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PRECAUTION

PRECAUTIONS

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

INFOID:0000000010336851

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:0000000010336852

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:

- Water soluble dirt:

- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.

- Oily dirt:

- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.

- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

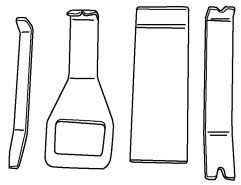
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000010351310

The actual shape of the tools may differ from those illustrated here.

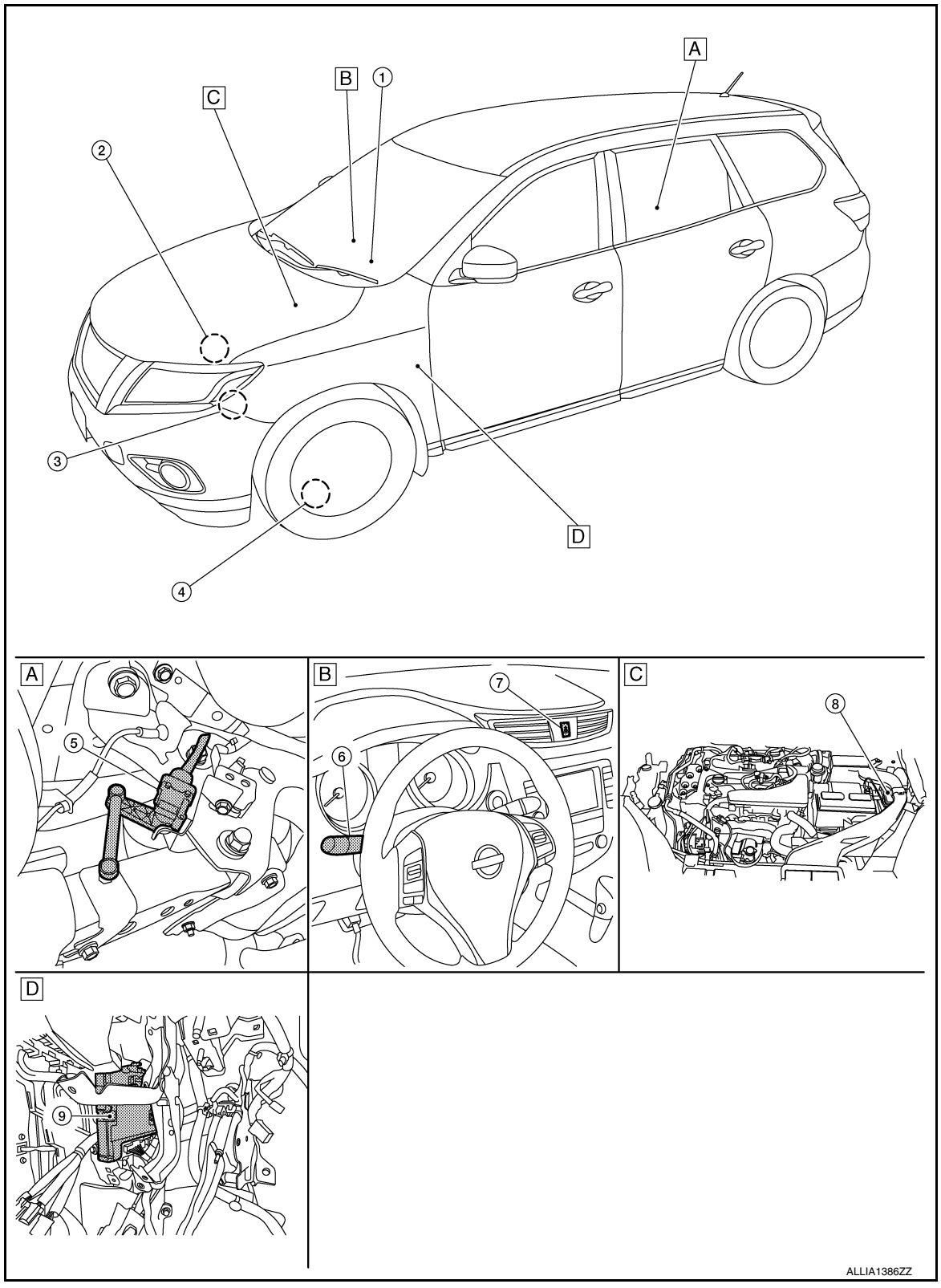
Tool number (TechMate No.) Tool name	Description
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000010286948



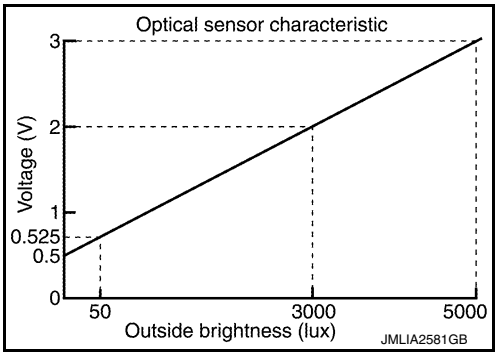
A. Right rear wheel area
B. Instrument panel
C. Engine compartment
D. Left side of instrument panel (view with trim panel removed)

No.	Part	Function
1.	Optical sensor	Refer to EXL-10, "Optical Sensor".
2.	LED headlamp control module	Turns the headlamps ON according to the power supply from IPDM E/R.
3.	Headlamp aiming motor	Moves the headlamps up/down based on inputs from the front and rear height sensors.
4.	Front height sensor	Sends the vehicles pitch angle signal to the IPDM E/R necessary for adjusting the headlamp aiming motors.
5.	Rear height sensor	Sends the vehicles pitch angle signal to the IPDM E/R necessary for adjusting the headlamp aiming motors.
6.	Combination switch (Lighting and turn signal switch)	Refer to BCS-9, "COMBINATION SWITCH READING SYSTEM : System Description" (with Intelligent Key) or BCS-81, "COMBINATION SWITCH READING SYSTEM : System Description" (without Intelligent Key).
7.	Hazard switch	Refer to EXL-11, "Hazard Switch".
8.	IPDM E/R	• Supplies voltage to the load according to the request from BCM (via CAN communication). • Refer to PCS-4, "Component Parts Location" for detailed installation location.
9.	BCM	• Detects each switch condition by the combination switch reading function. • Judges that the exterior lamps are turned ON according to the vehicle condition. • Requests the headlamp (HI/LO), tail lamp and front fog lamp ON to IPDM E/R (via CAN communication). • Requests high beam indicator lamp ON to the combination meter (via CAN communication). • Judges the outside brightness from the optical sensor signal. • Judges the ON/OFF timing according to the vehicle condition. • Judges the ON/OFF status of the exterior lamp according to the outside brightness and the vehicle condition. • Refer to BCS-7, "BODY CONTROL SYSTEM : Component Parts Location" (with Intelligent Key) or BCS-79, "BODY CONTROL SYSTEM : Component Parts Location" (without Intelligent Key).

Optical Sensor

INFOID:0000000010286949

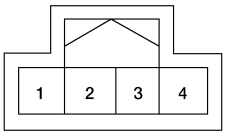
Optical sensor converts the outside brightness (lux) to voltage and transmits the optical sensor signal to BCM.



Hazard Switch

INFOID:0000000010286950

Inputs the hazard switch ON/OFF signal to BCM.



		OFF	ON
2	Hazard switch ON/OFF signal		●
3	Ground		●
4	Illumination +	●	
		◁	
1	Illumination -	●	

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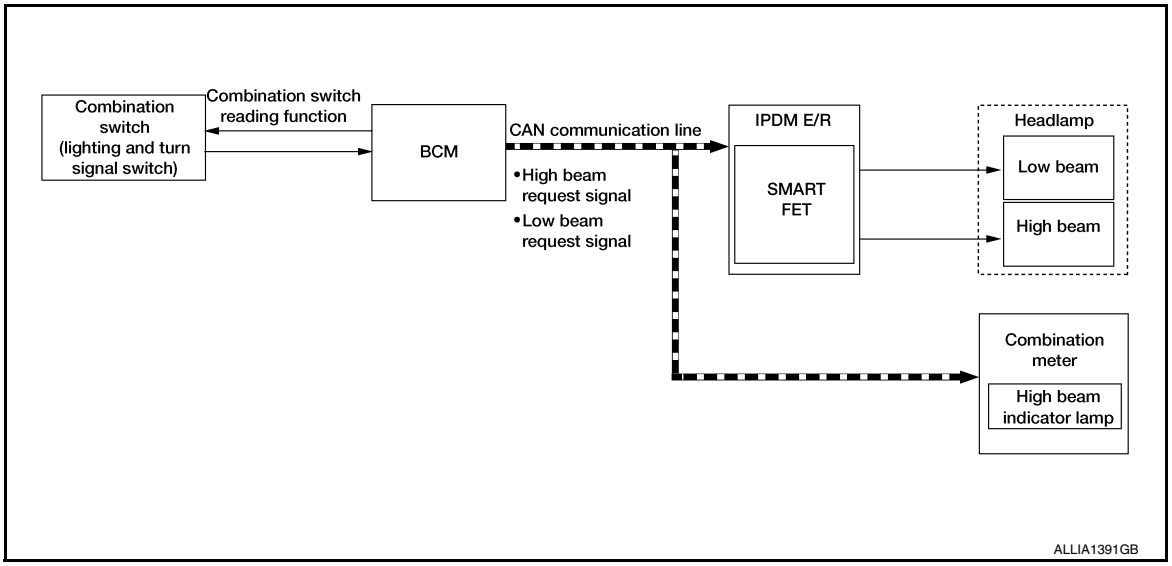
SYSTEM
HEADLAMP SYSTEM
HEADLAMP SYSTEM : System Description

INFOID:0000000010336173

SYSTEM DIAGRAM



OUTLINE

Headlamp is controlled by combination switch reading function and headlamp control function of BCM, and Smart FET 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 power switch ON
- Lighting switch PASS

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 power 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 headlamp ON according to the high beam request signal.

HEADLAMP SYSTEM : Fail-Safe

INFOID:0000000010336174

CAN COMMUNICATION CONTROL

When CAN communication with 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

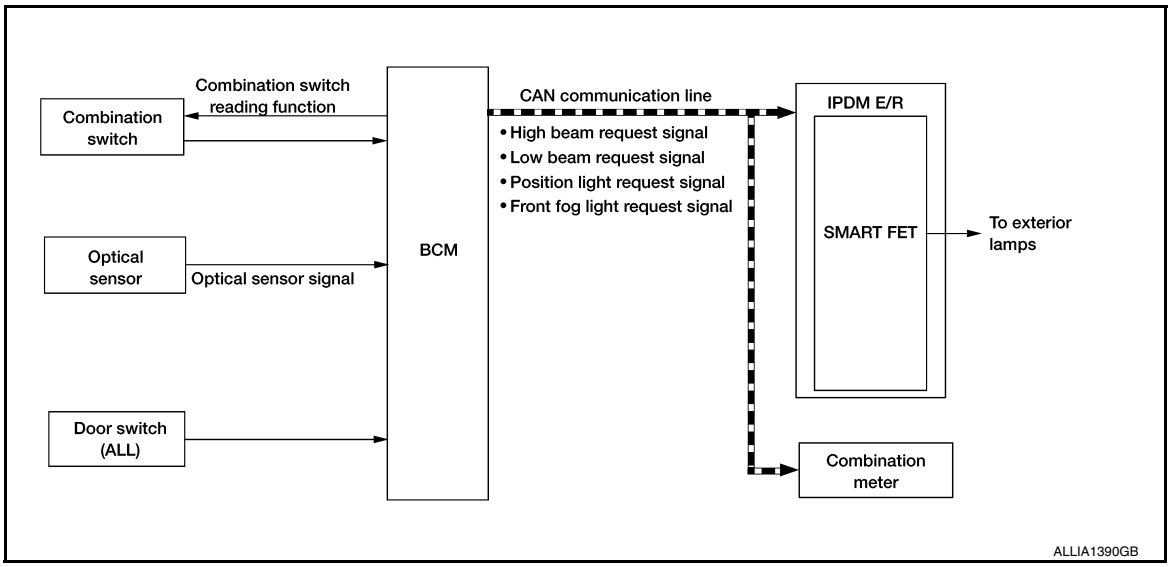
Control part	Fail-safe operation
Headlamp	• Turns ON the headlamp low beam when the power switch is turned ON • Turns OFF the headlamp low beam when the power switch is turned OFF

AUTO LIGHT SYSTEM

AUTO LIGHT SYSTEM : System Description

INFOID:0000000010336175

SYSTEM DIAGRAM



OUTLINE

• Auto light system is controlled by each function of BCM and IPDM E/R.

Controlled by BCM:
- Combination switch reading function
- Headlamp control function
- Auto light function
- Delay timer function
- Auto light adjustment system

Controlled by IPDM E/R:
- Auto light system has the auto light function and delay timer function.
- Auto light function automatically turns ON/OFF the exterior lamps* and each illumination automatically, depending on the outside brightness.
- When auto light system turns the exterior lamps ON with the power switch OFF, delay timer function turns the exterior lamps OFF, depending on the vehicle condition with the auto light function after a certain period of time.

*: Headlamp (LO/HI), parking lamp, side marker lamp, tail lamp and front fog lamp (Headlamp HI and front fog lamp depend on the combination switch condition).

AUTO LIGHT FUNCTION

• BCM detects the combination switch condition with the combination switch reading function.
• BCM supplies voltage to optical sensor when the power switch is turned ON or ACC.
• Optical sensor converts outside brightness (lux) to voltage and transmits the optical sensor signal to BCM.
• BCM judges outside brightness from the optical sensor signal and judges ON/OFF condition of the exterior lamp and each illumination according to the outside brightness.
• BCM transmits each request signal to IPDM E/R and combination meter via CAN communication according to ON/OFF condition by the auto light function.

NOTE:
ON/OFF timing differs based on the sensitivity from the setting. The setting can be set by CONSULT. Refer to.

AUTO LIGHT ADJUSTMENT SYSTEM

The auto light adjustment system automatically, dims/brightens the display, according to brightness outside the vehicle, when lighting switch 1ST, lighting switch 2ND or lighting switch AUTO is operated. Refer to EXL-13, "AUTO LIGHT SYSTEM : System Description".

DELAY TIMER FUNCTION

BCM turns the exterior lamp OFF depending on the vehicle condition with the auto light function when the power switch is turned OFF.

- Turns the exterior lamp OFF 5 minutes after detecting that any door opens. (Door switch ON).
- Turns the exterior lamp OFF a certain period of time* after closing all doors. (Door switch ON→OFF).
- Turns the exterior lamp OFF with the power switch ACC or the light switch OFF.

*: The preset time is 45 seconds. The timer operating time can be set by CONSULT. Refer to BCS-19, "HEADLAMP : CONSULT Function (BCM - HEADLAMP)" (with Intelligent Key) or BCS-90, "HEADLAMP : CONSULT Function (BCM - HEADLAMP)" (without Intelligent Key).

NOTE:

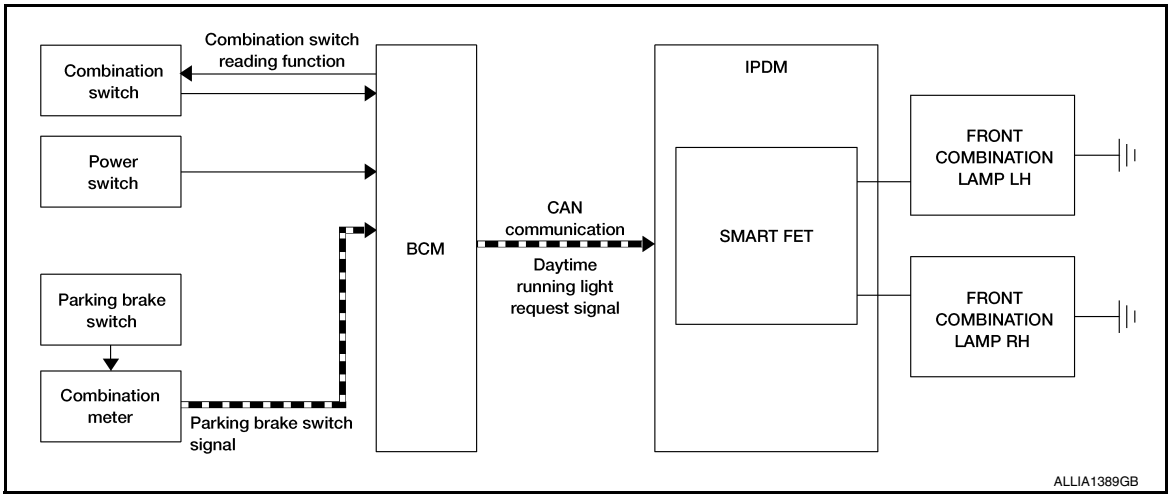
When any position other than the light switch AUTO is set, the auto light system function switches to the exterior lamp battery saver function.

DAYTIME RUNNING LIGHT SYSTEM

DAYTIME RUNNING LIGHT SYSTEM : System Description

INFOID:0000000010336176

SYSTEM DIAGRAM



OUTLINE

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

DAYTIME RUNNING LIGHT OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM detects the vehicle condition according to power 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 light request signal to IPDM E/R using CAN communication according to the daytime running light ON condition.

Daytime running light ON condition:

- Vehicle condition READY
- Lighting switch OFF or 1ST
- Lighting switch AUTO, and the auto light function OFF judgment
- Parking brake switch OFF

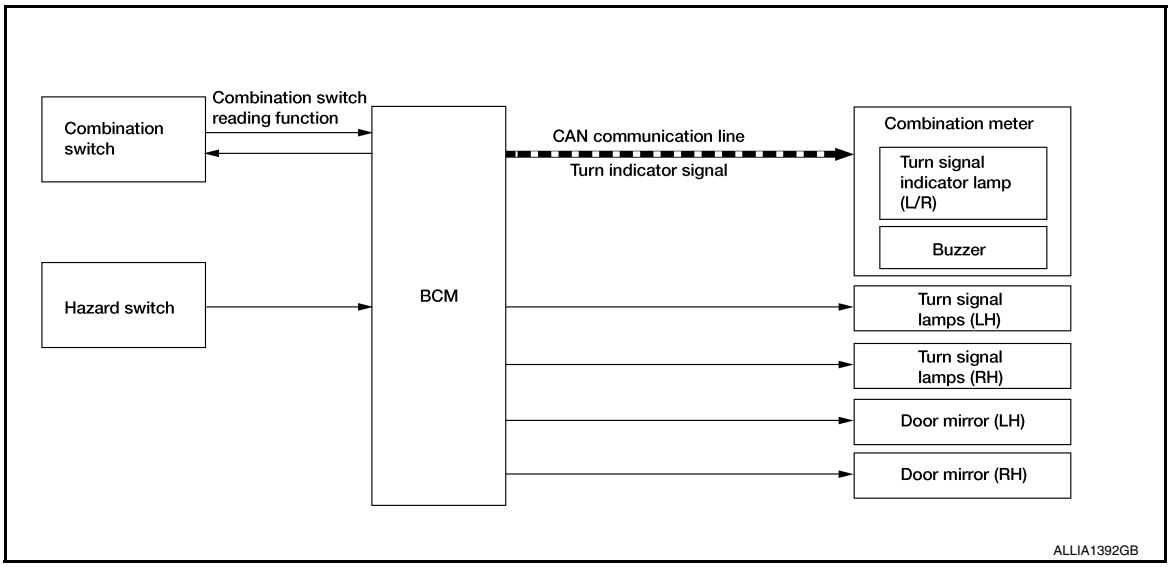
- IPDM E/R controls the daytime running light request signal.
- Power is supplied from the IPDM E/R to the daytime lights.

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Description

INFOID:0000000010336177

SYSTEM DIAGRAM



OUTLINE

Turn signal lamp and the hazard warning lamp is controlled by combination switch reading function and the flasher control 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 power switch is 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 ON. BCM blinks the hazard warning lamp.

TURN SIGNAL INDICATOR LAMP AND TURN SIGNAL OPERATION

- BCM transmits the turn signal indicator lamp signal to the combination meter using CAN communication while the turn signal lamp and the hazard warning lamp are operating.
- Combination meter outputs the turn signal sound with the integrated buzzer while blinking the turn signal indicator lamp according to the turn signal indicator lamp signal.

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.

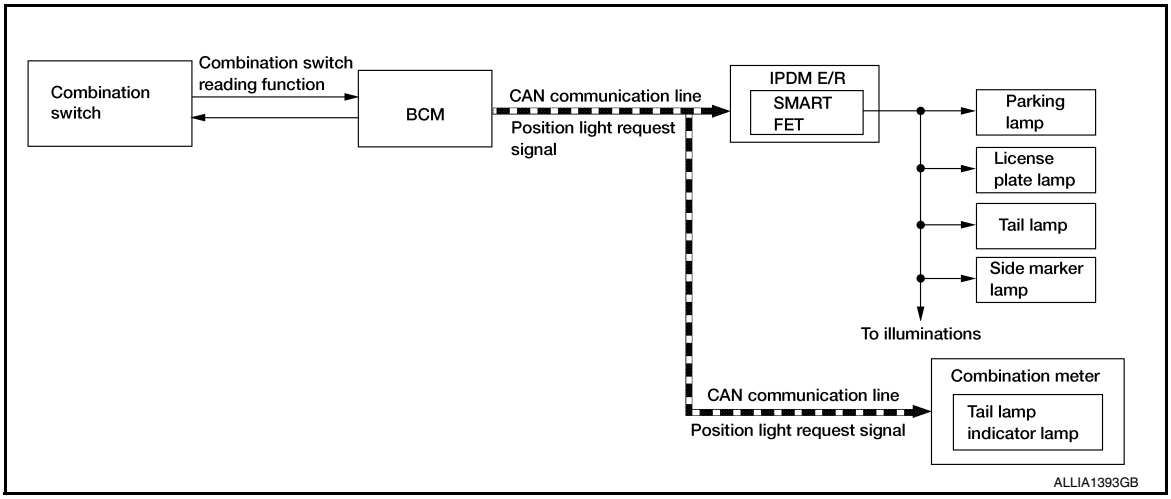
PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM

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

scription

INFOID:0000000010336178

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 smart FET 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 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 power switch ON

- IPDM E/R turns the parking, license plate, side marker 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:0000000010336179

CAN COMMUNICATION CONTROL

When CAN communication with 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

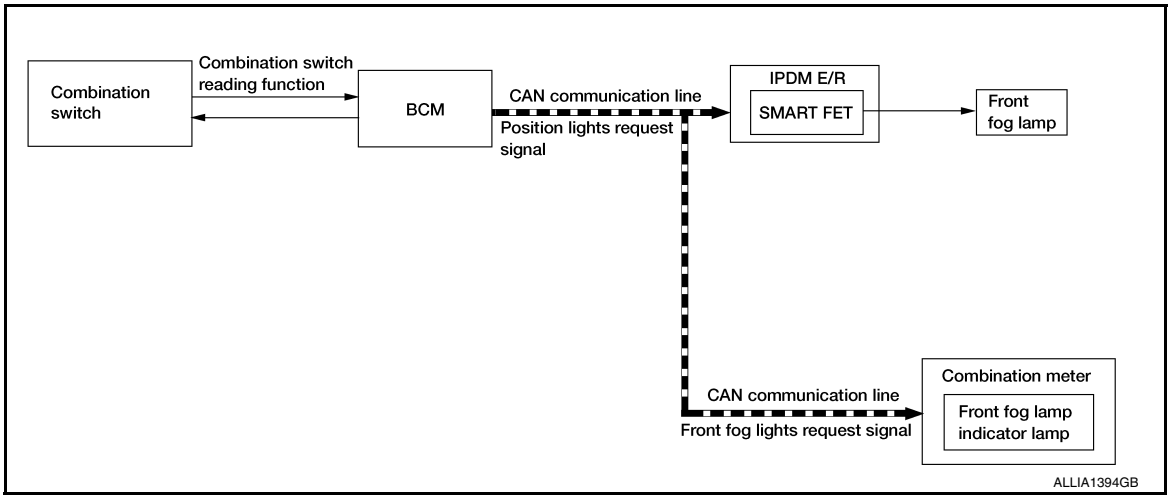
Control part	Fail-safe operation
• Parking lamp • License plate lamp • Illumination • Tail lamp • Side marker lamp	• Turns ON the tail lamp when the power switch is turned ON • Turns OFF the tail lamp when the power switch is turned OFF

FRONT FOG LAMP SYSTEM

FRONT FOG LAMP SYSTEM : System Description

INFOID:0000000010336180

SYSTEM DIAGRAM



OUTLINE

Front fog lamp is controlled by combination switch reading function, front fog lamp control function of BCM, and smart FET 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 lights request signal to IPDM E/R and the combination meter 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 and the power switch ON

IPDM E/R turns the front fog lamp ON according to the front fog lights request signal.
Combination meter turns the front fog lamp indicator lamp ON according to the front fog lights request signal.

FRONT FOG LAMP SYSTEM : Fail-Safe

INFOID:0000000010336181

CAN COMMUNICATION CONTROL

When CAN communication with 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

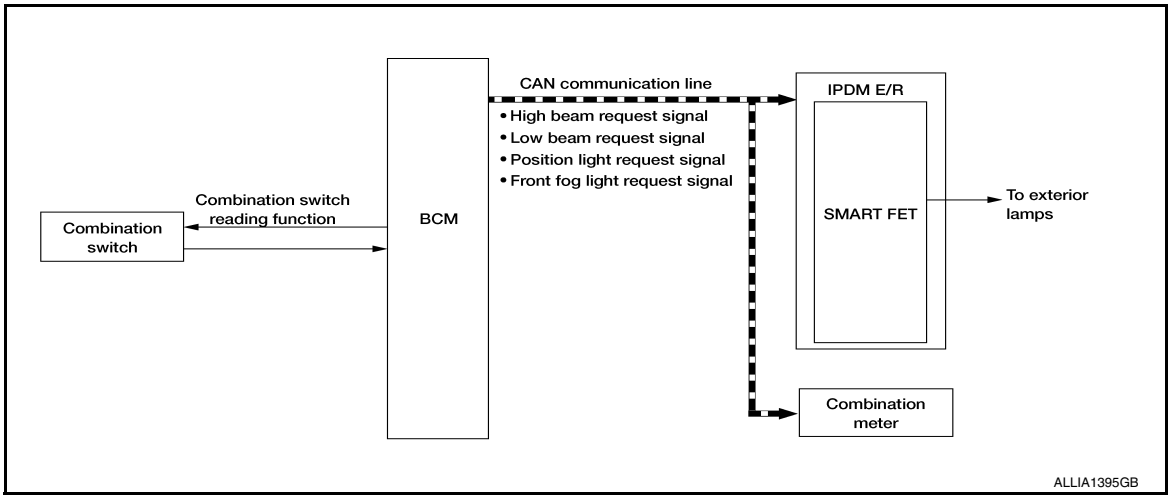
Control part	Fail-safe operation
Front fog lamp	Front fog lamp OFF

EXTERIOR LAMP BATTERY SAVER SYSTEM

EXTERIOR LAMP BATTERY SAVER SYSTEM : System Description

INFOID:0000000010336182

SYSTEM DIAGRAM



OUTLINE

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

Controlled by BCM:
- Combination switch reading function
- Headlamp control function
- Exterior lamp battery saver function

Controlled by IPDM E/R:
- BCM turns the exterior lamps* OFF after a period of time to prevent the battery from over-discharge when the power 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 power switch is turned from ON → OFF with the exterior lamps ON.

NOTE:

• Headlamp control function turns the exterior lamps ON normally when the power switch is turned ACC or set the vehicle to READY (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)
WITH INTELLIGENT KEY

WITH INTELLIGENT KEY : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010287175

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	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

WITH INTELLIGENT KEY : CONSULT Function (BCM - HEADLAMP)

INFOID:0000000010287176

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 [On/Off]	
LIGHT OFF SW [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW [On/Off]	
FR FOG SW [On/Off]	
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
OPTI SEN (DTCT) [V]	Indicates outside brightness voltage signal from optical sensor.
OPTI SEN (FILT) [V]	Indicates outside brightness voltage signal from optical sensor filtered by BCM.

ACTIVE TEST

Test Item	Description
FR FOG LAMP	This test is able to check front fog lamp operation [On/Off].
STOP LAMP 1	This test is able to check rear combination lamp stop lamp operation [On/Off].
STOP LAMP 3	This test is able to check high-mounted stop lamp operation [On/Off].

WORK SUPPORT

Support Item	Setting	Description
TWILIGHT ON	MODE2*	Autolamp function ON.
	MODE1	Autolamp function OFF.
CUSTOM A/LIGHT SETTING	MODE4	Less sensitive than normal setting (turns ON later).
	MODE3	More sensitive than MODE2.
	MODE2	More sensitive than normal setting (turns ON earlier).
	MODE1*	Normal setting.
ILL DELAY SET	MODE 8	Autolamp delay timer.
	MODE 7	
	MODE 6	
	MODE 4	
	MODE 5	
	MODE 3	
	MODE 2	
	MODE 1*	

*: Initial setting

WITH INTELLIGENT KEY : CONSULT Function (BCM - FLASHER)

INFOID:0000000010287177

DATA MONITOR

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

ACTIVE TEST

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

WITHOUT INTELLIGENT KEY

WITHOUT INTELLIGENT KEY : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010287178

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			×	×	×		

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Remote keyless entry system	MULTI REMOTE ENT					×		
Exterior lamp	HEADLAMP			×	×			
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×		×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

WITHOUT INTELLIGENT KEY : CONSULT Function (BCM - HEADLAMP) *INFOID:0000000010287179*

DATA MONITOR

Monitor Item [Unit]	Description
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 [On/Off]	
LIGHT OFF SW [On/Off]	
PASSING 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
DAYTIME RUNNING LIGHT	This test is able to check daytime running lamp operation [On/Off].
ILL DIM SIGNAL	This test is able to check head lamp illumination dimming operation [On/Off].

WITHOUT INTELLIGENT KEY : CONSULT Function (BCM - FLASHER)

INFOID:0000000010287180

DATA MONITOR

Monitor Item [Unit]	Description
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.
RKE-PANIC [On/Off]	Indicates condition of panic alarm signal from Intelligent Key.

ACTIVE TEST

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

DIAGNOSIS SYSTEM (IPDM E/R)

CONSULT Function (IPDM E/R)

INFOID:0000000010287181

APPLICATION ITEM

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

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

ECU IDENTIFICATION

The IPDM E/R part number is displayed.

SELF DIAGNOSTIC RESULT

Refer to PCS-20, "DTC Index".

DATA MONITOR

Monitor Item [Unit]	Description
REVERSE SIGNAL [Open/Close]	Indicates condition of transmission range switch R (Reverse) position.
IGN RELAY [Open/Close]	Indicates condition of ignition relay-1.
PUSH SW [Open/Close]	Indicates condition of push-button ignition switch.
INTERLOCK/PNP SW [Open/Close]	Indicates condition of transmission range switch P (Park) and N (Neutral) positions.
OIL PRESSURE SW [Open/Close]	Indicates condition of oil pressure switch.
HOOD SW [Open/Close]	Indicates condition of hood switch.
COMPRESSOR [OFF/ON]	Indicates condition of A/C compressor.
HORN RELAY [OFF/ ON]	Indicates condition of horn relay.
COOLING FAN [OFF/ON]	Indicates condition of cooling fan relay-1.
FRONT WIPER HI/LO RELAY [OFF/ON]	Indicates condition of front wiper high relay.
FRONT WIPER RELAY [OFF/ON]	Indicates condition of front wiper relay.
IGN RELAY OFF STATUS [OFF/ON]	Indicates condition of ignition relay-1 OFF status.
IGN RELAY ON STATUS [OFF/ON]	Indicates condition of ignition relay-1 ON status.
COOLING FAN RELAY 1 [OFF/ON]	Indicates condition of cooling fan relay-1.
STARTER RELAY [OFF/ON]	Indicates condition of starter relay.
COMP ECV DUTY [%]	Indicates condition of A/C compressor.
COOLING FAN RELAY 2 [%]	Indicates condition of cooling fan relay-2.
FR FOG LAMP LH [%]	Indicates condition of front fog lamp LH.
FR FOG LAMP RH [%]	Indicates condition of front fog lamp RH.
PARKING LAMP [%]	Indicates condition of parking lamp.
TAIL LAMP LH [%]	Indicates condition of tail lamp LH.
TAIL LAMP RH [%]	Indicates condition of tail lamp RH.
DAYTIME RUNNING LIGHT LH [%]	Indicates condition of daytime running light LH.
DAYTIME RUNNING LIGHT RH [%]	Indicates condition of daytime running light RH.
HEADLAMP (HI) LH [%]	Indicates condition of headlamp high beam LH.

Monitor Item [Unit]	Description
HEADLAMP (HI) RH [%]	Indicates condition of headlamp high beam RH.
HEADLAMP (LO) LH [%]	Indicates condition of headlamp low beam LH.
HEADLAMP (LO) RH [%]	Indicates condition of headlamp low beam RH.
A/C RELAY STUCK [NG/OK]	Indicates condition of A/C relay.
A/C RELAY [Off/On]	Indicates condition of A/C relay.
COMP ECV STATUS [NG/OK]	Indicates condition of A/C compressor.
VEHICLE SECURITY HORN [Off/On]	Indicates condition of horn relay.
BATTERY CURRENT SENSOR [NG/OK]	Indicates condition of battery current sensor.
FRONT FOG LAMP [Off/On]	Indicates condition of front fog lamps.
COMP ECV CURRENT [A]	Indicates condition of A/C compressor current.
BATTERY VOLTAGE [V]	Indicates condition of battery voltage.
COOLING FAN DUTY [%]	Indicates condition of cooling fans.
HOOD SW (CAN) [OPEN/CLOSE]	Indicates condition of hood switch.
FRONT WIPER [STOP/LOW/HIGH]	Indicates condition of front wiper motor.
FR WIPER STOP POSITION [STOP P/ACTIVE P]	Indicates condition of front wiper motor stop.
HEADLAMP (HI) [Off/On]	Indicates condition of headlamp high beams.
HEADLAMP (LO) [Off/On]	Indicates condition of headlamp low beams.
IGNITION RELAY STATUS [Off/On]	Indicates condition of ignition relay-1.
IGN RELAY MONITOR [Off/On]	Indicates condition of ignition relay-1 feedback.
IGNITION POWER SUPPLY [Off/On]	Indicates condition of ignition relay-1.
INTERLOCK/PNP SW (CAN) [Off/On]	Indicates condition of transmission range switch P (Park) and N (Neutral) positions.
PUSH-BUTTON IGN SW (CAN) [Off/On]	Indicates condition of push-button ignition switch.
TAIL LAMP [Off/On]	Indicates condition of tail lamps.
REVERSE SIGNAL (CAN) [Off/On]	Indicates condition of transmission range switch R (Reverse) position.
ST&ST CONT RELAY STATUS [Off/ST R On]	Indicates condition of starter cut and starter relays.
STARTER MOTOR STATUS [Off/On]	Indicates condition of starter motor.
STARTER RELAY (CAN) [LOW/HIGH]	Indicates condition of starter relay.
IPDM NOT SLEEP [NO RDY/RDY]	Indicates condition of IPDM E/R sleep status.
AFTER COOLING TIME [No request/Request]	Indicates condition of cooling fan request.
AFTER COOLING SPEED [%]	Indicates condition of cooling fans.
COOLING FAN TYPE [NISSAN/RENAULT]	Indicates cooling fan type.
COMPRESSOR REQ1 [Off/On]	Indicates condition of A/C compressor request.
VHCL SECURITY HORN REQ [Off/On]	Indicates condition of horn relay request.
DTRL REQ [Off/On]	Indicates condition of daytime running light request.
SLEEP/WAKE UP [WAKEUP/SLEEP]	Indicates condition of IPDM E/R sleep/wake.
CRANKING ENABLE-TCM [NG/OK]	Indicates condition of crank enable from TCM.
CRANKING ENABLE-ECM [NG/OK]	Indicates condition of crank enable from ECM.
CAN DIAGNOSIS [NG/OK]	Indicates condition of CAN diagnosis.
FRONT FOG LAMP REQ [Off/On]	Indicates condition of front fog lamp request.
HIGH BEAM REQ [Off/On]	Indicates condition of headlamp high beam request.
HORN CHIRP [Off/On]	Indicates condition of horn relay request.
COOLING FAN REQ [%]	Indicates condition of cooling fan request.
ENGINE STATUS [STOP/RUN/IDLING]	Indicates condition of engine status.

Monitor Item [Unit]	Description
TURN SIGNAL REQ [Off/LH/RH]	Indicates condition of turn signal request.
FR WIPER REQ [RETURN/LOW/HIGH]	Indicates condition of front wiper motor request.
SHIFT POSITION [P/R/N/D/L]	Indicates condition of transmission range switch positions.
LOW BEAM REQ [Off/On]	Indicates condition of headlamp low beam request.
POSITION LIGHT REQ [Off/On]	Indicates condition of parking lamp request.
COMPRESSOR REQ2 [Off/On]	Indicates condition of A/C compressor request.
IGNITION SW [Off/On]	Indicates condition of ignition switch.
VEHICLE SPEED (METER) [mph/km/h]	Indicates vehicle speed.
BAT DISCHARGE COUNT [0-100]	Indicates condition of battery discharge.
BATTERY STATUS [NG/OK]	Indicates battery status.

ACTIVE TEST

Test item	Description
HORN	This test is able to check horn operation [Off/On].
FRONT WIPER	This test is able to check wiper motor operation [Off/Low/High].
COMPRESSOR	This test is able to check A/C compressor operation [Off/On].
COOLING FAN (DUAL)	This test is able to check cooling fan operation [Off/LO/HI].
HEADLAMP (HI)	This test is able to check headlamp high beam operation [Off/3/5].
HEADLAMP (LO)	This test is able to check headlamp low beam operation [Off/3/5].
FRONT FOG LAMP	This test is able to check front fog lamp operation [Off/3/5].
DAYTIME RUNNING LAMP	This test is able to check daytime running lamp operation [Off/3/5].
PARKING LAMP	This test is able to check parking lamp operation [Off/3/5].
TAIL LAMP	This test is able to check tail lamp operation [Off/3/5].

CAN DIAG SUPPORT MNTR

Refer to LAN-14, "CAN Diagnostic Support Monitor".

ECU DIAGNOSIS INFORMATION

BCM, IPDM E/R

List of ECU Reference

INFOID:0000000010286972

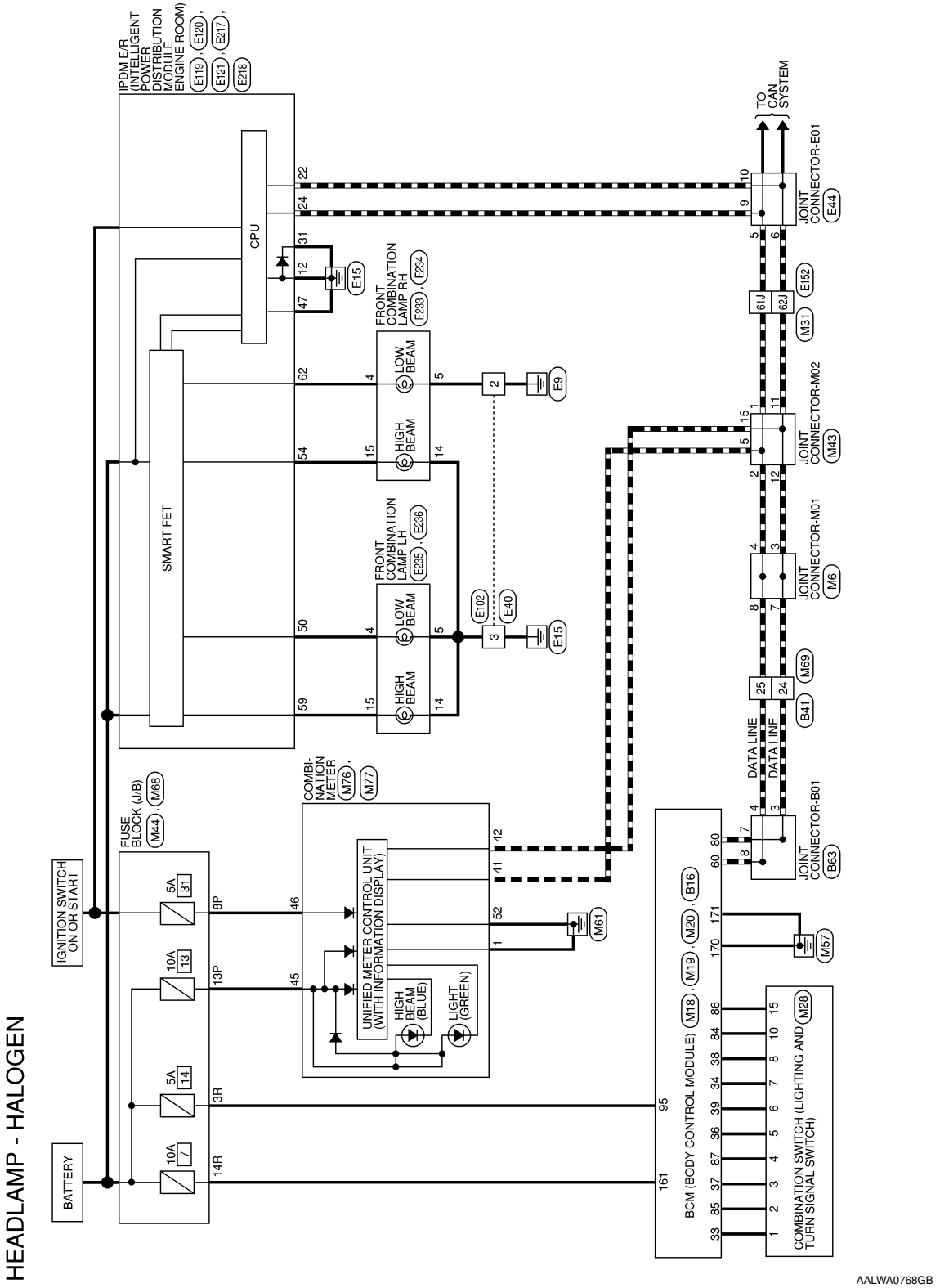
ECU	Reference
BCM	BCS-28, "Reference Value" (with Intelligent Key) BCS-96, "Reference Value" (without Intelligent Key)
	BCS-47, "Fail Safe" (with Intelligent Key) BCS-107, "Fail Safe" (without Intelligent Key)
	BCS-47, "DTC Inspection Priority Chart" (with Intelligent Key) BCS-107, "DTC Inspection Priority Chart" (without Intelligent Key)
	BCS-48, "DTC Index" (with Intelligent Key) BCS-108, "DTC Index" (without Intelligent Key)
IPDM E/R	PCS-12, "Reference Value".
	PCS-19, "Fail-safe"
	PCS-20, "DTC Index"

WIRING DIAGRAM

HEADLAMP

Wiring Diagram

INFOID:0000000010288622



HEAD LAMP - HALOGEN CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

H.S.

100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81
120	119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101

Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

H.S.

167	166	165	164		163	162	161
176	175	174	173	172	171	170	169	168

Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–

Terminal No.	Color of Wire	Signal Name
4	BG	–
5	G	–
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

AALIA2132GB

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
5	L	–
11	P	–
12	P	–
15	P	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

			5J	4J	3J	2J	1J				
			10J	9J	8J	7J	6J				
21J	20J	19J	18J	17J	16J	15J	14J	13J	12J	11J	
	30J	29J	28J	27J	26J	25J	24J	23J	22J		
41J	40J	39J	38J	37J	36J	35J	34J	33J	32J	31J	
	50J	49J	48J	47J	46J	45J	44J	43J	42J		
61J	60J	59J	58J	57J	56J	55J	54J	53J	52J	51J	
	70J	69J	68J	67J	66J	65J	64J	63J	62J		
81J	80J	79J	78J	77J	76J	75J	74J	73J	72J	71J	
	90J	89J	88J	87J	86J	85J	84J	83J	82J		
			95J	94J	93J	92J		91J			
			100J	99J	98J	97J		96J			

Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
3R	V	–
14R	W	–

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8P	LA/BR	–
13P	LA/G	–

AALIA2133GB

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND1

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

41	42	43	44	45	46
47	48	49	50	51	52

Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	E40
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2
3	4

Terminal No.	Color of Wire	Signal Name
2	GR	–
3	B	–

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.

4	3	2	1
8	7	6	5
12	11	10	9
16	15	14	13
20	19	18	17
24	23	22	21
28	27	26	25

Terminal No.	Color of Wire	Signal Name
5	L	–
6	P	–
9	L	–
10	P	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	B	SIGNAL GROUND

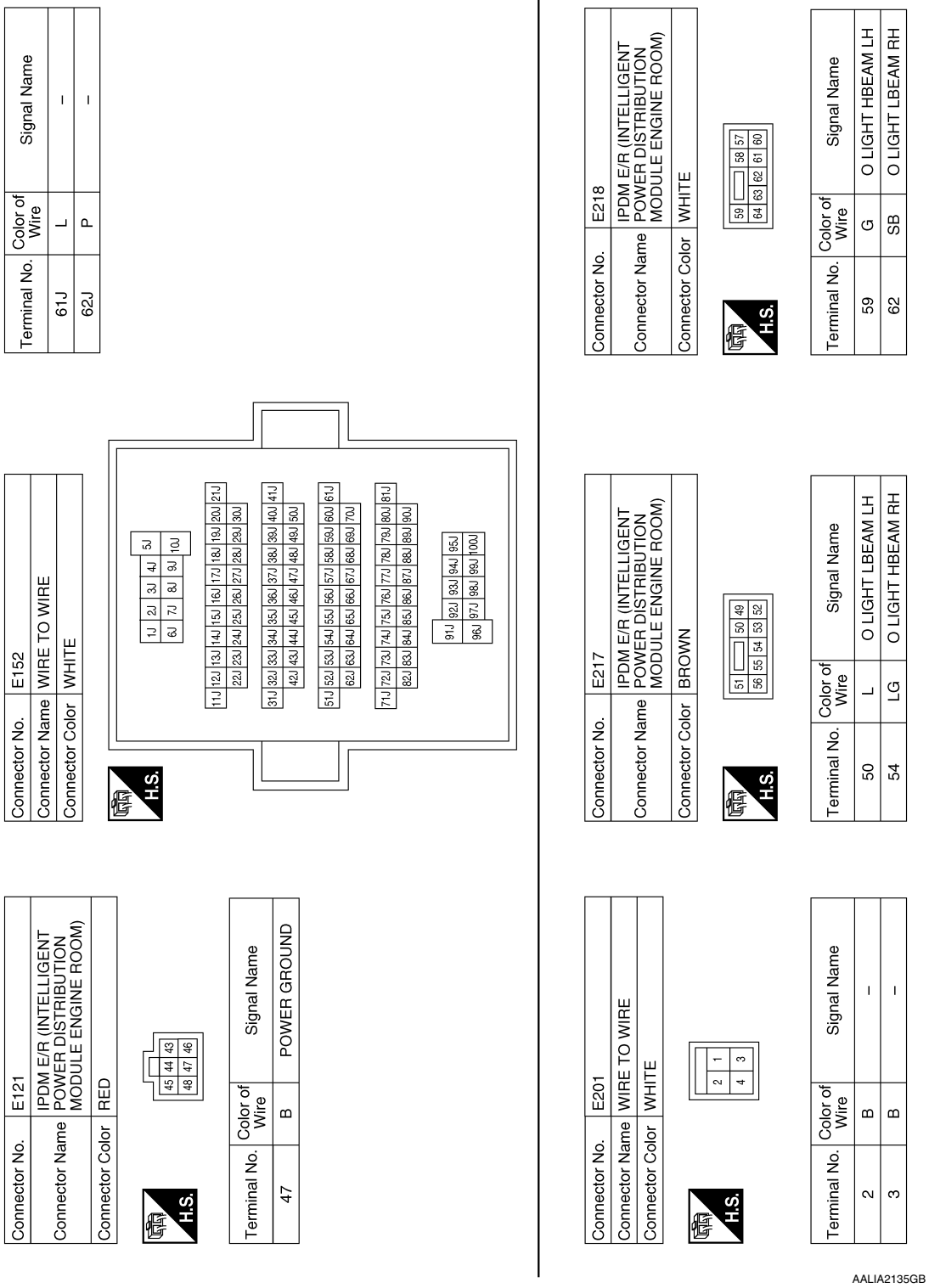
Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

30	29	28	27	26	25	24	23	22	21	20	19
42	41	40	39	38	37	36	35	34	33	32	31

Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
31	B	2ND SIGNAL GROUND

AALIA2134GB


Connector No. E121
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color RED
H.S.
45 44 43
48 47 46
Terminal No. Color of Wire Signal Name
47 B POWER GROUND
Connector No. E152
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
Terminal No. Color of Wire Signal Name
61J L –
62J P –
Connector No. E201
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
2 1
4 3
Terminal No. Color of Wire Signal Name
2 B –
3 B –
Connector No. E217
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color BROWN
H.S.
51 50 49
56 55 54 53 52
Terminal No. Color of Wire Signal Name
50 L O LIGHT LBEAM LH
54 LG O LIGHT HBEAM RH
Connector No. E218
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE
H.S.
59 58 57
64 63 62 61 60
Terminal No. Color of Wire Signal Name
59 G O LIGHT HBEAM LH
62 SB O LIGHT LBEAM RH
AALIA2135GB

Connector No.	E233
Connector Name	FRONT COMBINATION LAMP RH (WITH HALOGEN HEADLAMPS)
Connector Color	BLACK

H.S.

4	5	6
7	8	9

Terminal No.	Color of Wire	Signal Name
4	SB	–
5	B	–

Connector No.	E234
Connector Name	FRONT COMBINATION LAMP RH (WITH HALOGEN HEADLAMPS)
Connector Color	GRAY

H.S.

10	11	12
13	14	15

Terminal No.	Color of Wire	Signal Name
14	B	–
15	LG	–

Connector No.	E235
Connector Name	FRONT COMBINATION LAMP LH (WITH HALOGEN HEADLAMPS)
Connector Color	BLACK

H.S.

4	5	6
7	8	9

Terminal No.	Color of Wire	Signal Name
4	L	–
5	B	–

Connector No.	E236
Connector Name	FRONT COMBINATION LAMP LH (WITH HALOGEN HEADLAMPS)
Connector Color	GRAY

H.S.

10	11	12
13	14	15

Terminal No.	Color of Wire	Signal Name
14	B	–
15	G	–

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
60	L	CAN-H
80	P	CAN-L

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

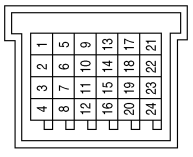
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

AALIA2136GB

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.



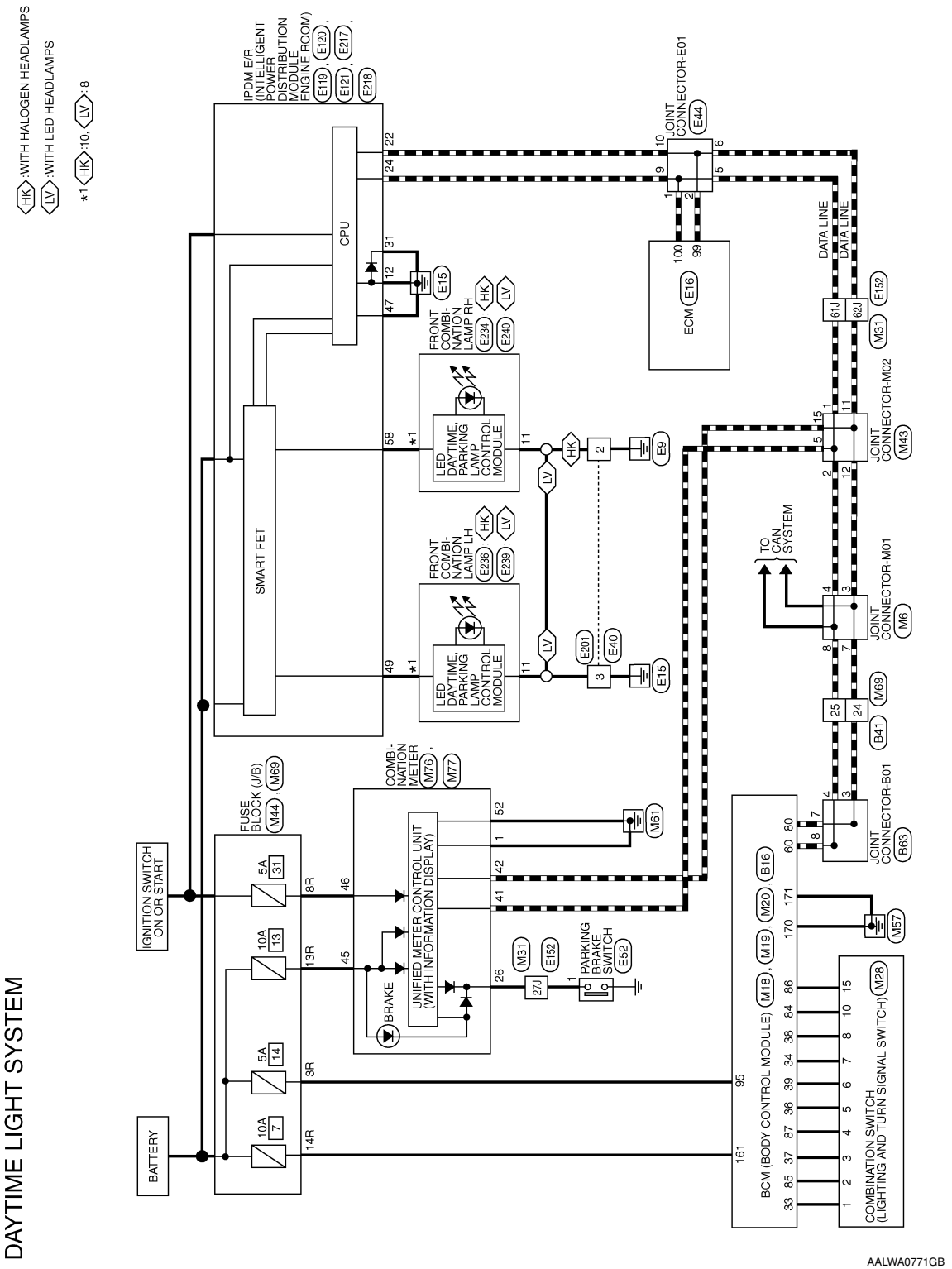
Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

AALIA2137GB

DAYTIME LIGHT SYSTEM

Wiring Diagram

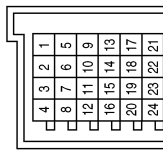
INFOID:0000000010288623



DAYTIME LIGHT SYSTEM CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

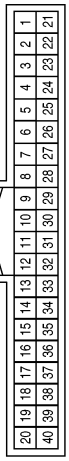
H.S.



Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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

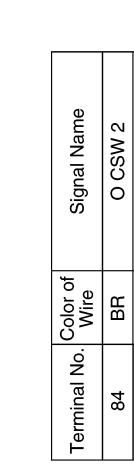
H.S.



Terminal No.	Color of Wire	Signal Name
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

H.S.



Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

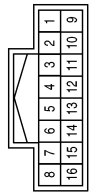
Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

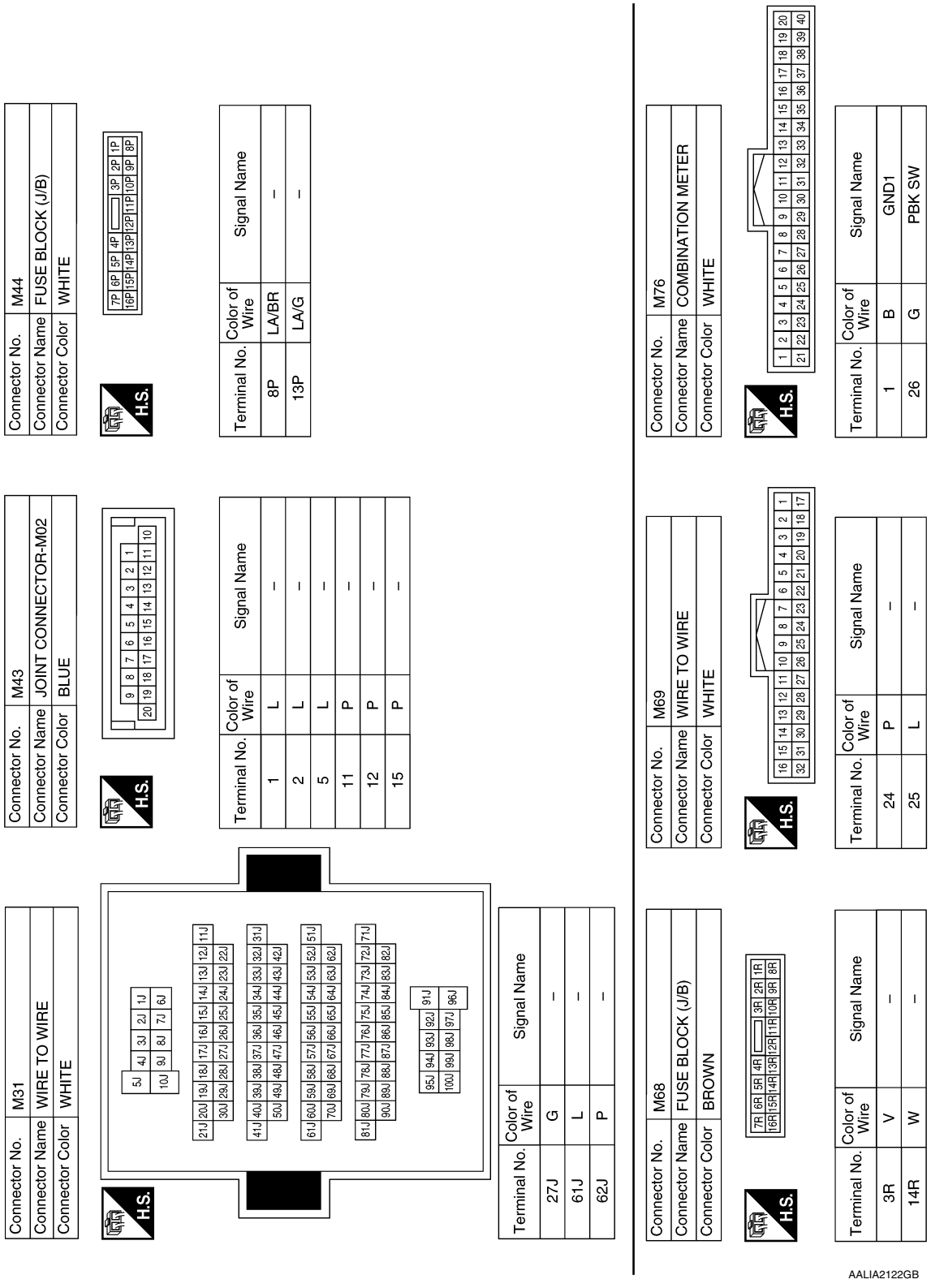
H.S.



Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–
4	BG	–

Terminal No.	Color of Wire	Signal Name
5	G	–
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

AALIA2121GB


Connector No. M31
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
Terminal No. Signal Name
27J –
61J –
62J –
Connector No. M43
Connector Name JOINT CONNECTOR-M02
Connector Color BLUE
H.S.
Terminal No. Color of Wire Signal Name
1 L –
2 L –
5 L –
11 P –
12 P –
15 P –
Connector No. M44
Connector Name FUSE BLOCK (J/B)
Connector Color WHITE
H.S.
Terminal No. Color of Wire Signal Name
8P LA/BR –
13P LA/G –
Connector No. M68
Connector Name FUSE BLOCK (J/B)
Connector Color BROWN
H.S.
Terminal No. Color of Wire Signal Name
3R V –
14R W –
Connector No. M69
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
Terminal No. Color of Wire Signal Name
24 P –
25 L –
Connector No. M76
Connector Name COMBINATION METER
Connector Color WHITE
H.S.
Terminal No. Color of Wire Signal Name
1 B GND1
26 G PBK SW
AALIA2122GB

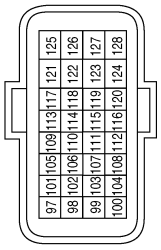
Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
41	L	CAN–H
42	P	CAN–L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	E16
Connector Name	ECM
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
99	P	CAN–L
100	L	CAN–H

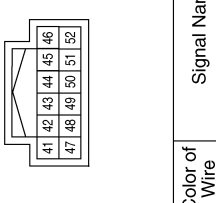
Connector No.	E40
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	GR	–
3	B	–

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	L	–
2	P	–
5	L	–
6	P	–
9	L	–
10	P	–

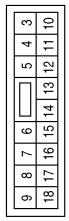
Connector No.	E52
Connector Name	PARKING BRAKE SWITCH
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
12	B	SIGNAL GROUND

AALIA2123GB

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

30	29	28	27	26	25	24	23	22	21	20	19
42	41	40	39	38	37	36	35	34	33	32	31

Terminal No.	Color of Wire	Signal Name
22	P	CAN–L
24	L	CAN–H
31	B	2ND SIGNAL GROUND

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

H.S.

45	44	43
48	47	46

Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

								5J		
						4J		10J		
		1J	2J	3J	8J	9J				
		6J	7J							
11J	12J	13J	14J	15J	16J	17J	18J	19J	20J	21J
	22J	23J	24J	25J	26J	27J	28J	29J	30J	
31J	32J	33J	34J	35J	36J	37J	38J	39J	40J	41J
	42J	43J	44J	45J	46J	47J	48J	49J	50J	
51J	52J	53J	54J	55J	56J	57J	58J	59J	60J	61J
	62J	63J	64J	65J	66J	67J	68J	69J	70J	
71J	72J	73J	74J	75J	76J	77J	78J	79J	80J	81J
		82J	83J	84J	85J	86J	87J	88J	89J	90J
				91J	92J	93J	94J	95J		
					96J	97J	98J	99J	100J	

Terminal No.	Color of Wire	Signal Name
27J	G	–
61J	L	–
62J	P	–

Connector No.	E201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

2	1
4	3

Terminal No.	Color of Wire	Signal Name
2	B	–
3	B	–

AALIA2124GB

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

H.S.

51		50	49
56	55	54	53	52

Terminal No.	Color of Wire	Signal Name
49	R	O LIGHT DTRL LH

Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

59		58	57
64	63	62	61	60

Terminal No.	Color of Wire	Signal Name
58	R	O LIGHT DTRL RH

Connector No.	E234
Connector Name	FRONT COMBINATION LAMP RH (WITH HALOGEN HEADLAMPS)
Connector Color	GRAY

H.S.

10	11	12
13	14	15

Terminal No.	Color of Wire	Signal Name
10	R	–
11	GR	–

Connector No.	E236
Connector Name	FRONT COMBINATION LAMP LH (WITH HALOGEN HEADLAMPS)
Connector Color	GRAY

H.S.

10	11	12
13	14	15

Terminal No.	Color of Wire	Signal Name
10	R	–
11	GR	–

Connector No.	E239
Connector Name	FRONT COMBINATION LAMP LH (WITH LED HEADLAMPS)
Connector Color	BLACK

H.S.

4	5	6	7
8	9	10	11

Terminal No.	Color of Wire	Signal Name
8	R	–
11	B	–

Connector No.	E240
Connector Name	FRONT COMBINATION LAMP RH (WITH LED HEADLAMPS)
Connector Color	BLACK

H.S.

4	5	6	7
8	9	10	11

Terminal No.	Color of Wire	Signal Name
8	R	–
11	B	–

AALIA2125GB

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

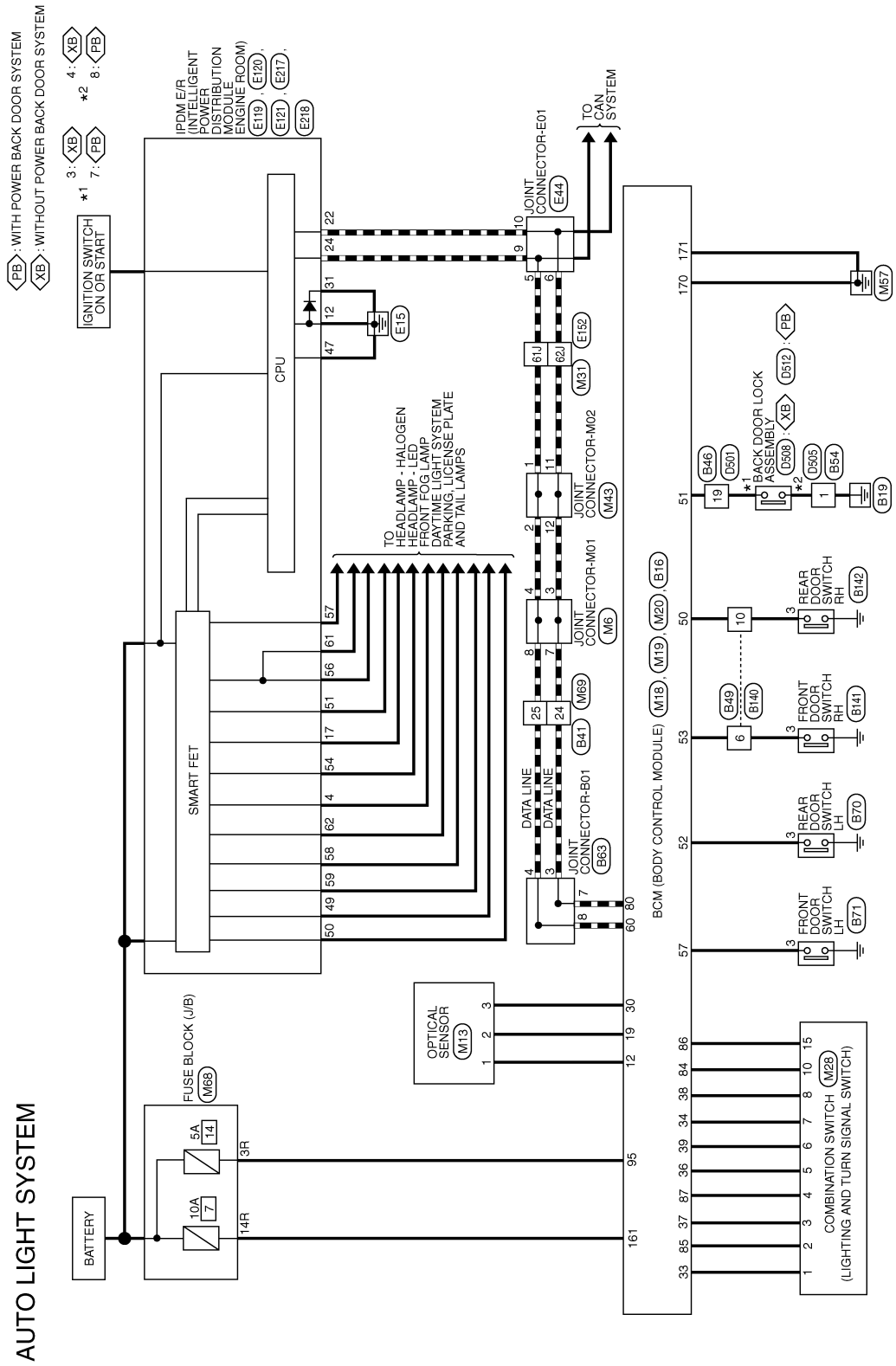
Terminal No.	Color of Wire	Signal Name
60	L	CAN–H
80	P	CAN–L

AALIA2126GB

AUTO LIGHT SYSTEM

Wiring Diagram

INFOID:0000000010288624



AALWA0767GB

AUTO LIGHT SYSTEM CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

Connector No.	M13
Connector Name	OPTICAL SENSOR
Connector Color	WHITE

H.S.

1	2	3

Terminal No.	Color of Wire	Signal Name
1	W	–
2	LG	–
3	V	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	W	O PWR AUTOLIGHT SENSOR
19	LG	I AUTOLIGHT SENSOR
30	V	O GND AUTOLIGHT SENSOR
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

H.S.

100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81
120	119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101

Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

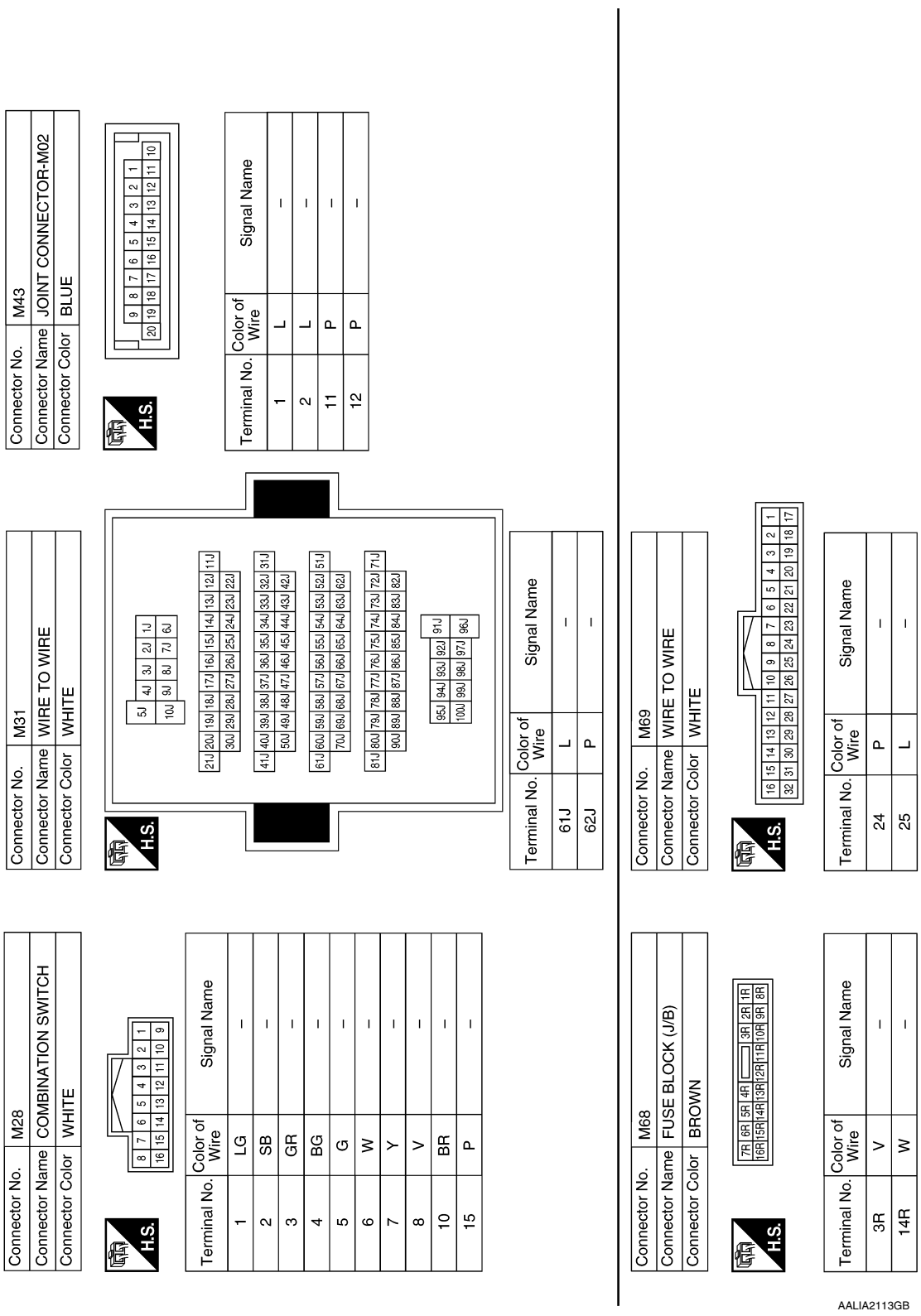
Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

H.S.

167	166	165	164		163	162	161
176	175	174	173	172	171	170	169	168

Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

AALIA2112GB


Connector No. M28
Connector Name COMBINATION SWITCH
Connector Color WHITE
H.S.
8 7 6 5 4 3 2 1
16 15 14 13 12 11 10 9
Terminal No. Color of Wire Signal Name
1 LG –
2 SB –
3 GR –
4 BG –
5 G –
6 W –
7 Y –
8 V –
10 BR –
15 P –
Connector No. M31
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
5J 4J 3J 2J 1J
10J 9J 8J 7J 6J
21J 20J 19J 18J 17J 16J 15J 14J 13J 12J 11J
30J 29J 28J 27J 26J 25J 24J 23J 22J
41J 40J 39J 38J 37J 36J 35J 34J 33J 32J 31J
50J 49J 48J 47J 46J 45J 44J 43J 42J
61J 60J 59J 58J 57J 56J 55J 54J 53J 52J 51J
70J 69J 68J 67J 66J 65J 64J 63J 62J
81J 80J 79J 78J 77J 76J 75J 74J 73J 72J 71J
90J 89J 88J 87J 86J 85J 84J 83J 82J
95J 94J 93J 92J 91J
100J 99J 98J 97J 96J
Terminal No. Color of Wire Signal Name
61J L –
62J P –
Connector No. M43
Connector Name JOINT CONNECTOR-M02
Connector Color BLUE
H.S.
9 8 7 6 5 4 3 2 1
20 19 18 17 16 15 14 13 12 11 10
Terminal No. Color of Wire Signal Name
1 L –
2 L –
11 P –
12 P –
Connector No. M68
Connector Name FUSE BLOCK (J/B)
Connector Color BROWN
H.S.
7R 6R 5R 4R 3R 2R 1R
16R 15R 14R 13R 12R 11R 10R 9R 8R
Terminal No. Color of Wire Signal Name
3R V –
14R W –
Connector No. M69
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
Terminal No. Color of Wire Signal Name
24 P –
25 L –
AALIA2113GB

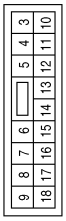
Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
5	L	–
6	P	–
9	L	–
10	P	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

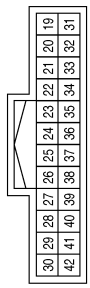
H.S.



Terminal No.	Color of Wire	Signal Name
4	Y	O LIGHT POSITION REAR LH
12	B	SIGNAL GROUND
17	W	O LIGHT POSITION REAR RH

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

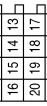
H.S.



Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
31	B	2ND SIGNAL GROUND

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

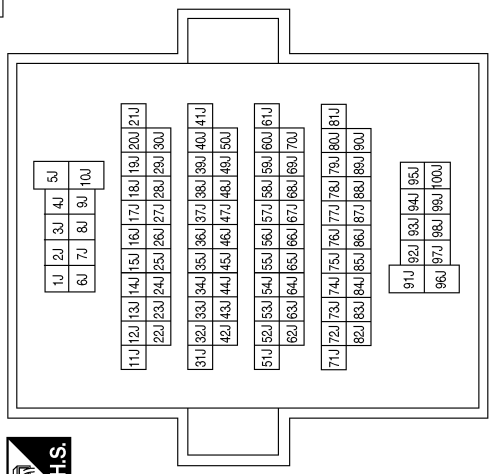
H.S.



Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

AALIA2114GB

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

H.S.

51		50	49
56	55	54	53	52

Terminal No.	Color of Wire	Signal Name
49	R	O LIGHT DTRL LH
50	L	O LIGHT LBEAM LH
51	V	O LIGHT FR FOG LAMPS LH
54	LG	O LIGHT HBEAM RH
56	BG	O LIGHT CLEARANCE FR LH

Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

59		58	57
64	63	62	61	60

Terminal No.	Color of Wire	Signal Name
57	W	O LIGHT FR FOG LAMPS RH
58	R	O LIGHT DTRL RH
59	G	O LIGHT HBEAM LH
61	GR	O LIGHT CLEARANCE FR RH
62	SB	O LIGHT LBEAM RH

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
50	W	I RR DOOR SW
51	LG	I TGATE SW
52	R	I RL DOOR SW
53	SB	I AS DOOR2 SW
57	SB	I DR DOOR2 SW
60	L	CAN–H
80	P	CAN–L

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
19	LG	–

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	SB	–
10	W	–

AALIA2115GB

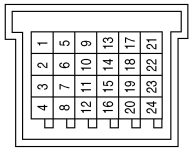
Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

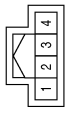
H.S.



Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

Connector No.	B70
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

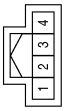
H.S.



Terminal No.	Color of Wire	Signal Name
3	R	–

Connector No.	B71
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE

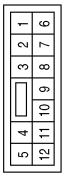
H.S.



Terminal No.	Color of Wire	Signal Name
3	SB	–

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE

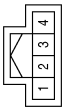
H.S.



Terminal No.	Color of Wire	Signal Name
6	GR	–
10	W	–

Connector No.	B141
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
3	GR	–

AALIA2116GB

Connector No.	B142
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	W	–

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
19	W	–

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	D508
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT POWER BACK DOOR SYSTEM)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	W	–
4	GR	–

Connector No.	D512
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH POWER BACK DOOR SYSTEM)
Connector Color	WHITE

H.S.

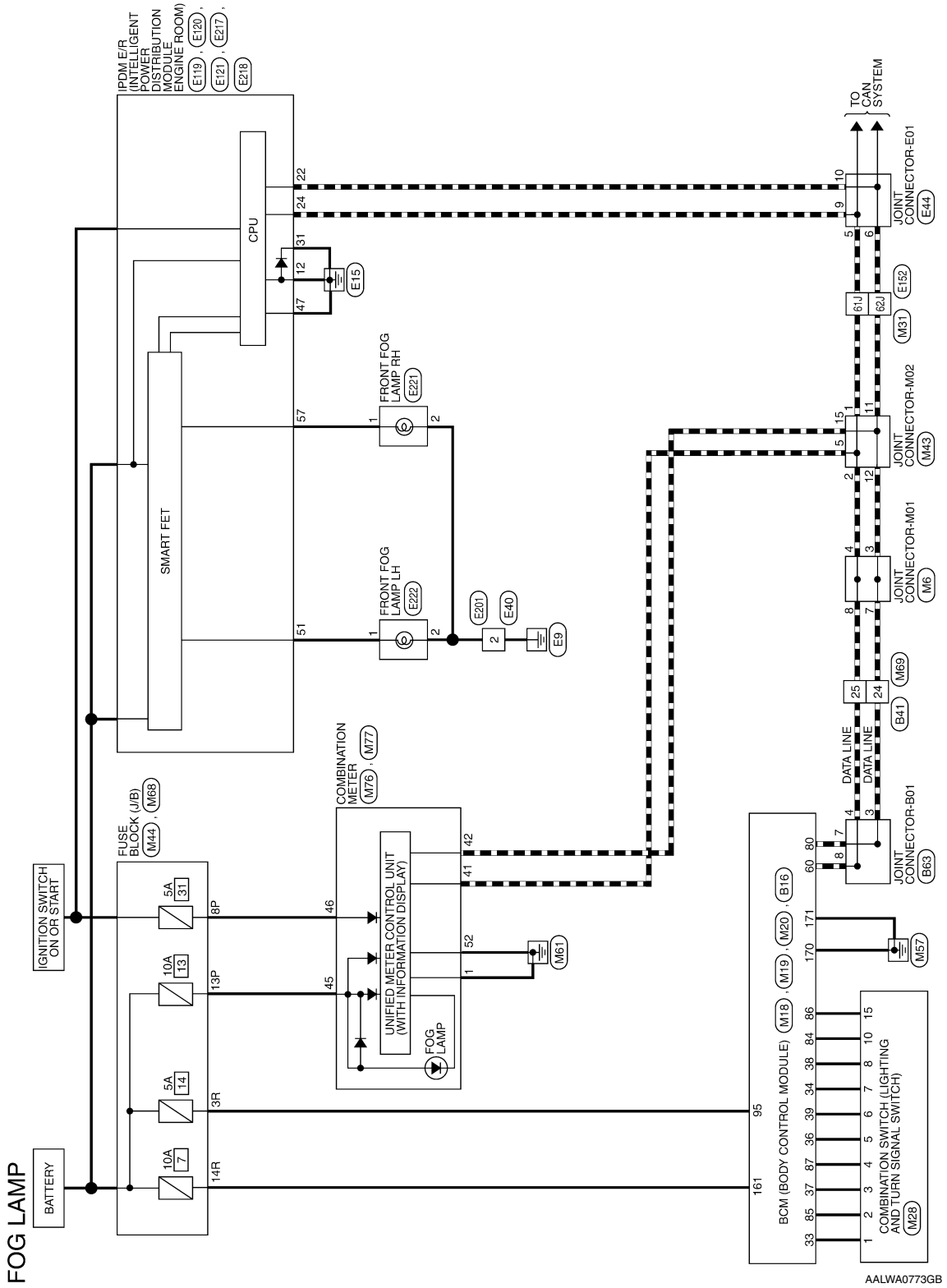
Terminal No.	Color of Wire	Signal Name
7	W	–
8	B	–

AALIA2117GB

FRONT FOG LAMP SYSTEM

Wiring Diagram

INFOID:0000000010288625



AALWA0773GB

FOG LAMP CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

H.S.

Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–
4	BG	–
5	G	–

Terminal No.	Color of Wire	Signal Name
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

AALIA2127GB

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
5	L	–
11	P	–
12	P	–
15	P	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

5J	4J	3J	2J	1J
	9J	8J	7J	6J
10J				

21J	20J	19J	18J	17J	16J	15J	14J	13J	12J	11J
	30J	29J	28J	27J	26J	25J	24J	23J	22J	
41J	40J	39J	38J	37J	36J	35J	34J	33J	32J	31J
	50J	49J	48J	47J	46J	45J	44J	43J	42J	
61J	60J	59J	58J	57J	56J	55J	54J	53J	52J	51J
	70J	69J	68J	67J	66J	65J	64J	63J	62J	
81J	80J	79J	78J	77J	76J	75J	74J	73J	72J	71J
	90J	89J	88J	87J	86J	85J	84J	83J	82J	

95J	94J	93J	92J	91J
100J	99J	98J	97J	96J

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
3R	V	–
14R	W	–

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8P	LA/BR	–
13P	LA/G	–

AALIA2128GB

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND1

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

41	42	43	44	45	46
47	48	49	50	51	52

Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	E40
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2
3	4

Terminal No.	Color of Wire	Signal Name
2	GR	–

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.

4	3	2	1
8	7	6	5
12	11	10	9
16	15	14	13
20	19	18	17
24	23	22	21
28	27	26	25

Terminal No.	Color of Wire	Signal Name
5	L	–
6	P	–
9	L	–
10	P	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	B	SIGNAL GROUND

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

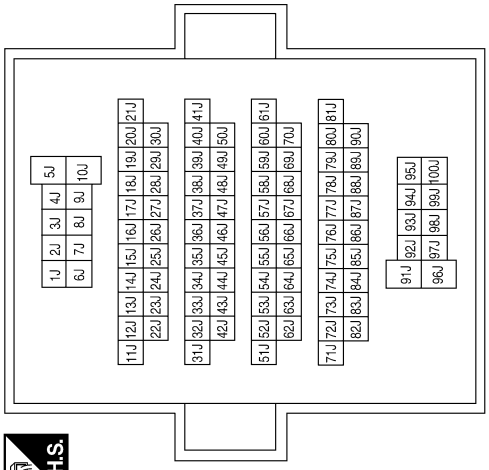
30	29	28	27	26	25	24	23	22	21	20	19
42	41	40	39	38	37	36	35	34	33	32	31

Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
31	B	2ND SIGNAL GROUND

AALIA2129GB

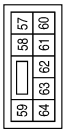
Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE



H.S.

Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



H.S.

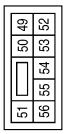
Terminal No.	Color of Wire	Signal Name
57	W	O LIGHT FR FOG LAMPS RH

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

H.S.

Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

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



H.S.

Terminal No.	Color of Wire	Signal Name
51	V	O LIGHT FR FOG LAMPS LH

Connector No.	E201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

AALIA2130GB

Connector No.	E221
Connector Name	FRONT FOG LAMP RH
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–
2	GR	–

Connector No.	E222
Connector Name	FRONT FOG LAMP LH
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	V	–
2	GR	–

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

Terminal No.	Color of Wire	Signal Name
60	L	CAN-H
80	P	CAN-L

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

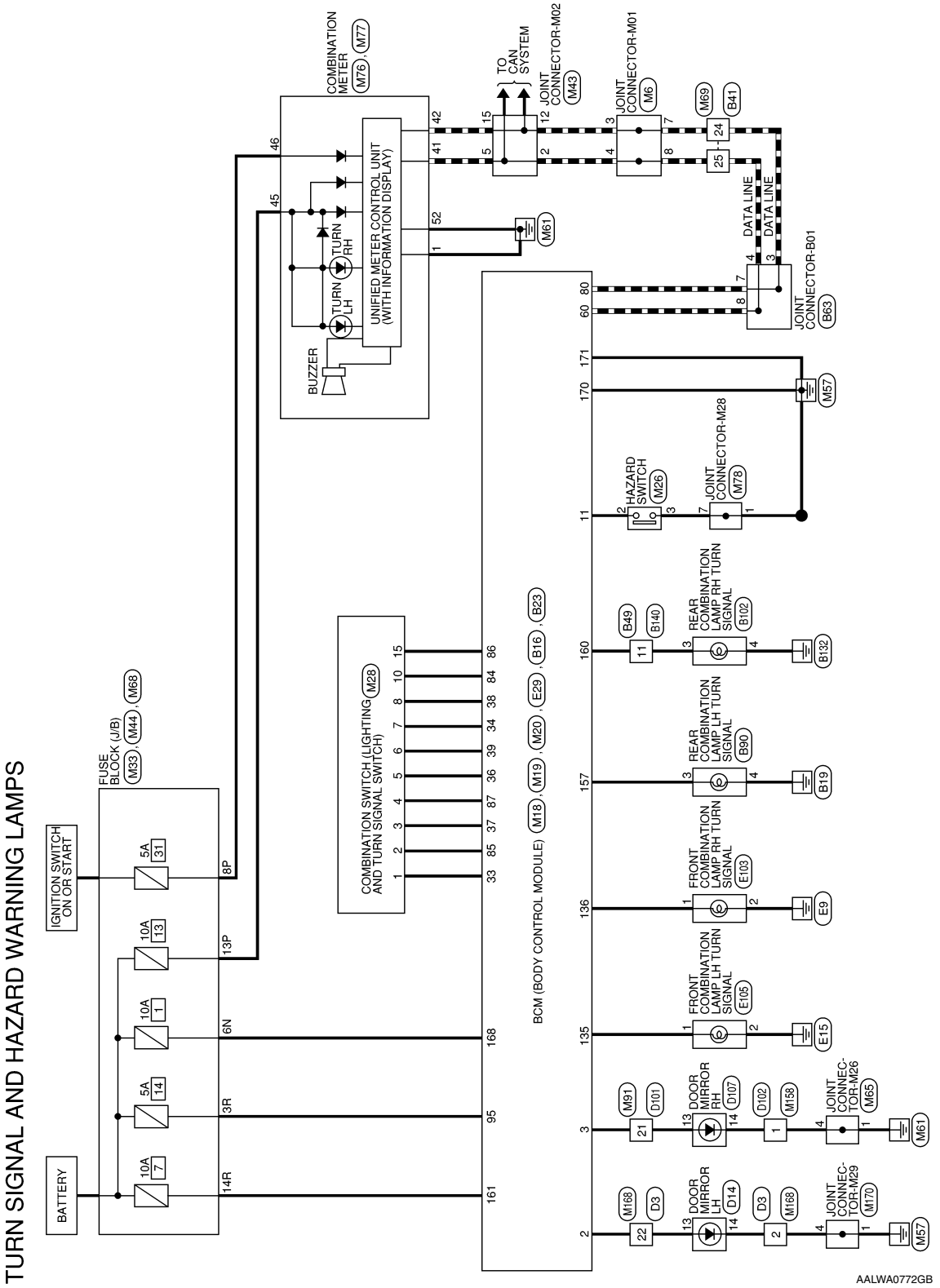
Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

AALIA2131GB

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

Wiring Diagram

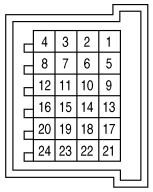
INFOID:0000000010288626



TURN SIGNAL AND HAZARD WARNING LAMPS CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

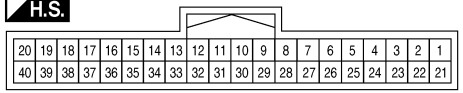
H.S.



Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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

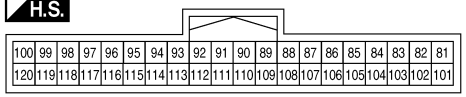
H.S.



Terminal No.	Color of Wire	Signal Name
2	LA/G	O DI FR LEFT D
3	LA/Y	O DI FR RIGHT D
11	Y	I HAZARD SW D
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

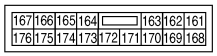
H.S.



Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

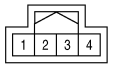
H.S.



Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
168	BG	I PWR FLASHERS
170	B	I GND1
171	B	I GND2

Connector No.	M26
Connector Name	HAZARD SWITCH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
2	Y	–
3	GR	–

AALIA2162GB

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–
4	BG	–
5	G	–
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

3N	2N	1N
8N	7N	6N	5N	4N

Terminal No.	Color of Wire	Signal Name
6N	BG	–

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	L	–
5	L	–
12	P	–
15	P	–

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8P	LA/BR	–
13P	LA/G	–

Connector No.	M65
Connector Name	JOINT CONNECTOR-M26
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	B	–
4	B	–

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
3R	V	–
14R	W	–

AALIA2163GB

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

41	42	43	44	45	46
47	48	49	50	51	52

Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND1

Connector No.	M158
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
21	LA/Y	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	M78
Connector Name	JOINT CONNECTOR-M28
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	GR	–
7	GR	–

AALIA2164GB

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	–
22	LA/G	–

Connector No.	M170
Connector Name	JOINT CONNECTOR-M29
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	B	–
4	B	–

Connector No.	E29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

132	131	130	129	128	127	126	125	124	123	122	121
144	143	142	141	140	139	138	137	136	135	134	133

Terminal No.	Color of Wire	Signal Name
135	BR	DI FR LEFT E
136	GR	O DI FR RIGHT E

Connector No.	E103
Connector Name	FRONT COMBINATION LAMP RH
Connector Color	GRAY

H.S.

2	1
3	

Terminal No.	Color of Wire	Signal Name
1	GR	–
2	BR	–

Connector No.	E105
Connector Name	FRONT COMBINATION LAMP LH
Connector Color	GRAY

H.S.

2	1
3	

Terminal No.	Color of Wire	Signal Name
1	BR	–
2	B	–

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
60	L	CAN-H
80	P	CAN-L

AALIA2165GB

Connector No.	B23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY

H.S.

151	150	149	148		147	146	145
160	159	158	157	156	155	154	153	152

Terminal No.	Color of Wire	Signal Name
157	GR	O DI RR LEFT B
160	P	O DI RR RIGHT B

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	P	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

Connector No.	B90
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
3	GR	–
4	B	–

Connector No.	B102
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
3	LA/V	–
4	B	–

AALIA2166GB

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	LA/V	–

Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	LA/B	–
22	LA/G	–

Connector No.	D14
Connector Name	DOOR MIRROR LH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	LA/G	–
14	LA/B	–

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
21	LA/G	–

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LA/B	–

Connector No.	D107
Connector Name	DOOR MIRROR RH
Connector Color	WHITE

H.S.

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

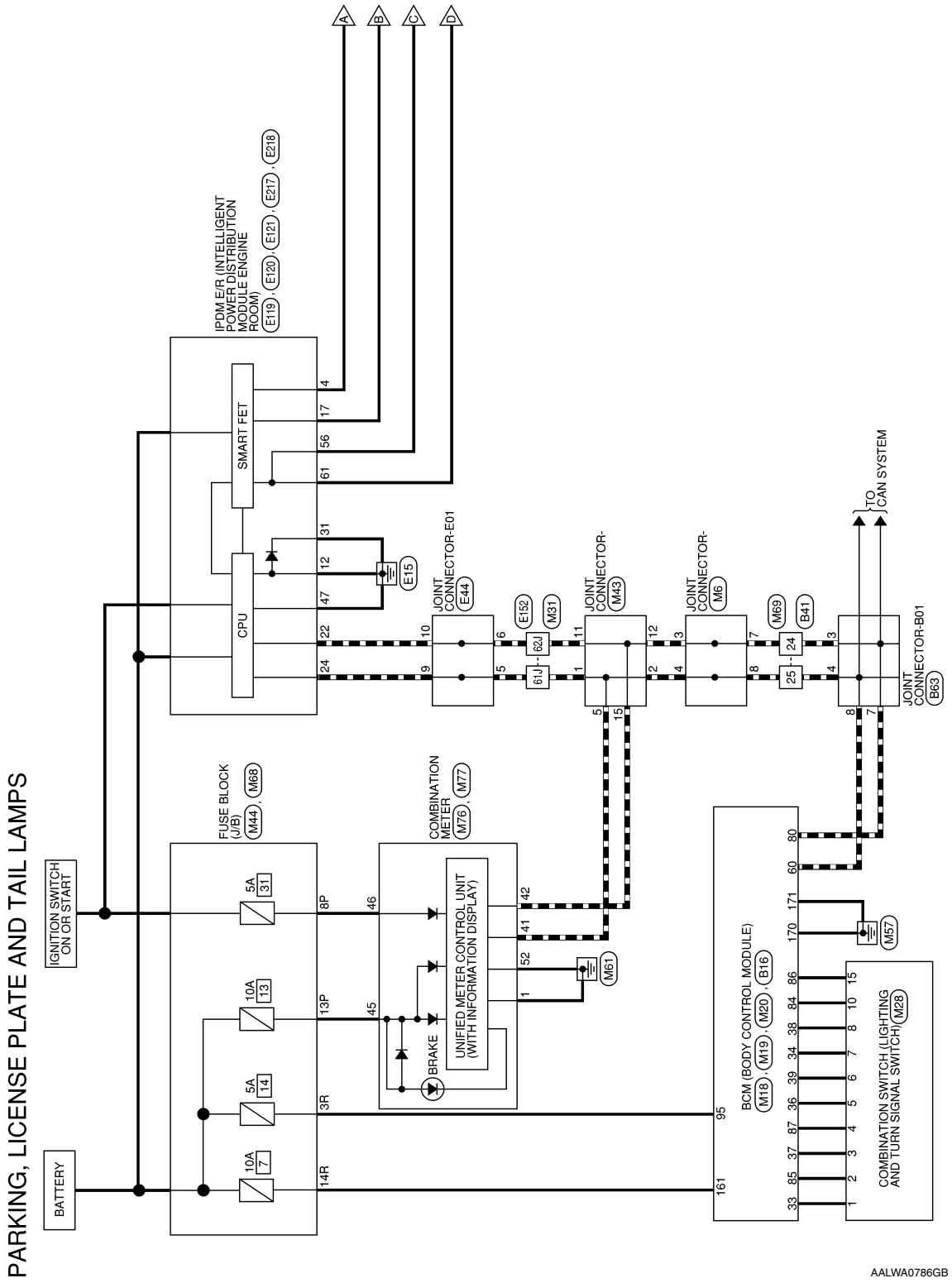
Terminal No.	Color of Wire	Signal Name
13	LA/G	–
14	LA/B	–

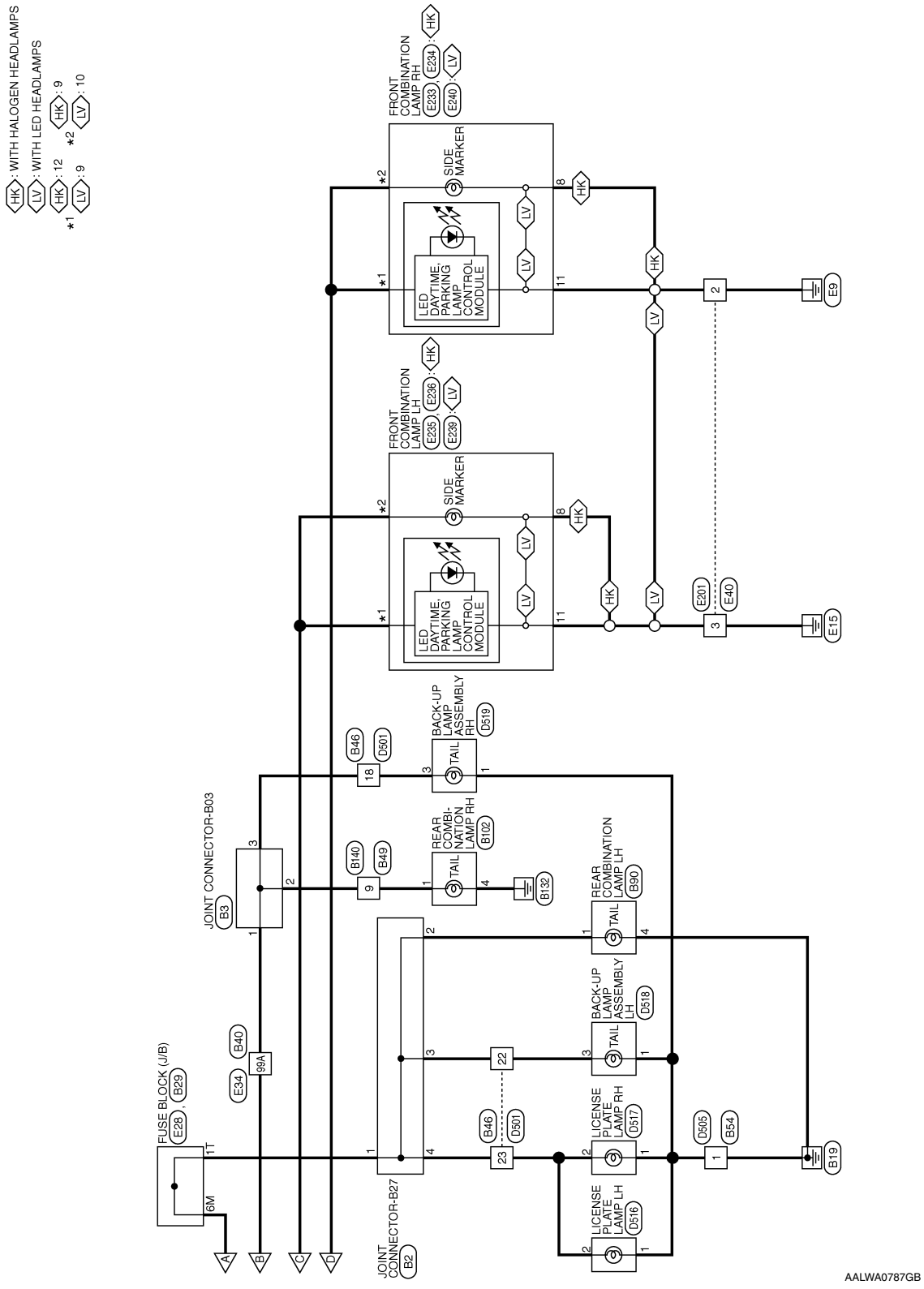
AALIA2239GB

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

Wiring Diagram

INFOID:0000000010288627

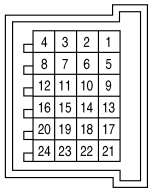



HK : WITH HALOGEN HEADLAMPS
LV : WITH LED HEADLAMPS
HK : 12 *1
LV : 9 *1
HK : 9 *2
LV : 10 *2
FRONT COMBINATION LAMP RH
E233
E234
E240
FRONT COMBINATION LAMP LH
E235
E236
E239
SIDE MARKER
LED DAYTIME, PARKING LAMP CONTROL MODULE
E9
E15
E201
E40
BACK-UP LAMP ASSEMBLY RH
D519
BACK-UP LAMP ASSEMBLY LH
D518
REAR COMBI-NATION LAMP RH
B102
REAR COMBINATION LAMP LH
B90
JOINT CONNECTOR-B03
B3
B46
D501
B140
B49
B132
B40
E34
99A
FUSE BLOCK (J/B)
E28
B29
1T
6M
22
23
LICENSE PLATE LAMP RH
D517
LICENSE PLATE LAMP LH
D516
D505
B54
B19
JOINT CONNECTOR-B27
B2
A
B
C
D
AALWA0787GB

PARKING, LICENSE AND TAIL LAMPS CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

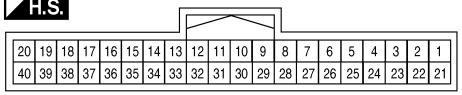
H.S.



Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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

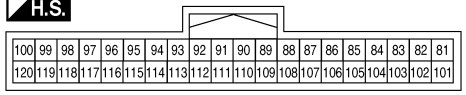
H.S.



Terminal No.	Color of Wire	Signal Name
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

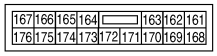
H.S.



Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

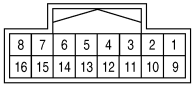
H.S.



Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.



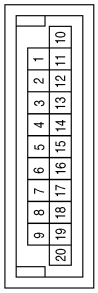
Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–
4	BG	–

Terminal No.	Color of Wire	Signal Name
5	G	–
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

AALIA2149GB

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

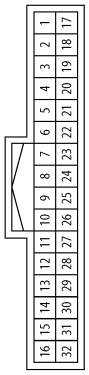
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
5	L	–
11	P	–
12	P	–
15	P	–

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

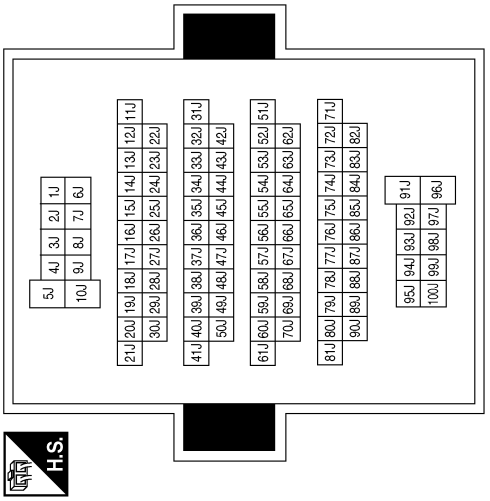
H.S.



Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

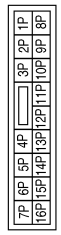
Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
3R	V	–
14R	W	–

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

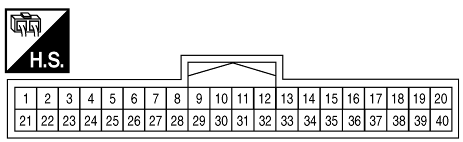
H.S.



Terminal No.	Color of Wire	Signal Name
8P	LA/BR	–
13P	LA/G	–

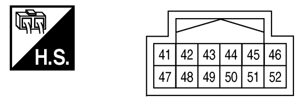
AALIA2150GB

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE



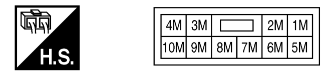
Terminal No.	Color of Wire	Signal Name
1	B	GND1

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE



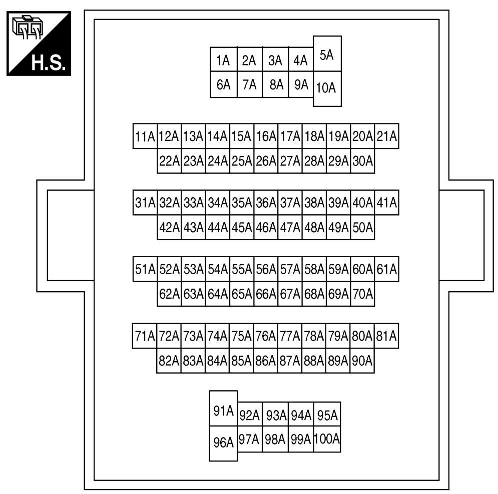
Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	E28
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6M	Y	–

Connector No.	E34
Connector Name	WIRE TO WIRE
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
99A	W	–

Connector No.	E40
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
2	GR	–
3	B	–

AALIA2151GB

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
5	L	–
6	P	–
9	L	–
10	P	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
4	Y	O LIGHT POSITION REAR LH
12	B	SIGNAL GROUND
17	W	O LIGHT POSITION REAR RH

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
31	B	2ND SIGNAL GROUND

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

H.S.

Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

AALIA2152GB

Connector No.	E201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

2	1
4	3

Terminal No.	Color of Wire	Signal Name
2	B	–
3	B	–

Connector No.	E233
Connector Name	FRONT COMBINATION LAMP RH (WITH HALOGEN HEADLAMPS)
Connector Color	BLACK

H.S.

4	5	6
7	8	9

Terminal No.	Color of Wire	Signal Name
8	B	–
9	W	–

Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

				5J
1J	2J	3J	4J	
6J	7J	8J	9J	10J

11J	12J	13J	14J	15J	16J	17J	18J	19J	20J	21J
	22J	23J	24J	25J	26J	27J	28J	29J	30J	
31J	32J	33J	34J	35J	36J	37J	38J	38J	40J	41J
		42J	43J	44J	45J	46J	47J	48J	49J	50J
51J	52J	53J	54J	55J	56J	57J	58J	59J	60J	61J
		62J	63J	64J	65J	66J	67J	68J	69J	70J
71J	72J	73J	74J	75J	76J	77J	78J	79J	80J	81J
		82J	83J	84J	85J	86J	87J	88J	89J	90J
				91J	92J	93J	94J	95J		
				96J	97J	98J	99J	100J		

Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

59				58	57
64	63	62	61	60	

Terminal No.	Color of Wire	Signal Name
61	GR	O LIGHT CLEARANCE FR RH

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

H.S.

51				50	49
56	55	54	53	52	

Terminal No.	Color of Wire	Signal Name
56	BG	O LIGHT CLEARANCE FR LH

AALIA2153GB

Connector No.	E234
Connector Name	FRONT COMBINATION LAMP RH (WITH HALOGEN HEADLAMPS)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
11	GR	–
12	GR	–

Connector No.	E235
Connector Name	FRONT COMBINATION LAMP LH (WITH HALOGEN HEADLAMPS)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
8	B	–
9	P	–

Connector No.	E236
Connector Name	FRONT COMBINATION LAMP LH (WITH HALOGEN HEADLAMPS)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
11	GR	–
12	BG	–

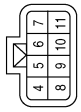
Connector No.	E239
Connector Name	FRONT COMBINATION LAMP LH (WITH LED HEADLAMPS)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
9	BG	–
10	P	–
11	B	–

Connector No.	E240
Connector Name	FRONT COMBINATION LAMP RH (WITH LED HEADLAMPS)
Connector Color	BLACK

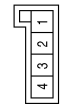
H.S.



Terminal No.	Color of Wire	Signal Name
9	GR	–
10	W	–
11	B	–

Connector No.	B2
Connector Name	JOINT CONNECTOR-B27
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	LA/R	–
2	LA/R	–
3	LA/R	–
4	LA/R	–

AALIA2154GB

Connector No.	B3
Connector Name	JOINT CONNECTOR-B03
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	LA/BR	–
2	LA/BR	–
3	LA/BR	–

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
60	L	CAN-H
80	P	CAN-L

Connector No.	B29
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

2T		1T
6T	5T	4T 3T

Terminal No.	Color of Wire	Signal Name
1T	LA/R	–

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Terminal No.	Color of Wire	Signal Name
99A	LA/BR	–

Connector No.	B40
Connector Name	WIRE TO WIRE
Connector Color	GRAY

H.S.

5A	4A	3A	2A	1A
10A	9A	8A	7A	6A

21A	20A	19A	18A	17A	16A	15A	14A	13A	12A	11A
30A	29A	28A	27A	26A	25A	24A	23A	22A		

41A	40A	39A	38A	37A	36A	35A	34A	33A	32A	31A
50A	49A	48A	47A	46A	45A	44A	43A	42A		

61A	60A	59A	58A	57A	56A	55A	54A	53A	52A	51A
70A	69A	68A	67A	66A	65A	64A	63A	62A		

81A	80A	79A	78A	77A	76A	75A	74A	73A	72A	71A
90A	89A	88A	87A	86A	85A	84A	83A	82A		

95A	94A	93A	92A	91A
100A	99A	98A	97A	96A

AALIA2155GB

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
9	LA/BR	–

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
18	LA/BR	–
22	LA/R	–
23	LA/R	–

Connector No.	B102
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LA/BR	–
4	B	–

Connector No.	B90
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LA/R	–
4	B	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

AALIA2156GB

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
9	LA/BR	–

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
18	LA/R	–
22	LA/Y	–
23	P	–

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	D516
Connector Name	LICENSE PLATE LAMP LH
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–
2	P	–

Connector No.	D517
Connector Name	LICENSE PLATE LAMP RH
Connector Color	BROWN

H.S.

