition switch is turned from ON or ACC to OFF, the battery saver feature is activated.

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-30, "BATTERY SAVER: CONSULT-III Function".

HEADLAMP (HALOGEN TYPE)

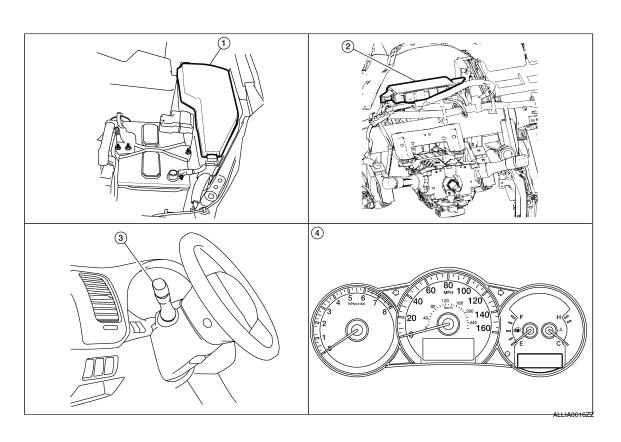
System Diagram



System Description

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

Component Parts Location



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HEADLAMP (HALOGEN TYPE)

< FUNCTION DIAGNOSIS >

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

Component Description

INFOID:0000000004201456

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-30, "BATTERY SAVER: CONSULT-III Function".

DAYTIME RUNNING LIGHT SYSTEM

< FUNCTION DIAGNOSIS >

DAYTIME RUNNING LIGHT SYSTEM

System Diagram

Combination switch reading function Headlamp high Combination CAN communication line IPDM E/R LH Daytime light request signal Headlamp high RH Daytime CAN communication line **ECM** light всм Engine status signal relay Parking brake switch Combination meter Parking brake switch signal AWLIA0010G

System Description

INFOID:0000000004201458

INFOID:0000000004201457

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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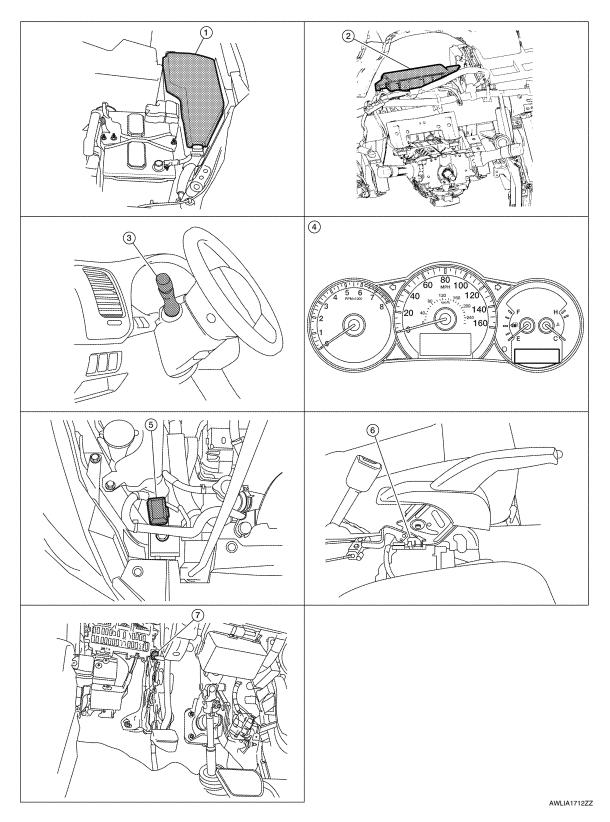
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Component Parts Location

INFOID:0000000004201459



- 1. IPDM E/R E17, E18, E200, E201
- BCM M16,M17, M18, M19 (view with 3. Combination switch M28 instrument panel removed)

DAYTIME RUNNING LIGHT SYSTEM

< FUNCTION DIAGNOSIS >

- 4. Combination meter M24
- 5. Daytime running light relay E228
- Parking brake switch
 E35 (coupe with CVT)
 M73 (with M/T)

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7. Parking brake switch E35 (sedan with CVT)

INFOID:0000000004201460

Component Description

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

OPERATION

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

Engi	ne	With engine stopped			With engine running														
Liebties soliteb		OFF		1ST		2ND		OFF		1ST		2ND							
Lighting switch		Hi	Lo	Р	Hi	Lo	Р	Hi	Lo	Р	Hi	Lo	Р	Hi	Lo	Р	Hi	Lo	Р
Headlamp	High beam	_	-	_	_	-	×	×	-	×	•*	•*	×	•*	•*	×	×	-	×
Headiamp	Low beam	-	-	-	-	_	×	×	×	×	ı	-	×	ı	-	×	×	×	×
Tail lamp		_	-	_	×	×	×	×	×	×	ı	ı	_	×	×	×	×	×	×
License and instru tion lamp	ment illumina-	_	-	_	×	×	×	×	×	×	-	ı	-	×	×	×	×	×	×

- · Hi: "HIGH BEAM" position
- · Lo: "LOW BEAM" position
- P: "FLASH TO PASS" position
- x: 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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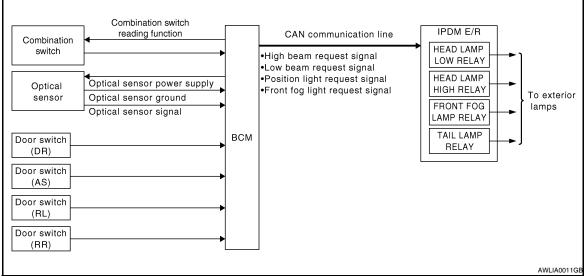
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AUTO LIGHT SYSTEM

System Diagram

INFOID:0000000004201461



System Description

INFOID:0000000004201462

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

Component Parts Location

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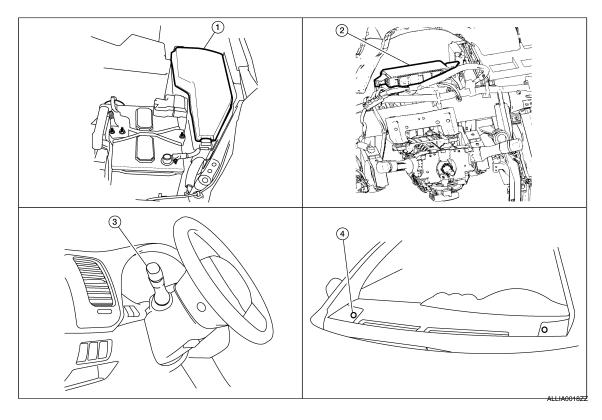
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- I. IPDM E/R E17, E18, E200
- 2. BCM M16, M17, M18, M19, M21 (view 3. Combination switch M28 with instrument panel removed)
- 4. Optical sensor M66

Component Description

INFOID:0000000004201464

AUTO LIGHT OPERATION

Applicable lamps

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

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

NOTE:

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

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FRONT FOG LAMP

System Diagram

Combination switch reading function switch switch switch switch Front fog light request signal FRONT FOG LAMP RELAY Front fog lamp

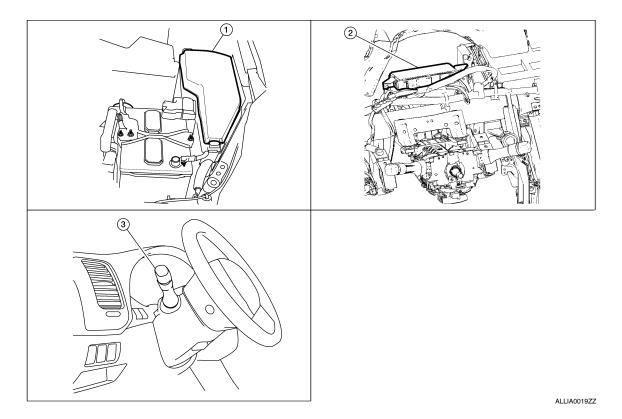
System Description

INFOID:0000000004201466

- 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:0000000004201467



1. IPDM E/R E17, E18, E200

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

FRONT FOG LAMP

< FUNCTION DIAGNOSIS >

Component Description

INFOID:0000000004201468

FRONT FOG LAMP OPERATION

When the lighting switch is in front fog lamp ON position and also in 1ST or 2ND position or AUTO position (headlamp is ON), the BCM detects FR FOG ON and the HEAD LAMP1, 2 ON or the AUTO LIGHT ON. The BCM sends a front fog lamp request ON signal through the CAN communication lines to the IPDM E/R. The IPDM E/R then turns ON the front fog lamp relay sending power to the front fog lamps.

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

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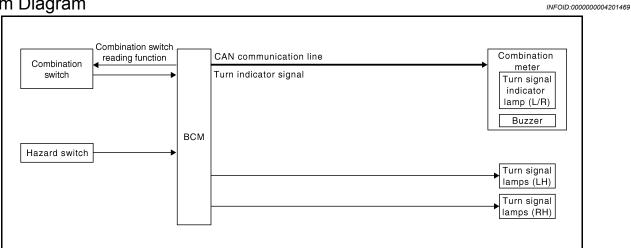
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TURN SIGNAL AND HAZARD WARNING LAMPS

System Diagram



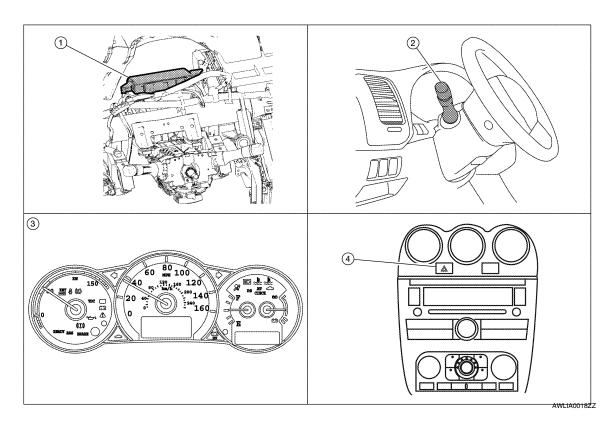
System Description

INFOID:0000000004201470

- 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

INFOID:0000000004201471



- BCM M16, M17, M18, M19 (view with 2. Combination switch M28 instrument panel removed)
- Hazard switch M54

3. Combination meter M24

TURN SIGNAL AND HAZARD WARNING LAMPS

< FUNCTION DIAGNOSIS >

Component Description

INFOID:0000000004201472

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. Refer to SEC-26, "System Description".

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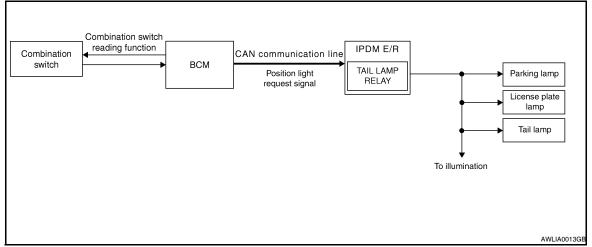
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PARKING, LICENSE PLATE AND TAIL LAMPS

System Diagram

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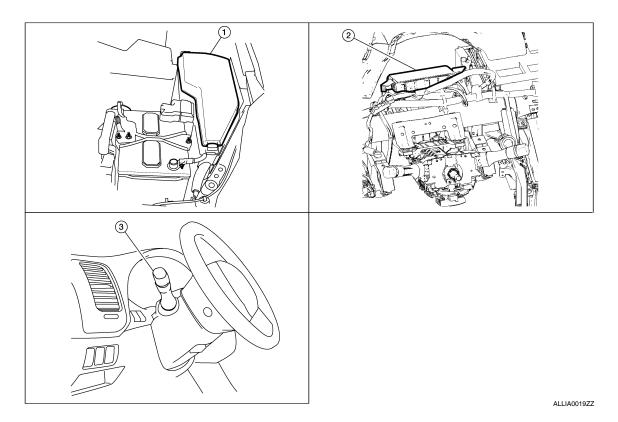
System Description

INFOID:0000000004201474

- 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:0000000004201475



1. IPDM E/R E17, E18, E201

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

PARKING, LICENSE PLATE AND TAIL LAMPS

< FUNCTION DIAGNOSIS >

Component Description

INFOID:0000000004201476

PARKING, LICENSE PLATE AND TAIL LAMPS OPERATION

When the lighting switch is in 1ST position, BCM detects the LIGHTING SWITCH 1ST POSITION ON. The BCM sends a parking light ON request through the CAN communication lines to the IPDM E/R. The IPDM E/R then activates the tail lamp relay which sends power to the parking and instrument illumination circuits.

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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-30, "BATTERY SAVER: CONSULT-III Function".

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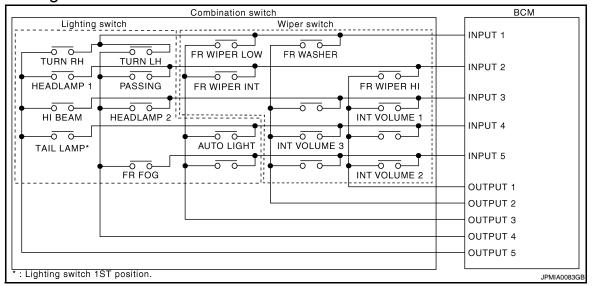
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System Diagram

INFOID:0000000004201477



System Description

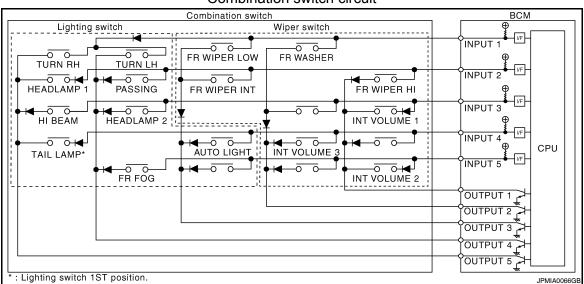
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OUTLINE

- 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 circuit



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
INPUT 4	_	INT VOLUME 3	AUTO LIGHT	_	TAIL LAMP
INPUT 5	INT VOLUME 2	_		FR FOG	_

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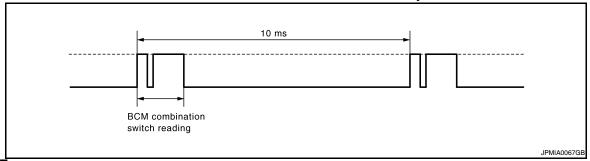
NOTE:

Headlamp has a dual system switch.

COMBINATION SWITCH READING FUNCTION

Description

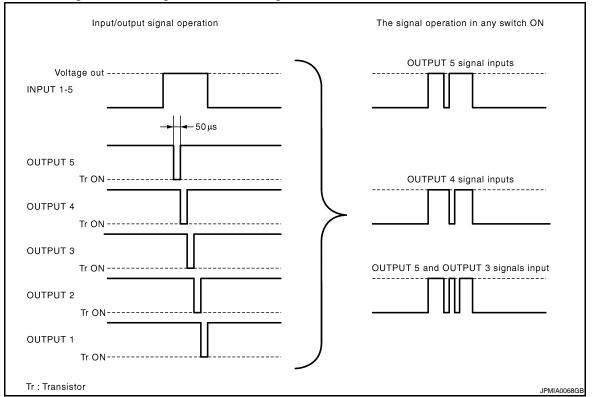
BCM reads the status of the combination switch at 10ms interval normally.



NOTE:

BCM reads the status of the combination switch at 60ms interval when BCM is controlled at low power consumption mode.

- 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.



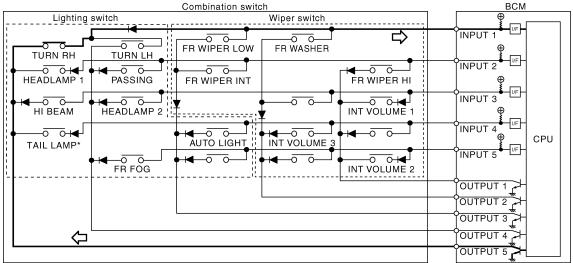
Operation Example

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 >

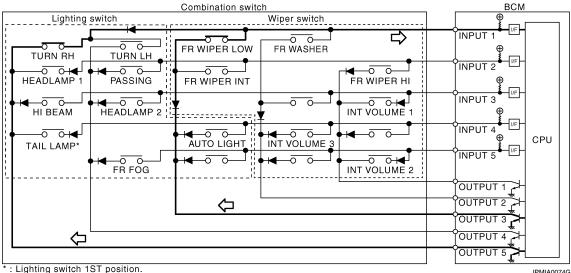
• The circuit between INPUT 1 and OUTPUT 5 is formed when the TURN RH switch is turned ON.



- : Lighting switch 1ST position.
- 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.



- 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-	INT VOLUME switch ON/OFF status						
tion	ation delay inter- val	INT VOLUME 1 switch	INT VOLUME 2 switch	INT VOLUME 3 switch				
1	Short	ON	ON	ON				
2	1	ON	ON	OFF				
3		ON	OFF	OFF				
4		OFF	OFF	OFF				
5		OFF	OFF	ON				
6	↓ ↓	OFF	ON	ON				
7	Long	OFF	ON	OFF				

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< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: Diagnosis Description

INFOID:0000000004498156

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 selection item	Diagnosis mode					
System	Sub system selection item	WORK SUPPORT	DATA MONITOR	ACTIVE TEST			
Door lock	DOOR LOCK	×	×	×			
Rear window defogger	REAR DEFOGGER		×	×			
Warning chime	BUZZER		×	×			
Interior room lamp timer	INT LAMP	×	×	×			
Remote keyless entry system	MUTI REMOTE ENT	×	×	×			
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	×	×				

COMMON ITEM: CONSULT-III Function

INFOID:0000000004498157

ECU IDENTIFICATION Displays the BCM part No.

SELF-DIAG RESULT

Refer to EXL-215, "DTC Index".

< FUNCTION DIAGNOSIS >

HEADLAMP

HEADLAMP: CONSULT-III Function

INFOID:0000000004498158

WORK SUPPORT

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

^{1:} Initial setting

DATA MONITOR

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

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^{2:} With auto light system

< 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 SENSOR [V] ¹	The value of exterior brightness voltage input from the optical sensor

^{1:} With auto light system.

ACTIVE TEST

Test item	Operation	Description		
TAIL LAMP	ON	Transmits the Position light request signal to IPDM E/R with CAN communication to turn the tail lamp ON.		
	OFF	Stops the tail lamp request signal transmission.		
	HI	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 communication to turn the front fog lamp ON.		
	OFF	Stops the front fog lights request signal transmission.		
DAYTIME RUNNING LIGHT*	ON			
DAT TIME NOMINING EIGHT	OFF			

^{2:} The item is indicated, not monitored.

< FUNCTION DIAGNOSIS >

Test item	Operation	Description
	RH	
CORNERING LAMP*	LH	-
	OFF	
ILL DIM SIGNAL*	ON	
ILL DIW SIGNAL	OFF	_

^{*:} The item is indicated, not monitored.

FLASHER

FLASHER: CONSULT-III Function

INFOID:0000000004498159

Work support

Service item	Setting item	Setting			
HAZARD ANSWER BACK	LOCK ONLY*	Activated when locking.			
	UNLK ONLY	Activated when unlocking.	Sets the hazard warning lamp answer back activation when the door is lock/unlock with the request switch or		
	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]	Lach switch condition that bow judges from the combination switch reading function	
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

Test item	Operation	Description
	RH	Blinks right turn signal lamp.
FLASHER	LH	Blinks left turn signal lamp.
	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:0000000004498161

WORK SUPPORT

Service item	Setting item	Setting			
BATTERY SAVER SET	ON*	With the e	With the exterior lamp battery saver function		
DATTENT SAVENSET	OFF	Without the exterior lamp battery saver function			
ROOM LAMP BAT SAV SET	ON*	With the interior room lamp battery saver function			
NOOW LAWF BAT 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 ope			
TOOM EAW! TIME! 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 serial 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.
DATTEIN SAVEN	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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< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

INFOID:0000000004498162

AUTO ACTIVE TEST

Description

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

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

Operation Procedure

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

NOTE:

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

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

CAUTION:

Close front door RH.

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

NOTE:

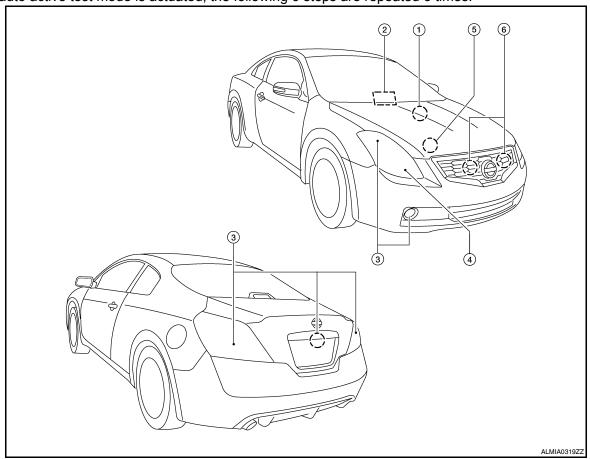
When auto active test mode has to be cancelled halfway through test, turn ignition switch OFF. **CAUTION**:

- If auto active test mode cannot be actuated, check door switch system. Refer to <u>DLK-69</u>. "Component Function Check".
- Do not start the engine.

Inspection in Auto Active Test Mode

< FUNCTION DIAGNOSIS >

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



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

^{*:} Outputs duty ratio of 50% for 5 seconds \rightarrow duty ratio of 100% for 5 seconds on the cooling fan control module.

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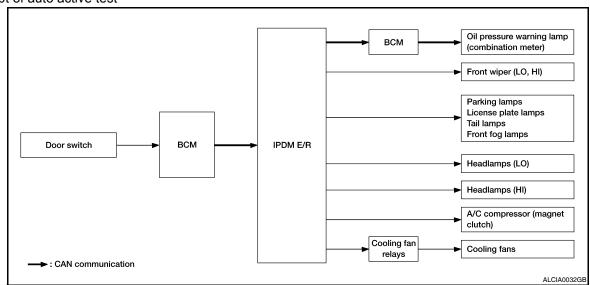
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< FUNCTION DIAGNOSIS >

Concept of auto active test



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

Diagnosis chart in auto active test mode

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

< FUNCTION DIAGNOSIS >

Symptom	Inspection contents		Possible cause
	Perform auto active test.	YES	Harness or connector between IPDM E/R and oil pressure switch Oil pressure switch IPDM E/R
Oil pressure warning lamp does not operate	Does the oil pressure warning lamp blink?	NO	CAN communication signal between IPDM E/R and BCM CAN communication signal between BCM and combination meter Combination meter
	Perform auto active test. Does the cooling fan operate?	YES	ECM signal input circuit CAN communication signal between ECM and IPDM E/ R
Cooling fan does not operate		NO	Cooling fan Harness or connector between cooling fan and cooling fan relays Cooling fan relays Harness or connector between IPDM E/R and cooling fan relays IPDM E/R

CONSULT - III Function (IPDM E/R)

INFOID:0000000004498163

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 EXL-239, "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.	

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< FUNCTION DIAGNOSIS >

Monitor Item [Unit]	MAIN SIG- NALS	Description
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.
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 communication.
CRNRNG LMP REQ [Off]		NOTE: This item is displayed, but cannot be monitored.

ACTIVE TEST

Test item

Test item	Operation	Description	
CORNERING LAMP	Off	NOTE: This item is displayed, but cannot be monitored.	
	LH		
	RH		
HORN	On	Operates horn relay 1 and horn relay 2 for 20 ms.	
FRONT WIPER	Off	OFF	
	Lo	Operates the front wiper relay.	
	Hi	Operates the front wiper relay and front wiper high relay.	

DIAGNOSIS SYSTEM (IPDM E/R)

< FUNCTION DIAGNOSIS >

Test item	Operation	Description		
	1	OFF		
MOTOR FAN	2	Outputs 50% pulse duty signal (PWM signal) to the cooling fan control module.		
MOTOR FAIN	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

INFOID:0000000004498177

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	Rattery nower supply	Н	
11	Battery power supply	10	

Is the fuse or fusible link blown?

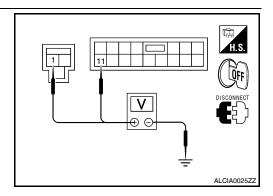
YES >> Replace the blown fuse or fusible link after repairing the affected circuit.

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.

((+) (-)				
В	СМ		(Approx.)		
Connector	Terminal	Ground			
M16	1	Glound	Dottoni valtona		
M17	11		Battery voltage		



Is the measurement normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

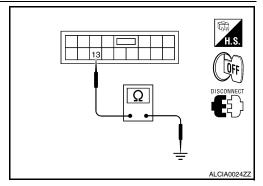
Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector Terminal		Ground	Continuity
M17	13		Yes

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.



BCM (BODY CONTROL MODULE): Special Repair Requirement

INFOID:0000000004498178

1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to BCS-6, "CONFIGURATION (BCM): Special Repair Requirement".

>> 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

Is the fuse blown?

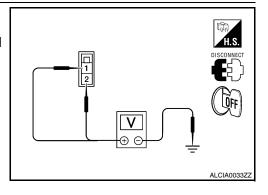
YES >> Replace the blown fuse or fusible link after repairing the affected circuit.

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.

(+)	(-)	Voltage (V)	
IPDI	IPDM E/R		(Approx.)	
Connector	Terminal			
E16	1	Ground	Pottoni voltogo	
E10	2		Battery voltage	



Is the measurement value normal?

YES >> GO TO 3

NO >> Repair harness or connector.

3. CHECK GROUND CIRCUIT

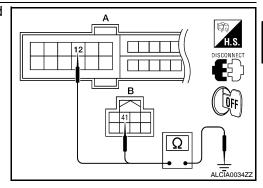
Check continuity between IPDM E/R harness connectors and ground.

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
A: E18	12	Giodila	Yes
B: E17	41		163

Does continuity exist?

YES >> Inspection End.

NO >> Repair harness or connector.



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< COMPONENT DIAGNOSIS >

HEADLAMP (HI) CIRCUIT

Description

The IPDM E/R (intelligent power distribution module engine room) controls the headlamp high relay based on inputs from the BCM over the CAN communication lines. When the headlamp high relay is energized, power flows through fuses 48 and 49, located in the IPDM E/R. Power then flows to the front combination lamps to the headlamp high beam.

Component Function Check

INFOID:0000000004201490

1. CHECK HEADLAMP (HI) OPERATION

®WITHOUT CONTULT-III

- 1. Start IPDM E/R auto active test. Refer to PCS-14, "Diagnosis Description".
- 2. Check that the headlamp switches to the high beam.

NOTE:

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

PCONSULT-III

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

HI: Headlamp switches to the high beam.

OFF : Headlamp OFF

Does the headlamp switch to the high beam?

YES >> Headlamp (HI) circuit is normal.

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

Diagnosis Procedure

INFOID:0000000004201491

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

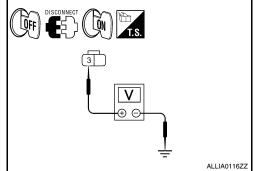
®CONSULT-III ACTIVE TEST

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

< COMPONENT DIAGNOSIS >

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

(+)			(-)	Voltage	
Connector Terminal					
RH	E222	3	Ground	Patton, voltago	
LH E213 3		3	Ground	Battery voltage	



Is battery voltage present?

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

3.check headlamp (HI) circuit for open

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

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

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Does continuity exist?

YES >> GO TO 4

NO >> Repair the harnesses or connectors.

4. CHECK FRONT COMBINATION LAMP (HI) GROUND CIRCUIT

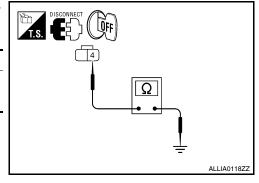
- 1. Disconnect the front combination lamp connector.
- 2. Check continuity between the front combination lamp harness connector terminal and ground.

Connector		Terminal	_	Continuity	
RH	E222	4	Ground	Yes	
LH	E213	4	Ground	163	

Does continuity exist?

YES >> Inspect the headlamp bulb.

NO >> Repair the harness.



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< COMPONENT DIAGNOSIS >

HEADLAMP (LO) CIRCUIT HEADLAMP (HALOGEN)

HEADLAMP (HALOGEN): Description

INFOID:0000000004201492

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:0000000004201493

1. CHECK HEADLAMP (LO) OPERATION

WITHOUT CONSULT-III

- 1. Start IPDM E/R auto active test. Refer to PCS-14, "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.

(P)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-42, "HEADLAMP (HALOGEN) : Diagnosis Procedure".

HEADLAMP (HALOGEN): Diagnosis Procedure

INFOID:0000000004201494

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

(P)CONSULT-III

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

< COMPONENT DIAGNOSIS >

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		

DISCONNECT CON ITS.

Is battery voltage present?

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

$3. {\sf CHECK}$ HEADLAMP (LO) CIRCUIT FOR OPEN

- 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.

	АВ		Continuity		
Con	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.

4.CHECK FRONT COMBINATION LAMP (LO) GROUND CIRCUIT

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

Conr	nector	Terminal	_	Continuity
RH	E223	2	Ground	Yes
LH	E212	2	Ground	165

Does continuity exist?

YES >> Inspect the headlamp bulb.

NO >> Repair the harness.

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

$1.\mathsf{CHECK}$ HEADLAMP (LO) OPERATION

WITHOUT CONSULT-III

- Start IPDM E/R auto active test. Refer to <u>PCS-14, "Diagnosis Description"</u>.
- 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

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INFOID:0000000004201496

< COMPONENT DIAGNOSIS >

- 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-44, "HEADLAMP (XENON): Diagnosis Procedure".

HEADLAMP (XENON): Diagnosis Procedure

INFOID:0000000004201497

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.

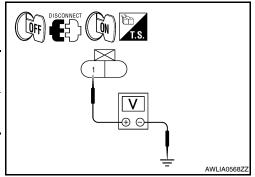
NO >> GO TO 2

2.CHECK HEADLAMP (LO) OUTPUT VOLTAGE

(P)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
Со	nnector	Terminal	(-)	voltage
RH	E223	1	Ground	Battery voltage
LH	E212	1	Ground	



Is battery voltage present?

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

3.check headlamp (LO) circuit for open

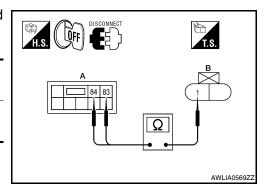
- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the front combination lamp harness connector.

A			В		Continuity
Conr	nector	Terminal	Connector	Terminal	Continuity
RH	E200	83	E223	1	Yes
LH	L200	84	E212	1	165

Does continuity exist?

YES >> GO TO 4

NO >> Repair the harnesses or connectors.



< COMPONENT DIAGNOSIS >

YES

NO

4.CHECK FRONT COMBINATION LAMP (LO) GROUND CIRCUIT

Disconnect the front combination lamp connector.

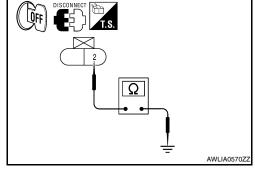
>> Inspect the headlamp bulb.

>> Repair the harness.

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

Coni	nector	Terminal	_	Continuity
RH	E223	2	Ground	Yes
LH	E212	2	Glound	163

Does continuity exist?



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FRONT FOG LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

FRONT FOG LAMP CIRCUIT

Description INFOID:0000000004201498

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

Component Function Check

INFOID:0000000004201499

1.CHECK FRONT FOG LAMP OPERATION

NWITHOUT CONSULT-III

- Activate IPDM E/R auto active test. Refer to PCS-14, "Diagnosis Description".
- Check that the front fog lamp is turned ON.

(P)CONSULT-III

- 1. Select "EXTERNAL LAMP" of IPDM E/R active test item.
- 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-46, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004201500

1. CHECK FRONT FOG LAMP FUSE

- Turn the ignition switch OFF.
- 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

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

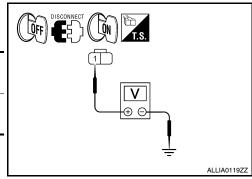
(+)			(-)	Voltage
Co	nnector	Terminal	(-)	voltage
LH	E214	1	Ground	Battery voltage
RH	E227	1	Glound	

Is battery voltage present?

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

${f 3}.$ CHECK FRONT FOG LAMP OPEN CIRCUIT

Turn the ignition switch OFF.



FRONT FOG LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

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

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

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Does continuity exist?

YES >> GO TO 4

NO >> Repair the harnesses or connectors.

4. CHECK FRONT FOG LAMP GROUND CIRCUIT

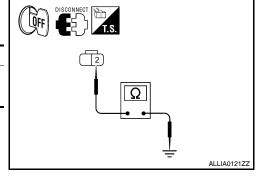
- Disconnect the front fog lamp connector.
- 2. Check continuity between the front fog lamp harness connector terminal and ground.

Con	nector	Terminal	_	Continuity
RH	E227	2	Ground	Yes
LH	E214	2	Ground	103

Does continuity exist?

YES >> Inspect the fog lamp bulb.

NO >> Repair the harness.



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PARKING LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

PARKING LAMP CIRCUIT

Description INFOID:000000004201501

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

Component Function Check

INFOID:0000000004201502

1. CHECK PARKING LAMP OPERATION

NWITHOUT CONSULT-III

- Activate IPDM E/R auto active test. Refer to PCS-14, "Diagnosis Description".
- 2. Check that the parking lamp is turned ON.

(P)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-48, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004201503

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)

(E)CONSULT-III

PARKING LAMP CIRCUIT

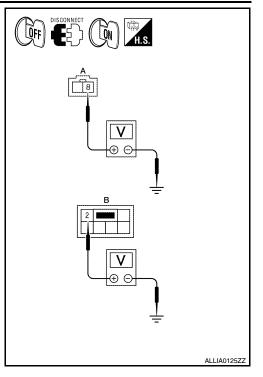
< COMPONENT DIAGNOSIS >

- 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.

1	(+)	(-)	Voltage	
Connector		Terminal		
Front	A: E218, E225	8	Ground	Battery voltage
Rear	B: B30, B45	2	Ground	Dattery Voltage

Is battery voltage present?

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



3.CHECK PARKING LAMP CIRCUIT (OPEN)

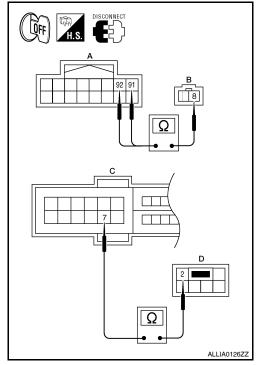
- 1. Turn the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between the IPDM E/R harness connector and the combination lamp harness connector.

Connector		Terminal	Connector	Terminal	Continuity
Front	A: E201	91, 92	B: E218, E225	8	Yes
Rear	C: E18	7	D: B30, B45	2	163

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 >

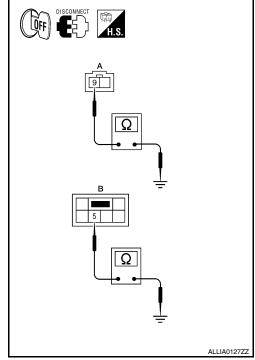
- Disconnect the combination lamp connector.
- Check continuity between the combination lamp harness connector terminal and ground.

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

Does continuity exist?

>> Inspect the parking lamp bulb. >> Repair the harness. YES

NO



TURN SIGNAL LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

TURN SIGNAL LAMP CIRCUIT

Description INFOID:000000004201504

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

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

NOTE:

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

Component Function Check

1. CHECK TURN SIGNAL LAMP

@CONSULT-III

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

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

Does the turn signal lamp blink?

YES >> Turn signal lamp circuit is normal.

NO >> Refer to EXL-51, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK TURN SIGNAL LAMP BULB

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

Is the bulb OK?

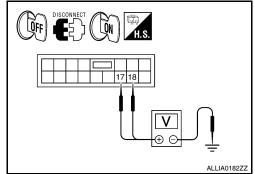
YES >> GO TO 2

NO >> Replace the bulb.

2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

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

Con	(+) Connector Terminal				-		(-)	Voltage
RH	M17	17		15 10 10 10 10 10 10 10 10 10 10 10 10 10 1				
LH	M17	18	Ground	1 s				



Is the measurement value normal?

YES >> GO TO 3

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

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TURN SIGNAL LAMP CIRCUIT

< COMPONENT DIAGNOSIS >

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	18	E217	5	
Door mirror LH			D4	7	Yes
Rear RH			B45	3	165
Front RH	M17	17	E224	5	
Door mirror RH			D107	7	

Does continuity exist?

YES >> GO TO 4

NO >> Repair the harnesses or connectors.

4. CHECK TURN SIGNAL LAMP SHORT CIRCUIT

Check continuity between the BCM harness connector and the ground.

Conr	Connector		_	Continuity
LH	M17	18	Ground	No
RH	IVIII	17	Ground	

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 5

5. CHECK TURN SIGNAL LAMP GROUND CIRCUIT

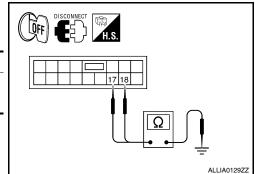
Check continuity between the front combination lamp, the rear combination lamp or the door mirror and ground (if equipped with turn signals in mirrors).

Connector		Terminal	_	Continuity
Front RH	E224	7		
Front LH	E217	7		
Rear RH	B45	5	Cround	Yes
Rear LH	B30	5	Ground	163
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

Description INFOID:000000004201507

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

Component Function Check

1. CHECK OPTICAL SENSOR SIGNAL BY CONSULT-III

(P)CONSULT-III

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

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

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

Is the item status normal?

YES >> Optical sensor is normal.

NO >> Refer to EXL-53, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK OPTICAL SENSOR POWER SUPPLY INPUT

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

(+)	(-)	Voltage	
Connector	Terminal	(-)	voltage	
M66	1	Ground	5V	

Is the voltage reading as specified?

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

2.CHECK OPTICAL SENSOR GROUND INPUT

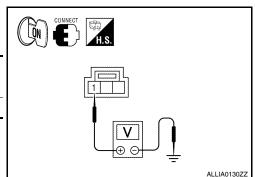
Check the voltage between the optical sensor harness connector and ground.

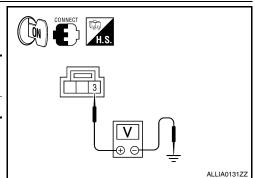
(+)	(-)	Voltage
Connector	Terminal	(-)	voltage
M66	3	Ground	Less than 0.2V

Is the voltage reading as specified?

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

3. CHECK OPTICAL SENSOR SIGNAL OUTPUT





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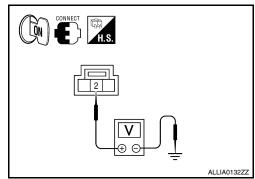
OPTICAL SENSOR

< COMPONENT DIAGNOSIS >

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

(+)		(–)	Condition	Voltage	
Connector	Terminal	()	Condition	voltage	
M66	2 Ground	2 Cround	When illuminating	3.1V or more *	
		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.

$oldsymbol{4}.$ CHECK OPTICAL SENSOR POWER SUPPLY FOR OPEN CIRCUIT

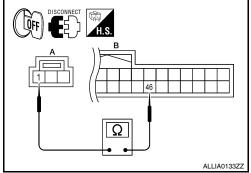
- Turn the ignition switch OFF.
- 2. Disconnect the optical sensor connector and BCM connector.
- 3. Check continuity between the optical sensor harness connector and the BCM harness connector.

A			Continuity	
Connector	Terminal	Connector	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

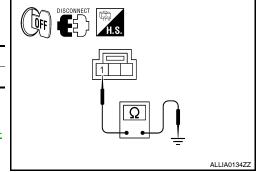
Check the continuity between the optical sensor harness connector and the ground.

Connector	Terminal	_	Continuity
M66	1	Ground	No

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".



6. CHECK OPTICAL SENSOR GROUND FOR OPEN CIRCUIT

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

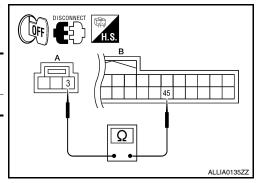
	A		В	Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M66	3	M18	45	Yes	

Does continuity exist?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

NO >> Repair the harnesses or connectors.

7.CHECK OPTICAL SENSOR SIGNAL FOR OPEN CIRCUIT



OPTICAL SENSOR

< COMPONENT DIAGNOSIS >

- 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		В	Continuity
Connector	Terminal	Connector Terminal		Continuity
M66	2	M18	21	Yes

Does continuity exist?

YES >> GO TO 8

NO >> Repair the harnesses or connectors.

8.CHECK OPTICAL SENSOR SIGNAL FOR SHORT CIRCUIT

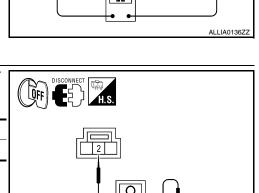
Check the continuity between the optical sensor harness connector and ground.

Connector	Terminal	_	Continuity
M66	2	Ground	No

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM. Refer to BCS-96, "Removal and Installa-



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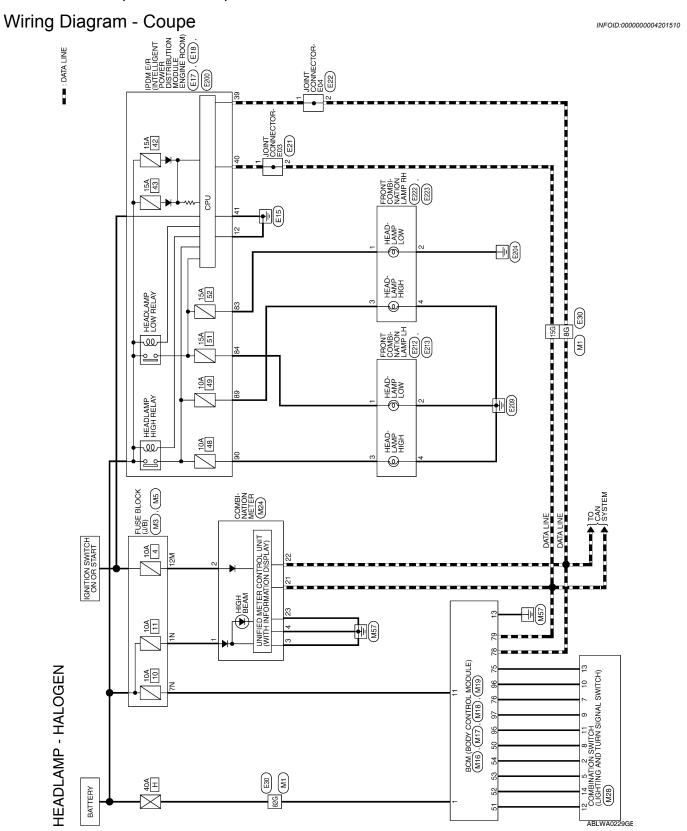
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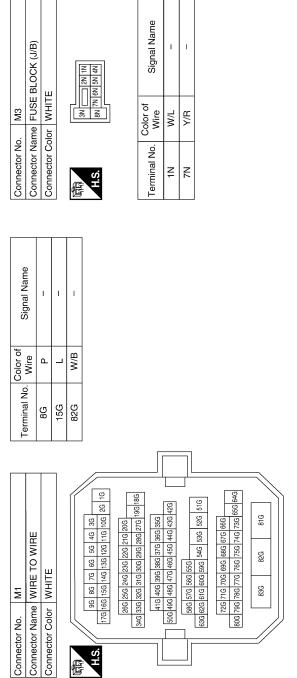
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HEADLAMP (HALOGEN)



HEADLAMP CONNECTORS - HALOGEN



Connector No. M5). M5		Connector No. M16	No. M16		Connector No. M17	M17	
Connector Name FUSE BI	ame FUS	E BLOCK (J/B)	Connector	Vame BC	Connector Name BCM (BODY CONTROL	Connector Na	me BCM (Connector Name BCM (BODY CONTROL
Connector Color WHITE	olor WHI	1		MO	MODULE)		MODULE)	LE)
		!	Connector Color BLACK	Solor BLA	JOK	Connector Color WHITE	lor WHITE	
A.S.	5M 4M [34 24 14 14 14 14 14 14 1	H.S.		1 3	H.S.	112 13 14 15 16 17 18 19	8 9 10 16 17 18 19
Terminal No. Wire	Color of Wire	Signal Name	Terminal No. Wire	Color of Wire	Signal Name	Terminal No. Wire	Color of Wire	Signal Name
12M	۵	ı	-	M/B	BAT_POWER_F/L	#	Y/R	BAT_BCM_FUSE

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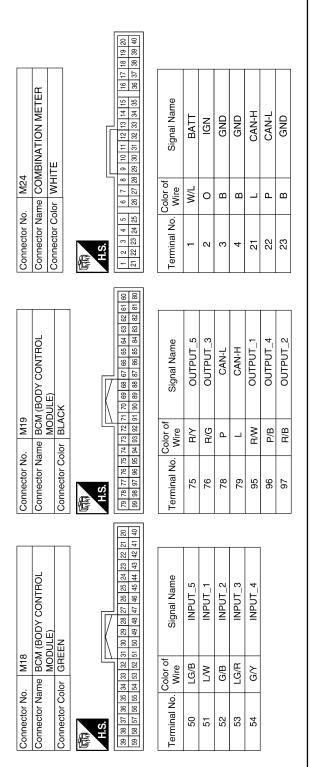
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GND1

3





Signal Name

Color of Wire

Terminal No.

