

SECTION EXL

EXTERIOR LIGHTING SYSTEM

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PRECAUTIONS

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PRECAUTION

PRECAUTIONS

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

INFOID:000000009606279

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

WARNING:

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

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

WARNING:

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

Precaution for Work

INFOID:000000009606280

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

PREPARATION

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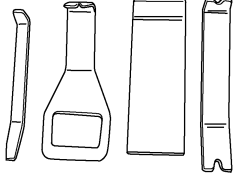
PREPARATION

PREPARATION

Special Service Tool

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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
— (J-46534) TrimTool Set	Removing trim components
 AWJIA0483ZZ	

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COMPONENT PARTS

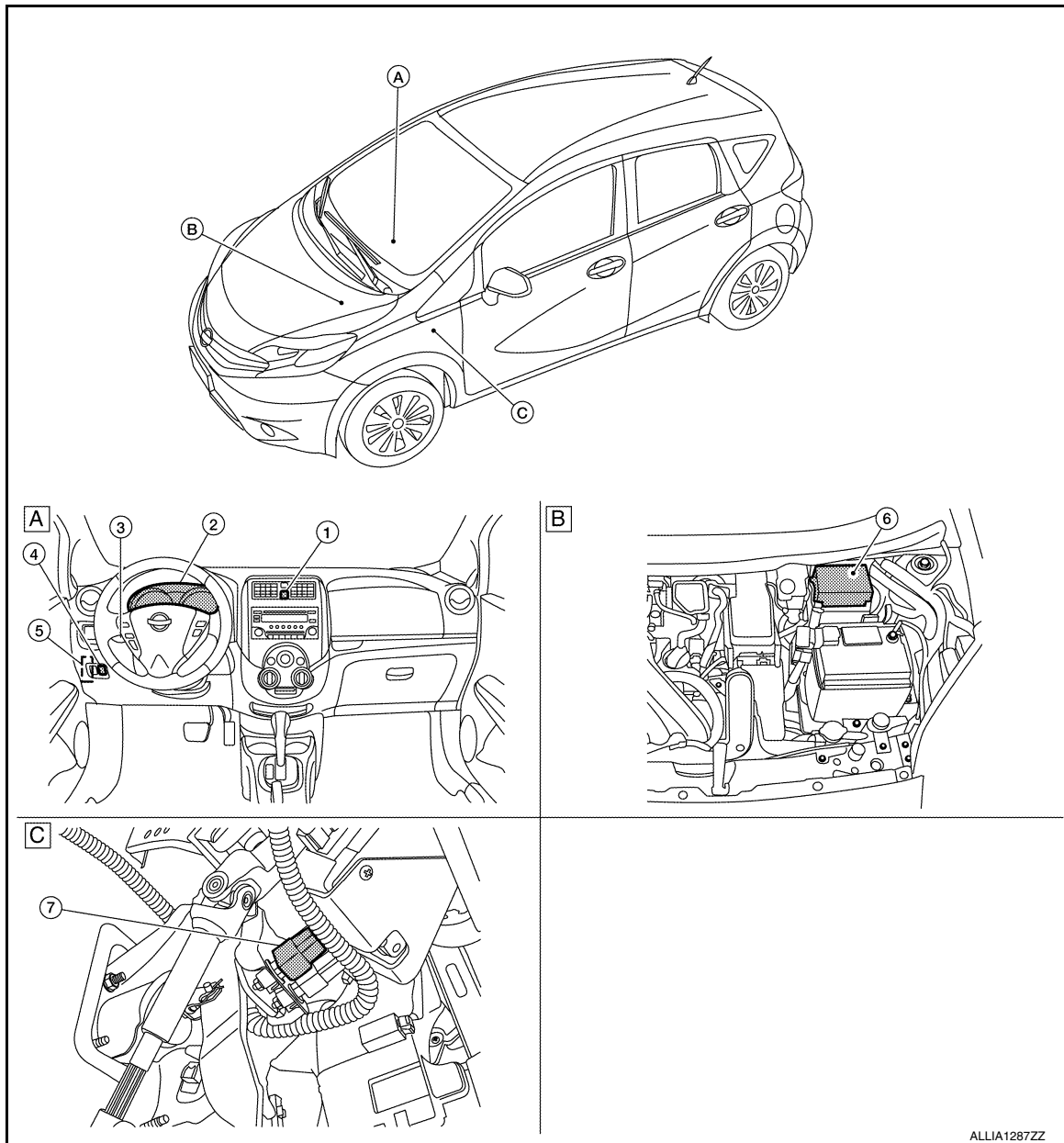
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SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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No.	Part	Function
1.	Hazard switch	Refer to EXL-10. "TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Description" .
2.	Combination meter	Refer to MWI-7. "METER SYSTEM : System Description" .
3.	Combination switch (Lighting & turn signal switch)	Refer to EXL-10. "TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Description" .
4.	Headlamp aiming switch	Refer to EXL-9. "HEADLAMP AIMING SYSTEM (MANUAL) : System Description" .
5.	BCM	Refer to BCS-5. "BODY CONTROL SYSTEM : System Description" .

COMPONENT PARTS

< SYSTEM DESCRIPTION >

No.	Part	Function
6.	IPDM E/R	- Controls the integrated relay, and supplies voltage to the load according to the request from BCM (via CAN communication). - Refer to PCS-5, "RELAY CONTROL SYSTEM : System Description" for detailed installation location.
7.	Stop lamp switch	Refer to EXL-10, "PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM : System Description" .

Daytime Running Light Relay

INFOID:000000009472850

Daytime running light relay ground circuit is switched according to request from IPDM E/R.

Hazard Switch

INFOID:000000009472851

Inputs the hazard switch ON/OFF signal to BCM.

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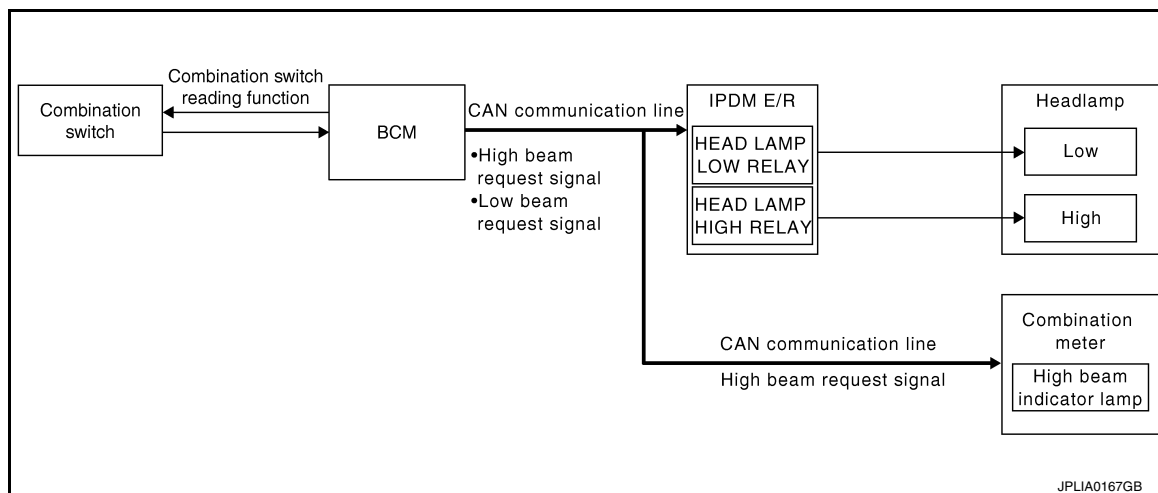
SYSTEM

HEADLAMP SYSTEM

HEADLAMP SYSTEM : System Description

INFOID:000000009472853

SYSTEM DIAGRAM



OUTLINE

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

HEADLAMP (LO) OPERATION

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

Headlamp (LO) ON condition

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

HEADLAMP (HI) OPERATION

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

Headlamp (HI) ON condition

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

HEADLAMP SYSTEM : Fail-safe

INFOID:000000009472855

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 BCM

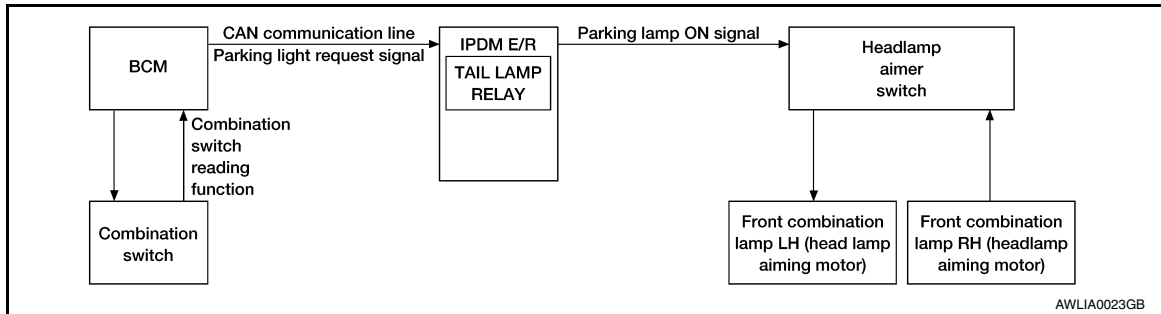
SYSTEM

< SYSTEM DESCRIPTION >

Control part	Fail-safe operation
Headlamp	• Turns ON the headlamp low relay when the ignition switch is turned ON • Turns OFF the headlamp low relay when the ignition switch is turned OFF • Headlamp high relay OFF

HEADLAMP AIMING SYSTEM (MANUAL)

HEADLAMP AIMING SYSTEM (MANUAL) : System Diagram



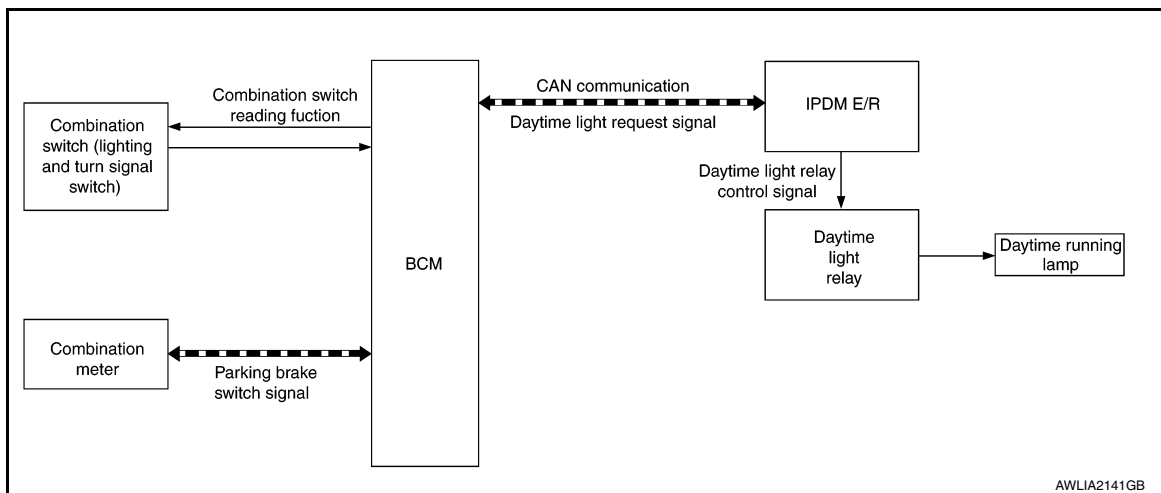
HEADLAMP AIMING SYSTEM (MANUAL) : System Description

The headlamp aiming system (manual) controls the headlamp light axis height according to input from the headlamp aiming switch. The variable internal resistance of the headlamp aiming switch controls the signal ground of the headlamp aiming motors located on the front combination lamp LH and RH. The headlamp aiming system operates when the combination switch (lighting and turn signal switch) is in the 2nd position.

DAYTIME RUNNING LIGHT SYSTEM

DAYTIME RUNNING LIGHT SYSTEM : System Description

SYSTEM DIAGRAM



OUTLINE

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

DAYTIME RUNNING LAMP OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM detects the engine condition according to push-button ignition switch
- BCM detects the parking brake condition by the parking brake switch signal received from combination meter using CAN communication.
- BCM transmits the daytime running lamp request signal to IPDM E/R using CAN communication according to the daytime running lamp ON condition.

Daytime running light ON condition

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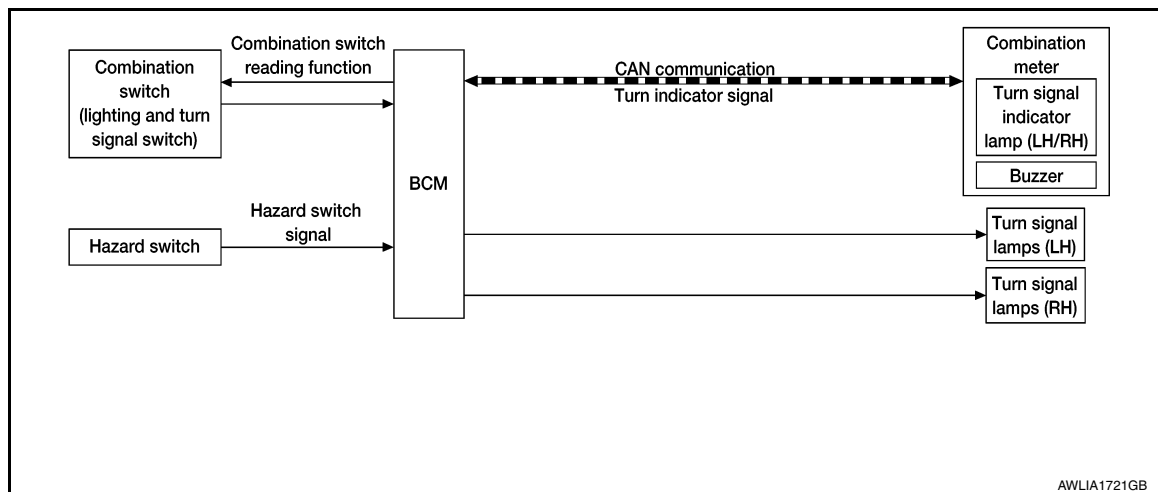
- Engine running
- Lighting switch OFF or 1ST
- Lighting switch AUTO, and the auto light function OFF judgment
- Parking brake switch OFF
- IPDM E/R controls the daytime running lamp relay (ground-side) to turn ON according to the daytime running lamp request signal.
- Power is supplied from the daytime running lamp to the daytime running lamps.

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Description

INFOID:000000009472862

SYSTEM DIAGRAM



OUTLINE

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

TURN SIGNAL LAMP OPERATION

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

HAZARD WARNING LAMP OPERATION

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

HIGH FLASHER OPERATION

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

NOTE:

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

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM

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

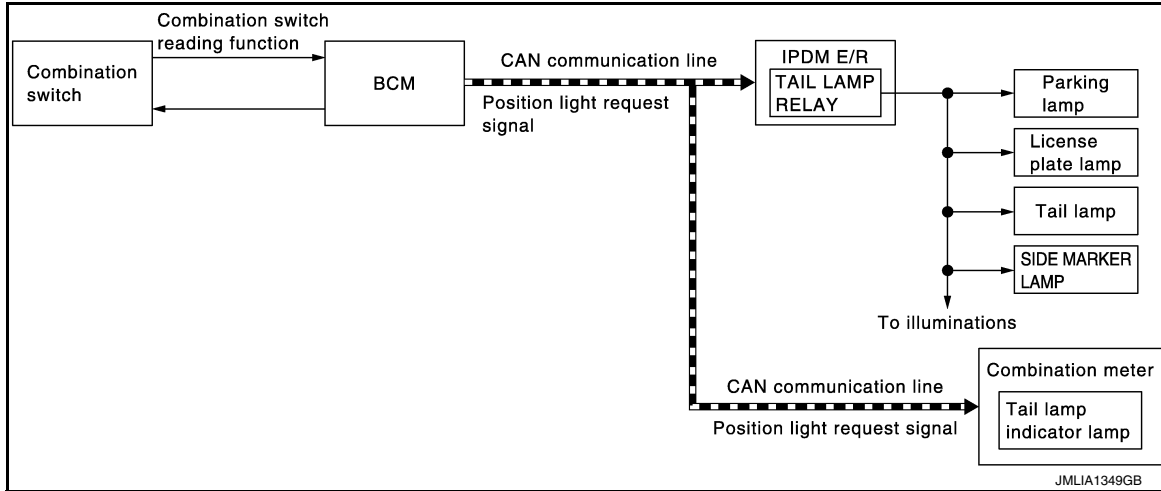
SYSTEM

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SYSTEM DIAGRAM



OUTLINE

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

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the position light request signal to IPDM E/R and the combination meter via CAN communication according to the ON/OFF condition of the parking, license plate, side marker (Without Daytime running lamps) and tail lamps.

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

- Lighting switch 1ST
- Lighting switch 2ND
- Lighting switch AUTO, and the auto light function ON judgment.
- Lighting switch AUTO, with the front fog lamp switch ON and the ignition switch ON
- IPDM E/R turns the integrated tail lamp relay ON and turns the parking, license plate, side marker (without daytime running lamps) and tail lamps ON according to the position light request signal.
- Combination meter turns the tail lamp indicator lamp ON according to the position light request signal.

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM : Fail-safe

INFOID:000000009472866

EXL

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 BCM

Control part	Fail-safe operation
• Parking lamp • License plate lamp • Illumination • Tail lamp • Side marker lamp (Without day-time running 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 FOG LAMP SYSTEM

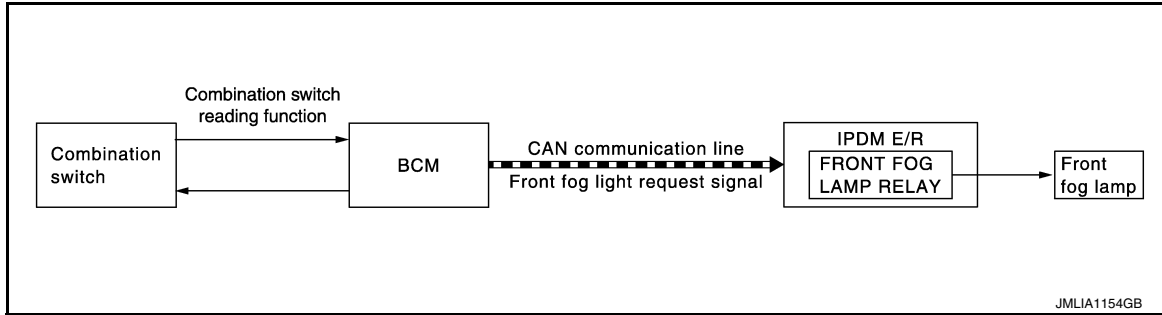
SYSTEM

< SYSTEM DESCRIPTION >

FRONT FOG LAMP SYSTEM : System Description

INFOID:000000009472867

SYSTEM DIAGRAM



OUTLINE

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

FRONT FOG LAMP OPERATION

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

Front fog lamp ON condition

- Front fog lamp switch ON, and any of the following condition is satisfied. (except for the high beam ON)
- Lighting switch 2ND
- Lighting switch AUTO (auto light function ON judgment)

IPDM E/R turns the integrated front fog lamp relay ON, and turns the front fog lamp ON according to the front fog light request signal.

FRONT FOG LAMP SYSTEM : Fail-safe

INFOID:000000009472869

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 BCM

Control part	Fail-safe operation
Front fog lamp	Front fog lamp relay OFF

EXTERIOR LAMP BATTERY SAVER SYSTEM

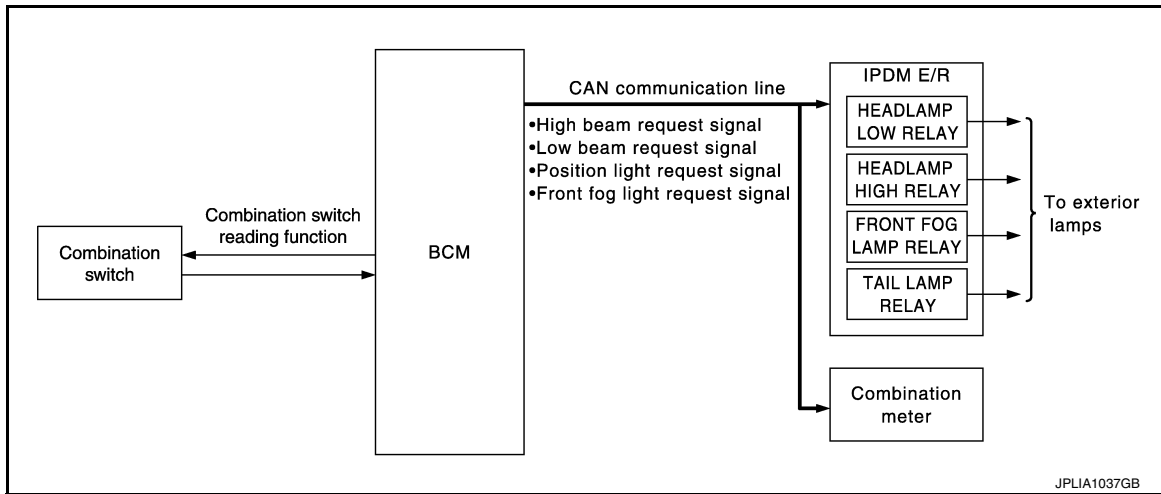
SYSTEM

< SYSTEM DESCRIPTION >

EXTERIOR LAMP BATTERY SAVER SYSTEM : System Description

INFOID:000000009472870

SYSTEM DIAGRAM



OUTLINE

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

Control by BCM

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

Control by IPDM E/R

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

EXTERIOR LAMP BATTERY SAVER ACTIVATION

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

NOTE:

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000009578842

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		ECU identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN DIAG SUPPORT MNTR
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×			
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Exterior lamp	HEAD LAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×		×	×		
Interior room lamp battery saver	BATTERY SAVER			×	×	×		
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×		×		
Signal buffer system	SIGNAL BUFFER			×				

HEADLAMP

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

HEADLAMP : CONSULT Function (BCM - HEAD LAMP)

INFOID:000000009578843

DATA MONITOR

Monitor Item [Unit]	Description
PUSH SW [On/Off]	Indicates condition of push-button ignition switch.
ENGINE STATE [Stop/Stall/Crank/Run]	Indicates engine status received from ECM on CAN communication line.
VEH SPEED 1 [km/h]	Indicates vehicle speed signal received from ABS on CAN communication line.
TURN SIGNAL R [On/Off]	Indicates condition of combination switch.
TURN SIGNAL L [On/Off]	
TAIL LAMP SW [On/Off]	
HI BEAM SW [On/Off]	
HEAD LAMP SW 1 [On/Off]	
HEAD LAMP SW 2 [On/Off]	
PASSING SW [On/Off]	
FR FOG SW [On/Off]	
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.

ACTIVE TEST

Test Item	Description
FR FOG LAMP	This test is able to check front fog lamp operation [On/Off].
HEAD LAMP	This test is able to check head lamp operation [Hi/Low/Off].
ILL DIM SIGNAL	This test is able to check head lamp illumination dimming operation [On/Off].
TAIL LAMP	This test is able to check tail lamp operation [On/Off].

WORK SUPPORT

Support Item	Setting	Description
BATTERY SAVER SET	On*	Exterior lamp battery saver function ON.
	Off	Exterior lamp battery saver function OFF.
ILL DELAY SET	MODE 8	180 sec.
	MODE 7	150 sec.
	MODE 6	120 sec.
	MODE 4	60 sec.
	MODE 5	90 sec.
	MODE 3	30 sec.
	MODE 2	OFF
	MODE 1*	45 sec.
		Sets delay timer function operation time (All doors closed).

*: Initial setting

FLASHER

FLASHER : CONSULT Function (BCM - FLASHER)

INFOID:000000009578844

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

ACTIVE TEST

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

WORK SUPPORT

Support Item	Setting	Description
HAZARD ANSWER BACK	Lock/Unlock*	Hazard warning lamp activation when doors are locked or unlocked with Intelligent Key.
	Unlock Only	Hazard warning lamp activation when doors are unlocked with Intelligent Key.
	Lock Only	Hazard warning lamp activation when doors are locked with Intelligent Key.
	Off	No hazard warning lamp activation when doors are locked or unlocked with Intelligent Key.

* : Initial setting

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

INFOID:000000009578845

AUTO ACTIVE TEST

Description

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

- Front wiper (LO, HI)
- Parking lamp
- License plate lamp
- Tail lamp
- Front fog lamp
- Headlamp (LO, HI)
- A/C compressor (magnet clutch)
- Cooling fan

Operation Procedure

NOTE:

Never perform auto active test in the following conditions.

