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PRECAUTION

PRECAUTIONS

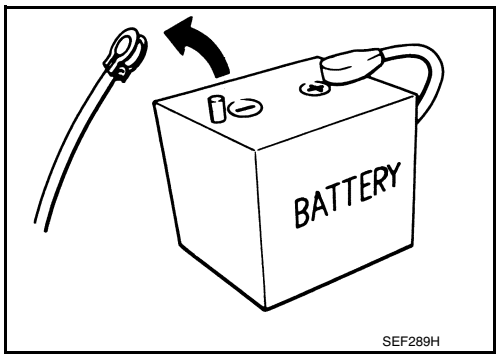
Precautions for Removing Battery Terminal

INFOID:0000000013549104

When disconnecting the battery terminal, pay attention to the following.

- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

BR08DE	: 4 minutes	YD25DDTi	: 2 minutes
D4D engine	: 20 minutes	YS23DDT	: 4 minutes
HRA2DDT	: 12 minutes	YS23DDTT	: 4 minutes
K9K engine	: 4 minutes	ZD30DDTi	: 60 seconds
M9R engine	: 4 minutes	ZD30DDTT	: 60 seconds
R9M engine	: 4 minutes		
V9X engine	: 4 minutes		



NOTE:
ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.

NOTE:
- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
  - Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
  - Driving for 30 minutes or more on a steep slope.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:
If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

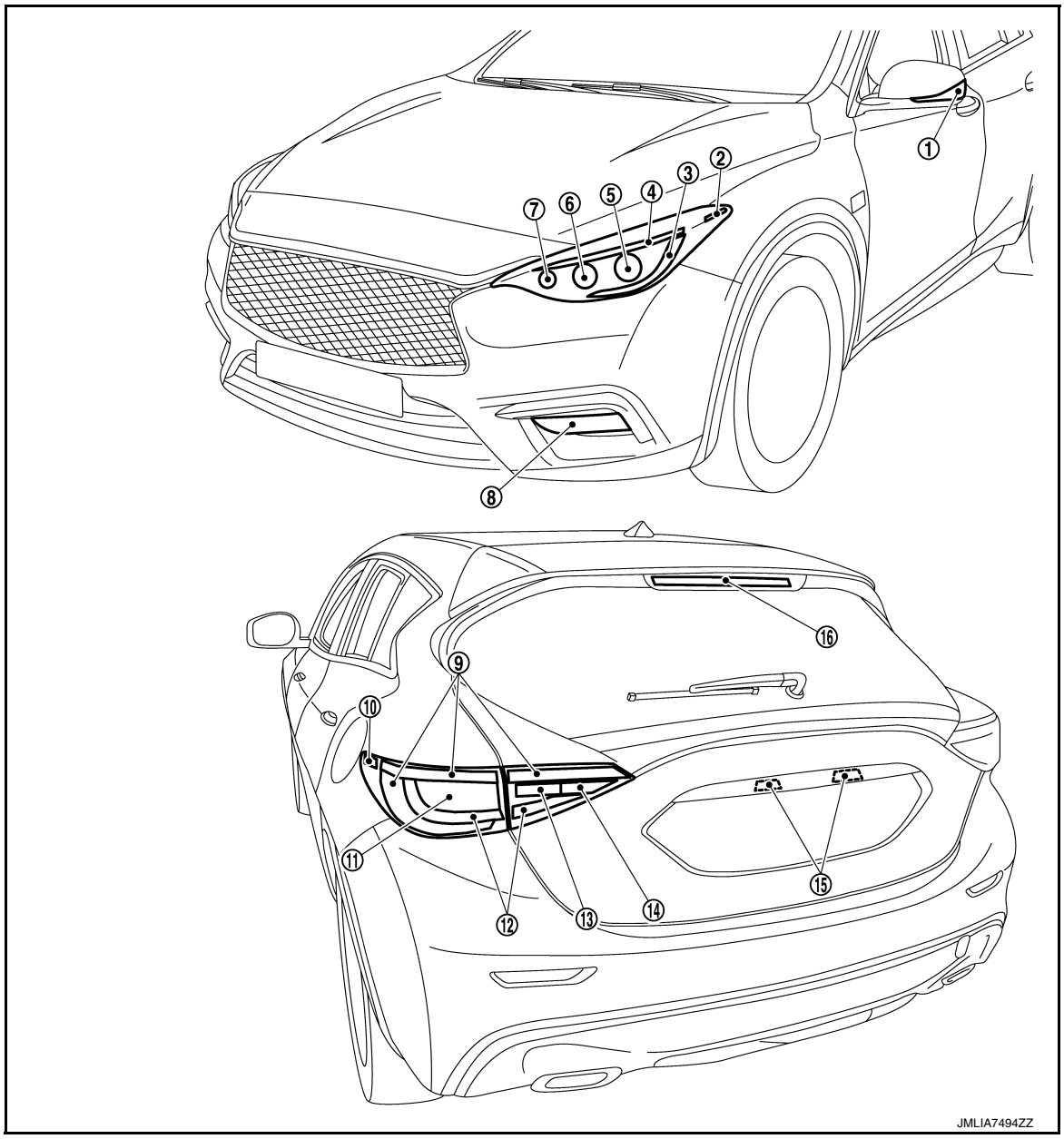
NOTE:
The removal of 12V battery may cause a DTC detection error.

SYSTEM DESCRIPTION

COMPONENT PARTS

Exterior Lamp Appearance

INFOID:0000000013549105



① Side turn signal lamp	② Front side marker lamp	③ Daytime running light/Parking lamp/ Position lamp
④ Daytime running light/Parking lamp/ Position lamp/Front turn signal lamp	⑤ Headlamp (Hi/Lo)	⑥ Headlamp (Hi)
⑦ Cornering lamp	⑧ Front fog lamp	⑨ Tail lamp
⑩ Rear side marker lamp	⑪ Stop lamp/Rear turn signal lamp	⑫ Rear turn signal lamp
⑬ Back-up lamp	⑭ Rear fog lamp (driver side only)	⑮ License plate lamp
⑯ High-mounted stop lamp		

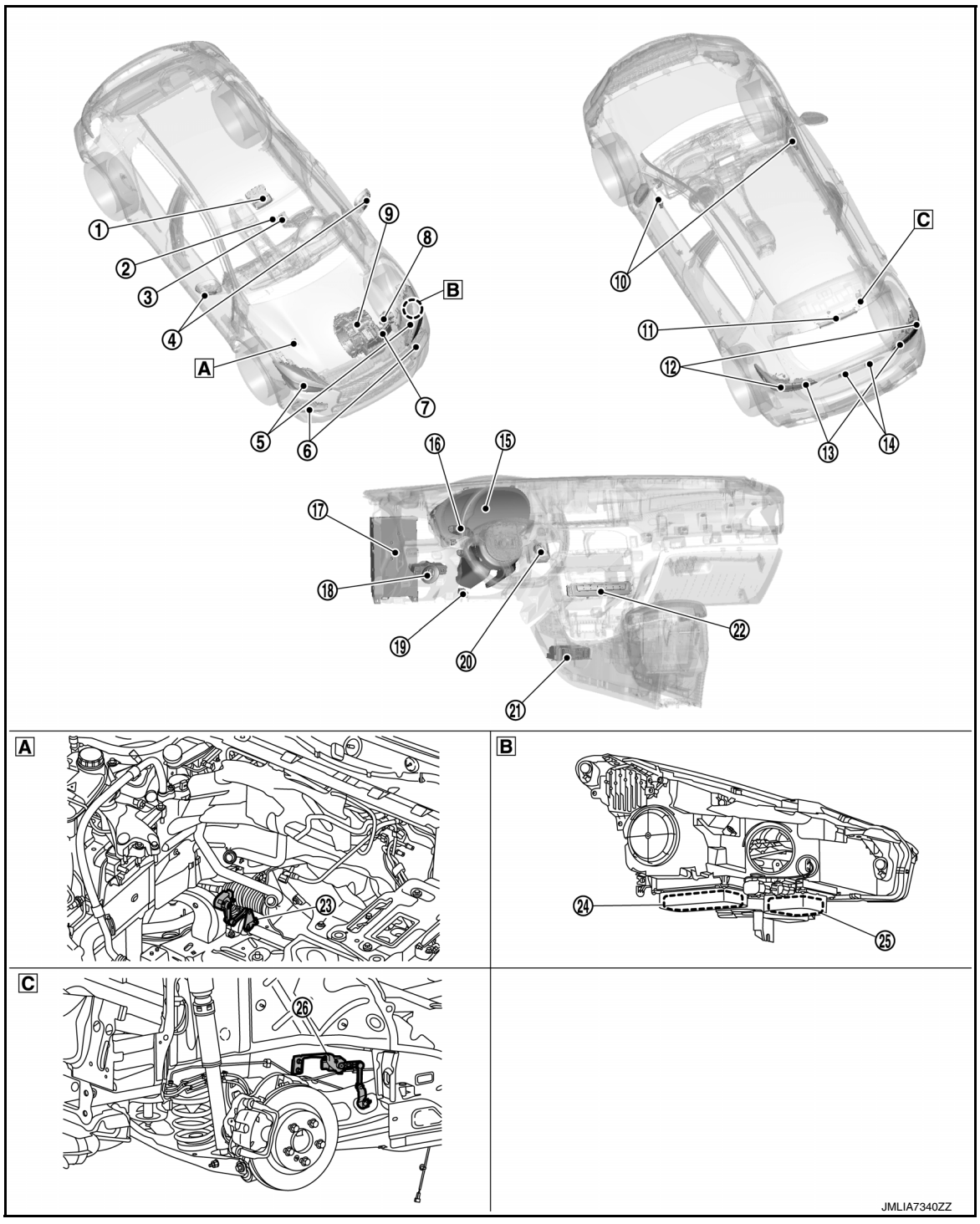
Bulb Specifications

INFOID:0000000013688719

Item		Type	Wattage (W)
Front combination lamp	Headlamp (Hi/Lo)	LED	—
	Headlamp (Hi)		
	Parking lamp/daytime running light Position lamp		
	Parking lamp/daytime running light Position lamp/Front turn signal lamp		
	Cornering lamp		
	Front side marker lamp		
Front fog lamp		LED	—
Side turn signal lamp (built in door mirror)		LED	—
Rear combination lamp (body side)	Tail lamp	LED	—
	Stop lamp/Rear turn signal lamp		
	Rear turn signal lamp		
	Rear side marker lamp		
Rear combination lamp (back door side)	Tail lamp	LED	—
	Back-up lamp		
	Rear turn signal lamp		
	Rear fog lamp (driver side only)		
License plate lamp		LED	—
High-mounted stop lamp		LED	—

Component Parts Location

INFOID:0000000013549107



A Engine room RH (lower side) B Front combination lamp (back) C Rear axle housing RH

No.	Component	Function
①	Overhead control panel control unit	• Overhead control panel control unit transmits light & rain sensor signal to BCM via roof LIN communication. • Refer to INL-7, "Component Parts Location" for detailed installation location.
②	Light & rain sensor	Refer to EXL-20, "Light & Rain Sensor".

No.	Component		Function
③	Front camera unit		• Judges the vehicle status from each signal in order to control the high beam assist control. • Refer to DAS-9, "Component Parts Location" for detailed installation location.
④	Door mirror	Side turn signal lamp	Refer to EXL-14, "Exterior Lamp Appearance" and EXL-15, "Bulb Specifications".
⑤	Front combination lamp	Headlamp (HI)	Refer to EXL-14, "Exterior Lamp Appearance" and EXL-15, "Bulb Specifications".
		Headlamp (LO)	
		Daytime running light (upper side)/ Parking lamp (upper side)/Position lamp (upper side)	
		Daytime running light (lower side)/ Parking lamp (lower side)/Position lamp (lower side)	
		Front turn signal lamp	
		Front side marker lamp	
		Swivel actuator	Refer to EXL-19, "FRONT COMBINATION LAMP : Swivel Actuator".
		Headlamp aiming motor	Refer to EXL-19, "FRONT COMBINATION LAMP : Headlamp Aiming Motor".
⑥	Front fog lamp		Refer to EXL-14, "Exterior Lamp Appearance" and EXL-15, "Bulb Specifications".
⑦	ECM		• ECM transmits engine status signal to BCM via CAN communication • Refer to EC-27, "Component Parts Location" for detailed installation location.
⑧	Electronic stability program control unit		• Electronic stability program control unit transmits vehicle speed signal and yaw angle signal to BCM via CAN communication. • Electronic stability program control unit receives brake light switch signal. And send to BCM via CAN communication. • Refer to BRC-29, "Component Parts Location" for detailed installation location.
⑨	Transaxle assembly	TCM	• TCM transmits shift position signal to electronic ignition switch control unit via CAN communication. • Refer to TM-17, "Component Parts Location" for detailed installation location.
⑩	Front door control unit		• Front door control unit receives turn indicator signal via CAN communication. And supplies voltage to the side turn signal lamp. • Refer to DLK-10, "DOOR LOCK SYSTEM : Component Parts Location" for detailed installation location.
⑪	Hi-mounted stop lamp		Refer to EXL-14, "Exterior Lamp Appearance" and EXL-15, "Bulb Specifications".
⑫	Rear combination lamp (body side)	Tail lamp	Refer to EXL-14, "Exterior Lamp Appearance" and EXL-15, "Bulb Specifications".
		Stop lamp	
		Rear turn signal lamp	
		Rear side marker lamp	
⑬	Rear combination lamp (back door side)	Tail lamp	Refer to EXL-14, "Exterior Lamp Appearance" and EXL-15, "Bulb Specifications".
		Rear turn signal lamp	
		Back-up lamp	
⑭	License plate lamp		Refer to EXL-14, "Exterior Lamp Appearance" and EXL-15, "Bulb Specifications".

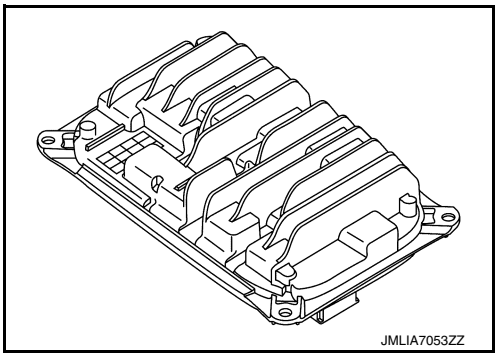
No.	Component		Function
⑮	Combination meter		• Turns the indicator lamp and warning (information display/ buzzer) ON/OFF according to the request from each control unit via CAN communication. • Blinks the turn signal indicator lamp and outputs the turn signal operating sound with integrated buzzer according to the request from BCM via CAN communication.
⑯	Steering column control module	Combination switch	• Steering column control module transmits steering angle signal to BCM via CAN communication. • Refer to EXL-20, "Combination Switch".
⑰	BCM		• Exterior lamp ON/OFF is judged from each signal, and then a request is transmitted to headlamp control unit. • It also transmits a request to the combination meter (CAN communication) to turn indicator lamp and warning (information display/buzzer) ON/OFF. • Blinks the turn signal lamp and hazard warning lamp according to the each switch condition. • Requests the turn signal indicator lamp blink to the combination meter via CAN communication. • Requests the turn signal operating sound ON to the combination meter via CAN communication. • Supplies voltage to the turn signal lamp (rear), front fog lamp, rear fog lamp, tail lamp, license plate lamp, back-up lamp, stop lamp and hi-mounted stop lamp. • Refer to BCS-8, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
⑱	Rotary light switch		Refer to EXL-20, "Rotary Light Switch"
⑲	Brake light switch		• Brake light switch transmits brake light switch signal to electronic stability program control unit. • Refer to BRC-29, "Component Parts Location" for detailed installation location.
⑳	Electronic ignition switch control unit		• Electronic ignition switch control unit receives shift position signal from each control unit via CAN communication. And send reverse signal to BCM via CAN communication • Refer to PCS-5, "Component Parts Location" for detailed installation location.
㉑	Air bag diagnosis sensor unit		• Air bag diagnosis sensor unit transmits car crash information signal to BCM via CAN communication. • Refer to SRC-8, "Component Parts Location" for detailed installation location.
㉒	Upper control panel control unit	Hazard switch	Refer to EXL-21, "Hazard Switch".
㉓	Front height sensor		Refer to EXL-19, "Front Height Sensor".
㉔	Front combination lamp	Headlamp control unit	Refer to EXL-18, "FRONT COMBINATION LAMP : Headlamp Control Unit"
㉕		LED headlamp control module	Refer to EXL-19, "FRONT COMBINATION LAMP : LED Headlamp Control Module"
㉖	Rear height sensor		Refer to EXL-20, "Rear Height Sensor".

FRONT COMBINATION LAMP

FRONT COMBINATION LAMP : Headlamp Control Unit

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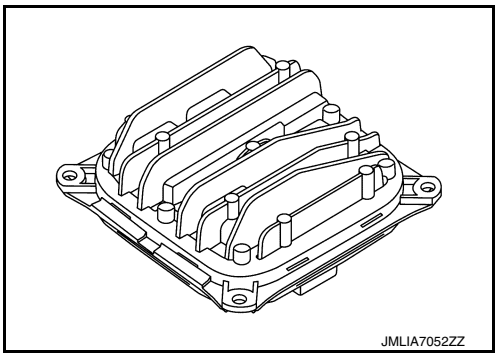
- Headlamp control unit is integrated in the front combination lamp.
- Headlamp control unit receives each signals (via CAN communication) from each control unit. And send each signals to LED headlamp control module (via headlamp LIN communication).
- Headlamp control unit controls the swivel actuator, headlamp aiming motor and each lamps.
- Headlamp control unit LH receives each height sensor signal from each height sensor. And control the headlamp aiming motor.


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FRONT COMBINATION LAMP : LED Headlamp Control Module

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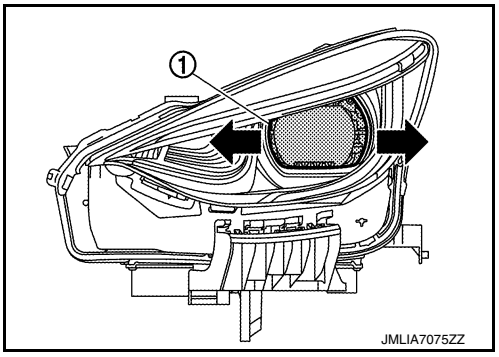
- LED headlamp control module is integrated in the front combination lamp.
- LED headlamp control module receives each signals (via headlamp LIN communication) from headlamp control unit. And control the headlamp (LO/HI).



FRONT COMBINATION LAMP : Swivel Actuator

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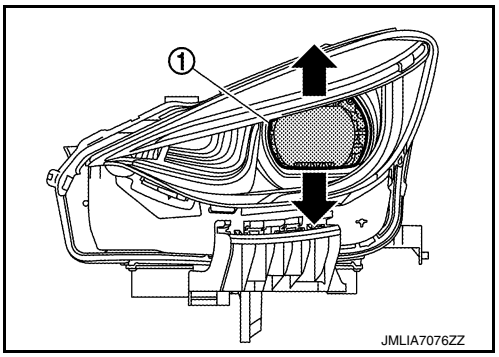
- Swivel actuator is installed in the front combination lamp.
- Swivel actuator moves the headlamp light axis ① leftward and rightward according to input drive signal from headlamp control unit.



FRONT COMBINATION LAMP : Headlamp Aiming Motor

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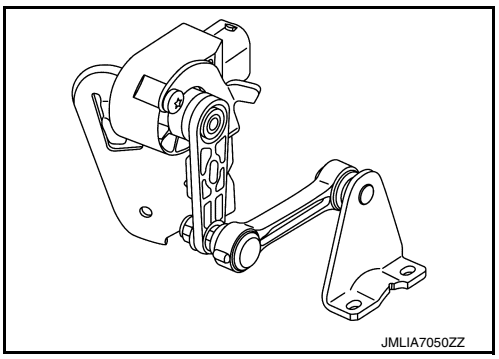
- Headlamp aiming motor is integrated in the front combination lamp.
- Headlamp aiming motor adjusts the headlamp light axis ① upward and downward according to input drive signal from headlamp control unit.



Front Height Sensor

INFOID:0000000013549112

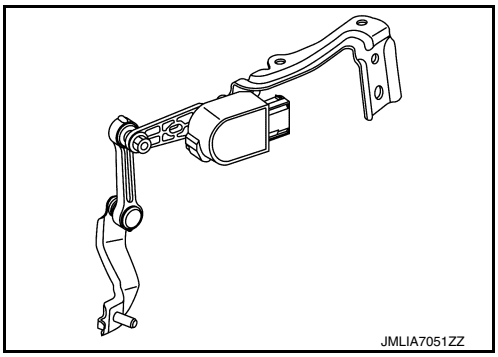
- Front height sensor is installed in front suspension member.
- Front height sensor detects the vehicle front height deviation with sensor lever, and transmits the detected value as a front height sensor signal to headlamp control unit.



Rear Height Sensor

INFOID:0000000013549113

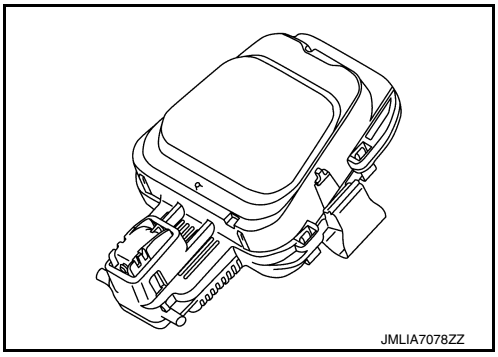
- Rear height sensor is installed in rear side member.
- Rear height sensor detects the vehicle rear height deviation with sensor lever, and transmits the detected value as a rear height sensor signal to headlamp control unit.


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Light & Rain Sensor

INFOID:0000000013549114

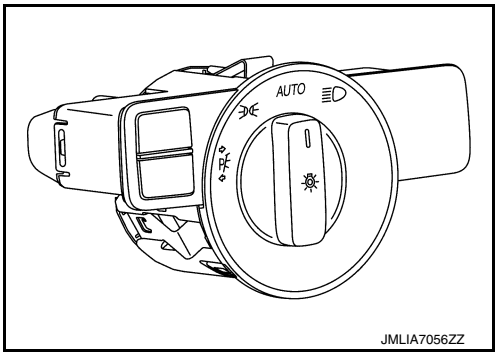
- The light & rain sensor detects the outside ambient light level, forward light level and sensor conditions.
- Based on ambient light level (day/night detection), forward light level (tunnel detection) and sensor conditions it judges ON/OFF condition for exterior lamps.
- And it transmits exterior lamp ON/OFF request to the BCM by the roof LIN communication.


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Rotary Light Switch

INFOID:0000000013549115

Rotary light switch integrates light control switch and front fog lamp switch. Input to the each switch signal to BCM.

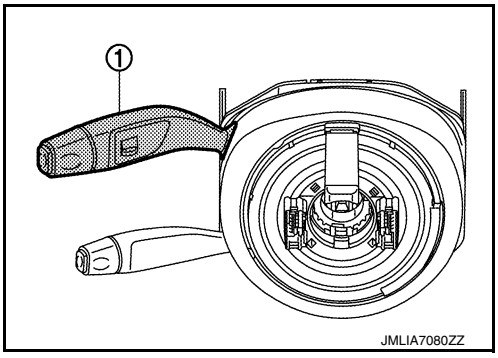


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Combination Switch

INFOID:0000000013549116

Combination switch ① is built in to the steering column control module. Inputs the combination switch condition signal to BCM (via CAN communication).

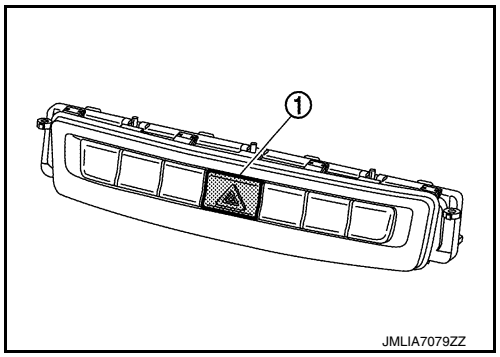


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Hazard Switch

INFOID:0000000013549117

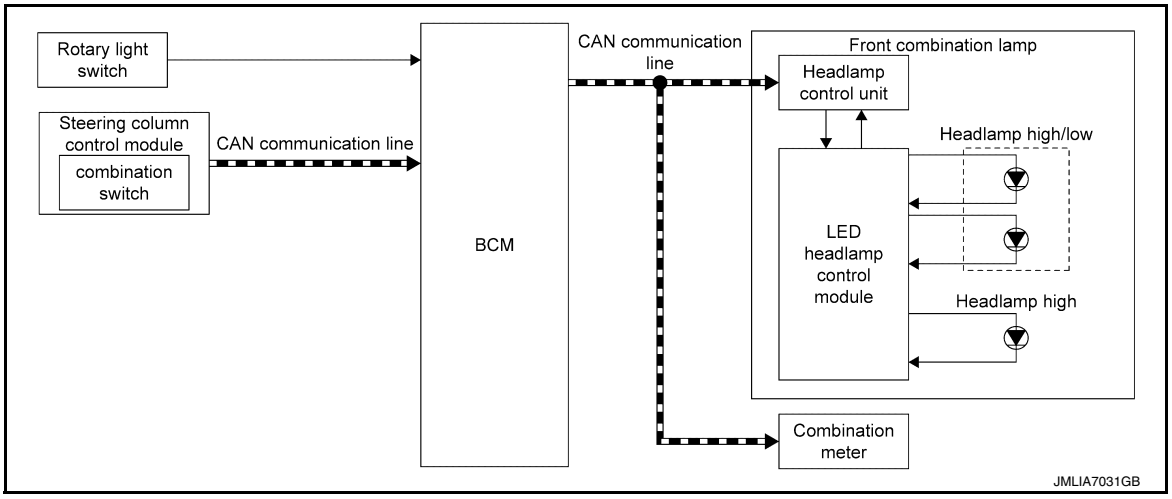
Hazard switch ① is built in to the upper control panel control unit. Inputs the hazard switch ON/OFF signal to BCM (via CAN communication).



SYSTEM
HEADLAMP SYSTEM
HEADLAMP SYSTEM : System Description

INFOID:0000000013549118

SYSTEM DIAGRAM



OUTLINE

Headlamp is controlled by headlamp control function of BCM.

HEADLAMP (LO) OPERATION

- BCM detects the rotary light switch condition.
- BCM transmits the low beam request signal to headlamp control unit and the combination meter via CAN communication.
- Headlamp control unit transmits the low beam signal to LED headlamp control module according to the headlamp (LO) ON condition.

Headlamp (LO) ON condition
- Rotary light switch LO
- Rotary light switch AUTO with the ignition switch ON (Only when the illumination judgment by auto light system is ON. For details, refer to EXL-24, "AUTO LIGHT SYSTEM : System Description".)

- Combination meter turns the dipped beam indicator lamp ON according to the low beam request signal.

HEADLAMP (HI) OPERATION

- BCM detects the rotary light switch condition and combination switch condition (received from steering column control unit via CAN communication).
- BCM transmits the high beam request signal to headlamp control unit and the combination meter via CAN communication.
- Headlamp control unit transmits the high beam signal to LED headlamp control module according to the headlamp (HI) ON condition.

Headlamp (HI) ON condition
- Combination switch HI with the rotary light switch LO
- Combination switch HI with the rotary light switch AUTO and ignition switch ON (Only when the illumination judgment by auto light system is ON and the illumination judgment by high beam assist system is ON. For details, refer to EXL-24, "AUTO LIGHT SYSTEM : System Description".)
- Combination switch PASS

- Combination meter turns the high beam indicator lamp ON according to the high beam request signal.

PASSING OPERATION

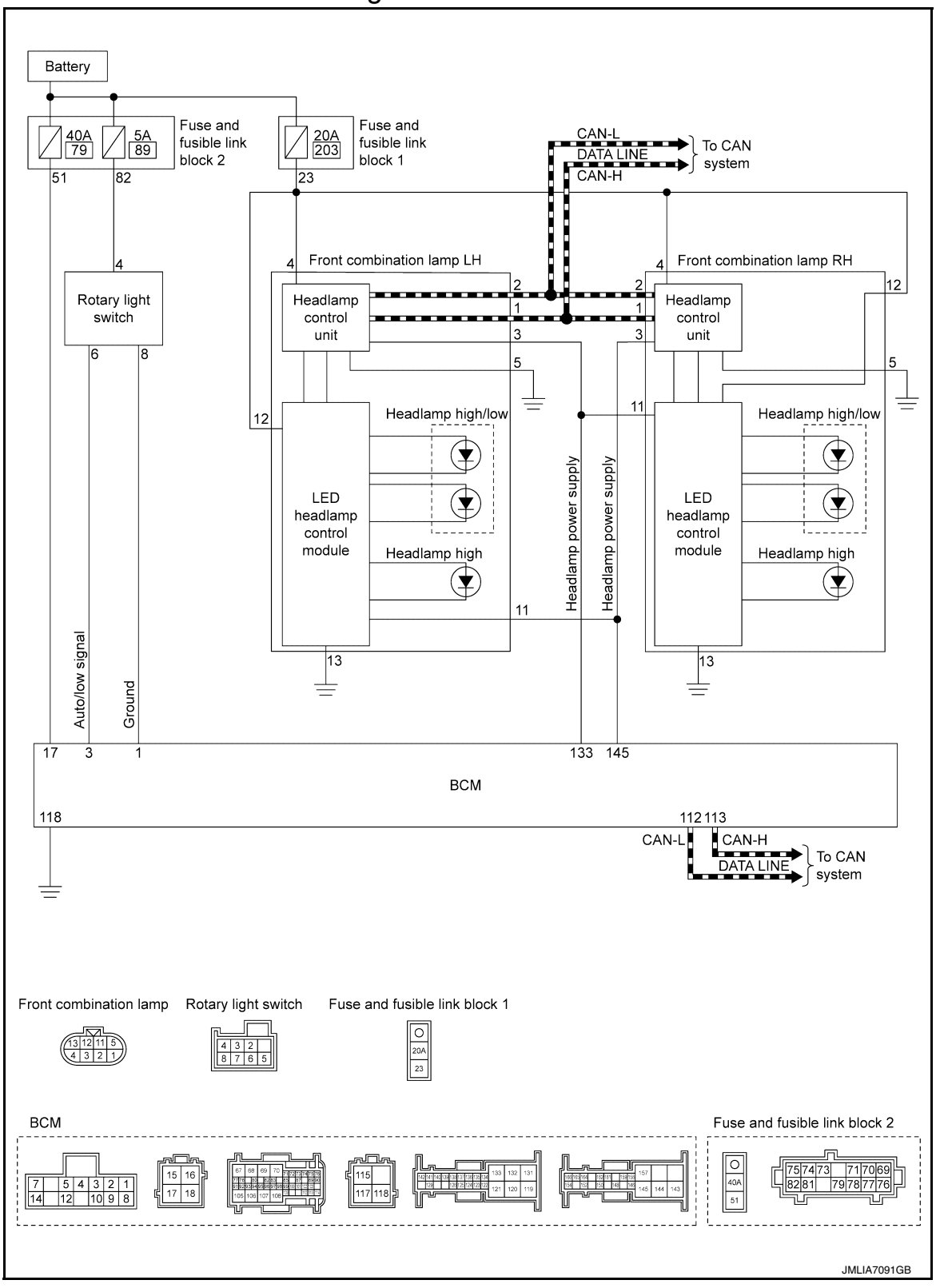
- BCM detects the combination switch condition (received from steering column control unit via CAN communication).
- BCM transmits the high beam request signal to headlamp control unit and the combination meter with CAN communication.
- Headlamp control unit transmits the high beam signal to LED headlamp control module according to the headlamp (HI) ON condition.

Passing ON condition
- Combination switch PASS
• Combination meter turns the high beam indicator lamp ON according to the high beam request signal.

NOTE:
• If passing switch is operated continuously for approximately 30 seconds or more, BCM judges that passing switch is malfunctioning and turns the passing operation OFF.
• When passing switch is operating normally, if the passing switch is returned to the neutral position, passing function becomes operational again.

HEADLAMP SYSTEM : Circuit Diagram

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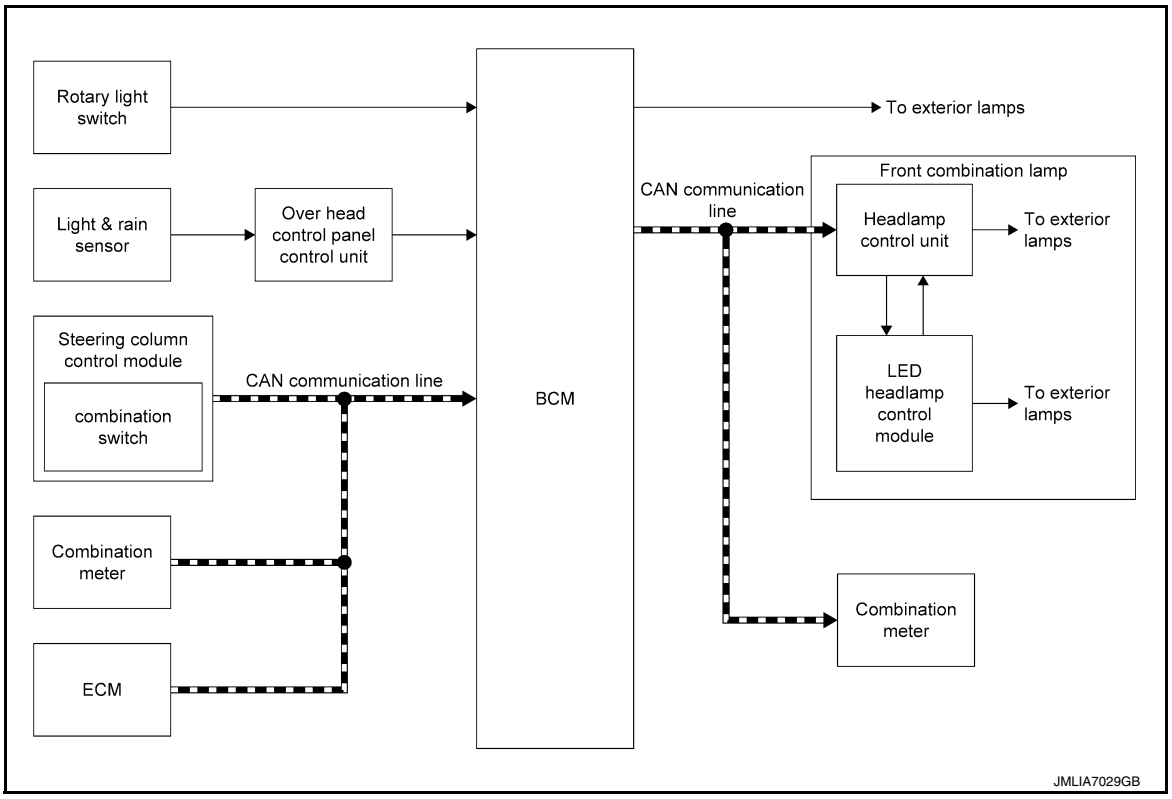


AUTO LIGHT SYSTEM

AUTO LIGHT SYSTEM : System Description

INFOID:0000000013549120

SYSTEM DIAGRAM



OUTLINE

- Auto light system is controlled by auto light function and wiper linked auto lighting function of BCM.
- Auto light system has the auto light function, wiper linked auto lighting function.

- Auto light function automatically turns ON/OFF the exterior lamps*, depending on the outside brightness.
- Wiper linked auto lighting function automatically turns ON/OFF the exterior lamps* when the rotary light switch is in the AUTO position, according to a front wiper operation.

*: Headlamp (LO/HI), front fog lamp, position lamp, license plate lamp, side marker lamp and tail lamp.

NOTE:

- Headlamp (HI) depend on the rotary light switch condition and the illumination judgment of high beam assist system. For details, refer to EXL-26, "HIGH BEAM ASSIST SYSTEM : System Description".
- Front fog lamp depend on the rotary light switch condition.

AUTO LIGHT FUNCTION

Description

- BCM detects rotary light switch condition.
- BCM receives engine status signal from ECM via CAN communication.
- Light & rain sensor converts outside brightness to voltage and transmits the light & rain signal to BCM (via roof LIN communication).
- When ignition switch is turned ON, BCM detects outside brightness from the light & rain sensor signal and judges ON/OFF condition of each exterior lamp, depending on the outside brightness condition.
- BCM transmits each request signal to headlamp control unit and combination meter via CAN communication, according to ON/OFF condition by the auto light function.

WIPER LINKED AUTO LIGHTING FUNCTION

When rotary light switch is AUTO, if wiper operation is performed for 20 seconds or more and wiper operation cycle* is set to 6 seconds or less, the headlamp (LO) illuminates.

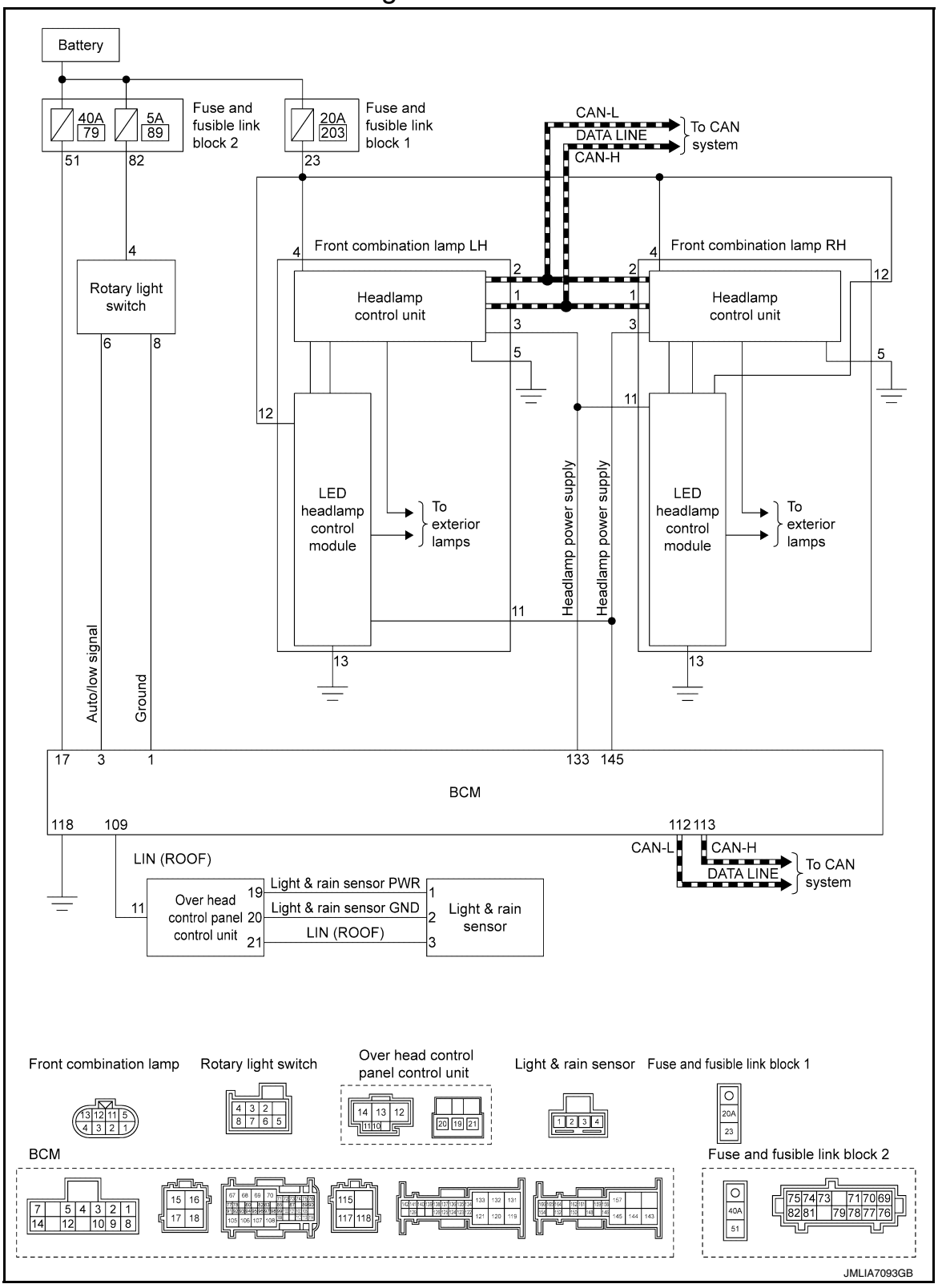
*: Wiper operation cycle is the intermittent time between the start of one wiper operation and the start of the next wiper operation.

NOTE:

When no wiper operation is performed for approximately 60 seconds with wiper linked auto lighting function active, headlamp (LO) turns OFF.

AUTO LIGHT SYSTEM : Circuit Diagram

INFOID:0000000013549121

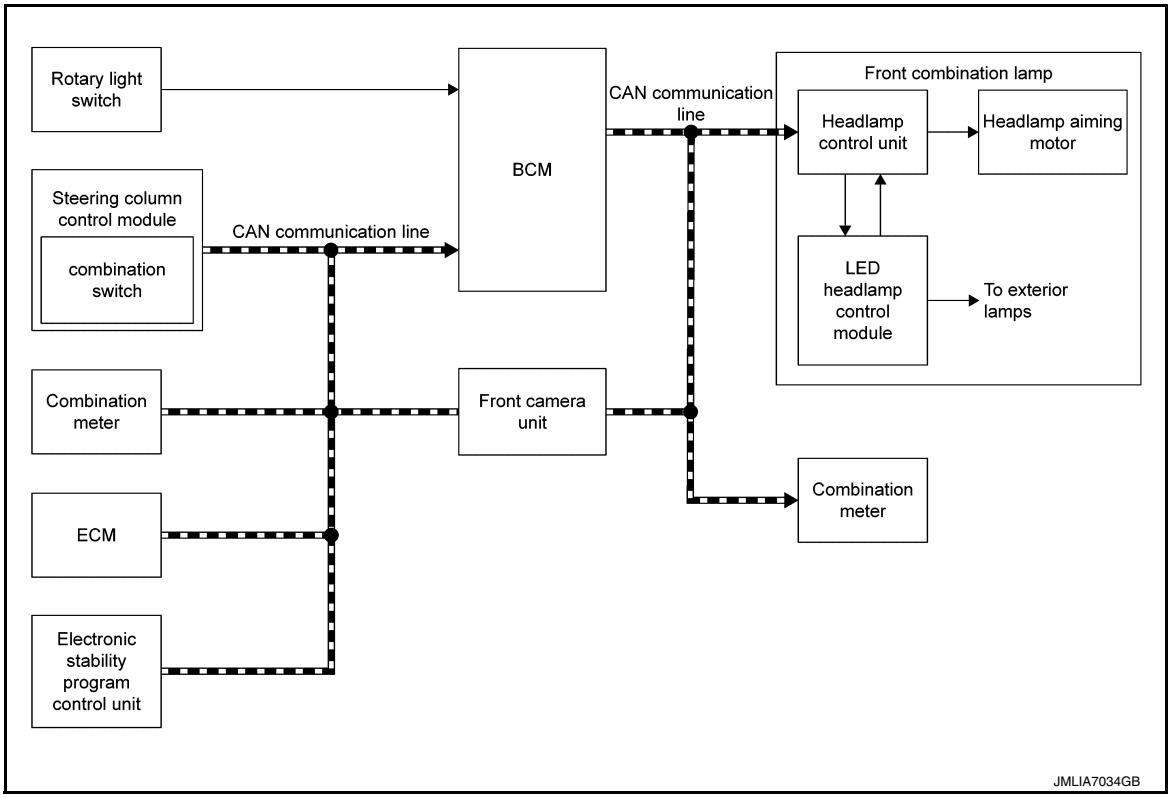


HIGH BEAM ASSIST SYSTEM

HIGH BEAM ASSIST SYSTEM : System Description

INFOID:0000000013549122

SYSTEM DIAGRAM



OUTLINE

- High beam assist system is controlled by each function of BCM and front camera unit.
- High beam assist system is a system that can reduce the driver's switch operation load. The system automatically switches the headlamp to the low beam mode when a vehicle ahead or an oncoming vehicle appears, while driving the vehicle with the headlamps in high beam mode at night.
- When the high beam assist system operation permission conditions are satisfied, the high beam assist indicator lamp in the combination meter (information display) turns ON and informs that the high beam assist is in operation.
- High beam assist system is controlled by each function of BCM and front camera unit.

Control by BCM
- Auto light function
- Headlamp control function

Control by Front Camera Unit
- High beam assist control function
- Headlamp aiming control function

OPERATION DESCRIPTION

- BCM detects the rotary light switch condition and combination switch condition (received from steering column control unit via CAN communication).
- BCM transmits the high beam assist indicator lamp signal to the combination meter via CAN communication when the high beam assist system operation permission conditions are satisfied.

High beam assist system operation permission conditions
- Combination switch HI with the lighting switch AUTO and engine running (Only when the illuminating judgment by auto light function is ON. For details, refer to EXL-24, "AUTO LIGHT SYSTEM : System Description".)
- Combination meter turns the high beam assist indicator lamp ON according to the high beam assist indicator lamp signal.
- Front camera unit detects the vehicle status and ambient status that are required for high beam assist control with the following signals.
- Vehicle speed signal (received from electronic stability program control unit via CAN communication)

- Engine status signal (received from ECM via CAN communication)
- Yaw angle signal (received from electronic stability program control unit via CAN communication)
- Steering angle signal (received from steering column control unit via CAN communication)
- Camera image signal (input from image sensor integrated in the front camera unit)

• Front camera unit judges the current recommended beam according to the vehicle status and ambient condition, and transmits the high beam assist request signal (headlamp HI operation / headlamp LO operation) to headlamp control unit via CAN communication.
• Front camera unit switches the headlamp LO operation / headlamp HI operation and controls headlamp LO aiming operation according to high beam assist request signal while the high beam assist system operation permission conditions are satisfied. For headlamp operation, refer to EXL-22, "HEADLAMP SYSTEM : System Description".

RECOMMENDED BEAM JUDGMENT BY FRONT CAMERA UNIT

Headlamp HI Operation Request

Front camera unit requests the headlamp HI operation to headlamp control unit when all of following conditions are satisfied.
• Detects the vehicle speed is approx. 40 km/h or more.
• Recognizes the ambient condition is dark.
• Recognizes there is no oncoming vehicle or no vehicle ahead in front of the vehicle.

Headlamp LO Aiming Operation Request

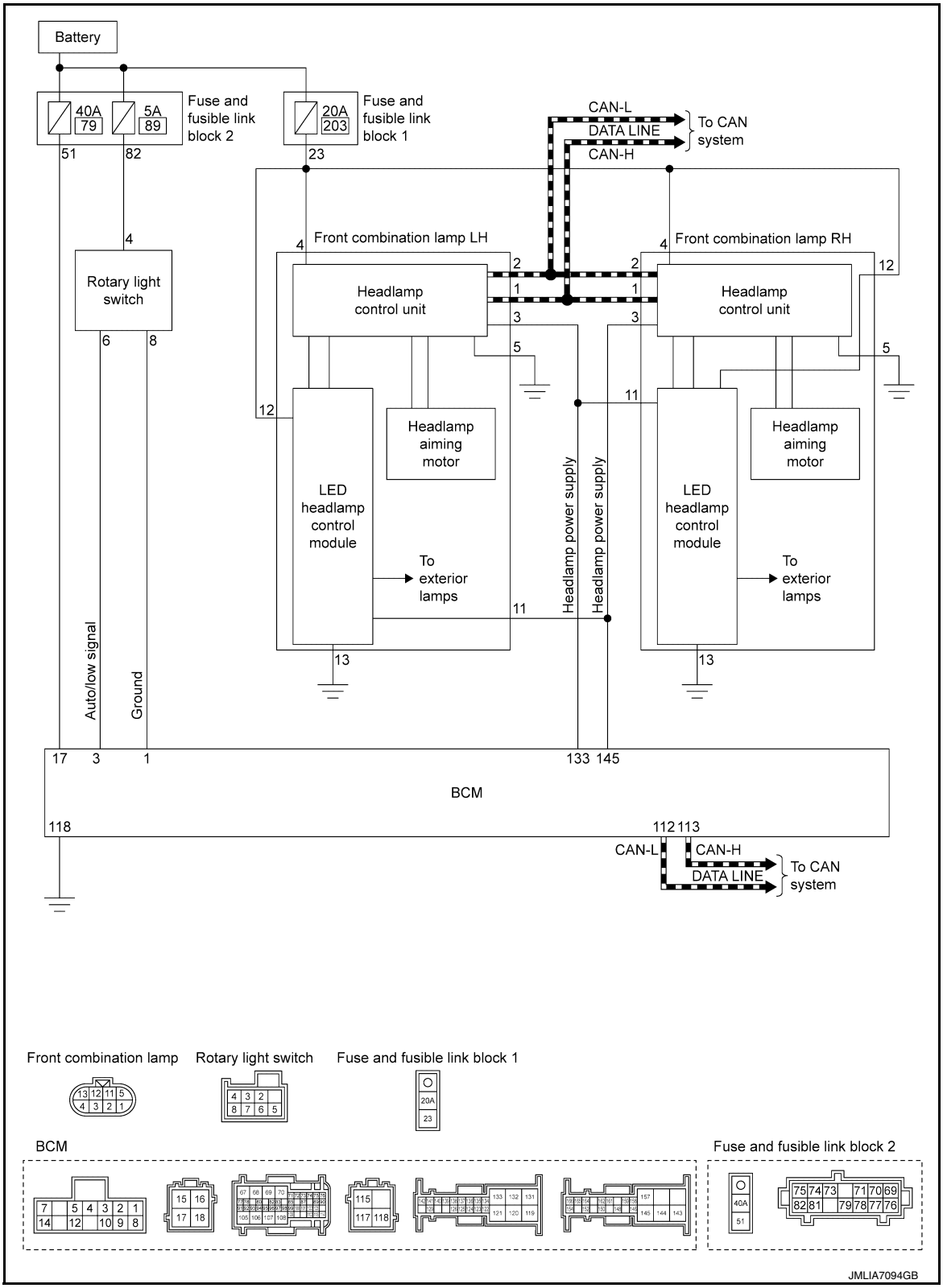
Front camera unit requests the headlamp LO aiming operation to headlamp control unit when either of following conditions is satisfied.
• Detects the vehicle speed is approx. 25 km/h or less.
• Recognizes the ambient condition is bright.
• Recognizes there is oncoming vehicle or vehicle ahead in front of the vehicle.

Headlamp LO Operation Request

Front camera unit requests the headlamp LO operation to headlamp control unit when either of following conditions is satisfied.
• Detects the vehicle speed is approx. 45 km/h or less.
• Recognizes the ambient condition is bright.
• Recognizes there is oncoming vehicle or vehicle ahead in front of the vehicle.

HIGH BEAM ASSIST SYSTEM : Circuit Diagram

INFOID:0000000013549123

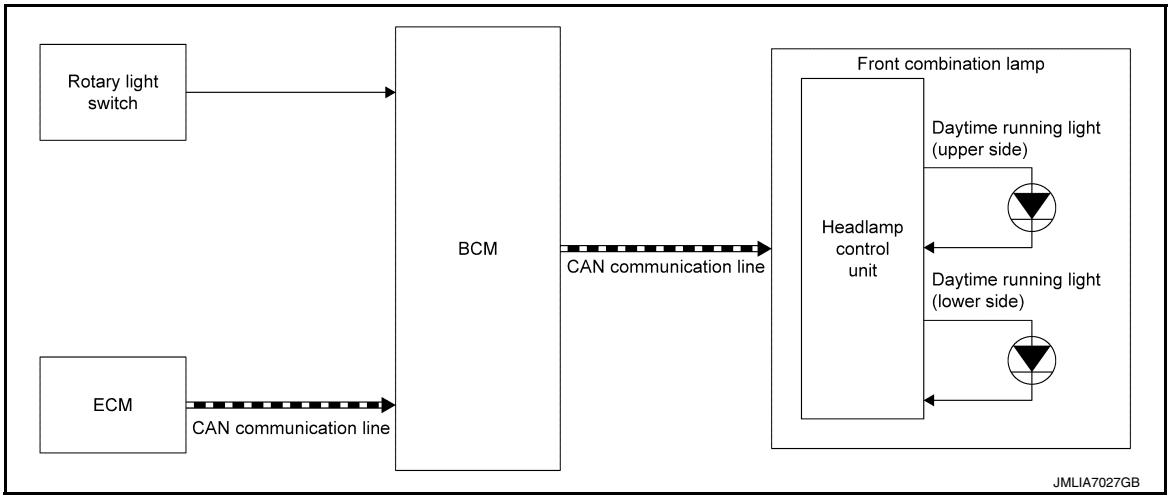


DAYTIME RUNNING LIGHT SYSTEM

DAYTIME RUNNING LIGHT SYSTEM : System Description

INFOID:0000000013549124

SYSTEM DIAGRAM



OUTLINE

Daytime running light is controlled by daytime running light control function of BCM.

DAYTIME RUNNING LIGHT OPERATION

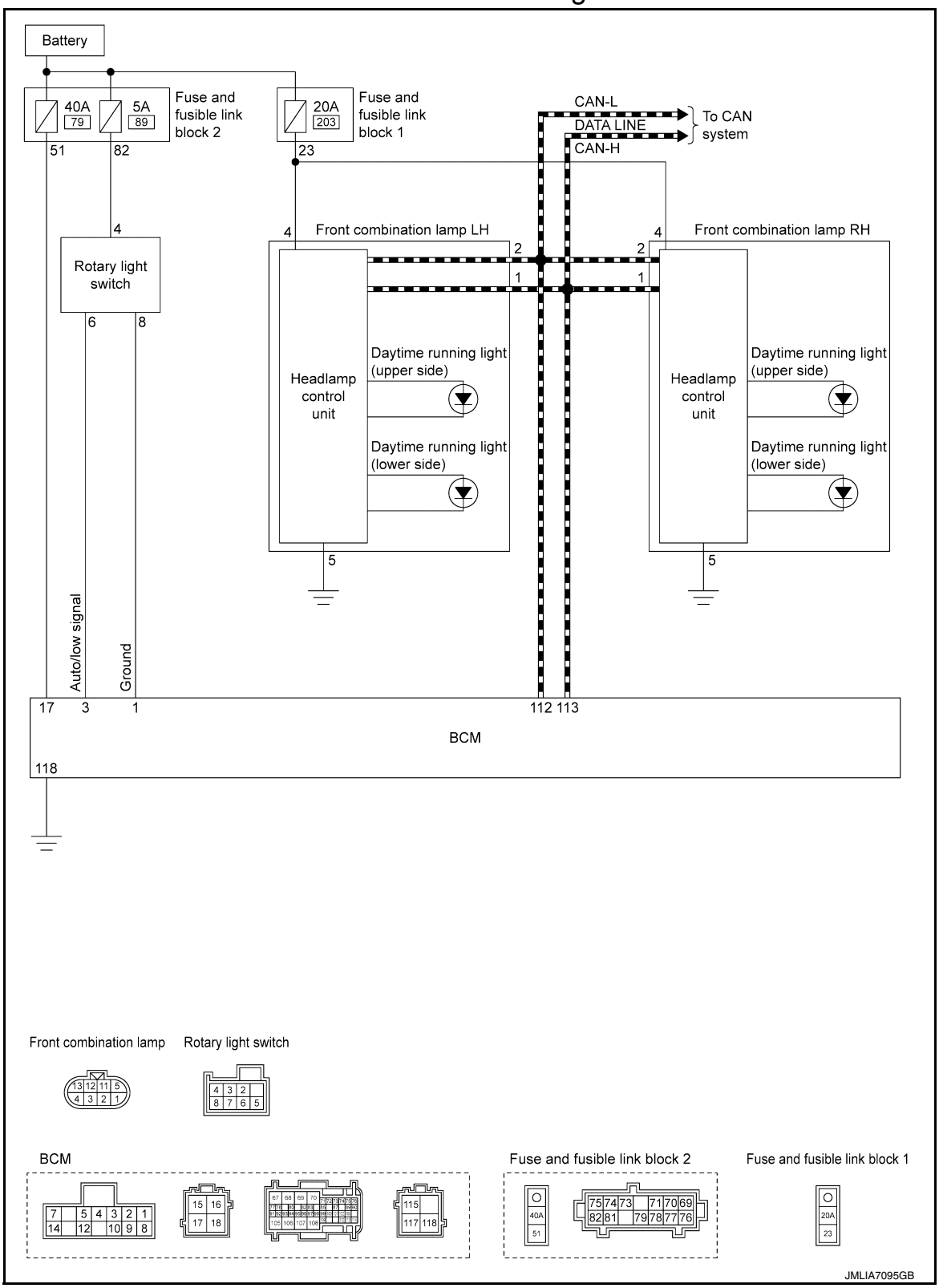
- BCM detects the rotary light switch condition.
- BCM detects vehicle condition depending on the engine status signal (received from ECM via CAN communication).
- BCM transmits the daytime running light request signal to headlamp control unit via CAN communication according to the daytime running light ON condition.

Daytime running light ON condition

- Engine running and rotary light switch AUTO (Only when the illumination judgment by auto light system is OFF. For details, refer to EXL-24, "AUTO LIGHT SYSTEM : System Description".)

DAYTIME RUNNING LIGHT SYSTEM : Circuit Diagram

INFOID:0000000013549125

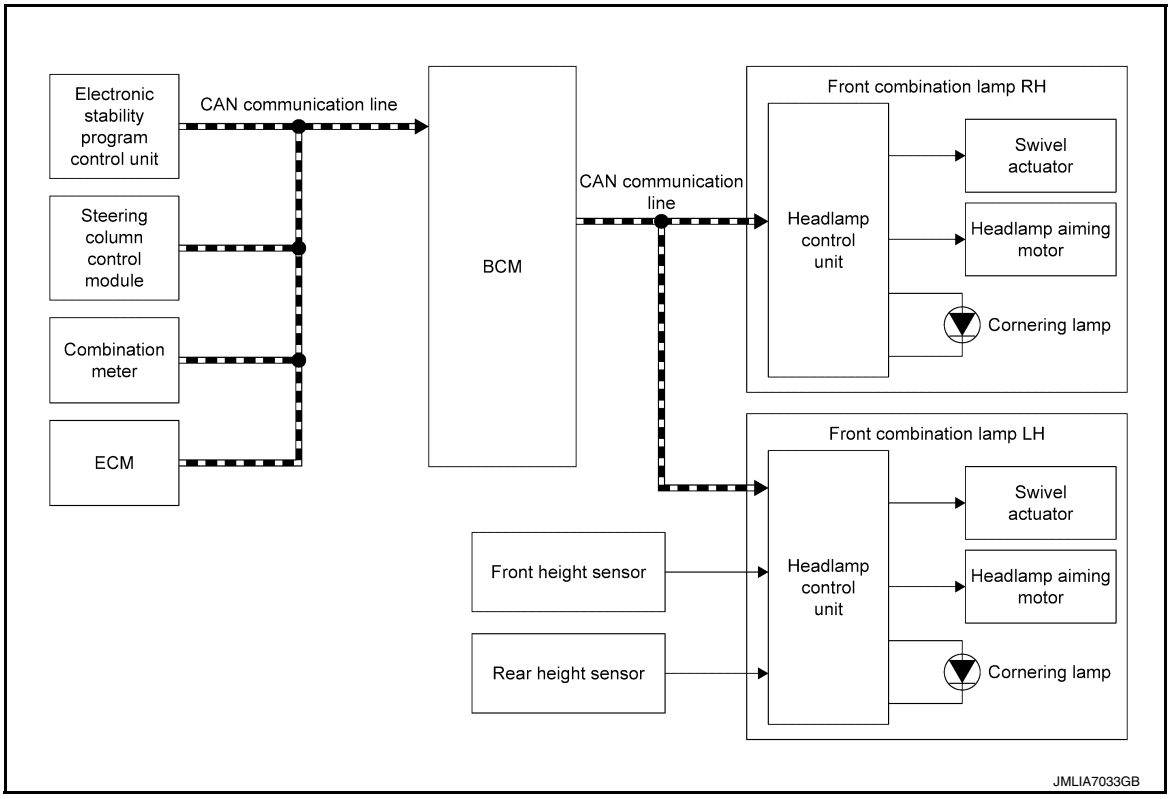


ACTIVE ADAPTIVE FRONT-LIGHTING SYSTEM

ACTIVE ADAPTIVE FRONT-LIGHTING SYSTEM : System Description

INFOID:0000000013549126

SYSTEM DIAGRAM



OUTLINE

- AFS (ACTIVE ADAPTIVE FRONT-LIGHTING SYSTEM) is controlled by headlamp control unit.
- AFS has active curve control, cornering lamp control, and the headlamp auto aiming control.
- Active curve control swivels the headlamp to the steering direction.
- Cornering lamp control illuminates the headlamp to the steering direction.
- Headlamp auto aiming control moves the headlamp light axis up/down according to the vehicle height.

ACTIVE CORVE CONTROL

Active Curve Control Description

- Headlamp control unit controls the headlamp when the steering wheel is turned rightward or leftward.
- Headlamp control unit detects the vehicle condition necessary for active curve control with the following signals.
- Engine status signal (received from ECM via CAN communication)
- Low beam request signal (received from BCM via CAN communication)
- Vehicle speed signal (received from electronic stability program control unit via CAN communication)
- Yaw angle signal (received from electronic stability program control unit via CAN communication)
- Steering angle signal (received from steering column control unit via CAN communication)
- When the operation conditions are satisfied, headlamp control unit controls the swivel angle depending on the steering angle and the vehicle speed.

Active curve operation condition

- Engine running
- Headlamp LO
- While driving

Swivel Operation

- Headlamp control unit transmits the swivel actuator drive signal to the swivel actuator when activation conditions are satisfied. And swivels the headlamp LO.
- Swivel operations are performed up to the maximum angles of 15° for inside headlamp and 7.5° for outside headlamp in the same direction as the steering direction.
- The swivel starts, and returns to the swivel angle 0° (straight-forward position) when the steering is returned to the straight-forward position.

CONERING LAMP CONTROL

Cornering Lamp Control Description
- Headlamp control unit controls the headlamp when the steering wheel is turned rightward or leftward.
- Headlamp control unit detects the vehicle condition necessary for cornering lamp control with the following signals.
  - Engine status signal (received from ECM via CAN communication)
  - Low beam request signal (received from BCM via CAN communication)
  - Vehicle speed signal (received from electronic stability program control unit via CAN communication)
  - Turn indicator lamp LH/RH signal (received from electronic stability program control unit via CAN communication)
  - Steering angle signal (received from steering column control unit via CAN communication)
- When the operation conditions are satisfied, headlamp control unit controls the swivel angle depending on the steering angle and the vehicle speed.

Active curve operation condition
- Engine running
- Headlamp LO
- While driving
- Turn signal lamp blinks and vehicle speed approx. 40 km/h or less.
- Input the steering angle signal and approx. 70 km/h or less

Cornering Lamp Illuminate Operation

Headlamp control unit illuminates cornering lamps in the same direction as the steering direction and the combination switch (turn signal switch) operation direction.

NOTE:

The illuminance of cornering lamp varies depending on steering angle and steering angle speed. (The higher the steering angle and steering angle speed, the quicker the cornering lamps illuminate.)

HEADLAMP AUTO AIMING CONTROL

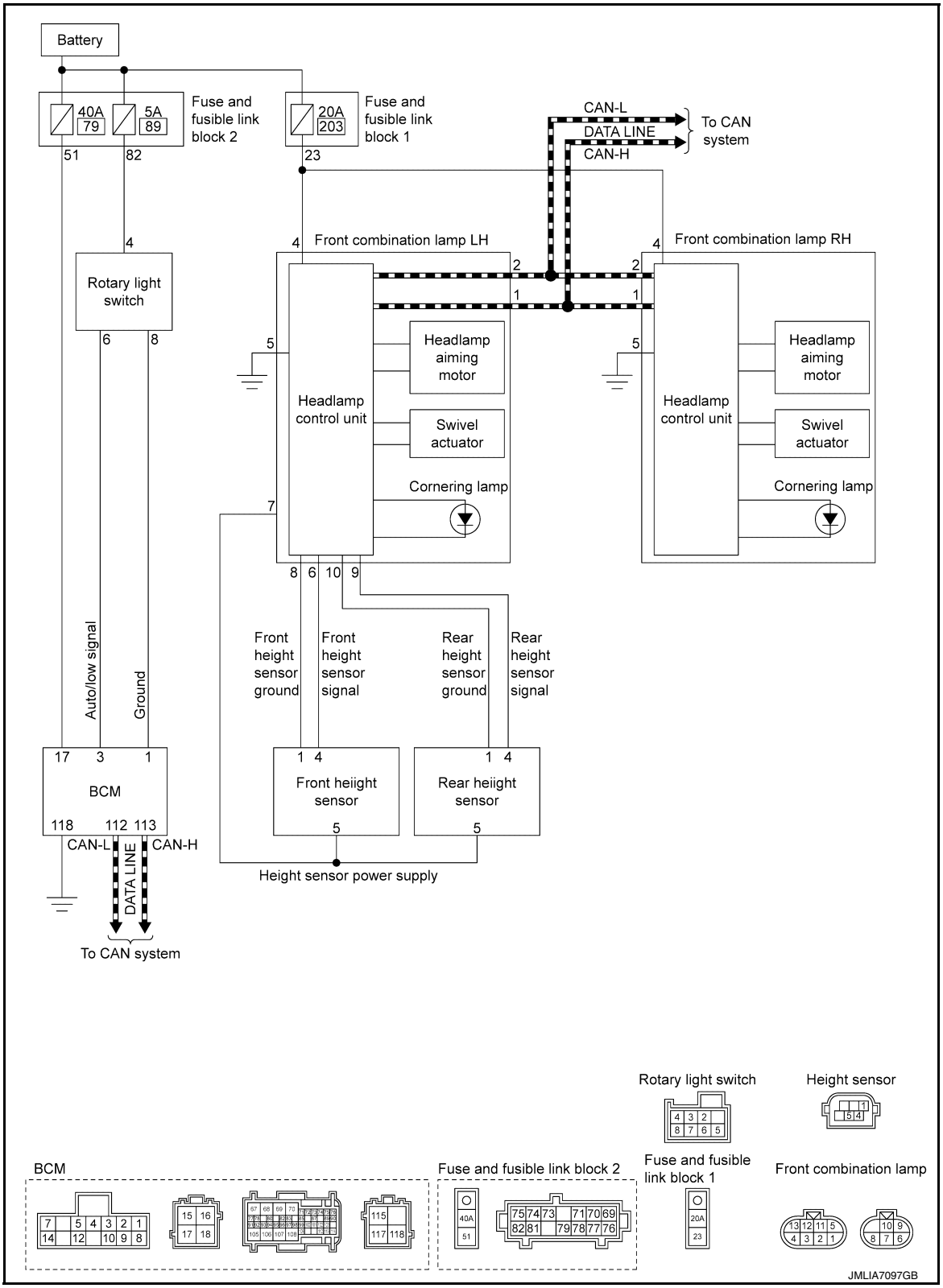
Headlamp Auto Aiming Control Description
- Headlamp control unit controls the headlamp light axis height appropriately according to the vehicle height.
- Headlamp control unit detects the vehicle condition necessary for headlamp auto aiming control with the following signals.
  - Front height sensor signal
  - Rear height sensor signal
  - Engine status signal (received from ECM via CAN communication)
  - Low beam request signal (received from BCM via CAN communication)
  - Vehicle speed signal (received from electronic stability program control unit via CAN communication)
- When the operation conditions are satisfied, headlamp control unit transmits the aiming motor drive signal for adjusting the headlamp axis height.

Headlamp auto aiming operation condition
- Engine running
- Headlamp LO
- While driving (Control mode is switched according to the driving condition.)

Headlamp Auto Aiming Operation
- Headlamp control unit calculates the vehicle pitch angle from the each height sensor signal. Headlamp control unit judges the angle for adjusting the axis gap from the preset position.
- Headlamp control unit controls the headlamp axis by changing the aiming motor drive signal output according to the vehicle-rearward height when detecting the following vehicle condition. Output is maintained if other condition than following is detected.
  - Engine running
  - Headlamp LO
  - Vehicle posture becomes stable after changing the vehicle posture change is detected with the headlamp LO and the vehicle stopped
  - Vehicle speed is maintained with the headlamp ON and the vehicle driven

ACTIVE ADAPTIVE FRONT-LIGHTING SYSTEM : Circuit Diagram

INFOID:0000000013549127

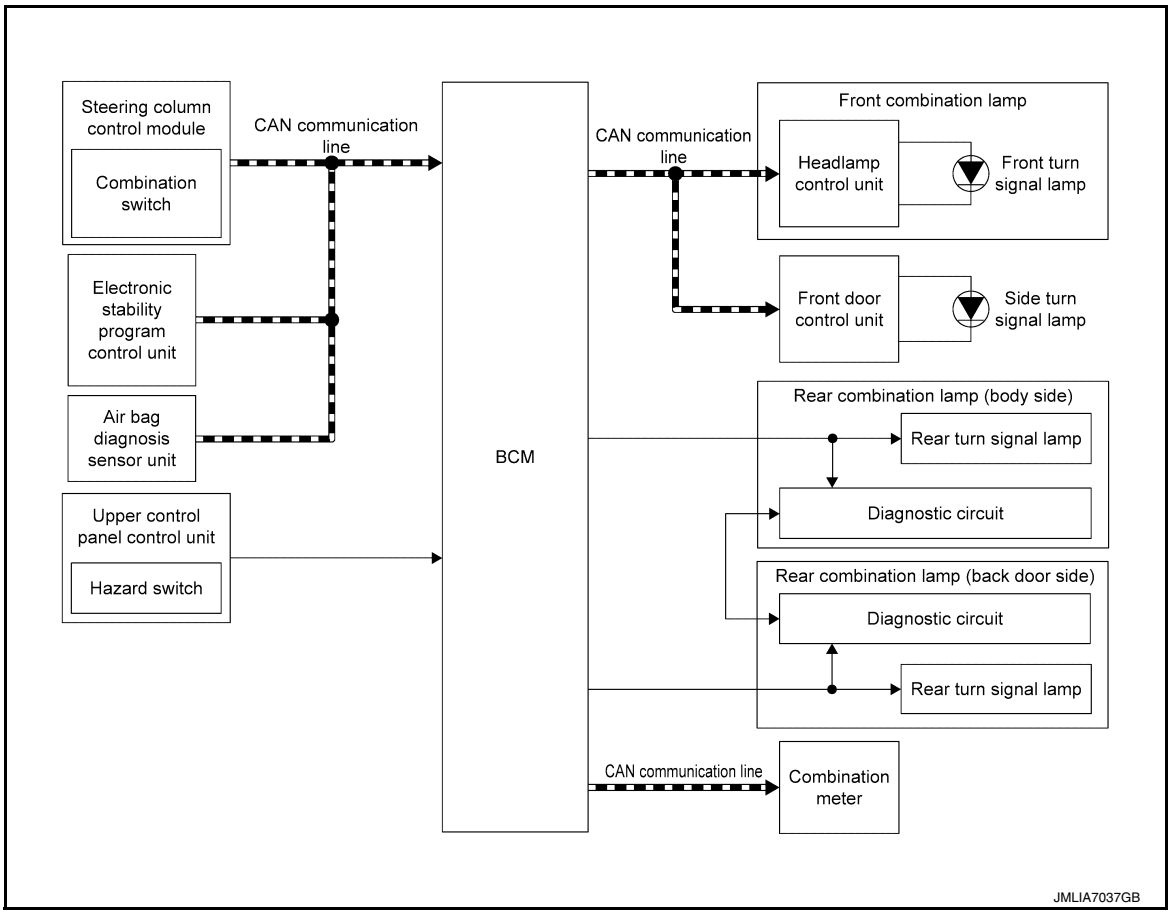


TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Description

INFOID:0000000013549128

SYSTEM DIAGRAM



OUTLINE

Turn signal lamp and hazard warning lamp is controlled by flasher control function of BCM.

TURN SIGNAL LAMP OPERATION

- BCM detects the combination switch condition (revive from steering column control unit via CAN communication)
- Front and side turn signal lamp: BCM transmits the turn indicator LH/RH signal to the headlamp control unit and front door control unit via CAN communication according to the turn signal lamp LH/RH blinks.
- Rear turn signal lamp: BCM supplies voltage to the LH/RH turn signal lamp circuit according to the turn signal lamp LH/RH blinks.

Turn Signal Lamp Operation Condition

- Ignition switch ON
- Combination switch TURN LH/RH

HAZARD WARNING LAMP OPERATION

BCM transmits turn indicator signal (via CAN communication), and supplies voltage to both turn signal lamp circuits when the hazard switch is ON. BCM blinks the hazard warning lamp.

TURN SIGNAL INDICATOR LAMP AND TURN SIGNAL OPERATION

- BCM transmits the turn indicator 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 indicator signal.

3-TIME FLASHER FUNCTION

- By a short touch of the turn signal lever, BCM blinks the turn signal lamps 3 times in the selected direction.

- Cancels the operation when short touch of the turn signal lever in the reverse direction during the 3-time flasher function operation.

REAR TURN SIGNAL LAMP DIAGNOSTIC OPERATION

If the rear turn signal lamp (back door side) or the rear turn signal lamp in the same direction (LH/RH) stops illuminating, “Diagnostic TI” detects a malfunction in the rear turn signal lamp and high flasher operations the rear turn signal lamp that is still illuminating.

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 malfunction is detected with the turn signal lamp operating.

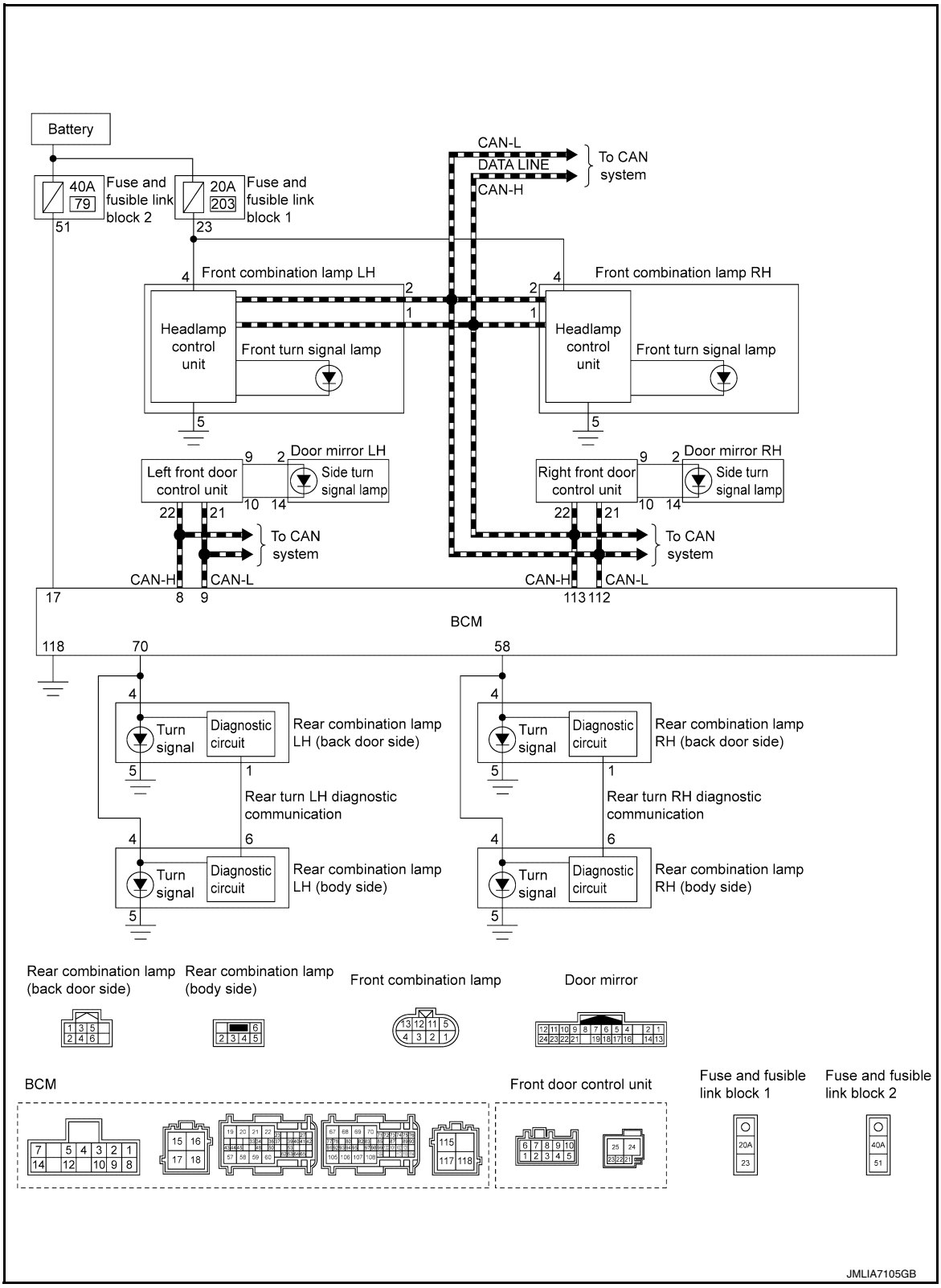
NOTE:
The blinking speed is normal while operating the hazard warning lamp.

AUTO HAZARD FUNCTION

- Air bag diagnosis sensor unit transmits car crash information signal to BCM via CAN communication, when air bag diagnosis sensor unit detects strong impact to the vehicle body while ignition switch is ON.
- When car crash information signal received from air bag diagnosis sensor unit is detected, BCM controls the each turn signal lamp system and hazard lamp blinks.