Connector Name COMBINATION SWITCH

M28

Connector No.

Connector Color | WHITE

OUTPUT_3

LG/R

2 / ω 6

OUTPUT_4

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OUTPUT 5

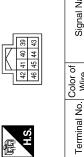
LG/B

R/G

INPUT 3

INPUT_2 INPUT_4





INPUT_1 OUTPUT_1

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P/B

10 Ξ 72 13 4

R/B

Color of Signal Name Wire	P CAN-L	L CAN-H	GND (SIGNAL)
Terminal No.	39	40	41

OUTPUT_2

G/B

INPUT_5

ſ	9	4	1
	5	13	
$\Box \Box$		12	
- IV		Ξ	l
- 11		10	l
$\parallel \parallel \perp$		6	
	2	8	
	-	7	



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HEADLAMP (HALOGEN)

	А
Signal Name	В
Signa	С
Color of	D
Connector No. E21	Е
	F
MER) WER) WER) WERS WERS SEG 286 SEG 286 SEG 386	G
Signal Na GND (PON GND (PON GND (PON GND (PON GND GND GND GND GND GND GND GND GND GN	Н
12 B GND (P Signal N) Wire Signal	I
Terminal No. Connector No. Connector Nam Connector Nam Connector Color	J
10N (SOOM) (SOOM) 19 2031323334 19 202122324 The Foot	K
PDM E/R (INTELLIGENT PDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) MODULE ENGINE ROOM) MODULE ENGINE ROOM) MHITE ESERETZERE 30 3 4 5 6 7 8 ESERETZERE 30 3 4 5 6 7 8 ESERETZERE 30 3 MHITE MHITE ESERETZERE 30 3 MHITE ESERETZERE 30 3 MHITE MHITE ESERETZERE 30 3 MHITE ESERETZERE 30 3 MHITE MHITE ESERETZERE 30 3 MHITE ESERETZERE 30 3 MHITE MHITE ESERETZERE 30 3 MHITE ESERETZERE 30 3 MHITE MHITE ESERETZERE 30 3 MHITE ESERETZERE 30 3 MHITE MHITE ESERETZERE 30 3 MHITE ESERETZERE 30 3 MHITE MHITE ESERETZERE 30 3 MHITE ESERETZERE 30 3 MHITE MHITE ESERETZERE 30 3 MHITE MHI	EXL
POWER E/N WHITE OF WH	
Connector No. E18 Connector Name POWEF MODUL Connector Color WHITE Connector No. E22 Connector Name JOINT Connector Color of Terminal No. Wire 1 P P 2 P 2 P P	N
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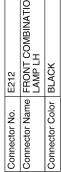
E213	Connector Name FRONT COMBINATION LAMP LH	BLACK
Connector No.	Connector Name	Connector Color BLACK
	NO	







Terminal No.	Color of Wire	Signal Na
ဧ	g	H/L_LH
4	В	GND







Signal Name	H/L_LH_LO	GND	
Color of Wire	7	В	
Terminal No.	1	2	

ot Signal I	H/L_L!	GN	
Color of Wire	٦	В	
Ferminal No.	1	2	

Connector No. E223 Connector Name FRONT COMBINATI LAMP RH Connector Color BLACK









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







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

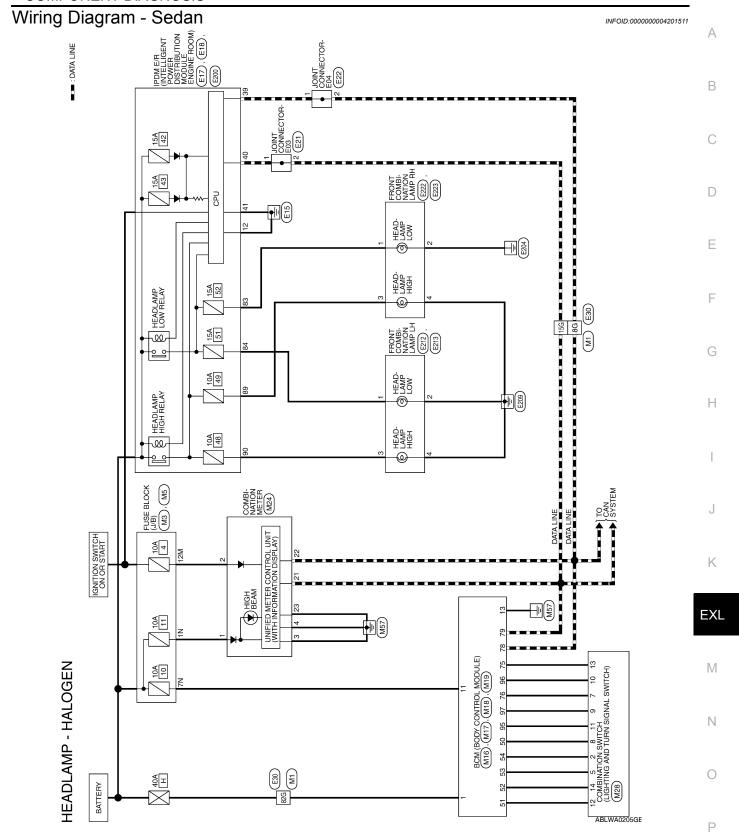
E222	Connector Name FRONT COMBINATION LAMP RH	BLACK	
Connector No.	Connector Name	Connector Color BLACK	



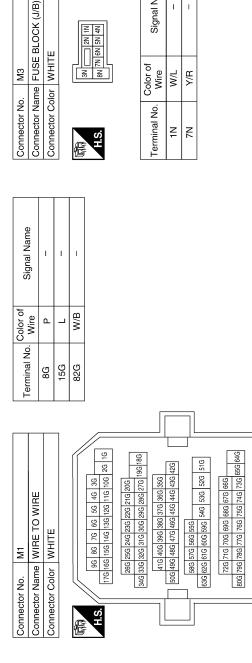


Signal Name	H/L_RH_HI	GND
Color of Wire	MΠ	В
Terminal No.	8	4

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HEADLAMP CONNECTORS - HALOGEN



Signal Name

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

Connector Name BCM (BODY CONTROL

Connector Name FUSE BLOCK (J/B)

M5

Connector No.

Connector Color WHITE

M16

Connector No.



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

MODULE)	CK		Signal Name	BAT_POWER_F/L
<u>M</u>	lor BLA		Color of Wire	M/B
	Connector Color BLACK	咸南 H.S.	Terminal No.	1

Signal Name	I	
Color of Wire	Ь	
inal No.	2M	

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

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81G

82G

83G

HEADLAMP (HALOGEN)

	18 19 20 38 39 40								
Connector No. M24 Connector Name COMBINATION METER Connector Color WHITE	9 10 11 12 13 14 15 16 17	Signal Name	BATT	IGN	GND	GND	CAN-H	CAN-L	GND
me COM	6 7 8 26 27 28	Color of Wire	M/L	0	В	В	Г	Ь	В
Connector No. M24 Connector Name COMBII Connector Color WHITE	H.S. 1 2 3 4 5 21 22 23 24 25	Terminal No.	ļ.	2	3	4	21	22	23
Connector No. M19 Connector Name BCM (BODY CONTROL MODULE) Connector Color BLACK	70 89 88 67 66 65 64 63 82 61 80 90 89 88 87 88 85 84 83 82 61 80	Signal Name	OUTPUT_5	OUTPUT_3	CAN-L	CAN-H	OUTPUT_1	OUTPUT_4	OUTPUT_2
me BCM MOD or BLAC	76 75 74 73 72 71 70 69 96 95 94 98 92 91 90 89	Color of Wire	₽Ą	B/G	Д	_	B/W	P/B	B/B
Connector No. M19 Connector Name BCM (EMODUI Connector Color BLACK	H.S. H.S. 77 77 76 75 79 96 95 95 95 95 95 95 95 95 95 95 95 95 95	Terminal No. Wire	75	9/	78	62	92	96	26
	21 20 41 40								
M18 BCM (BODY CONTROL MODULE) GREEN	30 29 28 27 26 25 24 23 22 50 49 48 47 46 45 44 49 42	Signal Name	INPUT_5	INPUT_1	INPUT_2	INPUT_3	INPUT_4		
me BCM MOD OF GRE	35 54 53 32 51 51 52 51 51 52 51 51 52 51 51 52 51 51 51 51 51 51 51 51 51 51 51 51 51	Color of Wire	LG/B	Γ/M	G/B	LG/R	G/Y		
Connector No. M18 Connector Name BCM (BOD) MODULE) Connector Color GREEN	H.S. (13) 38 37 36 35 55 55 55 55 55 55 55 55 55 55 55 55	Terminal No. Wire	50	51	52	53	54		

			_									
	PDM E/R (INTELLIGENT POWER DISTRIBUTION	MODULE ENGINE ROOM)	<u> </u>	Ī	7 04				Signal Name	CAN-L	CAN-H	GND (SIGNAL)
_	me PO	<u>Q</u> :	lor WH		42	46 45			Color of Wire	- L	Т	В
Connector No.	Connector Na		Connector Color WHITE	ØE	A HA	J.			Terminal No. Wire	39	40	41
				<u>ت</u> ا						-	l	
Signal Name	OUTPUT_4	OUTPUT_3	INPUT_3	OUTPUT_5	INPUT_2	INPUT_4	INPUT_1	OUTPUT 1	INPUT_5	OUTPUT_2		
Color of Wire	Q /\	LG/R	B/G	LG/B	B/B	P/B	B/W	///	. A	G/B		
Terminal No. Wire	2	5	7	8	6	10	=	1.0	13	41		
Connector No. M28	Connector Name COMBINATION SWITCH Connector Color WHITE				:	8 9 10 11 12 13 .						



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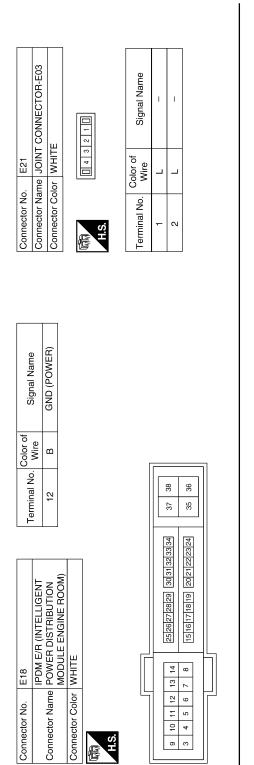
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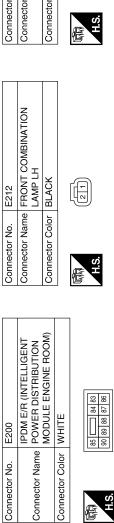
Signal Name	1	ı	1								
Color of Wire	۵	_	LG								
Terminal No. Wire	86	15G	82G								
Connector No. E30 Connector Name WIRE TO WIRE	Connector Color WHITE			H.S. 16 20 106 116 126 136 146 156 176 166 176 166 176 166 176 166 176 1	206 216 226 236 246 256 266	186 1996 2705 2805 2905 300 310 3205 3305 3405	42G 43G 44G 45G 46G 47G 48G 19G 50G	22 P P P P P P P P P P P P P P P P P P	51G 52G 53G 54G 59G 61G 61G 62G 68G	64G 65G 73G 74G 75G 77G 77G 77G 78G 80G 80G	816 826 836
Connector No. E22 Connector Name JOINT CONNECTOR-E04	Connector Color WHITE			H.S.		Terminal No. Color of Signal Name	1 P	2 P			

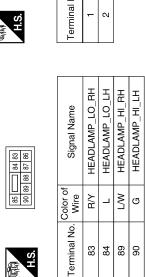
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HEADLAMP (HALOGEN)

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

ctor Na	me FRONT C	nector Name FRONT COMBINATION LAMP LH
nector Color	lor BLACK	\
	4	
ninal No.	Color of Wire	Signal Name
	g	H/L_LH_HI
	В	GND





Termina	3	4			
Signal Name	H/L_LH_LO	GND			
Color of Wire	Τ	В			
Terminal No. Wire	1	2			
					i
Signal Name	HEADLAMP_LO_RH	HEADLAMP_LO_LH	HEADLAMP_HI_RH	HEADLAMP_HI_LH	
olor of Wire	R/Y	_	<u>N</u>	ŋ	

E223	Sonnector Name FRONT COMBINATION	LAMP RH	BLACK	
Connector No.	Connector Name		Connector Color BLACK	

Connector Name FRONT COMBINATION LAMP RH	>		Signal Name	H/L_RH_LO	GND
me FRONT C	lor BLACE		Color of Wire	R/Y	В
Connector Na	Connector Color BLACK	南 H.S.	Terminal No.	1	2

INT COMBINATION	CK	£	Signal Name	IH_RH_HI	UNE
me FRC	or BLA	4	Color of Wire	N/	В
Connector Na	Connector Co	赋 H.S.	Terminal No.	3	4
	Connector Name FRONT COMBINATION LAMP RH	Connector Name FRONT COMBINATION LAMP RH Connector Color BLACK	Connector Name FRONT COMBINATION LAMP RH Connector Color BLACK ##S.	Connector Name FRONT COMBINATION LAMP RH Connector Color BLACK H.S. Terminal No. Color of Signal Name	Connector Name FRONT COMBINATION LAMP RH Connector Color BLACK H.S. Terminal No. Wire Signal Name 3 LW H/L_RH_HI

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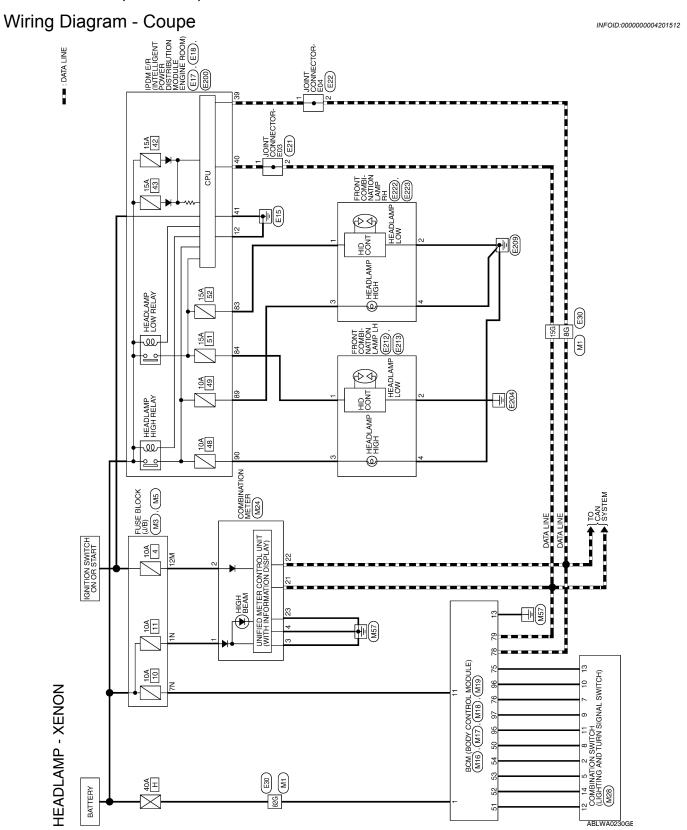
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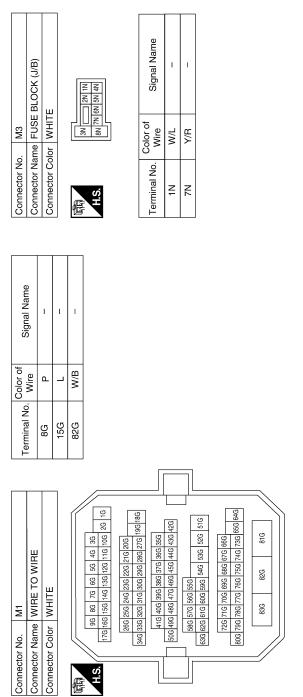
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HEADLAMP (XENON)



HEADLAMP CONNECTORS - XENON



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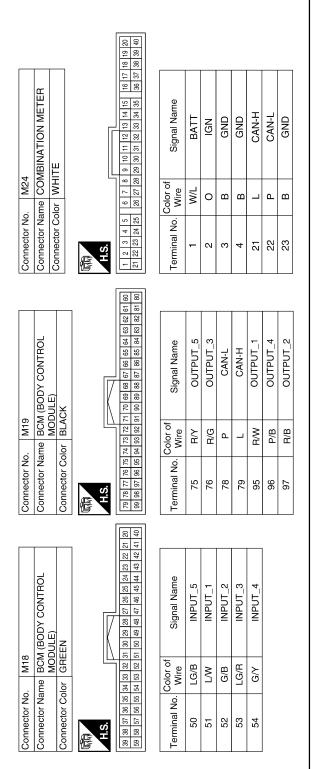
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Signal Name

OUTPUT_3

OUTPUT_4

OUTPUT 5

INPUT 3

INPUT_2 INPUT_4





Signal Name	CAN-L	CAN-H	GND (SIGNAL)
Color of Wire	Ь	٦	a
Terminal No.	39	40	41

OUTPUT_2

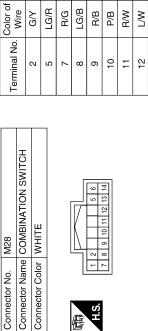
G/B

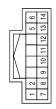
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INPUT_5

INPUT_1 OUTPUT_1







Connector Color | WHITE

M28

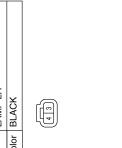
Connector No.

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HEADLAMP (XENON)

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Signal Name	В
Signa	С
Color of	D
Connector No. E21	Е
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MER) WER) WER) 10	G
Signal Na GND (PON GND (PON 1226) 256 66 76 72 126 136 146 1 1 122 136 146 1 1 122 136 146 1 1 122 136 146 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Н
12 B GND (P Signal N) Wire Signal	I
Terminal No. Connector No. Connector Nam Connector Nam Connector Nam Connector Colo	J
10N (SOOM) (SOOM	K
PDM E/R (INTELLIGENT Connector Name POWER DISTRIBUTION MODULE ENGINE ROOM) MODULE ENGINE ROOM) MODULE ENGINE ROOM) Selectrical Solution Selectrica	EXL
Color of Wire P P P P P P P P P P P P P P P P P P P	
Connector No. F18 Connector Name POWEF MODUL Connector Color WHITE Sonnector No. E22 Connector No. Mire 1 P P 10 1 3 2 3 4 5 6 7 8 1 1 1 1 1 1 1 1 1	N
S S S S ABLIA0789GB	0
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213	Connector Name FRONT COMBINATION LAMP LH	ACK
Connector No. E213	Connector Name FR LAI	Connector Color BLACK

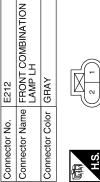


Signal Name H/L_LH_HI GND

Color of

Terminal No.

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Connector No.

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

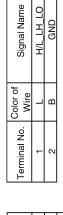
E200

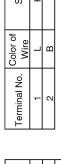
Connector No.

Connector Name

Connector Color WHITE







Signal Name HEADLAMP LO RH HEADLAMP LO LH HEADLAMP HI HH HFADI AMP HI IH	Color of Wire R/Y L/W L/W
HEADLAMP LO LH HEADLAMP HI RH	
HEADLAMP_LO_RH	λγ
oigilai Naille	'ire
Omol Momo	or of



Connector Name FRONT COMBINATION LAMP RH

Connector No.

BLACK

Connector Color



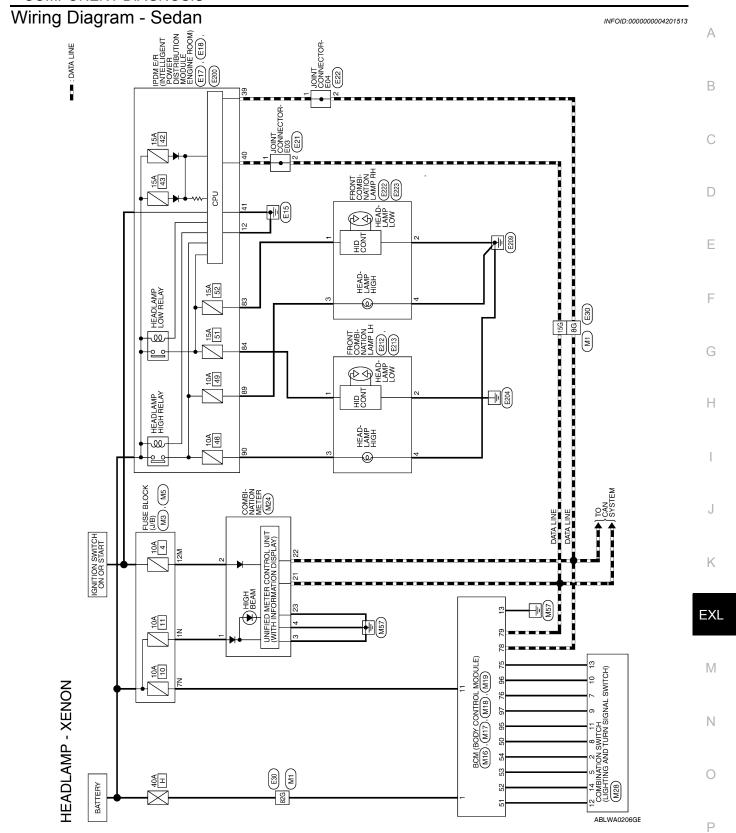
Signal Name	H/L_RH_LO	GND	
Color of Wire	R/Υ	В	
Terminal No.	1	2	

ermina 1	Color of Signature Signature	1 R/Y H/	2 B
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Signal Name	H/L_RH_HI	GND	
Color of Wire	MΠ	В	
Terminal No.	3	4	



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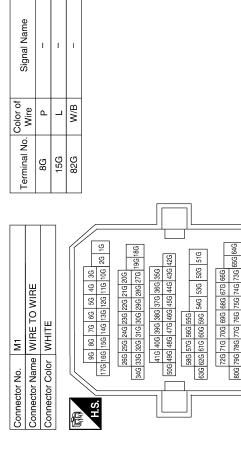
Connector Name FUSE BLOCK (J/B)

Connector No.

Connector Color WHITE

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HEADLAMP CONNECTORS - XENON

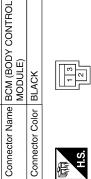


Terminal No.	Color of Wire	Signal Name
Z.	M/L	ı
NZ NZ	Y/R	ı









Connector No. | M16

Connector Name FUSE BLOCK (J/B)

M5

Connector No.

Connector Color WHITE



	Signal Name	BAT_POWER_F
30	Wire	W/B
	Terminal No. Wire	-

OWER_F/L

Signal Name	_	
Color of Wire	Р	
Terminal No.	12M	

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82G

83G

		18 19 20 38 39 40								
Connector No. M24 Connector Name COMBINATION METER Connector Color WHITE		6 7 8 9 10 11 12 13 14 15 16 17 18 18 18 26 27 28 29 30 31 32 33 34 35 36 36 37 38 38 38 38 38 38 38 38 38 38 38 38 38	Signal Name	BATT	IGN	GND	GND	CAN-H	CAN-L	GND
me COM		26 27 28	Color of Wire	M/L	0	В	В	Γ	Ь	В
Connector No. M24 Connector Name COMBII Connector Color WHITE		21 22 23 24 25	Terminal No. Wire	1	2	3	4	21	22	23
	F	81 80								
Connector No. M19 Connector Name BCM (BODY CONTROL MODULE) Connector Color BLACK		70 69 68 67 66 65 64 63 62 90 89 88 87 86 85 84 83 82	Signal Name	OUTPUT_5	OUTPUT_3	CAN-L	CAN-H	OUTPUT_1	OUTPUT_4	OUTPUT_2
me BCM MOD or BLAC		75 74 73 72 71 95 94 93 92 91	Solor of Wire	₽Ą	B/G	۵	٦	B/W	P/B	B/B
Connector No. M19 Connector Name BCM (EMODUI	H.S.	79 78 77 76 75 99 98 97 96 95	Terminal No. Wire	75	9/	78	62	92	96	97
		21 20 41 40								
M18 BCM (BODY CONTROL MODULE) GREEN		30 29 28 27 26 25 24 23 22 50 49 48 47 46 45 44 43 42	Signal Name	INPUT_5	INPUT_1	INPUT_2	INPUT_3	INPUT_4		
me BCM MOD lor GRE		34 33 32 31 54 53 52 51	Color of Wire	LG/B	Γ/M	G/B	LG/R	G/Y		
Connector No. M18 Connector Name BCM (BODY MODULE) Connector Color GREEN	T.S.	39 38 37 36 35 34 33 59 58 57 56 55 54 53	Terminal No. Wire	50	51	52	53	54		

	PDM E/R (INTELLIGENT	Connector Name POWER DISTRIBUTION	MODULE ENGINE ROOM)		Ī	42 41 40 39	46 45 44 43				Signal Name		CAN-L	CAN-H	(IANGIS) CING
E17	IPD	ne PO	8	or WH	Ľ	4	46			Color of	Wire		<u>а</u>	Т	٥
Connector No.		Connector Nar		Connector Color WHITE	E	Make	H.S.		•		Terminal No.		68	40	11
nal Name		JTPUT_4	JTPUT_3	NPUT_3	JTPUT_5	NPUT_2	NPUT_4	NPUT_1	JTPLJT 1		NPUT_5	JTPUT 2			

Signal Name	OUTPUT_4	OUTPUT_3	INPUT_3	OUTPUT_5	INPUT_2	INPUT_4	INPUT_1	OUTPUT_1	INPUT_5	OUTPUT_2	
Color of Wire	G/Y	LG/R	R/G	LG/B	B/B	P/B	R/W	M	R/Y	G/B	
Terminal No.	2	2		8	6	10	11	12	13	14	

M28	Connector Name COMBINATION SWITCH	WHITE	2 8 9 10 11 12 13 14 P
Connector No.	Connector Name	Connector Color WHITE	赋利 H.S.



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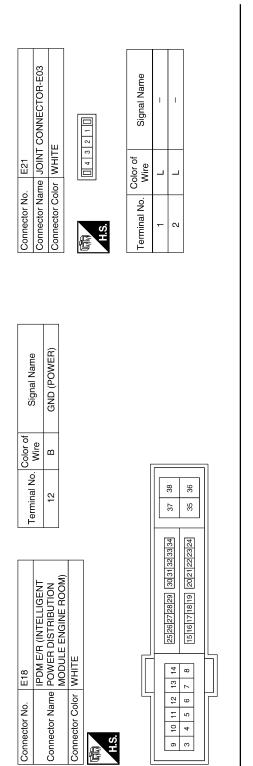
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Signal Name	I	ı	-								
Color of Wire	Ь	_	LG								
Terminal No. Wire	8G	15G	82G								
Connector No. E30 Connector Name WIRE TO WIRE				H.S. 16 26 106 116 126 136 146 156 166 176	206 216 226 236 246 256 266	186 196 276 286 296 306 316 326 346	426 436 446 456 466 476 486 506	582 572 583	51G 52G 53G 54G 58G 80G 81G 82G 83G	64G 65G 77G 74G 77G 77G 77G 77G 78G 80G	81G 82G 83G
Connector No. E22 Connector Name JOINT CONNECTOR-E04	Connector Color WHITE			- 11		Color of Signal Name Wire		- d			
Connector No.	Connector (H.S.		Terminal No.	-	2			

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HEADLAMP (XENON)

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

E212

Connector No.

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

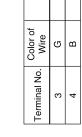
Connector Name

E200

Connector No.

Connector Color WHITE

	Signal Name	H/L_LH_HI	GND
(F)	Color of Wire	5	В
	H .	 	-



Connector Name FRONT COMBINATION LAMP LH			Signal Name	H/L_LH_LO	GND
ne FRONT C LAMP LH	or GRAY	2	Color of Wire	Τ	В
Connector Nar	Connector Color	呵荷 H.S.	Terminal No.	1	2

Terminal No.	Color of Wire	Sign
1	٦	H/L
2	В	

Signal Name	HEADLAMP_LO_RH	HEADLAMP_LO_LH	HEADLAMP_HI_RH	HEADLAMP_HI_LH	
Color of Wire	R/Υ	7	ΓW	9	
Terminal No.	83	84	89	06	



Connector Name FRONT COMBINATION LAMP RH			Signal Name	H/L_RH_LO	GND
e FRONT C	r GRAY		Color of Wire	R/Y	В
Connector Nam	Connector Color GRAY	赋利 H.S.	Terminal No.	1	2

Signal Name	Terminal No. Wire Signal Nam 3 LW H/L_RH_H		Φ =
	Color of Wire	- (Fig. 1)	Signal Nam H/L_RH_H

是 H.S.	

Terminal No. Wire Signal	3 L/W H/L_F	4 B GN	
Termina	3	4	

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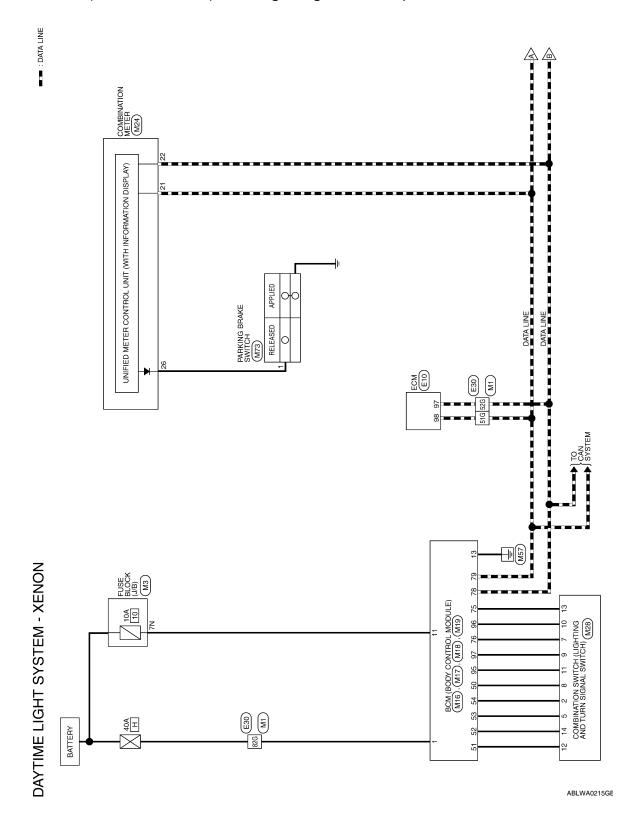
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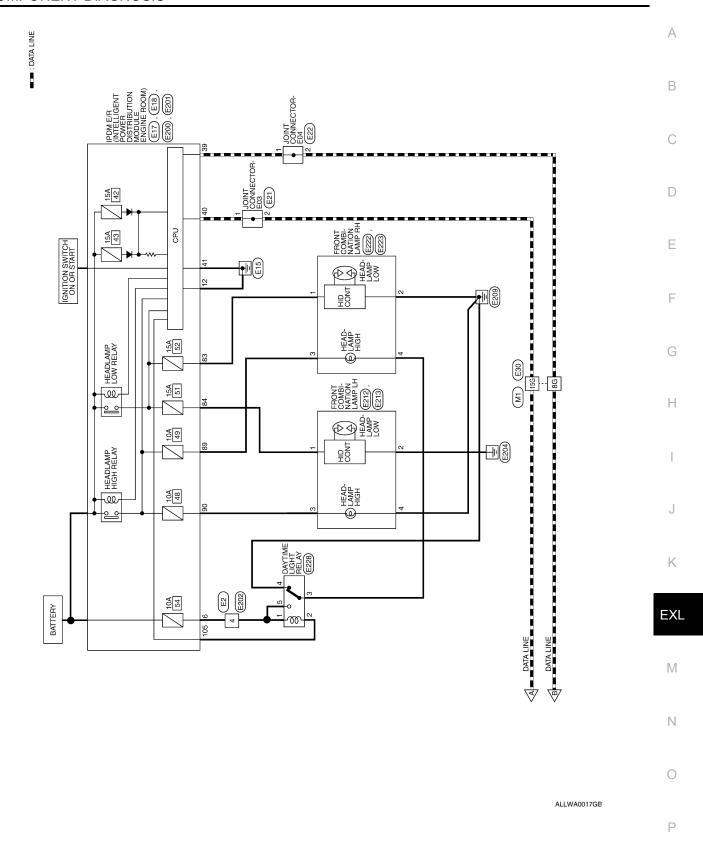
Connector No.

INFOID:0000000004201514

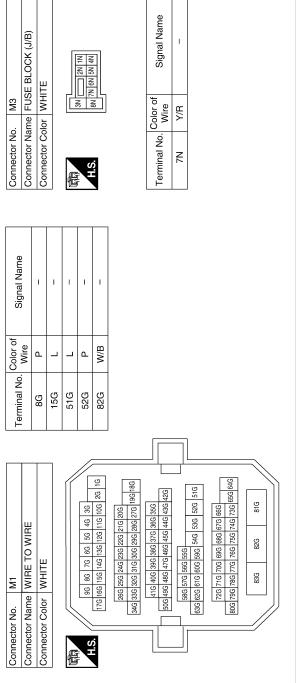
DAYTIME RUNNING LIGHT SYSTEM HEADLAMP (XENON TYPE)

HEADLAMP (XENON TYPE): Wiring Diagram - Coupe





DAYTIME LIGHT SYSTEM CONNECTORS - XENON



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

Connector Name BCM (BODY CONTROL MODULE)

Connector Name BCM (BODY CONTROL MODULE)

M16

Connector No.

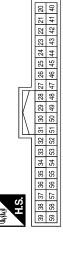
BLACK

Connector Color

Connector No. M17

WHITE

Connector Color



Signal Name	INPUT_5	INPUT_1	INPUT_2	INPUT_3	INPUT 4
Color of Wire	LG/B	M/I	G/B	LG/R	G/Y
Terminal No. Wire	20	51	52	53	54

4 5 6 7 6 9 10 11 12 13 14 15 16 17 18 19	Signal Name	BAT_BCM_FUSE
1 12 13 14 16	Color of Wire	Y/R
H.S.	Terminal No.	#

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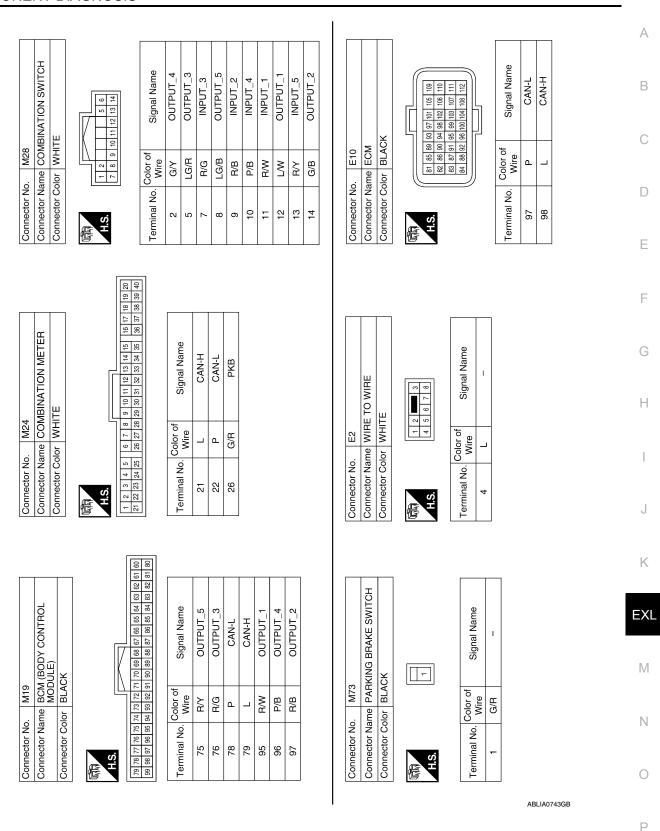
H.S.

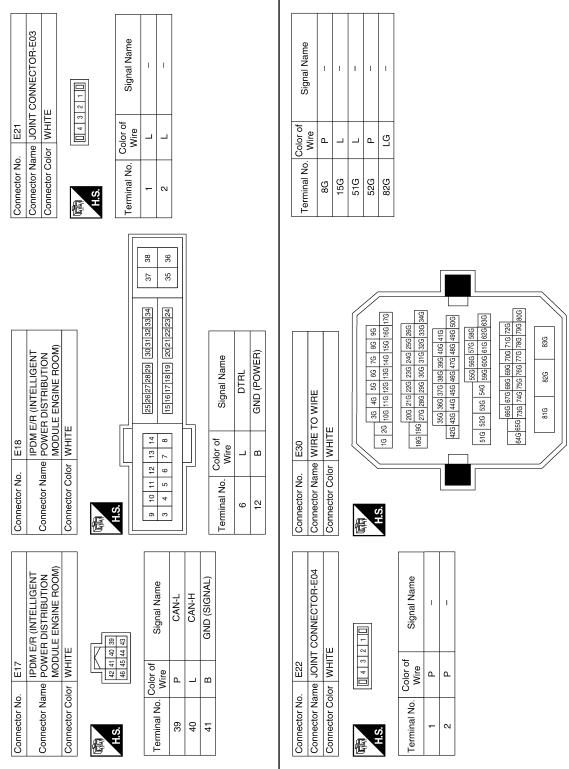
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Signal Name	BAT_POWER_F/L	
Color of Wire	M/B	
Terminal No.	-	

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< COMPONENT DIAGNOSIS >



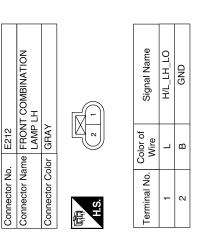


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< COMPONENT DIAGNOSIS >

Connector No.). E200		Connector No.	E201		Connector No.	. E202	
Connector Nar	Ime IPDI POV MOE	Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Connector Name	Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM	ENT ION OOM)	Connector Name WIRE TO WIRE Connector Color WHITE	me WIRE	TO WIRE
Connector Color WHITE	lor WHI	ITE	Connector Color WHITE	WHITE		Œ		
H.S.	88 06	88 87 88	H.S. 109105	208 977 906 95 94 99 92 91 906 105 100 100 100 100 100 100 100 100 100		H.S.	8 8 7 9 1	7 2 2 1 4 1 7 1
Terminal No. Wire	Color of Wire	Signal Name	Terminal No. Wire	or of Signal Name	ne	Terminal No. Wire	Color of Wire	Signal Name
83	R/Y	HEADLAMP_LO_RH	105	V DTRL_RLY	>.	4	SB	1
84	_	HEADLAMP_LO_LH						
68	<u>~</u>	HEADLAMP_HI_RH						
06	g	HEADLAMP_HI_LH						

Connector Name FRONT COMBINATION Connector Color BLACK H.S. Terminal No. Wire Signal Name 3 G H/L_LH_HI	Connector No. E222	Connector Name FRONT COMBINATION LAMP RH	Connector Color BLACK	H.S.	Terminal No. Color of Signal Name	
		NATION			Signal Name	H/L_LH_HI



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	Connector No. E228	Connector Name DAYTIME LIGHT RELAY	Connector Color BLACK	
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Signal Name	I	1	1	ı	Ι
Color of Wire	SB	۸	GR/R	В	SB
Terminal No.	1	2	ε	4	9







Signal Name	H/L_RH_LO	GND	
Color of Wire	R/Υ	В	
Terminal No.	-	2	

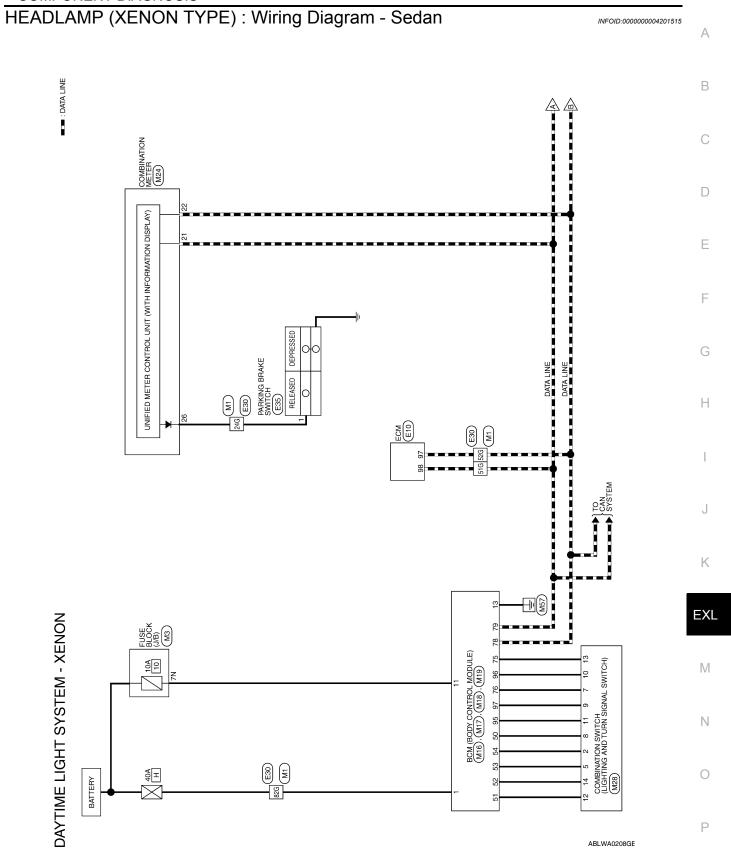
E222	Connector Name FRONT COMBINATION LAMP RH	3LACK	
Connector No.	Connector Name	Connector Color BLACK	

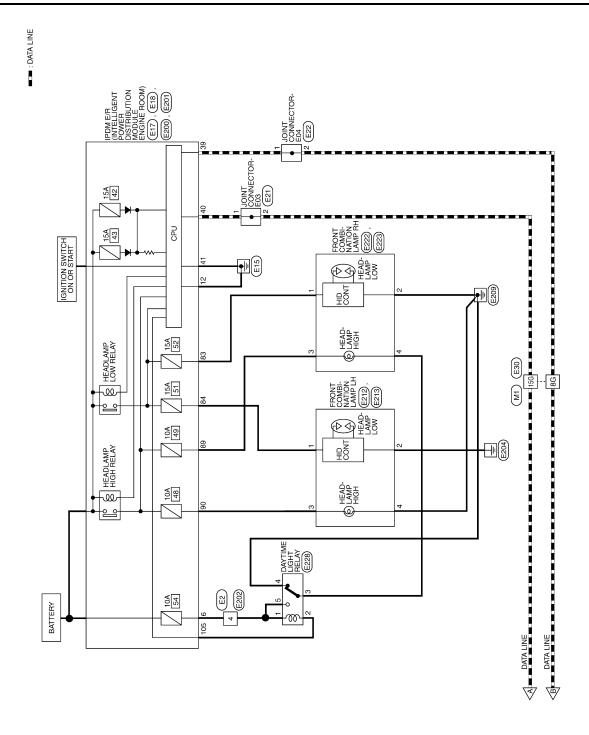




Signal Name	H/L_RH_HI	GND
Color of Wire	Γ/M	GR/R
Ferminal No.	3	4

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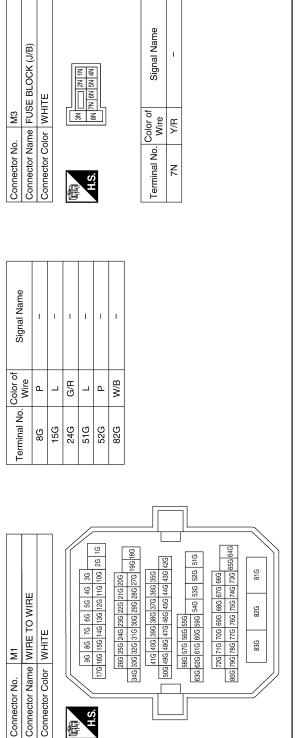




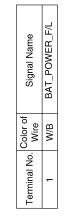
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DAYTIME LIGHT SYSTEM CONNECTORS - XENON



			21 20 411 40				
	Connector Name BCM (BODY CONTROL MODULE)	LEN	38 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41	Signal Name	INPUT_5	INPUT_1	INPUT_2
M18	ne BCN MO	or GRI	35 34 33 32 5 55 54 53 52 2	Solor of Wire	LG/B	L/W	G/B
Connector No.	Connector Nar	Connector Color GREEN	H.S. 39 38 37 38 35 59 58 57 56 55 15	Terminal No. Wire	50	51	52
Connector No. M17	Connector Name BCM (BODY CONTROL MODULE)	Connector Color WHITE	H.S. (1112 13 14 15 16 17 18 19)	Terminal No. Color of Signal Name	11 Y/R BAT_BCM_FUSE	13 B GND1	
						_	



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INPUT_3 INPUT_4

LG/R G/Y

53

EXL-85

Connector Name BCM (BODY CONTROL MODULE)

Connector No. | M16

BLACK

Connector Color

13

H.S.