- Passenger door is open
- CONSULT is connected

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

NOTE:

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

2. Turn the ignition switch OFF.
3. Turn the ignition switch ON, and within 20 seconds, press the driver door switch 10 times. Then turn the ignition switch OFF.
4. Turn the ignition switch ON within 10 seconds. After that the horn sounds once and the auto active test starts.
5. After a series of the following operations is repeated 3 times, auto active test is completed.

NOTE:

- When auto active test has to be cancelled halfway through test, turn the ignition switch OFF.
- When auto active test is not activated, door switch may be the cause. Check door switch. Refer to [DLK-84, "Component Function Check"](#).

Inspection in Auto Active Test

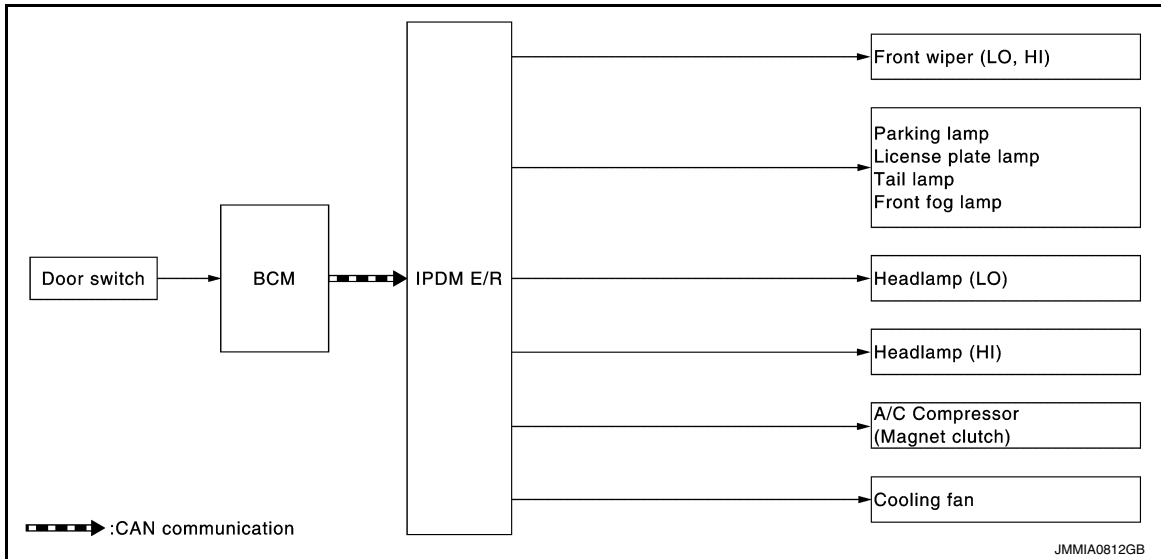
When auto active test is actuated, the following operation sequence is repeated 3 times.

Operation sequence	Inspection location	Operation
1	Front wiper	LO for 5 seconds → HI for 5 seconds
2	• Parking lamp • License plate lamp • Tail lamp • Front fog lamp	10 seconds
3	Headlamp	LO for 10 seconds → HI ON ⇔ OFF 5 times
4	A/C compressor (magnet clutch)	ON ⇔ OFF 5 times
5	Cooling fan	LO for 5 seconds → MID for 3 seconds → HI for 2 seconds

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

Concept of Auto Active Test



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

Diagnosis Chart in Auto Active Test

Symptom	Inspection contents	Possible cause
Any of the following components do not operate • Parking lamp • License plate lamp • Tail lamp • Front fog lamp • Headlamp (HI, LO) • Front wiper (HI, LO)	Perform auto active test. Does the applicable system operate?	YES BCM signal input circuit
		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 • BCM signal input circuit • CAN communication signal between BCM 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
Cooling fan does not operate	Perform auto active test. Does the cooling fan operate?	YES • ECM signal input circuit • CAN communication signal between ECM and IPDM E/R
		NO • Cooling fan motor • Harness or connector between IPDM E/R and cooling fan motor • IPDM E/R

CONSULT Function (IPDM E/R)

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APPLICATION ITEM

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

Direct Diagnostic Mode	Description
Ecu Identification	The IPDM E/R part number is displayed.
Self Diagnostic Result	The IPDM E/R self diagnostic results are displayed.
Data Monitor	The IPDM E/R input/output data is displayed in real time.

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

Direct Diagnostic Mode	Description
Active Test	The IPDM E/R activates outputs to test components.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

ECU IDENTIFICATION

The IPDM E/R part number is displayed.

SELF DIAGNOSTIC RESULT

Refer to [PCS-20, "DTC Index"](#).

DATA MONITOR

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

ACTIVE TEST

Test item	Description
HORN	This test is able to check horn operation [On].
FRONT WIPER	This test is able to check wiper motor operation [Hi/Low/Off].

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

Test item	Description
MOTOR FAN	This test is able to check cooling fan operation [4/3/2/1].
EXTERNAL LAMPS	This test is able to check external lamp operation [Fog/Hi/Lo/TAIL/Off].

CAN DIAG SUPPORT MNTR

Refer to [LAN-12. "CAN Diagnostic Support Monitor"](#).

BCM, IPDM E/R

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM, IPDM E/R

List of ECU Reference

INFOID:000000009472877

ECU	Reference
BCM	BCS-28, "Reference Value"
	BCS-44, "Fail-safe"
	BCS-46, "DTC Inspection Priority Chart"
	BCS-46, "DTC Index"
IPDM E/R	PCS-13, "Reference Value"
	PCS-18, "Fail-safe"
	PCS-20, "DTC Index"

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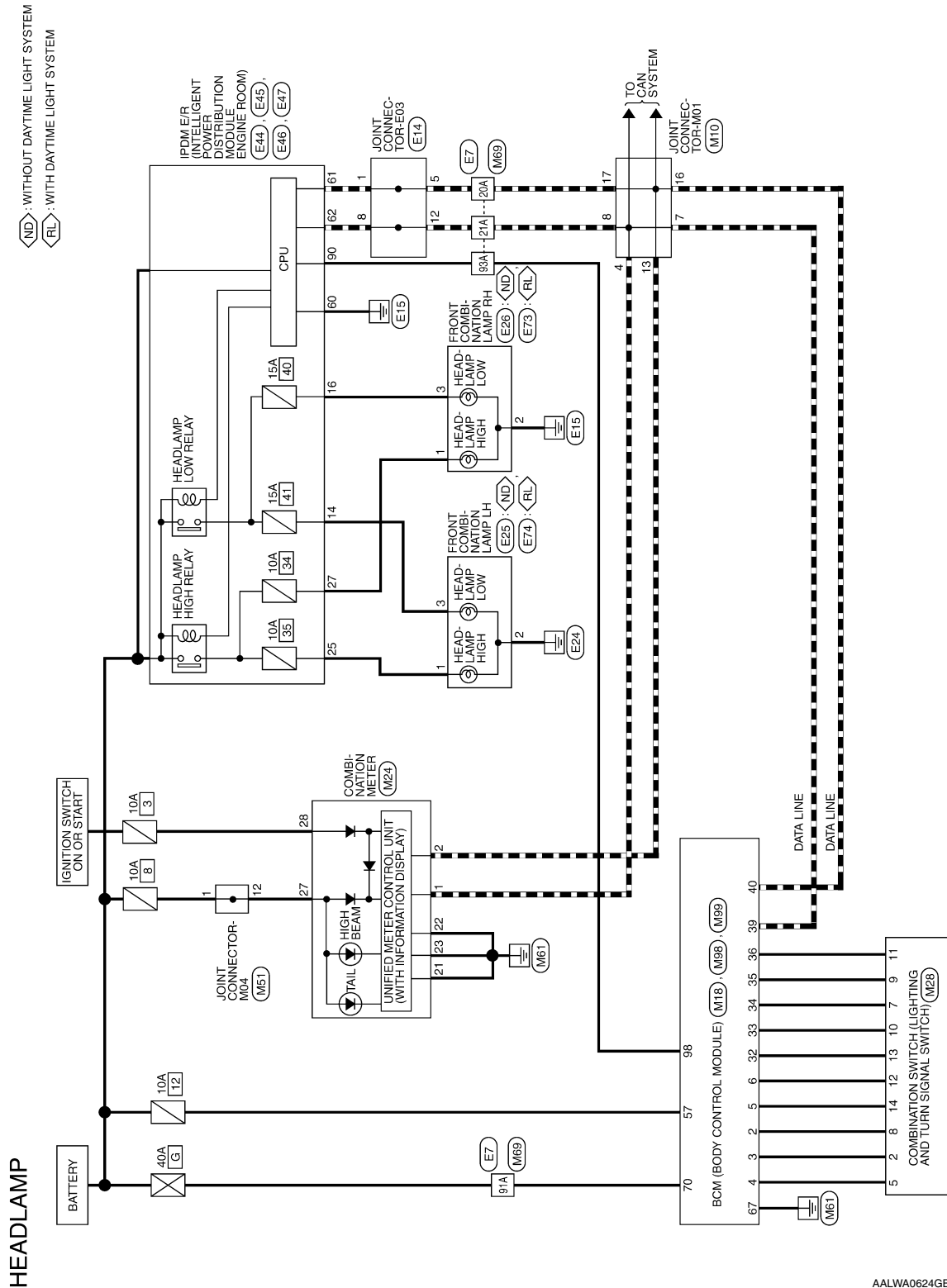
< WIRING DIAGRAM >

WIRING DIAGRAM

HEADLAMP

Wiring Diagram

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HEADLAMP

< WIRING DIAGRAM >

HEADLAMP CONNECTORS

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27



Terminal No.	Color of Wire	Signal Name
4	L	-
7	L	-
8	L	-
13	P	-
16	P	-
17	P	-

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



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
2	BR	COMBINATION SW INPUT 5
3	Y	COMBINATION SW INPUT 4
4	L	COMBINATION SW INPUT 3

Terminal No.	Color of Wire	Signal Name
5	G	COMBINATION SW INPUT 2
6	R	COMBINATION SW INPUT 1
32	P	COMBINATION SW OUTPUT 5
33	V	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	GR	COMBINATION SW OUTPUT 2
36	LG	COMBINATION SW OUTPUT 1
39	L	CAN-H
40	P	CAN-L

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
21	B	GND (ILLUMINATION)
22	B	GND (POWER)
23	B	GND (CIRCUIT)
27	R/W	BAT
28	GR	IGN

Connector No.	M28
Connector Name	COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12	13	14
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Terminal No.	Color of Wire	Signal Name
2	Y	-
5	L	-
7	W	-
8	BR	-

Terminal No.	Color of Wire	Signal Name
9	GR	-
10	V	-
11	LG	-
12	R	-
13	P	-
14	G	-

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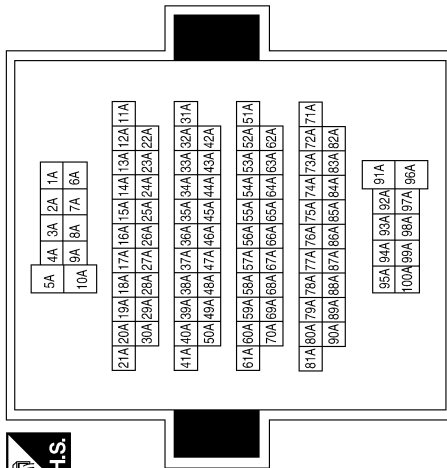
A B C D E F G H I J K EXL M N O P

HEADLAMP

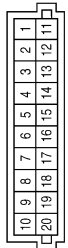
< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
20A	P	—
21A	L	—
91A	G	—
93A	O	—

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

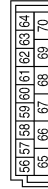


Connector No.	M51
Connector Name	JOINT CONNECTOR-M04
Connector Color	GRAY

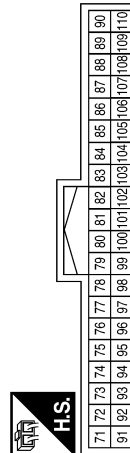


Terminal No.	Color of Wire	Signal Name
1	LG	—
12	R/W	—

Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
57	Y	BATTERY (FUSE)
67	B	GND
70	G	BATTERY (F/L)

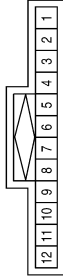
Terminal No.	Color of Wire	Signal Name
98	O	IGN RELAY OUTPUT 1 (USM)

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HEADLAMP

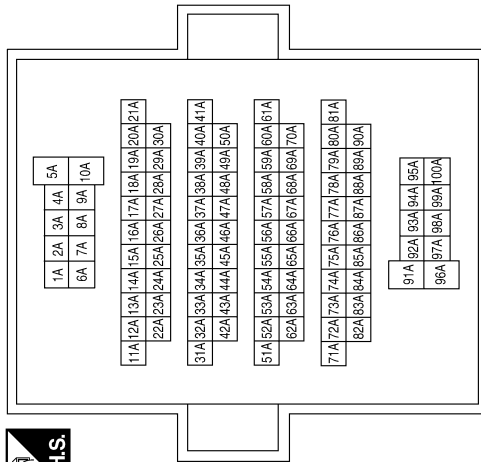
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Connector No.	E14
Connector Name	JOINT CONNECTOR-E03
Connector Color	BLUE



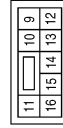
Terminal No.	Color of Wire	Signal Name
20A	P	-
21A	L	-
91A	Y	-
93A	L	-

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	P	-
5	P	-
8	L	-
12	L	-

Connector No.	E44
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
14	L	HEADLAMP LO LH
16	P	HEADLAMP LO RH

Connector No.	E26
Connector Name	FRONT COMBINATION LAMP RH (WITHOUT DAYTIME LIGHT SYSTEM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	Y	-
2	B	-
3	P	-

Connector No.	E25
Connector Name	FRONT COMBINATION LAMP LH (WITHOUT DAYTIME LIGHT SYSTEM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	G	-
2	B	-
3	L	-

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A B C D E F G H I J K EXL M N O P

HEADLAMP

< WIRING DIAGRAM >

Connector No.	E47
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



84	83	82	81	80	79	78	77
92	91	90	89	88	87	86	85

Terminal No.	Color of Wire	Signal Name
90	L	IGN SIGNAL

Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



64	63	62	61	60	59	58	57	56	55	54	53
76	75	74	73	72	71	70	69	68	67	66	65

Terminal No.	Color of Wire	Signal Name
60	B	GND (SIGNAL)
61	P	CAN-L
62	L	CAN-H

Connector No.	E45
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



21	20		19	18	17	
28	27		26	25	24	23

Terminal No.	Color of Wire	Signal Name
25	G	HEADLAMP HI LH
27	Y	HEADLAMP HI RH

Connector No.	E74
Connector Name	FRONT COMBINATION LAMP LH (WITH DAYTIME LIGHT SYSTEM)
Connector Color	BLACK



3	2	1
---	---	---

Terminal No.	Color of Wire	Signal Name
1	G	-
2	B	-
3	L	-

Connector No.	E73
Connector Name	FRONT COMBINATION LAMP RH (WITH DAYTIME LIGHT SYSTEM)
Connector Color	BLACK



3	2	1
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Terminal No.	Color of Wire	Signal Name
1	Y	-
2	B	-
3	P	-

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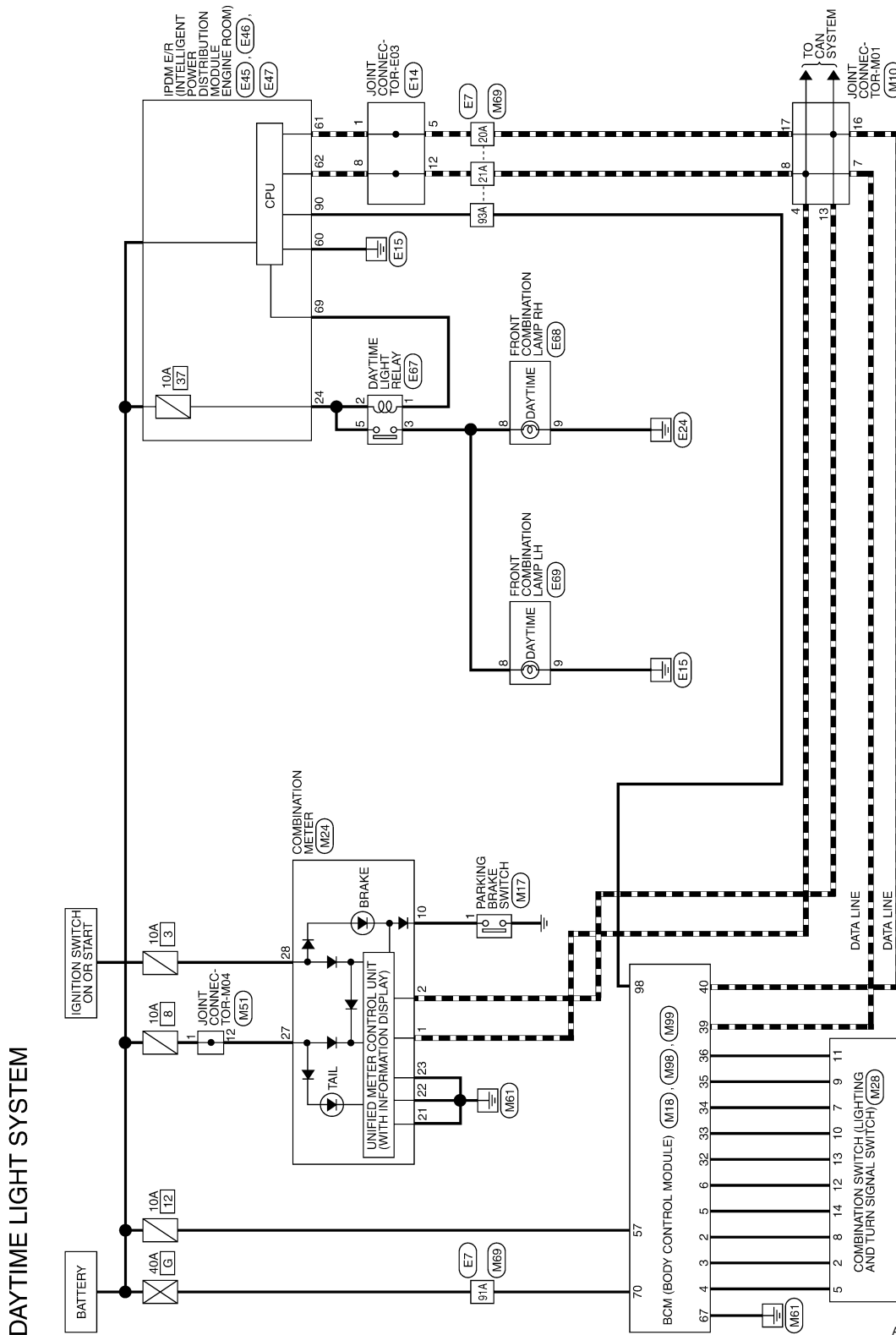
DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >

DAYTIME LIGHT SYSTEM

Wiring Diagram

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DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >

DAYTIME LIGHT SYSTEM CONNECTORS

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
4	L	-
7	L	-
8	L	-
13	P	-
16	P	-
17	P	-

Connector No.	M17
Connector Name	PARKING BRAKE SWITCH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	SB	-

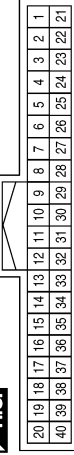
Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
2	BR	COMBINATION SW INPUT 5
3	Y	COMBINATION SW INPUT 4
4	L	COMBINATION SW INPUT 3
5	G	COMBINATION SW INPUT 2
6	R	COMBINATION SW INPUT 1

Terminal No.	Color of Wire	Signal Name
32	P	COMBINATION SW OUTPUT 5
33	V	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	GR	COMBINATION SW OUTPUT 2
36	LG	COMBINATION SW OUTPUT 1
37	L	CAN-H
38	P	CAN-L

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

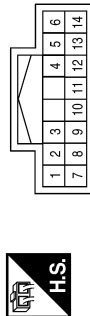


Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
10	SB	PKB SW
21	B	GND (ILLUMINATION)
22	B	GND (POWER)
23	B	GND (CIRCUIT)
27	R/W	BAT
28	GR	IGN

DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >

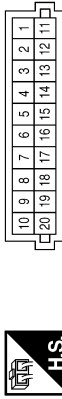
Connector No.	M28
Connector Name	COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	Y	-
5	L	-
7	W	-
8	BR	-

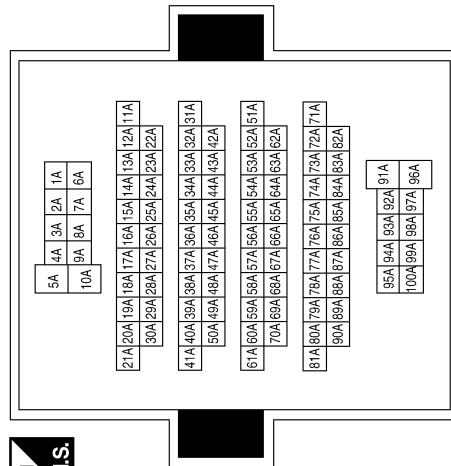
Terminal No.	Color of Wire	Signal Name
9	GR	-
10	V	-
11	LG	-
12	R	-
13	P	-
14	G	-

Connector No.	M51
Connector Name	JOINT CONNECTOR-M04
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	LG	-
12	R/W	-

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
20A	P	-
21A	L	-
91A	G	-
93A	O	-

Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
98	O	IGN RELAY OUTPUT 1 (USM)

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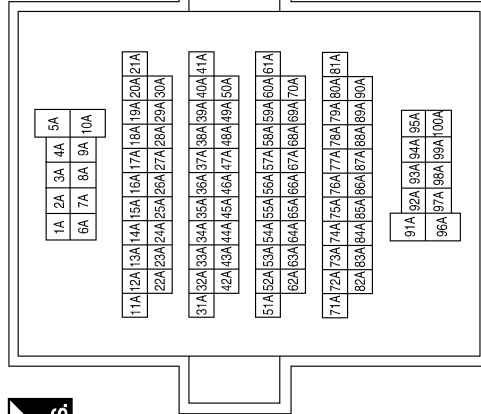
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DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
20A	P	—
21A	L	—
91A	Y	—
93A	L	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name
57	Y	BATTERY (FUSE)
67	B	GND
70	G	BATTERY (F/L)

Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



64	63	62	61	60	59	58	57	56	55	54	53
76	75	74	73	72	71	70	69	68	67	66	65

Terminal No.	Color of Wire	Signal Name
60	B	GND (SIGNAL)
61	P	CAN-L
62	L	CAN-H
69	GR	DTRL RLY

Connector No.	E45
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



21	20		19	18	17	
28	27	26	25	24	23	22

Terminal No.	Color of Wire	Signal Name
24	W	DTRL

Connector No.	E14
Connector Name	JOINT CONNECTOR-E03
Connector Color	BLUE



12	11	10	9	8	7	6	5	4	3	2	1
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Terminal No.	Color of Wire	Signal Name
1	P	—
5	P	—
8	L	—
12	L	—

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DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >

Connector No.	E68
Connector Name	FRONT COMBINATION LAMP RH (WITH DAYTIME LIGHT SYSTEM)
Connector Color	GRAY



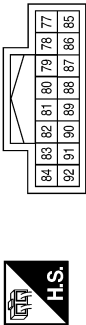
Terminal No.	Color of Wire	Signal Name
8	BR	-
9	R	-

Connector No.	E67
Connector Name	DAYTIME LIGHT RELAY
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	GR	-
2	W	-
3	BR	-
5	W	-

Connector No.	E47
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
90	L	IGN SIGNAL

Connector No.	E69
Connector Name	FRONT COMBINATION LAMP LH (WITH DAYTIME LIGHT SYSTEM)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
8	BR	-
9	B	-