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : Circuit Diagram

INFOID:0000000013549129



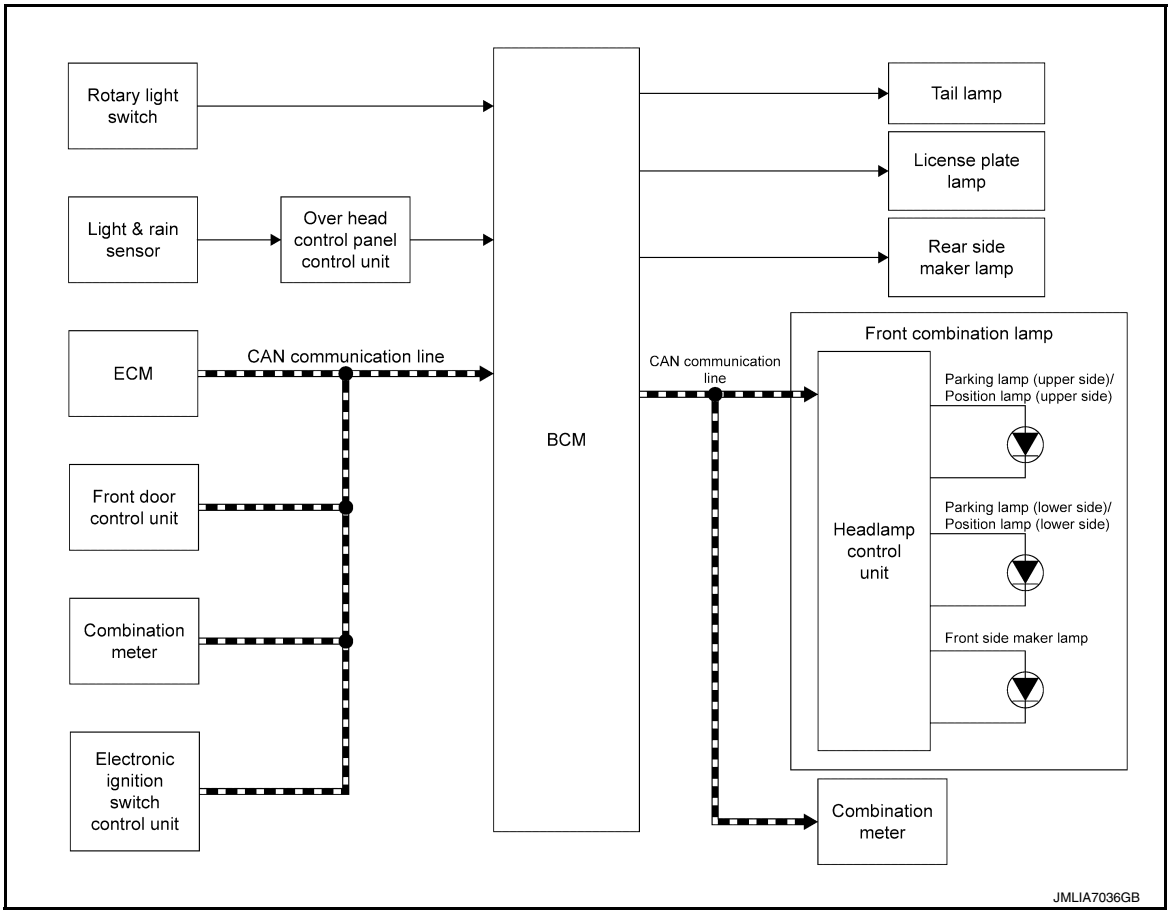
PARKING, POSITION, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM

PARKING, POSITION, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM :

System Description

INFOID:0000000013549130

SYSTEM DIAGRAM



OUTLINE

Parking, position, license plate, side marker and tail lamps are controlled by parking, position, license plate, side marker and tail lamps control function of BCM.

POSITION, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS OPERATION

- BCM detects the combination switch condition.
- BCM transmits the position light request signal to headlamp control unit and the combination meter via CAN communication according to the position, license plate, side marker and tail lamps ON condition.

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

- Ignition switch ON
- Rotary light switch LO or POSITION
- Lighting switch AUTO with the ignition switch ON (Only when the illumination judgment by auto light system is ON. For details, refer to EXL-24, "AUTO LIGHT SYSTEM : System Description".)
- Combination meter turns the position lamp indicator lamp ON according to the position light request signal.

NOTE:

Position lamp (upper side/lower side) and daytime running light (upper side/lower side) use a common light source. When the position, license plate, side marker and tail lamps are turned ON while daytime running light is ON, the parking lamp (lower side)/daytime running light (lower side) is dimmed.

PARKING LAMP OPERATION

- BCM detects the combination switch condition.
- BCM transmits the position light request signal to headlamp control unit and the combination meter via CAN communication according to the position, license plate, side marker and tail lamps ON condition.

Parking lamp ON condition

- Ignition switch OFF
- Rotary light switch PARKING LH or PARLING RH
- Combination meter turns the position lamp indicator lamp ON according to the position light request signal.

SIGNATURE LIGHT FUNCTION

Description

Signature light function is a function that turns ON the position, license plate, side marker and tail lamps for approx. 30 seconds after the doors are unlocked from the status that all doors are locked.

Operation Description

- BCM transmits the position light request signal to headlamp control unit and combination meter via CAN communication when all of following conditions are satisfied.

Signature light function ON condition

- Ignition switch OFF
- Rotary light switch AUTO
- Detects the door unlock signal (from electronic ignition switch control unit via CAN communication)
- Detects the ambient light level signal (from light & rain sensor via roof LIN communication)

- When in any of following conditions, signature light function can be cancelled while signature light function is operating.

Signature light function OFF condition

- Front driver side door OPEN
- Ignition switch other than OFF
- Rotary light switch other than AUTO
- Since signature light function ON, approx. 30 seconds are passed.

DELAY TIMER FUNCTION

Description

Delay timer function is a function that turns ON the position, license plate, side marker and tail lamps for approx. 60 seconds after engine running to ignition switch OFF.

Operation Description

- BCM transmits the position light request signal to headlamp control unit and combination meter via CAN communication when all of following conditions are satisfied.

Delay timer function ON condition

- Engine running → ignition switch OFF
- Rotary light switch AUTO
- Detects the engine status signal (from ECM via CAN communication)
- Detects the ambient light level signal (from light & rain sensor via roof LIN communication)

- When in any of following conditions, delay timer function can be cancelled while delay timer function is operating.

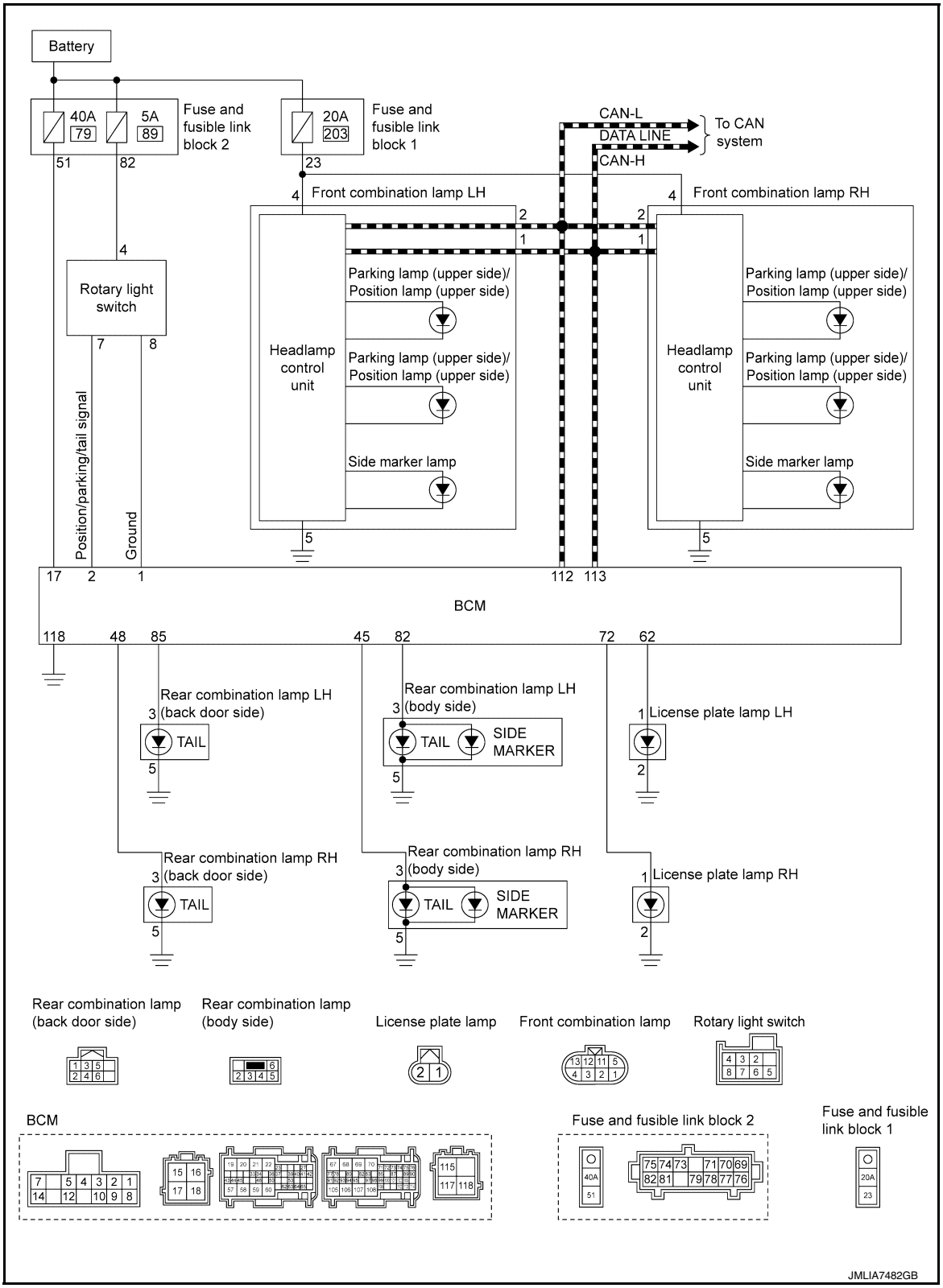
Delay timer function OFF condition

- Ignition switch other than OFF
- Rotary light switch other than AUTO
- Since delay timer function ON, approx. 60 seconds are passed.

PARKING, POSITION, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM :

Circuit Diagram

INFOID:0000000013549131

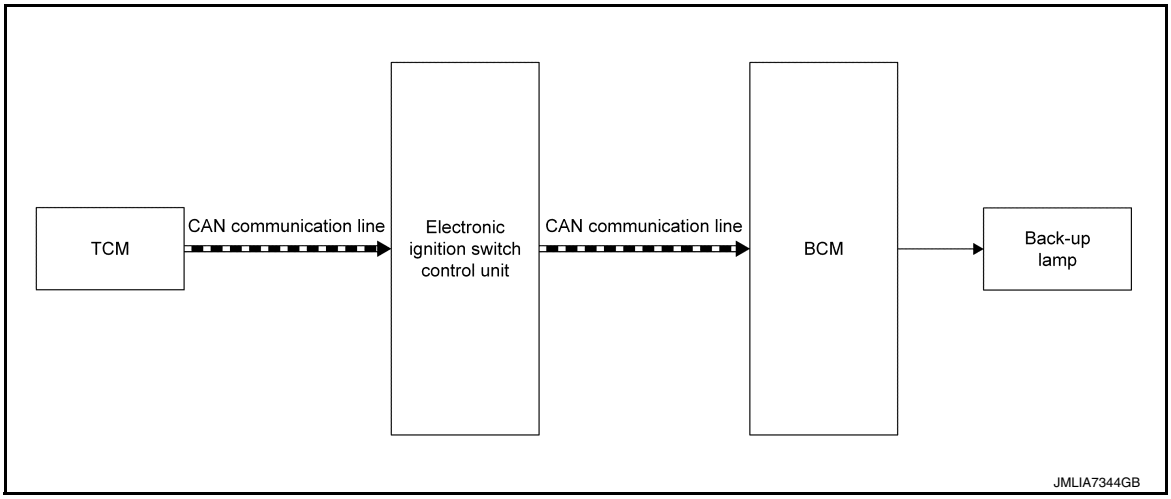


BACK-UP LAMP SYSTEM

BACK-UP LAMP SYSTEM : System Description

INFOID:0000000013549132

SYSTEM DIAGRAM



OUTLINE

Back-up lamp is controlled by back-up lamp control function of BCM.

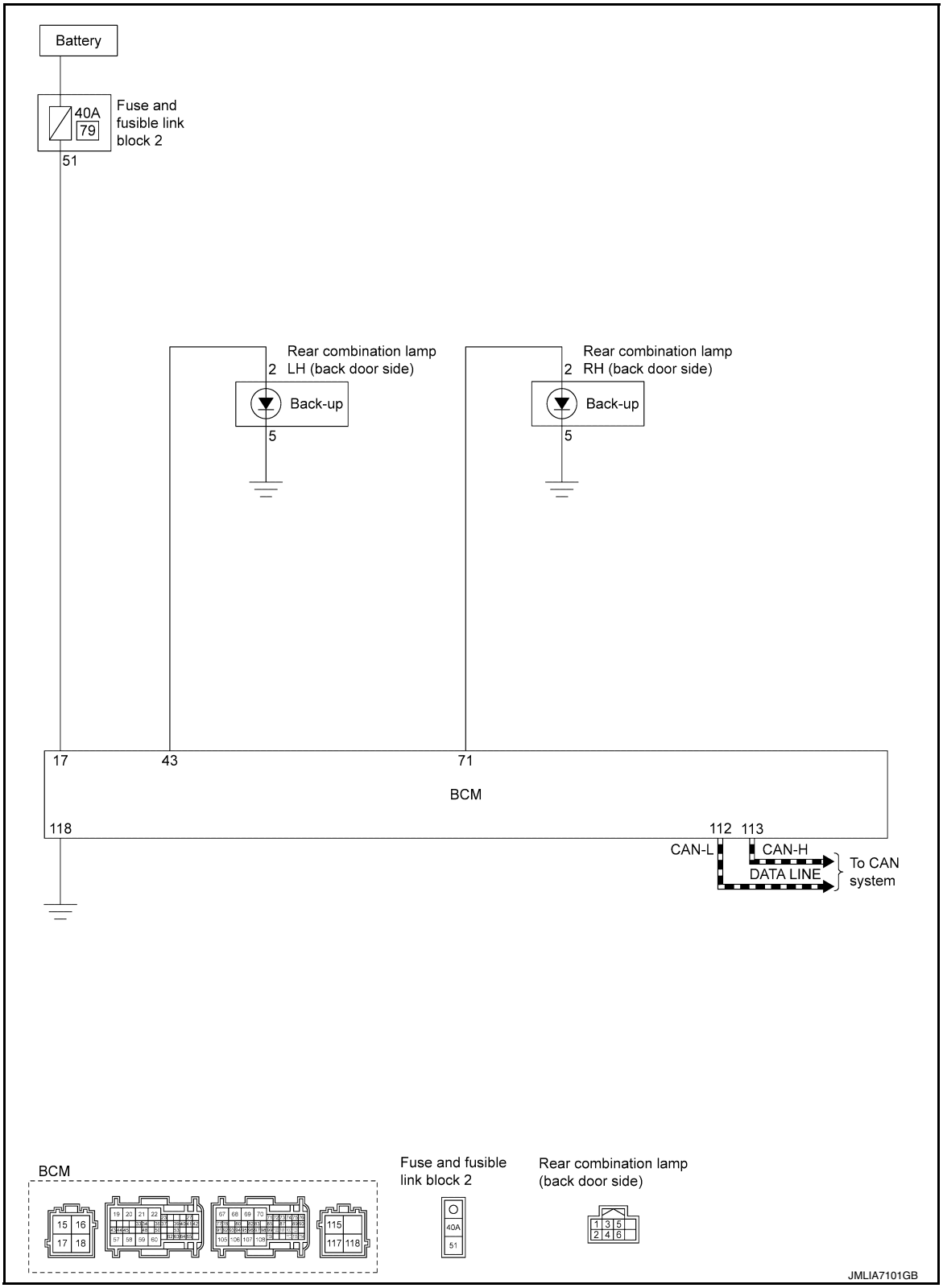
BACK-UP LAMP OPERATION

- Electronic ignition switch control unit receives shift position signal (via CAN communication) from TCM. And send reverse signal to BCM (via CAN communication).
- BCM supplies voltage to back-up lamp according to the back-up lamp ON condition.

Back-up lamp ON condition
- Ignition switch ON
- Selector lever position R

BACK-UP LAMP SYSTEM : Circuit Diagram

INFOID:0000000013549133

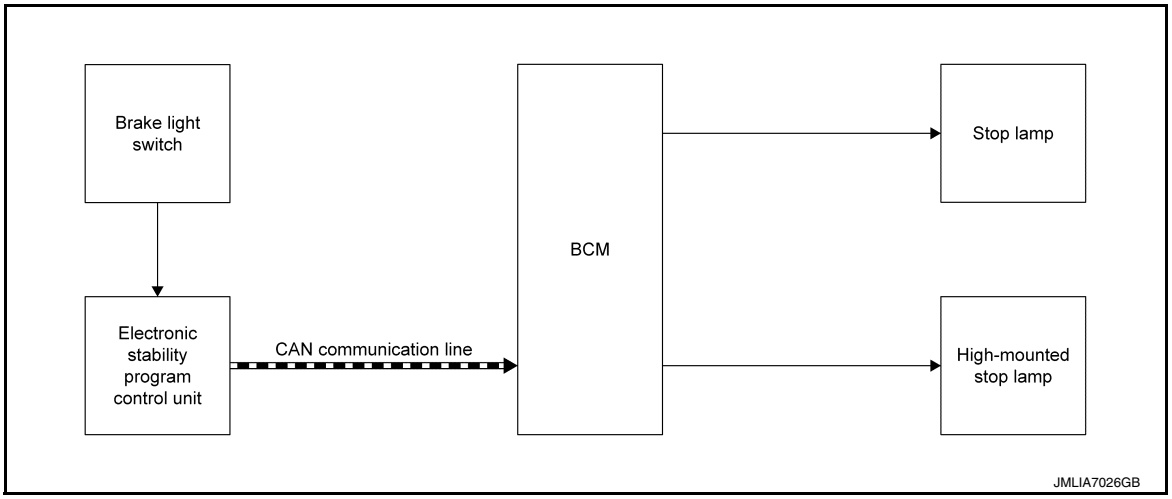


STOP LAMP SYSTEM

STOP LAMP SYSTEM : System Description

INFOID:0000000013549134

SYSTEM DIAGRAM



OUTLINE

Stop lamp and high-mounted stop lamp are controlled by stop lamp and high-mounted stop lamp control function of BCM.

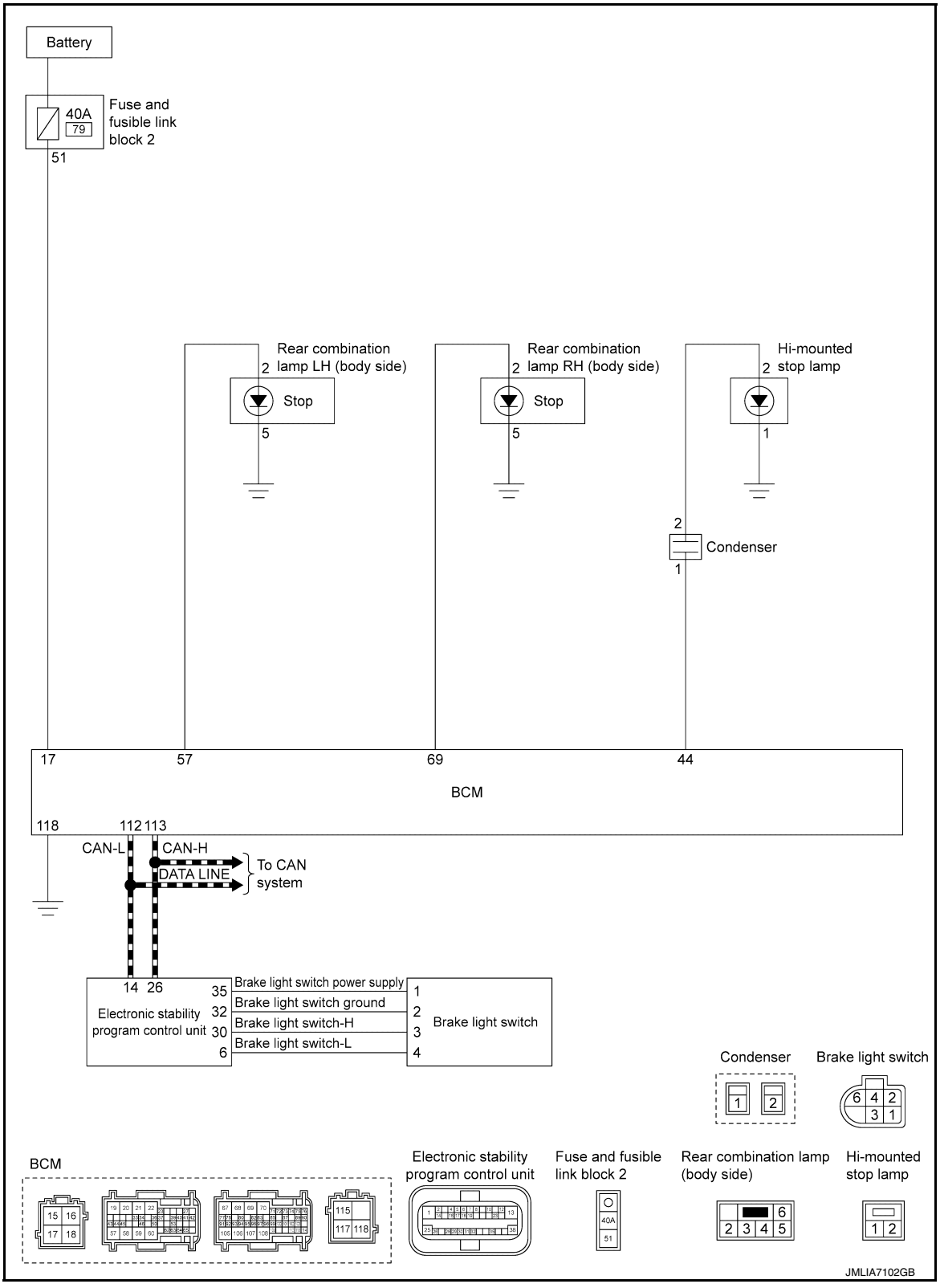
STOP LAMP AND HIGH-MOUNTED STOP LAMP OPERATION

- Electronic stability program control unit receive brake light switch signal from brake light switch. And send stop lamp signal to BCM (via CAN communication).
- BCM supplies voltage to stop lamp and high-mounted stop lamp according to the stop lamp and high-mounted stop lamp ON condition.

Stop lamp and high-mounted stop lamp ON condition
- Brake pedal is depressed

STOP LAMP SYSTEM : Circuit Diagram

INFOID:0000000013549135

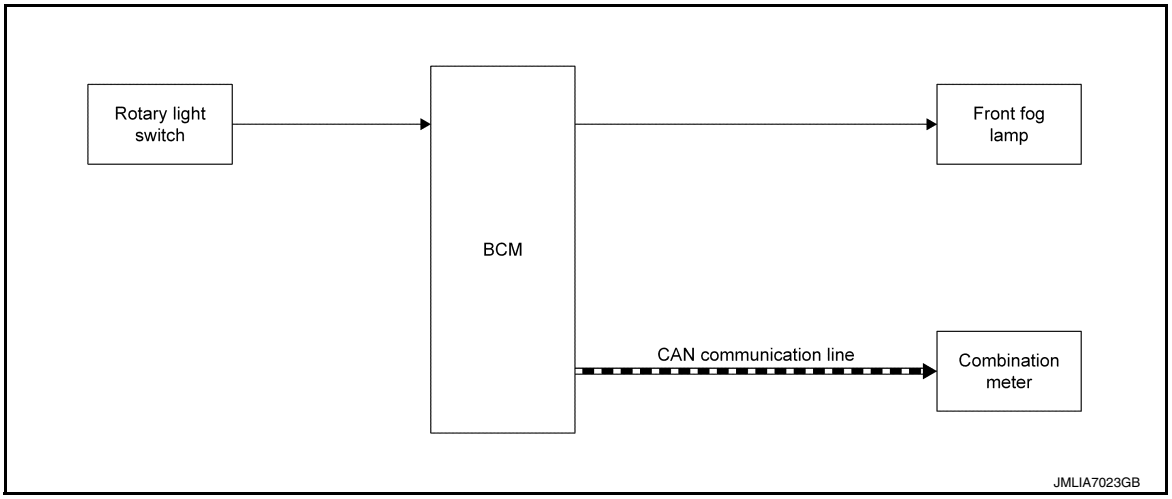


FRONT FOG LAMP SYSTEM

FRONT FOG LAMP SYSTEM : System Description

INFOID:0000000013549136

SYSTEM DIAGRAM



OUTLINE

Front fog lamp is controlled by front fog lamp control function of BCM.

FRONT FOG LAMP OPERATION

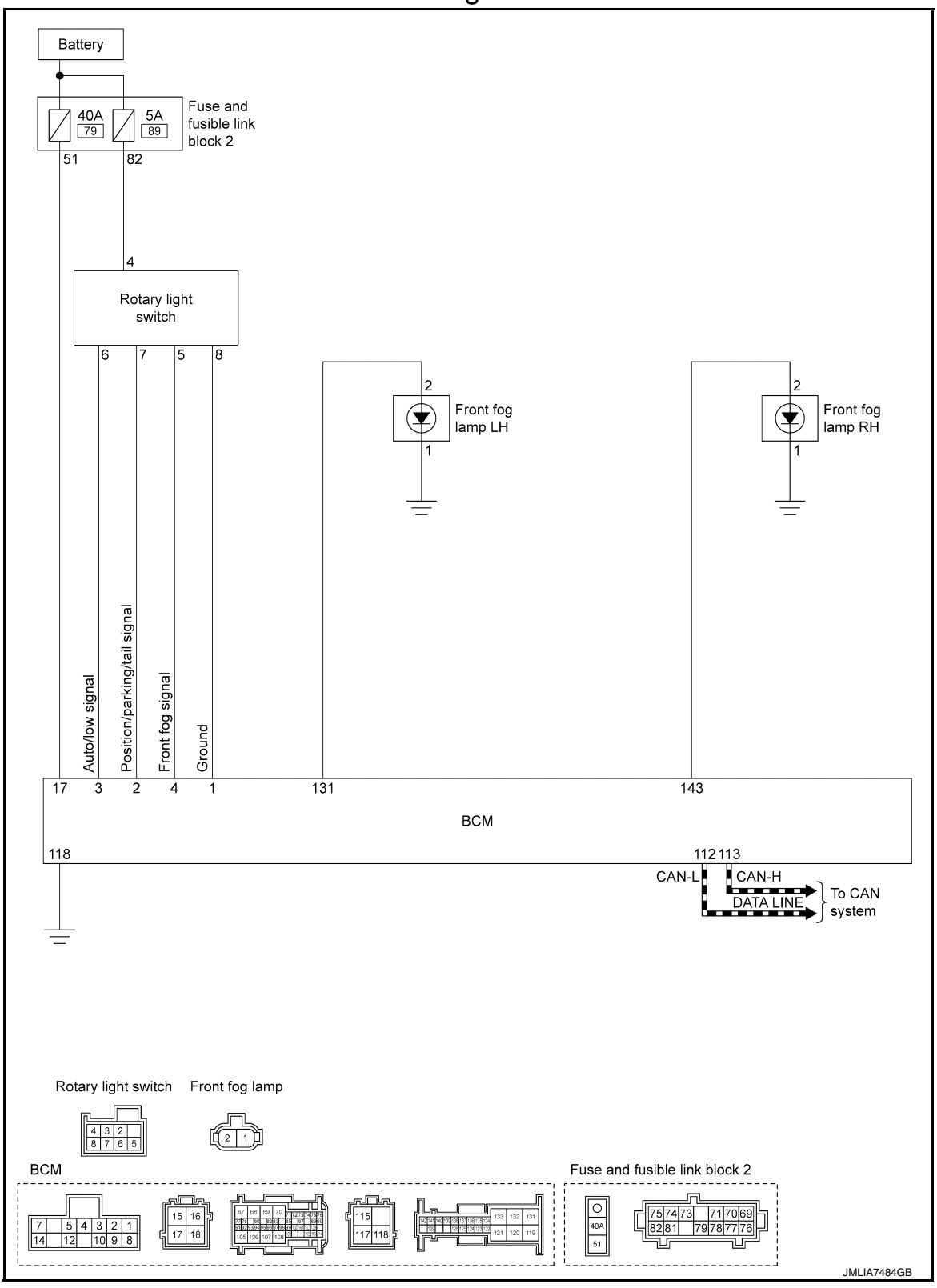
- BCM detects the rotary light switch condition.
- BCM supplies voltage to front fog lamp according to the front fog lamp ON condition.
- BCM transmits the front fog lamp status signal to combination meter via CAN communication.

Front fog lamp ON condition

- Front fog lamp switch ON, and any of the following conditions are satisfied.
- Rotary light switch LO or POSITION
- Rotary light switch AUTO with the ignition switch ON (Only when the illumination judgment by auto light system is ON. For details, refer to EXL-24, "AUTO LIGHT SYSTEM : System Description".)
- Combination meter turns the front fog lamp indicator lamp ON according to the front fog lamp status signal.

FRONT FOG LAMP SYSTEM : Circuit Diagram

INFOID:0000000013549137



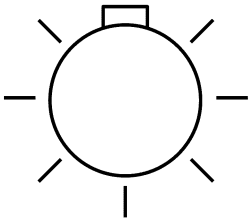
INFORMATION DISPLAY (COMBINATION METER)

INFORMATION DISPLAY (COMBINATION METER) : AFS Inoperative

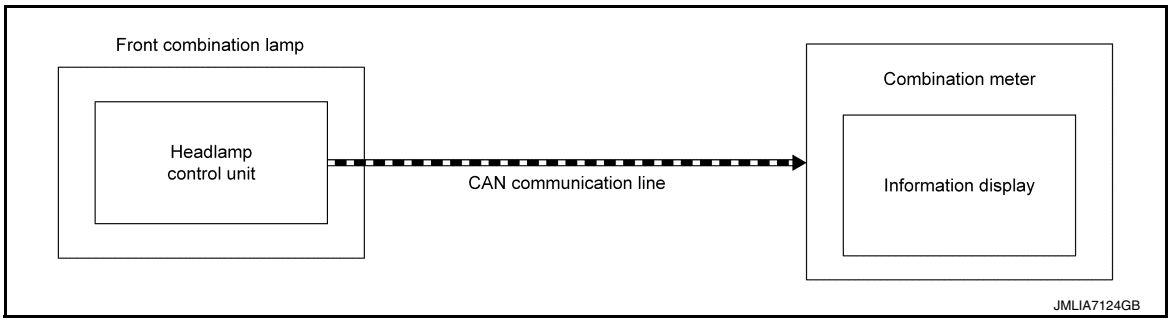
INFOID:0000000013549140

DESIGN/PURPOSE

AFS inoperative warning warns the driver that there is a malfunction in AFS system.

Symbol	Message
 JMLIA7045ZZ	Adaptive front lighting system Inoperative

SYSTEM DIAGRAM



SIGNAL PATH

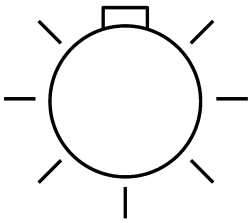
- When headlamp control unit detects a malfunction, AFS inoperative warning signal transmits to combination meter (via CAN communication).
- Combination meter receives AFS inoperative warning signal, AFS inoperative warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Auto Light System Inoperative

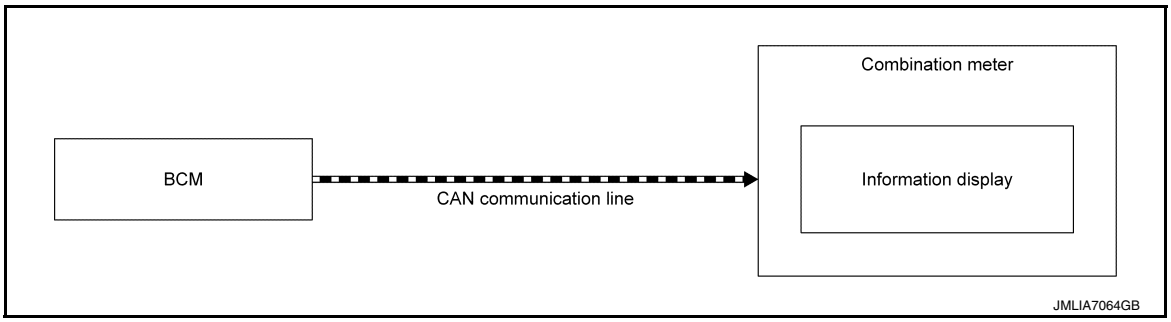
INFOID:0000000013549141

DESIGN/PURPOSE

Auto light system inoperative warning warns the driver that there is a malfunction in auto light system.

Symbol	Message
 JMLIA7045ZZ	Auto Lamp Function Inoperative

SYSTEM DIAGRAM



SIGNAL PATH

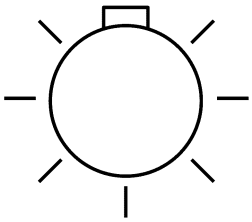
- When BCM detects a malfunction, auto light system inoperative warning signal transmits to combination meter (via CAN communication).
- Combination meter receives auto light system inoperative warning signal, auto light system inoperative pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Back-up Lamp Warning

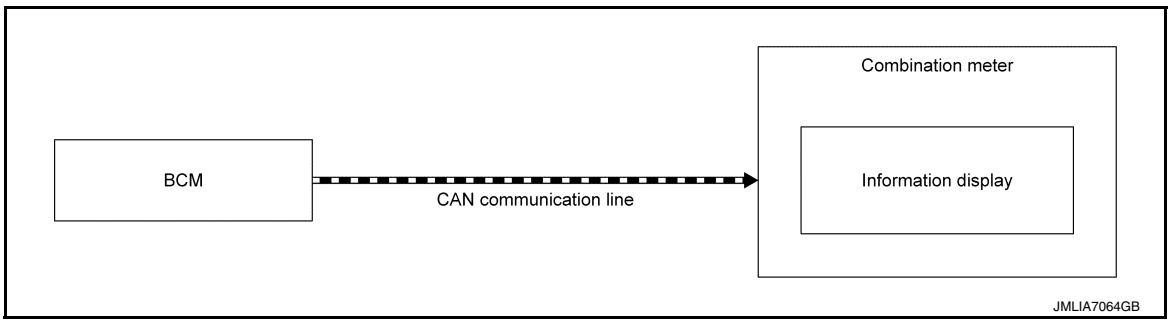
INFOID:0000000013549142

DESIGN/PURPOSE

Back-up lamp warning warns the driver that there is a malfunction in back-up lamp system.

Symbol	Message
 JMLIA7045ZZ	Backup Light

SYSTEM DIAGRAM



SIGNAL PATH

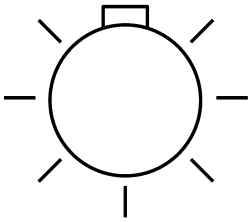
- When BCM detects a malfunction, back-up lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives back-up lamp warning signal, back-up lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Cornering Light Warning

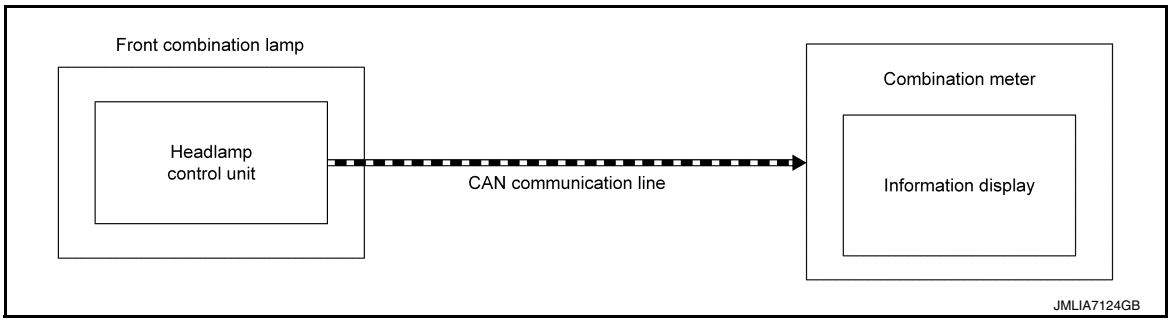
INFOID:0000000013549143

DESIGN/PURPOSE

Cornering light warning warns the driver that there is a malfunction in AFS system.

Symbol	Message
 JMLIA7045ZZ	Check Left Cornering Light or Check Right Cornering Light

SYSTEM DIAGRAM



SIGNAL PATH

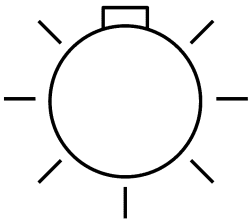
- When headlamp control unit detects a malfunction, Cornering light warning signal transmits to combination meter (via CAN communication).
- Combination meter receives Cornering light warning signal, Cornering light warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Daytime Running Light Warning

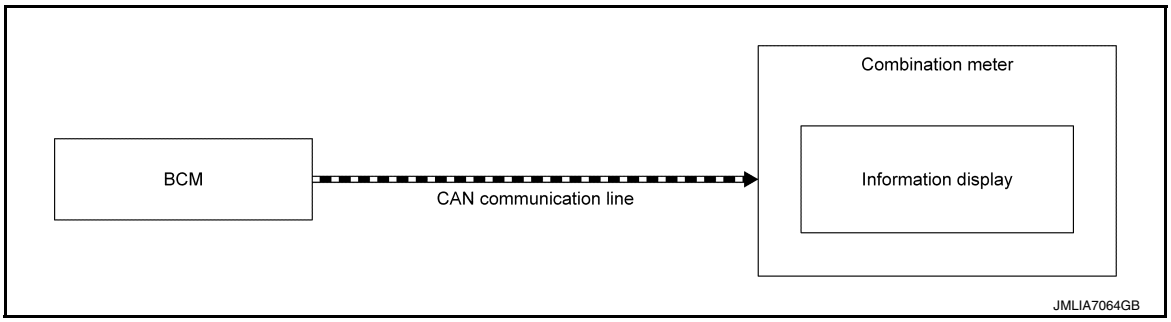
INFOID:0000000013549144

DESIGN/PURPOSE

Daytime running light warning warns the driver that there is a malfunction in daytime running light system.

Symbol	Message
 JMLIA7045ZZ	Check Left Daytime Running Light or Check Right Daytime Running Light

SYSTEM DIAGRAM



SIGNAL PATH

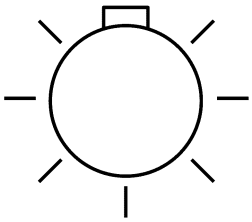
- When BCM detects a malfunction, daytime running light warning signal transmits to combination meter (via CAN communication).
- Combination meter receives daytime running light warning signal, daytime running light warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Exterior Lighting System Warning

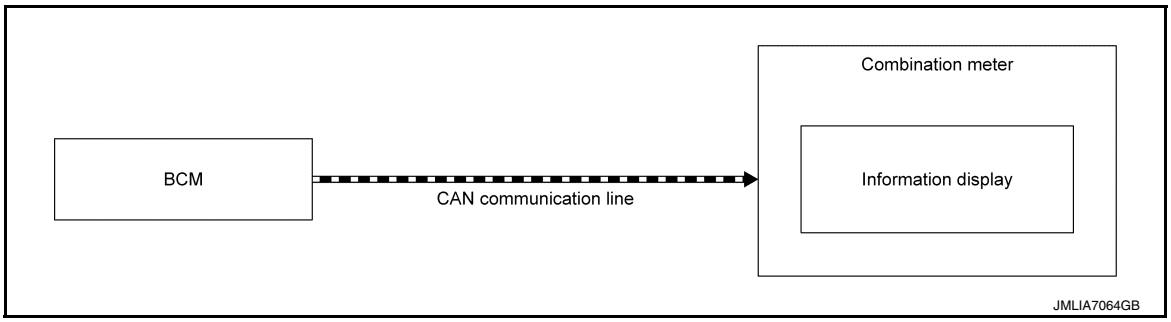
INFOID:0000000013549145

DESIGN/PURPOSE

Exterior lighting system warning warns the driver that there is a malfunction in exterior lighting system.

Symbol	Message
 JMLIA7045ZZ	Malfunction See Operator's Manual

SYSTEM DIAGRAM



SIGNAL PATH

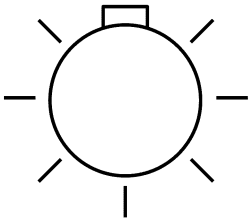
- When BCM detects a malfunction, exterior lighting system warning signal transmits to combination meter (via CAN communication).
- Combination meter receives exterior lighting system warning signal, exterior lighting system warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Front Fog Lamp Warning

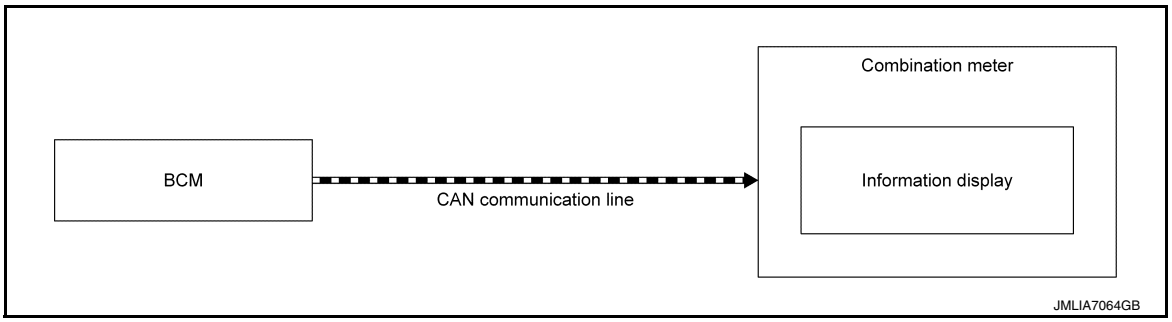
INFOID:0000000013549146

DESIGN/PURPOSE

Front fog lamp warning warns the driver that there is a malfunction in front fog lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Fog Lamp or Check Right Fog Lamp

SYSTEM DIAGRAM



SIGNAL PATH

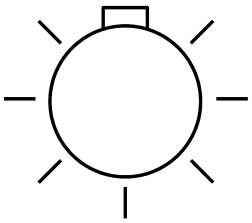
- When BCM detects a malfunction, front fog lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives front fog lamp warning signal, front fog lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Front Side Marker Lamp Warning

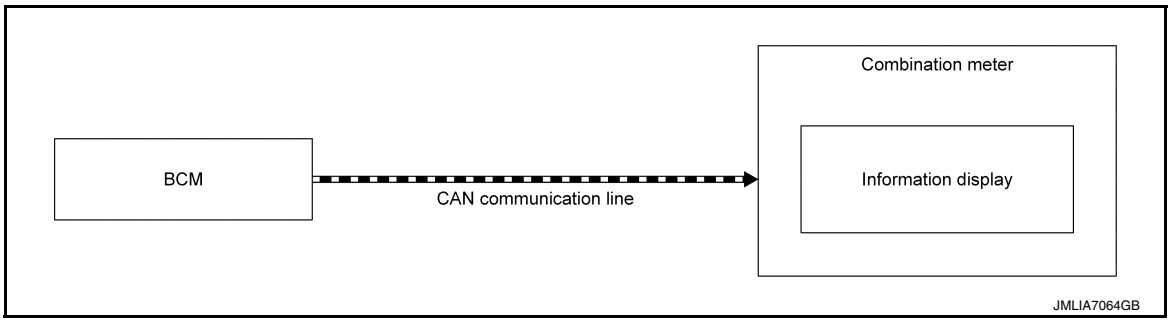
INFOID:0000000013662364

DESIGN/PURPOSE

Front side marker lamp warning warns the driver that there is a malfunction in parking, position, license plate, side marker and tail lamps system.

Symbol	Message
 JMLIA7045ZZ	Check Front Left Sidemarker Lamp or Check Front Right Sidemarker Lamp

SYSTEM DIAGRAM



SIGNAL PATH

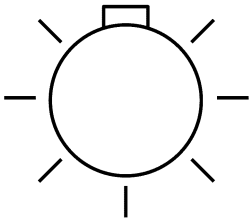
- When BCM detects a malfunction, front side marker lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives front side marker lamp warning signal, front side marker lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Front Turn Signal Lamp Warning

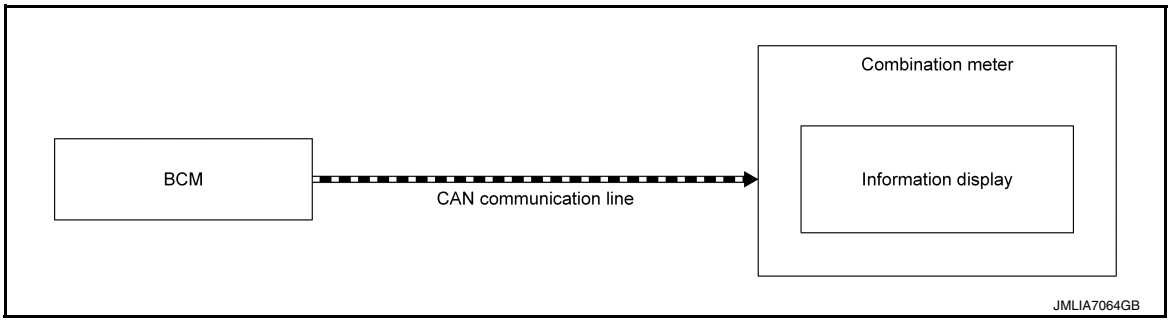
INFOID:0000000013549147

DESIGN/PURPOSE

Front turn signal lamp warning warns the driver that there is a malfunction in turn signal and hazard warning lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Front Left Turn Signal or Check Front Right Turn Signal

SYSTEM DIAGRAM



SIGNAL PATH

- When BCM detects a malfunction, front turn signal lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives front turn signal lamp warning signal, front turn signal lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Hazard Warning Lamp Malfunctioning

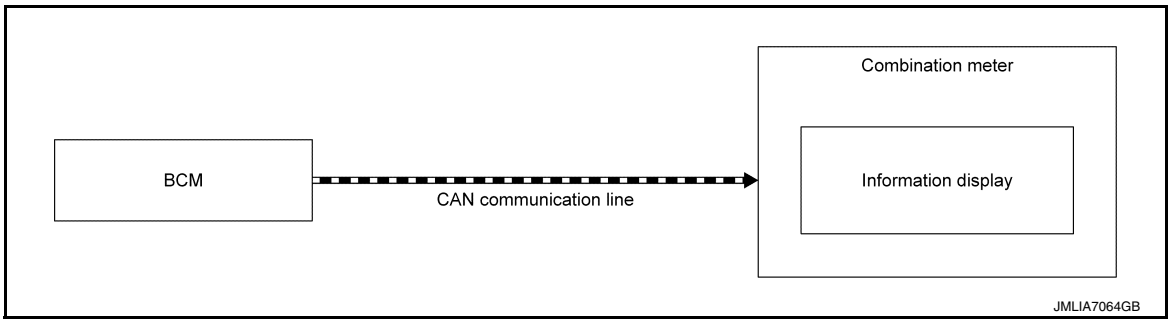
INFOID:0000000013549148

DESIGN/PURPOSE

Hazard warning lamp malfunction warning warns the driver that there is a malfunction in turn signal and hazard warning lamp system.

Symbol	Message
—	Hazard Warning Flashers Malfunctioning

SYSTEM DIAGRAM



SIGNAL PATH

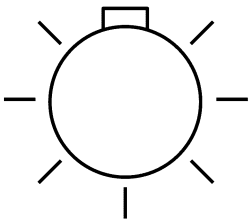
- When BCM detects a malfunction, hazard warning lamp malfunction warning signal transmits to combination meter (via CAN communication).
- Combination meter receives hazard warning lamp malfunction warning signal, Hazard warning lamp malfunction warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Headlamp High Beam Warning

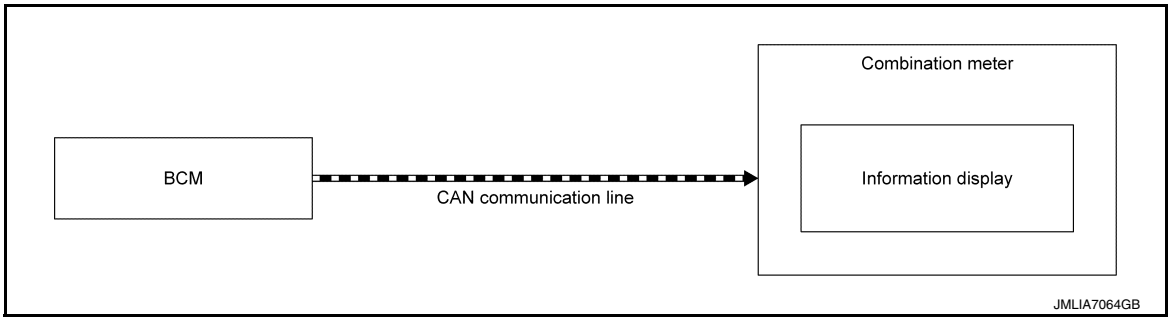
INFOID:0000000013549149

DESIGN/PURPOSE

Headlamp high beam warning warns the driver that there is a malfunction in headlamp system.

Symbol	Message
	Check Left High Beam or Check Right High Beam

SYSTEM DIAGRAM



SIGNAL PATH

- When BCM detects a malfunction, headlamp high beam warning signal transmits to combination meter (via CAN communication).

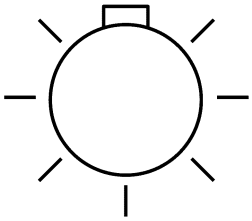
- Combination meter receives headlamp high beam warning signal, headlamp high beam warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Headlamp Low Beam Warning

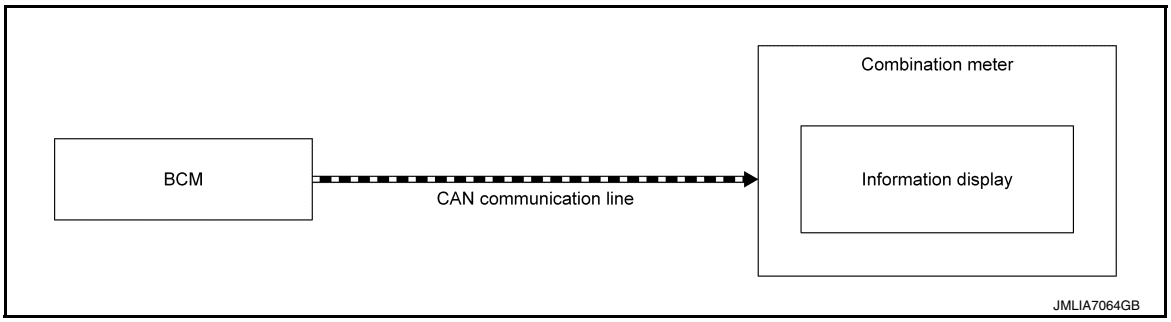
INFOID:0000000013549150

DESIGN/PURPOSE

Headlamp low beam warning warns the driver that there is a malfunction in headlamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Low Beam or Check Right Low Beam

SYSTEM DIAGRAM



SIGNAL PATH

- When BCM detects a malfunction, headlamp low beam warning signal transmits to combination meter (via CAN communication).
- Combination meter receives headlamp low beam warning signal, headlamp low beam warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : High Beam Assist Currently Unavailable

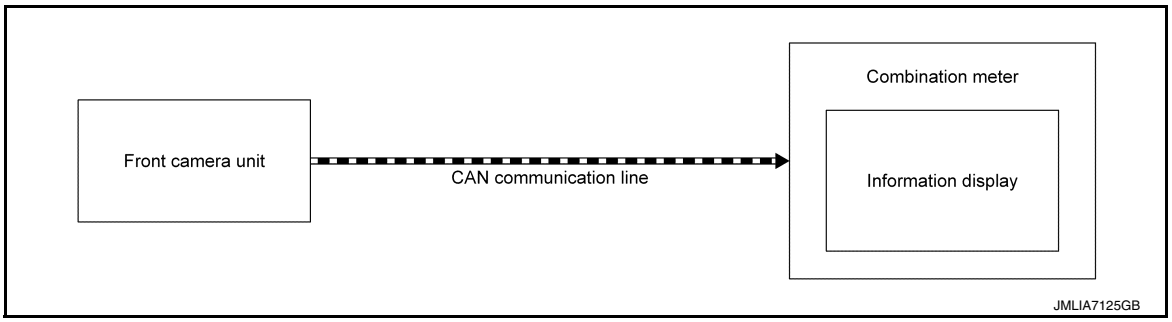
INFOID:0000000013549151

DESIGN/PURPOSE

High beam assist currently unavailable warning warns the driver that there is a malfunction in high beam assist system.

Symbol	Message
—	High beam assist Currently Unavailable See Operator′s Manual

SYSTEM DIAGRAM



SIGNAL PATH

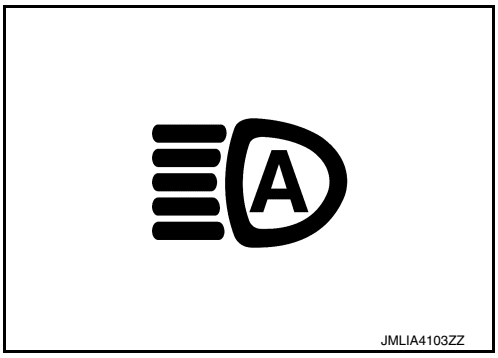
- When front camera unit detects a malfunction, high beam assist currently unavailable warning signal transmits to combination meter (via CAN communication).
- Combination meter receives high beam assist currently unavailable warning signal, high beam assist currently unavailable warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : High Beam Assist Indicator

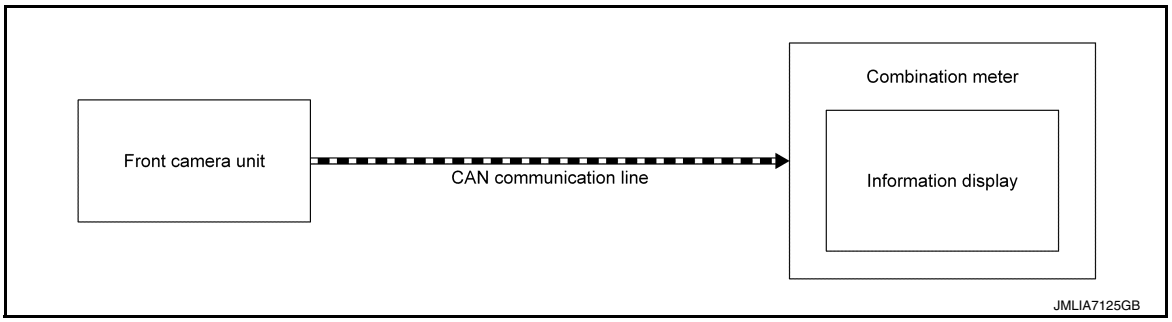
INFOID:0000000013549152

DESIGN/PURPOSE

High beam assist indicator lamp informs the driver that the high beam assist system is in operating status.



SYSTEM DIAGRAM



SIGNAL PATH

- Front camera unit transmits the high beam assist indicator lamp signal to the combination meter via CAN communication when the high beam assist system operation permission conditions are satisfied.
- When combination meter receives high beam assist indicator lamp signal, combination meter turns high beam assist indicator lamp ON.

INFORMATION DISPLAY (COMBINATION METER) : High Beam Assist Inoperative

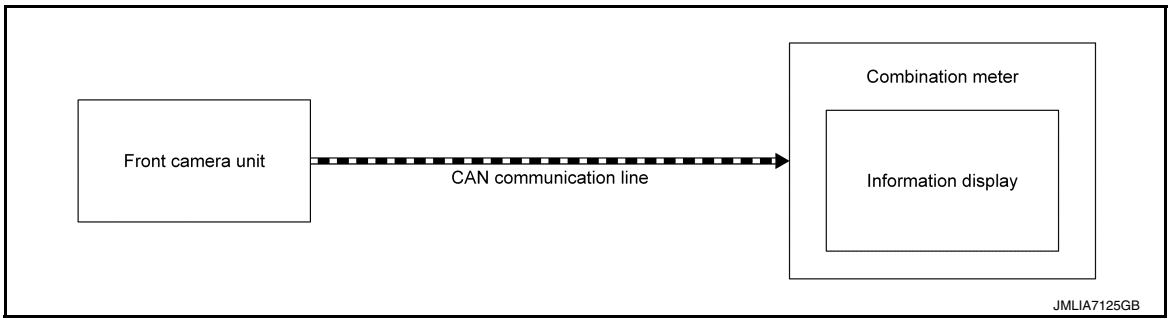
INFOID:0000000013549153

DESIGN/PURPOSE

High beam assist inoperative warning warns the driver that there is a malfunction in high beam assist system.

Symbol	Message
—	High beam assist Inoperative

SYSTEM DIAGRAM



SIGNAL PATH

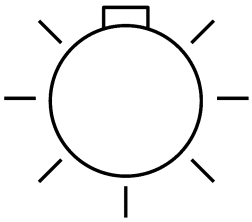
- When front camera unit detects a malfunction, high beam assist inoperative warning signal transmits to combination meter (via CAN communication).
- Combination meter receives high beam assist inoperative warning signal, High beam assist inoperative warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Hi-mounted Stop Lamp Warning

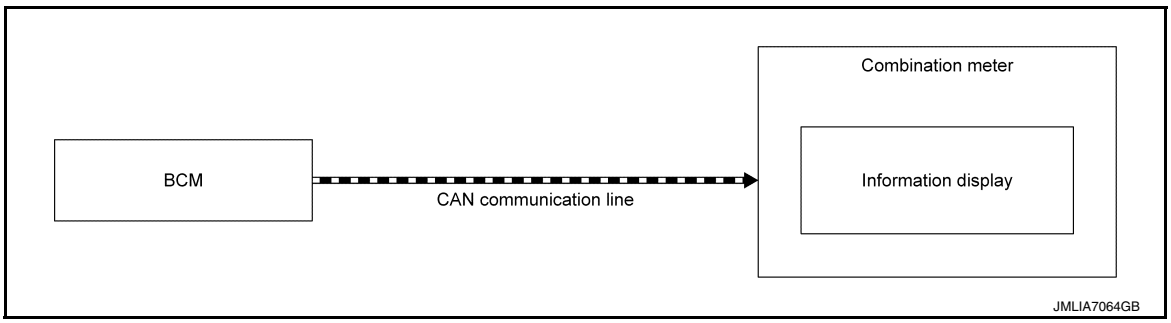
INFOID:0000000013549154

DESIGN/PURPOSE

Stop lamp warning warns the driver that there is a malfunction in stop lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Brake Lamp or Check Right Brake Lamp

SYSTEM DIAGRAM



SIGNAL PATH

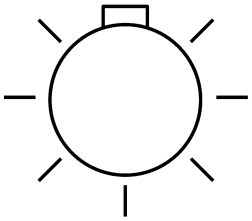
- When BCM detects a malfunction, stop lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives stop lamp warning signal, stop lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : License Plate Lamp Warning

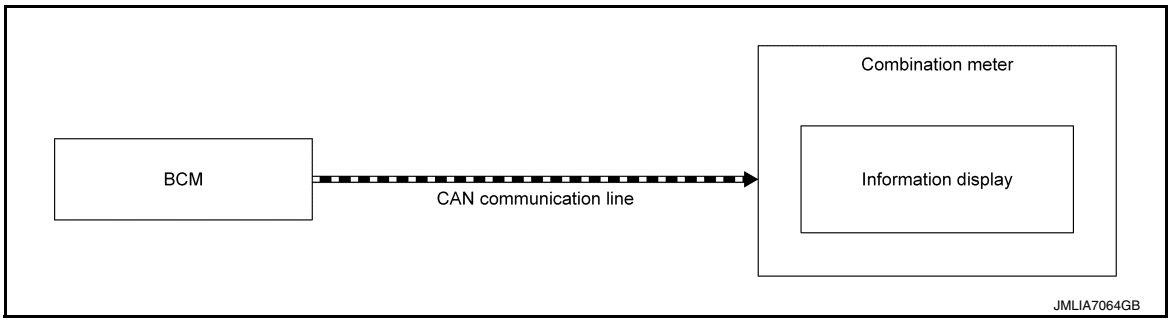
INFOID:0000000013549155

DESIGN/PURPOSE

License plate lamp warning warns the driver that there is a malfunction in parking, position, license plate and tail lamp system.

Symbol	Message
 JMLIA7045ZZ	License Plate Lamp

SYSTEM DIAGRAM



SIGNAL PATH

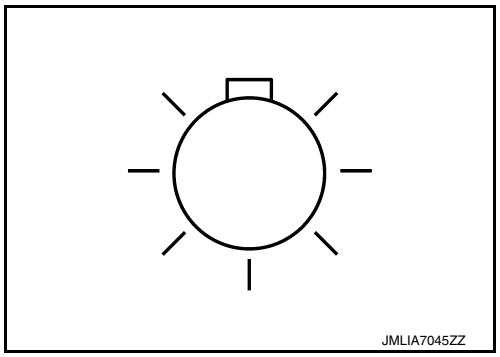
- When BCM detects a malfunction, license plate lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives license plate lamp warning signal, license plate lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Light Reminder Warning (Information Display)

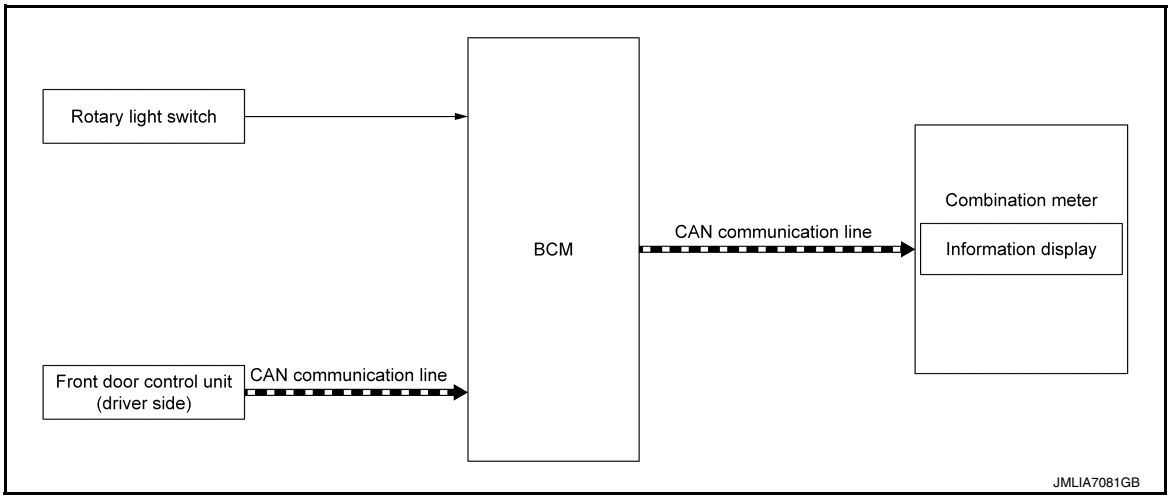
INFOID:0000000013549156

DESIGN/PURPOSE

When the driver is exiting the vehicle while ignition is in any position other than ON and lamps are ON, the light reminder warning (information display) displays a warning in the information display to alert the driver.

Symbol	Message
 JMLIA7045ZZ	Switch Off Lights

SYSTEM DIAGRAM



SIGNAL PATH

- BCM reads status of rotary light switch.
- BCM judges light reminder warning (information display) by rotary light switch signal and front driver side door condition.
- BCM receives front door switch signal from front door control unit (driver side) via CAN communication.
- BCM transmits buzzer output signal to combination meter via CAN communication.
- When combination meter receives the buzzer output signal, “Light reminder warning” pop-up screen appears in the information display.

WARNING/INDICATOR OPERATING CONDITION

When all of the following conditions are satisfied.

- Ignite switch other than ON
- Rotary light switch LO or POSITION
- Front door (driver side) OPEN

WARNING/INDICATOR CANCEL CONDITION

When any of the following conditions are satisfied.

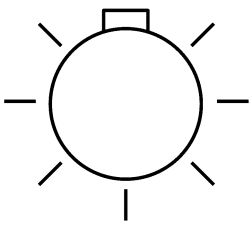
- Ignition ON
- Rotary light switch other than LO or POSITION
- Front door (driver side) CLOSE

INFORMATION DISPLAY (COMBINATION METER) : Parking Lamp Warning

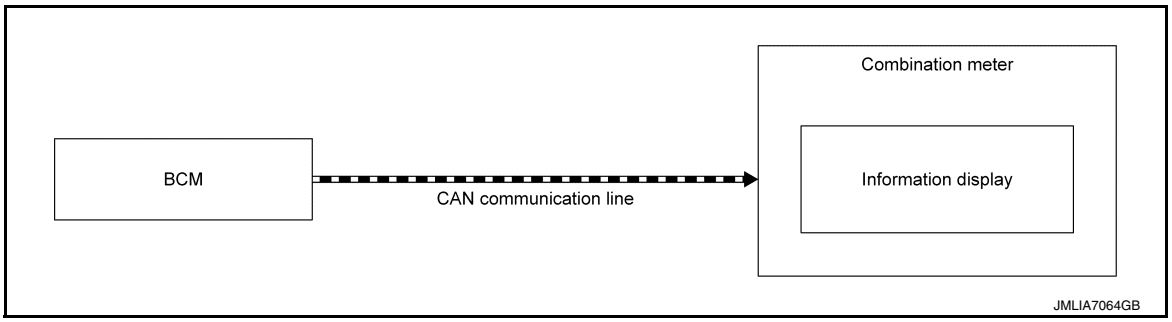
INFOID:0000000013549157

DESIGN/PURPOSE

Parking lamp warning warns the driver that there is a malfunction in Parking, position, license plate and tail lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Front Left Parking Lamp or Check Front Right Parking Lamp

SYSTEM DIAGRAM



SIGNAL PATH

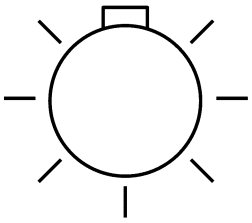
- When BCM detects a malfunction, parking lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives parking lamp warning signal, parking lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Rear Side Marker Lamp Warning

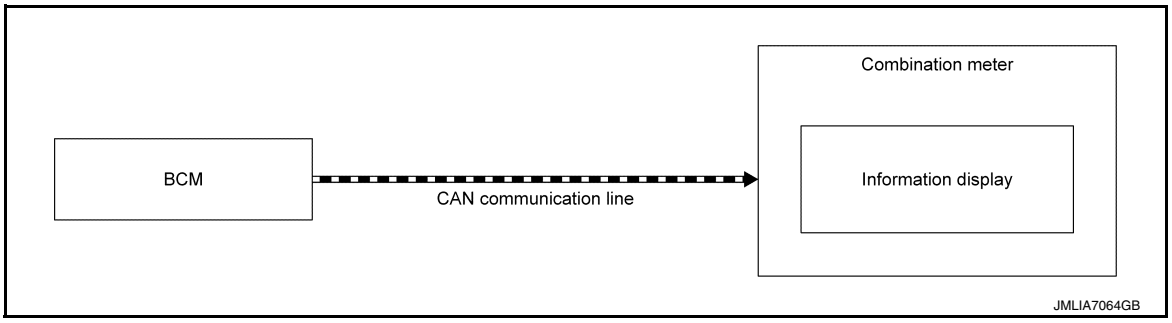
INFOID:0000000013662365

DESIGN/PURPOSE

Rear side marker lamp warning warns the driver that there is a malfunction in parking, position, license plate, side marker and tail lamps system.

Symbol	Message
 JMLIA7045ZZ	Check Rear Left Sidemarker Lamp or Check Rear Right Sidemarker Lamp

SYSTEM DIAGRAM



SIGNAL PATH

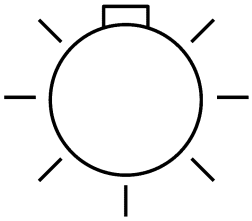
- When BCM detects a malfunction, rear side marker lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives rear side marker lamp warning signal, rear side marker lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Rear Turn Signal Lamp Warning

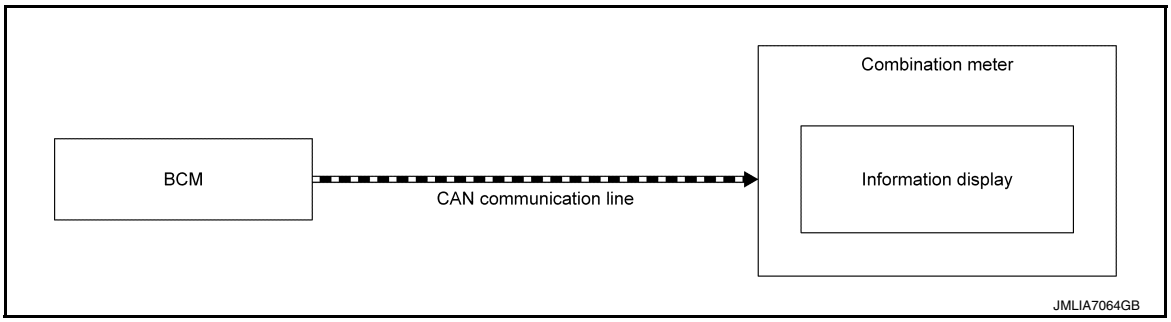
INFOID:0000000013549159

DESIGN/PURPOSE

Rear turn signal lamp warning warns the driver that there is a malfunction in turn signal and hazard warning lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Rear Left Turn Signal or Check Rear Right Turn Signal

SYSTEM DIAGRAM



SIGNAL PATH

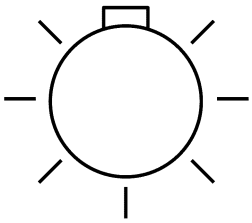
- When BCM detects a malfunction, rear turn signal lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives rear turn signal lamp warning signal, rear turn signal lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Side Turn Signal Lamp Warning

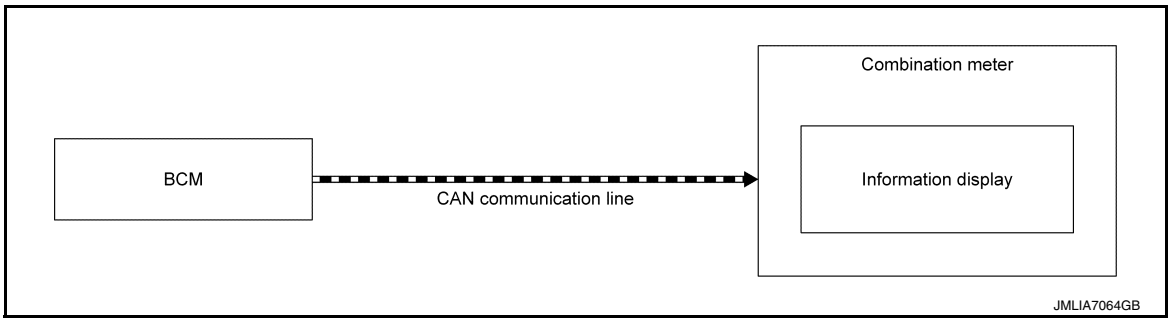
INFOID:0000000013549160

DESIGN/PURPOSE

Side turn signal lamp warning warns the driver that there is a malfunction in turn signal and hazard warning lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Mirror Turn Signal or Check Right Mirror Turn Signal

SYSTEM DIAGRAM



SIGNAL PATH

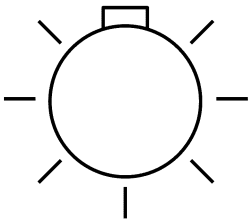
- When BCM detects a malfunction, side turn signal lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives side turn signal lamp warning signal, side turn signal lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Stop Lamp Warning

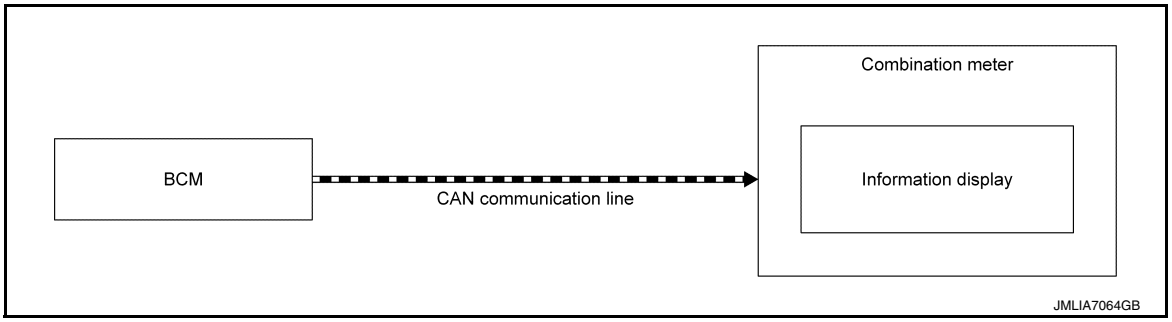
INFOID:0000000013549161

DESIGN/PURPOSE

Stop lamp warning warns the driver that there is a malfunction in stop lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Brake Lamp or Check Right Brake Lamp

SYSTEM DIAGRAM



SIGNAL PATH

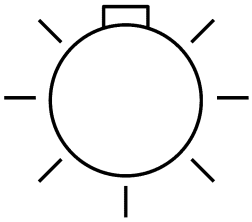
- When BCM detects a malfunction, stop lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives stop lamp warning signal, stop lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Tail Lamp Warning

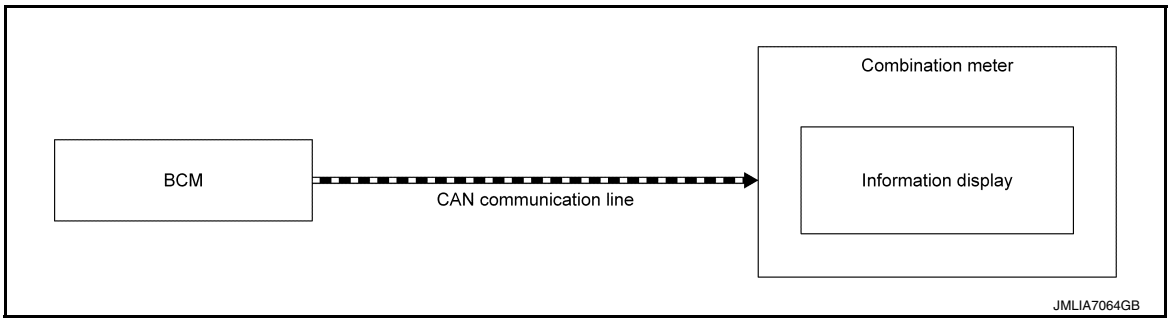
INFOID:0000000013549162

DESIGN/PURPOSE

Tail lamp warning warns the driver that there is a malfunction in tail lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Tail Lamp or Check Right Tail Lamp

SYSTEM DIAGRAM



SIGNAL PATH

- When BCM detects a malfunction, tail lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives tail lamp warning signal, tail lamp warning pop-up screen appears in the information display.

WARNING CHIME

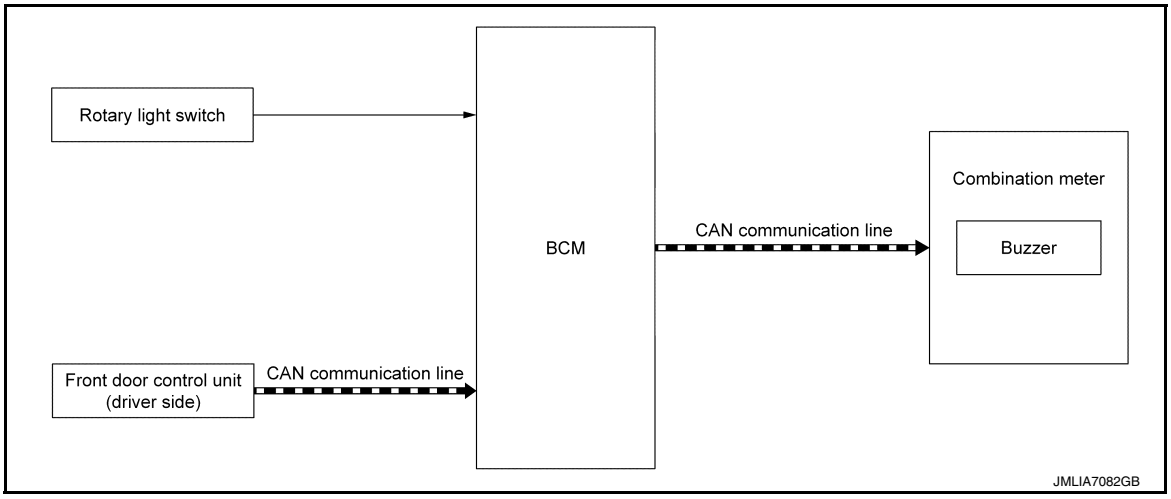
WARNING CHIME : Light Reminder Warning (Buzzer)

INFOID:0000000013549163

PURPOSE

Light reminder warning (buzzer) warns the driver of egression from the vehicle while ignition switch is OFF and lamp is in ON status.

SYSTEM DIAGRAM



SIGNAL PATH

- BCM reads status of rotary light switch.
- BCM judges light reminder warning (buzzer) by rotary light switch status and front driver side door condition.
- BCM receives front door switch signal from front door control unit (driver side) via CAN communication.

- BCM transmits buzzer output signal to combination meter via CAN communication.
- When combination meter receives buzzer output signal, combination meter sounds warning buzzer.

WARNING/INDICATOR OPERATING CONDITION

When all of the following conditions are satisfied.
- Ignition switch other than ON
- Rotary light switch LO or POSITION
- Front door (driver side) OPEN

WARNING/INDICATOR CANCEL CONDITION

When any of the following conditions are satisfied.
- Ignition ON
- Rotary light switch other than LO or POSITION
- Front door (driver side) CLOSE

WARNING/INDICATOR/CHIME LIST

WARNING/INDICATOR/CHIME LIST : Warning Lamp/Indicator Lamp

INFOID:0000000013549164

Item	Design	Reference
Dipped beam indicator lamp		For function, refer to MWI-21, "WARNING LAMPS/INDICATOR LAMPS : Dipped Beam Indicator Lamp".
Front fog lamp indicator lamp		For function, refer to MWI-25, "WARNING LAMPS/INDICATOR LAMPS : Front Fog Lamp Indicator Lamp".
High beam indicator lamp		For function, refer to MWI-26, "WARNING LAMPS/INDICATOR LAMPS : High Beam Indicator Lamp".
Position lamp indicator lamp		For function, refer to MWI-30, "WARNING LAMPS/INDICATOR LAMPS : Position Lamp Indicator Lamp".
Turn signal indicator lamp		For function, refer to MWI-33, "WARNING LAMPS/INDICATOR LAMPS : Turn Signal Indicator Lamp".

WARNING/INDICATOR/CHIME LIST : Warning Chime

INFOID:0000000013549165

Item	Reference
Light reminder warning (buzzer)	Refer to EXL-61, "WARNING CHIME : Light Reminder Warning (Buzzer)".

WARNING/INDICATOR/CHIME LIST : Warning/Indicator (Information Display)

INFOID:0000000013549166

Item	Reference
AFS inoperative	Refer to EXL-45, "INFORMATION DISPLAY (COMBINATION METER) : AFS Inoperative".
Auto light system inoperative	Refer to EXL-46, "INFORMATION DISPLAY (COMBINATION METER) : Auto Light System Inoperative".
Back-up lamp warning	Refer to EXL-47, "INFORMATION DISPLAY (COMBINATION METER) : Back-up Lamp Warning".
Cornering light warning	Refer to EXL-47, "INFORMATION DISPLAY (COMBINATION METER) : Cornering Light Warning".
Daytime running light warning	Refer to EXL-48, "INFORMATION DISPLAY (COMBINATION METER) : Daytime Running Light Warning".