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< COMPONENT DIAGNOSIS >



10 11 12 13 14	Signal Name	OUTPUT_4	OUTPUT_3	INPUT_3
7 1 2 8 9	Color of Wire	G/Y	LG/R	B/G
	inal No.	2	5	7



H.S.	

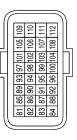




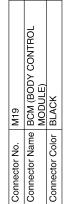
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-	2	3	4	1 2 3 4 5	9	2	8	6	10	11	12	13	14	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	16	17	18	19	20	
21	21 22 23 24 25	23	24	52	56	26 27 28 29 30 31 32 33 34 35	28	29	30	31	32	33	34	32	36	36 37 38 39 40	38	39	40	
																				_
	Terminal No.	ina	<u>Z</u>	<u>.</u>	Color of	٦	=			ਲੱ	🖺	Signal Name	<u>a</u>	_e						

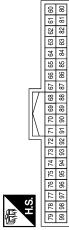
Signal Nam	CAN-H	CAN-L	PKB
Color of Wire	٦	Ь	G/R
Terminal No.	21	22	26

E10	ECM	BLACK	
Connector No.	Connector Name ECM	Connector Color BLACK	

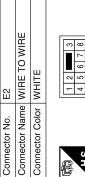


Signal Name	CAN-L	CAN-H
Color of Wire	Ь	7
Terminal No.	26	86





Signal Name	OUTPUT_5	OUTPUT_3	CAN-L	CAN-H	OUTPUT_1	OUTPUT_4	OUTPUT 2
Color of Wire	R/Y	B/G	۵	_	W/H	P/B	B/B
Terminal No.	75	9/	78	79	95	96	26



Connector No.

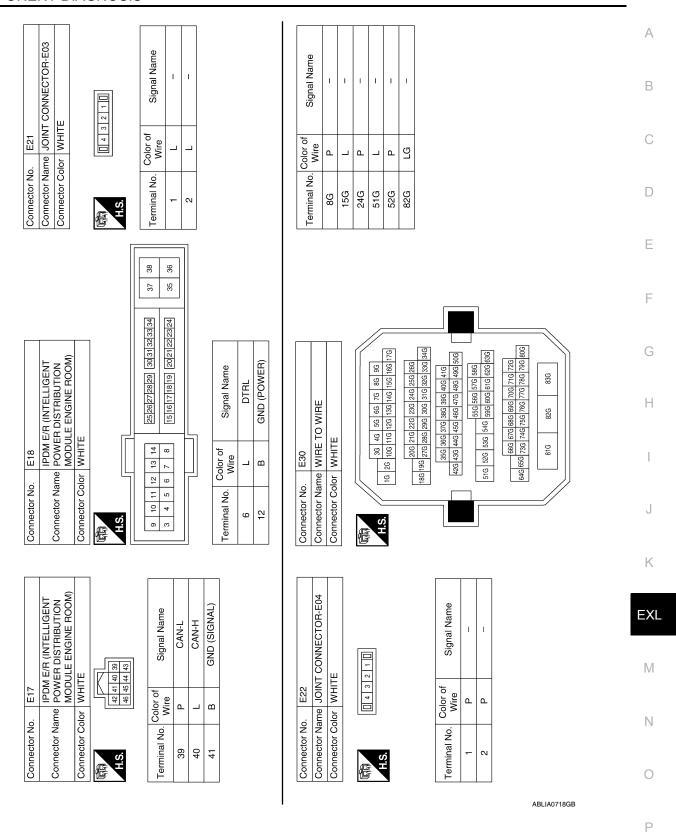




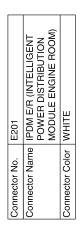


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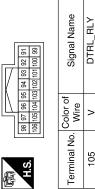
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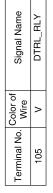


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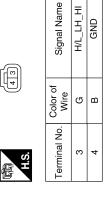
















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	Connector Name FRONT COMBINATION	·LH	,	
E212	FRON	LAMP LH	GRAY	
Connector No.	Connector Name		Connector Color GRAY	



Signal Nar	T_H_L_LH_L	GND
Color of Wire	٦	В
Terminal No.	1	2

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Connector Color

Connector No.

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

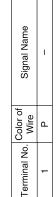
E200

Connector No.

Connector Color WHITE



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Signal Nar	_	
Color of Wire	SB	
Terminal No.	4	

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



Signal Name	_	_	I	I	I
Color of Wire	SB	۸	GR/R	В	SB
rminal No.	-	2	3	4	5

Connector No.	E223
Connector Name	Connector Name FRONT COMBINATION LAMP RH
Connector Color GRAY	GRAY



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Signal Name	H/L_RH_L0	GND
Color of Wire	R/Y	В
Terminal No.	ļ	5

HEADLAMP (HALOGEN)

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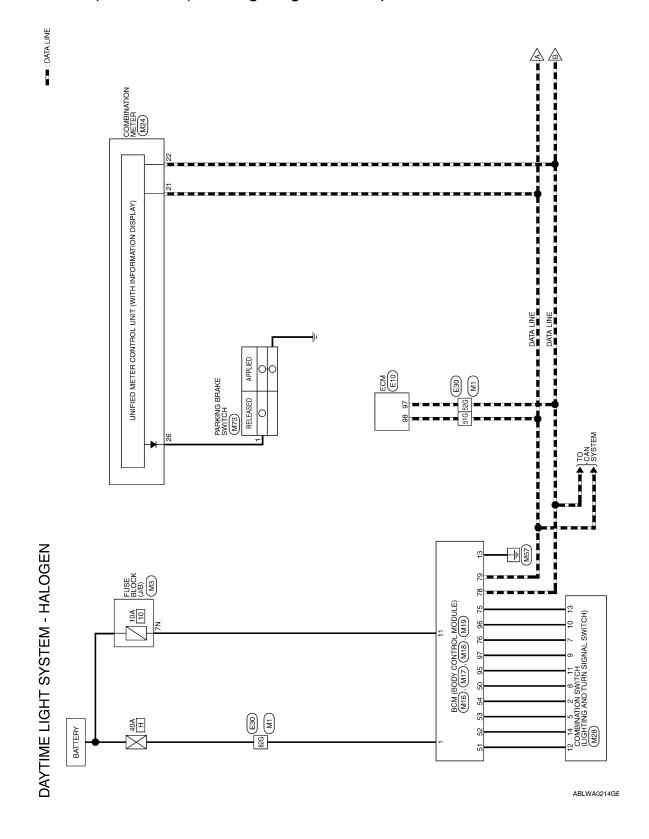
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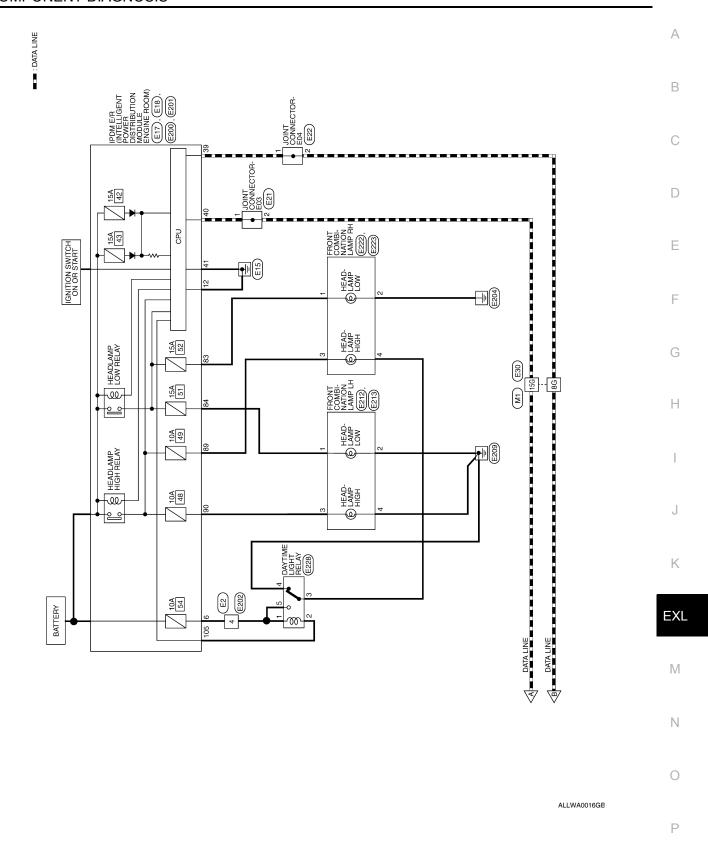
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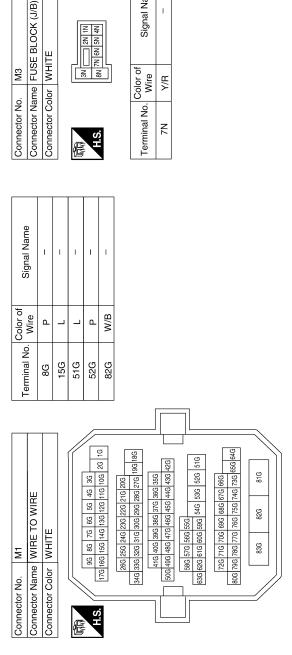
HEADLAMP (HALOGEN): Wiring Diagram - Coupe

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DAYTIME LIGHT SYSTEM CONNECTORS - HALOGEN



Signal Name

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

Connector Name BCM (BODY CONTROL MODULE)

M16

Connector No.

BLACK

Connector Color

Connector Name BCM (BODY CONTROL MODULE)
Connector Color GREEN

Connector Color

M18

Connector No.



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Signal Name	INPUT_5	INPUT_1	INPUT_2	INPUT_3	INPUT_4
Color of Wire	LG/B	M/l	G/B	LG/R	G/Y
Terminal No.	20	51	25	23	54

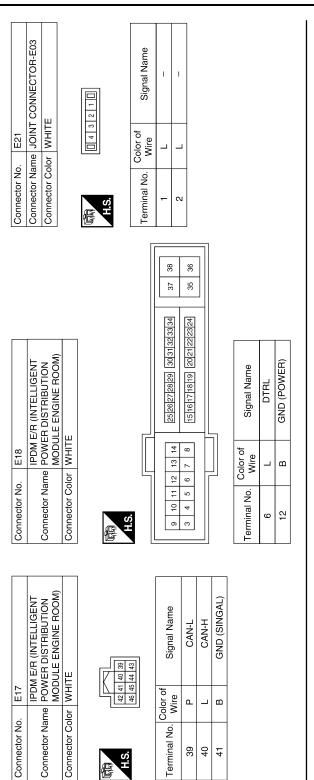
		_
Signal Name	BAT_POWER_F/L	
Color of Wire	W/B	
Terminal No.	1	

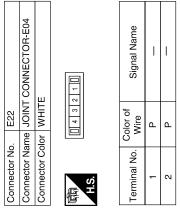
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VITCH		ame	T_4	L3	T_5	_2	4_	-	1_1	5	T_2				(D) (-12)	ame		ī	
Connector Name COMBINATION SWITCH	10 11 12 13 14	Signal Name	OUTPUT	OUTPUT_3 INPUT_3	OUTPUT	INPUT	INPUT	INPUT_1	OUTPUT_1	INPUT	OUTPUT				85 89 93 97 for 105 100 86 90 94 96 for 106 110 87 91 95 99 for 111 88 92 95 for 101 111	Signal Name	CAN-L	CAN-H	
ame COMBII	7 8 9 10	Color of Wire	∂/5 B/5	LG/R R/G	LG/B	R/B	P/B	B/W	M	R/Υ	G/B	o. E10	ame ECM	olor BLACK	81 85 89 8 82 86 90 9 83 87 91 9 84 88 92 9	Color of Wire	۵		
Connector Name	品S.	Terminal No.	2	5 /	8	6	10	=	12	13	41	Connector No.	Connector Name ECM	Connector Color	H.S.	Terminal No.	6	86	
		16 17 18 19 20 36 37 38 39 40																	
ETER				T T												ıme			
Connector Name COMBINATION METER Connector Color WHITE		29 10 11 12 13 14 15 29 30 31 32 33 34 35	100	Signal Name CAN-H	CAN-L	PKB							TO WIRE	ш	2 9 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Signal Name			
tme COMBI		26 27 28	Color of	Wire	ı <u>a</u>	G/R						1 2	ame WIRE	olor WHITE	4 1 5	Color of Wire	7		
Connector Name Connector Color	而 H.S.	1 2 3 4 5 21 22 23 24 25		l erminal No.	52	26						Connector No	Connector Name WIRE TO WIRE	Connector Color	所 H.S.	Terminal No.	4		
	1	64 63 62 61 60 84 83 82 81 80												T	1				
Connector Name BCM (BODY CONTROL MODULE) Connector Color BLACK		72 71 70 69 68 67 66 65 64 63 6 92 91 90 89 88 87 86 85 84 83 8	O Month	Signal Name OUTPUT_5		CAN-L	CAN-H	OUTPUT_1	OUTPUT_4	OUTPUT_2			Connector Name PABKING BRAKE SWITCH			Signal Name	CAN-H		
ame BCM (BOE MODULE) slor BLACK		74 73 72 71 7		Wire R/Y	B/G	۵	٦	B/W	P/B	R/B		M73	ime PARKI	olor BLACK		Color of Wire	G/R		
Connector Name Connector Color	原南 H.S.	79 78 77 76 75 74 73 99 98 97 96 95 94 93	F	i erminai No. 75	9/	78	79	95	96	26		Connector No	Connector Na	Connector Color	H.S.	Terminal No.	-		
																	Al	BLIA0738GB	

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Ferrina No Color of Signal Name Connector Name Provide Rother Brown Front Recognition Front													1						А
Corrector No. E30	FIAT CITETAN CIT	R DISTRIBUTION	LE ENGINE ROOM)			84 83	87 86	Signal Name	HEADLAMP_LO_RH	HEADLAMP_LO_LH	HEADLAMP_HI_RH	HEADLAMP_HI_LH		COMBINATION		Signal Name	H/L_LH_LO	GND	В
Connector No. E.20 Connector Name Wife TO Wife Connector Name Wife TO Wife Connector Name Wife TO Wife Connector No. E.20 MODULE ENGINE HOUNE HOUNE Connector Color WHITE Connector Color WHIT			-	_		88	88 88 88		R/Y					$\overline{}$			_	ω	
Connector No. E201 Connector Name Wirls Connector Name Wirls Connector Name Wirls Connector Name Connecto	Connect	Connect		Connect		E	H.S.	Termina	83	84	88	06		Connecto	(A)	Terminal	-	C/	Е
Connector No. E30																	1]	F
Connector No. E30 Connector No. E30 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Color WHITE E30 26	Signal Name	1	I	1	ı	İ								TO WIRE		Signal Name	1		
Connector No. E30 Connector No. E30 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Color WHITE E30 26	olor of Wire	Ь		_	Ь	LG								E202 e WIRE	3 7 6 5	olor of Wire	SB		Н
Connector No. E30 Connector No. E30 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Color WHITE E30 26			15G	51G	52G	82G								nnector No.	<u>s.</u>				I
Connector No. E30 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Color WHITE Sol	Ter															Ter			J
Connector No. Connector No. Connector No. Connector Name Connector Name Connector Name Connector Name Connector Name Connector No. 105			7		//		740		1	[g							1	1	K
Connector No. Connector No. Connector No. Connector Name Connector Name Connector Name Connector Name Connector Name Connector No. 105		ш			76 86	3G 14G 15G 16G 1	3G 24G 25G 26G 0G 31G 32G 33G 3			G 60G 61G 62G 63		394 704 718 724 766 776 786 796		ELLIGENT RIBUTION INE ROOM)		al Name	IL_RLY		EX
Connector No. Connector No. Connector No. Connector Name Connector Name Connector Name Connector Name Connector Name Connector No. 105	O. F.				4G 5G	G 11G 12G 13	G 21G 22G 23 G 28G 29G 30	36G 37G 38C		53G 54G 59		3G 74G 75G 7		E/R (INTE ER DISTR JLE ENGI	94 93 92 91	Signe	DTR		M
	tor No. E30	tor Color WHIT	_		Т	2G	18G 19G 27	350		516 526		8-		-	98 97 96 95				Ν
ABLIA0740GB	Connect	Connect		E	I	5								Connect	雨 H.S.	Termina	105		0
																		ABLIA0740GB	

Connector No.	E223
Connector Name	Connector Name FRONT COMBINATION
	LAMP RH
Connector Color BLACK	BLACK

Signal Name	H/L_RH_LO	GND
Color of Wire	R/Y	В





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

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





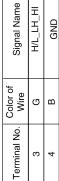
Signal Name	H/L_RH_HI	GND		
Color of Wire	N/¬	GR/R		
Terminal No.	3	4		

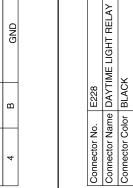


Color of Wire	N/	GR/R	
Terminal No.	က	4	









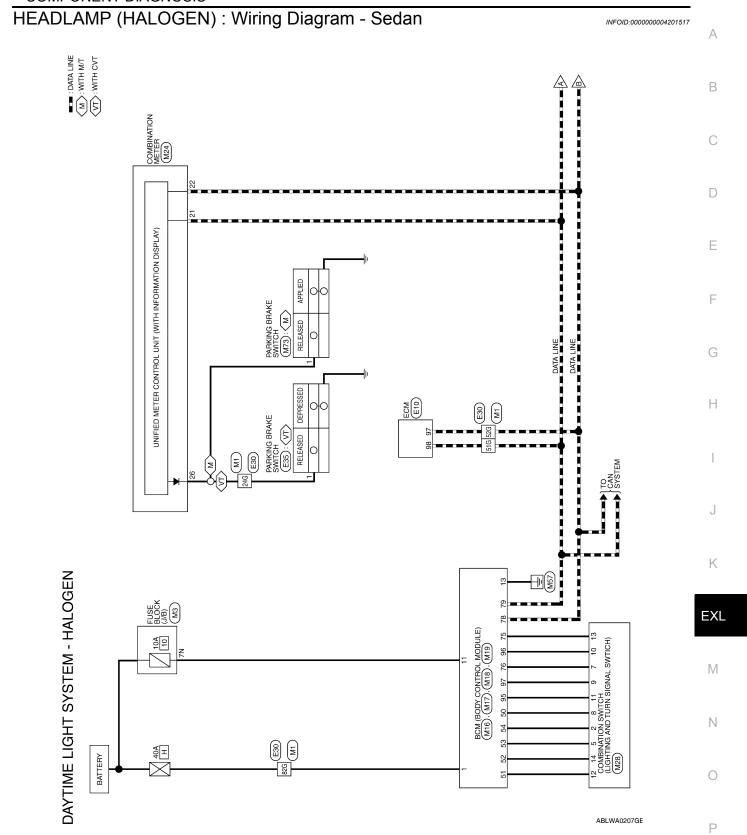


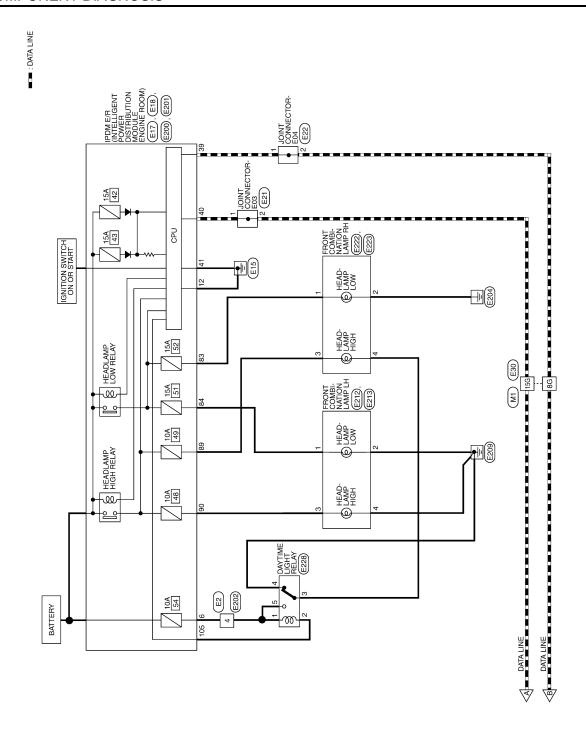




Signal Name	_	_	_	_	I
Color of Wire	SB	>	GR/R	В	SB
Terminal No. Wire	-	2	3	4	5

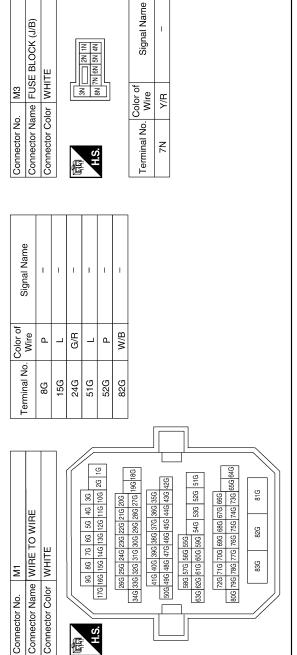
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DAYTIME LIGHT SYSTEM CONNECTORS - HALOGEN



			11 20						
8	Connector Name BCM (BODY CONTROL MODULE)	REEN	H.S. H.S. 39 89 77 86 55 45 55 150 42 48 47 46 45 44 43 42 41 40	f Signal Name	INPUT_5	INPUT_1	INPUT_2	INPUT_3	
M18	ne BC MC	or GR	36 35 54 53 52 52 55 55 55 55 55 55 55 55 55 55 55	Solor of Wire	LG/B	Γ/M	G/B	LG/R	
Connector No.	Connector Nar	Connector Color GREEN	H.S. 39 38 37 38 35 35 35 35 35 35 35 35 35 35 35 35 35	Terminal No. Wire	50	51	52	53	
	Connector Name BCM (BODY CONTROL MODULE)	ITE	4 5 6 7	Signal Name	BAT_BCM_FUSE	GND1			
M17	ne BCN MOI	or WH	12 5 6 7 13 14 14	Solor of Wire	Y/R	В			
Connector No.	Connector Nar	Connector Color WHITE	H.S.	Terminal No. Wire	Ξ	13			
		•					•		
	Connector Name BCM (BODY CONTROL MODULE)	8	<u> </u>	Signal Name	BAT_POWER_F/L				
M16	ne BCM (BO MODULE	or BLA(Solor of Wire	M/B	-			
Connector No.	Connector Nan	Connector Color BLACK	原 H.S.	Terminal No. Wire	-				

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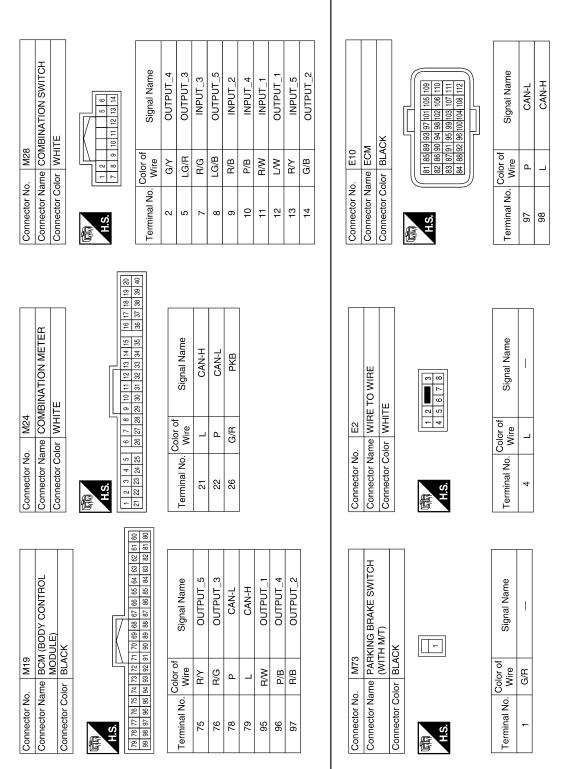
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< COMPONENT DIAGNOSIS >



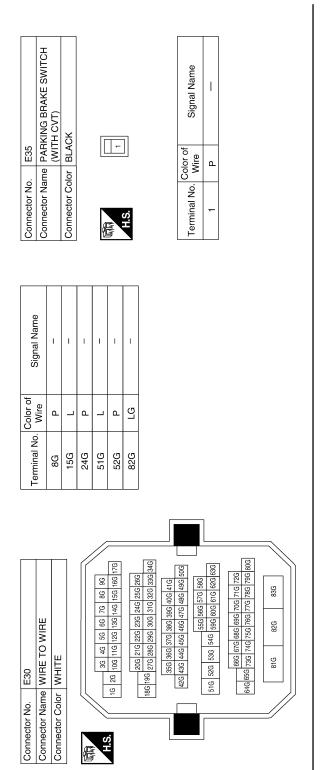
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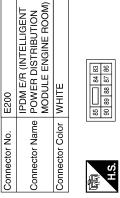
	10313 2					
Connector Name JOINT CONNECTOR-E03 Connector Color WHITE		Signal Name -				
me JOINT CO	3 2	Color of Wire L				
Connector Name	H.S.	Terminal No.				
		38 38				
		334 37				
ROOM)			Name RL OWER)			
POWER DISTRIBUTION MODULE ENGINE ROOM) WHITE	ſ		Signal Name DTRL GND (POWER)			
		11 12 13 14 5 6 7 8	Color of Wire L			
Connector Name Connector Color	H.S.	0 K	Terminal No. 6 12			
- Q				40		
POWER DISTRIBUTION MODULE ENGINE ROOM) WHITE		Signal Name CAN-L CAN-H	GND (SINGAL)	NNECTOR-E	Signal Name	
POWER DI MODULE E WHITE	42 41 40 39 46 45 44 43	o of	<u> </u>	E22 	Color of Wire P	
Connector Name Prowing Line ELCON MODULE ENGINE ROOM Connector Color WHITE	H.S.	Terminal No. Co	4	inector No.	nal No	
Š Š		T P			ABLIA0713GB	

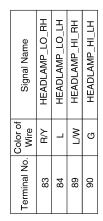
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Connector No.	E201	_	Connector No.	. E202
	IPDI	IPDM E/R (INTELLIGENT	Connector Na	Connector Name WIRE TO WIRE
onnector Nan	e MOV	Connector Name POWER DISTRIBUTION MODULE ENGINE ROOM)	Connector Color WHITE	lor WHITE
Connector Color WHITE	or WHI	TE		
H.S.	106 105 104 10	98 97 99 92 91 100 100 100 100 100 100 100 100 100	H.S.	4 6 9 7 7
Terminal No. Wire	Solor of Wire	Signal Name	Terminal No. Wire	Color of Signal Name
105	^	DTRL_RLY	4	SB





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Connector Name FRONT COMBINATION Connector Name FRONT COMBINATION Connector Color BLACK Connector Color BLACK Connector Color BLACK Connector Color BLACK H.S. A.S. A.S. Terminal No. Color of Wire Signal Name 1 L H/L_LH_LO 3 G H/L_LH_HI
COMBINATION H. Signal Name H/L_LH_LO
COMBINATION H. Signal Name H/L_LH_LO
me FRON LAMF Ilor BLAC Color of Wire

Signal Name	H/L_RH_HI	GND						
Color of Wire	M	GR/R						
Terminal No.	က	4						
						ı	_	
Signal Name	H/L_LH_HI	GND			Connector Name DAYTIME LIGHT RELAY			ſī
Color of Wire	ŋ	В		E228	ne DAYTII	or BI ACK		
Terminal No. Wire	က	4		Connector No. E228	Connector Nar	Connector Color BI ACK		Ð
								1
Signal Name	H/L_LH_LO	GND			Connector Name FRONT COMBINATION	RH	\ \ \	
Color of Wire	Г	В		E223	ne FRON	LAMP RH	or BLACk	
Terminal No.	1	2		Connector No. E223	Connector Nan		Connector Color BLACK	
			1					

	Connector Name DAYTIME LIGHT RELAY	ACK		2	4 1	Signal Name	ı	1	1	1	1
	ne DA	or BL		L	<u>—</u>]	Color of Wire	SB	>	GR/R	В	SB
	Connector Nar	Connector Color BLACK		匿	П.S.	Terminal No. Wire	-	2	3	4	5
	Vame FRONT COMBINATION	L	~			Signal Name	H/L_RH_LO	GND			
	e FRON	LAMP AH	Color BLACK	البر	נ ש	Color of Wire	R/Y	В			
	lam		Solo			۰.					

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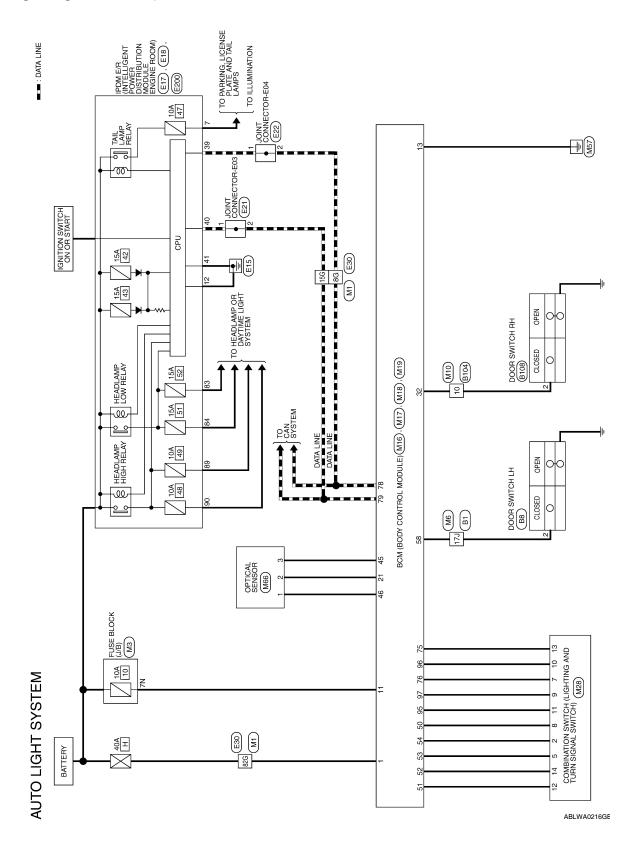
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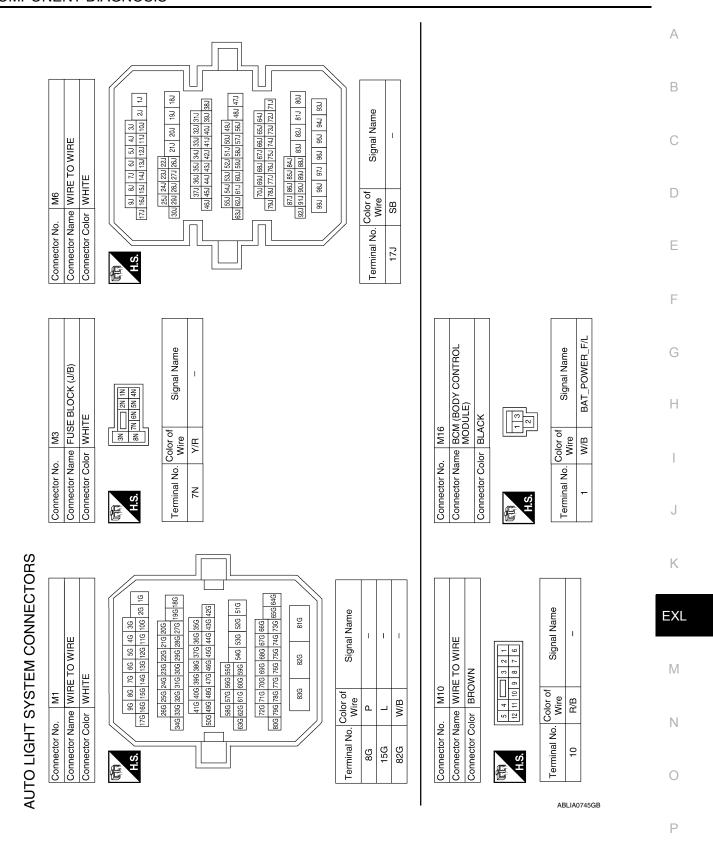
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AUTO LIGHT SYSTEM

Wiring Diagram - Coupe

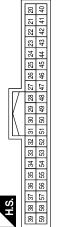




Signal Name	GND_RF2_A/L	A/L_SENS_KEYLESS_ TUNER_POWER_ SUPPLY	INPUT_5	INPUT_1	INPUT_2	INPUT_3	INPUT_4	DR_DOOR_SW
Color of Wire	Ь	W/N	LG/B	L/W	G/B	LG/R	G/Y	SB
Terminal No.	45	46	50	51	52	53	54	28

Connector No.). M66	
Connector Na	ıme OPT	Connector Name OPTICAL SENSOR
Connector Color WHITE	lor WHI	TE
南 H.S.		23
Terminal No.	Color of Wire	Signal Name
-	W/A	POWER
2	B/B	OUTPUT
3	Ь	GND

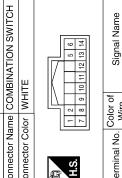




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Signal Name	AUTO_LIGHT_SENSO R_INPUT1	AS_DOOR_SW
Color of Wire	P/B	R/B
Terminal No. Wire	21	32

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

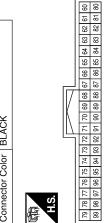


Signal Name	OUTPUT_4	INPUT_3	OUTPUT_3	OUTPUT_5	INPUT_2	INPUT_4	INPUT_1	OUTPUT_1	INPUT_5	OUTPUT_2
Color of Wire	G∕Y	LG/R	R/G	LG/B	R/B	P/B	B/W	M	R/Υ	G/B
Terminal No.	2	5	7	80	6	10	11	12	13	14
				•						

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



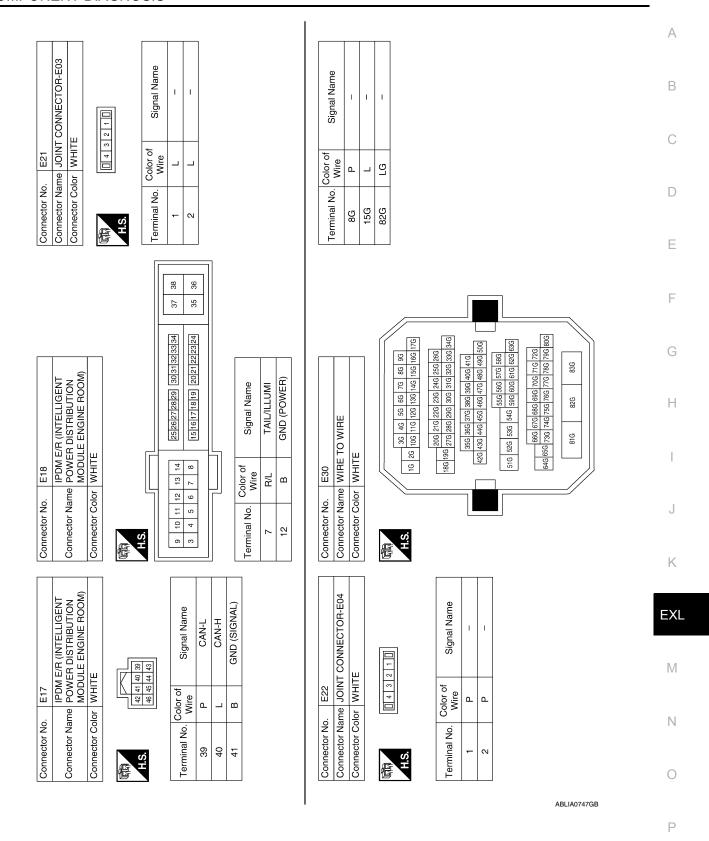
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	ODY CONT E)		
M19	BCM (B	BLACK	
Connector No.	Connector Name BCM (BODY CONTROL MODULE)	Connector Color BLACK	

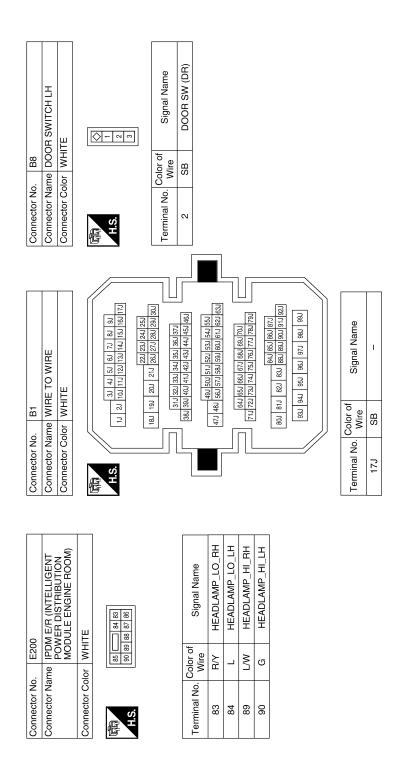


Signal Name	OUTPUT_5	OUTPUT_3	CAN-L	CAN-H	OUTPUT_1	OUTPUT_4	OUTPUT_2
Color of Wire	R/Υ	R/G	۵	_	W/A	B/B	B/B
Terminal No.	75	9/	78	6/	92	96	26

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AUTO LIGHT SYSTEM





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B108	Connector Name DOOR SWITCH F	WHITE		Color of
Connector No.	Connector Name	Connector Color WHITE	R.S.	
B104	WIRE TO WIRE	SROWN	7 8 9 10 11 12	Color of
Connector No.	Connector Name WIRE TO WIRE	Connector Color BROWN	H.S.	Colc

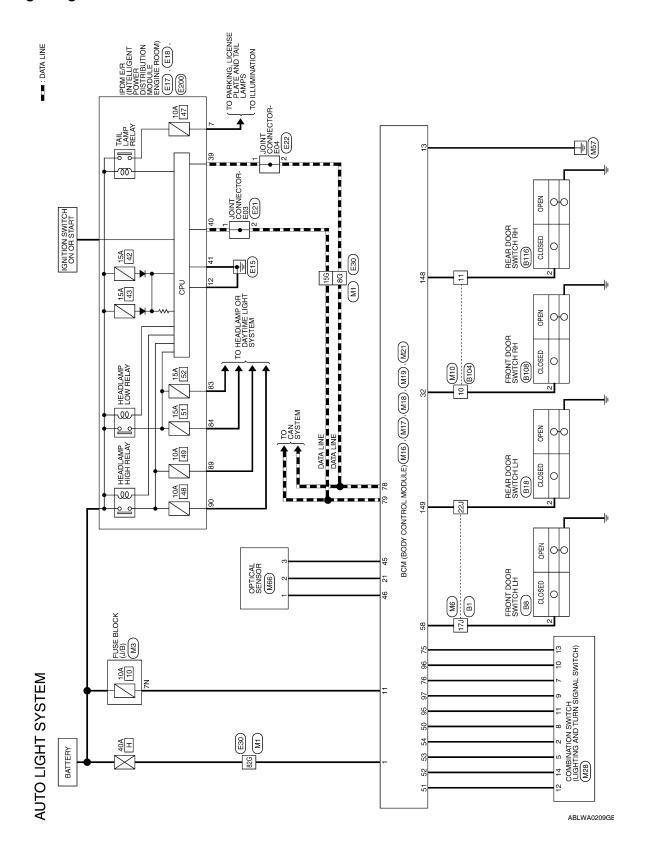
		7	
Signal Name	DOOR SW (AS)	NA (AV)	
. Wire	R/B		
Terminal No. Wire	2	N	
Signal Name		1	
ire	B/B	98	
No.	- H	<u>r</u>	
Terminal No. Wire	10		

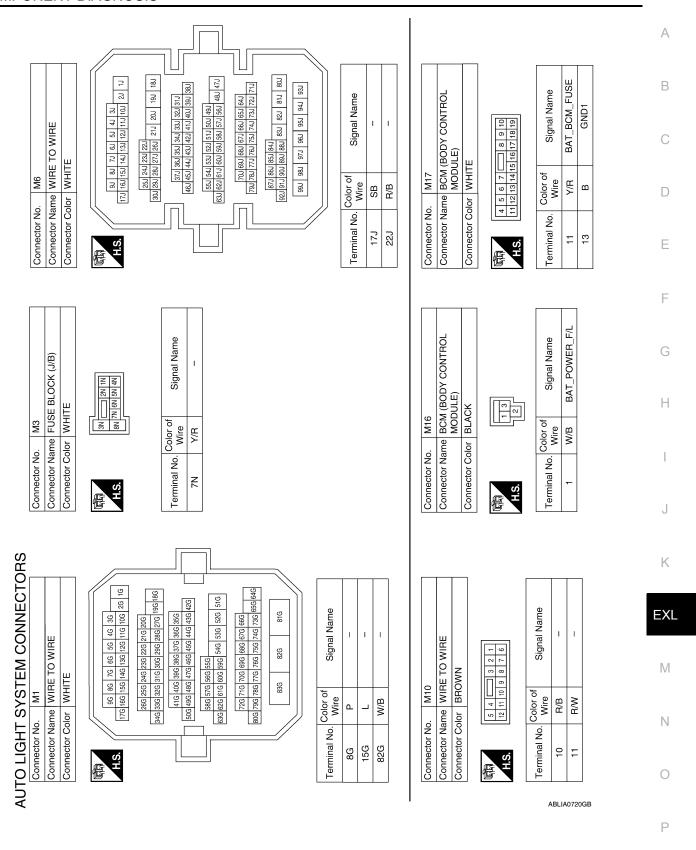
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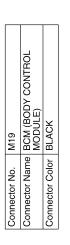
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	61 60	81 80								
	62	85								
	63	83								
	42	84	ည	12	m.			- .	4.	N.
	93	82	Signal Name	OUTPUT_5	OUTPUT_3	با	ェ	OUTPUT_1	OUTPUT_4	OUTPUT_2
	99	98	=	교	l⊋	CAN-L	CAN-H	ו⊡	\mathbb{R}	l⊋
닏	29	87	<u> </u>	5	ΙĘ	Ö	ပြ	팃		5
\parallel / \parallel	89	88	Si	ಠ	o			ŏ	o	ಠ
IV.	69	88	"							
IN.	0/	96								
Ш	7	91	-							
ㄱ	72	95	ည္စ	_	ניז			>	м	l
	73	95 94 93	Solor o	₽	B/G	Ф		R/W	P/B	B/B
	74	94	o -							
	77 76 75 74 73	92	ું							
	9/	96	=							
я I	17	6	Terminal No. Wire	75	92	78	79	95	96	97
į	78	86	Ĕ							
◀	79	66	 							

										_
Signal Name	OUTPUT_4	INPUT_3	OUTPUT_3	OUTPUT_5	INPUT_2	INPUT_4	INPUT_1	OUTPUT_1	INPUT_5	OUTPUT_2
Color of Wire	G/Y	LG/R	R/G	LG/B	B/B	P/B	R/W	L/W	R/Υ	G/B
Terminal No.	2	5	7	80	6	10	11	12	13	14

Signal Name	GND_RF2_A/L	A/L_SENS_KEYLESS_ TUNER_POWER_ SUPPLY	S_TUPNI	1_TUPUI	2_TUPUT_2	INPUT_3	4_TUPUT_4	DR_DOOR_SW
Color of Wire	Ь	W//	LG/B	N/I	G/B	LG/R	G/Y	SB
Terminal No.	45	46	90	51	52	53	24	28



i de la companya de l	Cormector INC	Connector Na	Connector Co		惛	H.S.
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Connector No.	M18
Connector Name	Connector Name BCM (BODY CONTROL MODULE)
Connector Color GREEN	GREEN



Signal Name	AUTO_LIGHT_SENSO R_INPUT1	AS_DOOR_SW
Color of Wire	P/B	R/B
Terminal No. Wire	21	32

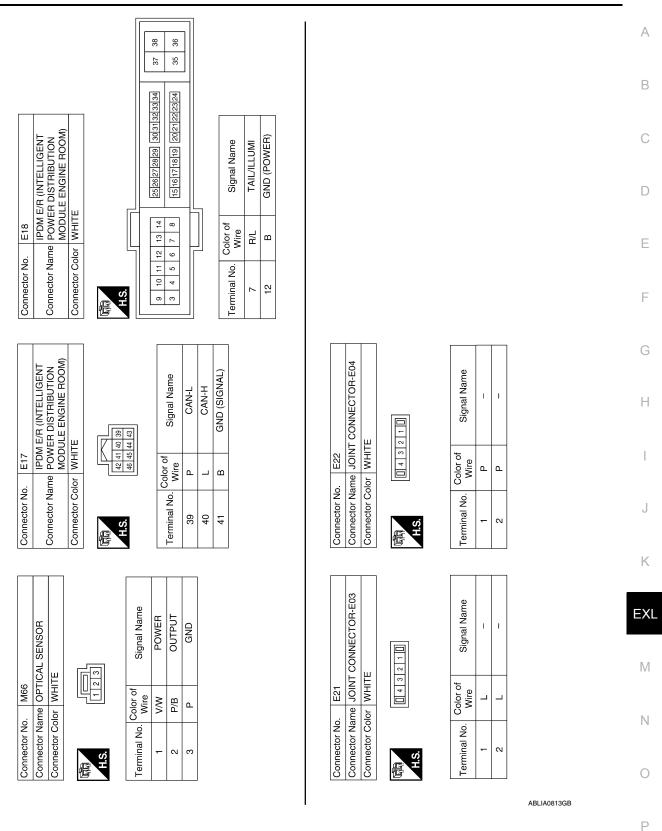
				113 112 133 132	
	Connector Name BCM (BODY CONTROL MODULE)			130 (129 128 127 128 125 124 123 122 12.1 120 119 118 117 116 115 114 115 114 115 114 115 115 114 115 115	Signal Name
Z Z Z	BCM (BOD MODULE)	GRAY		125 124 123	Color of
Connector No.	Connector Name	Connector Color	南 H.S.	131 130 129 128 127 126 1 151 150 149 148 147 146 1	Terminal No.