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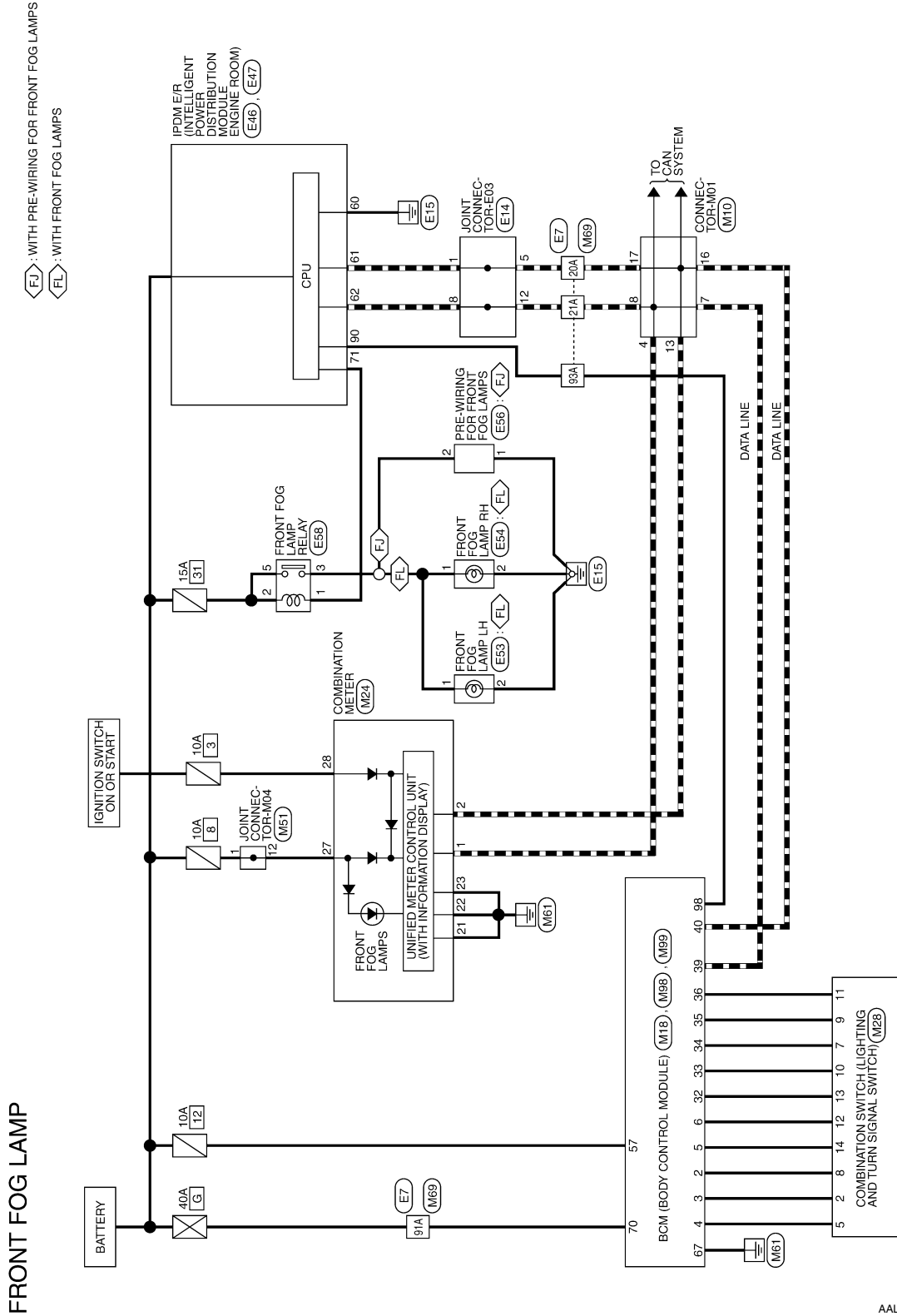
FRONT FOG LAMP

< WIRING DIAGRAM >

FRONT FOG LAMP

Wiring Diagram

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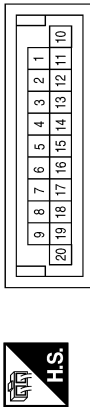
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FRONT FOG LAMP

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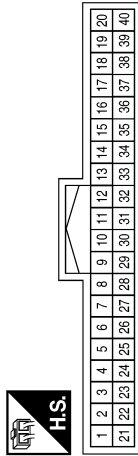
FRONT FOG LAMP CONNECTORS

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
4	L	-
7	L	-
8	L	-
13	P	-
16	P	-
17	P	-

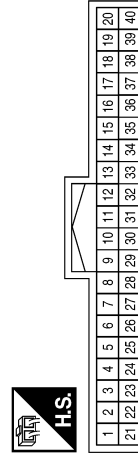
Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
2	BR	COMBINATION SW INPUT 5
3	Y	COMBINATION SW INPUT 4
4	L	COMBINATION SW INPUT 3
5	G	COMBINATION SW INPUT 2
6	R	COMBINATION SW INPUT 1

Terminal No.	Color of Wire	Signal Name
32	P	COMBINATION SW OUTPUT 5
33	V	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	GR	COMBINATION SW OUTPUT 2
36	LG	COMBINATION SW OUTPUT 1
39	L	CAN-H
40	P	CAN-L

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



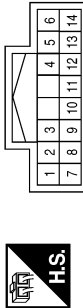
Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
10	SB	PKB SW
21	B	GND (ILLUMINATION)
22	B	GND (POWER)
23	B	GND (CIRCUIT)
27	R/W	BAT
28	GR	IGN

AALIA1381GB

FRONT FOG LAMP

< WIRING DIAGRAM >

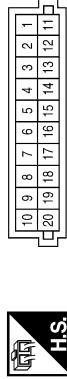
Connector No.	M28
Connector Name	COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	Y	-
5	L	-
7	W	-
8	BR	-

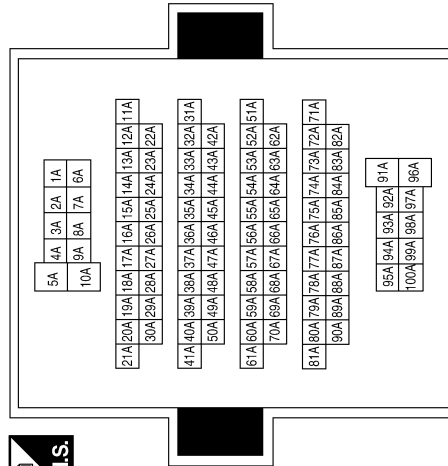
Terminal No.	Color of Wire	Signal Name
9	GR	-
10	V	-
11	LG	-
12	R	-
13	P	-
14	G	-

Connector No.	M51
Connector Name	JOINT CONNECTOR-M04
Connector Color	GRAY



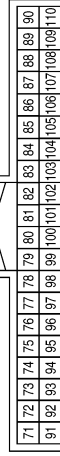
Terminal No.	Color of Wire	Signal Name
1	LG	-
12	R/W	-

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
20A	P	-
21A	L	-
91A	G	-
93A	O	-

Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
98	O	IGN RELAY

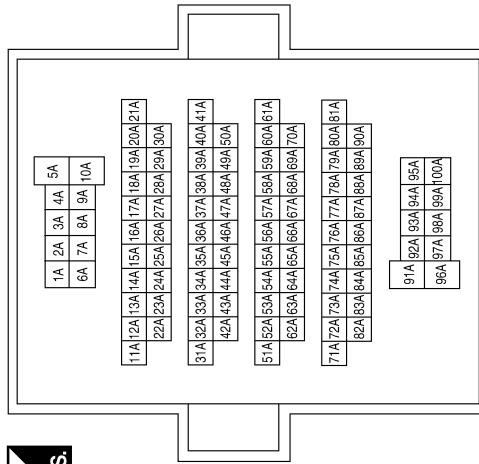
AALIA1382GB

FRONT FOG LAMP

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
20A	P	-
21A	L	-
91A	Y	-
93A	L	-

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

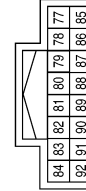


Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
57	Y	BATTERY (FUSE)
67	B	GND
70	G	BATTERY (F/L)

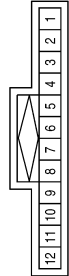
Connector No.	E47
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Connector No.	E14
Connector Name	JOINT CONNECTOR-E03
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
90	L	IGN SIGNAL

Terminal No.	Color of Wire	Signal Name
60	B	GND (SIGNAL)
61	P	CAN-L
62	L	CAN-H
71	W	FR FOG RLY

Terminal No.	Color of Wire	Signal Name
1	P	-
5	P	-
8	L	-
12	L	-

AALIA1383GB

FRONT FOG LAMP

< WIRING DIAGRAM >

Connector No.	E56
Connector Name	PRE-WIRING FOR FRONT FOG LAMPS
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	B	-
2	Y	-

Connector No.	E54
Connector Name	FRONT FOG LAMP RH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	Y	-
2	B	-

Connector No.	E53
Connector Name	FRONT FOG LAMP LH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	Y	-
2	B	-

Connector No.	E58
Connector Name	FRONT FOG LAMP RELAY
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	W	-
2	V	-
3	Y	-
5	V	-

AALIA1384GB

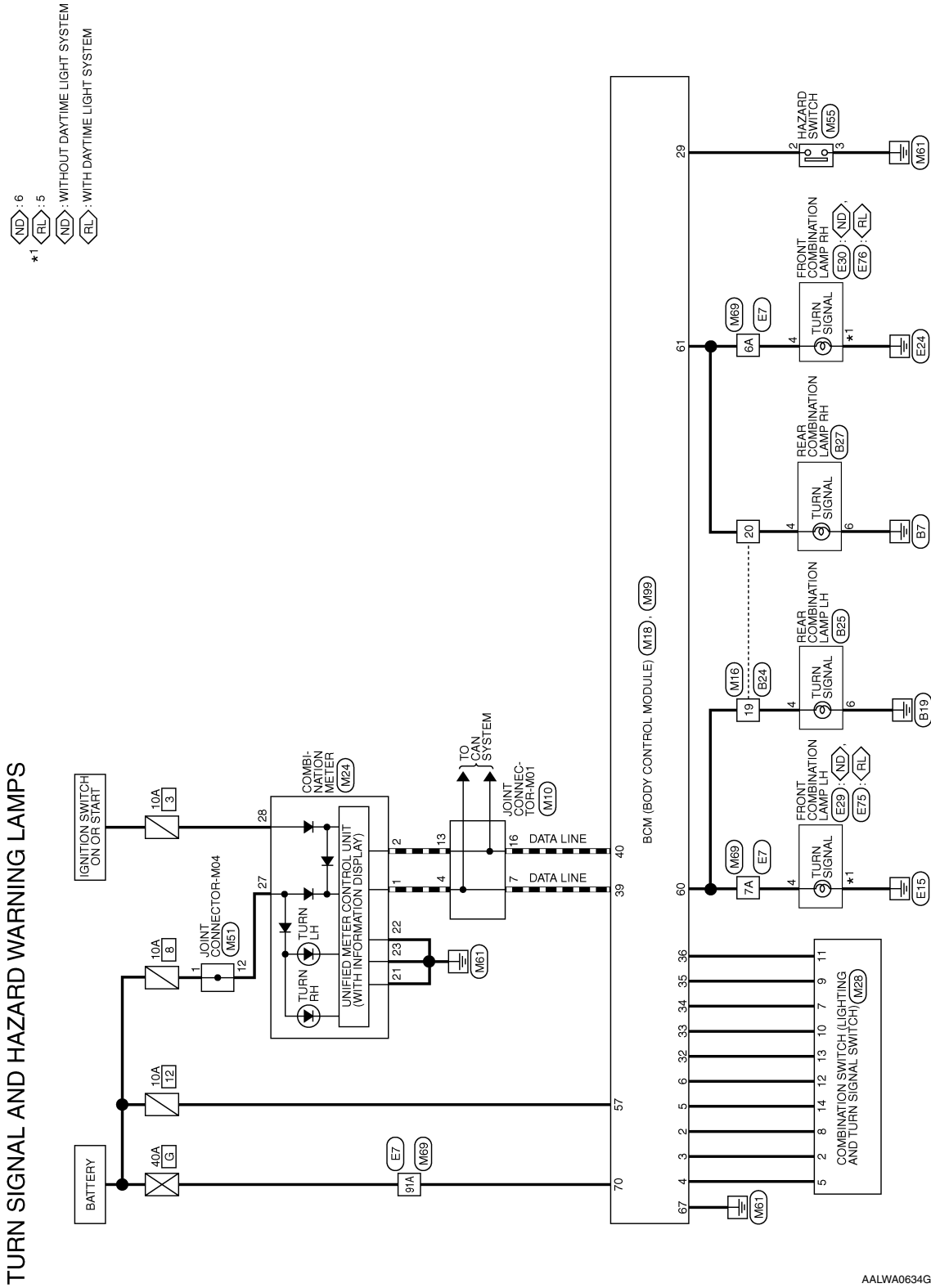
TURN SIGNAL AND HAZARD WARNING LAMPS

< WIRING DIAGRAM >

TURN SIGNAL AND HAZARD WARNING LAMPS

Wiring Diagram

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AALWA0634GB

TURN SIGNAL AND HAZARD WARNING LAMPS

< WIRING DIAGRAM >

TURN SIGNAL AND HAZARD WARNING LAMPS CONNECTORS

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name
4	L	-
7	L	-
13	P	-
16	P	-

Terminal No.	Color of Wire	Signal Name
19	V	-
20	W	-

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



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name
2	BR	COMBINATION SW INPUT 5
3	Y	COMBINATION SW INPUT 4
4	L	COMBINATION SW INPUT 3
5	G	COMBINATION SW INPUT 2
6	R	COMBINATION SW INPUT 1
29	O	HAZARD SW

Terminal No.	Color of Wire	Signal Name
32	P	COMBINATION SW OUTPUT 5
33	V	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	GR	COMBINATION SW OUTPUT 2
36	LG	COMBINATION SW OUTPUT 1
39	L	CAN-H
40	P	CAN-L

AALIA1391GB

TURN SIGNAL AND HAZARD WARNING LAMPS

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
21	B	GND (ILLUMINATION)
22	B	GND (POWER)
23	B	GND (CIRCUIT)
27	R/W	BAT
28	GR	IGN

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21

Connector No.	M51
Connector Name	JOINT CONNECTOR-M04
Connector Color	GRAY



10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
9	GR	-
10	V	-
11	LG	-
12	R	-
13	P	-
14	G	-

Connector No.	M28
Connector Name	COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)
Connector Color	WHITE



1	2	3	4	5	6
7	8	9	10	11	12
13	14				

Terminal No.	Color of Wire	Signal Name
1	LG	-
12	R/W	-

Terminal No.	Color of Wire	Signal Name
2	Y	-
5	L	-
7	W	-
8	BR	-

AALIA1392GB

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TURN SIGNAL AND HAZARD WARNING LAMPS

< WIRING DIAGRAM >

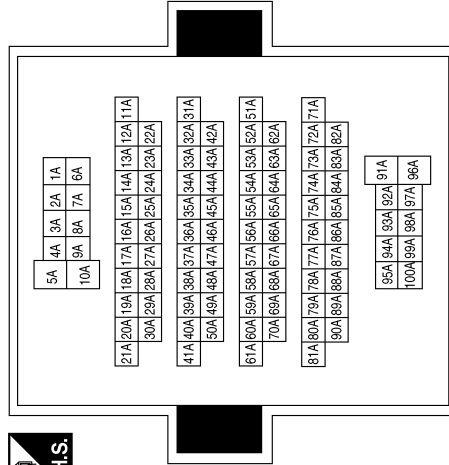
Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name
57	Y	BATTERY (FUSE)
60	V	FLASHER OUTPUT (LEFT)
61	W	FLASHER OUTPUT (RIGHT)
67	B	GND
70	G	BATTERY (F/L)

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6A	G	-
7A	V	-
91A	G	-

Connector No.	M55
Connector Name	HAZARD SWITCH
Connector Color	WHITE



4	3	2	1
---	---	---	---

Terminal No.	Color of Wire	Signal Name
2	O	-
3	B	-

AALIA1393GB

TURN SIGNAL AND HAZARD WARNING LAMPS

< WIRING DIAGRAM >

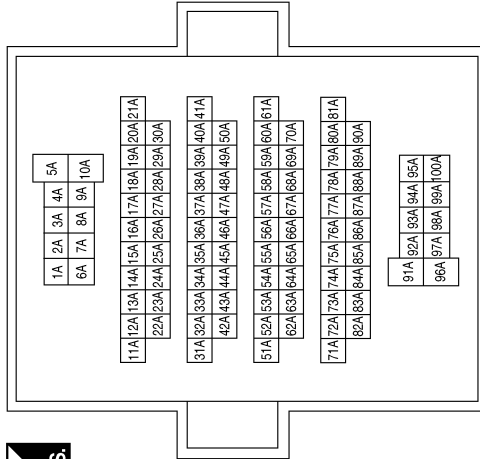
Connector No.	E29
Connector Name	FRONT COMBINATION LAMP LH (WITHOUT DAYTIME LIGHT SYSTEM)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
4	V	—
6	B	—

Terminal No.	Color of Wire	Signal Name
6A	W	—
7A	V	—
91A	Y	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	E76
Connector Name	FRONT COMBINATION LAMP RH (WITH DAYTIME LIGHT SYSTEM)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
4	W	—
5	B	—

Connector No.	E75
Connector Name	FRONT COMBINATION LAMP LH (WITH DAYTIME LIGHT SYSTEM)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
4	V	—
5	B	—

Connector No.	E30
Connector Name	FRONT COMBINATION LAMP RH (WITHOUT DAYTIME LIGHT SYSTEM)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
4	W	—
6	B	—

AALIA1394GB

TURN SIGNAL AND HAZARD WARNING LAMPS

< WIRING DIAGRAM >

Connector No.	B27
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE

2	1
6	5
4	3



Terminal No.	Color of Wire	Signal Name
4	W	—
6	B	—

Connector No.	B25
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE

2	1
6	5
4	3



Terminal No.	Color of Wire	Signal Name
4	G	—
6	B	—

Connector No.	B24
Connector Name	WIRE TO WIRE
Connector Color	WHITE

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24



Terminal No.	Color of Wire	Signal Name
19	G	—
20	W	—

AALIA1395GB

PARKING, LICENSE PLATE AND TAIL LAMPS

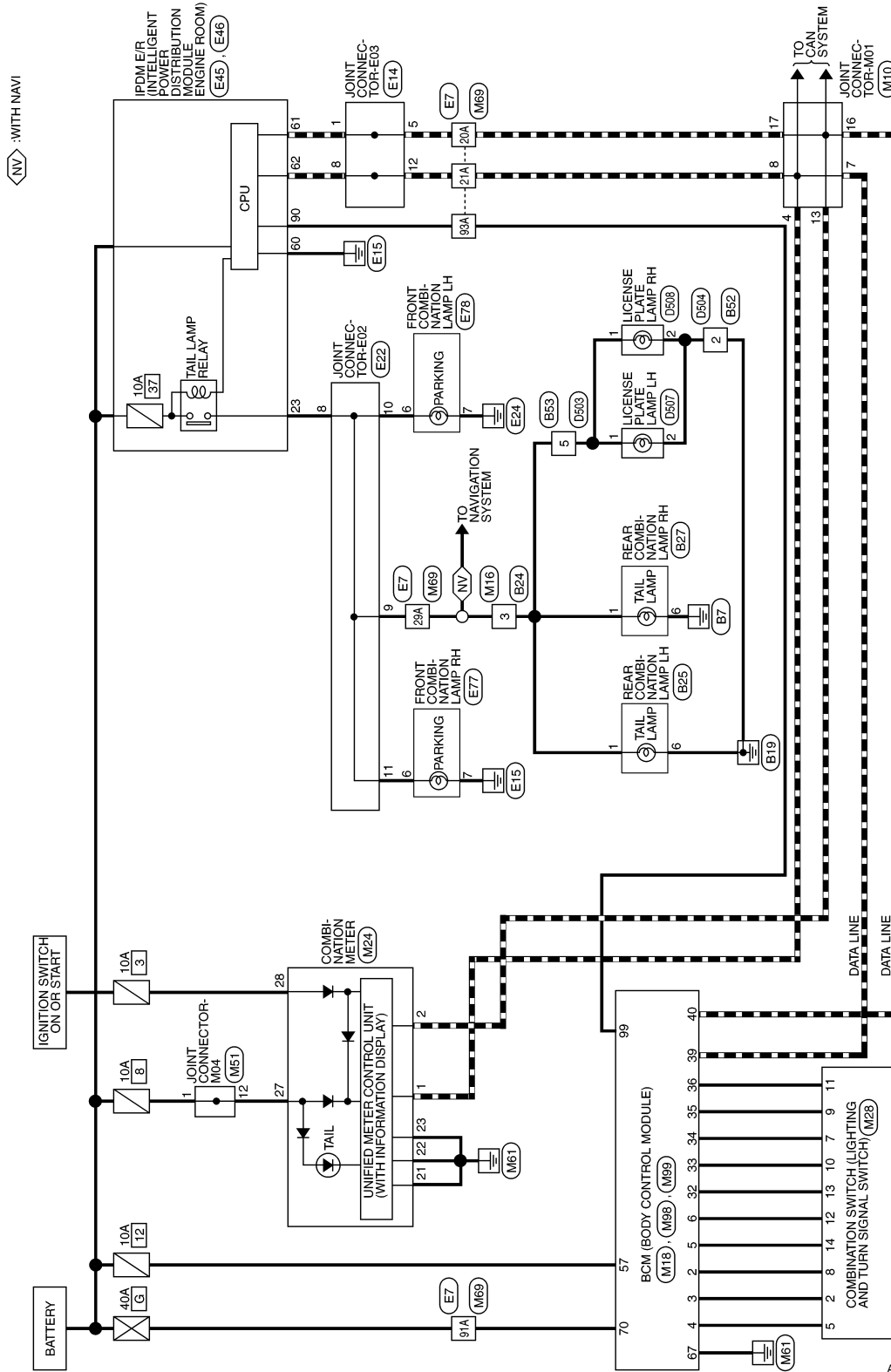
< WIRING DIAGRAM >

PARKING, LICENSE PLATE AND TAIL LAMPS

Wiring Diagram-With Daytime Light System

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PARKING, LICENSE PLATE AND TAIL LAMPS - WITH DAYTIME LIGHT SYSTEM



AALWA0636GB

PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

PARKING, LICENSE PLATE AND TAIL LAMPS CONNECTORS - WITH DAYTIME LIGHT SYSTEM

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name
4	L	-
7	L	-
8	L	-
13	P	-
16	P	-
17	P	-

Terminal No.	Color of Wire	Signal Name
3	R	-

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



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name
2	BR	COMBINATION SW INPUT 5
3	Y	COMBINATION SW INPUT 4
4	L	COMBINATION SW INPUT 3
5	G	COMBINATION SW INPUT 2
6	R	COMBINATION SW INPUT 1

Terminal No.	Color of Wire	Signal Name
32	P	COMBINATION SW OUTPUT 5
33	V	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	GR	COMBINATION SW OUTPUT 2
36	LG	COMBINATION SW OUTPUT 1
39	L	CAN-H
40	P	CAN-L

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



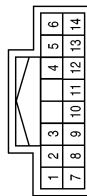
20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
----	----	----	----	----	----	----	----	----	----	----	---	---	---	---	---	---	---	---	---

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
21	B	GND (ILLUMINATION)
22	B	GND (POWER)
23	B	GND (CIRCUIT)
27	R/W	BAT
28	GR	IGN

PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

Connector No.	M28
Connector Name	COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	Y	-
5	L	-
7	W	-
8	BR	-

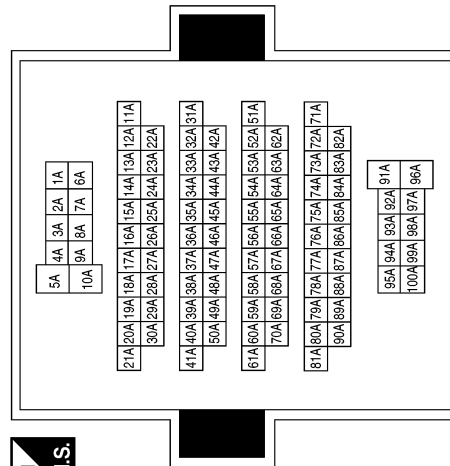
Terminal No.	Color of Wire	Signal Name
9	GR	-
10	V	-
11	LG	-
12	R	-
13	P	-
14	G	-

Connector No.	M51
Connector Name	JOINT CONNECTOR-M04
Connector Color	GRAY



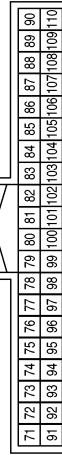
Terminal No.	Color of Wire	Signal Name
1	LG	-
12	R/W	-

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
20A	P	-
21A	L	-
29A	R	-
91A	G	-
93A	O	-

Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
98	O	IGN RELAY OUTPUT 1 (USM)

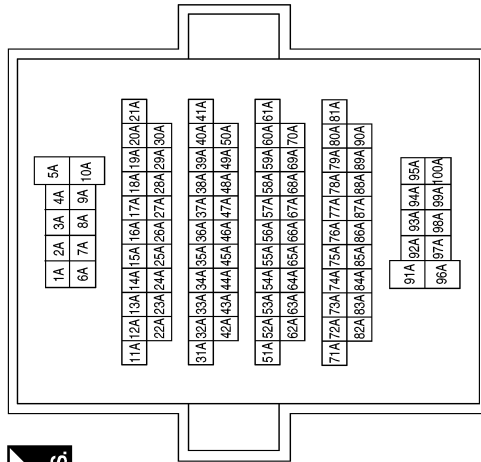
AALIA1403GB

PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
20A	P	—
21A	L	—
29A	R	—
91A	Y	—
93A	L	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