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

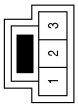
Connector No.	D518
Connector Name	BACK-UP LAMP ASSEMBLY LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	GR	–
3	LA/Y	–

AALIA2157GB

Connector No.	D519
Connector Name	BACK-UP LAMP ASSEMBLY RH
Connector Color	WHITE



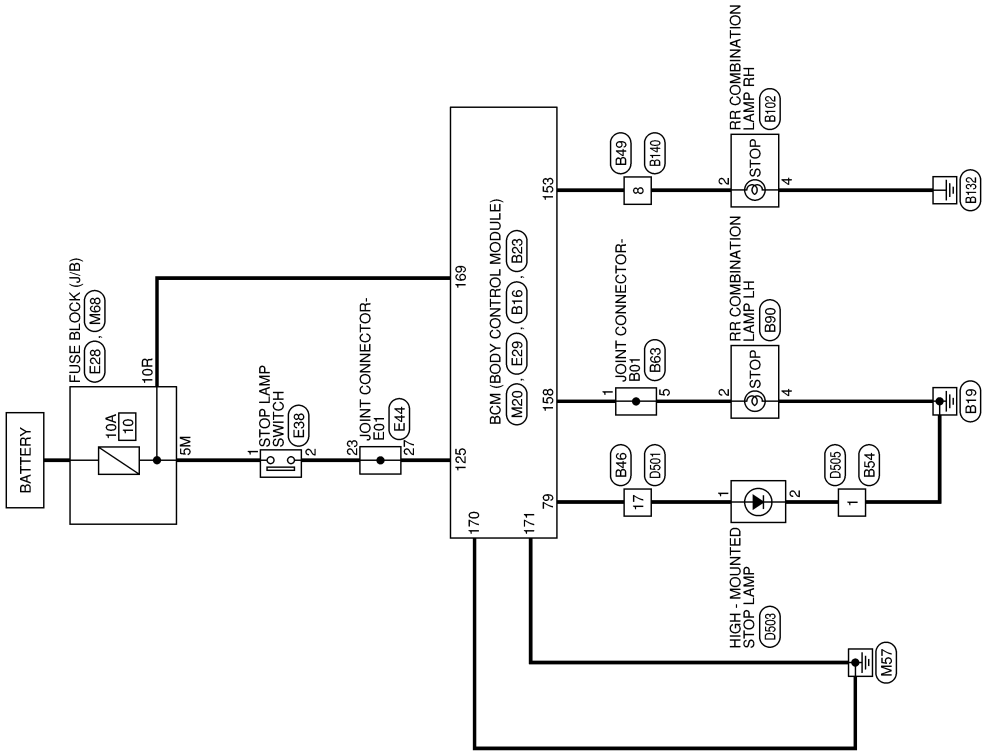
Terminal No.	Color of Wire	Signal Name
1	GR	–
3	LA/R	–

AALIA2173GB

STOP LAMP

Wiring Diagram

INFOID:0000000010288628



STOP LAMP

AALWA0765GB

STOP LAMP CONNECTORS

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

H.S.

167	166	165	164		163	162	161
176	175	174	173	172	171	170	169	168

Terminal No.	Color of Wire	Signal Name
169	GR	I PWR STOP LAMP
170	B	I GND1
171	B	I GND2

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
10R	GR	–

Connector No.	E28
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

4M	3M		2M	1M
10M	9M	8M	7M	6M	5M

Terminal No.	Color of Wire	Signal Name
5M	V	–

Connector No.	E29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

132	131	130	129	128	127	126	125	124	123	122	121
144	143	142	141	140	139	138	137	136	135	134	133

Terminal No.	Color of Wire	Signal Name
125	LG	I BRAKE SW2

Connector No.	E38
Connector Name	STOP LAMP SWITCH
Connector Color	WHITE

H.S.

3	4
1	2

Terminal No.	Color of Wire	Signal Name
1	V	–
2	LG	–

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.

4	3	2	1
8	7	6	5
12	11	10	9
16	15	14	13
20	19	18	17
24	23	22	21
28	27	26	25

Terminal No.	Color of Wire	Signal Name
23	LG	–
27	LG	–

AALIA2158GB

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
79	LA/W	O STOP LAMP 3

Connector No.	B23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY

H.S.

151	150	149	148		147	146	145
160	159	158	157	156	155	154	153	152

Terminal No.	Color of Wire	Signal Name
153	LA/W	O STOP LAMP 1
158	LA/Y	O STOP LAMP 2 NISSAN EUR

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
17	LA/W	–

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	LA/W	–

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

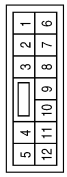
H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LA/Y	–
5	LA/Y	–

AALIA2159GB

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
8	LA/Y	–

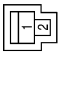
Connector No.	B102
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
2	LA/Y	–
4	B	–

Connector No.	B90
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
2	LA/Y	–
4	B	–

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE

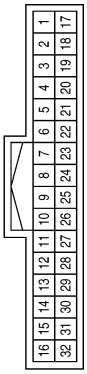


Terminal No.	Color of Wire	Signal Name
1	B	–

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

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

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE



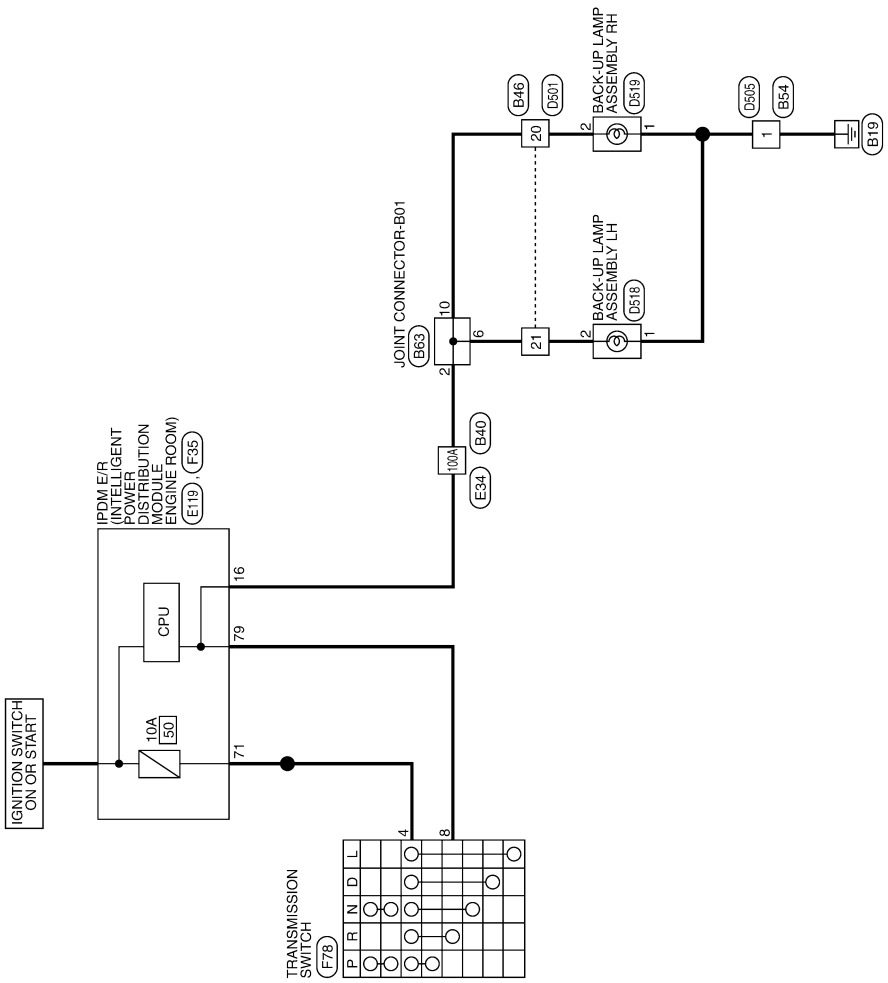
Terminal No.	Color of Wire	Signal Name
17	Y	–

AALIA2160GB

BACK-UP LAMP

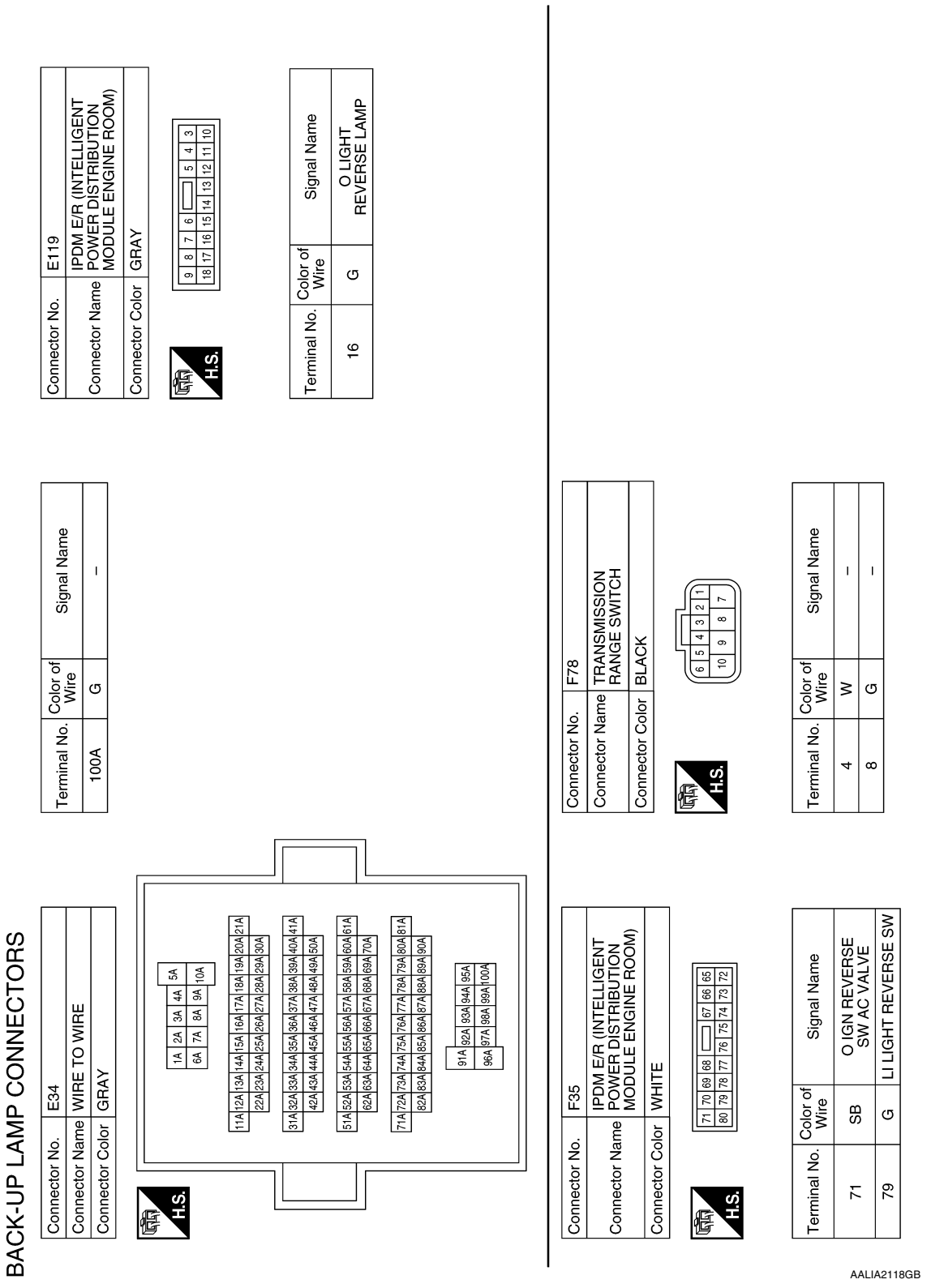
Wiring Diagram

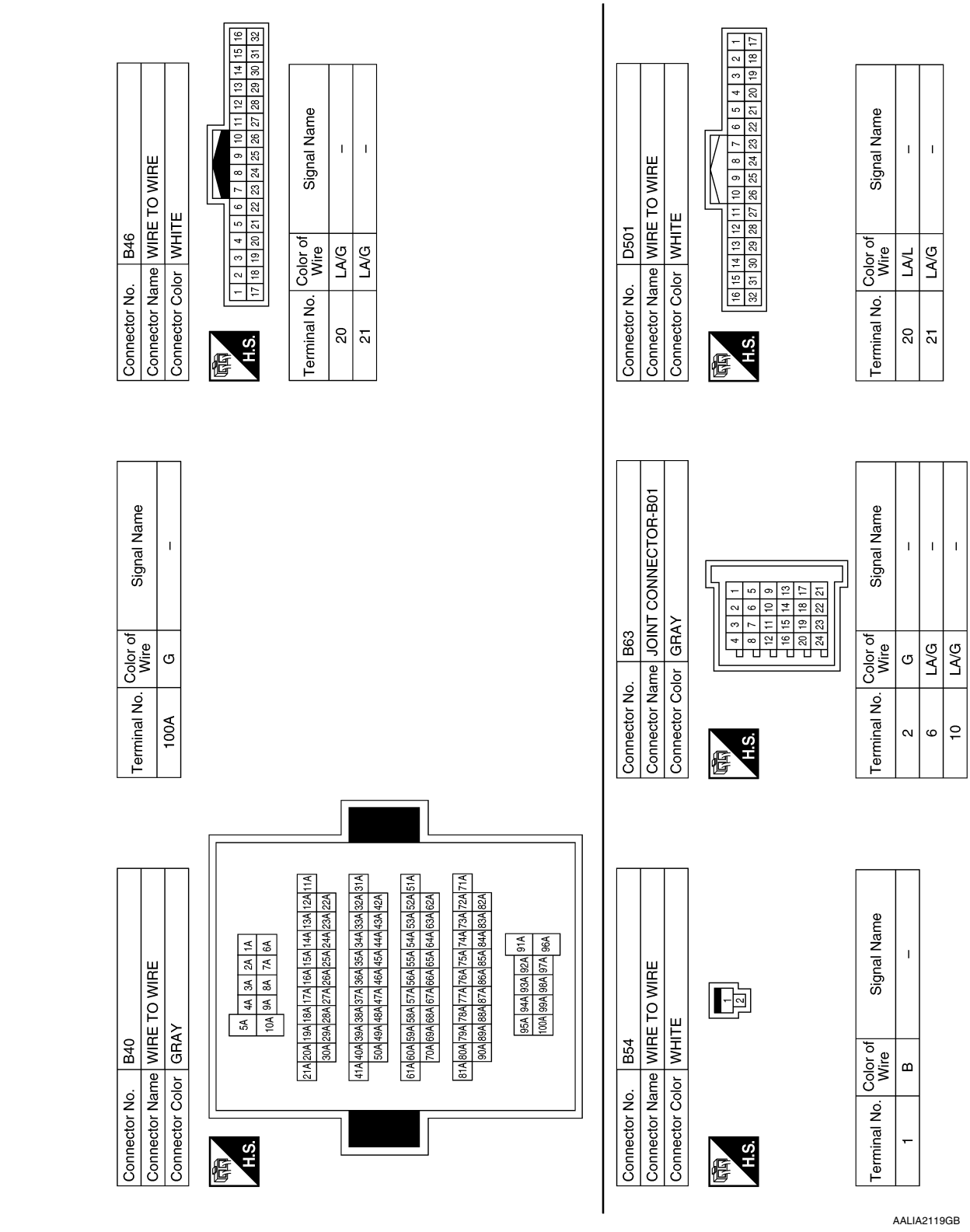
INFOID:0000000010288629



BACK - UP LAMP

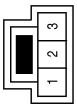
AALWA0763GB


BACK-UP LAMP CONNECTORS
Connector No. E34
Connector Name WIRE TO WIRE
Connector Color GRAY
H.S.
1A 2A 3A 4A 5A
6A 7A 8A 9A 10A
11A 12A 13A 14A 15A 16A 17A 18A 19A 20A 21A
22A 23A 24A 25A 26A 27A 28A 29A 30A
31A 32A 33A 34A 35A 36A 37A 38A 39A 40A 41A
42A 43A 44A 45A 46A 47A 48A 49A 50A
51A 52A 53A 54A 55A 56A 57A 58A 59A 60A 61A
62A 63A 64A 65A 66A 67A 68A 69A 70A
71A 72A 73A 74A 75A 76A 77A 78A 79A 80A 81A
82A 83A 84A 85A 86A 87A 88A 89A 90A
91A 92A 93A 94A 95A
96A 97A 98A 99A 100A
Terminal No. Color of Wire Signal Name
100A G –
Connector No. E119
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color GRAY
H.S.
9 8 7 6 5 4 3
18 17 16 15 14 13 12 11 10
Terminal No. Color of Wire Signal Name
16 G O LIGHT REVERSE LAMP
Connector No. F78
Connector Name TRANSMISSION RANGE SWITCH
Connector Color BLACK
H.S.
6 5 4 3 2 1
10 9 8 7
Terminal No. Color of Wire Signal Name
4 W –
8 G –
Connector No. F35
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE
H.S.
71 70 69 68 67 66 65
80 79 78 77 76 75 74 73 72
Terminal No. Color of Wire Signal Name
71 SB O IGN REVERSE SW AC VALVE
79 G LI LIGHT REVERSE SW
AALIA2118GB


Connector No. B40
Connector Name WIRE TO WIRE
Connector Color GRAY
H.S.
5A 4A 3A 2A 1A
10A 9A 8A 7A 6A
21A 20A 19A 18A 17A 16A 15A 14A 13A 12A 11A
30A 29A 28A 27A 26A 25A 24A 23A 22A
41A 40A 39A 38A 37A 36A 35A 34A 33A 32A 31A
50A 49A 48A 47A 46A 45A 44A 43A 42A
61A 60A 59A 58A 57A 56A 55A 54A 53A 52A 51A
70A 69A 68A 67A 66A 65A 64A 63A 62A
81A 80A 79A 78A 77A 76A 75A 74A 73A 72A 71A
90A 89A 88A 87A 86A 85A 84A 83A 82A
95A 94A 93A 92A 91A
100A 99A 98A 97A 96A
Terminal No. Color of Wire Signal Name
100A G –
Connector No. B46
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
Terminal No. Color of Wire Signal Name
20 LA/G –
21 LA/G –
Connector No. B54
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2
Terminal No. Color of Wire Signal Name
1 B –
Connector No. B63
Connector Name JOINT CONNECTOR-B01
Connector Color GRAY
H.S.
4 3 2 1
8 7 6 5
12 11 10 9
16 15 14 13
20 19 18 17
24 23 22 21
Terminal No. Color of Wire Signal Name
2 G –
6 LA/G –
10 LA/G –
Connector No. D501
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
Terminal No. Color of Wire Signal Name
20 LA/L –
21 LA/G –
AALIA2119GB

Connector No.	D519
Connector Name	BACK-UP LAMP ASSEMBLY RH
Connector Color	WHITE

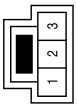
H.S.



Terminal No.	Color of Wire	Signal Name
1	GR	–
2	LA/L	–

Connector No.	D518
Connector Name	BACK-UP LAMP ASSEMBLY LH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	GR	–
2	LA/G	–

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

AALIA2120GB

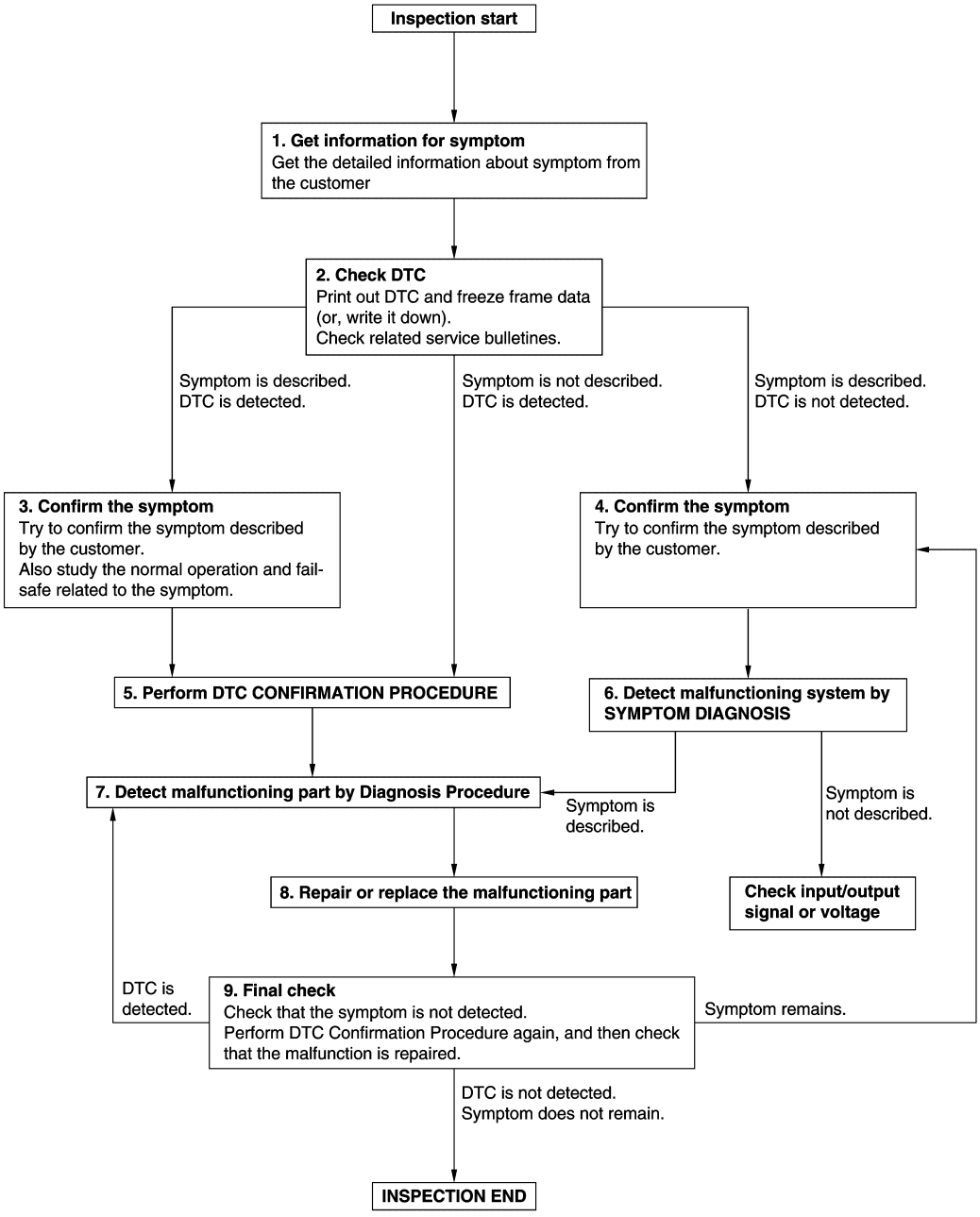
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000010286974

OVERALL SEQUENCE



JMKIA8652GB

DETAILED FLOW

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 BCS-47, "DTC Inspection Priority Chart" (BCM) (with Intelligent Key System) or BCS-107, "DTC Inspection Priority Chart" (BCM) (without Intelligent Key System) or PCS-12, "Reference Value" (IPDM E/R), 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 DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic 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 Diagnostic 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.

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000010376487

CAUTION:
- **When the IPDM E/R is replaced or disconnected and reconnected, perform "SENSOR INITIALIZE" with CONSULT.**

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000010376488

1.SENSOR INITIALIZE

CONSULT WORK SUPPORT
Perform "SENSOR INITIALIZE". Refer to EXL-85, "SENSOR INITIALIZE : Special Repair Requirement".

>> WORK END

SENSOR INITIALIZE

SENSOR INITIALIZE : Description

INFOID:0000000010376489

HEADLAMP AIMING CONTROL SYSTEM
Perform the sensor initialize when installing, removing and replacing the auto levelizer control unit or suspension components.

SENSOR INITIALIZE : Special Repair Requirement

INFOID:0000000010376490

CAUTION:
If performing aiming adjustment after the levelizer initialization, be sure to start the engine after turning ignition switch OFF.

1.VEHICLE CONDITION CHECK

1. Park the vehicle in the straight-forward position.
2. Unload the vehicle (no passenger aboard).

>> GO TO 2.

2.SENSOR INITIALIZE

CONSULT WORK SUPPORT
1. Select "SENSOR INITIALIZE" of IPDM E/R work support item.
2. Select "START".
3. When "INITIALIZE COMPLETE", select "END".

CAUTION:
If "INITIALIZE NOT DONE" is indicated, auto levelizer control unit detects that the sensor lever signal was changing. The sensor initialization is cancelled. In this case, turn the ignition switch OFF, do not allow the vehicle height to change. Perform the sensor initialization again.

Is the sensor initialize completed?

YES >> GO TO 3.
NO >> Perform the sensor initialize again.

3.SELF-DIAGNOSIS RESULT CHECK

Perform the self-diagnosis with CONSULT. Check that any DTC is not detected.

Is any DTC detected?

YES >> GO TO 2.
NO >> Sensor initialize completed.

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:0000000010290265

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

1. CHECK FUSE

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
161	BCM power supply	7 (10A)

Is the fuse blown?

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

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M20.
2. Check voltage between BCM connector M20 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M20	161	—	Battery voltage

Is the inspection result normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M20 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	170	—	Yes
	171		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:0000000010290266

Regarding Wiring Diagram information, refer to BCS-110, "Wiring Diagram".

1. CHECK FUSE

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
161	BCM power supply	7 (10A)

Is the fuse blown?

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

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M20.
2. Check voltage between BCM connector M20 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M20	161	—	Battery voltage

Is the inspection result normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M20 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	170	—	Yes
	171		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

OPTICAL SENSOR

Component Function Check

INFOID:0000000010286996

1.CHECK OPTICAL SENSOR SIGNAL BY CONSULT

CONSULT DATA MONITOR
1. Turn power switch ON.
2. Select “OPTICAL SENSOR” of BCM (HEADLAMP) data monitor item.
3. Turn lighting switch AUTO.
4. With the optical sensor illuminating, check the monitor status.

Monitor item	Condition		Voltage (Approx.)
OPTICAL SENSOR	Optical sensor	When illuminating	3.1 V or more *
		When shutting off light	0.6 V or less

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

Is the inspection result normal?

YES >> Optical sensor is normal.
NO >> Refer to EXL-88, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010286997

1.CHECK OPTICAL SENSOR POWER SUPPLY INPUT

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

(+)		(–)	Voltage (Approx.)
Optical sensor			
Connector	Terminal		
M13	1	Ground	5 V

Is the inspection result normal?

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

2.CHECK OPTICAL SENSOR GROUND INPUT

Check voltage between optical sensor harness connector and ground.

(+)		(–)	Voltage (Approx.)
Optical sensor			
Connector	Terminal		
M13	3	Ground	0 V

Is the inspection result normal?

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

3.CHECK OPTICAL SENSOR SIGNAL OUTPUT

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

(+)		(–)	Condition		Voltage (Approx.)
Optical sensor					
Connector	Terminal				
M13	2	Ground	Optical sensor	When illuminating	3.1 V or more *
				When shutting off light	0.6 V or less

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

Is the inspection result normal?

YES >> GO TO 7.
NO >> Replace the optical sensor.

4. CHECK OPTICAL SENSOR OPEN CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M13	1	M18	12	Yes

Is the inspection result normal?

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

5. CHECK OPTICAL SENSOR SHORT CIRCUIT

Check continuity between optical sensor harness connector and ground.

Optical sensor		Ground	Continuity
Connector	Terminal		
M13	1		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key system) or BCS-135, "Removal and Installation" (without Intelligent Key system).
NO >> Repair or replace harness.

6. CHECK OPTICAL SENSOR GROUND OPEN CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M13	3	M18	30	Yes

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key system) or BCS-135, "Removal and Installation" (without Intelligent Key system).
NO >> Repair or replace harness.

7. CHECK OPTICAL SENSOR SIGNAL OPEN CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M13	2	M18	19	Yes

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace harness.

8. CHECK OPTICAL SENSOR SHORT CIRCUIT

Check continuity between optical sensor harness connector and ground.

Optical sensor		Ground	Continuity
Connector	Terminal		
M13	2		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key system) or BCS-135, "Removal and Installation" (without Intelligent Key system).
NO >> Repair or replace harness.

HAZARD SWITCH

Component Function Check

INFOID:0000000010286998

1.CHECK HAZARD SWITCH SIGNAL BY CONSULT

CONSULT DATA MONITOR
1. Turn power 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-91, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010286999

1.CHECK HAZARD SWITCH SIGNAL INPUT

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

(+)		(–)	Voltage (Approx.)
Hazard switch			
Connector	Terminal		
M26	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	
M26	2	M18	11	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		
M26	2		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key) or BCS-135, "Removal and Installation" (without Intelligent Key).
NO >> Repair or replace harness.

4. CHECK HAZARD SWITCH GROUND OPEN CIRCUIT

Check continuity between hazard switch harness connector and ground.

Hazard switch		Ground	Continuity
Connector	Terminal		
M26	3		Yes

Is the inspection result normal?

YES >> Replace hazard switch. Refer to EXL-125, "Removal and Installation".
NO >> Repair or replace harness.

TURN SIGNAL LAMP CIRCUIT

Description

INFOID:0000000010330247

The BCM monitors inputs from the combination switch (lighting and turn signal switch) to determine when to activate the turn signals. The BCM outputs voltage direction to the left and right turn signals during turn signal operation or both during hazard warning operation. The BCM sends a turn signal indicator request to the combination meter via the CAN communication lines.
The BCM performs the fast flasher operation (fail-safe) if any bulb or harness of the turn signal lamp circuit is open.
NOTE:
Turn signal lamp blinks at normal speed when using the hazard warning lamp.

Component Function Check

INFOID:0000000010330248

1.CHECK TURN SIGNAL LAMP

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

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

Is the inspection result normal?

YES >> Turn signal lamp circuit is normal.
NO >> Refer to EXL-93, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010330249

Regarding Wiring Diagram information, refer to EXL-185, "Wiring Diagram".

1.CHECK TURN SIGNAL LAMP BULB

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

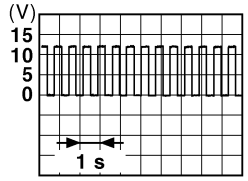
Is the bulb OK?

YES >> GO TO 2.
NO >> Replace the bulb.

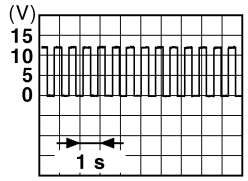
2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

1. Turn the ignition switch OFF.
2. Disconnect the front combination lamp harness connector or the side turn signal harness connector or the rear combination lamp harness connector in question.
3. Turn the ignition switch ON.
4. Operate the turn signal switch.
5. While the turn signal is operating, check the voltage between the front combination lamp harness connector and ground.

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

LH	E105	1	Ground	 PKID0926E
RH	E103			

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

(+)			(−)	Voltage (Approx.)
Connector		Terminal		
LH	B90	3	Ground	 PKID0926E
RH	B102			

Are the inspection results normal?

YES >> GO TO 5.
NO >> GO TO 3.

3. CHECK TURN SIGNAL LAMP CIRCUIT FOR OPEN

1. Turn the ignition switch OFF.
2. Disconnect BCM harness connector E29 or B23.
3. Check continuity between the BCM harness connector E29 and the front combination lamp harness connector.

BCM			Front combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
LH	E29	135	E105	1	Yes
RH		136	E103		

4. Check continuity between the BCM harness connector B23 and the rear combination lamp harness connector.

BCM			Rear combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
LH	B23	157	B90	3	Yes
RH		160	B102		

Are the inspection results normal?

YES >> GO TO 4.
NO >> Repair or replace the harness or connectors.

4. CHECK TURN SIGNAL LAMP SHORT CIRCUIT

1. Check continuity between the BCM harness connector E29 and ground.

BCM			Ground	Continuity
Connector		Terminal		
LH	E29	135		No
RH		136		

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

BCM			Ground	Continuity
Connector		Terminal		
LH	B23	157		No
RH		160		

Are the inspection results normal?

YES >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key) or BCS-135, "Removal and Installation" (without Intelligent Key).
NO >> Repair or replace the harness or connectors.

5. CHECK TURN SIGNAL LAMP GROUND CIRCUIT

1. Turn the ignition switch OFF.
2. Check continuity between the front combination lamp harness connector or the side turn signal harness connector or the rear combination lamp harness connector in question and ground.

Front combination lamp			(–)	Continuity
Connector		Terminal		
LH	E105	2	Ground	Yes
RH	E103			

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

Rear combination lamp			(–)	Continuity
Connector		Terminal		
LH	B90	4	Ground	Yes
RH	B102			

Are the inspection results normal?

YES >> Replace the malfunctioning lamp.
NO >> Repair or replace the harness or connectors.

B121A FRONT FOG LAMP LH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010321286

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B121A	FR FOG LAMP LH PWR SPLY CIRC [CIRC SHORT TO GROUND	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B121A detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-96, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010321287

1.CHECK FOG LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	51		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FOG LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between fog lamp harness connector and ground.

Fog lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E222	1		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B1231 DAYTIME RUNNING LIGHT RH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010287232

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B1231	DTRL RH PWR SPLY CIRC [CIRC SHORT TO GRND]	When a short circuit to ground in the daytime running lamp circuit is detected.	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B1231 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-97, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010375484

1.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Disconnect front combination lamp 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	E218	58		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

Front combination lamp (RH)			Ground	Continuity
Connector		Terminal		
RH	E234	10		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B1256 FRONT FOG LAMP RH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010321292

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B1256	FR FOG LAMP RH PWR SPLY CIRC [CIRC SHORT TO GRND]	When a short circuit to ground is detected.	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B1256 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-98, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010375499

1.CHECK FOG LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	51		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FOG LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between fog lamp harness connector and ground.

Fog lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E222	1		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20CB DAYTIME RUNNING LIGHT LH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010296914

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B02CB	DTRL LH PWR SPLY CIRC [CIRC SHORT TO GRND]	When a short circuit to ground is detected.	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B02CB detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-99, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010375500

1.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	49		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between fog lamp harness connector and ground.

Front combination lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E236	10		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20CE HEADLAMP (HI) LH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010296917

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20CE	DTRL LH PWR SPLY CIRC [CIRC SHORT TO GRND]	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.

2. Perform self-diagnostic result.

Is DTC B20CE detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-100, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010375501

1.CHECK HEAD LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E218	59		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK HEAD LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

Front combination lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E234	15		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20CF HEADLAMP (HI) RH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010296918

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20CF	HL (HI) RH PWR SPLY CIRC [CIRC SHORT TO GRND]	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20CF detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-101, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010375502

1.CHECK HEAD LAMP SHORT CIRCUIT TO GROUND

1. Disconnect front combination lamp 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	E217	54		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK HEAD LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

Front combination lamp (RH)			Ground	Continuity
Connector		Terminal		
RH	E234	15		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20D0 HEADLAMP (LO) LH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010297886

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20D0	HI (LO) RH PWR SPLY CIRC [CIRC SHORT TO GRND]	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20D0 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-102, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010375503

1.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	50		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

Front combination lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E233	4		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20D1 HEADLAMP (LO) RH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010297888

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20D1	HL (LO) RH PWR SPLY CIRC [CIRC SHORT TO GRND]	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20D1 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-103, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010375504

1.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E218	62		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FOG LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between fog lamp harness connector and ground.

Fog lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E233	4		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20D2 PARKING LAMP POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010297890

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20D2	PARKING LAMP PWR SPLY CIRC [CIRC SHORT TO GROUND]	When a short to ground is detected in the parking lamp power supply circuit.	• Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.
1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20D2 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-104, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010375505

1.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	56		No
RH	E218	61		

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	56		No
RH	E218	61		

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20D4 TAIL LAMP LH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010297892

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20D4	TAIL LAMP LH PWR SPLY CIRC [CIRC SHORT TO GRND]	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20D4 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-105, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010375506

1.CHECK TAIL LAMP SHORT CIRCUIT TO GROUND

1. Disconnect rear combination lamp (LH), license plate lamps, back up lamp connectors and IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E119	4		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK TAIL LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between rear combination lamp harness connector and ground.

Rear combination lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	B90	1		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20D5 TAIL LAMP RH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010297894

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20D5	TAIL LAMP RH PWR SPLY CIRC [CIRC SHORT TO GRND]	When a short circuit to ground is detected in the tail lamp supply voltage circuit.	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20D5 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-106, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010375507

1.CHECK TAIL LAMP SHORT CIRCUIT TO GROUND

1. Disconnect rear combination lamp (RH), back up lamp connectors and IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R			Ground	Continuity
Connector		Terminal		
RH	E119	17		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK TAIL LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between rear combination lamp harness connector and ground.

Rear combination lamp (RH)			Ground	Continuity
Connector		Terminal		
RH	B102	1		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000010325965

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-100, "DTC Logic" (LH) or EXL-101, "DTC Logic" (RH).
	Both sides	**Symptom diagnosis** "BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON" Refer to EXL-100, "DTC Logic" (LH) or EXL-101, "DTC Logic" (RH).	
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 toEXL-102, "DTC Logic" (LH) or EXL-103, "DTC Logic" (RH).
	Both sides	**Symptom diagnosis** "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer toEXL-102, "DTC Logic" (LH) or EXL-103, "DTC Logic" (RH).	
Each lamp is not turned ON/OFF with lighting switch AUTO.		• Combination switch • Harness between combination switch and BCM • BCM	Combination switch Refer to BCS-73, "Symptom Table" (with Intelligent Key) or BCS-133, "Symptom Table" (without Intelligent Key).
		• Optical sensor • Harness between optical sensor and BCM • BCM	Optical sensor Refer to EXL-88, "Component Function Check".
Daytime running light is not turned ON. [Headlamp (HI) is turned ON.]		• Fuse • Harness between IPDM E/R and front combination lamp • IPDM E/R • BCM • ECM • Combination meter	• Daytime running light circuit Refer to EXL-97, "DTC Logic". • BCM (HEADLAMP) Data monitor "ENGINE STATE" • Combination meter Data monitor "PKB SW" • BCM (HEADLAMP) 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-104, "DTC Logic".

Symptom		Possible cause	Inspection item
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-104, "DTC Logic".
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-105, "DTC Logic".
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-104, "DTC Logic".	
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-93, "Component Function Check".
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 MWI-59, "COMBINATION METER : Diagnosis Procedure".
• 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-91, "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-96, "DTC Logic" (LH) or EXL-98, "DTC Logic" (RH).
	Both sides	**Symptom diagnosis** “BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON” Refer to EXL-96, "DTC Logic" (LH) or EXL-98, "DTC Logic" (RH).	

NORMAL OPERATING CONDITION

Description

INFOID:0000000010325966

AUTO LIGHT SYSTEM

The headlamp may not be turned ON/OFF immediately after passing dark area or bright area (short tunnel, sky bridge, shadowed area, etc.) while using the auto light system. This is caused by for the control difference. This is normal.

BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

Description

INFOID:0000000010325969

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

Diagnosis Procedure

INFOID:0000000010325970

1.COMBINATION SWITCH INSPECTION

Check combination switch. Refer to BCS-73, "Symptom Table" (with Intelligent Key system) or BCS-133, "Symptom Table" (without Intelligent Key system).

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 “HEADLAMP (HI)”of IPDM E/R data monitor item.
2. With operating the lighting switch, check the monitor status.

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

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key system) or BCS-135, "Removal and Installation" (without Intelligent Key system).

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check headlamp (HI) circuit. Refer to EXL-100, "DTC Logic" (LH) or EXL-101, "DTC Logic" (RH).

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Repair or replace the malfunctioning part.

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

Description

INFOID:0000000010325971

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

Diagnosis Procedure

INFOID:0000000010325972

1.CHECK COMBINATION SWITCH

Check combination switch. Refer to BCS-73, "Symptom Table" (with Intelligent Key) or BCS-133, "Symptom Table" (without Intelligent Key).

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 “HEADLAMP (LO)”of IPDM E/R data monitor item.
2. With operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
HEADLAMP (LO)	Lighting switch	2ND	On
		OFF	Off

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key) or BCS-135, "Removal and Installation" (without Intelligent Key).

3.HEADLAMP (LO) CIRCUIT INSPECTION

Check headlamp (LO) circuit. Refer to EXL-102, "DTC Logic" (LH) or EXL-103, "DTC Logic" (RH).

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

Description

INFOID:0000000010325973

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

Diagnosis Procedure

INFOID:0000000010325974

1.COMBINATION SWITCH INSPECTION

Check combination switch. Refer to BCS-73, "Symptom Table" (with Intelligent Key) or BCS-133, "Symptom Table" (without Intelligent Key).

Is the combination switch normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning part.

2.CHECK TAIL LAMP REQUEST SIGNAL INPUT

CONSULT DATA MONITOR
1. Select “TAIL LAMP” of IPDM E/R data monitor item.
2. With operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
TAIL LAMP	Lighting switch	1ST	On
		OFF	Off

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key) or BCS-135, "Removal and Installation" (without Intelligent Key).

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

Description

INFOID:0000000010325975

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

Diagnosis Procedure

INFOID:0000000010325976

1.CHECK COMBINATION SWITCH

Check combination switch. Refer to BCS-73, "Symptom Table" (with Intelligent Key) or BCS-133, "Symptom Table" (without Intelligent Key).

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning part.

2.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT

CONSULT DATA MONITOR

1. Select “FRONT FOG LAMP 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
FRONT FOG LAMP REQ	Front fog lamp switch (With lighting switch 2ND)	ON	On
		OFF	Off

Is the item status normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key) or BCS-135, "Removal and Installation" (without Intelligent Key).

PERIODIC MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Inspection

INFOID:0000000009795989

PREPARATION BEFORE ADJUSTING

Before performing aiming adjustment, check the following:

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

CAUTION:

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

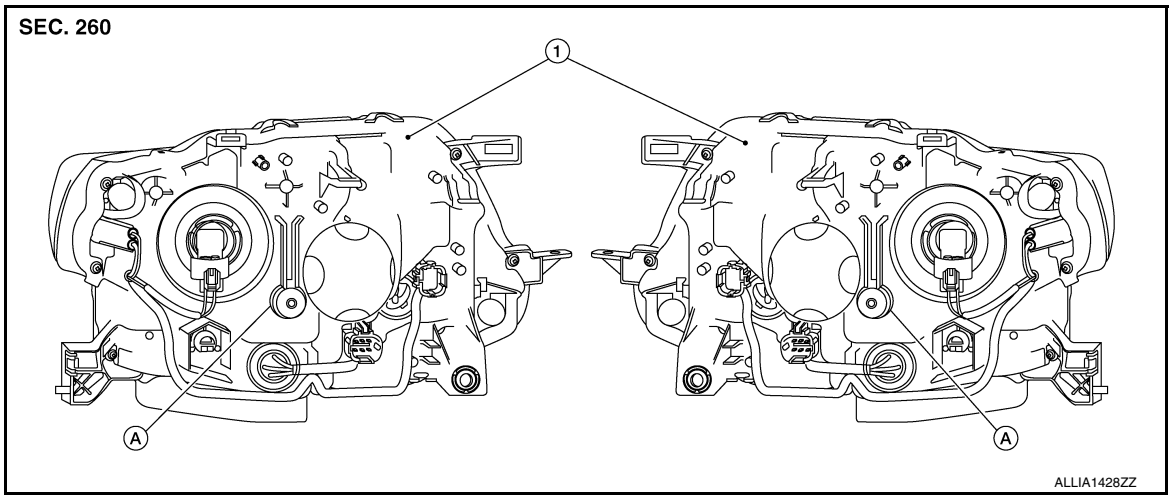
- Place a driver or equivalent weight of 68.5 kg (150 lb) on the driver seat.
- By hand, bounce the front and rear of the vehicle to settle the suspension and eliminate any static load.
- Place the front tires in the straight ahead position.
- Aim each headlamp individually and ensure other headlamp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

NOTE:

- For headlamp aiming details, refer to regulations in your area.
- By regulation, no means for horizontal aim adjustment is provided from the factory; only vertical aim is adjustable.
- Use adjusting screw to perform aiming adjustment.
- Perform headlamp aiming if:

- The vehicle front body has been repaired;
- The front combination lamp has been removed or replaced;
- Any outfitting has been installed;
- The vehicle’s standard load condition has been substantially increased.

AIMING ADJUSTMENT SCREW

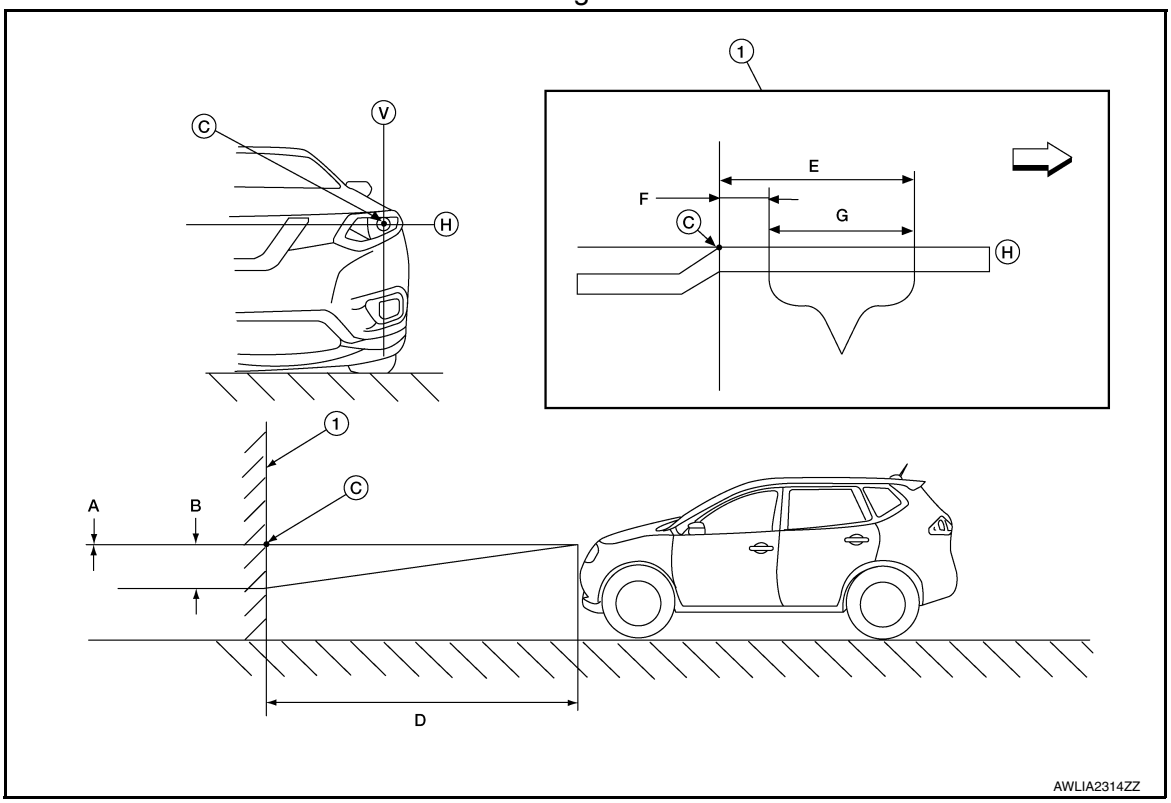


1. Front combination lamp (view from rear)
A. Headlamp HI/LO (UP/DOWN) adjustment screw

Aiming Adjustment Procedure

INFOID:0000000009795990

Aiming Chart



1.	Adjustment screen	A.	Highest cutoff line height	B.	Lowest cutoff line height
C.	Headlamp bulb center (H-V point)	D.	Distance of headlamp aiming screen from vehicle 7.62 m (25 ft)	E.	Maximum aim evaluation distance from vertical center on aiming screen 399 mm (3°R)
F.	Minimum aim evaluation distance from vertical center on aiming screen 133 mm (1°R)	G.	Aim evaluation area	H.	Horizontal aiming evaluation line
V.	Vertical aiming evaluation line	⇦	Right		

A (Highest cutoff line height)	**-13.3 mm (0.5 in)**	**0.1° up**
B (Lowest cutoff line height)	**53.2 mm (2.1 in)**	**0.4° down**

LOW BEAM AND HIGH BEAM

NOTE:

• Basic illuminating area for evaluation and/or adjustment should be within range shown on aiming chart.

1. Use adjustment screw to perform aiming adjustment.
   • **Ensure fog lamps are turned off.**
2. 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 a tape etc. The lens is made of resin.
3. 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.
4. Face the front of the vehicle to the screen and measure distance between the headlamp center and the screen surface.

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

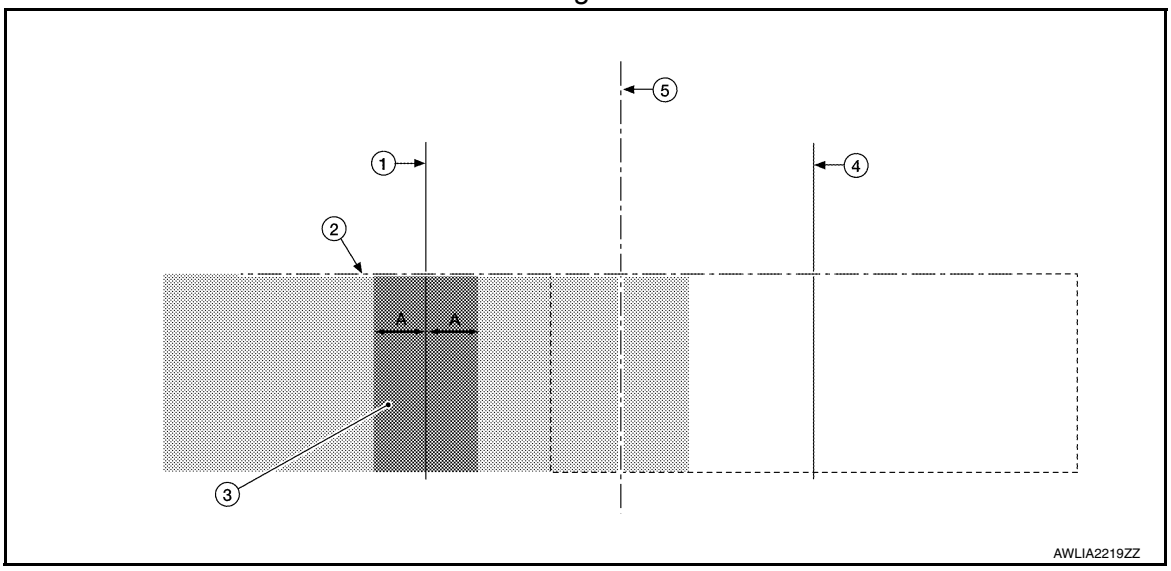
5. Start the engine. Turn the headlamp on.
6. Determine the preferred vertical aim range dimensions, using the aiming chart.
7. Measure the projected beam within the aim evaluation segment on the screen.
8. Adjust the beam pattern of each headlamp until the aim evaluation segment (the area relative to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

FRONT FOG LAMP AIMING ADJUSTMENT

Aiming Adjustment Procedure

INFOID:0000000009795992

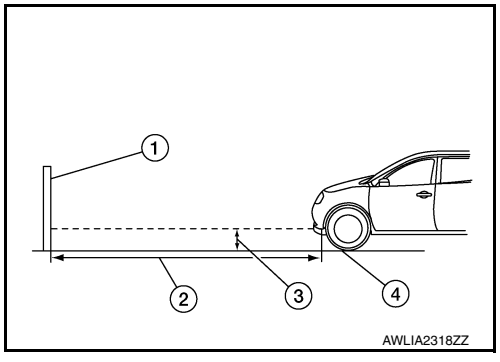
Aiming Chart



1.	Vertical center line of fog lamp (LH)	2.	Lamp center above ground	3.	Fog lamp high intensity area (LH)
4.	Vertical center line of fog lamp (RH)	5.	Vertical center axis	A.	100mm (4in)

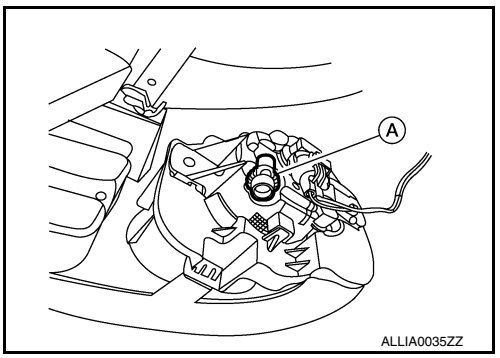
NOTE:
- (LH) Fog lamp aiming specifications shown, (RH) similar.
- Check the following conditions before performing the aiming adjustment.
- Keep all tires inflated to correct pressure.
- Place vehicle on level ground.
- See that vehicle is unloaded (except for full levels of coolant, engine oil and fuel, and spare tire, jack, and tools). Have the driver or equivalent weight placed in driver seat.
- When performing adjustment, if necessary, cover the headlamps and opposite fog lamp.

1. Set the distance between the screen and the center of the fog lamp lens as shown.
   (1) Aiming screen or a matte white surface
   (2) 7.62 m (25 ft)
   (3) Floor to center of fog lamp lens
   (4) Floor



2. Turn front fog lamps ON.

3. Access adjusting screw (A) from underneath front bumper fascia. Adjust front fog lamps using adjusting screw so that the top edge of the high intensity zone is at the fog lamp centers above ground.

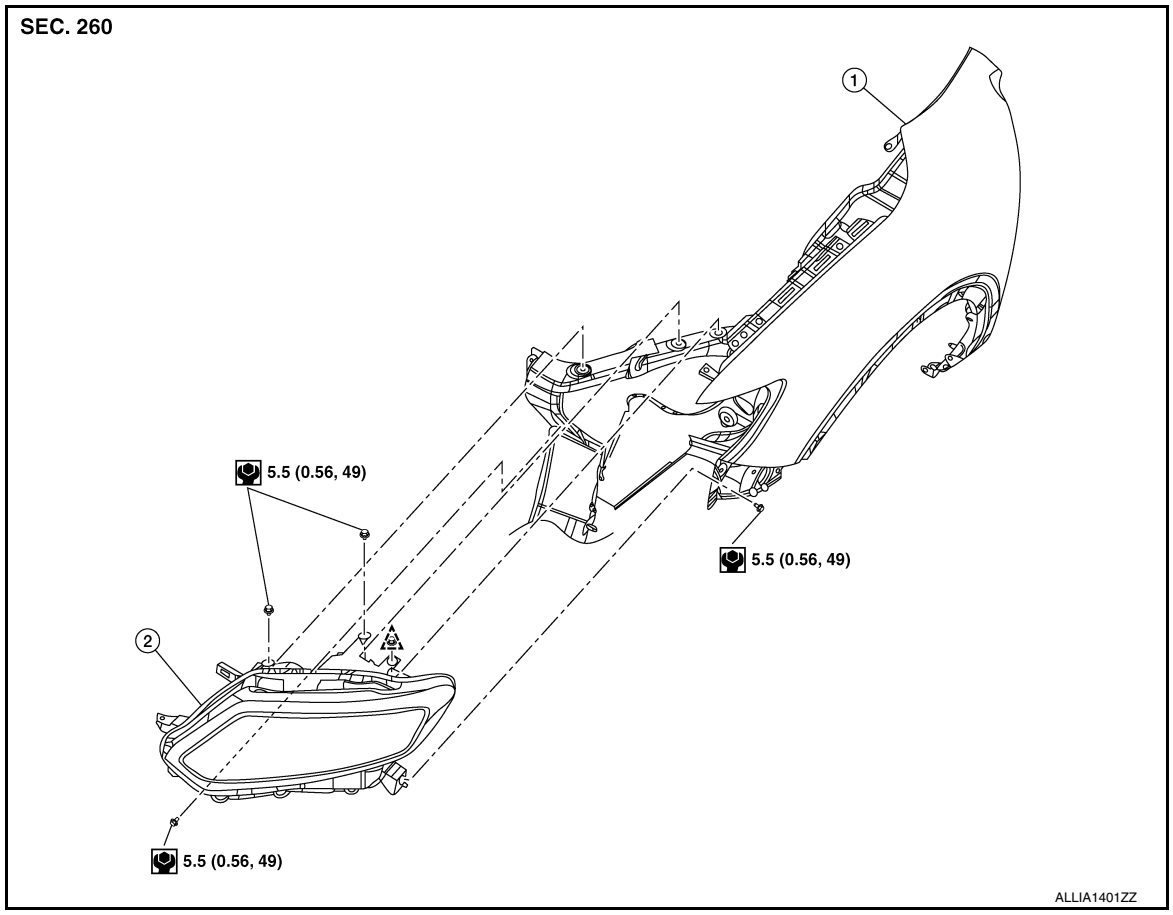


REMOVAL AND INSTALLATION

FRONT COMBINATION LAMP

Exploded View

INFOID:0000000009795993



1. Front fender
2. Front combination lamp
Clip

Removal and Installation

INFOID:0000000009795994

REMOVAL

1. Remove front bumper fascia. Refer to EXT-17, "Removal and Installation".
2. Remove front combination lamp bolts and clip.
3. Pull front combination lamp forward.
4. Disconnect the harness connectors from the front combination lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

NOTE:

After installation, perform headlamp aiming adjustment. Refer to EXL-114, "Inspection".