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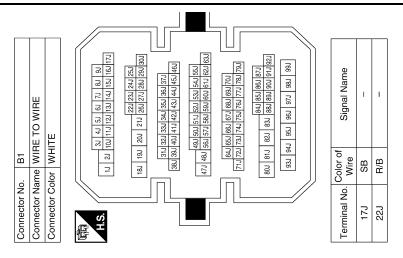
RR_DOOR_SW RL_DOOR_SW

B/B

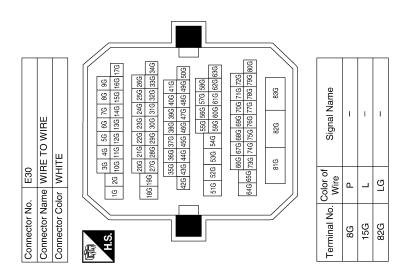
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Connector No.	. E200	0
Connector Name		IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	lor WHITE	TE
H.S.	88 06	89 68 87 86
Terminal No.	Color of Wire	Signal Name
83	R/Υ	HEADLAMP_LO_RH
84	٦	HEADLAMP_LO_LH
88	ΓW	HEADLAMP_HI_RH
06	В	HEADLAMP_HI_LH



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	Connector Name FRONT DOOR SWITCH LH Connector Color WHITE	Connector Color WHITE	Connector Name REAR Connector Color WHITE	Connector No. B18 Connector Name REAR DOOR SWITCH LH Connector Color WHITE	Connector No. B104 Connector Name WIRE TO WIRE Connector Color BROWN I 2 3	BT04 ■ WIRE 1 BROW 1 2 3 ■ 6 7 8 9	O WIRE
]] -	1	Terminal No. Color of	Solor	₩
Terminal No. Color of Wire	Signal Name	Terminal No. Color of Wire	Solor of Wire	Signal Name	5	Wire	
	DOOR SW (DR)	2	B/B	DOOR SW (RL)	2 =	2 M	

Connector No. B108	. B10	80	Connector No. B116). B11	9
nnector Nar	me FRC	Connector Name FRONT DOOR SWITCH RH	Connector Na	me RE/	Connector Name REAR DOOR SWITCH RH
Connector Color WHITE	lor WH	ITE	Connector Color WHITE	olor WHI	TE
师 H.S.			E S.H		○ - 2 0
Terminal No. Wire	Color of Wire	Signal Name	Terminal No. Wire	Color of Wire	Signal Name
c	a a/a	DOOR SW (AS)	0	W/a	DOOR SW (BB)

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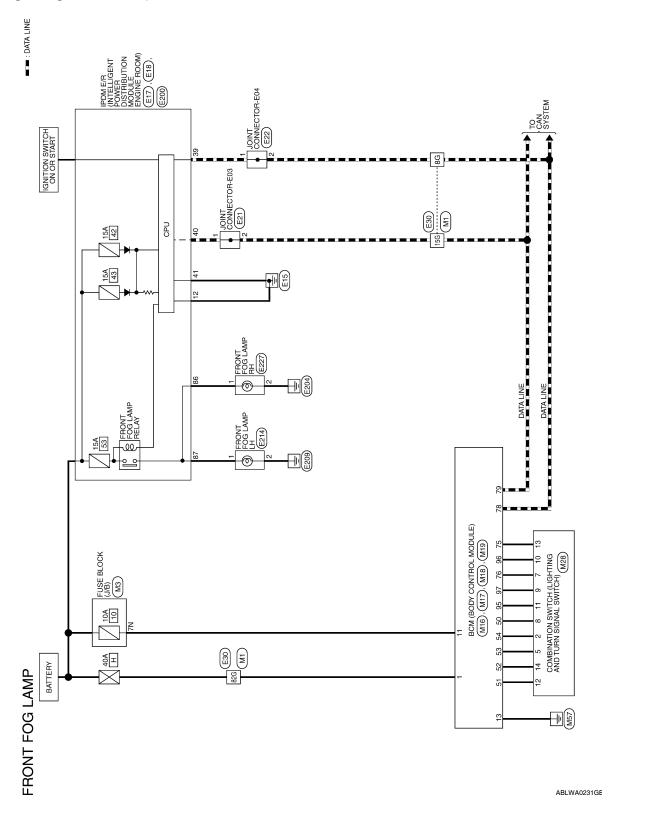
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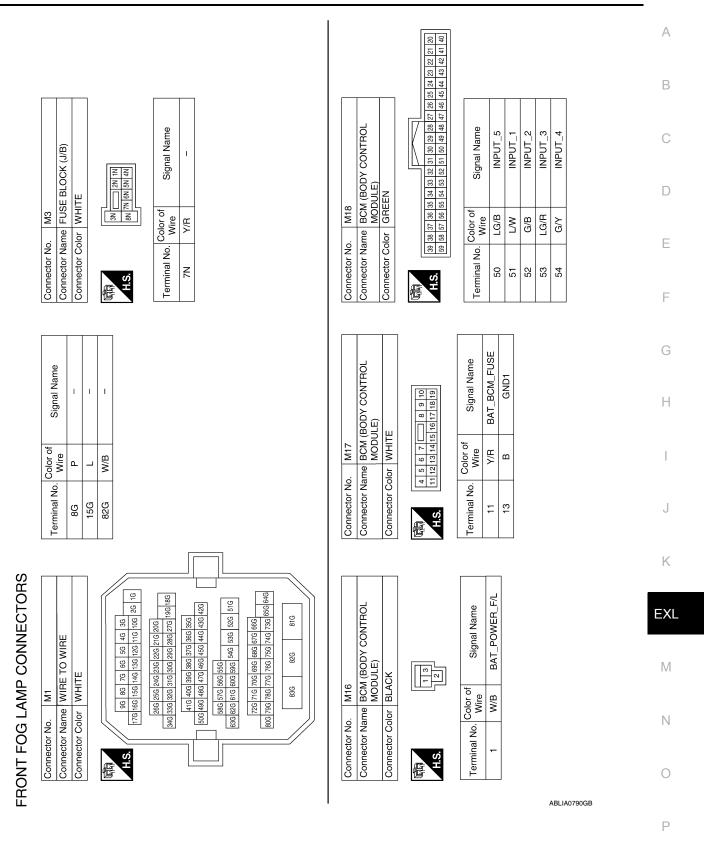
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FRONT FOG LAMP SYSTEM

Wiring Diagram - Coupe



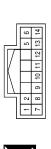


FRONT FOG LAMP SYSTEM

Connector No.). E17	
Connector Name		IPDM E/R (INTELLIGENT POWER DISTRIBUTION
MODUI Connector Color WHITE	MOI lor WHI	MODULE ENGINE ROOM) WHITE
E.S.	42 4 45 45	42 41 40 38
Terminal No.	Color of Wire	Signal Name
39	Ь	CAN-L
40	٦	CAN-H
41	В	GND (SIGNAL)

		Connector Name JOINT CONNECTOR-E03	111	3 2 1	Signal Name	ı	1
	E21	TNIOC	WHIT	4 3	Color of Wire	٦	_
	Connector No.	Connector Name	Connector Color WHITE	原 H.S.	Terminal No.	-	6

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



	Signal Name	
	Color of Wire	,
_	Terminal No.	

Signal Name	OUTPUT_4	OUTPUT_3	INPUT_3	OUTPUT_5	INPUT_2	INPUT_4	INPUT_1	OUTPUT_1	INPUT_5	OUTPUT 2
Color of Wire	G/Y	LG/R	R/G	LG/B	B/B	P/B	B/W	\ \	R/Y	G/B
Terminal No.	2	5	7	80	6	10	11	12	13	14

OUTPUT_4	OUTPUT_3	INPUT_3	OUTPUT_5	INPUT_2	INPUT_4	INPUT_1	OUTPUT_1	INPUT_5	OUTPUT_2	
G/Y	LG/R	R/G	LG/B	B/B	B/B	B/W	Λ	R/Υ	G/B	
2	5	2	8	6	10	11	12	13	14	

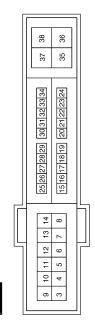
			E18
			Connector No.
_	'	ı	

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

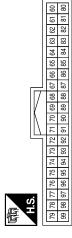
WHITE

Connector Color

Signal Name	GND (POWER)	
Color of Wire	В	
Terminal No.	12	



M19	Connector Name BCM (BODY CONTR	MODULE)	BLACK	
Connector No.	Connector Name		Connector Color BLACK	



Signal Name	OUTPUT_5	OUTPUT_3	CAN-L	CAN-H	OUTPUT_1	OUTPUT_4	OUTPUT_2
Color of Wire	R/Y	R/G	Ь	Т	R/W	P/B	R/B
Terminal No.	75	9/	78	6/	96	96	26

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FRONT FOG LAMP SYSTEM

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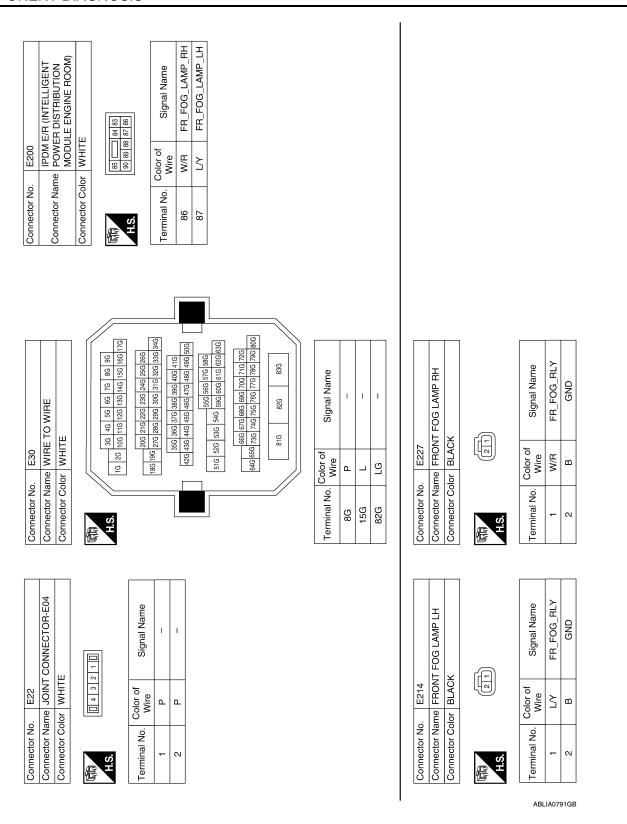
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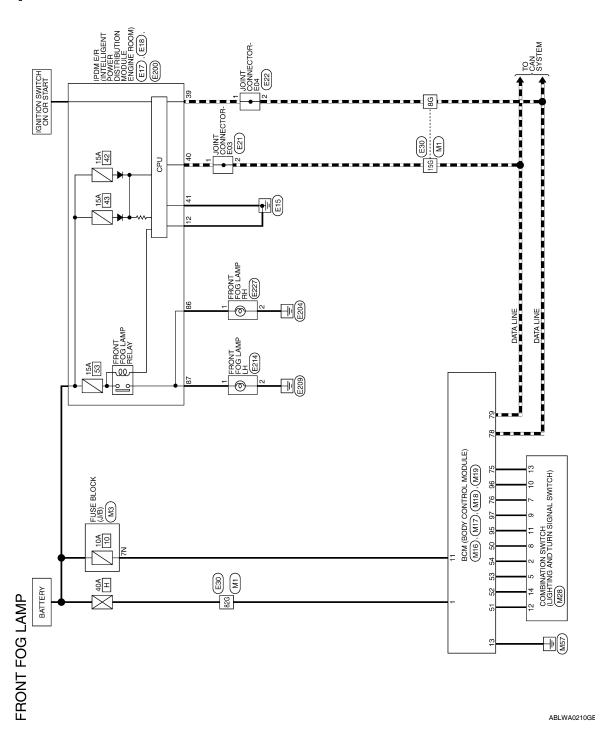
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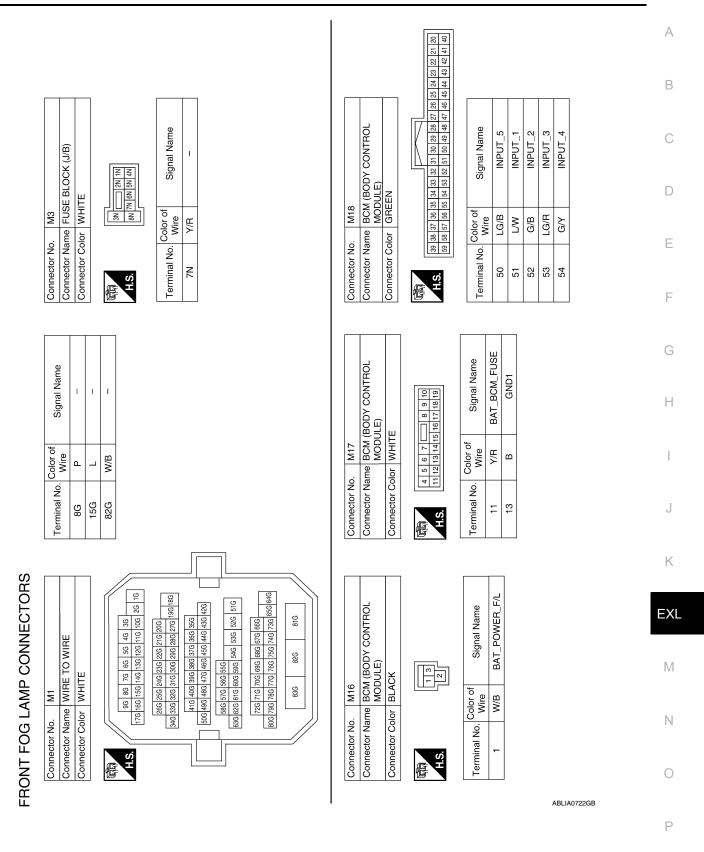


Wiring Diagram - Sedan

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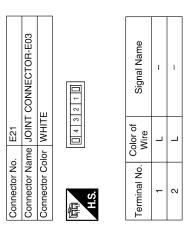


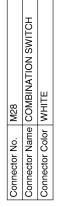


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Connector Name	Connector Name POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE	WHITE
原动 H.S.	45 41 40 33 46 44 43 33









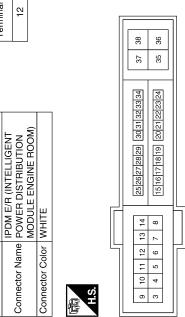


Terminal No.	Color of Wire	Signal Name
2	G/Y	OUTPUT_4
5	LG/R	OUTPUT_3
7	R/G	INPUT_3
8	LG/B	OUTPUT_5
6	B/B	INPUT_2
10	B/B	INPUT_4
11	B/W	INPUT_1
12	L/W	OUTPUT_1
13	R/Y	INPUT_5
14	G/B	OUTPUT_2

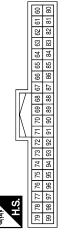
Signal Name	GND (POWER)
Color of Wire	В
Terminal No.	12

E18

Connector No.



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



Signal Name	OUTPUT_5	OUTPUT_3	CAN-L	CAN-H	OUTPUT_1	OUTPUT_4	OUTPUT_2
Color of Wire	Ρ/Υ	B/G	۵	_	B/W	B/B	B/B
Terminal No.	75	9/	28	62	92	96	97

FRONT FOG LAMP SYSTEM

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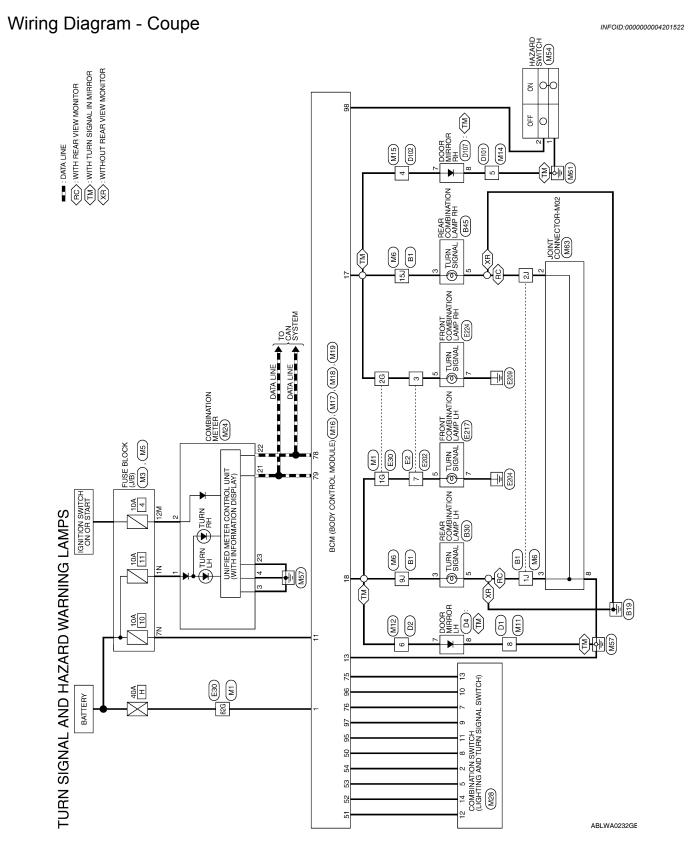
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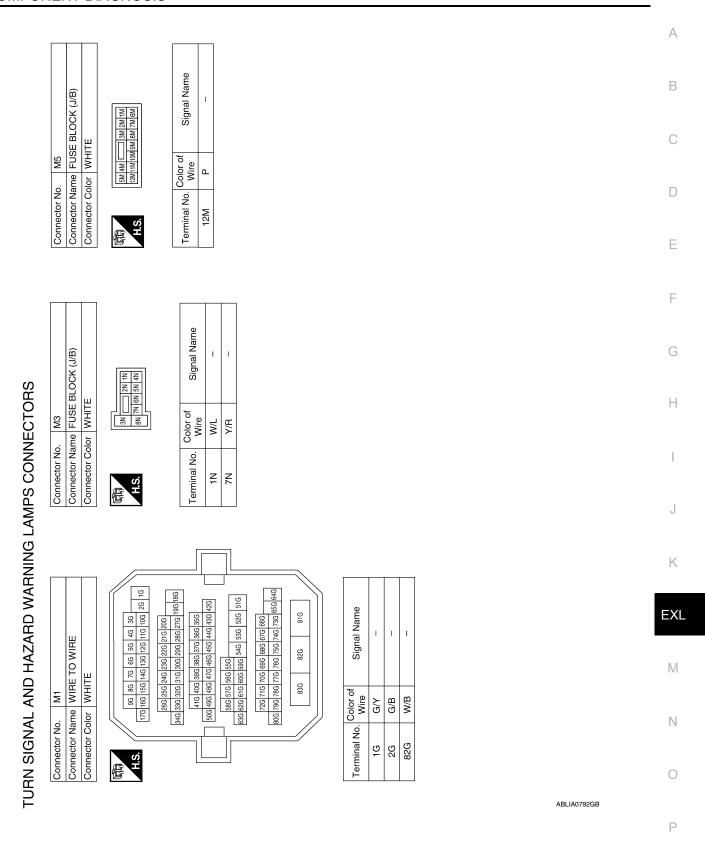
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Connector No. E200 Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) Connector Color WHITE SS SS SS SS SS SS SS	Terminal No. Color of Signal Name 86 W/R FR_FOG_LAMP_RH 87 L/Y FR_FOG_LAMP_LH					
E30 WHITE TO WIRE	42G 43G 44G 44G 48G 46G 47G 48G 48G 56G 57G 58G 57G 57G 57G 57G 57G 57G 57G 57G 57G 57	Signal Name	Connector No. E227 Connector Name FRONT FOG LAMP RH Connector Color BLACK		Signal Name FR_FOG_RLY	GND
Connector No. E30 Connector Name WIRE TO WIRE Connector Color WHITE A46 56 66 16 26 106 116 126 136 1 206 216 226 236 306 186 196 270 286 236 306 306	85 65 65 65 65 65 65 65 65 65 65 65 65 65	Color of Wire P	Vo. E227 Vame FRONT Color BLACK		Color of Wire	В
Connector No. Connector Name Connector Color H.S.		Terminal No. 8G 15G 15G 15G 15G 15G 15G 15G 15G 15G 15	Connector No. Connector Name	H.S.	Terminal No.	2
Signa	1 1		Connector No. E214 Connector Name FRONT FOG LAMP LH Connector Color BLACK	(0)	Signal Name FR_FOG_RLY	GND
ume JOINT (WHITE INTERNATE WHITE WHI	م م		ime FRONT		Color of Wire	В
Connector No. E22 Connector Name JOINT Connector Color WHITE H.S. Terminal No. Color of Wire	- 0		Connector No. E214 Connector Name FRONT	H.S.	Terminal No.	2

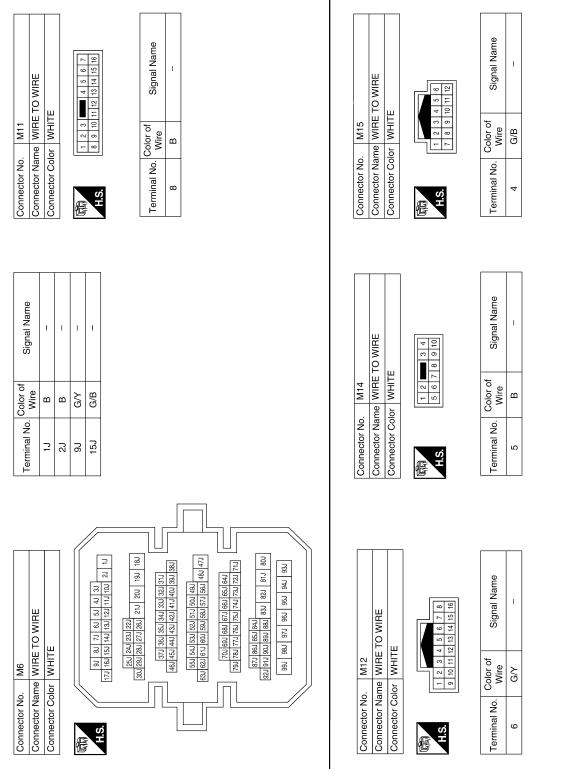
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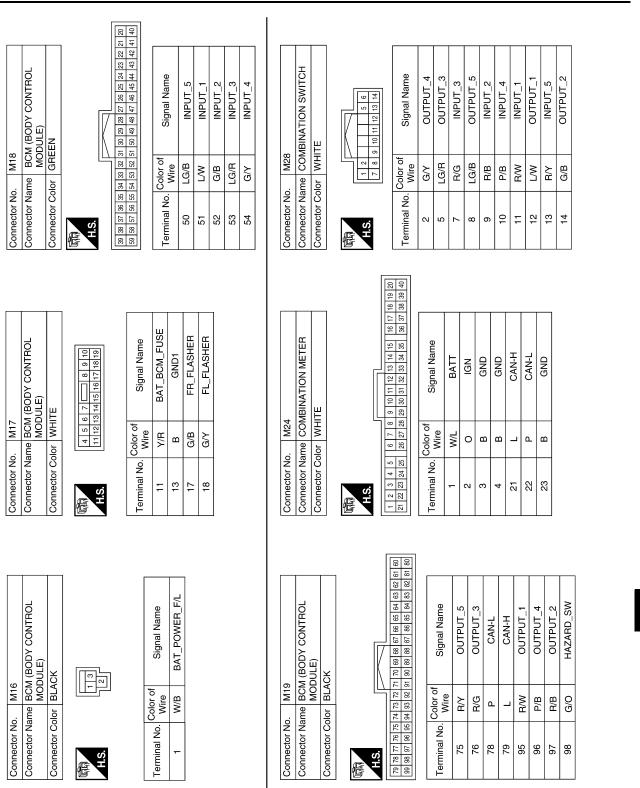
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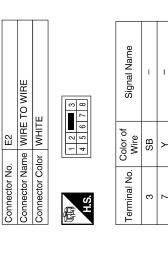
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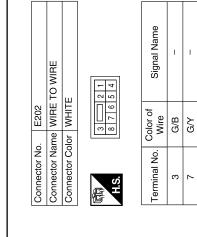
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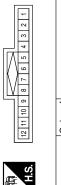
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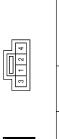
M63	Connector Name JOINT CONNECTOR-M02	UE	
Connector No.	Connector Name	Connector Color BLUE	



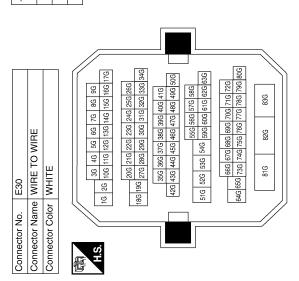
Signal Name	ı	I	I	
Color of Wire	В	В	В	
Terminal No. Wire	2	3	80	

_	I		Signal Name	1	ı	ı
В	В		Color of Wire	\	SB	ГG
3	8		Terminal No.	1G	2G	82G

	D SWITCH		le:
M54	HAZAR	WHITE	
Connector No.	Connector Name HAZARD SWITCH	Connector Color WHITE	
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Signal Nam	GND	HAZARD_S	
Color of Wire	В	G/O	
Terminal No.	1	2	

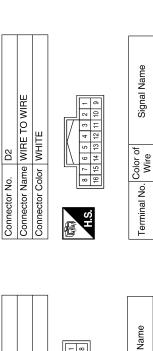


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Signal Name FLASHER_OUT_PUT (LEFT) GND A B GND	
Baso Mire Branch MHTTE Baso Baso Baso Baso Baso Baso Baso Baso	
Connector No. Connector Name Connector Color Terminal No. S 3 3 D	
F	;
FEACH FRH GRAY GRAY Or of Signal Name FLASHER OUT_PUT ('B GND B GND TO Signal Name FLASHER OUT_PUT R	
Color of Wire B B B/R G/B G/B G/B G/B G/B	
Connector Name Connector Name Connector Name Terminal No. Will 11 2 2 B 9 9 G 15 G 15 G 15 G 16 G 17	
K	r
Signal Name Signal Name Signal Name CAND CAN	(L
NTT CO LA 95.5 8.82 8.83 8.14 9.55 1.95	1
Connector No. B1 Tulialia	
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Signal Name

- A		D102	Connector Name WIRE TO WIRE	WHITE
G/Y			me	lor
9		Connector No.	Connector Na	Connector Color WHITE
	l			

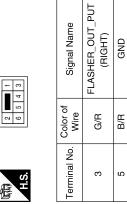
72	WIRE TO WIRE	ITE	8 8 7 1 L	Signal Name	1
D102	me WIF	lor WH	12 5 11 12 11 11 11 11 11 11 11 11 11 11 11	Color of Wire	٥
Connector No.	Connector Name	Connector Color WHITE	H.S.	Terminal No. Wire	
			· <u></u>		•

	•				
	IE TO WIRE	ITE	13 12 11 10 9 8	Signal Name	ı
	me WIF	lor WH	7 6 5 4 16 15 14 13	Color of Wire	ď
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	H.S.	Terminal No. Wire	α

	-		D101	IRE TO WIRE	HITE	2
•	В			S	>	- 5
	8		Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	高 A.S.
		I				

7 8 9 10	Signal Name	_
1 2 9 7 7	Color of Wire	В
(H.S.	Terminal No. Wire	9

Connector No.	B45
Connector Name	Connector Name REAR COMBINATION LAMP
	RH
Connector Color WHITE	WHITE



D4	Connector Name DOOR MIRROR LH	WHITE	
Connector No.	Connector Name	Connector Color WHITE	

Signal Name	TURN(+)	TURN(-)	
Color of Wire	G/Y	В	
Terminal No.	7	8	

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Connector Name DOOR MIRROR RH Connector Color WHITE

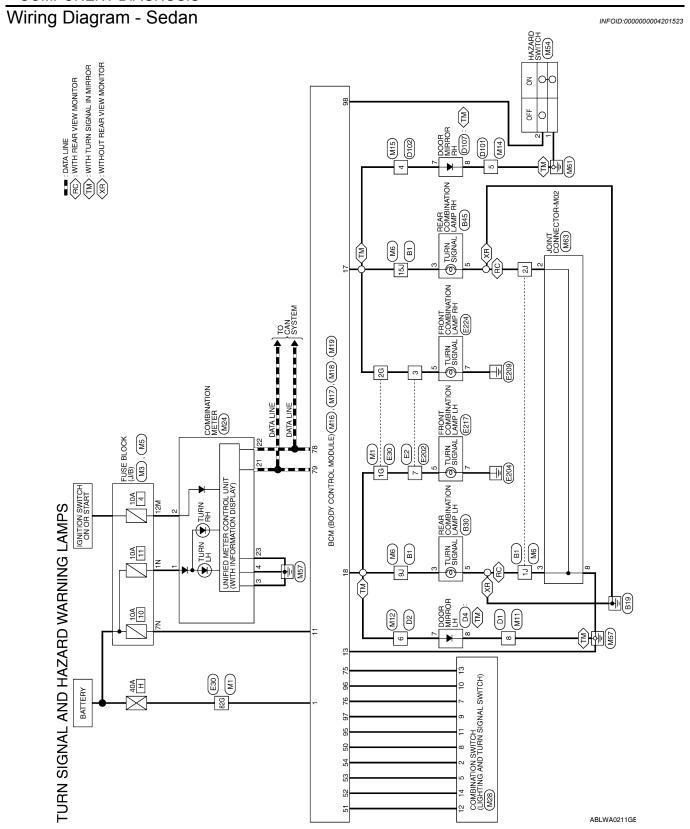
D107

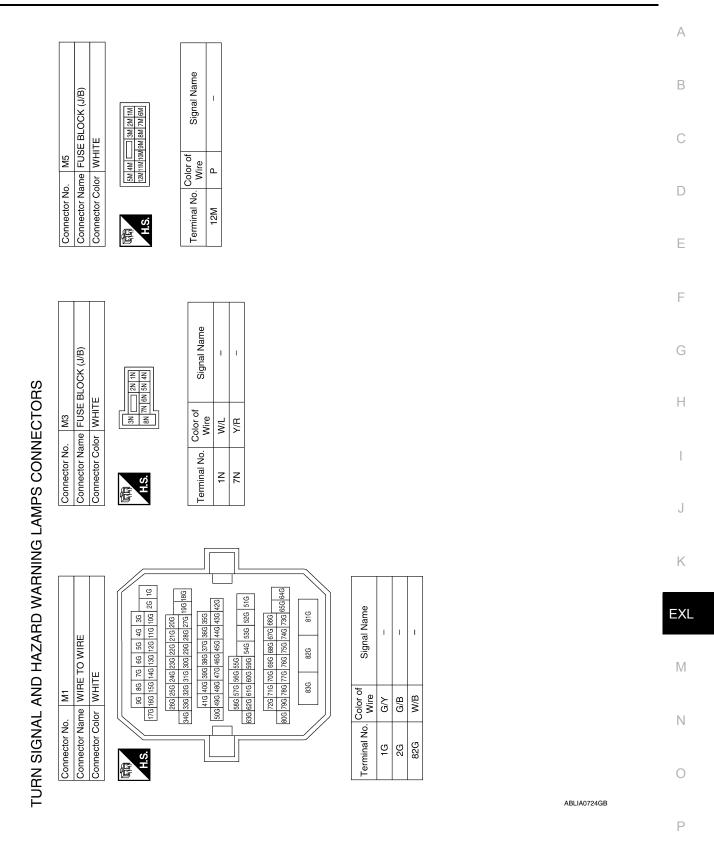
Connector No.



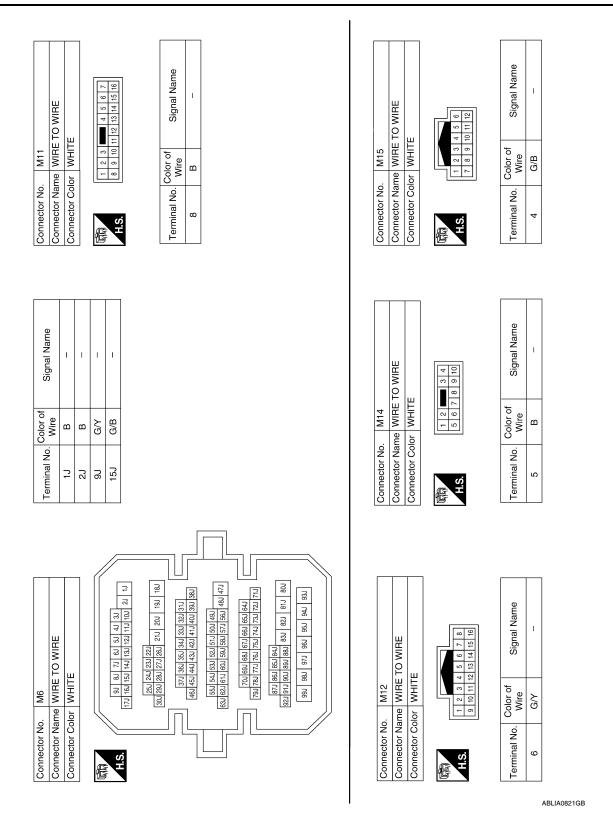


Signal Nar	TURN(+	(-)NHOL
Color of Wire	G/B	В
Terminal No.	7	8



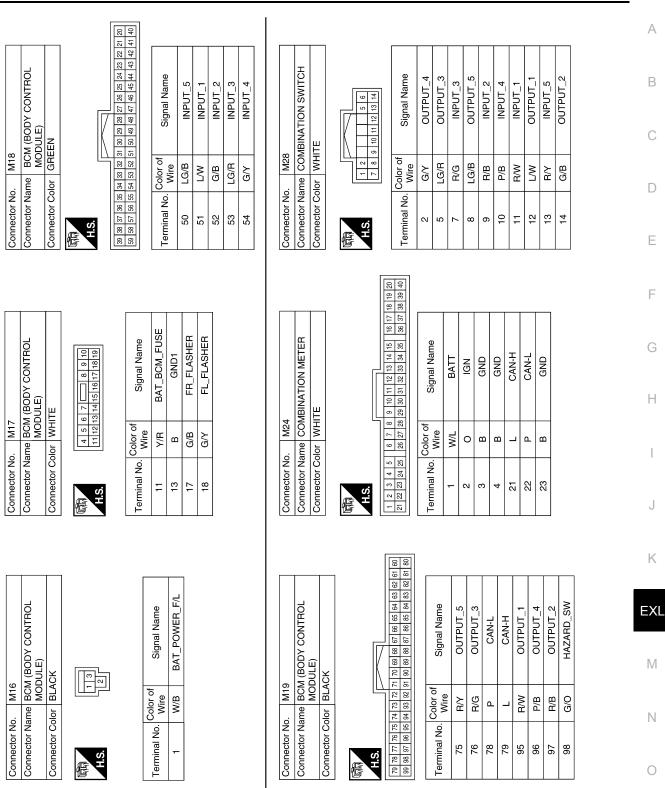


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< COMPONENT DIAGNOSIS >



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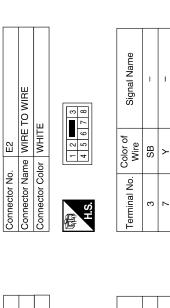
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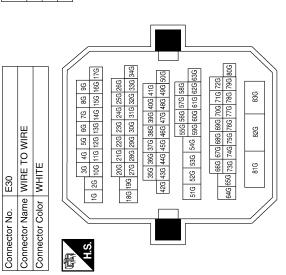


Connector No.	. M63	
nector Na	me JOII	Connector Name JOINT CONNECTOR-M02
Connector Color BLUE	lor BLU	Е
H.S.	12 11 10 9	8 7 6 5 4 3 2 1
Terminal No.	Color of Wire	Signal Name
2	В	ı
က	В	1
8	В	I

Connector No.). M54	
onnector Na	ıme HAZA	Connector Name HAZARD SWITCH
Connector Color WHITE	olor WHIT	ш
雨 H.S.	<u></u>	2 4
Terminal No.	Color of Wire	Signal Name
1	В	GND
2	G/O	HAZARD_SW

		-
Connector No.	E202	
Connector Name WIRE TO WIRE	ne WIRE	TO WIRE
Connector Color WHITE	or WHITE	111
雨 H.S.	3 7 6	5 1
Terminal No.	Color of Wire	Signal Name
3	G/B	ı
7	G/Y	1

Signal Name	-	I	-
Color of Wire	٨	SB	LG
Terminal No.	1G	26	82G

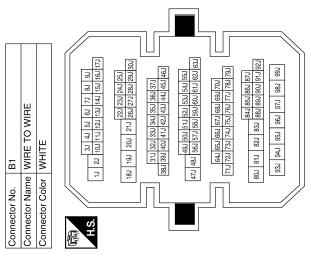


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< COMPONENT DIAGNOSIS >

Sonnector Na	ime FRONT LAMP I	Connector Name FRONT COMBINATION LAMP RH Connector Color GRAY			
Connector Color	-				
S.H.					
Terminal No.	Color of Wire	Signal Name			
5	g/B	FLASHER_OUT_PUT (RIGHT)			
7	В	GND			
Terminal No.	Color of Wire	Signal Name	Connector No.		
L1	В	ı	Connector Name		REAR COMBINATION LAMP
27	B/R	ı	Connector Color	_	
91	ďγ	ı			
15J	G/B	ı	E	2	
			H.S.	6 7	8
			Terminal No.	Color of Wire	Signal Name
			8	G/Y	FLASHER_OUT_PUT (LEFT)
			ro.	В	GND (WITH REAR VIEW MONITOR)
			ß	B/R	GND (WITHOUT REAR VIEW MONITOR)

Old votoco	r	
Cormector No.	.	
nector Na	me FRONT C LAMP LH	Connector Name FRONT COMBINATION LAMP LH
nnector Cc	Connector Color GRAY	
H.S.		(E)
Terminal No.	Color of Wire	Signal Name
2	G/Y	FLASHER_OUT_PUT (LEFT)
7	В	GND



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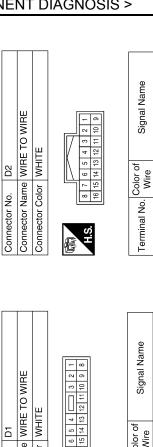
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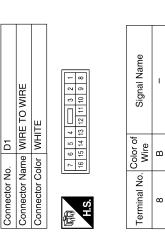


Signal Name

Terminal No.

G/Y

			1		
20	RE TO WIRE	ТЕ	4 9 8 7 1 1 L	Signal Name	-
. D102	me WIF	lor WH	12 5 1	Color of Wire	G/B
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	雨 H.S.	Terminal No. Wire	4
			· <u></u>		



1 E TO WIRE TE	8 0 6 8 10 10 10 10 10 10 10 10 10 10 10 10 10	Signal Name	ı
me WIRE	5 6 2	Color of Wire	В
Connector No. D101 Connector Name WIRE TO WIRE Connector Color WHITE	原知 H.S.	Terminal No. Wire	5

Connector No.	o. B45	
Connector Name	ame REAR RH	REAR COMBINATION LAMP RH
Connector Color WHITE	olor WHIT	111
H.S.	0 2	■ 4 1 ⊗
Terminal No.	Color of Wire	Signal Name
3	G/R	FLASHER_OUT_PUT (RIGHT)

GND

B/R

2

	_	_				
	NIRROR LH	Ш		Signal Name	TURN(+)	(-)NHNL
D	me DOOF	lor WHIT	4 8 7 2 2 9	Color of Wire	G/Y	В
Connector No.	Connector Name DOOR MIRROR LH	Connector Color WHITE	H.S.	Terminal No.	2	8

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Connector Name DOOR MIRROR RH

D107

Connector No.