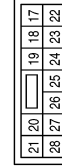


Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



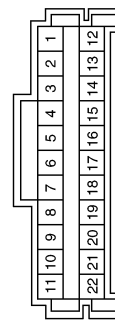
Terminal No.	Color of Wire	Signal Name
57	Y	BATTERY (FUSE)
67	B	GND
70	G	BATTERY (F/L)

Connector No.	E45
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
23	R	CLEARANCE

Connector No.	E22
Connector Name	JOINT CONNECTOR-E02
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
8	R	—
9	R	—
10	R	—
11	R	—

Connector No.	E14
Connector Name	JOINT CONNECTOR-E03
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	P	—
5	P	—
8	L	—
12	L	—

AALIA1404GB

PARKING, LICENSE PLATE AND TAIL LAMPS

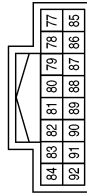
< WIRING DIAGRAM >

Connector No.	E77
Connector Name	FRONT COMBINATION LAMP RH (WITH DAYTIME LIGHT SYSTEM)
Connector Color	BLACK



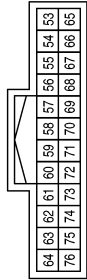
Terminal No.	Color of Wire	Signal Name
6	R	—
7	B	—

Connector No.	E47
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



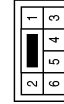
Terminal No.	Color of Wire	Signal Name
90	L	IGN SIGNAL

Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



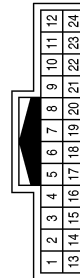
Terminal No.	Color of Wire	Signal Name
60	B	GND (SIGNAL)
61	P	CAN-L
62	L	CAN-H

Connector No.	B25
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	L	—
6	B	—

Connector No.	B24
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	L	—

Connector No.	E78
Connector Name	FRONT COMBINATION LAMP LH (WITH DAYTIME LIGHT SYSTEM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
6	R	—
7	B	—

AALIA1405GB

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PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

Connector No.	B27
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE

2	1
6	5
4	3



Terminal No.	Color of Wire	Signal Name
1	L	—
6	B	—

Connector No.	B52
Connector Name	WIRE TO WIRE
Connector Color	WHITE

4	3	2	1
---	---	---	---



Terminal No.	Color of Wire	Signal Name
2	B	—

Connector No.	B53
Connector Name	WIRE TO WIRE
Connector Color	WHITE

4	3	2	1
8	7	6	5



Terminal No.	Color of Wire	Signal Name
5	GR	—

Connector No.	D503
Connector Name	WIRE TO WIRE
Connector Color	WHITE

1	2	3	4
5	6	7	8



Terminal No.	Color of Wire	Signal Name
5	GR	—

Connector No.	D504
Connector Name	WIRE TO WIRE
Connector Color	WHITE

1	2	3	4
---	---	---	---



Terminal No.	Color of Wire	Signal Name
2	B	—

Connector No.	D507
Connector Name	LICENSE PLATE LAMP LH
Connector Color	BROWN

2	1
---	---



Terminal No.	Color of Wire	Signal Name
1	GR	—
2	B	—

AALIA1406GB

PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

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P

Connector No.	D508
Connector Name	LICENSE PLATE LAMP RH
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1	GR	-
2	B	-

AALIA1407GB

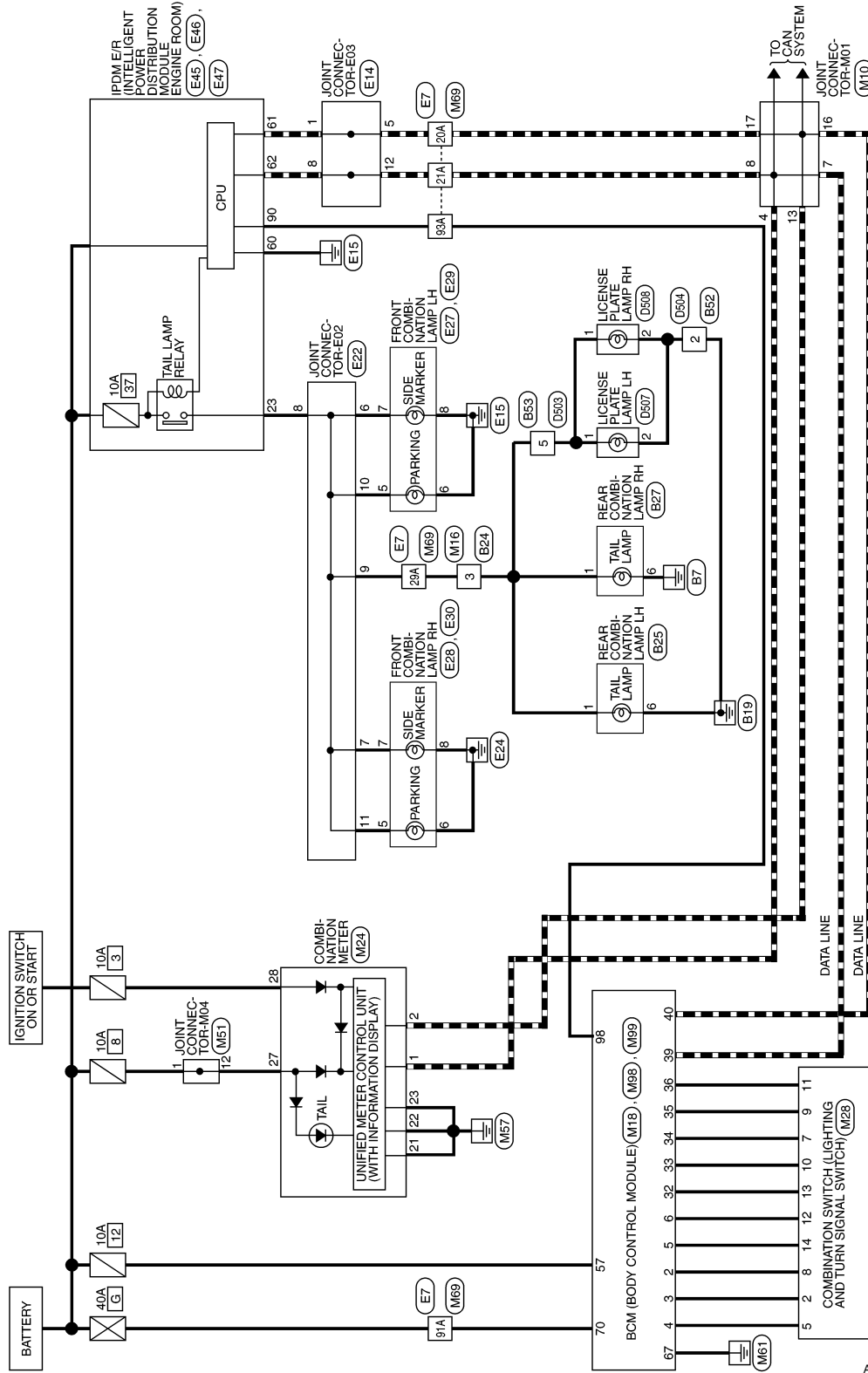
PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

Wiring Diagram-Without Daytime Light System

INFOID:000000009473007

PARKING, LICENSE PLATE AND TAIL LAMPS - WITHOUT DAYTIME LIGHT SYSTEM



AALWA0635GB

PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

PARKING, LICENSE PLATE AND TAIL LAMPS CONNECTORS - WITHOUT DAYTIME LIGHT SYSTEM

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Color	WHITE



12	11	10	9	8	7	6	5	4	3	2	1
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Terminal No.	Color of Wire	Signal Name
4	L	-
7	L	-
8	L	-
13	P	-
16	P	-
17	P	-

Terminal No.	Color of Wire	Signal Name
3	R	-

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



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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Terminal No.	Color of Wire	Signal Name
2	BR	COMBINATION SW INPUT 5
3	Y	COMBINATION SW INPUT 4
4	L	COMBINATION SW INPUT 3
5	G	COMBINATION SW INPUT 2
6	R	COMBINATION SW INPUT 1

Terminal No.	Color of Wire	Signal Name
32	P	COMBINATION SW OUTPUT 5
33	V	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	GR	COMBINATION SW OUTPUT 2
36	LG	COMBINATION SW OUTPUT 1
39	L	CAN-H
40	P	CAN-L

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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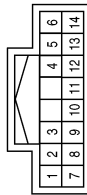
Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
21	B	GND (ILLUMINATION)
22	B	GND (POWER)
23	B	GND (CIRCUIT)
27	RW	BAT
28	GR	IGN

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PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

Connector No.	M28
Connector Name	COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	Y	-
5	L	-
7	W	-
8	BR	-

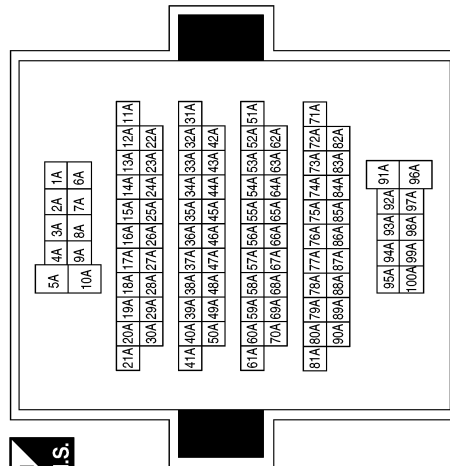
Terminal No.	Color of Wire	Signal Name
9	GR	-
10	V	-
11	LG	-
12	R	-
13	P	-
14	G	-

Connector No.	M51
Connector Name	JOINT CONNECTOR-M04
Connector Color	GRAY



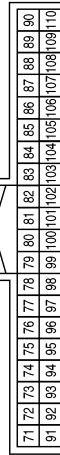
Terminal No.	Color of Wire	Signal Name
1	LG	-
12	RW	-

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
20A	P	-
21A	L	-
29A	R	-
91A	G	-
93A	O	-

Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



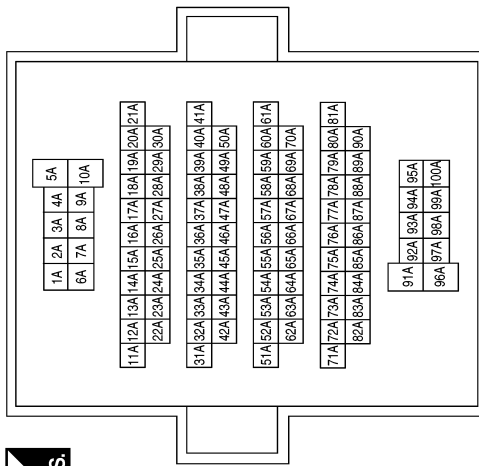
Terminal No.	Color of Wire	Signal Name
98	O	IGN RELAY OUTPUT 1 (USM)

PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
20A	P	—
21A	L	—
29A	R	—
91A	Y	—
93A	L	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



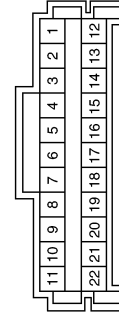
Terminal No.	Color of Wire	Signal Name
57	Y	BATTERY (FUSE)
67	B	GND
70	G	BATTERY (F/L)

Connector No.	E27
Connector Name	FRONT COMBINATION LAMP LH (WITHOUT DAYTIME LIGHT SYSTEM)
Connector Color	BLACK



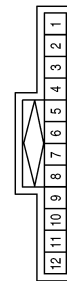
Terminal No.	Color of Wire	Signal Name
7	R	—
8	B	—

Connector No.	E22
Connector Name	JOINT CONNECTOR-E02
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	R	—
7	R	—
8	R	—
9	R	—
10	R	—
11	R	—

Connector No.	E14
Connector Name	JOINT CONNECTOR-E03
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	P	—
5	P	—
8	L	—
12	L	—

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PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

Connector No.	E30
Connector Name	FRONT COMBINATION LAMP RH (WITHOUT DAYTIME LIGHT SYSTEM)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
5	R	-
6	B	-

Connector No.	E29
Connector Name	FRONT COMBINATION LAMP LH (WITHOUT DAYTIME LIGHT SYSTEM)
Connector Color	GRAY



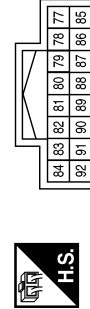
Terminal No.	Color of Wire	Signal Name
5	R	-
6	B	-

Connector No.	E28
Connector Name	FRONT COMBINATION LAMP RH (WITHOUT DAYTIME LIGHT SYSTEM)
Connector Color	BLACK



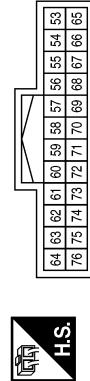
Terminal No.	Color of Wire	Signal Name
7	R	-
8	B	-

Connector No.	E47
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
90	L	IGN SIGNAL

Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
60	B	GND (SIGNAL)
61	P	CAN-L
62	L	CAN-H

Connector No.	E45
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
23	R	CLEARANCE

AALIA1399GB

PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

Connector No.	B27
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE



2	1
6	5
4	3

Terminal No.	Color of Wire	Signal Name
1	L	—
6	B	—

Connector No.	B25
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE



2	1
6	5
4	3

Terminal No.	Color of Wire	Signal Name
1	L	—
6	B	—

Connector No.	B24
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
3	L	—

Connector No.	D503
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4
5	6	7	8

Terminal No.	Color of Wire	Signal Name
5	GR	—

Connector No.	B53
Connector Name	WIRE TO WIRE
Connector Color	WHITE



4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name
5	GR	—

Connector No.	B52
Connector Name	WIRE TO WIRE
Connector Color	WHITE



4	3	2	1
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Terminal No.	Color of Wire	Signal Name
2	B	—

AALIA1400GB

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PARKING, LICENSE PLATE AND TAIL LAMPS

< WIRING DIAGRAM >

Connector No.	D508
Connector Name	LICENSE PLATE LAMP RH
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1	GR	-
2	B	-

Connector No.	D507
Connector Name	LICENSE PLATE LAMP LH
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1	GR	-
2	B	-

Connector No.	D504
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	B	-

AALIA1401GB

STOP LAMP

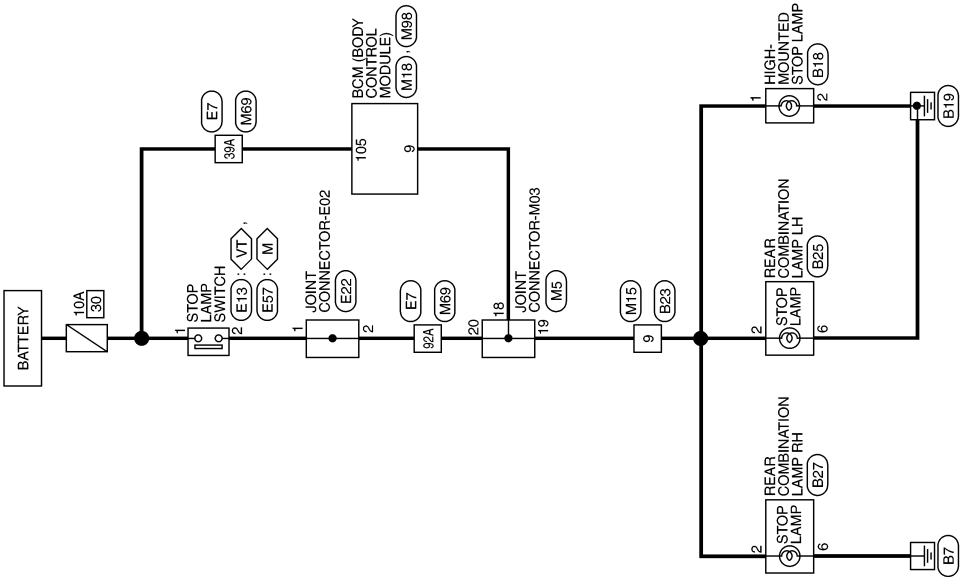
< WIRING DIAGRAM >

STOP LAMP

Wiring Diagram

INFOID:000000009473003

M : WITH M/T
VT : WITH CVT



STOP LAMP

AALWA0630GB

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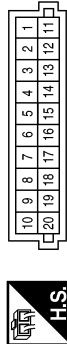
EXL

STOP LAMP

< WIRING DIAGRAM >

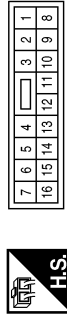
STOP LAMP CONNECTORS

Connector No.	M5
Connector Name	JOINT CONNECTOR-M03
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
18	LG	—
19	R	—
20	R	—

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
9	R	—

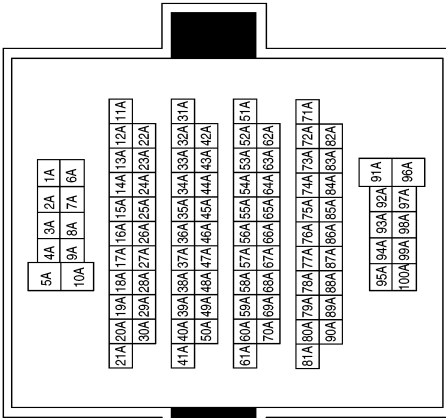
Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
9	LG	BRAKE SW 1

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
39A	SB	—
92A	R	—

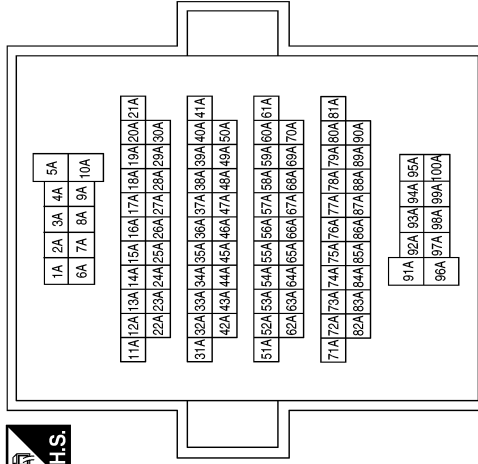
Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110

Terminal No.	Color of Wire	Signal Name
105	SB	BRAKE SW2

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
39A	SB	—
92A	LG	—

STOP LAMP

< WIRING DIAGRAM >

Connector No.	E57
Connector Name	STOP LAMP SWITCH (WITH M/T)
Connector Color	BLACK



2	1
---	---

Terminal No.	Color of Wire	Signal Name
1	SB	-
2	LG	-

Connector No.	E22
Connector Name	JOINT CONNECTOR-E02
Connector Color	WHITE



11	10	9	8	7	6	5	4	3	2	1
22	21	20	19	18	17	16	15	14	13	12

Terminal No.	Color of Wire	Signal Name
1	LG	-
2	LG	-

Connector No.	E13
Connector Name	STOP LAMP SWITCH (WITH CVT)
Connector Color	WHITE



3	4
1	2

Terminal No.	Color of Wire	Signal Name
1	SB	-
2	LG	-

Connector No.	B25
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE



2	1
6	5
4	3

Terminal No.	Color of Wire	Signal Name
2	R	-
6	B	-

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16					

Terminal No.	Color of Wire	Signal Name
9	R	-

Connector No.	B18
Connector Name	HIGH-MOUNTED STOP LAMP
Connector Color	BLACK



2	1
---	---

Terminal No.	Color of Wire	Signal Name
1	R	-
2	B	-

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STOP LAMP

< WIRING DIAGRAM >

Connector No.	B27
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	R	-
6	B	-

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BACK-UP LAMP

< WIRING DIAGRAM >

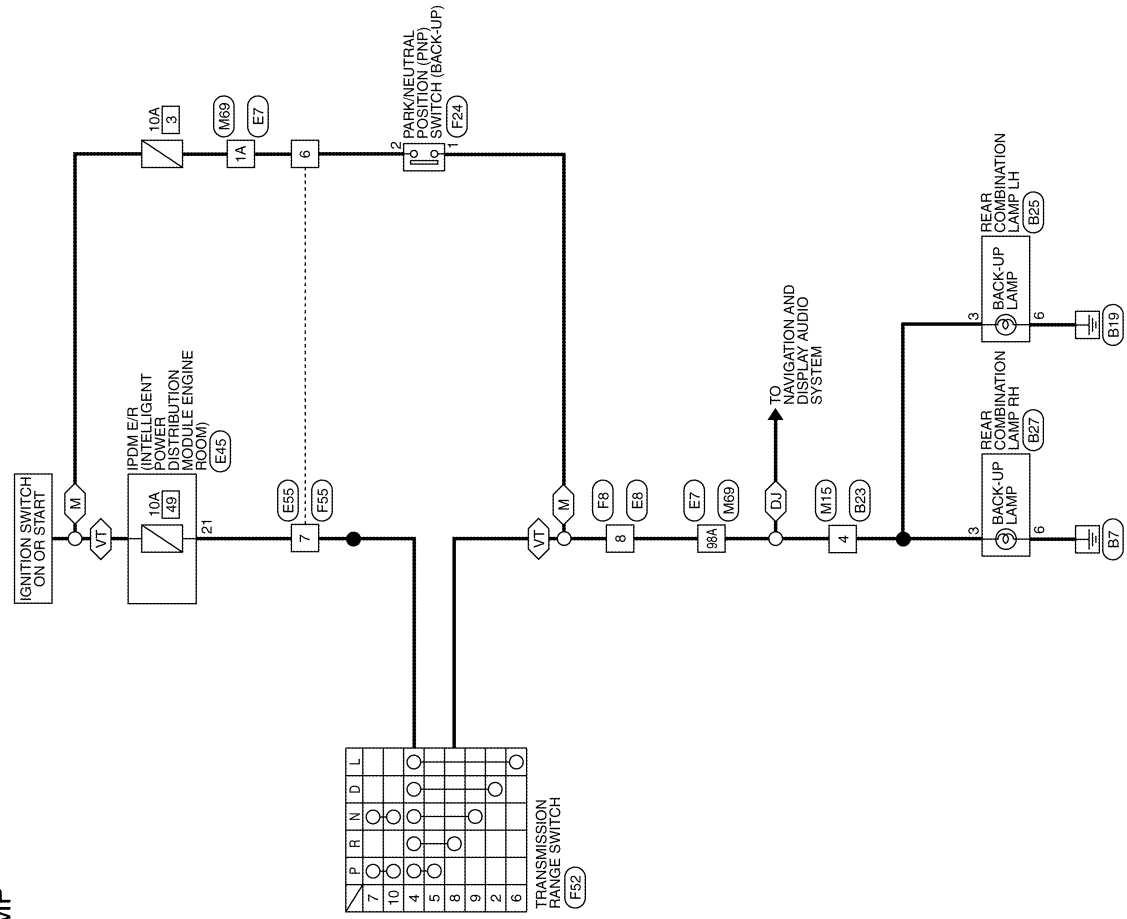
BACK-UP LAMP

Wiring Diagram

INFOID:000000009473004

BACK-UP LAMP

DJ : WITH NAVIGATION AND DISPLAY AUDIO SYSTEM
M : WITH M/T
VT : WITH CVT



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EXL

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BACK-UP LAMP

< WIRING DIAGRAM >

BACK-UP LAMP CONNECTORS

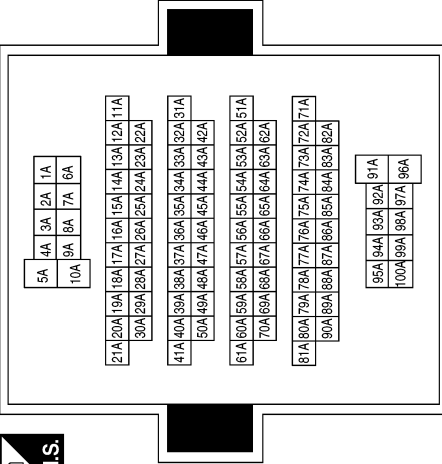
Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE

7	6	5	4	3	2	1		
16	15	14	13		11	10	9	8



Terminal No.	Color of Wire	Signal Name
4	SB	—

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1A	GR	—
98A	SB	—

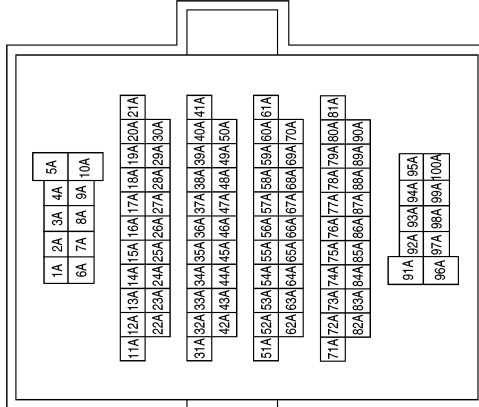
Connector No.	E8
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
8	SB	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1A	GR	—
98A	SB	—

Connector No.	E55
Connector Name	WIRE TO WIRE
Connector Color	GRAY



1	2	3	4	5		
6	7	8	9	10	11	12

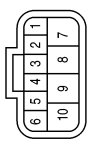
Terminal No.	Color of Wire	Signal Name
6	GR	—
7	R	—