Bulb Replacement

INFOID:0000000009795995

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 (LOW BEAM) BULB

Removal

1. Rotate the bulb counterclockwise and remove from the front combination lamp.
2. Disconnect the harness connector from bulb and remove.

Installation
Installation is in the reverse order of removal.
CAUTION:
After installing the bulb, install the bulb socket securely for watertightness.

HEADLAMP (HIGH BEAM) BULB

Removal

1. Remove plastic cover.
2. Rotate the bulb counterclockwise and remove from the front combination lamp.
3. Disconnect the harness connector from bulb and remove.

Installation
Installation is in the reverse order of removal.
CAUTION:
After installing the bulb, install the bulb socket securely for watertightness.

PARKING (SIDE MARKER) LAMP BULB

Removal

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

Installation
Installation is in the reverse order of removal.
CAUTION:
After installing the bulb, install the bulb socket securely for watertightness.

TURN SIGNAL LAMP BULB

Removal

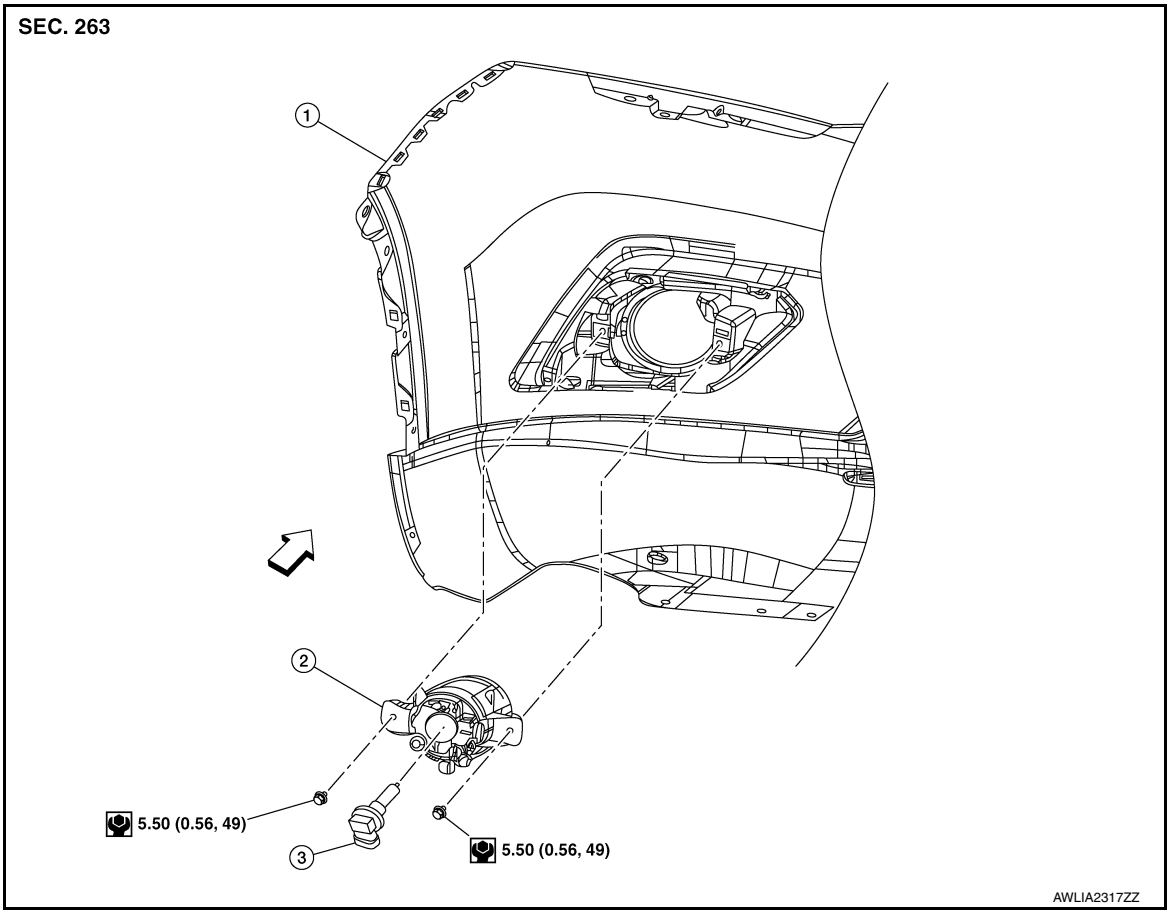
1. Rotate bulb socket counterclockwise and remove from the front combination lamp.
2. Remove the bulb from bulb socket.

Installation
Installation is in the reverse order of removal.
CAUTION:
After installing the bulb, install the bulb socket securely for watertightness.

FOG LAMP

Exploded View

INFOID:0000000009795997



1. Front bumper fascia
2. Fog lamp
3. Fog lamp bulb

⇦ Front

Removal and Installation

INFOID:0000000009795998

REMOVAL

1. Partially remove front fender protector. Refer to EXT-28, "FENDER PROTECTOR : Exploded View".
2. Disconnect the harness connector from the fog lamp.
3. Remove fog lamp bolts and fog lamp.

INSTALLATION

Installation in the reverse order of removal.

NOTE:

After installation, perform fog lamp aiming adjustment. Refer to EXL-117, "Aiming Adjustment Procedure".

Bulb Replacement

INFOID:0000000009795999

WARNING:

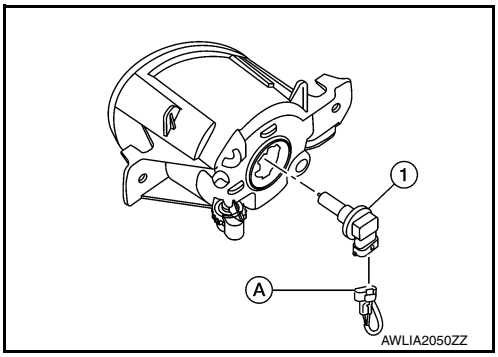
Do not touch bulb by hand while it is lit or right after being turned off. Burning may result.

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 front fender protector. Refer to EXT-28, "FENDER PROTECTOR : Exploded View".
2. Disconnect the harness connector from the fog lamp (A).
3. Rotate bulb (1) counterclockwise and remove.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

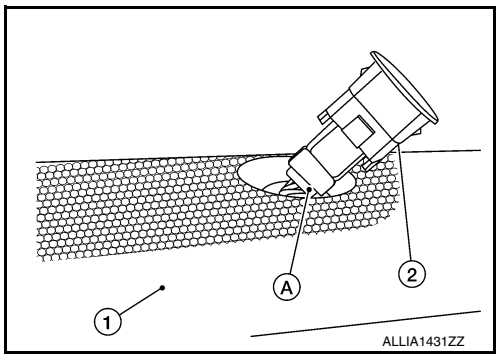
OPTICAL SENSOR

Removal and Installation

INFOID:0000000010336279

REMOVAL

1. Release the optical sensor (2) from defroster grille (1) using a suitable tool.
2. Disconnect the harness connector (A) from the optical sensor (2) and remove.



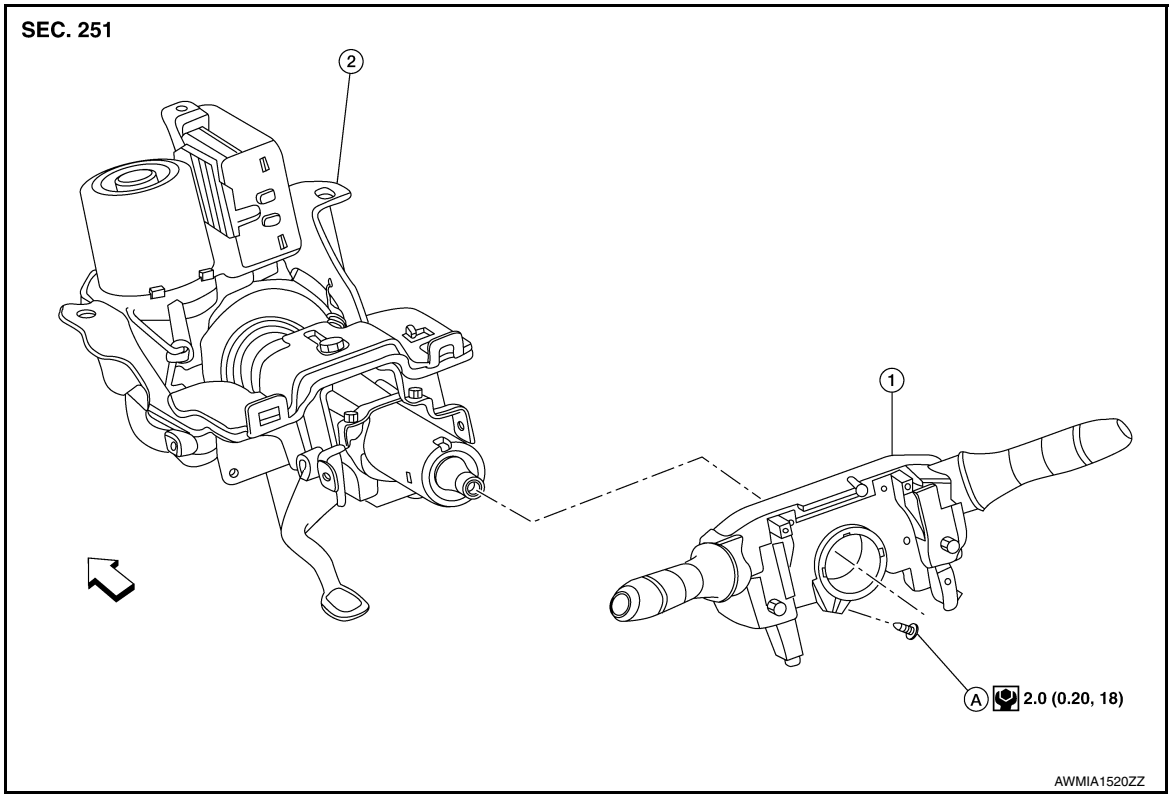
INSTALLATION

Installation is in the reverse order of removal.

COMBINATION SWITCH

Exploded View

INFOID:0000000010351322



1. Combination switch
2. Steering column
A. Screw

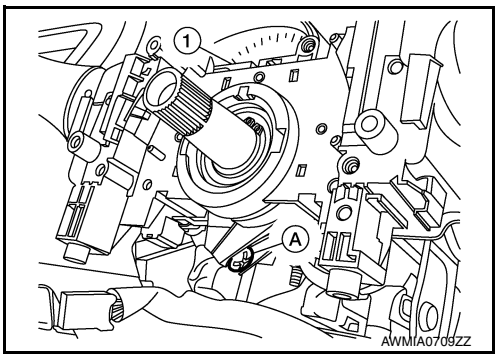
⇦ Front

Removal and Installation

INFOID:0000000010351323

REMOVAL

1. Remove the steering angle sensor. Refer to BRC-139, "Removal and Installation".
2. Disconnect harness connector from combination switch.
3. Remove screw (A) and combination switch (1).



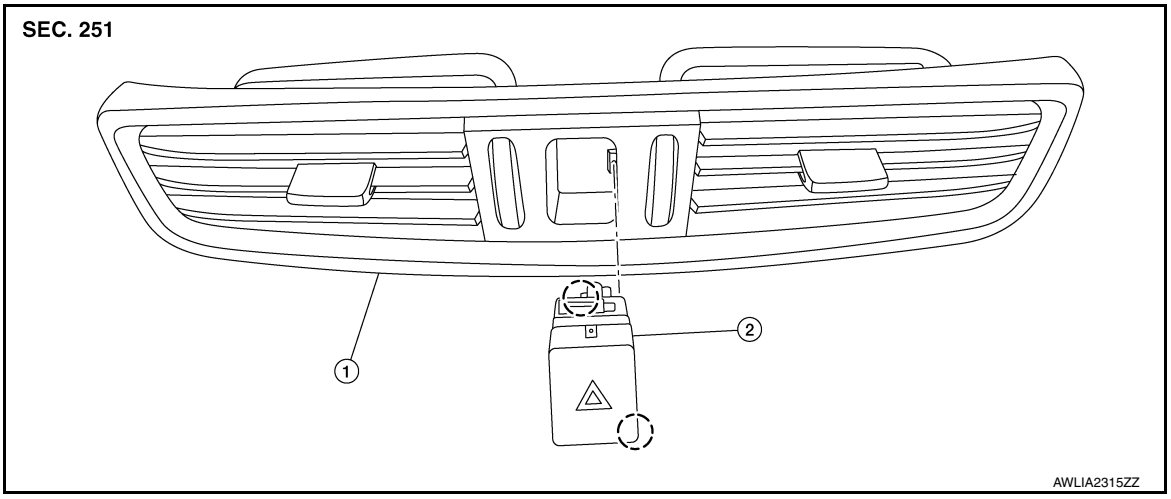
INSTALLATION

Installation is in the reverse order of removal.

HAZARD SWITCH

Exploded View

INFOID:0000000009796002



1. Center ventilator grille
2. Hazard switch
Pawl

Removal and Installation

INFOID:0000000009796003

REMOVAL

1. Remove center ventilator grille. Refer to VTL-13, "CENTER VENTILATOR GRILLE : Removal and Installation".
2. Release the pawls and remove the hazard switch.

INSTALLATION

Installation is in the reverse order of removal.

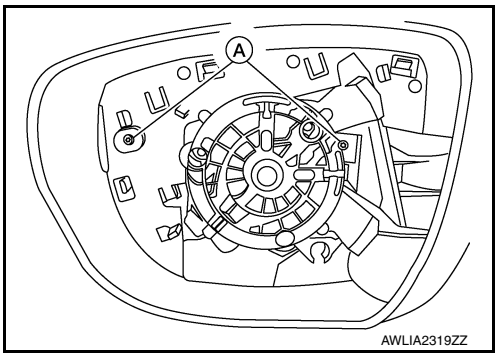
SIDE TURN SIGNAL LAMP

Removal and Installation

INFOID:0000000010357679

REMOVAL

1. Remove door mirror rear finisher. Refer to MIR-25, "Removal and Installation".
2. Remove door mirror glass. Refer to MIR-24, "Removal and Installation".
3. Remove the screws (A) and reposition side turn signal lamp.



4. Disconnect the harness connector from the side turn signal lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

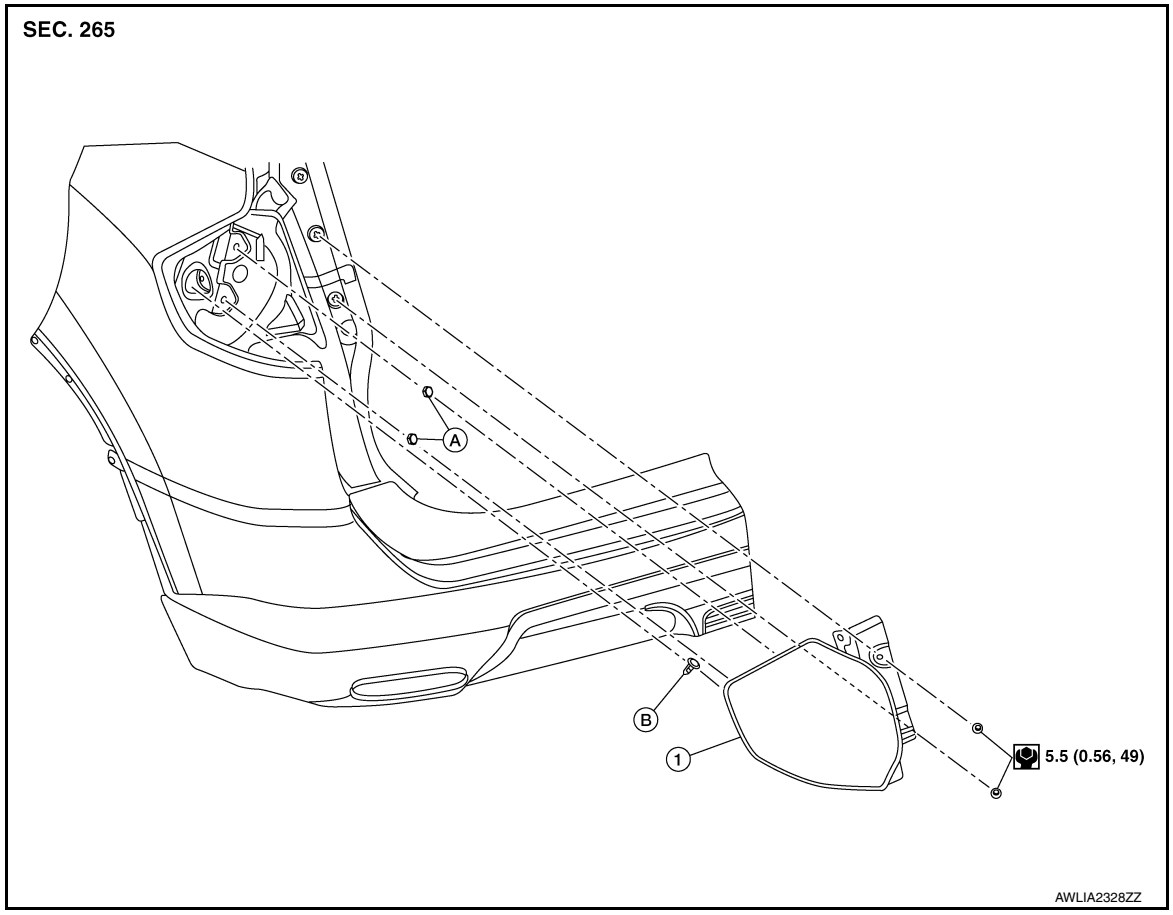
INFOID:0000000010357680

The side turn signal lamp bulb is not serviced separately. Refer to EXL-126, "Removal and Installation".

REAR COMBINATION LAMP

Exploded View

INFOID:0000000009796004



1. Rear combination lamp
A. Grommet
B. Clip

Removal and Installation

INFOID:0000000009796005

REMOVAL

1. Remove side air spoiler. Refer to EXT-48, "Removal and Installation".
2. Remove rear combination lamp bolts.
3. Pull rear combination lamp rearward to release from clip and locators.
4. Disconnect the harness connector from the rear combination lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000010338569

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 LAMP BULB

Removal

1. Remove rear combination lamp. Refer to EXL-127, "Removal and Installation".
2. Rotate stop lamp bulb socket counterclockwise and remove.
3. Remove stop 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.

TAIL LAMP BULB

Removal

1. Remove rear combination lamp. Refer to EXL-127, "Removal and Installation".
2. Rotate tail lamp bulb socket counterclockwise and remove.
3. Remove 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.

TURN SIGNAL LAMP BULB

Removal

1. Remove rear combination lamp. Refer to EXL-127, "Removal and Installation".
2. Rotate turn signal lamp bulb socket counterclockwise and remove.
3. Remove turn signal lamp bulb from bulb socket.

Installation

Installation is in the reverse order of removal.

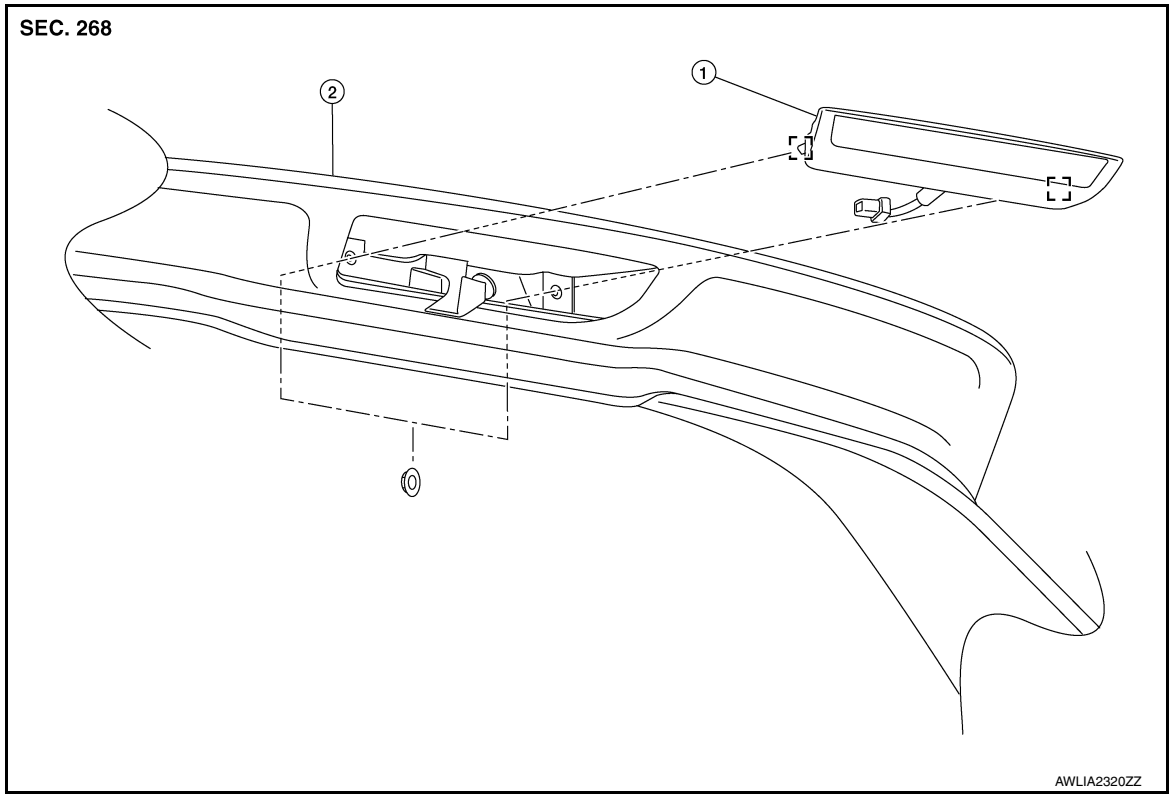
CAUTION:

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

HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:0000000009796007



1. High-mounted stop lamp
2. Back door
Stud

Removal and Installation

INFOID:0000000009796008

REMOVAL

1. Remove access cover using a suitable tool. Refer to INT-38, "Exploded View".
2. Remove high-mounted stop lamp nuts.
3. Disconnect the harness connector from high-mounted stop lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000010338573

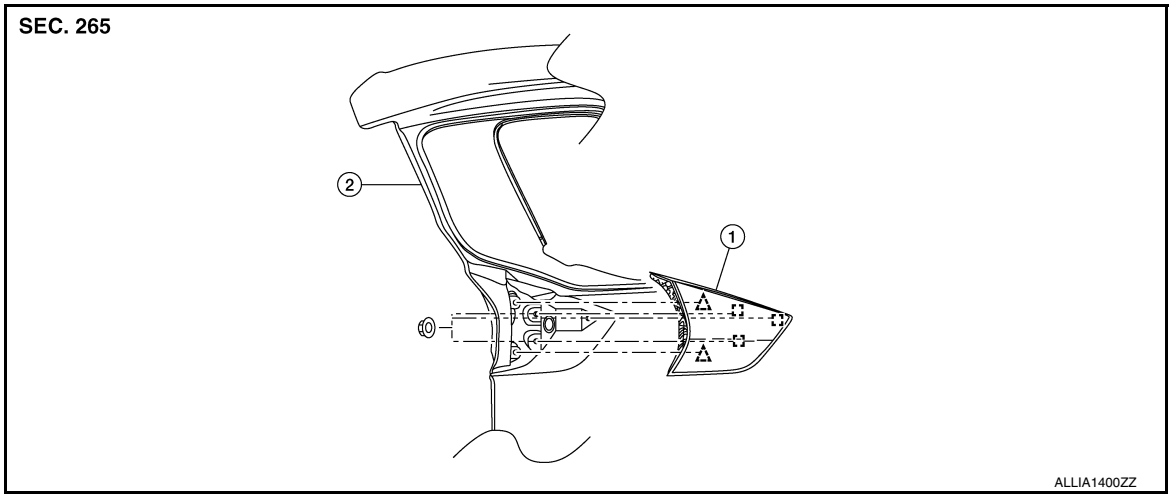
HIGH-MOUNTED STOP LAMP BULB

The high-mounted stop lamp bulb is not serviced separately. Refer to EXL-129, "Removal and Installation".

BACK-UP LAMP ASSEMBLY

Exploded View

INFOID:0000000009796009



1. Back-up lamp assembly
2. Back door
3. Clip
4. Stud

Removal and Installation

INFOID:0000000009796010

REMOVAL

1. Remove back door finisher. Refer to INT-38, "Removal and Installation".
2. Remove back-up lamp assembly nuts.
3. Pull back-up lamp assembly rearward, disconnect the harness connector and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000009796011

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.**

TAIL LAMP BULB

Removal

1. Remove back-up lamp assembly. Refer to EXL-130, "Removal and Installation".
2. Rotate tail lamp bulb socket counterclockwise and remove.
3. Remove 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.

BACK-UP LAMP BULB

Removal

1. Remove back-up lamp assembly. Refer to EXL-130, "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.

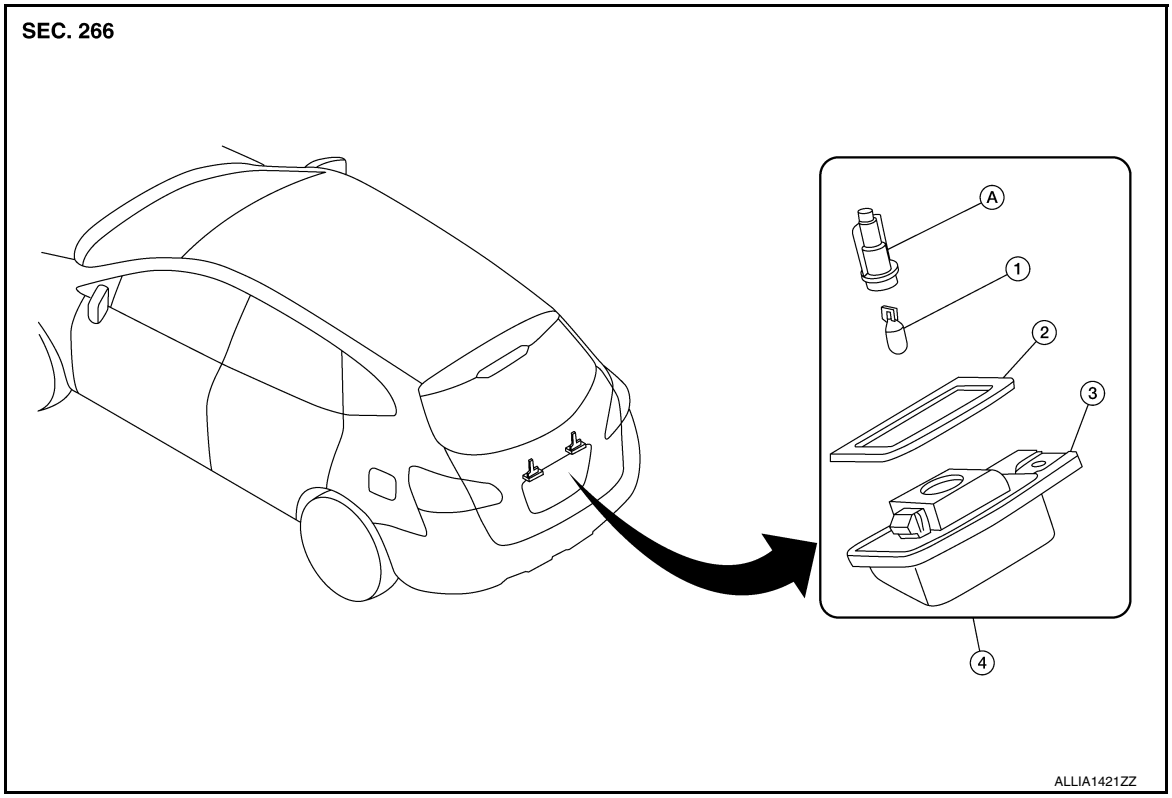
CAUTION:

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

LICENSE PLATE LAMP

Exploded View

INFOID:0000000010365316



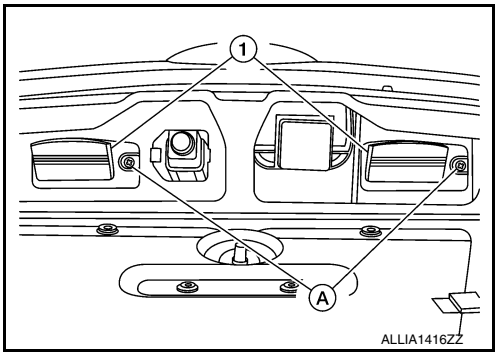
1. License plate lamp bulb
2. License plate lamp seal
3. License plate lamp
4. License plate lamp assembly
A. License plate lamp bulb socket

Removal and Installation

INFOID:0000000009796013

REMOVAL

1. Release the license lamp finisher. Refer to EXT-50, "Exploded View".
2. Remove the screw (A) (LH or RH) and pull license plate lamp (1) (LH or RH) downward.



3. Disconnect the harness connector from the license plate lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000009796014

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-132, "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.

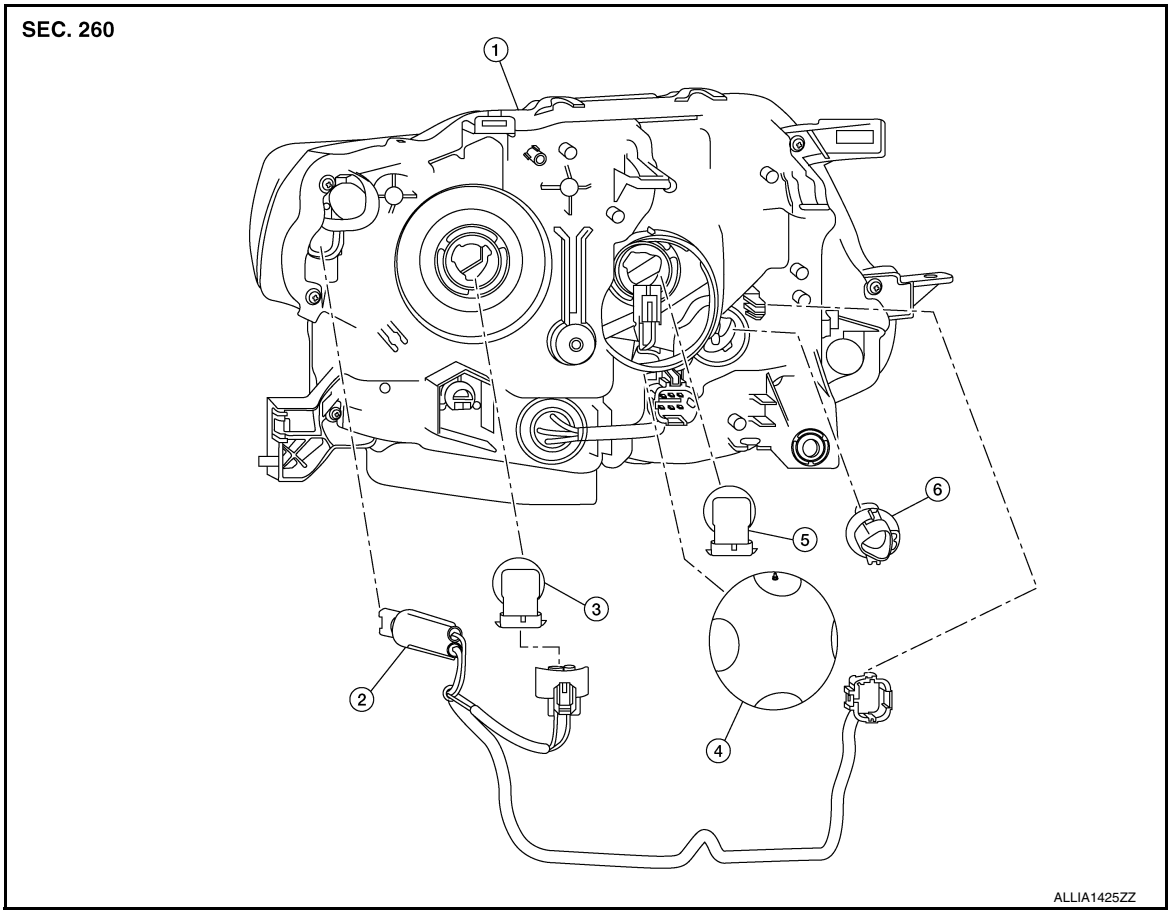
CAUTION:
After installing the bulb, install the bulb socket securely for watertightness.

UNIT DISASSEMBLY AND ASSEMBLY

FRONT COMBINATION LAMP

Exploded View

INFOID:0000000010377938



1. Front combination lamp
2. Parking (side marker) lamp bulb socket
3. Headlamp (low beam) bulb
4. Plastic cover
5. Headlamp (high beam) bulb
5. Turn signal lamp bulb socket

Disassembly and Assembly

INFOID:0000000009795996

DISASSEMBLY

1. Remove front combination lamp. Refer to EXL-119, "Removal and Installation".
2. Rotate the headlamp (low beam) bulb counterclockwise and remove.
3. Disconnect the harness connector from headlamp (low beam) bulb.
4. Remove plastic cover.
5. Rotate the headlamp (high beam) bulb counterclockwise and remove.
6. Disconnect the harness connector from headlamp (high beam) bulb.
7. Rotate the parking (side marker) lamp bulb socket counterclockwise and remove.
8. Remove the parking (side marker) lamp bulb from the bulb socket.
9. Rotate the turn signal lamp bulb socket counterclockwise and remove.
10. Remove the turn signal lamp bulb from the bulb socket.

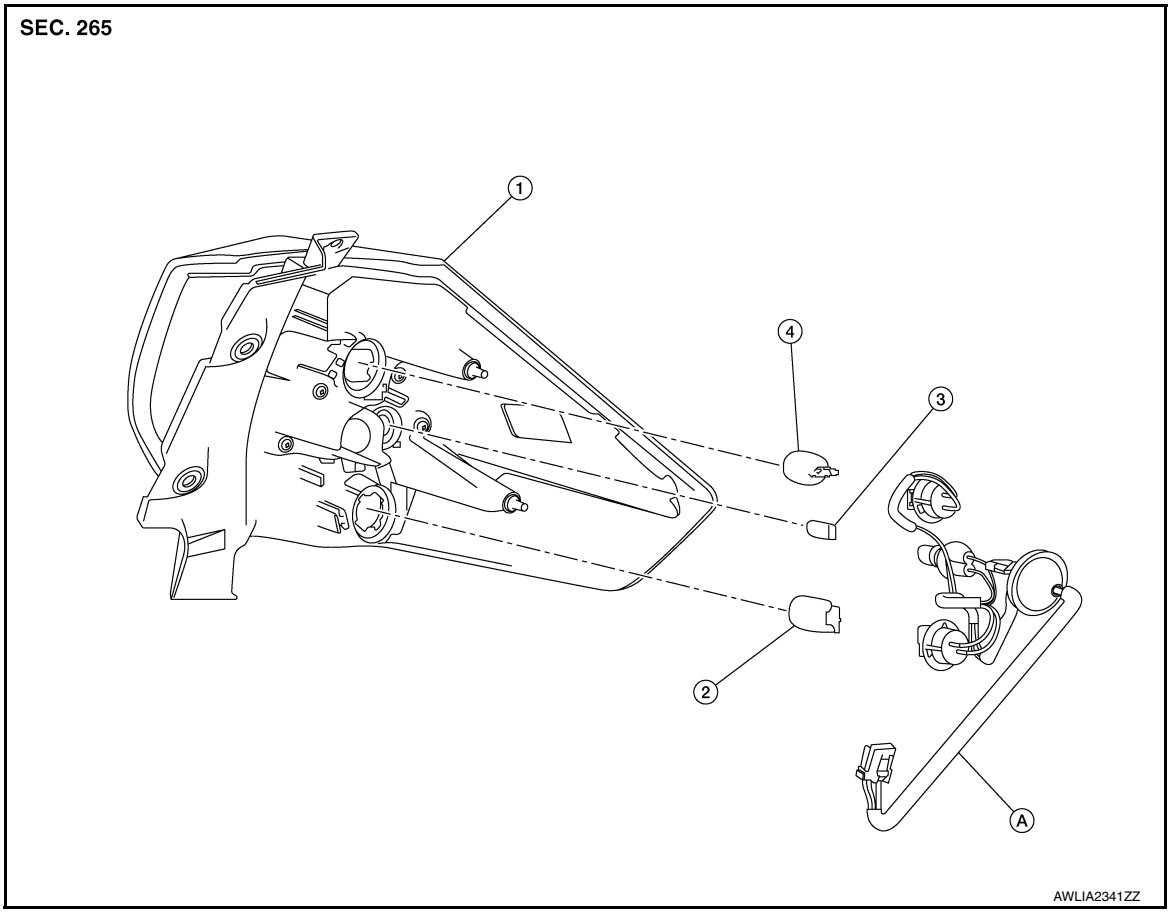
ASSEMBLY

Assembly is in the reverse order of disassembly.

REAR COMBINATION LAMP

Exploded View

INFOID:0000000010377939



1. Rear combination lamp
2. Turn signal lamp bulb
3. Tail lamp bulb
4. Stop lamp bulb
A. Rear combination lamp harness

Disassembly and Assembly

INFOID:0000000010377940

DISASSEMBLY

1. Remove rear combination lamp. Refer to EXL-127, "Removal and Installation".
2. Rotate the stop lamp bulb socket counterclockwise and remove.
3. Remove the stop lamp bulb from the bulb socket.
4. Rotate the tail lamp bulb socket counterclockwise and remove.
5. Remove the tail lamp bulb from the bulb socket.
6. Rotate the turn signal lamp bulb socket counterclockwise and remove.
7. Remove the turn signal 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)

Bulb Specifications

INFOID:0000000010336293

Item		Wattage (W)*
Front combination lamp	High beam	65
	Low beam	55
	Turn signal lamp	28/8
	Parking (side marker) lamp	5
	Daytime running lamp	—
Fog lamp (if equipped)		55
Side turn signal lamp		—
Rear combination lamp	Stop lamp	21
	Tail lamp	5
	Turn signal lamp	21
Back-up lamp	Tail lamp	5
	Back-up lamp	16
License plate lamp		5
High-mounted stop lamp		—

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

PRECAUTION

PRECAUTIONS

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

INFOID:0000000010335190

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:0000000010335191

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:

- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.

- Oily dirt:
- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.

- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

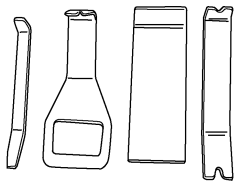
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000010351309

The actual shape of the tools may differ from those illustrated here.

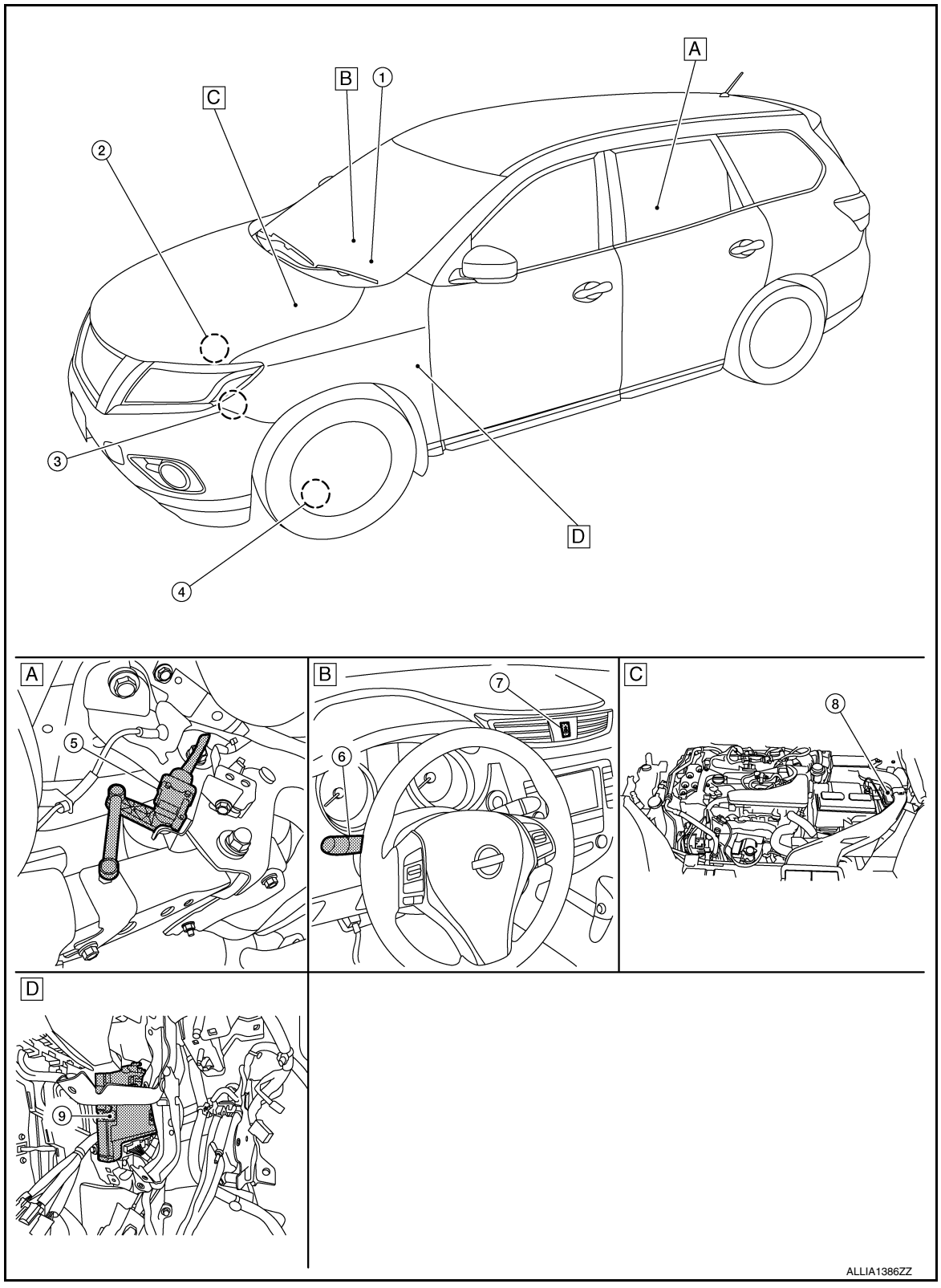
Tool number (TechMate No.) Tool name	Description
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000010330263



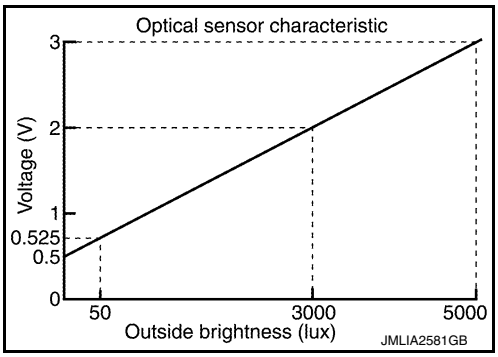
A. Right rear wheel area
B. Instrument panel
C. Engine compartment
D. Left side of instrument panel (view with trim panel removed)

No.	Part	Function
1.	Optical sensor	Refer to EXL-140, "Optical Sensor".
2.	LED headlamp control module	Turns the headlamps ON according to the power supply from IPDM E/R.
3.	Headlamp aiming motor	Moves the headlamps up/down based on inputs from the front and rear height sensors.
4.	Front height sensor	Sends the vehicles pitch angle signal to the IPDM E/R necessary for adjusting the headlamp aiming motors.
5.	Rear height sensor	Sends the vehicles pitch angle signal to the IPDM E/R necessary for adjusting the headlamp aiming motors.
6.	Combination switch (Lighting and turn signal switch)	Refer to BCS-9, "COMBINATION SWITCH READING SYSTEM : System Description".
7.	Hazard switch	Refer to EXL-141, "Hazard Switch".
8.	IPDM E/R	• Supplies voltage to the load according to the request from BCM (via CAN communication). • Refer to PCS-4, "Component Parts Location" for detailed installation location.
9.	BCM	• Detects each switch condition by the combination switch reading function. • Judges that the exterior lamps are turned ON according to the vehicle condition. • Requests the headlamp (HI/LO), tail lamp and front fog lamp ON to IPDM E/R (via CAN communication). • Requests high beam indicator lamp ON to the combination meter (via CAN communication). • Judges the outside brightness from the optical sensor signal. • Judges the ON/OFF timing according to the vehicle condition. • Judges the ON/OFF status of the exterior lamp according to the outside brightness and the vehicle condition. • Refer to BCS-7, "BODY CONTROL SYSTEM : Component Parts Location" (with Intelligent Key) or BCS-79, "BODY CONTROL SYSTEM : Component Parts Location" (without Intelligent Key).

Optical Sensor

INFOID:0000000010330264

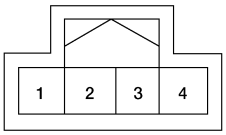
Optical sensor converts the outside brightness (lux) to voltage and transmits the optical sensor signal to BCM.



Hazard Switch

INFOID:0000000010330265

Inputs the hazard switch ON/OFF signal to BCM.



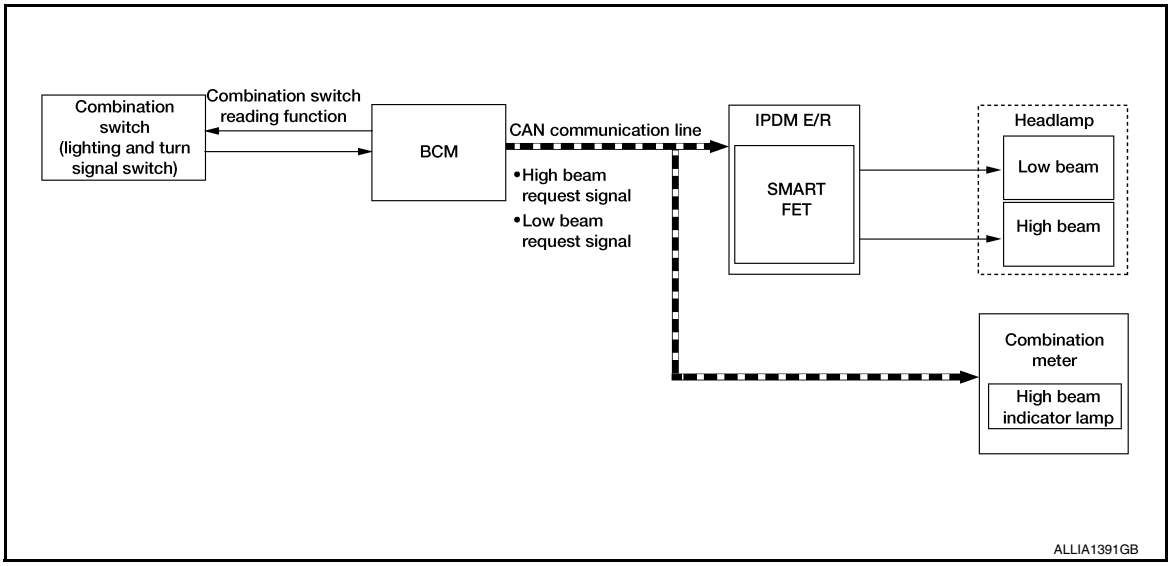
		OFF	ON
2	Hazard switch ON/OFF signal		●
3	Ground		●
4	Illumination +	●	
		◁	
1	Illumination -	●	

ALLIA1397GB

SYSTEM
HEADLAMP SYSTEM
HEADLAMP SYSTEM : System Description

INFOID:0000000010330266

SYSTEM DIAGRAM



OUTLINE

Headlamp is controlled by combination switch reading function and headlamp control function of BCM, and smart FET 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 power switch ON
- Lighting switch PASS

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 power 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 headlamp ON according to the high beam request signal.

HEADLAMP SYSTEM : Fail-Safe

INFOID:0000000010330267

CAN COMMUNICATION CONTROL

When CAN communication with 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

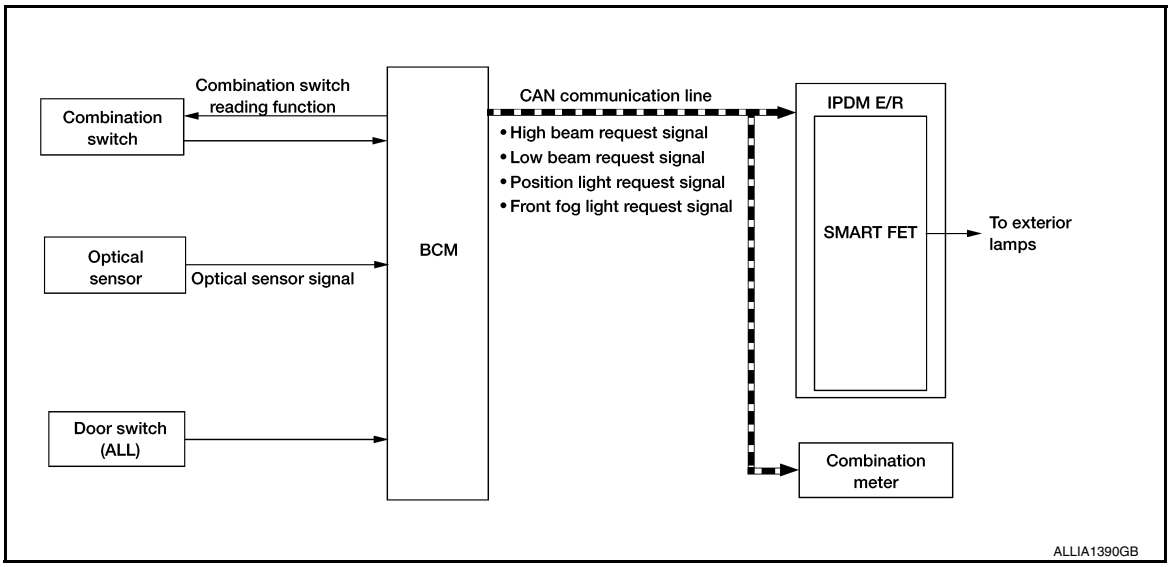
Control part	Fail-safe operation
Headlamp	• Turns ON the headlamp low beam when the power switch is turned ON • Turns OFF the headlamp low beam when the power switch is turned OFF

AUTO LIGHT SYSTEM

AUTO LIGHT SYSTEM : System Description

INFOID:0000000010336120

SYSTEM DIAGRAM



OUTLINE

• Auto light system is controlled by each function of BCM and IPDM E/R.

Controlled by BCM:
- Combination switch reading function
- Headlamp control function
- Auto light function
- Delay timer function
- Auto light adjustment system

Controlled by IPDM E/R:
- Auto light system has the auto light function and delay timer function.
- Auto light function automatically turns ON/OFF the exterior lamps* and each illumination automatically, depending on the outside brightness.
- When auto light system turns the exterior lamps ON with the power switch OFF, delay timer function turns the exterior lamps OFF, depending on the vehicle condition with the auto light function after a certain period of time.

*: Headlamp (LO/HI), parking lamp, side marker lamp, tail lamp and front fog lamp (Headlamp HI and front fog lamp depend on the combination switch condition).

AUTO LIGHT FUNCTION

• BCM detects the combination switch condition with the combination switch reading function.
• BCM supplies voltage to optical sensor when the power switch is turned ON or ACC.
• Optical sensor converts outside brightness (lux) to voltage and transmits the optical sensor signal to BCM.
• BCM judges outside brightness from the optical sensor signal and judges ON/OFF condition of the exterior lamp and each illumination according to the outside brightness.
• BCM transmits each request signal to IPDM E/R and combination meter via CAN communication according to ON/OFF condition by the auto light function.

NOTE:
ON/OFF timing differs based on the sensitivity from the setting. The setting can be set by CONSULT. Refer to.

AUTO LIGHT ADJUSTMENT SYSTEM

The auto light adjustment system automatically, dims/brightens the display, according to brightness outside the vehicle, when lighting switch 1ST, lighting switch 2ND or lighting switch AUTO is operated. Refer to EXL-143, "AUTO LIGHT SYSTEM : System Description".

DELAY TIMER FUNCTION

BCM turns the exterior lamp OFF depending on the vehicle condition with the auto light function when the power switch is turned OFF.

- Turns the exterior lamp OFF 5 minutes after detecting that any door opens. (Door switch ON).
- Turns the exterior lamp OFF a certain period of time* after closing all doors. (Door switch ON→OFF).
- Turns the exterior lamp OFF with the power switch ACC or the light switch OFF.

*: The preset time is 45 seconds. The timer operating time can be set by CONSULT. Refer to BCS-19, "HEADLAMP : CONSULT Function (BCM - HEADLAMP)" with (Intelligent Key) or BCS-90, "HEADLAMP : CONSULT Function (BCM - HEADLAMP)" (without Intelligent Key).