Item	Reference
Exterior lighting system warning	Refer to EXL-49, "INFORMATION DISPLAY (COMBINATION METER) : Exterior Lighting System Warning".
Front fog lamp warning	Refer to EXL-49, "INFORMATION DISPLAY (COMBINATION METER) : Front Fog Lamp Warning".
Front side marker lamp warning	Refer to EXL-50, "INFORMATION DISPLAY (COMBINATION METER) : Front Side Marker Lamp Warning".
Front turn signal lamp warning	Refer to EXL-51, "INFORMATION DISPLAY (COMBINATION METER) : Front Turn Signal Lamp Warning".
Hazard warning lamp malfunctioning	Refer to EXL-51, "INFORMATION DISPLAY (COMBINATION METER) : Hazard Warning Lamp Malfunctioning".
Headlamp high beam warning	Refer to EXL-52, "INFORMATION DISPLAY (COMBINATION METER) : Headlamp High Beam Warning".
Headlamp low beam warning	Refer to EXL-53, "INFORMATION DISPLAY (COMBINATION METER) : Headlamp Low Beam Warning".
High beam assist currently unavailable	Refer to EXL-53, "INFORMATION DISPLAY (COMBINATION METER) : High Beam Assist Currently Unavailable".
High beam assist indicator	Refer to EXL-54, "INFORMATION DISPLAY (COMBINATION METER) : High Beam Assist Indicator".
High beam assist inoperative	Refer to EXL-54, "INFORMATION DISPLAY (COMBINATION METER) : High Beam Assist Inoperative".
Hi-mounted stop lamp warning	Refer to EXL-55, "INFORMATION DISPLAY (COMBINATION METER) : Hi-mounted Stop Lamp Warning".
License plate lamp warning	Refer to EXL-55, "INFORMATION DISPLAY (COMBINATION METER) : License Plate Lamp Warning".
Light reminder warning (information display)	Refer to EXL-56, "INFORMATION DISPLAY (COMBINATION METER) : Light Reminder Warning (Information Display)".
Parking lamp warning	Refer to EXL-57, "INFORMATION DISPLAY (COMBINATION METER) : Parking Lamp Warning".
Rear side marker lamp warning	Refer to EXL-58, "INFORMATION DISPLAY (COMBINATION METER) : Rear Side Marker Lamp Warning".
Rear turn signal lamp warning	Refer to EXL-58, "INFORMATION DISPLAY (COMBINATION METER) : Rear Turn Signal Lamp Warning".
Side turn signal lamp warning	Refer to EXL-59, "INFORMATION DISPLAY (COMBINATION METER) : Side Turn Signal Lamp Warning".
Stop lamp warning	Refer to EXL-60, "INFORMATION DISPLAY (COMBINATION METER) : Stop Lamp Warning".
Tail lamp warning	Refer to EXL-60, "INFORMATION DISPLAY (COMBINATION METER) : Tail Lamp Warning".

DIAGNOSIS SYSTEM (HEADLAMP CONTROL UNIT LH)

CONSULT Function (H/L control module LH)

INFOID:0000000013549167

APPLICATION ITEMS

Diagnosis mode	Description
ECU Identification	Allows confirmation of headlamp control unit LH hardware version
Self Diagnostic Result	Displays the diagnosis results judged by headlamp control unit LH
Work Support	Performs setting for each function
Data Monitor	Displays input/output data for headlamp control unit LH in real time
Active Test	Transmits a drive signal to the load to check their operation

ECU IDENTIFICATION

Hardware version of headlamp control unit LH can be checked.

SELF DIAGNOSTIC RESULT

Self diagnostic result that is judged by headlamp control unit LH can be checked. Refer to EXL-83, "DTC Index".

- When “CRNT” is displayed on self diagnostic result, the system is presently malfunctioning.
- When “PAST” is displayed on self diagnostic result, system malfunction in the past is detected, but the system is presently normal.

WORK SUPPORT

Work item	Description
Adjustment of headlamps via diagnosis	Adjust headlamp leveler to the instal position
Reset operating hours counter of FL lamp fan motor 1	Resetting the hour counter of headlamp fan motor
Reset of operating hours counter of L pos DTRL turn sig	Resetting the hour counter of position lamp, daytime running light and front turn signal lamp
Zero position adjustment	Adjust height sensor signal output under unladen conditions

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item [Value/Unit]	Description
OUTPUT VOLTAGE CH 1 [V]	—
OUTPUT VOLTAGE CH 2 [V]	—
OUTPUT VOLTAGE CH 3 [V]	—
OUTPUT VOLTAGE CH 6 [V]	—
VHCL SPEED [km/h]	Displays the vehicle speed
On-board power supply voltage [V]	—
TURN SIGNAL LAMP [Off/Left on/Right on/Hazard]	Displays the turn signal lamp condition
STEERING WHEEL ANGLE [°]	Displays the steering wheel angle value

Monitor item [Value/Unit]	Description
HIGH BEAMS (CAN) [No/Yes]	Displays the headlamp (HI) condition
Right rear wheel speed [1/min]	—
Right front wheel speed [1/min]	—
Left rear wheel speed [1/min]	—
Left front wheel speed [1/min]	—
YAW RATE [°/s]	—
Status of circuit 15 [LOCK/OFF/ACC/On/Start]	—
LOW BEAMS [OFF/On]	Displays the headlamp (LO) condition
VOLTAGE AT CIRCUIT 30 [V]	Displays the battery power supply voltage
VOLTAGE AT CIRCUIT 30L [V]	Displays the headlamp power supply voltage
AVRG VEHICLE LV RR AXLE	Displays the rear height sensor signal output value
LEFT REAR LEVEL SENSOR	Displays the rear height sensor detection level
AVRG VEHICLE LV FR AXLE	Displays the front height sensor signal output value
LEFT FRONT LEVEL SENSOR	Displays the front height sensor detection level
Internal temperature sensor [°C]	—
Temperature sensor channel-1 [°C]	—
Temperature sensor channel-2 [°C]	—
Temperature sensor channel-3 [°C]	—
Temperature sensor channel-4 [°C]	—
Temperature sensor channel-5 [°C]	—
LEFT FR LAMP FAN MTR 1 [OFF/ON/Defect]	—
LIGHT DISTRIBUTION [Symm/RV/LV]	—
TOURIST MODE [NOT ACT/ACTIVE]	—
LEFT CORNERING ILLUMI	—
RIGHT CORNERING ILLUMI	—
HIGH BEAMS [0/1]	Displays the headlamp (HI) condition
LEFT LT DSTRBTN ACT MTR	—
RIGHT LT DSTRBTN ACT MTR	—
ZERO POS ADJUSTMENT [OFF/On]	—

Monitor item [Value/Unit]	Description
ZERO POS REAR AXLE [V]	—
ZERO POS FRONT AXLE [V]	—
OUTPUT VOLTAGE CH 4 [V]	—
OUTPUT VOLTAGE CH 5 [V]	—
OPERAT HOUR CNTR (FAN) [H]	—
LEFT ACT CRV ILLUMI MTR [uStep]	—
LEFT HL RANGE ADJ MTR [uStep]	—
OPERAT HOUR COUNT CH 1 [H]	—
OPERAT HOUR COUNT CH 2 [H]	—
OPERAT HOUR COUNT CH 3 [H]	—
OPERAT HOUR COUNT CH 4 [H]	—
OPERAT HOUR COUNT CH 5 [H]	—
OPERAT HOUR COUNT CH 6 [H]	—

ACTIVE TEST

Test item	Description
Check left front lamp unit fan motor 1	—
Test of left H/L range adjust act motor	—
Active curve illumination position sensor	—
Light distribution position sensor	—
Active curve illumination actuator motor	—
Light distribution actuator motor	—
Fan	—
Active curve illumination	—
Active curve illumination with steering angle	—
Intelligent light spread	—
Headlamp range adjustment	—

DIAGNOSIS SYSTEM (HEADLAMP CONTROL UNIT RH)

CONSULT Function (H/L control module RH)

INFOID:0000000013549168

APPLICATION ITEMS

Diagnosis mode	Description
ECU Identification	Allows confirmation of headlamp control unit RH hardware version
Self Diagnostic Result	Displays the diagnosis results judged by headlamp control unit RH
Work Support	Performs setting for each function
Data Monitor	Displays input/output data for headlamp control unit RH in real time
Active Test	Transmits a drive signal to the load to check their operation

ECU IDENTIFICATION

Hardware version of headlamp control unit RH can be checked.

SELF DIAGNOSTIC RESULT

Self diagnostic result that is judged by headlamp control unit RH can be checked. Refer to EXL-94, "DTC Index".

- When “CRNT” is displayed on self diagnostic result, the system is presently malfunctioning.
- When “PAST” is displayed on self diagnostic result, system malfunction in the past is detected, but the system is presently normal.

WORK SUPPORT

Work item	Description
Reset operating hours counter of FR lamp fan motor 1	Resetting the hour counter of headlamp fan motor
Reset of operating hours counter of R pos DTRL turn sig	Resetting the hour counter of position lamp, daytime running light and front turn signal lamp

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item [Value/Unit]	Description
OUTPUT VOLTAGE CH 1 [V]	—
OUTPUT VOLTAGE CH 2 [V]	—
OUTPUT VOLTAGE CH 3 [V]	—
OUTPUT VOLTAGE CH 6 [V]	—
VHCL SPEED [km/h]	Displays the vehicle speed
On-board power supply voltage [V]	—
TURN SIGNAL LAMP [Off/Left on/Right on/Hazard]	Displays the turn signal lamp condition
HIGH BEAMS (CAN) [No/Yes]	Displays the headlamp (HI) condition
Status of circuit 15 [LOCK/OFF/ACC/On/Start]	—

Monitor item [Value/Unit]	Description
LOW BEAMS [OFF/On]	Displays the headlamp (LO) condition
Internal temperature sensor [°C]	—
Temperature sensor channel-1 [°C]	—
Temperature sensor channel-2 [°C]	—
Temperature sensor channel-3 [°C]	—
Temperature sensor channel-4 [°C]	—
Temperature sensor channel-5 [°C]	—
VOLTAGE AT CIRCUIT 30 [V]	Displays the battery power supply voltage
VOLTAGE AT CIRCUIT 30L [V]	Displays the headlamp power supply voltage
RH FR LAMP FAN MOTOR 1 [OFF/On/Defect]	—
OPERAT HOUR COUNT CH 1 [H]	—
OPERAT HOUR COUNT CH 2 [H]	—
OPERAT HOUR COUNT CH 3 [H]	—
OPERAT HOUR COUNT CH 4 [H]	—
OPERAT HOUR COUNT CH 5 [H]	—
OPERAT HOUR COUNT CH 6 [H]	—
OPERAT HOUR CNTR (FAN) [H]	—
OUTPUT VOLTAGE CH 4 [H]	—
OUTPUT VOLTAGE CH 5 [H]	—
RH CURVE ILL ACT MOTOR [uStep]	—
RH HL RANGE ACT MOTOR [uStep]	—

ACTIVE TEST

Test item	Description
Check right front lamp unit fan motor 1	—
Check right front lamp unit fan motor 2	—
Light distribution position sensor	—

Test item	Description
Active curve illumination position sensor	—
Active curve illumination actuator motor	—
Light distribution actuator motor	—
Active curve illumination	—
Active curve illumination with steering angle	—
Intelligent light spread	—
Fan	—
Headlamp range adjustment	—

DIAGNOSIS SYSTEM (LED HEADLAMP CONTROL MODULE LH)

CONSULT Function (LED H/L CONTROL MODULE LH)

INFOID:0000000013549169

APPLICATION ITEMS

Diagnosis mode	Description
ECU Identification	Allows confirmation of LED headlamp control module LH hardware version
Work Support	Performs setting for each function
Data Monitor	Displays input/output data for LED headlamp control module LH in real time
Active Test	Transmits a drive signal to the load to check their operation

ECU IDENTIFICATION

Hardware version of led headlamp control module LH can be checked.

WORK SUPPORT

Work item	Description
Reset operating hours counter of FL lamp fan motor 2	Resetting the hour counter of headlamp fan motor

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item [Value/Unit]	Description
STATUS [OFF/ON/Qualified/Detected]	—
OPERAT HOUR COUNT CH 1 [H]	—
OPERAT HOUR COUNT CH 2 [H]	—
OPERAT HOUR COUNT CH 3 [H]	—
OPERAT HOUR CNTR (FAN) [H]	—
ACT MOD LED EXT LT LH FR [°C]	—
TEMPERATURE SENSOR 1 [°C]	—
TEMPERATURE SENSOR 2 [°C]	—
TEMPERATURE SENSOR 3 [°C]	—
VOLTAGE AT CIRCUIT 30L [V]	Displays the headlamp power supply
VOLTAGE AT CIRCUIT 30 [V]	Displays the battery power supply
OUTPUT VOLTAGE CH 1 [V]	—

Monitor item [Value/Unit]	Description
OUTPUT VOLTAGE CH 2 [V]	—
OUTPUT VOLTAGE CH 3 [V]	—

ACTIVE TEST

Test item	Description
Test output of high beams	—
Test output of low beams	—
Check left front lamp unit fan motor 2	—
Fan	—
LED exterior lights	—

DIAGNOSIS SYSTEM (LED HEADLAMP CONTROL MODULE RH)

CONSULT Function (LED H/L control module RH)

INFOID:0000000013549170

APPLICATION ITEMS

Diagnosis mode	Description
ECU Identification	Allows confirmation of LED headlamp control module RH hardware version
Work Support	Performs setting for each function
Data Monitor	Displays input/output data for LED headlamp control module RH in real time
Active Test	Transmits a drive signal to the load to check their operation

ECU IDENTIFICATION

Hardware version of led headlamp control module RH can be checked.

WORK SUPPORT

Work item	Description
Reset operating hours counter of FR lamp fan motor 2	Resetting the hour counter of headlamp fan motor

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item [Value/Unit]	Description
STATUS [OFF/ON/Qualified/Detected]	—
OPERAT HOUR CNTR (FAN) [H]	—
ACT MOD LED EXT LT RH FR [°C]	—
TEMPERATURE SENSOR 1 [°C]	—
TEMPERATURE SENSOR 2 [°C]	—
TEMPERATURE SENSOR 3 [°C]	—
VOLTAGE AT CIRCUIT 30L [V]	Displays the headlamp power supply
VOLTAGE AT CIRCUIT 30 [V]	Displays the battery power supply
OUTPUT VOLTAGE CH 1 [V]	—
OUTPUT VOLTAGE CH 2 [V]	—
OUTPUT VOLTAGE CH 3 [V]	—
OPERAT HOUR COUNT CH 1 [H]	—

Monitor item [Value/Unit]	Description
OPERAT HOUR COUNT CH 2 [H]	—
OPERAT HOUR COUNT CH 3 [H]	—

ACTIVE TEST

Test item	Description
Test output of high beams	—
Test output of low beams	—
Check right front lamp unit fan motor 2	—
Fan	—
LED exterior lights	—

ECU DIAGNOSIS INFORMATION

BCM, FRONT DOOR CONTROL UNIT

List of ECU Reference

INFOID:0000000013549171

ECU	Reference
BCM	BCS-32, "Reference Value"
	BCS-50, "Fail-safe"
	BCS-51, "DTC Index"
Left front door control unit	DLK-50, "Reference Value"
	DLK-57, "Fail-safe"
	DLK-58, "DTC Inspection Priority Chart"
	DLK-60, "DTC Index"
Right front door control unit	DLK-62, "Reference Value"
	DLK-68, "Fail-safe"
	DLK-69, "DTC Inspection Priority Chart"
	DLK-70, "DTC Index"

HEADLAMP CONTROL UNIT LH

Reference Value

INFOID:0000000013549172

VALUES ON THE DIAGNOSIS TOOL

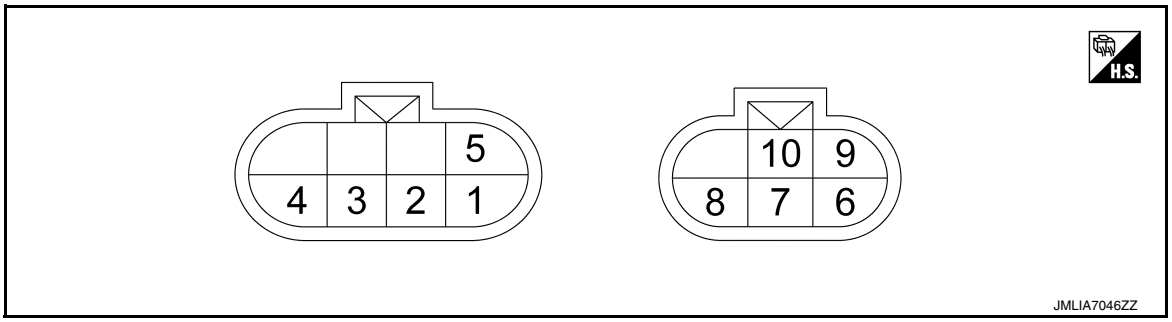
NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

CONSULT MONITOR ITEM

Monitor item	Condition		Value/Status (Approx.)
OUTPUT VOLTAGE CH 1	—		—
OUTPUT VOLTAGE CH 2	—		—
OUTPUT VOLTAGE CH 3	—		—
OUTPUT VOLTAGE CH 6	—		—
VHCL SPEED	While driving		Displays the vehicle speed calculated by headlamp control unit LH
On-board power supply voltage	—		—
TURN SIGNAL LAMP	Ignition switch ON	Turn signal lamp OFF	Off
		Turn signal lamp LH blinking	Left on
		Turn signal lamp RH blinking	Right on
		Turn signal lamp LH and RH blinking	Hazard
STEERING WHEEL ANGLE	When driving straight		0.0°
	Turning left		Positive value
	Turning right		Negative value
HIGH BEAMS (CAN)	Headlamp (HI)	ON	Yes
		OFF	No
Right rear wheel speed	—		—
Right front wheel speed	—		—
Left rear wheel speed	—		—
Left front wheel speed	—		—
YAW RATE	—		—
Status of circuit 15	—		—
LOW BEAMS	Headlamp (LO)	ON	On
		OFF	OFF
VOLTAGE AT CIRCUIT 30	Ignition switch OFF		Battery voltage
VOLTAGE AT CIRCUIT 30L	Ignition switch ON		Battery voltage
AVRG VEHICLE LV RR AXLE	Vehicle rear height	Unloaded vehicle condition	11
		Low	Value decreases from the unladen status
LEFT REAR LEVEL SENSOR	Vehicle rear height	Unloaded vehicle condition	2.080
		Low	Value increases from the unladen status
AVRG VEHICLE LV FR AXLE	Vehicle front height	Unloaded vehicle condition	-4
		Low	Value decreases from the unladen status

Monitor item	Condition		Value/Status (Approx.)
LEFT FRONT LEVEL SENSOR	Vehicle front height	Unloaded vehicle condition	2.130
		Low	Value increases from the unladen status
Internal temperature sensor	—		—
Internal temperature sensor-1	—		—
Internal temperature sensor-2	—		—
Internal temperature sensor-3	—		—
Internal temperature sensor-4	—		—
Internal temperature sensor-5	—		—
LEFT FR LAMP FAN MTR 1	—		—
LIGHT DISTRIBUTION	—		—
TOURIST MODE	—		—
LEFT CORNERING ILLUMI	—		—
RIGHT CORNERING ILLUMI	—		—
HIGH BEAMS	Headlamp (HI)	ON	1
		OFF	0
LEFT LT DSTRBTN ACT MTR	—		—
RIGHT LT DSTRBTN ACT MTR	—		—
ZERO POS ADJUSTMENT	—		—
ZERO POS REAR AXLE	—		—
ZERO POS FRONT AXLE	—		—
OUTPUT VOLTAGE CH 4	—		—
OUTPUT VOLTAGE CH 5	—		—
OPERAT HOUR CNTR (FAN)	—		—
LEFT ACT CRV ILLUMI MTR	—		—
LEFT HL RANGE ADJ MTR	—		—
OPERAT HOUR COUNT CH 1	—		—
OPERAT HOUR COUNT CH 2	—		—
OPERAT HOUR COUNT CH 3	—		—
OPERAT HOUR COUNT CH 4	—		—
OPERAT HOUR COUNT CH 5	—		—
OPERAT HOUR COUNT CH 6	—		—

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (W)	Ground	CAN-H	Input/ Output	—		—
2 (L)	Ground	CAN-L	Input/ Output	—		—
3 (Y)	Ground	Headlamp power supply	Input	Ignition switch ON		13.2 V
4 (V)	Ground	Battery power supply	Input	Ignition switch OFF		13.6 V
5 (B)	Ground	Ground	Output	Ignition switch ON		0.8 V
6 (L)	Ground	Front height sensor signal	Input	Vehicle front height	Unloaded vehicle condition	2.1 V
					Low	Value increases from the unladen status
7 (P)	Ground	Height sensor power supply	Output	Ignition switch	ON	5.0 V
					OFF	0 V
8 (BR)	Ground	Front height sensor ground	Input	Ignition switch ON		0 V
9 (G)	Ground	Rear height sensor signal	Input	Vehicle rear height	Unloaded vehicle condition	2.1 V
					Low	Value increases from the unladen status
10 (BR)	Ground	Rear height sensor ground	Input	Ignition switch ON		0 V

Fail-safe

INFOID:0000000013549173

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B1783	04	LED headlamp control module (LED headlamp control module)	[SYSTEM INTERNAL FAILURES]	Headlamp (HI/LO) does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	1C		[CIRC VOLTAGE OUT OF RANGE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
	87		[MISSING MESSAGE]		Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B1787	11	Headlamp range adjustment actuator (Headlamp range adjustment actuator)	[CIRC SHORT TO GRND]	Headlamp aiming motor does not operate	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	71		[ACTUATOR STUCK]		Return to normal status
	98		[COMPONENT/SYS OVER TEMP]		Return to normal status
B17ED	11	Low beam output signal (Low beam output signal)	[CIRC SHORT TO GRND]	Headlamp (LO) does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (Headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (Headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (Headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (Headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (Headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB6	01	Temp sensor 1 (LED H/L cont ECU) [Temperature sensor 1 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB7	01	Temp sensor 2 (LED H/L cont ECU) [Temperature sensor 2 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB8	01	Temp sensor 3 (LED H/L cont ECU) [Temperature sensor 3 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B210D	00	Power supply (Power supply)	[NO SUBTYPE INFO]	—	—
B210E	00	Power supply (Power supply)	[NO SUBTYPE INFO]	—	—
B210F	14	Circuit 30 (Circuit 30)	[CIRC SHORT TO GROUND OR OPEN]	Headlamp (HI/LO) does not lighting	Return to normal status
B2239	00	Headlamp range adjustment (Headlamp range adjustment)	[NO SUBTYPE INFO]	Headlamp (HI/LO) does not lighting Active adaptive lighting system does not operate	Return to normal status
	55		[NOT CONFIURED]	Headlamp (HI/LO) does not lighting	Return to normal status
	64		[SIGNAL PLAUSIBILITY FAILURE]	Active adaptive lighting system does not operate	Return to normal status
B2386	01	LED headlamp control module fan 1 (LED headlamp control module fan 1)	[ELECTRICAL MALFUNCTION]	Headlamp (HI/LO) dim lighting	Return to normal status
B238A	01	LED headlamp control module fan 2 (LED headlamp control module fan 2)	[ELECTRICAL MALFUNCTION]	Headlamp (HI/LO) dim lighting	Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B2837	11	Active curve illumination sensor (Active curve illumination sensor)	[CIRC SHORT TO GRND]	Active adaptive lighting system does not operate	Return to normal status
	13		[CIRC OPEN]		Return to normal status
B2838	11	Active curve illumination actuator (Active curve illumination actuator)	[CIRC SHORT TO GRND]	Swivel actuator does not operate	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	71		[ACTUATOR STUCK]		Return to normal status
	98		[COMPONENT/SYS OVER TEMP]		Return to normal status
B2839	11	Cornering lamp (Cornering lamp)	[CIRC SHORT TO GRND]	Cornering lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B284C	11	Light distribution sensor (Light distribution sensor)	[CIRC SHORT TO GRND]	Light distribution on safety position	Return to normal status
	13		[CIRC OPEN]		Return to normal status
B284D	11	Light distribution actuator (Light distribution actuator)	[CIRC SHORT TO GRND]	Light distribution does not change	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	71		[ACTUATOR STUCK]	Light distribution on safety position	Return to normal status
	98		[COMPONENT/SYS OVER TEMP]	Light distribution does not change	Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B2856	11	High beam output signal (High beam output signal)	[CIRC SHORT TO GRND]	Headlamp (HI) does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	Parking lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2858	11	Front turn signal lamp output signal (Front turn signal lamp output signal)	[CIRC SHORT TO GRND]	Front turn signal lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	Front side marker lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	Daytime running lights without function.	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
C151E	04	Front level sensor lh (Front level sensor left hand)	[SYSTEM INTERNAL FAILURES]	Active adaptive lighting system does not operate	Return to normal status
	11		[CIRC SHORT TO GRND]		Return to normal status
	12		[CIRC SHORT TO BATTERY]		Return to normal status
	16		[CIRC VOLT BELOW THRESHOLD]		Return to normal status
	17		[CIRC VOLT ABOVE THRESHOLD]		Return to normal status
	29		[SIGNAL INVALID]		Return to normal status
	31		[NO SIGNAL]		Return to normal status
C1526	04	Rear level sensor lh (Rear level sensor left hand)	[SYSTEM INTERNAL FAILURES]	Active adaptive lighting system does not operate	Return to normal status
	11		[CIRC SHORT TO GRND]		Return to normal status
	12		[CIRC SHORT TO BATTERY]		Return to normal status
	16		[CIRC VOLT BELOW THRESHOLD]		Return to normal status
	17		[CIRC VOLT ABOVE THRESHOLD]		Return to normal status
	29		[SIGNAL INVALID]		Return to normal status
	31		[NO SIGNAL]		Return to normal status
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	Active adaptive lighting system does not operate	Return to normal status
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U1008	01	Communication error (LIN bus 1) [Communication error (LIN bus 1)]	[ELECTRICAL MALFUNCTION]	Headlamp (HI/LO) does not lighting Active adaptive lighting system does not operate	Return to normal status
U118B	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Headlamp (HI/LO) does not lighting Active adaptive lighting system does not operate	Return to normal status
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	High beam assist system does not operate	Return to normal status

*: Headlamp (HI/LO), daytime running light, parking lamp, position lamp, front side marker lamp and front turn signal lamp

DTC Index

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×: Applicable

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Reference page
B1783	04	LED headlamp control module (LED headlamp control module)	[SYSTEM INTERNAL FAILURES]	×	EXL-151
	13		[CIRC OPEN]	×	
	1C		[CIRC VOLTAGE OUT OF RANGE]	×	
	55		[NOT CONFIURED]	×	
	87		[MISSING MESSAGE]	×	
B1787	11	Headlamp range adjustment actuator (Headlamp range adjustment actuator)	[CIRC SHORT TO GRND]	×	EXL-157
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	71		[ACTUATOR STUCK]	×	
	98		[COMPONENT/SYS OVER TEMP]	×	
B17ED	11	Low beam output signal (Low beam output signal)	[CIRC SHORT TO GRND]	×	EXL-161
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-169

DTC		CONSULT screen items		Fail-safe	Reference page
		(Trouble diagnosis content)	[Malfunction type]		
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-171
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-173
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-175
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-177
B1FB6	01	Temp sensor 1 (LED H/L cont ECU) [Temperature sensor 1 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-179
B1FB7	01	Temp sensor 2 (LED H/L cont ECU) [Temperature sensor 2 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-181
B1FB8	01	Temp sensor 3 (LED H/L cont ECU) [Temperature sensor 3 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-183
B210D	00	Power supply (Power supply)	[NO SUBTYPE INFO]	—	EXL-185
B210E	00	Power supply (Power supply)	[NO SUBTYPE INFO]	—	EXL-190
B210F	14	Circuit 30 (Circuit 30)	[CIRC SHORT TO GROUND OR OPEN]	×	EXL-195
B2239	00	Headlamp range adjustment (Headlamp range adjustment)	[NO SUBTYPE INFO]	×	EXL-198
	55		[NOT CONFIURED]	×	
	64		[SIGNAL PLAUSIBILITY FAILURE]	×	
B2386	01	LED headlamp control module fan 1 (LED headlamp control module fan 1)	[ELECTRICAL MALFUNCTION]	×	EXL-200
B238A	01	LED headlamp control module fan 2 (LED headlamp control module fan 2)	[ELECTRICAL MALFUNCTION]	×	EXL-202
B2837	11	Active curve illumination sensor (Active curve illumination sensor)	[CIRC SHORT TO GRND]	×	EXL-212
	13		[CIRC OPEN]	×	

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Reference page
B2838	11	Active curve illumination actuator (Active curve illumination actuator)	[CIRC SHORT TO GRND]	×	EXL-214
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	71		[ACTUATOR STUCK]	×	
	98		[COMPONENT/SYS OVER TEMP]	×	
B2839	11	Cornering lamp (Cornering lamp)	[CIRC SHORT TO GRND]	×	EXL-217
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
B284C	11	Light distribution sensor (Light distribution sensor)	[CIRC SHORT TO GRND]	×	EXL-220
	13		[CIRC OPEN]	×	
B284D	11	Light distribution actuator (Light distribution actuator)	[CIRC SHORT TO GRND]	×	EXL-222
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	71		[ACTUATOR STUCK]	×	
	98		[COMPONENT/SYS OVER TEMP]	×	
B2856	11	High beam output signal (High beam output signal)	[CIRC SHORT TO GRND]	×	EXL-230
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	×	EXL-233
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
B2858	11	Front turn signal lamp output signal (Front turn signal lamp output signal)	[CIRC SHORT TO GRND]	×	EXL-236
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	

DTC		CONSULT screen items		Fail-safe	Reference page
		(Trouble diagnosis content)	[Malfunction type]		
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	×	EXL-239
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	×	EXL-242
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
C151E	04	Front level sensor lh (Front level sensor left hand)	[SYSTEM INTERNAL FAILURES]	×	EXL-245
	11		[CIRC SHORT TO GRND]	×	
	12		[CIRC SHORT TO BATTERY]	×	
	16		[CIRC VOLT BELOW THRESHOLD]	×	
	17		[CIRC VOLT ABOVE THRESHOLD]	×	
	29		[SIGNAL INVALID]	×	
	31		[NO SIGNAL]	×	
C1526	04	Rear level sensor lh (Rear level sensor left hand)	[SYSTEM INTERNAL FAILURES]	×	EXL-249
	11		[CIRC SHORT TO GRND]	×	
	12		[CIRC SHORT TO BATTERY]	×	
	16		[CIRC VOLT BELOW THRESHOLD]	×	
	17		[CIRC VOLT ABOVE THRESHOLD]	×	
	29		[SIGNAL INVALID]	×	
	31		[NO SIGNAL]	×	
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	×	EXL-253
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-255
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-258
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-261
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-264
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-267
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-270

DTC		CONSULT screen items		Fail-safe	Reference page
		(Trouble diagnosis content)	[Malfunction type]		
U1008	01	Communication error (LIN bus 1) [Communication error (LIN bus 1)]	[ELECTRICAL MALFUNCTION]	×	EXL-273
U118B	00	Communication error (Communication error)	[NO SUBTYPE INFO]	×	EXL-277
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	×	EXL-279

HEADLAMP CONTROL UNIT RH

Reference Value

INFOID:0000000013549175

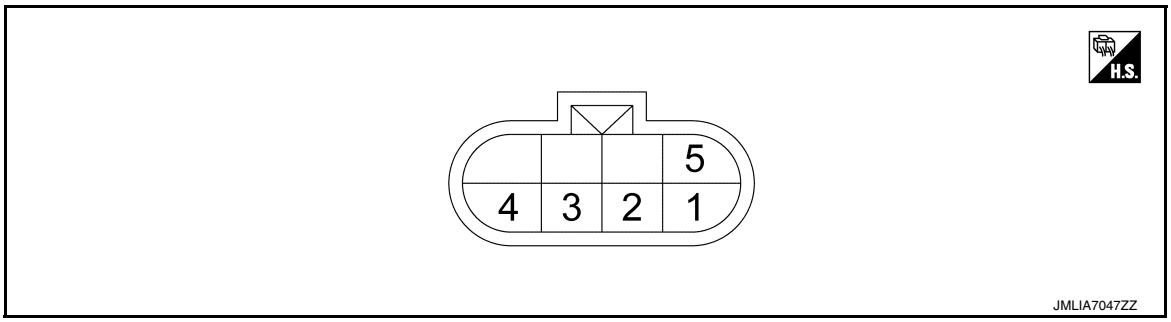
VALUES ON THE DIAGNOSIS TOOL

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

CONSULT MONITOR ITEM

Monitor item	Condition		Value/Status (Approx.)
OUTPUT VOLTAGE CH 1	—		—
OUTPUT VOLTAGE CH 2	—		—
OUTPUT VOLTAGE CH 3	—		—
OUTPUT VOLTAGE CH 6	—		—
VHCL SPEED	while driving		Displays the vehicle speed calculated by headlamp control unit
On-board power supply voltage	—		—
TURN SIGNAL LAMP	Ignition switch ON	Turn signal lamp OFF	Off
		Turn signal lamp LH blinking	Left on
		Turn signal lamp RH blinking	Right on
		Turn signal lamp LH and RH blinking	Hazard
HIGH BEAMS (CAN)	Headlamp (HI)	ON	Yes
		OFF	No
Status of circuit 15	—		—
LOW BEAMS	Headlamp (LO)	ON	On
		OFF	OFF
Internal temperature sensor	—		—
Internal temperature sensor-1	—		—
Internal temperature sensor-2	—		—
Internal temperature sensor-3	—		—
Internal temperature sensor-4	—		—
Internal temperature sensor-5	—		—
VOLTAGE AT CIRCUIT 30	Ignition switch OFF		Battery voltage
VOLTAGE AT CIRCUIT 30L	Ignition switch ON		Battery voltage
RH FR LAMP FAN MOTOR 1	—		—
OPERAT HOUR COUNT CH 1	—		—
OPERAT HOUR COUNT CH 2	—		—
OPERAT HOUR COUNT CH 3	—		—
OPERAT HOUR COUNT CH 4	—		—
OPERAT HOUR COUNT CH 5	—		—
OPERAT HOUR COUNT CH 6	—		—
OPERAT HOUR CNTR (FAN)	—		—
OUTPUT VOLTAGE CH 4	—		—
OUTPUT VOLTAGE CH 5	—		—
RH CURVE ILL ACT MOTOR	—		—
RH HL RANGE ACT MOTOR	—		—

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
1 (W)	Ground	CAN-H	Input/ Output	—	—
2 (L)	Ground	CAN-L	Input/ Output	—	—
3 (GR)	Ground	Headlamp power supply	Input	Ignition switch ON	13.2 V
4 (BR)	Ground	Battery power supply	Input	Ignition switch OFF	13.6 V
5 (B)	Ground	Ground	Output	Ignition switch ON	0.8 V

Fail-safe

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DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B1783	04	LED headlamp control module (LED headlamp control module)	[SYSTEM INTERNAL FAILURES]	Headlamp (HI/LO) does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	1C		[CIRC VOLTAGE OUT OF RANGE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
	87		[MISSING MESSAGE]		Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B1787	11	Headlamp range adjustment actuator (Headlamp range adjustment actuator)	[CIRC SHORT TO GRND]	Headlamp aiming motor does not operate	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	71		[ACTUATOR STUCK]		Return to normal status
	98		[COMPONENT/SYS OVER TEMP]		Return to normal status
B17ED	11	Low beam output signal (Low beam output signal)	[CIRC SHORT TO GRND]	Headlamp (LO) does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB6	01	Temp sensor 1 (LED H/L cont ECU) [Temperature sensor 1 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB7	01	Temp sensor 2 (LED H/L cont ECU) [Temperature sensor 2 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB8	01	Temp sensor 3 (LED H/L cont ECU) [Temperature sensor 3 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B210D	00	Power supply (Power supply)	[NO SUBTYPE INFO]	—	—
B210E	00	Power supply (Power supply)	[NO SUBTYPE INFO]	—	—
B210F	14	Circuit 30 (Circuit 30)	[CIRC SHORT TO GROUND OR OPEN]	Headlamp (HI/LO) does not lighting	Return to normal status
B2239	00	Headlamp range adjustment (Headlamp range adjustment)	[NO SUBTYPE INFO]	Headlamp (HI/LO) does not lighting Active adaptive lighting system does not operate	Return to normal status
	55		[NOT CONFIURED]	Headlamp (HI/LO) does not lighting	Return to normal status
	64		[SIGNAL PLAUSIBILITY FAILURE]	Active adaptive lighting system does not operate	Return to normal status
B2386	01	LED headlamp control module fan 1 (LED headlamp control module fan 1)	[ELECTRICAL MALFUNCTION]	Headlamp (HI/LO) dim lighting	Return to normal status
B238A	01	LED headlamp control module fan 2 (LED headlamp control module fan 2)	[ELECTRICAL MALFUNCTION]	Headlamp (HI/LO) dim lighting	Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B2837	11	Active curve illumination sensor (Active curve illumination sensor)	[CIRC SHORT TO GRND]	Active adaptive lighting system does not operate	Return to normal status
	13		[CIRC OPEN]		Return to normal status
B2838	11	Active curve illumination actuator (Active curve illumination actuator)	[CIRC SHORT TO GRND]	Swivel actuator does not operate	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	71		[ACTUATOR STUCK]		Return to normal status
	98		[COMPONENT/SYS OVER TEMP]		Return to normal status
B2839	11	Cornering lamp (Cornering lamp)	[CIRC SHORT TO GRND]	Cornering lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B284C	11	Light distribution sensor	[CIRC SHORT TO GRND]	Light distribution on safety position	Return to normal status
	13		[CIRC OPEN]		Return to normal status
B284D	11	Light distribution actuator (Light distribution actuator)	[CIRC SHORT TO GRND]	Light distribution does not change	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	71		[ACTUATOR STUCK]	Light distribution on safety position	Return to normal status
	98		[COMPONENT/SYS OVER TEMP]	Light distribution does not change	Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B2856	11	High beam output signal (High beam output signal)	[CIRC SHORT TO GRND]	Headlamp (HI) does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	Parking lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2858	11	Front turn signal lamp output signal (Front turn signal lamp output signal)	[CIRC SHORT TO GRND]	Front turn signal lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	Front side marker lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	Daytime running lights without function.	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	Active adaptive lighting system does not operate	Return to normal status
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U1008	01	Communication error (LIN bus 1) [Communication error (LIN bus 1)]	[ELECTRICAL MALFUNCTION]	Headlamp (HI/LO) does not lighting Active adaptive lighting system does not operate	Return to normal status
U118A	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Headlamp (HI/LO) does not lighting Active adaptive lighting system does not operate	Return to normal status
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	High beam assist system does not operate	Return to normal status

*: Headlamp (HI/LO), daytime running light, parking lamp, position lamp, front side marker lamp and front turn signal lamp

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×: Applicable

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Reference page
B1783	04	LED headlamp control module (LED headlamp control module)	[SYSTEM INTERNAL FAILURES]	×	EXL-153
	13		[CIRC OPEN]	×	
	1C		[CIRC VOLTAGE OUT OF RANGE]	×	
	55		[NOT CONFIURED]	×	
	87		[MISSING MESSAGE]	×	

DTC		CONSULT screen items		Fail-safe	Reference page
		(Trouble diagnosis content)	[Malfunction type]		
B1787	11	Headlamp range adjustment actuator (Headlamp range adjustment actuator)	[CIRC SHORT TO GRND]	×	EXL-158
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	71		[ACTUATOR STUCK]	×	
	98		[COMPONENT/SYS OVER TEMP]	×	
B17ED	11	Low beam output signal (Low beam output signal)	[CIRC SHORT TO GRND]	×	EXL-163
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-169
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-171
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-173
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-175
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-177
B1FB6	01	Temp sensor 1 (LED H/L cont ECU) [Temperature sensor 1 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-179
B1FB7	01	Temp sensor 2 (LED H/L cont ECU) [Temperature sensor 2 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-181
B1FB8	01	Temp sensor 3 (LED H/L cont ECU) [Temperature sensor 3 (LED headlamp control ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-183
B210D	00	Power supply (Power supply)	[NO SUBTYPE INFO]	—	EXL-187
B210E	00	Power supply (Power supply)	[NO SUBTYPE INFO]	—	EXL-192
B210F	14	Circuit 30 (Circuit 30)	[CIRC SHORT TO GROUND OR OPEN]	×	EXL-196

DTC		CONSULT screen items		Fail-safe	Reference page
		(Trouble diagnosis content)	[Malfunction type]		
B2239	00	Headlamp range adjustment (Headlamp range adjustment)	[NO SUBTYPE INFO]	×	EXL-199
	55		[NOT CONFIURED]	×	
	64		[SIGNAL PLAUSIBILITY FAILURE]	×	
B2386	01	LED headlamp control module fan 1 (LED headlamp control module fan 1)	[ELECTRICAL MALFUNCTION]	×	EXL-200
B238A	01	LED headlamp control module fan 2 (LED headlamp control module fan 2)	[ELECTRICAL MALFUNCTION]	×	EXL-202
B2837	11	Active curve illumination sensor (Active curve illumination sensor)	[CIRC SHORT TO GRND]	×	EXL-212
	13		[CIRC OPEN]	×	
B2838	11	Active curve illumination actuator (Active curve illumination actuator)	[CIRC SHORT TO GRND]	×	EXL-215
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	71		[ACTUATOR STUCK]	×	
	98		[COMPONENT/SYS OVER TEMP]	×	
B2839	11	Cornering lamp (Cornering lamp)	[CIRC SHORT TO GRND]	×	EXL-218
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
B284C	11	Light distribution sensor (Light distribution sensor)	[CIRC SHORT TO GRND]	×	EXL-220
	13		[CIRC OPEN]	×	
B284D	11	Light distribution actuator (Light distribution actuator)	[CIRC SHORT TO GRND]	×	EXL-223
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	71		[ACTUATOR STUCK]	×	
	98		[COMPONENT/SYS OVER TEMP]	×	
B2856	11	High beam output signal (High beam output signal)	[CIRC SHORT TO GRND]	×	EXL-231
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	

DTC		CONSULT screen items		Fail-safe	Reference page
		(Trouble diagnosis content)	[Malfunction type]		
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	×	EXL-234
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
B2858	11	Front turn signal lamp output signal (Front turn signal lamp output signal)	[CIRC SHORT TO GRND]	×	EXL-237
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	×	EXL-240
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	×	EXL-243
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[NOT CONFIURED]	×	
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	×	EXL-253
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-256
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-259
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-262
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-265
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-268
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-271
U1008	01	Communication error (LIN bus 1) [Communication error (LIN bus 1)]	[ELECTRICAL MALFUNCTION]	×	EXL-273
U118A	00	Communication error (Communication error)	[NO SUBTYPE INFO]	×	EXL-275
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	×	EXL-280

LED HEADLAMP CONTROL MODULE LH

Reference Value

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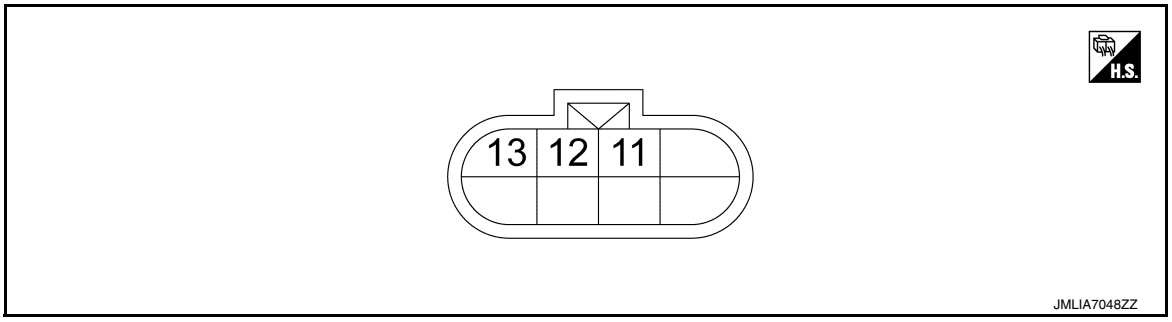
VALUES ON THE DIAGNOSIS TOOL

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

CONSULT MONITOR ITEM

Monitor item	Condition	Value/Status (Approx.)
STATUS	—	—
OPERAT HOUR COUNT CH 1	—	—
OPERAT HOUR COUNT CH 2	—	—
OPERAT HOUR COUNT CH 3	—	—
OPERAT HOUR CNTR (FAN)	—	—
ACT MOD LED EXT LT LH FR	—	—
TEMPERATURE SENSOR 1	—	—
TEMPERATURE SENSOR 2	—	—
TEMPERATURE SENSOR 3	—	—
VOLTAGE AT CIRCUIT 30L	Ignition switch ON	Battery voltage
VOLTAGE AT CIRCUIT 30	Ignition switch OFF	Battery voltage
OUTPUT VOLTAGE CH 1	—	—
OUTPUT VOLTAGE CH 2	—	—
OUTPUT VOLTAGE CH 3	—	—

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ output		
11 (GR)	Ground	Headlamp power supply	Input	Ignition switch ON	13.2 V
12 (BR)	Ground	Battery power supply	Input	Ignition switch OFF	13.6 V
13 (B)	Ground	Ground	Output	Ignition switch ON	0.8 V

LED HEADLAMP CONTROL MODULE RH

Reference Value

INFOID:0000000013549179

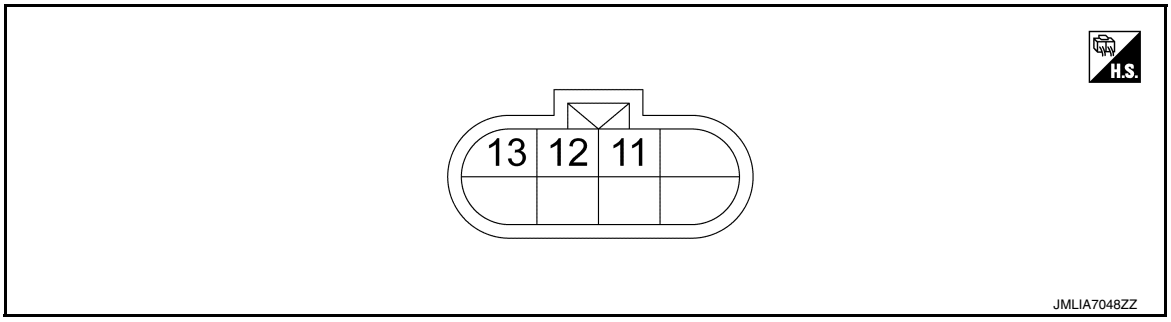
VALUES ON THE DIAGNOSIS TOOL

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

CONSULT MONITOR ITEM

Monitor item	Condition	Value/Status (Approx.)
STATUS	—	—
OPERAT HOUR CNTR (FAN)	—	—
ACT MOD LED EXT LT RH FR	—	—
TEMPERATURE SENSOR 1	—	—
TEMPERATURE SENSOR 2	—	—
TEMPERATURE SENSOR 3	—	—
VOLTAGE AT CIRCUIT 30L	Ignition switch ON	Battery voltage
VOLTAGE AT CIRCUIT 30	Ignition switch OFF	Battery voltage
OUTPUT VOLTAGE CH 1	—	—
OUTPUT VOLTAGE CH 2	—	—
OUTPUT VOLTAGE CH 3	—	—
OPERAT HOUR COUNT CH 1	—	—
OPERAT HOUR COUNT CH 2	—	—
OPERAT HOUR COUNT CH 3	—	—

TERMINAL LAYOUT



PHYSICAL VALUES

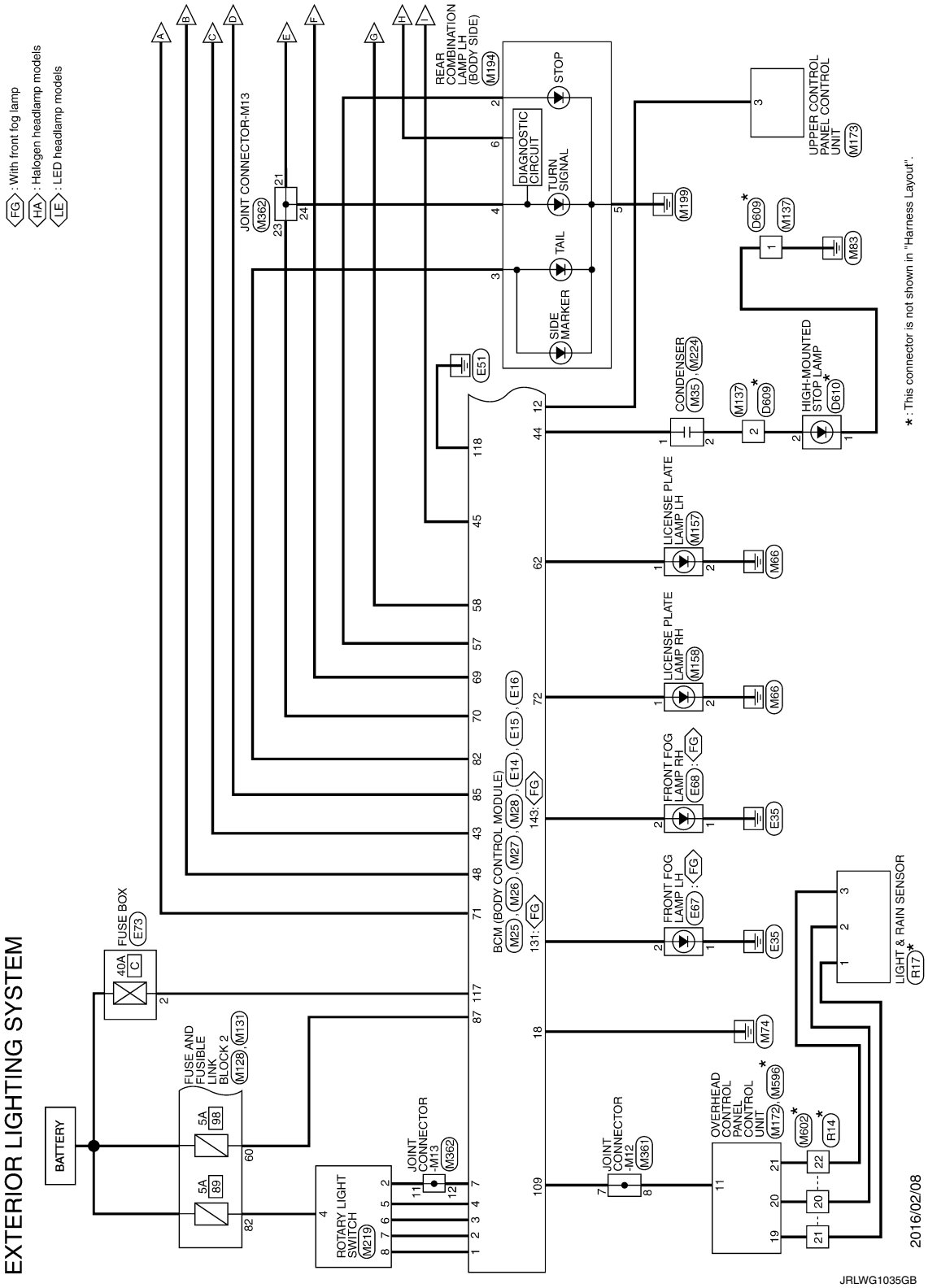
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ output		
11 (Y)	Ground	Headlamp power supply	Input	Ignition switch ON	13.2 V
12 (BR)	Ground	Battery power supply	Input	Ignition switch OFF	13.6 V
13 (B)	Ground	Ground	Output	Ignition switch ON	0.8 V

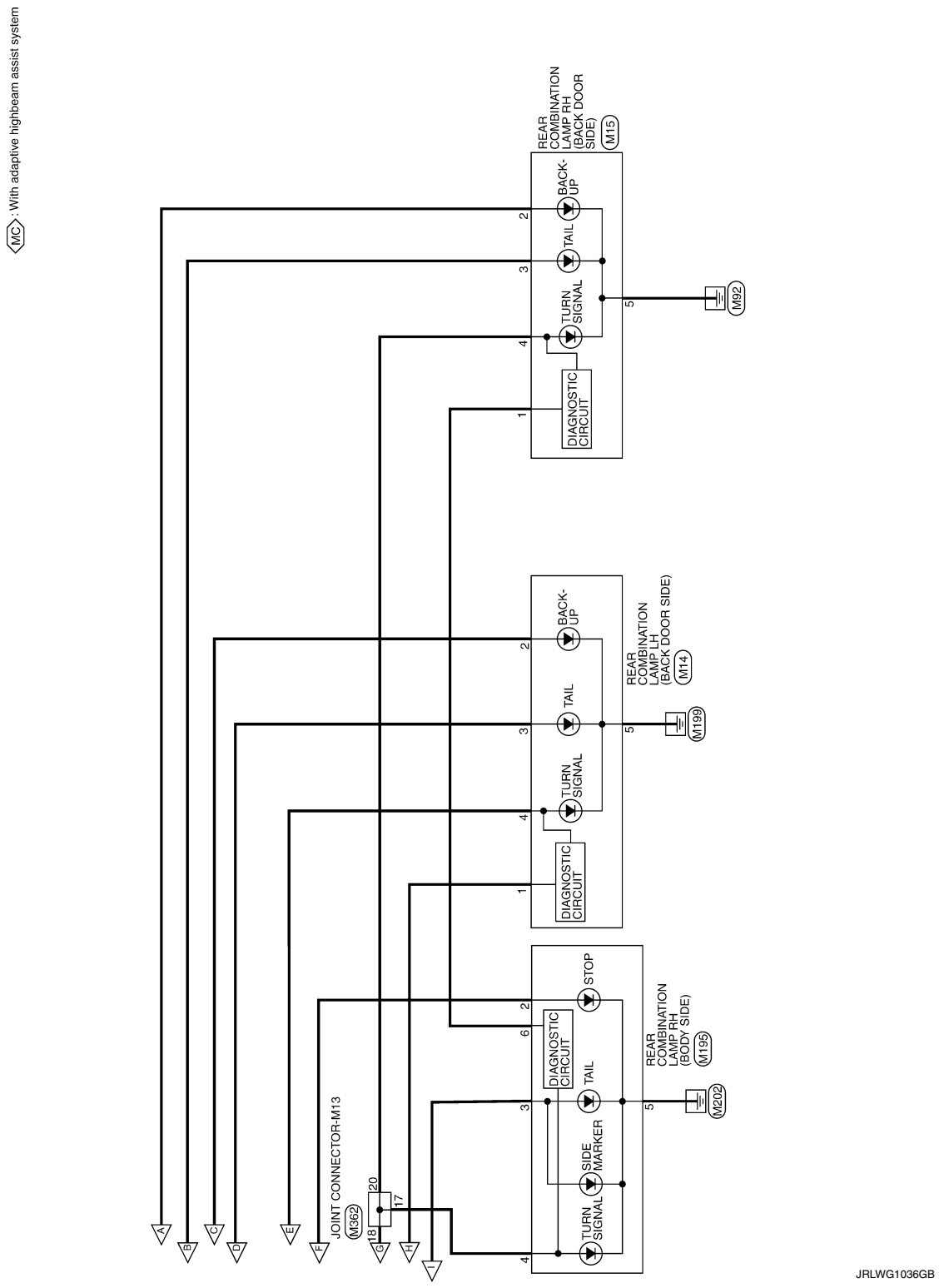
WIRING DIAGRAM

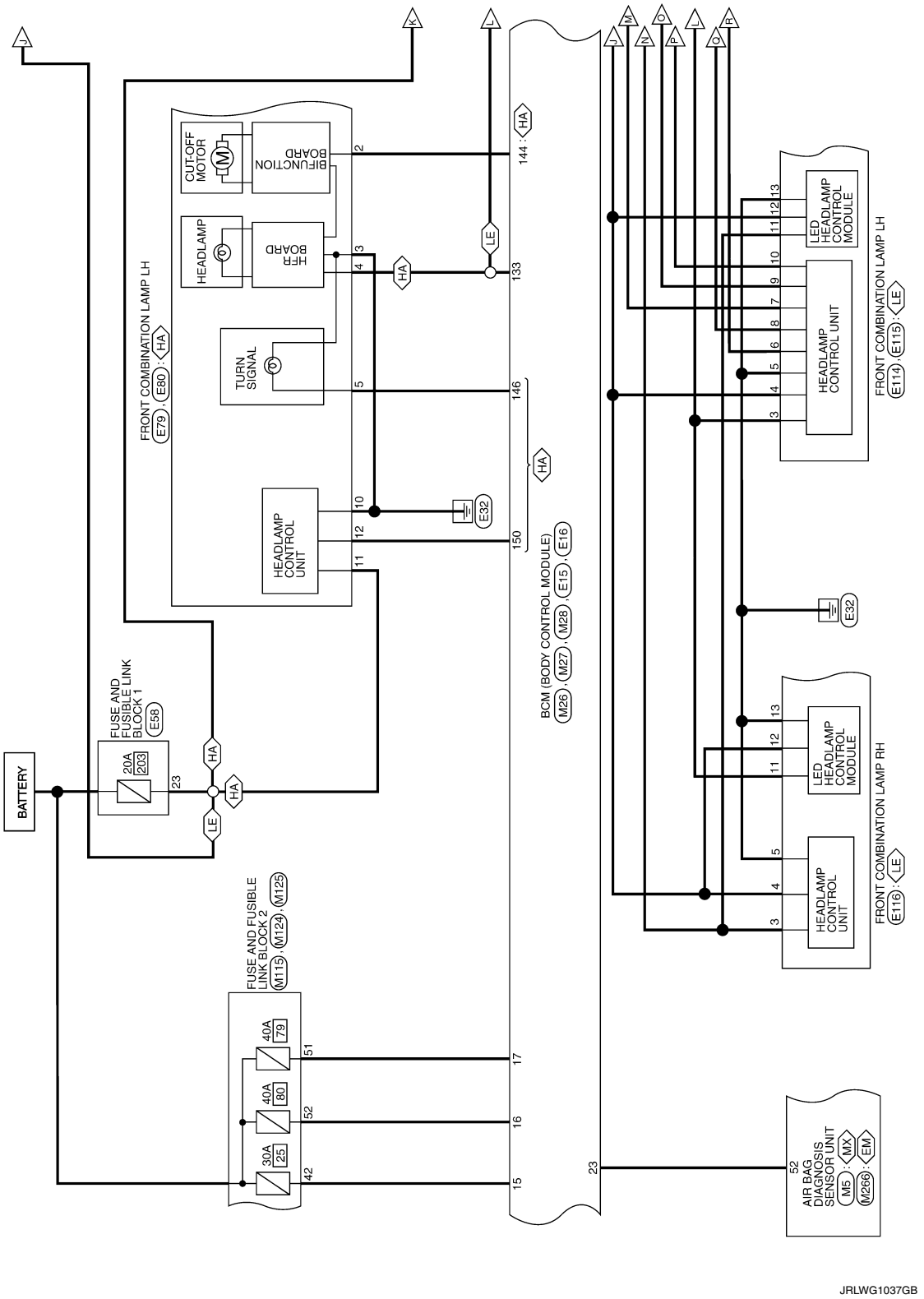
EXTERIOR LIGHTING SYSTEM

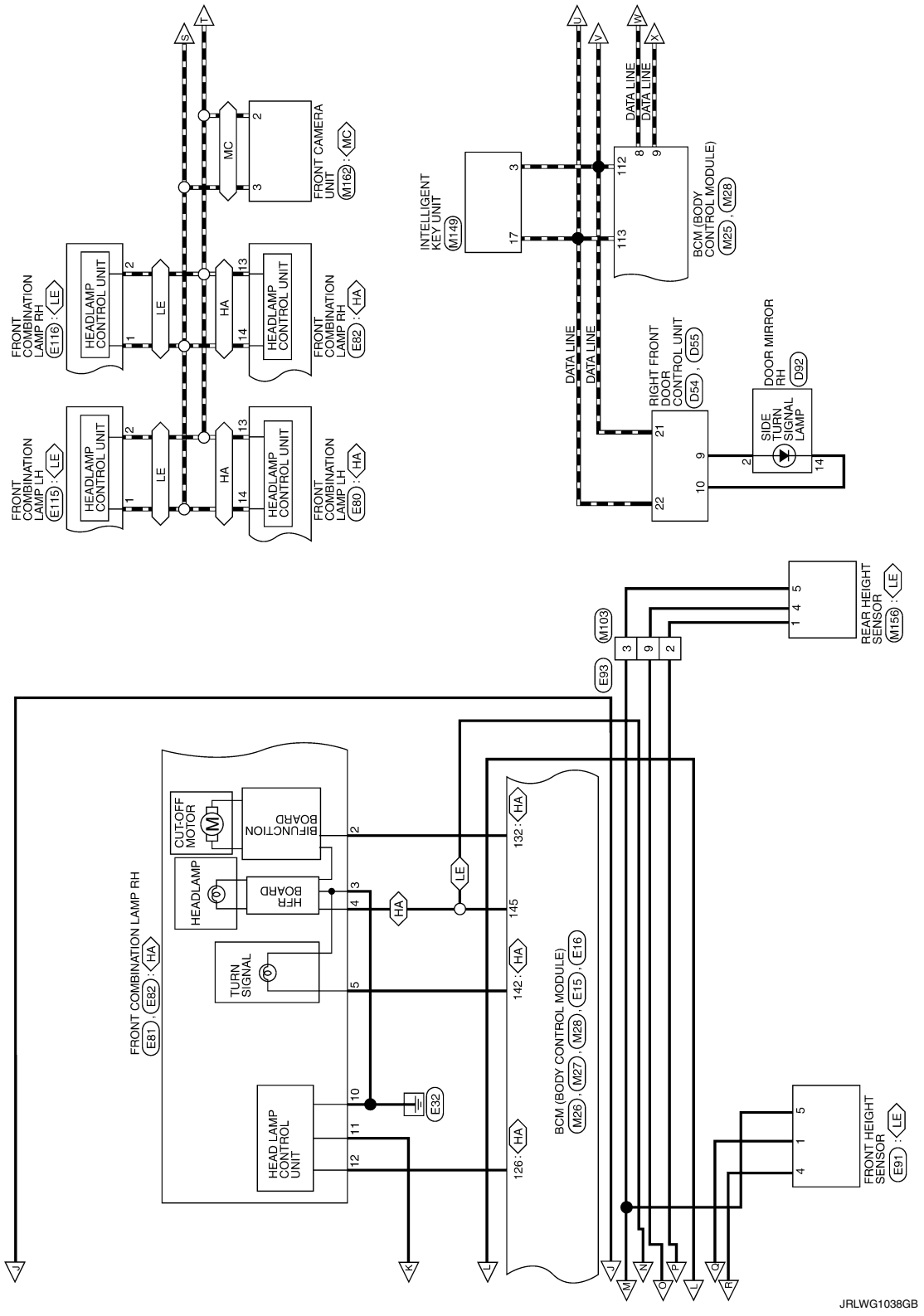
Wiring Diagram

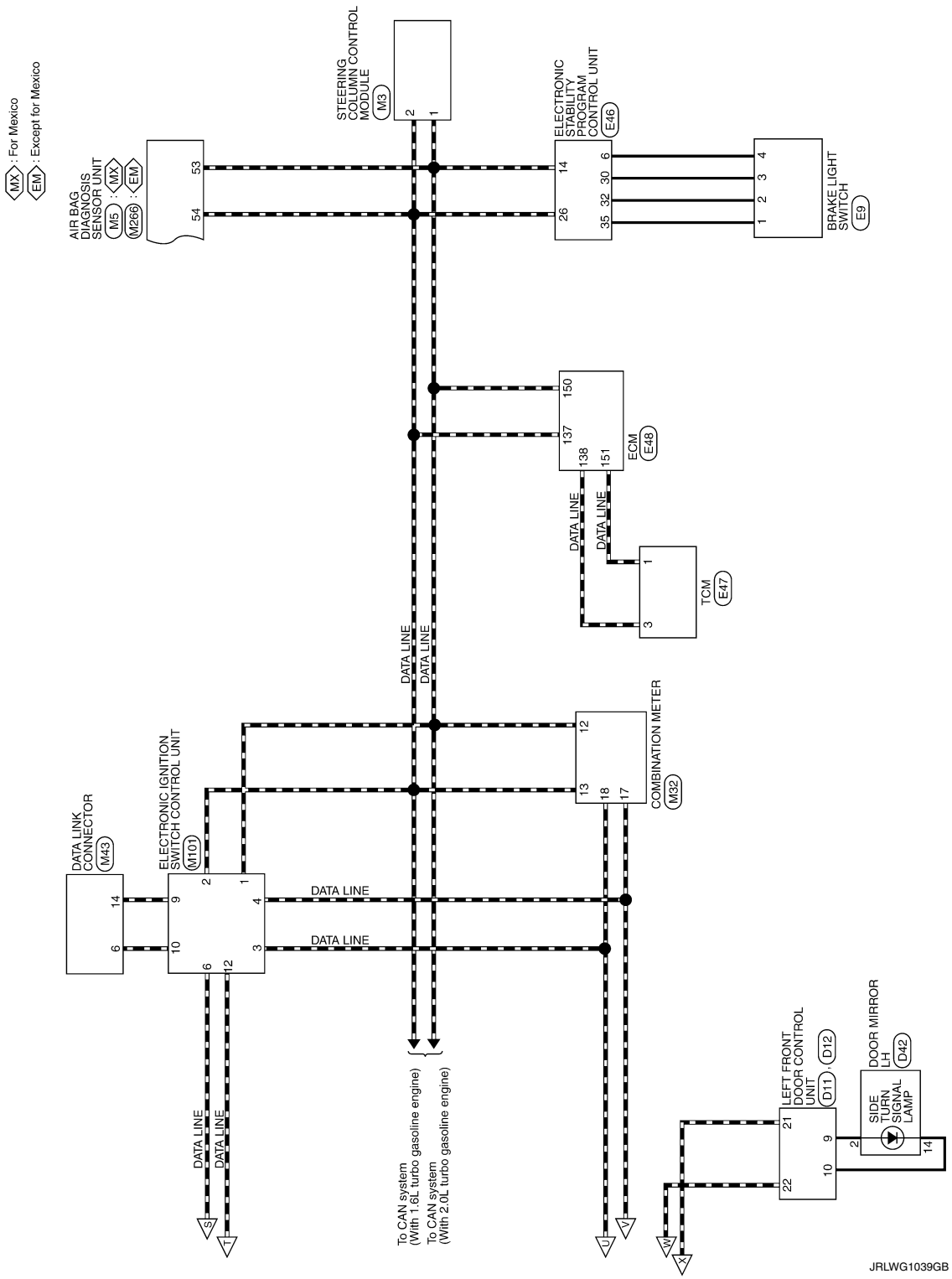
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MC : With adaptive highbeam assist system
REAR COMBINATION LAMP RH (BACK DOOR SIDE) M15
BACK-UP
TAIL
TURN SIGNAL
DIAGNOSTIC CIRCUIT
M92
REAR COMBINATION LAMP LH (BACK DOOR SIDE) M14
M199
REAR COMBINATION LAMP RH (BODY SIDE) M195
STOP
SIDE MARKER
M202
JOINT CONNECTOR-M13 M362
20
18
17
A
B
C
D
E
F
G
H
I
JRLWG1036GB


FRONT COMBINATION LAMP LH
E79 E80 : HA
CUT-OFF MOTOR
BIFUNCTION BOARD
HEADLAMP
HFR BOARD
TURN SIGNAL
HEADLAMP CONTROL UNIT
E32
144 : HA
133
146
150
BCM (BODY CONTROL MODULE)
M26 M27 M28 E15 E16
FUSE AND FUSIBLE LINK BLOCK 1
E58
20A 203
BATTERY
FUSE AND FUSIBLE LINK BLOCK 2
M113 M124 M125
40A 79
40A 80
30A 25
LED HEADLAMP CONTROL MODULE
HEADLAMP CONTROL UNIT
FRONT COMBINATION LAMP LH
E114 E115 : LE
FRONT COMBINATION LAMP RH
E116 : LE
AIR BAG DIAGNOSIS SENSOR UNIT
M5 : MX
M266 : EM
JRLWG1037GB


FRONT COMBINATION LAMP RH (E81), (E82) : HA
FRONT COMBINATION LAMP LH (E115) : LE
FRONT COMBINATION LAMP RH (E116) : LE
FRONT COMBINATION LAMP LH (E80) : HA
FRONT COMBINATION LAMP RH (E82) : HA
HEADLAMP CONTROL UNIT
LE
HA
MC
FRONT CAMERA UNIT (M162) : MC
INTELLIGENT KEY UNIT (M149)
BCM (BODY CONTROL MODULE) (M25), (M28)
DATA LINE
RIGHT FRONT DOOR CONTROL UNIT (D54), (D55)
DOOR MIRROR RH (D92)
SIDE TURN SIGNAL LAMP
REAR HEIGHT SENSOR (M156) : LE
(M103)
(E93)
BIFUNCTION BOARD
HFJ3 BOARD
CUT-OFF MOTOR
HEADLAMP
TURN SIGNAL
HEAD LAMP CONTROL UNIT
(E32)
BCM (BODY CONTROL MODULE) (M26), (M27), (M28), (E15), (E16)
FRONT HEIGHT SENSOR (E91) : LE
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MX : For Mexico
EM : Except for Mexico
AIR BAG DIAGNOSIS SENSOR UNIT
M5 : MX
M266 : EM
STEERING COLUMN CONTROL MODULE M3
ELECTRONIC STABILITY PROGRAM CONTROL UNIT E46
BRAKE LIGHT SWITCH E9
ECM E48
TCM E47
DATA LINE
COMBINATION METER M32
DATA LINK CONNECTOR M43
ELECTRONIC IGNITION SWITCH CONTROL UNIT M101
To CAN system (With 1.6L turbo gasoline engine)
To CAN system (With 2.0L turbo gasoline engine)
LEFT FRONT DOOR CONTROL UNIT D11, D12
DOOR MIRROR LH D42
SIDE TURN SIGNAL LAMP
JRLWG1039GB

EXTERIOR LIGHTING SYSTEM

Connector No.	D11
Connector Name	LEFT FRONT DOOR CONTROL UNIT
Connector Type	MB_A00254005981

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	AUOTMATIC DIMMING MIRROR PWR
2	W	GND
3	B	DOOR MIRROR DEFOGGER GROUND
4	L	DOOR MIRROR DEFOGGER POWER SUPPLY
5	BR	BSW INDICATOR GND
6	P	ADJUSTMENTMOTOR POWER
7	L	VERTICAL INCLINATION CONT
8	Y	HORIZONTAL INCLINATION CONT
9	G	TURN SIG LAMP POWER
10	V	TURN SIG LAMP GND

Connector No.	D12
Connector Name	LEFT FRONT DOOR CONTROL UNIT
Connector Type	MB_A00254006281

Terminal No.	Color Of Wire	Signal Name [Specification]
21	BR	BODY CAN 2-L
22	R	BODY CAN 2-H
23	L	ROTARY CATCH SIGNAL
24	BR	GROUND
25	R	BATTERY POWER SUPPLY

Connector No.	D42
Connector Name	DOOR MIRROR LH
Connector Type	TH24MW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	G	-
4	BR	-
5	B	-
6	L	-
7	L	-
8	O	-
9	O	-
10	L	-
11	Y	-
12	P	-
13	W	-
14	V	-
16	V	-
17	SHIELD	-
18	W	-
19	B	-
21	G	-
22	GR	-
23	B	-
24	BR	-

Connector No.	D54
Connector Name	RIGHT FRONT DOOR CONTROL UNIT
Connector Type	MB_A00254005981

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	AUOTMATIC DIMMING MIRROR PWR
2	Y	GND
3	G	DOOR MIRROR DEFOGGER GROUND
4	L	DOOR MIRROR DEFOGGER POWER SUPPLY
5	BR	BSW INDICATOR GND
6	V	ADJUSTMENTMOTOR POWER
7	P	VERTICAL INCLINATION CONT
8	W	HORIZONTAL INCLINATION CONT
9	GR	TURN SIG LAMP POWER
10	O	TURN SIG LAMP GND

Connector No.	D55
Connector Name	RIGHT FRONT DOOR CONTROL UNIT
Connector Type	MB_A00254006281

Terminal No.	Color Of Wire	Signal Name [Specification]
21	BR	BODY CAN 1-L
22	R	BODY CAN 1-H
24	BR	GROUND
25	R	BATTERY POWER SUPPLY

Connector No.	D92
Connector Name	DOOR MIRROR RH
Connector Type	TH24MW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	GR	-
4	L	-
5	B	-
6	L	-
7	L	-
8	B	-
9	B	-
10	P	-
11	W	-
12	V	-
13	Y	-
14	O	-
16	P	-
17	SHIELD	-
18	W	-
19	G	-
21	BR	-
22	O	-
23	Y	-
24	O	-

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EXTERIOR LIGHTING SYSTEM

Connector No.	D609
Connector Name	WIRE TO WIRE
Connector Type	TK02FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	W	-

Connector No.	D610
Connector Name	HIGH MOUNTED STOP LAMP
Connector Type	TK02FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	E9
Connector Name	BRAKE LIGHT SWITCH
Connector Type	MB_A0325459828

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	L	-
3	V	-
4	B	-

Connector No.	E14
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A0235458926

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
115	R	BAT (V/A DECOUPLING RELAY)
117	R	BAT (V/A DECOUPLING RELAY)
118	BR	GND

Connector No.	E15
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A1665400081

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
119	V	RR WASHER CONT
120	GR	FR WASHER CONT
121	W	BRAKE PEDAL
122	Y	SPARY NOZZLE HOSE HEATER POWER SUPPLY
123	G	INJECTION RELAY CONT
124	BR	HOOD SWITCH STATUS 1
125	B	K-LINE MOTORST
126	GR	PARKING LAMP LH
129	G	FRONT WIPER STOP POSITION
131	Y	FRONT FOG LAMP LH
132	O	HIGH BEAM LH
133	L	LOW BEAM RH [With halogen lamp]
133	Y	LOW BEAM RH [With LED lamp]
134	BR	WASHER LEVEL SW GND
135	P	HORN CONT
136	R	FR WIPER RELAY CONT
137	V	FR WIPER HI/LO RELAY CONT
138	G	BRAKE FLUID LEVEL SW SIG
139	L	WASHER LEVEL SW SIG
140	Y	HOOD SWITCH STATUS 2
141	R	WARM START
142	V	FRONT TURN SIGNAL LH

Connector No.	E16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A1665400181

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
143	Y	FRONT FOG LAMP RH
144	W	HIGH BEAM RH
145	GR	LOW BEAM LH
146	P	FRONT TURN SIGNAL RH
148	V	FR BRAKE WEAR SENSOR RH
150	GR	PARKING LAMP RH
152	L	LIN (BAT SENSOR)
154	Y	HEADLAMP AIMING RH
157	O	SSK STAT
158	R	COOLANT LEVEL SW SIG
159	BR	COOLANT LEVEL SW GND
161	P	AMBIENT SENSOR GND
162	G	AMBIENT SENSOR SIG
164	O	BRAKE FLUID LEVEL SW GND
165	V	HEADLAMP AIMING LH
166	R	DECOUPLING RELAY CONT

Connector No.	E46
Connector Name	ELECTRONIC STABILITY PROGRAM CONTROL UNIT
Connector Type	MB_A2465400581

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	MOTOR POWER SUPPLY
2	W	BRAKE PEDAL
4	P	RIGHT FRONT AXLE RPM SENSOR SIGNAL
5	GR	BRAKE VACUUM SENSOR POWER SUPPLY

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EXTERIOR LIGHTING SYSTEM

6	B	BRAKE LIGHT SWITCH-L
7	R	BATTERY POWER SUPPLY
8	Y	LEFT FRONT AXLE RPM SENSOR SIGNAL
10	O	STANDSTILL CONTROL (SSC) STATUS
12	P	BRAKE VACUUM SENSOR SIGNAL
13	BR	GROUND (MOTOR)
14	G	CAN-L
16	B	RIGHT FRONT AXLE RPM SENSOR POWER SUPPLY
17	Y	RIGHT REAR AXLE RPM SENSOR POWER SUPPLY
18	BR	LEFT REAR AXLE RPM SENSOR SIGNAL
19	W	LEFT FRONT AXLE RPM SENSOR POWER SUPPLY
23	B	BRAKE VACUUM SENSOR GROUND
25	P	VALVE RELAY POWER SUPPLY
26	W	CAN-H
28	R	BATTERY POWER SUPPLY
29	P	RIGHT REAR AXLE RPM SENSOR SIGNAL
30	V	BRAKE LIGHT SWITCH-H
31	GR	LEFT REAR AXLE RPM SENSOR POWER SUPPLY
32	L	BRAKE LIGHT SWITCH GROUND
35	R	BRAKE LIGHT SWITCH POWER SUPPLY
38	B	GROUND (VALVE)

Connector No.	E47
Connector Name	TCM
Connector Type	MB_A2465450026

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	CAN-L
2	V	NOT P
3	GR	CAN-H
5	W	BATTERY POWER SUPPLY

Connector No.	E48
Connector Name	ECM
Connector Type	MB_A0075406981

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
97	R	POWER SUPPLY (ECM)
98	BR	ECM GROUND
99	V	POWER SUPPLY (ECM)
100	BR	ECM GROUND
101	R	POWER SUPPLY (ECM)
102	B	ECM GROUND
103	L	COOLING FAN CONTROL SIGNAL
104	R	SENSOR POWER SUPPLY (ACCELERATOR PEDAL POSITION SENSOR 1)
105	G	SENSOR POWER SUPPLY (ACCELERATOR PEDAL POSITION SENSOR 2)
106	BR	SENSOR GROUND (ACCELERATOR PEDAL POSITION SENSOR1)
111	B	IGNITION SIGNAL
112	Y	POWER SUPPLY (BATTERY)
116	W	STARTER RELAY-L
119	GR	SENSOR GROUND (ACCELERATOR PEDAL POSITION SENSOR 2)
120	O	SENSOR GROUND
122	R	HOT START SIGNAL
123	GR	MOTOR RELAY CONTROL SIGNAL
127	O	FUEL PUMP ON SIGNAL
132	G	ACCELERATOR PEDAL POSITION SENSOR 1
136	Y	POWERTRAIN SENSOR CAN-H
137	W	CAN-H
138	GR	POWERTRAIN CAN-H
141	B	WATER PUMP RELAY CONTROL SIGNAL
145	W	ACCELERATOR PEDAL POSITION SENSOR 2
146	G	FUEL TANK PRESSURE SENSOR
147	L	CRASH SIGNAL
148	W	STARTER RELAY-H
149	B	POWERTRAIN SENSOR CAN-L
150	G	CAN-L
151	L	POWERTRAIN CAN-L
152	V	EVAP CANISTER VENT CONTROL VALVE
153	BR	EVAP PURGE CONTROL VALVE

Connector No.	E58
Connector Name	FUSE AND FUSIBLE LINK BLOCK 1
Connector Type	MB_A0065450901

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
23	B	-

Connector No.	E67
Connector Name	FRONT FOG LAMP LH
Connector Type	MB_A0405456328

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	Y	-

Connector No.	E68
Connector Name	FRONT FOG LAMP RH
Connector Type	MB_A0405456328

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	Y	-

Connector No.	E73
Connector Name	FUSE BOX
Connector Type	MB_A0035462340

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	Y	-

Connector No.	E79
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS08FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	R	-

Terminal No.	Color Of Wire	Signal Name [Specification]
2	W	-
3	B	-
4	L	-
5	P	-
6	V	-
7	B	-
8	G	-

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EXTERIOR LIGHTING SYSTEM

Connector No.	E80
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS06FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
10	BR	GROUND
11	R	BATTERY POWER SUPPLY
12	GR	PARKING LAMP SIGNAL
13	L	CAN-H
14	W	CAN-L

Connector No.	E81
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS08FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	O	-
3	B	-
4	GR	-
5	V	-
6	Y	-
7	B	-
8	P	-