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BACK-UP LAMP

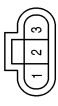
< WIRING DIAGRAM >

Connector No.	F52
Connector Name	TRANSMISSION RANGE SWITCH
Connector Color	BLACK



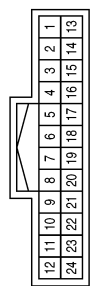
Terminal No.	Color of Wire	Signal Name
4	R/W	-
8	O	-

Connector No.	F24
Connector Name	PARK/NEUTRAL POSITION (PNP) SWITCH
Connector Color	GREEN



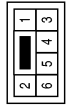
Terminal No.	Color of Wire	Signal Name
1	O	-
2	R	-

Connector No.	F8
Connector Name	WIRE TO WIRE
Connector Color	WHITE



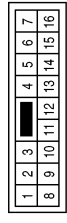
Terminal No.	Color of Wire	Signal Name
8	O	-

Connector No.	B25
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE



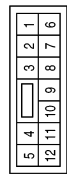
Terminal No.	Color of Wire	Signal Name
3	Y/L	-
6	B	-

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	Y/L	-

Connector No.	F55
Connector Name	WIRE TO WIRE
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
6	R	-
7	R	-

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BACK-UP LAMP

< WIRING DIAGRAM >

Connector No.	B27
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE

2	1
6	5 4 3



Terminal No.	Color of Wire	Signal Name
3	Y/L	-
6	B	-

AALIA1452GB

HEADLAMP AIMING SYSTEM (MANUAL)

< WIRING DIAGRAM >

HEADLAMP AIMING SYSTEM - MANUAL CONNECTORS

Connector No.	M5
Connector Name	JOINT CONNECTOR-M03
Connector Color	BROWN



10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE



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



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
2	O	-
7	P	-

Terminal No.	Color of Wire	Signal Name
7	L	-
8	L	-
16	P	-
17	P	-

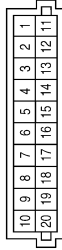
Terminal No.	Color of Wire	Signal Name
2	BR	COMBINATION SW INPUT 5
3	Y	COMBINATION SW INPUT 4
4	L	COMBINATION SW INPUT 3
5	G	COMBINATION SW INPUT 2
6	R	COMBINATION SW INPUT 1
32	P	COMBINATION SW OUTPUT 5
33	V	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	GR	COMBINATION SW OUTPUT 2
36	LG	COMBINATION SW OUTPUT 1
39	L	CAN-H
40	P	CAN-L

AALIA1375GB

HEADLAMP AIMING SYSTEM (MANUAL)

< WIRING DIAGRAM >

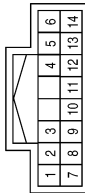
Connector No.	M51
Connector Name	JOINT CONNECTOR-M04
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
8	Y	—
10	W	—

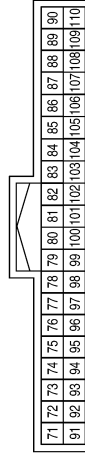
Terminal No.	Color of Wire	Signal Name
5	L	—
7	W	—
8	BR	—
9	GR	—
10	V	—
11	LG	—
12	R	—
13	P	—
14	G	—

Connector No.	M28
Connector Name	COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	Y	—

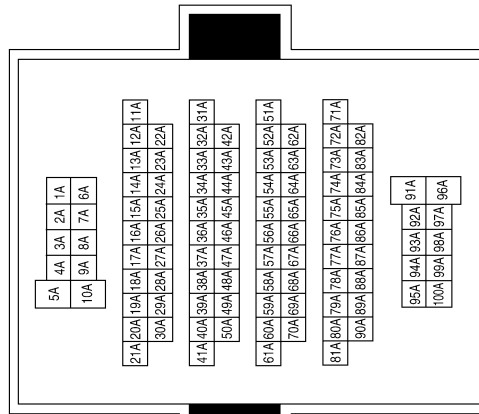
Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
98	O	IGN RELAY OUTPUT 1 (USM)

Terminal No.	Color of Wire	Signal Name
2A	W	—
15A	R	—
16A	P	—
20A	P	—
21A	L	—
91A	G	—
93A	O	—

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



AALIA1376GB

A B C D E F G H I J K EXL M N O P

HEADLAMP AIMING SYSTEM (MANUAL)

< WIRING DIAGRAM >

Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name
57	Y	BATTERY (FUSE)
67	B	GND
70	G	BATTERY (F/L)

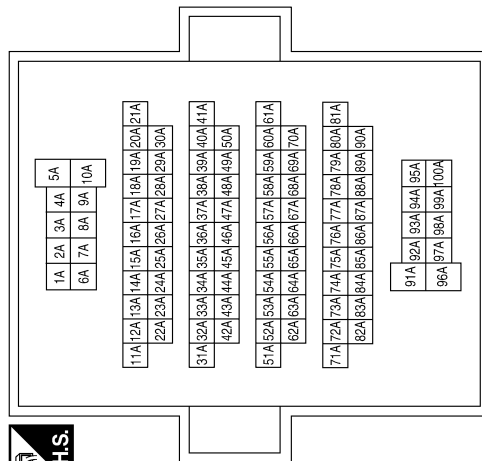
Connector No.	M105
Connector Name	HEADLAMP AIMING SWITCH
Connector Color	WHITE



4	3	2	1
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Terminal No.	Color of Wire	Signal Name
1	B	-
2	Y	-
3	R	-
4	B	-

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	E14
Connector Name	JOINT CONNECTOR-E03
Connector Color	BLUE



12	11	10	9	8	7	6	5	4	3	2	1
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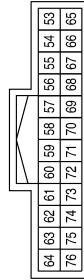
Terminal No.	Color of Wire	Signal Name
1	P	-
5	P	-
8	L	-
12	L	-

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HEADLAMP AIMING SYSTEM (MANUAL)

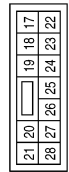
< WIRING DIAGRAM >

Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



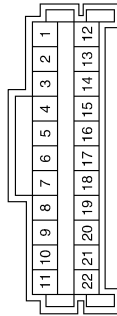
Terminal No.	Color of Wire	Signal Name
60	B	GND (SIGNAL)
61	P	CAN-L
62	L	CAN-H

Connector No.	E45
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
22	P	TAIL/ILLUMI

Connector No.	E22
Connector Name	JOINT CONNECTOR-E02
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
12	Y	-
13	Y	-
14	Y	-
15	W	-
16	W	-
17	W	-

Connector No.	E66
Connector Name	FRONT COMBINATION LAMP LH (HEADLAMP AIMING MOTOR)
Connector Color	BLACK



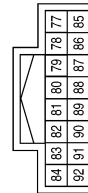
Terminal No.	Color of Wire	Signal Name
1	B	-
2	W	-
3	Y	-

Connector No.	E65
Connector Name	FRONT COMBINATION LAMP RH (HEADLAMP AIMING MOTOR)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	B	-
2	W	-
3	Y	-

Connector No.	E47
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
90	L	IGN SIGNAL

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A B C D E F G H I J K EXL M N O P

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

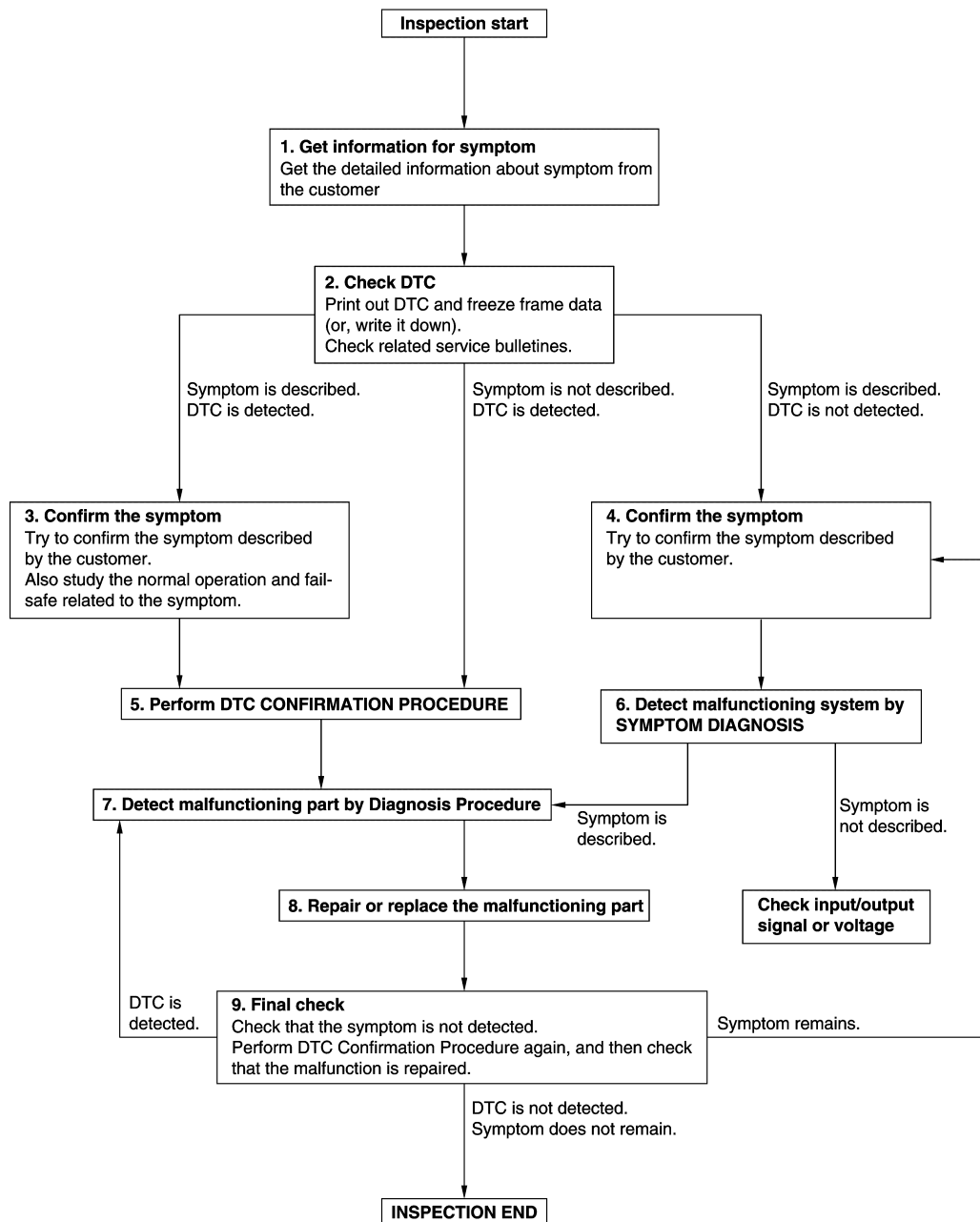
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000009472882

OVERALL SEQUENCE



JMKIA8652GB

DETAILED FLOW

Revision: April 2013

EXL-70

2014 Note

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

1. Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).
2. Check operation condition of the function that is malfunctioning.

>> GO TO 2.

2.CHECK DTC

1. Check DTC.
2. Perform the following procedure if DTC is detected.
 - Record DTC and freeze frame data (Print them out using CONSULT.)
 - Erase DTC.
 - Study the relationship between the cause detected by DTC and the symptom described by the customer.
3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

Symptom is described, DTC is detected>>GO TO 3.

Symptom is described, DTC is not detected>>GO TO 4.

Symptom is not described, DTC is detected>>GO TO 5.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

Also study the normal operation and fail-safe related to the symptom.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time. If two or more DTCs are detected, refer to DTC INSPECTION PRIORITY CHART, and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.

If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.

NO >> Check according to [GI-41, "Intermittent Incident"](#).

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

Is the symptom described?

YES >> GO TO 7.

NO >> Monitor input data from related sensors or check voltage of related module terminals using CONSULT.

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to [GI-41, "Intermittent Incident"](#).

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnosis Procedure again after repair and replacement.
3. Check DTC. If DTC is detected, erase it.

>> GO TO 9.

9. FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.

When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 7.

YES-2 >> Symptom remains: GO TO 4.

NO >> Before returning the vehicle to the customer, always erase DTC.

HEADLAMP (HI) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

HEADLAMP (HI) CIRCUIT

Component Function Check

INFOID:0000000009472883

1.CHECK HEADLAMP (HI) OPERATION

CONSULT ACTIVE TEST

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

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

NOTE:

ON/OFF is repeated 1 second each.

Is the inspection result normal?

- YES >> Headlamp (HI) circuit is normal.
NO >> Refer to [EXL-73, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000009472884

1.CHECK HEADLAMP (HI) OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

(+)			(-)	Test item		Voltage (Approx.)
IPDM E/R						
Connector		Terminal				
RH	E45	25	Ground	EXTERNAL LAMPS	Hi	Battery voltage
					Off	0 V
LH		27			Hi	Battery voltage
					Off	0 V

Is the inspection result normal?

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

2.CHECK HEADLAMP (HI) OPEN CIRCUIT

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

IPDM E/R			Headlamp high		Continuity
Connector		Terminal	Connector	Terminal	
RH	E45	27	E26 (without DTRL) E73 (with DTRL)	1	Yes
LH		25	E25 (without DTRL) E74 (with DTRL)		

Is the inspection result normal?

HEADLAMP (HI) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- YES >> GO TO 5.
NO >> Repair or replace harness.

3.CHECK HEADLAMP (HI) FUSE

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

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

Is the inspection result normal?

- YES >> Replace IPDM E/R.
NO >> GO TO 4.

4.CHECK HEADLAMP (HI) SHORT CIRCUIT

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
RH	E45	27		No
LH		25		

Is the inspection result normal?

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

5.CHECK HEADLAMP (HI) GROUND OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect headlamp high connector.
3. Check continuity between headlamp high harness connector and ground.

Headlamp high			Ground	Continuity
Connector		Terminal		
RH	E26 (with DTRL) E73 (without DTRL)	2		Yes
LH	E25 (without DTRL) E74 (with DTRL)			

Is the inspection result normal?

- YES >> Replace headlamp (HI) bulb. (Bulb socket is abnormal.)
NO >> Repair or replace harness.

HEADLAMP (LO) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

HEADLAMP (LO) CIRCUIT

Component Function Check

INFOID:000000009472887

1.CHECK HEADLAMP (LO) OPERATION

CONSULT ACTIVE TEST

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

Lo : Headlamp (LO) ON

Off : Headlamp (LO) OFF

Is the inspection result normal?

YES >> Headlamp (LO) is normal.

NO >> Refer to [EXL-75, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009472888

1.CHECK HEADLAMP (LO) OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

(+)			(-)	Test item		Voltage (Approx.)
IPDM E/R						
Connector		Terminal				
RH	E44	16	Ground	EXTERNAL LAMPS	Lo	Battery voltage
					Off	0 V
LH		14			Lo	Battery voltage
					Off	0 V

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK HEADLAMP (LO) OPEN CIRCUIT

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

IPDM E/R		Headlamp low		Continuity
Connector	Terminal	Connector	Terminal	
RH	E44	E26 (without DTRL) E73 (with DTRL)	3	Yes
LH		E25 (without DTRL) E73 (with DTRL)		

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

3.CHECK HEADLAMP (LO) FUSE

HEADLAMP (LO) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

Unit	Lotion	Fuse No.	Capacity
Headlamp LO (RH)	IPDM E/R	#40	15 A
Headlamp LO (LH)		#41	

Is the inspection result normal?

YES >> Replace IPDM E/R.

NO >> GO TO 4.

4.CHECK HEADLAMP (LO) SHORT CIRCUIT

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
RH	E44	16		No
LH		14		

Is the inspection result normal?

YES >> Replace fuse. (Replace IPDM E/R if the fuse is blown again.)

NO >> Repair or replace harness. And then replace the fuse.

5.CHECK HEADLAMP (LO) GROUND OPEN CIRCUIT

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

Headlamp low			Ground	Continuity
Connector		Terminal		
RH	E26 (without DTRL) E73 (with DTRL)	2		Yes
LH	E25 (without DTRL) E74 (with DTRL)			

Is the inspection result normal?

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

NO >> Repair or replace harness.

HEADLAMP AIMING SYSTEM (MANUAL)

< DTC/CIRCUIT DIAGNOSIS >

HEADLAMP AIMING SYSTEM (MANUAL)

Description

INFOID:000000009667167

The manual headlamp aiming system uses a headlamp aiming switch to adjust the axis of the headlamp aiming motor. The headlamp aiming switch has four settings, each with a different resistance value. The headlamp aiming motor adjusts to the proper axis based off the position of the headlamp aiming switch.

Diagnosis Procedure

INFOID:000000009667168

Regarding Wiring Diagram information, refer to [EXL-65. "Wiring Diagram"](#).

1.CHECK HEADLAMP AIMING MOTOR POWER SUPPLY

1. Disconnect headlamp aiming motor harness connectors.
2. Turn ignition switch ON.
3. Check voltage between headlamp aiming motor harness connectors and ground.

Headlamp aiming motor		—	Voltage
Connector	Terminal		(Approx.)
E65 (RH)	3	Ground	Battery voltage
E66 (LH)			

Is the inspection normal?

YES >> GO TO 2

NO >> Check the following:

- 10A fuse No. 5 located in the fuse block (J/B).
- Harness for open or short between headlamp aiming motor and fuse block (JB).

2.CHECK HEADLAMP AIMING SWITCH SIGNAL FOR OPEN OR SHORT CIRCUIT

1. Disconnect headlamp aiming switch connector M140.
2. Check continuity between the headlamp aiming switch harness connector and headlamp aiming motor harness connector.

Headlamp aiming switch		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
M105	3	LH	E66	Yes
		RH	E65	

3. Check continuity between the headlamp aiming switch harness connector and ground.

Headlamp aiming switch		—	Continuity
Connector	Terminal		
M105	3	Ground	No

Are continuity results as specified?

YES >> GO TO 3

NO >> Repair the harness or connector.

3.CHECK HEADLAMP AIMING MOTOR GROUND CIRCUIT

Check continuity between headlamp aiming motor and ground.

Front combination lamp		-	Continuity
Connector	Terminal		

HEADLAMP AIMING SYSTEM (MANUAL)

< DTC/CIRCUIT DIAGNOSIS >

LH	E66	1	Ground	Yes
RH	E65			

Does continuity exist?

YES >> GO TO 4

NO >> Repair the harness or connector.

4.CHECK HEADLAMP AIMING SWITCH

Check continuity between the headlamp aiming switch terminals 1 and 2 in each switch position.

Component	Terminal		Switch Position	Continuity
Headlamp aiming switch	1	3	0	604 ohms
			1	324 ohms
			2	191 ohms
			3	130 ohms

Are continuity results as specified?

YES >> GO TO 5

NO >> Replace the headlamp aiming switch.

5.CHECK HEADLAMP AIMING SWITCH GROUND CIRCUIT

Check continuity between headlamp aiming switch harness connector and ground.

Connector	Terminal	—	Continuity
M105	2	Ground	Yes

Is continuity present?

YES >> Inspect headlamp aiming motors.

NO >> Repair harness or connector.

DAYTIME RUNNING LIGHT RELAY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DAYTIME RUNNING LIGHT RELAY CIRCUIT

Component Function Check

INFOID:000000009472889

1.CHECK DAYTIME RUNNING LIGHT OPERATION

CONSULT ACTIVE TEST

1. Select "DAYTIME RUNNING LIGHT" of BCM (HEADLAMP) active test item.
2. With operating the test items, check that daytime running light operation.

On : Daytime running light ON
Off : Daytime running light OFF

Is the inspection result normal?

- YES >> Daytime running light relay circuit is normal.
NO >> Refer to [EXL-79, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009472890

1.CHECK DAYTIME RUNNING LIGHT RELAY FUSE

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

Unit	Fuse No.	Capacity
Daytime running light relay	#37	10 A

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace the fuse after repairing the applicable circuit.

2.CHECK DAYTIME RUNNING LIGHT RELAY POWER SUPPLY

1. Remove daytime running light relay.
2. Check voltage between daytime running light relay harness connector and ground.

(+)		(-)	Voltage (Approx.)
Daytime running light relay			
Connector	Terminal		
E67	2	Ground	Battery voltage
	5		

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK DAYTIME RUNNING LIGHT RELAY

Check daytime running light relay. Refer to [EXL-80, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace daytime running light relay.

4.CHECK DAYTIME RUNNING LIGHT RELAY CONTROL SIGNAL OUTPUT

CONSULT ACTIVE TEST

1. Install daytime running light relay.
2. Turn ignition switch ON.
3. Select "DAYTIME RUNNING LIGHT" of BCM (HEADLAMP) active test item.
4. With operating the test item, check voltage between IPDM E/R harness connector and ground.

DAYTIME RUNNING LIGHT RELAY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Test item		Voltage (Approx.)
IPDM E/R					
Connector	Terminal				
E45	69	Ground	DAYTIME RUN- NING LIGHT	On	0 V
				Off	Battery voltage

Is the inspection result normal?

YES >> Daytime running light relay circuit is OK.

NO-1 (Fixed at 0 V)>>GO TO 5.

NO-2 (Fixed at battery voltage) >>Replace IPDM E/R.

5.CHECK DAYTIME RUNNING LIGHT RELAY CONTROL SIGNAL OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Remove daytime running light relay.
3. Disconnect IPDM E/R harness connector.
4. Check continuity between IPDM E/R harness connector and daytime running light relay harness connector.

IPDM E/R		Daytime running light relay		Continuity
Connector	Terminal	Connector	Terminal	
E45	69	E67	1	Yes

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK DAYTIME RUNNING LIGHT RELAY CONTROL SIGNAL SHORT CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E45	69		No

Is the inspection result normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace harness.

Component Inspection

INFOID:000000009472891

1.CHECK DAYTIME RUNNING LIGHT RELAY

1. Turn the ignition switch OFF.
2. Remove daytime running light relay.
3. Apply battery voltage to daytime running light relay- between terminals 1 and 2.
4. Check continuity between daytime running light relay terminals.

Daytime running lamp relay		Condition		Continuity
Connector	Terminal			
E67	3	Voltage	Apply	Yes
	5		Not Apply	No

Is the inspection result normal?

YES >> Daytime running light relay is normal.

NO >> Replace daytime running light relay.

PARKING LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

PARKING LAMP CIRCUIT

Component Function Check

INFOID:000000009472892

1.CHECK PARKING LAMP OPERATION

CONSULT ACTIVE TEST

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

TAIL : Parking lamp ON
Off : Parking lamp OFF

Is the inspection result normal?

- YES >> Parking lamp circuit is normal.
NO >> Refer to [EXL-81, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009472893

1.CHECK PARKING LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
• Parking lamp • Front side marker lamp	IPDM E/R	#37	10 A

Is the inspection result normal?

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

2.CHECK PARKING LAMP SHORT CIRCUIT

1. Disconnect the following connectors.
 - IPDM E/R
 - Front combination lamp
 - Front side marker lamp
2. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E45	23		No

Is the inspection result normal?

- YES >> Replace fuse. (Replace IPDM E/R if fuse is blown again.)
NO >> Repair or replace harness. And then replace the fuse.

3.CHECK PARKING LAMP BULB

Check applicable lamp bulb.

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace bulb.

4.CHECK PARKING LAMP OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

PARKING LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

(+)			(-)	Test item		Voltage (Approx.)
IPDM E/R						
Connector		Terminal				
RH	E45	23	Ground	EXTERNAL LAMPS	TAIL	Battery voltage
					Off	0 V
LH					TAIL	Battery voltage
					Off	0 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace IPDM E/R.

5.CHECK PARKING LAMP OPEN CIRCUIT

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

IPDM E/R		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E45	23	E28 (Without DTRL)	Yes
LH			E27 (Without DTRL)	
RH			E30 (Without DTRL)	
LH			E29 (Without DTRL)	
RH			E77 (With DTRL)	
LH			E78 (With DTRL)	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK PARKING LAMP GROUND OPEN CIRCUIT

Check continuity between front combination lamp harness connector and ground.

Front combination lamp			Ground	Continuity
Connector		Terminal		Yes
RH	E28 (Without DTRL)	8		
LH	E27 (Without DTRL)	8		
RH	E30 (Without DTRL)	6		
LH	E29 (Without DTRL)	6		
RH	E77 (With DTRL)	7		
LH	E78 (With DTRL)	7		

Is the inspection result normal?

YES >> Check corresponding bulb socket and harness. Repair or replace if necessary.

NO >> Repair or replace harness.

TAIL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TAIL LAMP CIRCUIT

Component Function Check

INFOID:000000009472896

1.CHECK TAIL LAMP OPERATION

CONSULT ACTIVE TEST

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

TAIL : Tail Lamp ON
Off : Tail lamp OFF

Is the inspection result normal?