NOTE:

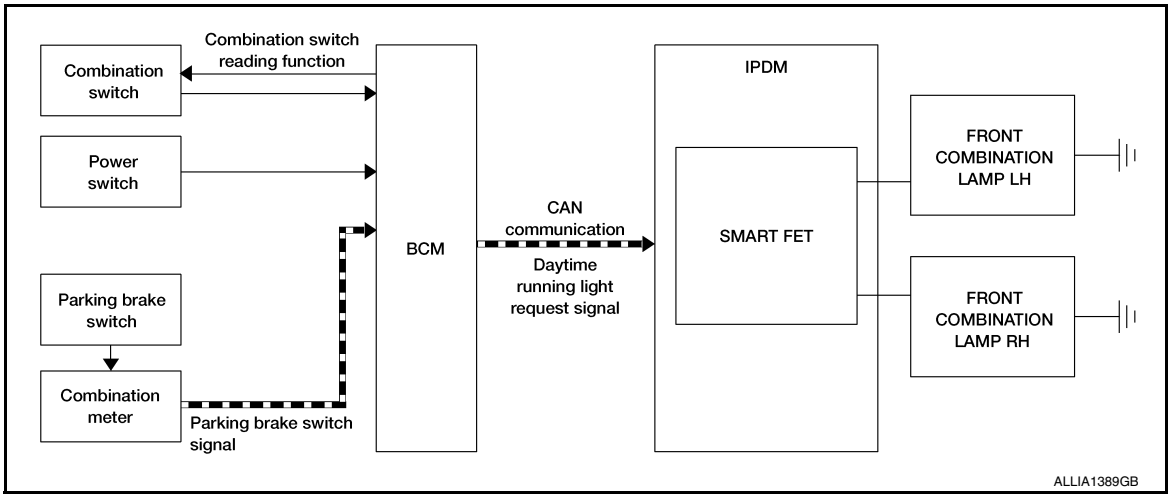
When any position other than the light switch AUTO is set, the auto light system function switches to the exterior lamp battery saver function.

DAYTIME RUNNING LIGHT SYSTEM

DAYTIME RUNNING LIGHT SYSTEM : System Description

INFOID:0000000010330272

SYSTEM DIAGRAM



OUTLINE

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

DAYTIME RUNNING LIGHT OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM detects the vehicle condition according to power 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 light request signal to IPDM E/R using CAN communication according to the daytime running light ON condition.

Daytime running light ON condition:

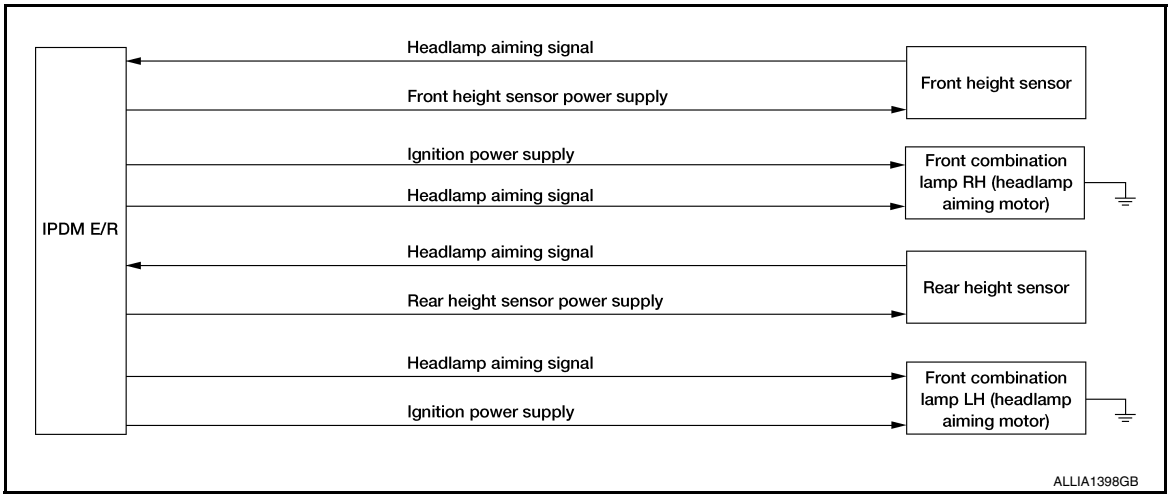
- Vehicle condition READY
- Lighting switch OFF or 1ST
- Lighting switch AUTO, and the auto light function OFF judgment
- Parking brake switch OFF

- IPDM E/R controls the daytime running light request signal.
- Power is supplied from the IPDM E/R to the daytime lights.

HEADLAMP AIMING CONTROL SYSTEM (AUTO)

HEADLAMP AIMING CONTROL SYSTEM (AUTO) : System Diagram

INFOID:0000000010340297



HEADLAMP AIMING CONTROL SYSTEM (AUTO) : System Description

INFOID:0000000010340298

OUTLINE

- Headlamp aiming control system is controlled by the IPDM E/R.
- The IPDM E/R controls the headlamp light axis height appropriately depending on the vehicle front and rear height sensor positions.
- Auto levelizer control unit detects the vehicle condition necessary for the aiming motor control with the following signals.

- Front and rear height sensor signals

HEADLAMP AUTO AIMING OPERATION

- The IPDM E/R calculates vehicle pitch angle from the front and rear height sensor signals and determines the necessary correction to compensate the deviation from standard light axis position.
- The IPDM E/R outputs aiming motor drive signal when operating conditions are met.

Operating condition:

- Ignition switch ON
- Parking lamp ON

- The IPDM E/R unit changes the aiming motor drive signal when any of the correcting conditions are detected. Output is maintained if other condition is detected.

Correcting condition:

- Parking lamp is turned ON.
- Vehicle posture becomes stable after the vehicle posture change is detected with the parking lamp ON and the vehicle stopped.
- Vehicle speed is maintained with the parking lamp ON and the vehicle driven.

CAUTION:

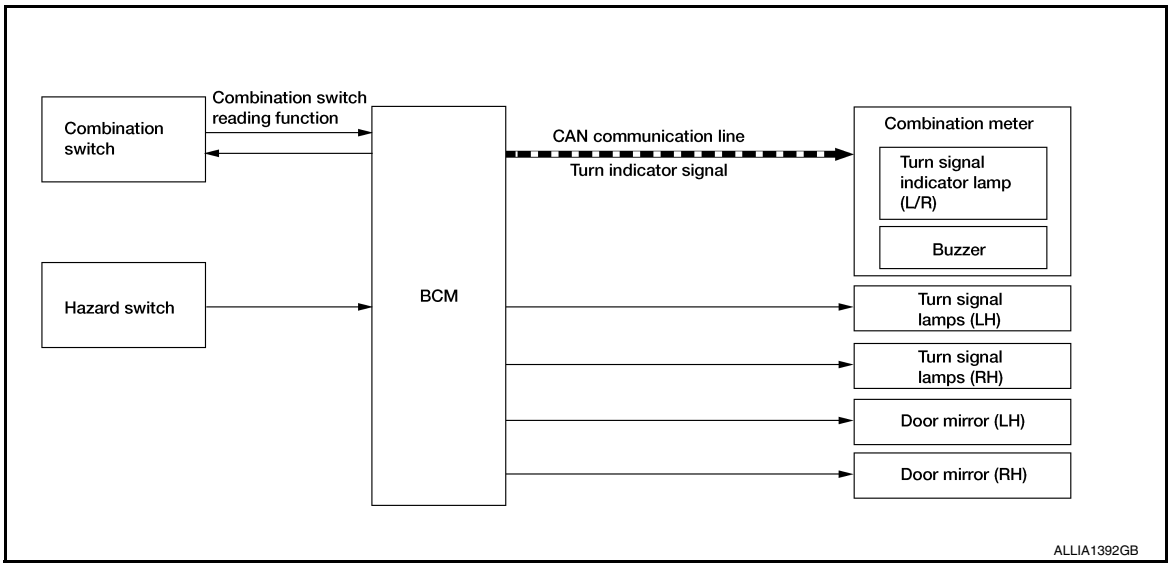
If the suspension is worn, the adjusted axis position may differ from the preset position.

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Description

INFOID:0000000010330273

SYSTEM DIAGRAM



OUTLINE

Turn signal lamp and the hazard warning lamp is controlled by combination switch reading function and the flasher control 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 power switch is 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 ON. BCM blinks the hazard warning lamp.

TURN SIGNAL INDICATOR LAMP AND TURN SIGNAL OPERATION

- BCM transmits the turn signal indicator lamp signal to the combination meter using CAN communication while the turn signal lamp and the hazard warning lamp are operating.
- Combination meter outputs the turn signal sound with the integrated buzzer while blinking the turn signal indicator lamp according to the turn signal indicator lamp signal.

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.

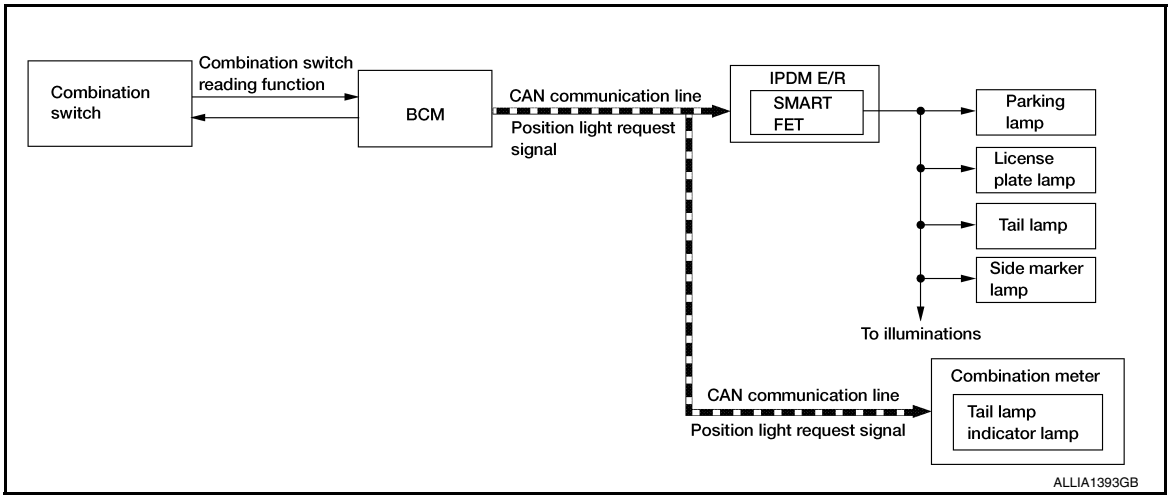
PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM

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

scription

INFOID:0000000010330274

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 smart FET 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 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 power switch ON

- IPDM E/R turns the integrated tail lamp ON and turns the parking, license plate, side marker 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:0000000010330276

CAN COMMUNICATION CONTROL

When CAN communication with 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

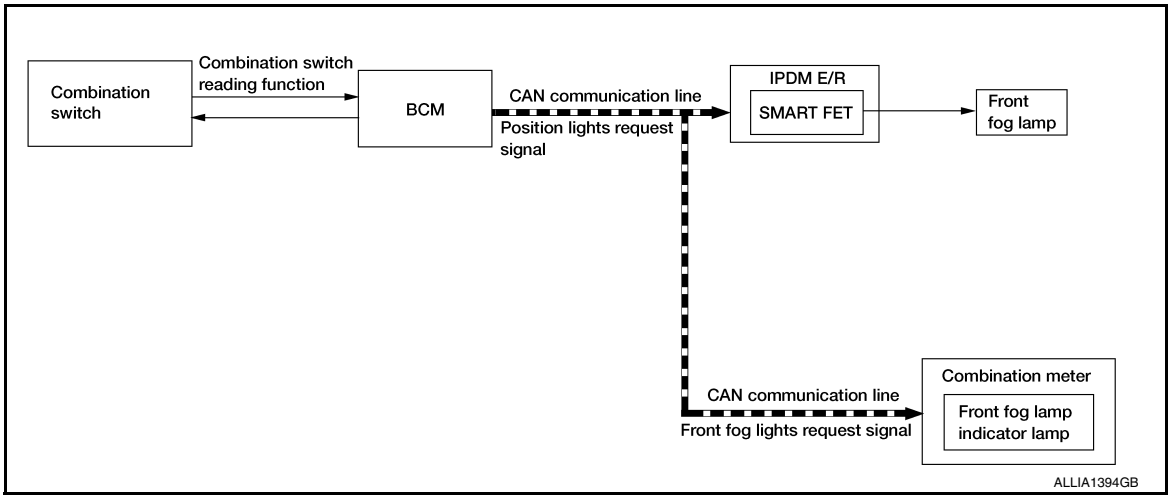
Control part	Fail-safe operation
• Parking lamp • License plate lamp • Illumination • Tail lamp • Side marker lamp	• Turns ON the tail lamp when the power switch is turned ON • Turns OFF the tail lamp when the power switch is turned OFF

FRONT FOG LAMP SYSTEM

FRONT FOG LAMP SYSTEM : System Description

INFOID:0000000010330277

SYSTEM DIAGRAM



OUTLINE

Front fog lamp is controlled by combination switch reading function, front fog lamp control function of BCM, and smart FET 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 lights request signal to IPDM E/R and the combination meter 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 and the power switch ON

IPDM E/R turns the front fog lamp ON according to the front fog lights request signal.
Combination meter turns the front fog lamp indicator lamp ON according to the front fog lights request signal.

FRONT FOG LAMP SYSTEM : Fail-Safe

INFOID:0000000010330279

CAN COMMUNICATION CONTROL

When CAN communication with 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

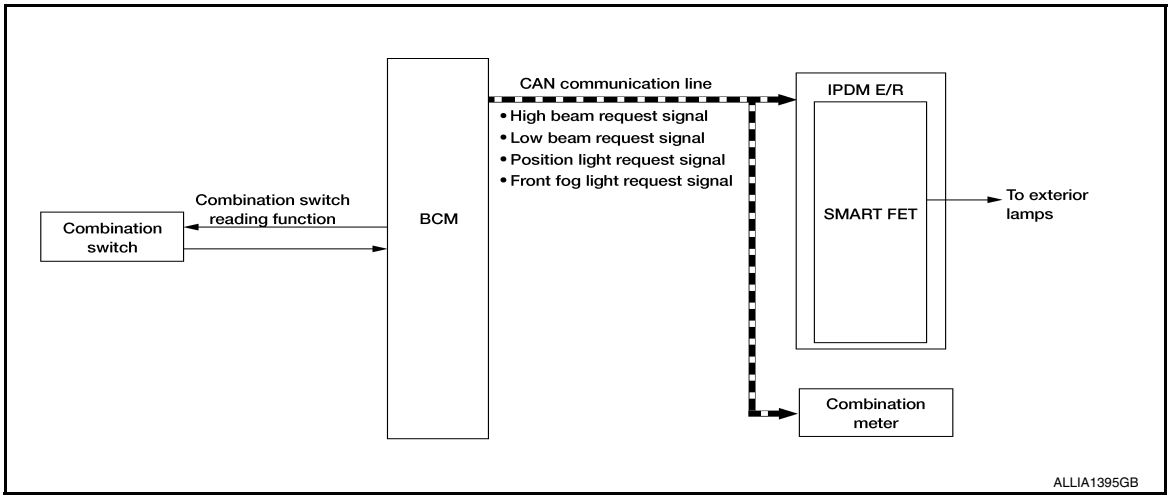
Control part	Fail-safe operation
Front fog lamp	Front fog lamp OFF

EXTERIOR LAMP BATTERY SAVER SYSTEM

EXTERIOR LAMP BATTERY SAVER SYSTEM : System Description

INFOID:0000000010330280

SYSTEM DIAGRAM



OUTLINE

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

Controlled by BCM:
- Combination switch reading function
- Headlamp control function
- Exterior lamp battery saver function

Controlled by IPDM E/R:
- BCM turns the exterior lamps* OFF after a period of time to prevent the battery from over-discharge when the power 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 power switch is turned from ON → OFF with the exterior lamps ON.

NOTE:
• Headlamp control function turns the exterior lamps ON normally when the power switch is turned ACC or set the vehicle to READY (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)
WITH INTELLIGENT KEY

WITH INTELLIGENT KEY : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010287185

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	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

WITH INTELLIGENT KEY : CONSULT Function (BCM - HEADLAMP)

INFOID:0000000010287188

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 [On/Off]	
LIGHT OFF SW [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW [On/Off]	
FR FOG SW [On/Off]	
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
OPTI SEN (DTCT) [V]	Indicates outside brightness voltage signal from optical sensor.
OPTI SEN (FILT) [V]	Indicates outside brightness voltage signal from optical sensor filtered by BCM.

ACTIVE TEST

Test Item	Description
FR FOG LAMP	This test is able to check front fog lamp operation [On/Off].
STOP LAMP 1	This test is able to check rear combination lamp stop lamp operation [On/Off].
STOP LAMP 3	This test is able to check high-mounted stop lamp operation [On/Off].

WORK SUPPORT

Support Item	Setting	Description
TWILIGHT ON	MODE2*	Autolamp function ON.
	MODE1	Autolamp function OFF.
CUSTOM A/LIGHT SETTING	MODE4	Less sensitive than normal setting (turns ON later).
	MODE3	More sensitive than MODE2.
	MODE2	More sensitive than normal setting (turns ON earlier).
	MODE1*	Normal setting.
ILL DELAY SET	MODE 8	Autolamp delay timer.
	MODE 7	
	MODE 6	
	MODE 4	
	MODE 5	
	MODE 3	
	MODE 2	
	MODE 1*	

*: Initial setting

WITH INTELLIGENT KEY : CONSULT Function (BCM - FLASHER)

INFOID:0000000010287191

DATA MONITOR

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

ACTIVE TEST

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

WITHOUT INTELLIGENT KEY

WITHOUT INTELLIGENT KEY : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010287193

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			×	×	×		

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Remote keyless entry system	MULTI REMOTE ENT					×		
Exterior lamp	HEADLAMP			×	×			
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×		×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

WITHOUT INTELLIGENT KEY : CONSULT Function (BCM - HEADLAMP)

INFOID:0000000010287194

DATA MONITOR

Monitor Item [Unit]	Description
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 [On/Off]	
LIGHT OFF SW [On/Off]	
PASSING 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
DAYTIME RUNNING LIGHT	This test is able to check daytime running lamp operation [On/Off].
ILL DIM SIGNAL	This test is able to check head lamp illumination dimming operation [On/Off].

WITHOUT INTELLIGENT KEY : CONSULT Function (BCM - FLASHER)

INFOID:0000000010287195

DATA MONITOR

Monitor Item [Unit]	Description
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.
RKE-PANIC [On/Off]	Indicates condition of panic alarm signal from Intelligent Key.

ACTIVE TEST

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

DIAGNOSIS SYSTEM (IPDM E/R)

CONSULT Function (IPDM E/R)

INFOID:0000000010287196

APPLICATION ITEM

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

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

ECU IDENTIFICATION

The IPDM E/R part number is displayed.

SELF DIAGNOSTIC RESULT

Refer to PCS-20, "DTC Index".

DATA MONITOR

Monitor Item [Unit]	Description
REVERSE SIGNAL [Open/Close]	Indicates condition of transmission range switch R (Reverse) position.
IGN RELAY [Open/Close]	Indicates condition of ignition relay-1.
PUSH SW [Open/Close]	Indicates condition of push-button ignition switch.
INTERLOCK/PNP SW [Open/Close]	Indicates condition of transmission range switch P (Park) and N (Neutral) positions.
OIL PRESSURE SW [Open/Close]	Indicates condition of oil pressure switch.
HOOD SW [Open/Close]	Indicates condition of hood switch.
COMPRESSOR [OFF/ON]	Indicates condition of A/C compressor.
HORN RELAY [OFF/ ON]	Indicates condition of horn relay.
COOLING FAN [OFF/ON]	Indicates condition of cooling fan relay-1.
FRONT WIPER HI/LO RELAY [OFF/ON]	Indicates condition of front wiper high relay.
FRONT WIPER RELAY [OFF/ON]	Indicates condition of front wiper relay.
IGN RELAY OFF STATUS [OFF/ON]	Indicates condition of ignition relay-1 OFF status.
IGN RELAY ON STATUS [OFF/ON]	Indicates condition of ignition relay-1 ON status.
COOLING FAN RELAY 1 [OFF/ON]	Indicates condition of cooling fan relay-1.
STARTER RELAY [OFF/ON]	Indicates condition of starter relay.
COMP ECV DUTY [%]	Indicates condition of A/C compressor.
COOLING FAN RELAY 2 [%]	Indicates condition of cooling fan relay-2.
FR FOG LAMP LH [%]	Indicates condition of front fog lamp LH.
FR FOG LAMP RH [%]	Indicates condition of front fog lamp RH.
PARKING LAMP [%]	Indicates condition of parking lamp.
TAIL LAMP LH [%]	Indicates condition of tail lamp LH.
TAIL LAMP RH [%]	Indicates condition of tail lamp RH.
DAYTIME RUNNING LIGHT LH [%]	Indicates condition of daytime running light LH.
DAYTIME RUNNING LIGHT RH [%]	Indicates condition of daytime running light RH.
HEADLAMP (HI) LH [%]	Indicates condition of headlamp high beam LH.

Monitor Item [Unit]	Description
HEADLAMP (HI) RH [%]	Indicates condition of headlamp high beam RH.
HEADLAMP (LO) LH [%]	Indicates condition of headlamp low beam LH.
HEADLAMP (LO) RH [%]	Indicates condition of headlamp low beam RH.
A/C RELAY STUCK [NG/OK]	Indicates condition of A/C relay.
A/C RELAY [Off/On]	Indicates condition of A/C relay.
COMP ECV STATUS [NG/OK]	Indicates condition of A/C compressor.
VEHICLE SECURITY HORN [Off/On]	Indicates condition of horn relay.
BATTERY CURRENT SENSOR [NG/OK]	Indicates condition of battery current sensor.
FRONT FOG LAMP [Off/On]	Indicates condition of front fog lamps.
COMP ECV CURRENT [A]	Indicates condition of A/C compressor current.
BATTERY VOLTAGE [V]	Indicates condition of battery voltage.
COOLING FAN DUTY [%]	Indicates condition of cooling fans.
HOOD SW (CAN) [OPEN/CLOSE]	Indicates condition of hood switch.
FRONT WIPER [STOP/LOW/HIGH]	Indicates condition of front wiper motor.
FR WIPER STOP POSITION [STOP P/ACTIVE P]	Indicates condition of front wiper motor stop.
HEADLAMP (HI) [Off/On]	Indicates condition of headlamp high beams.
HEADLAMP (LO) [Off/On]	Indicates condition of headlamp low beams.
IGNITION RELAY STATUS [Off/On]	Indicates condition of ignition relay-1.
IGN RELAY MONITOR [Off/On]	Indicates condition of ignition relay-1 feedback.
IGNITION POWER SUPPLY [Off/On]	Indicates condition of ignition relay-1.
INTERLOCK/PNP SW (CAN) [Off/On]	Indicates condition of transmission range switch P (Park) and N (Neutral) positions.
PUSH-BUTTON IGN SW (CAN) [Off/On]	Indicates condition of push-button ignition switch.
TAIL LAMP [Off/On]	Indicates condition of tail lamps.
REVERSE SIGNAL (CAN) [Off/On]	Indicates condition of transmission range switch R (Reverse) position.
ST&ST CONT RELAY STATUS [Off/ST R On]	Indicates condition of starter cut and starter relays.
STARTER MOTOR STATUS [Off/On]	Indicates condition of starter motor.
STARTER RELAY (CAN) [LOW/HIGH]	Indicates condition of starter relay.
IPDM NOT SLEEP [NO RDY/RDY]	Indicates condition of IPDM E/R sleep status.
AFTER COOLING TIME [No request/Request]	Indicates condition of cooling fan request.
AFTER COOLING SPEED [%]	Indicates condition of cooling fans.
COOLING FAN TYPE [NISSAN/RENAULT]	Indicates cooling fan type.
COMPRESSOR REQ1 [Off/On]	Indicates condition of A/C compressor request.
VHCL SECURITY HORN REQ [Off/On]	Indicates condition of horn relay request.
DTRL REQ [Off/On]	Indicates condition of daytime running light request.
SLEEP/WAKE UP [WAKEUP/SLEEP]	Indicates condition of IPDM E/R sleep/wake.
CRANKING ENABLE-TCM [NG/OK]	Indicates condition of crank enable from TCM.
CRANKING ENABLE-ECM [NG/OK]	Indicates condition of crank enable from ECM.
CAN DIAGNOSIS [NG/OK]	Indicates condition of CAN diagnosis.
FRONT FOG LAMP REQ [Off/On]	Indicates condition of front fog lamp request.
HIGH BEAM REQ [Off/On]	Indicates condition of headlamp high beam request.
HORN CHIRP [Off/On]	Indicates condition of horn relay request.
COOLING FAN REQ [%]	Indicates condition of cooling fan request.
ENGINE STATUS [STOP/RUN/IDLING]	Indicates condition of engine status.

Monitor Item [Unit]	Description
TURN SIGNAL REQ [Off/LH/RH]	Indicates condition of turn signal request.
FR WIPER REQ [RETURN/LOW/HIGH]	Indicates condition of front wiper motor request.
SHIFT POSITION [P/R/N/D/L]	Indicates condition of transmission range switch positions.
LOW BEAM REQ [Off/On]	Indicates condition of headlamp low beam request.
POSITION LIGHT REQ [Off/On]	Indicates condition of parking lamp request.
COMPRESSOR REQ2 [Off/On]	Indicates condition of A/C compressor request.
IGNITION SW [Off/On]	Indicates condition of ignition switch.
VEHICLE SPEED (METER) [mph/km/h]	Indicates vehicle speed.
BAT DISCHARGE COUNT [0-100]	Indicates condition of battery discharge.
BATTERY STATUS [NG/OK]	Indicates battery status.

ACTIVE TEST

Test item	Description
HORN	This test is able to check horn operation [Off/On].
FRONT WIPER	This test is able to check wiper motor operation [Off/Low/High].
COMPRESSOR	This test is able to check A/C compressor operation [Off/On].
COOLING FAN (DUAL)	This test is able to check cooling fan operation [Off/LO/HI].
HEADLAMP (HI)	This test is able to check headlamp high beam operation [Off/3/5].
HEADLAMP (LO)	This test is able to check headlamp low beam operation [Off/3/5].
FRONT FOG LAMP	This test is able to check front fog lamp operation [Off/3/5].
DAYTIME RUNNING LAMP	This test is able to check daytime running lamp operation [Off/3/5].
PARKING LAMP	This test is able to check parking lamp operation [Off/3/5].
TAIL LAMP	This test is able to check tail lamp operation [Off/3/5].

CAN DIAG SUPPORT MNTR

Refer to LAN-14, "CAN Diagnostic Support Monitor".

ECU DIAGNOSIS INFORMATION

BCM, IPDM E/R

List of ECU Reference

INFOID:0000000010330283

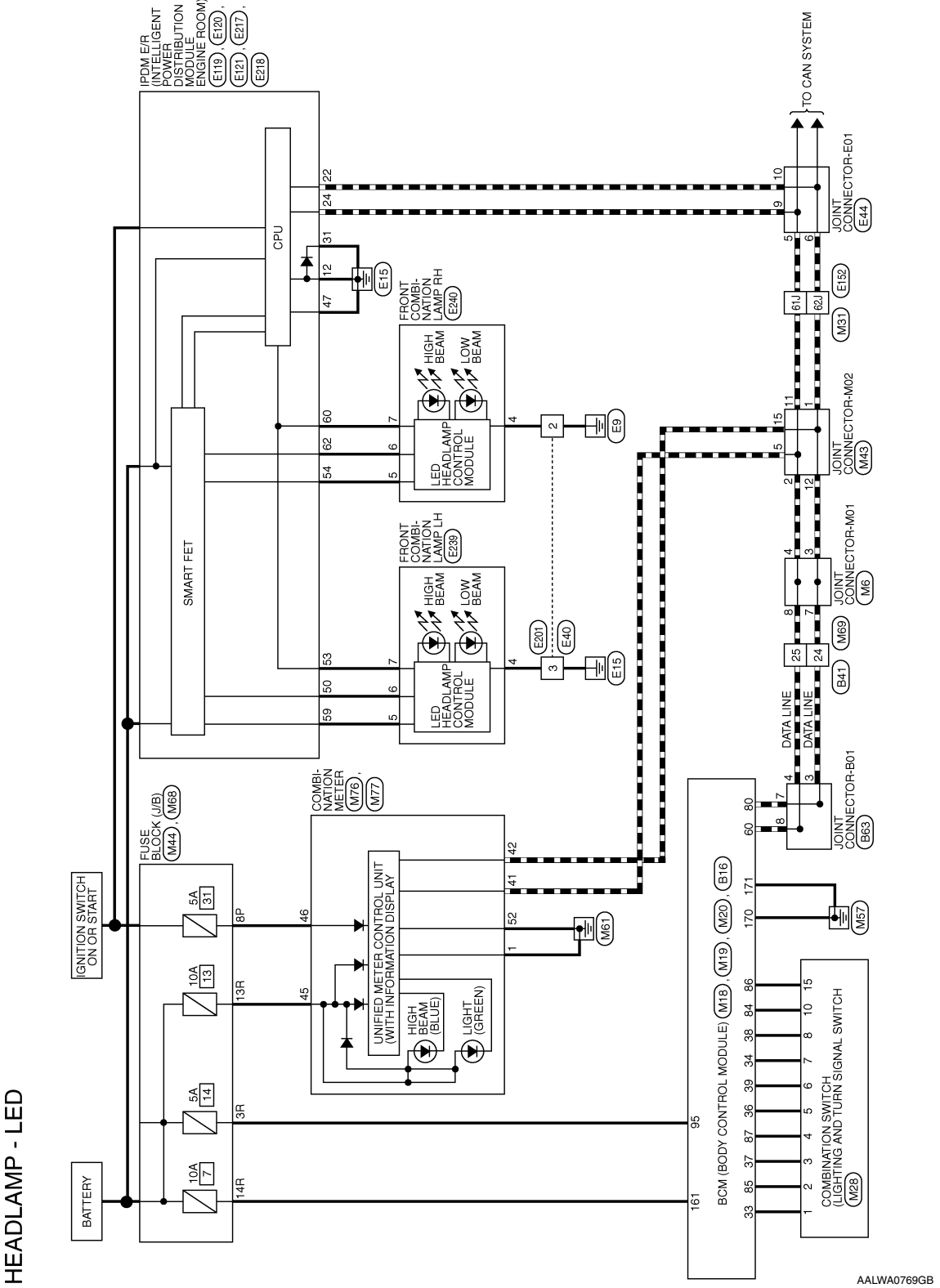
ECU	Reference
BCM	BCS-28, "Reference Value" (with Intelligent Key system) BCS-96, "Reference Value" (without Intelligent Key system)
	BCS-47, "Fail Safe" (with Intelligent Key system) BCS-107, "Fail Safe" (without Intelligent Key system)
	BCS-47, "DTC Inspection Priority Chart" (with Intelligent Key system) BCS-107, "DTC Inspection Priority Chart" (without Intelligent Key system)
	BCS-48, "DTC Index" (with Intelligent Key system) BCS-108, "DTC Index" (without Intelligent Key system)
IPDM E/R	PCS-12, "Reference Value".
	PCS-19, "Fail-safe"
	PCS-20, "DTC Index"

WIRING DIAGRAM

HEADLAMP

Wiring Diagram

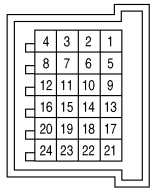
INFOID:0000000010288648



HEAD LAMP - LED CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

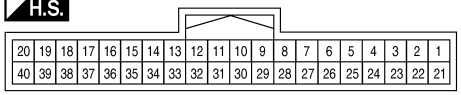
H.S.



Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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

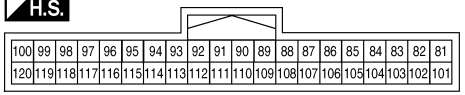
H.S.



Terminal No.	Color of Wire	Signal Name
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

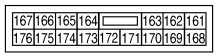
H.S.



Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

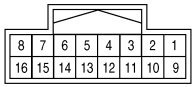
H.S.



Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–
4	BG	–

Terminal No.	Color of Wire	Signal Name
5	G	–
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

AALIA2138GB

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
5	L	–
11	P	–
12	P	–
15	P	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
3R	V	–
14R	W	–

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

			5J	4J	3J	2J	1J					
				10J	9J	8J	7J	6J				
21J	20J	19J	18J	17J	16J	15J	14J	13J	12J	11J		
	30J	29J	28J	27J	26J	25J	24J	23J	22J			
41J	40J	39J	38J	37J	36J	35J	34J	33J	32J	31J		
	50J	49J	48J	47J	46J	45J	44J	43J	42J			
61J	60J	59J	58J	57J	56J	55J	54J	53J	52J	51J		
	70J	69J	68J	67J	66J	65J	64J	63J	62J			
81J	80J	79J	78J	77J	76J	75J	74J	73J	72J	71J		
	90J	89J	88J	87J	86J	85J	84J	83J	82J			
				95J	94J	93J	92J	91J				
				100J	99J	98J	97J	96J				

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8P	LA/BR	–
13P	LA/G	–

AALIA2139GB

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND1

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

41	42	43	44	45	46
47	48	49	50	51	52

Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	E40
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2
3	4

Terminal No.	Color of Wire	Signal Name
2	GR	–
3	B	–

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.

4	3	2	1
8	7	6	5
12	11	10	9
16	15	14	13
20	19	18	17
24	23	22	21
28	27	26	25

Terminal No.	Color of Wire	Signal Name
5	L	–
6	P	–
9	L	–
10	P	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	B	SIGNAL GROUND

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

30	29	28	27	26	25	24	23	22	21	20	19
42	41	40	39	38	37	36	35	34	33	32	31

Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
31	B	2ND SIGNAL GROUND

AALIA2140GB

Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

H.S.

Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
59	G	O LIGHT HBEAM LH
60	Y	LI LED DETECTION 1
62	SB	O LIGHT LBEAM RH

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

H.S.

Terminal No.	Color of Wire	Signal Name
50	L	O LIGHT LBEAM LH
53	GR	LI LED DETECTION 2
54	LG	O LIGHT HBEAM RH

Connector No.	E201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–
3	B	–

AALIA2141GB

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
60	L	CAN-H
80	P	CAN-L

Connector No.	E240
Connector Name	FRONT COMBINATION LAMP RH (WITH LED HEADLAMPS)
Connector Color	BLACK

H.S.

4	5	6	7
8	9	10	11

Terminal No.	Color of Wire	Signal Name
4	B	–
5	LG	–
6	SB	–
7	Y	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

Connector No.	E239
Connector Name	FRONT COMBINATION LAMP LH (WITH LED HEADLAMPS)
Connector Color	BLACK

H.S.

4	5	6	7
8	9	10	11

Terminal No.	Color of Wire	Signal Name
4	B	–
5	G	–
6	L	–
7	GR	–

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

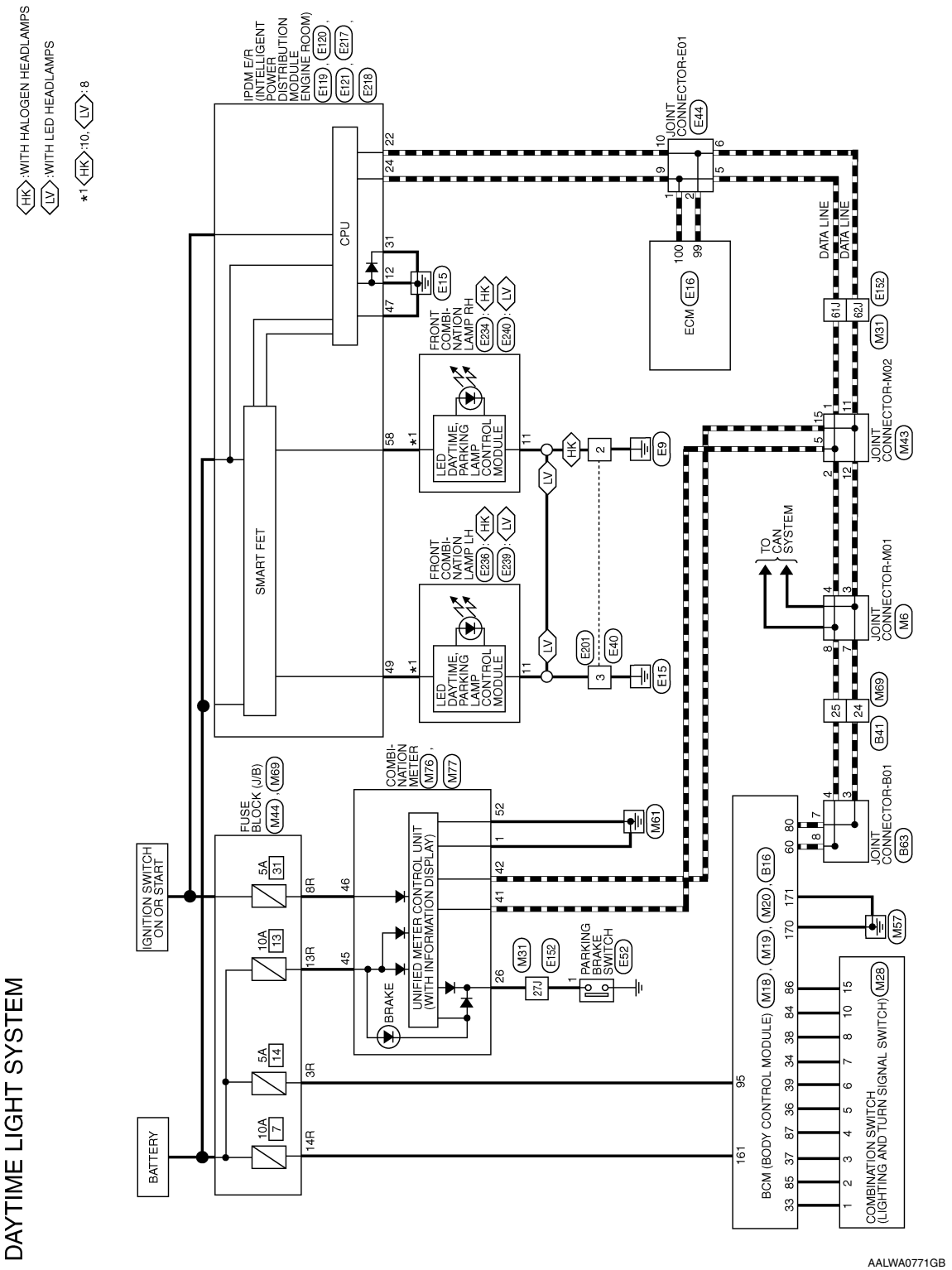
Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

AALIA2142GB

DAYTIME LIGHT SYSTEM

Wiring Diagram

INFOID:0000000010288649



DAYTIME LIGHT SYSTEM CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

H.S.

100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81
120	119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101

Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

H.S.

167	166	165	164	163	162	161
176	175	174	173	172	171	170	169	168

Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

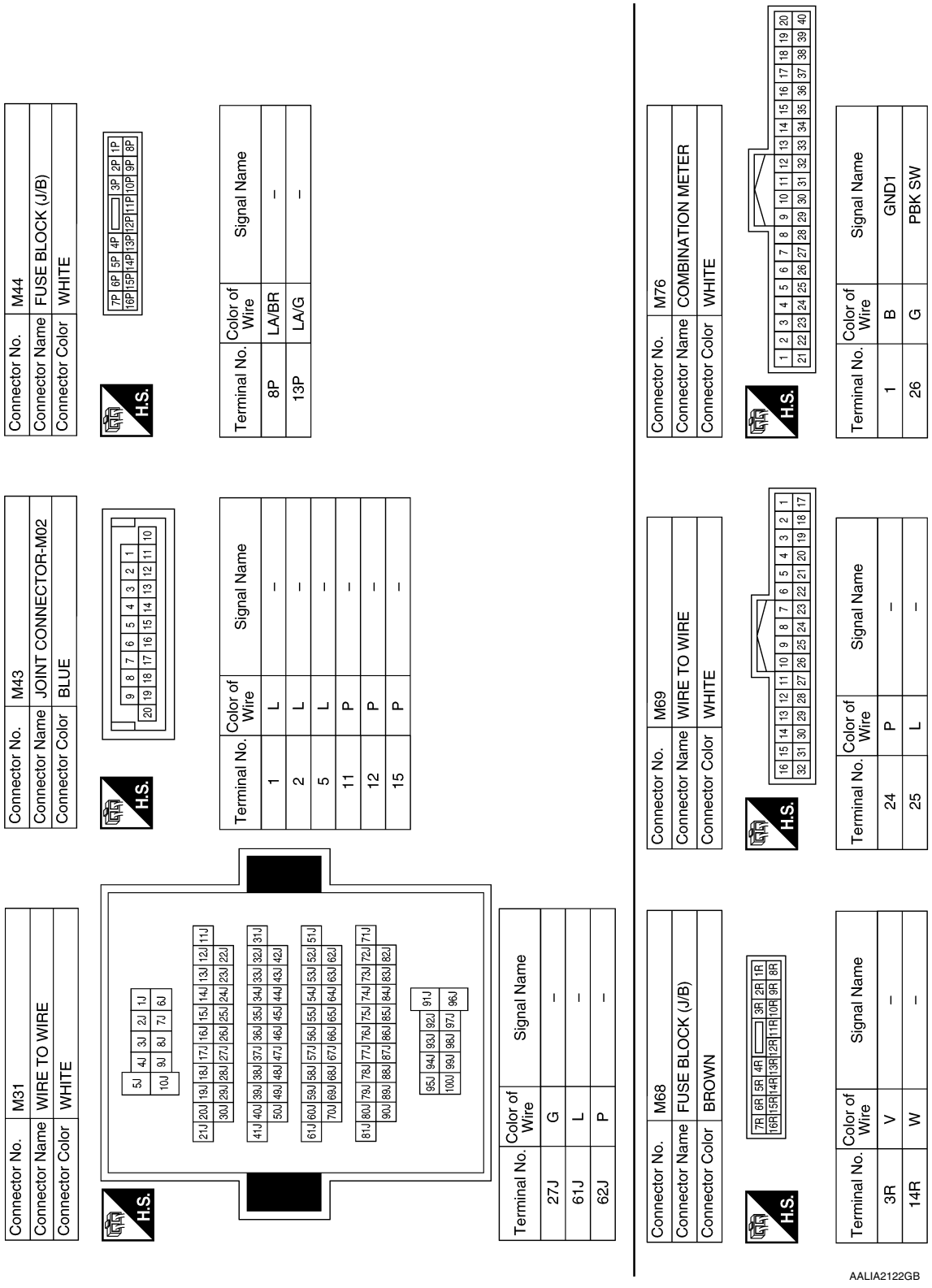
H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–
4	BG	–

Terminal No.	Color of Wire	Signal Name
5	G	–
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

AALIA2121GB


Connector No. M31
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
5J 4J 3J 2J 1J
10J 9J 8J 7J 6J
21J 20J 19J 18J 17J 16J 15J 14J 13J 12J 11J
30J 29J 28J 27J 26J 25J 24J 23J 22J
41J 40J 39J 38J 37J 36J 35J 34J 33J 32J 31J
50J 49J 48J 47J 46J 45J 44J 43J 42J
61J 60J 59J 58J 57J 56J 55J 54J 53J 52J 51J
70J 69J 68J 67J 66J 65J 64J 63J 62J
81J 80J 79J 78J 77J 76J 75J 74J 73J 72J 71J
90J 89J 88J 87J 86J 85J 84J 83J 82J
95J 94J 93J 92J 91J
100J 99J 98J 97J 96J
Terminal No. Color of Wire Signal Name
27J G –
61J L –
62J P –
Connector No. M43
Connector Name JOINT CONNECTOR-M02
Connector Color BLUE
H.S.
9 8 7 6 5 4 3 2 1
20 19 18 17 16 15 14 13 12 11 10
Terminal No. Color of Wire Signal Name
1 L –
2 L –
5 L –
11 P –
12 P –
15 P –
Connector No. M44
Connector Name FUSE BLOCK (J/B)
Connector Color WHITE
H.S.
7P 6P 5P 4P 3P 2P 1P
16P 15P 14P 13P 12P 11P 10P 9P 8P
Terminal No. Color of Wire Signal Name
8P LA/BR –
13P LA/G –
Connector No. M68
Connector Name FUSE BLOCK (J/B)
Connector Color BROWN
H.S.
7R 6R 5R 4R 3R 2R 1R
16R 15R 14R 13R 12R 11R 10R 9R 8R
Terminal No. Color of Wire Signal Name
3R V –
14R W –
Connector No. M69
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
Terminal No. Color of Wire Signal Name
24 P –
25 L –
Connector No. M76
Connector Name COMBINATION METER
Connector Color WHITE
H.S.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Terminal No. Color of Wire Signal Name
1 B GND1
26 G PBK SW
AALIA2122GB

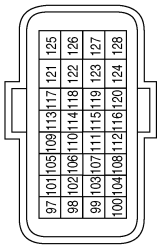
Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
41	L	CAN–H
42	P	CAN–L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	E16
Connector Name	ECM
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
99	P	CAN–L
100	L	CAN–H

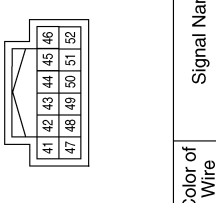
Connector No.	E40
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	GR	–
3	B	–

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	L	–
2	P	–
5	L	–
6	P	–
9	L	–
10	P	–

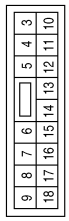
Connector No.	E52
Connector Name	PARKING BRAKE SWITCH
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
12	B	SIGNAL GROUND

AALIA2123GB

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

30	29	28	27	26	25	24	23	22	21	20	19
42	41	40	39	38	37	36	35	34	33	32	31

Terminal No.	Color of Wire	Signal Name
22	P	CAN–L
24	L	CAN–H
31	B	2ND SIGNAL GROUND

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

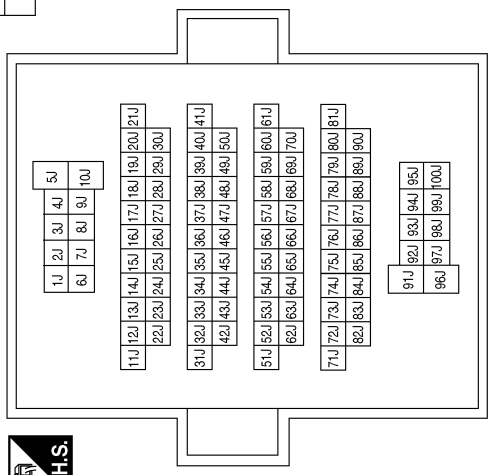
H.S.

45	44	43
48	47	46

Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
27J	G	–
61J	L	–
62J	P	–

Connector No.	E201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

2	1
4	3

Terminal No.	Color of Wire	Signal Name
2	B	–
3	B	–

AALIA2124GB

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

H.S.

51		50	49
56	55	54	53	52

Terminal No.	Color of Wire	Signal Name
49	R	O LIGHT DTRL LH

Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

59		58	57
64	63	62	61	60

Terminal No.	Color of Wire	Signal Name
58	R	O LIGHT DTRL RH

Connector No.	E234
Connector Name	FRONT COMBINATION LAMP RH (WITH HALOGEN HEADLAMPS)
Connector Color	GRAY

H.S.

10	11	12
13	14	15

Terminal No.	Color of Wire	Signal Name
10	R	–
11	GR	–

Connector No.	E236
Connector Name	FRONT COMBINATION LAMP LH (WITH HALOGEN HEADLAMPS)
Connector Color	GRAY

H.S.

10	11	12
13	14	15

Terminal No.	Color of Wire	Signal Name
10	R	–
11	GR	–

Connector No.	E239
Connector Name	FRONT COMBINATION LAMP LH (WITH LED HEADLAMPS)
Connector Color	BLACK

H.S.

4	5	6	7
8	9	10	11

Terminal No.	Color of Wire	Signal Name
8	R	–
11	B	–

Connector No.	E240
Connector Name	FRONT COMBINATION LAMP RH (WITH LED HEADLAMPS)
Connector Color	BLACK

H.S.

4	5	6	7
8	9	10	11

Terminal No.	Color of Wire	Signal Name
8	R	–
11	B	–

AALIA2125GB

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

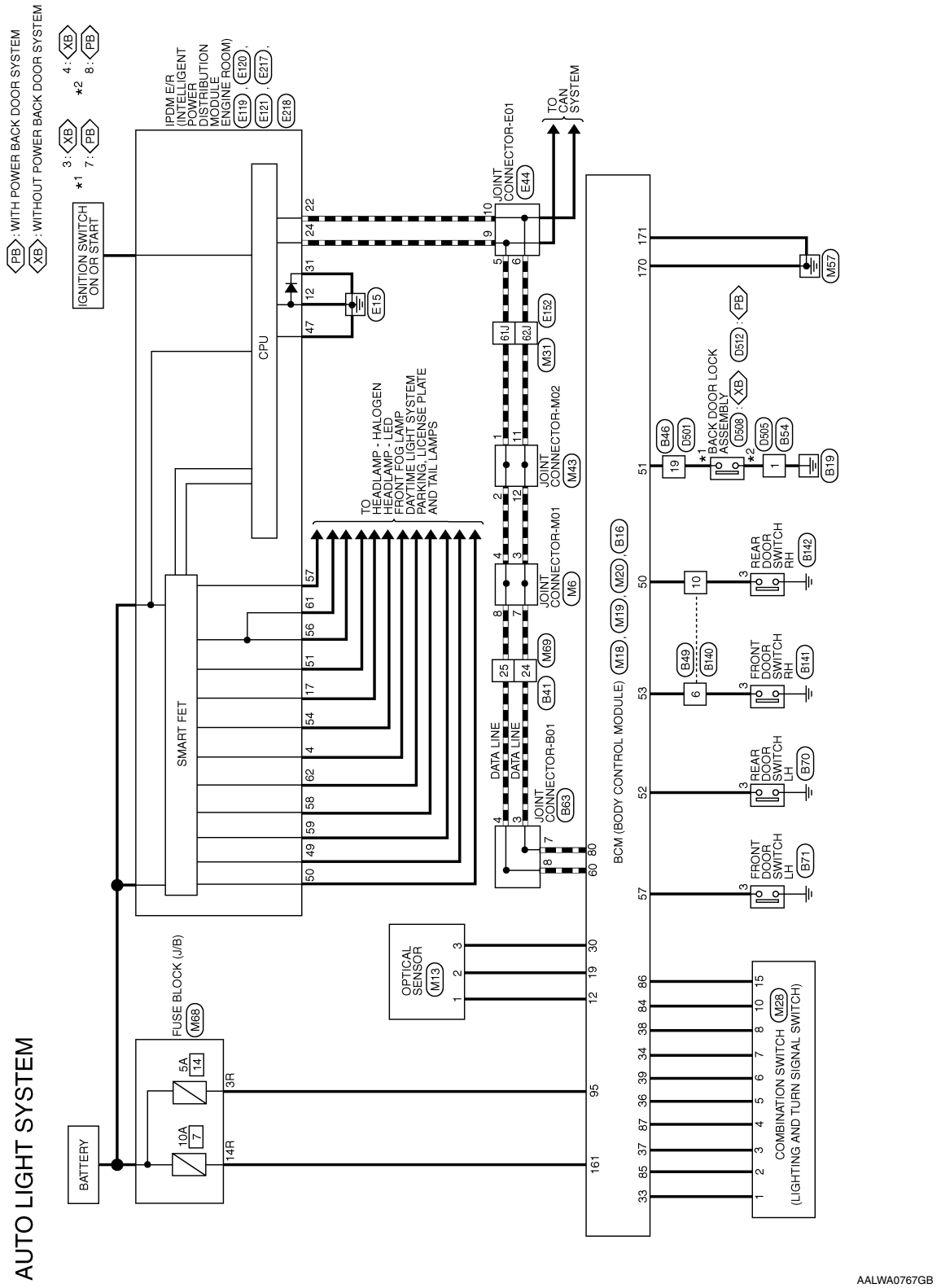
Terminal No.	Color of Wire	Signal Name
60	L	CAN–H
80	P	CAN–L

AALIA2126GB

AUTO LIGHT SYSTEM

Wiring Diagram

INFOID:0000000010288650



AALWA0767GB

AUTO LIGHT SYSTEM CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

Connector No.	M13
Connector Name	OPTICAL SENSOR
Connector Color	WHITE

H.S.

1	2	3

Terminal No.	Color of Wire	Signal Name
1	W	–
2	LG	–
3	V	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	W	O PWR AUTOLIGHT SENSOR
19	LG	I AUTOLIGHT SENSOR
30	V	O GND AUTOLIGHT SENSOR
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

H.S.

100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81
120	119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101

Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

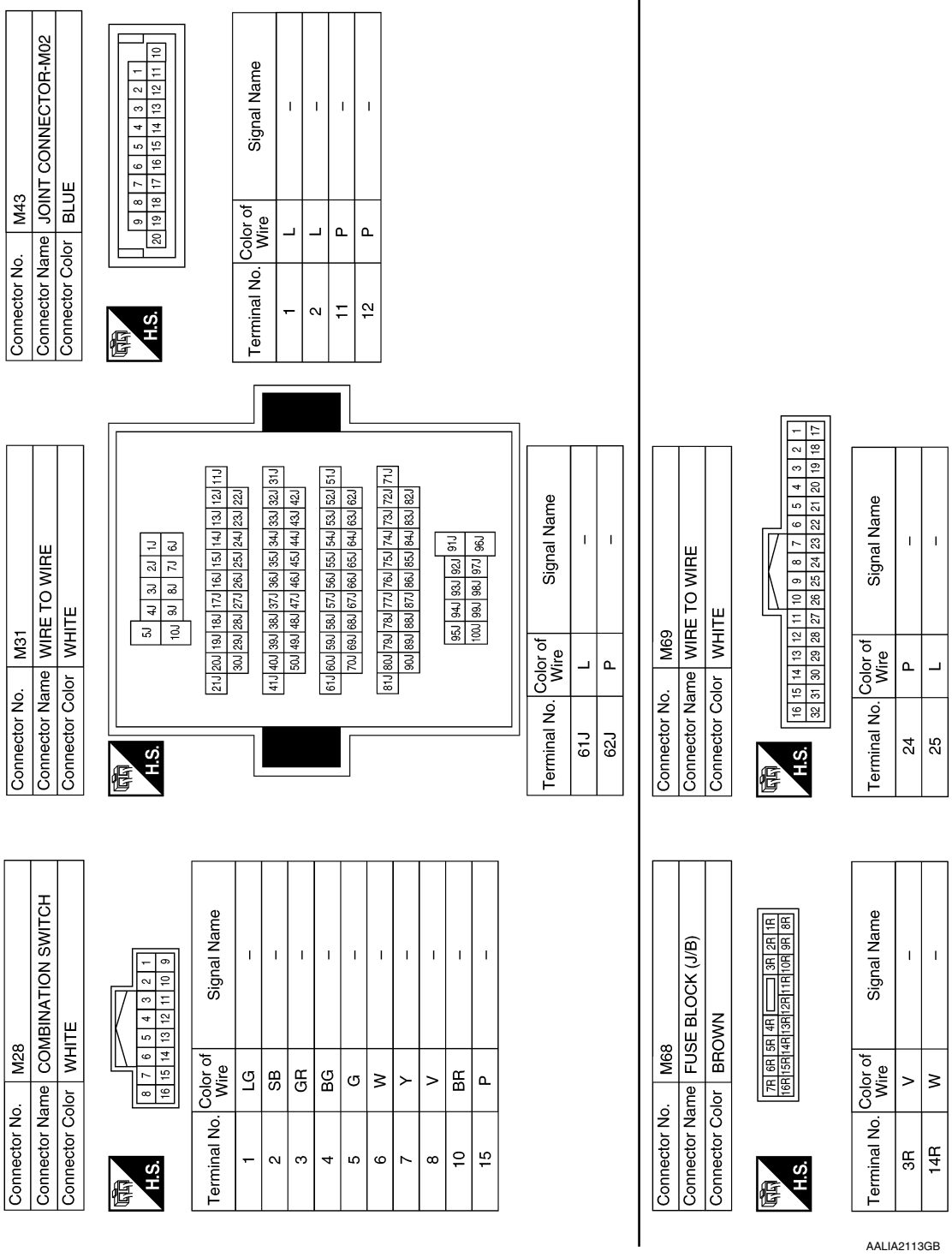
Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

H.S.