Connector No.	E82
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS06FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
10	BR	GROUND
11	R	BATTERY POWER SUPPLY
12	GR	PARKING LAMP SIGNAL
13	L	CAN-H
14	W	CAN-L

Connector No.	E91
Connector Name	FRONT HEIGHT SENSOR
Connector Type	MB_A2105403681

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
4	L	-
5	R	-

Connector No.	E93
Connector Name	WIRE TO WIRE
Connector Type	MB_A2205453728

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	BR	-
3	P	-
4	B	-
6	SHIELD	-
9	G	-
10	R	-
11	W	-

Connector No.	E114
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS06FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
6	L	FRONT HEIGHT SENSOR SIGNAL
7	P	HEIGHT SENSOR POWER SUPPLY
8	BR	FRONT HEIGHT SENSOR GROUND
9	G	REAR HEIGHT SENSOR SINGAL
10	BR	REAR HEIGHT SENSOR GROUND

Connector No.	E115
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS08FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	CAN-H
2	L	CAN-L
3	Y	HEADLAMP POWER SUPPLY
4	V	BATTERY POWER SUPPLY
5	B	GROUND
11	GR	HEADLAMP POWER SUPPLY
12	BR	BATTERY POWER SUPPLY
13	B	GROUND

Connector No.	E116
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS08FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	CAN-H
2	L	CAN-L
3	GR	HEADLAMP POWER SUPPLY
4	BR	BATTERY POWER SUPPLY
5	B	GROUND
11	Y	HEADLAMP POWER SUPPLY
12	BR	BATTERY POWER SUPPLY
13	B	GROUND

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EXTERIOR LIGHTING SYSTEM

Connector No.	M3
Connector Name	STEERING COLUMN CONTROL MODULE
Connector Type	MB_A2045401281

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	CAN-L (CHASIS)
2	W	CAN-H (CHASIS)
3	BR	GND
4	R	KI.30G
6	R	KI.30
7	BR	GND
8	L	AB1+
9	Y	AB1-
10	V	AB2+
11	G	AB2-

Connector No.	M5
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	MB_A0095405681

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	BUMPER SENSOR RH GROUND
2	W	BUMPER SENSOR RH SIGNAL
3	B	BUMPER SENSOR LH SIGNAL
4	W	BUMPER SENSOR LH GROUND
9	L/G	POP-UP ENGINE HOOD ACTUATOR RH (-)
10	BR/B	POP-UP ENGINE HOOD ACTUATOR RH (+)
11	O	POP-UP ENGINE HOOD ACTUATOR LH (+)
12	BR/W	POP-UP ENGINE HOOD ACTUATOR LH (-)
37	V	FUSE(-)
38	W	FUSE(+)

40	Y	OCCUPANT LIN SIGNAL
41	V/G	RPRH(+)
42	BR/Y	RPRH(-)
43	BR/Y	RPLH(-)
44	V/G	RPLH(+)
45	B	REAR BUCKLE SWITCH RH(-)
46	G	REAR BUCKLE SWITCH RH(+)
47	B	REAR BUCKLE SWITCH CENTER(-)
48	G	REAR BUCKLE SWITCH CENTER(+)
49	B	REAR BUCKLE SWITCH RH(-)
50	G	REAR BUCKLE SWITCH RH(+)
51	Y	AIR BAG SIGNAL
52	P	AIR BAG SIGNAL
53	G	CAN-L
54	W	CAN-H
57	R	B-SATELITE LH(+)
58	B	B-SATELITE LH(-)
59	BR	B-SATELITE RH(-)
60	L	B-SATELITE RH(+)
61	BR	FRONT DOOR SATELLITE RH(-)
62	G	FRONT DOOR SATELLITE RH(+)
63	B	FRONT DOOR SATELLITE LH(+)
64	BR	FRONT DOOR SATELLITE LH(-)
67	W	REAR DOOR SATELLITE RH(-)
68	B	REAR DOOR SATELLITE RH(+)
69	R	REAR DOOR SATELLITE LH(+)
70	W	REAR DOOR SATELLITE LH(-)
71	Y	BUCKLE SWITCH AS(+)
72	O	BUCKLE SWITCH AS(-)
73	Y	BUCKLE SWITCH DR(+)
74	O	BUCKLE SWITCH DR(-)
75	V/G	CLH(+)
76	BR/Y	CLH(-)
77	W/BR	CRH(+)
78	R/V	CRH(-)
85	P	CZS RH(-)
86	W	CZS RH(+)
87	BR	CZS LH(-)
88	L	CZS LH(+)
89	O	SAB AS(-)
90	Y	SAB AS(+)
93	Y	SAB DR(+)
94	O	SAB DR(-)
95	BR	FPRH(-)
96	L/W	FPRH(+)
97	G	FPLH(+)
98	V	FPLH(-)
100	BR	GND
101	BR	GND
103	Y	KI.15R

104	G	KI.30

Connector No.	M14
Connector Name	REAR COMBINATION LAMP LH (BACK DOOR SIDE)
Connector Type	TH08FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	GR	-
3	B	-
4	L	-
5	BR	-
6	GR	-

Connector No.	M15
Connector Name	REAR COMBINATION LAMP RH (BACK DOOR SIDE)
Connector Type	TH08FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	GR	-
3	GR	-
4	L	-
5	B	-

Connector No.	M25
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A0075405081

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	ROTARY LIGHT SW GND
2	O	ROTARY LIGHT SW (PU,PR/TAL)
3	R	ROTARY LIGHT SW (AUTO/LOW)
4	G	ROTARY LIGHT SW (FR FOG)
5	Y	-
7	GR	SWITCH INDICATOR
8	R	CAN-H (BODY 2)
9	BR	CAN-L (BODY 2)
12	O	LIN (IBS)
14	G	FOOT LAMP

Connector No.	M26
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A0235459826

Terminal No.	Color Of Wire	Signal Name [Specification]
15	W	BAT (FUSE)
16	BR	BAT (FUSE)
17	R	BAT (FUSE)
18	B	GND

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EXTERIOR LIGHTING SYSTEM

Connector No.	M27
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A1665400381

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
19	Y	RR POWER WINDOW MOTOR RH CONT (UP)
20	G	RR POWER WINDOW MOTOR RH CONT (DOWN)
21	B	RR POWER WINDOW MOTOR LH CONT (UP)
22	GR	RR POWER WINDOW MOTOR LH CONT (DOWN)
23	P	AIR BAG SIGNAL
27	GR	BACK DOOR OPENER SW
33	O	RR POWER WINDOW SW LH GND
34	BR	RR POWER WINDOW SW LH (DOWN)
36	O	RR POWER WINDOW SW LH (UP)
37	W	RR DOOR RH STATUS
39	Y	BACK DOOR STATUS
40	V	BACK DOOR LAMP
41	W	RR DOOR LH STATUS
42	V	LUGGAGE ROOM LAMP
43	GR	BACK-UP LAMP LH
44	W	HIGH-MOUNTED STOP LAMP
45	O	TAIL LAMP (BODY RH)
48	GR	TAIL LAMP (BK RH)
50	GR	-
57	Y	STOP LAMP (BODY LH)
58	B	REAR TURN SIGNAL RH
59	P	RR DOOR RH UNLOCK
60	G	RR DOOR RH LOCK
62	GR	LICENSE PLATE LAMP LH
63	W	HALL SENSOR LH SIGNAL
64	GR	HALL SENSOR LH GND
65	R	HALL SENSOR LH POWER SUPPLY

Connector No.	M28
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A1665400481

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
67	V	BACK DOOR UNLOCK
69	GR	STOP LAMP (BODY RH)
70	B	REAR TURN SIGNAL LH
71	GR	BACK-UP LAMP RH
72	Y	LICENSE PLATE LAMP RH
73	L	RR POWER WINDOW SW RH UP
74	B	RR POWER WINDOW SW RH DOWN
75	L	RR POWER WINDOW SW RH GND
76	GR	HALL SENSOR RH POWER SUPPLY
77	R	SUB BAT-
78	B	TERMINAL RELAY 15R1 CONT
80	B	REAR WIPER RELAY CONT
82	GR	TAIL LAMP (BODY LH)
83	P	TERMINAL RELAY 15R2 CONT
85	B	TAIL LAMP (BK LH)
87	R	BAT (VIA LATCHING TERMINAL RELAY 30G)
89	O	HALL SENSOR RH GND
90	V	HALL SENSOR RH SIGNAL
91	P	FUEL LEVEL SENSOR GND
92	L	FUEL LEVEL SENSOR
93	GR	FUEL LEVEL SENSOR
94	Y	FUEL FILLER LID STATUS
97	G	LATCHING TERMINAL RELAY 30G CONT 1
98	B	LATCHING TERMINAL RELAY 30G GND 1
99	W	LATCHING TERMINAL RELAY 30G GND 2
100	V	LATCHING TERMINAL RELAY 30G CONT 2
101	Y	REAR DOOR INSIDE HANDLE LAMP CONT
102	GR	AMBIENT LAMP CONT
103	V	SUB BAT RELAY CONT
105	G	RR DOOR LH UNLOCK
106	W	FUEL FILLER LID UNLOCK
107	L	RR DOOR LH LOCK
108	R	SUB BAT+
109	O	LIN (ROOF)
112	BR	CAN-L (BODY 1)
113	R	CAN-H (BODY 1)

114	B	INJECTION RELAY CONT

Connector No.	M32
Connector Name	COMBINATION METER
Connector Type	MB_A0525452726

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	GROUND
4	R	BATTERY POWER SUPPLY
12	GR	CAN-L
13	W	CAN-H
17	BR	CAN-L
18	R	CAN-H

Connector No.	M35
Connector Name	CONDENSER
Connector Type	P01FB-A

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-

Connector No.	M43
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
4	B	CHASSIS_GND
5	B	ELECTRONICS_GND
6	GR	DIAGNOSTICS-CAN_H_DAI
8	W	IGN_SW
12	L	DIAGNOSTIC-CAN-L_NIS
13	V	DIAGNOSTIC-CAN_H_NIS
14	GR	DIAGNOSTICS-CAN_L_DAI
16	R	BATTERY

Connector No.	M101
Connector Name	ELECTRONIC IGNITION SWITCH CONTROL UNIT
Connector Type	MB_A0265458426

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	CHASSIS CAN-L
2	W	CHASSIS CAN-H
3	R	BODY CAN 1-H
4	BR	BODY CAN 1-L
6	W	STEERING LOCK OPERATION
9	GR	REMOTE KEYLESS
10	W	POWER SUPPLY
11	BR	DIAGNOSTIC CAN-L
12	L	DIAGNOSTIC CAN-H

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EXTERIOR LIGHTING SYSTEM

Connector No.	M103
Connector Name	WIRE TO WIRE
Connector Type	MB_A2205459228



Terminal No.	Color Of Wire	Signal Name [Specification]
2	BR	-
3	P	-
4	B	-
6	SHIELD	-
9	G	-
10	R	-
11	W	-

Connector No.	M115
Connector Name	FUSE AND FUSIBLE LINK BLOCK 2
Connector Type	MB_A0065450901

Terminal No.	Color Of Wire	Signal Name [Specification]
42	W	-

Connector No.	M124
Connector Name	FUSE AND FUSIBLE LINK BLOCK 2
Connector Type	MB_A0065452901



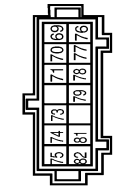
Terminal No.	Color Of Wire	Signal Name [Specification]
51	R	-

Connector No.	M125
Connector Name	FUSE AND FUSIBLE LINK BLOCK 2
Connector Type	MB_A0065453101



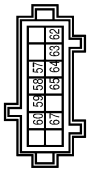
Terminal No.	Color Of Wire	Signal Name [Specification]
52	BR	-

Connector No.	M128
Connector Name	FUSE AND FUSIBLE LINK BLOCK 2
Connector Type	MB_A0395456128



Terminal No.	Color Of Wire	Signal Name [Specification]
57	R	-
58	P	-
59	O	-
60	R	-
62	W	-
63	V	-
64	G	-
65	B	-
67	Y	-

Connector No.	M131
Connector Name	FUSE AND FUSIBLE LINK BLOCK 2
Connector Type	MB_A2205459928



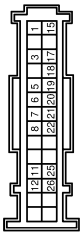
Terminal No.	Color Of Wire	Signal Name [Specification]
69	B	-
70	P	-
71	B	-
73	BR	-
74	B	-
75	G	-
76	R	-
77	Y	-
78	P	-
79	GR	-
81	O	-
82	B	-

Connector No.	M137
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	W	-

Connector No.	M149
Connector Name	INTELLIGENT KEY UNIT
Connector Type	MB_A0045407281



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GND
3	BR	BODY CAN 1-L
5	L	REAR INSIDE KEY ANTENNA SIG 1
6	Y	OUTSIDE KEY ANTENNA RH SIG 1
7	G	OUTSIDE KEY ANTENNA LH SIG 1
8	W	FRONT INSIDE KEY ANTENNA SIG 1
11	GR	FR I-KEY DOOR HANDLE RH GND
12	B	FR I-KEY DOOR HANDLE LH GND
15	R	BATTERY POWER SUPPLY
17	R	BODY CAN 1-H
18	B	KEYLESS COMMUNICATION SIG
19	R	REAR INSIDE KEY ANTENNA SIG 2
20	O	OUTSIDE KEY ANTENNA RH SIG 2
21	V	OUTSIDE KEY ANTENNA LH SIG 2
22	B	FRONT INSIDE KEY ANTENNA SIG 2
25	V	FR I-KEY DOOR HANDLE RH SIG
26	P	FR I-KEY DOOR HANDLE LH SIG

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EXTERIOR LIGHTING SYSTEM

Connector No.	M156
Connector Name	REAR HEIGHT SENSOR
Connector Type	MB_A2105403681

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
4	G	-
5	P	-

Connector No.	M157
Connector Name	LICENSE PLATE LAMP LH
Connector Type	RH02FB

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	B	-

Connector No.	M158
Connector Name	LICENSE PLATE LAMP RH
Connector Type	RH02FB

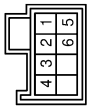
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	M162
Connector Name	FRONT CAMERA UNIT
Connector Type	MB_A0255458826

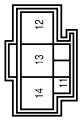
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	GROUND
2	L	CAN-L
3	W	CAN-H
4	R	BATTERY POWER SUPPLY
5	O	HEATER GROUND
6	Y	HEATER POWER SUPPLY

Connector No.	M172
Connector Name	OVERHEAD CONTROL PANEL CONTROL UNIT
Connector Type	MB_A0025406781

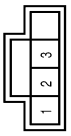
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
11	O	LIN (ROOF)
12	B	GND
13	G	BATTERY POWER SUPPLY
14	O	BATTERY POWER SUPPLY

Connector No.	M173
Connector Name	UPPER CONTROL PANEL CONTROL UNIT
Connector Type	MB_A0385451228

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	PWR SPLY
2	BR	GND
3	O	LIN

Connector No.	M194
Connector Name	REAR COMBINATION LAMP LH (BODY SIDE)
Connector Type	NS06MW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	Y	-
3	GR	-
4	B	-
5	BR	-
6	V	-

Connector No.	M195
Connector Name	REAR COMBINATION LAMP RH (BODY SIDE)
Connector Type	NS06MW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	O	-
4	B	-
5	BR	-
6	V	-

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EXTERIOR LIGHTING SYSTEM

Connector No.	M219
Connector Name	ROTARY LIGHT SWITCH
Connector Type	MB_A0255458826

Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	Y	-
4	B	-
5	G	-
6	R	-
7	O	-
8	W	-

Connector No.	M224
Connector Name	CONDENSER
Connector Type	P01FB-A

Terminal No.	Color Of Wire	Signal Name [Specification]
2	W	-

Connector No.	M266
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	MB_A0105404681

Terminal No.	Color Of Wire	Signal Name [Specification]
5	B	ACTIVE VENT PS(-)
6	Y	ACTIVE VENT PS(+)
37	V	FUSE-
38	W	FUSE+
40	Y	OCCUPANT LIN SIGNAL
41	V/G	RPRH(+)
42	BR/Y	RPRH(-)
43	BR/Y	RPLH(-)
44	V/G	RPLH(+)
51	Y	AIR BAG SIGNAL
52	P	AIR BAG SIGNAL
53	G	CAN-L
54	W	CAN-H
57	R	B-SATELITE LH(+)
58	B	B-SATELITE LH(-)
59	BR	B-SATELITE RH(-)
60	L	B-SATELITE RH(+)
61	BR	FRONT DOOR SATELLITE RH(-)
62	G	FRONT DOOR SATELLITE RH(+)
63	B	FRONT DOOR SATELLITE LH(+)
64	BR	FRONT DOOR SATELLITE LH(-)
65	G	SEAT POS PS(+)
66	BR	SEAT POS PS(-)
67	W	REAR DOOR SATELLITE RH(-)
68	B	REAR DOOR SATELLITE RH(+)
69	R	REAR DOOR SATELLITE LH(+)
70	W	REAR DOOR SATELLITE LH(-)
71	Y	BUCKLE_SWITCH_PS+
72	O	BUCKLE_SWITCH_PS-
73	Y	BUCKLE_SWITCH_DR+
74	O	BUCKLE_SWITCH_DR-
75	V/G	CLH(+)
76	BR/Y	CLH(-)
77	W/BR	CRH(+)
78	R/V	CRH(-)
81	R	FORCE LIMITER PS(-)

82	B	FORCE LIMITER PS(+)
85	P	CZS RH(-)
86	W	CZS RH(+)
87	BR	CZS LH(-)
88	L	CZS LH(+)
89	O	SAB AS(-)
90	Y	SAB AS(+)
93	Y	SAB DR(+)
94	O	SAB DR(-)
95	BR	FPRH(-)
96	L/W	FPRH(+)
97	G	FPLH(+)
98	V	FPLH(-)
100	BR	GND
101	BR	GND
103	Y	KL15R
104	G	KL30

Connector No.	M361
Connector Name	JOINT CONNECTOR-M12
Connector Type	FEA24JG

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	W	-
3	W	-
4	W	-
5	Y	-
6	Y	-
7	O	-
8	O	-
9	R	-
10	R	-
11	R	-
12	R	-
13	G	-
14	W	-
15	P	-
16	P	-
21	L	-

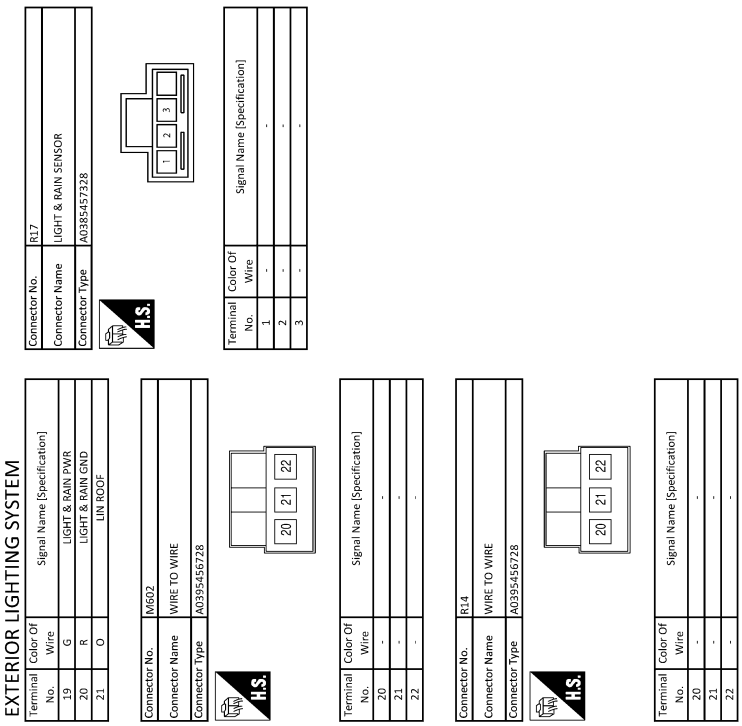
22	L	-
23	W	-
24	W	-

Connector No.	M362
Connector Name	JOINT CONNECTOR-M13
Connector Type	FEA24JBR

Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	V	-
6	G	-
7	GR	-
8	GR	-
10	GR	-
11	GR	-
12	GR	-
17	B	-
18	B	-
20	L	-
21	L	-
23	B	-
24	B	-

Connector No.	M596
Connector Name	OVERHEAD CONTROL PANEL CONTROL UNIT
Connector Type	A0395456728

JRLWG1048GB



JRLWG1049GB

BASIC INSPECTION

ADDITIONAL SERVICE WHEN REPLACING HEADLAMP CONTROL UNIT

Description

INFOID:0000000013549181

Perform the following operations when replacing headlamp control unit. (For details, refer to EXL-115, "Work Procedure".)

CONSULT Work Support item

Headlamp control unit LH
- Adjustment of headlamps via diagnosis
- Reset operating hours counter of FL lamp fan motor 1
- Reset of operating hours counter of L pos DTRL turn sig
- Zero position adjustment

Headlamp control unit RH
- Reset operating hours counter of FR lamp fan motor 1
- Reset of operating hours counter of R pos DTRL turn sig

Work Procedure

INFOID:0000000013549182

HEADLAMP CONTROL UNIT LH

1. PERFORM “WORK SUPPORT”

With CONSULT
1. Turn ignition switch ON.
2. Select “Work Support” mode of “H/L control module LH” using CONSULT.
3. Select and start the following items.

- Adjustment of headlamps via diagnosis
- Reset operating hours counter of FL lamp fan motor 1
- Reset of operating hours counter of L pos DTRL turn sig
- Zero position adjustment

>> WORK END

HEADLAMP CONTROL UNIT RH

1. PERFORM “WORK SUPPORT”

With CONSULT
1. Turn ignition switch ON.
2. Select “Work Support” mode of “H/L control module RH” using CONSULT.
3. Select and start the following items.

- Reset operating hours counter of FR lamp fan motor 1
- Reset of operating hours counter of R pos DTRL turn sig

>> WORK END

ADDITIONAL SERVICE WHEN REPLACING LED HEADLAMP CONTROL MODULE

Description

INFOID:0000000013549183

Perform the following operations when replacing LED headlamp control module. (For details, refer to EXL-116, "Work Procedure".)

CONSULT Work Support item

LED headlamp control module LH
- Reset operating hours counter of FL lamp fan motor 2

LED headlamp control module RH
- Reset operating hours counter of FR lamp fan motor 2

Work Procedure

INFOID:0000000013549184

LED HEADLAMP CONTROL MODULE LH

1. PERFORM “WORK SUPPORT”

With CONSULT
1. Turn ignition switch ON.
2. Select “Work Support” mode of “LED H/L control module LH” using CONSULT.
3. Select and start the “Reset operating hours counter of FL lamp fan motor 2”.

>> WORK END

LED HEADLAMP CONTROL MODULE RH

1. PERFORM “WORK SUPPORT”

With CONSULT
1. Turn ignition switch ON.
2. Select “Work Support” mode of “LED H/L control module RH” using CONSULT.
3. Select and start the “Reset operating hours counter of FR lamp fan motor 2”.

>> WORK END

SENSOR INITIALIZE

Description

INFOID:0000000013549185

Perform the sensor initialize when the following operation is performed. (For details, refer to EXL-117, "Work Procedure".)

- Replacing front combination lamp.
- Removing, installing or replacing each height sensor.

Work Procedure

INFOID:0000000013549186

1.PERFORM “WORK SUPPORT”

With CONSULT

1. Turn ignition switch ON.
2. Select “Work Support” mode of “H/L control module LH” using CONSULT.
3. Select and start the “Zero position adjustment”.

>> WORK END

DTC/CIRCUIT DIAGNOSIS

B1642 REAR TURN SIGNAL LAMP LH CIRCUIT

DTC Description

INFOID:0000000013549506

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1642	11	Turn signal lamp rl output signal (Turn signal lamp rear left output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Rear turn signal lamp LH signal
				Threshold	Harness to the rear turn signal lamp LH is shorted to ground
				Diagnosis delay time	1 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Rear turn signal lamp LH signal
				Threshold	Harness to the rear turn signal lamp LH is shorted to battery or open
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to rear combination lamp LH)
- BCM
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN LH.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-118, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549507

1.CHECK REAR TURN SIGNAL LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
- BCM
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	70		Not existed

Is the inspection result normal?

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

2.CHECK REAR TURN SIGNAL LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH harness connector.

Body side

BCM		Rear combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
M28	70	M194	4	Existed

Back door side

BCM		Rear combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
M28	70	M14	4	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	70	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
- BCM
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-118, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp LH. Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side)
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-118, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B1646 REAR TURN SIGNAL LAMP RH CIRCUIT

DTC Description

INFOID:0000000013549508

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1646	11	Turn signal lamp rr output signal (Turn signal lamp rear right output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Rear turn signal lamp RH signal
				Threshold	Harness to the rear turn signal lamp RH is shorted to ground
				Diagnosis delay time	1 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Rear turn signal lamp RH signal
				Threshold	Harness to the rear turn signal lamp RH is shorted to battery or open
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to rear combination lamp RH)
- BCM
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN RH.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-120, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549509

1.CHECK REAR TURN SIGNAL LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
- BCM
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	58		Not existed

Is the inspection result normal?

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

2.CHECK REAR TURN SIGNAL LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH harness connector.

Body side

BCM		Rear combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
M27	58	M195	4	Existed

Back door side

BCM		Rear combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
M27	58	M15	4	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	58	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect following connectors.
2. Turn ignition switch ON.

- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
- BCM

3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-120, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp RH. Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side).
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-120, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B164A REAR TURN SIGNAL LAMP LH

DTC Description

INFOID:0000000013549510

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B164A	49	Turn signal lamp rl (Turn signal lamp rear left)	[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Rear turn signal lamp LH signal
				Threshold	Diagnostic circuit has a malfunction. There is an internal electrical error.
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to rear combination lamp LH)
- BCM
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN LH.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-122, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

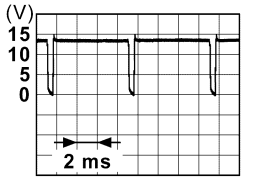
Diagnosis Procedure

INFOID:0000000013549511

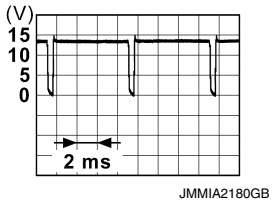
1.CHECK REAR TURN SIGNAL LAMP LH SIGNAL

1. Turn ignition switch ON.
2. With operating the turn signal switch, check output waveform between rear combination lamp LH harness connector and ground using oscilloscope.

Body side

+		-	Test item		Output waveform (Reference value)
Rear combination lamp LH					
Connector	Terminal				
M194	4	Ground	Turn signal switch	Left	 JMMIA2180GB
				Center	0 V

Back door side

+		-	Test item		Output waveform (Reference value)
Rear combination lamp LH					
Connector	Terminal				
M14	4	Ground	Turn signal switch	Left	 JMMIA2180GB
				Center	0 V

Is the inspection result normal?

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

2.CHECK REAR TURN SIGNAL LAMP LH SIGNAL GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear combination lamp LH connector.
3. Check continuity between rear combination lamp LH harness connector and ground.

Body side

Rear combination lamp LH		Ground	Continuity
Connector	Terminal		
M194	5		Not existed

Back door side

Rear combination lamp LH		Ground	Continuity
Connector	Terminal		
M14	5		Not existed

Is the inspection result normal?

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

3.CHECK REAR TURN SIGNAL LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
- BCM
3. Check continuity between BCM harness connector and rear combination lamp LH harness connector.

Body side

BCM		Rear combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
M28	70	M194	4	Existed

Back door side

BCM		Rear combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
M28	70	M14	4	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	70		Not existed

Is the inspection result normal?

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

4. CHECK REAR TURN SIGNAL LAMP LH SIGNAL CIRCUIT 2

Check voltage between rear BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	70	Ground	0 V

Is the inspection result normal?

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

5. ERASE DTC

1. Connect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
- BCM
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-122, "DTC Description".

Is DTC detected?

YES >> GO TO 6.
NO >> INSPECTION END

6. REPLACE REAR COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp LH. Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side)
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-122, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B164B REAR TURN SIGNAL LAMP RH

DTC Description

INFOID:0000000013549512

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B164B	49	Turn signal lamp rr (Turn signal lamp rear right)	[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Rear turn signal lamp RH signal
				Threshold	Diagnostic circuit has a malfunction. There is an internal electrical error.
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to rear combination lamp RH)
- BCM
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN RH.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-125, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

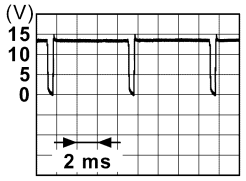
Diagnosis Procedure

INFOID:0000000013549513

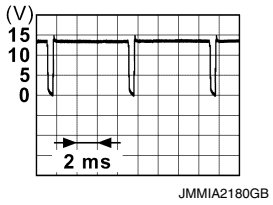
1.CHECK REAR TURN SIGNAL LAMP RH SIGNAL

1. Turn ignition switch ON.
2. With operating the turn signal switch, check output waveform between rear combination lamp RH harness connector and ground using oscilloscope.

Body side

+ Rear combination lamp RH Connector	+ Rear combination lamp RH Terminal	-	Test item		Output waveform (Reference value)
M195	4	Ground	Turn signal switch	Right	 JMMIA2180GB
				Center	0 V

Back door side

+		-	Test item		Output waveform (Reference value)
Rear combination lamp RH					
Connector	Terminal				
M15	4	Ground	Turn signal switch	Right	 JMMIA2180GB
				Center	0 V

Is the inspection result normal?

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

2.CHECK REAR TURN SIGNAL LAMP RH SIGNAL GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear combination lamp RH connector.
3. Check continuity between rear combination lamp RH harness connector and ground.

Body side

Rear combination lamp RH		Ground	Continuity
Connector	Terminal		
M194	5		Not existed

Back door side

Rear combination lamp RH		Ground	Continuity
Connector	Terminal		
M14	5		Not existed

Is the inspection result normal?

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

3.CHECK REAR TURN SIGNAL LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect following connectors.

- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
- BCM

3. Check continuity between BCM harness connector and rear combination lamp RH harness connector.

Body side

BCM		Rear combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
M27	58	M195	4	Existed

Back door side

BCM		Rear combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
M27	58	M15	4	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	58		Not existed

Is the inspection result normal?

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

4. CHECK REAR TURN SIGNAL LAMP RH SIGNAL CIRCUIT 2

Check voltage between rear BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	58	Ground	0 V

Is the inspection result normal?

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

5. ERASE DTC

1. Connect following connectors.
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
- BCM
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-125, "DTC Description".

Is DTC detected?

YES >> GO TO 6.
NO >> INSPECTION END

6. REPLACE REAR COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp RH. Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side)
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-125, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B164C REAR TURN SIGNAL LAMP LH DIAGNOSTIC CIRCUIT

DTC Description

INFOID:0000000013549514

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B164C	11	Turn signal lamp rl diagnostic circuit (Turn signal lamp rear left diagnostic circuit)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Rear turn signal lamp LH diagnostic circuit signal
				Threshold	Harness to the diagnostic circuit is shorted to ground
				Diagnosis delay time	32 sec.

POSSIBLE CAUSE

- Harness or connector [rear combination lamp LH (body side) to rear combination lamp LH (back door side)]
- BCM
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN LH and wait 32 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-128, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549515

1.CHECK REAR TURN DIAGNOSTIC CIRCUIT LH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
3. Check continuity between rear combination lamp LH (body side) harness connector and ground.

Rear combination lamp LH (body side)		Ground	Continuity
Connector	Terminal		
M194	6		Not existed

Is the inspection result normal?

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

2.ERASE DTC

1. Connect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
2. Turn ignition switch ON.

3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-128, "DTC Description".

Is DTC detected?

YES >> GO TO 3.
NO >> INSPECTION END

3. REPLACE REAR COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp LH. Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side)
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-128, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B164D REAR TURN SIGNAL LAMP RH DIAGNOSTIC CIRCUIT

DTC Description

INFOID:0000000013549516

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B164D	11	Turn signal lamp rr diagnostic circuit (Turn signal lamp rear right diagnostic circuit)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Rear turn signal lamp RH diagnostic circuit signal
				Threshold	Harness to the diagnostic circuit is shorted to ground
				Diagnosis delay time	32 sec.

POSSIBLE CAUSE

- Harness or connector [rear combination lamp RH (body side) to rear combination lamp RH (back door side)]
- BCM
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN RH and wait 32 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-130, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549517

1.CHECK REAR TURN DIAGNOSTIC CIRCUIT RH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
3. Check continuity between rear combination lamp RH (body side) harness connector and ground.

Rear combination lamp RH (body side)		Ground	Continuity
Connector	Terminal		
M195	6		Not existed

Is the inspection result normal?

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

2.ERASE DTC

1. Connect following connectors.
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
2. Turn ignition switch ON.

3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-130, "DTC Description".

Is DTC detected?

YES >> GO TO 3.
NO >> INSPECTION END

3.REPLACE REAR COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp RH. Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side)
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-130, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B16AF STOP LAMP LH CIRCUIT

DTC Description

INFOID:0000000013549518

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B16AF	11	Left brake lamp output signal (Left brake lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp LH signal
				Threshold	Harness to the stop lamp LH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp LH signal
				Threshold	Harness to the stop lamp LH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp LH (body side)]
- BCM
- Rear combination lamp LH (body side)

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Brake pedal depressed and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-132, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549519

1.CHECK STOP LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp LH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	57		Not existed

Is the inspection result normal?

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

2.CHECK STOP LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH (body side) harness connector.

BCM		Rear combination lamp LH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M27	57	M194	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	57	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp LH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-132, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP LH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp LH (body side). Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-132, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B16B3 STOP LAMP RH CIRCUIT

DTC Description

INFOID:0000000013549520

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B16B3	11	Right brake lamp output signal (Right brake lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp RH signal
				Threshold	Harness to the stop lamp RH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp RH signal
				Threshold	Harness to the stop lamp RH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp RH (body side)]
- BCM
- Rear combination lamp RH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Brake pedal depressed and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-134, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549521

1.CHECK STOP LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp RH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	69		Not existed

Is the inspection result normal?

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

2.CHECK STOP LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH (body side) harness connector.

BCM		Rear combination lamp RH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M28	69	M195	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	69	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp RH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-134, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP RH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp RH (body side). Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-134, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B16B7 HI-MOUNTED STOP LAMP CIRCUIT

DTC Description

INFOID:0000000013549522

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B16B7	11	Hi-mount stop lamp center output sig (Hi-mounted stop lamp center output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Hi-mounted stop signal
				Threshold	Harness to the hi-mounted stop lamp is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Hi-mounted stop signal
				Threshold	Harness to the hi-mounted stop lamp is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to hi-mounted stop lamp)
- BCM
- Hi-mounted stop lamp
- Condenser

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Brake pedal depressed and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-136, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549523

1.CHECK HI-MOUNTED STOP LAMP SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect following connectors.

- Hi-mounted stop lamp
- Condenser
- BCM

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	44		Not existed

4. Check continuity between hi-mounted stop lamp harness connector and ground.

Hi-mounted stop lamp		Ground	Continuity
Connector	Terminal		
D610	2		Not existed

Is the inspection result normal?

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

2.CHECK HI-MOUNTED STOP LAMP SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and condenser harness connector.

BCM		Condenser		Continuity
Connector	Terminal	Connector	Terminal	
M27	44	M35	1	Existed

2. Check continuity between hi-mounted stop lamp harness connector and condenser harness connector.

Hi-mounted stop lamp		Condenser		Continuity
Connector	Terminal	Connector	Terminal	
D610	2	M224	2	Existed

Is the inspection result normal?

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

3.CHECK HI-MOUNTED STOP LAMP SIGNAL CIRCUIT 3

1. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	44	Ground	0 V

2. Check voltage between hi-mounted stop lamp harness connector and ground.

(+)		(–)	Voltage (Approx.)
Hi-mounted stop lamp			
Connector	Terminal		
D610	2	Ground	0 V

Is the inspection result normal?

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

4.CHECK CONDENSER

Check continuity between condenser terminals.

BCM				Continuity
Connector	Terminal	Connector	Terminal	
M35	1	M224	2	Existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace condenser.

5.ERASE DTC

1. Connect following connectors.

- Hi-mounted stop lamp
- Condenser
- BCM

2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-136, "DTC Description".

Is DTC detected?

YES >> GO TO 6.
NO >> INSPECTION END

6. REPLACE HI-MOUNTED STOP LAMP AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace hi-mounted stop lamp. Refer to EXL-308, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-136, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B16F7 FRONT FOG LAMP LH CIRCUIT

DTC Description

INFOID:0000000013549524

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B16F7	11	Fog lamp lh (Fog lamp left hand)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION with front fog lamp ON
				Signal (terminal)	Front fog lamp LH signal
				Threshold	Harness to the front fog lamp LH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION with front fog lamp ON
				Signal (terminal)	Front fog lamp LH signal
				Threshold	Harness to the front fog lamp LH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to front fog lamp LH)
- BCM
- Front fog lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary switch POSITION.
3. Turn front fog lamp switch ON and wait 12.5 seconds or more.
4. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-139, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549525

1.CHECK FRONT FOG LAMP LH SIGNAL CIRCUIT 1

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

BCM		Ground	Continuity
Connector	Terminal		
E15	131		Not existed

Is the inspection result normal?

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

2.CHECK FRONT FOG LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front fog lamp LH harness connector.

BCM		Front fog lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
E15	131	E67	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E15	131	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and front fog lamp LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-139, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE FRONT FOG LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front fog lamp LH. Refer to EXL-294, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-139, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B16FB FRONT FOG LAMP RH CIRCUIT

DTC Description

INFOID:0000000013549526

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B16FB	11	Fog lamp rh (Fog lamp right hand)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION with front fog lamp ON
				Signal (terminal)	Front fog lamp RH signal
				Threshold	Harness to the front fog lamp RH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION with front fog lamp ON
				Signal (terminal)	Front fog lamp RH signal
				Threshold	Harness to the front fog lamp RH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to front fog lamp RH)
- BCM
- Front fog lamp RH

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary switch POSITION.
3. Turn front fog lamp switch ON and wait 12.5 seconds or more.
4. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-141, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549527

1.CHECK FRONT FOG LAMP RH SIGNAL CIRCUIT 1

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

BCM		Ground	Continuity
Connector	Terminal		
E16	143		Not existed

Is the inspection result normal?

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

2.CHECK FRONT FOG LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front fog lamp RH harness connector.

BCM		Front fog lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
E16	143	E68	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E16	143	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and front fog lamp RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-141, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE FRONT FOG LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front fog lamp RH. Refer to EXL-294, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-141, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B1707 BACK-UP LAMP LH CIRCUIT

DTC Description

INFOID:0000000013549528

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1707	11	Back-up lamp lh output signal (Back-up lamp left hand output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Selector lever is R position
				Signal (terminal)	Back-up lamp LH signal
				Threshold	Harness to the back-up lamp LH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Selector lever is R position
				Signal (terminal)	Back-up lamp LH signal
				Threshold	Harness to the back-up lamp LH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp LH (back door side)]
- BCM
- Rear combination lamp LH (back door side)

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Shift the selector lever to R position and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-143, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549529

1.CHECK BACK-UP LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp LH (back door side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	43		Not existed

Is the inspection result normal?

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

2.CHECK BACK-UP LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH (back door side) harness connector.

BCM		Rear combination lamp LH (back door side)		Continuity
Connector	Terminal	Connector	Terminal	
M27	43	M14	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	43	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp LH (back door side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-143, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP LH (BACK DOOR SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp LH (back door side). Refer to EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-143, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B170B BACK-UP LAMP RH CIRCUIT

DTC Description

INFOID:0000000013549530

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B170B	11	Back-up lamp rh output signal (Back-up lamp right hand output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	• Selector lever is R position
				Signal (terminal)	Back-up lamp RH signal
				Threshold	Harness to the back-up lamp RH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	• Selector lever is R position
				Signal (terminal)	Back-up lamp RH signal
				Threshold	Harness to the back-up lamp RH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp RH (back door side)]
- BCM
- Rear combination lamp RH (back door side)

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Shift the selector lever to R position and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-145, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549531

1.CHECK BACK-UP LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp RH (back door side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	71		Not existed

Is the inspection result normal?

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

2.CHECK BACK-UP LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH (back door side) harness connector.

BCM		Rear combination lamp RH (back door side)		Continuity
Connector	Terminal	Connector	Terminal	
M28	71	M15	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	71	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp RH (back door side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-145, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP RH (BACK DOOR SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp RH (back door side). Refer to EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-145, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B173D SIDE TURN SIGNAL LAMP CIRCUIT
LH

LH : DTC Description

INFOID:0000000013549532

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B173D	11	Side turn signal lamp output signal (Side turn signal lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Side turn signal lamp LH signal
				Threshold	Harness to the side turn signal lamp LH is shorted to ground
				Diagnosis delay time	2.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Side turn signal lamp LH signal
				Threshold	Harness to the side turn signal lamp LH is shorted to battery or open
				Diagnosis delay time	2.5 sec.

POSSIBLE CAUSE
- Harness or connector (left front door control unit to door mirror LH)
- Left front door control unit
- Door mirror LH

FAIL-SAFE
Inhibit turn signal lamp operation

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN LH.
3. Perform self-diagnosis for “Left front door control unit”.

Is DTC detected?

YES >> Refer to EXL-147, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549533

1.CHECK SIDE TURN SIGNAL LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect left front door control unit and door mirror LH connector.
3. Check continuity between BCM harness connector and ground.

Left front door control unit		Ground	Continuity
Connector	Terminal		
D11	9		Not existed

Is the inspection result normal?

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

2.CHECK SIDE TURN SIGNAL LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between left front door control unit harness connector and door mirror LH harness connector.

Left front door control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	
D11	9	D42	2	Existed

2. Check voltage between left front door control unit harness connector and ground.

(+)		(–)	Voltage (Approx.)
Left front door control unit			
Connector	Terminal		
D11	9	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect left front door control unit and door mirror LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “Left front door control unit” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-147, "LH : DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE SIDE TURN SIGNAL LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace side turn signal LH. Refer to EXL-295, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “Left front door control unit” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-147, "LH : DTC Description".

Is DTC detected?

YES >> Replace left front door control unit. Refer to DLK-286, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549534

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B173D	11	Side turn signal lamp output signal (Side turn signal lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Side turn signal lamp RH signal
				Threshold	Harness to the side turn signal lamp RH is shorted to ground
				Diagnosis delay time	2.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Side turn signal lamp RH signal
				Threshold	Harness to the side turn signal lamp RH is shorted to battery or open
				Diagnosis delay time	2.5 sec.

POSSIBLE CAUSE

- Harness or connector (right front door control unit to door mirror RH)
- Right front door control unit
- Door mirror RH

FAIL-SAFE

Inhibit turn signal lamp operation

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN RH.
3. Perform self-diagnosis for “Right front door control unit”.

Is DTC detected?

YES >> Refer to EXL-149, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549535

1.CHECK SIDE TURN SIGNAL LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect right front door control unit and door mirror RH connector.
3. Check continuity between BCM harness connector and ground.

Right front door control unit		Ground	Continuity
Connector	Terminal		
D54	9		Not existed

Is the inspection result normal?

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

2.CHECK SIDE TURN SIGNAL LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between right front door control unit harness connector and door mirror RH harness connector.

Right front door control unit		Door mirror RH		Continuity
Connector	Terminal	Connector	Terminal	
D54	9	D92	2	Existed

2. Check voltage between right front door control unit harness connector and ground.

(+)		(–)	Voltage (Approx.)
Right front door control unit			
Connector	Terminal		
D54	9	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect right front door control unit and door mirror RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “Right front door control unit” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-148, "RH : DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE SIDE TURN SIGNAL LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace side turn signal lamp RH. Refer to EXL-295, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “Right front door control unit” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-148, "RH : DTC Description".

Is DTC detected?

YES >> Replace right front door control unit. Refer to DLK-286, "Removal and Installation".
NO >> INSPECTION END

B1783 LED HEADLAMP CONTROL MODULE
LH

LH : DTC Description

INFOID:0000000013549536

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1783	04	LED headlamp control module (LED headlamp control module)	[SYSTEM INTERNAL FAILURES]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	LED headlamp control module LH internal malfunction
				Diagnosis delay time	—
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	LED headlamp control module LH power supply circuit
				Threshold	Harness to LED headlamp control module LH has a open circuit
				Diagnosis delay time	—
	1C		[CIRC VOLTAGE OUT OF RANGE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	LED headlamp control module LH power supply circuit
				Threshold	There is power supply voltage value out of the permissible range
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—
	87		[MISSING MESSAGE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Headlamp LIN communication
				Threshold	Headlamp LIN communication signal is missing message
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE (B1783-04, 13, 1C, 87)

- Fuse
- Harness or connector
- Front combination lamp

POSSIBLE CAUSE (B1783-55)

Front combination lamp LH

FAIL-SAFE

Headlamp (HI/LO) does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-152, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549537

DTC B1783-04, 13, 1C, 87

1.CHECK FUSE

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

Unit	Location	Fuse No.	Capacity
LED headlamp control module	Fuse and fusible link block 1	203	20A

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit if a fuse is blown (open).
NO >> GO TO 2.

2.CHECK LED HEADLAMP CONTROL MODULE LH POWER SUPPLY 1

Check voltage between front combination lamp LH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp LH			
Connector	Terminal		
E115	12	Ground	13.6 V

Is the inspection result normal?

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

3.CHECK LED HEADLAMP CONTROL MODULE LH POWER SUPPLY 2

1. Turn ignition switch ON.
2. Check voltage between front combination lamp LH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp LH			
Connector	Terminal		
E115	11	Ground	13.2 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 4.

4.CHECK LED HEADLAMP CONTROL MODULE LH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp LH connector.
3. Check continuity between BCM harness connector and front combination lamp LH harness connector.

BCM		Front combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
E16	145	E115	11	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E16	145		Not existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-56, "Intermittent Incident".
NO >> Repair or replace harness.

5.CHECK LED HEADLAMP CONTROL MODULE LH GROUND CIRCUIT

Check continuity between front combination lamp LH harness connector and ground.

Front combination lamp LH		Ground	Continuity
Connector	Terminal		
E115	13		Existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6.ERASE DTC

1. Connect BCM and front combination lamp LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-151, "LH : DTC Description".

Is DTC detected?

YES >> GO TO 7.
NO >> INSPECTION END

7.REPLACE FRONT COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-151, "LH : DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

DTC B1783-55

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549538

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1783	04	LED headlamp control module (LED headlamp control module)	[SYSTEM INTERNAL FAILURES]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	LED headlamp control module RH internal malfunction
				Diagnosis delay time	—
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	LED headlamp control module RH power supply circuit
				Threshold	Harness to LED headlamp control module RH has a open circuit
				Diagnosis delay time	—
	1C		[CIRC VOLTAGE OUT OF RANGE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	LED headlamp control module RH power supply circuit
				Threshold	There is power supply voltage value out of the permissible range
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—
	87		[MISSING MESSAGE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Headlamp LIN communication
				Threshold	Headlamp LIN communication signal is missing message
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE (B1783-04, 13, 1C, 87)

- Fuse
- Harness or connector
- Front combination lamp

POSSIBLE CAUSE (B1783-55)

Front combination lamp RH

FAIL-SAFE

Headlamp (HI/LO) does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-154, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549539

DTC B1783-04, 13, 1C, 87

1.CHECK FUSE

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

Unit	Location	Fuse No.	Capacity
LED headlamp control module	Fuse and fusible link block 1	203	20A

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit if a fuse is blown (open).
NO >> GO TO 2.

2.CHECK LED HEADLAMP CONTROL MODULE RH POWER SUPPLY 1

Check voltage between front combination lamp RH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp RH			
Connector	Terminal		
E116	12	Ground	13.6 V

Is the inspection result normal?

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

3.CHECK LED HEADLAMP CONTROL MODULE RH POWER SUPPLY 2

1. Turn ignition switch ON.
2. Check voltage between front combination lamp RH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp RH			
Connector	Terminal		
E116	11	Ground	13.2 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 4.

4.CHECK LED HEADLAMP CONTROL MODULE RH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp RH connector.
3. Check continuity between BCM harness connector and front combination lamp RH harness connector.

BCM		Front combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
E15	133	E116	11	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E15	133		Not existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-56, "Intermittent Incident".
NO >> Repair or replace harness.

5.CHECK LED HEADLAMP CONTROL MODULE RH GROUND CIRCUIT

Check continuity between front combination lamp RH harness connector and ground.

Front combination lamp RH		Ground	Continuity
Connector	Terminal		
E116	13		Existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6.ERASE DTC

1. Connect BCM and front combination lamp RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-153, "RH : DTC Description".

Is DTC detected?

YES >> GO TO 7.
NO >> INSPECTION END

7.REPLACE FRONT COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-153, "RH : DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

DTC B1783-55

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B1787 HEADLAMP AIMING MOTOR
LH

LH : DTC Description

INFOID:0000000013549540

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1787	11	Headlamp range adjustment actuator (Headlamp range adjustment actuator)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to headlamp aiming motor LH is shorted to ground
				Diagnosis delay time	—
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to headlamp aiming motor LH has a open circuit
				Diagnosis delay time	—
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp aiming motor LH internal malfunction
				Diagnosis delay time	—
	4B		[OVER TEMPERATURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp aiming motor LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	71		[ACTUATOR STUCK]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp aiming motor LH is blocked
				Diagnosis delay time	—
	98		[COMPONENT/SYS OVER TEMP]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp aiming motor LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Headlamp aiming motor does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the ignition switch ON.

2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-158, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549541

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549542

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1787	11	Headlamp range adjustment actuator (Headlamp range adjustment actuator)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to headlamp aiming motor RH is shorted to ground
				Diagnosis delay time	—
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to headlamp aiming motor RH has a open circuit
				Diagnosis delay time	—
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp aiming motor RH internal malfunction
				Diagnosis delay time	—
	4B		[OVER TEMPERATURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp aiming motor RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	71		[ACTUATOR STUCK]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp aiming motor RH is blocked
				Diagnosis delay time	—
	98		[COMPONENT/SYS OVER TEMP]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp aiming motor RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Headlamp aiming motor does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-160, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549543

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B17ED LOW BEAM CIRCUIT
LH
LH : DTC Description

INFOID:0000000013549544

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B17ED	11	Low beam output signal (Low beam output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp (LO) LH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp (LO) LH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Headlamp (LO) LH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Headlamp (LO) LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Headlamp (LO) does not lighting

DTC CONFIRMATION PROCEDURE
1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-162, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549545

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549546

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B17ED	11	Low beam output signal (Low beam output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp (LO) RH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp (LO) RH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Headlamp (LO) RH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Headlamp (LO) RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Headlamp (LO) does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-163, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549547

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B17F7 LICENSE PLATE LAMP CIRCUIT

DTC Description

INFOID:0000000013549548

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B17F7	11	License plate lamp output signal	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	License plate lamp signal
				Threshold	Harness to the license plate lamp is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	License plate lamp signal
				Threshold	Harness to the license plate lamp is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to license plate lamp)
- BCM
- License plate lamp LH
- License plate lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch POSITION and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-164, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549549

1.CHECK LICENSE PLATE LAMP SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and license plate lamp connector.
3. Check continuity between BCM harness connector and ground.

LH

BCM		Ground	Continuity
Connector	Terminal		
M27	62		Not existed

RH

BCM		Ground	Continuity
Connector	Terminal		
M28	72		Not existed

Is the inspection result normal?

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

2.CHECK LICENSE PLATE LAMP SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and license plate lamp harness connector.

LH

BCM		license plate lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
M27	62	M157	1	Existed

RH

BCM		license plate lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
M28	72	M158	1	Existed

2. Check voltage between BCM harness connector and ground.

LH

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	62	Ground	0 V

RH

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	72	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and license plate lamp connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-164, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE LICENSE PLATE LAMP AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding license plate lamp. Refer to EXL-310, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-164, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B17FC PARKING LAMP/POSITION LAMP SWITCH

DTC Description

INFOID:0000000013549550

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B17FC	16	Standing light/parking light switch (Standing light/parking light switch)	[CIRC VOLT BELOW THRESHOLD]	Diagnosis condition	Ignition switch OFF
				Signal (terminal)	—
				Threshold	Battery power supply is not available
				Diagnosis delay time	—

POSSIBLE CAUSE

- Battery
- Alternator
- Harness or connector

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-166, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549551

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-51, "DTC Index".

2.CHECK BATTERY VOLTAGE

Measure the battery voltage.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform battery inspection. Refer to PG-102, "MAIN BATTERY : How to Handle Battery".

3.CHECK HEADLAMP CONTROL UNIT POWER SUPPLY

1. Turn ignition switch OFF.
2. Check voltage between front combination lamp LH harness connector and ground.

LH

(+)		(–)	Voltage (Approx.)
Front combination lamp LH			
Connector	Terminal		
E115	4	Ground	13.6 V

RH

(+)		(–)	Voltage (Approx.)
Front combination lamp RH			
Connector	Terminal		
E116	4	Ground	13.6 V

Is the inspection result normal?

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

4. CHECK HEADLAMP CONTROL UNIT GROUND CIRCUIT

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

LH

Front combination lamp LH		Ground	Continuity
Connector	Terminal		
E115	5		Existed

RH

Front combination lamp RH		Ground	Continuity
Connector	Terminal		
E116	5		Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace harness.

B1F10 HAZARD SWITCH

DTC Description

INFOID:0000000013549552

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1F10	2A	Hazard switch (Hazard switch)	[SIGNAL STUCK IN RANGE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Upper control panel control unit malfunction. There is no signal change (switch stuck)
				Diagnosis delay time	40 sec.

POSSIBLE CAUSE

- Upper control panel control unit
- BCM

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON and wait 40 seconds or more.
2. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-168, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549553

1.CHECK SELF DIAGNOSTIC RESULT

Check DTC using CONSULT.

What is the display history of DTC?

“PAST” >> GO TO 2.
“CRNT”>> GO TO 3.

2.ERASE DTC

1. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”.

Is DTC detected?

YES >> GO TO 3.
NO >> Check intermittent incident. Refer to GI-56, "Intermittent Incident".

3.CHECK SWITCH OPERATION

Check the operation of each switch on upper control panel control unit is normal.

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> Replace upper control panel control unit. Refer to BCS-252, "Removal and Installation".

B1FB1 HEADLAMP CONTROL UNIT TEMPERATURE SENSOR 1

LH

LH : DTC Description

INFOID:0000000013549554

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 1 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-169, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549555

1. REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549556

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit RH temperature sensor 1 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-170, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549557

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B1FB2 HEADLAMP CONTROL UNIT TEMPERATURE SENSOR 2

LH

LH : DTC Description

INFOID:0000000013549558

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 2 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-171, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549559

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549560

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit RH temperature sensor 2 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-172, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549561

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B1FB3 HEADLAMP CONTROL UNIT TEMPERATURE SENSOR 3

LH

LH : DTC Description

INFOID:0000000013549562

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 3 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-173, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549563

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549564

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit RH temperature sensor 3 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-174, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549565

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B1FB4 HEADLAMP CONTROL UNIT TEMPERATURE SENSOR 4

LH

LH : DTC Description

INFOID:0000000013549566

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 4 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-175, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549567

1. REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549568

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit RH temperature sensor 4 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-176, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549569

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B1FB5 HEADLAMP CONTROL UNIT TEMPERATURE SENSOR 5

LH

LH : DTC Description

INFOID:0000000013549570

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 5 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-177, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549571

1. REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549572

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit RH temperature sensor 5 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-178, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549573

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B1FB6 LED HEADLAMP CONTROL MODULE TEMPERATURE SENSOR 1 LH

LH : DTC Description

INFOID:0000000013549574

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB6	01	Temp sensor 1 (LED H/L cont ECU) [Temperature sensor 1 (LED headlamp cont ECU)]	[ELECTRICAL MAL-FUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to LED headlamp control module LH temperature sensor 1 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-179, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549575

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549576

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB6	01	Temp sensor 1 (LED H/L cont ECU) [Temperature sensor 1 (LED headlamp cont ECU)]	[ELECTRICAL MAL-FUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to LED headlamp control module RH temperature sensor 1 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE
Front combination lamp RH

FAIL-SAFE
Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-180, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549577

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B1FB7 LED HEADLAMP CONTROL MODULE TEMPERATURE SENSOR 2

LH

LH : DTC Description

INFOID:0000000013549578

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB7	01	Temp sensor 2 (LED H/L cont ECU) [Temperature sensor 2 (LED headlamp cont ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to LED headlamp control module LH temperature sensor 2 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-181, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549579

1. REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549580

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB7	01	Temp sensor 2 (LED H/L cont ECU) [Temperature sensor 2 (LED headlamp cont ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to LED headlamp control module RH temperature sensor 2 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-182, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549581

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B1FB8 LED HEADLAMP CONTROL MODULE TEMPERATURE SENSOR 3 LH

LH : DTC Description

INFOID:0000000013549582

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB8	01	Temp sensor 3 (LED H/L cont ECU) [Temperature sensor 3 (LED headlamp cont ECU)]	[ELECTRICAL MAL-FUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to LED headlamp control module LH temperature sensor 3 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-183, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549583

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549584

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB8	01	Temp sensor 3 (LED H/L cont ECU) [Temperature sensor 3 (LED headlamp cont ECU)]	[ELECTRICAL MAL-FUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to LED headlamp control module RH temperature sensor 3 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-184, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549585

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B210D LOW BEAM POWER SUPPLY
LH

LH : DTC Description

INFOID:0000000013549586

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B210D	00	Power supply (Power supply)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Less than 9 V
				Diagnosis delay time	15 sec.

POSSIBLE CAUSE

- Fuse
- Harness or connector
- BCM
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON and wait 15 seconds or more.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-185, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549587

1.CHECK FUSE

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

Unit	Location	Fuse No.	Capacity
Headlamp control unit	Fuse and fusible link block 1	203	20A

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit if a fuse is blown (open).
NO >> GO TO 2.

2.CHECK HEADLAMP CONTROL UNIT LH POWER SUPPLY 1

Check voltage between front combination lamp LH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp LH			
Connector	Terminal		
E115	4	Ground	13.6 V

Is the inspection result normal?

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

3.CHECK HEADLAMP CONTROL UNIT LH POWER SUPPLY 2

1. Turn ignition switch ON.
2. Check voltage between front combination lamp LH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp LH			
Connector	Terminal		
E115	3	Ground	13.2 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 4.

4.CHECK HEADLAMP CONTROL UNIT LH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp LH connector.
3. Check continuity between BCM harness connector and front combination lamp LH harness connector.

BCM		Front combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
E15	133	E115	3	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E15	133		Not existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-56, "Intermittent Incident".
NO >> Repair or replace harness.

5.CHECK HEADLAMP CONTROL UNIT LH GROUND CIRCUIT

Check continuity between front combination lamp LH harness connector and ground.

Front combination lamp LH		Ground	Continuity
Connector	Terminal		
E115	5		Existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6.ERASE DTC

1. Connect BCM and front combination lamp LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-185, "LH : DTC Description".

Is DTC detected?

YES >> GO TO 7.
NO >> INSPECTION END

7.REPLACE FRONT COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".

3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-185, "LH : DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549588

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B210D	00	Power supply (Power supply)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Less than 9 V
				Diagnosis delay time	15 sec.

POSSIBLE CAUSE

- Fuse
- Harness or connector
- BCM
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON and wait 15 seconds or more.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-187, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549589

1.CHECK FUSE

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

Unit	Location	Fuse No.	Capacity
Headlamp control unit	Fuse and fusible link block 1	203	20A

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit if a fuse is blown (open).
NO >> GO TO 2.

2.CHECK HEADLAMP CONTROL UNIT RH POWER SUPPLY 1

1. Check voltage between front combination lamp RH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp RH			
Connector	Terminal		
E116	4	Ground	13.6 V

Is the inspection result normal?

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

3.CHECK HEADLAMP CONTROL UNIT RH POWER SUPPLY 2

1. Turn ignition switch ON.
2. Check voltage between front combination lamp RH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp RH			
Connector	Terminal		
E116	3	Ground	13.2 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 4.

4.CHECK HEADLAMP CONTROL UNIT RH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp RH connector.
3. Check continuity between BCM harness connector and front combination lamp RH harness connector.

BCM		Front combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
E16	145	E116	3	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E16	145		Not existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-56, "Intermittent Incident".
NO >> Repair or replace harness.

5.CHECK HEADLAMP CONTROL UNIT RH GROUND CIRCUIT

Check continuity between front combination lamp RH harness connector and ground.

Front combination lamp RH		Ground	Continuity
Connector	Terminal		
E116	5		Existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6.ERASE DTC

1. Connect BCM and front combination lamp RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.

4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-187, "RH : DTC Description".

Is DTC detected?

YES >> GO TO 7.
NO >> INSPECTION END

7. REPLACE FRONT COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-187, "RH : DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B210E HIGH BEAM POWER SUPPLY
LH

LH : DTC Description

INFOID:0000000013549590

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B210E	00	Power supply (Power supply)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	More than 17 V
				Diagnosis delay time	15 sec.

POSSIBLE CAUSE
- Fuse
- Harness or connector
- BCM
- Front combination lamp LH

FAIL-SAFE
—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON and wait 15 seconds or more.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-190, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549591

1.CHECK FUSE

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

Unit	Location	Fuse No.	Capacity
Headlamp control unit	Fuse and fusible link block 1	203	20A

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit if a fuse is blown (open).
NO >> GO TO 2.

2.CHECK HEADLAMP CONTROL UNIT LH POWER SUPPLY 1

Check voltage between front combination lamp LH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp LH			
Connector	Terminal		
E115	4	Ground	13.6 V

Is the inspection result normal?

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

3. CHECK HEADLAMP CONTROL UNIT LH POWER SUPPLY 2

1. Turn ignition switch ON.
2. Check voltage between front combination lamp LH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp LH			
Connector	Terminal		
E115	3	Ground	13.2 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 4.

4. CHECK HEADLAMP CONTROL UNIT LH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp LH connector.
3. Check continuity between BCM harness connector and front combination lamp LH harness connector.

BCM		Front combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
E15	133	E115	3	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E15	133		Not existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-56, "Intermittent Incident".
NO >> Repair or replace harness.

5. CHECK HEADLAMP CONTROL UNIT LH GROUND CIRCUIT

Check continuity between front combination lamp LH harness connector and ground.

Front combination lamp LH		Ground	Continuity
Connector	Terminal		
E115	5		Existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6. ERASE DTC

1. Connect BCM and front combination lamp LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-190, "LH : DTC Description".

Is DTC detected?

YES >> GO TO 7.
NO >> INSPECTION END

7. REPLACE FRONT COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".

3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-190, "LH : DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549592

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B210E	00	Power supply (Power supply)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	More than 17 V
				Diagnosis delay time	15 sec.

POSSIBLE CAUSE

- Fuse
- Harness or connector
- BCM
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON and wait 15 seconds or more.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-192, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549593

1.CHECK FUSE

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

Unit	Location	Fuse No.	Capacity
Headlamp control unit	Fuse and fusible link block 1	203	20A

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit if a fuse is blown (open).
NO >> GO TO 2.

2.CHECK HEADLAMP CONTROL UNIT RH POWER SUPPLY 1

Check voltage between front combination lamp RH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp RH			
Connector	Terminal		
E116	4	Ground	13.6 V

Is the inspection result normal?

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

3.CHECK HEADLAMP CONTROL UNIT RH POWER SUPPLY 2

1. Turn ignition switch ON.
2. Check voltage between front combination lamp RH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front combination lamp RH			
Connector	Terminal		
E116	3	Ground	13.2 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 4.

4.CHECK HEADLAMP CONTROL UNIT RH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp RH connector.
3. Check continuity between BCM harness connector and front combination lamp RH harness connector.

BCM		Front combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
E16	145	E116	3	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E16	145		Not existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-56, "Intermittent Incident".
NO >> Repair or replace harness.

5.CHECK HEADLAMP CONTROL UNIT RH GROUND CIRCUIT

Check continuity between front combination lamp RH harness connector and ground.

Front combination lamp RH		Ground	Continuity
Connector	Terminal		
E116	5		Existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6.ERASE DTC

1. Connect BCM and front combination lamp RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.

4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-192, "RH : DTC Description".

Is DTC detected?

YES >> GO TO 7.
NO >> INSPECTION END

7.REPLACE FRONT COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-192, "RH : DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B210F HEADLAMP POWER SUPPLY
LH

LH : DTC Description

INFOID:0000000013549594

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B210F	14	Circuit 30 (Circuit 30)	[CIRC SHORT TO GROUND OR OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Less than 3 V
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to front combination lamp LH)
- BCM
- Front combination lamp LH

FAIL-SAFE

Headlamp (HI/LO) does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-195, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549595

1.CHECK HEADLAMP CONTROL UNIT LH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp LH connector.
3. Check continuity between BCM harness connector and front combination lamp LH harness connector.

BCM		Front combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
E15	133	E115	3	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E15	133		Not existed

Is the inspection result normal?

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

2.ERASE DTC

1. Connect BCM and front combination lamp LH connector.
2. Turn ignition switch ON.

3. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-195, "LH : DTC Description".

Is DTC detected?

YES >> GO TO 3.
NO >> INSPECTION END

3.REPLACE FRONT COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-195, "LH : DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549596

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B210F	14	Circuit 30 (Circuit 30)	[CIRC SHORT TO GROUND OR OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Less than 3 V
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to front combination lamp RH)
- BCM
- Front combination lamp RH

FAIL-SAFE

Headlamp (HI/LO) does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-196, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549597

1.CHECK HEADLAMP CONTROL UNIT RH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp RH connector.
3. Check continuity between BCM harness connector and front combination lamp RH harness connector.

BCM		Front combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
E16	145	E116	3	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E16	145		Not existed

Is the inspection result normal?

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

2.ERASE DTC

1. Connect BCM and front combination lamp RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-196, "RH : DTC Description".

Is DTC detected?

YES >> GO TO 3.
NO >> INSPECTION END

3.REPLACE FRONT COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-196, "RH : DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2239 HEADLAMP AIMING CONTROL

LH

LH : DTC Description

INFOID:0000000013549598

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2239	00	Headlamp range adjustment (Headlamp range adjustment)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp control unit LH internal malfunction
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—
	64		[SIGNAL PLAUSIBILITY FAILURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp control unit LH has a malfunction. There is an implausible signal.
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE (B2239-00)

- Headlamp (HI/LO) does not lighting
- Active adaptive lighting system does not operate

FAIL-SAFE (B2239-55)

Headlamp (HI/LO) does not lighting

FAIL-SAFE (B2239-64)

Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-198, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549599

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549600

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2239	00	Headlamp range adjustment (Headlamp range adjustment)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp control unit RH internal malfunction
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—
	64		[SIGNAL PLAUSIBILITY FAILURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp control unit RH has a malfunction. There is an implausible signal.
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE (B2239-00)

- Headlamp (HI/LO) does not lighting
- Active adaptive lighting system does not operate

FAIL-SAFE (B2239-55)

Headlamp (HI/LO) does not lighting

FAIL-SAFE (B2239-64)

Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-199, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549601

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B2386 LED HEADLAMP CONTROL MODULE FAN 1

LH

LH : DTC Description

INFOID:0000000013549602

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2386	01	LED headlamp control module fan 1 (LED headlamp control module fan 1)	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp control unit LH fan 1 has a open or short circuit
				Diagnosis delay time	50 sec.

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Headlamp (HI/LO) dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON and wait 50 seconds or more.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-200, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549603

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549604

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2386	01	LED headlamp control module fan 1 (LED headlamp control module fan 1)	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp control unit RH fan 1 has a open or short circuit
				Diagnosis delay time	50 sec.

POSSIBLE CAUSE
Front combination lamp RH

FAIL-SAFE

Headlamp (HI/LO) dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON and wait 50 seconds or more.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-201, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549605

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B238A LED HEADLAMP CONTROL MODULE FAN 2

LH

LH : DTC Description

INFOID:0000000013549606

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B238A	01	LED headlamp control module fan 2 (LED headlamp control module fan 2)	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	LED headlamp control module LH has a open or short circuit
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Headlamp (HI/LO) dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-202, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549607

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549608

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B238A	01	LED headlamp control module fan 2 (LED headlamp control module fan 2)	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	LED headlamp control module RH has a open or short circuit
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp RH

FAIL-SAFE

Headlamp (HI/LO) dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-203, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549609

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B2800 STOP LAMP LH CIRCUIT

DTC Description

INFOID:0000000013549610

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2800	11	Stop lamp and tail lamp lh (outer) [Stop lamp and tail lamp left hand (outer)]	[CIRC SHORT TO GRND]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp LH signal
				Threshold	Harness to the stop lamp LH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp LH signal
				Threshold	Harness to the stop lamp LH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp LH (body side)]
- BCM
- Rear combination lamp LH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Brake pedal depressed and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-204, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549611

1.CHECK STOP LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp LH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	57		Not existed

Is the inspection result normal?

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

2.CHECK STOP LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH (body side) harness connector.

BCM		Rear combination lamp LH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M27	57	M194	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	57	Ground	0 V

Is the inspection result normal?

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

3. ERASE DTC

1. Connect BCM and rear combination lamp LH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-204, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4. REPLACE REAR COMBINATION LAMP LH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp LH (body side). Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-204, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2801 TAIL LAMP LH (BACK DOOR SIDE) CIRCUIT

DTC Description

INFOID:0000000013549612

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2801	11	Stop lamp and tail lamp lh (inner) [Stop lamp and tail lamp left hand (inner)]	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp LH (back door side) signal
				Threshold	Harness to the tail lamp LH (back door side) is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp LH (back door side) signal
				Threshold	Harness to the tail lamp LH (back door side) is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp LH (back door side)]
- BCM
- Rear combination lamp LH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch POSITION and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-206, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549613

1.CHECK TAIL LAMP LH (BACK DOOR SIDE) SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp LH (back door side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	85		Not existed

Is the inspection result normal?

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

2.CHECK TAIL LAMP LH (BACK DOOR SIDE) SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH (back door side) harness connector.

BCM		Rear combination lamp LH (back door side)		Continuity
Connector	Terminal	Connector	Terminal	
M28	85	M14	3	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	85	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp LH (back door side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-206, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP LH (BACK DOOR SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp LH (back door side). Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-206, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2802 STOP LAMP RH CIRCUIT

DTC Description

INFOID:0000000013549614

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2802	11	Stop lamp and tail lamp rh (outer) [Stop lamp and tail lamp right hand (outer)]	[CIRC SHORT TO GRND]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp RH signal
				Threshold	Harness to the stop lamp RH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp RH signal
				Threshold	Harness to the stop lamp RH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp RH (body side)]
- BCM
- Rear combination lamp RH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Brake pedal depressed and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-208, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549615

1.CHECK STOP LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp RH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	69		Not existed

Is the inspection result normal?

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

2.CHECK STOP LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH (body side) harness connector.

BCM		Rear combination lamp RH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M28	69	M195	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	69	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp RH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-208, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP RH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp RH (body side). Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-208, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2803 TAIL LAMP RH (BACK DOOR SIDE) CIRCUIT

DTC Description

INFOID:0000000013549616

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2803	11	Stop lamp and tail lamp rh (inner) [Stop lamp and tail lamp right hand (inner)]	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp RH (back door side) signal
				Threshold	Harness to the tail lamp RH (back door side) is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp RH (back door side) signal
				Threshold	Harness to the tail lamp RH (back door side) is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp RH (back door side)]
- BCM
- Rear combination lamp RH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch POSITION and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-210, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549617

1.CHECK TAIL LAMP RH (BACK DOOR SIDE) SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp RH (back door side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	48		Not existed

Is the inspection result normal?

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

2.CHECK TAIL LAMP RH (BACK DOOR SIDE) SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH (back door side) harness connector.

BCM		Rear combination lamp RH (back door side)		Continuity
Connector	Terminal	Connector	Terminal	
M27	48	M15	3	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	48	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp RH (back door side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-210, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP RH (BACK DOOR SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp RH (back door side). Refer to EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-210, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2837 SWIVEL POSITION SENSOR CIRCUIT

LH

LH : DTC Description

INFOID:0000000013549618

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2837	11	Active curve illumination sensor (Active curve illumination sensor)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to swivel sensor LH is shorted to ground
				Diagnosis delay time	2 sec.
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to swivel sensor LH has a open circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-212, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549619

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549620

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2837	11	Active curve illumination sensor (Active curve illumination sensor)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to swivel sensor RH is shorted to ground
				Diagnosis delay time	2 sec.
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to swivel sensor RH has a open circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-213, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549621

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B2838 SWIIVEL ACTUATOR CIRCUIT
LH
LH : DTC Description

INFOID:0000000013549622

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2838	11	Active curve illumination actuator (Active curve illumination actuator)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to swivel actuator LH is shorted to ground
				Diagnosis delay time	—
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to swivel actuator LH has a open circuit
				Diagnosis delay time	—
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Swivel actuator LH internal malfunction
				Diagnosis delay time	—
	4B		[OVER TEMPERATURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Swivel actuator LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	71		[ACTUATOR STUCK]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Swivel actuator LH is blocked
				Diagnosis delay time	—
	98		[COMPONENT/SYS OVER TEMP]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Swivel actuator LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Swivel actuator does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-215, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549623

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549624

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2838	11	Active curve illumination actuator (Active curve illumination actuator)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to swivel actuator RH is shorted to ground
				Diagnosis delay time	—
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to swivel actuator RH has a open circuit
				Diagnosis delay time	—
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Swivel actuator RH internal malfunction
				Diagnosis delay time	—
	4B		[OVER TEMPERATURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Swivel actuator RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	71		[ACTUATOR STUCK]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Swivel actuator RH is blocked
				Diagnosis delay time	—
	98		[COMPONENT/SYS OVER TEMP]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Swivel actuator RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Swivel actuator does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-216, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549625

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B2839 CORNERING LAMP

LH

LH : DTC Description

INFOID:0000000013549626

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2839	11	Cornering lamp (Cornering lamp)	[CIRC SHORT TO GRND]	Diagnosis condition	Engine start and turn the steering wheel to the left
				Signal (terminal)	—
				Threshold	Harness to cornering lamp LH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Engine start and turn the steering wheel to the left
				Signal (terminal)	—
				Threshold	Harness to cornering lamp LH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Engine start and turn the steering wheel to the left
				Signal (terminal)	—
				Threshold	Cornering lamp LH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Engine start and turn the steering wheel to the left
				Signal (terminal)	—
				Threshold	Cornering lamp LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Cornering lamp does not lighting

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine.
2. Turn the steering wheel to the left.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-218, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549627

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549628

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2839	11	Cornering lamp (Cornering lamp)	[CIRC SHORT TO GRND]	Diagnosis condition	Engine start and turn the steering wheel to the right
				Signal (terminal)	—
				Threshold	Harness to cornering lamp RH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Engine start and turn the steering wheel to the right
				Signal (terminal)	—
				Threshold	Harness to cornering lamp RH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Engine start and turn the steering wheel to the right
				Signal (terminal)	—
				Threshold	Cornering lamp RH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Engine start and turn the steering wheel to the right
				Signal (terminal)	—
				Threshold	Cornering lamp RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Cornering lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine.
2. Turn the steering wheel to the right.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-219, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549629

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B284C LIGHT DISTRIBUTION SENSOR

LH

LH : DTC Description

INFOID:0000000013549630

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B284C	11	Light distribution sensor (Light distribution sensor)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to light destribution sensor LH is shorted to ground
				Diagnosis delay time	2 sec.
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to light destribution sensor LH has a open circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Light distribution on safety position

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-220, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549631

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549632

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B284C	11	Light distribution sensor (Light distribution sensor)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to light destribution sensor RH is shorted to ground
				Diagnosis delay time	2 sec.
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to light destribution sensor RH has a open circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Light distribution on safety position

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-221, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549633

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B284D LIGHT DISTRIBUTION ACTUATOR LH

LH : DTC Description

INFOID:0000000013549634

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B284D	11	Light distribution actuator (Light distribution actuator)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to light distribution actuator LH is shorted to ground
				Diagnosis delay time	—
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to light distribution actuator LH has a open circuit
				Diagnosis delay time	—
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Distribution actuator LH internal malfunction
				Diagnosis delay time	—
	4B		[OVER TEMPERATURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Distribution actuator LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	71		[ACTUATOR STUCK]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Distribution actuator LH is blocked
				Diagnosis delay time	—
	98		[COMPONENT/SYS OVER TEMP]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Distribution actuator LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE (B284D-11, 13, 49, 4B, 98)

Light distribution does not change

FAIL-SAFE (B284D-71)

Light distribution on safety position

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-223, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549635

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549636

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B284D	11	Light distribution actuator (Light distribution actuator)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to light distribution actuator RH is shorted to ground
				Diagnosis delay time	—
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Harness to light distribution actuator RH has a open circuit
				Diagnosis delay time	—
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Distribution actuator RH internal malfunction
				Diagnosis delay time	—
	4B		[OVER TEMPERATURE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Distribution actuator RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	71		[ACTUATOR STUCK]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Distribution actuator RH is blocked
				Diagnosis delay time	—
	98		[COMPONENT/SYS OVER TEMP]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Distribution actuator RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp RH

FAIL-SAFE (B284D-11, 13, 49, 4B, 98)
Light distribution does not change

FAIL-SAFE (B284D-71)
Light distribution on safety position

DTC CONFIRMATION PROCEDURE
1.PERFORM DTC CONFIRMATION PROCEDURE
1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-225, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549637

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B2853 TAIL LAMP LH (BODY SIDE) CIRCUIT

DTC Description

INFOID:0000000013549638

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2853	11	Tail lamp lh output signal (Tail lamp left hand output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp LH (body side) signal
				Threshold	Harness to the tail lamp LH (body side) is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp LH (body side) signal
				Threshold	Harness to the tail lamp LH (body side) is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp LH (body side)]
- BCM
- Rear combination lamp LH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch POSITION and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-226, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549639

1.CHECK TAIL LAMP LH (BODY SIDE) SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp LH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	82		Not existed

Is the inspection result normal?

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

2.CHECK TAIL LAMP LH (BODY SIDE) SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH (body side) harness connector.

BCM		Rear combination lamp LH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M28	82	M194	3	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	82	Ground	0 V

Is the inspection result normal?

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

3. ERASE DTC

1. Connect BCM and rear combination lamp LH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-226, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4. REPLACE REAR COMBINATION LAMP LH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp LH (body side). Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-226, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2854 TAIL LAMP RH (BODY SIDE) CIRCUIT

DTC Description

INFOID:0000000013549640

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2854	11	Tail lamp rh output signal (Tail lamp right hand output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp RH (body side) signal
				Threshold	Harness to the tail lamp RH (body side) is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp RH (body side) signal
				Threshold	Harness to the tail lamp RH (body side) is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp RH (body side)]
- BCM
- Rear combination lamp RH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch POSITION and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-228, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549641

1.CHECK TAIL LAMP RH (BODY SIDE) SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp RH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	45		Not existed

Is the inspection result normal?

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

2.CHECK TAIL LAMP RH (BODY SIDE) SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH (body side) harness connector.

BCM		Rear combination lamp RH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M27	45	M195	3	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	45	Ground	0 V

Is the inspection result normal?