- YES >> Tail lamp circuit is normal.
NO >> Refer to [EXL-83, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009472897

1.CHECK TAIL LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
• Tail lamp • license plate lamp	IPDM E/R	#37	10 A

Is the inspection result normal?

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

2.CHECK TAIL LAMP SHORT CIRCUIT

1. Disconnect IPDM E/R connector, licence plate lamp connector and rear combination lamp connector.
2. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E45	23		No

Is the inspection result normal?

- YES >> Replace fuse. (Replace IPDM E/R if the fuse is blown again.)
NO >> Repair or replace harness. And then replace the fuse.

3.CHECK TAIL LAMP BULB

Check applicable lamp bulb.

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace bulb.

4.CHECK TAIL LAMP OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

TAIL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Test item		Voltage (Approx.)
IPDM E/R					
Connector	Terminal				
E45	23	Ground	EXTERNAL LAMPS	TAIL	Battery voltage
				Off	0 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace IPDM E/R.

5.CHECK TAIL LAMP OPEN CIRCUIT

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

IPDM E/R		Rear combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E45	B27	1	Yes
LH		B25		

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK TAIL LAMP GROUND OPEN CIRCUIT

Check continuity between rear combination lamp harness connector and ground.

Rear combination lamp		Ground	Continuity
Connector	Terminal		
RH	B27		Yes
LH	B25	6	

Is the inspection result normal?

YES >> Check corresponding bulb socket and harness. Repair or replace if necessary.

NO >> Repair or replace harness.

LICENSE PLATE LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

LICENSE PLATE LAMP CIRCUIT

Component Function Check

INFOID:000000009472898

1.CHECK TAIL LAMP OPERATION

Check that the tail lamp is turned ON.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check tail lamp circuit. Refer to [EXL-83, "Component Function Check"](#).

2.CHECK LICENSE PLATE LAMP OPERATION

CONSULT ACTIVE TEST

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

2. With operating the lighting switch, check that the license plate lamp is turned ON.

TAIL : License plate lamp ON

Off : License plate lamp OFF

Is the inspection result normal?

YES >> License plate lamp circuit is normal.

NO >> Refer to [EXL-85, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009472899

1.CHECK LICENSE PLATE LAMP BULB

Check the applicable lamp bulb.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace bulb.

2.CHECK LICENSE PLATE LAMP OPEN CIRCUIT

1. Turn ignition switch OFF.

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

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

IPDM E/R			License plate lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	E45	23	D508	1	Yes
LH			D507		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK LICENSE PLATE LAMP GROUND OPEN CIRCUIT

Check continuity between license plate lamp harness connector and ground.

License plate lamp			Ground	Continuity
Connector		Terminal		
RH	D508	2		Yes
LH				

Is the inspection result normal?

YES >> Check corresponding bulb socket and harness. Repair or replace if necessary.

NO >> Repair or replace harness.

TURN SIGNAL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TURN SIGNAL LAMP CIRCUIT

Component Function Check

INFOID:000000009472900

1.CHECK TURN SIGNAL LAMP

ⓅCONSULT ACTIVE TEST

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

LH : Turn signal lamps (LH) ON

RH : Turn signal lamps (RH) ON

Off : Turn signal lamps OFF

Is the inspection result normal?

YES >> Turn signal lamp circuit is normal.

NO >> Refer to [EXL-86, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009472901

1.CHECK TURN SIGNAL LAMP

ⓅCONSULT ACTIVE TEST

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

LH : Turn signal lamps (LH) ON

RH : Turn signal lamps (RH) ON

Off : Turn signal lamps OFF

Which turn signal lamp does not turn ON?

Side turn signal lamp>>GO TO 3.

Other than side turn signal lamp>>GO TO 2.

2.CHECK TURN SIGNAL LAMP BULB

Check the applicable lamp bulb.

Is the inspection result normal?

YES >> GO TO 3.

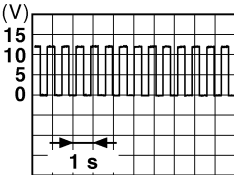
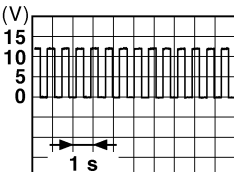
NO >> Replace bulb.

3.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

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

TURN SIGNAL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

(+) BCM		(-)	Condition	Voltage (Approx.)	
Connector	Terminal				
LH	M99	Ground	Turn signal switch	LH	
				OFF	0 V
RH	61			RH	
				OFF	0 V

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 5.

4.CHECK TURN SIGNAL LAMP OPEN CIRCUIT

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

Front turn signal lamp

BCM		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	M99	E30 (Without DTRL)	4	Yes
LH		E29 (Without DTRL)		
RH		E76 (With DTRL)		
LH		E75 (With DTRL)		

Rear turn signal lamp

BCM		Rear combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	M99	B27	4	Yes
LH		B25		

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

5.CHECK TURN SIGNAL LAMP SHORT CIRCUIT

Check continuity between BCM harness connector and ground.

TURN SIGNAL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

BCM			Ground	Continuity
Connector		Terminal		No
RH	M99	61		
LH		60		

Is the inspection result normal?

YES >> (When lamp other than side turn signal lamp does not turn ON) Check each bulb socket for internal short circuit, and if check result is normal, replace BCM. Refer to [BCS-67, "Removal and Installation"](#).

NO >> Repair or replace harness.

6.CHECK TURN SIGNAL LAMP GROUND OPEN CIRCUIT

Check continuity between BCM harness connector and front combination lamp, door mirror or rear combination lamp and ground.

Front turn signal lamp

Front combination lamp			Ground	Continuity
Connector		Terminal		Yes
RH	E30 (Without DTRL)	6		
LH	E29 (Without DTRL)			
RH	E76 (With DTRL)	5		
LH	E75 (With DTRL)			

Rear turn signal lamp

Rear combination lamp			Ground	Continuity
Connector		Terminal		Yes
RH	B27	6		
LH	B25			

Is the inspection result normal?

YES >> Check corresponding bulb socket and harness. Repair or replace if necessary.

NO >> Repair or replace harness.

FRONT FOG LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

FRONT FOG LAMP CIRCUIT

Component Function Check

INFOID:000000009486641

1.CHECK FRONT FOG LAMP OPERATION

☒ WITHOUT CONSULT

1. Start IPDM E/R auto active test. Refer to [PCS-9, "Diagnosis Description"](#).
2. Check that the front fog lamp is turned ON.

☐ CONSULT

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

FOG : Front fog lamp ON

OFF : Front fog lamp OFF

Is the front fog lamp turned ON?

- YES >> Front fog lamp circuit is normal.
NO >> Refer to [EXL-89, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009486642

Regarding Wiring Diagram information, refer to [EXL-32, "Wiring Diagram"](#).

1.CHECK FRONT FOG LAMP FUSE

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

Unit	Fuse No.	Capacity
Front fog lamp	31	15 A

Is the fuse blown?

- YES >> GO TO 2.
NO >> Replace the fuse after repairing the affected circuit.

2.CHECK FOG LAMP BULB

Check the applicable fog 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 3.
NO >> Replace the bulb.

3.CHECK FRONT FOG LAMP OUTPUT VOLTAGE

☐ CONSULT ACTIVE TEST

1. Turn ignition switch OFF.
2. Disconnect front fog lamp connector.
3. Turn ignition switch ON.
4. Select EXTERNAL LAMPS of IPDM E/R active test item.
5. While operating the fog lamps, check voltage between front fog lamp harness connector and ground.

(+)		(-)	Test item	Voltage (Approx.)
Front fog lamp				
Connector	Terminal			

FRONT FOG LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

RH	E54	1	Ground	EXTERNAL LAMPS	Fog	Battery voltage
					Off	0 V
LH	E53				Fog	Battery voltage
					Off	0 V

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 5.

4.CHECK FRONT FOG LAMP GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between front fog lamp harness connector and ground.

Front fog lamp			Ground	Continuity
Connector		Terminal		
RH	E54	2		Yes
LH	E53			

Is the inspection result normal?

YES >> Replace malfunctioning lamp.

NO >> Repair or replace the harness or connector.

5.CHECK FRONT FOG LAMP RELAY TO FRONT FOG LAMPS CIRCUIT FOR OPEN

1. Disconnect front fog lamp relay connector E58.
2. Check continuity between the front fog lamp relay harness connector E58 and the front fog lamp connectors E53 and E54.

Connector	Terminal	Connector	Terminal	Continuity
E58	3	E53	1	Yes
		E54	1	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the harness or connector.

6.CHECK FRONT FOG LAMP RELAY POWER SUPPLY CIRCUIT

Check the voltage between the front fog lamp relay connector E58 and ground.

(+)		(-)	Voltage
Connector	Terminal		
E58	2	Ground	Battery voltage
	5		

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the harness or connector.

7.CHECK IPDM E/R TO FRONT FOG LAMP RELAY CONTROL CIRCUIT FOR OPEN

1. Disconnect IPDM E/R connector E46.
2. Check continuity between the front fog lamp relay harness connector E58 and the IPDM E/R connector E46.

Connector	Terminal	Connector	Terminal	Continuity
E58	1	E46	71	Yes

Is the inspection result normal?

YES >> Check the front fog lamp relay. Refer to [EXL-91, "Component Inspection"](#).

FRONT FOG LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace the harness or connector.

Component Inspection

INFOID:000000009486643

1. CHECK FRONT FOG LAMP RELAY

1. Turn ignition switch OFF.
2. Remove front fog lamp relay.
3. Check the continuity between front fog lamp relay terminals 3 and 5 when voltage is supplied between terminals 1 and 2.

Terminals	Condition	Continuity
3 and 5	12V direct current supply between terminals 1 and 2	Yes
	No current supply	No

Is the inspection result normal?

- YES >> Inspection End.
NO >> Replace front fog lamp relay.

A
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EXL

HAZARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

HAZARD SWITCH

Component Function Check

INFOID:000000009472906

1.CHECK HAZARD SWITCH SIGNAL BY CONSULT

CONSULT DATA MONITOR

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

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

Is the inspection result normal?

- YES >> Hazard switch circuit is normal.
NO >> Refer to [EXL-92, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009472907

1.CHECK HAZARD SWITCH SIGNAL INPUT

1. Turn ignition switch OFF.
2. Disconnect hazard switch connector.
3. Check voltage between hazard switch connector and ground.

(+)		(-)	Voltage (Approx.)
Hazard switch			
Connector	Terminal		
M55	2	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK HAZARD SWITCH SIGNAL OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between hazard switch harness connector and BCM harness connector.

Hazard switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M55	2	M18	29	Yes

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK HAZARD SWITCH SIGNAL SHORT CIRCUIT

Check continuity between hazard switch harness connector and ground.

Hazard switch		Ground	Continuity
Connector	Terminal		
M55	2		No

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-67, "Removal and Installation"](#).
NO >> Repair or replace harness.

HAZARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

4.CHECK HAZARD SWITCH GROUND OPEN CIRCUIT

Check continuity between hazard switch harness connector and ground.

Hazard switch		Ground	Continuity
Connector	Terminal		
M55	3		Yes

Is the inspection result normal?

- YES >> Replace hazard switch.
- NO >> Repair or replace harness.

EXL

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

WITHOUT DAYTIME RUNNING LIGHT SYSTEM

WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Symptom Table

INFOID:000000009472912

CAUTION:

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

Symptom		Possible cause	Inspection item
Headlamp (HI) is not turned ON.	One side	- Fuse - Halogen bulb (HI) - Harness between IPDM E/R and headlamp (HI) - Harness between headlamp (HI) and ground - IPDM E/R	Headlamp (HI) circuit Refer to EXL-73. "Component Function Check" .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON" Refer to EXL-98. "WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Diagnosis Procedure" .	
High beam indicator lamp is not turned ON. [Headlamp (HI) is turned ON.]		Combination meter	- Combination meter Data monitor "HI-BEAM IND" - BCM (HEAD LAMP) Active test "HEADLAMP"
Headlamp (LO) is not turned ON.	One side	- Fuse - Halogen bulb (LO) - Harness between IPDM E/R and headlamp lamp (LO) - Harness between headlamp (LO) and ground - IPDM E/R	Headlamp (LO) circuit Refer to EXL-75. "Component Function Check" .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-100. "Diagnosis Procedure" .	
Parking lamp is not turned ON.		- Fuse - Parking lamp bulb - Harness between IPDM E/R and front combination lamp - Harness between front combination lamp and ground - IPDM E/R	Parking lamp circuit Refer to EXL-81. "Component Function Check" .
Front side marker lamp is not turned ON.		- Front side marker lamp bulb - Harness between IPDM E/R and front side marker lamp - Harness between front side marker lamp and ground	Front side marker lamp circuit Refer to EXL-81. "Component Function Check" .
Tail lamp is not turned ON.		- Fuse - Tail lamp bulb - Harness between IPDM E/R and rear combination lamp - Harness between rear combination lamp and ground - IPDM E/R	Tail lamp circuit Refer to EXL-83. "Component Function Check" .
License plate lamp is not turned ON.		- License plate lamp bulb - Harness between IPDM E/R and license plate lamp - Harness between license plate lamp and ground	License plate lamp circuit Refer to EXL-85. "Component Function Check" .

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

Symptom		Possible cause	Inspection item
Parking lamp, side marker lamp, tail lamp and license plate lamp are not turned ON.		Symptom diagnosis "PARKING, SIDE MARKER, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON" Refer to EXL-101, "Diagnosis Procedure" .	
Tail lamp indicator is not turned ON. (Exterior lamps are turned ON.)		Combination meter	- Combination meter - Data monitor "LIGHT IND" - BCM (HEADLAMP) - Active test "TAIL LAMP"
Turn signal lamp does not blink.	Indicator lamp is normal. (Applicable side performs high flasher activation.)	- Turn signal lamp bulb - Door mirror - Harness between BCM and each turn signal lamp - Harness between each turn signal lamp and ground	Turn signal lamp circuit Refer to EXL-86, "Component Function Check" .
	Indicator lamp is included.	- Combination switch - Harness between combination switch and BCM - BCM	Combination meter Power supply and ground circuit Refer to EXL-94, "WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Symptom Table" (without DRL) or EXL-95, "WITH DAYTIME RUNNING LIGHT SYSTEM : Symptom Table" (with DRL).
Turn signal indicator lamp does not blink. (Turn signal lamp is normal.)	One side	Combination meter	—
	Both sides (Always)	- Turn signal indicator lamp signal - BCM - Combination meter	- Combination meter - Data monitor "TURN IND" - BCM (FLASHER) - Active test "FLASHER"
	Both sides (Only when activating hazard warning lamp with ignition switch OFF)	- Combination meter power supply and ground circuit - Combination meter	Combination meter Power supply and ground circuit Refer to EXL-94, "WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Symptom Table" (without DRL) or EXL-95, "WITH DAYTIME RUNNING LIGHT SYSTEM : Symptom Table" (with DRL).
- Hazard warning lamp does not activate. - Hazard warning lamp continues activating. (Turn signal is normal.)		- Hazard switch - Harness between hazard switch and BCM - Harness between hazard switch and ground - BCM	Hazard switch circuit Refer to EXL-92, "Component Function Check" .
Front fog lamp is not turned ON.	One side	- Front fog lamp bulb - Harness between IPDM E/R and front fog lamp - Harness between front fog lamp and ground - IPDM E/R	Front fog lamp circuit Refer to EXL-89, "Component Function Check" .
	Both sides	Symptom diagnosis "BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-102, "Description" .	

WITH DAYTIME RUNNING LIGHT SYSTEM

WITH DAYTIME RUNNING LIGHT SYSTEM : Symptom Table

INFOID:000000009472913

CAUTION:

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

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

Symptom		Possible cause	Inspection item
Headlamp (HI) is not turned ON.	One side	• Fuse • Halogen bulb (HI) • Harness between IPDM E/R and headlamp (HI) • Harness between headlamp (HI) and ground • IPDM E/R	Headlamp (HI) circuit Refer to EXL-73, "Component Function Check" .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON" Refer to EXL-98, "WITH DAYTIME RUNNING LIGHT SYSTEM : Diagnosis Procedure" .	
High beam indicator lamp is not turned ON. [Headlamp (HI) is turned ON.]		Combination meter	• Combination meter - Data monitor "HI-BEAM IND"
Headlamp (LO) is not turned ON.	One side	• Fuse • Halogen bulb (LO) • Harness between IPDM E/R and headlamp lamp (LO) • Harness between headlamp (LO) and ground • IPDM E/R	Headlamp (LO) circuit Refer to EXL-79, "Component Function Check" .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-100, "Diagnosis Procedure" .	
Daytime running light is not turned ON.		• Fuse • Harness between IPDM E/R and daytime running light relay • Daytime running light relay • IPDM E/R • BCM • ECM • Combination meter	• Daytime running light relay circuit Refer to EXL-79, "Component Function Check". • Combination meter - Data monitor "PKB SW" • BCM - Active test "DAYTIME RUNNING LIGHT"
Parking lamp is not turned ON.		• Fuse • Parking lamp bulb • Harness between IPDM E/R and front combination lamp • IPDM E/R	Parking lamp circuit Refer to EXL-81, "Component Function Check" .
Front side marker lamp is not turned ON.		• Front side marker lamp bulb • Harness between IPDM E/R and front side marker lamp • Harness between front side marker lamp and ground • IPDM E/R	Front side marker lamp circuit Refer to EXL-81, "Component Function Check" .
Tail lamp (Rear side marker lamp) is not turned ON.		• Fuse • Tail lamp bulb • Harness between IPDM E/R and rear combination lamp • Harness between and rear combination lamp and ground	Tail lamp circuit Refer to EXL-83, "Component Function Check" .
License plate lamp is not turned ON.		• License plate lamp bulb • Harness between IPDM E/R and license plate lamp • Harness between license plate lamp and ground	License plate lamp circuit Refer to EXL-85, "Component Function Check" .
Parking lamp, side marker lamp, tail lamp and license plate lamp are not turned ON.		Symptom diagnosis "PARKING, SIDE MARKER, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON" Refer to EXL-101, "Diagnosis Procedure" .	

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

Symptom		Possible cause	Inspection item
Tail lamp indicator is not turned ON. (Exterior lamps are turned ON.)		Combination meter	- Combination meter - Data monitor "LIGHT IND" - BCM (HEADLAMP) - Active test "TAIL LAMP"
Turn signal lamp does not blink.	Indicator lamp is normal. (Applicable side performs high flasher activation.)	- Turn signal lamp bulb - Door mirror - Harness between BCM and each turn signal lamp - Harness between each turn signal lamp and ground	Turn signal lamp circuit Refer to EXL-86, "Component Function Check" .
	Indicator lamp is included.	- Combination switch - Harness between combination switch and BCM - BCM	Combination meter Power supply and ground circuit Refer to EXL-95, "WITH DAYTIME RUNNING LIGHT SYSTEM : Symptom Table" (with DRL) or EXL-94, "WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Symptom Table" (without DRL).
Turn signal indicator lamp does not blink. (Turn signal lamp is normal.)	One side	Combination meter	—
	Both sides (Always)	- Turn signal indicator lamp signal - BCM - Combination meter	- Combination meter - Data monitor "TURN IND" - BCM (FLASHER) - Active test "FLASHER"
	Both sides (Only when activating hazard warning lamp with ignition switch OFF)	- Combination meter power supply and ground circuit - Combination meter	Combination meter Power supply and ground circuit Refer to EXL-95, "WITH DAYTIME RUNNING LIGHT SYSTEM : Symptom Table" (with DRL) or EXL-94, "WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Symptom Table" (without DRL).
- Hazard warning lamp does not activate. - Hazard warning lamp continues activating. (Turn signal is normal.)		- Hazard switch - Harness between hazard switch and BCM - Harness between hazard switch and ground - BCM	Hazard switch circuit Refer to EXL-92, "Component Function Check" .
Front fog lamp is not turned ON.	One side	- Front fog lamp bulb - Harness between IPDM E/R and front fog lamp - Harness between front fog lamp and ground - IPDM E/R	Front fog lamp circuit Refer to EXL-89, "Component Function Check" .
	Both sides	Symptom diagnosis "BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-102, "Diagnosis Procedure" .	

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BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON WITH DAYTIME RUNNING LIGHT SYSTEM

WITH DAYTIME RUNNING LIGHT SYSTEM : Description

INFOID:000000009472915

Both side headlamps (HI) are not turned ON when setting to the lighting switch HI or PASS.

WITH DAYTIME RUNNING LIGHT SYSTEM : Diagnosis Procedure

INFOID:000000009472916

1.COMBINATION SWITCH INSPECTION

Check combination switch. Refer to [EXL-95, "WITH DAYTIME RUNNING LIGHT SYSTEM : Symptom Table"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK HEADLAMP (HI) REQUEST SIGNAL INPUT

CONSULT DATA MONITOR

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

Monitor item	Condition		Monitor status
HL HI REQ	Lighting switch (2ND)	HI or PASS	On
		LO	Off

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-67, "Removal and Installation"](#).

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check headlamp (HI) circuit. Refer to [EXL-98, "WITH DAYTIME RUNNING LIGHT SYSTEM : Description"](#).

Is the inspection result normal?

YES >> Refer to [GI-41, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning part.

WITHOUT DAYTIME RUNNING LIGHT SYSTEM

WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Description

INFOID:000000009472917

Both side headlamps (HI) are not turned ON when setting to the lighting switch HI or PASS.

WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Diagnosis Procedure

INFOID:000000009472918

1.COMBINATION SWITCH INSPECTION

Check combination switch. Refer to [EXL-94, "WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Symptom Table"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK HEADLAMP (HI) REQUEST SIGNAL INPUT

CONSULT DATA MONITOR

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

Monitor item	Condition		Monitor status
HL HI REQ	Lighting switch (2ND)	HI or PASS	On
		LO	Off

BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-67, "Removal and Installation"](#).

3. HEADLAMP (HI) CIRCUIT INSPECTION

Check headlamp (HI) circuit. Refer to [EXL-73, "Component Function Check"](#).

Is the inspection result normal?

YES >> Refer to [GI-41, "Intermittent Incident"](#).

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:000000009472919

Both side headlamps (LO) are not turned ON in any condition.

Diagnosis Procedure

INFOID:000000009472920

1.CHECK COMBINATION SWITCH

Check combination switch. Refer to [EXL-95, "WITH DAYTIME RUNNING LIGHT SYSTEM : Symptom Table"](#) (with DRL) or [EXL-94, "WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Symptom Table"](#) (without DRL).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK HEADLAMP (LO) REQUEST SIGNAL INPUT

CONSULT DATA MONITOR

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

Monitor item	Condition		Monitor status
HL LO REQ	Lighting switch	2ND	On
		OFF	Off

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-67, "Removal and Installation"](#).

3.HEADLAMP (LO) CIRCUIT INSPECTION

Check headlamp (LO) circuit. Refer to [EXL-75, "Component Function Check"](#).

Is the inspection result normal?

YES >> Refer to [GI-41, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning part.

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

< SYMPTOM DIAGNOSIS >

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

Description

INFOID:000000009472921

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

Diagnosis Procedure

INFOID:000000009472922

1.COMBINATION SWITCH INSPECTION

Check combination switch. Refer to [EXL-101, "Diagnosis Procedure"](#).

Is the combination switch normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT

CONSULT DATA MONITOR

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

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

Is the inspection result normal?

YES >> Replace IPDM E/R.

NO >> Replace BCM. Refer to [BCS-67, "Removal and Installation"](#).

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

Description

INFOID:000000009472923

The front fog lamps are not turned ON in any condition.

Diagnosis Procedure

INFOID:000000009472924

1.CHECK FRONT FOG LAMP FUSE

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

Unit	Fuse No.	Capacity
Front fog lamp	#31	15 A

Is the inspection result normal?

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

2.CHECK FRONT FOG LAMP SHORT CIRCUIT

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
RH	E46	71		No
LH				

Is the inspection result normal?

- YES >> Replace fuse. (Replace IPDM E/R if the fuse is blown again.)
NO >> Repair or replace harness. And then replace the fuse.

3.COMBINATION SWITCH INSPECTION

Check combination switch. Refer to [EXL-102, "Description"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Repair or replace the malfunctioning part.

4.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT

CONSULT 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 (With lighting switch 2ND)	ON	On
		OFF	Off

Is the item status normal?

- YES >> GO TO 5.
NO >> Replace BCM. Refer to [BCS-67, "Removal and Installation"](#).

5.FRONT FOG LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to [EXL-89, "Component Function Check"](#).

Is the inspection result normal?

- YES >> Refer to [GI-41, "Intermittent Incident"](#).
NO >> Repair or replace the malfunctioning part.

HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

PERIODIC MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Inspection

INFOID:000000009445897

PREPARATION BEFORE ADJUSTING

Before performing aiming adjustment, check the following:

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

CAUTION:

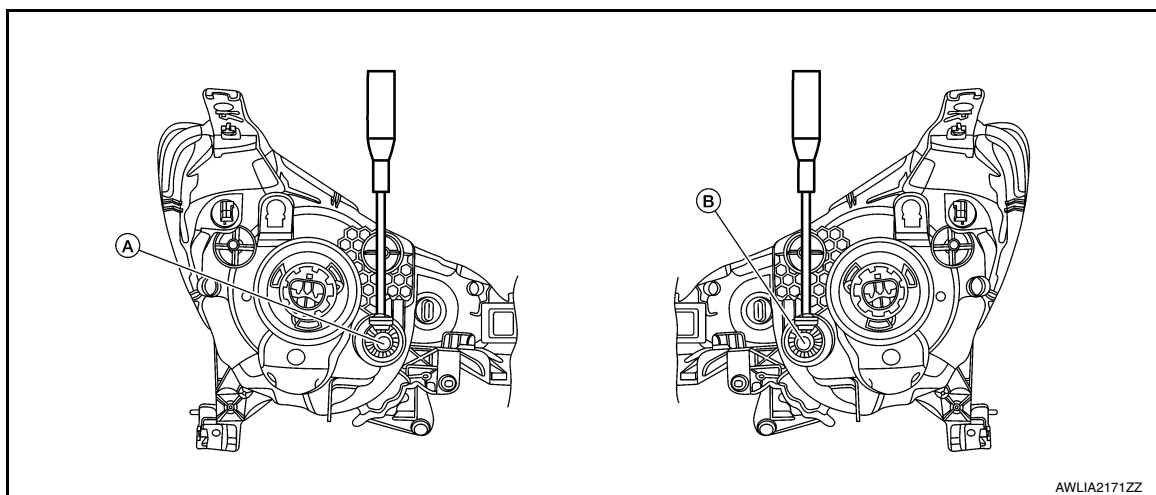
Do not use organic solvent (thinner, gasoline etc.)

- Place a driver or equivalent weight of 68.5 kg (150 lb) on the driver seat.
- By hand, bounce the front and rear of the vehicle to settle the suspension and eliminate any static load.
- Place the front tires in the straight ahead position.
- Confirm headlamp aiming switch is set to "0" (zero) position.
- Aim each headlamp individually and ensure other headlamp beam pattern is blocked from screen.

NOTE:

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

AIMING ADJUSTMENT SCREW



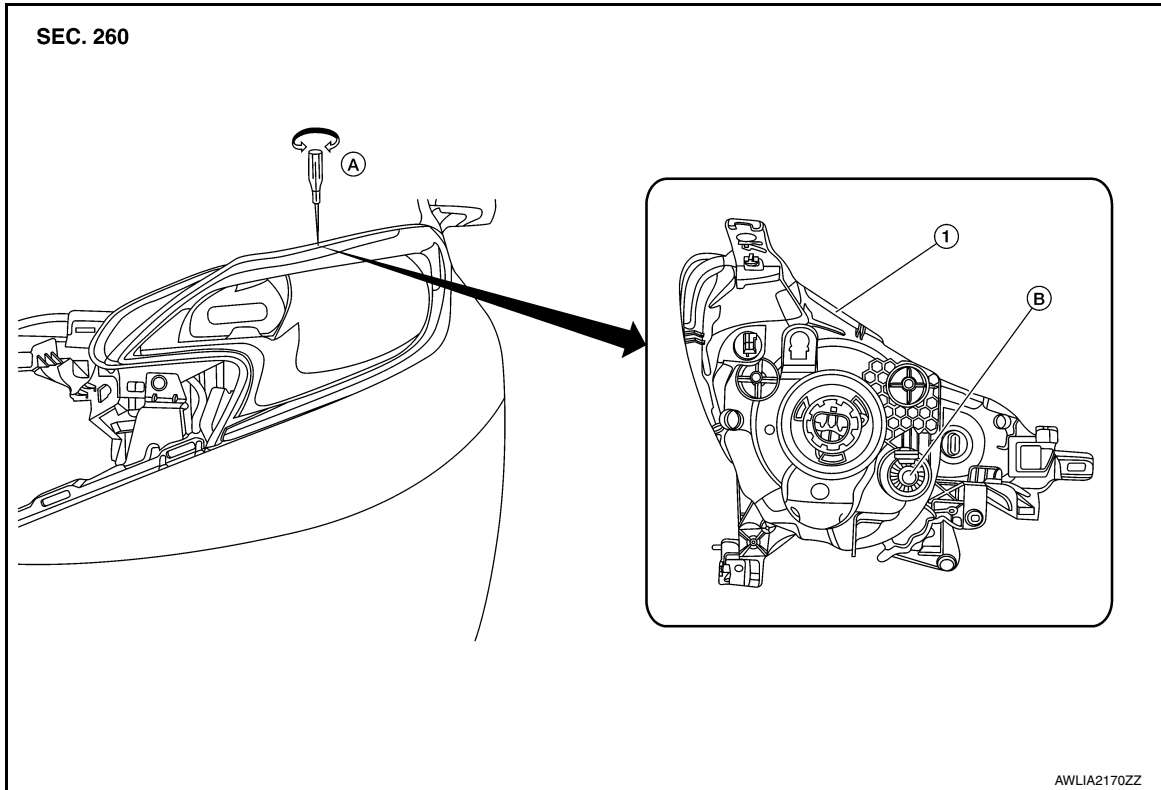
A. Headlamp (LH) (UP/DOWN)
adjustment screw

B. Headlamp (RH) (UP/DOWN)
adjustment screw

AIMING ADJUSTMENT SCREW

HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >



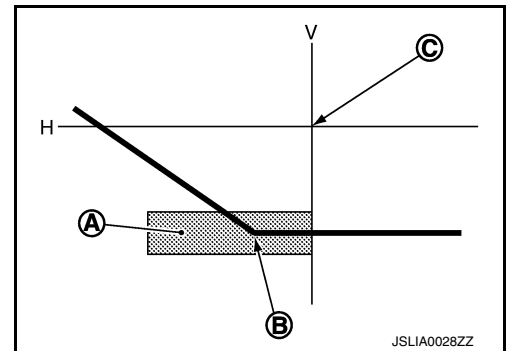
1. Front combination lamp A. Suitable tool (for aiming adjustment) B. Adjusting screw

Aiming Adjustment Procedure

INFOID:000000009445898

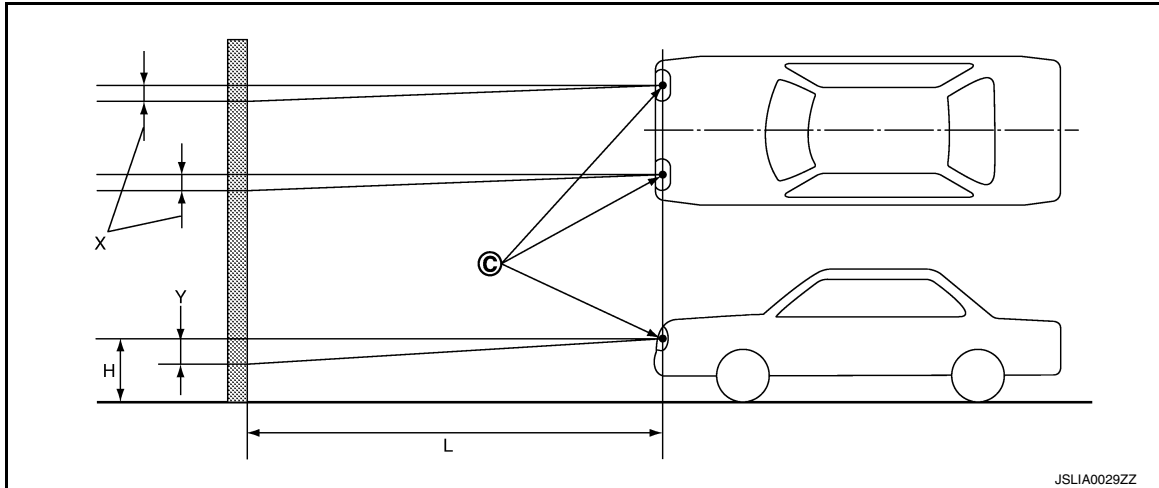
1. Use the aiming adjustment screw to adjust the elbow point projected by the low beams on the screen, so that it is within the aiming adjustment area.
Low beam distribution on the screen

- A. : 150 mm (5.91 in)
B. : 100 mm (3.94 in)
C. : 100 mm (3.94 in)



HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >



- C. Vertical center line of headlamp H. Horizontal center line of headlamp L. Distance from headlamp center to screen
X. Aiming adjustment area (lateral) Y. Aiming adjustment area (vertical)

Distance from headlamp center to screen (L) : 10 m (33 ft)

Unit: mm (in)

Aiming adjustment area		
Vertical direction (Y) (Lower side from headlamp center height)		Lateral direction (X) (Left side from headlamp center line)
Highest light axis	100 (3.94)	0 - 100 (3.94)
Target light axis	100 (3.94)	
Lowest light axis	150 (5.91)	

LOW BEAM AND HIGH BEAM

NOTE:

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

CAUTION:

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

- Place the screen on the same level and flat surface as the vehicle.
- NOTE:**
- Surface should be free of any debris that would cause a difference between the headlamp center and the adjustment screen.
- Face the front of the vehicle to the screen and measure distance between the headlamp center and the screen surface.

Distance (D) between the headlamp center and the screen : 10 m (33 ft)

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

FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

FRONT FOG LAMP AIMING ADJUSTMENT

Inspection

INFOID:000000009445899

PREPARATION BEFORE ADJUSTING

Before performing aiming adjustment procedure, check the following:

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

CAUTION:

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

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

NOTE:

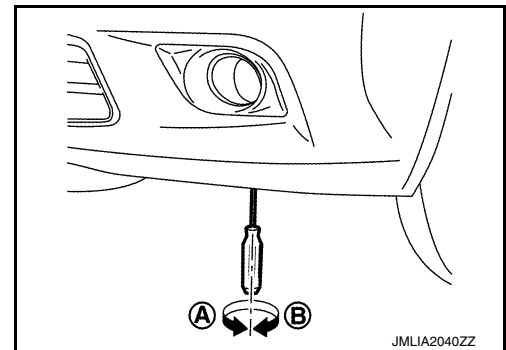
- For headlamp aiming details, refer to regulations in your area.
- By regulation, no means for horizontal aim adjustment is provided from the factory; only vertical aim is adjustable.
- Use adjusting screw to perform aiming adjustment.
- Perform headlamp aiming if:
 - The vehicle front body has been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

AIMING ADJUSTMENT SCREW

- Turn the aiming adjusting screw using a suitable tool to aim the fog lamp.

A: UP

B: DOWN



Aiming Adjustment Procedure

INFOID:000000009445909

1. Screen placement.

NOTE:

- Place the screen perpendicular to the level road.
- Position the vehicle facing the screen with 10 m (33 ft) between the front fog lamp center and the screen.

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

CAUTION:

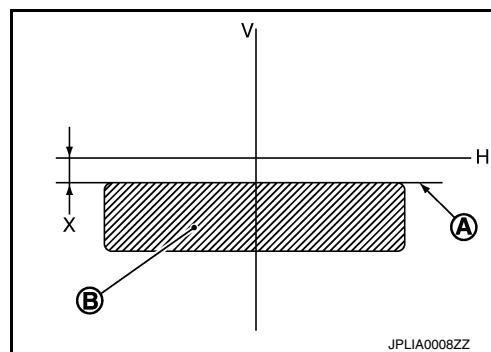
Do not cover the lens surface with a tape etc. The lens are made of resin.

FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

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

- A :Cutoff line
- B :High illuminance
- H :Horizontal center line of front fog lamp
- V :Vertical center line of front fog lamp
- X :Cutoff line height



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FRONT COMBINATION LAMP

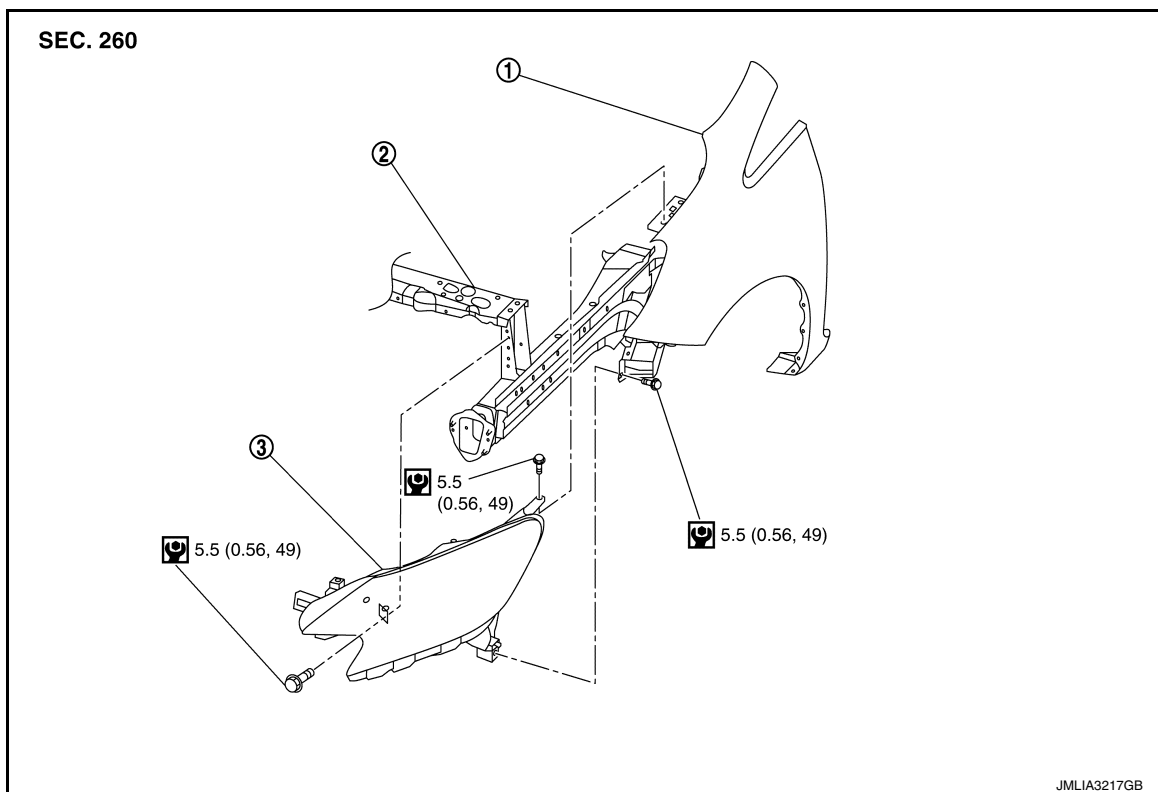
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

FRONT COMBINATION LAMP

Exploded View

INFOID:000000009015732



1. Front fender

2. Radiator core upper support

3. Front combination lamp

Removal and Installation

INFOID:000000009015733

REMOVAL

1. Remove front bumper fascia. Refer to [EXT-16, "Removal and Installation"](#).
2. Remove the front combination lamp bolts.
3. Pull front combination lamp forward.
4. Disconnect the harness connectors from front combination lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

NOTE:

After installation, perform headlamp aiming adjustment procedure. Refer to [EXL-104, "Aiming Adjustment Procedure"](#).

Bulb Replacement

INFOID:000000009015734

WARNING:

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

CAUTION:

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

HEADLAMP BULB

FRONT COMBINATION LAMP

< REMOVAL AND INSTALLATION >

Removal

1. Remove plastic cover.
2. Remove bulb from the front combination lamp.

Installation

Installation is in the reverse order of removal.

CAUTION:

After installing the bulb, install the bulb socket securely for watertightness.

SIDE MARKER LAMP BULB

Removal

1. Rotate bulb socket counterclockwise and remove.
2. Remove the bulb from bulb socket.

Installation

Installation is in the reverse order of removal.

CAUTION:

After installing the bulb, install the bulb socket securely for watertightness.

FRONT TURN SIGNAL/PARKING LAMP BULB

Removal

1. Rotate bulb socket counterclockwise and remove.
2. Remove the bulb from bulb socket.

Installation

Installation is in the reverse order of removal.

CAUTION:

After installing the bulb, install the bulb socket securely for watertightness.

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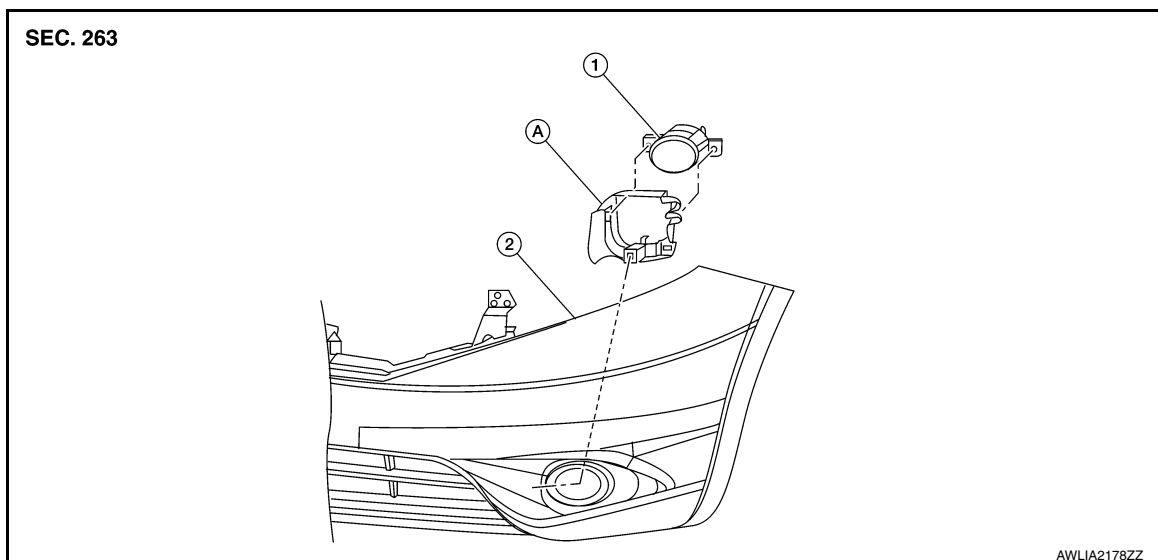
FRONT FOG LAMP

< REMOVAL AND INSTALLATION >

FRONT FOG LAMP

Exploded View

INFOID:000000009445901



1. Front fog lamp

2. Front bumper fascia

A. Front fog lamp bracket

Removal and Installation

INFOID:000000009445902

REMOVAL

1. Partially remove front fender protector. Refer to [EXT-24. "Exploded View"](#).
2. Disconnect the harness connector from front fog lamp.
3. Remove screws and front fog lamp.

INSTALLATION

Installation is in the reverse order of removal.

NOTE:

After installation, perform fog lamp aiming adjustment procedure. Refer to [EXL-104. "Aiming Adjustment Procedure"](#).

Bulb Replacement

INFOID:000000009445910

WARNING:

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

CAUTION:

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

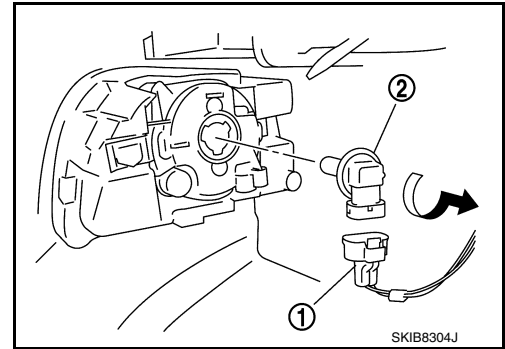
REMOVAL

1. Partially remove fender protector. Refer to [EXT-24. "Exploded View"](#).

FRONT FOG LAMP

< REMOVAL AND INSTALLATION >

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



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installing the bulb, install the bulb socket securely for watertightness.

A
B
C
D
E
F
G
H
I
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K
EXL
M
N
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P

COMBINATION SWITCH

< REMOVAL AND INSTALLATION >

COMBINATION SWITCH

Removal and Installation

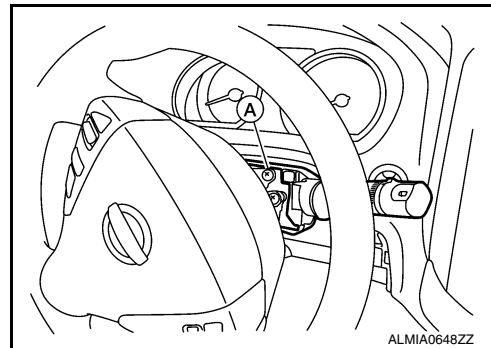
INFOID:000000009606282

CAUTION:

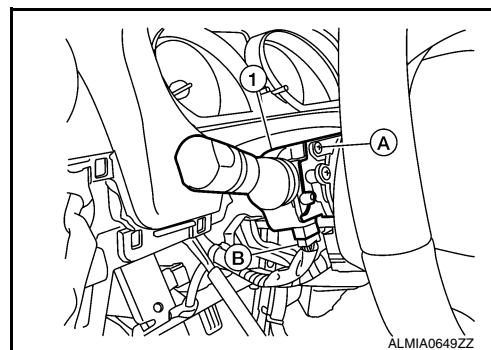
- Before servicing, turn the ignition switch OFF, disconnect both battery terminals and wait at least three minutes.
- Do not use air or electric tools when removing or installing the combination switch.

REMOVAL

1. Disconnect the negative and positive battery terminals, then wait at least three minutes. Refer to [PG-69, "Removal and Installation \(Battery\)"](#).
2. Remove the steering column covers. Refer to [IP-17, "Removal and Installation"](#).
3. Rotate steering wheel clockwise to access first combination switch screw (A) and remove.



4. Rotate steering wheel counter-clockwise to access second combination switch screw (A) and remove.
5. Disconnect the harness connector (B) from the combination switch (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After the work is completed, make sure no system malfunction is detected by air bag warning lamp.
- In case a malfunction is detected by the air bag warning lamp, reset with the self-diagnosis function and delete the memory with CONSULT.
- If a malfunction is still detected after the above operation, perform self-diagnosis to repair malfunctions. Refer to [EXL-70, "Work Flow"](#).

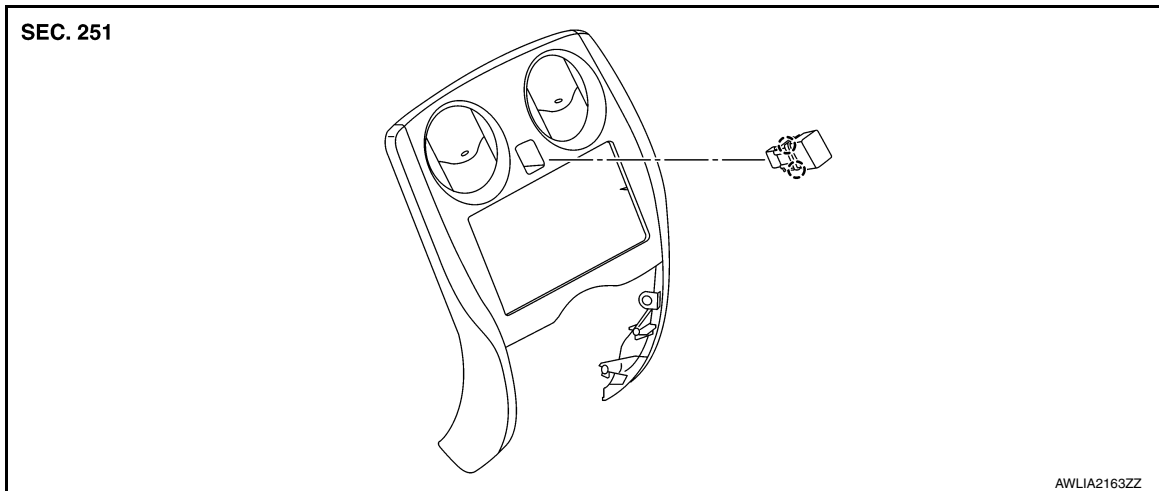
HAZARD SWITCH

< REMOVAL AND INSTALLATION >

HAZARD SWITCH

Exploded View

INFOID:000000009015739



1. Cluster lid C

2. Hazard switch

 Pawl

Removal and Installation

INFOID:000000009445907

REMOVAL

1. Remove cluster lid C. Refer to [IP-22. "Removal and Installation"](#).
2. Release pawls and remove hazard switch.

INSTALLATION

Installation is in the reverse order of removal.