167	166	165	164		163	162	161
176	175	174	173	172	171	170	169	168

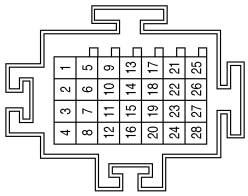
Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

AALIA2112GB


Connector No. M28
Connector Name COMBINATION SWITCH
Connector Color WHITE
H.S.
8 7 6 5 4 3 2 1
16 15 14 13 12 11 10 9
Terminal No. Color of Wire Signal Name
1 LG –
2 SB –
3 GR –
4 BG –
5 G –
6 W –
7 Y –
8 V –
10 BR –
15 P –
Connector No. M31
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
5J 4J 3J 2J 1J
10J 9J 8J 7J 6J
21J 20J 19J 18J 17J 16J 15J 14J 13J 12J 11J
30J 29J 28J 27J 26J 25J 24J 23J 22J
41J 40J 39J 38J 37J 36J 35J 34J 33J 32J 31J
50J 49J 48J 47J 46J 45J 44J 43J 42J
61J 60J 59J 58J 57J 56J 55J 54J 53J 52J 51J
70J 69J 68J 67J 66J 65J 64J 63J 62J
81J 80J 79J 78J 77J 76J 75J 74J 73J 72J 71J
90J 89J 88J 87J 86J 85J 84J 83J 82J
95J 94J 93J 92J 91J
100J 99J 98J 97J 96J
Terminal No. Color of Wire Signal Name
61J L –
62J P –
Connector No. M43
Connector Name JOINT CONNECTOR-M02
Connector Color BLUE
H.S.
9 8 7 6 5 4 3 2 1
20 19 18 17 16 15 14 13 12 11 10
Terminal No. Color of Wire Signal Name
1 L –
2 L –
11 P –
12 P –
Connector No. M68
Connector Name FUSE BLOCK (J/B)
Connector Color BROWN
H.S.
7R 6R 5R 4R 3R 2R 1R
16R 15R 14R 13R 12R 11R 10R 9R 8R
Terminal No. Color of Wire Signal Name
3R V –
14R W –
Connector No. M69
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
Terminal No. Color of Wire Signal Name
24 P –
25 L –
AALIA2113GB

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

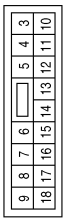
H.S.



Terminal No.	Color of Wire	Signal Name
5	L	–
6	P	–
9	L	–
10	P	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

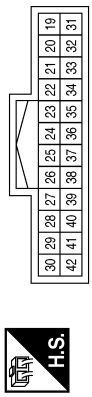
H.S.



Terminal No.	Color of Wire	Signal Name
4	Y	O LIGHT POSITION REAR LH
12	B	SIGNAL GROUND
17	W	O LIGHT POSITION REAR RH

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
31	B	2ND SIGNAL GROUND

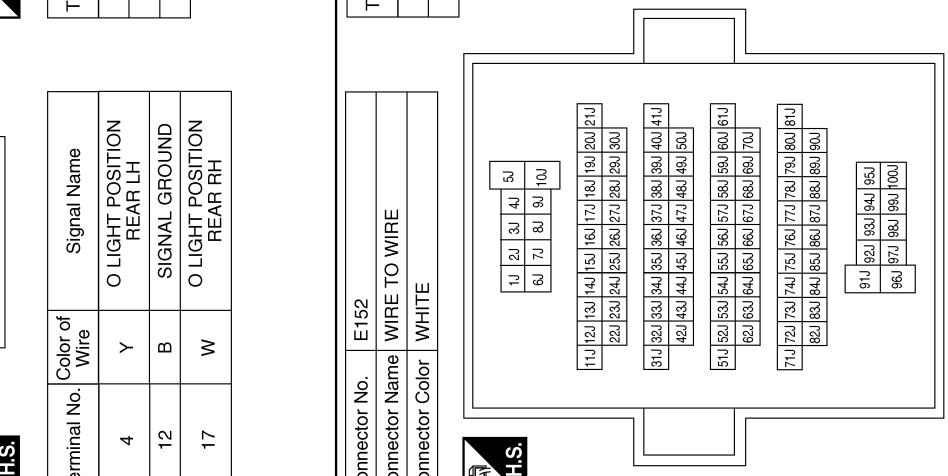
Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

H.S.

Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

AALIA2114GB

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

H.S.

51		50	49
56	55	54	53	52

Terminal No.	Color of Wire	Signal Name
49	R	O LIGHT DTRL LH
50	L	O LIGHT LBEAM LH
51	V	O LIGHT FR FOG LAMPS LH
54	LG	O LIGHT HBEAM RH
56	BG	O LIGHT CLEARANCE FR LH

Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

59		58	57
64	63	62	61	60

Terminal No.	Color of Wire	Signal Name
57	W	O LIGHT FR FOG LAMPS RH
58	R	O LIGHT DTRL RH
59	G	O LIGHT HBEAM LH
61	GR	O LIGHT CLEARANCE FR RH
62	SB	O LIGHT LBEAM RH

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
50	W	I RR DOOR SW
51	LG	I TGATE SW
52	R	I RL DOOR SW
53	SB	I AS DOOR2 SW
57	SB	I DR DOOR2 SW
60	L	CAN–H
80	P	CAN–L

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
19	LG	–

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	SB	–
10	W	–

AALIA2115GB

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

Connector No.	B70
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	R	–

Connector No.	B71
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	SB	–

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
6	GR	–
10	W	–

Connector No.	B141
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	GR	–

AALIA2116GB

Connector No.	B142
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	W	–

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
19	W	–

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	D508
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT POWER BACK DOOR SYSTEM)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	W	–
4	GR	–

Connector No.	D512
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH POWER BACK DOOR SYSTEM)
Connector Color	WHITE

H.S.

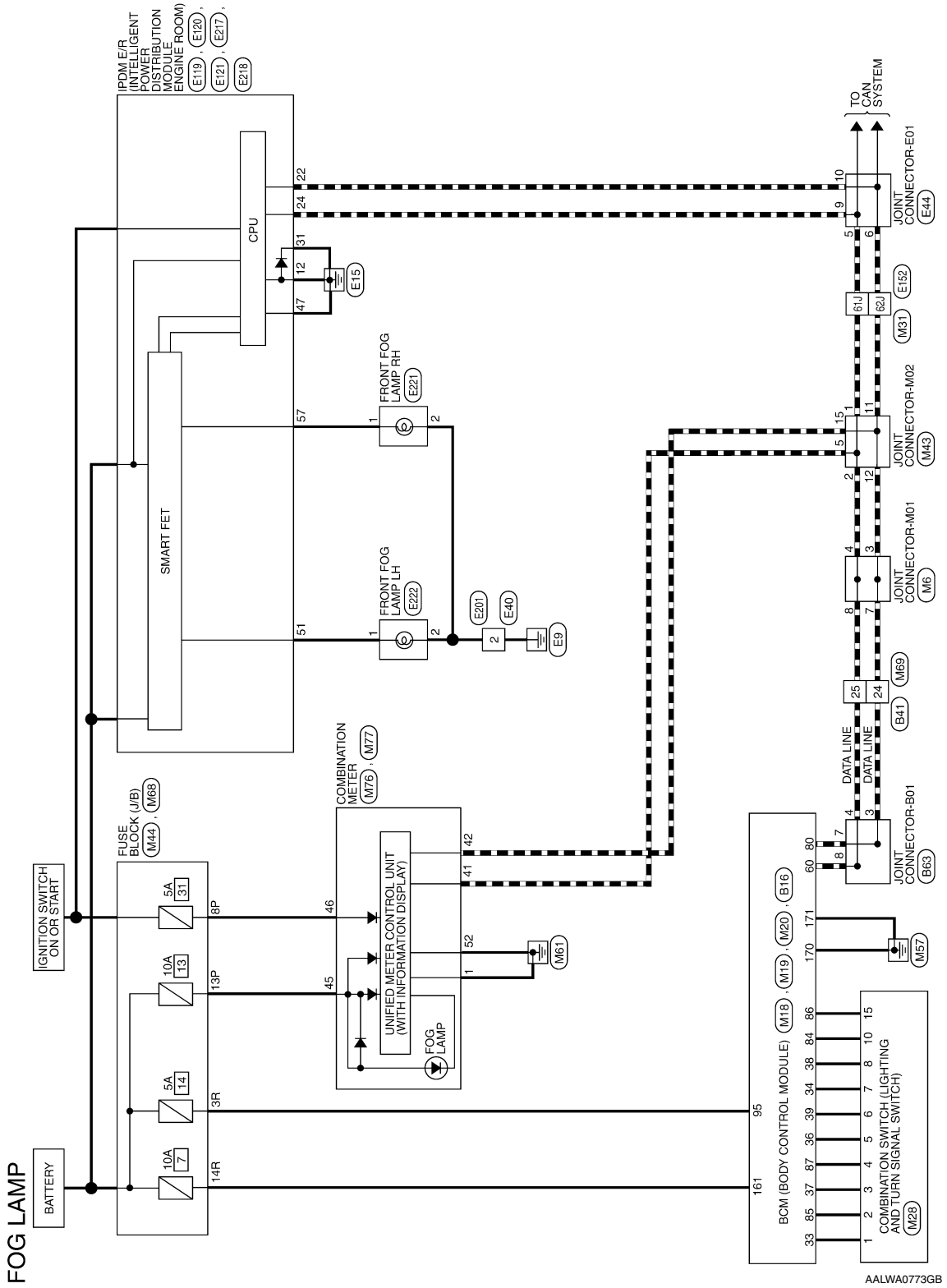
Terminal No.	Color of Wire	Signal Name
7	W	–
8	B	–

AALIA2117GB

FRONT FOG LAMP SYSTEM

Wiring Diagram

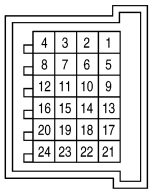
INFOID:0000000010288651



FOG LAMP CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

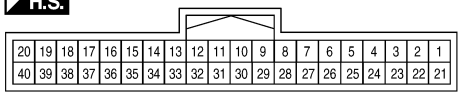
H.S.



Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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

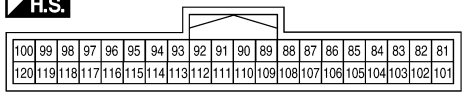
H.S.



Terminal No.	Color of Wire	Signal Name
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

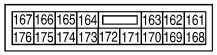
H.S.



Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

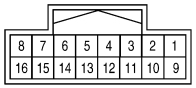
H.S.



Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–
4	BG	–
5	G	–

Terminal No.	Color of Wire	Signal Name
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

AALIA2127GB

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
5	L	–
11	P	–
12	P	–
15	P	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

5J	4J	3J	2J	1J
	10J	9J	8J	7J	6J

21J	20J	19J	18J	17J	16J	15J	14J	13J	12J	11J
	30J	29J	28J	27J	26J	25J	24J	23J	22J	

41J	40J	39J	38J	37J	36J	35J	34J	33J	32J	31J
	50J	49J	48J	47J	46J	45J	44J	43J	42J	

61J	60J	59J	58J	57J	56J	55J	54J	53J	52J	51J
	70J	69J	68J	67J	66J	65J	64J	63J	62J	

81J	80J	79J	78J	77J	76J	75J	74J	73J	72J	71J
	90J	89J	88J	87J	86J	85J	84J	83J	82J	

95J	94J	93J	92J	91J
100J	99J	98J	97J	96J

Terminal No.	Color of Wire	Signal Name
3R	V	–
14R	W	–

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
8P	LA/BR	–
13P	LA/G	–

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

AALIA2128GB

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND1

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

41	42	43	44	45	46
47	48	49	50	51	52

Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	E40
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2
3	4

Terminal No.	Color of Wire	Signal Name
2	GR	–

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.

4	3	2	1
8	7	6	5
12	11	10	9
16	15	14	13
20	19	18	17
24	23	22	21
28	27	26	25

Terminal No.	Color of Wire	Signal Name
5	L	–
6	P	–
9	L	–
10	P	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	B	SIGNAL GROUND

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

30	29	28	27	26	25	24	23	22	21	20	19
42	41	40	39	38	37	36	35	34	33	32	31

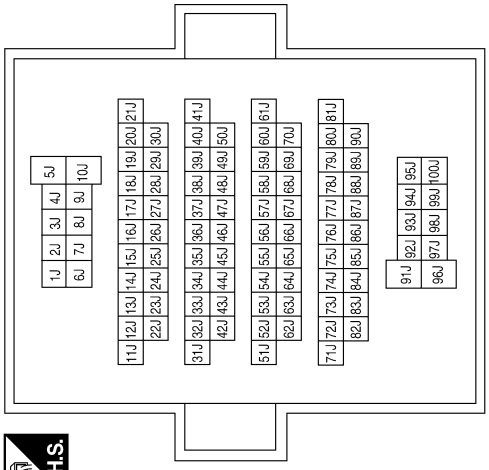
Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
31	B	2ND SIGNAL GROUND

AALIA2129GB

Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

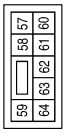
Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
57	W	O LIGHT FR FOG LAMPS RH

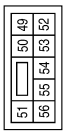
Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

H.S.

Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

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

H.S.



Terminal No.	Color of Wire	Signal Name
51	V	O LIGHT FR FOG LAMPS LH

Connector No.	E201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

AALIA2130GB

Connector No.	E221
Connector Name	FRONT FOG LAMP RH
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–
2	GR	–

Connector No.	E222
Connector Name	FRONT FOG LAMP LH
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	V	–
2	GR	–

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

Terminal No.	Color of Wire	Signal Name
60	L	CAN-H
80	P	CAN-L

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

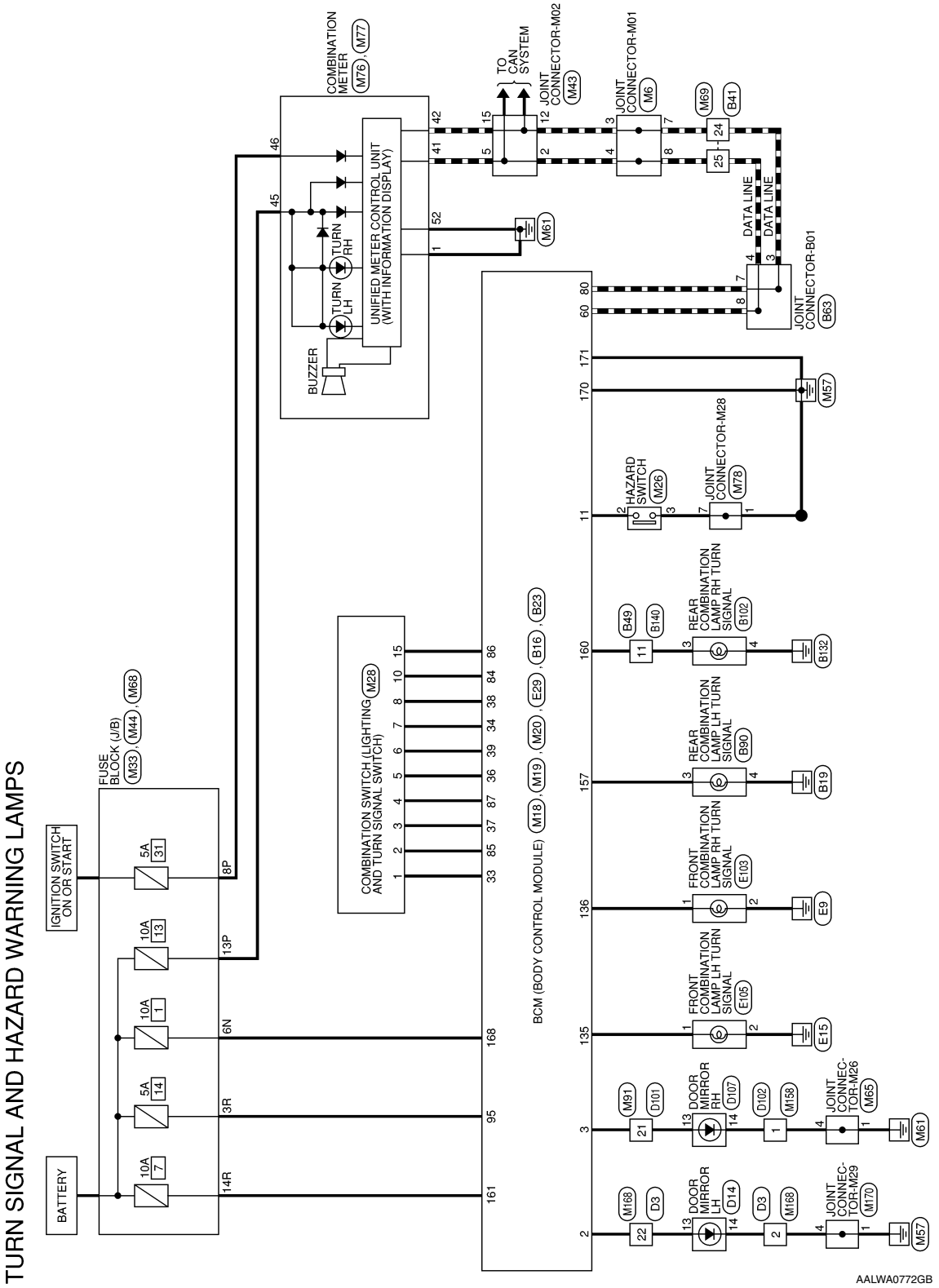
Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

AALIA2131GB

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

Wiring Diagram

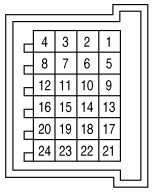
INFOID:0000000010288652



TURN SIGNAL AND HAZARD WARNING LAMPS CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

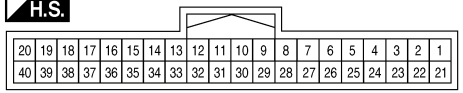
H.S.



Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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

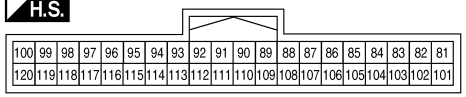
H.S.



Terminal No.	Color of Wire	Signal Name
2	LA/G	O DI FR LEFT D
3	LA/Y	O DI FR RIGHT D
11	Y	I HAZARD SW D
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

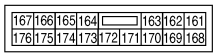
H.S.



Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

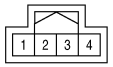
H.S.



Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
168	BG	I PWR FLASHERS
170	B	I GND1
171	B	I GND2

Connector No.	M26
Connector Name	HAZARD SWITCH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
2	Y	–
3	GR	–

AALIA2162GB

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–
4	BG	–
5	G	–
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

3N	2N	1N
8N	7N	6N	5N	4N

Terminal No.	Color of Wire	Signal Name
6N	BG	–

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	L	–
5	L	–
12	P	–
15	P	–

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8P	LA/BR	–
13P	LA/G	–

Connector No.	M65
Connector Name	JOINT CONNECTOR-M26
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	B	–
4	B	–

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
3R	V	–
14R	W	–

AALIA2163GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND1

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

41	42	43	44	45	46
47	48	49	50	51	52

Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	M78
Connector Name	JOINT CONNECTOR-M28
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	GR	–
7	GR	–

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
21	LA/Y	–

Connector No.	M158
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	–

AALIA2164GB

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	–
22	LA/G	–

Connector No.	M170
Connector Name	JOINT CONNECTOR-M29
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	B	–
4	B	–

Connector No.	E29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

132	131	130	129	128	127	126	125	124	123	122	121
144	143	142	141	140	139	138	137	136	135	134	133

Terminal No.	Color of Wire	Signal Name
135	BR	DI FR LEFT E
136	GR	O DI FR RIGHT E

Connector No.	E103
Connector Name	FRONT COMBINATION LAMP RH
Connector Color	GRAY

H.S.

2	1
3	

Terminal No.	Color of Wire	Signal Name
1	GR	–
2	BR	–

Connector No.	E105
Connector Name	FRONT COMBINATION LAMP LH
Connector Color	GRAY

H.S.

2	1
3	

Terminal No.	Color of Wire	Signal Name
1	BR	–
2	B	–

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
60	L	CAN-H
80	P	CAN-L

AALIA2165GB

Connector No.	B23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY

H.S.

151	150	149	148		147	146	145
160	159	158	157	156	155	154	153	152

Terminal No.	Color of Wire	Signal Name
157	GR	O DI RR LEFT B
160	P	O DI RR RIGHT B

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	P	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

Connector No.	B90
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
3	GR	–
4	B	–

Connector No.	B102
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
3	LA/V	–
4	B	–

AALIA2166GB

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	LA/V	–

Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	LA/B	–
22	LA/G	–

Connector No.	D14
Connector Name	DOOR MIRROR LH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	LA/G	–
14	LA/B	–

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
21	LA/G	–

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LA/B	–

Connector No.	D107
Connector Name	DOOR MIRROR RH
Connector Color	WHITE

H.S.

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

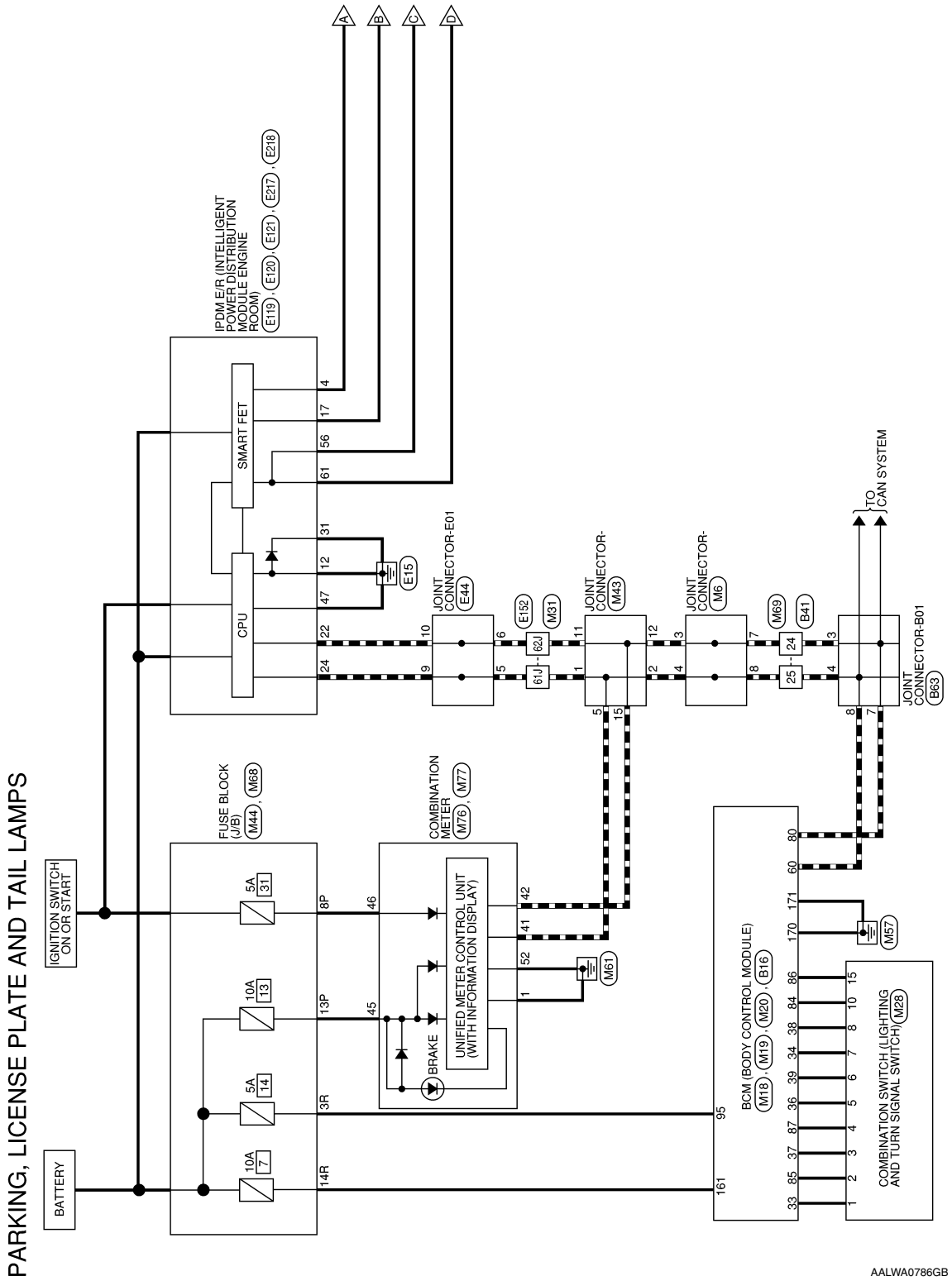
Terminal No.	Color of Wire	Signal Name
13	LA/G	–
14	LA/B	–

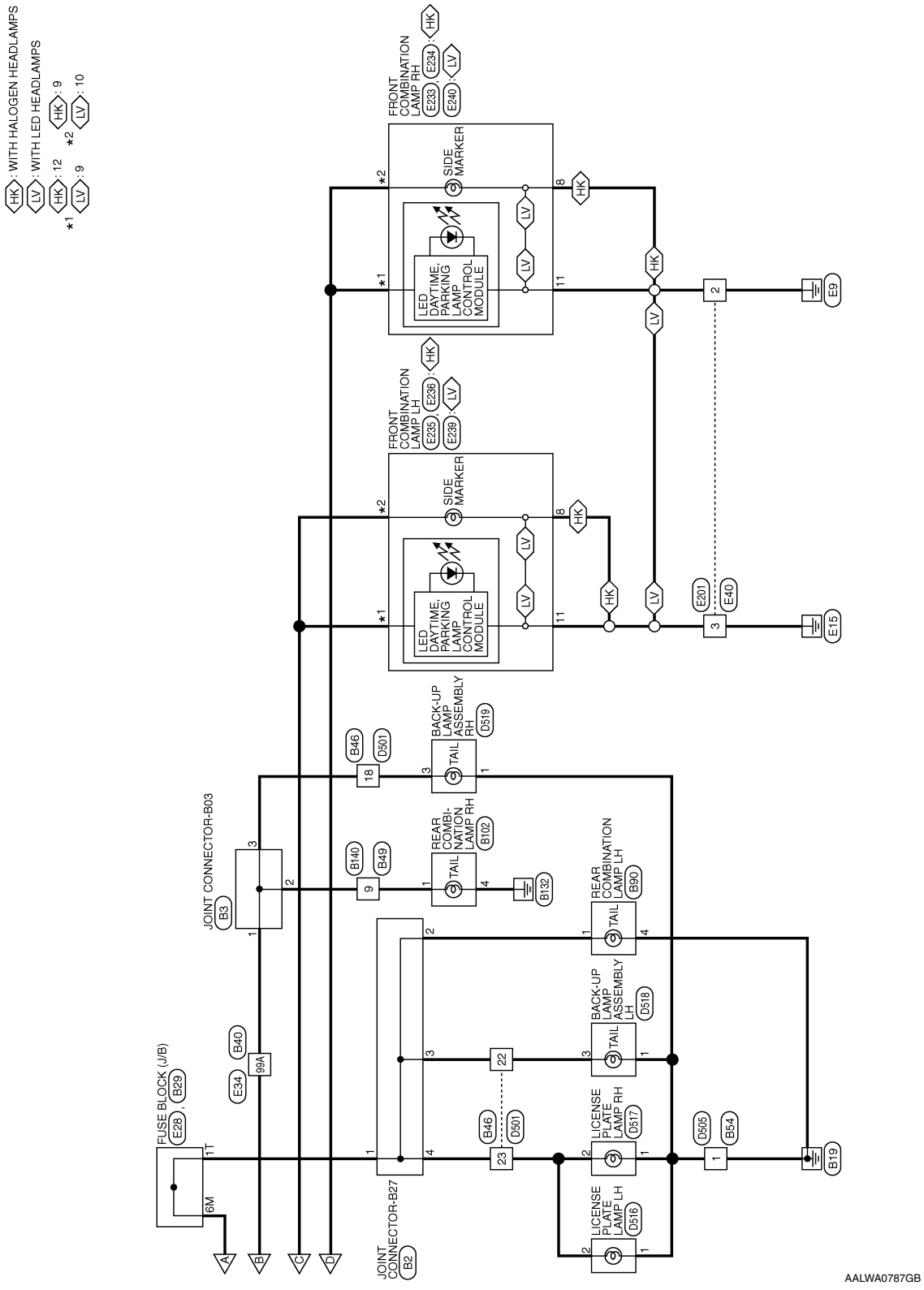
AALIA2239GB

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

Wiring Diagram

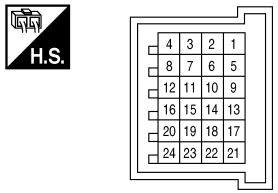
INFOID:0000000010288653




HK : WITH HALOGEN HEADLAMPS
LV : WITH LED HEADLAMPS
HK : 12 *1
LV : 9 *1
HK : 9 *2
LV : 10 *2
FRONT COMBINATION LAMP RH
E233
E234
E240
FRONT COMBINATION LAMP LH
E235
E236
E239
SIDE MARKER
LED DAYTIME, PARKING LAMP CONTROL MODULE
E9
E15
E201
E40
BACK-UP LAMP ASSEMBLY RH
D519
BACK-UP LAMP ASSEMBLY LH
D518
REAR COMBI-NATION LAMP RH
B102
REAR COMBINATION LAMP LH
B90
JOINT CONNECTOR-B03
B3
JOINT CONNECTOR-B27
B2
FUSE BLOCK (J/B)
E28
B29
B40
E34
99A
B46
D501
B140
B49
B132
LICENSE PLATE LAMP RH
D517
LICENSE PLATE LAMP LH
D516
D505
B54
B19
A
B
C
D
AALWA0787GB

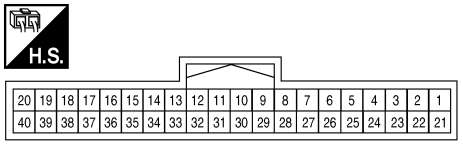
PARKING, LICENSE AND TAIL LAMPS CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY



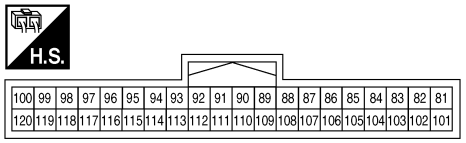
Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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



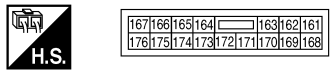
Terminal No.	Color of Wire	Signal Name
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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



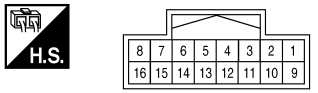
Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

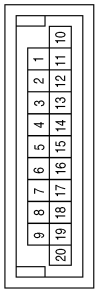


Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–
4	BG	–

Terminal No.	Color of Wire	Signal Name
5	G	–
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

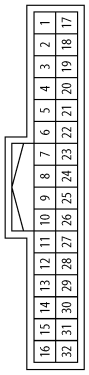
AALIA2149GB

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE



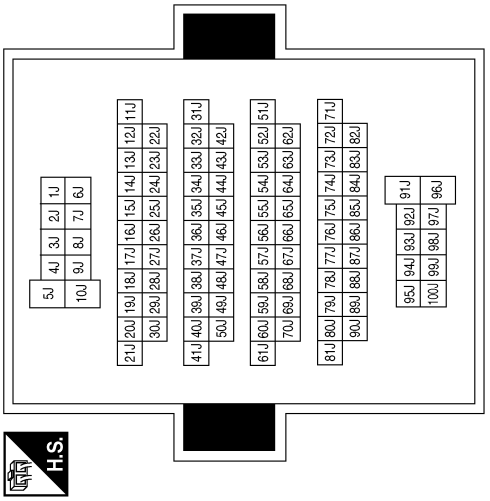
Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
5	L	–
11	P	–
12	P	–
15	P	–

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



Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

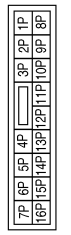


Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

Terminal No.	Color of Wire	Signal Name
3R	V	–
14R	W	–

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

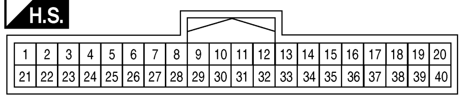


Terminal No.	Color of Wire	Signal Name
8P	LA/BR	–
13P	LA/G	–

AALIA2150GB

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE

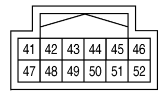
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	GND1

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE

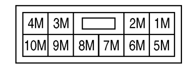
H.S.



Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	E28
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

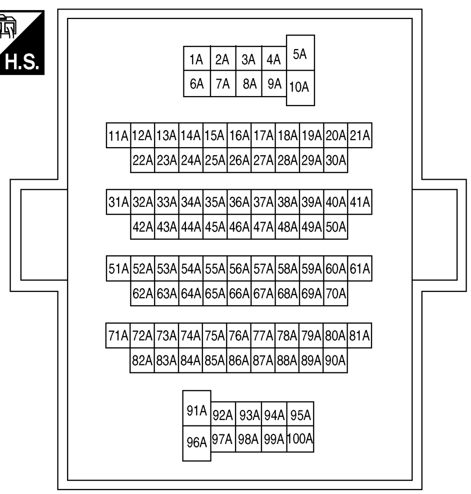
H.S.



Terminal No.	Color of Wire	Signal Name
6M	Y	–

Connector No.	E34
Connector Name	WIRE TO WIRE
Connector Color	GRAY

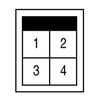
H.S.



Terminal No.	Color of Wire	Signal Name
99A	W	–

Connector No.	E40
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
2	GR	–
3	B	–

AALIA2151GB

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
5	L	–
6	P	–
9	L	–
10	P	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
4	Y	O LIGHT POSITION REAR LH
12	B	SIGNAL GROUND
17	W	O LIGHT POSITION REAR RH

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
31	B	2ND SIGNAL GROUND

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

H.S.

Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

AALIA2152GB

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
56	BG	O LIGHT CLEARANCE FR LH

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

H.S.

Terminal No.	Color of Wire	Signal Name
61	GR	O LIGHT CLEARANCE FR RH

Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

Connector No.	E201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–
3	B	–

Connector No.	E233
Connector Name	FRONT COMBINATION LAMP RH (WITH HALOGEN HEADLAMPS)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
8	B	–
9	W	–

AALIA2153GB

Connector No.	E234
Connector Name	FRONT COMBINATION LAMP RH (WITH HALOGEN HEADLAMPS)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
11	GR	–
12	GR	–

Connector No.	E235
Connector Name	FRONT COMBINATION LAMP LH (WITH HALOGEN HEADLAMPS)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
8	B	–
9	P	–

Connector No.	E236
Connector Name	FRONT COMBINATION LAMP LH (WITH HALOGEN HEADLAMPS)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
11	GR	–
12	BG	–

Connector No.	E239
Connector Name	FRONT COMBINATION LAMP LH (WITH LED HEADLAMPS)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
9	BG	–
10	P	–
11	B	–

Connector No.	E240
Connector Name	FRONT COMBINATION LAMP RH (WITH LED HEADLAMPS)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
9	GR	–
10	W	–
11	B	–

Connector No.	B2
Connector Name	JOINT CONNECTOR-B27
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LA/R	–
2	LA/R	–
3	LA/R	–
4	LA/R	–

AALIA2154GB

Connector No.	B3
Connector Name	JOINT CONNECTOR-B03
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	LA/BR	–
2	LA/BR	–
3	LA/BR	–

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
60	L	CAN-H
80	P	CAN-L

Connector No.	B29
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

2T		1T
6T	5T	4T 3T

Terminal No.	Color of Wire	Signal Name
1T	LA/R	–

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Terminal No.	Color of Wire	Signal Name
99A	LA/BR	–

Connector No.	B40
Connector Name	WIRE TO WIRE
Connector Color	GRAY

H.S.

5A	4A	3A	2A	1A
10A	9A	8A	7A	6A

21A	20A	19A	18A	17A	16A	15A	14A	13A	12A	11A
30A	29A	28A	27A	26A	25A	24A	23A	22A		

41A	40A	39A	38A	37A	36A	35A	34A	33A	32A	31A
50A	49A	48A	47A	46A	45A	44A	43A	42A		

61A	60A	59A	58A	57A	56A	55A	54A	53A	52A	51A
70A	69A	68A	67A	66A	65A	64A	63A	62A		

81A	80A	79A	78A	77A	76A	75A	74A	73A	72A	71A
90A	89A	88A	87A	86A	85A	84A	83A	82A		

95A	94A	93A	92A	91A
100A	99A	98A	97A	96A

AALIA2155GB

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
9	LA/BR	–

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
18	LA/BR	–
22	LA/R	–
23	LA/R	–

Connector No.	B102
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LA/BR	–
4	B	–

Connector No.	B90
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LA/R	–
4	B	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

AALIA2156GB

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
9	LA/BR	–

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
18	LA/R	–
22	LA/Y	–
23	P	–

Connector No.	B505
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	D516
Connector Name	LICENSE PLATE LAMP LH
Connector Color	BROWN

H.S.

1	2

Terminal No.	Color of Wire	Signal Name
1	B	–
2	P	–

Connector No.	D517
Connector Name	LICENSE PLATE LAMP RH
Connector Color	BROWN

H.S.

1	2

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

Connector No.	D518
Connector Name	BACK-UP LAMP ASSEMBLY LH
Connector Color	WHITE

H.S.

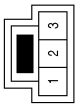
1	2	3

Terminal No.	Color of Wire	Signal Name
1	GR	–
3	LA/Y	–

AALIA2157GB

Connector No.	D519
Connector Name	BACK-UP LAMP ASSEMBLY RH
Connector Color	WHITE

H.S.



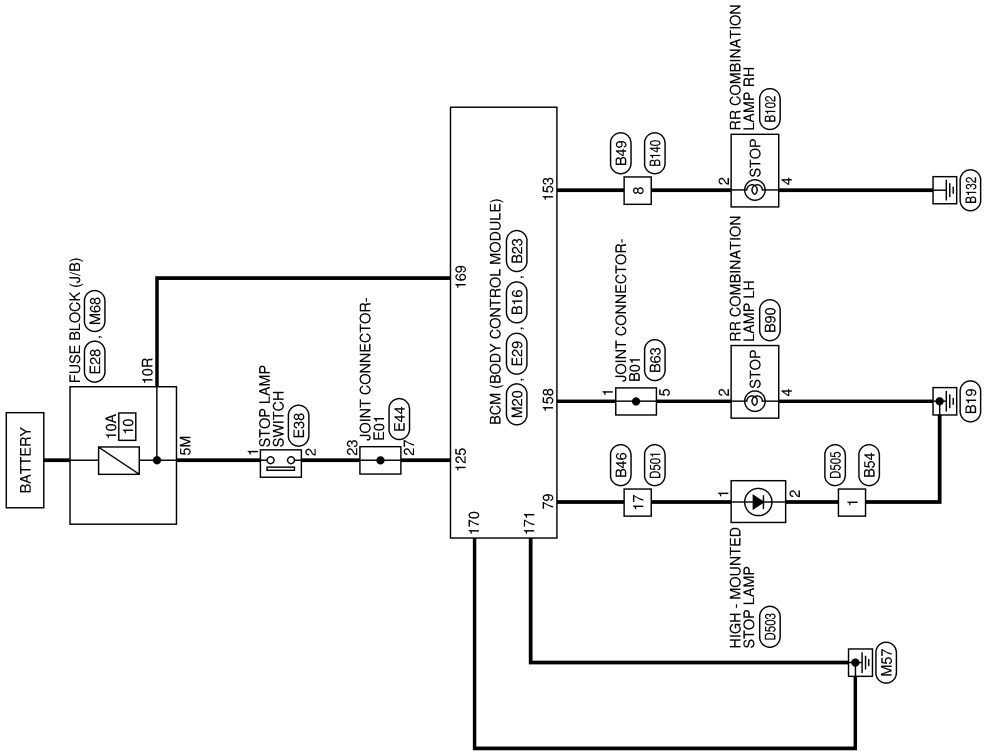
Terminal No.	Color of Wire	Signal Name
1	GR	–
3	LA/R	–

AALIA2173GB

STOP LAMP

Wiring Diagram

INFOID:0000000010288654



STOP LAMP CONNECTORS

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

H.S.

167	166	165	164		163	162	161
176	175	174	173	172	171	170	169

Terminal No.	Color of Wire	Signal Name
169	GR	I PWR STOP LAMP
170	B	I GND1
171	B	I GND2

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
10R	GR	–

Connector No.	E28
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

4M	3M		2M	1M
10M	9M	8M	7M	6M	5M

Terminal No.	Color of Wire	Signal Name
5M	V	–

Connector No.	E29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

132	131	130	129	128	127	126	125	124	123	122	121
144	143	142	141	140	139	138	137	136	135	134	133

Terminal No.	Color of Wire	Signal Name
125	LG	I BRAKE SW2

Connector No.	E38
Connector Name	STOP LAMP SWITCH
Connector Color	WHITE

H.S.

3	4
1	2

Terminal No.	Color of Wire	Signal Name
1	V	–
2	LG	–

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.

4	3	2	1
8	7	6	5
12	11	10	9
16	15	14	13
20	19	18	17
24	23	22	21
28	27	26	25

Terminal No.	Color of Wire	Signal Name
23	LG	–
27	LG	–

AALIA2158GB

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
79	LA/W	O STOP LAMP 3

Connector No.	B23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY

H.S.

151	150	149	148		147	146	145
160	159	158	157	156	155	154	153	152

Terminal No.	Color of Wire	Signal Name
153	LA/W	O STOP LAMP 1
158	LA/Y	O STOP LAMP 2 NISSAN EUR

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
17	LA/W	–

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	LA/W	–

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LA/Y	–
5	LA/Y	–

AALIA2159GB

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	LA/Y	–

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
1	B	–

Connector No.	B102
Connector Name	REAR COMBINATION LAMP RH
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
2	LA/Y	–
4	B	–

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

H.S.

2	1

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

Connector No.	B90
Connector Name	REAR COMBINATION LAMP LH
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
2	LA/Y	–
4	B	–

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

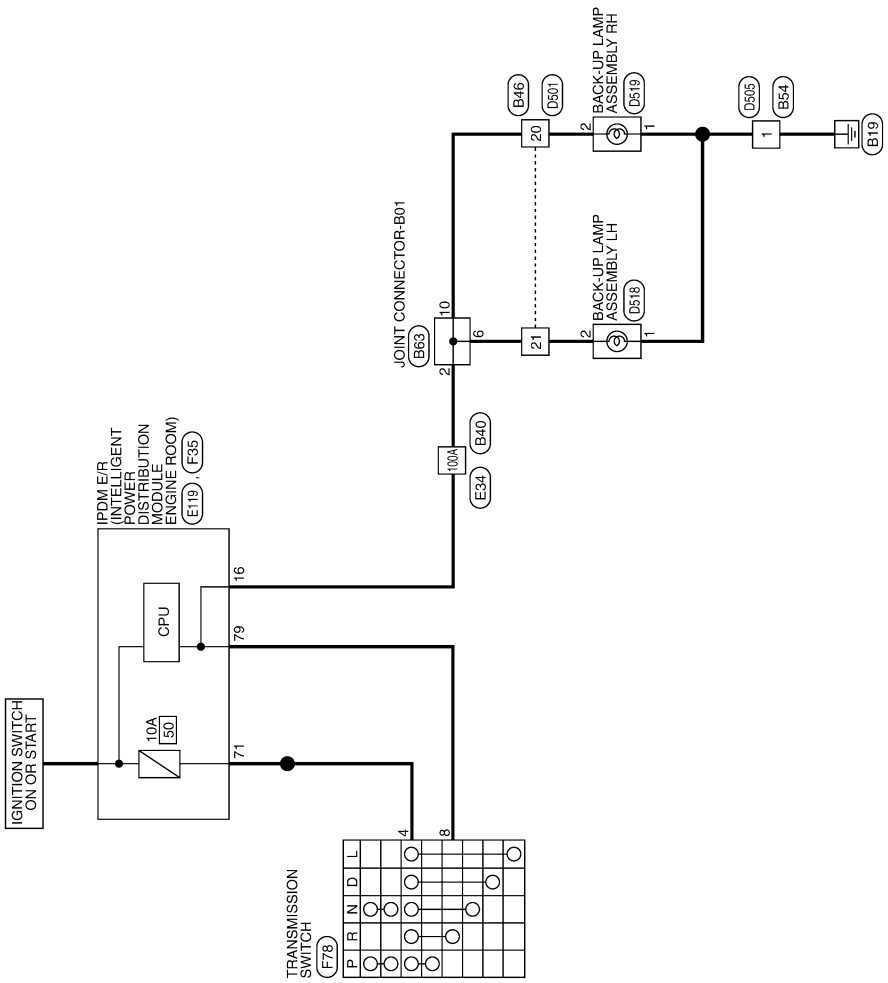
Terminal No.	Color of Wire	Signal Name
17	Y	–

AALIA2160GB

BACK-UP LAMP

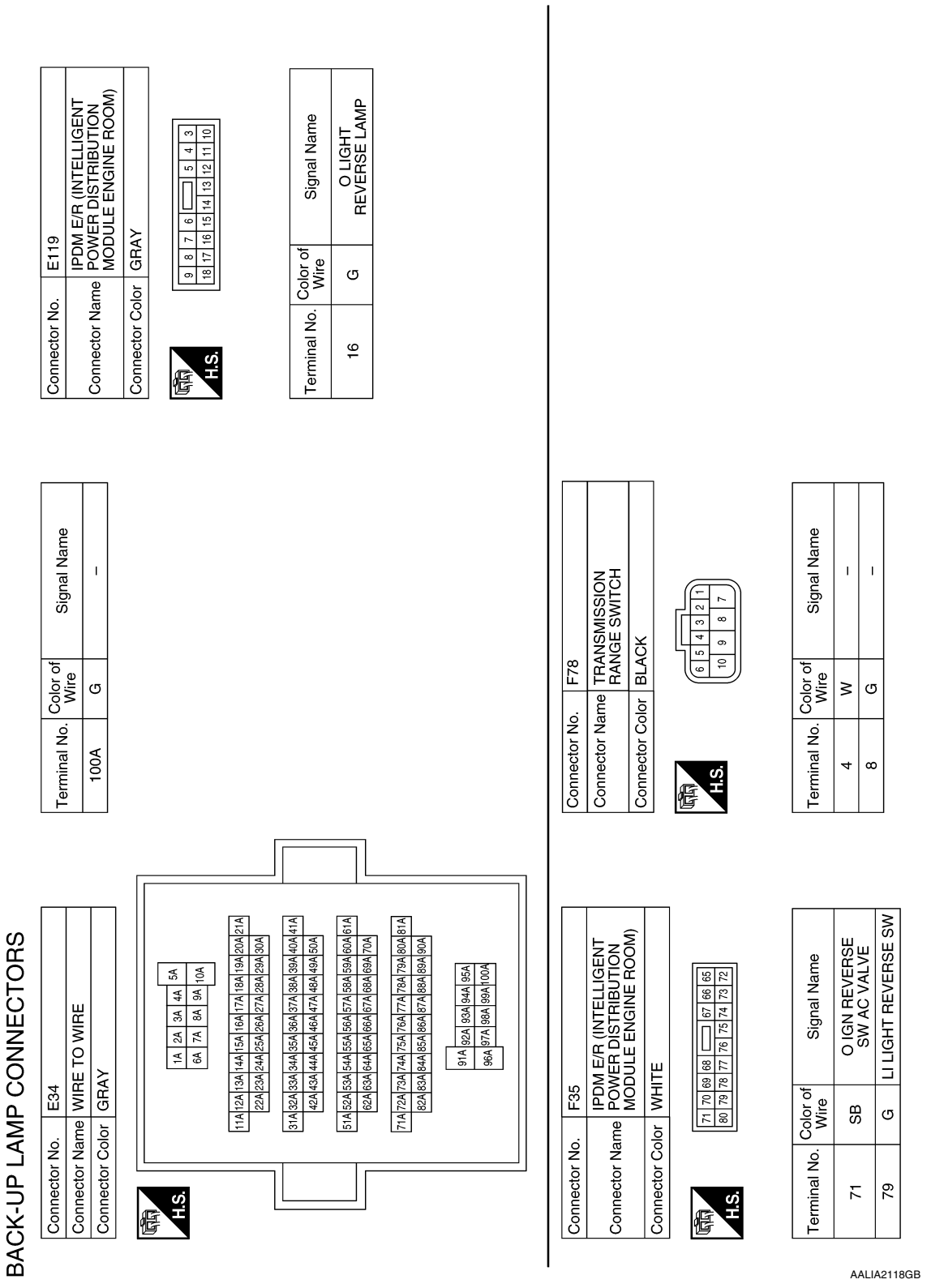
Wiring Diagram

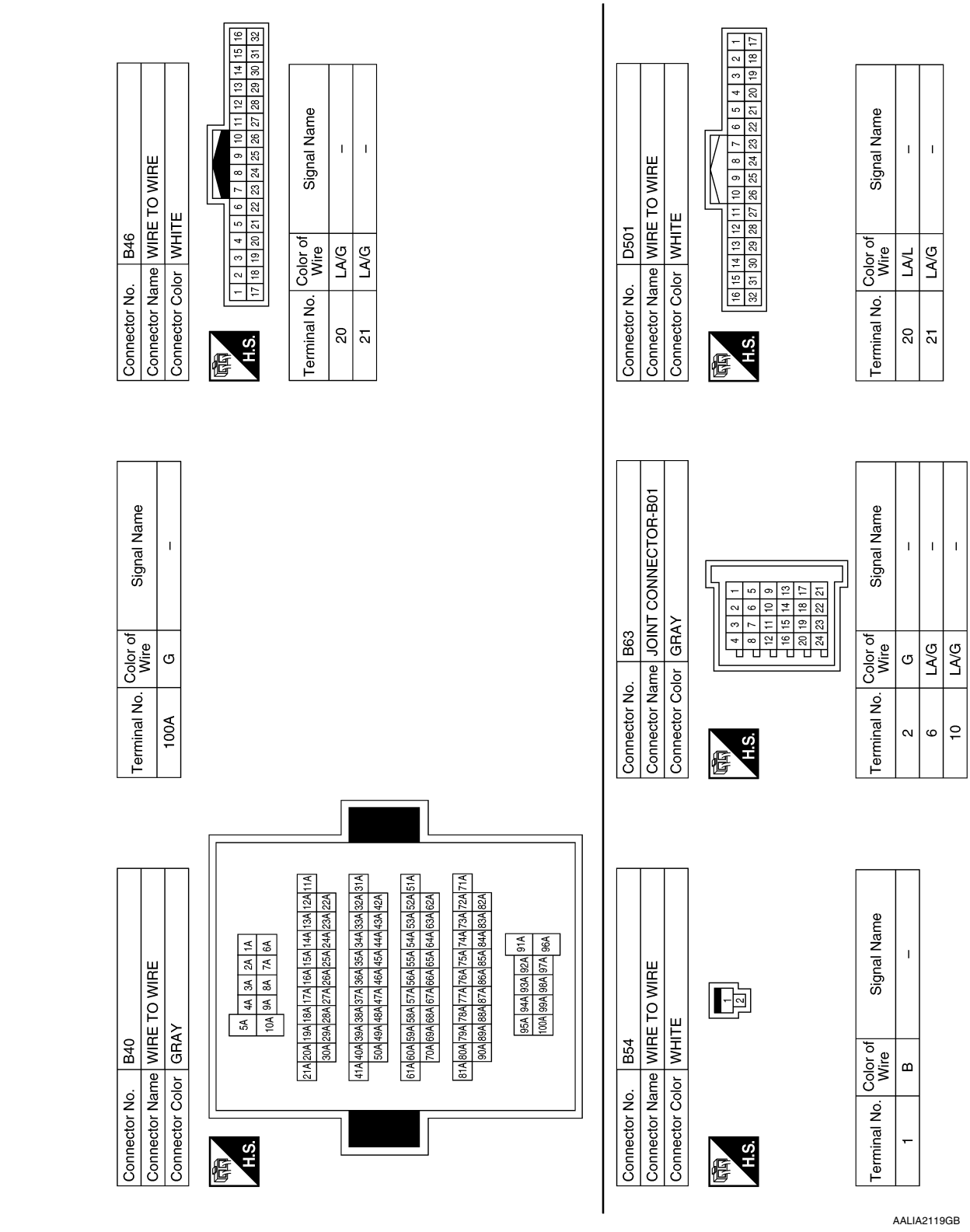
INFOID:0000000010288655



BACK - UP LAMP

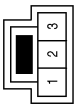
AALWA0763GB


BACK-UP LAMP CONNECTORS
Connector No. E34
Connector Name WIRE TO WIRE
Connector Color GRAY
H.S.
1A 2A 3A 4A 5A
6A 7A 8A 9A 10A
11A 12A 13A 14A 15A 16A 17A 18A 19A 20A 21A
22A 23A 24A 25A 26A 27A 28A 29A 30A
31A 32A 33A 34A 35A 36A 37A 38A 39A 40A 41A
42A 43A 44A 45A 46A 47A 48A 49A 50A
51A 52A 53A 54A 55A 56A 57A 58A 59A 60A 61A
62A 63A 64A 65A 66A 67A 68A 69A 70A
71A 72A 73A 74A 75A 76A 77A 78A 79A 80A 81A
82A 83A 84A 85A 86A 87A 88A 89A 90A
91A 92A 93A 94A 95A
96A 97A 98A 99A 100A
Terminal No. Color of Wire Signal Name
100A G –
Connector No. E119
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color GRAY
H.S.
9 8 7 6 5 4 3
18 17 16 15 14 13 12 11 10
Terminal No. Color of Wire Signal Name
16 G O LIGHT REVERSE LAMP
Connector No. F35
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE
H.S.
71 70 69 68 67 66 65
80 79 78 77 76 75 74 73 72
Terminal No. Color of Wire Signal Name
71 SB O IGN REVERSE SW AC VALVE
79 G LI LIGHT REVERSE SW
Connector No. F78
Connector Name TRANSMISSION RANGE SWITCH
Connector Color BLACK
H.S.
6 5 4 3 2 1
10 9 8 7
Terminal No. Color of Wire Signal Name
4 W –
8 G –
AALIA2118GB


Connector No. B40
Connector Name WIRE TO WIRE
Connector Color GRAY
H.S.
Terminal No. Color of Wire Signal Name
100A G –
Connector No. B46
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
Terminal No. Color of Wire Signal Name
20 LA/G –
21 LA/G –
Connector No. B54
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
Terminal No. Color of Wire Signal Name
1 B –
Connector No. B63
Connector Name JOINT CONNECTOR-B01
Connector Color GRAY
H.S.
Terminal No. Color of Wire Signal Name
2 G –
6 LA/G –
10 LA/G –
Connector No. D501
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
Terminal No. Color of Wire Signal Name
20 LA/L –
21 LA/G –
AALIA2119GB

Connector No.	D519
Connector Name	BACK-UP LAMP ASSEMBLY RH
Connector Color	WHITE

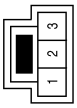
H.S.