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

3. ERASE DTC

1. Connect BCM and rear combination lamp RH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-228, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4. REPLACE REAR COMBINATION LAMP RH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp RH (body side). Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-228, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2856 HIGH BEAM CIRCUIT
LH
LH : DTC Description

INFOID:0000000013549644

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2856	11	High beam output signal (High beam output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch LO with combination switch HI
				Signal (terminal)	—
				Threshold	Harness to headlamp (HI) LH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch LO with combination switch HI
				Signal (terminal)	—
				Threshold	Harness to headlamp (HI) LH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch LO with combination switch HI
				Signal (terminal)	—
				Threshold	Headlamp (HI) LH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch LO with combination switch HI
				Signal (terminal)	—
				Threshold	Headlamp (HI) LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Headlamp (HI) does not lighting

DTC CONFIRMATION PROCEDURE
1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-231, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549645

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549646

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2856	11	High beam output signal (High beam output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch LO with combination switch HI
				Signal (terminal)	—
				Threshold	Harness to headlamp (HI) RH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch LO with combination switch HI
				Signal (terminal)	—
				Threshold	Harness to headlamp (HI) RH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch LO with combination switch HI
				Signal (terminal)	—
				Threshold	Headlamp (HI) RH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch LO with combination switch HI
				Signal (terminal)	—
				Threshold	Headlamp (HI) RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Headlamp (HI) does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-232, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549647

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B2857 POSITION LAMP CIRCUIT
LH

LH : DTC Description

INFOID:0000000013549648

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to position lamp LH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to position lamp LH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Position lamp LH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Position lamp LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Parking lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-233, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549649

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549650

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to position lamp RH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to position lamp RH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Position lamp RH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Position lamp RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Parking lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-235, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549651

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B2858 FRONT TURN SIGNAL LAMP CIRCUIT
LH

LH : DTC Description

INFOID:0000000013549652

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2858	11	Front turn signal lamp output signal (Front turn signal lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	—
				Threshold	Harness to front turn signal lamp LH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	—
				Threshold	Harness to front turn signal lamp LH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	—
				Threshold	Front turn signal lamp LH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	—
				Threshold	Front turn signal lamp LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Front turn signal lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN LH.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-237, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549653

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549654

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2858	11	Front turn signal lamp output signal (Front turn signal lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	—
				Threshold	Harness to front turn signal lamp RH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	—
				Threshold	Harness to front turn signal lamp RH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	—
				Threshold	Front turn signal lamp RH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	—
				Threshold	Front turn signal lamp RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Front turn signal lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN RH.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-238, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549655

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B2859 SIDE MAKER LAMP CIRCUIT
LH

LH : DTC Description

INFOID:0000000013662792

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to front side marker lamp LH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to front side marker lamp LH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Front side marker lamp LH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Front side marker lamp LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Front side marker lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-240, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013662793

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013662794

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to front side marker lamp RH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to front side marker lamp RH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Front side marker lamp RH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Front side marker lamp RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Front side marker lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-240, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013662795

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

B2860 DAYTIME RUNNING LIGHT CIRCUIT
LH

LH : DTC Description

INFOID:0000000013549656

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Harness to daytime running light LH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Harness to daytime running light LH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Daytime running light LH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Daytime running light LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Daytime running light does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-243, "LH : Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549657

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549658

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Harness to daytime running light RH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Harness to daytime running light RH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELEC-TRONIC FAILURE]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Daytime running light RH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERA-TURE]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Daytime running light RH has a mal-function. There is a over tempera-ture.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Daytime running light does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-244, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549659

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

C151E FRONT HEIGHT SENSOR

DTC Description

INFOID:0000000013549660

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
C151E	04	Front level sensor lh (Front level sensor left hand)	[SYSTEM INTERNAL FAILURES]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp control unit LH internal malfunction
				Diagnosis delay time	2 sec.
	11		[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Height sensor power supply
				Threshold	4.75 V or less
				Diagnosis delay time	2 sec.
	12		[CIRC SHORT TO BATTERY]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Height sensor power supply
				Threshold	5.25 V or more
				Diagnosis delay time	2 sec.
	16		[CIRC VOLT BELOW THRESHOLD]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Front height sensor signal
				Threshold	Less than 0.5 V
				Diagnosis delay time	2 sec.
	17		[CIRC VOLT ABOVE THRESHOLD]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Front height sensor signal
				Threshold	More than 4.5 V
				Diagnosis delay time	2 sec.
	29		[SIGNAL INVALID]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Front height sensor signal
				Threshold	The front height sensor has a malfunction. There is an invalid signal.
				Diagnosis delay time	2 sec.
	31		[NO SIGNAL]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Front height sensor signal
				Threshold	The front height sensor has a malfunction. The signal is not present.
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- Harness or connector (headlamp control unit to front height sensor)
- Front height sensor
- Front combination lamp LH

FAIL-SAFE

Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-246, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549661

1.CHECK FRONT HEIGHT SENSOR INSTALLATION CONDITION

Check mounting part of front height sensor and its link for looseness and deformation.

Is it properly installed?

YES >> GO TO 2.
NO >> Install front height sensor properly.

2.CHECK FRONT HEIGHT SENSOR POWER SUPPLY

1. Turn ignition switch ON.
2. Check voltage between front height sensor harness connector and ground.

(+)		(–)	Voltage
Front height sensor			
Connector	Terminal		
E91	5	Ground	4.75 - 5.25 V

Is the inspection result normal?

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

3.CHECK FRONT HEIGHT SENSOR GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front combination lamp LH and front height sensor connector.
3. Check continuity between front combination lamp LH harness connector and ground.

Front height sensor		Ground	Continuity
Connector	Terminal		
E91	1		Not existed

Is the inspection result normal?

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

4.CHECK FRONT HEIGHT SENSOR SIGNAL

1. Connect front combination lamp LH and front height sensor connector.
2. Turn ignition switch ON.
3. Check voltage between front combination lamp LH harness connector and ground.

(+)		(–)	Voltage
Front combination lamp LH			
Connector	Terminal		
E114	6	Ground	0.5 - 4.5 V

Is the inspection result normal?

YES >> GO TO 9.
NO >> GO TO 7.

5.CHECK FRONT HEIGHT SENSOR POWER SUPPLY CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect front combination lamp LH and front height sensor connector.

3. Check continuity between front combination lamp LH harness connector and front height sensor harness connector.

Front combination lamp LH		Front height sensor		Continuity
Connector	Terminal	Connector	Terminal	
E114	7	E91	5	Existed

4. Check continuity between front height sensor harness connector and ground.

Front height sensor		Ground	Continuity
Connector	Terminal		
E91	5		Not existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6.CHECK FRONT HEIGHT SENSOR POWER SUPPLY CIRCUIT 2

Check voltage between front height sensor harness connector and ground.

(+)		(–)	Voltage
Front height sensor			
Connector	Terminal		
E91	5	Ground	0 V

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace harness.

7.CHECK FRONT HEIGHT SENSOR SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect front combination lamp LH and front height sensor connector.
3. Check continuity between front combination lamp LH harness connector and front height sensor harness connector.

Front combination lamp LH		Front height sensor		Continuity
Connector	Terminal	Connector	Terminal	
E114	6	E91	4	Existed

4. Check continuity between front height sensor harness connector and ground.

Front height sensor		Ground	Continuity
Connector	Terminal		
E91	4		Not existed

Is the inspection result normal?

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

8.CHECK FRONT HEIGHT SENSOR SIGNAL CIRCUIT 2

Check voltage between front height sensor harness connector and ground.

(+)		(–)	Voltage
Front height sensor			
Connector	Terminal		
E91	5	Ground	0 V

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace harness.

9.ERASE DTC

1. Connect front combination lamp LH and front height sensor connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-245, "DTC Description".

Is DTC detected?

YES >> GO TO 10.
NO >> INSPECTION END

10.REPLACE FRONT HEIGHT SENSOR AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front height sensor. Refer to EXL-301, "FRONT HEIGHT SENSOR : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-245, "DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

C1526 REAR HEIGHT SENSOR

DTC Description

INFOID:0000000013549662

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
C1526	04	Rear level sensor lh (Rear level sensor left hand)	[SYSTEM INTERNAL FAILURES]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Headlamp control unit LH internal malfunction
				Diagnosis delay time	2 sec.
	11		[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Height sensor power supply
				Threshold	4.75 V or less
				Diagnosis delay time	2 sec.
	12		[CIRC SHORT TO BATTERY]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Height sensor power supply
				Threshold	5.25 V or more
				Diagnosis delay time	2 sec.
	16		[CIRC VOLT BELOW THRESHOLD]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Rear height sensor signal
				Threshold	Less than 0.5 V
				Diagnosis delay time	2 sec.
	17		[CIRC VOLT ABOVE THRESHOLD]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Rear height sensor signal
				Threshold	More than 4.5 V
				Diagnosis delay time	2 sec.
	29		[SIGNAL INVALID]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Rear height sensor signal
				Threshold	The rear height sensor has a malfunction. There is an invalid signal.
				Diagnosis delay time	2 sec.
	31		[NO SIGNAL]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	Rear height sensor signal
				Threshold	The rear height sensor has a malfunction. The signal is not present.
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- Harness or connector (headlamp control unit to rear height sensor)
- Rear height sensor
- Front combination lamp LH

FAIL-SAFE

Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-250, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549663

1.CHECK REAR HEIGHT SENSOR INSTALLATION CONDITION

Check mounting part of rear height sensor and its link for looseness and deformation.

Is it properly installed?

YES >> GO TO 2.
NO >> Install rear height sensor properly.

2.CHECK REAR HEIGHT SENSOR POWER SUPPLY

1. Turn ignition switch ON.
2. Check voltage between rear height sensor harness connector and ground.

(+)		(–)	Voltage
Rear height sensor			
Connector	Terminal		
M156	5	Ground	4.75 - 5.25 V

Is the inspection result normal?

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

3.CHECK REAR HEIGHT SENSOR GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front combination lamp LH and rear height sensor connector.
3. Check continuity between front combination lamp LH harness connector and ground.

Rear height sensor		Ground	Continuity
Connector	Terminal		
M156	1		Not existed

Is the inspection result normal?

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

4.CHECK REAR HEIGHT SENSOR SIGNAL

1. Connect front combination lamp LH and rear height sensor connector.
2. Turn ignition switch ON.
3. Check voltage between front combination lamp LH harness connector and ground.

(+)		(–)	Voltage
Front combination lamp LH			
Connector	Terminal		
E114	9	Ground	0.5 - 4.5 V

Is the inspection result normal?

YES >> GO TO 9.
NO >> GO TO 7.

5.CHECK REAR HEIGHT SENSOR POWER SUPPLY CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect front combination lamp LH and rear height sensor connector.

3. Check continuity between front combination lamp LH harness connector and rear height sensor harness connector.

Front combination lamp LH		Rear height sensor		Continuity
Connector	Terminal	Connector	Terminal	
E114	7	M156	5	Existed

4. Check continuity between rear height sensor harness connector and ground.

Rear height sensor		Ground	Continuity
Connector	Terminal		
M156	5		Not existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6. CHECK REAR HEIGHT SENSOR POWER SUPPLY CIRCUIT 2

Check voltage between rear height sensor harness connector and ground.

(+)		(–)	Voltage
Rear height sensor			
Connector	Terminal		
M156	5	Ground	0 V

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace harness.

7. CHECK REAR HEIGHT SENSOR SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect front combination lamp LH and rear height sensor connector.
3. Check continuity between front combination lamp LH harness connector and rear height sensor harness connector.

Front combination lamp LH		Rear height sensor		Continuity
Connector	Terminal	Connector	Terminal	
E114	9	M156	4	Existed

4. Check continuity between rear height sensor harness connector and ground.

Rear height sensor		Ground	Continuity
Connector	Terminal		
M156	4		Not existed

Is the inspection result normal?

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

8. CHECK REAR HEIGHT SENSOR SIGNAL CIRCUIT 2

Check voltage between rear height sensor harness connector and ground.

(+)		(–)	Voltage
Rear height sensor			
Connector	Terminal		
M156	5	Ground	0 V

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace harness.

9.ERASE DTC

1. Connect front combination lamp LH and rear height sensor connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-249, "DTC Description".

Is DTC detected?

YES >> GO TO 10.
NO >> INSPECTION END

10.REPLACE REAR HEIGHT SENSOR AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear height sensor. Refer to EXL-301, "REAR HEIGHT SENSOR : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-249, "DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

P1240 CAN COMM CIRCUIT

LH

LH : DTC Description

INFOID:0000000013549664

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Headlamp control unit LH detected CAN communication
				Diagnosis delay time	—

POSSIBLE CAUSE

- CAN communication line
- Headlamp control unit LH

FAIL-SAFE

Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-253, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549665

1.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> Repair or replace harness.

RH

RH : DTC Description

INFOID:0000000013549666

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Headlamp control unit RH detected CAN communication
				Diagnosis delay time	—

POSSIBLE CAUSE

- CAN communication line
- Headlamp control unit RH

FAIL-SAFE

Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-254, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549667

1.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

YES >> Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
NO >> Repair or replace harness.

U0100 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013549668

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	ECM does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- ECM
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control unit LH”.

Is DTC detected?

YES >> Refer to EXL-255, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549669

1.CHECK DTC WITH ECM

Check that DTC is not detected with ECM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to EC-142, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE ECM AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace ECM. Refer to EC-963, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH.” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-255, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549670

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	ECM does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- ECM
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control unit RH”.

Is DTC detected?

YES >> Refer to EXL-256, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549671

1.CHECK DTC WITH ECM

Check that DTC is not detected with ECM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to EC-142, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE ECM AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace ECM. Refer to EC-963, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH.” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-256, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

U0121 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013549672

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic stability program control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic stability program control unit
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control unit LH”.

Is DTC detected?

YES >> Refer to EXL-258, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549673

1.CHECK DTC WITH ELECTRONIC STABILITY PROGRAM CONTROL UNIT

Check that DTC is not detected with electronic stability program control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BRC-59, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE ELECTRONIC STABILITY PROGRAM CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic stability program control unit. Refer to BRC-975, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-258, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549674

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic stability program control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic stability program control unit
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control unit RH”.

Is DTC detected?

YES >> Refer to EXL-259, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549675

1.CHECK DTC WITH ELECTRONIC STABILITY PROGRAM CONTROL UNIT

Check that DTC is not detected with electronic stability program control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BRC-59, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE ELECTRONIC STABILITY PROGRAM CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic stability program control unit. Refer to BRC-975, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.

5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-259, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

U0146 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013549676

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic ignition switch control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic ignition switch control unit
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-261, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549677

1.CHECK DTC WITH ELECTRONIC IGNITION SWITCH CONTROL UNIT

Check that DTC is not detected with electronic ignition switch control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PCS-12, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.INPUT THE VIN OF THE VEHICLE

1. Turn ignition switch ON.
2. Select “Work Support” mode of “Electronic ign switch cont unit” using CONSULT.
3. Select and start the “VIN REGISTRATION”.

Is input the VIN completed?

YES >> GO TO 4.
NO >> Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".

4.ERASE DTC

1. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-261, "LH : DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE ELECTRONIC IGNITION SWITCH CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-261, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549678

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic ignition switch control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic ignition switch control unit
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-262, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549679

1.CHECK DTC WITH ELECTRONIC IGNITION SWITCH CONTROL UNIT

Check that DTC is not detected with electronic ignition switch control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PCS-12, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.INPUT THE VIN OF THE VEHICLE

1. Turn ignition switch ON.
2. Select “Work Support” mode of “Electronic ign switch cont unit” using CONSULT.
3. Select and start the “VIN REGISTRATION”.

Is input the VIN completed?

YES >> GO TO 4.
NO >> Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".

4.ERASE DTC

1. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-262, "RH : DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE ELECTRONIC IGNITION SWITCH CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-262, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

U0155 CAN COMMUNICATION
LH

LH : DTC Description

INFOID:0000000013549680

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Combination meter does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE
- CAN communication line
- Combination meter
- Front combination lamp LH

FAIL-SAFE
—

DTC CONFIRMATION PROCEDURE
1.PERFORM DTC CONFIRMATION PROCEDURE
1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-264, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549681

1.CHECK DTC WITH COMBINATION METER
Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to MWI-85, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS
Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE COMBINATION METER AND ERASE DTC
1. Turn ignition switch OFF.
2. Replace combination meter. Refer to MWI-155, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-264, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549682

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Combination meter does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Combination meter
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-265, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549683

1.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to MWI-85, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE COMBINATION METER AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace combination meter. Refer to MWI-155, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-265, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

U0168 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013549684

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic ignition switch control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic ignition switch control unit
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-267, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549685

1.CHECK DTC WITH ELECTRONIC IGNITION SWITCH CONTROL UNIT

Check that DTC is not detected with electronic ignition switch control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PCS-12, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.INPUT THE VIN OF THE VEHICLE

1. Turn ignition switch ON.
2. Select “Work Support” mode of “Electronic ign switch cont unit” using CONSULT.
3. Select and start the “VIN REGISTRATION”.

Is input the VIN completed?

YES >> GO TO 4.
NO >> Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".

4.ERASE DTC

1. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-267, "LH : DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE ELECTRONIC IGNITION SWITCH CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-267, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549686

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic ignition switch control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic ignition switch control unit
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-268, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549687

1.CHECK DTC WITH ELECTRONIC IGNITION SWITCH CONTROL UNIT

Check that DTC is not detected with electronic ignition switch control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PCS-12, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.INPUT THE VIN OF THE VEHICLE

1. Turn ignition switch ON.
2. Select “Work Support” mode of “Electronic ign switch cont unit” using CONSULT.
3. Select and start the “VIN REGISTRATION”.

Is input the VIN completed?

YES >> GO TO 4.
NO >> Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".

4.ERASE DTC

1. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-268, "RH : DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE ELECTRONIC IGNITION SWITCH CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-268, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

U0212 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013549688

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Engine start and turn the steering wheel to the left
				Signal (terminal)	CAN communication
				Threshold	Steering column control module does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Steering column control module
- Front combination lamp

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine.
2. Turn the steering wheel to the left.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-270, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549689

1.CHECK DTC WITH STEERING COLUMN CONTROL MODULE

Check that DTC is not detected with steering column control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-61, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE STEERING COLUMN CONTROL MODULE AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace steering column control module. Refer to BCS-250, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.

5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-270, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549690

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Engine start and turn the steering wheel to the right
				Signal (terminal)	CAN communication
				Threshold	Steering column control module does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Steering column control module
- Front combination lamp

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine.
2. Turn the steering wheel to the right.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-271, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549691

1.CHECK DTC WITH STEERING COLUMN CONTROL MODULE

Check that DTC is not detected with steering column control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-61, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE STEERING COLUMN CONTROL MODULE AND ERASE DTC

1. Turn ignition switch OFF.

2. Replace steering column control module. Refer to BCS-61, "DTC Index".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-271, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

U1008 LIN COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013549692

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U1008	01	Communication error (LIN bus 1) [Communication error (LIN bus 1)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	Headlamp LIN communication
				Threshold	LED headlamp control module LH does not transmit signal on the headlamp LIN communication
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

- Headlamp (HI/LO) does not lighting
- Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-273, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549693

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549694

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U1008	01	Communication error (LIN bus 1) [Communication error (LIN bus 1)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	Headlamp LIN communication
				Threshold	LED headlamp control module RH does not transmit signal on the headlamp LIN communication
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

- Headlamp (HI/LO) does not lighting
- Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-274, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549695

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-290, "Removal and Installation".

>> INSPECTION END

U118A COMMUNICATION ERROR

DTC Description

INFOID:0000000013549696

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U118A	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Headlamp control unit LH does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Front combination lamp

FAIL-SAFE

- Headlamp (HI/LO) does not lighting
- Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-275, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549697

1.CHECK DTC WITH HEADLAMP CONTROL UNIT LH

Check that DTC is not detected with headlamp control unit LH.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to EXL-83, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE HEADLAMP CONTROL UNIT LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-275, "DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

U118B COMMUNICATION ERROR

DTC Description

INFOID:0000000013549698

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U118B	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Headlamp control unit RH does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Front combination lamp

FAIL-SAFE

- Headlamp (HI/LO) does not lighting
- Active adaptive lighting system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-277, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549699

1.CHECK DTC WITH HEADLAMP CONTROL UNIT RH

Check that DTC is not detected with headlamp control unit RH.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to EXL-94, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE HEADLAMP CONTROL UNIT RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-277, "DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

U11A3 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013549700

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Front camera unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Front camera unit
- Front combination lamp LH

FAIL-SAFE

High beam assist system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-279, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013549701

1.CHECK DTC WITH FRONT CAMERE UNIT

Check that DTC is not detected with front camera unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DAS-44, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE FRONT CAMERE UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front camera unit. Refer to DAS-176, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-279, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013549702

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Front camera unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Front camera unit
- Front combination lamp RH

FAIL-SAFE

High beam assist system does not operate

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-280, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013549703

1.CHECK DTC WITH FRONT CAMERE UNIT

Check that DTC is not detected with front camera unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DAS-44, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE FRONT CAMERE UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front camera unit. Refer to DAS-176, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-280, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-290, "Removal and Installation".
NO >> INSPECTION END

U141E COMMUNICATION ERROR

DTC Description

INFOID:0000000013549704

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U141E	00	Communication error (Communication error)	—	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Rotary light switch is in an unplausible position
				Diagnosis delay time	—

POSSIBLE CAUSE

- Fuse
- Harness or connector
- Rotary light switch
- BCM

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-282, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013549705

1.CHECK FUSE

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

Unit	Location	Fuse No.	Capacity
Rotary light switch	Fuse and fusible link block 2	89	5A

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit if a fuse is blown (open).
NO >> GO TO 2.

2.CHECK ROTARY LIGHT SWITCH POWER SUPPLY

Check voltage between rotary light switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Rotary light switch			
Connector	Terminal		
M219	4	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK ROTARY LIGHT SWICH GROUND CIRCUIT

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

BCM		Rotary light switch		Continuity
Connector	Terminal	Connector	Terminal	
M25	7	M219	2	Existed

3. Check continuity between rotary light switch harness connector and ground.

Rotary light switch		Ground	Continuity
Connector	Terminal		
M219	2		Not existed

Is the inspection result normal?

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

4. CHECK ROTARY LIGHT SWICH SIGNAL CIRCUIT

1. Check continuity between BCM harness connector and rotary light switch harness connector.

BCM		Rotary light switch		Continuity
Connector	Terminal	Connector	Terminal	
M25	1	M219	8	Existed
	2		7	
	3		6	
	4		5	
	5		3	

2. Check continuity between rotary light switch harness connector and ground.

Rotary light switch		Ground	Continuity
Connector	Terminal		
M219	8		Not existed
	7		
	6		
	5		
	3		

Is the inspection result normal?

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

5. CHECK ROTARY LIGHT SWICH SIGNAL CIRCUIT

Check voltage between rotary light switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Rotary light switch			
Connector	Terminal		

M219	8	Ground	0 V
	7		
	6		
	5		
	3		

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6.ERASE DTC

1. Connect BCM and rotary light switch connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-282, "DTC Description".

Is DTC detected?

YES >> GO TO 7.
NO >> INSPECTION END

7.REPLACEROTARY LIGHT SWITCH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rotary light switch. Refer to EXL-298, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-282, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

PERIODIC MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Description

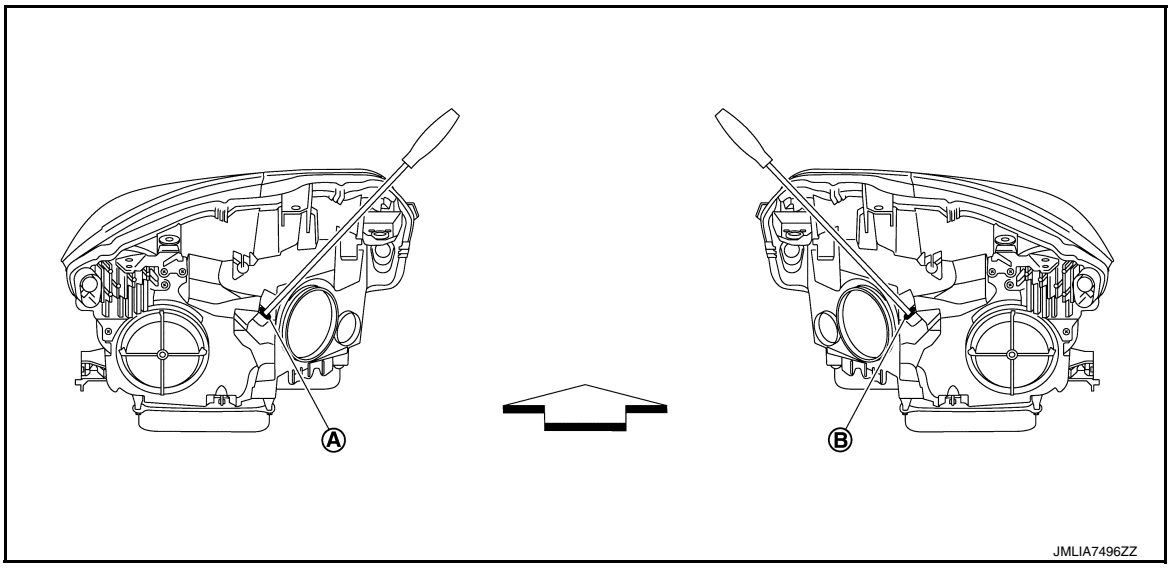
INFOID:0000000013688724

PREPARATION BEFORE ADJUSTING

NOTE:
- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the headlamp assembly has been replaced.

Before performing aiming adjustment, check the following.
- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)
  NOTE:
  Never remove the temporary tire, jack and on-vehicle tool.
- Wipe out dirt on the headlamp.
  CAUTION:
  Never use organic solvent (thinner, gasoline etc.).
- Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW



Ⓐ Headlamp LH (UP/DOWN) adjustment screw

Ⓑ Headlamp RH (UP/DOWN) adjustment screw

⇦ : Vehicle front

Adjustment screw		Screwdriver rotation	Facing direction
Ⓐ	Headlamp LH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN
Ⓑ	Headlamp RH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN

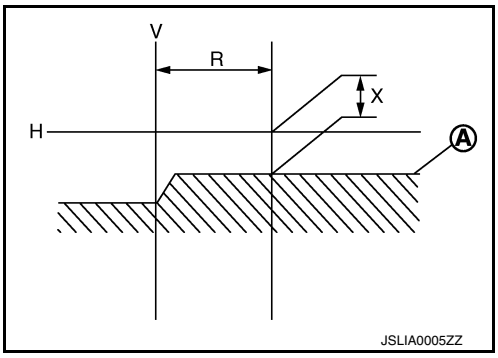
For aiming adjustment procedure, refer to EXL-286, "Aiming Adjustment Procedure".

Aiming Adjustment Procedure

INFOID:0000000013688725

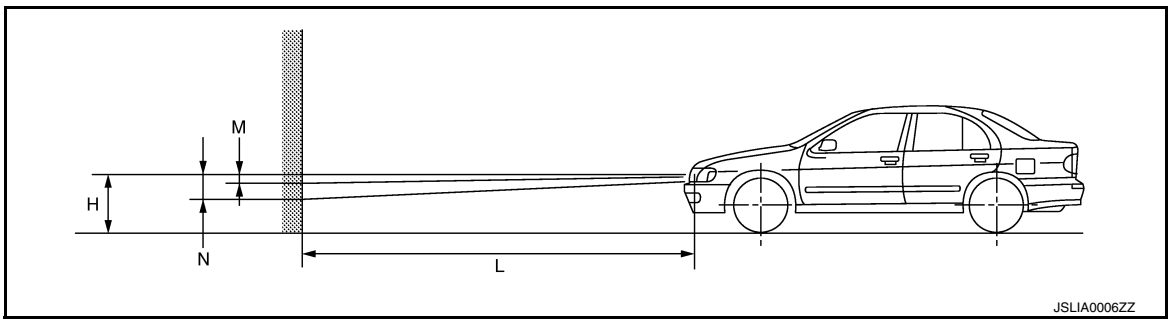
1. Place the screen.
   NOTE:
   • Stop the vehicle facing the wall.
   • Place the board on a plain road vertically.
2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the headlamp center and the screen.
3. Start the engine. Turn the headlamp (LO) ON.
   NOTE:
   Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.
   CAUTION:
   Never cover the lens surface with tape etc. The lens is made of rejin.
4. Measure the distance (X) between the horizontal center line of headlamp (H) and the cutoff line Ⓐ within the light axis measurement range (R) from the vertical center line ahead of headlamp (V).
   Low beam distribution on the screen

   Light axis measurement range (R) : 350 ± 175 mm (13.78 ± 6.89 in)



5. Adjust the cutoff line height (X) with the aiming adjustment screw so as to enter in the adjustment range (M–N) according to the horizontal center line of headlamp (H).

Side view



Distance from headlamp center to screen (L) : 10 m (32.8 ft)

unit: mm (in)

Horizontal center line of headlamp (H)	Highest cutoff line height (M)	Lowest cutoff line height (N)
700 (27.56) or less	4 (0.16)	30 (1.18)
701 (27.60) – 800 (31.50)	4 (0.16)	30 (1.18)
801 (31.54) or more	17 (0.67)	44 (1.73)

FRONT FOG LAMP AIMING ADJUSTMENT

Description

INFOID:0000000013549209

PREPARATION BEFORE ADJUSTING

NOTE:
- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the front fog lamp has been replaced.

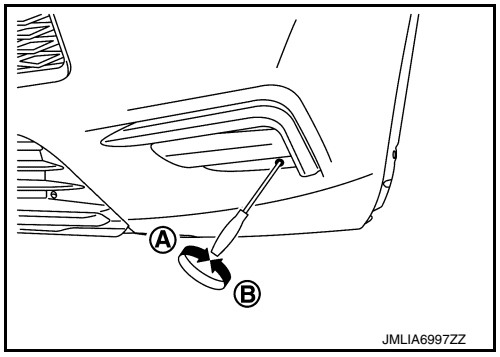
Before performing aiming adjustment, check the following.
- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)
  NOTE:
  Do not remove the temporary tire, jack and on-vehicle tool.
- Wipe out dirt on the front fog lamp.
  CAUTION:
  Never use organic solvent (thinner, gasoline etc.).
- Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW

For Standard Models
- Turn the aiming adjusting screw for adjustment.

  Ⓐ: UP

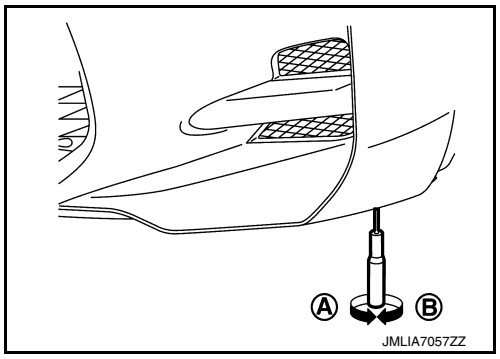
  Ⓑ: DOWN
- For the position and direction of the adjusting screw, refer to the figure.
  NOTE:
  A screwdriver or hexagonal wrench [6 mm (0.24 in)] can be used for adjustment.



Except for Standard Models
- Turn the aiming adjusting screw for adjustment.

  Ⓐ: UP

  Ⓑ: DOWN
- For the position and direction of the adjusting screw, refer to the figure.
  NOTE:
  A screwdriver or hexagonal wrench [6 mm (0.24 in)] can be used for adjustment.



For aiming adjustment procedure, refer to EXL-287, "Aiming Adjustment Procedure".

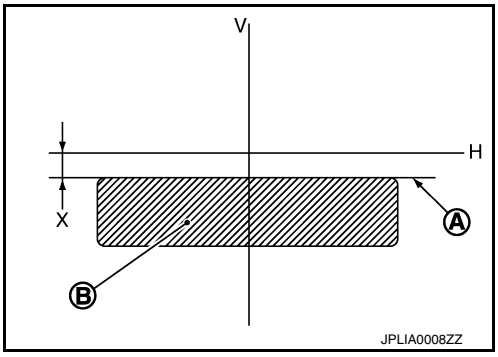
Aiming Adjustment Procedure

INFOID:0000000013549210

1. Place the screen.
   NOTE:
   - Stop the vehicle facing the wall.
   - Place the board on a plain road vertically.
2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the front fog lamp center and the screen.
3. Start the engine. Turn the front fog lamp ON.

CAUTION:
Never cover the lens surface with a tape, etc. because it is made from resin.
NOTE:
Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.

4. Adjust the cutoff line Ⓐ with the aiming adjustment screw so that the distance (X) between the horizontal center line of front fog lamp (H) and cutoff line Ⓐ becomes 100 mm (3.94 in).
Front fog lamp light distribution on the screen



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

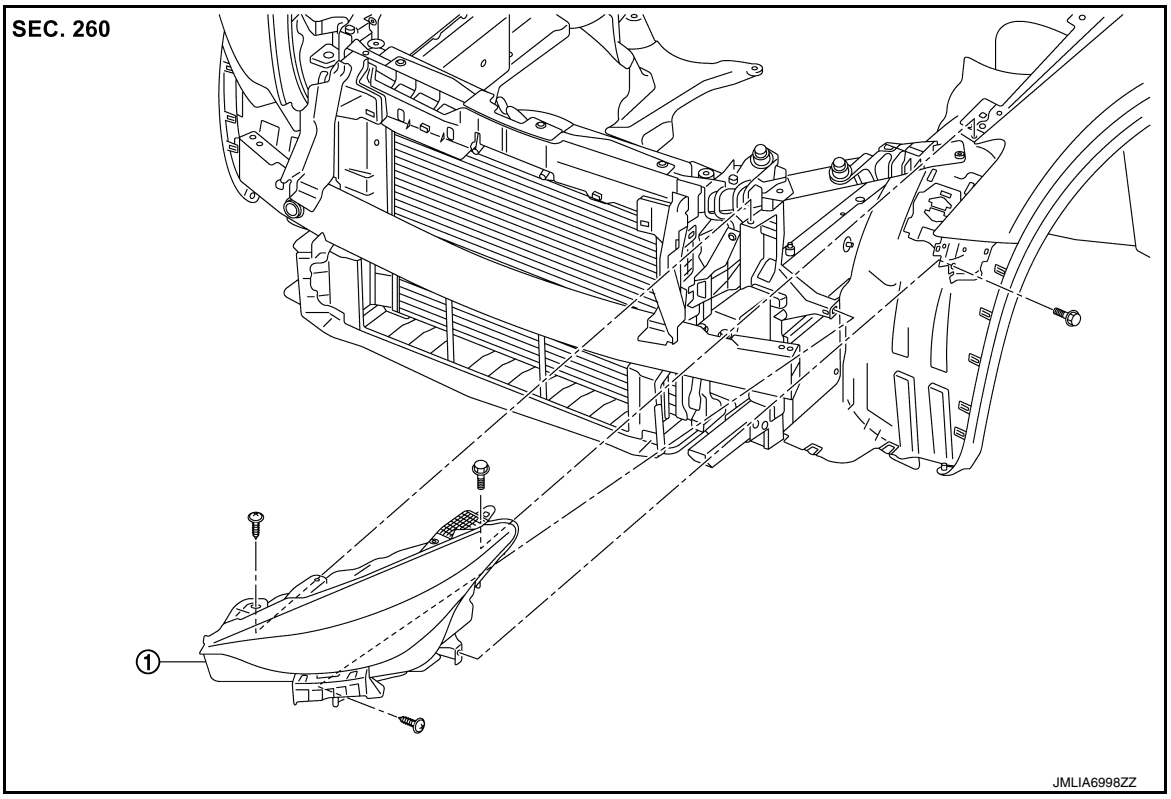
REMOVAL AND INSTALLATION

FRONT COMBINATION LAMP

Exploded View

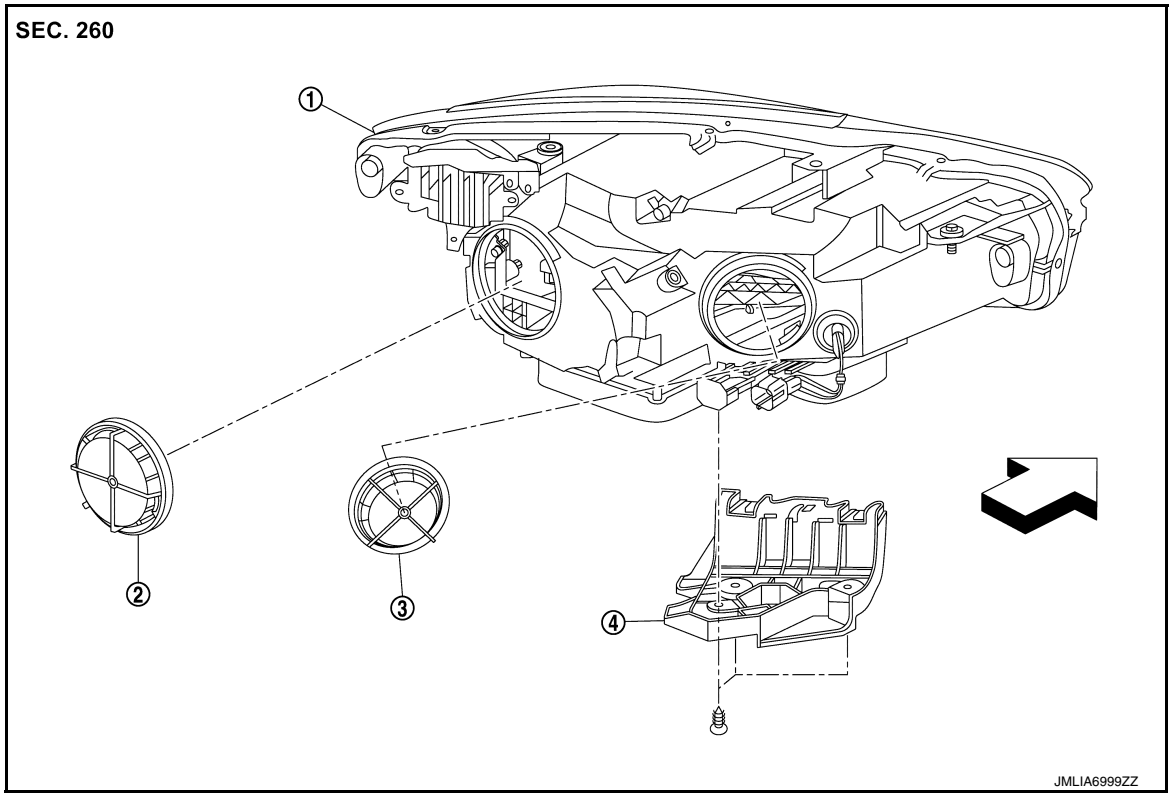
INFOID:0000000013549211

REMOVAL



① Front combination lamp

DISASSEMBLY



① Front combination lamp ② Socket cover ③ Socket cover
④ Front bumper clip
⇦ : Vehicle front

Removal and Installation

INFOID:0000000013549212

CAUTION:
Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-13, "Precautions for Removing Battery Terminal".

REMOVAL

1. Remove front bumper fascia. Refer to EXT-21, "Removal and Installation".
2. Remove front combination lamp mounting bolts and fixing screws.
3. Pull out front combination lamp forward the vehicle.
4. Disconnect front combination lamp harness connectors.
5. Remove front combination lamp.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:
- **After installation, perform aiming adjustment. Refer to EXL-285, "Description".**
- **Be sure to perform "ADDITIONAL SERVICE WHEN REPLACING HEADLAMP CONTROL UNIT" when removing the front combination lamp. Refer to EXL-115, "Description".**
- **Be sure to perform "ADDITIONAL SERVICE WHEN REPLACING LED HEADLAMP CONTROL MODULE" when removing the front combination lamp. Refer to EXL-116, "Description".**

Replacement

INFOID:0000000013549213

HEADLAMP (HI/LO)

CAUTION:
Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front combination lamp as a set. Refer to EXL-290, "Removal and Installation".

HEADLAMP (HI)

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front combination lamp as a set. Refer to EXL-290, "Removal and Installation".

PARKING LAMP/DAYTIME RUNNING LIGHT/ POSITION LAMP/FRONT TURN SIGNAL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front combination lamp as a set. Refer to EXL-290, "Removal and Installation".

PARKING LAMP/DAYTIME RUNNING LIGHT/ POSITION LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front combination lamp as a set. Refer to EXL-290, "Removal and Installation".

CORNERING LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front combination lamp as a set. Refer to EXL-290, "Removal and Installation".

FRONT SIDE MARKER LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front combination lamp as a set. Refer to EXL-290, "Removal and Installation".

Disassembly and Assembly

INFOID:0000000013549214

DISASSEMBLY

1. Remove front combination lamp. Refer to EXL-290, "Removal and Installation".
2. Remove front bumper clip fixing screws, and then remove front bumper clip.
3. Remove socket cover.

ASSEMBLY

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **After installation, perform aiming adjustment. Refer to EXL-285, "Description".**
- **Be sure to perform "ADDITIONAL SERVICE WHEN REPLACING HEADLAMP CONTROL UNIT" when removing the front combination lamp. Refer to EXL-115, "Description".**
- **Be sure to perform "ADDITIONAL SERVICE WHEN REPLACING LED HEADLAMP CONTROL MODULE" when removing the front combination lamp. Refer to EXL-116, "Description".**

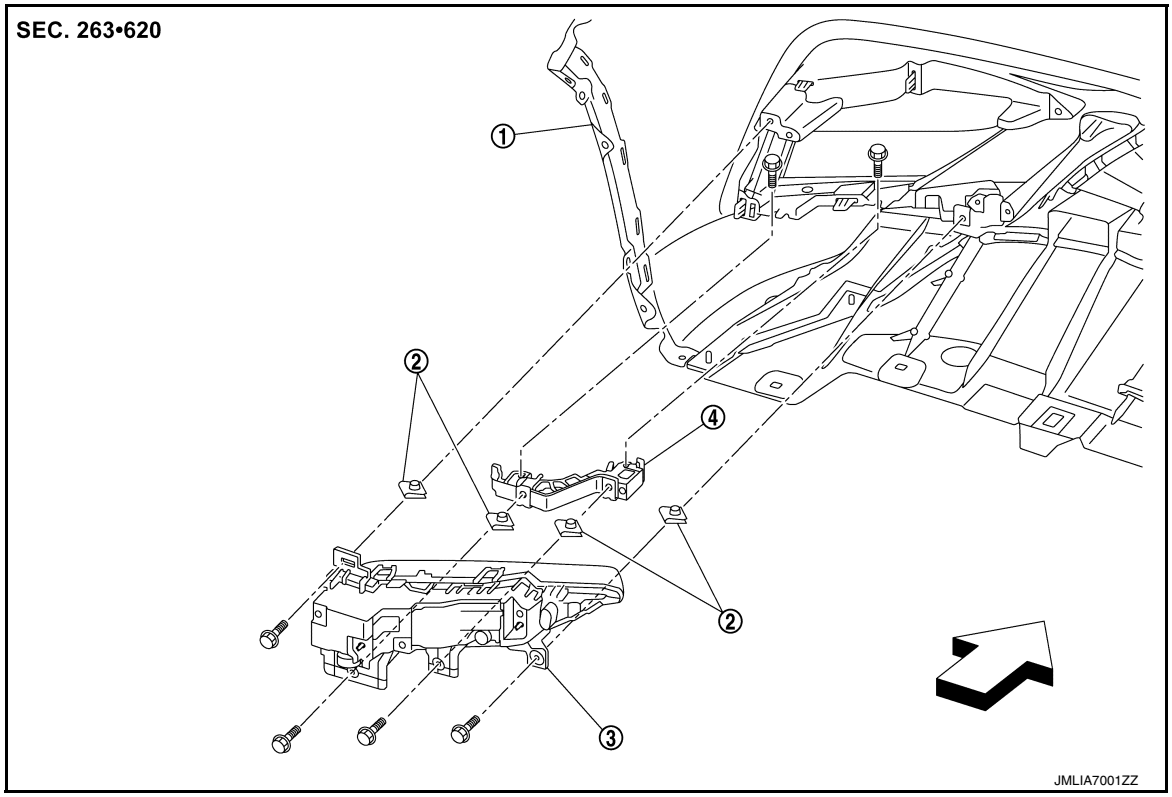
FRONT FOG LAMP

Exploded View

INFOID:0000000013549215

2WD MODELS

Standard Models

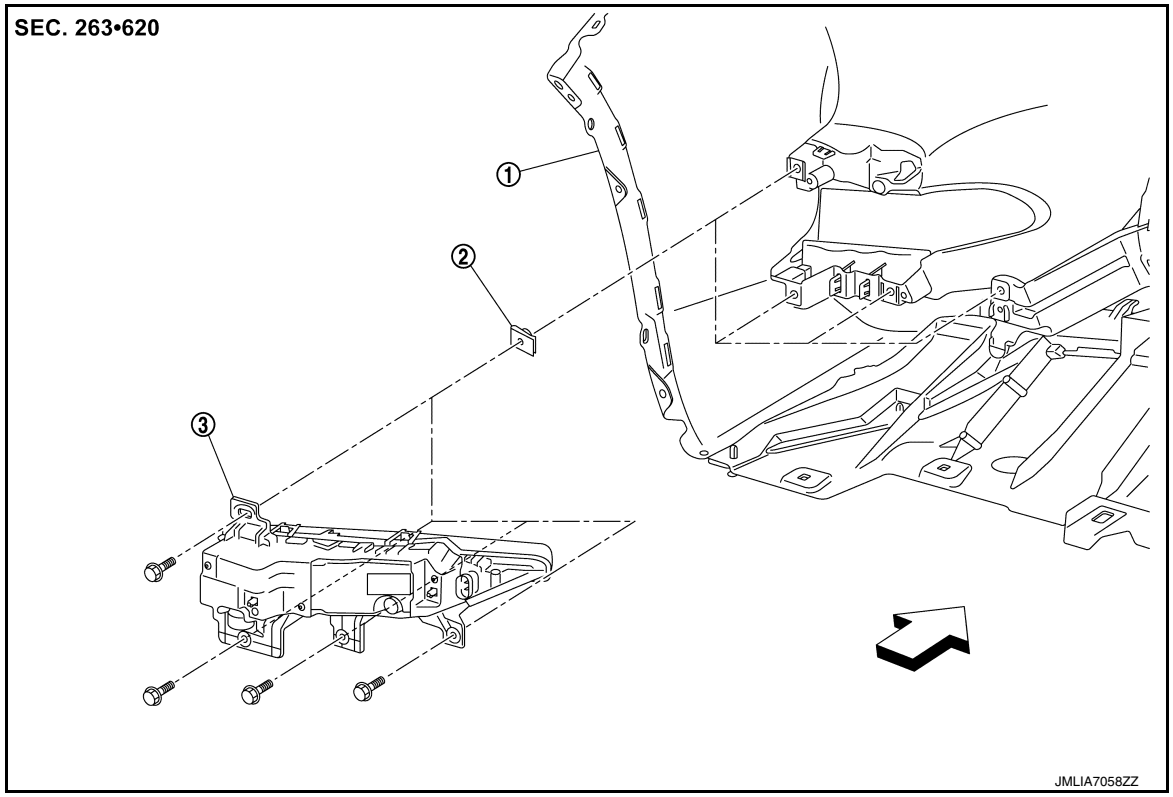


① Front bumper fascia ② U nut ③ Front fog lamp

④ Front fog lamp bracket

⇦ : Vehicle front

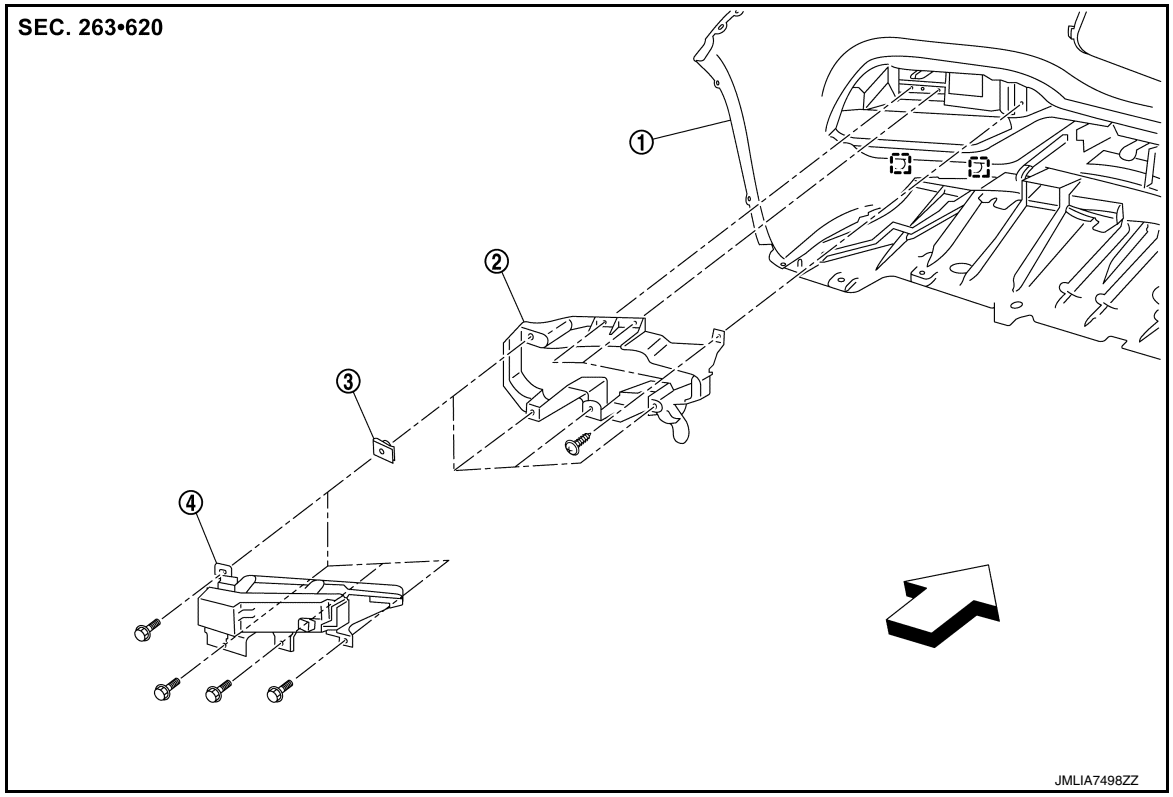
Sports Models



① Front bumper fascia ② U nut ③ Front fog lamp

⇦ : Vehicle front

AWD MODELS



① Front bumper fascia ② Front fog lamp bracket ③ U nut
④ Front fog lamp
: Metal clip
: Vehicle front

Removal and Installation

INFOID:0000000013549216

CAUTION:
Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-13, "Precautions for Removing Battery Terminal".

REMOVAL

1. Remove front fender protector. Refer to EXT-41, "FENDER PROTECTOR : Removal and Installation".
2. Disconnect front fog lamp harness connector.
3. Remove front fog lamp mounting bolts, and then remove front fog lamp.
4. Remove front fog lamp bracket.

2WD models (standard models)
- Remove front fog lamp bracket mounting bolts, and then remove front fog lamp bracket.

AWD models
- Remove front fog lamp bracket fixing screws and metal clips, and then remove front fog lamp bracket.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:
After installation, perform aiming adjustment. Refer to EXL-287, "Description".

Replacement

INFOID:0000000013549217

FRONT FOG LAMP

CAUTION:
Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front combination lamp as a set. Refer to EXL-294, "Removal and Installation".

SIDE TURN SIGNAL LAMP

Exploded View

INFOID:0000000013549218

Refer to MIR-68, "Exploded View".

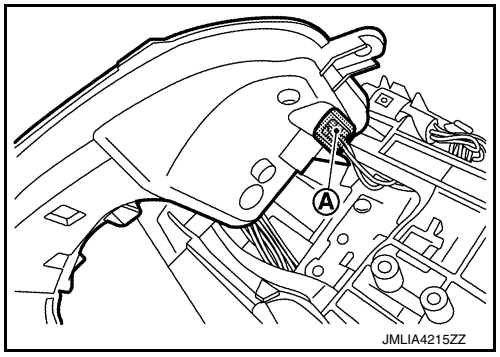
Removal and Installation

INFOID:0000000013549219

CAUTION:
Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-13, "Precautions for Removing Battery Terminal".

REMOVAL

1. Remove door mirror finisher. Refer to MIR-72, "DOOR MIRROR ASSEMBLY : Disassembly and Assembly".
2. Remove side turn signal lamp fixing screws.
3. Disconnect side turn signal lamp harness connector Ⓐ, and then remove side turn signal lamp.



INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000013549220

SIDE TURN SIGNAL LAMP

CAUTION:
Replacement of a single part is not possible due to the adoption of LED. For replacement, replace side turn signal lamp as a set. Refer to EXL-295, "Removal and Installation".

LIGHTING & TURN SIGNAL SWITCH

Removal and Installation

INFOID:0000000013549221

REMOVAL

Remove light & turn signal switch (steering column control module). Refer to BCS-250, "Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

HAZARD SWITCH

Removal and Installation

INFOID:0000000013549222

REMOVAL

Remove upper control panel control unit. Refer to BCS-252, "Removal and Installation".

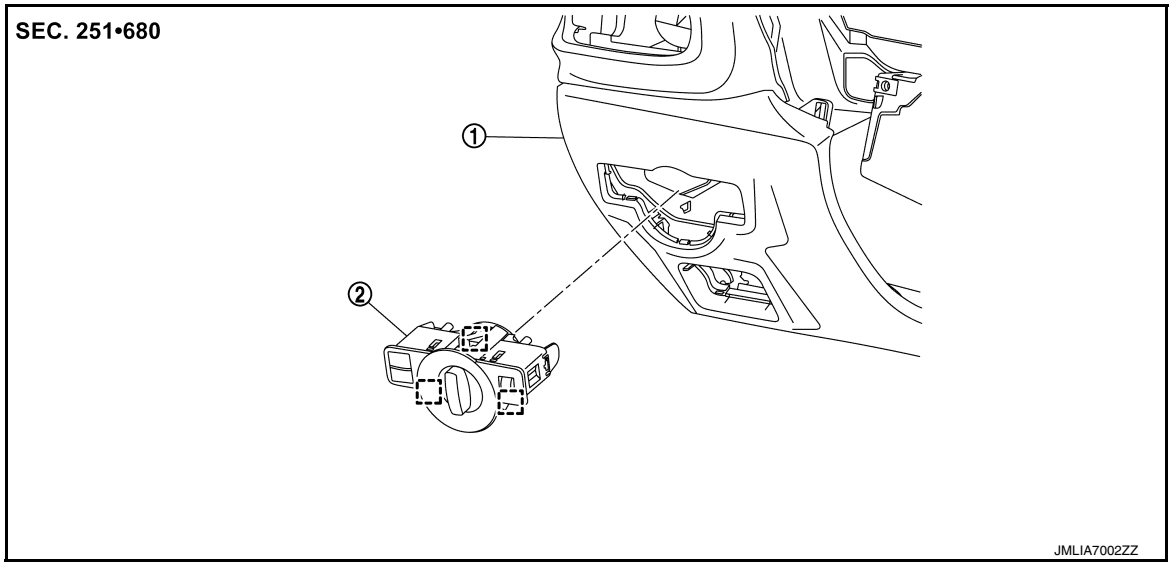
INSTALLATION

Install in the reverse order of removal.

ROTARY LIGHT SWITCH

Exploded View

INFOID:0000000013549223



① Instrument panel assembly ② Rotary light switch

⬚ : Metal clip

Removal and Installation

INFOID:0000000013549224

CAUTION:

Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-13, "Precautions for Removing Battery Terminal".

REMOVAL

1. Remove instrument panel. Refer to IP-13, "Removal and Installation".
2. Disengage rotary light switch fixing metal clips, and then remove rotary light switch.

INSTALLATION

Install in the reverse order of removal.

LIGHT & RAIN SENSOR

Removal and Installation

INFOID:0000000013549225

REMOVAL

Remove light & rain sensor. Refer to WW-81, "Removal and Installation".

INSTALLATION

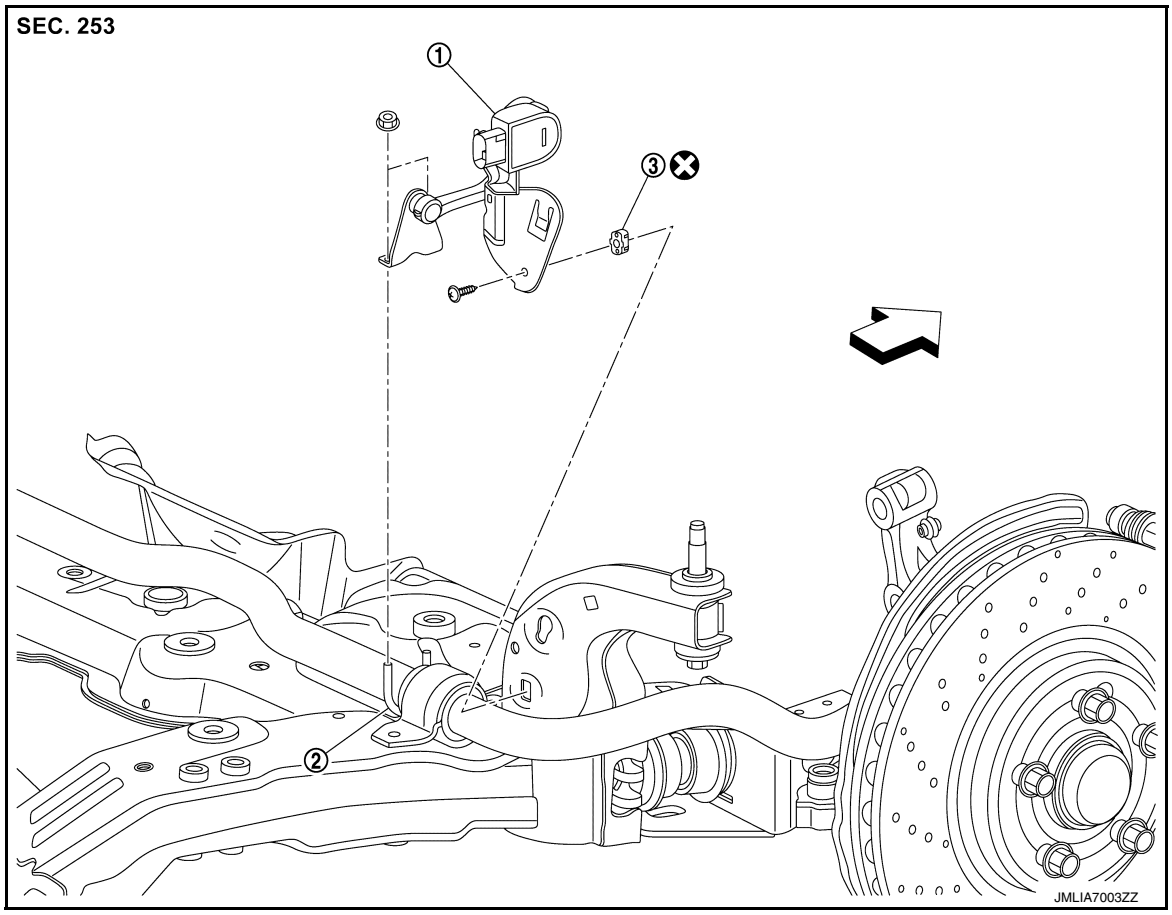
Install in the reverse order of removal.

HEIGHT SENSOR

Exploded View

INFOID:0000000013549226

FRONT HEIGHT SENSOR

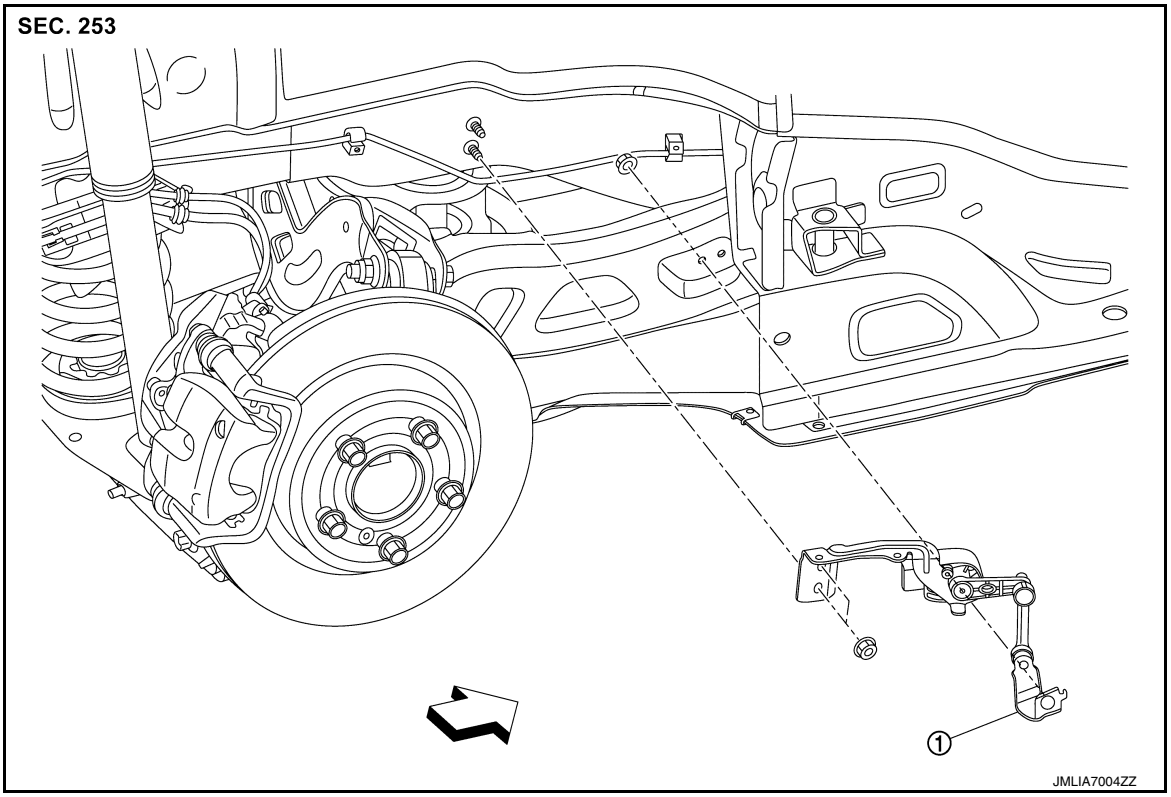


① Front height sensor ② Front height sensor bracket ③ Grommet

⇦ : Vehicle front

⊗ : Always replace after every disassembly.

REAR HEIGHT SENSOR



① Rear height sensor

⇦ : Vehicle front

FRONT HEIGHT SENSOR

FRONT HEIGHT SENSOR : Removal and Installation

INFOID:0000000013549227

CAUTION:

Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-13, "Precautions for Removing Battery Terminal".

REMOVAL

1. Disconnect front height sensor harness connector.
2. Remove front height sensor mounting nuts and fixing screw.
3. Remove front height sensor.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Be sure to perform "SENSOR INITIALIZE" when removing the front height sensor. Refer to EXL-117, "Description".

REAR HEIGHT SENSOR

REAR HEIGHT SENSOR : Removal and Installation

INFOID:0000000013549228

CAUTION:

Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-13, "Precautions for Removing Battery Terminal".

REMOVAL

1. Disconnect rear height sensor harness connector.
2. Remove rear height sensor mounting nuts.

3. Remove rear height sensor.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

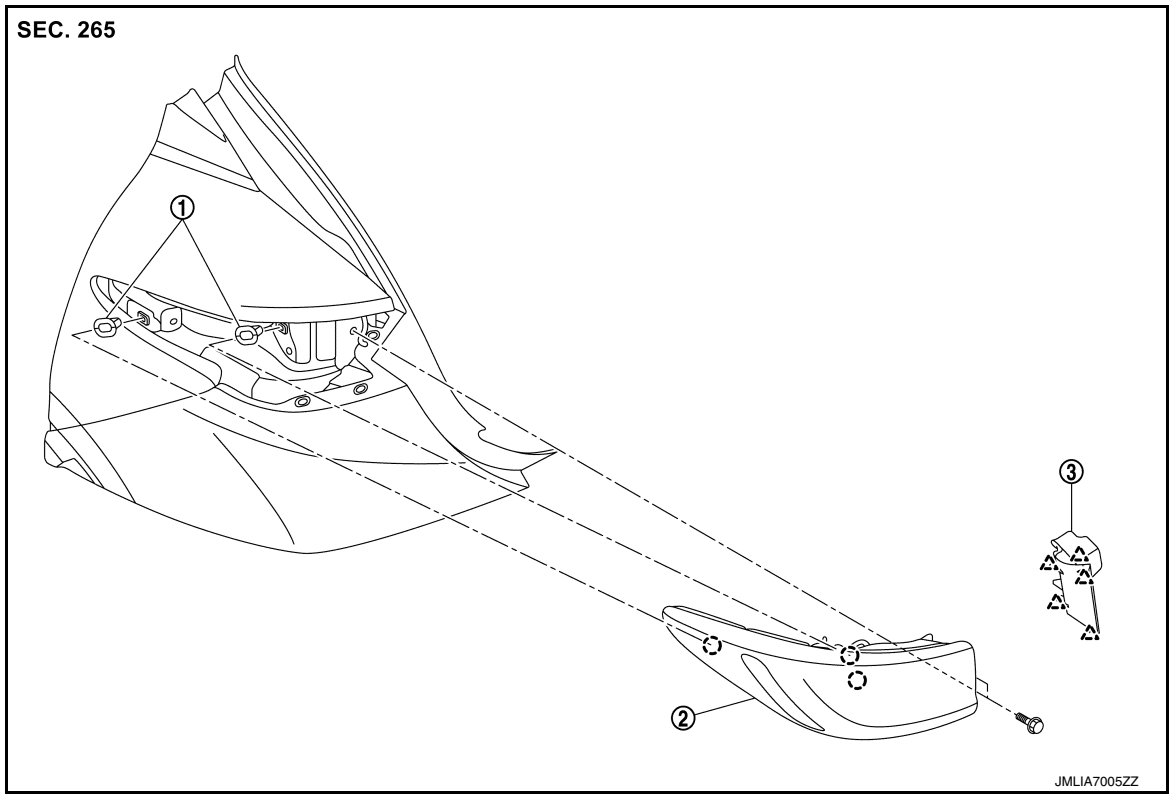
Be sure to perform "SENSOR INITIALIZE" when removing the rear height sensor. Refer to EXL-117, "Description".

REAR COMBINATION LAMP

Exploded View

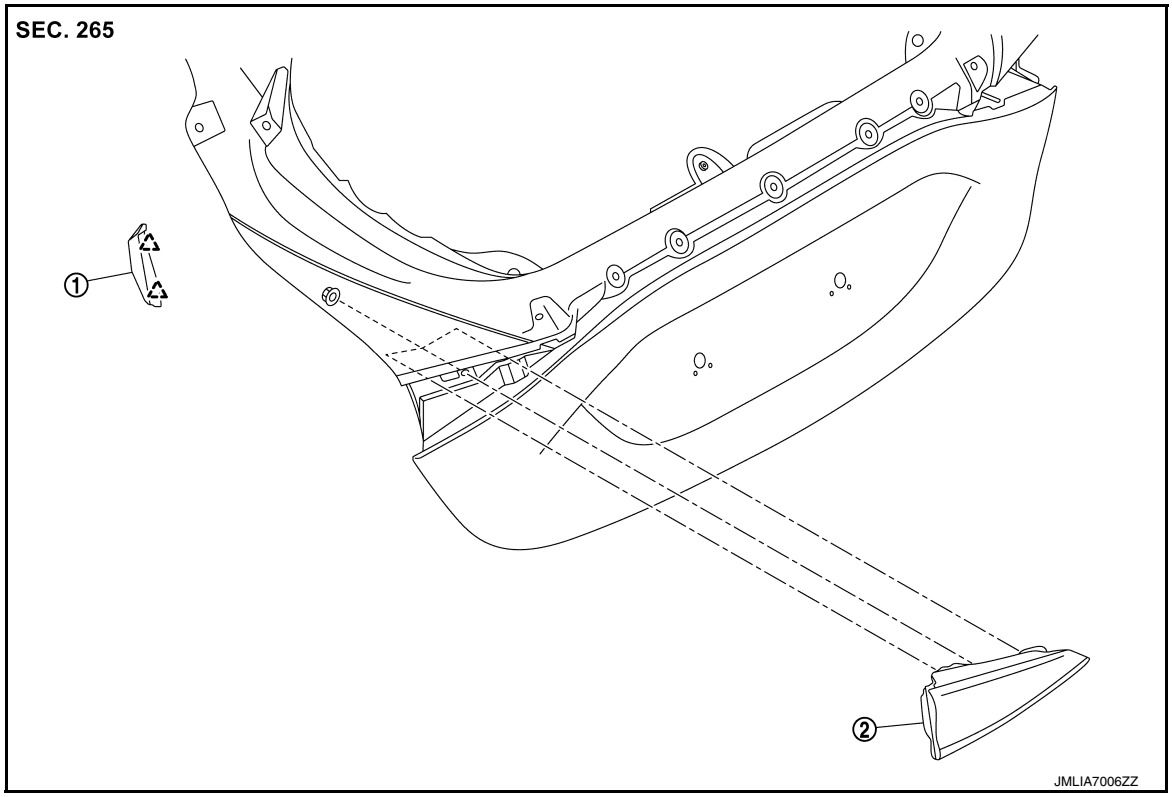
INFOID:0000000013549229

BODY SIDE



① Grommet
② Rear combination lamp
③ Rear combination lamp finisher
: Clip
: Pawl

BACK DOOR SIDE



① Rear combination lamp finisher ② Rear combination lamp

: Pawl

REAR COMBINATION LAMP (BODY SIDE)

REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation

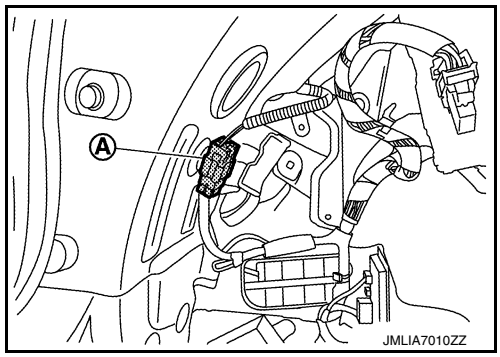
INFOID:0000000013549230

CAUTION:

- **Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-13, "Precautions for Removing Battery Terminal".**
- **When removing, always use a remover tool that is made of plastic.**

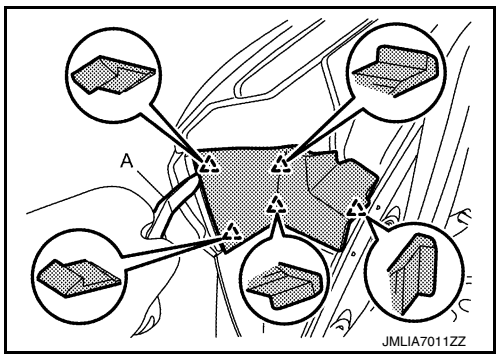
REMOVAL

1. Fully open back door.
2. Remove luggage side finisher lid. Refer to INT-36, "Exploded View".
3. Disconnect rear combination lamp harness connector Ⓐ.

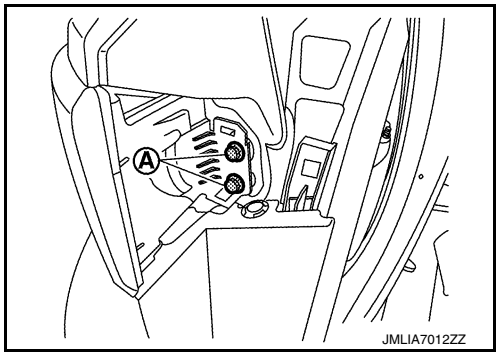


4. Disengage rear combination lamp finisher fixing pawls using a remover tool (A), and then remove rear combination lamp finisher.

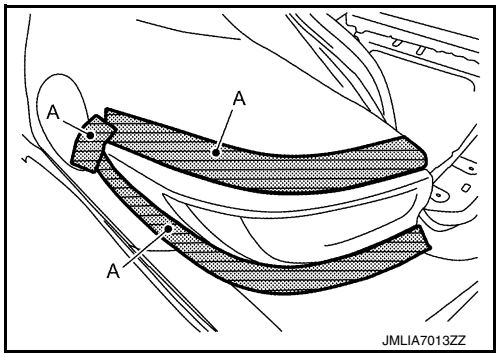
: Pawl



5. Remove rear combination lamp mounting bolts Ⓐ.

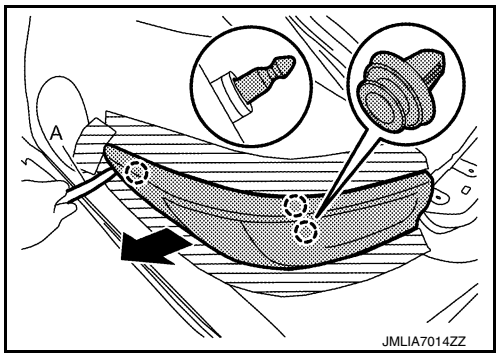


6. Apply protective tape (A) on the part to protect it from damage.

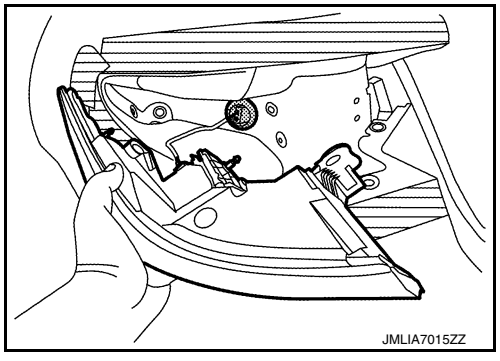


7. Disengage rear combination lamp fixing clips using a remover tool (A).

: Clip



8. Remove grommet, and then remove rear combination lamp.



INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Always replace seal packing with new part after every removal.

REAR COMBINATION LAMP (BODY SIDE) : Replacement

INFOID:0000000013549231

TAIL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".

STOP LAMP/REAR TURN SIGNAL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".

REAR TURN SIGNAL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".

REAR SIDE MARKER LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-304, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".

REAR COMBINATION LAMP (BACK DOOR SIDE)

REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation

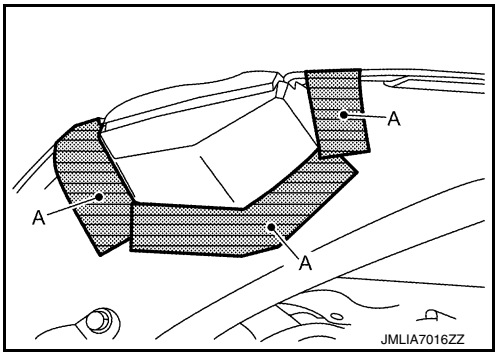
INFOID:0000000013549232

CAUTION:

- **Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-13, "Precautions for Removing Battery Terminal".**
- **When removing, always use a remover tool that is made of plastic.**

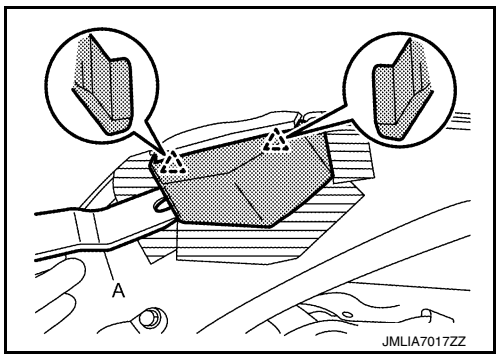
REMOVAL

1. Remove back door inner finisher. Refer to INT-43, "Removal and Installation".
2. Apply protective tape (A) on the part to protect it from damage.

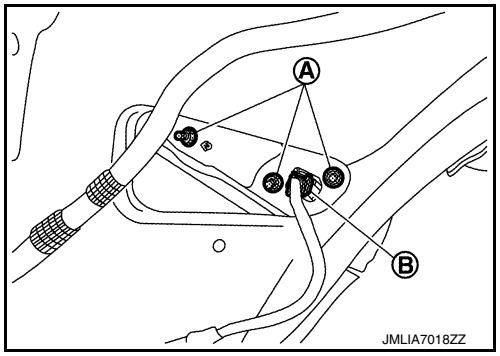


3. Disengage rear combination lamp fixing pawls using a remover tool (A).

: Pawl



4. Remove rear combination lamp mounting nuts Ⓐ, and then disconnect harness connector Ⓑ.



5. Pull rear combination lamp toward vehicle rear to remove rear combination lamp.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Always replace seal packing with new part after every removal.

REAR COMBINATION LAMP (BACK DOOR SIDE) : Replacement

INFOID:0000000013549233

TAIL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".

REAR TURN SIGNAL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".

REAR FOG LAMP (DRIVER SIDE ONLY)

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".

BACK-UP LAMP

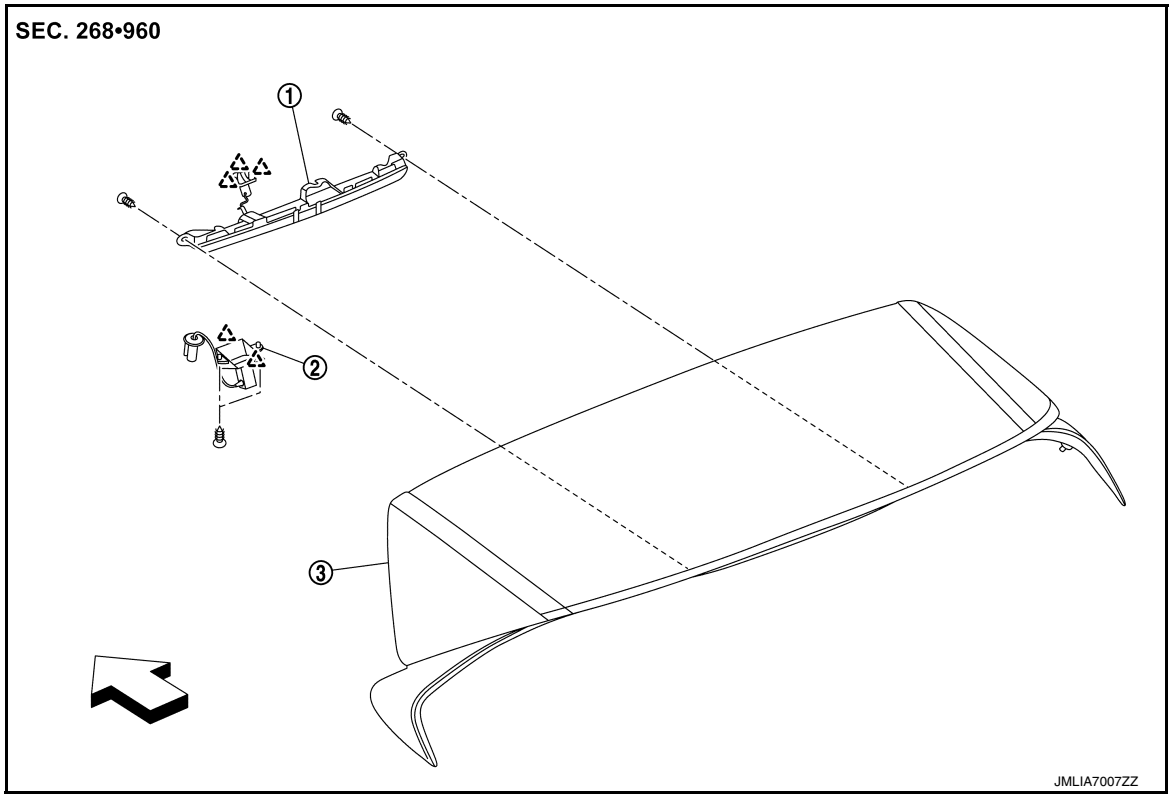
CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-306, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".

HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:0000000013549234



① High-mounted stop lamp ② High-mounted stop lamp bracket ③ Rear spoiler

: Pawl

: vehicle front

Removal and Installation

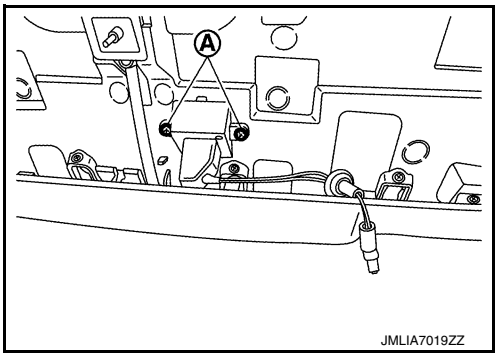
INFOID:0000000013549235

CAUTION:

Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-13, "Precautions for Removing Battery Terminal".

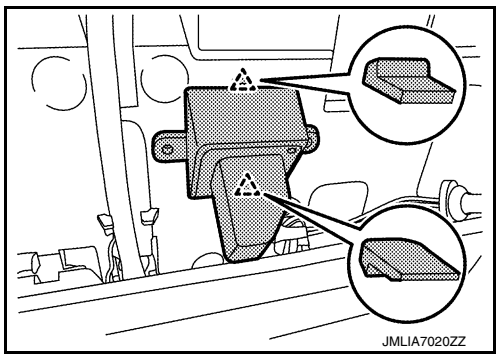
REMOVAL

1. Remove rear spoiler. Refer to EXT-59, "REAR SPOILER : Removal and Installation".
2. Remove high-mounted stop lamp bracket fixing screws Ⓐ.



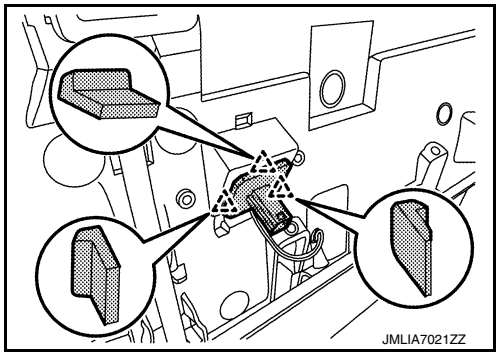
3. Disengage high-mounted stop lamp bracket fixing pawls, and then remove high-mounted stop lamp bracket.

: Pawl

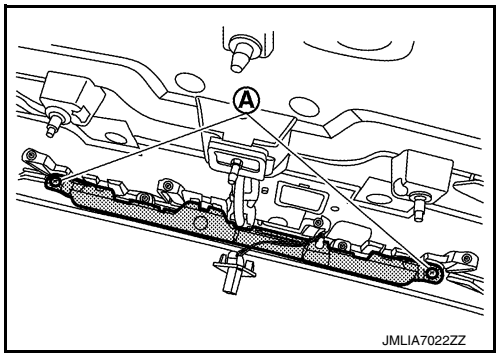


4. Disengage high-mounted stop lamp harness cover fixing pawls.

: Pawl



5. Remove high-mounted stop lamp fixing screws Ⓐ, and then remove high-mounted stop lamp.



INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000013549236

HIGH-MOUNTED STOP LAMP

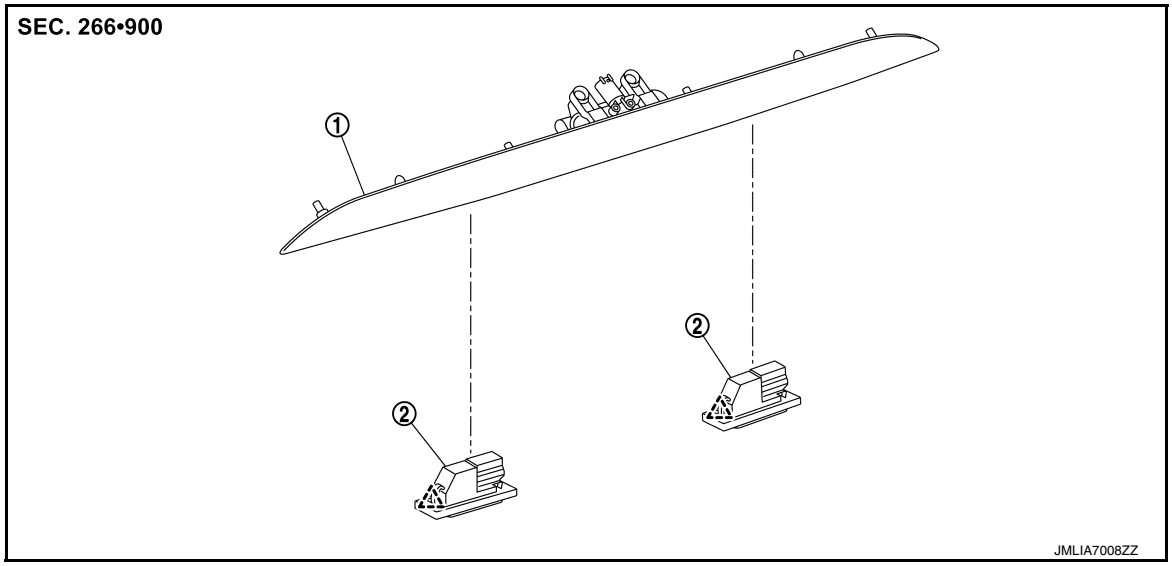
CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace high-mounted stop lamp unit as a set. Refer to EXL-308, "Removal and Installation".

LICENSE PLATE LAMP

Exploded View

INFOID:0000000013549237



① Back door finisher ② License plate lamp

△ : Pawl

Removal and Installation

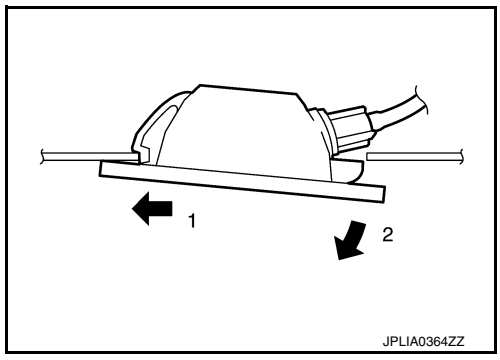
INFOID:0000000013549238

CAUTION:

Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-13, "Precautions for Removing Battery Terminal".

REMOVAL

1. While pressing license plate lamp to direction right side, pull it to direction outside and then remove it.



2. Disconnect license plate lamp harness connector, and then remove license plate lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000013549239

LICENSE PLATE LAMP BULB

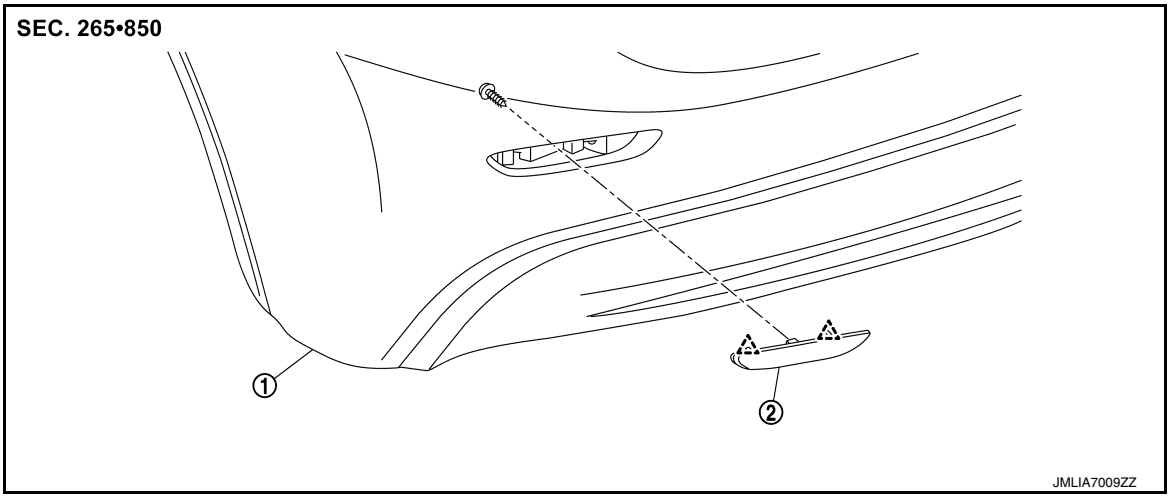
CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace high-mounted stop lamp unit as a set. Refer to EXL-310, "Removal and Installation".

REAR REFLEX REFLECTOR

Exploded View

INFOID:0000000013549240



① Rear bumper fascia ② Rear reflex reflector

△ : Pawl

Removal and Installation

INFOID:0000000013549241

REMOVAL

1. Remove rear bumper fascia. Refer to EXT-29, "Removal and Installation".
2. Remove rear reflex reflector mounting bolt and fixing pawls, and then remove rear reflex reflector.

INSTALLATION

Install in the reverse order of removal.

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000013549242

Item		Type	Wattage (W)
Front combination lamp	Headlamp (Hi/Lo)	LED	—
	Headlamp (Hi)		
	Parking lamp/daytime running light Position lamp		
	Parking lamp/daytime running light Position lamp/Front turn signal lamp		
	Cornering lamp		
	Front side marker lamp		
Front fog lamp		LED	—
Side turn signal lamp (built in door mirror)		LED	—
Rear combination lamp (body side)	Tail lamp	LED	—
	Stop lamp/Rear turn signal lamp		
	Rear turn signal lamp		
	Rear side marker lamp		
Rear combination lamp (back door side)	Tail lamp	LED	—
	Back-up lamp		
	Rear turn signal lamp		
	Rear fog lamp (driver side only)		
License plate lamp		LED	—
High-mounted stop lamp		LED	—

PRECAUTION

PRECAUTIONS

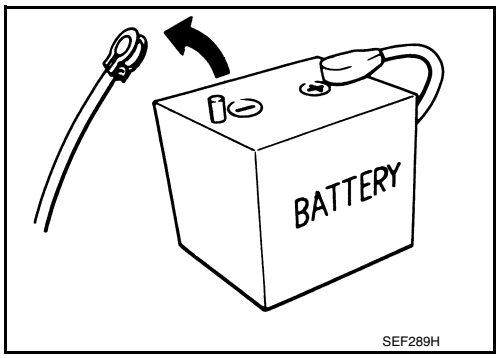
Precautions for Removing Battery Terminal

INFOID:0000000013549889

When disconnecting the battery terminal, pay attention to the following.

- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

BR08DE	: 4 minutes	YD25DDTi	: 2 minutes
D4D engine	: 20 minutes	YS23DDT	: 4 minutes
HRA2DDT	: 12 minutes	YS23DDTT	: 4 minutes
K9K engine	: 4 minutes	ZD30DDTi	: 60 seconds
M9R engine	: 4 minutes	ZD30DDTT	: 60 seconds
R9M engine	: 4 minutes		
V9X engine	: 4 minutes		



NOTE:
ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.

NOTE:
- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
  - Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
  - Driving for 30 minutes or more on a steep slope.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:
If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

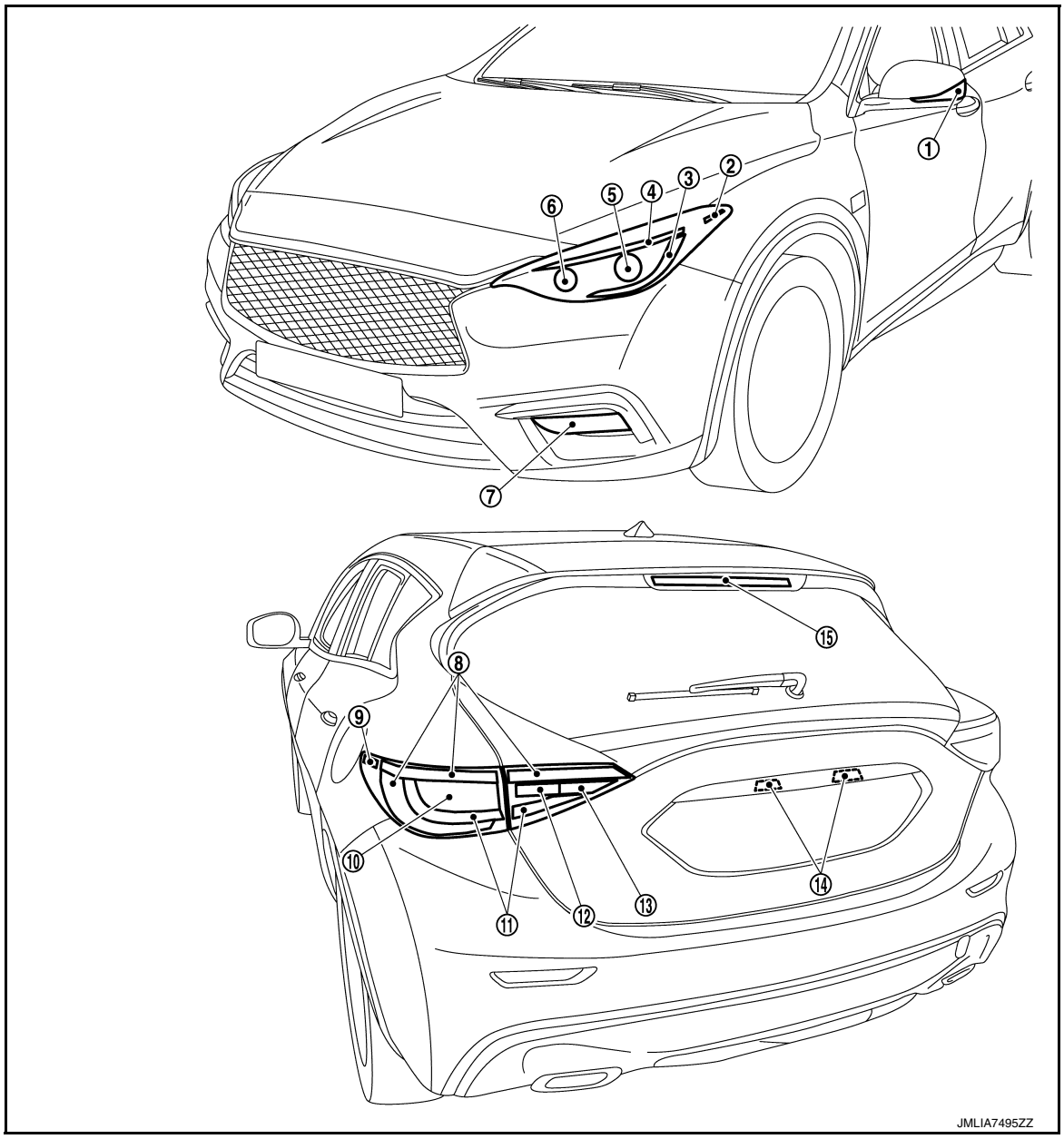
NOTE:
The removal of 12V battery may cause a DTC detection error.

SYSTEM DESCRIPTION

COMPONENT PARTS

Exterior Lamp Appearance

INFOID:0000000013549890



① Side turn signal lamp	② Front side marker lamp	③ Parking lamp/Daytime running light/ Position lamp
④ Parking lamp/Daytime running light/ Position lamp	⑤ Headlamp (Hi/Lo)	⑥ Front turn signal lamp
⑦ Front fog lamp	⑧ Tail lamp	⑨ Rear side marker lamp
⑩ Stop lamp/Rear turn signal lamp	⑪ Rear turn signal lamp	⑫ Back-up lamp
⑬ Rear fog lamp (driver side only)	⑭ License plate lamp	⑮ High-mounted stop lamp

Bulb Specifications

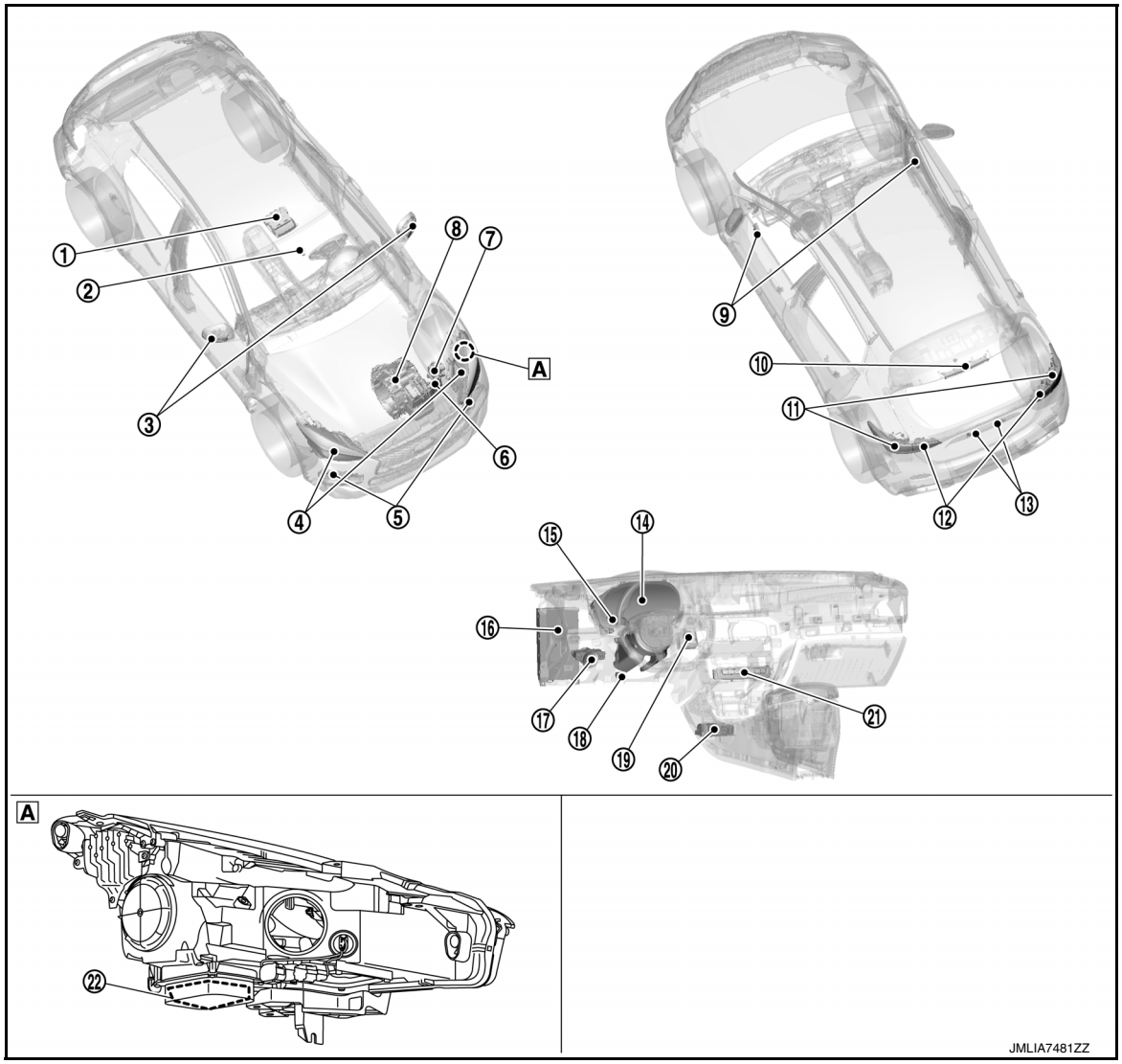
INFOID:0000000013549891

Bulb Specifications

Item		Type	Wattage (W)
Front combination lamp	Headlamp (Hi/Lo)	H9	60/55
	Parking lamp/daytime running light/ Position lamp	LED	—
	Front turn signal lamp	PWY24W	24
	Front side marker lamp	LED	—
Front fog lamp		LED	—
Side turn signal lamp (built in door mirror)		LED	—
Rear combination lamp (body side)	Tail lamp	LED	—
	Stop lamp/Rear turn signal lamp	LED	—
	Rear turn signal lamp	LED	—
	Rear side marker lamp	LED	—
Rear combination lamp (trunk lid side)	Tail lamp	LED	—
	Rear turn signal lamp	LED	—
	Back-up lamp	LED	—
	Rear fog lamp (driver side only)	LED	—
License plate lamp		LED	—
High-mounted stop lamp		LED	—

Component Parts Location

INFOID:0000000013549892



A Front combination lamp (back)

No.	Component		Function
①	Overhead control panel control unit		• Overhead control panel control unit transmits light & rain sensor signal to BCM via roof LIN communication. • Refer to INL-7, "Component Parts Location" for detailed installation location.
②	Light & rain sensor		Refer to EXL-319, "Light & Rain Sensor".
③	Door mirror	Side turn signal lamp	Refer to EXL-314, "Exterior Lamp Appearance" and EXL-314, "Bulb Specifications".

No.	Component		Function
④	Front combination lamp	Headlamp (HI)	Refer to EXL-314, "Exterior Lamp Appearance" and EXL-314, "Bulb Specifications".
		Headlamp (LO)	
		Daytime running light (upper side)/ Parking lamp (upper side)/Position lamp (upper side)	
		Daytime running light (lower side)/ Parking lamp (lower side)/Position lamp (lower side)	
		Front turn signal lamp	
		Front side marker lamp	
⑤	Front fog lamp*		Refer to EXL-314, "Exterior Lamp Appearance" and EXL-314, "Bulb Specifications".
⑥	ECM		• ECM transmits engine status signal to BCM via CAN communication • Refer to EC-27, "Component Parts Location" for detailed installation location.
⑦	Electronic stability program control unit		• Electronic stability program control unit transmits vehicle speed signal to BCM via CAN communication. • Electronic stability program control unit receives brake light switch signal. And send to BCM via CAN communication. • Refer to BRC-29, "Component Parts Location" for detailed installation location.
⑧	Transaxle assembly	TCM	• TCM transmits shift position signal to electronic ignition switch control unit via CAN communication. • Refer to TM-17, "Component Parts Location" for detailed installation location.
⑨	Front door control unit		• Front door control unit receives turn indicator signal via CAN communication. And supplies voltage to the side turn signal lamp. • Refer to DLK-10, "DOOR LOCK SYSTEM : Component Parts Location" for detailed installation location.
⑩	Hi-mounted stop lamp		Refer to EXL-314, "Exterior Lamp Appearance" and EXL-314, "Bulb Specifications".
⑪	Rear combination lamp (body side)	Tail lamp	Refer to EXL-314, "Exterior Lamp Appearance" and EXL-314, "Bulb Specifications".
		Stop lamp	
		Rear turn signal lamp	
		Rear side marker lamp	
⑫	Rear combination lamp (back door side)	Tail lamp	Refer to EXL-314, "Exterior Lamp Appearance" and EXL-314, "Bulb Specifications".
		Rear turn signal lamp	
		Back-up lamp	
⑬	License plate lamp		Refer to EXL-314, "Exterior Lamp Appearance" and EXL-314, "Bulb Specifications".
⑭	Combination meter		• Turns the indicator lamp and warning (information display/ buzzer) ON/OFF according to the request from each control unit via CAN communication. • Blinks the turn signal indicator lamp and outputs the turn signal operating sound with integrated buzzer according to the request from BCM via CAN communication.
⑮	Steering column control module	Combination switch	Refer to EXL-319, "Combination Switch".

No.	Component		Function
⑯	BCM		• Exterior lamp ON/OFF is judged from each signal, and then a request is transmitted to headlamp control unit. • It also transmits a request to the combination meter (CAN communication) to turn indicator lamp and warning (information display/buzzer) ON/OFF. • Blinks the turn signal lamp and hazard warning lamp according to the each switch condition. • Requests the turn signal indicator lamp blink to the combination meter via CAN communication. • Requests the turn signal operating sound ON to the combination meter via CAN communication. • Supplies voltage to the headlamp (HI/LO), turn signal lamp (front/rear), front fog lamp, rear fog lamp, tail lamp, license plate lamp, back-up lamp, stop lamp and hi-mounted stop lamp. • Refer to BCS-8, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
⑰	Rotary light switch		Refer to EXL-319, "Rotary Light Switch"
⑱	Brake light switch		• Brake light switch transmits brake light switch signal to electronic stability program control unit. • Refer to BRC-29, "Component Parts Location" for detailed installation location.
⑲	Electronic ignition switch control unit		• Electronic ignition switch control unit receives shift position signal from each control unit via CAN communication. And send reverse signal to BCM via CAN communication • Refer to PCS-5, "Component Parts Location" for detailed installation location.
⑳	Air bag diagnosis sensor unit		• Air bag diagnosis sensor unit transmits car crash information signal to BCM via CAN communication. • Refer to SRC-8, "Component Parts Location" for detailed installation location.
㉑	Upper control panel control unit	Hazard switch	Refer to EXL-319, "Hazard Switch".
㉒	Front combination lamp	Headlamp control unit	Refer to EXL-318, "FRONT COMBINATION LAMP : Headlamp Control Unit"

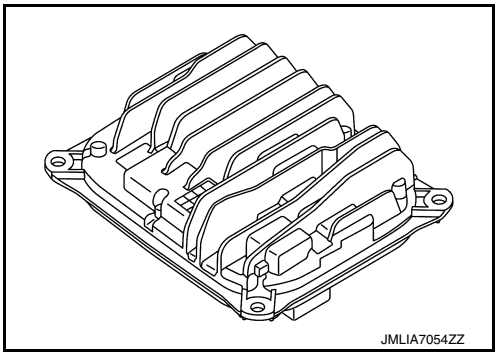
*: With front fog lamp

FRONT COMBINATION LAMP

FRONT COMBINATION LAMP : Headlamp Control Unit

INFOID:0000000013549893

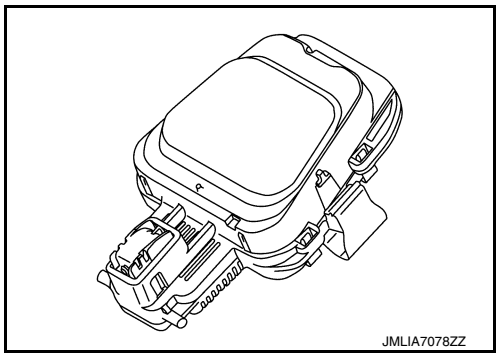
- Headlamp control unit is integrated in the front combination lamp.
- Headlamp control unit receives each signals (via CAN communication) from each control unit.



Light & Rain Sensor

INFOID:0000000013549895

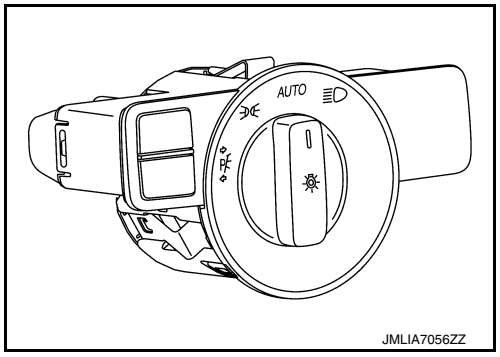
- The light & rain sensor detects the outside ambient light level, forward light level and sensor conditions.
- Based on ambient light level (day/night detection), forward light level (tunnel detection) and sensor conditions it judges ON/OFF condition for exterior lamps.
- And it transmits exterior lamp ON/OFF request to the BCM by the roof LIN communication.


JMLIA7078ZZ

Rotary Light Switch

INFOID:0000000013549896

Rotary light switch integrates light control switch and front fog lamp switch. Input to the each switch signal to BCM.

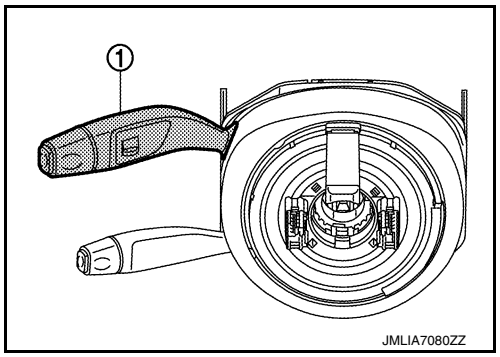


JMLIA7056ZZ

Combination Switch

INFOID:0000000013549897

Combination switch ① is built in to the steering column control module. Inputs the combination switch condition signal to BCM (via CAN communication).

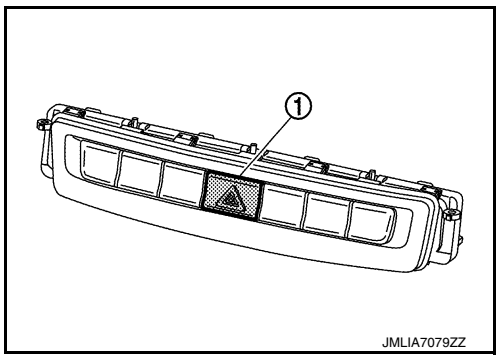


JMLIA7080ZZ

Hazard Switch

INFOID:0000000013549898

Hazard switch ① is built in to the upper control panel control unit. Inputs the hazard switch ON/OFF signal to BCM (via CAN communication).

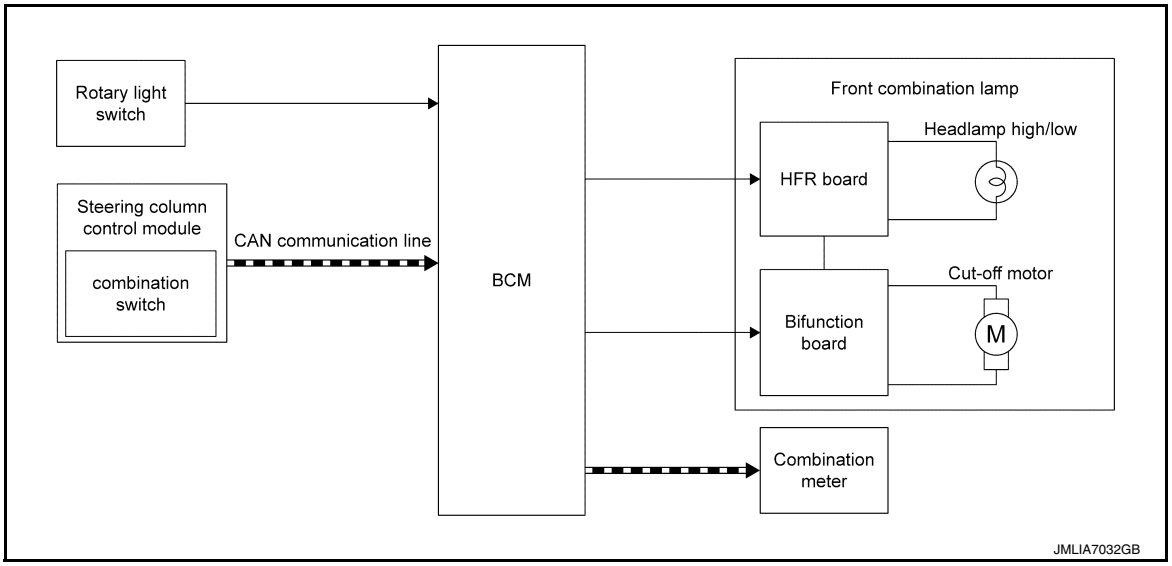


JMLIA7079ZZ

SYSTEM
HEADLAMP SYSTEM
HEADLAMP SYSTEM : System Description

INFOID:0000000013549899

SYSTEM DIAGRAM



OUTLINE
Headlamp is controlled by headlamp control function of BCM.

HEADLAMP (LO) OPERATION
- BCM detects the rotary light switch condition.
- BCM supplies voltage to HFR board and headlamp according to the headlamp (LO) ON condition.
- BCM transmits the low beam request signal to combination meter via CAN communication.

Headlamp (LO) ON condition
- Rotary light switch LO
- Rotary light switch AUTO with the ignition switch ON (Only when the illumination judgment by auto light system is ON. For details, refer to EXL-323, "AUTO LIGHT SYSTEM : System Description".)

- Combination meter turns the dipped beam indicator lamp ON according to the low beam request signal.

HEADLAMP (HI) OPERATION
- BCM detects the rotary light switch condition and combination switch condition (received from steering column control unit via CAN communication).
- BCM supplies voltage to HFR board, headlamp and bifunction board.
- Bifunction board controls cut-off motor according to the headlamp (HI) ON condition.
- BCM transmits the high beam request signal to combination meter via CAN communication.

Headlamp (HI) ON condition
- Combination switch HI with the rotary light switch LO
- Combination switch HI with the rotary light switch AUTO and ignition switch ON (Only when the illumination judgment by auto light system is ON and the illumination judgment by high beam assist system is ON. For details, refer to EXL-323, "AUTO LIGHT SYSTEM : System Description".)
- Combination switch PASS

- Combination meter turns the high beam indicator lamp ON according to the high beam request signal.

PASSING OPERATION
- BCM detects the combination switch condition (received from steering column control unit via CAN communication).
- BCM supplies voltage to HFR board, headlamp and bifunction board.
- Bifunction board controls cut-off motor according to the headlamp (HI) ON condition.
- BCM transmits the high beam request signal to combination meter via CAN communication.

Passing ON condition

- Combination switch PASS
• Combination meter turns the high beam indicator lamp ON according to the high beam request signal.

NOTE:

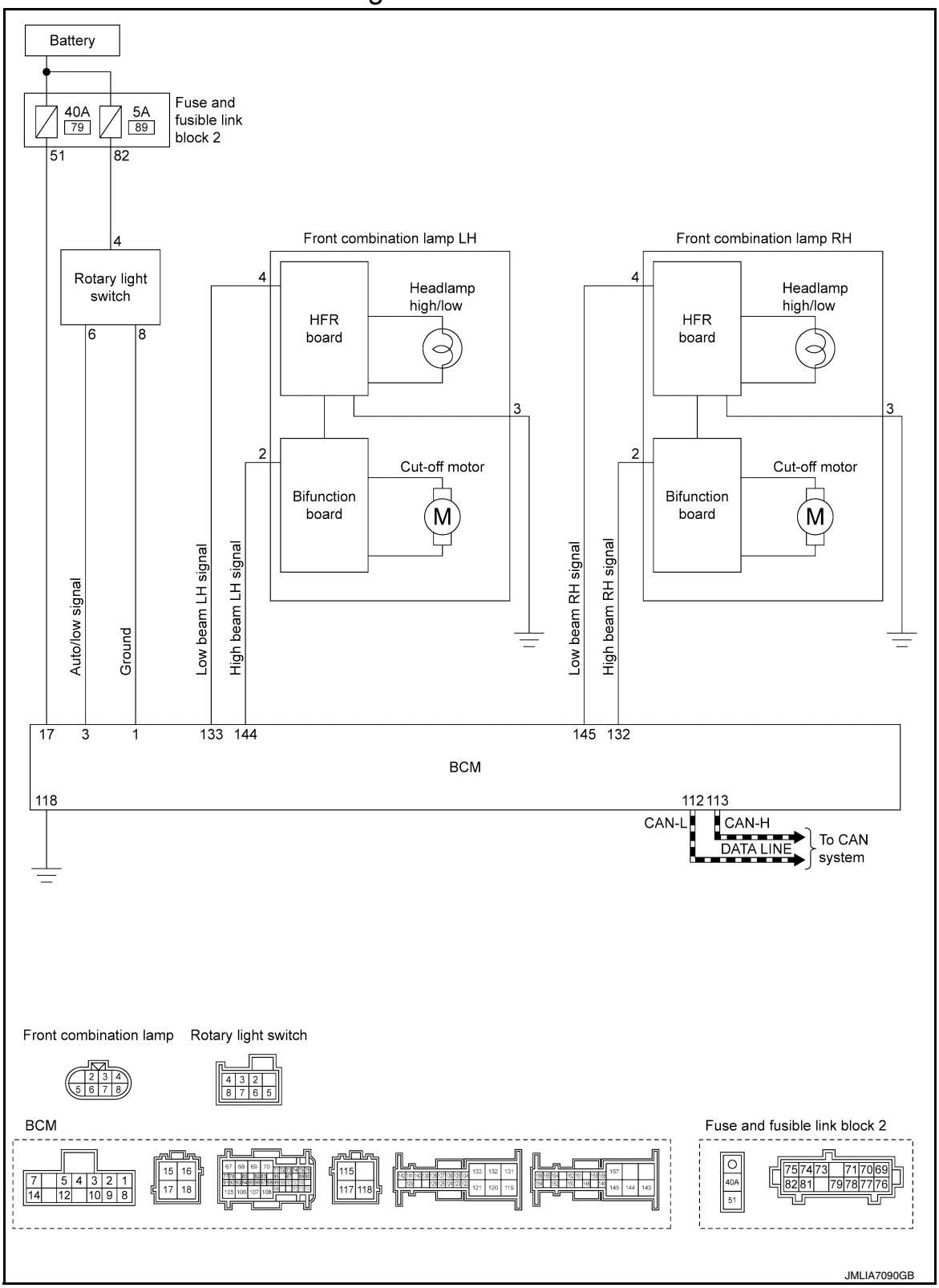
• If passing switch is operated continuously for approximately 30 seconds or more, BCM judges that passing switch is malfunctioning and turns the passing operation OFF.
• When passing switch is operating normally, if the passing switch is returned to the neutral position, passing function becomes operational again.

HEADLAMP VOLTAGE PROTECTION FUNCTION

• Headlamp voltage protection function control by HFR board.
• HFR (Halogen Flux Regulation) board checks voltage supplied to headlamp. When abnormal voltage is detected, HER board turns OFF headlamp illumination.

HEADLAMP SYSTEM : Circuit Diagram

INFOID:0000000013549900

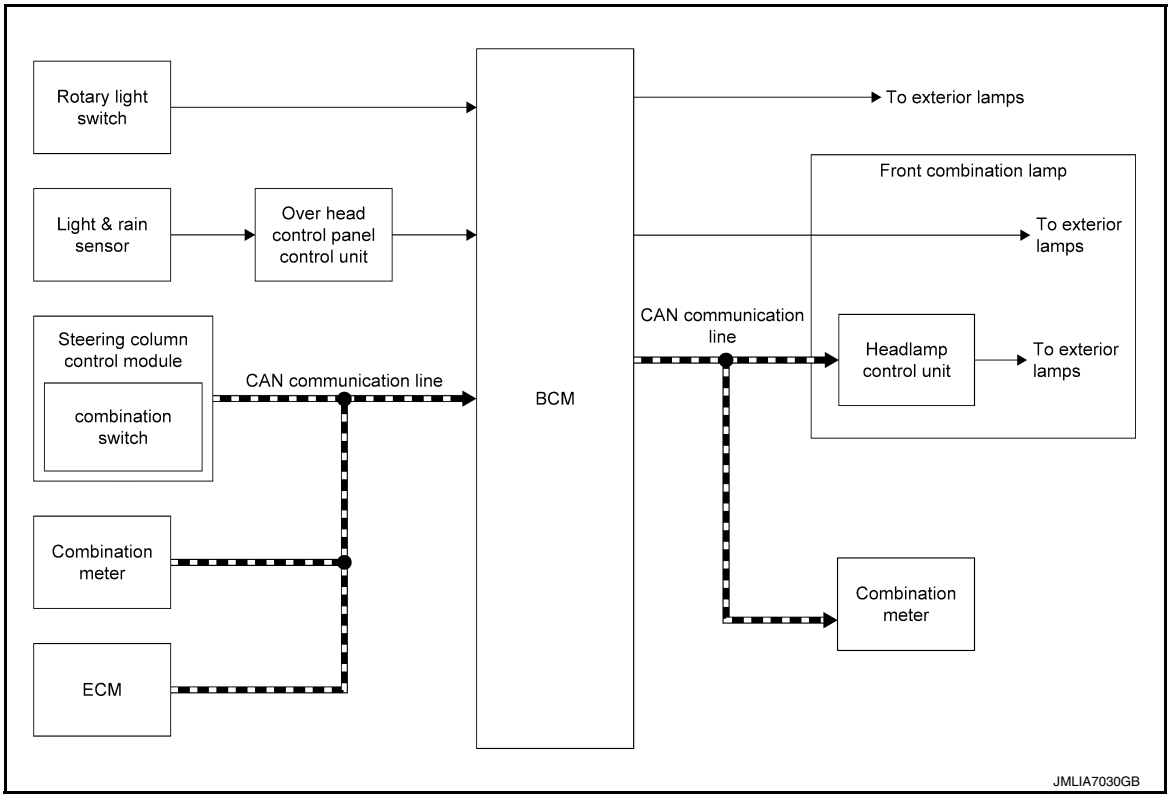


AUTO LIGHT SYSTEM

AUTO LIGHT SYSTEM : System Description

INFOID:0000000013549901

SYSTEM DIAGRAM



OUTLINE

- Auto light system is controlled by auto light function and wiper linked auto lighting function of BCM.
- Auto light system has the auto light function, wiper linked auto lighting function.
- Auto light function automatically turns ON/OFF the exterior lamps*, depending on the outside brightness.
- Wiper linked auto lighting function automatically turns ON/OFF the exterior lamps* when the rotary light switch is in the AUTO position, according to a front wiper operation.

*: Headlamp (LO/HI), front fog lamp, position lamp, license plate lamp, side marker lamp and tail lamp.

NOTE:

Front fog lamp depend on the rotary light switch condition.

AUTO LIGHT FUNCTION

Description

- BCM detects rotary light switch condition.
- BCM receives engine status signal from ECM via CAN communication.
- Light & rain sensor converts outside brightness to voltage and transmits the light & rain signal to BCM (via roof LIN communication).
- When ignition switch is turned ON, BCM detects outside brightness from the light & rain sensor signal and judges ON/OFF condition of each exterior lamp, depending on the outside brightness condition.
- BCM transmits each request signal to headlamp control unit and combination meter via CAN communication, according to ON/OFF condition by the auto light function.

WIPER LINKED AUTO LIGHTING FUNCTION

When rotary light switch is AUTO, if wiper operation is performed for 20 seconds or more and wiper operation cycle* is set to 6 seconds or less, the headlamp (LO) illuminates.

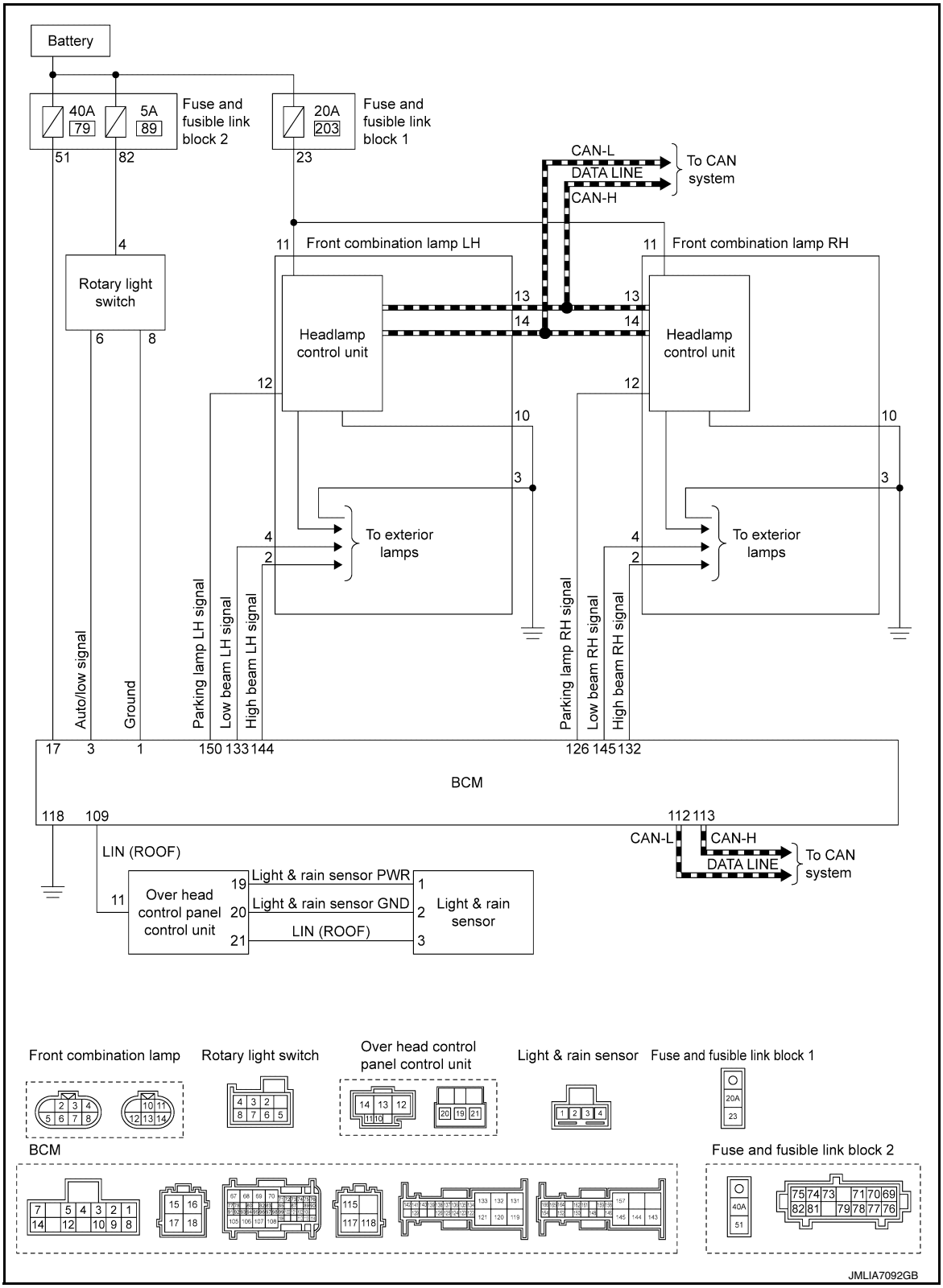
*: Wiper operation cycle is the intermittent time between the start of one wiper operation and the start of the next wiper operation.

NOTE:

When no wiper operation is performed for approximately 60 seconds with wiper linked auto lighting function active, headlamp (LO) turns OFF.

AUTO LIGHT SYSTEM : Circuit Diagram

INFOID:0000000013549902

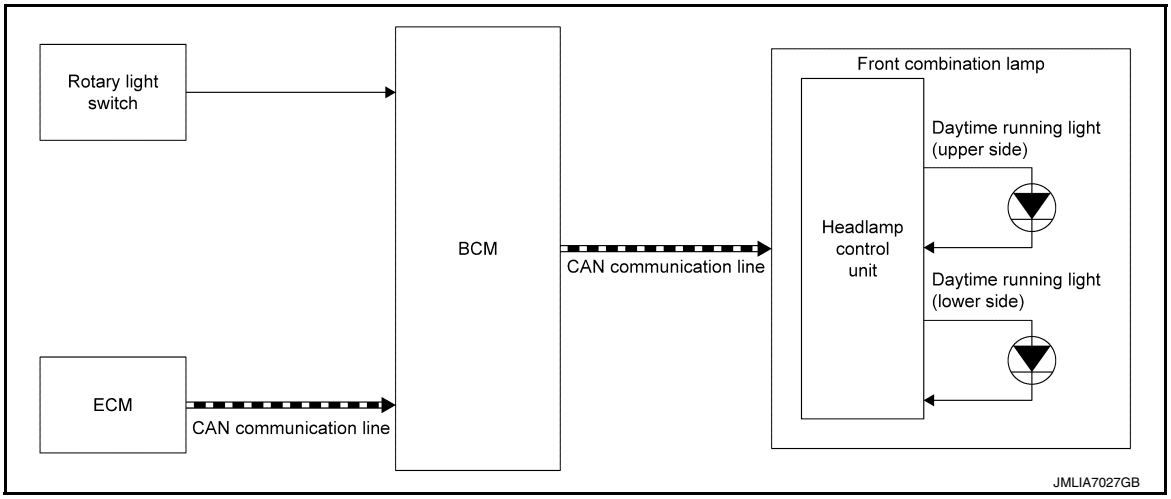


DAYTIME RUNNING LIGHT SYSTEM

DAYTIME RUNNING LIGHT SYSTEM : System Description

INFOID:0000000013549903

SYSTEM DIAGRAM



OUTLINE

Daytime running light is controlled by daytime running light control function of BCM.

DAYTIME RUNNING LIGHT OPERATION

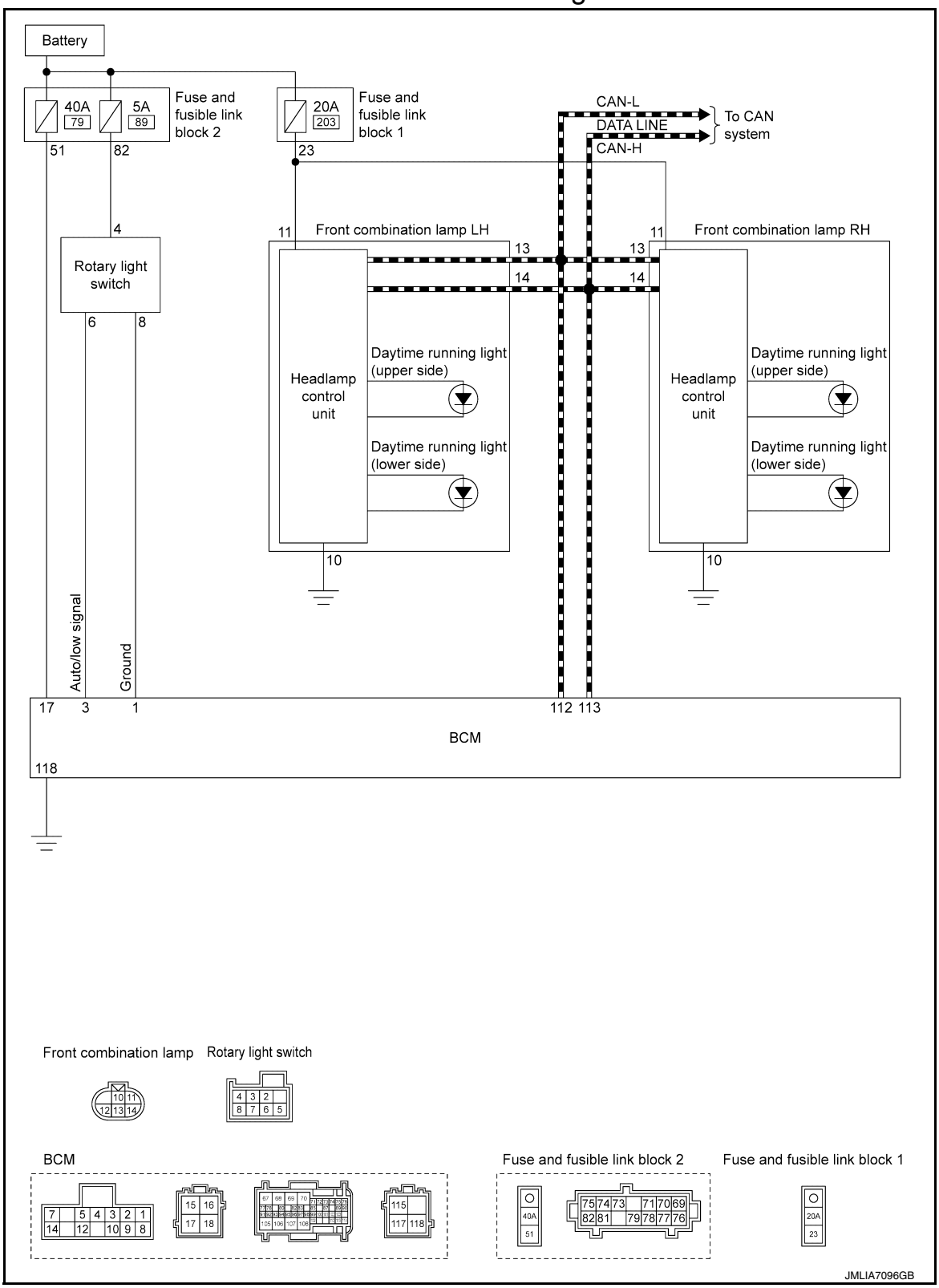
- BCM detects the rotary light switch condition.
- BCM detects vehicle condition depending on the engine status signal (received from ECM via CAN communication).
- BCM transmits the daytime running light request signal to headlamp control unit via CAN communication according to the daytime running light ON condition.

Daytime running light ON condition

- Engine running and rotary light switch AUTO (Only when the illumination judgment by auto light system is OFF. For details, refer to EXL-323, "AUTO LIGHT SYSTEM : System Description".)

DAYTIME RUNNING LIGHT SYSTEM : Circuit Diagram

INFOID:0000000013549904

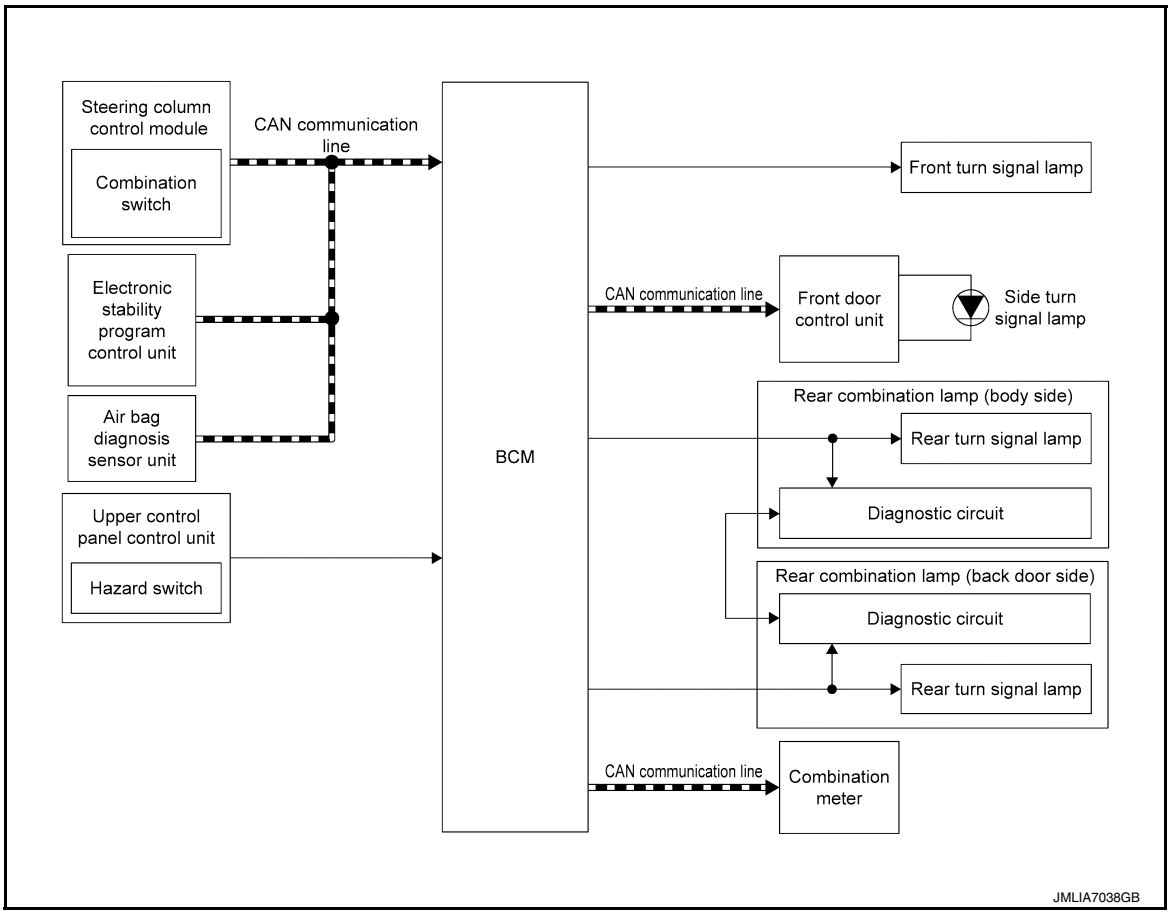


TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Description

INFOID:0000000013549907

SYSTEM DIAGRAM



OUTLINE

Turn signal lamp and hazard warning lamp is controlled by flasher control function of BCM.

TURN SIGNAL LAMP OPERATION

- BCM detects the combination switch condition (revive from steering column control unit via CAN communication)
- Front and rear turn signal lamp: BCM supplies voltage to the LH/RH turn signal lamp circuit according to the turn signal lamp LH/RH blinks.
- Side turn signal lamp: BCM transmits the turn indicator LH/RH signal to the headlamp control unit and front door control unit via CAN communication according to the turn signal lamp LH/RH blinks.

Turn Signal Lamp Operation Condition

- Ignition switch ON
- Combination switch TURN LH/RH

HAZARD WARNING LAMP OPERATION

BCM transmits turn indicator signal (via CAN communication), and supplies voltage to both turn signal lamp circuits when the hazard switch is ON. BCM blinks the hazard warning lamp.

TURN SIGNAL INDICATOR LAMP AND TURN SIGNAL OPERATION

- BCM transmits the turn indicator 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 indicator signal.

3-TIME FLASHER FUNCTION

- By a short touch of the turn signal lever, BCM blinks the turn signal lamps 3 times in the selected direction.

- Cancels the operation when short touch of the turn signal lever in the reverse direction during the 3-time flasher function operation.

REAR TURN SIGNAL LAMP DIAGNOSTIC OPERATION

If the rear turn signal lamp (back door side) or the rear turn signal lamp in the same direction (LH/RH) stops illuminating, “Diagnostic TI” detects a malfunction in the rear turn signal lamp and high flasher operations the rear turn signal lamp that is still illuminating.

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 malfunction is detected with the turn signal lamp operating.

  NOTE:

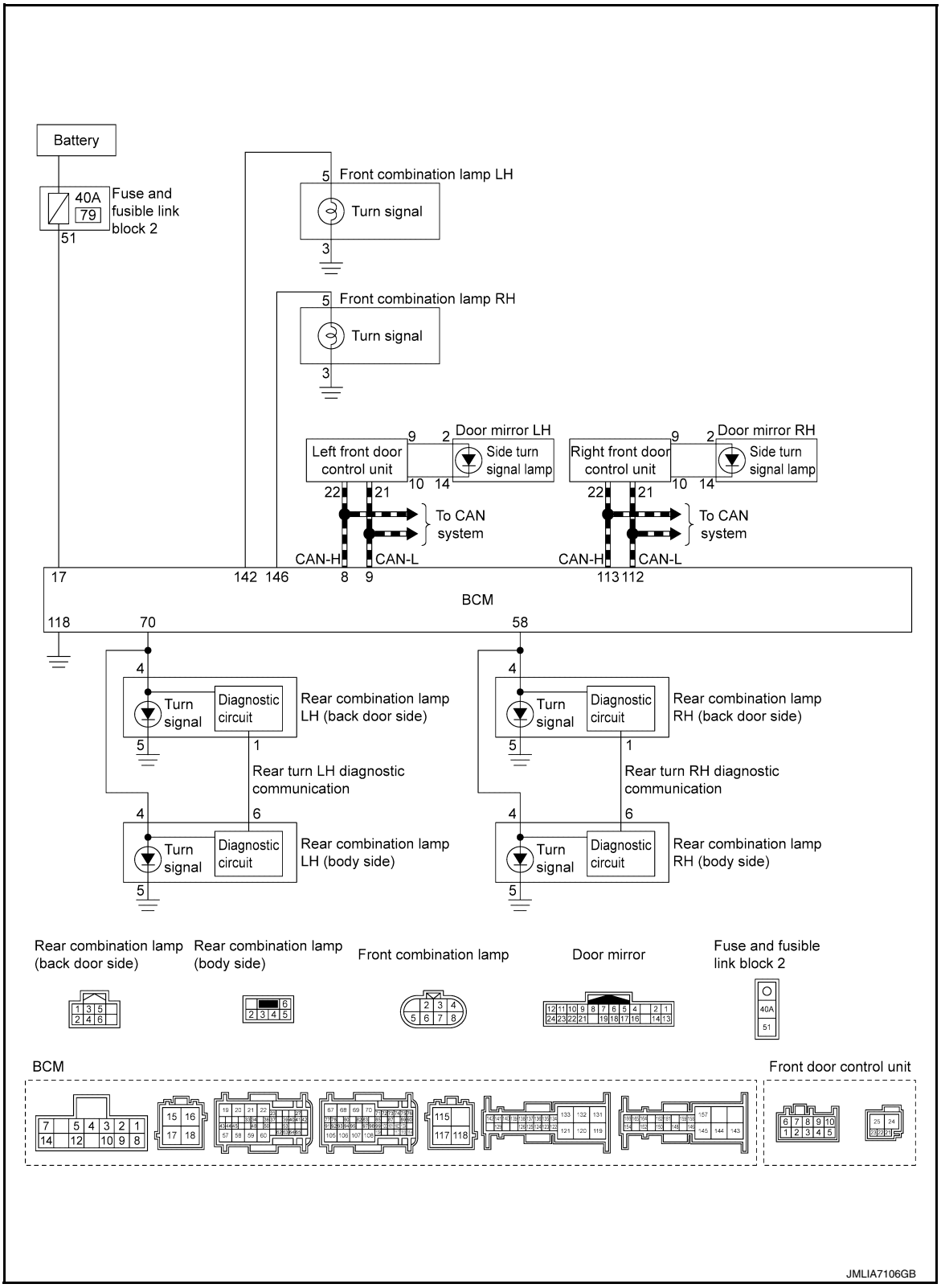
  The blinking speed is normal while operating the hazard warning lamp.

AUTO HAZARD FUNCTION

- Air bag diagnosis sensor unit transmits car crash information signal to BCM via CAN communication, when air bag diagnosis sensor unit detects strong impact to the vehicle body while ignition switch is ON.
- When car crash information signal received from air bag diagnosis sensor unit is detected, BCM controls the each turn signal lamp system and hazard lamp blinks.

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : Circuit Diagram

INFOID:0000000013549908



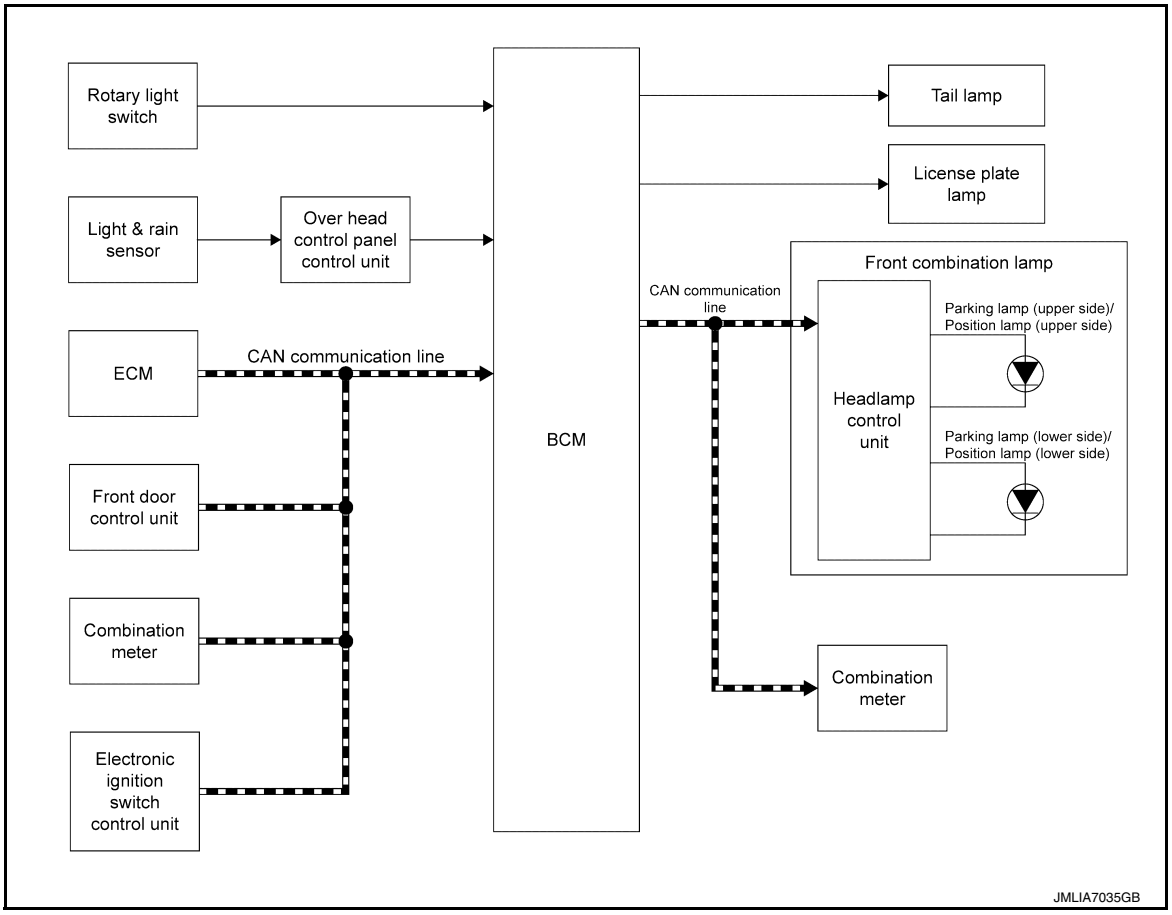
PARKING, POSITION, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM

PARKING, POSITION, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM :

System Description

INFOID:0000000013549909

SYSTEM DIAGRAM



OUTLINE

Parking, position, license plate, side marker and tail lamps are controlled by parking, position, license plate, side marker and tail lamps control function of BCM.

POSITION, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS OPERATION

- BCM detects the combination switch condition.
- BCM transmits the position light request signal to headlamp control unit and the combination meter via CAN communication according to the position, license plate, side marker and tail lamps ON condition.

Position, license plate, side marker and tail lamps ON condition
- Ignition switch ON
- Rotary light switch LO or POSITION
- Lighting switch AUTO with the ignition switch ON (Only when the illumination judgment by auto light system is ON. For details, refer to EXL-323, "AUTO LIGHT SYSTEM : System Description".)

- Combination meter turns the position lamp indicator lamp ON according to the position light request signal.

NOTE:

Position lamp (upper side/lower side) and daytime running light (upper side/lower side) use a common light source. When the position, license plate and tail lamps are turned ON while daytime running light is ON, the parking lamp (lower side)/daytime running light (lower side) is dimmed.

PARKING LAMP OPERATION

- BCM detects the combination switch condition.
- BCM transmits the position light request signal to headlamp control unit and the combination meter via CAN communication according to the position, license plate, side marker and tail lamps ON condition.

Parking lamp ON condition
- Ignition switch OFF
- Rotary light switch PARKING LH or PARLING RH

- Combination meter turns the position lamp indicator lamp ON according to the position light request signal.

SIGNATURE LIGHT FUNCTION

Description

Signature light function is a function that turns ON the position, license plate, side marker and tail lamps for approx. 30 seconds after the doors are unlocked from the status that all doors are locked.

Operation Description

- BCM transmits the position light request signal to headlamp control unit and combination meter via CAN communication when all of following conditions are satisfied.

Signature light function ON condition

- Ignition switch OFF
- Rotary light switch AUTO
- Detects the door unlock signal (from electronic ignition switch control unit via CAN communication)
- Detects the ambient light level signal (from light & rain sensor via roof LIN communication)
- When in any of following conditions, signature light function can be cancelled while signature light function is operating.

Signature light function OFF condition

- Front driver side door OPEN
- Ignition switch other than OFF
- Rotary light switch other than AUTO
- Since signature light function ON, approx. 30 seconds are passed.

DELAY TIMER FUNCTION

Description

Delay timer function is a function that turns ON the position, license plate, side marker and tail lamps for approx. 60 seconds after engine running to ignition switch OFF.

Operation Description

- BCM transmits the position light request signal to headlamp control unit and combination meter via CAN communication when all of following conditions are satisfied.

Delay timer function ON condition

- Engine running → ignition switch OFF
- Rotary light switch AUTO
- Detects the engine status signal (from ECM via CAN communication)
- Detects the ambient light level signal (from light & rain sensor via roof LIN communication)
- When in any of following conditions, delay timer function can be cancelled while delay timer function is operating.

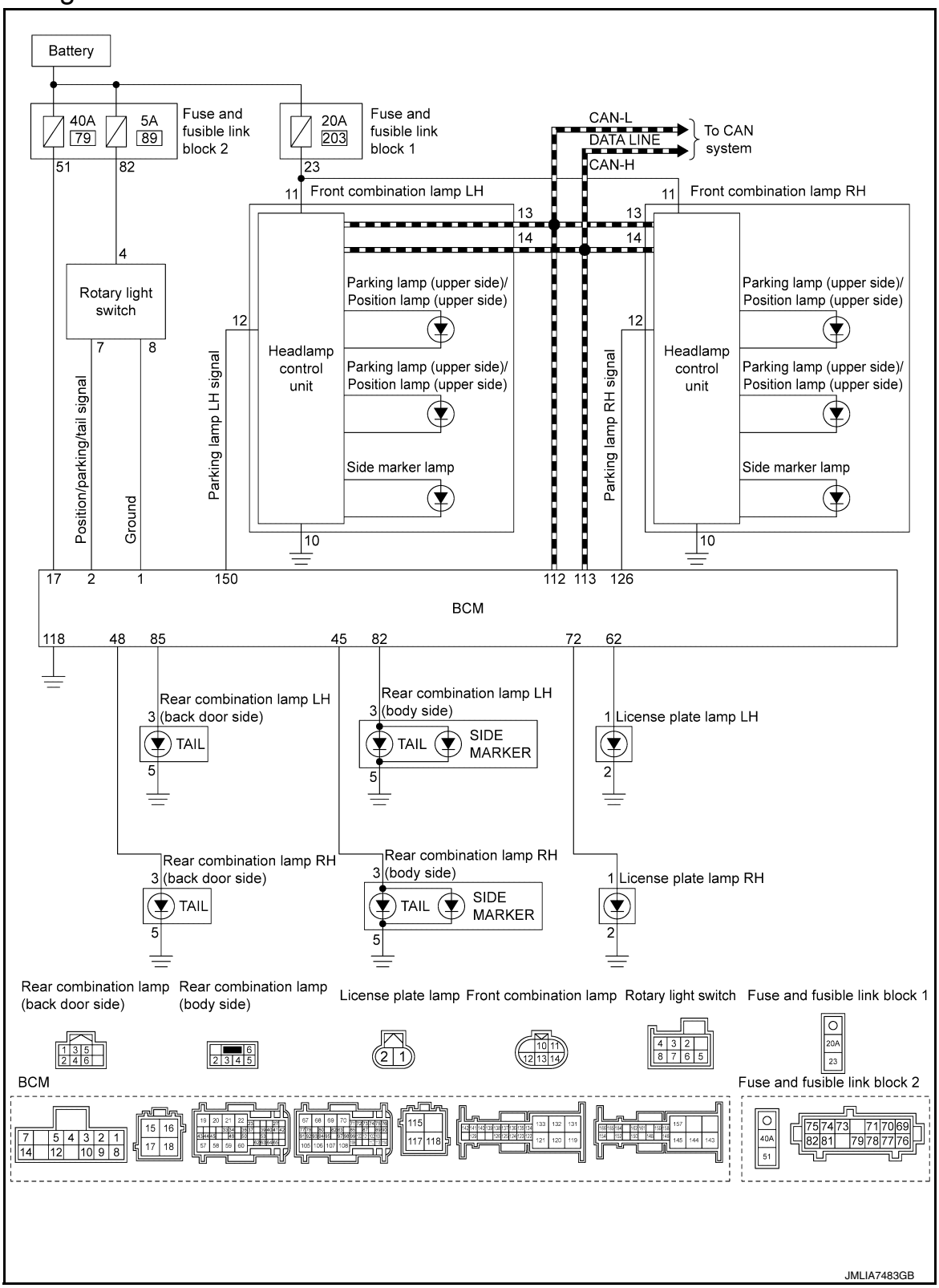
Delay timer function OFF condition

- Ignition switch other than OFF
- Rotary light switch other than AUTO
- Since delay timer function ON, approx. 60 seconds are passed.

PARKING, POSITION, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM :

Circuit Diagram

INFOID:0000000013549910

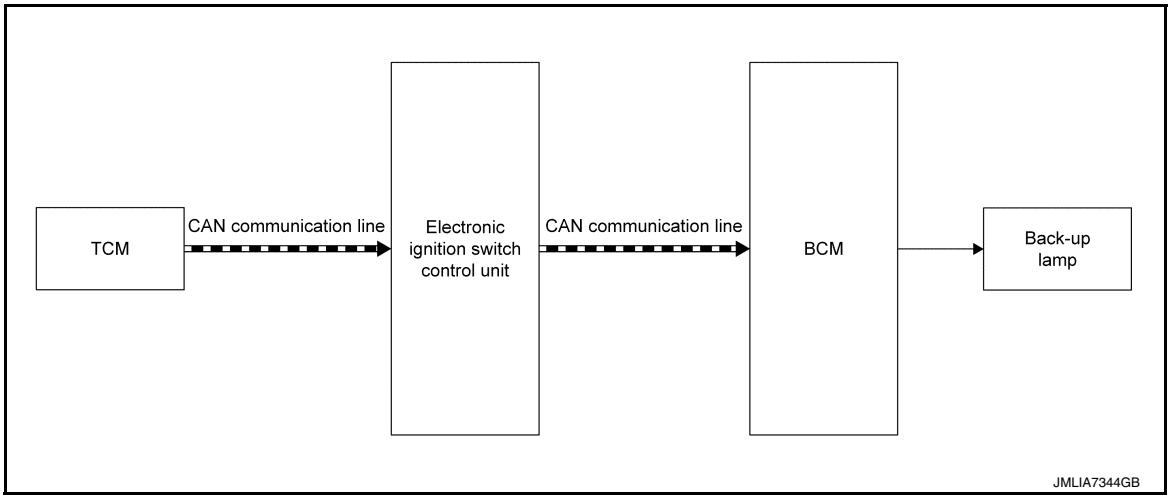


BACK-UP LAMP SYSTEM

BACK-UP LAMP SYSTEM : System Description

INFOID:0000000013549911

SYSTEM DIAGRAM



OUTLINE

Back-up lamp is controlled by back-up lamp control function of BCM.

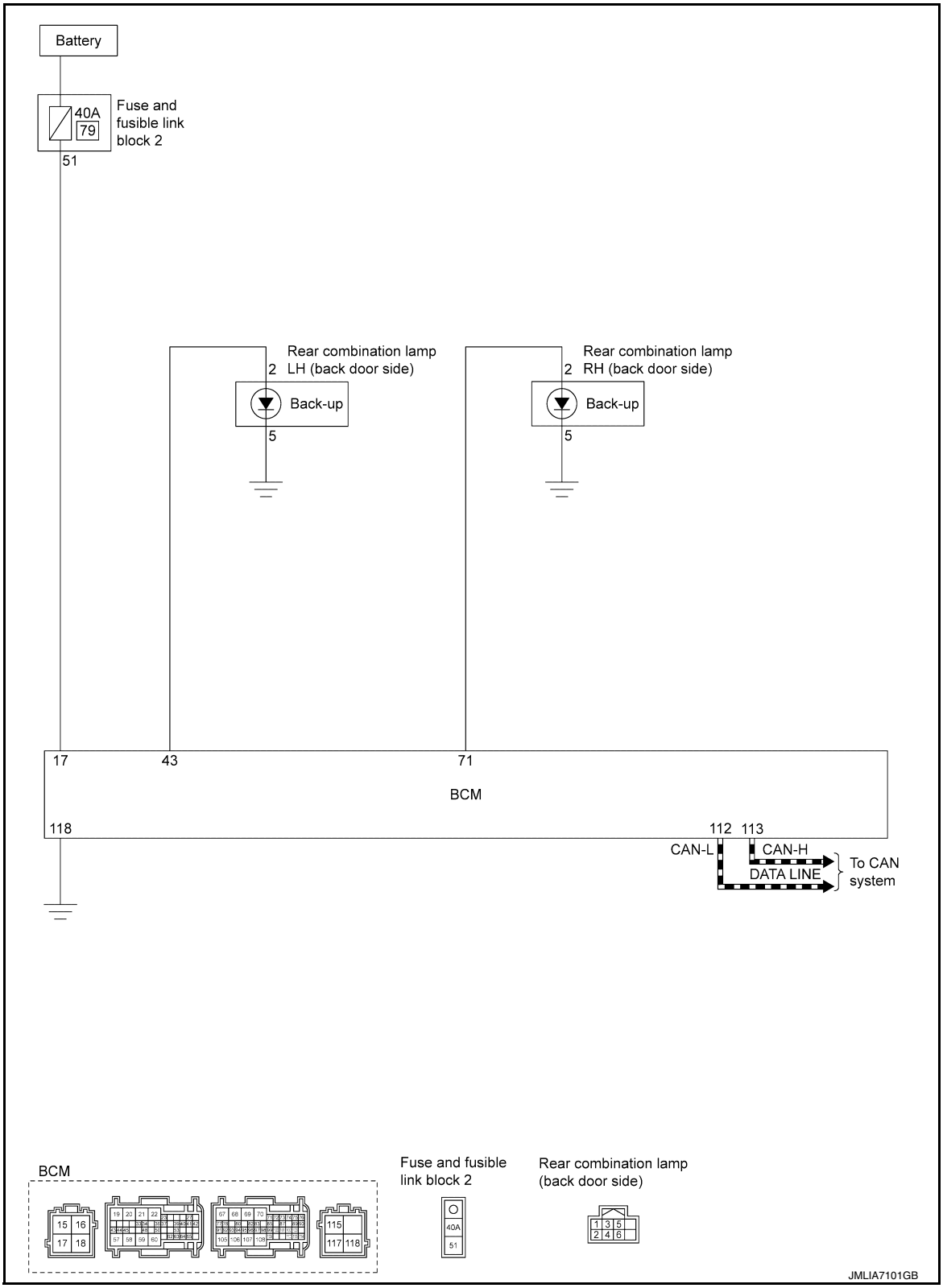
BACK-UP LAMP OPERATION

- Electronic ignition switch control unit receives shift position signal (via CAN communication) from TCM. And send reverse signal to BCM (via CAN communication).
- BCM supplies voltage to back-up lamp according to the back-up lamp ON condition.

Back-up lamp ON condition
- Ignition switch ON
- Selector lever position R

BACK-UP LAMP SYSTEM : Circuit Diagram

INFOID:0000000013549912

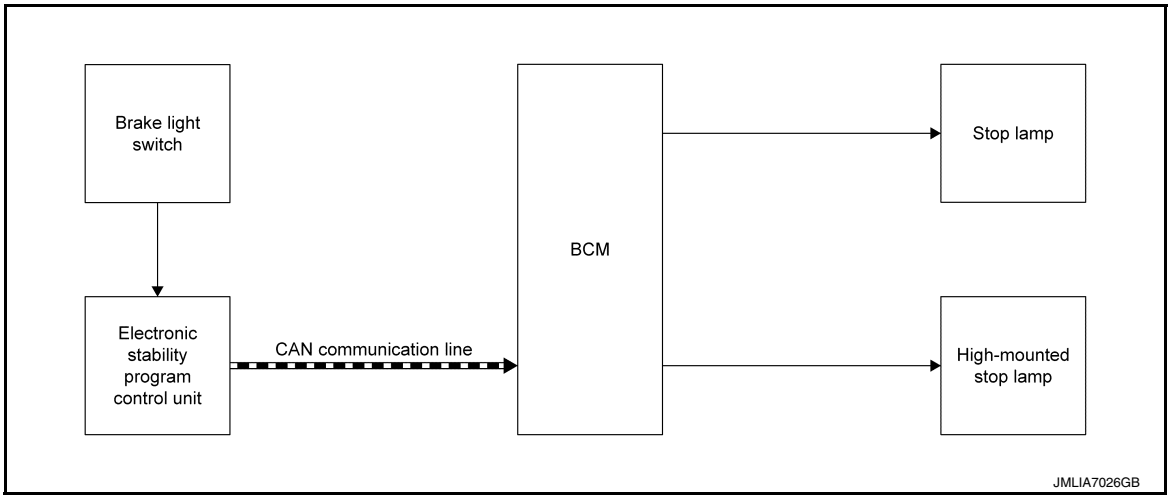


STOP LAMP SYSTEM

STOP LAMP SYSTEM : System Description

INFOID:0000000013549913

SYSTEM DIAGRAM



OUTLINE

Stop lamp and high-mounted stop lamp are controlled by stop lamp and high-mounted stop lamp control function of BCM.