A
B
C
D
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EXL
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P

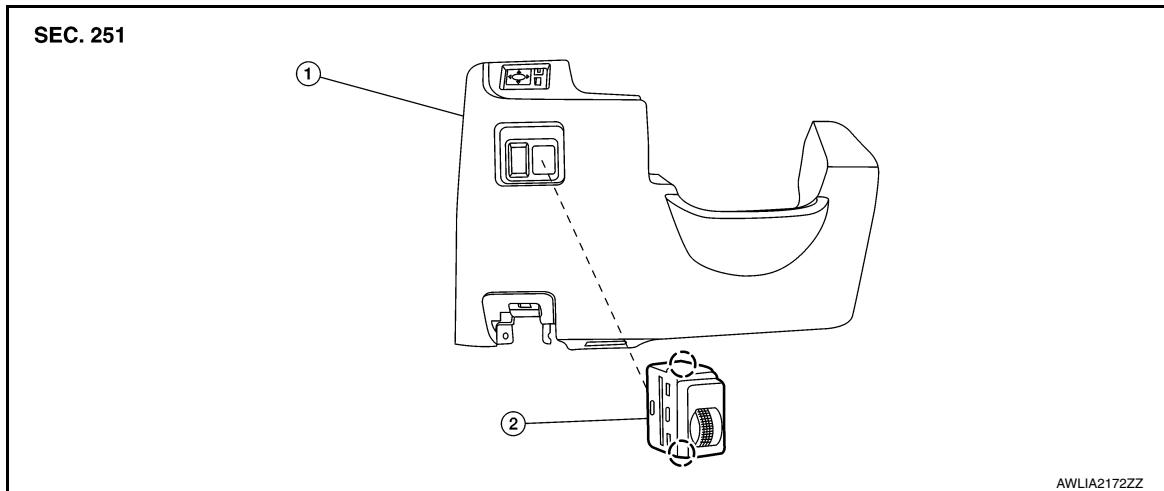
HEADLAMP AIMING SWITCH

< REMOVAL AND INSTALLATION >

HEADLAMP AIMING SWITCH

Exploded View

INFOID:000000009015743



1. Instrument lower panel LH

2. Headlamp aiming switch

 Pawl

Removal and Installation

INFOID:000000009641646

REMOVAL

1. Remove instrument lower panel LH. Refer to [IP-24, "Removal and Installation"](#).
2. While pressing pawls, push the headlamp aiming switch to remove.

INSTALLATION

Installation is in the reverse order of removal.

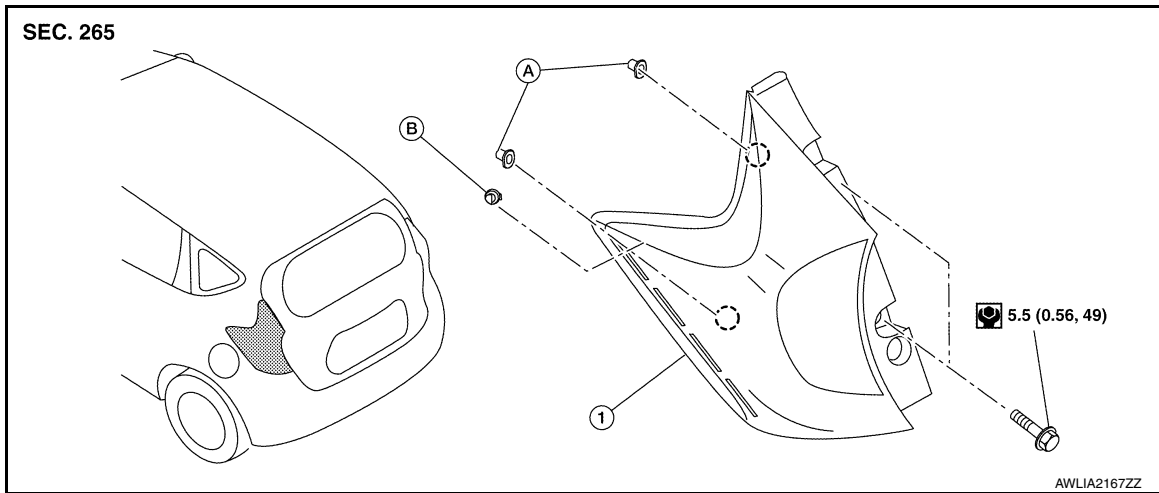
REAR COMBINATION LAMP

< REMOVAL AND INSTALLATION >

REAR COMBINATION LAMP

Exploded View

INFOID:000000009015744



1. Rear combination lamp

A. Grommet

B. Clip

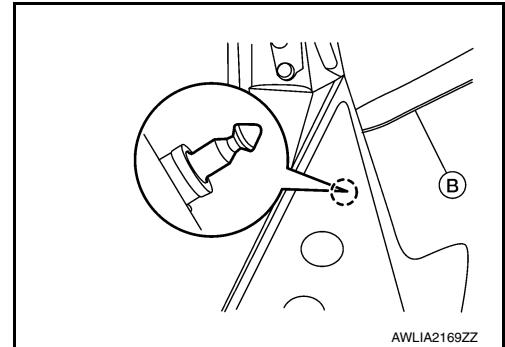
C. Locating pin

Removal and Installation

INFOID:000000009015745

REMOVAL

1. Remove rear combination lamp bolts.
2. Release the locating pin (A) of the rear combination lamp using a suitable tool (B) as shown.



3. Disconnect the harness connector from the rear combination lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:000000009015746

WARNING:

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

CAUTION:

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

STOP/TAIL LAMP BULB

Removal

1. Remove rear combination lamp. Refer to [EXL-115, "Removal and Installation"](#).

REAR COMBINATION LAMP

< REMOVAL AND INSTALLATION >

2. Rotate stop/tail lamp bulb socket counterclockwise and remove.
3. Remove stop/tail lamp bulb from bulb socket.

Installation

Installation is in the reverse order of removal.

CAUTION:

After installing the bulb, install bulb socket securely for watertightness.

REAR TURN SIGNAL LAMP BULB

Removal

1. Remove rear combination lamp. Refer to [EXL-115. "Removal and Installation"](#).
2. Rotate rear turn signal lamp bulb socket counterclockwise and remove.
3. Remove rear turn signal lamp bulb from bulb socket.

Installation

Installation is in the reverse order of removal.

CAUTION:

After installing the bulb, install bulb socket securely for watertightness.

BACK-UP LAMP BULB

Removal

1. Remove rear combination lamp. Refer to [EXL-115. "Removal and Installation"](#).
2. Rotate back-up lamp bulb socket counterclockwise and remove.
3. Remove back-up lamp bulb from bulb socket.

Installation

Installation is in the reverse order of removal.

CAUTION:

After installing the bulb, install bulb socket securely for watertightness.

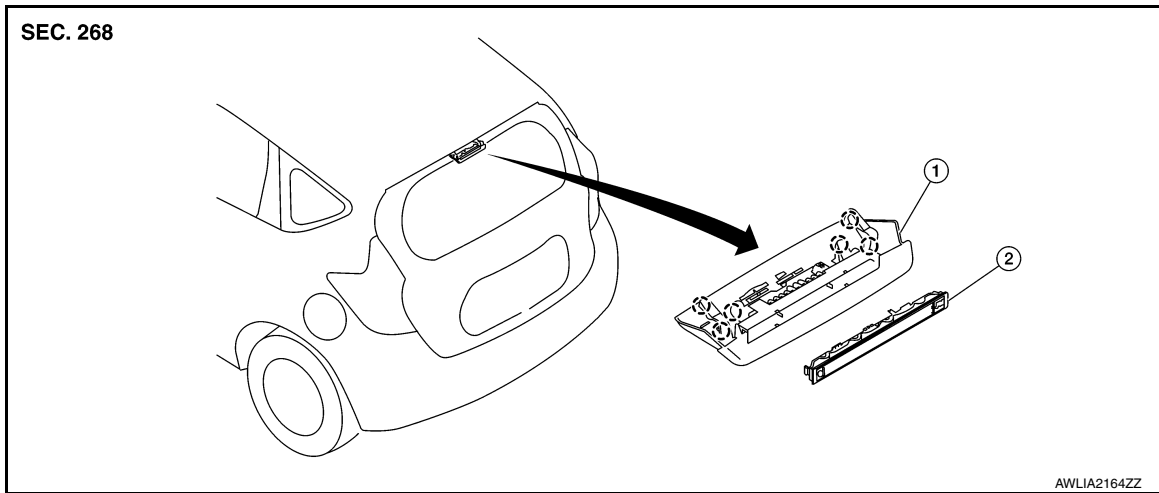
HIGH-MOUNTED STOP LAMP

< REMOVAL AND INSTALLATION >

HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:000000009015747



1. High-mounted stop lamp
2. High-mounted stop lamp LED () Pawl

Removal and Installation

INFOID:000000009015748

REMOVAL

1. Release high-mounted stop lamp pawls using a suitable tool.
2. Disconnect the harness connector from high-mounted stop lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:000000009015749

HIGH-MOUNTED STOP LAMP BULB

The high-mounted stop lamp bulb is a LED and is integrated into the high-mounted stop lamp and is serviced as an assembly. Refer to [EXL-117, "Removal and Installation"](#).

EXL

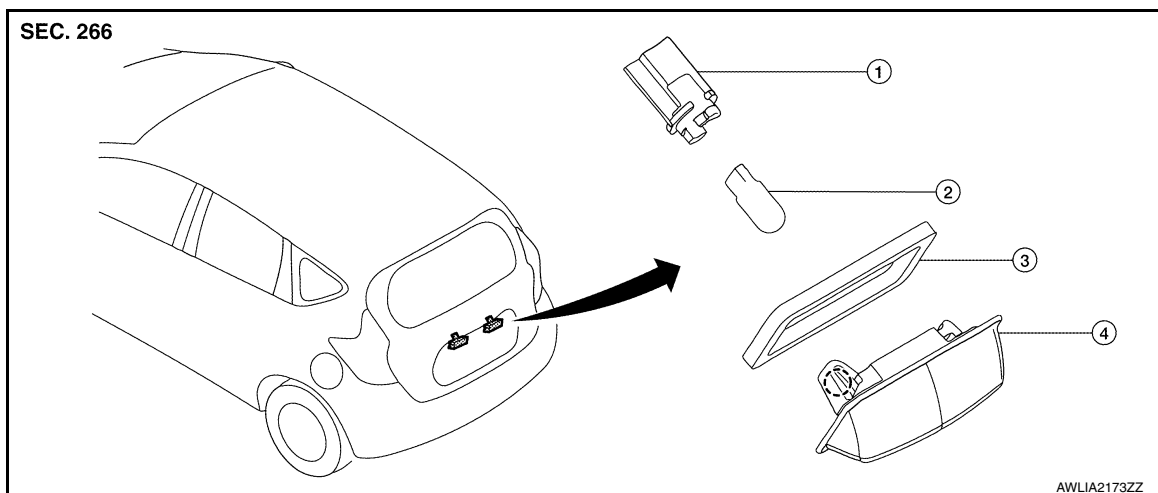
LICENSE PLATE LAMP

< REMOVAL AND INSTALLATION >

LICENSE PLATE LAMP

Exploded View

INFOID:0000000009015750



- | | | |
|-----------------------------------|----------------------------|---------|
| 1. License plate lamp bulb socket | 2. License plate lamp bulb | 3. Seal |
| 4. License plate lamp | ○ Pawl | |

Removal and Installation

INFOID:0000000009015751

REMOVAL

1. Remove back door outer finisher. Refer to [EXT-34, "Removal and Installation"](#).
2. Disconnect harness connector from license plate lamp.
3. Release license plate lamp pawl and remove license plate lamp.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000009015752

WARNING:

Do not touch bulb with your hand while it is on or right after being turned off. Burning may result.

CAUTION:

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

REMOVAL

1. Remove license plate lamp. Refer to [EXL-118, "Removal and Installation"](#).
2. Rotate license plate lamp bulb socket counterclockwise and remove.
3. Remove license plate lamp bulb from bulb socket.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installing the bulb, install the bulb socket securely for watertightness.

FRONT COMBINATION LAMP

< UNIT DISASSEMBLY AND ASSEMBLY >

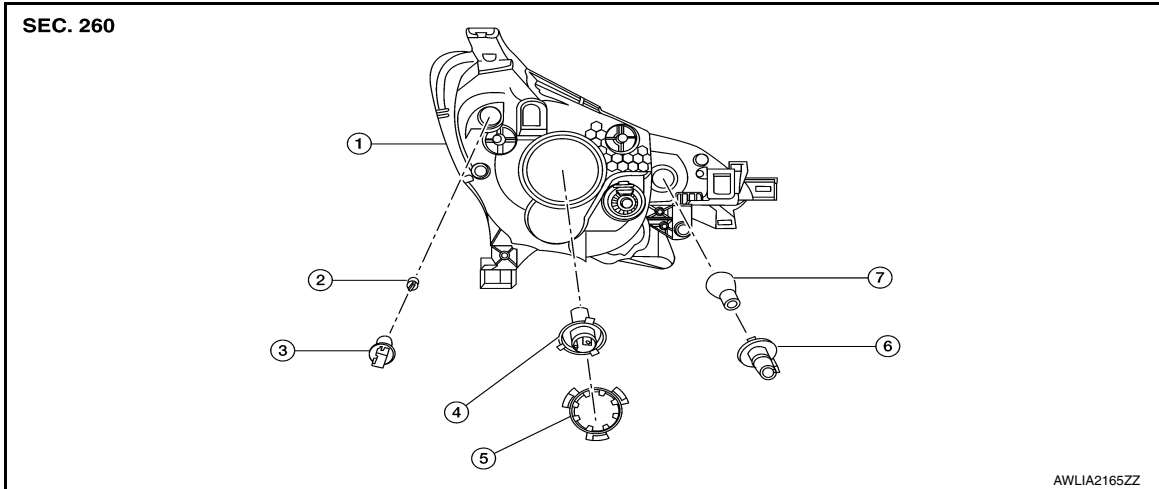
UNIT DISASSEMBLY AND ASSEMBLY

FRONT COMBINATION LAMP

Exploded View

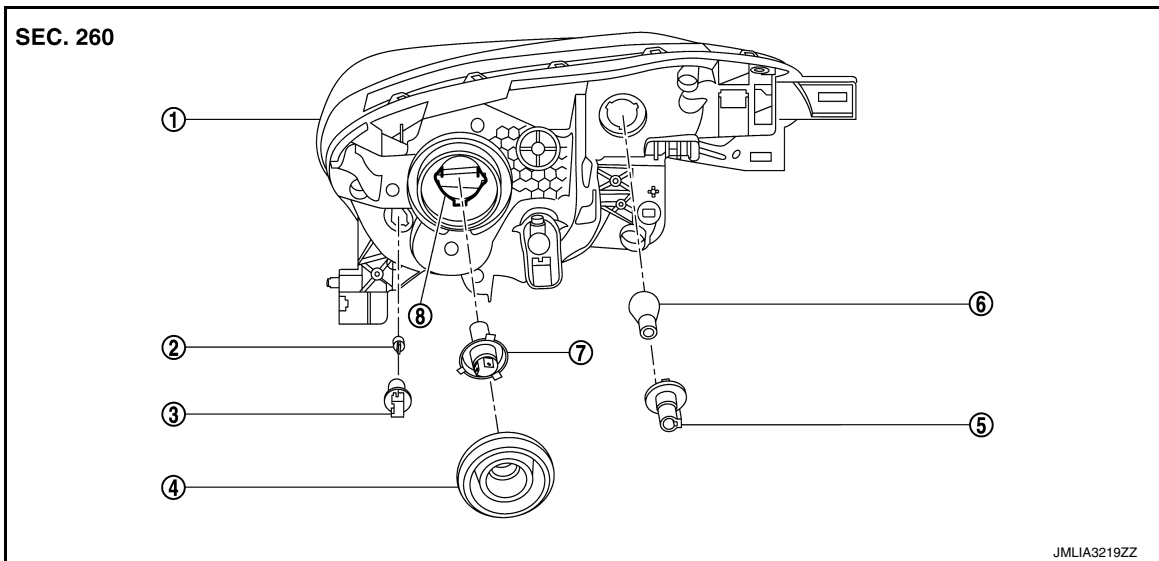
INFOID:0000000009670495

FRONT COMBINATION LAMP - WITHOUT AIMING MOTOR



- | | | |
|--|--------------------------|---|
| 1. Front combination lamp | 2. Side marker lamp bulb | 3. Side marker lamp socket |
| 4. Headlamp bulb | 5. Lock ring | 6. Front turn signal/Parking lamp bulb socket |
| 7. Front turn signal/Parking lamp bulb | | |

FRONT COMBINATION LAMP - WITH AIMING MOTOR



- | | | |
|---------------------------|---|--|
| 1. Front combination lamp | 2. Side marker lamp bulb | 3. Side marker lamp bulb socket |
| 4. Lock ring | 5. Front turn signal/parking lamp bulb socket | 6. Front turn signal/parking lamp bulb |
| 7. Headlamp Bulb | 8. Retaining spring | |

Disassembly and Assembly

INFOID:0000000009670496

WARNING:

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

CAUTION:

FRONT COMBINATION LAMP

< UNIT DISASSEMBLY AND ASSEMBLY >

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

DISASSEMBLY

1. Remove front combination lamp. Refer to [EXL-108, "Removal and Installation"](#).
2. Rotate lock ring counterclockwise and remove.
3. Remove headlamp bulb.
4. Rotate side marker bulb socket counterclockwise and remove.
5. Remove the side marker lamp bulb from the side marker bulb socket.
6. Rotate turn signal/parking lamp bulb socket counterclockwise and remove.
7. Remove turn signal/parking lamp bulb from turn signal/parking lamp bulb socket.

ASSEMBLY

Assembly is in the reverse order of disassembly.

CAUTION:

- After installing the headlamp bulb, be sure to install lock ring securely to ensure watertightness.
- After installing, be sure to install the bulb sockets securely to ensure watertightness.

REAR COMBINATION LAMP

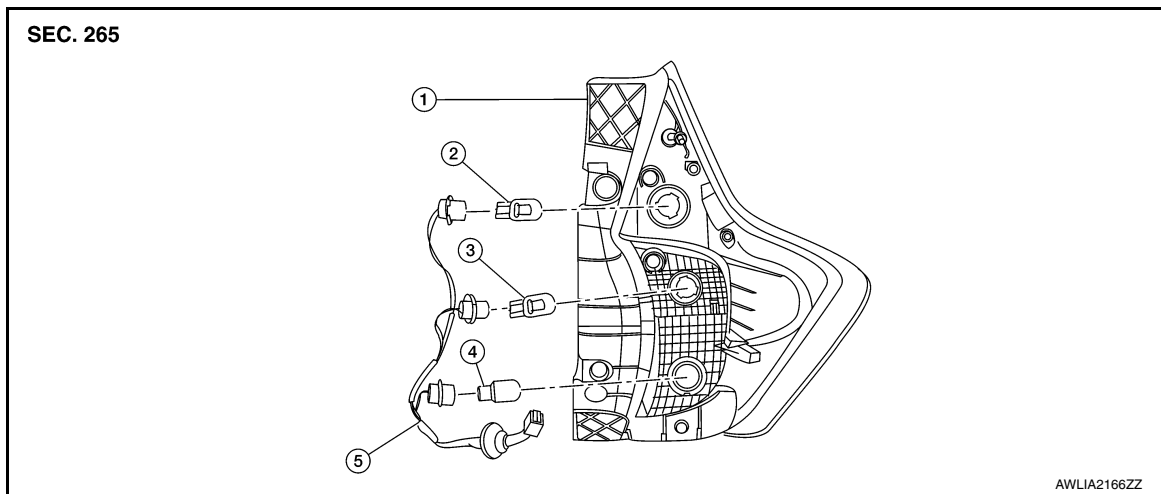
< UNIT DISASSEMBLY AND ASSEMBLY >

REAR COMBINATION LAMP

Exploded View - Non LED

INFOID:000000009670499

REAR COMBINATION LAMP - NON LED



- | | | |
|-------------------------------|--|---------------------------|
| 1. Rear combination lamp | 2. Rear tail lamp bulb | 3. Rear back-up lamp bulb |
| 4. Rear turn signal lamp bulb | 5. Rear combination lamp harness connector | |

Disassembly and Assembly - Non LED

INFOID:000000009670500

REAR COMBINATION LAMP

WARNING:

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

CAUTION:

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

Disassembly

1. Remove rear combination lamp. Refer to [EXL-115, "Removal and Installation"](#).
2. Rotate rear turn signal lamp bulb socket counterclockwise to remove from rear combination lamp.
3. Remove the rear turn signal lamp bulb from bulb socket.
4. Rotate back-up lamp bulb socket counterclockwise to remove from rear combination lamp.
5. Remove the back-up lamp bulb from bulb socket.
6. Rotate stop/tail lamp bulb socket counterclockwise to remove from rear combination lamp.
7. Remove the stop/tail lamp bulb from bulb socket.

Assembly

Assembly is in the reverse order of disassembly.

CAUTION:

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

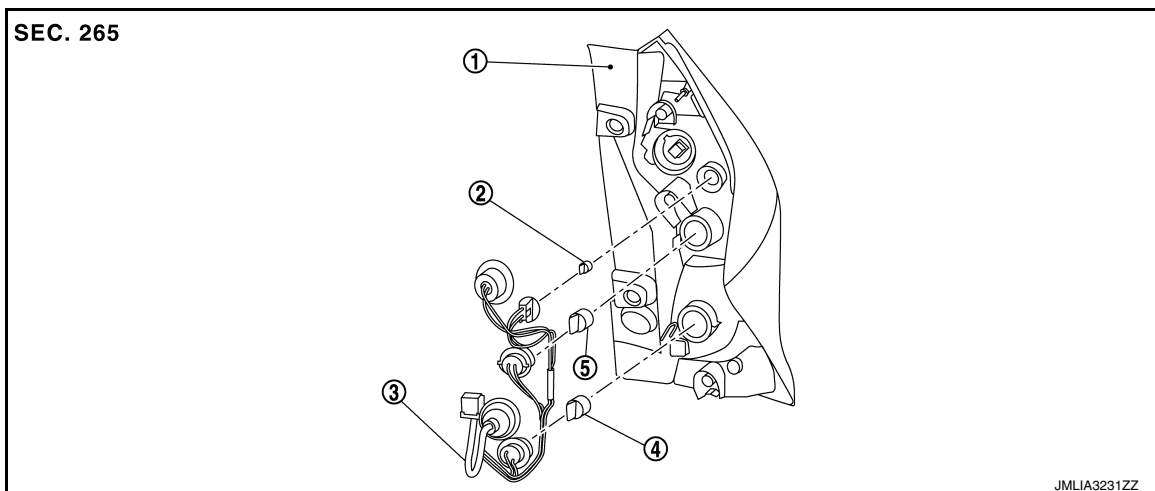
REAR COMBINATION LAMP

< UNIT DISASSEMBLY AND ASSEMBLY >

Exploded View - LED

INFOID:000000009670501

REAR COMBINATION LAMP - LED



- | | | |
|---------------------------|-------------------------------|------------------------------------|
| 1. Rear combination lamp | 2. Rear tail lamp bulb | 3. Rear LED lamp harness connector |
| 4. Rear back-up lamp bulb | 5. Rear turn signal lamp bulb | |

Disassembly and Assembly - LED

INFOID:000000009670502

REAR COMBINATION LAMP

WARNING:

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

CAUTION:

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

Disassembly

1. Remove rear combination lamp. Refer to [EXL-115, "Removal and Installation"](#).
2. Rotate rear turn signal lamp bulb socket counterclockwise to remove from rear combination lamp.
3. Remove the rear turn signal lamp bulb from bulb socket.
4. Rotate back-up lamp bulb socket counterclockwise to remove from rear combination lamp.
5. Remove the back-up lamp bulb from bulb socket.
6. Disconnect the harness connector from the LED lamp.
7. Rotate side marker lamp bulb socket counterclockwise to remove from rear combination lamp.
8. Remove the side marker lamp bulb from bulb socket.

Assembly

Assembly is in the reverse order of disassembly.

CAUTION:

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

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb specification

INFOID:0000000009015753

ARGENTINA MODELS ONLY

Item		Wattage (W)*
Front combination	Headlamp (HI/LO)	60/55
	Front turn signal lamp	21
	Side marker lamp	5
Fog lamp (if equipped)		55
Daytime running lamp built-in fog lamp		19
Rear combination	Stop lamp	LED
	Tail lamp	5
	Rear turn signal lamp	21
	Back-up lamp	21
License plate lamp		5
High-mounted stop lamp	Normal glass	LED
	Privacy glass	LED

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

NON ARGENTINA MODELS

Item		Wattage (W)*
Front combination	Headlamp (HI/LO)	65/55
	Front turn signal/Parking lamp	27/8
	Side marker lamp	5
Fog lamp (if equipped)		55
Rear combination	Stop/Tail lamp	21/5
	Rear turn signal lamp	21
	Back-up lamp	21
License plate lamp		5
High-mounted stop lamp	Normal glass	LED
	Privacy glass	LED

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