Terminal No.	Color of Wire	Signal Name
1	GR	–
2	LA/L	–

Connector No.	D518
Connector Name	BACK-UP LAMP ASSEMBLY LH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	GR	–
2	LA/G	–

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

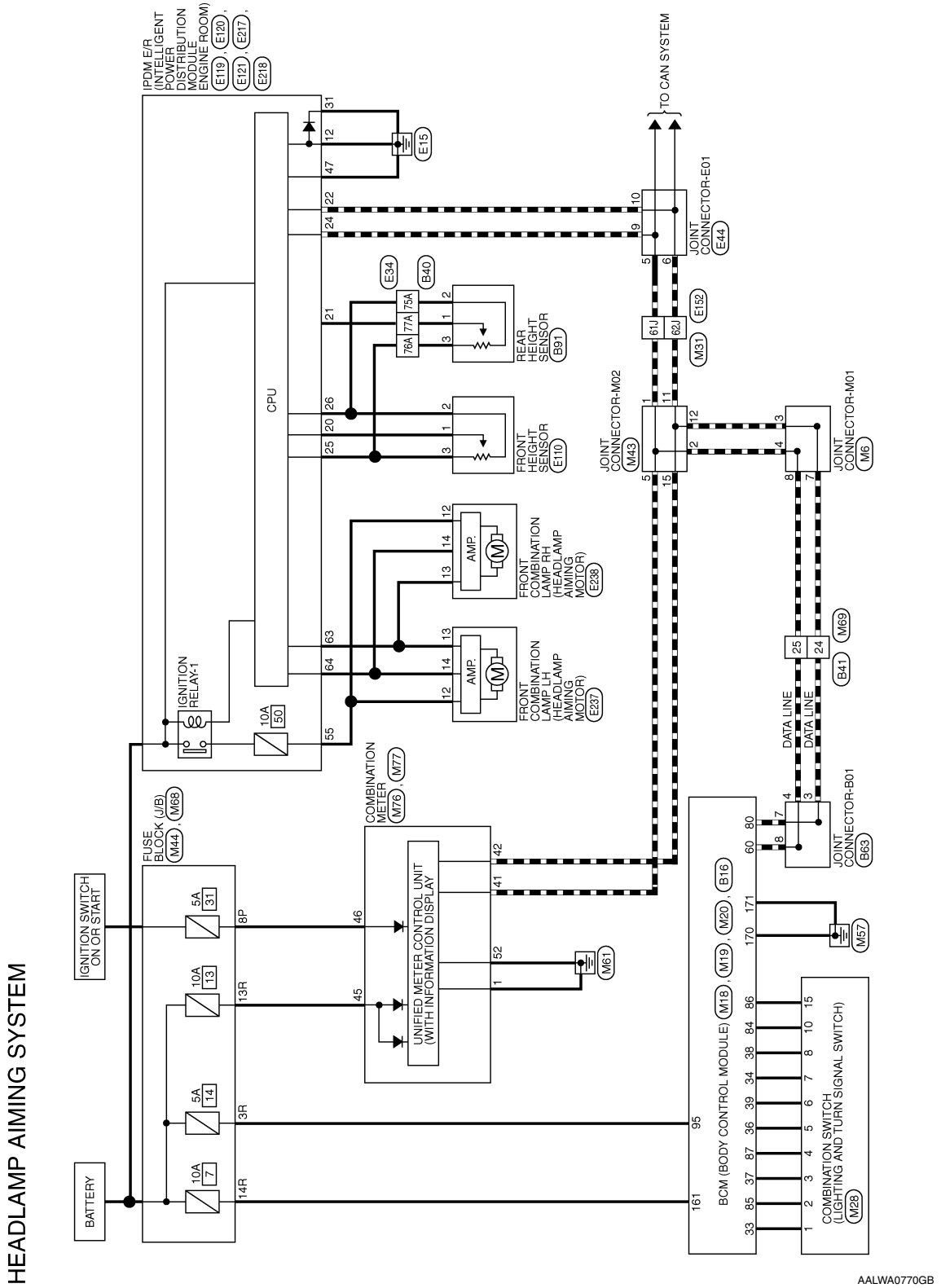
Terminal No.	Color of Wire	Signal Name
1	B	–

AALIA2120GB

HEADLAMP AIMING SYSTEM (AUTOMATIC)

Wiring Diagram

INFOID:0000000010288656



HEADLAMP AIMING SYSTEM CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–
4	L	–
7	P	–
8	L	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

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

H.S.

100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81
120	119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101

Terminal No.	Color of Wire	Signal Name
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

H.S.

167	166	165	164		163	162	161
176	175	174	173	172	171	170	169	168

Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
171	B	I GND2

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	SB	–
3	GR	–
4	BG	–

Terminal No.	Color of Wire	Signal Name
5	G	–
6	W	–
7	Y	–
8	V	–
10	BR	–
15	P	–

AALIA2143GB

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
5	L	–
11	P	–
12	P	–
15	P	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
24	P	–
25	L	–

Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

5J	4J	3J	2J	1J
	10J	9J	8J	7J	6J

21J	20J	19J	18J	17J	16J	15J	14J	13J	12J	11J
		30J	29J	28J	27J	26J	25J	24J	23J	22J
41J	40J	39J	38J	37J	36J	35J	34J	33J	32J	31J
		50J	49J	48J	47J	46J	45J	44J	43J	42J
61J	60J	59J	58J	57J	56J	55J	54J	53J	52J	51J
		70J	69J	68J	67J	66J	65J	64J	63J	62J
81J	80J	79J	78J	77J	76J	75J	74J	73J	72J	71J
		90J	89J	88J	87J	86J	85J	84J	83J	82J
							95J	94J	93J	92J	91J
							100J	99J	98J	97J	96J

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
3R	V	–
14R	W	–

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
8P	LA/BR	–
13P	LA/G	–

AALIA2144GB

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND1

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

41	42	43	44	45	46
47	48	49	50	51	52

Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	E34
Connector Name	WIRE TO WIRE
Connector Color	GRAY

H.S.

	1A	2A	3A	4A
	6A	7A	8A	9A

11A	12A	13A	14A	15A	16A	17A	18A	19A	20A	21A
	22A	23A	24A	25A	26A	27A	28A	29A	30A	
31A	32A	33A	34A	35A	36A	37A	38A	39A	40A	41A
	42A	43A	44A	45A	46A	47A	48A	49A	50A	
51A	52A	53A	54A	55A	56A	57A	58A	59A	60A	61A
	62A	63A	64A	65A	66A	67A	68A	69A	70A	
71A	72A	73A	74A	75A	76A	77A	78A	79A	80A	81A
	82A	83A	84A	85A	86A	87A	88A	89A	90A	

	91A	92A	93A	94A
		96A	97A	98A

5A	95A
10A	100A

Terminal No.	Color of Wire	Signal Name
75A	B	–
76A	G	–
77A	SB	–

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE

H.S.

4	3	2	1
8	7	6	5
12	11	10	9
16	15	14	13
20	19	18	17
24	23	22	21
28	27	26	25

Terminal No.	Color of Wire	Signal Name
5	L	–
6	P	–
9	L	–
10	P	–

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Connector No.	E110
Connector Name	FRONT HEIGHT SENSOR
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–
2	B	–
3	BR	–

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
12	B	SIGNAL GROUND

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
20	W	I HEIGHT FRONT
21	SB	I HEIGHT REAR
22	P	CAN-L
24	L	CAN-H
25	G	O HEIGHT SENSOR SUPPLY
26	B	O HEIGHT SENSOR GROUND
31	B	2ND SIGNAL GROUND

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

H.S.

Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

AALIA2146GB

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1J	2J	3J	4J	5J
6J	7J	8J	9J	10J

11J	12J	13J	14J	15J	16J	17J	18J	19J	20J	21J
	22J	23J	24J	25J	26J	27J	28J	29J	30J	

31J	32J	33J	34J	35J	36J	37J	38J	39J	40J	41J
	42J	43J	44J	45J	46J	47J	48J	49J	50J	

51J	52J	53J	54J	55J	56J	57J	58J	59J	60J	61J
	62J	63J	64J	65J	66J	67J	68J	69J	70J	

71J	72J	73J	74J	75J	76J	77J	78J	79J	80J	81J
	82J	83J	84J	85J	86J	87J	88J	89J	90J	

91J	92J	93J	94J	95J
	96J	97J	98J	100J

Terminal No.	Color of Wire	Signal Name
61J	L	–
62J	P	–

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

H.S.

51		50	49
56	55	54	53	52

Terminal No.	Color of Wire	Signal Name
55	SB	O IGN REVERSE SW AC VALVE 1

Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

59		58	57
64	63	62	61	60

Terminal No.	Color of Wire	Signal Name
63	B	I LEVELIZER DC MOTOR GROUND
64	V	O LEVELIZER DC MOTOR

Connector No.	E237
Connector Name	FRONT COMBINATION LAMP LH (HEAD LAMP AIMING MOTOR)
Connector Color	BLACK

H.S.

12	13	14

Terminal No.	Color of Wire	Signal Name
12	L	–
13	B	–
14	V	–

Connector No.	E238
Connector Name	FRONT COMBINATION LAMP RH (HEAD LAMP AIMING MOTOR)
Connector Color	BLACK

H.S.

12	13	14

Terminal No.	Color of Wire	Signal Name
12	SB	–
13	B	–
14	V	–

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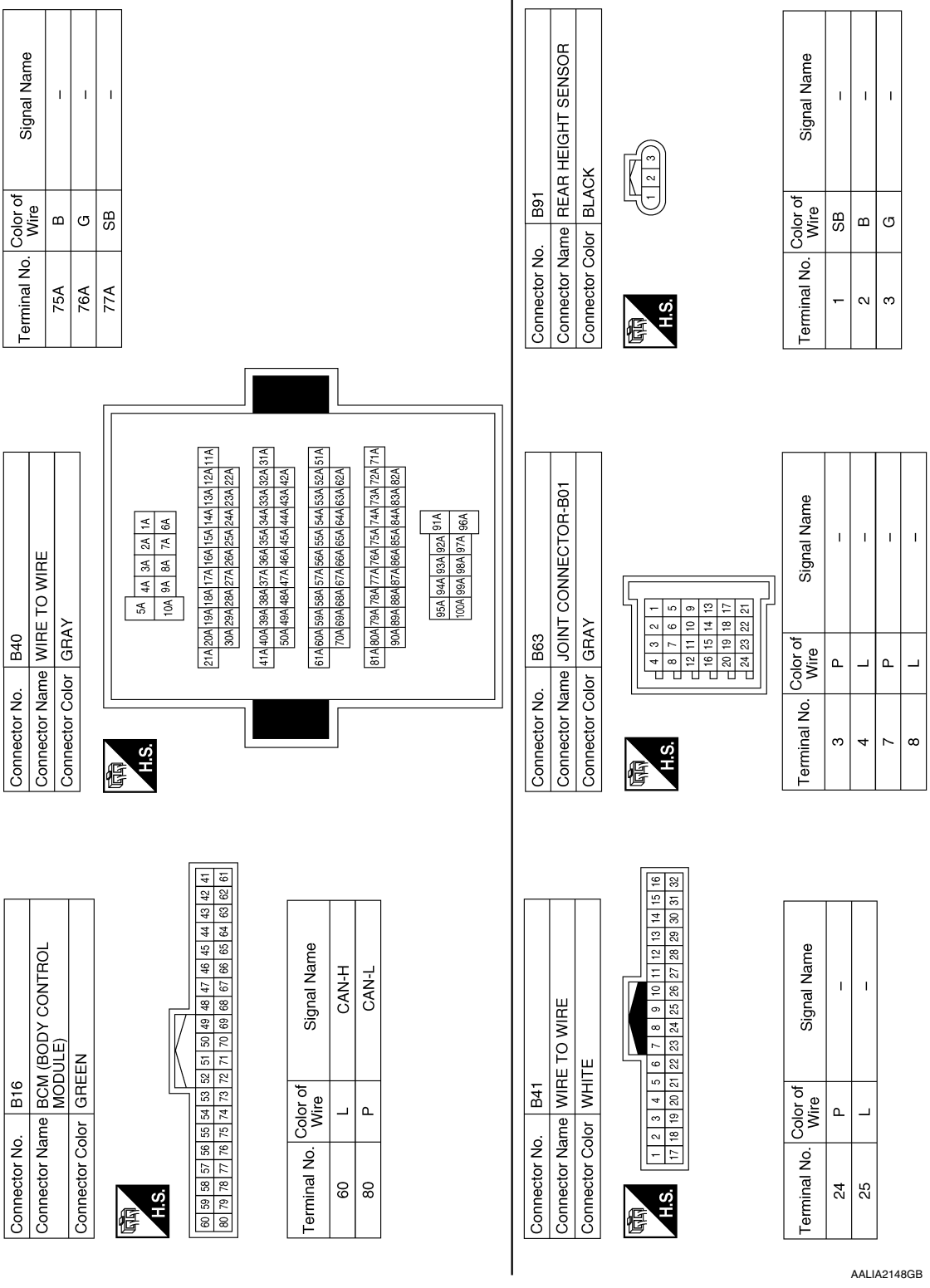
Terminal No. | Color of Wire | Signal Name
75A | B | –
76A | G | –
77A | SB | –
Connector No. | B40
Connector Name | WIRE TO WIRE
Connector Color | GRAY
H.S.
5A 4A 3A 2A 1A
10A 9A 8A 7A 6A
21A 20A 19A 18A 17A 16A 15A 14A 13A 12A 11A
30A 29A 28A 27A 26A 25A 24A 23A 22A
41A 40A 39A 38A 37A 36A 35A 34A 33A 32A 31A
50A 49A 48A 47A 46A 45A 44A 43A 42A
61A 60A 59A 58A 57A 56A 55A 54A 53A 52A 51A
70A 69A 68A 67A 66A 65A 64A 63A 62A
81A 80A 79A 78A 77A 76A 75A 74A 73A 72A 71A
90A 89A 88A 87A 86A 85A 84A 83A 82A
95A 94A 93A 92A 91A
100A 99A 98A 97A 96A
Connector No. | B91
Connector Name | REAR HEIGHT SENSOR
Connector Color | BLACK
H.S.
1 2 3
Terminal No. | Color of Wire | Signal Name
1 | SB | –
2 | B | –
3 | G | –
Connector No. | B16
Connector Name | BCM (BODY CONTROL MODULE)
Connector Color | GREEN
H.S.
60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41
80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61
Terminal No. | Color of Wire | Signal Name
60 | L | CAN-H
80 | P | CAN-L
Connector No. | B63
Connector Name | JOINT CONNECTOR-B01
Connector Color | GRAY
H.S.
4 3 2 1
8 7 6 5
12 11 10 9
16 15 14 13
20 19 18 17
24 23 22 21
Terminal No. | Color of Wire | Signal Name
3 | P | –
4 | L | –
7 | P | –
8 | L | –
Connector No. | B41
Connector Name | WIRE TO WIRE
Connector Color | WHITE
H.S.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
Terminal No. | Color of Wire | Signal Name
24 | P | –
25 | L | –
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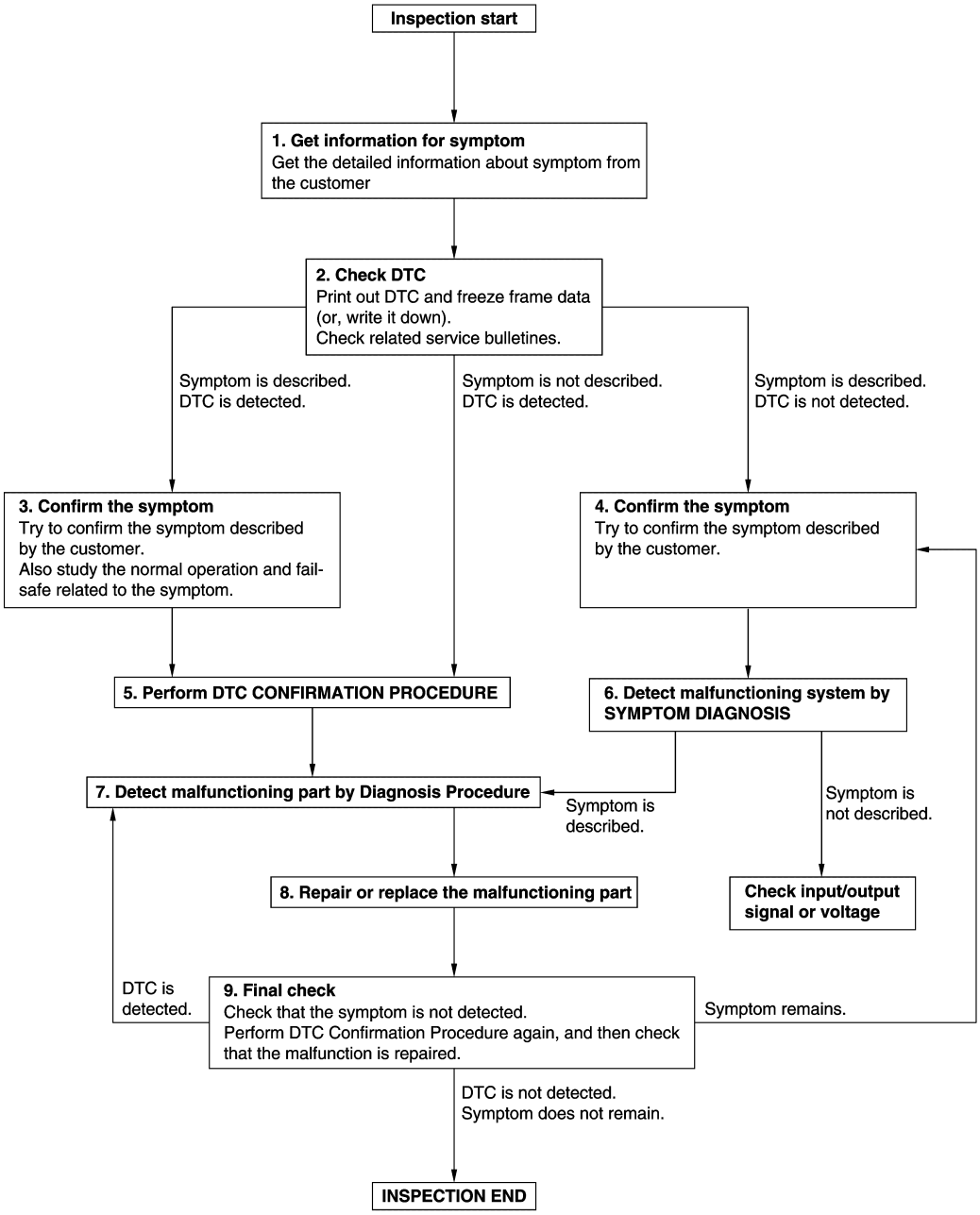
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000010287040

OVERALL SEQUENCE



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DETAILED FLOW

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 BCS-47, "DTC Inspection Priority Chart" (with Intelligent Key system) or BCS-107, "DTC Inspection Priority Chart" (without Intelligent Key system) (BCM) or PCS-20, "DTC Index" (IPDM E/R), 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 DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic 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 Diagnostic 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.

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000010365309

CAUTION:

- **When the IPDM E/R is replaced or disconnected and reconnected, perform "SENSOR INITIALIZE" with CONSULT.**

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000010365310

1.SENSOR INITIALIZE

CONSULT WORK SUPPORT

Perform "SENSOR INITIALIZE". Refer to EXL-222, "SENSOR INITIALIZE : Special Repair Requirement".

>> WORK END

SENSOR INITIALIZE

SENSOR INITIALIZE : Description

INFOID:0000000010365313

HEADLAMP AIMING CONTROL SYSTEM

Perform the sensor initialize when installing, removing and replacing the auto levelizer control unit or suspension components.

SENSOR INITIALIZE : Special Repair Requirement

INFOID:0000000010365314

CAUTION:

If performing aiming adjustment after the levelizer initialization, be sure to start the engine after turning ignition switch OFF.

1.VEHICLE CONDITION CHECK

1. Park the vehicle in the straight-forward position.
2. Unload the vehicle (no passenger aboard).

>> GO TO 2.

2.SENSOR INITIALIZE

CONSULT WORK SUPPORT

1. Select "SENSOR INITIALIZE" of IPDM E/R work support item.
2. Select "START".
3. When "INITIALIZE COMPLETE", select "END".

CAUTION:

If "INITIALIZE NOT DONE" is indicated, auto levelizer control unit detects that the sensor lever signal was changing. The sensor initialization is cancelled. In this case, turn the ignition switch OFF, do not allow the vehicle height to change. Perform the sensor initialization again.

Is the sensor initialize completed?

YES >> GO TO 3.
NO >> Perform the sensor initialize again.

3.SELF-DIAGNOSIS RESULT CHECK

Perform the self-diagnosis with CONSULT. Check that any DTC is not detected.

Is any DTC detected?

YES >> GO TO 2.
NO >> Sensor initialize completed.

LED HEADLAMP OPERATION INSPECTION

Diagnosis Procedure

INFOID:0000000010287041

1.CHECK START

1. In the cool LED status (wait for more than 10 minutes after turning headlamp OFF), turn ON and turn OFF headlamp for the several times. Check that headlamp operates normally each time.
2. In the cool LED status, turn headlamp ON, wait until headlamp enters to the stable status (approximately 5 minutes after turning headlamp ON), and then check that headlamp operates normally without blinking or flickering.
3. In the warm LED status (turn headlamp ON for more than 15 minutes and wait for 1 minute after turning OFF), turn ON and turn OFF headlamp for the several times. Check that headlamp operates normally each time.
4. Turn headlamp ON for approximately 30 minutes, and then check that headlamp operates normally without difference in brightness between LH and RH, blinking or flickering.

Is the inspection result normal?

YES >> Inspection End.
NO >> Refer to EXL-256, "Symptom Table".

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:0000000010290271

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

1. CHECK FUSE

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
161	BCM power supply	7 (10A)

Is the fuse blown?

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

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M20.
2. Check voltage between BCM connector M20 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M20	161	—	Battery voltage

Is the inspection result normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M20 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	170	—	Yes
	171		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:0000000010290272

Regarding Wiring Diagram information, refer to BCS-110, "Wiring Diagram".

1. CHECK FUSE

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
161	BCM power supply	7 (10A)

Is the fuse blown?

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

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M20.
2. Check voltage between BCM connector M20 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M20	161	—	Battery voltage

Is the inspection result normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M20 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	170	—	Yes
	171		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

OPTICAL SENSOR

Component Function Check

INFOID:0000000010350547

1.CHECK OPTICAL SENSOR SIGNAL BY CONSULT

CONSULT DATA MONITOR
1. Turn power switch ON.
2. Select “OPTICAL SENSOR” of BCM (HEADLAMP) data monitor item.
3. Turn lighting switch AUTO.
4. With the optical sensor illuminating, check the monitor status.

Monitor item	Condition		Voltage (Approx.)
OPTICAL SENSOR	Optical sensor	When illuminating	3.1 V or more *
		When shutting off light	0.6 V or less

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

Is the inspection result normal?

YES >> Optical sensor is normal.
NO >> Refer to EXL-226, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010350548

1.CHECK OPTICAL SENSOR POWER SUPPLY INPUT

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

(+)		(–)	Voltage (Approx.)
Optical sensor			
Connector	Terminal		
M13	1	Ground	5 V

Is the inspection result normal?

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

2.CHECK OPTICAL SENSOR GROUND INPUT

Check voltage between optical sensor harness connector and ground.

(+)		(–)	Voltage (Approx.)
Optical sensor			
Connector	Terminal		
M13	3	Ground	0 V

Is the inspection result normal?

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

3.CHECK OPTICAL SENSOR SIGNAL OUTPUT

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

(+)		(−)	Condition		Voltage (Approx.)
Optical sensor					
Connector	Terminal				
M13	2	Ground	Optical sensor	When illuminating	3.1 V or more *
				When shutting off light	0.6 V or less

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

Is the inspection result normal?

YES >> GO TO 7.
NO >> Replace the optical sensor.

4. CHECK OPTICAL SENSOR OPEN CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M13	1	M18	12	Yes

Is the inspection result normal?

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

5. CHECK OPTICAL SENSOR SHORT CIRCUIT

Check continuity between optical sensor harness connector and ground.

Optical sensor		Ground	Continuity
Connector	Terminal		
M13	1		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with I Key) or BCS-135, "Removal and Installation" (without I Key).
NO >> Repair or replace harness.

6. CHECK OPTICAL SENSOR GROUND OPEN CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M13	3	M18	30	Yes

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with I Key) or BCS-135, "Removal and Installation" (without I Key).
NO >> Repair or replace harness.

7. CHECK OPTICAL SENSOR SIGNAL OPEN CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M13	2	M18	19	Yes

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace harness.

8. CHECK OPTICAL SENSOR SHORT CIRCUIT

Check continuity between optical sensor harness connector and ground.

Optical sensor		Ground	Continuity
Connector	Terminal		
M13	2		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with I Key) or BCS-135, "Removal and Installation" (without I Key).
NO >> Repair or replace harness.

HAZARD SWITCH

Component Function Check

INFOID:0000000010350549

1.CHECK HAZARD SWITCH SIGNAL BY CONSULT

CONSULT DATA MONITOR
1. Turn power 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-229, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010350550

1.CHECK HAZARD SWITCH SIGNAL INPUT

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

(+)		(–)	Voltage (Approx.)
Hazard switch			
Connector	Terminal		
M26	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	
M26	2	M18	11	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		
M26	2		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key system) or BCS-135, "Removal and Installation" (without Intelligent Key system).
NO >> Repair or replace harness.

4. CHECK HAZARD SWITCH GROUND OPEN CIRCUIT

Check continuity between hazard switch harness connector and ground.

Hazard switch		Ground	Continuity
Connector	Terminal		
M26	3		Yes

Is the inspection result normal?

YES >> Replace hazard switch. Refer to EXL-276, "Removal and Installation".
NO >> Repair or replace harness.

TURN SIGNAL LAMP CIRCUIT

Description

INFOID:0000000010350551

The BCM monitors inputs from the combination switch (lighting and turn signal switch) to determine when to activate the turn signals. The BCM outputs voltage direction to the left and right turn signals during turn signal operation or both during hazard warning operation. The BCM sends a turn signal indicator request to the combination meter via the CAN communication lines.
The BCM performs the fast flasher operation (fail-safe) if any bulb or harness of the turn signal lamp circuit is open.
NOTE:
Turn signal lamp blinks at normal speed when using the hazard warning lamp.

Component Function Check

INFOID:0000000010350552

1.CHECK TURN SIGNAL LAMP

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

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

Is the inspection result normal?

YES >> Turn signal lamp circuit is normal.
NO >> Refer to EXL-231, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010350553

Regarding Wiring Diagram information, refer to EXL-185, "Wiring Diagram".

1.CHECK TURN SIGNAL LAMP BULB

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

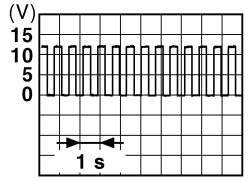
Is the bulb OK?

YES >> GO TO 2.
NO >> Replace the bulb.

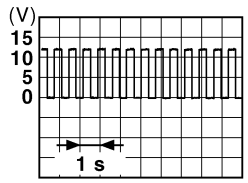
2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

1. Turn the ignition switch OFF.
2. Disconnect the front combination lamp harness connector or the side turn signal harness connector or the rear combination lamp harness connector in question.
3. Turn the ignition switch ON.
4. Operate the turn signal switch.
5. While the turn signal is operating, check the voltage between the front combination lamp harness connector and ground.

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

LH	E105	1	Ground	 PKID0926E
RH	E103			

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

(+)			(−)	Voltage (Approx.)
Connector		Terminal		
LH	B90	3	Ground	 PKID0926E
RH	B102			

Are the inspection results normal?

YES >> GO TO 5.
NO >> GO TO 3.

3. CHECK TURN SIGNAL LAMP CIRCUIT FOR OPEN

1. Turn the ignition switch OFF.
2. Disconnect BCM harness connector E29 or B23.
3. Check continuity between the BCM harness connector E29 and the front combination lamp harness connector.

BCM			Front combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
LH	E29	135	E105	1	Yes
RH		136	E103		

4. Check continuity between the BCM harness connector B23 and the rear combination lamp harness connector.

BCM			Rear combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
LH	B23	157	B90	3	Yes
RH		160	B102		

Are the inspection results normal?

YES >> GO TO 4.
NO >> Repair or replace the harness or connectors.

4. CHECK TURN SIGNAL LAMP SHORT CIRCUIT

1. Check continuity between the BCM harness connector E29 and ground.

BCM			Ground	Continuity
Connector		Terminal		
LH	E29	135		No
RH		136		

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

BCM			Ground	Continuity
Connector		Terminal		
LH	B23	157		No
RH		160		

Are the inspection results normal?

YES >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key) or BCS-135, "Removal and Installation" (without Intelligent Key).
NO >> Repair or replace the harness or connectors.

5. CHECK TURN SIGNAL LAMP GROUND CIRCUIT

1. Turn the ignition switch OFF.
2. Check continuity between the front combination lamp harness connector or the side turn signal harness connector or the rear combination lamp harness connector in question and ground.

Front combination lamp			(–)	Continuity
Connector		Terminal		
LH	E105	2	Ground	Yes
RH	E103			

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

Rear combination lamp			(–)	Continuity
Connector		Terminal		
LH	B90	4	Ground	Yes
RH	B102			

Are the inspection results normal?

YES >> Replace the malfunctioning lamp.
NO >> Repair or replace the harness or connectors.

B121A FRONT FOG LAMP LH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376092

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B121A	FR FOG LAMP LH PWR SPLY CIRC [CIRC SHORT TO GROUND	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.
1. Turn ignition switch ON.

2. Perform self-diagnostic result.

Is DTC B121A detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-234, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376093

1.CHECK FOG LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	51		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FOG LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between fog lamp harness connector and ground.

Fog lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E222	1		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B1231 DAYTIME RUNNING LIGHT RH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376094

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B1231	DTRL RH PWR SPLY CIRC [CIRC SHORT TO GRND]	When a short circuit to ground in the daytime running lamp circuit is detected.	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B1231 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-235, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376095

1.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Disconnect front combination lamp 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	E218	58		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

Front combination lamp (RH)			Ground	Continuity
Connector		Terminal		
RH	E240	8		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B1256 FRONT FOG LAMP RH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376096

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B1256	FR FOG LAMP RH PWR SPLY CIRC [CIRC SHORT TO GRND]	When a short circuit to ground is detected.	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B1256 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-236, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376097

1.CHECK FOG LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	51		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FOG LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between fog lamp harness connector and ground.

Fog lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E222	1		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B1C00 HEIGHT SENSOR POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376098

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B1C00	HEIGHT SENSOR PWR SPLY CIRC [CIRC SHORT TO GRND]	When the height sensor power supply circuit is shorted to supply power or shorted to ground	• Short to ground • Short to supply voltage
	HEIGHT SENSOR PWR SPLY CIRC [CIRC SHORT TO BATTERY]		

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B1C00 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-237, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376099

1.CHECK HEIGHT SENSOR SHORT CIRCUIT TO GROUND

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E120	25		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK HEIGHT SENSOR SHORT CIRCUIT TO BATTERY VOLTAGE

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

IPDM E/R		Ground	Voltage (Approx.)
Connector	Terminal		
E120	25		0 V

Is the inspection result normal?

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

3.CHECK HEIGHT SENSOR SHORT CIRCUIT TO BATTERY VOLTAGE

1. Reconnect IPDM E/R connector.
2. Check the voltage between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Voltage (Approx.)
Connector	Terminal		
E120	25		0 V

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".

NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B1C01 FRONT HEIGHT SENSOR SIGNAL

DTC Logic

INFOID:0000000010376100

DTC DETECTION LOGIC

DTC No.	Self-diagnosis item	DTC Detection Condition	Possible causes
B1C01	FR HEIGHT SENSOR SIGNAL [CIRC SHORT TO BATTERY] FR HEIGHT SENSOR SIGNAL [CIRC SHORT TO GROUND OR OPEN] FR HEIGHT SENSOR SIGNAL [CIRC VOLTAGE OUT OF RANGE]	• Short to ground • Short to supply voltage • Circuit voltage out of range	• Harness or connectors between the front height sensor and the IPDM E/R (The sensor circuit is open or shorted) • IPDM E/R • Height sensor

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH IPDM E/R

1. Turn ignition switch ON.
2. Check Self-diagnostic result with CONSULT.

Is DTC detected?

YES >> Refer to EXL-239, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376101

1.CHECK HEIGHT SENSOR SHORT CIRCUIT TO GROUND

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E120	20		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK HEIGHT SENSOR SHORT OPEN CIRCUIT

Check the continuity between IPDM E/R harness connector and height sensor connector.

IPDM E/R		Front height sensor		Ground	Continuity
Connector	Terminal	Connector	Terminal		
E120	20	E110	1		Yes

Is the inspection result normal?

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

3.CHECK HEIGHT SENSOR SHORT CIRCUIT TO BATTERY VOLTAGE

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

IPDM E/R		Ground	Voltage (Approx.)
Connector	Terminal		
E120	20		0 V

Is the inspection result normal?

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

4. CHECK HEIGHT SENSOR SHORT CIRCUIT TO BATTERY VOLTAGE

1. Reconnect IPDM E/R connector.
2. Check the voltage between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Voltage (Approx.)
Connector	Terminal		
E120	20		0 V

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B1C02 REAR HEIGHT SENSOR SIGNAL

DTC Logic

INFOID:0000000010376102

DTC DETECTION LOGIC

DTC No.	Self-diagnosis item	DTC Detection Condition	Possible causes
B1C02	RR HEIGHT SENSOR SIGNAL [CIRC SHORT TO BATTERY] RR HEIGHT SENSOR SIGNAL [CIRC SHORT TO GROUND OR OPEN] RR HEIGHT SENSOR SIGNAL [CIRC VOLTAGE OUT OF RANGE]	• Short to ground • Short to supply voltage • Circuit voltage out of range	• Harness or connectors between the rear height sensor and the IPDM E/R (The sensor circuit is open or shorted) • IPDM E/R • Height sensor

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH IPDM E/R

1. Turn ignition switch ON.
2. Check Self-diagnostic result with CONSULT.

Is DTC detected?

YES >> Refer to EXL-241, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376103

1.CHECK HEIGHT SENSOR SHORT CIRCUIT TO GROUND

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E120	21		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK HEIGHT SENSOR SHORT OPEN CIRCUIT

Check the continuity between IPDM E/R harness connector and height sensor connector.

IPDM E/R		Rear height sensor		Ground	Continuity
Connector	Terminal	Connector	Terminal		
E120	20	B91	1		Yes

Is the inspection result normal?

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

3.CHECK HEIGHT SENSOR SHORT CIRCUIT TO BATTERY VOLTAGE

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

IPDM E/R		Ground	Voltage (Approx.)
Connector	Terminal		
E120	21		0 V

Is the inspection result normal?

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

4. CHECK HEIGHT SENSOR SHORT CIRCUIT TO BATTERY VOLTAGE

1. Reconnect IPDM E/R connector.
2. Check the voltage between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Voltage (Approx.)
Connector	Terminal		
E120	21		0 V

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B1C07 AIMING MOTOR DRIVE SIGNAL

DTC Logic

INFOID:0000000010376104

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B1C07	AIMING MOTOR DRIVE SIGNAL [CIRC SHORT TO GRND]	• DC motor circuit short to ground • DC motor circuit short to supply voltage	• Front combination lamp harness • IPDM E/R
	AIMING MOTOR DRIVE SIGNAL [CIRC SHORT TO BATTERY]		
	AIMING MOTOR DRIVE SIGNAL [SIGNAL COMPARE FAILURE]		

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.
1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B1C07 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-243, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376105

1.CHECK HEADLAMP AIMING MOTOR DRIVE SIGNAL SHORT CIRCUIT TO GROUND

1. Disconnect LH and RH headlamp aiming motor connectors and IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E218	64		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK HEADLAMP AIMING MOTOR DRIVE SIGNAL SHORT CIRCUIT TO BATTERY VOLTAGE

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

IPDM E/R		Ground	Voltage (Approx.)
Connector	Terminal		
E218	64		0 V

Is the inspection result normal?

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

3.CHECK HEADLAMP AIMING MOTOR DRIVE SIGNAL SHORT CIRCUIT TO BATTERY VOLTAGE

1. Reconnect IPDM E/R connector.
2. Check the voltage between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Voltage (Approx.)
Connector	Terminal		
E218	64		0 V

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20CB DAYTIME RUNNING LIGHT LH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376106

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20CB	DTRL LH PWR SPLY CIRC [CIRC SHORT TO GRND]	When a short circuit to ground is detected.	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B02CB detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-245, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376107

1.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	49		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between fog lamp harness connector and ground.

Front combination lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E239	8		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20CE HEADLAMP (HI) LH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376108

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20CE	DTRL LH PWR SPLY CIRC [CIRC SHORT TO GRND]	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20CE detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-246, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376109

1.CHECK HEAD LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E218	59		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK HEAD LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

Front combination lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E236	15		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20CF HEADLAMP (HI) RH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376110

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20CF	HL (HI) RH PWR SPLY CIRC [CIRC SHORT TO GRND]	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20CF detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-247, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376111

1.CHECK HEAD LAMP SHORT CIRCUIT TO GROUND

1. Disconnect front combination lamp 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	E217	54		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK HEAD LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

Front combination lamp (RH)			Ground	Continuity
Connector		Terminal		
RH	E240	5		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20D0 HEADLAMP (LO) LH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376112

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20D0	HI (LO) RH PWR SPLY CIRC [CIRC SHORT TO GRND]	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20D0 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-248, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376113

1.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	50		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

Front combination lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	E239	6		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20D1 HEADLAMP (LO) RH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376114

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20D1	HL (LO) RH PWR SPLY CIRC [CIRC SHORT TO GRND]	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20D1 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-249, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376115

1.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Disconnect front combination lamp 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	E218	62		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

Front combination lamp (LH)			Ground	Continuity
Connector		Terminal		
RH	E240	6		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20D2 PARKING LAMP POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376116

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20D2	PARKING LAMP PWR SPLY CIRC [CIRC SHORT TO GROUND]	When a short to ground is detected in the parking lamp power supply circuit.	• Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.
1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20D2 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-250, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376117

1.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	56		No
RH	E218	61		

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp harness connector and ground.

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E217	56		No
RH	E218	61		

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20D4 TAIL LAMP LH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376118

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20D4	TAIL LAMP LH PWR SPLY CIRC [CIRC SHORT TO GRND]	• Short to ground	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20D4 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-251, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376119

1.CHECK TAIL LAMP SHORT CIRCUIT TO GROUND

1. Disconnect rear combination lamp (LH), license plate lamps, back up lamp connectors and IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R			Ground	Continuity
Connector		Terminal		
LH	E119	4		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK TAIL LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between rear combination lamp harness connector and ground.

Rear combination lamp (LH)			Ground	Continuity
Connector		Terminal		
LH	B90	1		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20D5 TAIL LAMP RH POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000010376120

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
B20D5	TAIL LAMP RH PWR SPLY CIRC [CIRC SHORT TO GRND]	When a short circuit to ground is detected in the tail lamp supply voltage circuit.	• IPDM E/R • Short to ground

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.

1. Turn ignition switch ON.
2. Perform self-diagnostic result.

Is DTC B20D5 detected?

YES >> Proceed to diagnosis procedure. Refer to EXL-252, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376121

1.CHECK TAIL LAMP SHORT CIRCUIT TO GROUND

1. Disconnect rear combination lamp (RH), back up lamp connectors and IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R			Ground	Continuity
Connector		Terminal		
RH	E119	17		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK TAIL LAMP SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between rear combination lamp harness connector and ground.

Rear combination lamp (RH)			Ground	Continuity
Connector		Terminal		
RH	B102	1		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20DB HEIGHT SENSOR INITIALIZE NOT DONE

DTC Logic

INFOID:0000000010376122

DTC DETECTION LOGIC

DTC	Display Item	DTC detection condition	Possible causes
B20DB	HEIGHT SENS INTIALIZE NOT DONE [MISSING CALIBRATION]	Sensor initialization is not complete.	• Incomplete sensor initialization. • Rear height sensor • Front height sensor
	HEIGHT SENS INTIALIZE NOT DONE [NOT CONFIGURED]		

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT
1. Turn ignition switch ON.
2. Perform self-diagnosis of IPDM E/R using CONSULT.

Is DTC B20DB detected?

YES >> Refer to EXL-253, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010376123

1.CHECK SELF-DIAGNOSTIC RESULT

With CONSULT.
1. Turn ignition ON.
2. Select “SENSOR INITIALIZE” of IPDM E/R Work Support item.

Is DTC B20DB detected?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Inspection End.

B20E2 LED HEADLAMP RH

DTC Logic

INFOID:0000000010350724

DTC DETECTION LOGIC

DTC No.	Self-diagnosis item	DTC Detection Condition	Possible causes
B20E2	LED HEADLAMP RH [CMPNENT INTERNAL MLFNCTN]	• Detection signal circuit short to ground	• Harness or connectors between the front combination lamp RH and the IPDM E/R • IPDM E/R

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH IPDM E/R

1. Turn ignition switch ON.
2. Check Self-diagnostic result with CONSULT.

Is DTC detected?

YES >> Refer to EXL-254, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010350725

1.CHECK FRONT COMBINATION LAMP RH SHORT CIRCUIT TO GROUND

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E218	60		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP RH SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp RH harness connector and ground.

Front combination lamp RH		Ground	Ground
Connector	Terminal		
E240	7		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B20E3 LED HEADLAMP LH

DTC Logic

INFOID:0000000010350728

DTC DETECTION LOGIC

DTC No.	Self-diagnosis item	DTC Detection Condition	Possible causes
B20E3	LED HEADLAMP LH [CMPNENT INTERNAL MLFNCTN]	• Detection signal circuit short to ground	• Harness or connectors between the front combination lamp LH and the IPDM E/R • IPDM E/R

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH IPDM E/R

1. Turn ignition switch ON.
2. Check Self-diagnostic result with CONSULT.

Is DTC detected?

YES >> Refer to EXL-255, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010350729

1.CHECK FRONT COMBINATION LAMP LH SHORT CIRCUIT TO GROUND

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E217	53		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK FRONT COMBINATION LAMP LH SHORT CIRCUIT TO GROUND

1. Reconnect IPDM E/R connector.
2. Check continuity between front combination lamp LH harness connector and ground.

Front combination lamp LH		Ground	Ground
Connector	Terminal		
E239	7		No

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000010350643

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 • LED • Harness between IPDM E/R and headlamp (HI) • Harness between headlamp (HI) and ground • IPDM E/R	Headlamp (HI) circuit Refer to EXL-246, "DTC Logic" (LH) or EXL-247, "DTC Logic" (RH).
	Both sides	**Symptom diagnosis** "BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON" Refer to EXL-246, "DTC Logic" (LH) or EXL-247, "DTC Logic" (RH).	
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 • LED • Harness between IPDM E/R and headlamp lamp (LO) • Harness between headlamp (LO) and ground • IPDM E/R	Headlamp (LO) circuit Refer toEXL-248, "DTC Logic" (LH) or EXL-249, "DTC Logic" (RH).
	Both sides	**Symptom diagnosis** "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer toEXL-248, "DTC Logic" (LH) or EXL-249, "DTC Logic" (RH).	
Each lamp is not turned ON/OFF with lighting switch AUTO.		• Combination switch • Harness between combination switch and BCM • BCM	Combination switch Refer to BCS-73, "Symptom Table" (with Intelligent Key) or BCS-133, "Symptom Table" (without Intelligent Key).
		• Optical sensor • Harness between optical sensor and BCM • BCM	Optical sensor Refer to EXL-226, "Component Function Check".
Daytime running light is not turned ON. [Headlamp (HI) is turned ON.]		• Fuse • Harness between IPDM E/R and front combination lamp • IPDM E/R • BCM • ECM • Combination meter	• Daytime running light circuit Refer to EXL-235, "DTC Logic". • BCM (HEADLAMP) Data monitor "ENGINE STATE" • Combination meter Data monitor "PKB SW" • BCM (HEADLAMP) 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-250, "DTC Logic".

Symptom		Possible cause	Inspection item
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-250, "DTC Logic".
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-251, "DTC Logic".
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-261, "Description".	
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-93, "Component Function Check".
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 MWI-59, "COMBINATION METER : Diagnosis Procedure".
• 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-229, "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-234, "DTC Logic" (LH) or EXL-236, "DTC Logic" (RH).
	Both sides	**Symptom diagnosis** "BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-234, "DTC Logic" (LH) or EXL-236, "DTC Logic" (RH).	

NORMAL OPERATING CONDITION

Description

INFOID:0000000010350644

AUTO LIGHT SYSTEM

The headlamp may not be turned ON/OFF immediately after passing dark area or bright area (short tunnel, sky bridge, shadowed area, etc.) while using the auto light system. This is caused by for the control difference. This is normal.

BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

Description

INFOID:0000000010350645

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

Diagnosis Procedure

INFOID:0000000010350646

1.COMBINATION SWITCH INSPECTION

Check combination switch. Refer to BCS-73, "Symptom Table" (with Intelligent Key system) or BCS-133, "Symptom Table" (without Intelligent Key system).

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 “HEADLAMP (HI)”of IPDM E/R data monitor item.
2. With operating the lighting switch, check the monitor status.

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

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key system) or BCS-135, "Removal and Installation" (without Intelligent Key system).

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check headlamp (HI) circuit. Refer to EXL-246, "DTC Logic" (LH) or EXL-247, "DTC Logic" (RH).

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Repair or replace the malfunctioning part.

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

Description

INFOID:0000000010350647

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

Diagnosis Procedure

INFOID:0000000010350648

1.CHECK COMBINATION SWITCH

Check combination switch. Refer to BCS-73, "Symptom Table" (with Intelligent Key system) or BCS-133, "Symptom Table" (without Intelligent Key system).

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 “HEADLAMP (LO)”of IPDM E/R data monitor item.
2. With operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
HEADLAMP (LO)	Lighting switch	2ND	On
		OFF	Off

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key system) or BCS-135, "Removal and Installation" (without Intelligent Key system).

3.HEADLAMP (LO) CIRCUIT INSPECTION

Check headlamp (LO) circuit. Refer to EXL-248, "DTC Logic" (LH) or EXL-249, "DTC Logic" (RH).

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

Description

INFOID:0000000010350649

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

Diagnosis Procedure

INFOID:0000000010350650

1.COMBINATION SWITCH INSPECTION

Check combination switch. Refer to BCS-73, "Symptom Table" (with Intelligent Key system) or BCS-133, "Symptom Table" (without Intelligent Key system).

Is the combination switch normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning part.

2.CHECK TAIL LAMP REQUEST SIGNAL INPUT

CONSULT DATA MONITOR
1. Select “TAIL LAMP” of IPDM E/R data monitor item.
2. With operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
TAIL LAMP	Lighting switch	1ST	On
		OFF	Off

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key system) or BCS-135, "Removal and Installation" (without Intelligent Key system).

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

Description

INFOID:0000000010350651

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

Diagnosis Procedure

INFOID:0000000010350652

1.CHECK COMBINATION SWITCH

Check combination switch. Refer to BCS-73, "Symptom Table" (with Intelligent Key) or BCS-133, "Symptom Table" (without Intelligent Key).

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning part.

2.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT

CONSULT DATA MONITOR
1. Select “FRONT FOG LAMP 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
FRONT FOG LAMP REQ	Front fog lamp switch (With lighting switch 2ND)	ON	On
		OFF	Off

Is the item status normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-75, "Removal and Installation" (with Intelligent Key) or BCS-135, "Removal and Installation" (without Intelligent Key).

PERIODIC MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Inspection

INFOID:0000000010247821

PREPARATION BEFORE ADJUSTING

Before performing aiming adjustment, check the following:

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

CAUTION:

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

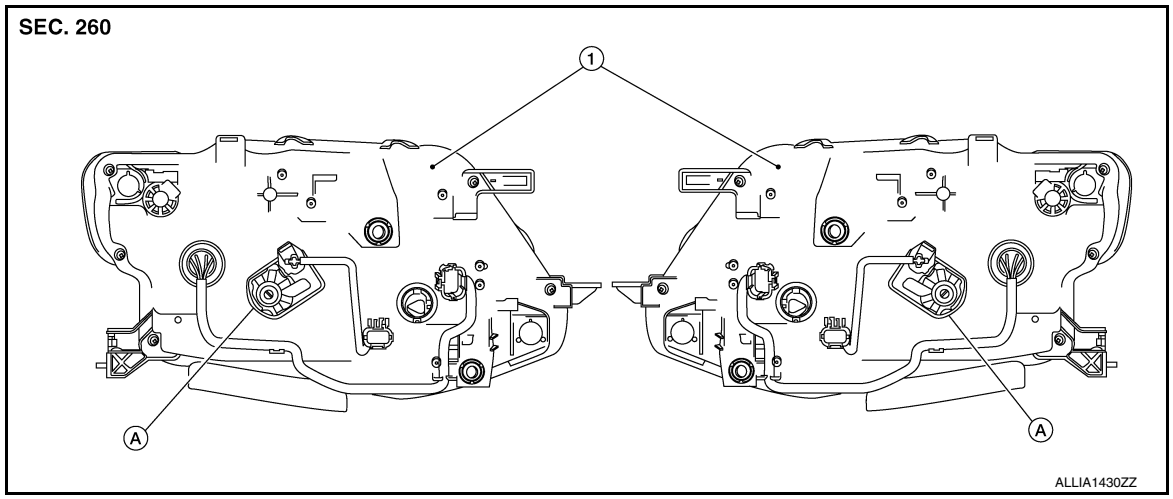
- Place a driver or equivalent weight of 68.5 kg (150 lb) on the driver seat.
- By hand, bounce the front and rear of the vehicle to settle the suspension and eliminate any static load.
- Place the front tires in the straight ahead position.
- Aim each headlamp individually and ensure other headlamp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

NOTE:

- For headlamp aiming details, refer to regulations in your area.
- By regulation, no means for horizontal aim adjustment is provided from the factory; only vertical aim is adjustable.
- Use adjusting screw to perform aiming adjustment.
- Perform headlamp aiming if:

- The vehicle front body has been repaired;
- The front combination lamp has been removed or replaced;
- Any outfitting has been installed;
- The vehicle’s standard load condition has been substantially increased.

AIMING ADJUSTMENT SCREW

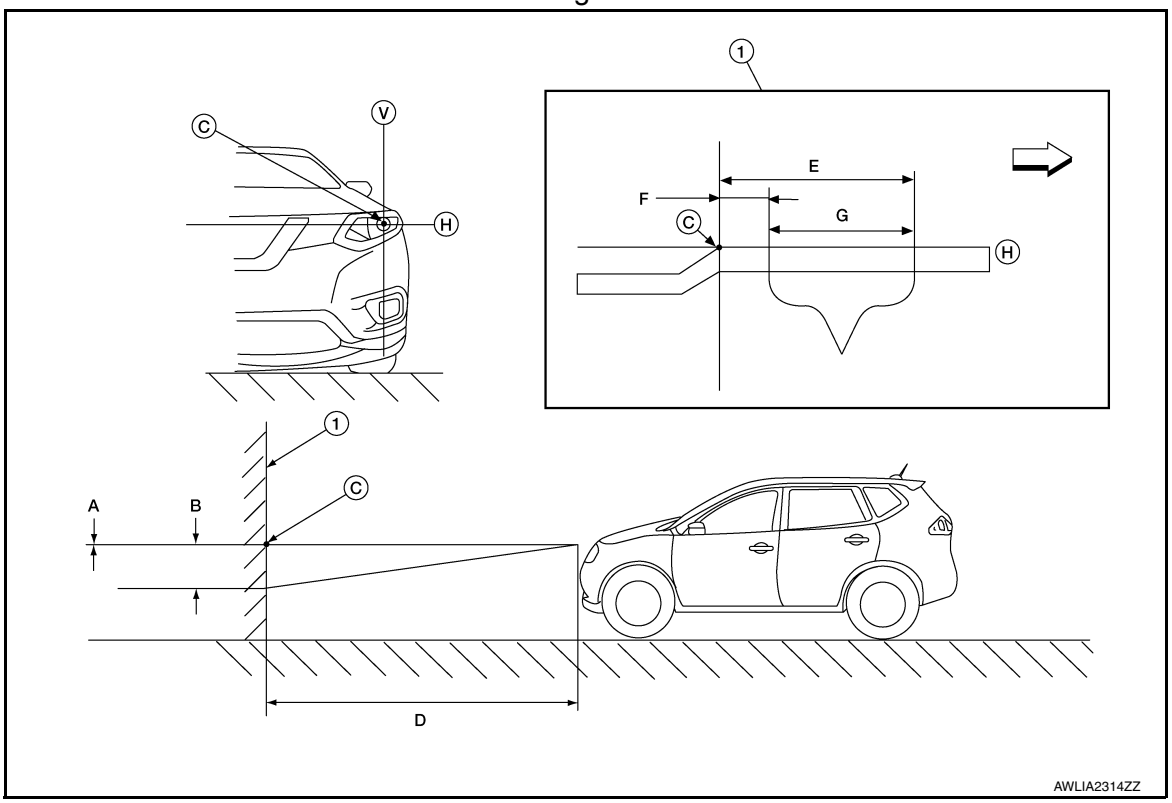


1. Front combination lamp (view from rear)
A. Headlamp HI/LO (UP/DOWN) adjustment screw

Aiming Adjustment Procedure

INFOID:0000000010247822

Aiming Chart



1. Adjustment screen	A. Highest cutoff line height	B. Lowest cutoff line height
C. Headlamp bulb center (H-V point)	D. Distance of headlamp aiming screen from vehicle 7.62 m (25 ft)	E. Maximum aim evaluation distance from vertical center on aiming screen 399 mm (3°R)
F. Minimum aim evaluation distance from vertical center on aiming screen 133 mm (1°R)	G. Aim evaluation area	H. Horizontal aiming evaluation line
V. Vertical aiming evaluation line	⇦ Right	

A (Highest cutoff line height)	**-13.3 mm (0.5 in)**	**0.1° up**
B (Lowest cutoff line height)	**53.2 mm (2.1 in)**	**0.4° down**

LOW BEAM AND HIGH BEAM

NOTE:

- Basic illuminating area for evaluation and/or adjustment should be within range shown on aiming chart.