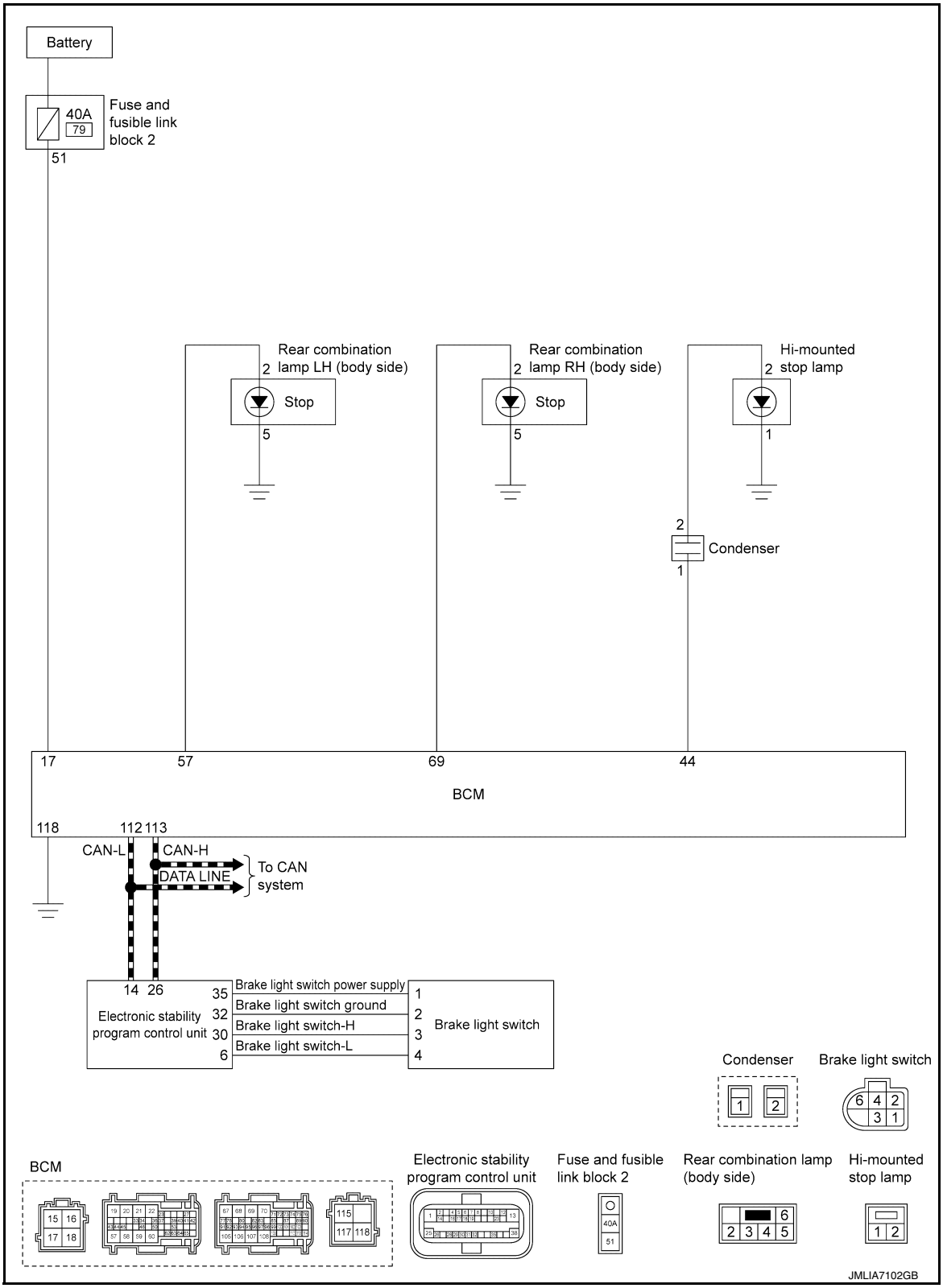
STOP LAMP AND HIGH-MOUNTED STOP LAMP OPERATION

- Electronic stability program control unit receive brake light switch signal from brake light switch. And send stop lamp signal to BCM (via CAN communication).
- BCM supplies voltage to stop lamp and high-mounted stop lamp according to the stop lamp and high-mounted stop lamp ON condition.

Stop lamp and high-mounted stop lamp ON condition
- Brake pedal is depressed

STOP LAMP SYSTEM : Circuit Diagram

INFOID:0000000013549914

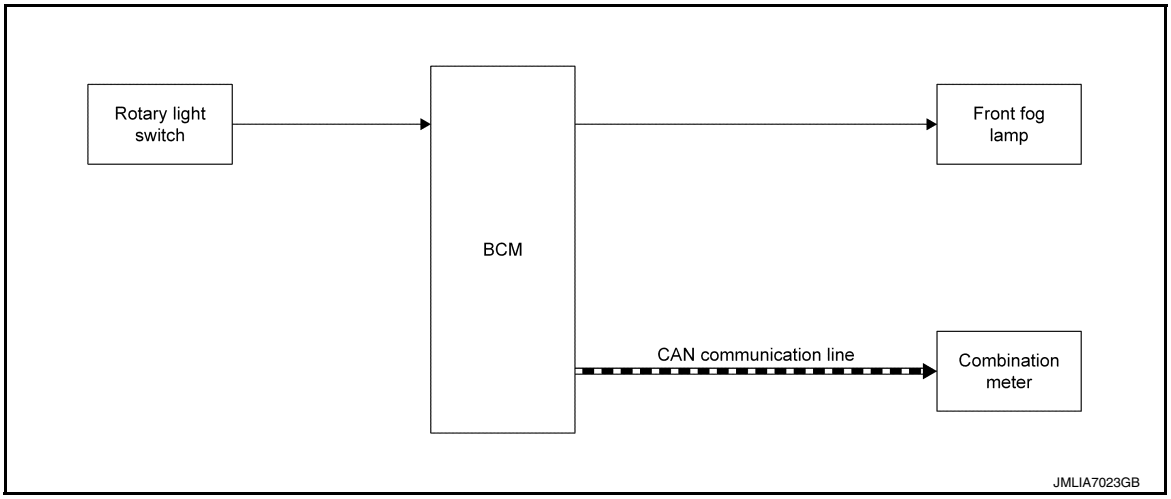


FRONT FOG LAMP SYSTEM

FRONT FOG LAMP SYSTEM : System Description

INFOID:0000000013549915

SYSTEM DIAGRAM



OUTLINE

Front fog lamp is controlled by front fog lamp control function of BCM.

FRONT FOG LAMP OPERATION

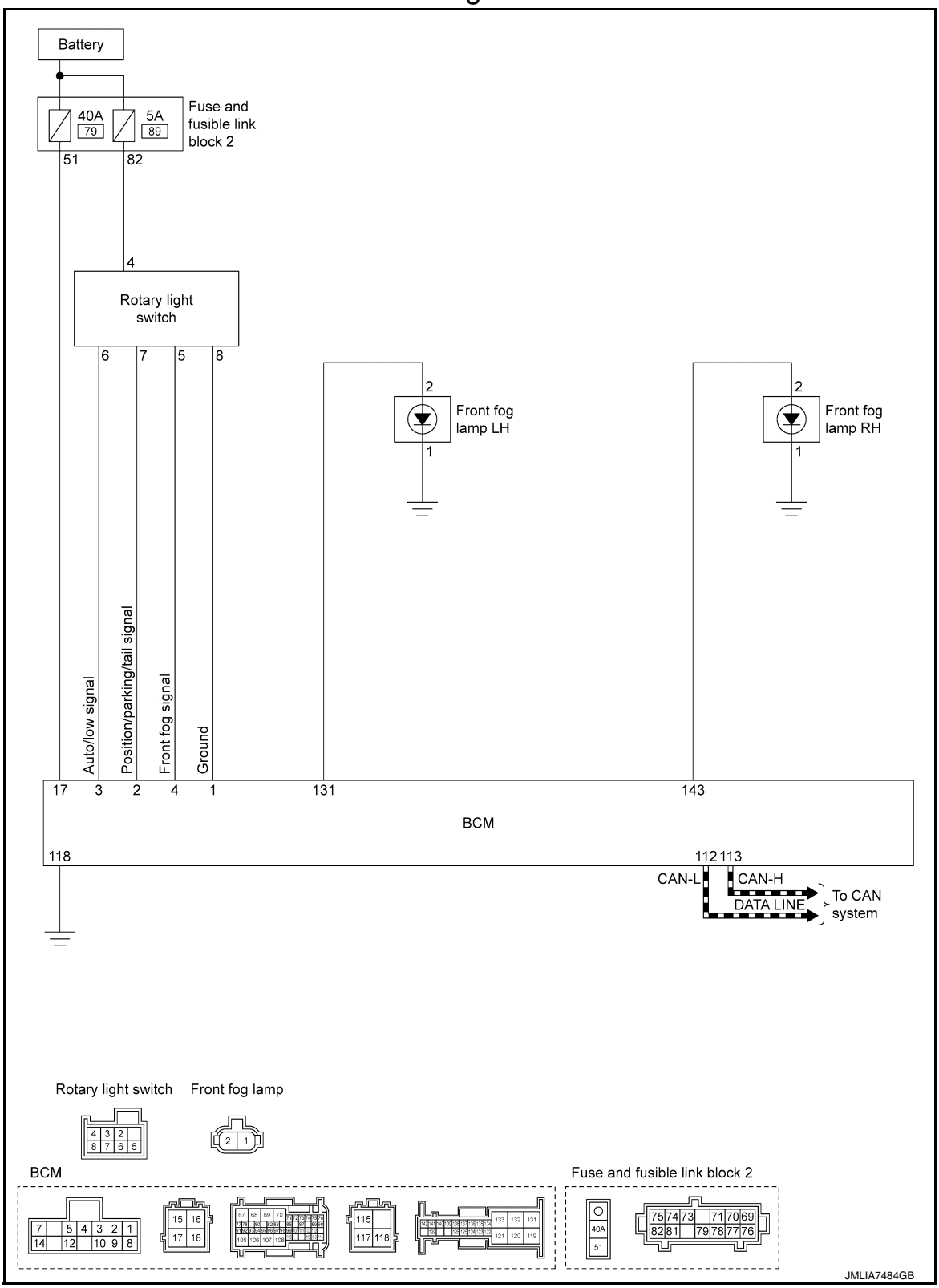
- BCM detects the rotary light switch condition.
- BCM supplies voltage to front fog lamp according to the front fog lamp ON condition.
- BCM transmits the front fog lamp status signal to combination meter via CAN communication.

Front fog lamp ON condition

- Front fog lamp switch ON, and any of the following conditions are satisfied.
- Rotary light switch LO or POSITION
- Rotary light switch AUTO with the ignition switch ON (Only when the illumination judgment by auto light system is ON. For details, refer to EXL-323, "AUTO LIGHT SYSTEM : System Description".)
- Combination meter turns the front fog lamp indicator lamp ON according to the front fog lamp status signal.

FRONT FOG LAMP SYSTEM : Circuit Diagram

INFOID:0000000013549916



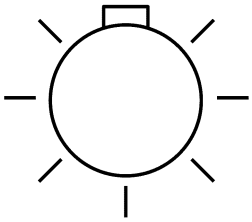
INFORMATION DISPLAY (COMBINATION METER)

INFORMATION DISPLAY (COMBINATION METER) : Auto Light System Inoperative

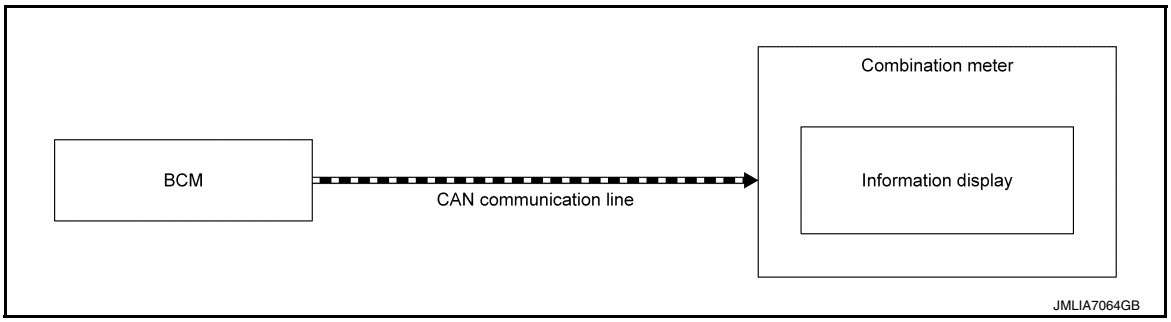
INFOID:0000000013549919

DESIGN/PURPOSE

Auto light system inoperative warning warns the driver that there is a malfunction in auto light system.

Symbol	Message
 JMLIA7045ZZ	Auto Lamp Function Inoperative

SYSTEM DIAGRAM



SIGNAL PATH

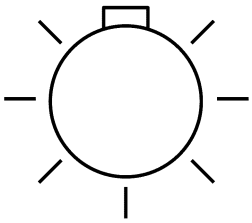
- When BCM detects a malfunction, auto light system inoperative warning signal transmits to combination meter (via CAN communication).
- Combination meter receives auto light system inoperative warning signal, auto light system inoperative pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Back-up Lamp Warning

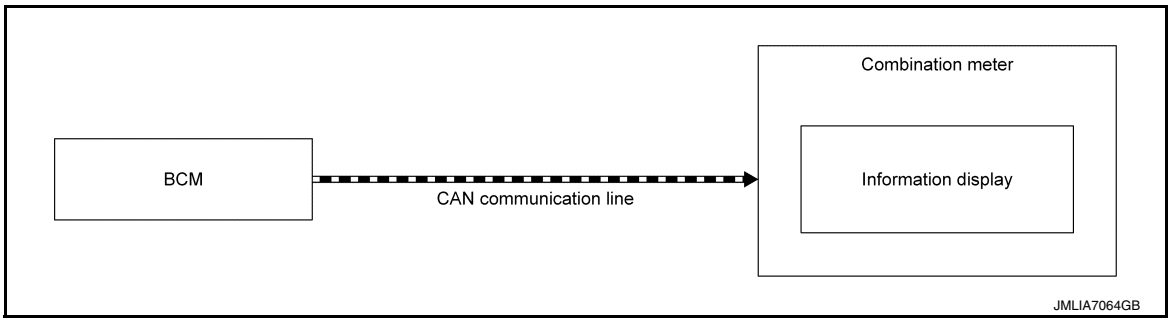
INFOID:0000000013549920

DESIGN/PURPOSE

Back-up lamp warning warns the driver that there is a malfunction in back-up lamp system.

Symbol	Message
 JMLIA7045ZZ	Backup Light

SYSTEM DIAGRAM



SIGNAL PATH

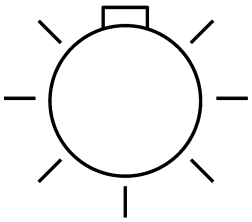
- When BCM detects a malfunction, back-up lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives back-up lamp warning signal, back-up lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Daytime Running Light Warning

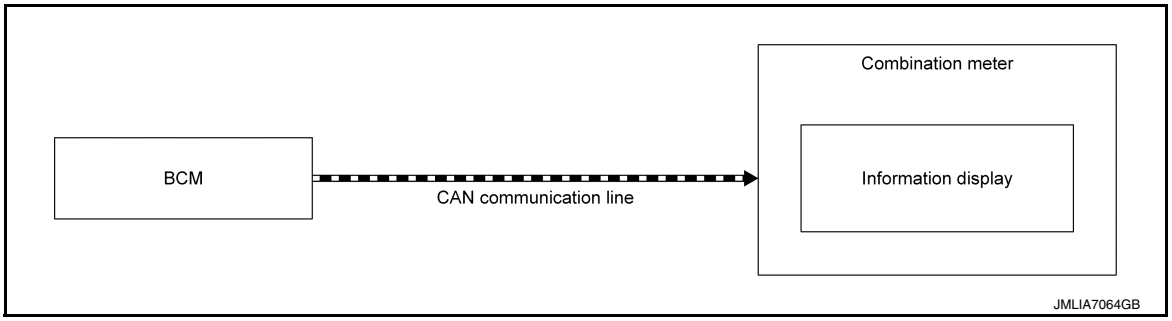
INFOID:0000000013549921

DESIGN/PURPOSE

Daytime running light warning warns the driver that there is a malfunction in daytime running light system.

Symbol	Message
 JMLIA7045ZZ	Check Left Daytime Running Light or Check Right Daytime Running Light

SYSTEM DIAGRAM



SIGNAL PATH

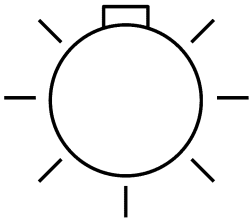
- When BCM detects a malfunction, daytime running light warning signal transmits to combination meter (via CAN communication).
- Combination meter receives daytime running light warning signal, daytime running light warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Exterior Lighting System Warning

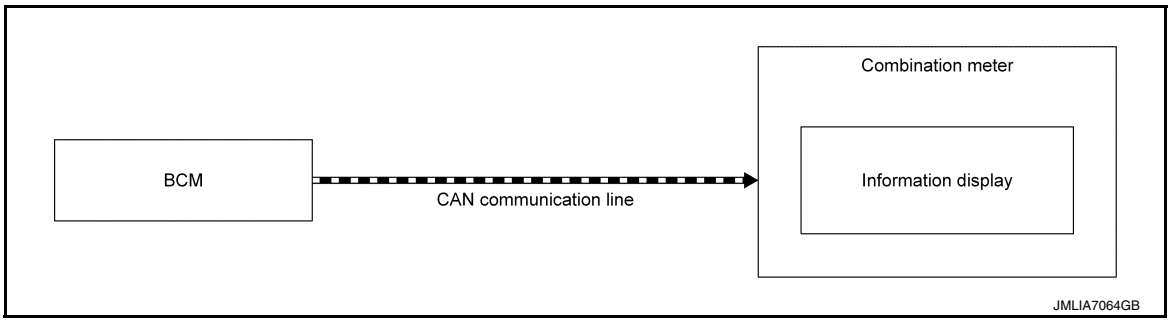
INFOID:0000000013549922

DESIGN/PURPOSE

Exterior lighting system warning warns the driver that there is a malfunction in exterior lighting system.

Symbol	Message
 JMLIA7045ZZ	Malfunction See Operator's Manual

SYSTEM DIAGRAM



SIGNAL PATH

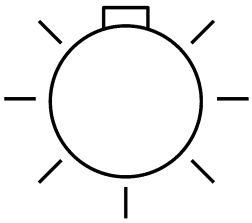
- When BCM detects a malfunction, exterior lighting system warning signal transmits to combination meter (via CAN communication).
- Combination meter receives exterior lighting system warning signal, exterior lighting system warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Front Fog Lamp Warning

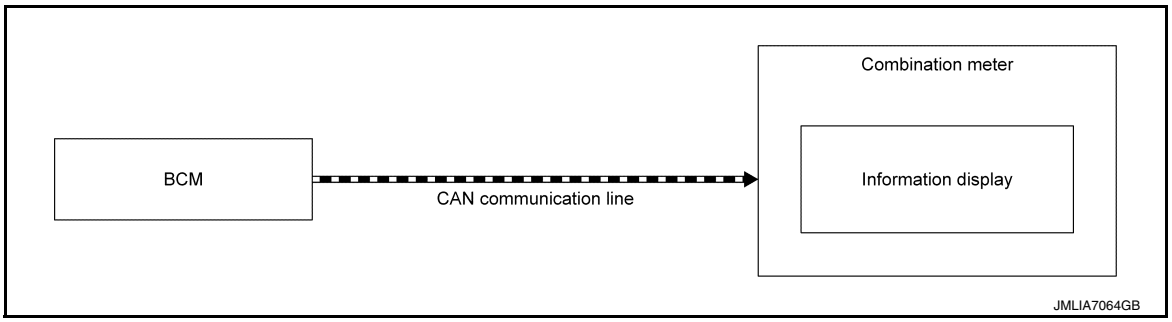
INFOID:0000000013549923

DESIGN/PURPOSE

Front fog lamp warning warns the driver that there is a malfunction in front fog lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Fog Lamp or Check Right Fog Lamp

SYSTEM DIAGRAM



SIGNAL PATH

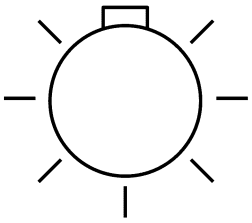
- When BCM detects a malfunction, front fog lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives front fog lamp warning signal, front fog lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Front Side Marker Lamp Warning

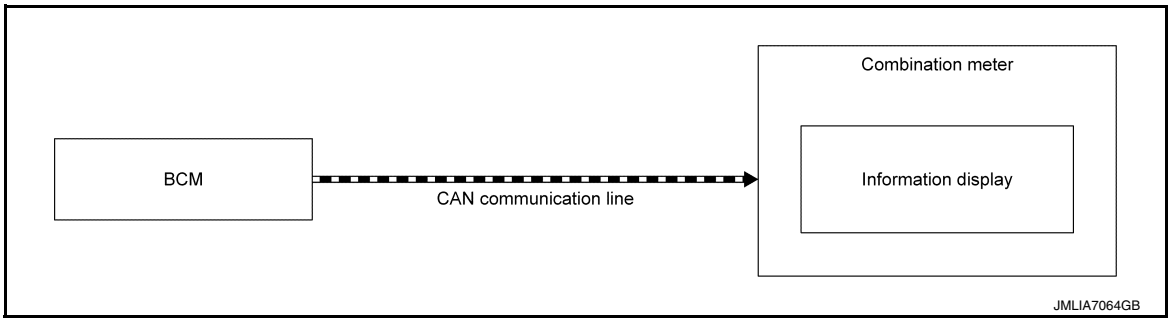
INFOID:0000000013688941

DESIGN/PURPOSE

Front side marker lamp warning warns the driver that there is a malfunction in parking, position, license plate, side marker and tail lamps system.

Symbol	Message
 JMLIA7045ZZ	Check Front Left Sidemarker Lamp or Check Front Right Sidemarker Lamp

SYSTEM DIAGRAM



SIGNAL PATH

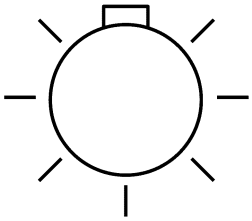
- When BCM detects a malfunction, front side marker lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives front side marker lamp warning signal, front side marker lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Front Turn Signal Lamp Warning

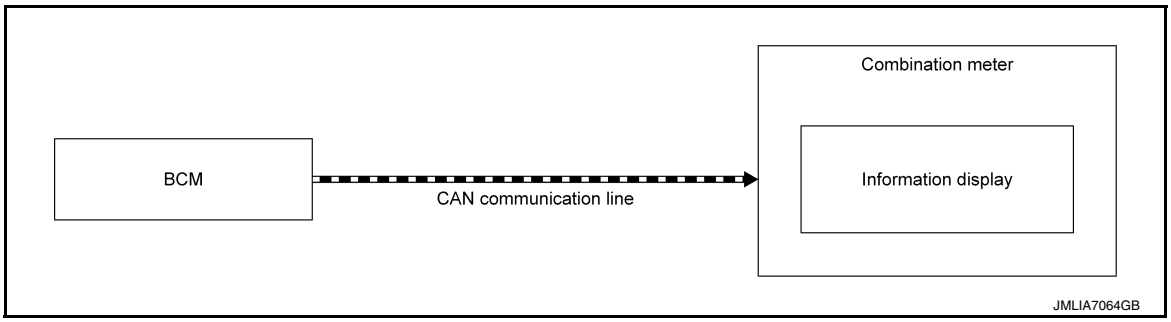
INFOID:0000000013549924

DESIGN/PURPOSE

Front turn signal lamp warning warns the driver that there is a malfunction in turn signal and hazard warning lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Front Left Turn Signal or Check Front Right Turn Signal

SYSTEM DIAGRAM



SIGNAL PATH

- When BCM detects a malfunction, front turn signal lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives front turn signal lamp warning signal, front turn signal lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Hazard Warning Lamp Malfunctioning

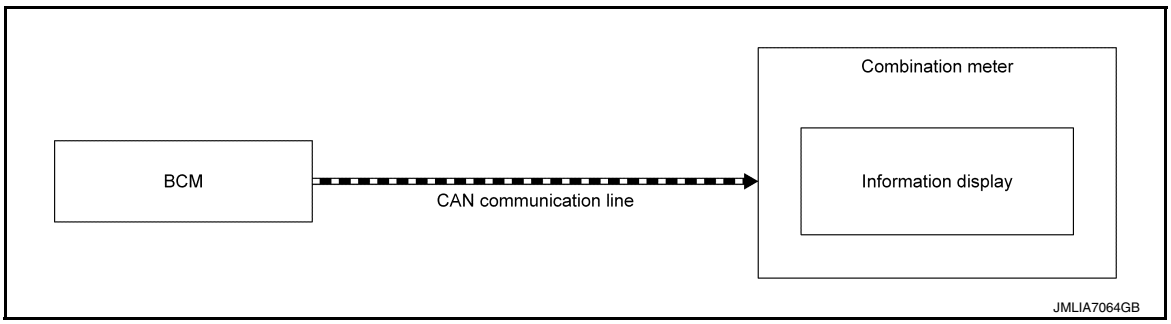
INFOID:0000000013549925

DESIGN/PURPOSE

Hazard warning lamp malfunction warning warns the driver that there is a malfunction in turn signal and hazard warning lamp system.

Symbol	Message
—	Hazard Warning Flashers Malfunctioning

SYSTEM DIAGRAM



SIGNAL PATH

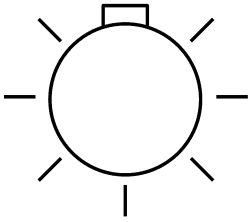
- When BCM detects a malfunction, hazard warning lamp malfunction warning signal transmits to combination meter (via CAN communication).
- Combination meter receives hazard warning lamp malfunction warning signal, Hazard warning lamp malfunction warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Headlamp High Beam Warning

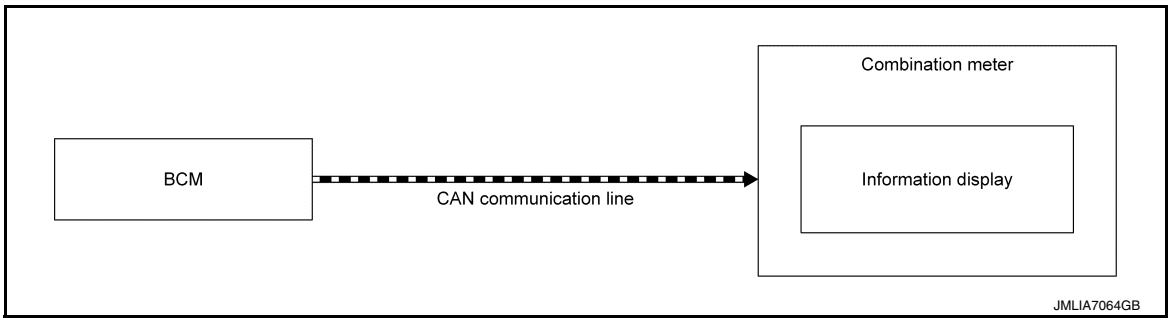
INFOID:0000000013549926

DESIGN/PURPOSE

Headlamp high beam warning warns the driver that there is a malfunction in headlamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left High Beam or Check Right High Beam

SYSTEM DIAGRAM



SIGNAL PATH

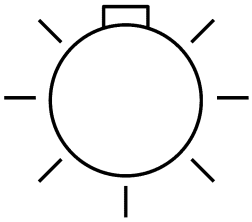
- When BCM detects a malfunction, headlamp high beam warning signal transmits to combination meter (via CAN communication).
- Combination meter receives headlamp high beam warning signal, headlamp high beam warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Headlamp Low Beam Warning

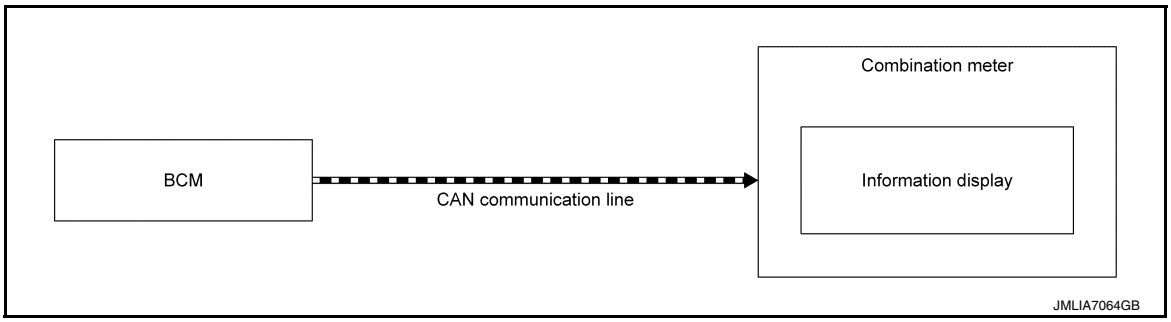
INFOID:0000000013549927

DESIGN/PURPOSE

Headlamp low beam warning warns the driver that there is a malfunction in headlamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Low Beam or Check Right Low Beam

SYSTEM DIAGRAM



SIGNAL PATH

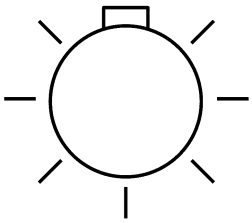
- When BCM detects a malfunction, headlamp low beam warning signal transmits to combination meter (via CAN communication).
- Combination meter receives headlamp low beam warning signal, headlamp low beam warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Hi-mounted Stop Lamp Warning

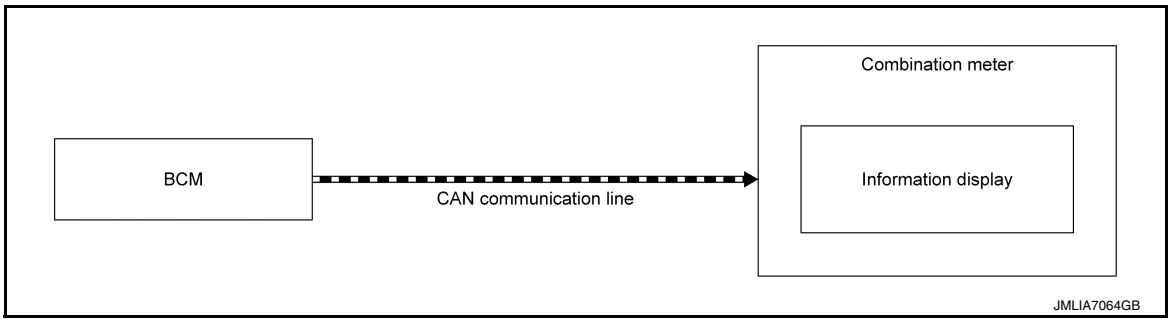
INFOID:0000000013549928

DESIGN/PURPOSE

Stop lamp warning warns the driver that there is a malfunction in stop lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Brake Lamp or Check Right Brake Lamp

SYSTEM DIAGRAM



SIGNAL PATH

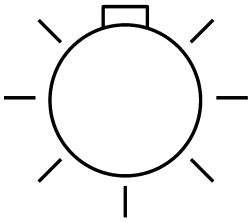
- When BCM detects a malfunction, stop lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives stop lamp warning signal, stop lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : License Plate Lamp Warning

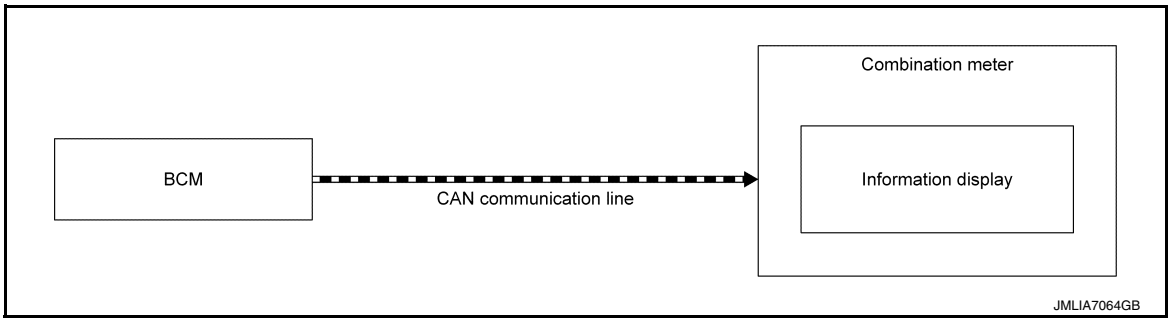
INFOID:0000000013549929

DESIGN/PURPOSE

License plate lamp warning warns the driver that there is a malfunction in parking, position, license plate and tail lamp system.

Symbol	Message
 JMLIA7045ZZ	License Plate Lamp

SYSTEM DIAGRAM



SIGNAL PATH

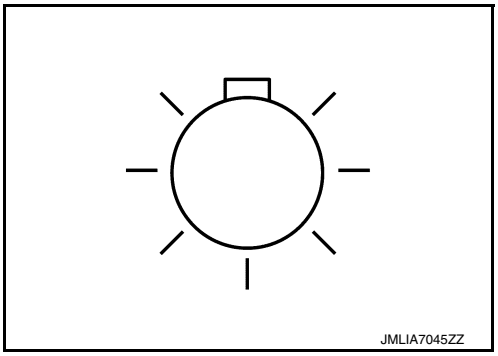
- When BCM detects a malfunction, license plate lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives license plate lamp warning signal, license plate lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Light Reminder Warning (Information Display)

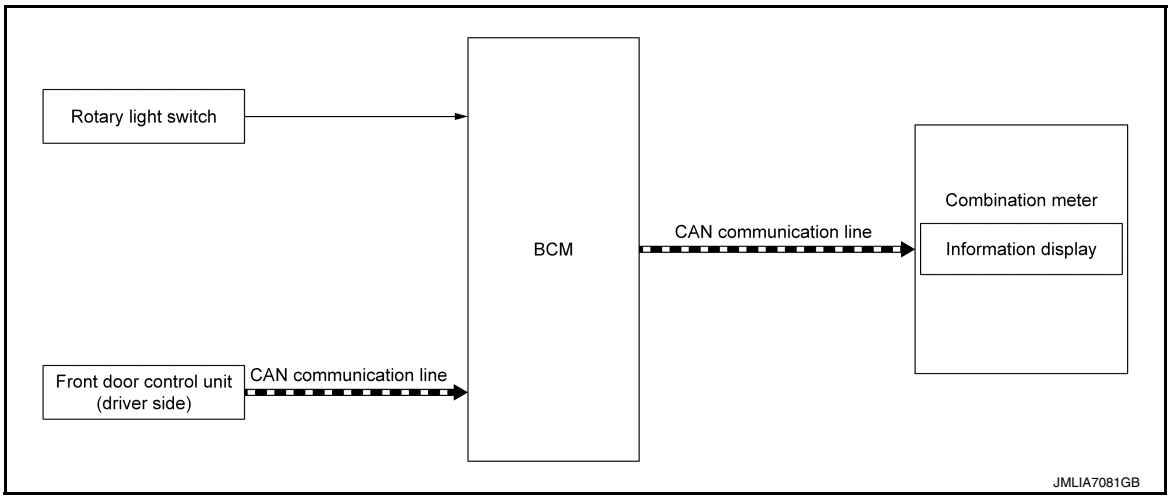
INFOID:0000000013549930

DESIGN/PURPOSE

When the driver is exiting the vehicle while ignition is in any position other than ON and lamps are ON, the light reminder warning (information display) displays a warning in the information display to alert the driver.

Symbol	Message
	Switch Off Lights

SYSTEM DIAGRAM



SIGNAL PATH

- BCM reads status of rotary light switch.
- BCM judges light reminder warning (information display) by rotary light switch signal and front driver side door condition.
- BCM receives front door switch signal from front door control unit (driver side) via CAN communication.
- BCM transmits buzzer output signal to combination meter via CAN communication.
- When combination meter receives the buzzer output signal, “Light reminder warning” pop-up screen appears in the information display.

WARNING/INDICATOR OPERATING CONDITION

When all of the following conditions are satisfied.

- Ignition switch other than ON
- Rotary light switch LO or POSITION
- Front door (driver side) OPEN

WARNING/INDICATOR CANCEL CONDITION

When any of the following conditions are satisfied.

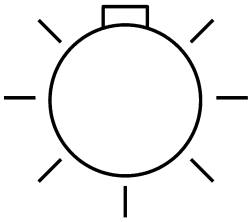
- Ignition ON
- Rotary light switch other than LO or POSITION
- Front door (driver side) CLOSE

INFORMATION DISPLAY (COMBINATION METER) : Parking Lamp Warning

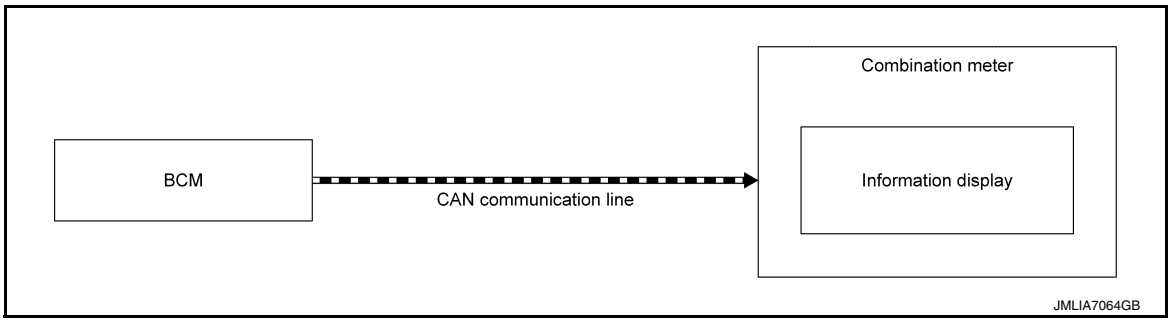
INFOID:0000000013549931

DESIGN/PURPOSE

Parking lamp warning warns the driver that there is a malfunction in Parking, position, license plate and tail lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Front Left Parking Lamp or Check Front Right Parking Lamp

SYSTEM DIAGRAM



SIGNAL PATH

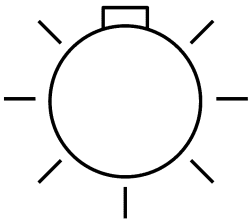
- When BCM detects a malfunction, parking lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives parking lamp warning signal, parking lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Rear Side Marker Lamp Warning

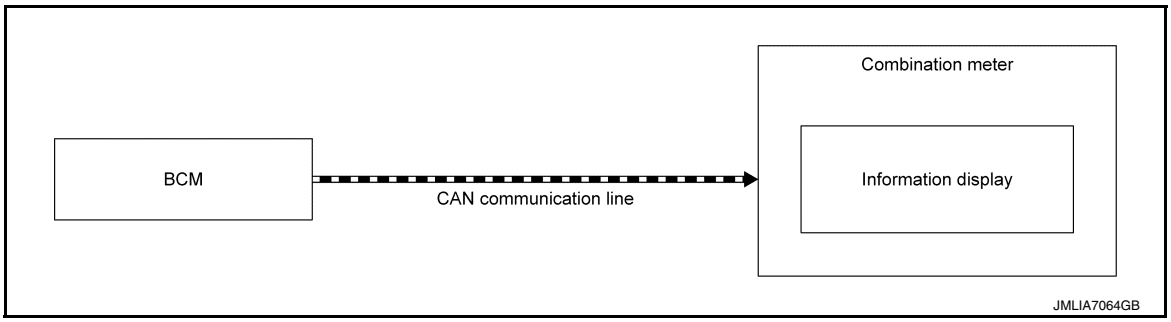
INFOID:0000000013688942

DESIGN/PURPOSE

Rear side marker lamp warning warns the driver that there is a malfunction in parking, position, license plate, side marker and tail lamps system.

Symbol	Message
 JMLIA7045ZZ	Check Rear Left Sidemarker Lamp or Check Rear Right Sidemarker Lamp

SYSTEM DIAGRAM



SIGNAL PATH

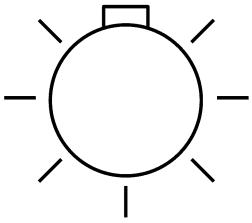
- When BCM detects a malfunction, rear side marker lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives rear side marker lamp warning signal, rear side marker lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Rear Turn Signal Lamp Warning

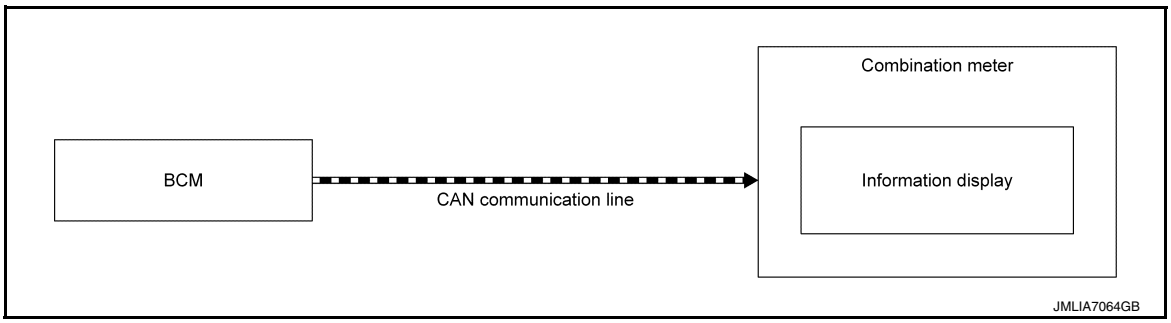
INFOID:0000000013549933

DESIGN/PURPOSE

Rear turn signal lamp warning warns the driver that there is a malfunction in turn signal and hazard warning lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Rear Left Turn Signal or Check Rear Right Turn Signal

SYSTEM DIAGRAM



SIGNAL PATH

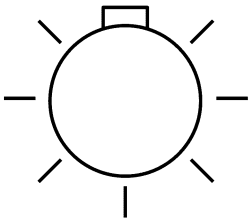
- When BCM detects a malfunction, rear turn signal lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives rear turn signal lamp warning signal, rear turn signal lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Side Turn Signal Lamp Warning

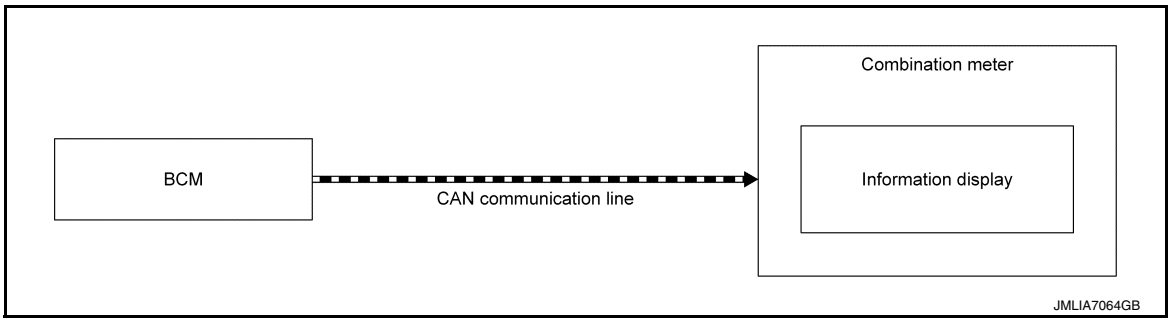
INFOID:0000000013549934

DESIGN/PURPOSE

Side turn signal lamp warning warns the driver that there is a malfunction in turn signal and hazard warning lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Mirror Turn Signal or Check Right Mirror Turn Signal

SYSTEM DIAGRAM



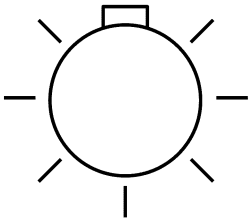
SIGNAL PATH

- When BCM detects a malfunction, side turn signal lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives side turn signal lamp warning signal, side turn signal lamp warning pop-up screen appears in the information display.

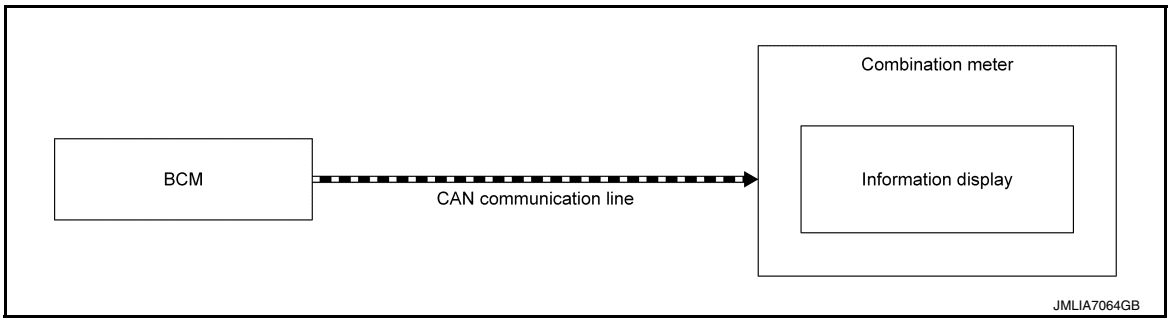
INFORMATION DISPLAY (COMBINATION METER) : Stop Lamp Warning *INFOID:0000000013549935*

DESIGN/PURPOSE

Stop lamp warning warns the driver that there is a malfunction in stop lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Brake Lamp or Check Right Brake Lamp

SYSTEM DIAGRAM



SIGNAL PATH

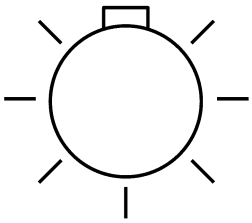
- When BCM detects a malfunction, stop lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives stop lamp warning signal, stop lamp warning pop-up screen appears in the information display.

INFORMATION DISPLAY (COMBINATION METER) : Tail Lamp Warning

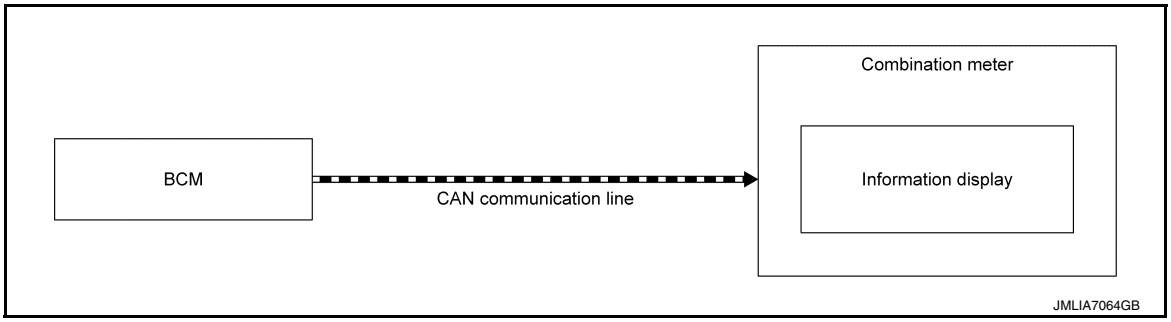
INFOID:0000000013549936

DESIGN/PURPOSE

Tail lamp warning warns the driver that there is a malfunction in tail lamp system.

Symbol	Message
 JMLIA7045ZZ	Check Left Tail Lamp or Check Right Tail Lamp

SYSTEM DIAGRAM



SIGNAL PATH

- When BCM detects a malfunction, tail lamp warning signal transmits to combination meter (via CAN communication).
- Combination meter receives tail lamp warning signal, tail lamp warning pop-up screen appears in the information display.

WARNING CHIME

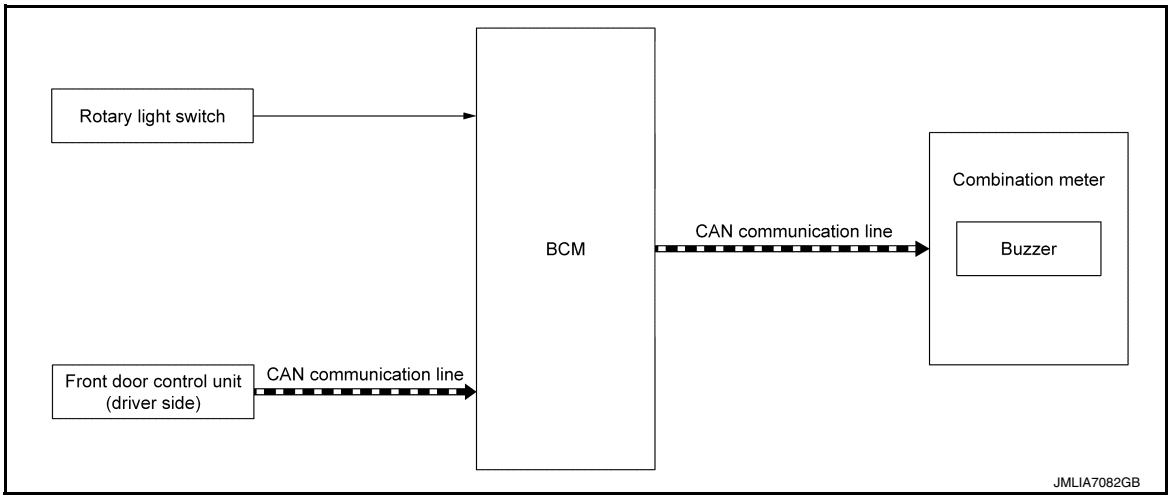
WARNING CHIME : Light Reminder Warning (Buzzer)

INFOID:0000000013549937

PURPOSE

Light reminder warning (buzzer) warns the driver of egression from the vehicle while ignition switch is OFF and lamp is in ON status.

SYSTEM DIAGRAM



SIGNAL PATH

- BCM reads status of rotary light switch.
- BCM judges light reminder warning (buzzer) by rotary light switch status and front driver side door condition.
- BCM receives front door switch signal from front door control unit (driver side) via CAN communication.
- BCM transmits buzzer output signal to combination meter via CAN communication.
- When combination meter receives buzzer output signal, combination meter sounds warning buzzer.

WARNING/INDICATOR OPERATING CONDITION

When all of the following conditions are satisfied.

- Ignition switch other than ON
- Rotary light switch LO or POSITION
- Front door (driver side) OPEN

WARNING/INDICATOR CANCEL CONDITION

When any of the following conditions are satisfied.

- Ignition ON
- Rotary light switch other than LO or POSITION
- Front door (driver side) CLOSE

WARNING/INDICATOR/CHIME LIST

WARNING/INDICATOR/CHIME LIST : Warning Lamp/Indicator Lamp

INFOID:0000000013549938

Item	Design	Reference
Dipped beam indicator lamp		For function, refer to MWI-21, "WARNING LAMPS/INDICATOR LAMPS : Dipped Beam Indicator Lamp".
Front fog lamp indicator lamp*		For function, refer to MWI-25, "WARNING LAMPS/INDICATOR LAMPS : Front Fog Lamp Indicator Lamp".
High beam indicator lamp		For function, refer to MWI-26, "WARNING LAMPS/INDICATOR LAMPS : High Beam Indicator Lamp".
Position lamp indicator lamp		For function, refer to MWI-30, "WARNING LAMPS/INDICATOR LAMPS : Position Lamp Indicator Lamp".
Turn signal indicator lamp		For function, refer to MWI-33, "WARNING LAMPS/INDICATOR LAMPS : Turn Signal Indicator Lamp".

*: With front fog lamp

WARNING/INDICATOR/CHIME LIST : Warning Chime

INFOID:0000000013549939

Item	Reference
Light reminder warning (buzzer)	Refer to EXL-351, "WARNING CHIME : Light Reminder Warning (Buzzer)".

WARNING/INDICATOR/CHIME LIST : Warning/Indicator (Information Display)

INFOID:0000000013549940

Item	Reference
Auto light system inoperative	Refer to EXL-338, "INFORMATION DISPLAY (COMBINATION METER) : Auto Light System Inoperative".
Back-up lamp warning	Refer to EXL-339, "INFORMATION DISPLAY (COMBINATION METER) : Back-up Lamp Warning".
Daytime running light warning	Refer to EXL-340, "INFORMATION DISPLAY (COMBINATION METER) : Daytime Running Light Warning".
Exterior lighting system warning	Refer to EXL-340, "INFORMATION DISPLAY (COMBINATION METER) : Exterior Lighting System Warning".
Front fog lamp warning*	Refer to EXL-341, "INFORMATION DISPLAY (COMBINATION METER) : Front Fog Lamp Warning".
Front side marker lamp warning	Refer to EXL-342, "INFORMATION DISPLAY (COMBINATION METER) : Front Side Marker Lamp Warning".
Front turn signal lamp warning	Refer to EXL-342, "INFORMATION DISPLAY (COMBINATION METER) : Front Turn Signal Lamp Warning".
Hazard warning lamp malfunctioning	Refer to EXL-343, "INFORMATION DISPLAY (COMBINATION METER) : Hazard Warning Lamp Malfunctioning".
Headlamp high beam warning	Refer to EXL-344, "INFORMATION DISPLAY (COMBINATION METER) : Headlamp High Beam Warning".
Headlamp low beam warning	Refer to EXL-344, "INFORMATION DISPLAY (COMBINATION METER) : Headlamp Low Beam Warning".
Hi-mounted stop lamp warning	Refer to EXL-345, "INFORMATION DISPLAY (COMBINATION METER) : Hi-mounted Stop Lamp Warning".
License plate lamp warning	Refer to EXL-346, "INFORMATION DISPLAY (COMBINATION METER) : License Plate Lamp Warning".
Light reminder warning (information display)	Refer to EXL-346, "INFORMATION DISPLAY (COMBINATION METER) : Light Reminder Warning (Information Display)".
Parking lamp warning	Refer to EXL-347, "INFORMATION DISPLAY (COMBINATION METER) : Parking Lamp Warning".
Rear side marker lamp warning	Refer to EXL-348, "INFORMATION DISPLAY (COMBINATION METER) : Rear Side Marker Lamp Warning".
Rear turn signal lamp warning	Refer to EXL-349, "INFORMATION DISPLAY (COMBINATION METER) : Rear Turn Signal Lamp Warning".
Side turn signal lamp warning	Refer to EXL-349, "INFORMATION DISPLAY (COMBINATION METER) : Side Turn Signal Lamp Warning".
Stop lamp warning	Refer to EXL-350, "INFORMATION DISPLAY (COMBINATION METER) : Stop Lamp Warning".
Tail lamp warning	Refer to EXL-351, "INFORMATION DISPLAY (COMBINATION METER) : Tail Lamp Warning".

*: With front fog lamp

DIAGNOSIS SYSTEM (HEADLAMP CONTROL UNIT LH)

CONSULT Function (H/L control module LH)

INFOID:0000000013549941

APPLICATION ITEMS

Diagnosis mode	Description
ECU Identification	Allows confirmation of headlamp control unit LH hardware version
Self Diagnostic Result	Displays the diagnosis results judged by headlamp control unit LH
Work Support	Performs setting for each function
Data Monitor	Displays input/output data for headlamp control unit LH in real time
Active Test	Transmits a drive signal to the load to check their operation

ECU IDENTIFICATION

Hardware version of headlamp control unit LH can be checked.

SELF DIAGNOSTIC RESULT

Self diagnostic result that is judged by headlamp control unit LH can be checked. Refer to EXL-365, "DTC Index".

- When “CRNT” is displayed on self diagnostic result, the system is presently malfunctioning.
- When “PAST” is displayed on self diagnostic result, system malfunction in the past is detected, but the system is presently normal.

WORK SUPPORT

Work item	Description
Adjustment of headlamps via diagnosis	**NOTE:** This item cannot be used.
Reset operating hours counter of FL lamp fan motor 1	**NOTE:** This item cannot be used.
Reset of operating hours counter of L pos DTRL turn sig	Resetting the hour counter of position lamp and daytime running light
Zero position adjustment	**NOTE:** This item cannot be used.

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item [Value/Unit]	Description
OUTPUT VOLTAGE CH 1 [V]	—
OUTPUT VOLTAGE CH 2 [V]	—
OUTPUT VOLTAGE CH 3 [V]	—
OUTPUT VOLTAGE CH 6 [V]	—
VHCL SPEED [km/h]	Displays the vehicle speed
On-board power supply voltage [V]	—
TURN SIGNAL LAMP [Off/Left on/Right on/Hazard]	Displays the turn signal lamp condition

Monitor item [Value/Unit]	Description
STEERING WHEEL ANGLE [°]	Displays the steering wheel angle value
HIGH BEAMS (CAN) [No/Yes]	Displays the headlamp (HI) condition
Right rear wheel speed [1/min]	—
Right front wheel speed [1/min]	—
Left rear wheel speed [1/min]	—
Left front wheel speed [1/min]	—
YAW RATE [°/s]	—
Status of circuit 15 [LOCK/OFF/ACC/On/Start]	—
LOW BEAMS [OFF/On]	Displays the headlamp (LO) condition
VOLTAGE AT CIRCUIT 30 [V]	Displays the battery power supply voltage
VOLTAGE AT CIRCUIT 30L [V]	Displays the headlamp power supply voltage
AVRG VEHICLE LV RR AXLE	**NOTE:** This item cannot be monitored.
LEFT REAR LEVEL SENSOR	**NOTE:** This item cannot be monitored.
AVRG VEHICLE LV FR AXLE	**NOTE:** This item cannot be monitored.
LEFT FRONT LEVEL SENSOR	**NOTE:** This item cannot be monitored.
Internal temperature sensor [°C]	—
Temperature sensor channel-1 [°C]	—
Temperature sensor channel-2 [°C]	—
Temperature sensor channel-3 [°C]	—
Temperature sensor channel-4 [°C]	—
Temperature sensor channel-5 [°C]	—
LEFT FR LAMP FAN MTR 1 [OFF/ON/Defect]	—
LIGHT DISTRIBUTION [Symm/RV/LV]	—
TOURIST MODE [NOT ACT/ACTIVE]	—
LEFT CORNERING ILLUMI	—
RIGHT CORNERING ILLUMI	—
HIGH BEAMS [0/1]	Displays the headlamp (HI) condition

Monitor item [Value/Unit]	Description
LEFT LT DSTRBTN ACT MTR	—
RIGHT LT DSTRBTN ACT MTR	—
ZERO POS ADJUSTMENT [OFF/On]	—
ZERO POS REAR AXLE [V]	—
ZERO POS FRONT AXLE [V]	—
OUTPUT VOLTAGE CH 4 [V]	—
OUTPUT VOLTAGE CH 5 [V]	—
OPERAT HOUR CNTR (FAN) [H]	—
LEFT ACT CRV ILLUMI MTR [uStep]	—
LEFT HL RANGE ADJ MTR [uStep]	—
OPERAT HOUR COUNT CH 1 [H]	—
OPERAT HOUR COUNT CH 2 [H]	—
OPERAT HOUR COUNT CH 3 [H]	—
OPERAT HOUR COUNT CH 4 [H]	—
OPERAT HOUR COUNT CH 5 [H]	—
OPERAT HOUR COUNT CH 6 [H]	—

ACTIVE TEST

Test item	Description
Check left front lamp unit fan motor 1	—
Test of left H/L range adjust act motor	—
Active curve illumination position sensor	—
Light distribution position sensor	—
Active curve illumination actuator motor	—
Light distribution actuator motor	—
Fan	—
Active curve illumination	—
Active curve illumination with steering angle	—
Intelligent light spread	—
Headlamp range adjustment	—

DIAGNOSIS SYSTEM (HEADLAMP CONTROL UNIT RH)

CONSULT Function (H/L control module RH)

INFOID:0000000013549942

APPLICATION ITEMS

Diagnosis mode	Description
ECU Identification	Allows confirmation of headlamp control unit RH hardware version
Self Diagnostic Result	Displays the diagnosis results judged by headlamp control unit RH
Work Support	Performs setting for each function
Data Monitor	Displays input/output data for headlamp control unit RH in real time
Active Test	Transmits a drive signal to the load to check their operation

ECU IDENTIFICATION

Hardware version of headlamp control unit RH can be checked.

SELF DIAGNOSTIC RESULT

Self diagnostic result that is judged by headlamp control unit RH can be checked. Refer to EXL-370, "DTC Index".

- When “CRNT” is displayed on self diagnostic result, the system is presently malfunctioning.
- When “PAST” is displayed on self diagnostic result, system malfunction in the past is detected, but the system is presently normal.

WORK SUPPORT

Work item	Description
Reset operating hours counter of FR lamp fan motor 1	**NOTE:** This item cannot be used.
Reset of operating hours counter of R pos DTRL turn sig	Resetting the hour counter of position lamp and daytime running light

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item [Value/Unit]	Description
OUTPUT VOLTAGE CH 1 [V]	—
OUTPUT VOLTAGE CH 2 [V]	—
OUTPUT VOLTAGE CH 3 [V]	—
OUTPUT VOLTAGE CH 6 [V]	—
VHCL SPEED [km/h]	Displays the vehicle speed
On-board power supply voltage [V]	—
TURN SIGNAL LAMP [Off/Left on/Right on/Hazard]	Displays the turn signal lamp condition
HIGH BEAMS (CAN) [No/Yes]	Displays the headlamp (HI) condition
Status of circuit 15 [LOCK/OFF/ACC/On/Start]	—

Monitor item [Value/Unit]	Description
LOW BEAMS [OFF/On]	Displays the headlamp (LO) condition
Internal temperature sensor [°C]	—
Temperature sensor channel-1 [°C]	—
Temperature sensor channel-2 [°C]	—
Temperature sensor channel-3 [°C]	—
Temperature sensor channel-4 [°C]	—
Temperature sensor channel-5 [°C]	—
VOLTAGE AT CIRCUIT 30 [V]	Displays the battery power supply voltage
VOLTAGE AT CIRCUIT 30L [V]	Displays the headlamp power supply voltage
RH FR LAMP FAN MOTOR 1 [OFF/On/Defect]	—
OPERAT HOUR COUNT CH 1 [H]	—
OPERAT HOUR COUNT CH 2 [H]	—
OPERAT HOUR COUNT CH 3 [H]	—
OPERAT HOUR COUNT CH 4 [H]	—
OPERAT HOUR COUNT CH 5 [H]	—
OPERAT HOUR COUNT CH 6 [H]	—
OPERAT HOUR CNTR (FAN) [H]	—
OUTPUT VOLTAGE CH 4 [H]	—
OUTPUT VOLTAGE CH 5 [H]	—
RH CURVE ILL ACT MOTOR [uStep]	—
RH HL RANGE ACT MOTOR [uStep]	—

ACTIVE TEST

Test item	Description
Check right front lamp unit fan motor 1	—
Check right front lamp unit fan motor 2	—
Light distribution position sensor	—

Test item	Description
Active curve illumination position sensor	—
Active curve illumination actuator motor	—
Light distribution actuator motor	—
Active curve illumination	—
Active curve illumination with steering angle	—
Intelligent light spread	—
Fan	—
Headlamp range adjustment	—

ECU DIAGNOSIS INFORMATION

BCM, FRONT DOOR CONTROL UNIT

List of ECU Reference

INFOID:0000000013549943

ECU	Reference
BCM	BCS-32, "Reference Value"
	BCS-50, "Fail-safe"
	BCS-51, "DTC Index"
Left front door control unit	DLK-50, "Reference Value"
	DLK-57, "Fail-safe"
	DLK-58, "DTC Inspection Priority Chart"
	DLK-60, "DTC Index"
Right front door control unit	DLK-62, "Reference Value"
	DLK-68, "Fail-safe"
	DLK-69, "DTC Inspection Priority Chart"
	DLK-70, "DTC Index"

HEADLAMP CONTROL UNIT LH

Reference Value

INFOID:0000000013549944

VALUES ON THE DIAGNOSIS TOOL

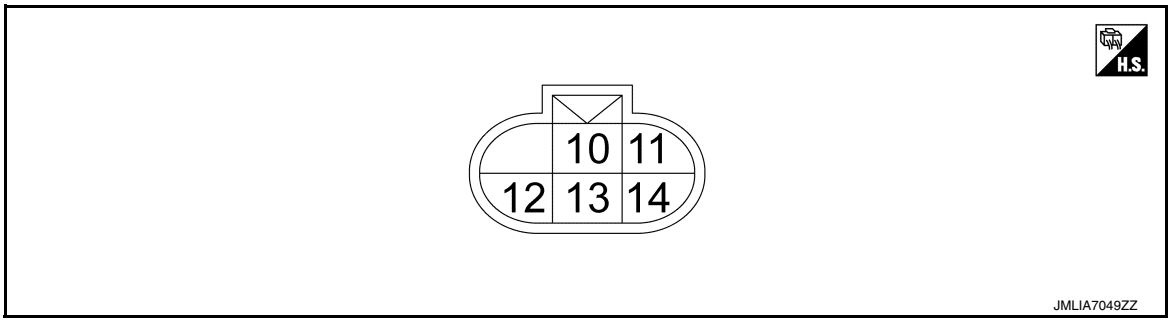
NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

CONSULT MONITOR ITEM

Monitor item	Condition		Value/Status (Approx.)
OUTPUT VOLTAGE CH 1	—		—
OUTPUT VOLTAGE CH 2	—		—
OUTPUT VOLTAGE CH 3	—		—
OUTPUT VOLTAGE CH 6	—		—
VHCL SPEED	While driving		Displays the vehicle speed calculated by headlamp control unit LH
On-board power supply voltage	Ignition switch ON		ERROR
TURN SIGNAL LAMP	Ignition switch ON	Turn signal lamp OFF	Off
		Turn signal lamp LH blinking	Left on
		Turn signal lamp RH blinking	Right on
		Turn signal lamp LH and RH blinking	Hazard
STEERING WHEEL ANGLE	When driving straight		0.0°
	Turning left		Positive value
	Turning right		Negative value
HIGH BEAMS (CAN)	Headlamp (HI)	ON	Yes
		OFF	No
Right rear wheel speed	—		—
Right front wheel speed	—		—
Left rear wheel speed	—		—
Left front wheel speed	—		—
YAW RATE	—		—
Status of circuit 15	—		—
LOW BEAMS	Headlamp (LO)	ON	ON
		OFF	OFF
VOLTAGE AT CIRCUIT 30	Ignition switch OFF		Battery voltage
VOLTAGE AT CIRCUIT 30L	Ignition switch ON		Battery voltage
AVRG VEHICLE LV RR AXLE	Vehicle rear height	Unloaded vehicle condition	11
		Low	Value decreases from the unladen status
LEFT REAR LEVEL SENSOR	Vehicle rear height	Unloaded vehicle condition	2.080
		Low	Value increases from the unladen status
AVRG VEHICLE LV FR AXLE	Vehicle front height	Unloaded vehicle condition	-4
		Low	Value decreases from the unladen status

Monitor item	Condition		Value/Status (Approx.)
LEFT FRONT LEVEL SENSOR	Vehicle front height	Unloaded vehicle condition	2.130
		Low	Value increases from the unladen status
Internal temperature sensor	—		—
Internal temperature sensor-1	—		—
Internal temperature sensor-2	—		—
Internal temperature sensor-3	—		—
Internal temperature sensor-4	—		—
Internal temperature sensor-5	—		—
LEFT FR LAMP FAN MTR 1	—		—
LIGHT DISTRIBUTION	—		—
TOURIST MODE	—		—
LEFT CORNERING ILLUMI	—		—
RIGHT CORNERING ILLUMI	—		—
HIGH BEAMS	Headlamp (HI)	ON	1
		OFF	0
LEFT LT DSTRBTN ACT MTR	—		—
RIGHT LT DSTRBTN ACT MTR	—		—
ZERO POS ADJUSTMENT	—		—
ZERO POS REAR AXLE	—		—
ZERO POS FRONT AXLE	—		—
OUTPUT VOLTAGE CH 4	—		—
OUTPUT VOLTAGE CH 5	—		—
OPERAT HOUR CNTR (FAN)	—		—
LEFT ACT CRV ILLUMI MTR	—		—
LEFT HL RANGE ADJ MTR	—		—
OPERAT HOUR COUNT CH 1	—		—
OPERAT HOUR COUNT CH 2	—		—
OPERAT HOUR COUNT CH 3	—		—
OPERAT HOUR COUNT CH 4	—		—
OPERAT HOUR COUNT CH 5	—		—
OPERAT HOUR COUNT CH 6	—		—

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
10 (BR)	Ground	Ground	Output	Ignition switch ON		0.8 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		13.6 V
12 (GR)	Ground	Parking lamp signal	Input	Parking lamp LH	OFF	0 V
					ON	Voltage should change when the lamp is turned ON
13 (L)	Ground	CAN-H	Input/ Output	—		—
14 (W)	Ground	CAN-L	Input/ Output	—		—

Fail-safe

INFOID:0000000013549945

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	Parking lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2859	11	Side marker lamp output signall (Side marker lamp output signal)	[CIRC SHORT TO GRND]	Front side marker lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	Daytime running light does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	—	—
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U118B	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Headlamp (HI/LO) does not lighting	Return to normal status
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—

*: Daytime running light, parking lamp, position lamp and front side marker lamp

DTC Index

INFOID:0000000013549946

×: Applicable

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Reference page
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-448
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-450
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-452
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-454
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-456
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	×	EXL-470
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[ACTUATOR STUCK]	×	

DTC		CONSULT screen items		Fail-safe	Reference page
		(Trouble diagnosis content)	[Malfunction type]		
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	×	EXL-473
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[ACTUATOR STUCK]	×	
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	×	EXL-476
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[ACTUATOR STUCK]	×	
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	—	EXL-479
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-481
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-484
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-487
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-490
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-493
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-496
U118B	00	Communication error (Communication error)	[NO SUBTYPE INFO]	×	EXL-501
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-503

HEADLAMP CONTROL UNIT RH

Reference Value

INFOID:0000000013549947

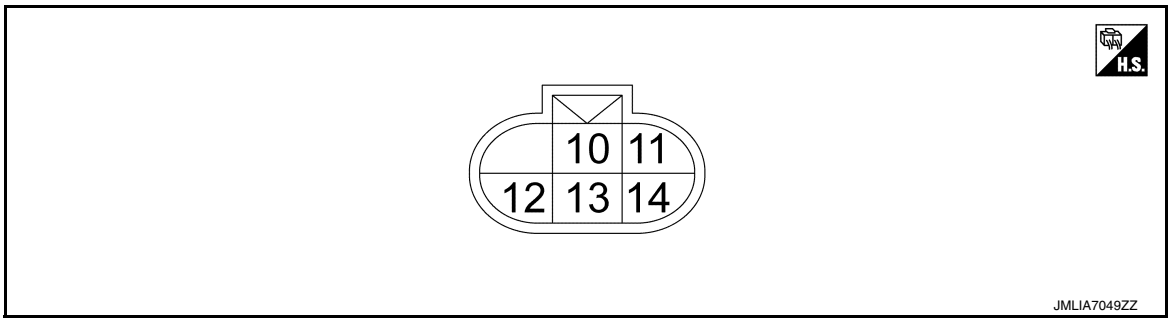
VALUES ON THE DIAGNOSIS TOOL

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

CONSULT MONITOR ITEM

Monitor item	Condition		Value/Status (Approx.)
OUTPUT VOLTAGE CH 1	—		—
OUTPUT VOLTAGE CH 2	—		—
OUTPUT VOLTAGE CH 3	—		—
OUTPUT VOLTAGE CH 6	—		—
VHCL SPEED	while driving		Displays the vehicle speed calculated by headlamp control unit
On-board power supply voltage	—		—
TURN SIGNAL LAMP	Ignition switch ON	Turn signal lamp OFF	Off
		Turn signal lamp LH blinking	Left on
		Turn signal lamp RH blinking	Right on
		Turn signal lamp LH and RH blinking	Hazard
HIGH BEAMS (CAN)	Headlamp (HI)	ON	Yes
		OFF	No
Status of circuit 15	—		—
LOW BEAMS	Headlamp (LO)	ON	ON
		OFF	OFF
Internal temperature sensor	—		—
Internal temperature sensor-1	—		—
Internal temperature sensor-2	—		—
Internal temperature sensor-3	—		—
Internal temperature sensor-4	—		—
Internal temperature sensor-5	—		—
VOLTAGE AT CIRCUIT 30	Ignition switch OFF		Battery voltage
VOLTAGE AT CIRCUIT 30L	Ignition switch ON		Battery voltage
RH FR LAMP FAN MOTOR 1	—		—
OPERAT HOUR COUNT CH 1	—		—
OPERAT HOUR COUNT CH 2	—		—
OPERAT HOUR COUNT CH 3	—		—
OPERAT HOUR COUNT CH 4	—		—
OPERAT HOUR COUNT CH 5	—		—
OPERAT HOUR COUNT CH 6	—		—
OPERAT HOUR CNTR (FAN)	—		—
OUTPUT VOLTAGE CH 4	—		—
OUTPUT VOLTAGE CH 5	—		—
RH CURVE ILL ACT MOTOR	—		—
RH HL RANGE ACT MOTOR	—		—

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
10 (BR)	Ground	Ground	Output	Ignition switch ON		0.8 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		13.6 V
12 (GR)	Ground	Parking lamp signal	Input	Parking lamp RH	OFF	0 V
					ON	Voltage should change when the lamp is turned ON
13 (L)	Ground	CAN-H	Input/ Output	—		—
14 (W)	Ground	CAN-L	Input/ Output	—		—

Fail-safe

INFOID:0000000013549948

DTC		CONSULT screen items		Fail-safe	Cancellation
		(Trouble diagnosis content)	[Malfunction type]		
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status

DTC		CONSULT screen items (Trouble diagnosis content)	CONSULT screen items [Malfunction type]	Fail-safe	Cancellation
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Exterior lamps* dim lighting	Return to normal status
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	Parking lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	Front side marker lamp does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	Daytime running light does not lighting	Return to normal status
	13		[CIRC OPEN]		Return to normal status
	49		[INTERNAL ELECTRONIC FAILURE]		Return to normal status
	4B		[OVER TEMPERATURE]		Return to normal status
	55		[NOT CONFIURED]		Return to normal status

DTC		CONSULT screen items		Fail-safe	Cancellation
		(Trouble diagnosis content)	[Malfunction type]		
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	—	—
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—
U118A	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Headlamp (HI/LO) does not lighting	Return to normal status
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	—

*: Daytime running light, parking lamp, position lamp and front side marker lamp

DTC Index

INFOID:0000000013549949

×: Applicable

DTC		CONSULT screen items		Fail-safe	Reference page
		(Trouble diagnosis content)	[Malfunction type]		
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-448
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-450
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-452

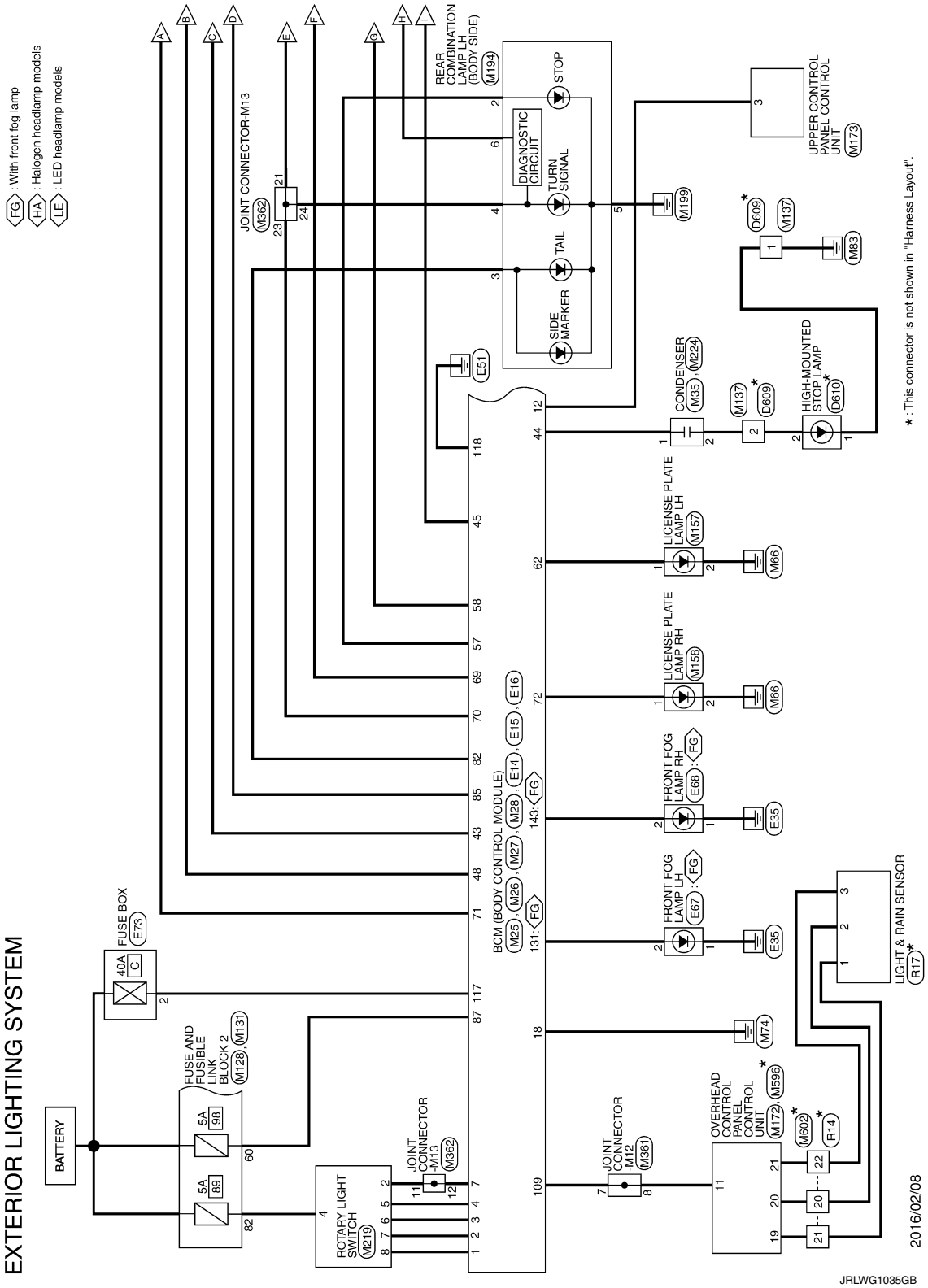
DTC		CONSULT screen items		Fail-safe	Reference page
		(Trouble diagnosis content)	[Malfunction type]		
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-454
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	×	EXL-456
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	×	EXL-471
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[ACTUATOR STUCK]	×	
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	×	EXL-474
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[ACTUATOR STUCK]	×	
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	×	EXL-477
	13		[CIRC OPEN]	×	
	49		[INTERNAL ELECTRONIC FAILURE]	×	
	4B		[OVER TEMPERATURE]	×	
	55		[ACTUATOR STUCK]	×	
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	—	EXL-479
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-482
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-485
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-488
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-491
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-494
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-497
U118A	00	Communication error (Communication error)	[NO SUBTYPE INFO]	×	EXL-499
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	—	EXL-504