Connector Color WHITE





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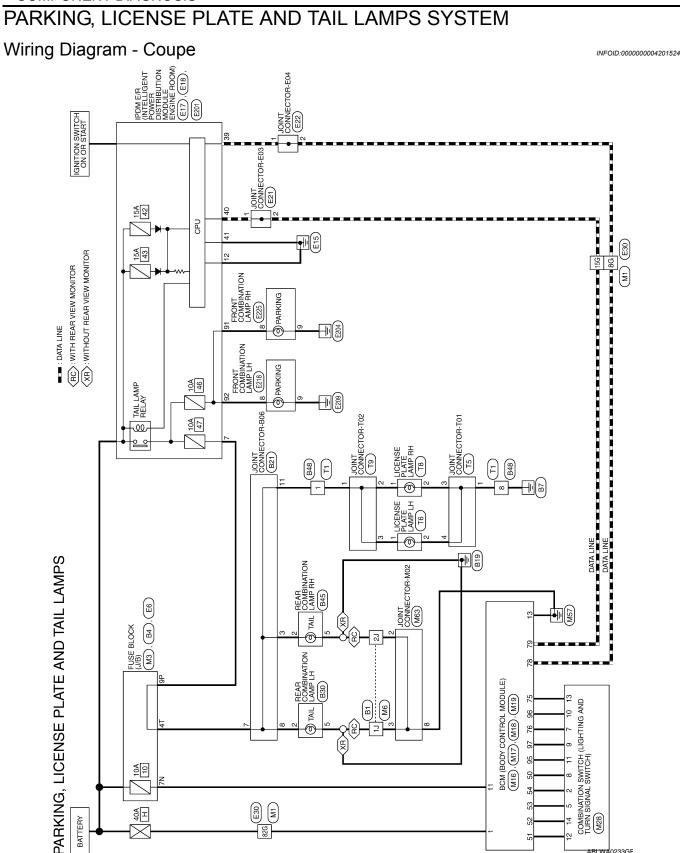
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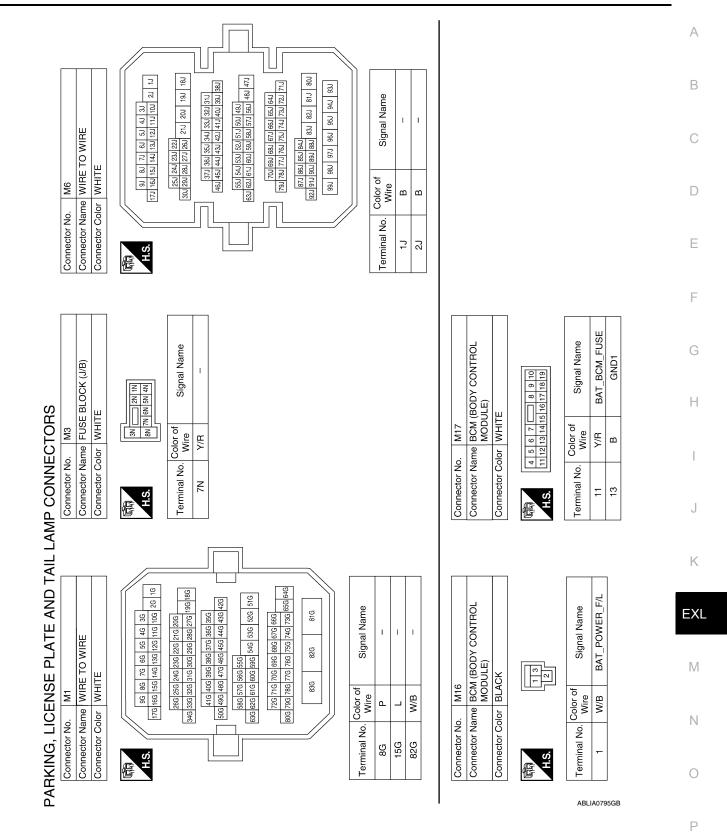


82G M1

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BATTERY

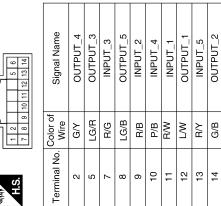
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM



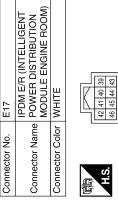
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

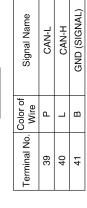
< COMPONENT DIAGNOSIS >





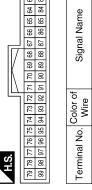










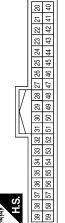


Signal Name	OUTPUT_5	OUTPUT_3	CAN-L	CAN-H	OUTPUT_1	OUTPUT_4	OUTPUT_2
Color of Wire	R/Y	B/G	Ь	٦	B/W	P/B	B/B
Terminal No.	75	9/	8/	79	96	96	26

Connector No. E6	Connector Name FUSE BLOCK (J/B)	Connector Color WHITE	
Connect	Connect	Connect	

Terminal No. Wire Signal Name	-	R/L	9P
	Signal Name	Color of Wire	Terminal No.

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



Signal Name	INPUT_5	INPUT_1	INPUT_2	INPUT_3	INPUT_4
Color of Wire	LG/B	M	G/B	LG/R	G/Y
Terminal No. Wire	09	51	52	23	54

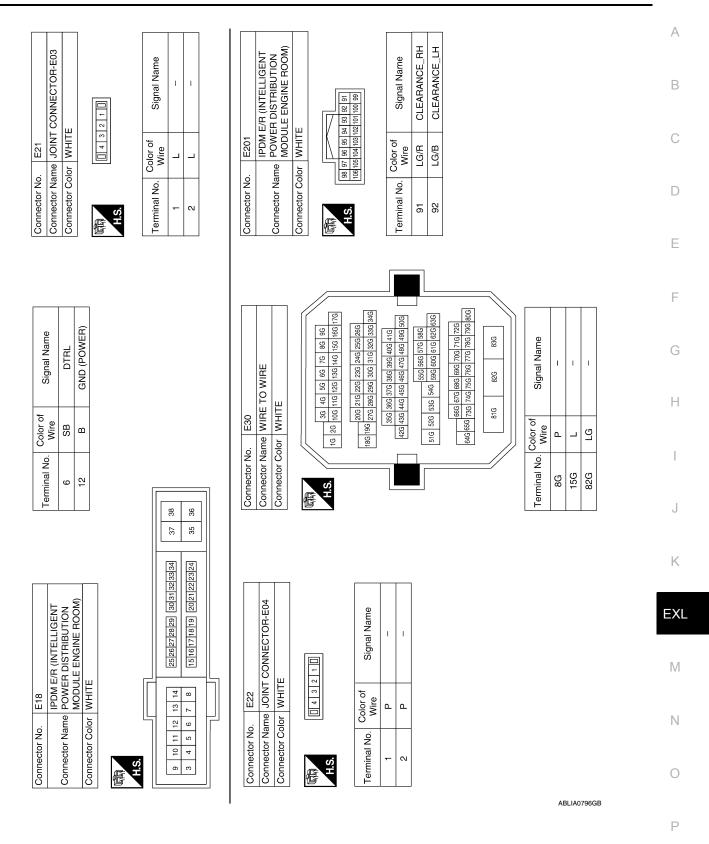
M63	Connector Name JOINT CONNECTOR-M02	BLUE	12 11 10 9 8 7 6 5 4 3 2 1
Connector No.	Connector Name	Connector Color BLUE	(元) (12 11 11 11 11 11 11 11 11 11 11 11 11 1

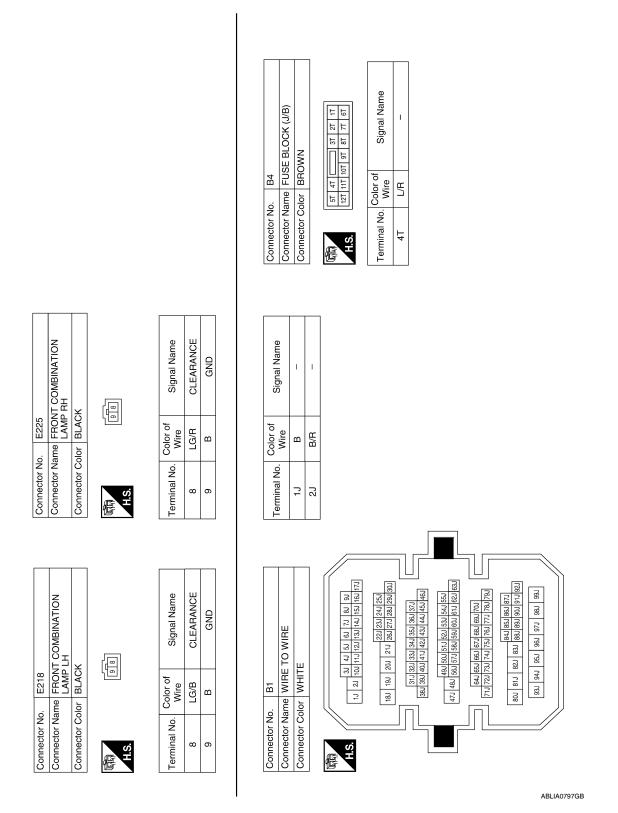
7 6 5 7	Signal Name	ı	_	_
21 10 9 8	Color of Wire	В	В	В
H.S.	Terminal No. Wire	2	3	8

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

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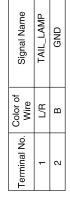


< COMPONENT DIAGNOSIS >

			А
Connector No. B45 Connector Name REAR COMBINATION LAMP Connector Color WHITE Terminal No. Wire Signal Name 2 L/R TAIL_LAMP 5 B/R GND	Connector No. T5 Connector Name JOINT CONNECTOR-T01 Connector Color WHITE	Signal Name	В
B45 Or WHITE Or WHITE Or WHITE Or Or Or Or Or Or Or O	T5 b JOINT CON WHITE	Color of Wire B B B B B	С
Connector No. Connector Color Connector Color HS. Connector Color Connector Color Connector Color Connector No. Connector No. Son Connector No. Connector No	Connector No. Connector Color Connector Color	Terminal No.	D
Con Con Tem	Conne	Te L	Е
			F
Connector Name REAR COMBINATION LAMP LH Connector Color WHITE Terminal No. Color of Signal Name 2 L/R TAIL_LAMP 5 B GND		Signal Name – – – – – – – – – – – – – – – – – – –	G
B30 LH WHITE WHITE C M M M M M M M M M	Connector No. T1 Connector Name WIRE TO WIRE Connector Color WHITE M.S. 8 7 6 5 4 3 2 1 10 11 10 11 10 11 10 11 10 1		Н
Connector No. B30 Connector Name REAR C LH Connector Color WHITE 2	No. T1 Name WIRE T Color WHITE 8 7 6 5 6 16 15 14 13	Color of Wire B B	I
Connector No. Connector Col. Connector Col. LS. LS.	Connector No. Connector Color Connector Color	Terminal No.	J
			K
Connector No. B21 Connector Name JOINT CONNECTOR-B06 Connector Color BLUE	O WIRE 13 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	Signal Name	EXL
No. B21 Name JOINT C Color BLUE 12 11 01 9 8 7 Wire L/R L/R	Me WIRE TO WHITE Or WHITE 1 2 3 4 5 5 1 1 1 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Color of Wire L/R L/R B	
Connector No. Connector Name Connector Color H.S. Talili T.S. Terminal No. (Color 3 1 1	11 UR Connector No. B48 Connector Name WIRE TO WIRE Connector Color WHITE	Terminal No.	N
		ABLIA0798GB	0

T8	Connector Name LICENSE PLATE LAMP RH	BROWN
Connector No.	Connector Name	Connector Color BROWN







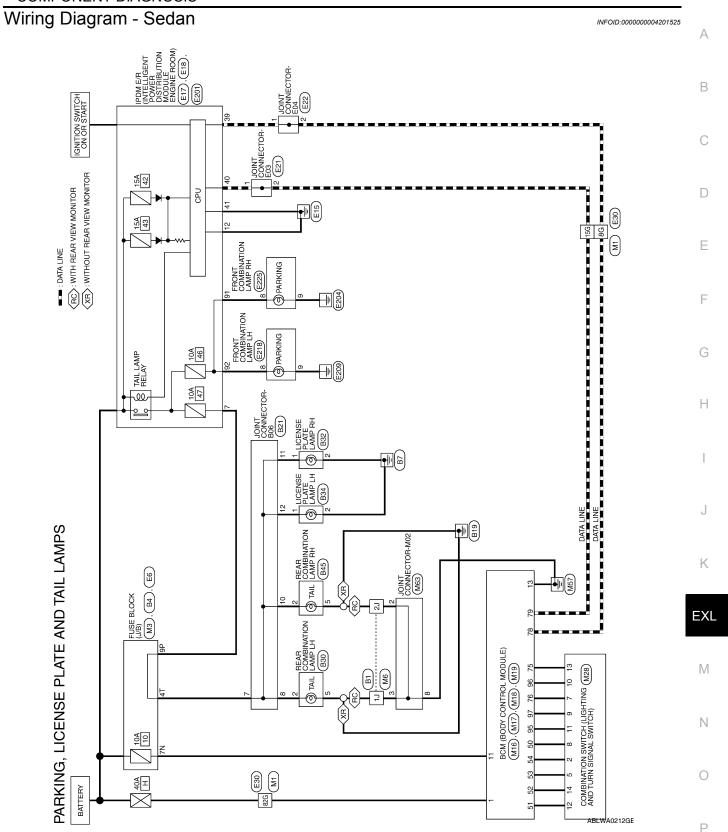
T6	Connector Name LICENSE PLATE LAMP LH	BROWN	
Connector No.	Connector Name	Connector Color BROWN	

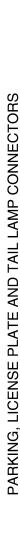


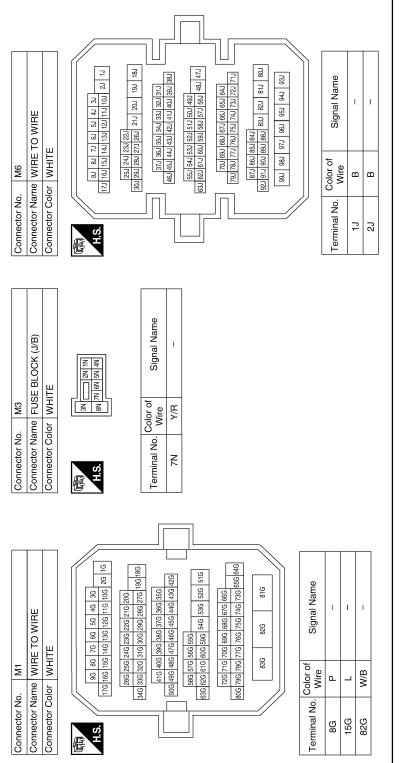


Signal Name	TAIL_LAMP	QN5
Color of Wire	L/R	В
Terminal No.	1	2

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Connector No. M16	o. M16		Connector No. M17	M17	Terminal No Color of	Color of	Ö.
Connector Na	ame BCN	Connector Name BCM (BODY CONTROL	Connector Name E	Connector Name BCM (BODY CONTROL		. Wire	5
	MOI	MODULE)	_	MODULE)	=	Y/R	BAT
Connector Color BLACK	olor BLA	CK	Connector Color WHITE	WHITE	13	В	
H.S.		13	(4 5 6 1112 13 H.S.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19			
Terminal No. Wire	Color of Wire	Signal Name					
-	M/B	BAT_POWER_F/L					

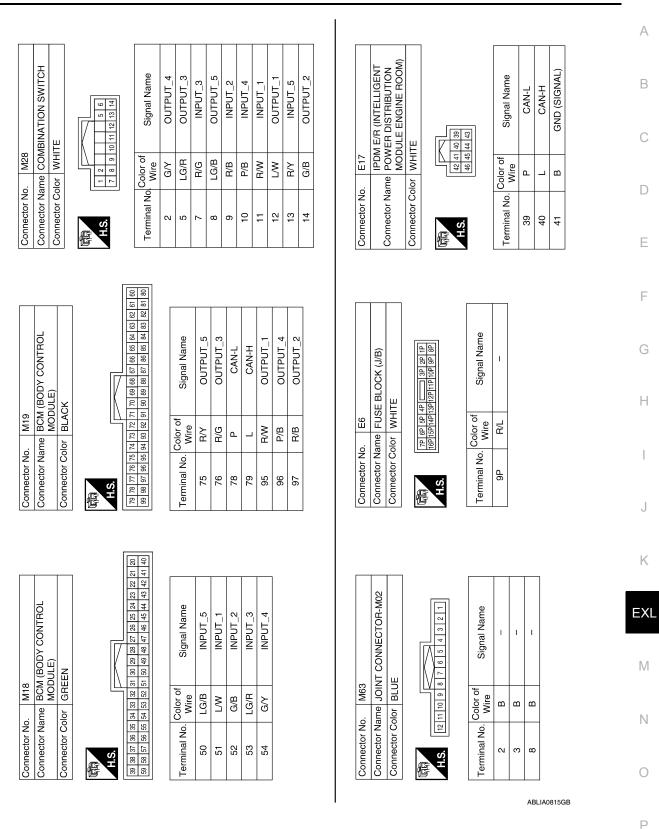
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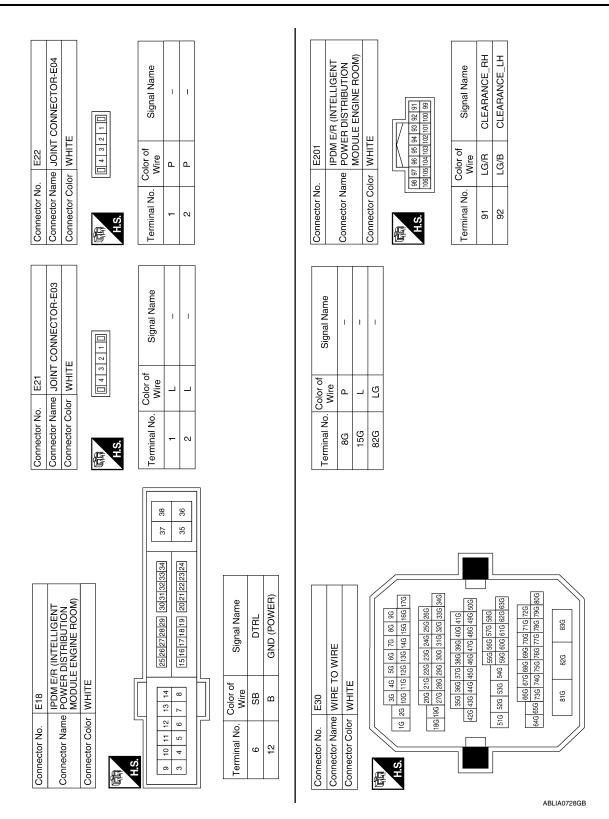
T BCM FUSE

GND1

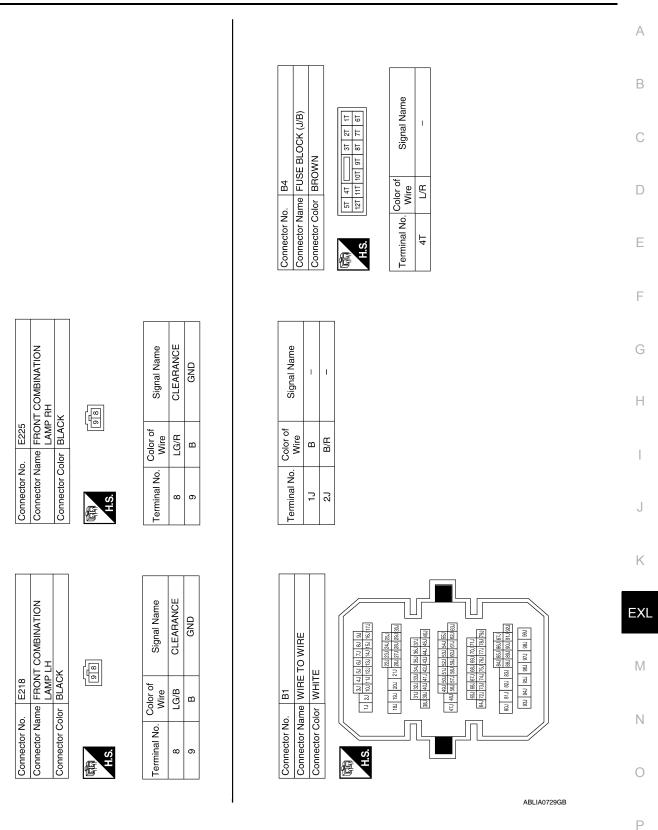
Signal Name

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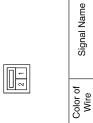


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Connector No.	B32
Connector Name	Connector Name LICENSE PLATE LAMP RH
Connector Color BROWN	BROWN



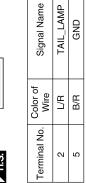




Signal Name	TAIL_LAMP	GND (WITHOUT REAR VIEW MONITOR)	GND (WITH REAR VIEW MONITOR)
Color of Wire	H/1	B/B	В
ıl No.			









Connector Name | JOINT CONNECTOR-B06

B21

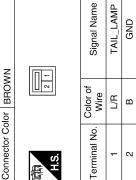
Connector No.

Connector Color BLUE



Signal Name	1	1	ı	1	1
Color of Wire	Z,	L/R	L/R	L/R	L/R
Terminal No. Wire	7	8	10	11	12

	Connector Name LICENSE PLATE LAMP LH		
B34	LICENSE	BROWN	
Connector No.	Connector Name	Connector Color BROWN	



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STOP LAMP < COMPONENT DIAGNOSIS > STOP LAMP Α Wiring Diagram - Coupe INFOID:0000000004201526 ⟨RC⟩: WITH REAR VIEW MONITOR ⟨XR⟩: WITHOUT REAR VIEW MONITOR В С D Е F G FUSE BLOCK (J/B) (E6), (B4) Н 22 B27 J Me Bit Κ EXL 10A BATTERY \mathbb{N}

STOP LAMP

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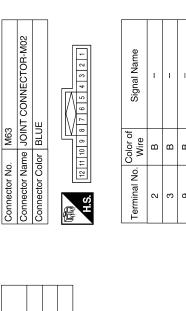
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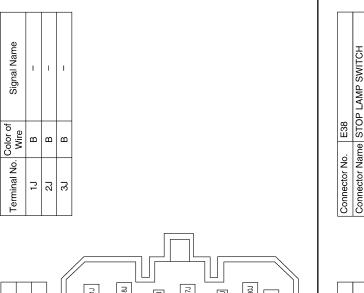
STOP LAMP CONNECTORS

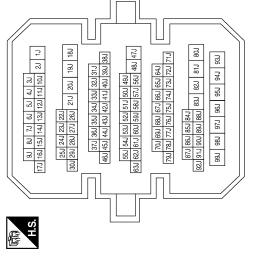
Connector No. M6
Connector Name WIRE TO WIRE

Connector Color WHITE



	IT CONN	ш			7 6 5)is			
	NOC at	IL BLUI	1	Ц	12 11 10 9 8		color of Wire	В	В	В
	Connector Name JOINT CONN	Connector Color BLUE					Terminal No. Wire	2	8	6
						-				
Ľ	2									





E38	Connector Name STOP LAMP SWITC (WITH CVT)	WHITE	
Connector No.	Connector Name	Connector Color WHITE	

Connector Name FUSE BLOCK (J/B)

9E

Connector No.

Connector Color WHITE

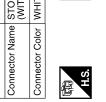
Connector Name STOP LAMP SWITCH (WITH M/T)

E38

Connector No.

Connector Color BLACK

2 1



3 4

Ferminal No. Color of Wire 1 R				
Ferminal No.	Color of Wire	Я	FG	
	Terminal No.	1	2	

Signal Name

Color of Wire

Terminal No.

Signal Name

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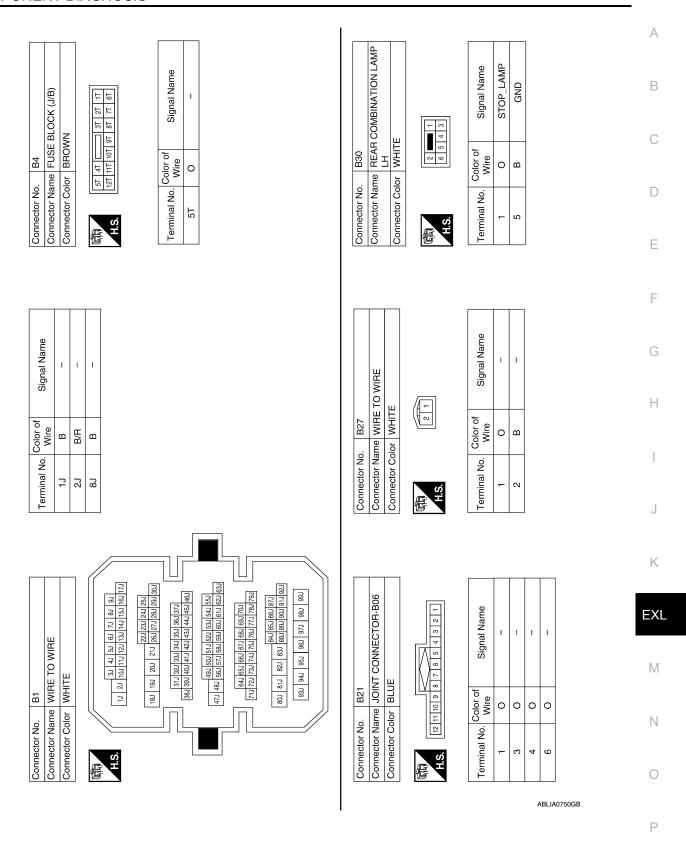
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Signal Name	I	-	
Color of Wire	R/G	Y/R	

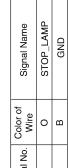
Signal Name	Ι	I
Color of Wire	R/G	Y/R
Terminal No.	2P	8P

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STOP LAMP



-14	0,40,4
Drinector No.	B401
onnector Name	onnector Name HIGH MOUNTED STOP LAMP
onnector Color WHITE	WHITE





Š	S	
Color of Wire	0	В
Terminal No.	1	2





Signal Name	_	ı
Color of Wire	0	В
Terminal No.	1	2

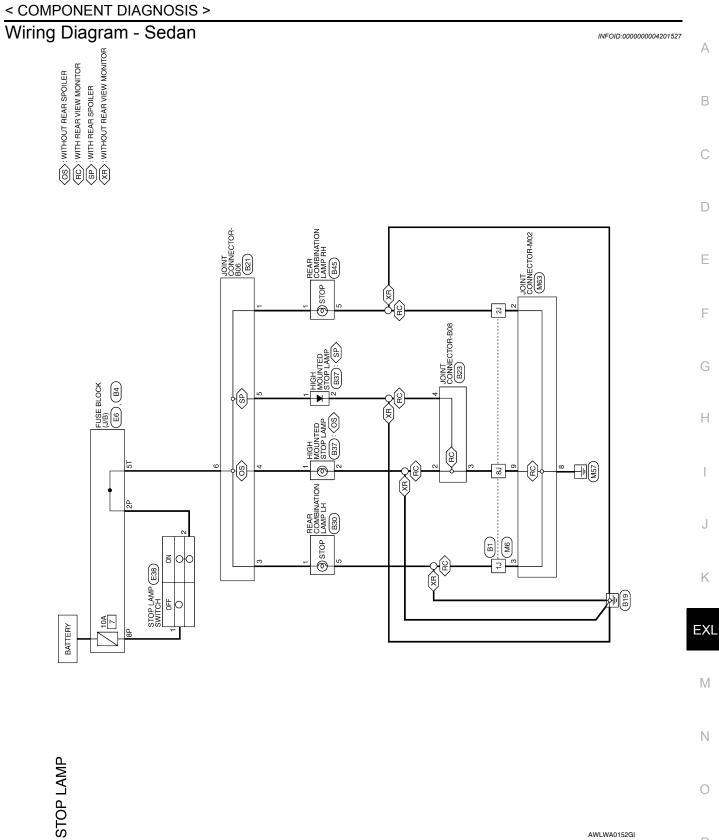






Signal Name	STOP_LAMP	GND
Color of Wire	0	B/R
Terminal No.	1	5

ABLIA0751GB



EXL-157

AWLWA0152GI

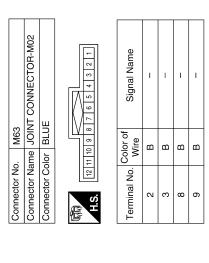
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STOP LAMP CONNECTORS

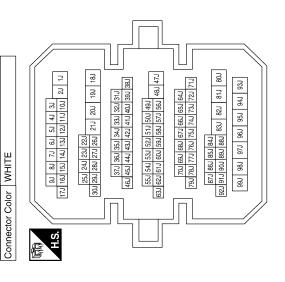
Connector Name | WIRE TO WIRE

M6

Connector No.



Signal Name	1	I	1
Color of Wire	В	В	В
Terminal No.	11	23	8.1



Connector No.	E38
Connector Name	Connector Name STOP LAMP SWITC
	(• • • • • • • • • • • • • • • • • • •
Connector Color BLACK	BLACK



Signal Name	I	1
Color of Wire	В	LG
Terminal No.	ŀ	2

Connector Name STOP I (WITH Connector Color WHITE	Connector No. E38 Connector Name STOP LAMP SWITCH (WITH CVT) Connector Color WHITE
崎 H.S.	(E) L



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

		1			
BLOCK (J/B)	ш	7P 6P 6P 4P 3P 2P 1P 16P 15P 14P 13P 12P 14P 15P 14P 14P	Signal Name	-	ı
me FUSE	lor WHIT	7P 6P 5P 4P C	Color of Wire	R/G	Y/B
Connector Name FUSE BLOCK (J/B)	Connector Color WHITE	H.S.	Terminal No.	2P	8P

E6

Connector No.

ABLIA0731GB

Р

		Α
		В
BLOCK (J/B) N T st rt rt Signal Name	B30 LH WHITE WHITE C	C
Sonnector Name	Connector No. B30 Connector Name REAR CC Connector Color WHITE Terminal No. Wire 1 0 Color of 5 B/R GN 5 B/R GN	E
		,
ө Е	H-B08	G
Signal Name	Connector No. B23	Н
Color of Wire Wire B/R B/R B	B23	I
Terminal No.	Connector No. B23 Connector Name JOINT Connector Color WHITE A.S. Terminal No. Wire 2 B 3 B 3 B 4 B	J
		K
B1 WHRE TO WIRE WIRE TO WIRE WIRE WIRE WIRE WIRE WIRE WIRE WIRE	Connector No. B21 Connector Name JOINT CONNECTOR-B06 Connector Color BLUE 1 0 8 7 6 5 4 3 2 1 Terminal No. Wire Signal Name 1 0	EXL
WIRE TO WIRE WIRE TO WIRE WHITE	No. B21 Name JOINT COI Color BLUE 12 11 10 9 8 7 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IVI
ctor No.	Connector No. Connector Name Connector Color H.S. 1 Colc 3 Colc 4 Colc 5 Colc 6 Colc 6 Colc 6 Colc 6 Colc 7 Colc 7 Colc 7 Colc 7 Colc 7 Colc 7 Colc 8 Colc 7 Colc 8 Colc 7 Colc 8 Colc 9 Colc	N
Connection of the state of the	Connec Connec Connec Termin:	0
	ABLIA0732GB	Б

Connector No.	B45
Connector Name	Connector Name REAR COMBINATION LAMP
	RH
Connector Color WHITE	WHITE

1	Signal Name	STOP_LAMP	GND
0 0	Color of Wire	0	B/R
	nal No.		

REAR	WHITE	6 5
Sonnector Name	Connector Color	E H.S.

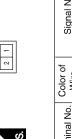
	21 9	Color o	0
	H.S.	Terminal No.	1
1			

Signal Name	STOP_LAMP	GND
Color of Wire	0	В
Terminal No.	1	2

onnector N	onnector C	S T
Con	Conr	

Color of Wire	0	<u>~</u>
Terminal No.	1	٥

Connector No.	B37
Connector Name	Connector Name HIGH MOUNTED STOP LAMP
	(WITHOUT REAR SPOILER)
Connector Color WHITE	WHITE

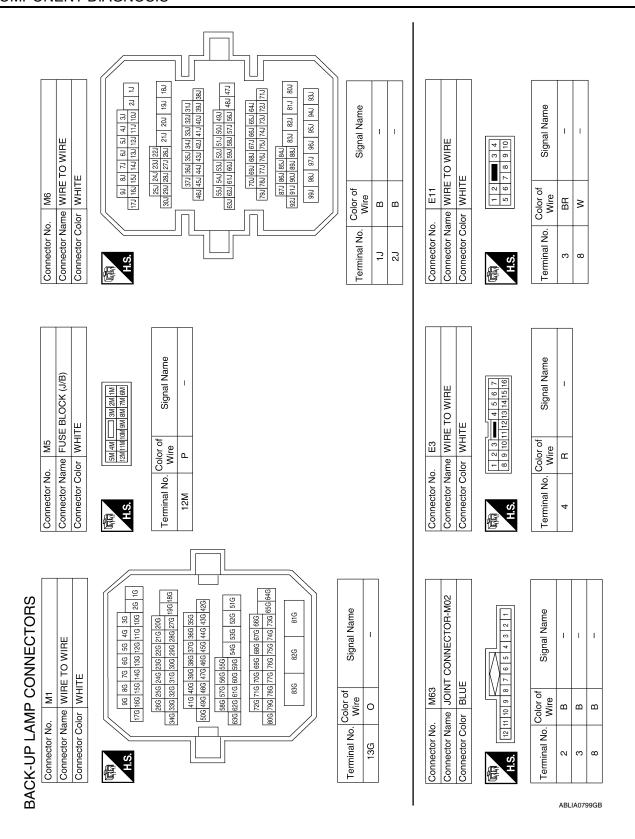


Signal Nar	STOP_LAI	GND
Color of Wire	0	В
Terminal No.	-	2

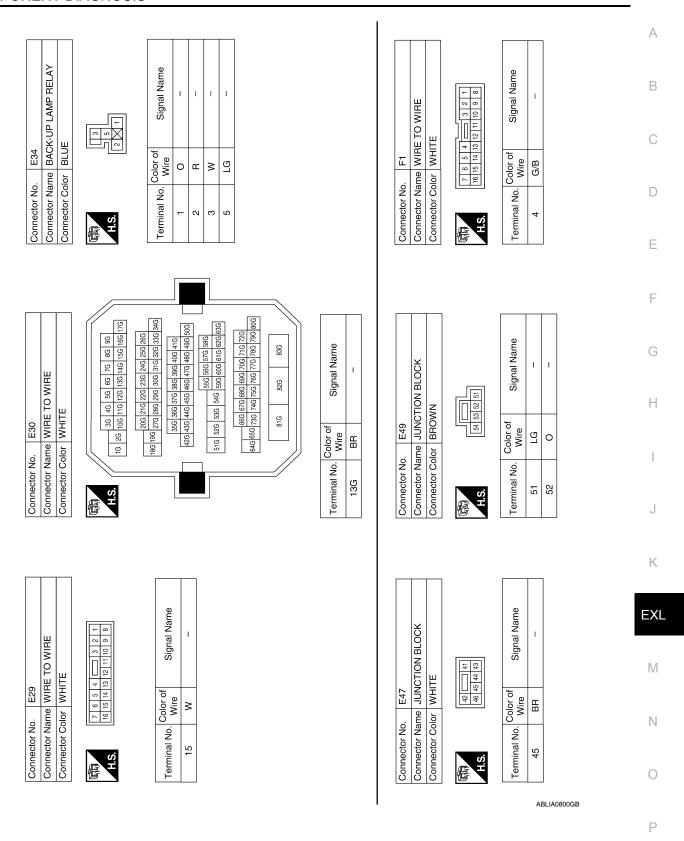
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BACK-UP LAMP Α Wiring Diagram - Coupe INFOID:0000000004201528 (M): WITH MAT (RC): WITH REAR VIEW MONITOR (VC): EXCEPT VQ35DE WITH CVT (VR): WITH VQ35DE AND CVT (VX): WITH QR25DE AND CVT (XX): WITH QR25DE AND CVT В C D Е F G Н BACK-UP LAMP (F24) SWITCH REAR COMBINATION LAMP LH (B30) B10 [B] [B] J K FUSE BLOCK (J/B) (M5) EXL (E30 IGNITION SWITCH ON OR START \mathbb{N} Ν **BACK-UP LAMP** 0 Р

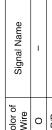
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BACK-UP LAMP



Connector No.	F24
Connector Name	Connector Name BACK-UP LAMP SWITCH
Connector Color BLACK	BLACK

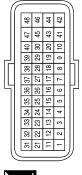






Signal Nar	1	1
Color of Wire	0	P/B
Terminal No.	1	2

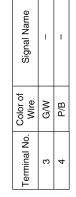






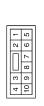




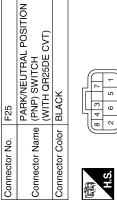




Connector No.



Signal Name	I	I
Color of Wire	0	P/B
Terminal No.	8	8



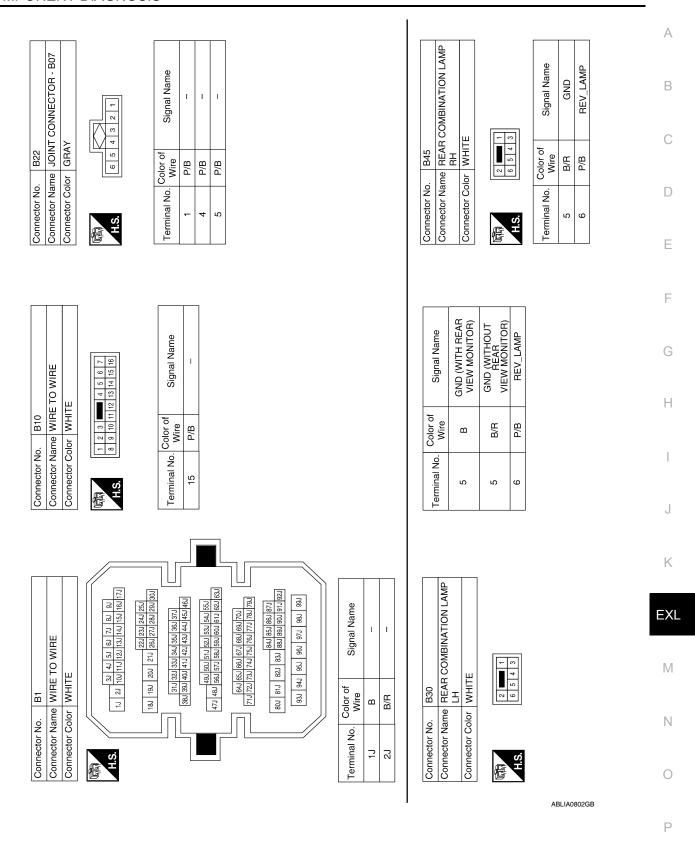




Signal Nar	N9I	R_OUTPL
Color of Wire	0	P/B
Terminal No.	3	5

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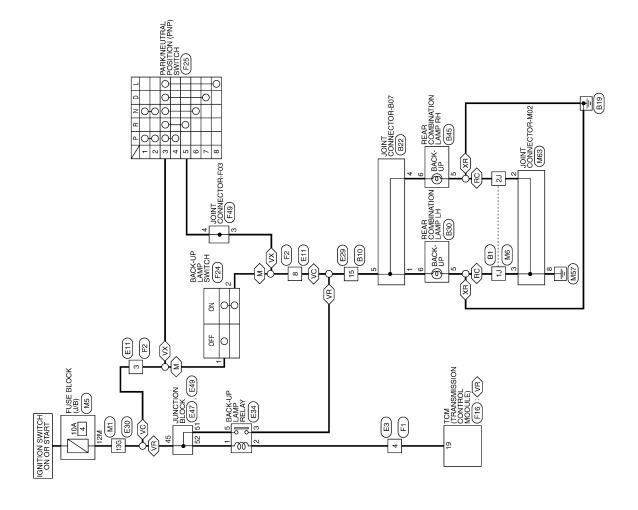
BACK-UP LAMP



Wiring Diagram - Sedan

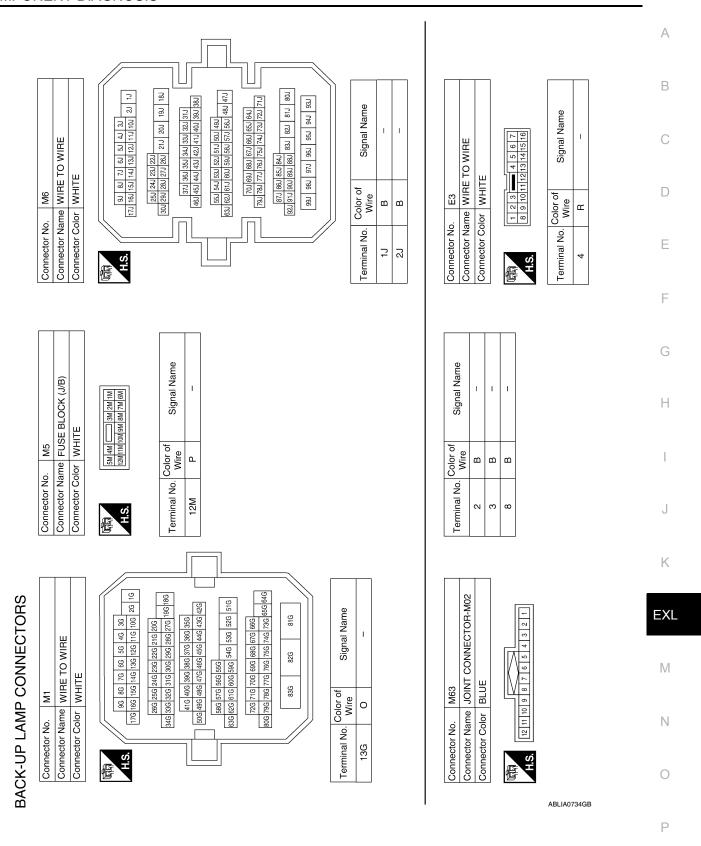
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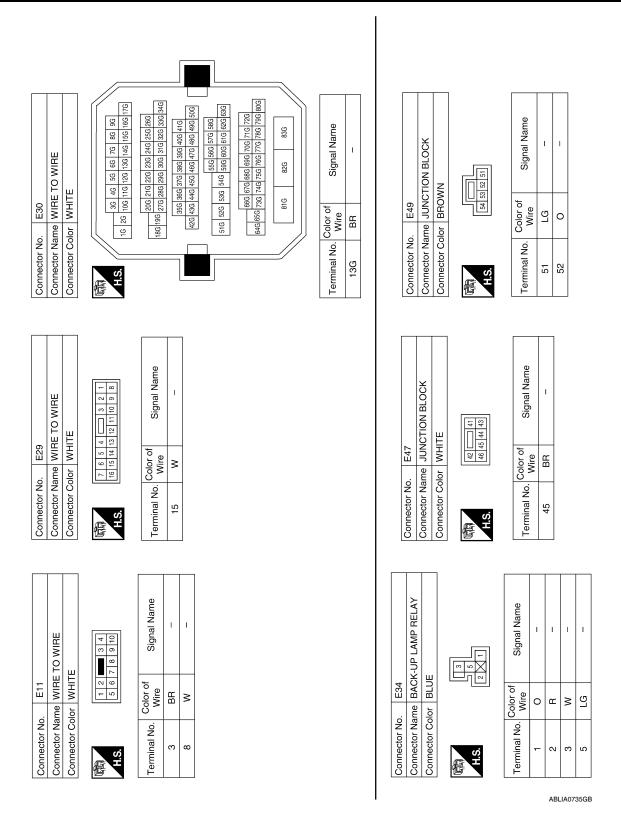




BACK-UP LAMP

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BACK-UP LAMP

Connector No.	Ξ		Connector No. F2). F2		Connector No. F16	F16	
nector Na	me WIF	Connector Name WIRE TO WIRE	Connector Name WIRE TO WIRE	ame WIRE	TO WIRE	Connector Nan	ne TCM	Connector Name TCM (TRANSMISSION
Connector Color WHITE	lor WH	ITE	Connector Color WHITE	Jor WHITE			CON	CONTROL MODULE)
						Connector Color BLACK	or BLAC	X
H.S.	7 6 5 4 16 15 14 13	13 12 11 10 9 8	是 H.S.	10 9 8	2 1	H.S.	32 33 34 3	47
				Color of		11 11	12 13 14 1	21 22 23 24 25 26 27 28 29 30 45 46 11 12 13 14 15 16 17 18 19 20 43 44
	Color of		Terminal No. Wire	Wire	Signal Name		2 3 4	5 6 7 8 9 10 41 42
Terminal No. Wire	Wire	Signal Name	ю	0	I	<i>J</i>		
4	G/B	-	α	a/d				
				2		Terminal No. Wire	Color of Wire	Signal Name
						19	G/B	REV LAMP RLY

Connector No. F49 Connector Name JOINT o Connector Color BLACK H.S. 6 4 3 3 H.S. Color of Terminal No. Wire 3 G/W	6t	Connector Name JOINT CONNECTOR-F03	ACK	9 8 7 7 6	of Signal Name	- /	
nnector No.	F49	ne JOIN	or BLAC		Color of Wire	G/W	9
		nector Name	nector Color				

	PARK/NEUTRAL POSITION (PNP) SWITCH (WITH QR25DE CVT)	CK	2 3 2 1	Signal Name	IGN	THE OUTPUT
- F25		lor BLA	8 8 8	Color of Wire	0	P/B
Connector No.	Connector Name	Connector Color BLACK	H.S.	Terminal No.	3	22

	Connector Name BACK-UP LAMP SWITCH	Υ	Q	Signal Name	I	-
F24	ne BACK	or BLACK	2	Color of Wire	0	B/B
Connector No.	Connector Na	Connector Color	用.S.	Terminal No.	-	2

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EXL-169

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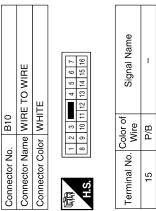
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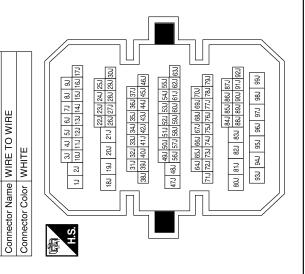


TE	2 3 mm 4 5 6 7 9 10 11 12 13 14 15 16	Signal Name	_
lor WHI	8 9 10 11	Color of Wire	P/B
Connector Color WHITE	馬 H.S.	Terminal No. Wire	15

Signal Name	ı	Ι	
Color of Wire	В	B/R	
Terminal No.	L1	27	

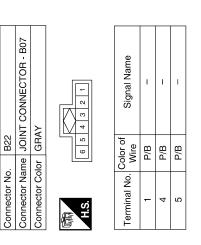
B

Connector No.