1. Use adjustment screw to perform aiming adjustment.
   - **Ensure fog lamps are turned off.**
2. 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 a tape etc. The lens is made of resin.
3. 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.
4. Face the front of the vehicle to the screen and measure distance between the headlamp center and the screen surface.

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

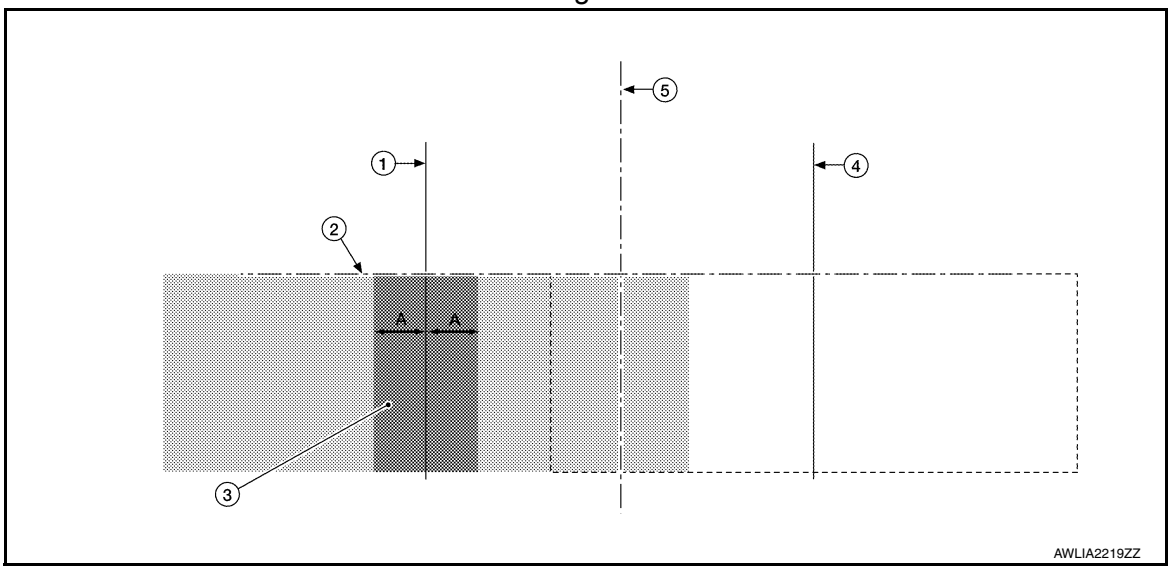
5. Start the engine. Turn the headlamp on.
6. Determine the preferred vertical aim range dimensions, using the aiming chart.
7. Measure the projected beam within the aim evaluation segment on the screen.
8. Adjust the beam pattern of each headlamp until the aim evaluation segment (the area relative to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

FRONT FOG LAMP AIMING ADJUSTMENT

Aiming Adjustment Procedure

INFOID:0000000010247824

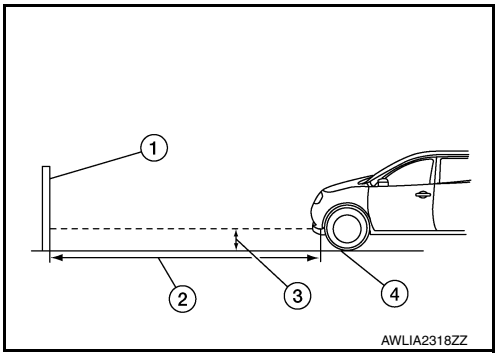
Aiming Chart



1. Vertical center line of fog lamp (LH)
2. Lamp center above ground
3. Fog lamp high intensity area (LH)
4. Vertical center line of fog lamp (RH)
5. Vertical center axis
A. 100mm (4in)

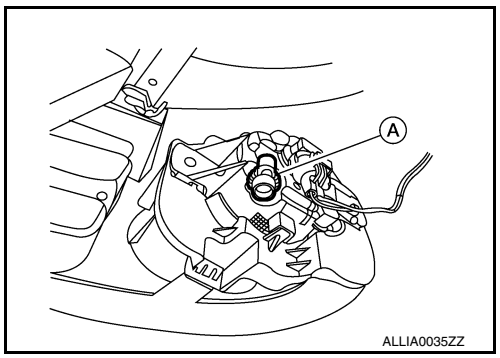
NOTE:
- (LH) Fog lamp aiming specifications shown, (RH) similar.
- Check the following conditions before performing the aiming adjustment.
- Keep all tires inflated to correct pressure.
- Place vehicle on level ground.
- See that vehicle is unloaded (except for full levels of coolant, engine oil and fuel, and spare tire, jack, and tools). Have the driver or equivalent weight placed in driver seat.
- When performing adjustment, if necessary, cover the headlamps and opposite fog lamp.

1. Set the distance between the screen and the center of the fog lamp lens as shown.
   (1) Aiming screen or a matte white surface
   (2) 7.62 m (25 ft)
   (3) Floor to center of fog lamp lens
   (4) Floor



2. Turn front fog lamps ON.

3. Access adjusting screw (A) from underneath front bumper fascia. Adjust front fog lamps using adjusting screw so that the top edge of the high intensity zone is at the fog lamp centers above ground.

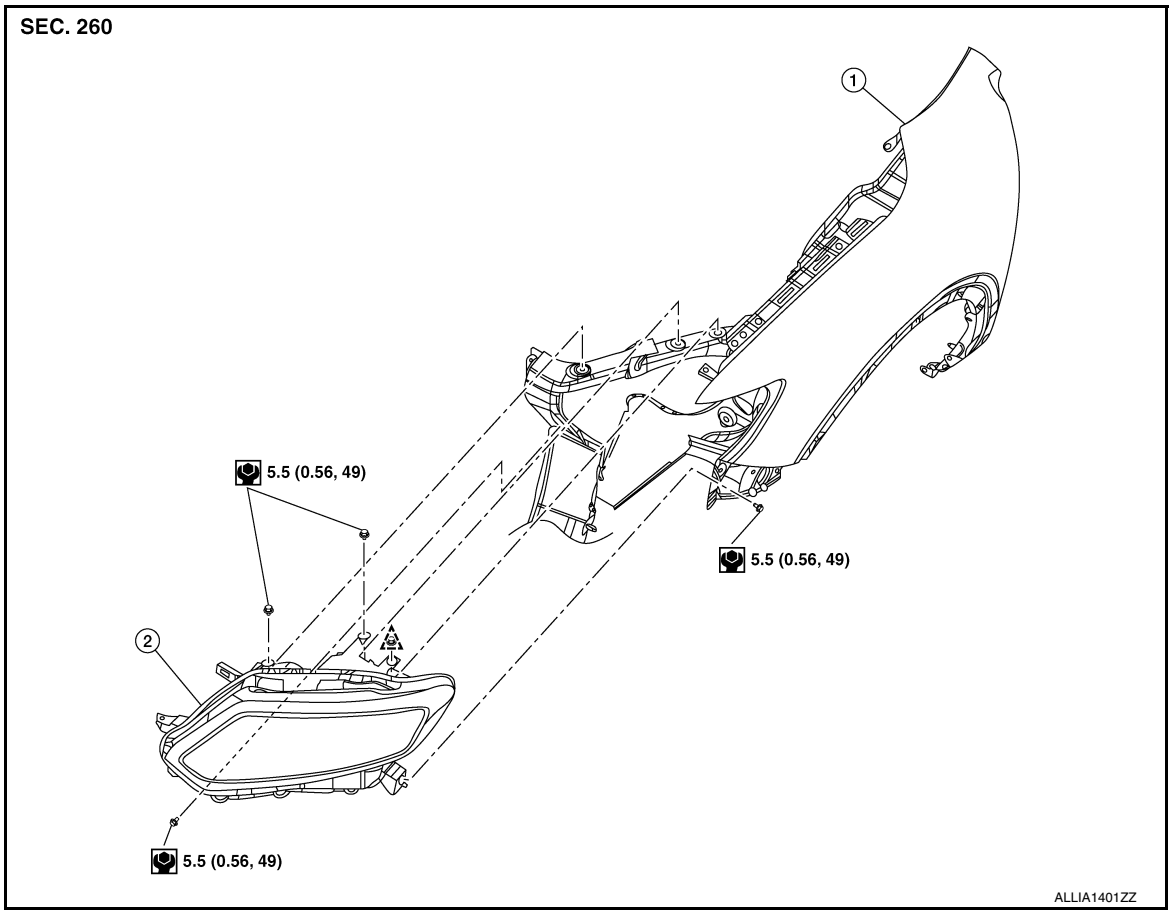


REMOVAL AND INSTALLATION

FRONT COMBINATION LAMP

Exploded View

INFOID:0000000010247825



1. Front fender
2. Front combination lamp
Clip

Removal and Installation

INFOID:0000000010247826

REMOVAL

1. Remove front bumper fascia. Refer to EXT-17, "Removal and Installation".
2. Remove front combination lamp bolts and clip.
3. Pull front combination lamp forward.
4. Disconnect the harness connectors from the front combination lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

NOTE:

After installation, perform headlamp aiming adjustment. Refer to EXL-114, "Inspection".

Bulb Replacement

INFOID:0000000010247827

HEADLAMP (LOW BEAM) BULB

The headlamp (low beam) bulb is not serviced separately. Refer to EXL-119, "Removal and Installation".

HEADLAMP (HIGH BEAM) BULB

The headlamp (high beam) bulb is not serviced separately. Refer to EXL-119, "Removal and Installation".

PARKING (SIDE MARKER) LAMP BULB

The parking lamp (side marker) bulb is not serviced separately. Refer to EXL-119, "Removal and Installation".

TURN SIGNAL LAMP BULB

Removal

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

Installation

Installation is in the reverse order of removal.

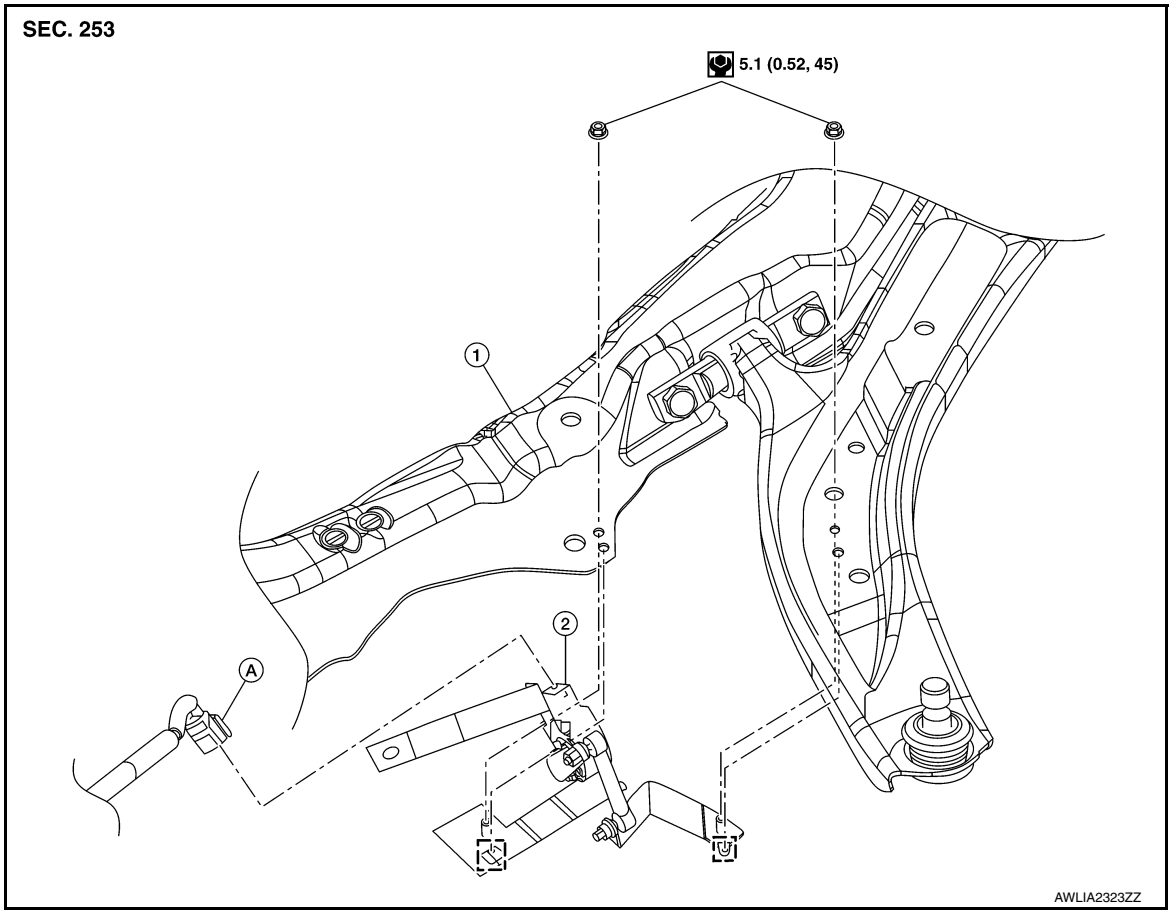
CAUTION:

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

HEIGHT SENSOR

Exploded View

INFOID:0000000010353869



1. Front suspension member
2. Front height sensor
A. Harness connector

Locator

Removal and Installation - Front Height Sensor

INFOID:0000000010335195

REMOVAL

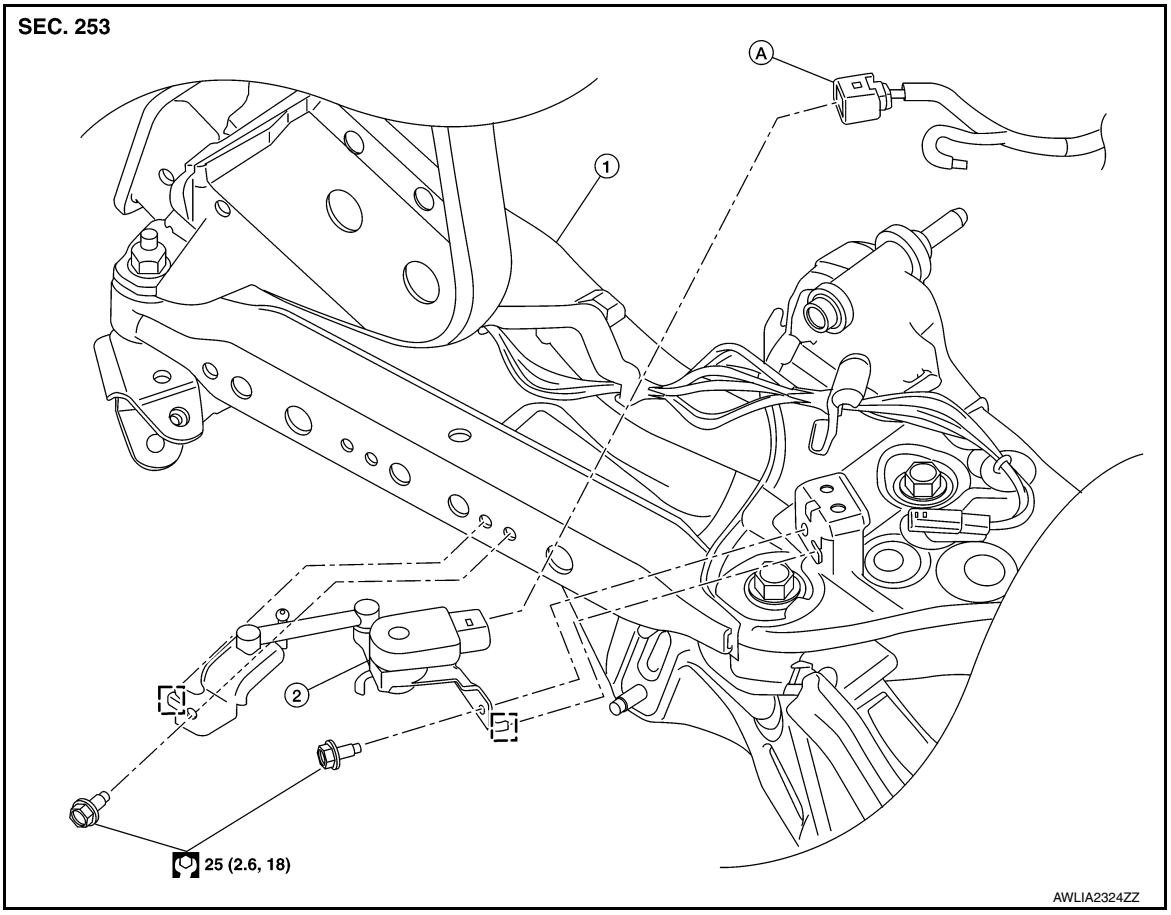
1. Disconnect the harness connector from the front height sensor.
2. Remove the nuts and the front height sensor.

INSTALLATION

Installation is in the reverse order of removal.
After installation, perform height sensor initialization. Refer to EXL-222, "SENSOR INITIALIZE : Description".

Exploded View

INFOID:0000000010353870



1. Rear suspension member
2. Rear height sensor
A. Harness connector

Locator

Removal and Installation - Rear Height Sensor

INFOID:0000000010335196

REMOVAL

1. Disconnect the harness connector from the rear height sensor.
2. Remove the bolts and rear height sensor.

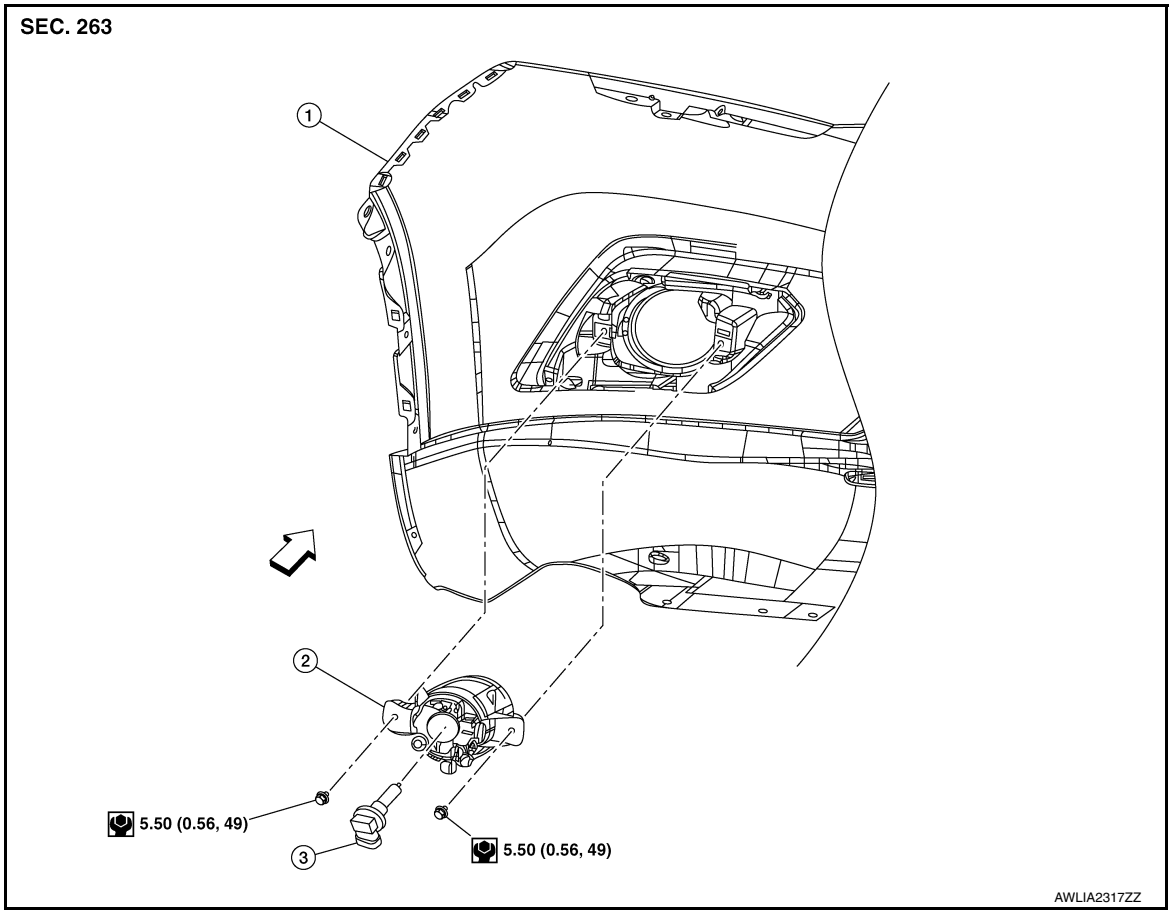
INSTALLATION

Installation is in the reverse order of removal.
After installation, perform height sensor initialization. Refer to EXL-222, "SENSOR INITIALIZE : Description".

FOG LAMP

Exploded View

INFOID:0000000010247829



1. Front bumper fascia
2. Fog lamp
3. Fog lamp bulb

⇦ Front

Removal and Installation

INFOID:0000000010247830

REMOVAL

1. Partially remove front fender protector. Refer to EXT-28, "FENDER PROTECTOR : Exploded View".
2. Disconnect the harness connector from the fog lamp.
3. Remove fog lamp bolts and fog lamp.

INSTALLATION

Installation in the reverse order of removal.

NOTE:

After installation, perform fog lamp aiming adjustment. Refer to EXL-117, "Aiming Adjustment Procedure".

Bulb Replacement

INFOID:0000000010247831

WARNING:

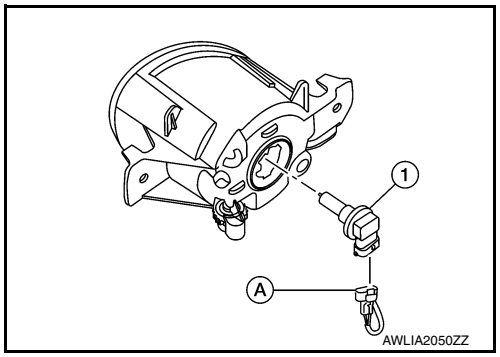
Do not touch bulb by hand while it is lit or right after being turned off. Burning may result.

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 front fender protector. Refer to EXT-28, "FENDER PROTECTOR : Exploded View".
2. Disconnect the harness connector from the fog lamp (A).
3. Rotate bulb (1) counterclockwise and remove.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

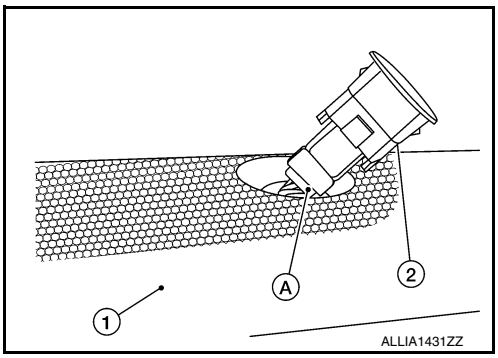
OPTICAL SENSOR

Removal and Installation

INFOID:0000000010335202

REMOVAL

1. Release the optical sensor (2) from defroster grille (1) using a suitable tool.
2. Disconnect the harness connector (A) from the optical sensor (2) and remove.



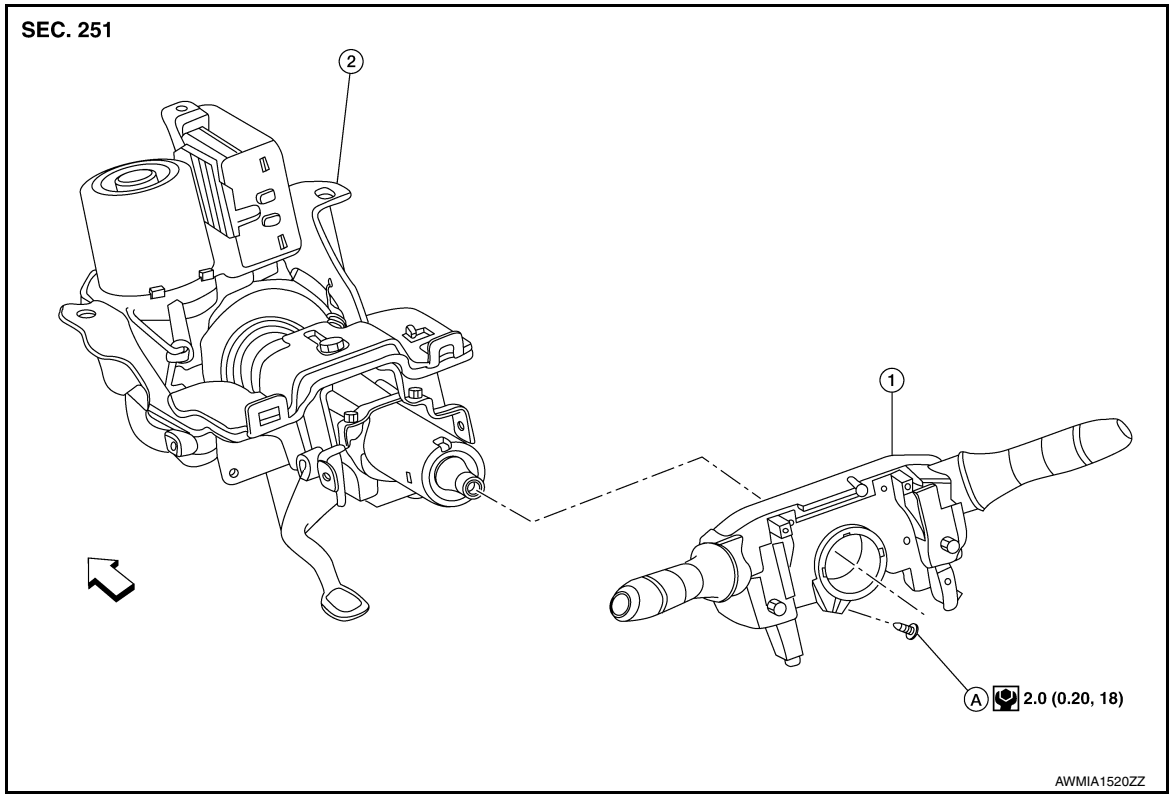
INSTALLATION

Installation is in the reverse order of removal.

COMBINATION SWITCH

Exploded View

INFOID:0000000010351324



1. Combination switch
2. Steering column
A. Screw

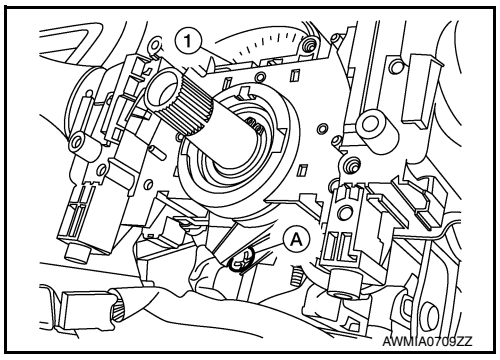
⇦ Front

Removal and Installation

INFOID:0000000010351325

REMOVAL

1. Remove the steering angle sensor. Refer to BRC-139, "Removal and Installation".
2. Disconnect harness connector from combination switch.
3. Remove screw (A) and combination switch (1).



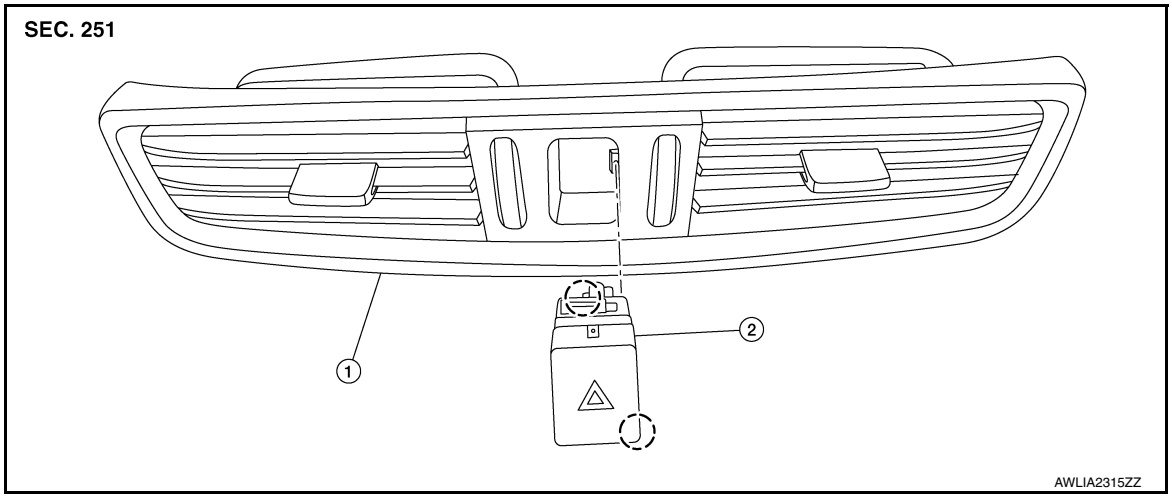
INSTALLATION

Installation is in the reverse order of removal.

HAZARD SWITCH

Exploded View

INFOID:0000000010247834



1. Center ventilator grille
2. Hazard switch
3. Pawl

Removal and Installation

INFOID:0000000010247835

REMOVAL

1. Remove center ventilator grille. Refer to VTL-13, "CENTER VENTILATOR GRILLE : Removal and Installation".
2. Release the pawls and remove the hazard switch.

INSTALLATION

Installation is in the reverse order of removal.

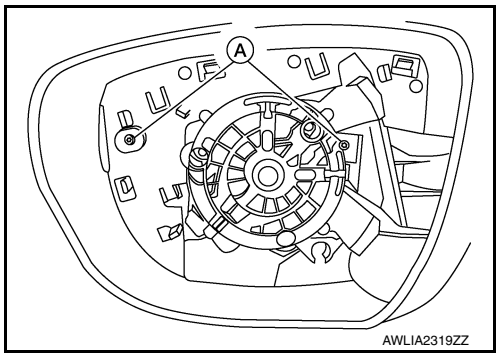
SIDE TURN SIGNAL LAMP

Removal and Installation

INFOID:0000000010365194

REMOVAL

1. Remove door mirror rear finisher. Refer to MIR-25, "Removal and Installation".
2. Remove door mirror glass. Refer to MIR-24, "Removal and Installation".
3. Remove the screws (A) and reposition side turn signal lamp.



4. Disconnect the harness connector from the side turn signal lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

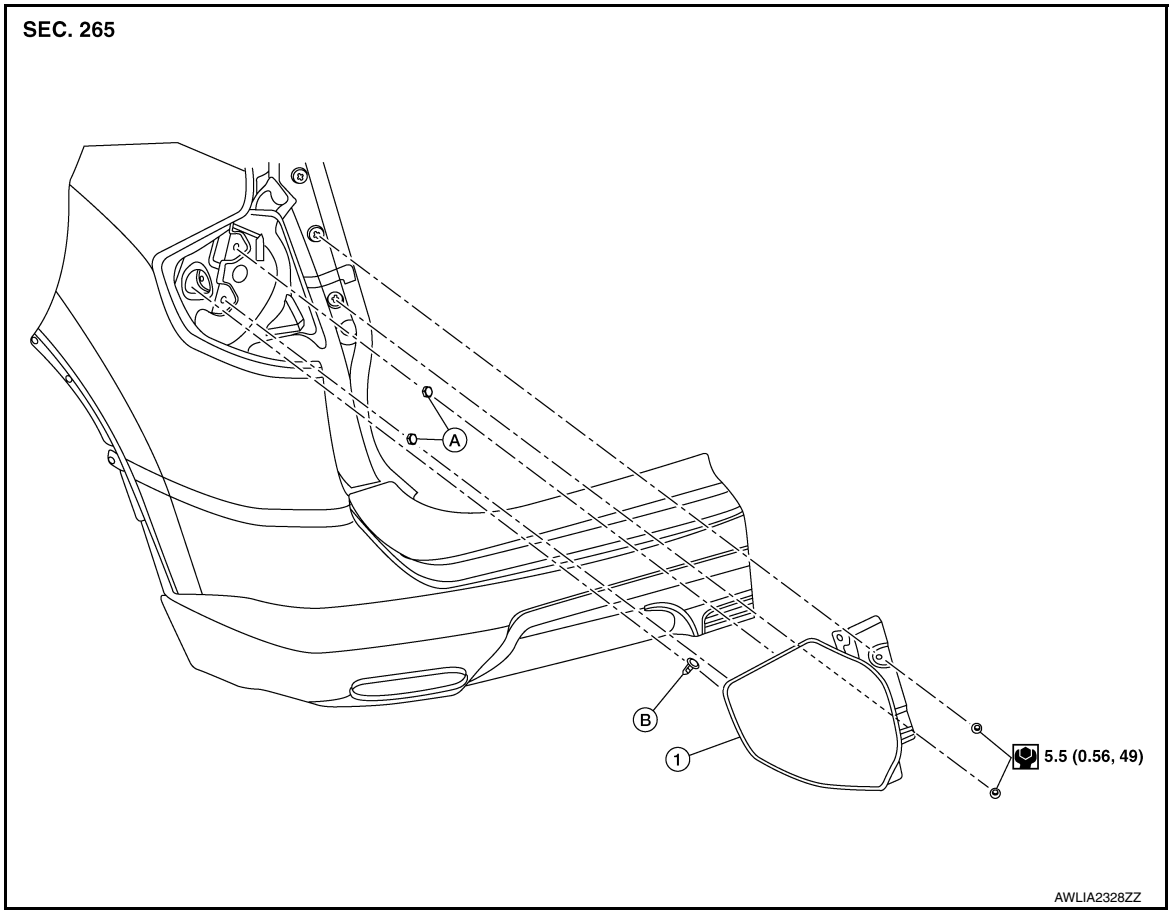
INFOID:0000000010365196

The side turn signal lamp bulb is not serviced separately. Refer to EXL-126, "Removal and Installation".

REAR COMBINATION LAMP

Exploded View

INFOID:0000000010247838



1. Rear combination lamp
A. Grommet
B. Clip

Removal and Installation

INFOID:0000000010247839

REMOVAL

1. Remove side air spoiler. Refer to EXT-48, "Removal and Installation".
2. Remove rear combination lamp bolts.
3. Pull rear combination lamp rearward to release from clip and locators.
4. Disconnect the harness connector from the rear combination lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000010338571

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 LAMP BULB

Removal

1. Remove rear combination lamp. Refer to EXL-127, "Removal and Installation".
2. Rotate stop lamp bulb socket counterclockwise and remove.
3. Remove stop 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.

TAIL LAMP BULB

Removal

1. Remove rear combination lamp. Refer to EXL-127, "Removal and Installation".
2. Rotate tail lamp bulb socket counterclockwise and remove.
3. Remove 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.

TURN SIGNAL LAMP BULB

Removal

1. Remove rear combination lamp. Refer to EXL-127, "Removal and Installation".
2. Rotate turn signal lamp bulb socket counterclockwise and remove.
3. Remove turn signal lamp bulb from bulb socket.

Installation

Installation is in the reverse order of removal.

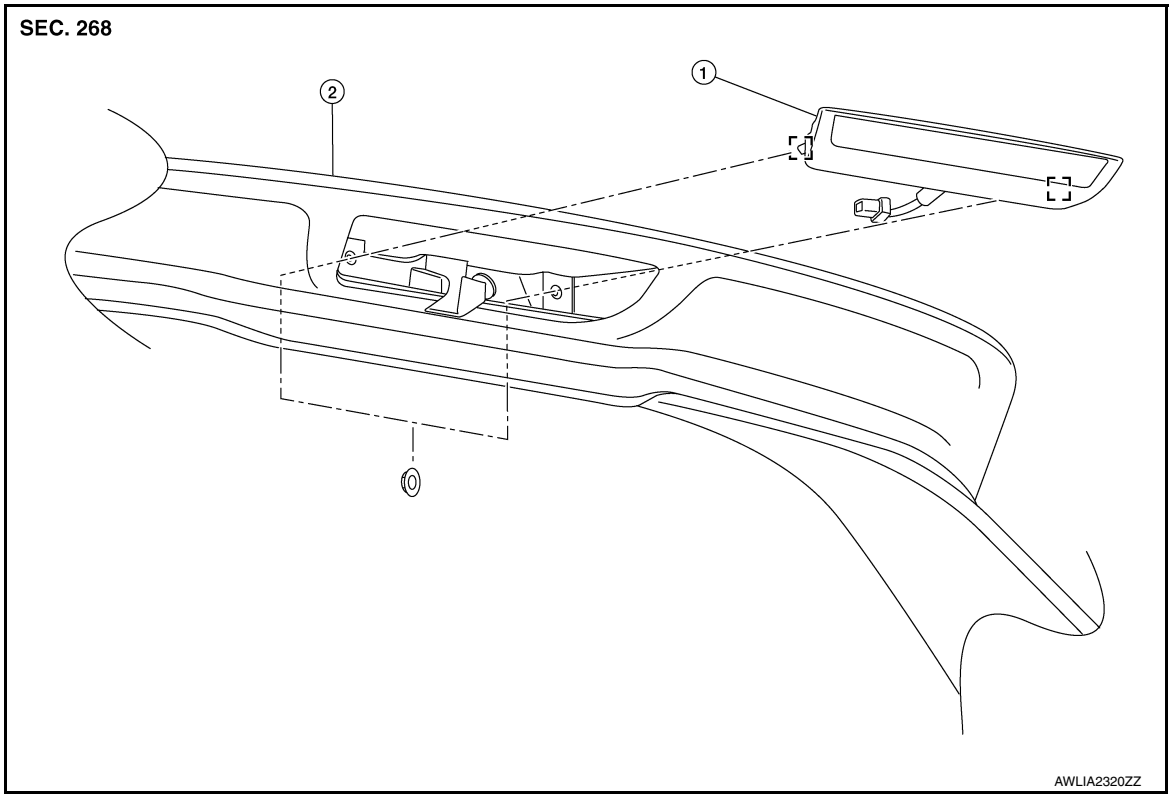
CAUTION:

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

HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:0000000010247841



1. High-mounted stop lamp
2. Back door
Stud

Removal and Installation

INFOID:0000000010247842

REMOVAL

1. Remove access cover using a suitable tool. Refer to INT-38, "Exploded View".
2. Remove high-mounted stop lamp nuts.
3. Disconnect the harness connector from high-mounted stop lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000010338577

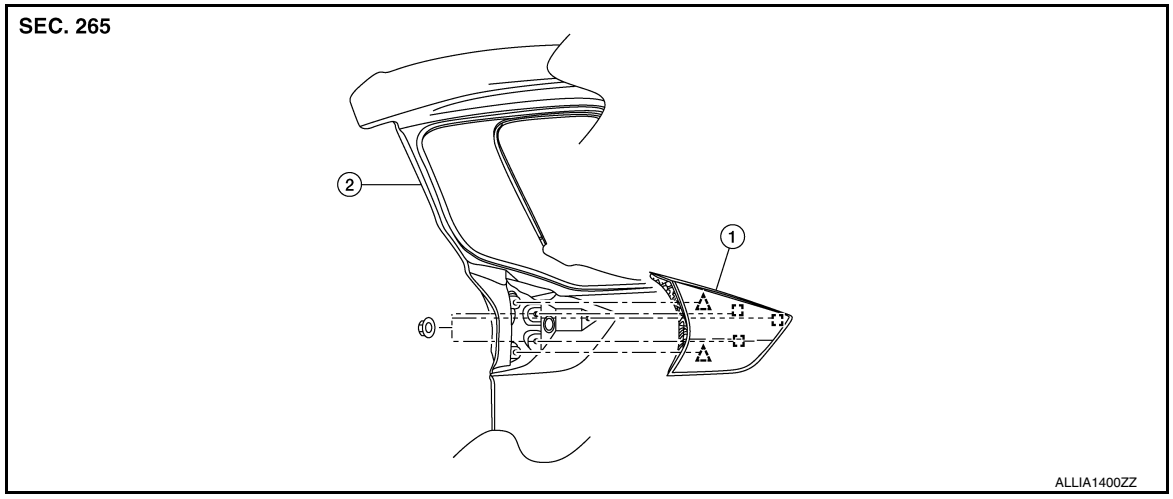
HIGH-MOUNTED STOP LAMP BULB

The high-mounted stop lamp bulb is not serviced separately. Refer to EXL-129, "Removal and Installation".

BACK-UP LAMP ASSEMBLY

Exploded View

INFOID:0000000010247843



1. Back-up lamp assembly
2. Back door
Clip
Stud

Removal and Installation

INFOID:0000000010247844

REMOVAL

1. Remove back door finisher. Refer to INT-38, "Removal and Installation".
2. Remove back-up lamp assembly nuts.
3. Pull back-up lamp assembly rearward, disconnect the harness connector and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000010247845

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.**

TAIL LAMP BULB

Removal

1. Remove back-up lamp assembly. Refer to EXL-130, "Removal and Installation".
2. Rotate tail lamp bulb socket counterclockwise and remove.
3. Remove 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.

BACK-UP LAMP BULB

Removal

1. Remove back-up lamp assembly. Refer to EXL-130, "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.

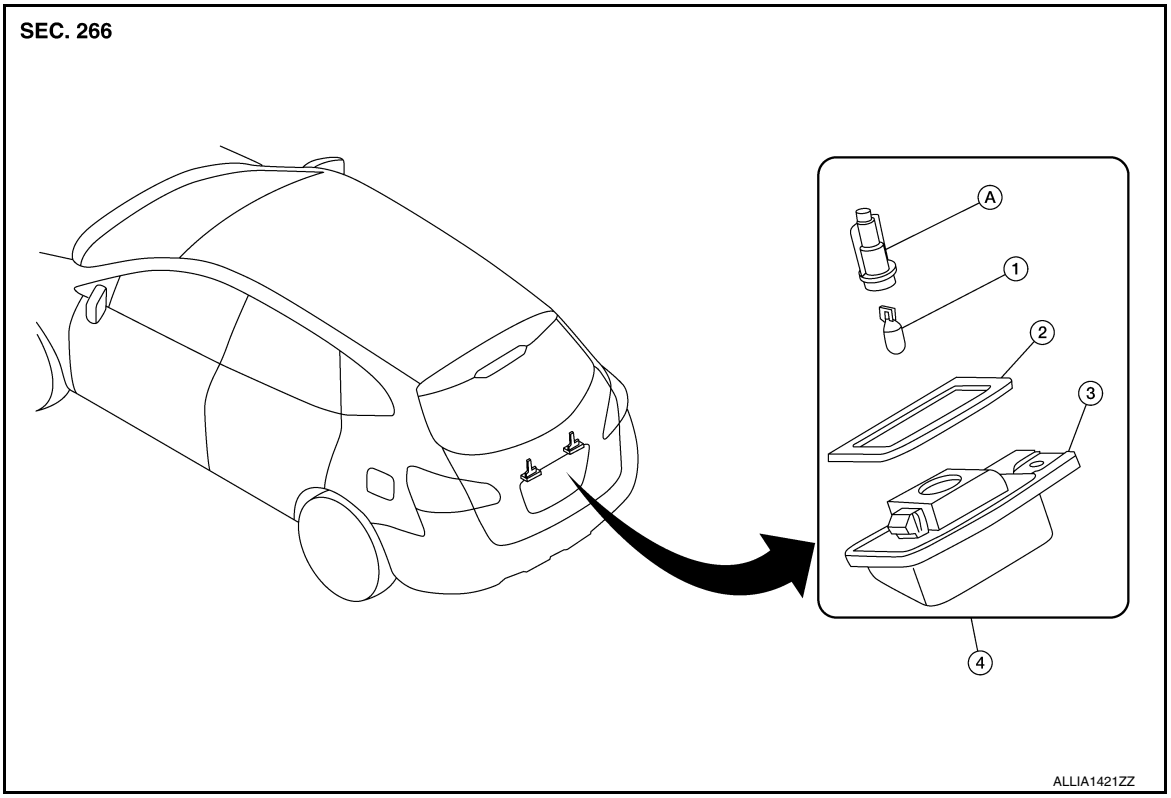
CAUTION:

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

LICENSE PLATE LAMP

Exploded View

INFOID:0000000010365390



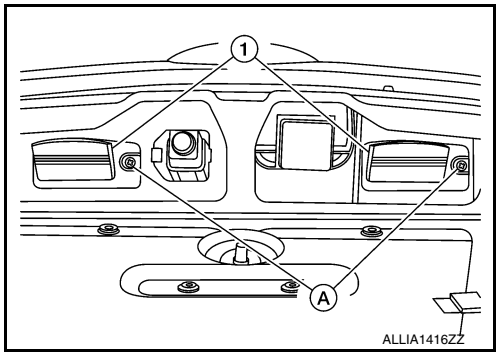
1. License plate lamp bulb
2. License plate lamp seal
3. License plate lamp
4. License plate lamp assembly
A. License plate lamp bulb socket

Removal and Installation

INFOID:0000000010247847

REMOVAL

1. Release the license lamp finisher. Refer to EXT-50, "Exploded View".
2. Remove the screw (A) (LH or RH) and pull license plate lamp (1) (LH or RH) rearward.



3. Disconnect the harness connector from the license plate lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000010247848

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-283, "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.

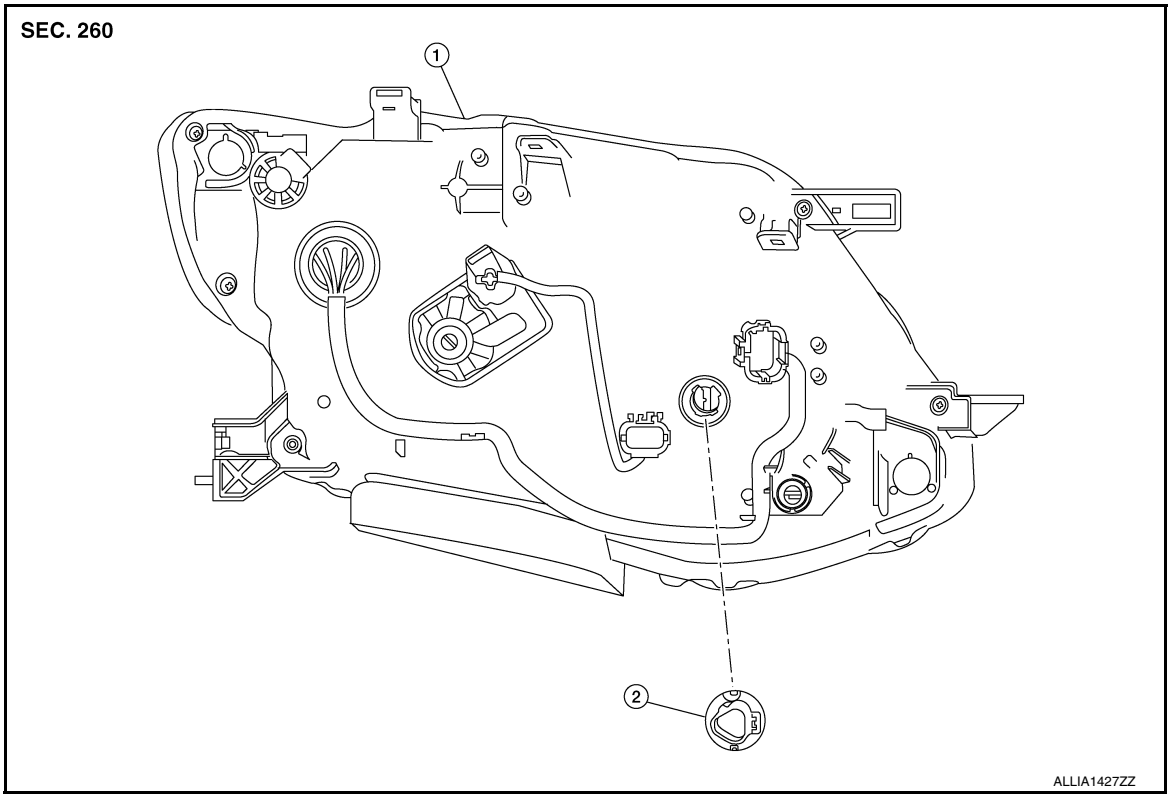
CAUTION:
After installing the bulb, install the bulb socket securely for watertightness.

UNIT DISASSEMBLY AND ASSEMBLY

FRONT COMBINATION LAMP

Exploded View

INFOID:0000000010377947



1. Front combination lamp
2. Turn signal lamp bulb socket

Disassembly and Assembly

INFOID:0000000010377948

DISASSEMBLY

1. Remove front combination lamp. Refer to EXL-268, "Removal and Installation".
2. Rotate the turn signal lamp bulb socket counterclockwise and remove.
3. Remove the turn signal lamp bulb from the bulb socket.

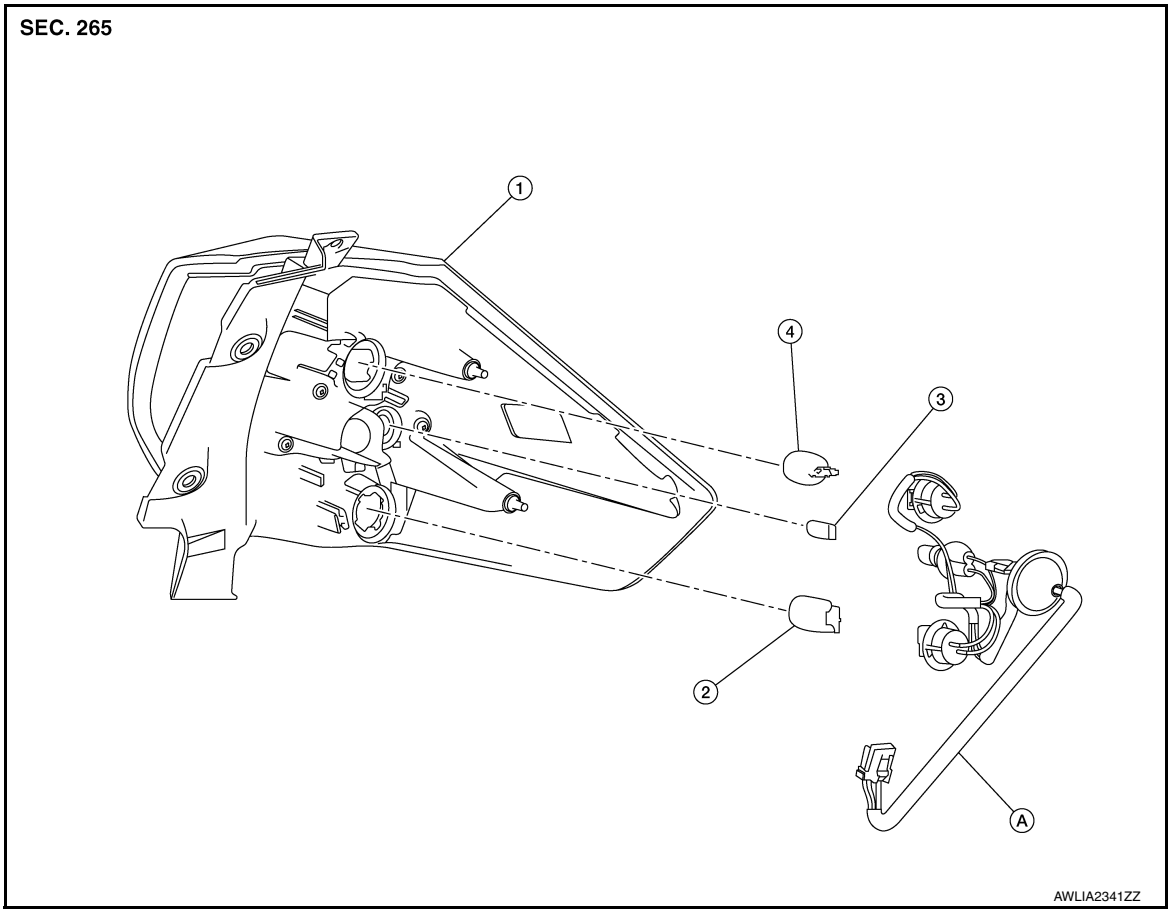
ASSEMBLY

Assembly is in the reverse order of disassembly.

REAR COMBINATION LAMP

Exploded View

INFOID:0000000010377949



1. Rear combination lamp
2. Turn signal lamp bulb
3. Tail lamp bulb
4. Stop lamp bulb
A. Rear combination lamp harness

Disassembly and Assembly

INFOID:0000000010377950

DISASSEMBLY

1. Remove rear combination lamp. Refer to EXL-278, "Removal and Installation".
2. Rotate the stop lamp bulb socket counterclockwise and remove.
3. Remove the stop lamp bulb from the bulb socket.
4. Rotate the tail lamp bulb socket counterclockwise and remove.
5. Remove the tail lamp bulb from the bulb socket.
6. Rotate the turn signal lamp bulb socket counterclockwise and remove.
7. Remove the turn signal 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)

Bulb Specifications

INFOID:0000000010336294

Item		Wattage (W)*
Front combination lamp	High beam	—
	Low beam	—
	Turn signal lamp	28/8
	Parking (side marker) lamp	—
	Daytime running lamp	—
Fog lamp		55
Side turn signal lamp		—
Rear combination lamp	Stop lamp	21
	Tail lamp	5
	Turn signal lamp	21
Back-up lamp	Tail lamp	5
	Back-up lamp	16
License plate lamp		5
High-mounted stop lamp		—

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