	Connector Name REAR COMBINATION LAMP	ш	<u> </u>	Signal Name	GND	REV LAMP
B45	ne REAR RH	or WHITE	2 6 5 4	Color of Wire	B/B	P/B
Connector No.	Connector Nar	Connector Color WHITE	原列 H.S.	Terminal No.	2	9

	REAR COMBINATION LAMP LH	ITE	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Signal Name	GND (WITH REAR VIEW MONITOR)	GND (WITHOUT REAR VIEW MONITOR)	REV_LAMP
. B30		lor WHITE	0 0	Color of Wire	В	B/R	P/B
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	5	5	9



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< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

Α

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status	
ED WIDED !!!	Other than front wiper switch HI	OFF	_
FR WIPER HI	Front wiper switch HI	ON	
ED MIDED LOW	Other than front wiper switch LO	OFF	_
FR WIPER LOW	Front wiper switch LO	ON	_
ED WACHED CW	Front washer switch OFF	OFF	- E
FR WASHER SW	Front washer switch ON	ON	_
FR WIPER INT	Other than front wiper switch INT	OFF	– F
FR WIPER IN	Front wiper switch INT	ON	_
FR WIPER STOP	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	_
TUDNI SIONAL D	Other than turn signal switch RH	OFF	_ -
TURN SIGNAL R	Turn signal switch RH	ON	_
TURN SIGNAL L	Other than turn signal switch LH	OFF	_
TURN SIGNAL L	Turn signal switch LH	ON	_
TAIL LAMD CVA	Other than lighting switch 1ST and 2ND	OFF	_
TAIL LAMP SW	Lighting switch 1ST or 2ND	ON	_
HI BEAM SW	Other than lighting switch HI	OFF	_ `
HI BEAIN SW	Lighting switch HI	ON	_
HEAD LAMP SW 1	Other than lighting switch 2ND	OFF	ŀ
HEAD LAWP SW 1	Lighting switch 2ND	ON	
HEAD LAMP SW 2	Other than lighting switch 2ND	OFF	
HEAD LAWP SW 2	Lighting switch 2ND	ON	
PASSING SW	Other than lighting switch PASS	OFF	_
FASSING SW	Lighting switch PASS	ON	1
AUTO LIGHT SW	Other than lighting switch AUTO	OFF	_
AUTO LIGITI SW	Lighting switch AUTO	ON	_
FR FOG SW	Front fog lamp switch OFF	OFF	_
FR FOG SW	Front fog lamp switch ON	ON	_
DOOR SW-DR	Driver door closed	OFF	
DOOK SW-DK	Driver door opened	ON	_
DOOD SW AS	Passenger door closed	OFF	_
DOOR SW-AS	Passenger door opened	ON	- F
DOOR SW-RR	Rear door RH closed	OFF	=
DOOK SW-KK	Rear door RH opened	ON	=
DOOR SW-RL	Rear door LH closed	OFF	=
DOON SVV-NL	Rear door LH opened	ON	_

Monitor Item	Condition	Value/Status
DOOR SW-BK	NOTE: This item is displayed, but cannot be monitored.	OFF
CDL LOCK SW	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
KEN ON TROM	Other than driver door key cylinder LOCK position	OFF
KEY CYL LK-SW	Driver door key cylinder LOCK position	ON
14EV 0V4 11N1 0V4	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
LIAZADD CW	When hazard switch is not pressed	OFF
HAZARD SW	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
TD CANCEL CV	Trunk lid opener cancel switch OFF	OFF
TR CANCEL SW	Trunk lid opener cancel switch ON	ON
TD/DD 005N 0M	Trunk lid opener switch OFF	OFF
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	ON
TDNU/// IAT MAITD	Trunk lid closed	OFF
TRNK/HAT MNTR	Trunk lid opened	ON
DVE LOOK	When LOCK button of Intelligent Key is not pressed	OFF
RKE-LOCK	When LOCK button of Intelligent Key is pressed	ON
DICE LINII OOK	When UNLOCK button of Intelligent Key is not pressed	OFF
RKE-UNLOCK	When UNLOCK button of Intelligent Key is pressed	ON
DVE TD/DD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is pressed	ON
DICE DANIO	When PANIC button of Intelligent Key is not pressed	OFF
RKE-PANIC	When PANIC button of Intelligent Key is pressed	ON
DICE DAM ODEN	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
DIVE MODE CHO	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
ODTICAL CENCOR	When outside of the vehicle is bright	Close to 5 V
OPTICAL SENSOR	When outside of the vehicle is dark	Close to 0 V
DEO OM DD	When driver door request switch is not pressed	OFF
REQ SW-DR	When driver door request switch is pressed	ON
DEC 014/ 40	When passenger door request switch is not pressed	OFF
REQ SW-AS	When passenger door request switch is pressed	ON
DEO CW DD/TD	When trunk request switch is not pressed	OFF
REQ SW-BD/TR	When trunk request switch is pressed	ON
DUCH OW	When engine switch (push switch) is not pressed	OFF
PUSH SW	When engine switch (push switch) is pressed	ON

Monitor Item	Condition	Value/Status	_
IGN RLY2-F/B	Ignition switch OFF or ACC	OFF	
IGN IXL12-17D	Ignition switch ON	ON	-
ACC RLY-F/B	Ignition switch OFF	OFF	_
ACC KLI-F/B	Ignition switch ACC or ON	ON	-
CLUTCH SW	When the clutch pedal is not depressed	OFF	-
SLUTON SVV	When the clutch pedal is depressed	ON	-
DDAKE OM 4	When the brake pedal is not depressed	ON	-
BRAKE SW 1	When the brake pedal is depressed	OFF	-
DETE (CANIOL CVA)	When selector lever is in P position	OFF	-
DETE/CANCL SW	When selector lever is in any position other than P	ON	-
DET DIVIN OW	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	-
	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	-
PUSH SW-IPDM	When engine switch (push switch) is not pressed	OFF	-
	When engine switch (push switch) is pressed	ON	-
	Ignition switch OFF or ACC	OFF	-
GN 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		ON	_
	Electronic steering column lock UNLOCK status		-
S/L UNLCK-IPDM	Electronic steering column lock UNLOCK status	OFF	-
	Electronic steering column lock LOCK status	ON	_
S/L RELAY-REQ	Ignition switch OFF or ACC	OFF	-
	Ignition switch ON	ON	_
/EH SPEED 1	While driving	Equivalent to speedometer reading	_
VEH SPEED 2	While driving	Equivalent to speedometer reading	

Monitor Item	Condition	Value/Status
	Driver door LOCK status	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
	Passenger door LOCK status	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
ID OK FLAG	Ignition switch ACC or ON	RESET
ID OK FLAG	Ignition switch OFF	SET
DDMT ENC STAT	When the engine start is prohibited	RESET
PRMT ENG STAT	When the engine start is permitted	SET
PRMT RKE STAT	NOTE: This item is displayed, but cannot be monitored.	RESET
KEY SW -SLOT	When Intelligent Key is not inserted into key slot	OFF
RET SW -SLOT	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored.	Operation frequency of Intelligent Key
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET
CONFRIMID ALL	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE
OONEIDM ID 4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET
CONFIRM ID4	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE
CONFIDM ID2	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET
CONFIRM ID3	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE
CONFIDMIDO	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET
CONFIRM ID2	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE
CONFIDM ID4	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET
CONFIRM ID1	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE
TP 4	The ID of fourth key is not registered to BCM	YET
1P 4	The ID of fourth key is registered to BCM	DONE
TD 0	The ID of third key is not registered to BCM	YET
TP 3	The ID of third key is registered to BCM	DONE
TD 0	The ID of second key is not registered to BCM	YET
TP 2	The ID of second key is registered to BCM	DONE
TD 1	The ID of first key is not registered to BCM	YET
TP 1	The ID of first key is registered to BCM	DONE
AIR PRESS FL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front RH tire

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Monitor Item	Condition	Value/Status	
AIR PRESS RR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear RH tire	
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire	
ID REGST FL1	When ID of front LH tire transmitter is registered	DONE	
ID REGGI FLI	When ID of front LH tire transmitter is not registered	YET	
ID REGST FR1	When ID of front RH tire transmitter is registered	DONE	
	When ID of front RH tire transmitter is not registered	YET	
ID REGST RR1	When ID of rear RH tire transmitter is registered	DONE	
	When ID of rear RH tire transmitter is not registered	YET	
	When ID of rear LH tire transmitter is registered	DONE	
ID REGST RL1	When ID of rear LH tire transmitter is not registered	YET	
MADNING LAND	Tire pressure indicator OFF	OFF	
WARNING LAMP	Tire pressure indicator ON	ON	
BUZZER	Tire pressure warning alarm is not sounding	OFF	
	Tire pressure warning alarm is sounding	ON	

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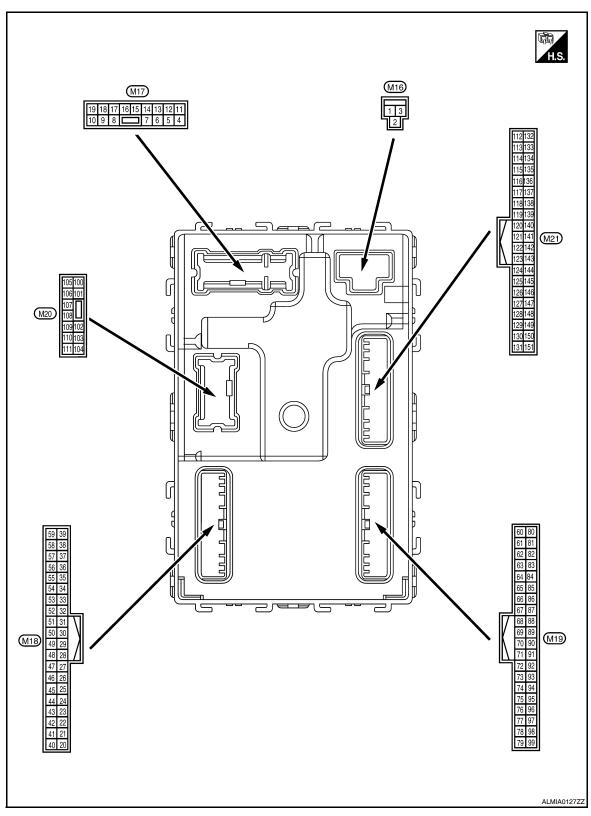
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Terminal Layout



Physical Values

	inal No. e color)	Description	ı	Input/ Condition Output		0		Value	A
(+)	(-)	Signal name				(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	Carried	Interior room lamp	Outrast	After passing the ir er operation time	nterior room lamp battery sav-	OV	[
(P/W)	Ground	power supply	Output	Any other time after lamp battery save	er passing the interior room roperation time	Battery voltage	-		
5	Cround	Front door RH UN-	Output	Front door DII	UNLOCK (actuator is activated)	Battery voltage			
(G/Y)	Ground	LOCK	Output	Front door RH	Other than UNLOCK (actuator is not activated)	OV	F		
7	Ground	Step lamp	Output	Step lamp	ON	0V			
(R/W)	Giound	Step lattip	Output	Step lattip	OFF	Battery voltage	(
8	Ground	All doors LOCK	Output	All doors	LOCK (actuator is activated)	Battery voltage			
(V)	Ciodila	/ III GOOTS LOOK	Cuiput	Other than LOCK (actual is not activated)	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)	Giodila	LOCK	Output	FIGHT GOOF EH	Other than UNLOCK (actuator is not activated)	OV			
10 ¹	Ground	Rear door RH and rear door LH UN-	Output	Rear door RH	UNLOCK (actuator is activated)	Battery voltage	,		
(G/Y)	Giodila	LOCK	Output	and rear door LH	Other than UNLOCK (actuator is not activated)	OV			
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage			
13 (B)	Ground	Ground	_	Ignition switch ON		0V	E		
14 (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 0 JSNIA0010GB	1		
15	Ground	ACC indicator lamp	Output	Ignition switch	OFF	Battery voltage			
(Y/L)			- 4	5 : 5 :	ACC or ON	0V			

		Description						
Terminal No. (Wire color)		Input/		Condition		Value		
(+)	(-)	Signal name	Output			(Approx.)		
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH	(V) 15 10 5 0 PKID0926E		
					Turn signal switch OFF	6.5 V		
					Turri signal Switch OFF	O V		
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E		
10		Doom lamp times		Interior room	OFF	Battery voltage		
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	ON	0V		
21	0.55	Ontinal	l 1	lanition switch	When outside of the vehi- cle is bright	Close to 5V		
(P/B)	Ground	Optical sensor signal	Input		When outside of the vehi- cle is dark	Close to 0V		
22	Ground	Clutch interlock	Input	Clutch interlock	OFF (clutch pedal is not depressed)	0V		
(R/Y)	Ground	switch	Прис	switch	ON (clutch pedal is depressed)	Battery voltage		
24 (R/W)	Ground	Stop lamp switch 1	Input		_	Battery voltage		
26	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	0V		
(O/L)	Ground	Stop lamp switch 2	Прис	Otop lamp switch	ON (brake pedal is depressed)	Battery voltage		
27 (G/W)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	(V) 15 10 5 0 10 ms JPMIA0011GB		
					UNLOCK status	0V		
29	Cround	Koy alot awitch	lnn::4	When Intelligent Key is inserted into key slot		Battery voltage		
(Y)	Ground	Key slot switch	Input	When Intelligent Key is not inserted into key slot		0V		
30	Ground	ACC feedback signal	ACC feedback signal Inni	und ACC feedback signal	Input	Ignition switch	OFF	0
(V/Y)	Signia	1.00 .coabaok digital	put	.3	ACC or ON	Battery voltage		

	inal No.	Description				Val			
(Wire color)		Signal name Input/		Condition		Value (Approx.)			
(+)	(-)		Output		T				
31	Ground	Rear window defog-	Input	Rear window de-	OFF	0V			
(G)		ger feedback signal	1	fogger switch	ON	Battery voltage			
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	(V) 15 10 5 0 10 ms JPMIA0011GB			
					ON (when front door RH opens)	0V			
33	Ground	Compressor ON sig-	Input	A/C switch	OFF	5V			
(SB)	J. 34114	nal	put	1200	ON	0V			
34 ²	Crown	Front door lock as-	lp.s4	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				Door lock/unlock	Lock	Battery voltage			
(GR)	Ground	Lock switch signal	Input	switch	Unlock	0V			
37 (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid opener cancel switch	CANCEL	15 10 5 0 10 ms JPMIA0012GB			
					ON	0V			
38		Rear window defog-		Rear window de-	OFF	5V			
(GR/ W)	Ground	ger ON signal	Input	fogger switch	ON	0V			
39 ²					Unlock	Battery voltage			
(GR/	Ground	Unlock switch signal	Input	Door lock/unlock switch	Lock	0V			
R)					2001	•			
40 ³ (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0013GB			
				Ignition switch OF	F or ACC	10.2V			
4.				Engine switch it (push switch) illu-	ON	5.5V			
41 (W)	Ground	Engine switch (push switch) illumination			t (push switch) illu-	(push switch) illu-	utput (push switch) illu-		
()					OFF	0V			
42	Ground	LOCK indicator lamp	OCK indicator lamp Output	LOCK indicator	ON	0V			
(R)	lamp		lamp	OFF	Battery voltage				

Terminal No. (Wire color)		Description				Value
(Wire	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		OV
46 (V/W)	Ground	Receiver & sensor power supply output	Output	Ignition switch	OFF ACC or ON	0V 5.0V
47		Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 ••• 0.2s
(G/O)	Ground	er signal	Output		When receiving the signal from the transmitter	(V) 6 4 2 0 ••• 0.2s OCC3880D
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 ON	0V
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	Blinking	(V) 15 10 5 0 JPMIA0014GB
-					OFF	Battery voltage
		round Combination switch Output	Output		All switch OFF Lighting switch 1ST	0V
50 (LG/ B)	Ground			Combination switch	Lighting switch high-beam	(V)
					Lighting switch 2ND	15
			Gaiput	(Wiper intermit- tent dial 4)	Turn signal switch RH	0

	inal No.	Description				Value	
(Wire	e color) (-)	Signal name	Input/ Output		Condition	Value (Approx.)	1
, ,			•		All switch OFF (Wiper intermittent dial 4)	ov	ı
51 (L/W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Front wiper switch HI (Wiper intermittent dial 4) Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0032GB	
					Wiper intermittent dial 7 All switch OFF (Wiper intermittent dial 4)	10.7V 0V	
					Front washer switch ON (Wiper intermittent dial 4)	(V)	
52 (G/B) Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	15 10 5 0 2 ms JPMIA0033GB	(
					All switch OFF	0V	
					Front wiper switch INT	00	
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	Front wiper switch LO Lighting switch AUTO	(V) 15 10 5 0 2 ms JPMIA0034GB	
					All switch OFF	0V	
					Front fog lamp switch ON		
54 (G/Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND Lighting switch flash-to- pass	(V) 15 10 5 0	
					Turn signal switch LH	2 ms JPMIA0035GB	
55				Front blower mo-	ON	Battery voltage	
(BR/ W)	Ground	Front blower monitor	Input	tor switch	OFF	0V	(
56 ²		Front door lock as-		Front door lock	OFF (neutral)	5V	
(L/B)	Ground	sembly LH (key cylin- der switch) (lock)	Input	assembly LH (key cylinder switch)	ON (lock)	0V	
57 (W)	Ground	Tire pressure warn- ing check switch	Input		_	5V	

	inal No. e color)	Description			Condition	Value
(+)	(-)	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 5 0 10 ms JPMIA0011GB
					ON (front door LH OPEN)	OV
59	Ground	Rear window defog-	Output	itnut Itcai WillacW ac-	Active	Battery voltage
(G/R)	Ordana	ger relay	Сигриг	fogger	Not activated	0V
60	Ground	Front console antenna 2 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(B/R)	Clound				When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
61	Ground	Center console an-	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB
(W/R)	Ground	tenna 2 (+)	Output	ÖFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB

	ninal No.	Description				Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
62 ⁴	Onesida	Front outside handle	0.4.4	When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(B/Y)	Ground	RH antenna (-)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
63 ⁴ Ground		Front outside handle RH antenna (+)	Output	When the front door RH request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(LG)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
64 ⁴		Front outside handle		When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(V)	Ground	LH 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

	ninal No. e color)	Description	lm:::4/		Condition	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
65 ⁴	Ground	Front outside handle	Output	When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(P)	Sidaha	LH antenna (+)	Guipai	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0063GB
66	Ground	Instrument panel antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(R)	Sidding				When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
67	Cround	Instrument panel an-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(G)	Ground	tenna (+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB

	inal No. e color)	Description	T		Condition	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
68 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
70 (R/B)	Ground	Ignition relay-2 control	Output	Ignition switch	OFF or ACC	0V Battery voltage
71 Ground			Input/	During waiting		(V) 15 10 5 1 ms JMKIA0064GB
(L/O) Gr	Ground	Remote keyless entry receiver signal	Output	When operating e	ither button on Intelligent Key	(V) 15 10 1 ms JMKIA0065GB
75 (R/Y)		Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
	Ground				Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB
					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) 15 10 5 0 2 ms JPMIA0040GB

Combination Combination switch Combination switch Combination		inal No.	Description				Value	
All switch OFF (Wiper intermittent dial 4) Lighting switch high-beam (Wiper intermittent dial 4) Lighting switch high-beam (Wiper intermittent dial 4) Lighting switch 2ND (Wiper intermittent dial 4) Any of the conditions below with all switch OFF (Wiper intermittent dial 1) Any of the conditions below with all switch OFF (Wiper intermittent dial 1) Wiper intermittent dial 2: Wiper intermittent dial 2: Wiper intermittent dial 3: Wiper intermittent dial 3: Wiper intermittent dial 4: Wiper intermittent dial 3: Wiper intermittent dial 4: Wiper intermittent dial 2: Wiper intermittent dial 3: Wiper intermittent dial 3: Wiper intermittent dial 4: Wiper int			Signal name			Condition		
To Ground (R/G) Gr							15 10 5 0 2 ms	
Lighting switch 2ND (Wiper intermittent dial 4) Any of the conditions below with all switch OFF - Wiper intermittent dial 1 - Wiper intermittent dial 2 - Wiper intermittent dial 3 - Wiper intermittent dial 4 - Wiper intermittent dial 3 - Wiper intermittent dial 1 - Wiper intermittent dial 3 - Wiper intermittent dial 1 - Wiper intermittent dial 1 - Wiper intermittent dial 1 - Wiper intermittent dial 2 - Wiper intermittent dial 3 - Wiper intermittent dial 1 - Wiper intermittent dial 1 - Wiper intermittent dial 1 - Wiper intermittent dial 2 - Wiper intermittent dial 1 - Wiper intermittent dial 2 - Wiper intermittent dial 1 - Wiper intermittent dial 2 - Wiper intermittent dial 2 - Wiper intermittent dial 1 - Wiper intermittent dial 2 - Wip		Ground		Input			2 ms	
with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 2 • Wiper intermittent dial 2 • Wiper intermittent dial 3 77 (BR) Ground Engine switch (push switch) Republic Ground CAN-L Third Ground CAN-L Republic Ground CAN-L Republic Ground CAN-H Republic Ground Gan-H Republic Gan-Gan-H Republic Ground Gan-H Republic Gan-Gan-H Republic Gan-Gan-Gan-Gan-Gan-Gan-Gan-Gan-Gan-Gan-	(100)						15 10 5 0 2 ms	
Ground Ground Switch S						with all switch OFFWiper intermittent dial 1Wiper intermittent dial 2	10 5 0 2 ms JPMIA0040GB	
(P) Ground CAN-L Output — — — — — — — — — — — — — — — — — — —		Ground		Input				
(L) Ground CAN-H Output OFF OV 80 (R/L) Ground Key slot illumination Output Key slot illumination Output Figure 1 s		Ground	CAN-L			_	_	
80 (R/L) Ground Key slot illumination Output Key slot illumination Blinking Blinking Solution		Ground	CAN-H	Input/ Output		_	_	
80 (R/L) Ground Key slot illumination Output Key slot illumination Blinking Blinking 15 10 5 10 15 10 5 10 15 10 5 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 10 10 10 10 10 10 10 10 10 10 10 10 10						OFF	0V	
		Ground	Key slot illumination O	Output		Blinking	15 10 5 0 1 s	
						ON	6.5V Battery voltage	

< ECU DIAGNOSIS >

	inal No.	Description	I			Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
81	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	0V
(LG)	Sibulia	Cit indicator famp	Catput	iginaon switon	ON	Battery voltage
83	Ground	ACC relay control	Output	Ignition switch	OFF	0V
(L)	Cround	7100 Toldy donator	Output	iginaon switon	ACC or ON	Battery voltage
84 (Y/R)	Ground	CVT device	Output		_	Battery voltage
85	0	Electronic steering	laa.d	Electronic steer-	Lock status	0V
(L/O)	Ground	column lock condition No. 1	Input	ing column lock	Unlock status	Battery voltage
86	Ground	Electronic steering column lock condition	Input	Electronic steer-	Lock status	Battery voltage
(G/R)	Giodila	No. 2	Input	ing column lock	Unlock status	0V
87	Craimal	Selector lever P posi-	. Innut C	Coloator laver	P position	0V
(G/B)	Ground	tion switch	Input	Selector lever	Any position other than P	Battery voltage
				Front door RH request switch	ON (pressed)	0V
88 ⁴ (P/L)			Input		OFF (not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
					ON (pressed)	0V
89 ⁴ (B/W)	Ground	Front door LH request switch Front door LH request switch Front door LH request switch		OFF (not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0V	
90	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0V
(Y)	Giound	lay control	Output	ignition switch	ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage
94	Ground	Steering wheel lock	Output	Ignition switch	OFF or ACC	Battery voltage
(G/Y)	Cidana	unit power supply	Caiput	.g	ON	0V

EXL-187

	inal No. e color)	Description	ı			Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB
95 (R/W)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3V
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB

< ECU DIAGNOSIS >

	inal No.	Description				Value
(+)	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
96		Combination switch		Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3V
(P/B)	Ground	INPUT 4	Input	switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB
					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
						JPMIA0039GB 1.3V

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

< ECU DIAGNOSIS >

	inal No. e color)	Description	I		0 1111	Value	
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)	
					LOCK status	Battery voltage	
99 (L/Y) Ground	Ground	Electronic steering column lock unit communication	Input/ Output	Electronic steer-ing column lock	LOCK or UNLOCK	(V) 15 10 5 0 50 ms JMKIA0066GB	
					For 15 seconds after UN- LOCK	Battery voltage	
					15 seconds or later after UNLOCK	0V	
103 (V) Ground	Cround	Trunk lid opening	Output	Trunk lid	Open (trunk lid opener actuator is activated)	Battery voltage	
	Trunk ha opening	Output	Trunk lid	Close (trunk lid opener actuator is not activated)	0V		
110	Ground	Trunk room lamp	Output	Trunk room lamp	ON	OV	
(V/W)	Ordana	Trank room lamp	Output	Traint room lamp	OFF	Battery voltage	
114 (B) Ground	Cround	Rear parcel shelf antenna 1 (-)		Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
	Ground		Output		When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	F

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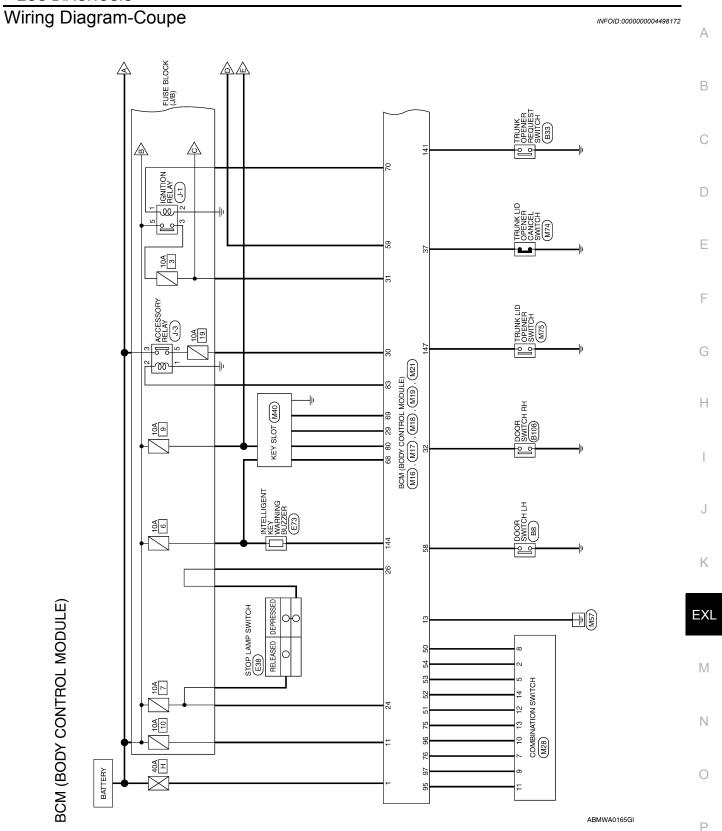
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	inal No. e color)	Description	Innut/		Condition	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
115		Rear parcel shelf an-		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(W)	Ground	tenna 1 (+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
118 ⁴	Ground	Rear bumper antenna (-)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(L/O)	Glound				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
119 ⁴	Ground	Rear bumper anten-	Output	When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0062GB
(BR/ W)	Ground	na (+)	Output	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB

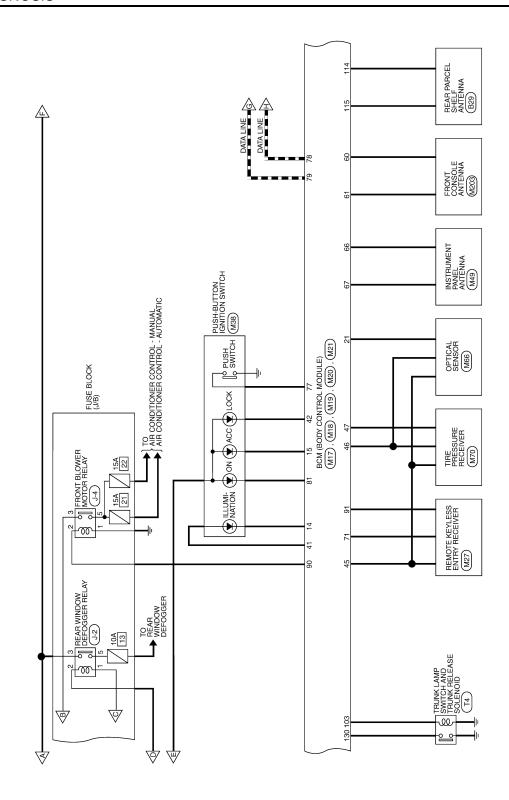
Terminal No. (Wire color)		Description				Value				
(Wire	e color) (-)	Signal name	Input/ Output		Condition	Value (Approx.)				
127	()		Output		OFF or ACC	Battery voltage				
(BR/ W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	ON	ov				
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	(V) 15 10 5 0 10 ms JPMIA0011GB				
					ON (trunk is open)	0V				
-				Ignition switch	When the clutch pedal is depressed	Battery voltage				
				OFF (M/T vehi- cle)	When the clutch pedal is not depressed	0V				
132 (R)	Ground	Starter motor relay control	Output	Ignition switch	When selector lever is in P or N position and the brake is depressed	Battery voltage				
				ON (other than M/ T vehicle)	When selector lever is in P or N position and the brake is not depressed	OV				
					witch r than M/) When selector lever is in P or N position and the brake is depressed When selector lever is in P or N position and the brake is not depressed ON (pressed) OFF (not pressed) OFF (not pressed)	0V				
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch		15				
144 ⁴	0	Intelligent Key warn-	0 : :	Request switch	Sounding	0V				
(GR)	Ground	ing buzzer	Output	buzzer	Not sounding	Battery voltage				
144 ⁵	Cracinal	Outside warning	لننسفين	Outside warning	Sounding	0V				
(GR)	Ground	buzzer	Output	buzzer	Not sounding	Battery voltage				
147	Ground	Trunk lid opener	Input	Trunk lid opener	Pressed	0V				
(L/R)	Giodila	switch	input	switch	Not pressed	Battery voltage				
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				
					ON (when rear door RH opens)	0V				

	inal No.	Description				Value
	e color)	Signal name	Input/		Condition	(Approx.)
(+)	(-)		Output			
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
					ON (when rear door LH opens)	0V

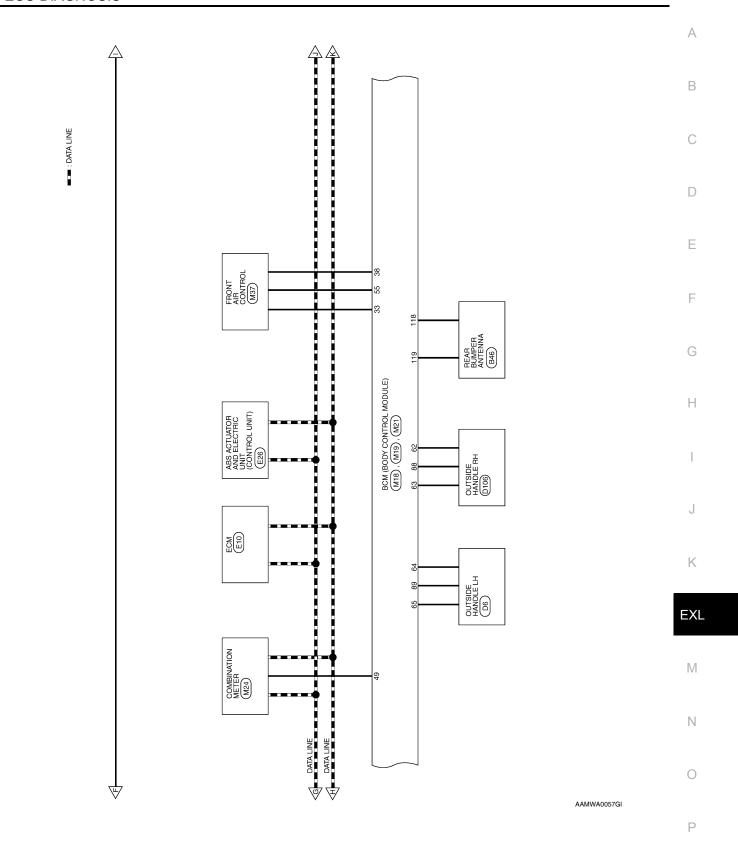
- 1: Sedan only
- 2: With LH front window anti-pinch
- 3: With LH and RH front window anti-pinch
- 4: With Intelligent Key
- 5: Without Intelligent Key

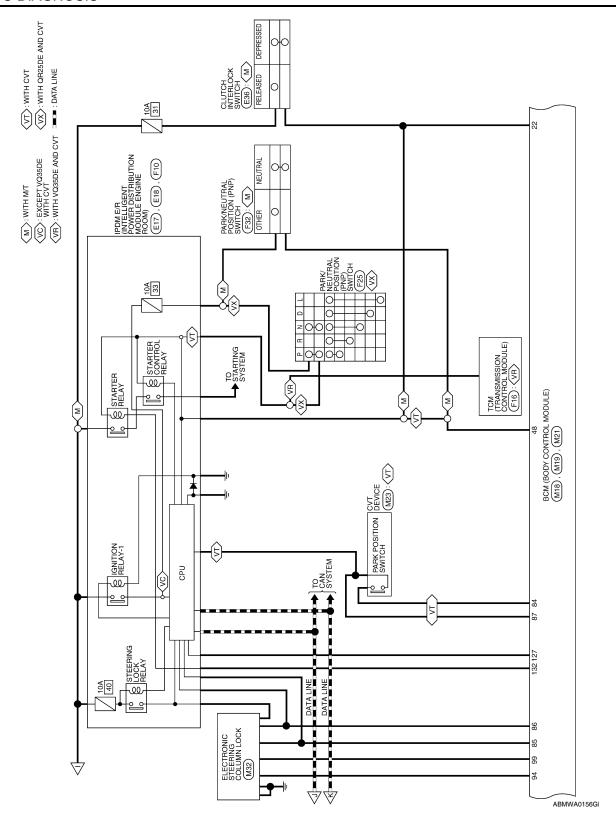


■== : DATA LINE



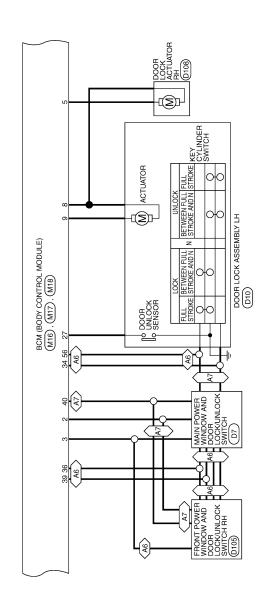
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 ⟨A6⟩
 : WITH LEFT POWER WINDOW ANTI-PINCH SYSTEM

 ⟨A7⟩
 : WITH LEFT AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM



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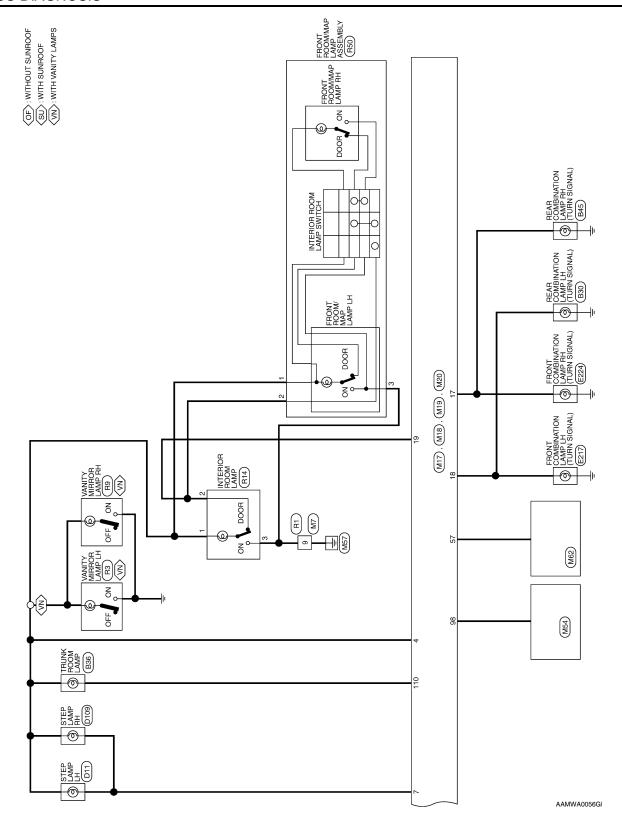
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Р



TUNER_POWER_SUP KEYLESS_TUNER_SI

SHIFT_N/P

IMMO_LED INPUT_5 INPUT_1 INPUT_2 INPUT_3 INPUT_4

A/L_SENS_KEYLESS_

Signal Name

ROOM_LAMP_OUTPUT

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19

STEP_LAMP_OUTPUT

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9

CDL_COMMON

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48

FR_FLASHER FL_FLASHER

G/B G/Y

17

LOW_SIDE_PUSH_LE D_OUTPUT

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4

GND1

В

ACC_LED

 $\frac{1}{2}$

5 16

ROOM_LAMP_BAT_ SAVER

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4 2

CDL_AS

Signal Name

Color of Wire

Terminal No.

H.S.

CDL_RR_RL_BACK

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G

Connector Name BCM (BODY CONTROL MODULE)

Connector No. M17

Connector Color WHITE

CDL_DR/FL

Signal Name

Color of Wire

Terminal No.

BAT_BCM_FUSE

BCM (BODY CONTROL MODULE) CONNECTORS

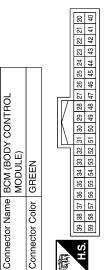
M16	Connector Name BCM (BODY CONTROL MODULE)	BLACK	
Connector No.	Connector Name	Connector Color BLACK	

o. M16	onnector Name BCM (BODY CONTROL MODULE)	onnector Color BLACK	
onnector No.	ctor Na	ctor Cc	



Signal Name	AT_POWER_F/L	P/W_POWER_SUPPL Y_PERM	POWER_WINDOW_ POWER_SUPPLY (RAP)	
Color of Wire	W/B	R/Y	N/¬	
Terminal No. Wire	1	2	3	

Signal Name	FOB_IN_SW_1	ACC_F/B	IGN_F/B	AS_DOOR_SW	AIRCON_SW	DOOR_KEY/C_
Color of Wire	Υ	V/Y	В	B/B	SB	L/R
erminal No. Wire	59	30	31	32	33	34



lo. Color of Wire	W/A			G/O	B/G	9	LG/B	Γ/M	G/B	LG/R	G/Y	BR/W	87		>	SB	Ç	
Terminal No.		46		47	48	49	20	51	52	53	54	55	56		22	258	209	
									ws		×	MS.						
ignal Name	B_IN_SW_1	ACC_F/B	IGN F/B	WS BOOD	WS NOOR	OB KEV/C	NLOCK_SW_	ı	3AL_UNLOCK_SW	K_CANCEL_SW	_DEFOGGER_SW	3AL_UNLOCK_SW	W_K-LINE	USH_LED	LOCK_LED	ı	1	

DOOR_KEY/C_LOCK_ SW TPMS_MODE_TRIGG ER_SW

BLOWER_FAN_SW

REAR_DEFOGGER_

DR_DOOR_SW

Signal Name	FOB_IN_SW_1	ACC_F/B	IGN_F/B	AS_DOOR_SW	AIRCON_SW	DOOR_KEY/C_ UNLOCK_SW_	ı	CENTRAL_UNLOCK_SW	TRUNK_CANCEL_SW	REAR_DEFOGGER_SW	CENTRAL_UNLOCK_SW	PW_K-LINE	PUSH_LED	S/L_LOCK_LED	-	-	GND_RF2_A/L
Wire	٨	٧/٨	g	B/B	SB	L/R	1	GR	0	GR/W	GR/R	A/G	*	В	1	ı	Ь
al No.						_				~					~		

Signal Name	1	AUTO_LIGHT_SENSO R_INPUT1	CLUTCH_SW	ı	STOP_LAMP_LOW_SW	ı	STOP_LAMP_HIGH_SW	DOOR_LOCK_STATUS	I
Color of Wire	ı	P/B	R/Υ	1	B/W	1	O/L	G/W	_
Terminal No. Wire	20	21	22	23	24	25	26	27	28

ABMIA0468GB

EXL-201

M18

Connector No.

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В

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Signal Name	1	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	1	S/L_POWER_SUPPLY_ 12V	OUTPUT_1	OUTPUT_4	OUTPUT_2
Color of Wire	-	7	Y/R	L/0	G/R	G/B	P/L	B/W	λ	L/R	_	_	√/5	B/W	B/B	R/B
Terminal No.	82	83	84	85	86	87	88	89	06	91	92	93	94	92	96	26

Signal Name	HAZARD_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	_	-	OUTPUT_5	OUTPUT_3	ENG_START_SW	CAN-L	CAN-H	FOB_SLOT_ ILLUMINATION	IGN_ON_LED	
Color of Wire	G/O	$\Gamma \mathcal{N}$	В	G	G/O	0	B/B	1/0	_	_	R/Y	R/G	BR	Ь	٦	R/L	LG	
Terminal No.	86	66	99	67	68	69	70	71	72	73	75	92	77	78	79	80	81	

				8									
	BCM (BODY CONTROL MODULE)	X		70 69 68 67 66 65 64 63 69 61	90 89 88 87 86 85 84 83 82	Signal Name	ROOM ANT 2 B	ROOM_ANT_2_A	AS_DOOR_ANT_B	AS_DOOR_ANT_A	DR_DOOR_ANT_B	DR_DOOR_ANT_A	
M19		r BLACK		73 72 74	93 95	Color of Wire	B/R	W/R	В/Υ	ГG	^	۵	
Connector No.	Connector Name	Connector Color	原动 H.S.	79 78 77 76 75 74	98 97 96 95	Terminal No.	09	61	62	63	64	65	

Terminal No.	Color of Wire	Signal Name
100	1	1
101	_	1
102	_	-
103	۸	CDL_BACK_TRUNK
104	_	_
105	1	-
106	-	-
107	-	_
108	_	_
109	1	_
110	N/W	TRUNK_LAMP_OUTPUT
111	1	_

	ONTROL		4	——————————————————————————————————————
2	Name BCM (BODY CONTROL MODULE)	Color WHITE	100 101 [102 103 104	105 106 107 108 109 110 111
<u>:</u>	· Name	Color	LE	



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M28 COMBINATION SWITCH WHITE	10 11 12 13 14	Signal Name	WASH_MTR	INPUT_4	INPUT_3	GND	OUTPUT_3
e e	8 8 9 1 1	Color of Wire	B/L	G/Y	LG/R	В	R/G
Connector No. Connector Name Connector Color	H.S.	Terminal No.	-	2	5	9	7

Signal Name	WASH_MTR	INPUT_4	INPUT_3	GND	OUTPUT_3	INPUT_5	OUTPUT_2	OUTPUT_4	OUTPUT_1	INPUT_1	OUTPUT_5	OUTPUT_2
Color of Wire	R/L	G/Y	LG/R	В	R/G	LG/B	B/B	P/B	B/W	M/l	₽Y	G/B
Terminal No.	-	2	5	9	7	8	6	10	11	12	13	14

Connector No. M21 Connector Name BCM (BODY CONTROL MODULE) Connector Color GRAY Connector Relation (19 17 17 17 17 17 17 17

Signal Name	1	1	TRUNK_ANT_1_B	TRUNK_ANT_1_A	ı	ı	BACK_DOOR_ANT_B	BACK_DOOR_ANT_A	ı	-	-
Color of Wire	ı	ı	В	Μ	ı	1	0/1	BR/W	ı	_	_
Terminal No.	112	113	114	115	116	117	118	119	120	121	123

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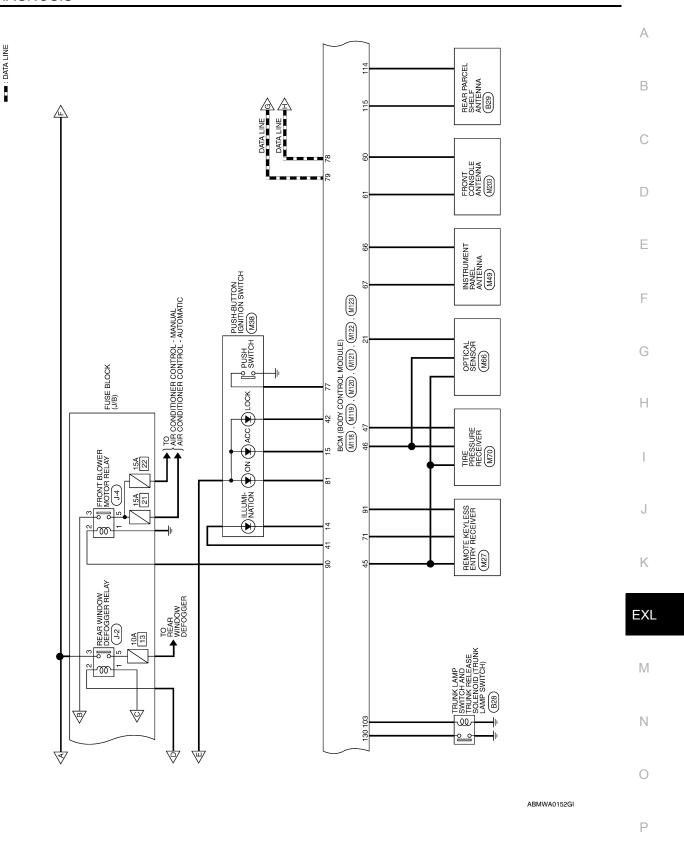
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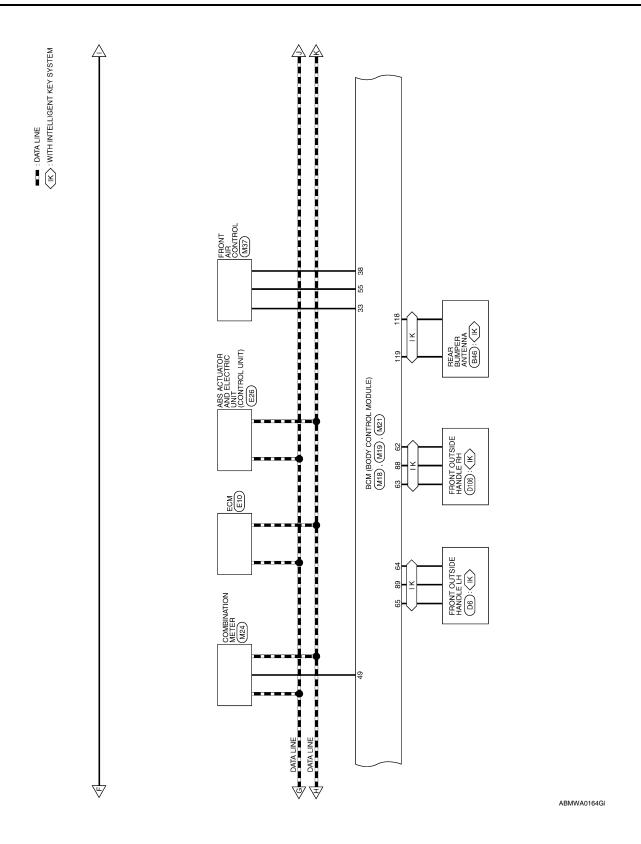
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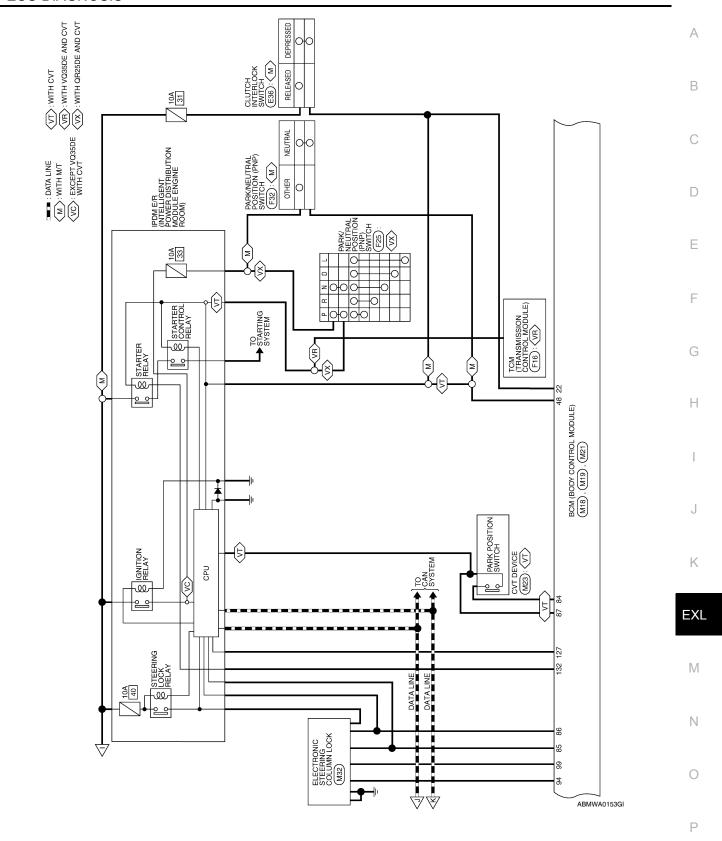
BATTERY

Wiring Diagram-Sedan INFOID:0000000004498173 (IK): WITH INTELLIGENT KEY OK): WITHOUT INTELLIGENT KEY TO): WITH TRUNK OPENER FROMEST SWITCH : WITH TRUNK OPENER REQUEST SWITCH FUSE BLOCK (J/B) \triangle IGNITION RELAY-2 <u>₩</u>~ ACCESSORY On RELAY 10A 10A REAR DOOR SWITCH RH (B116) BCM (BODY CONTROL MODULE) (M16) , (M17) , (M18) , (M19) , (M21) REAR DOOR SWITCH LH B18 KEY SLOT (M40) 53 98 89 FRONT DOOR SWITCH RH 6108 INTELLIGENT KEY KEY KEY KEY KEY KEY KEY BUZZER OUTSIDE WARNING BUZZER (E73): (OK) 10A FRONT DOOR SWITCH LH B8 BCM (BODY CONTROL MODULE) DEPRESSED STOP LAMP SWITCH 54 RELEASED 53 COMBINATION SWITCH 25 5 75 96 10A 9/ 97 95 40A H

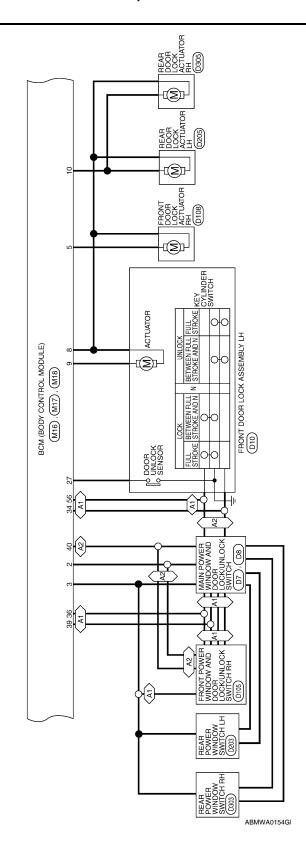
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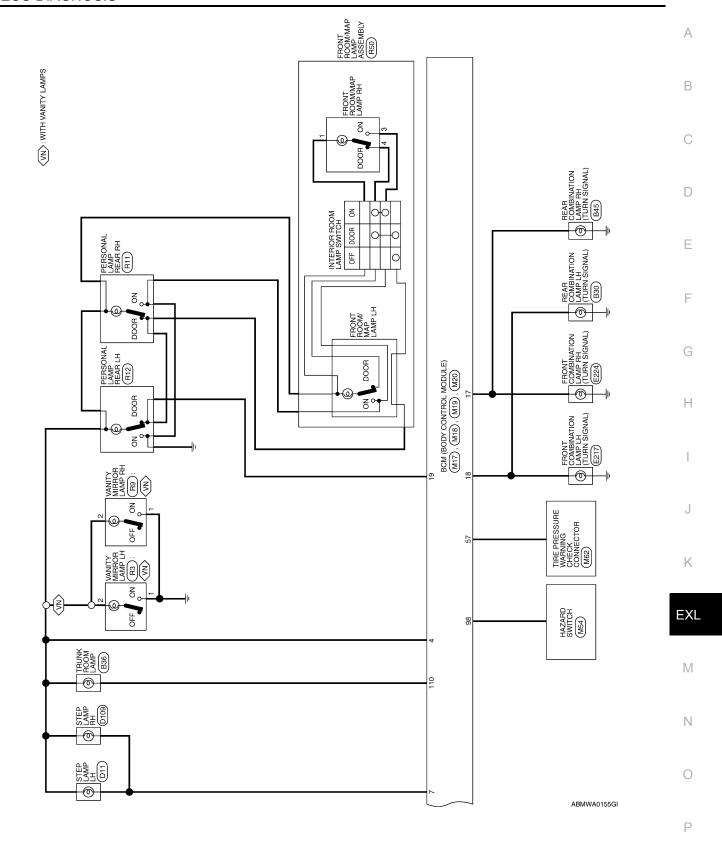












BCM (BODY CONTROL MODULE) CONNECTORS

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

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





LOW_SIDE_PUSH_LE D_OUTPUT

₹ m

ACC_LED

CDL_DR/FL CDL_RR_RL_BACK BAT_BCM_FUSE

G GY Ϋ́R

> 10 Ξ 5 5 4 15 19 17

Signal Name

Color of

Terminal No.

Connector Name BCM (BODY CONTROL MODULE)

M17

Connector No.

Connector Color WHITE

ROOM LAMP OUTPUT

19

STEP_LAMP_OUTPUT

₽/W

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CDL_COMMON

FR_FLASHER FL_FLASHER

G/B G/Y

ROOM_LAMP_BAT

M ď≺

CDL_AS SAVER

Signal Name

Color of Wire

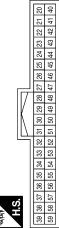
Terminal No.

of Signal Nar	BAT_POWEF	P/W_POWER_ Y_PERN	POWER_ WIN	POWER_SU	(RAP)
Color of Wire	M/B	Κ/A		\leq	
Terminal No.	1	2		က	

Signal Name	BAT_POWER_F/L	P/W_POWER_SUPP Y_PERM	POWER_ WINDOW_ POWER_ SUPPLY (RAP)
Color of Wire	M/B	R/Y	N/l
erminal No.	-	2	ဇာ

(RAP)		
:		M18
n		Connector No.







Signal Name	KEYLESS_TUNER_SI	SHIFT_N/P	IMMO_LED	INPUT_5	INPUT_1	INPUT_2	INPUT_3	INPUT_4	BLOWER_FAN_SW	DOOR_KEY/C_LOCK_ SW	TPMS_MODE_TRIGG ER_SW	DR_DOOR_SW	REAR_DEFOGGER_ RLY
Color of Wire	0/5	B/G	0/1	TG/B	M/٦	G/B	LG/R	J/S	BR/W	9/Л	Μ	SB	G/R
Terminal No.	47	48	49	09	51	25	23	54	22	99	29	28	69

Signal Name	DOOR_LOCK_STATUS	1	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	ı	-	GND_RF2_A/L	A/L_SENS_KEYLESS_	TUNER_POWER_SUP	PLY
Color of Wire	G/W	1	>	٨/٨	G	R/B	SB	L/R	1	GR	0	GR/W	GR/R	Y/G	Α	Ж	ı	ı	_		%	
Terminal No.	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45		46	

l		
erminal No.	Color of Wire	Signal Name
	-	-
	B/B	AUTO_LIGHT_SENSO R_INPUT1
	R/Y	CLUTCH_SW
	-	1
	B/W	STOP_LAMP_LOW_SW
	-	_
	7/O	STOP_LAMP_HIGH_SW
l		

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I No. Color of Signal Name	Y/R AT_DEVICE_OUT	L/O S/L_CONDITION_1	G/R S/L_CONDITION_2	G/B SHIFT_P	P/L AS_REQUEST SWITCH	B/W DR_REQUEST SWITCH	Y IGN2_CONT	L/R RF1_POWER_SUPPLY	1	ı	G/Y S/L_POWER_SUPPLY_ 12V	R/W OUTPUT_1	P/B OUTPUT_4	R/B OUTPUT_2	G/O HAZARD_SW	S/I K-I INE
Terminal No.	84	85	98	87	88	68	06	91	95	93	94	95	96	97	86	60

Signal Name	ROOM_ANT_1_B	ROOM_ANT_1_A	FOB_READER_CLOCK	FOB_READER_DATA	IGN_ELEC_CONT	RF1_TUNER_SIGNAL	-	-	OUTPUT_5	OUTPUT_3	ENG_START_SW	CAN-L	CAN-H	FOB_SLOT_ ILLUMINATION	IGN_ON_LED	-	ACC_CONT
Color of Wire	۳	g	G/O	0	B/B	0/7	1	-	R/Y	B/G	BR	Д	٦	R/L	LG	1	Τ
Terminal No.	99	67	89	69	70	71	72	73	75	92	77	78	79	80	81	82	83

Connector No.	M19	
Connector Name		BCM (BODY CONTROL MODULE)
Connector Color	r BLACK	X
H.S.		
78 77 76 75 74 7 98 97 96 95 94 g	73 72 71 70 93 92 91 90	70 69 68 67 66 65 64 63 62 61 60 90 89 88 87 86 85 84 83 82 81 80
Terminal No.	Color of Wire	Signal Name
09	B/R	ROOM_ANT_2_B
61	W/R	ROOM_ANT_2_A
62	Β/Y	AS_DOOR_ANT_B
63	ГG	AS_DOOR_ANT_A
64	۸	DR_DOOR_ANT_B
65	Д	DR_DOOR_ANT_A
	1	

Signal Name	1	1	1	CDL_BACK_TRUNK	=	_	-	-	1	1	TRUNK_LAMP_OUTPUT	-
Color of Wire	-	-	-	۸	-	_	-	-	-	-	M/A	-
Terminal No.	100	101	102	103	104	105	106	107	108	109	110	111

M20	Connector Name BCM (BODY CONTROL MODULE)	WHITE	00 101
Connector No.	Connector Name	Connector Color WHITE	[00] (105] (105]

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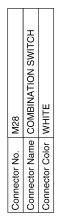
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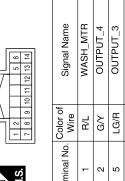
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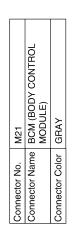
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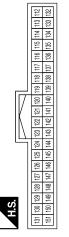


Signal Name	WASH_MTR	OUTPUT_4	OUTPUT_3	GND	INPUT_3	OUTPUT_5	INPUT_2	INPUT_4	INPUT_1	OUTPU_1	INPUT_5	OUTPUT_2
Color of Wire	R/L	G/Y	LG/R	В	B/G	LG/B	B/B	P/B	W/A	ΓW	R/Y	G/B
Terminal No.	-	2	5	9	7	8	6	10	11	12	13	14

Terminal No.	Color of Wire	Signal Name
119	BR/W	BACK_DOOR_ANT_A
120	-	1
121	1	ı
122	-	I
123	1	I
124	1	1
125	1	ı
126	1	I
127	BR/W	IGN_USM_CONT1
128	1	ı
129	1	ı
130	J//G	TRUNK_SW
131	-	I
132	Н	ST_CONT_USM
133	1	ı
134	-	ı
135	-	I
136	-	-
137	-	
138	-	-
139	-	-
140	ı	1
141	G/R	TRUNK_REQUEST_SW
142	1	-
143	1	1
144	GR	BUZZER
145	1	1
145	-	_
147	L/R	BACK_TRUNK_OPENER
148	R/W	RR_DOOR_SW
149	R/B	RL_DOOR_SW
150	-	1
151	1	I



Fail Safe



Signal Name	I	ı	TRUNK_ANT_1_B	TRUNK_ANT_1_A	I	ı	BACK_DOOR_ANT_B
Color of Wire	ı	ı	В	>	1	1	L/0
Terminal No. Wire	112	113	114	115	116	117	118

ABMIA0470GB

INFOID:0000000004498174

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

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 consistent • Starter control relay signal • Starter 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		
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 ful- filled 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 		
Inhibit electronic steering column lock 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 age)		 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 volt- 		
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)		
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)		

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Display contents of CONSULT	Fail-safe	Cancellation		
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 fulfilled • Power position changes to ACC • Receives 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		
B26E1: ENG STATE NO RECIV Inhibit engine cranking		When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)		

DTC Inspection Priority Chart

INFOID:0000000004498175

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

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

< ECU DIAGNOSIS >

Priority	DTC	
	B2013: ID DISCORD BCM-S/L	
	B2014: CHAIN OF S/L-BCM	
	B2553: IGNITION RELAY	
	B2555: STOP LAMP	
	B2556: PUSH-BTN IGN SW	
	B2557: VEHICLE SPEED	
	B2560: STARTER CONT RELAY	
	B2601: SHIFT POSITION	
	B2602: SHIFT POSITION	
	B2603: SHIFT POSI STATUS	
	• B2604: PNP SW	
	• B2605: PNP SW	
	• B2606: S/L RELAY	
	• B2607: S/L RELAY	
	B2608: STARTER RELAY	
	• B2609: S/L STATUS	
4	B260A: IGNITION RELAY	
	B260B: STEERING LOCK UNIT	
	B260C: STEERING LOCK UNIT	
	B260D: STEERING LOCK UNIT	
	B260F: ENG STATE SIG LOST B2612: S/L STATUS	
	B2614: ACC RELAY CIRC B2614: B1 CIVIER DELAY CIRC B2614: B1 CIVIER DELAY CIRC B2614: B2614: ACC RELAY CIRC B2615: ACC REL	
	B2615: BLOWER RELAY CIRC B2010, ION REL	
	B2616: IGN RELAY CIRC B2617: GTA BTER BELLAY CIRC B2617: GTA BTER BTER BELLAY CIRC B2617: GTA BTER BTER BTER BTER BTER BTER BTER BTER	
	B2617: STARTER RELAY CIRC B2614: B2614	
	• B2618: BCM	
	• B2619: BCM	
	B261A: PUSH-BTN IGN SW	
	B26E1: ENG STATE NO RECIV	
	C1729: VHCL SPEED SIG ERR	
	U0415: VEHICLE SPEED SIG	
	C1704: LOW PRESSURE FL	
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR	
	C1707: LOW PRESSURE RL	
	• C1708: [NO DATA] FL	
	• C1709: [NO DATA] FR	
	• C1710: [NO DATA] RR	
	• C1711: [NO DATA] RL	
	C1712: [CHECKSUM ERR] FL	
	C1713: [CHECKSUM ERR] FR	
	C1714: [CHECKSUM ERR] RR	
	C1715: [CHECKSUM ERR] RL	
5	C1716: [PRESSDATA ERR] FL	
	C1717: [PRESSDATA ERR] FR	
	C1718: [PRESSDATA ERR] RR	
	C1719: [PRESSDATA ERR] RL	
	• C1720: [CODE ERR] FL	
	• C1721: [CODE ERR] FR	
	C1722: [CODE ERR] RR	
	• C1723: [CODE ERR] RL	
	C1724: [BATT VOLT LOW] FL	
	C1725: [BATT VOLT LOW] FR	
	C1726: [BATT VOLT LOW] TR	
	C1720: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RL	
	C1727. [BATT VOLT LOW] RL C1734: CONTROL UNIT	
6	B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA	
Ü	B2623: INSIDE ANTENNA	

DTC Index

NOTE:

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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	_	_	_	BCS-38
U1010: CONTROL UNIT (CAN)	_	_	_	BCS-39
U0415: VEHICLE SPEED SIG	_	_	_	BCS-40
B2013: ID DISCORD BCM-S/L	×	_	_	SEC-38
B2014: CHAIN OF S/L-BCM	×	_	_	SEC-39
B2190: NATS ANTENNA AMP	×	_	_	SEC-64
B2191: DIFFERENCE OF KEY	×	_	_	<u>SEC-67</u>
B2192: ID DISCORD BCM-ECM	×	_	_	SEC-68
B2193: CHAIN OF BCM-ECM	×	_	_	SEC-69
B2553: IGNITION RELAY	_	_	_	PCS-60
B2555: STOP LAMP	_	_	_	SEC-70
B2556: PUSH-BTN IGN SW	_	×	_	SEC-72
B2557: VEHICLE SPEED	×	×	_	<u>SEC-74</u>
B2560: STARTER CONT RELAY	×	×	_	SEC-75
B2562: LOW VOLTAGE	_	_	_	BCS-41
B2601: SHIFT POSITION	×	×	_	<u>SEC-76</u>
B2602: SHIFT POSITION	×	×	_	SEC-79
B2603: SHIFT POSI STATUS	×	×	_	SEC-81
B2604: PNP SW	×	×	_	SEC-84
B2605: PNP SW	×	×	_	SEC-86
B2606: S/L RELAY	×	×	_	SEC-88
B2607: S/L RELAY	×	×	_	SEC-89
B2608: STARTER RELAY	×	×	_	SEC-91
B2609: S/L STATUS	×	×	_	SEC-93
B260A: IGNITION RELAY	×	×	_	PCS-62
B260B: STEERING LOCK UNIT	_	×	_	SEC-97
B260C: STEERING LOCK UNIT	_	×	_	<u>SEC-98</u>
B260D: STEERING LOCK UNIT	_	×	_	SEC-99
B260F: ENG STATE SIG LOST	×	×	_	SEC-100
B2612: S/L STATUS	×	×	_	SEC-101
B2614: ACC RELAY CIRC	_	×	_	PCS-65
B2615: BLOWER RELAY CIRC	_	×	_	PCS-68
B2616: IGN RELAY CIRC	_	×		PCS-71
B2617: STARTER RELAY CIRC	×	×	_	SEC-105
B2618: BCM	×	×	_	PCS-74

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2619: BCM	×	×	_	SEC-107
B261A: PUSH-BTN IGN SW	_	×	_	SEC-108
B2621: INSIDE ANTENNA	_	_	_	<u>DLK-59</u>
B2622: INSIDE ANTENNA	_	_	_	DLK-62
B2623: INSIDE ANTENNA	_	_	_	DLK-65
B26E1: ENG STATE NO RES	×	×	_	SEC-110
C1704: LOW PRESSURE FL	_	_	×	<u>WT-52</u>
C1705: LOW PRESSURE FR	_	_	×	<u>WT-52</u>
C1706: LOW PRESSURE RR	_	_	×	<u>WT-52</u>
C1707: LOW PRESSURE RL	_	_	×	<u>WT-52</u>
C1708: [NO DATA] FL	_	_	×	<u>WT-14</u>
C1709: [NO DATA] FR	_	_	×	<u>WT-14</u>
C1710: [NO DATA] RR	_	_	×	<u>WT-14</u>
C1711: [NO DATA] RL	_	_	×	<u>WT-14</u>
C1712: [CHECKSUM ERR] FL	_	_	×	<u>WT-16</u>
C1713: [CHECKSUM ERR] FR	_	_	×	<u>WT-16</u>
C1714: [CHECKSUM ERR] RR	_	_	×	<u>WT-16</u>
C1715: [CHECKSUM ERR] RL	_	_	×	<u>WT-16</u>
C1716: [PRESSDATA ERR] FL	_	_	×	<u>WT-18</u>
C1717: [PRESSDATA ERR] FR	_	_	×	<u>WT-18</u>
C1718: [PRESSDATA ERR] RR	_	_	×	<u>WT-18</u>
C1719: [PRESSDATA ERR] RL	_	_	×	<u>WT-18</u>
C1720: [CODE ERR] FL	_	_	×	<u>WT-16</u>
C1721: [CODE ERR] FR	_	_	×	<u>WT-16</u>
C1722: [CODE ERR] RR	_	_	×	<u>WT-16</u>
C1723: [CODE ERR] RL	_	_	×	<u>WT-16</u>
C1724: [BATT VOLT LOW] FL	_	_	×	<u>WT-16</u>
C1725: [BATT VOLT LOW] FR	_	_	×	<u>WT-16</u>
C1726: [BATT VOLT LOW] RR	_	_	×	<u>WT-16</u>
C1727: [BATT VOLT LOW] RL	_	_	×	<u>WT-16</u>
C1729: VHCL SPEED SIG ERR	_	_	×	<u>WT-19</u>
C1734: CONTROL UNIT	_	_	×	<u>WT-20</u>

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< ECU DIAGNOSIS >

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

Reference Value

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
IAIL&ULR REQ	Lighting switch 1ST, 2ND, HI or	AUTO (Light is illuminated)	On
III I O DEO	Lighting switch OFF		Off
HL LO REQ	Lighting switch 2ND HI or AUTO	(Light is illuminated)	On
III III DEO	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
ED WID DEO	Landida a socitata ONI	Front wiper switch INT	1LOW
FR WIP REQ	Ignition switch ON	Front wiper switch LO	Low
		Front wiper switch HI	Hi
		Front wiper stop position	STOP P
WIP AUTO STOP	Ignition switch ON	Any position other than front wiper stop position	ACT P
		Front wiper operates normally	Off
WIP PROT	Ignition switch ON	Front wiper stops at fail-safe operation	BLOCK
ION DIVA DEO	Ignition switch OFF or ACC	,	Off
IGN RLY1 -REQ	Ignition switch ON		On
ION DLV	Ignition switch OFF or ACC		Off
IGN RLY	Ignition switch ON		On
DUCH CW	Release the push-button ignition	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)	Off
INITED/ND CVA		Release clutch pedal (M/T models)	
INTER/NP SW	Ignition switch ON	CVT selector lever in P or N position (CVT models)	On
		Depress clutch pedal (M/T models)	
ST RLY CONT	Ignition switch ON		Off
OT INEL COM!	At engine cranking		On

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
IHBT RLY -REQ	Ignition switch ON	Off
INDI KLI -KEQ	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	 Press the selector button with 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
OIL D CIM	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
LIODN CLUDD	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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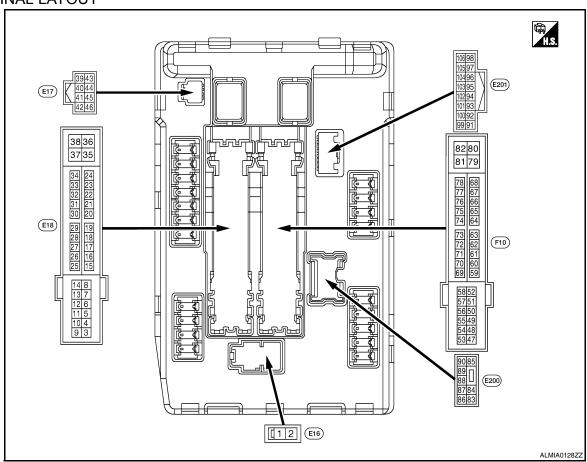
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< ECU DIAGNOSIS >

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
1 (R)	Ground	Battery power supply	Input	Ignition swi	tch OFF	Battery voltage
2 (L)	Ground	Battery power supply	Input	Ignition swi	tch OFF	Battery voltage
4	Craund	Frant winer I O	Outout	Ignition	Front wiper switch OFF	0V
(L/R)	Ground	Front wiper LO	Output	switch ON	Front wiper switch LO	Battery voltage
5	Ground	Front winer III	Output	Ignition	Front wiper switch OFF	0V
(L/B)	Gloulia	Front wiper HI	Output	switch ON	Front wiper switch HI	Battery voltage
6 (SB)	Ground	Daytime light relay power supply (Canada models only)	Output	Ignition switch OFF		Battery voltage
7	Ground	Tail, license plate lamps &	Output	Ignition	Lighting switch OFF	0V
(R/L)	Gloulia	interior lamps	Output	switch ON	Lighting switch 1ST	Battery voltage
10				Ignition swi (For a few s switch OFF	seconds after turning ignition	0V
(R/B)	Ground	ECM relay power supply	Output	`		Battery voltage

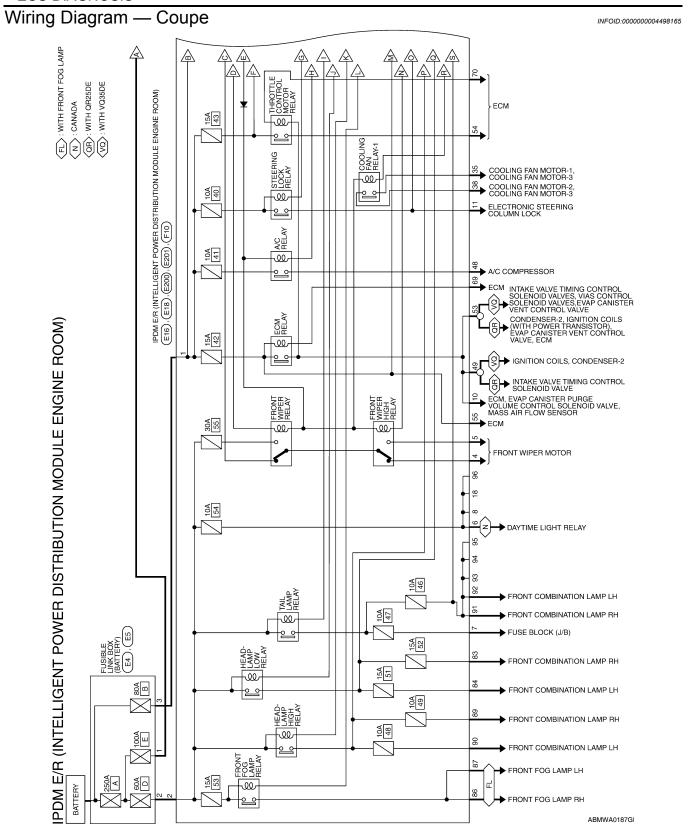
	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
44		Charita halousita suus		Ignition switch OFF	A few seconds after opening the driver door	Battery voltage
11 (P/L)	Ground	Steering lock unit power supply	Output	Ignition switch LOCK	Press the push-button ig- nition switch	Battery voltage
				Ignition swi	itch ACC or ON	0V
12 (B)	Ground	Ground	_	Ignition sw	itch ON	0V
13					tely 1 second or more after ignition switch ON	0V
(W)	Ground	Fuel pump power supply	Output		nately 1 second after turning on switch ON unning	Battery voltage
15	Cround	Ignition relay-1 power sup-	Output	Ignition swi	itch OFF	0V
(G/W)	Ground	ply	Output	Ignition swi	itch ON	Battery voltage
16				Ignition	Front wiper stop position	0V
(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	0V
(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	Refrigerant pressure sensor ground	_	Ignition swi	itch ON	0V
23 (B/R)	Ground	Refrigerant pressure sensor	_	Both A/C	switch ON (READY) C switch and blower motor N (electric compressor oper-	1.0 - 4.0V
24 (BR/W)	Ground	Refrigerant pressure sensor power supply	_	Ignition swi	itch ON	5V
25	Ground	Ignition relay-1 power sup-	Output	Ignition swi	itch OFF	0V
(GR)	Stourid	ply	σαιραί	Ignition swi	itch ON	Battery voltage
27	Ground	Ignition relay monitor	Input	Ignition swi	itch OFF or ACC	Battery voltage
BR/W)	Ciound	ignition roley monitor	mpat	Ignition swi		0V
28	Ground	Push-button ignition	Input	Press the p	oush-button ignition switch	0V
(BR)		switch	F	Release the	e push-button ignition switch	Battery voltage
				CVT mod-	CVT selector lever in any position other than P or N (ignition switch ON)	0V
30 (R/B)	Ground	Starter relay control	Input	0.0	CVT selector lever P or N (ignition switch ON)	Battery voltage
				M/T mod-	Release the clutch pedal	0V
				els	Depress the clutch pedal	Battery voltage

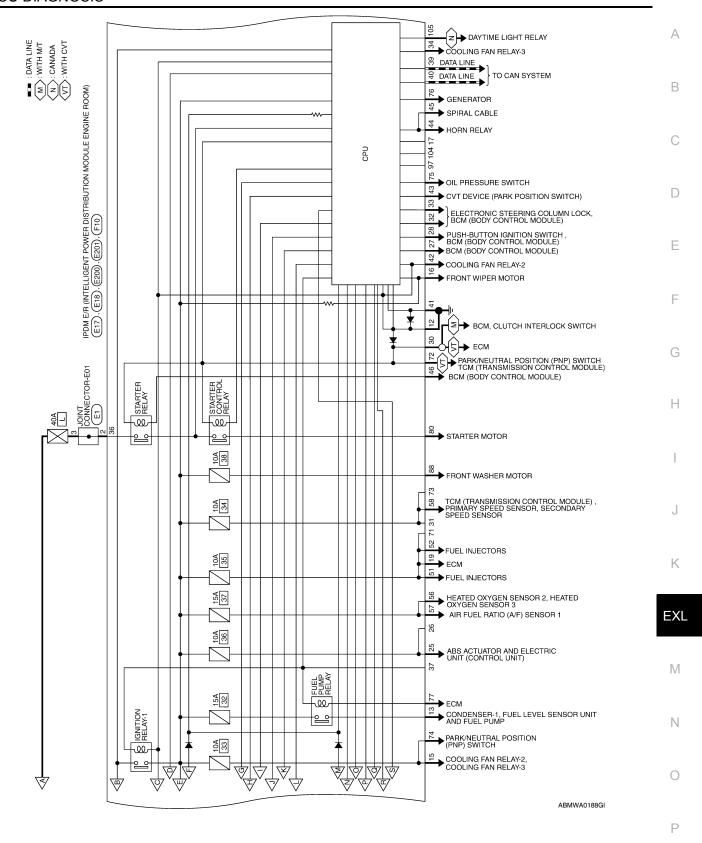
	nal No.	Description				Value
+	color)	Signal name	Input/ Output		Condition	(Approx.)
32	Ground	Electronic steering column	Input	vated	steering column lock is acti-	0V
(L/O)		lock unit condition-1	•	Electronic s tivated	steering column lock is deac-	Battery voltage
33	Ground	Electronic steering column	Input	Electronic s vated	steering column lock is acti-	Battery voltage
(G/R)	Ciouna	lock unit condition-2	mpat	Electronic s tivated	steering column lock is deac-	0V
34 (O/L)	Ground	Cooling fan relay-3 control	Input	Ignition swi	tch OFF or ACC	0V 0.7V
35	Ground	Cooling fan motor control	Output	•	tch OFF or ACC	0V
(L/B)	Giodila	Cooling lan motor control	Output	Ignition swi	tch ON	0.7V
36 (G)	Ground	Battery power supply	Input	Ignition swi	tch OFF	Battery voltage
38 (R/W)	Ground	Cooling fan motor control	Output	Ignition swi	tch OFF or ACC	0V 0.7V
39		CANL	Input/	igiillon swi	IGH ON	U.7 V
(P)	_	CAN - L	Output		_	_
40 (L)	_	CAN - H	Input/ Output		_	_
41 (B)	Ground	Ground	_	Ignition swi	tch ON	0V
42 (SD)	Ground	Cooling fan relay-2 control	Input	•	tch OFF or ACC	0V
(SB)				Ignition swi		0.7V
					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 selector button (CVT selector lever P)	0V
44	Ground	Horn relay control	Input	The horn is	deactivated	Battery voltage
(G/W)	Ground	Hom relay Control	mput	The horn is	activated	0V
45	Ground	Anti theft horn relay control	Input	The horn is	deactivated	Battery voltage
(L/O)	Signia	Tall all all all all all all all all all	pat	The horn is		0V
				CVT mod-	CVT selector lever in any position other than P or N (ignition switch ON)	0V
46 (R)	Ground	Starter relay control	Input	els	CVT selector lever P or N (ignition switch ON)	Battery voltage
				M/T mod-	Release the clutch pedal	0V
				els	Depress the clutch pedal	Battery voltage
					A/C switch OFF	0V
48 (Y/R)	Ground	A/C relay power supply	Output	Engine running	A/C switch ON (A/C compressor is operating)	Battery voltage

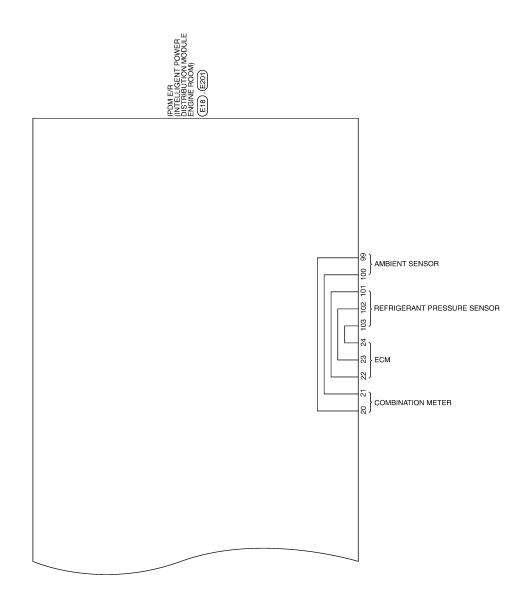
	nal No.	Description			Value	
+ (VVire	e color)	Signal name	Input/ Output	Condition	(Approx.)	
49		ECM relay power supply		Ignition switch OFF (For a few seconds after turning ignition switch OFF)	0V	
(R/B)	Ground	(with VQ35DE)	Output	Ignition switch ON Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	Battery voltage	
49		ECM relay power supply		Ignition switch OFF (For a few seconds after turning ignition switch OFF)	0V	
(B/R)	Ground	(without VQ35DE)	Output	Ignition switch ON Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	Battery voltage	
51	Cround	lanition rolay nower supply	Output	Ignition switch OFF	0V	
(LG)	Ground	Ignition relay power supply	Output	Ignition switch ON	Battery voltage	
52	Ground	Ignition relay power supply	Output	Ignition switch OFF	0V	
(Y/G)	Ground	ignition relay power supply	Output	Ignition switch ON	Battery voltage	
53		ECM relay power supply		Ignition switch OFF (For a few seconds after turning ignition switch OFF)	0V	
(B/R)	Ground	(with VQ35DE)	Output	Ignition switch ON Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	Battery voltage	
53		ECM relay power supply		Ignition switch OFF (For a few seconds after turning ignition switch OFF)	0V	
(R/B)	Ground	(without VQ35DE)	Output	Ignition switch ON Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	Battery voltage	
54		Throttle control motor re-		Ignition switch OFF (For a few seconds after turning ignition switch OFF)	0V	
(G/W)	Ground	lay power supply	Output	Ignition switch ON Ignition switch OFF (More than a few seconds after turning 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	0V	
(R/Y)	Ground	ignition relay power supply	Output	Ignition switch ON	Battery voltage	
57	Ground	Ignition relay power supply	Output	Ignition switch OFF	0V	
(O)	Ground	ignition relay power supply	Output	Ignition switch ON	Battery voltage	
58	Ground	Ignition relay power supply	Output	Ignition switch OFF	0V	
(Y)	Ground	ignition relay power supply	Output	Ignition switch ON	Battery voltage	

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
69 (W/B)	Ground	ECM relay control	Output	switch OFFIgnition sIgnition s	seconds after turning ignition witch ON switch OFF	Battery voltage 0 - 1.5V
					an a few seconds after turn- on switch OFF)	
70 (O)	Ground	Throttle control motor re- lay control	Output	Ignition swi	itch ON $ ightarrow$ OFF	0 -1.0V ↓ Battery voltage ↓ 0V
				Ignition swi	itch ON	0 - 1.0V
72				Ignition	CVT selector lever in P or N position	Battery voltage
(R/B)	Ground	PNP switch signal	Input	switch ON	CVT selector lever in any position other than P or N position	OV
74	Ground	Ignition relay power supply	Output	Ignition sw	itch OFF	0V
(Y)				Ignition sw		Battery voltage
75	Ground	Oil pressure switch	Input	Ignition	Engine stopped	0V
(P/L)			-	switch ON	Engine running	Battery voltage
				Ignition sw	itch ON	(V) 6 4 2 0 ► 2ms JPMIA0001GB
76 (GR)	Ground	Power generation command signal	Output		on "Active test", "ALTERNA- " of "ENGINE"	(V) 6 4 2 0 → 2ms JPMIA0002GB 3.8V
					on "Active test", "ALTERNA- /" of "ENGINE"	(V) 6 4 2 0 2 2ms JPMIA0003GB 1.4V
77 (B/R)	Ground	Fuel pump relay control	Output	Approximathe ignition Engine recognition	nately 1 second after turning on switch ON unning	0 - 1.0V
(D/K)					tely 1 second or more after ignition switch ON	Battery voltage

	nal No.	Description				Value
+	color)	Signal name	Input/ Output		Condition	(Approx.)
80 (B/W)	Ground	Starter motor	Output	At engine of	cranking	Battery voltage
83	Ground	Headlamp LO (RH)	Output	Ignition	Lighting switch OFF	0V
(R/Y)	Cround	ricadianip 20 (111)	Output	switch ON	Lighting switch 2ND	Battery voltage
84	Ground	Headlamp LO (LH)	Output	Ignition	Lighting switch OFF	0V
(L)	Cround	ricadiamp Lo (Li i)	Output	switch ON	Lighting switch 2ND	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 Canada models)	Battery voltage
					Front fog lamp switch OFF	0V
87 (L/Y)	Ground	Front fog lamp (LH)	Output	Lighting switch 2ND	Front fog lamp switch ON Daytime running light activated (Only for Canada models)	Battery voltage
					Front fog lamp switch OFF	0V
88 (R/W)	Ground	Washer pump power supply	Output	Ignition swi	itch ON	Battery voltage
89 (L/W)	Ground	Headlamp HI (RH)	Output	Ignition switch ON	Lighting switch HIlighting switch PASS	Battery voltage
(=, ,					Lighting switch OFF	0V
90 (G)	Ground	Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch HILighting switch PASS	Battery voltage
(0)				owiton on	Lighting switch OFF	0V
91	Ground	Parking lamp (RH)	Output	Ignition	Lighting switch 1ST	Battery voltage
(LG/R)	0.00	. a.i.i.i.g ia.i.i.p (i. ii.i)		switch ON	Lighting switch OFF	0V
92	Ground	Parking lamp (LH)	Output	Ignition	Lighting switch 1ST	Battery voltage
(LG/B)			•	switch ON	Lighting switch OFF	0V
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	Refrigerant pressure sensor ground		Ignition swi	itch ON	0V
102 (R/B)	Ground	Refrigerant pressure sensor	_	Both A/C	switch ON (READY) C switch and blower motor N (electric compressor oper-	1.0 - 4.0V
103 (P)	Ground	Refrigerant pressure sensor power supply	_	Ignition swi	itch ON	5V
105	Ground	Daytime light relay control	Output	Ignition switch ON	Daytime light system active	Battery voltage
(V)	Ground	Bayanne agric relay condor	Guipui	Ignition switch ON	Daytime light system inactive	0V







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< ECU DIAGNOSIS >

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

		_	_				_			,
	Connector Name FUSIBLE LINK BOX	(BALLENT)	47		[3 4]			Signal Name	1	
E2	e FUS	V (1)	or GR/		<u>1</u> 3		Solor of	Wire	۳	
Connector No. E5	Connector Nan		Connector Color GRAY		恒	H.S.		Terminal No. Wire	ю	
		\neg								
_	Connector Name FUSIBLE LINK BOX	ALIENT)	NWOF		<u>_</u>	· [2]		Signal Name	1	ı
). E4	Ime FL	9	olor BF				Color o	Wire	B/W	Β/Y
Connector No. E4	Connector Na		Connector Color BROWN		唇	H.S.		Terminal No. Wire	-	2
			1							
	NT CONNECTOR-E01	= = = =		q.	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			Signal Name	-	ı
Ξ	me JOII	or WH		⊣⊦	ო დ		Color of	Wire	В	១
Connector No.	Connector Name JOINT CONN	Connector Color WHITE			H.S.		Color of	Terminal No.	2	3

COLLEGED INC.	۱۵		
r Name	POWI MODU	Connector Name POWER DISTRIBUTION MODULE ENGINE ROOM)	Connector
Connector Color BLACK	BLAC	X	Connector
	[4-[4]		H.S.
Terminal No. W	Color of Wire	Signal Name	Terminal N
	æ	F/L_MAIN	39
	_	F/L_USM	40

	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	WHITE	41 40 39 45 44 43	Signal Name	CAN-L	CAN-H	GND (SIGNAL)	MOTOR_FAN_RLY_MID	DETENT_SW	HORN_RLY	HORN_SW	START_CONT
<u>.</u>			46	Color of Wire	۵	_	В	SB	G/B	G/W	9	Ж
	Connector Name	Connector Color	南南 H.S.	Terminal No.	39	40	41	42	43	44	45	46

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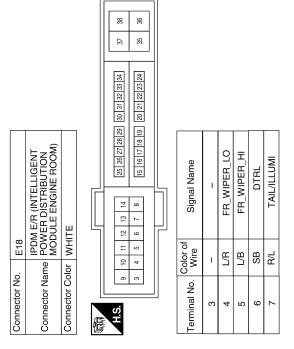
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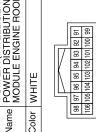
Signal Name	PD_SENS_SIG-E/R	PD_SENS PWR-E/R	ABS_ECU	1	IGN_SIGNAL	PUSH_START_SW	-	CLUTCH_I/L_SW	1	SL_CONDITION_1	SL_CONDITION_2	MOTOR_FAN_RLY_HI	MOTOR_FAN_LO	F/L_IGNSW	ı	F/L_MOTOR_FAN
Color of Wire	B/R	BR/W	GR	ı	BR/W	BR	-	B/B	_	0/1	G/R	O/L	L/B	ŋ	1	B/W
Terminal No.	23	24	25	26	27	28	58	90	31	32	33	34	32	36	37	38

Ferminal No.	Color of Wire	Signal Name
8	-	-
6	I	ı
10	B/B	ECM_VB
11	D/L	ESCL
12	В	GND (POWER)
13	Μ	FUEL_PUMP
14	-	I
15	G/W	START_IG-E/R
16	۲Λ	WIPER_AUTOSTOP
17	-	_
18	-	I
19	Λ	BCM_IGNSW
20	B/Y	AMB_SENS_GND-E/R
21	O/B	AMB_SENS_SIG-E/R
22	W/R	PD_SENS_GND-E/R



Terminal No. Wire	Color of Wire	Signal Name
98	ı	ı
66	BR/W	AMB_SENS_GND-FEM
100	SB	AMB_SENS_SIG-FEM
101	O/L	PD_SENS_GND-FEM
102	B/B	PD_SENS_SIG-FEM
103	Ь	PD_SENS_PWR-FEM
104	_	_
105	۸	DTRL_RLY
106	_	_

Connector No.	E201
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE	WHITE



	Signal Name	CLEARANCE_RH	CLEARANCE_LH	I	I	_	1	ı
30,000	Wire	LG/R	LG/B	ı	_	_	ı	ı
	Terminal No. Wire	91	85	93	94	96	96	26

Connector No.	E200
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROON
Connector Color WHITE	WHITE

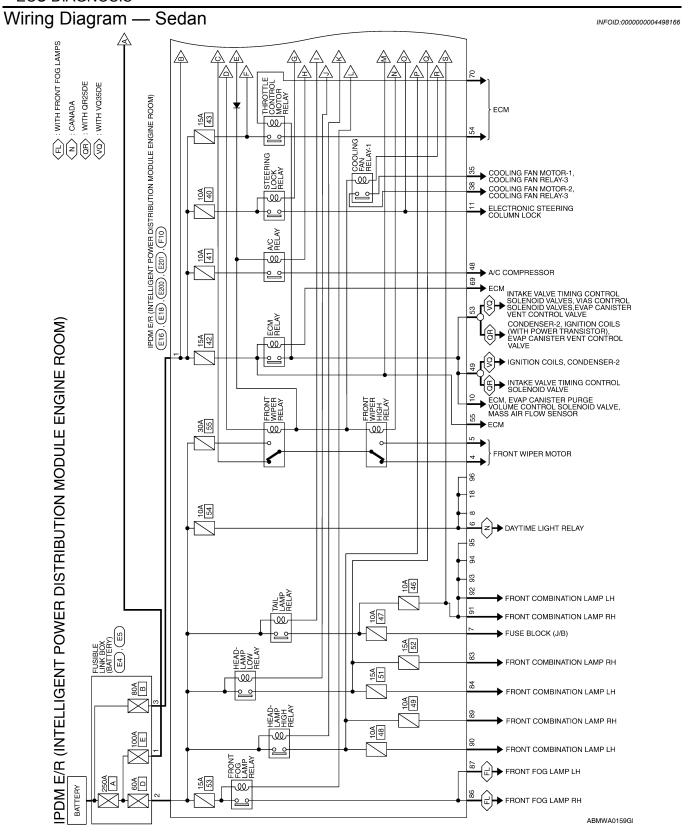


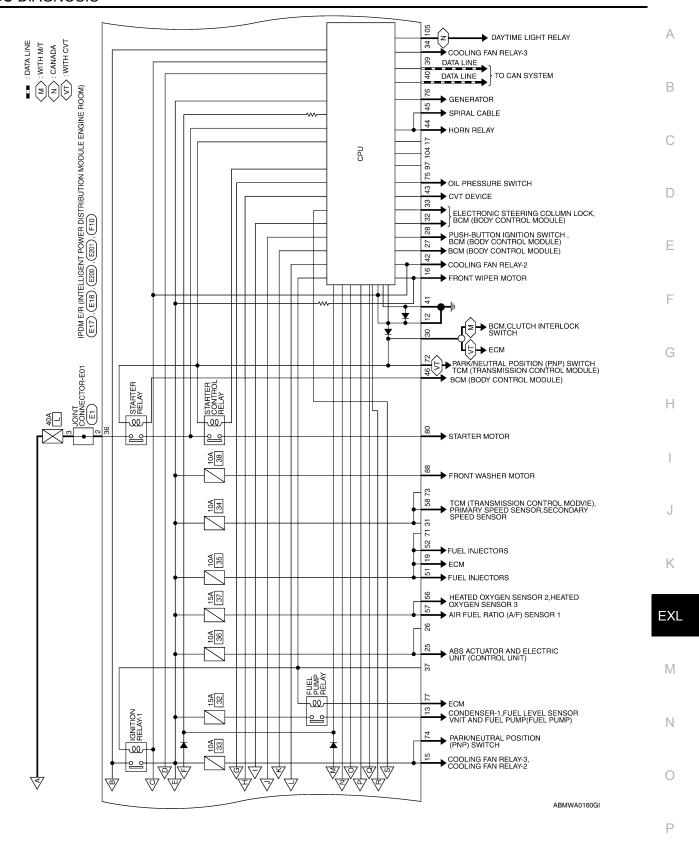


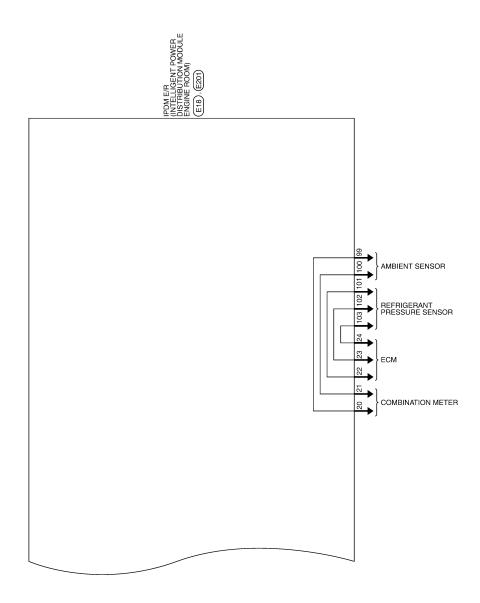
Signal Name	HEADLAMP_LO_RH	HEADLAMP_LO_LF	-	FR_FOG_LAMP_RF	H_FOG_LAMP_LH	WASHER_MTR	HEADLAMP_HI_RH	HEADLAMP_HI_LH
Color of Wire	R/Υ	_	1	W/R	\sim	R/W	N/	თ
Terminal No.	83	84	85	98	87	88	88	06

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Signal Name	1	ı	1	1	SSOF	MOTRLY	1	NPSW	1	START_IG-EGI	OIL_PRESSURE_SW	ALT_C	FPR	I	ı	STARTER_MOTOR	I	
Color of Wire	1	ı	ı	ı	M/B	0	ı	B/B	1		-	GR	B/B	1	ı	B/W	ı	ı
Terminal No.	65	99	29	89	69	20	71	72	73	74	75	76	77	78	62	80	81	82
ame		R_#1	R_#2	7.	25UE)	OL 35DE)		ΔT	2 #1	S #2	23							
Signal Name	1	INJECTOR_#1	INJECTOR_#2	IGN_SOL	(WITH OR:	ENG_SOL (WITH VQ35DE)	ETC	ECM RAT	O2 SENS #1	O2_SENS_#2	AT_ECU	ı	1	1	1	1	1	
Color of Wire	1	re	Y/G	a/a		B/B	W/S			0	>	1	1	1	1	1		
Terminal No.	20	51	52	73	3	53	54	55	56	57	58	59	09	61	62	63	64	
		<u> </u>				81 82	08 62			1						1		J
					L			_										
					11	73 74/75/76/77/78	63 64 65 66 67 68											
I IGENT	SUTION	E ROOM)				69 70 71 72 73	59 60 61 62 63			Signal Name				WITH QR25DE)	L (WITH	5DE)		
F/B (INTE	POWER DISTRIBUTION	ULE ENGIN	ا ا		1	56 57 58	50 51 52			Signal		. 0		(WITH O	IGN_SOL (WITH	VQ3		
		_	olor WHITE			53 54 55 8	47 48 49 5			Color of	A A II G		יי	B/B	0/0	2		
Connector No.			Connector Color	ø		H.S.				Terminal No	į	4/	04	49	040	9		
		[<u> </u>	Ľ	<u>"</u>	_									<u>'</u>			







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< ECU DIAGNOSIS >

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

Connector No. E1	E1	Connector No. E4	E4	Connector No.). E5
Connector Name	Connector Name JOINT CONNECTOR-E01	Connector Nam	Connector Name FUSIBLE LINK BOX	Connector Na	Connector Name FUSIBLE LINK BOX
Connector Color WHITE	WHITE		(BALLERY)		(BALLERY)
		Connector Color BROWN	r BROWN	Connector Color GRAY	olor GRAY
E					
	6 C C C C C C C C C C C C C C C C C C C		<u> </u>		113 4
	⊣ I	H.S.	5	H.S.	
Color of					-
l erminal No.	Vire Signal Name	Torming! No Color of		Color of Terminal No.	Color of Signal Name
2	- 9	ם פון	Wire Signar Ivanie		
c.		-	B/W –	က	١
)	3	2	В/У –		

	((INTELLIGENT DISTRIBUTION ENGINE ROOM)		
E17	IPDM E/R POWER I MODULE	WHITE	42 41 40 39 46 45 44 43
Connector No. E17	Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Connector Color WHITE	原 用.S.
E16	Sonnector Name POWER DISTRIBUTION MODULE ENGINE ROOM)	BLACK	
Connector No. E16	Connector Name	Connector Color BLACK	原 用.S.

POWER DISTRIBUTION MODULE ENGINE ROOM	WHITE	42 41 40 39 46 45 44 43	Signal Name	CAN-L	CAN-H	GND (SIGNAL)	MOTOR_FAN_RLY_N	DETENT_SW	HORN_RLY	HORN_SW	START_CONT
[SS		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Color of Wire	Ь	_	В	SB	G/B	G/W	0/7	æ
	Connector Color	H.S.	Terminal No.	39	40	41	42	43	44	45	46

AID

 Terminal No.
 Color of Wire
 Signal Name

 1
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 F/L_MAIN

 2
 L
 F/L_USM

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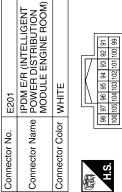
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< ECU DIAGNOSIS >

									_		_				_	
Signal Name	PD_SENS_SIG-E/R	PD_SENS PWR-E/R	ABS_ECU	I	IGN_SIGNAL	PUSH_START_SW	1	CLUTCH_I/L_SW	-	SL_CONDITION_1	SCONDITION_2	MOTOR_FAN_RLY_HI	MOTOR_FAN_LO	F/L_IGNSW	_	F/L_MOTOR_FAN
Color of Wire	B/R	BR/W	GR	ı	BR/W	BR	-	B/B	_	0/7	G/R	O/L	L/B	G	_	R/W
Terminal No.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38

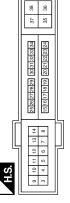
Signal Name	I	AMB_SENS_GND-FEM	AMB_SENS_SIG-FEM	PD_SENS_GND-FEM	PD_SENS_SIG-FEM	PD_SENS_PWR-FEM	ı	DTRL_RLY	I
Color of Wire	ı	BR/W	SB	O/L	B/B	Ь	ı	>	1
Terminal No.	86	66	100	101	102	103	104	105	106

Г	30,000	
,	Wire	Signal Name
	1	ı
	ı	ı
	R/B	ECM_VB
	P/L	ESCL
	В	GND (POWER)
	8	FUEL_PUMP
	1	ı
	G/W	START_IG-E/R
	$\Gamma \lambda$	WIPER_AUTOSTOP
	1	-
	1	1
	LY	BCM_IGNSW
	В/У	AMB_SENS_GND-E/R
	O/B	AMB_SENS_SIG-E/R
	W/R	PD_SENS_GND-E/R



Signal Name	CLEARANCE_RH	CLEARANCE_LH	1	I	ı	ı	ı
Color of Wire	LG/R	LG/B	ı	ı	ı	ı	ı
Terminal No.	91	92	93	94	92	96	26

Connector No.	E18
Connector Name	Sonnector Name POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE	WHITE



Signal Name	I	FR_WIPER_LO	FR_WIPER_HI	DTRL	TAIL/ILLUMI
Color of Wire	_	L/R	L/B	SB	B/L
Terminal No.	3	4	5	9	

E200	Connector Name POWER DISTRIBUTION MODULE ENGINE ROOM)	WHITE	
Connector No.	Connector Name	Connector Color WHITE	





Signal Name	HEADLAMP_LO_RH	HEADLAMP_LO_LH	-	FR_FOG_LAMP_RH	FR_FOG_LAMP_LH	WASHER_MTR	HEADLAMP_HI_RH	HEADLAMP_HI_LH
Color of Wire	R/Υ	٦	-	W/R	\sim	R/W	M	უ
Terminal No.	83	84	85	98	87	88	68	06

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< ECU DIAGNOSIS >

Signal Name	ı	ı	ı	ı	SSOF	MOTRLY	ı	NPSW	ı	START_IG-EGI	OIL_PRESSURE_SW	ALT_C	FPR	1	ı	STARTER_MOTOR	I	1
Color of Wire	1	ı	1	1	W/B	0	ı	R/B	-	У	P/L	GR	B/R	ı	1	B/W	-	1
Terminal No.	65	99	29	89	69	70	7.1	72	73	74	75	9/	77	78	79	80	81	82

	Signal Name	ı	INJECTOR_#1	INJECTOR_#2	IGN_SOL (WITH QR25DE)	ENG_SOL (WITH VQ35DE)	ETC	ECM_BAT	O2_SENS_#1	O2_SENS_#2	AT_ECU	I	I	I	I	ı	I
Color of	Wire	1	LG	Y/G	B/B	B/R	G/W	M/L	R/Υ	0	>	ı	_	ı	-	1	ı
	Terminal No.	50	51	52	53	53	54	55	56	57	58	59	09	61	62	63	64

	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)			81 82 82 83 84 85 85 85 85 85 85 85	Signal Name	1	A/C COMP	ENG SOL (WITH QR25DE)	IGN_SOL (WITH
). F10		lor WHITE		68 69 69 69 69 69 69 69 69 69 69 69 69 69	Color of Wire	1	Y/R	B/R	R/B
Connector No.	Connector Name	Connector Color	原 H.S.	53 54 55 66 57 47 48 49 50 51	Terminal No.	47	48	49	49

Fail Safe INFOID:0000000004498167

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

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< 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.

< 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 active for 90 seconds.

DTC Index

CONSULT-III display	Fail-safe	TIME	NOTE	Refer to
No DTC is detected. further testing may be required.	_	_	_	_
U1000: CAN COMM CIRCUIT	×	CRNT	1 – 39	PCS-20
B2098: IGN RELAY ON	×	CRNT	1 – 39	PCS-21
B2099: IGN RELAY OFF	_	CRNT	1 – 39	PCS-22
B2108: STRG LCK RELAY ON	_	CRNT	1 – 39	<u>SEC-42</u>
B2109: STRG LCK RELAY OFF	_	CRNT	1 – 39	<u>SEC-43</u>
B210A: STRG LCK STATE SW	_	CRNT	1 – 39	<u>SEC-44</u>
B210B: START CONT RLY ON	_	CRNT	1 – 39	<u>SEC-48</u>
B210C: START CONT RLY OFF	_	CRNT	1 – 39	<u>SEC-49</u>
B210D: STARTER RELAY ON	_	CRNT	1 – 39	<u>SEC-50</u>
B210E: STARTER RELAY OFF	_	CRNT	1 – 39	<u>SEC-51</u>
B210F: INTRLCK/PNP SW ON	_	CRNT	1 – 39	<u>SEC-54</u>
B2110: INTRLCK/PNP SW OFF	_	CRNT	1 – 39	<u>SEC-59</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

CAUTION:

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

Symp	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 EXL-40.
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAN Refer to EXL-243.	
High beam indicator lamp (Headlamp switches to the		Combination meter BCM	Combination meter. Data monitor "HI-BEAM IND" BCM (HEAD LAMP) Active test "HEADLAMP"
	One side	Front combination lamp (Low beam relay)	_
Headlamp does not switch to the low beam.	Both sides	Combination switch Harness between the combination switch and BCM BCM	Combination switch Refer to BCS-10.
		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 EXL-42. Xenon, refer to EXL-44
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (LO) A Refer to EXL-244, "Description".	RE NOT TURNED ON"
	When the ignition switch is turned ON	BCM Combination switch	Combination switch Refer to BCS-10.
Headlamp does not turn OFF.	The ignition switch is turned OFF (After activating the battery saver).	IPDM E/R	_
Headlamp is not turned ON/OFF with the lighting switch AUTO.		Combination switch Harness between the combination switch and BCM BCM	Combination switch Refer to BCS-10.
		Optical sensor Harness between the optical sensor and BCM BCM	Optical sensor Refer to <u>EXL-53</u> .

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

Symp	Symptom		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 EXL-11, "System Description".
Front fog lamp is not turned ON.	One side	Front fog lamp bulb Harness between IPDM E/R and the front combination lamp Front combination lamp IPDM E/R	Front fog lamp circuit Refer to EXL-46.
	Both side	Symptom diagnosis "BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-246.	
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-48</u> .
	Both sides	Symptom diagnosis "PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON" Refer to EXL-245.	
Turn signal lamp does not blink.	Indicator lamp is normal. (The applicable side performs the high flasher activation).	Harness between BCM and each turn signal lamp Turn signal lamp bulb Door mirror (if equipped with turn signals in the door mirrors)	Turn signal lamp circuit Refer to EXL-51.
	One side	Combination meter	_
Turn signal indicator lamp	Both sides (Always)	Turn signal indicator lamp signal Combination meter BCM	Combination meter. Data monitor "TURN IND" BCM (FLASHER) Active test "FLASHER"
does not blink.	Both sides (Does blink when activating the hazard warning lamp with the ignition switch OFF)	The combination meter power supply and the ground circuit Combination meter	Combination meter Power supply and the ground circuit Refer to MWI-43.

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NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description INFOID:000000004201543

XENON HEADLAMP

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

AUTO LIGHT SYSTEM

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

BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

< SYMPTOM DIAGNOSIS >

BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM Description NPFOID:000000004201544

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

Diagnosis Procedure

1. COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to BCS-10, "System Description".

Is the combination switch normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning part.

2.CHECK HEADLAMP (HI) REQUEST SIGNAL INPUT

©CONSULT-III DATA MONITOR

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

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

Is the item status normal?

YES >> GO TO 3

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check the headlamp (HI) circuit. Refer to EXL-40, "Description".

Is the headlamp (HI) circuit normal?

YES >> Replace IPDM E/R. Refer to PCS-48, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

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BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

Description INFOID:000000004201546

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

Diagnosis Procedure

INFOID:0000000004201547

1. CHECK COMBINATION SWITCH

Check the combination switch. Refer to BCS-10, "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

(P)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	Lighting switch	2ND	ON
	OFF	OFF	

Is the item status normal?

YES >> GO TO 3

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

3.HEADLAMP (LO) CIRCUIT INSPECTION

Check the headlamp (LO) circuit. For Halogen headlamps, refer to <u>EXL-42</u>. "<u>HEADLAMP (HALOGEN)</u>: <u>Diagnosis Procedure</u>". For Xenon headlamps, refer to <u>EXL-44</u>. "<u>HEADLAMP (XENON)</u>: <u>Diagnosis Procedure</u>". Is the headlamp (LO) circuit normal?

YES >> Replace IPDM E/R. Refer to PCS-48, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS > PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON Α Description INFOID:0000000004201548 The parking, license plate and tail lamps do not turn ON in with any lighting switch setting. В Diagnosis Procedure INFOID:0000000004201549 1.COMBINATION SWITCH INSPECTION Check the combination switch. Refer to BCS-10, "System Description". Is the combination switch normal? D YES >> GO TO 2 NO >> Repair or replace the malfunctioning part. 2.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT Е (P)CONSULT-III DATA MONITOR Select "TAIL & CLR REQ" of IPDM E/R DATA MONITOR item. With operating the lighting switch, check the monitor status. F Monitor item Condition Monitor status 1ST ON TAIL & CLR Lighting switch REQ OFF OFF Is the item status normal? Н YES >> GO TO 3 NO >> Replace BCM. Refer to BCS-96, "Removal and Installation". 3.PARK LAMP CIRCUIT INSPECTION Check the parking lamp circuit. Refer to EXL-48, "Description". Is the tail lamp circuit normal? YES >> Replace IPDM E/R. Refer to PCS-48, "Removal and Installation". NO >> Repair or replace the malfunctioning part. K

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BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

Description INFOID:000000004201550

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

Diagnosis Procedure

INFOID:0000000004201551

1. COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to BCS-10, "System Description".

Is the combination switch normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning part.

2.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT

(P)CONSULT-III DATA MONITOR

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

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

Is the item status normal?

YES >> GO TO 3

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

$3.\mathsf{front}$ fog LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to EXL-46, "Description".

Is the front fog lamp circuit normal?

YES >> Replace IPDM E/R. Refer to PCS-48, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRF-TFNSIONER"

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.)

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



▲ WARNING

XENON LAMP BALLAST parts no.SCB26

DOT

高電圧

職害となる感電の恐れがあるので、下記を守って下さい。 ・電源スイッチをOFFにしてから電源コネクタを設備して下さい。 ・電源スイッチをOFFにしてから電源コネクタを設備していさい。 ・発育ススターを用いて関急が膨胀とないで下さい。 ・電気テスターを用いて関急が膨胀とないで下さい。 ・ででは、 SEPIOLA SEPIOLA NUMBER OF SEPIOLA NUMBER OF SECONAL SECON

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

INFOID:0000000004201553

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EXL-247

EL-3422D

ON-VEHICLE MAINTENANCE

HEADLAMP

Aiming Adjustment

INFOID:0000000004201554

PREPARATION BEFORE ADJUSTING

NOTE:

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

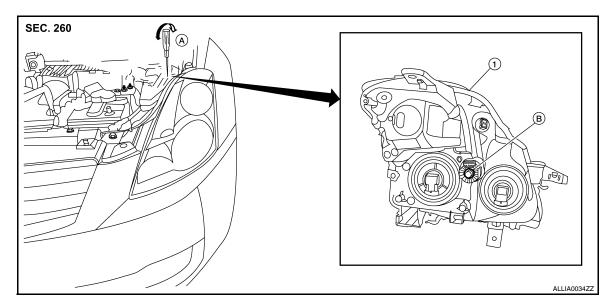
Before performing aiming adjustment, check the following.

• Adjust the tire pressure to specification.

- Position 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 levels and fuel tank is full.
- Confirm spare tire, jack and tools are properly stowed.
- Wipe off dirt on the headlamp.

CAUTION:

Never use organic solvent (thinner, gasoline etc.).



Aiming Adjustment procedure

1. Position the screen.

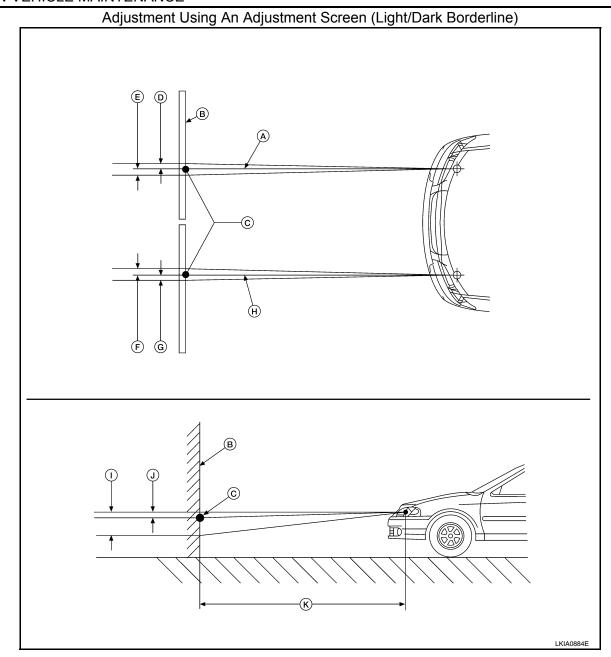
NOTE:

- · Stop the vehicle facing the screen.
- · Place the screen on a plain road vertically.
- 2. Face the screen with the vehicle. Maintain 7.62 m (25 ft) between the headlamp bulb center and the screen.
- 3. Start the engine. Turn the headlamp (LO) ON.

CAUTION:

Never cover the lens surface with tape, etc. The lens is made of resin. NOTE:

- Aim each headlamp individually and ensure other headlamp beam pattern is blocked from screen.
- For horizontal aiming, adjust headlamp until beam pattern is at horizontal center point.



- A. Headlamp beam (RH)
- D. 66.5 mm (2.6 in)
- G. 66.5 mm (2.6 in)
- J. 13.3 mm (0.5 in)
- B. Screen
- E. 66.5 mm (2.6 in)
- H. Headlamp beam (LH)
- K. 7.62 m (25 ft)
- C. Horizontal/Vertical center point of headlamp
- F. 66.5 mm (2.6 in)
- I. 53.2 mm (2.1 in)

Description INFOID:0000000004507212

PREPARATION BEFORE ADJUSTING

NOTE:

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

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to specification.
- · Position 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 levels and fuel tank is full.

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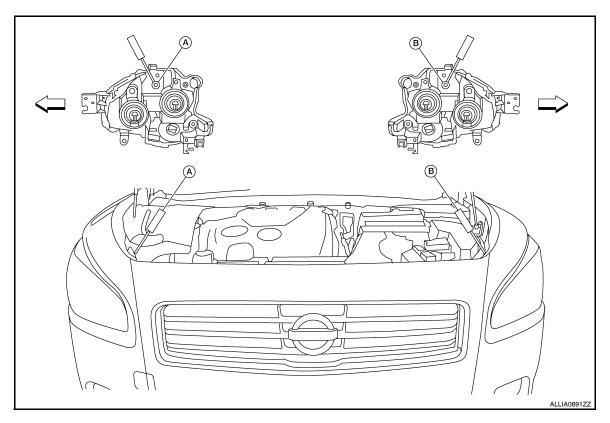
< ON-VEHICLE MAINTENANCE >

- · Confirm spare tire, jack and tools are properly stowed.
- Wipe off dirt on the headlamp.

CAUTION:

Never use organic solvent (thinner, gasoline etc.).

AIMING ADJUSTMENT SCREW



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

	Adjustment screw	Screw driver rotation	Facing direction
A Headlamp RH (UP/DOWN)		Clockwise	DOWN
А	rieadiamp (Or/DOWN)	Counterclockwise	UP
В	Headlemp I H (UD/DOWN)	Clockwise	DOWN
	Headlamp LH (UP/DOWN)	Counterclockwise	UP

Aiming Adjustment Procedure

INFOID:0000000004507213

Aiming Adjustment procedure

1. Position the screen.

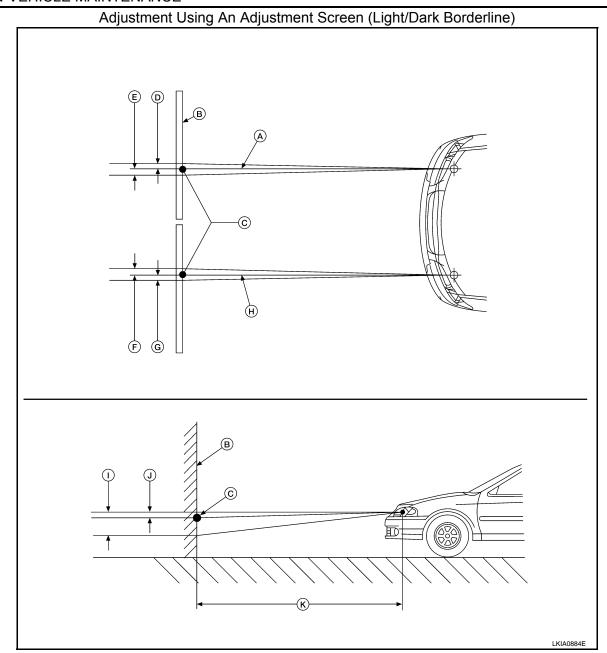
NOTE:

- Stop the vehicle facing the screen.
- · Place the screen on a plain road vertically.
- 2. Face the screen with the vehicle. Maintain 7.62 m (25 ft) between the headlamp bulb center and the screen.
- 3. Start the engine. Turn the headlamp (LO) ON.

CAUTION:

Never cover the lens surface with tape, etc. The lens is made of resin. NOTE:

- Aim each headlamp individually and ensure other headlamp beam pattern is blocked from screen.
- For horizontal aiming, adjust headlamp until beam pattern is at horizontal center point.



- A. Headlamp beam (RH)
- D. 66.5 mm (2.6 in)
- G. 66.5 mm (2.6 in)
- J. 13.3 mm (0.5 in)

- B. Screen
- E. 66.5 mm (2.6 in)
- H. Headlamp beam (LH)
- K. 7.62 m (25 ft)

- C. Horizontal/Vertical center point of headlamp
- F. 66.5 mm (2.6 in)
- I. 53.2 mm (2.1 in)

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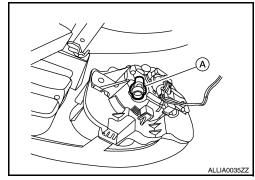
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FRONT FOG LAMP

Aiming Adjustment

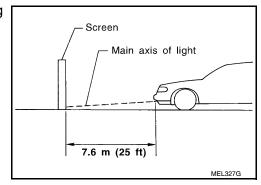
The fog lamp is a semi-sealed beam type which uses a replaceable halogen bulb. Before performing aiming adjustment, make sure of the following.

- 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.

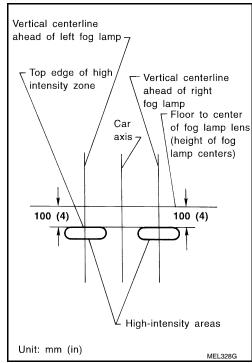


INFOID:0000000004201555

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



- 2. Turn front fog lamps ON.
- 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.



ON-VEHICLE REPAIR

HEADLAMP

Bulb Replacement

INFOID:0000000004201556

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HEADLAMP

CAUTION:

• Do not touch the glass of bulb directly by hand. Keep grease and other oily substances away from bulb. Do not touch bulb by hand while it is lit or right after being turned off, burning may result.

Removal

- 1. Disconnect negative battery terminal.
- Position the fender protector aside. Refer to <u>EXT-19</u>, "Removal and Installation"
- 3. Turn the headlamp bulb sockets counterclockwise to unlock and remove them (halogen).
- 4. Remove the plastic cover, disconnect the ignitor, unlock the retaining spring to unlock and remove the bulb (xenon only).
- 5. Turn the high beam lamp bulb socket counterclockwise to unlock and remove it.

Installation

CAUTION:

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

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FRONT TURN SIGNAL LAMP

Removal

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

Installation

Installation is in the reverse order of removal.

CAUTION:

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

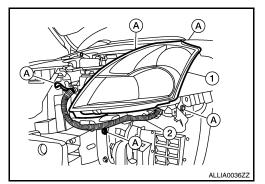
Removal and Installation

INFOID:0000000004201557

COMBINATION LAMP

Removal

- Disconnect battery negative terminal.
- Remove the front bumper fascia. Refer to <u>EXT-13</u>, "Removal and Installation".
- Ensure lighting switch is OFF.
- 4. Remove the headlamp bolts (A).
- Pull the headlamp assembly (1) toward the front of the vehicle, detach the headlamp harness (2) from the headlamp assembly, disconnect the bulb connectors and remove.



Installation

Installation is in the reverse order of removal.

NOTE:

Confirm headlamp aiming adjustment. Refer to EXL-248, "Aiming Adjustment".

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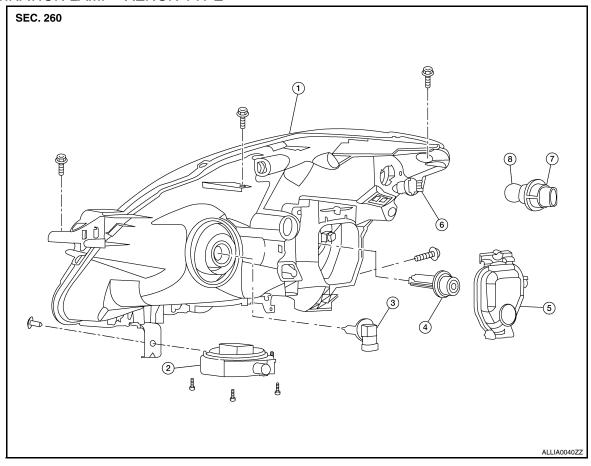
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Disassembly and Assembly

INFOID:0000000004201558

COMBINATION LAMP - XENON TYPE



- 1. Headlamp assembly
- 4. Xenon bulb
- 7. Front turn signal lamp bulb socket
- 2. Ballast
- 5. Plastic cover
- 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.
- 1. Remove the plastic cover, disconnect the xenon bulb connector, unlock the retaining spring to remove the xenon bulb.
- Turn the halogen bulb (high beam) lamp socket counterclockwise to unlock and remove it.
- 3. Turn the front turn signal lamp bulb socket counterclockwise to unlock and remove it.
- 4. Pull the front turn signal lamp bulb from its socket.
- Turn the park/side marker lamp bulb socket counterclockwise to unlock and remove it.
- Pull the park/side marker lamp bulb from its socket.

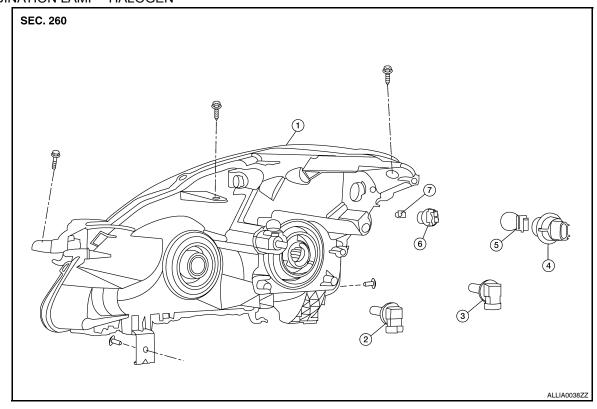
Assembly

Assembly is in the reverse order of disassembly.

CAUTION:

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

COMBINATION LAMP - HALOGEN



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

Disassembly

CAUTION:

- Do not touch the glass of the bulb directly by hand. Keep grease and other oily substances away from bulb. Do not touch bulb while it is lit or right after being turned off, burning may result.
- 1. Turn the halogen lamp bulb (low beam) counterclockwise to unlock and remove it.
- 2. Turn the halogen lamp bulb (high beam) socket counterclockwise to unlock and remove it.
- 3. Turn the front turn signal lamp bulb socket counterclockwise to unlock and remove it.
- 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.

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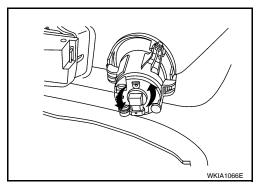
FRONT FOG LAMP

Bulb Replacement

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

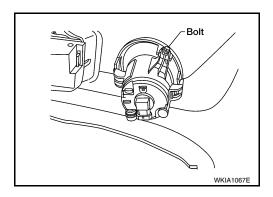
INFOID:0000000004201560

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 EXL-252, "Aiming Adjustment".

STOP LAMP

< ON-VEHICLE REPAIR >

STOP LAMP

Bulb Replacement

INFOID:0000000004523254

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STOP LAMP

Removal

- Remove rear combination lamp. Refer to <u>EXL-257, "Removal and Installation"</u>.
- 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

INFOID:0000000004523255

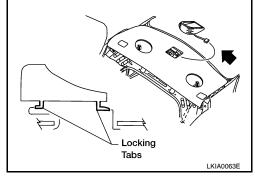
HIGH MOUNTED STOP LAMP (with rear spoiler)

The high-mounted stop lamp uses an LED circuit board instead of a bulb. The LED circuit board is not serviceable and the high-mounted stop lamp must be replaced as an assembly. Refer to EXT-47, "Removal and Installation".

HIGH-MOUNTED STOP LAMP (with parcel shelf)

Removal

- 1. Slide the high-mounted stop lamp assembly rearward on the parcel shelf to give clearance to the front tabs.
- 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-46, "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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BACK-UP LAMP

< ON-VEHICLE REPAIR >

BACK-UP LAMP

Bulb Replacement INFOID:0000000004201563

Removal

- 1. Remove the rear combination lamp. Refer to EXL-260, "Removal and Installation".
- Turn back-up lamp bulb socket counterclockwise to unlock and remove. Pull back-up lamp bulb from socket to remove.

Installation

Installation is in the reverse order of removal.

LICENSE PLATE LAMP

< ON-VEHICLE REPAIR >

LICENSE PLATE LAMP

Bulb Replacement

INFOID:0000000004201564

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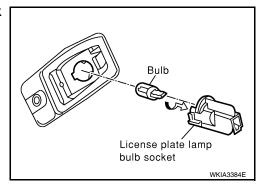
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REMOVAL

- 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

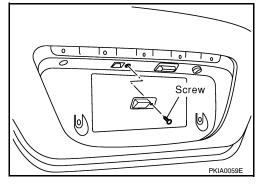
Installation is in the reverse order of removal.

Removal and Installation

INFOID:0000000004201565

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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REAR COMBINATION LAMP

< ON-VEHICLE REPAIR >

REAR COMBINATION LAMP

Bulb Replacement

INFOID:0000000004201566

REAR TURN SIGNAL LAMP

Removal

- 1. Remove the rear combination lamp. Refer to EXL-260, "Removal and Installation".
- 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

- Remove the rear combination lamp. Refer to <u>EXL-260, "Removal and Installation"</u>.
- 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-260, "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-260, "Removal and Installation".
- 2. Turn the side marker lamp bulb socket counterclockwise and remove it.
- 3. Remove the side marker lamp bulb.

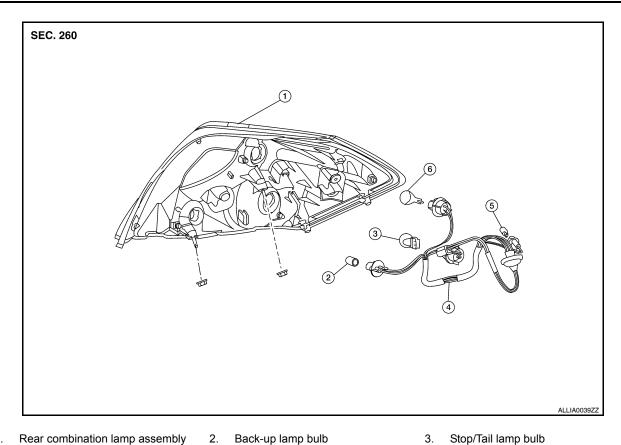
Installation

Installation is in the reverse order of removal.

Removal and Installation

INFOID:0000000004201567

COMPONENTS



- Rear combination lamp assembly Rear combination lamp harness
- - Side marker lamp bulb
- Stop/Tail lamp bulb 3.
- Rear turn signal lamp bulb

REMOVAL

- 1. Remove trunk side finisher. Refer to INT-23, "Removal and Installation".
- 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

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LIGHTING AND TURN SIGNAL SWITCH

Removal and Installation

INFOID:0000000004201568

Removal

- 1. Remove the spiral cable. Refer to <u>SR-8</u>, "Removal and Installation"
- 2. Disconnect the lighting and turn signal switch connector and remove the lighting and turn signal switch.

Installation

Installation is in the reverse order of removal.

HAZARD SWITCH

< ON-VEHICLE REPAIR >

HAZARD SWITCH

Removal and Installation

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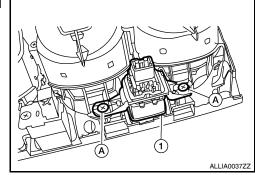
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Removal

- 1. Remove the cluster lid C. Refer to IP-12, "Removal and Installation".
- 2. Remove CVT finisher or M/T finisher. Refer to TM-255, "Removal and Installation" or TM-21, "Removal and Installation".
- 3. Remove the hazard switch screws (A) and remove the hazard switch. (1).



Installation

Installation is in the reverse order of removal.

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SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Headlamp INFOID:000000004201570

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

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

Exterior Lamp

INFOID:0000000004201571

Item		Wattage (W)*
Front combination lamp	Park/Turn signal lamp	27 (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	With parcel shelf (inside)	18
	With rear spoiler (outside)	LED

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