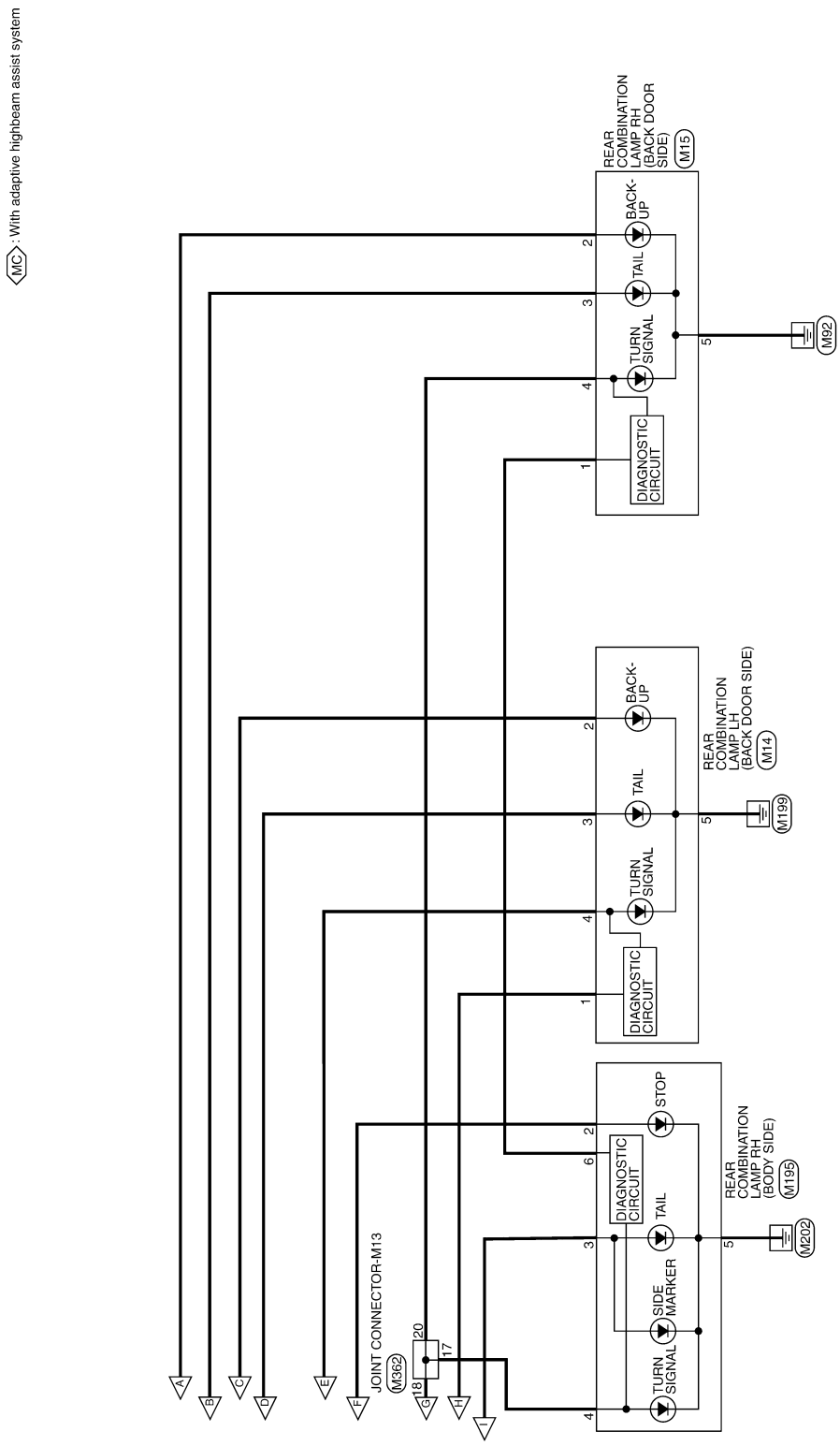
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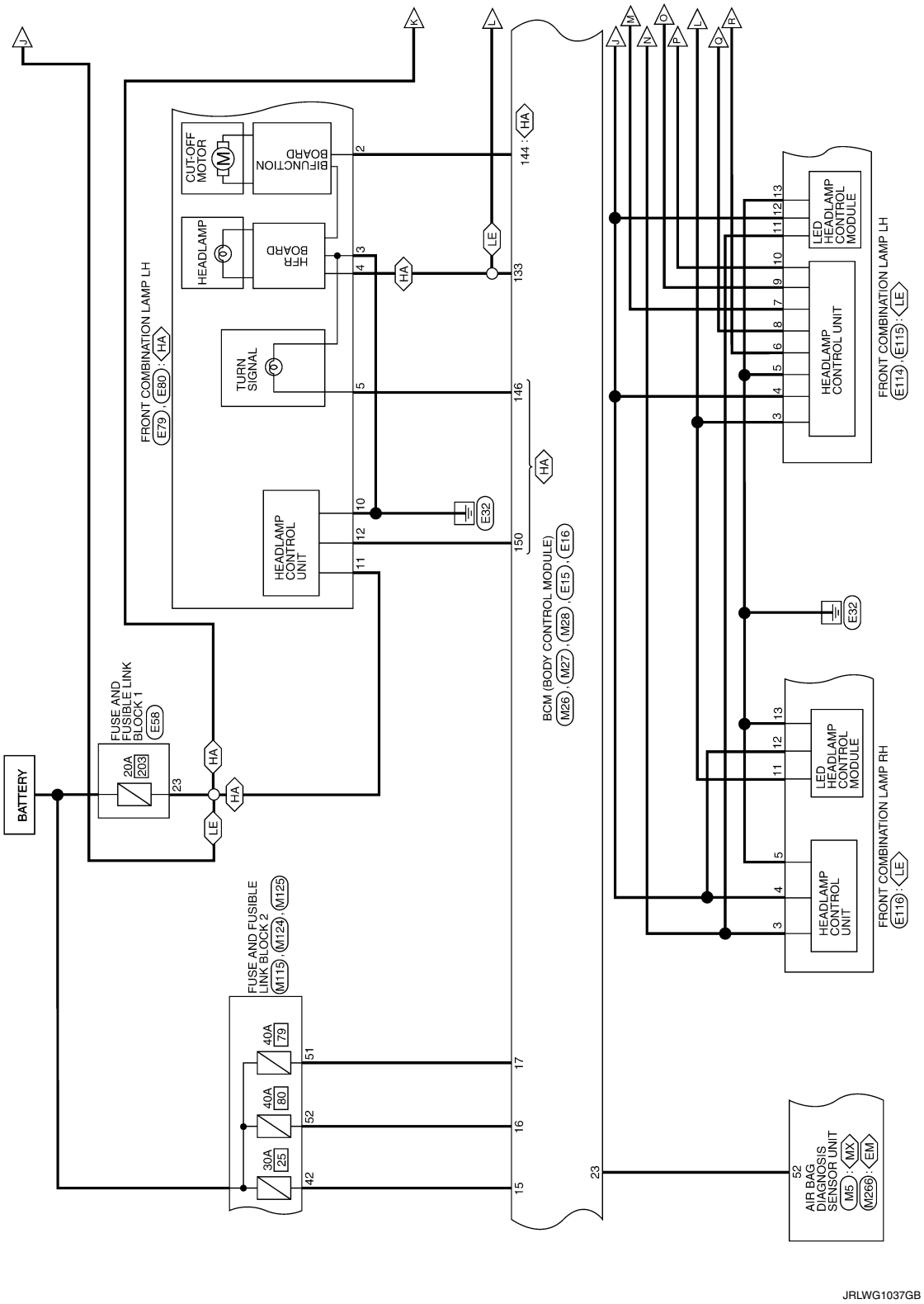
EXTERIOR LIGHTING SYSTEM

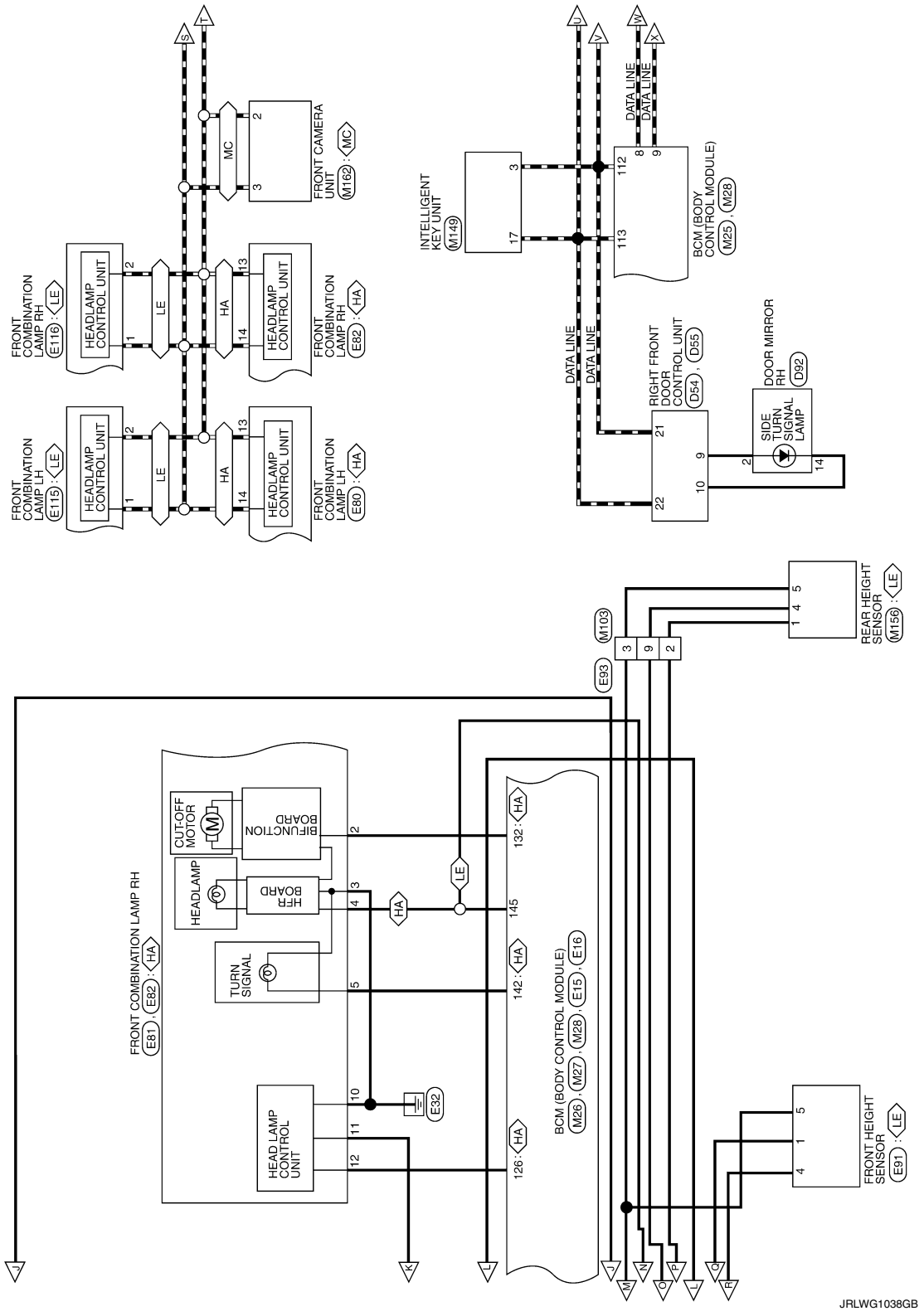
Wiring Diagram

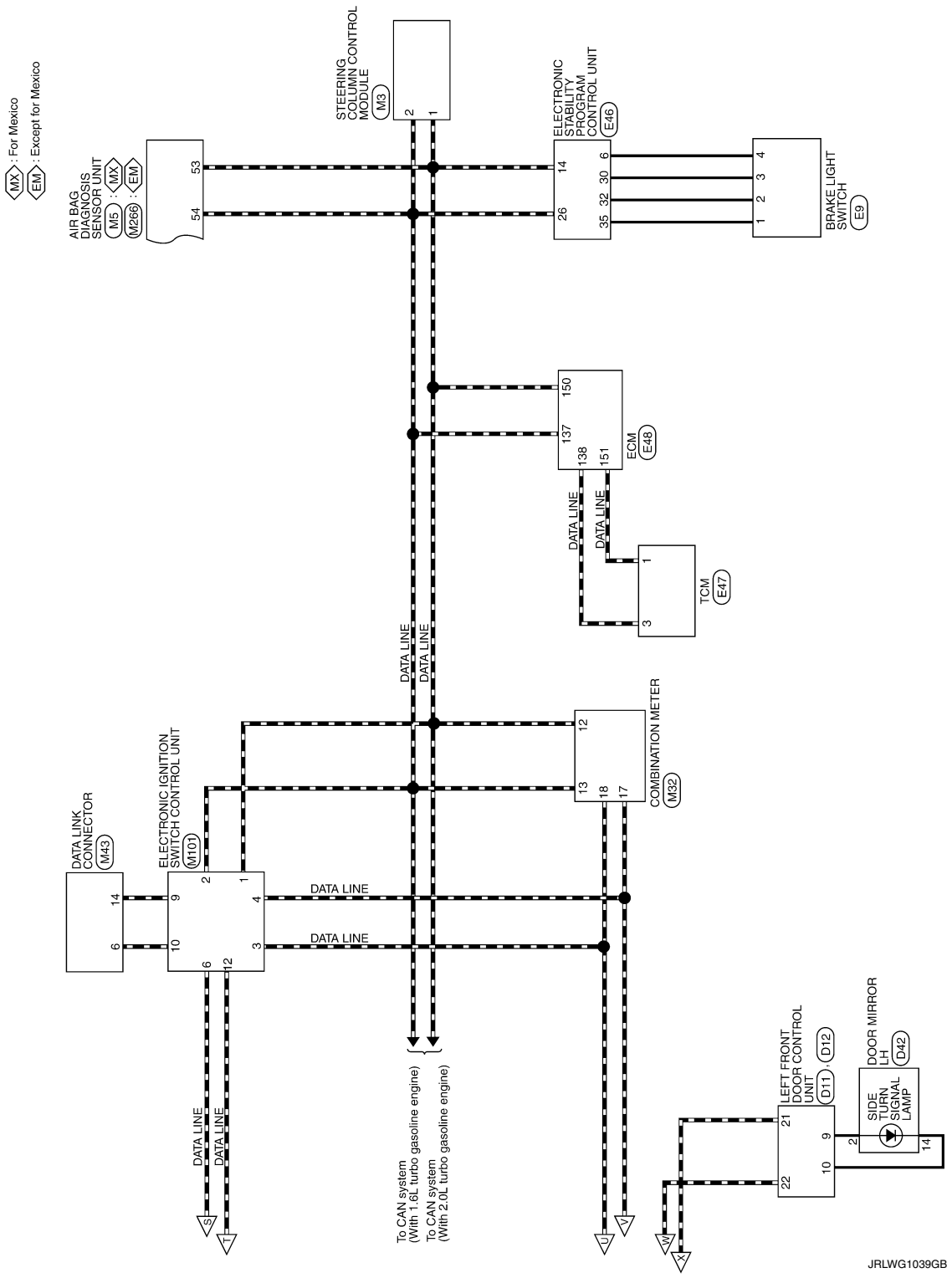
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MC : With adaptive highbeam assist system
REAR COMBINATION LAMP RH (BACK DOOR SIDE) M15
BACK-UP
TAIL
TURN SIGNAL
DIAGNOSTIC CIRCUIT
M92
REAR COMBINATION LAMP LH (BACK DOOR SIDE) M14
M199
REAR COMBINATION LAMP RH (BODY SIDE) M195
STOP
SIDE MARKER
M202
JOINT CONNECTOR-M13 M362
20
18
17
JRLWG1036GB


FRONT COMBINATION LAMP LH
E79
E80
HA
CUT-OFF MOTOR
BIFUNCTION BOARD
HEADLAMP
HI/FR BOARD
TURN SIGNAL
HEADLAMP CONTROL UNIT
LE
144 : HA
133
146
150
BCM (BODY CONTROL MODULE)
M26
M27
M28
E15
E16
E32
LED HEADLAMP CONTROL MODULE
HEADLAMP CONTROL UNIT
FRONT COMBINATION LAMP LH
E114
E115
FRONT COMBINATION LAMP RH
E116
BATTERY
FUSE AND FUSIBLE LINK BLOCK 1
E58
20A 203
FUSE AND FUSIBLE LINK BLOCK 2
M113
M124
M125
40A 79
40A 80
30A 25
AIR BAG DIAGNOSIS SENSOR UNIT
M5
M266
MX
EM
JRLWG1037GB


FRONT COMBINATION LAMP RH (E81), (E82) : HA
FRONT COMBINATION LAMP LH (E115) : LE
FRONT COMBINATION LAMP LH (E80) : HA
FRONT COMBINATION LAMP RH (E116) : LE
FRONT COMBINATION LAMP RH (E82) : HA
HEADLAMP CONTROL UNIT
LE
HA
MC
FRONT CAMERA UNIT (M162) : MC
INTELLIGENT KEY UNIT (M149)
DATA LINE
BCM (BODY CONTROL MODULE) (M25), (M28)
RIGHT FRONT DOOR CONTROL UNIT (D54), (D55)
DOOR MIRROR RH (D92)
SIDE TURN SIGNAL LAMP
REAR HEIGHT SENSOR (M156) : LE
(M103)
(E93)
BIFUNCTION BOARD
HFJ3 BOARD
CUT-OFF MOTOR
HEADLAMP
TURN SIGNAL
HEAD LAMP CONTROL UNIT
(E32)
BCM (BODY CONTROL MODULE) (M26), (M27), (M28), (E15), (E16)
FRONT HEIGHT SENSOR (E91) : LE
JRLWG1038GB


MX : For Mexico
EM : Except for Mexico
AIR BAG DIAGNOSIS SENSOR UNIT
M5 : MX
M266 : EM
STEERING COLUMN CONTROL MODULE M3
ELECTRONIC STABILITY PROGRAM CONTROL UNIT E46
BRAKE LIGHT SWITCH E9
ECM E48
TCM E47
DATA LINE
COMBINATION METER M32
DATA LINK CONNECTOR M43
ELECTRONIC IGNITION SWITCH CONTROL UNIT M101
To CAN system (With 1.6L turbo gasoline engine)
To CAN system (With 2.0L turbo gasoline engine)
LEFT FRONT DOOR CONTROL UNIT D11, D12
DOOR MIRROR LH D42
SIDE TURN SIGNAL LAMP
JRLWG1039GB

EXTERIOR LIGHTING SYSTEM

Connector No.	D11
Connector Name	LEFT FRONT DOOR CONTROL UNIT
Connector Type	MB_A00254005981

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	AUOTMATIC DIMMING MIRROR PWR
2	W	GND
3	B	DOOR MIRROR DEFOGGER GROUND
4	L	DOOR MIRROR DEFOGGER POWER SUPPLY
5	BR	BSW INDICATOR GND
6	P	ADJUSTMENTMOTOR POWER
7	L	VERTICAL INCLINATION CONT
8	Y	HORIZONTAL INCLINATION CONT
9	G	TURN SIG LAMP POWER
10	V	TURN SIG LAMP GND

Connector No.	D42
Connector Name	DOOR MIRROR LH
Connector Type	TH24MW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	G	-
4	BR	-
5	B	-
6	L	-
7	L	-
8	O	-
9	O	-
10	L	-
11	Y	-
12	P	-
13	W	-
14	V	-
16	V	-
17	SHIELD	-
18	W	-
19	B	-
21	G	-
22	GR	-
23	B	-
24	BR	-

Connector No.	D54
Connector Name	RIGHT FRONT DOOR CONTROL UNIT
Connector Type	MB_A00254005981

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	AUOTMATIC DIMMING MIRROR PWR
2	Y	GND
3	G	DOOR MIRROR DEFOGGER GROUND
4	L	DOOR MIRROR DEFOGGER POWER SUPPLY
5	BR	BSW INDICATOR GND
6	V	ADJUSTMENTMOTOR POWER
7	P	VERTICAL INCLINATION CONT
8	W	HORIZONTAL INCLINATION CONT
9	GR	TURN SIG LAMP POWER
10	O	TURN SIG LAMP GND

Connector No.	D92
Connector Name	DOOR MIRROR RH
Connector Type	TH24MW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	GR	-
4	L	-
5	B	-
6	L	-
7	L	-
8	B	-
9	B	-
10	P	-
11	W	-
12	V	-
13	Y	-
14	O	-
16	P	-
17	SHIELD	-
18	W	-
19	G	-
21	BR	-
22	O	-
23	Y	-
24	O	-

Connector No.	D12
Connector Name	LEFT FRONT DOOR CONTROL UNIT
Connector Type	MB_A00254006281

Terminal No.	Color Of Wire	Signal Name [Specification]
21	BR	BODY CAN 2-L
22	R	BODY CAN 2-H
23	L	ROTARY CATCH SIGNAL
24	BR	GROUND
25	R	BATTERY POWER SUPPLY

Connector No.	D55
Connector Name	RIGHT FRONT DOOR CONTROL UNIT
Connector Type	MB_A00254006281

Terminal No.	Color Of Wire	Signal Name [Specification]
21	BR	BODY CAN 1-L
22	R	BODY CAN 1-H
24	BR	GROUND
25	R	BATTERY POWER SUPPLY

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EXTERIOR LIGHTING SYSTEM

Connector No.	D609
Connector Name	WIRE TO WIRE
Connector Type	TK02FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	W	-

Connector No.	D610
Connector Name	HIGH MOUNTED STOP LAMP
Connector Type	TK02FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	E9
Connector Name	BRAKE LIGHT SWITCH
Connector Type	MB_A0325459828

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	L	-
3	V	-
4	B	-

Connector No.	E14
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A0235458926

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
115	R	BAT (VIA DECOUPLING RELAY)
117	R	BAT (VIA DECOUPLING RELAY)
118	BR	GND

Connector No.	E15
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A1665400081

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
119	V	RR WASHER CONT
120	GR	FR WASHER CONT
121	W	BRAKE PEDAL
122	Y	SPARY NOZZLE HOSE HEATER POWER SUPPLY
123	G	INJECTION RELAY CONT
124	BR	HOOD SWITCH STATUS 1
125	B	K-LINE MOTORST
126	GR	PARKING LAMP LH
129	G	FRONT WIPER STOP POSITION
131	Y	FRONT FOG LAMP LH
132	O	HIGH BEAM LH
133	L	LOW BEAM RH [With halogen lamp]
133	Y	LOW BEAM RH [With LED lamp]
134	BR	WASHER LEVEL SW GND
135	P	HORN CONT
136	R	FR WIPER RELAY CONT
137	V	FR WIPER HI/LO RELAY CONT
138	G	BRAKE FLUID LEVEL SW SIG
139	L	WASHER LEVEL SW SIG
140	Y	HOOD SWITCH STATUS 2
141	R	WARM START
142	V	FRONT TURN SIGNAL LH

Connector No.	E16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A1665400181

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
143	Y	FRONT FOG LAMP RH
144	W	HIGH BEAM RH
145	GR	LOW BEAM LH
146	P	FRONT TURN SIGNAL RH
148	V	FR BRAKE WEAR SENSOR RH
150	GR	PARKING LAMP RH
152	L	LIN (BAT SENSOR)
154	Y	HEADLAMP AIMING RH
157	O	SSK STAT
158	R	COOLANT LEVEL SW SIG
159	BR	COOLANT LEVEL SW GND
161	P	AMBIENT SENSOR GND
162	G	AMBIENT SENSOR SIG
164	O	BRAKE FLUID LEVEL SW GND
165	V	HEADLAMP AIMING LH
166	R	DECOUPLING RELAY CONT

Connector No.	E46
Connector Name	ELECTRONIC STABILITY PROGRAM CONTROL UNIT
Connector Type	MB_A2465400581

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	MOTOR POWER SUPPLY
2	W	BRAKE PEDAL
4	P	RIGHT FRONT AXLE RPM SENSOR SIGNAL
5	GR	BRAKE VACUUM SENSOR POWER SUPPLY

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EXTERIOR LIGHTING SYSTEM

6	B	BRAKE LIGHT SWITCH-L
7	R	BATTERY POWER SUPPLY
8	Y	LEFT FRONT AXLE RPM SENSOR SIGNAL
10	O	STANDSTILL CONTROL (SSC) STATUS
12	P	BRAKE VACUUM SENSOR SIGNAL
13	BR	GROUND (MOTOR)
14	G	CAN-L
16	B	RIGHT FRONT AXLE RPM SENSOR POWER SUPPLY
17	Y	RIGHT REAR AXLE RPM SENSOR POWER SUPPLY
18	BR	LEFT REAR AXLE RPM SENSOR SIGNAL
19	W	LEFT FRONT AXLE RPM SENSOR POWER SUPPLY
23	B	BRAKE VACUUM SENSOR GROUND
25	P	VALVE RELAY POWER SUPPLY
26	W	CAN-H
28	R	BATTERY POWER SUPPLY
29	P	RIGHT REAR AXLE RPM SENSOR SIGNAL
30	V	BRAKE LIGHT SWITCH-H
31	GR	LEFT REAR AXLE RPM SENSOR POWER SUPPLY
32	L	BRAKE LIGHT SWITCH GROUND
35	R	BRAKE LIGHT SWITCH POWER SUPPLY
38	B	GROUND (VALVE)

Connector No.	E47
Connector Name	TCM
Connector Type	MB_A2465450026

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	CAN-L
2	V	NOT P
3	GR	CAN-H
5	W	BATTERY POWER SUPPLY

Connector No.	E48
Connector Name	ECM
Connector Type	MB_A0075406981

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
97	R	POWER SUPPLY (ECM)
98	BR	ECM GROUND
99	V	POWER SUPPLY (ECM)
100	BR	ECM GROUND
101	R	POWER SUPPLY (ECM)
102	B	ECM GROUND
103	L	COOLING FAN CONTROL SIGNAL
104	R	SENSOR POWER SUPPLY (ACCELERATOR PEDAL POSITION SENSOR 1)
105	G	SENSOR POWER SUPPLY (ACCELERATOR PEDAL POSITION SENSOR 2)
106	BR	SENSOR GROUND (ACCELERATOR PEDAL POSITION SENSOR 1)
111	B	IGNITION SIGNAL
112	Y	POWER SUPPLY (BATTERY)
116	W	STARTER RELAY-L
119	GR	SENSOR GROUND (ACCELERATOR PEDAL POSITION SENSOR 2)
120	O	SENSOR GROUND
122	R	HOT START SIGNAL
123	GR	MOTOR RELAY CONTROL SIGNAL
127	O	FUEL PUMP ON SIGNAL
132	G	ACCELERATOR PEDAL POSITION SENSOR 1
136	Y	POWERTRAIN SENSOR CAN-H
137	W	CAN-H
138	GR	POWERTRAIN CAN-H
141	B	WATER PUMP RELAY CONTROL SIGNAL
145	W	ACCELERATOR PEDAL POSITION SENSOR 2
146	G	FUEL TANK PRESSURE SENSOR
147	L	CRASH SIGNAL
148	W	STARTER RELAY-H
149	B	POWERTRAIN SENSOR CAN-L
150	G	CAN-L
151	L	POWERTRAIN CAN-L
152	V	EVAP CANISTER VENT CONTROL VALVE
153	BR	EVAP PURGE CONTROL VALVE

Connector No.	E58
Connector Name	FUSE AND FUSIBLE LINK BLOCK 1
Connector Type	MB_A0065450901

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
23	B	-

Connector No.	E67
Connector Name	FRONT FOG LAMP LH
Connector Type	MB_A0405456328

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	Y	-

Connector No.	E68
Connector Name	FRONT FOG LAMP RH
Connector Type	MB_A0405456328

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	Y	-

Connector No.	E73
Connector Name	FUSE BOX
Connector Type	MB_A0035462340

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	Y	-

Connector No.	E79
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS08FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	R	-

Terminal No.	Color Of Wire	Signal Name [Specification]
2	W	-
3	B	-
4	L	-
5	P	-
6	V	-
7	B	-
8	G	-

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EXTERIOR LIGHTING SYSTEM

Connector No.	E80
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS06FGY-PR

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10	BR	GROUND
11	R	BATTERY POWER SUPPLY
12	GR	PARKING LAMP SIGNAL
13	L	CAN-H
14	W	CAN-L

Connector No.	E81
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS08FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	O	-
3	B	-
4	GR	-
5	V	-
6	Y	-
7	B	-
8	P	-

Connector No.	E82
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS06FGY-PR

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10	BR	GROUND
11	R	BATTERY POWER SUPPLY
12	GR	PARKING LAMP SIGNAL
13	L	CAN-H
14	W	CAN-L

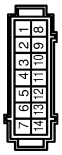
Connector No.	E91
Connector Name	FRONT HEIGHT SENSOR
Connector Type	MB_A2105403681

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
4	L	-
5	R	-

Connector No.	E93
Connector Name	WIRE TO WIRE
Connector Type	MB_A2205453728

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	BR	-
3	P	-
4	B	-
6	SHIELD	-
9	G	-
10	R	-
11	W	-

Connector No.	E114
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS06FGY-PR

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
6	L	FRONT HEIGHT SENSOR SIGNAL
7	P	HEIGHT SENSOR POWER SUPPLY
8	BR	FRONT HEIGHT SENSOR GROUND
9	G	REAR HEIGHT SENSOR SINGAL
10	BR	REAR HEIGHT SENSOR GROUND

Connector No.	E115
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS08FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	CAN-H
2	L	CAN-L
3	Y	HEADLAMP POWER SUPPLY
4	V	BATTERY POWER SUPPLY
5	B	GROUND
11	GR	HEADLAMP POWER SUPPLY
12	BR	BATTERY POWER SUPPLY
13	B	GROUND

Connector No.	E116
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS08FGY-PR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	CAN-H
2	L	CAN-L
3	GR	HEADLAMP POWER SUPPLY
4	BR	BATTERY POWER SUPPLY
5	B	GROUND
11	Y	HEADLAMP POWER SUPPLY
12	BR	BATTERY POWER SUPPLY
13	B	GROUND

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EXTERIOR LIGHTING SYSTEM

Connector No.	M3
Connector Name	STEERING COLUMN CONTROL MODULE
Connector Type	MB_A2045401281

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	CAN-L (CHASIS)
2	W	CAN-H (CHASIS)
3	BR	GND
4	R	KI.30G
6	R	KI.30
7	BR	GND
8	L	AB1+
9	Y	AB1-
10	V	AB2+
11	G	AB2-

Connector No.	M5
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	MB_A0095405681

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	BUMPER SENSOR RH GROUND
2	W	BUMPER SENSOR RH SIGNAL
3	B	BUMPER SENSOR LH SIGNAL
4	W	BUMPER SENSOR LH GROUND
9	L/G	POP-UP ENGINE HOOD ACTUATOR RH (-)
10	BR/B	POP-UP ENGINE HOOD ACTUATOR RH (+)
11	O	POP-UP ENGINE HOOD ACTUATOR LH (+)
12	BR/W	POP-UP ENGINE HOOD ACTUATOR LH (-)
37	V	FUSE(-)
38	W	FUSE(+)

40	Y	OCCUPANT LIN SIGNAL
41	V/G	RPRH(+)
42	BR/Y	RPRH(-)
43	BR/Y	RPLH(-)
44	V/G	RPLH(+)
45	B	REAR BUCKLE SWITCH RH(-)
46	G	REAR BUCKLE SWITCH RH(+)
47	B	REAR BUCKLE SWITCH CENTER(-)
48	G	REAR BUCKLE SWITCH CENTER(+)
49	B	REAR BUCKLE SWITCH RH(-)
50	G	REAR BUCKLE SWITCH RH(+)
51	Y	AIR BAG SIGNAL
52	P	AIR BAG SIGNAL
53	G	CAN-L
54	W	CAN-H
57	R	B-SATELITE LH(+)
58	B	B-SATELITE LH(-)
59	BR	B-SATELITE RH(-)
60	L	B-SATELITE RH(+)
61	BR	FRONT DOOR SATELLITE RH(-)
62	G	FRONT DOOR SATELLITE RH(+)
63	B	FRONT DOOR SATELLITE LH(+)
64	BR	FRONT DOOR SATELLITE LH(-)
67	W	REAR DOOR SATELLITE RH(-)
68	B	REAR DOOR SATELLITE RH(+)
69	R	REAR DOOR SATELLITE LH(+)
70	W	REAR DOOR SATELLITE LH(-)
71	Y	BUCKLE SWITCH AS(+)
72	O	BUCKLE SWITCH AS(-)
73	Y	BUCKLE SWITCH DR(+)
74	O	BUCKLE SWITCH DR(-)
75	V/G	CLH(+)
76	BR/Y	CLH(-)
77	W/BR	CRH(+)
78	R/V	CRH(-)
85	P	CZS RH(-)
86	W	CZS RH(+)
87	BR	CZS LH(-)
88	L	CZS LH(+)
89	O	SAB AS(-)
90	Y	SAB AS(+)
93	Y	SAB DR(+)
94	O	SAB DR(-)
95	BR	FPRH(-)
96	L/W	FPRH(+)
97	G	FPLH(+)
98	V	FPLH(-)
100	BR	GND
101	BR	GND
103	Y	KI.15R

104	G	KI.30

Connector No.	M14
Connector Name	REAR COMBINATION LAMP LH (BACK DOOR SIDE)
Connector Type	TH08FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	GR	-
3	B	-
4	L	-
5	BR	-
6	GR	-

Connector No.	M15
Connector Name	REAR COMBINATION LAMP RH (BACK DOOR SIDE)
Connector Type	TH08FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	GR	-
3	GR	-
4	L	-
5	B	-

Connector No.	M25
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A0075405081

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	ROTARY LIGHT SW GND
2	O	ROTARY LIGHT SW (PL/PR/TAL)
3	R	ROTARY LIGHT SW (AUTO/LOW)
4	G	ROTARY LIGHT SW (FR FOG)
5	Y	-
7	GR	SWITCH INDICATOR
8	R	CAN-H (BODY 2)
9	BR	CAN-L (BODY 2)
12	O	LIN (IBS)
14	G	FOOT LAMP

Connector No.	M26
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A0235459826

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
15	W	BAT (FUSE)
16	BR	BAT (FUSE)
17	R	BAT (FUSE)
18	B	GND

JRLWG1044GB

EXTERIOR LIGHTING SYSTEM

Connector No.	M27
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A1665400381

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
19	Y	RR POWER WINDOW MOTOR RH CONT (UP)
20	G	RR POWER WINDOW MOTOR RH CONT (DOWN)
21	B	RR POWER WINDOW MOTOR LH CONT (UP)
22	GR	RR POWER WINDOW MOTOR LH CONT (DOWN)
23	P	AIR BAG SIGNAL
27	GR	BACK DOOR OPENER SW
33	O	RR POWER WINDOW SW LH GND
34	BR	RR POWER WINDOW SW LH (DOWN)
36	O	RR POWER WINDOW SW LH (UP)
37	W	RR DOOR RH STATUS
39	Y	BACK DOOR STATUS
40	V	BACK DOOR LAMP
41	W	RR DOOR LH STATUS
42	V	LUGGAGE ROOM LAMP
43	GR	BACK-UP LAMP LH
44	W	HIGH-MOUNTED STOP LAMP
45	O	TAIL LAMP (BODY RH)
48	GR	TAIL LAMP (BK RH)
50	GR	-
57	Y	STOP LAMP (BODY LH)
58	B	REAR TURN SIGNAL RH
59	P	RR DOOR RH UNLOCK
60	G	RR DOOR RH LOCK
62	GR	LICENSE PLATE LAMP LH
63	W	HALL SENSOR LH SIGNAL
64	GR	HALL SENSOR LH GND
65	R	HALL SENSOR LH POWER SUPPLY

Connector No.	M28
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A1665400481

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
67	V	BACK DOOR UNLOCK
69	GR	STOP LAMP (BODY RH)
70	B	REAR TURN SIGNAL LH
71	GR	BACK-UP LAMP RH
72	Y	LICENSE PLATE LAMP RH
73	L	RR POWER WINDOW SW RH UP
74	B	RR POWER WINDOW SW RH DOWN
75	L	RR POWER WINDOW SW RH GND
76	GR	HALL SENSOR RH POWER SUPPLY
77	R	SUB BAT-
78	B	TERMINAL RELAY 15R1 CONT
80	B	REAR WIPER RELAY CONT
82	GR	TAIL LAMP (BODY LH)
83	P	TERMINAL RELAY 15R2 CONT
85	B	TAIL LAMP (BK LH)
87	R	BAT (VIA LATCHING TERMINAL RELAY 30G)
89	O	HALL SENSOR RH GND
90	V	HALL SENSOR RH SIGNAL
91	P	FUEL LEVEL SENSOR GND
92	L	FUEL LEVEL SENSOR
93	GR	FUEL LEVEL SENSOR
94	Y	FUEL FILLER LID STATUS
97	G	LATCHING TERMINAL RELAY 30G CONT 1
98	B	LATCHING TERMINAL RELAY 30G GND 1
99	W	LATCHING TERMINAL RELAY 30G GND 2
100	V	LATCHING TERMINAL RELAY 30G CONT 2
101	Y	REAR DOOR INSIDE HANDLE LAMP CONT
102	GR	AMBIENT LAMP CONT
103	V	SUB BAT RELAY CONT
105	G	RR DOOR LH UNLOCK
106	W	FUEL FILLER LID UNLOCK
107	L	RR DOOR LH LOCK
108	R	SUB BAT+
109	O	LIN (ROOF)
112	BR	CAN-L (BODY 1)
113	R	CAN-H (BODY 1)

114	B	INJECTION RELAY CONT

Connector No.	M32
Connector Name	COMBINATION METER
Connector Type	MB_A0525452726

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	GROUND
4	R	BATTERY POWER SUPPLY
12	GR	CAN-L
13	W	CAN-H
17	BR	CAN-L
18	R	CAN-H

Connector No.	M35
Connector Name	CONDENSER
Connector Type	P01FB-A

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-

Connector No.	M43
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

H.S.

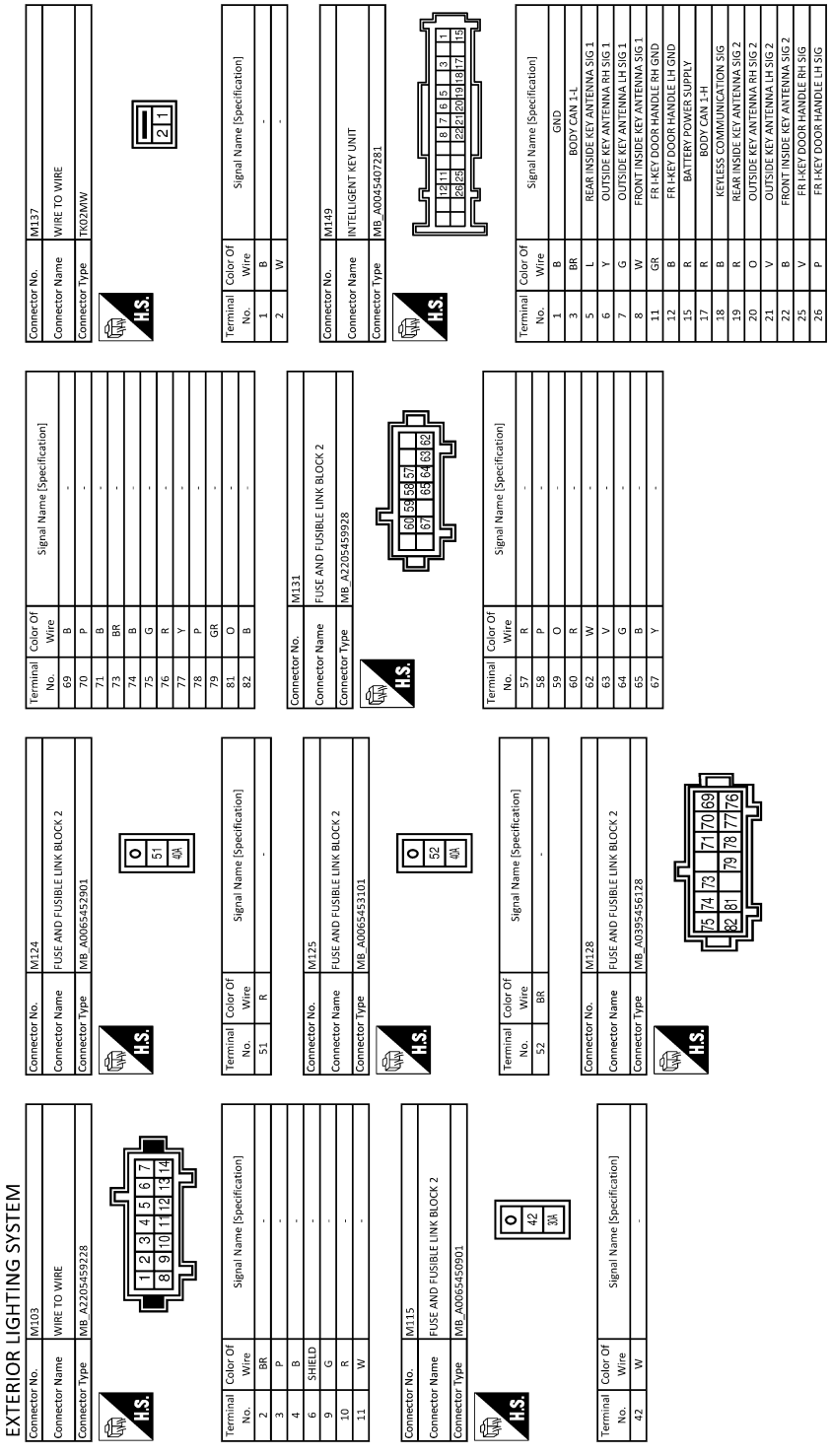
Terminal No.	Color Of Wire	Signal Name [Specification]
4	B	CHASSIS_GND
5	B	ELECTRONICS_GND
6	GR	DIAGNOSTICS-CAN_H_DAI
8	W	IGN_SW
12	L	DIAGNOSTIC-CAN-L_NIS
13	V	DIAGNOSTIC-CAN_H_NIS
14	GR	DIAGNOSTICS-CAN_L_DAI
16	R	BATTERY

Connector No.	M101
Connector Name	ELECTRONIC IGNITION SWITCH CONTROL UNIT
Connector Type	MB_A0265458426

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	CHASSIS CAN-L
2	W	CHASSIS CAN-H
3	R	BODY CAN 1-H
4	BR	BODY CAN 1-L
6	W	STEERING LOCK OPERATION
9	GR	REMOTE KEYLESS
10	W	POWER SUPPLY
11	BR	DIAGNOSTIC CAN-L
12	L	DIAGNOSTIC CAN-H

JRLWG1045GB



JRLWG1046GB

EXTERIOR LIGHTING SYSTEM

Connector No.	M156
Connector Name	REAR HEIGHT SENSOR
Connector Type	MB_A2105403681

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
4	G	-
5	P	-

Connector No.	M157
Connector Name	LICENSE PLATE LAMP LH
Connector Type	RH02FB

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	B	-

Connector No.	M158
Connector Name	LICENSE PLATE LAMP RH
Connector Type	RH02FB

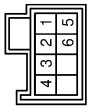
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	M162
Connector Name	FRONT CAMERA UNIT
Connector Type	MB_A0255458826

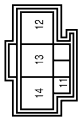
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	GROUND
2	L	CAN-L
3	W	CAN-H
4	R	BATTERY POWER SUPPLY
5	O	HEATER GROUND
6	Y	HEATER POWER SUPPLY

Connector No.	M172
Connector Name	OVERHEAD CONTROL PANEL CONTROL UNIT
Connector Type	MB_A0025406781

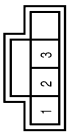
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
11	O	LIN (ROOF)
12	B	GND
13	G	BATTERY POWER SUPPLY
14	O	BATTERY POWER SUPPLY

Connector No.	M173
Connector Name	UPPER CONTROL PANEL CONTROL UNIT
Connector Type	MB_A0385451228

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	PWR SPLY
2	BR	GND
3	O	LIN

Connector No.	M194
Connector Name	REAR COMBINATION LAMP LH (BODY SIDE)
Connector Type	NS06MW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	Y	-
3	GR	-
4	B	-
5	BR	-
6	V	-

Connector No.	M195
Connector Name	REAR COMBINATION LAMP RH (BODY SIDE)
Connector Type	NS06MW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	O	-
4	B	-
5	BR	-
6	V	-

JRLWG1047GB

EXTERIOR LIGHTING SYSTEM

Connector No.	M219
Connector Name	ROTARY LIGHT SWITCH
Connector Type	MB_A0255458826

Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	Y	-
4	B	-
5	G	-
6	R	-
7	O	-
8	W	-

Connector No.	M224
Connector Name	CONDENSER
Connector Type	P01FB-A

Terminal No.	Color Of Wire	Signal Name [Specification]
2	W	-

Connector No.	M266
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	MB_A0105404681

Terminal No.	Color Of Wire	Signal Name [Specification]
5	B	ACTIVE VENT PS(-)
6	Y	ACTIVE VENT PS(+)
37	V	FUSE-
38	W	FUSE+
40	Y	OCCUPANT LIN SIGNAL
41	V/G	RPRH(+)
42	BR/Y	RPRH(-)
43	BR/Y	RPLH(-)
44	V/G	RPLH(+)
51	Y	AIR BAG SIGNAL
52	P	AIR BAG SIGNAL
53	G	CAN-L
54	W	CAN-H
57	R	B-SATELITE LH(+)
58	B	B-SATELITE LH(-)
59	BR	B-SATELITE RH(-)
60	L	B-SATELITE RH(+)
61	BR	FRONT DOOR SATELLITE RH(-)
62	G	FRONT DOOR SATELLITE RH(+)
63	B	FRONT DOOR SATELLITE LH(+)
64	BR	FRONT DOOR SATELLITE LH(-)
65	G	SEAT POS PS(+)
66	BR	SEAT POS PS(-)
67	W	REAR DOOR SATELLITE RH(-)
68	B	REAR DOOR SATELLITE RH(+)
69	R	REAR DOOR SATELLITE LH(+)
70	W	REAR DOOR SATELLITE LH(-)
71	Y	BUCKLE_SWITCH_PS+
72	O	BUCKLE_SWITCH_PS-
73	Y	BUCKLE_SWITCH_DR+
74	O	BUCKLE_SWITCH_DR-
75	V/G	CLH(+)
76	BR/Y	CLH(-)
77	W/BR	CRH(+)
78	R/V	CRH(-)
81	R	FORCE LIMITER PS(-)
82	B	FORCE LIMITER PS(+)
85	P	CZS RH(-)
86	W	CZS RH(+)
87	BR	CZS LH(-)
88	L	CZS LH(+)
89	O	SAB AS(-)
90	Y	SAB AS(+)
93	Y	SAB DR(+)
94	O	SAB DR(-)
95	BR	FPRH(-)
96	L/W	FPRH(+)
97	G	FPLH(+)
98	V	FPLH(-)
100	BR	GND
101	BR	GND
103	Y	KI.15R
104	G	KI.30

Connector No.	M361
Connector Name	JOINT CONNECTOR-M12
Connector Type	FEA24JG

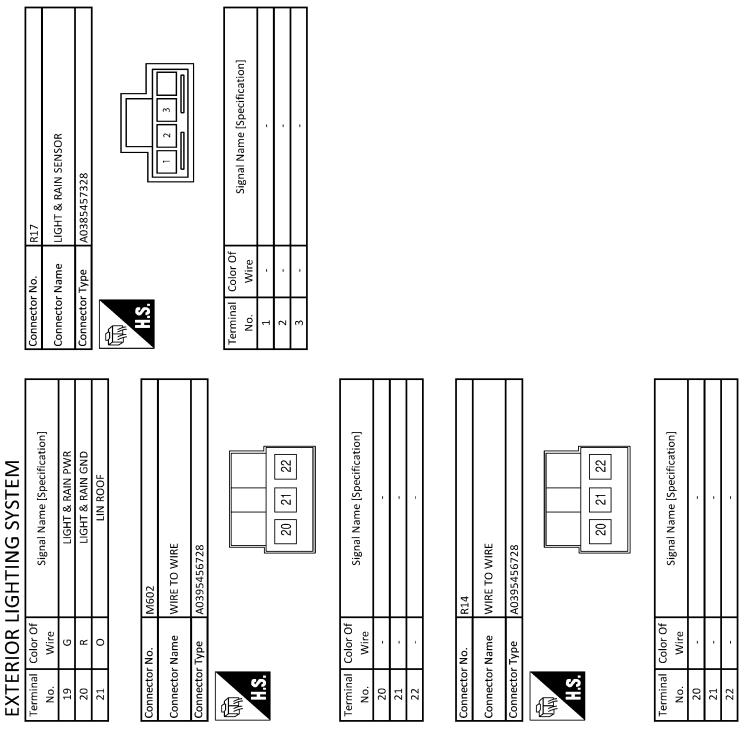
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	W	-
3	W	-
4	W	-
5	Y	-
6	Y	-
7	O	-
8	O	-
9	R	-
10	R	-
11	R	-
12	R	-
13	G	-
14	W	-
15	P	-
16	P	-
21	L	-
22	L	-
23	W	-
24	W	-

Connector No.	M362
Connector Name	JOINT CONNECTOR-M13
Connector Type	FEA24JBR

Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	V	-
6	G	-
7	GR	-
8	GR	-
10	GR	-
11	GR	-
12	GR	-
17	B	-
18	B	-
20	L	-
21	L	-
23	B	-
24	B	-

Connector No.	M596
Connector Name	OVERHEAD CONTROL PANEL CONTROL UNIT
Connector Type	A0395456728

JRLWG1048GB



JRLWG1049GB

BASIC INSPECTION

ADDITIONAL SERVICE WHEN REPLACING HEADLAMP CONTROL UNIT

Description

INFOID:0000000013549951

Perform the following operations when replacing headlamp control unit. (For details, refer to EXL-387, "Work Procedure".)

CONSULT Work Support item

Headlamp control unit LH
- Reset of operating hours counter of L pos DTRL turn sig

Headlamp control unit RH
- Reset of operating hours counter of R pos DTRL turn sig

Work Procedure

INFOID:0000000013549952

HEADLAMP CONTROL UNIT LH

1. PERFORM “WORK SUPPORT”

With CONSULT
1. Turn ignition switch ON.
2. Select “Work Support” mode of “H/L control module LH” using CONSULT.
3. Select and start the “Reset of operating hours counter of L pos DTRL turn sig”.

>> WORK END

HEADLAMP CONTROL UNIT RH

1. PERFORM “WORK SUPPORT”

With CONSULT
1. Turn ignition switch ON.
2. Select “Work Support” mode of “H/L control module RH” using CONSULT.
3. Select and start the “Reset of operating hours counter of R pos DTRL turn sig”.

>> WORK END

DTC/CIRCUIT DIAGNOSIS

B162A LOW BEAM LH CIRCUIT

DTC Description

INFOID:0000000013550624

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B162A	01	Low beam lh (Low beam left hand)	[ELECTRICAL MAL-FUNCTION]	Diagnosis condition	Headlamp (LO) LH ON
				Signal (terminal)	Headlamp (LO) LH signal
				Threshold	Harness to the headlamp (LO) LH has a short circuit
				Diagnosis delay time	13 sec.
	11		[CIRC SHORT TO GRND]	Diagnosis condition	Headlamp (LO) LH ON
				Signal (terminal)	Headlamp (LO) LH signal
				Threshold	Harness to the headlamp (LO) LH has a shorted to ground
				Diagnosis delay time	12.5 sec.
	12		[CIRC SHORT TO BATTERY]	Diagnosis condition	Headlamp (LO) LH ON
				Signal (terminal)	Headlamp (LO) LH signal
				Threshold	Harness to the headlamp (LO) LH has a shorted to battery
				Diagnosis delay time	13 sec.
	13		[CIRC OPEN]	Diagnosis condition	Headlamp (LO) LH ON
				Signal (terminal)	Headlamp (LO) LH signal
				Threshold	Harness to the headlamp (LO) LH has a open circuit
				Diagnosis delay time	13 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Headlamp (LO) LH ON
				Signal (terminal)	Headlamp (LO) LH signal
				Threshold	Harness to the headlamp (LO) LH has a shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to headlamp LH)
- BCM
- Headlamp LH bulb
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO and wait 13 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-389, "Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550625

1.CHECK HEADLAMP (LO) LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp LH connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E15	133		Not existed

Is the inspection result normal?

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

2.CHECK HEADLAMP (LO) LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front combination lamp LH harness connector.

BCM		Front combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
E15	133	E79	4	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E15	133	Ground	0 V

Is the inspection result normal?

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

3.CHECK HEADLAMP BULB

Check the headlamp LH bulb.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace the headlamp bulb. Refer to EXL-514, "Replacement".

4.ERASE DTC

1. Connect BCM and front combination lamp LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-388, "DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE FRONT COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.

5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-388, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B162E LOW BEAM RH CIRCUIT

DTC Description

INFOID:0000000013550626

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B162E	01	Low beam rh (Low beam right hand)	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Headlamp (LO) RH ON
				Signal (terminal)	Headlamp (LO) RH signal
				Threshold	Harness to the headlamp (LO) RH has a short circuit
				Diagnosis delay time	13 sec.
	11		[CIRC SHORT TO GRND]	Diagnosis condition	Headlamp (LO) RH ON
				Signal (terminal)	Headlamp (LO) RH signal
				Threshold	Harness to the headlamp (LO) RH has a shorted to ground
				Diagnosis delay time	12.5 sec.
	12		[CIRC SHORT TO BATTERY]	Diagnosis condition	Headlamp (LO) RH ON
				Signal (terminal)	Headlamp (LO) RH signal
				Threshold	Harness to the headlamp (LO) RH has a shorted to battery
				Diagnosis delay time	13 sec.
	13		[CIRC OPEN]	Diagnosis condition	Headlamp (LO) RH ON
				Signal (terminal)	Headlamp (LO) RH signal
				Threshold	Harness to the headlamp (LO) RH has a open circuit
				Diagnosis delay time	13 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Headlamp (LO) RH ON
				Signal (terminal)	Headlamp (LO) RH signal
				Threshold	Harness to the headlamp (LO) RH has a shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to headlamp RH)
- BCM
- Headlamp RH bulb
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Rotary light switch LO and wait 13 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-392, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550627

1.CHECK HEADLAMP (LO) RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp RH connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E16	145		Not existed

Is the inspection result normal?

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

2.CHECK HEADLAMP (LO) RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front combination lamp RH harness connector.

BCM		Front combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
E16	145	E81	4	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E16	145	Ground	0 V

Is the inspection result normal?

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

3.CHECK HEADLAMP BULB

Check the headlamp RH bulb.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace the headlamp bulb. Refer to EXL-514, "Replacement".

4.ERASE DTC

1. Connect BCM and front combination lamp RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-391, "DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE FRONT COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-391, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B1632 HIGH BEAM LH CIRCUIT

DTC Description

INFOID:0000000013550628

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1632	01	High beam lh (High beam left hand)	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Headlamp (HI) LH ON
				Signal (terminal)	Headlamp (HI) LH signal
				Threshold	Harness to the headlamp (HI) LH has a short circuit
				Diagnosis delay time	13 sec.
	11		[CIRC SHORT TO GRND]	Diagnosis condition	Headlamp (HI) LH ON
				Signal (terminal)	Headlamp (HI) LH signal
				Threshold	Harness to the headlamp (HI) LH has a shorted to ground
				Diagnosis delay time	12.5 sec.
	12		[CIRC SHORT TO BATTERY]	Diagnosis condition	Headlamp (HI) LH ON
				Signal (terminal)	Headlamp (HI) LH signal
				Threshold	Harness to the headlamp (HI) LH has a shorted to battery
				Diagnosis delay time	13 sec.
	13		[CIRC OPEN]	Diagnosis condition	Headlamp (HI) LH ON
				Signal (terminal)	Headlamp (HI) LH signal
				Threshold	Harness to the headlamp (HI) LH has a open circuit
				Diagnosis delay time	13 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Headlamp (HI) LH ON
				Signal (terminal)	Headlamp (HI) LH signal
				Threshold	Harness to the headlamp (HI) LH has a shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to headlamp LH)
- BCM
- Headlamp LH bulb
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Turn combination switch HI and wait 13 seconds or more.
4. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-395, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550629

1.CHECK HEADLAMP (HI) LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp LH connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E16	144		Not existed

Is the inspection result normal?

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

2.CHECK HEADLAMP (HI) LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front combination lamp LH harness connector.

BCM		Front combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
E16	144	E79	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E16	144	Ground	0 V

Is the inspection result normal?

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

3.CHECK HEADLAMP BULB

Check the headlamp LH bulb.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace the headlamp bulb. Refer to EXL-514, "Replacement".

4.ERASE DTC

1. Connect BCM and front combination lamp LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-394, "DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE FRONT COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-394, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B1636 HIGH BEAM RH CIRCUIT

DTC Description

INFOID:0000000013550630

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1636	01	High beam rh (High beam right hand)	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Headlamp (HI) RH ON
				Signal (terminal)	Headlamp (HI) RH signal
				Threshold	Harness to the headlamp (HI) RH has a short circuit
				Diagnosis delay time	13 sec.
	11		[CIRC SHORT TO GRND]	Diagnosis condition	Headlamp (HI) RH ON
				Signal (terminal)	Headlamp (HI) RH signal
				Threshold	Harness to the headlamp (HI) RH has a shorted to ground
				Diagnosis delay time	12.5 sec.
	12		[CIRC SHORT TO BATTERY]	Diagnosis condition	Headlamp (HI) RH ON
				Signal (terminal)	Headlamp (HI) RH signal
				Threshold	Harness to the headlamp (HI) RH has a shorted to battery
				Diagnosis delay time	13 sec.
	13		[CIRC OPEN]	Diagnosis condition	Headlamp (HI) RH ON
				Signal (terminal)	Headlamp (HI) RH signal
				Threshold	Harness to the headlamp (HI) RH has a open circuit
				Diagnosis delay time	13 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Headlamp (HI) RH ON
				Signal (terminal)	Headlamp (HI) RH signal
				Threshold	Harness to the headlamp (HI) RH has a shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to headlamp RH)
- BCM
- Headlamp RH bulb
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Turn combination switch HI and wait 13 seconds or more.
4. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-398, "Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550631

1.CHECK HEADLAMP (HI) RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp RH connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E15	132		Not existed

Is the inspection result normal?

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

2.CHECK HEADLAMP (HI) RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front combination lamp RH harness connector.

BCM		Front combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
E15	132	E81	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E15	132	Ground	0 V

Is the inspection result normal?

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

3.CHECK HEADLAMP BULB

Check the headlamp RH bulb.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace the headlamp bulb. Refer to EXL-514, "Replacement".

4.ERASE DTC

1. Connect BCM and front combination lamp RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-397, "DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE FRONT COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-397, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B163A FRONT TURN SIGNAL LAMP LH CIRCUIT

DTC Description

INFOID:0000000013550632

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B163A	01	Turn signal lamp fl output signal (Turn signal lamp front left output signal)	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Front turn signal lamp LH signal
				Threshold	Harness to the front turn signal lamp LH has a short circuit
				Diagnosis delay time	1.2 sec.
	11		[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Front turn signal lamp LH signal
				Threshold	Harness to the front turn signal lamp LH has a shorted to ground
				Diagnosis delay time	1 sec.
	12		[CIRC SHORT TO BATTERY]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Front turn signal lamp LH signal
				Threshold	Harness to the front turn signal lamp LH has a shorted to battery
				Diagnosis delay time	1.2 sec.
	13		[CIRC OPEN]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Front turn signal lamp LH signal
				Threshold	Harness to the front turn signal lamp LH has a open circuit
				Diagnosis delay time	1.2 se.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Front turn signal lamp LH signal
				Threshold	Harness to the front turn signal lamp LH has a shorted to battery or open
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to front turn signal lamp LH)
- BCM
- Front turn signal lamp LH bulb
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN LH.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-401, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550633

1.CHECK FRONT TURN SIGNAL LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp LH connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E16	146		Not existed

Is the inspection result normal?

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

2.CHECK FRONT TURN SIGNAL LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front combination lamp LH harness connector.

BCM		Front combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
E16	146	E79	5	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E16	146	Ground	0 V

Is the inspection result normal?

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

3.CHECK FRONT TURN SIGNAL LAMP BULB

Check the front turn signal lamp LH bulb.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace the front turn signal lamp LH bulb. Refer to EXL-514, "Replacement".

4.ERASE DTC

1. Connect BCM and front combination lamp LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-400, "DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE FRONT COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-400, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B163E FRONT TURN SIGNAL LAMP RH CIRCUIT

DTC Description

INFOID:0000000013550634

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B163E	01	Turn signal lamp fr output signal (Turn signal lamp front right output signal)	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Front turn signal lamp RH signal
				Threshold	Harness to the front turn signal lamp RH has a short circuit
				Diagnosis delay time	1.2 sec.
	11		[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Front turn signal lamp RH signal
				Threshold	Harness to the front turn signal lamp RH has a shorted to ground
				Diagnosis delay time	1 sec.
	12		[CIRC SHORT TO BATTERY]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Front turn signal lamp RH signal
				Threshold	Harness to the front turn signal lamp RH has a shorted to battery
				Diagnosis delay time	1.2 sec.
	13		[CIRC OPEN]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Front turn signal lamp RH signal
				Threshold	Harness to the front turn signal lamp RH has a open circuit
				Diagnosis delay time	1.2 se.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Front turn signal lamp RH signal
				Threshold	Harness to the front turn signal lamp RH has a shorted to battery or open
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to front combination lamp RH)
- BCM
- Front turn signal lamp RH bulb
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN RH.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-404, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550635

1.CHECK FRONT TURN SIGNAL LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp RH connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E15	142		Not existed

Is the inspection result normal?

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

2.CHECK FRONT TURN SIGNAL LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front combination lamp RH harness connector.

BCM		Front combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
E15	142	E81	5	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E15	142	Ground	0 V

Is the inspection result normal?

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

3.CHECK FRONT TURN SIGNAL LAMP BULB

Check the front turn signal lamp RH bulb.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace the front turn signal lamp RH bulb. Refer to EXL-514, "Replacement".

4.ERASE DTC

1. Connect BCM and front combination lamp RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-403, "DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE FRONT COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-403, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B1642 REAR TURN SIGNAL LAMP LH CIRCUIT

DTC Description

INFOID:0000000013550636

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1642	11	Turn signal lamp rl output signal (Turn signal lamp rear left output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Rear turn signal lamp LH signal
				Threshold	Harness to the rear turn signal lamp LH is shorted to ground
				Diagnosis delay time	1 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Rear turn signal lamp LH signal
				Threshold	Harness to the rear turn signal lamp LH is shorted to battery or open
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to rear combination lamp LH)
- BCM
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN LH.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-406, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550637

1.CHECK REAR TURN SIGNAL LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
- BCM
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	70		Not existed

Is the inspection result normal?

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

2.CHECK REAR TURN SIGNAL LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH harness connector.

Body side

BCM		Rear combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
M28	70	M194	4	Existed

Back door side

BCM		Rear combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
M28	70	M14	4	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	70	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
- BCM
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-406, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp LH. Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side)
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-406, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B1646 REAR TURN SIGNAL LAMP RH CIRCUIT

DTC Description

INFOID:0000000013550638

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1646	11	Turn signal lamp rr output signal (Turn signal lamp rear right output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Rear turn signal lamp RH signal
				Threshold	Harness to the rear turn signal lamp RH is shorted to ground
				Diagnosis delay time	1 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Rear turn signal lamp RH signal
				Threshold	Harness to the rear turn signal lamp RH is shorted to battery or open
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to rear combination lamp RH)
- BCM
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN RH.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-408, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550639

1.CHECK REAR TURN SIGNAL LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
- BCM
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	58		Not existed

Is the inspection result normal?

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

2.CHECK REAR TURN SIGNAL LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH harness connector.

Body side

BCM		Rear combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
M27	58	M195	4	Existed

Back door side

BCM		Rear combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
M27	58	M15	4	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	58	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect following connectors.
2. Turn ignition switch ON.

- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
- BCM

3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-408, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp RH. Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side).
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-408, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B164A REAR TURN SIGNAL LAMP LH

DTC Description

INFOID:0000000013550640

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B164A	49	Turn signal lamp rl (Turn signal lamp rear left)	[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Rear turn signal lamp LH signal
				Threshold	Diagnostic circuit has a malfunction. There is an internal electrical error.
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to rear combination lamp LH)
- BCM
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN LH.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-410, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

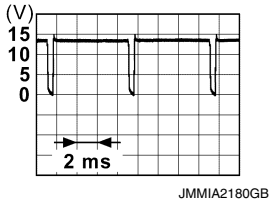
Diagnosis Procedure

INFOID:0000000013550641

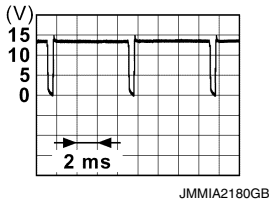
1.CHECK REAR TURN SIGNAL LAMP LH SIGNAL

1. Turn ignition switch ON.
2. With operating the turn signal switch, check output waveform between rear combination lamp LH harness connector and ground using oscilloscope.

Body side

+		-	Test item		Output waveform (Reference value)
Rear combination lamp LH					
Connector	Terminal				
M194	4	Ground	Turn signal switch	Left	 JMMIA2180GB
				Center	0 V

Back door side

+		-	Test item		Output waveform (Reference value)
Rear combination lamp LH					
Connector	Terminal				
M14	4	Ground	Turn signal switch	Left	 JMMIA2180GB
				Center	0 V

Is the inspection result normal?

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

2.CHECK REAR TURN SIGNAL LAMP LH SIGNAL GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear combination lamp LH connector.
3. Check continuity between rear combination lamp LH harness connector and ground.

Body side

Rear combination lamp LH		Ground	Continuity
Connector	Terminal		
M194	5		Not existed

Back door side

Rear combination lamp LH		Ground	Continuity
Connector	Terminal		
M14	5		Not existed

Is the inspection result normal?

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

3.CHECK REAR TURN SIGNAL LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
- BCM
3. Check continuity between BCM harness connector and rear combination lamp LH harness connector.

Body side

BCM		Rear combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
M28	70	M194	4	Existed

Back door side

BCM		Rear combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
M28	70	M14	4	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	70		Not existed

Is the inspection result normal?

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

4.CHECK REAR TURN SIGNAL LAMP LH SIGNAL CIRCUIT 2

Check voltage between rear BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	70	Ground	0 V

Is the inspection result normal?

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

5.ERASE DTC

1. Connect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
- BCM
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-410, "DTC Description".

Is DTC detected?

YES >> GO TO 6.
NO >> INSPECTION END

6.REPLACE REAR COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp LH. Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side)
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-410, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B164B REAR TURN SIGNAL LAMP RH

DTC Description

INFOID:0000000013550642

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B164B	49	Turn signal lamp rr (Turn signal lamp rear right)	[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Rear turn signal lamp RH signal
				Threshold	Diagnostic circuit has a malfunction. There is an internal electrical error.
				Diagnosis delay time	1 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to rear combination lamp RH)
- BCM
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN RH.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-413, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

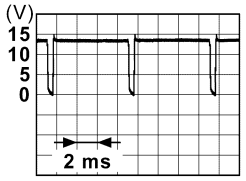
Diagnosis Procedure

INFOID:0000000013550643

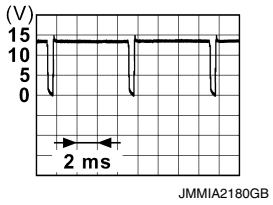
1.CHECK REAR TURN SIGNAL LAMP RH SIGNAL

1. Turn ignition switch ON.
2. With operating the turn signal switch, check output waveform between rear combination lamp RH harness connector and ground using oscilloscope.

Body side

+		-	Test item		Output waveform (Reference value)
Rear combination lamp RH					
Connector	Terminal				
M195	4	Ground	Turn signal switch	Right	 JMMIA2180GB
				Center	0 V

Back door side

+		-	Test item		Output waveform (Reference value)
Rear combination lamp RH					
Connector	Terminal				
M15	4	Ground	Turn signal switch	Right	 JMMIA2180GB
				Center	0 V

Is the inspection result normal?

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

2.CHECK REAR TURN SIGNAL LAMP RH SIGNAL GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear combination lamp RH connector.
3. Check continuity between rear combination lamp RH harness connector and ground.

Body side

Rear combination lamp RH		Ground	Continuity
Connector	Terminal		
M194	5		Not existed

Back door side

Rear combination lamp RH		Ground	Continuity
Connector	Terminal		
M14	5		Not existed

Is the inspection result normal?

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

3.CHECK REAR TURN SIGNAL LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
- BCM
3. Check continuity between BCM harness connector and rear combination lamp RH harness connector.

Body side

BCM		Rear combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
M27	58	M195	4	Existed

Back door side

BCM		Rear combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
M27	58	M15	4	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	58		Not existed

Is the inspection result normal?

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

4. CHECK REAR TURN SIGNAL LAMP RH SIGNAL CIRCUIT 2

Check voltage between rear BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	58	Ground	0 V

Is the inspection result normal?

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

5. ERASE DTC

1. Connect following connectors.
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
- BCM
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-413, "DTC Description".

Is DTC detected?

YES >> GO TO 6.
NO >> INSPECTION END

6. REPLACE REAR COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp RH. Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side)
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-413, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B164C REAR TURN SIGNAL LAMP LH DIAGNOSTIC CIRCUIT

DTC Description

INFOID:0000000013550644

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B164C	11	Turn signal lamp rl diagnostic circuit (Turn signal lamp rear left diagnostic circuit)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Rear turn signal lamp LH diagnostic circuit signal
				Threshold	Harness to the diagnostic circuit is shorted to ground
				Diagnosis delay time	32 sec.

POSSIBLE CAUSE

- Harness or connector [rear combination lamp LH (body side) to rear combination lamp LH (back door side)]
- BCM
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN LH and wait 32 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-416, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550645

1.CHECK REAR TURN DIAGNOSTIC CIRCUIT LH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
3. Check continuity between rear combination lamp LH (body side) harness connector and ground.

Rear combination lamp LH (body side)		Ground	Continuity
Connector	Terminal		
M194	6		Not existed

Is the inspection result normal?

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

2.ERASE DTC

1. Connect following connectors.
- Rear combination lamp LH (body side)
- Rear combination lamp LH (back door side)
2. Turn ignition switch ON.

3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-416, "DTC Description".

Is DTC detected?

YES >> GO TO 3.
NO >> INSPECTION END

3. REPLACE REAR COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp LH. Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side)
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. refer to EXL-416, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B164D REAR TURN SIGNAL LAMP RH DIAGNOSTIC CIRCUIT

DTC Description

INFOID:0000000013550646

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B164D	11	Turn signal lamp rr diagnostic circuit (Turn signal lamp rear right diagnostic circuit)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Rear turn signal lamp RH diagnostic circuit signal
				Threshold	Harness to the diagnostic circuit is shorted to ground
				Diagnosis delay time	32 sec.

POSSIBLE CAUSE

- Harness or connector [rear combination lamp RH (body side) to rear combination lamp RH (back door side)]
- BCM
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN RH and wait 32 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-418, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550647

1.CHECK REAR TURN DIAGNOSTIC CIRCUIT RH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect following connectors.
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
3. Check continuity between rear combination lamp RH (body side) harness connector and ground.

Rear combination lamp RH (body side)		Ground	Continuity
Connector	Terminal		
M195	6		Not existed

Is the inspection result normal?

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

2.ERASE DTC

1. Connect following connectors.
- Rear combination lamp RH (body side)
- Rear combination lamp RH (back door side)
2. Turn ignition switch ON.

3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-418, "DTC Description".

Is DTC detected?

YES >> GO TO 3.
NO >> INSPECTION END

3. REPLACE REAR COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding rear combination lamp RH. Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation" (body side) or EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation" (back door side)
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-418, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B16AF STOP LAMP LH CIRCUIT

DTC Description

INFOID:0000000013550648

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B16AF	11	Left brake lamp output signal (Left brake lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp LH signal
				Threshold	Harness to the stop lamp LH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp LH signal
				Threshold	Harness to the stop lamp LH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp LH (body side)]
- BCM
- Rear combination lamp LH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Brake pedal depressed and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-420, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550649

1.CHECK STOP LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp LH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	57		Not existed

Is the inspection result normal?

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

2.CHECK STOP LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH (body side) harness connector.

BCM		Rear combination lamp LH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M27	57	M194	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	57	Ground	0 V

Is the inspection result normal?

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

3. ERASE DTC

1. Connect BCM and rear combination lamp LH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-420, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4. REPLACE REAR COMBINATION LAMP LH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp LH (body side). Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-420, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B16B3 STOP LAMP RH CIRCUIT

DTC Description

INFOID:0000000013550650

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B16B3	11	Right brake lamp output signal (Right brake lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp RH signal
				Threshold	Harness to the stop lamp RH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp RH signal
				Threshold	Harness to the stop lamp RH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp RH (body side)]
- BCM
- Rear combination lamp RH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Brake pedal depressed and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-422, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550651

1.CHECK STOP LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp RH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	69		Not existed

Is the inspection result normal?

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

2.CHECK STOP LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH (body side) harness connector.

BCM		Rear combination lamp RH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M28	69	M195	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	69	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp RH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-422, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP RH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp RH (body side). Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-422, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B16B7 HI-MOUNTED STOP LAMP CIRCUIT

DTC Description

INFOID:0000000013550652

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B16B7	11	Hi-mount stop lamp center output sig (Hi-mounted stop lamp center output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Hi-mounted stop signal
				Threshold	Harness to the hi-mounted stop lamp is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Hi-mounted stop signal
				Threshold	Harness to the hi-mounted stop lamp is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to hi-mounted stop lamp)
- BCM
- Hi-mounted stop lamp
- Condenser

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Brake pedal depressed and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-424, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550653

1.CHECK HI-MOUNTED STOP LAMP SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect following connectors.

- Hi-mounted stop lamp
- Condenser
- BCM

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	44		Not existed

4. Check continuity between hi-mounted stop lamp harness connector and ground.

Hi-mounted stop lamp		Ground	Continuity
Connector	Terminal		
D610	2		Not existed

Is the inspection result normal?

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

2.CHECK HI-MOUNTED STOP LAMP SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and condenser harness connector.

BCM		Condenser		Continuity
Connector	Terminal	Connector	Terminal	
M27	44	M35	1	Existed

2. Check continuity between hi-mounted stop lamp harness connector and condenser harness connector.

Hi-mounted stop lamp		Condenser		Continuity
Connector	Terminal	Connector	Terminal	
D610	2	M224	2	Existed

Is the inspection result normal?

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

3.CHECK HI-MOUNTED STOP LAMP SIGNAL CIRCUIT 3

1. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	44	Ground	0 V

2. Check voltage between hi-mounted stop lamp harness connector and ground.

(+)		(–)	Voltage (Approx.)
Hi-mounted stop lamp			
Connector	Terminal		
D610	2	Ground	0 V

Is the inspection result normal?

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

4.CHECK CONDENSER

Check continuity between condenser terminals.

BCM				Continuity
Connector	Terminal	Connector	Terminal	
M35	1	M224	2	Existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace condenser.

5.ERASE DTC

1. Connect following connectors.

- Hi-mounted stop lamp
- Condenser
- BCM

2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-424, "DTC Description".

Is DTC detected?

YES >> GO TO 6.
NO >> INSPECTION END

6. REPLACE HI-MOUNTED STOP LAMP AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace hi-mounted stop lamp. Refer to EXL-529, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-424, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B16F7 FRONT FOG LAMP LH CIRCUIT

DTC Description

INFOID:0000000013550758

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B16F7	11	Fog lamp lh (Fog lamp left hand)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION with front fog lamp ON
				Signal (terminal)	Front fog lamp LH signal
				Threshold	Harness to the front fog lamp LH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION with front fog lamp ON
				Signal (terminal)	Front fog lamp LH signal
				Threshold	Harness to the front fog lamp LH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to front fog lamp LH)
- BCM
- Front fog lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary switch POSITION.
3. Turn front fog lamp switch ON and wait 12.5 seconds or more.
4. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-427, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550759

1.CHECK FRONT FOG LAMP LH SIGNAL CIRCUIT 1

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

BCM		Ground	Continuity
Connector	Terminal		
E15	131		Not existed

Is the inspection result normal?

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

2.CHECK FRONT FOG LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front fog lamp LH harness connector.

BCM		Front fog lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
E15	131	E67	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E15	131	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and front fog lamp LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-427, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE FRONT FOG LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front fog lamp LH. Refer to EXL-518, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-427, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B16FB FRONT FOG LAMP RH CIRCUIT

DTC Description

INFOID:0000000013550760

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B16FB	11	Fog lamp rh (Fog lamp right hand)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION with front fog lamp ON
				Signal (terminal)	Front fog lamp RH signal
				Threshold	Harness to the front fog lamp RH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION with front fog lamp ON
				Signal (terminal)	Front fog lamp RH signal
				Threshold	Harness to the front fog lamp RH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to front fog lamp RH)
- BCM
- Front fog lamp RH

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary switch POSITION.
3. Turn front fog lamp switch ON and wait 12.5 seconds or more.
4. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-429, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550761

1.CHECK FRONT FOG LAMP RH SIGNAL CIRCUIT 1

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

BCM		Ground	Continuity
Connector	Terminal		
E16	143		Not existed

Is the inspection result normal?

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

2.CHECK FRONT FOG LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front fog lamp RH harness connector.

BCM		Front fog lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
E16	143	E68	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E16	143	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and front fog lamp RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-429, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE FRONT FOG LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front fog lamp RH. Refer to EXL-518, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-429, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B1707 BACK-UP LAMP LH CIRCUIT

DTC Description

INFOID:0000000013550654

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1707	11	Back-up lamp lh output signal (Back-up lamp left hand output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Selector lever is R position
				Signal (terminal)	Back-up lamp LH signal
				Threshold	Harness to the back-up lamp LH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Selector lever is R position
				Signal (terminal)	Back-up lamp LH signal
				Threshold	Harness to the back-up lamp LH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp LH (back door side)]
- BCM
- Rear combination lamp LH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Shift the selector lever to R position and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-431, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550655

1.CHECK BACK-UP LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp LH (back door side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	43		Not existed

Is the inspection result normal?

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

2.CHECK BACK-UP LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH (back door side) harness connector.

BCM		Rear combination lamp LH (back door side)		Continuity
Connector	Terminal	Connector	Terminal	
M27	43	M14	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	43	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp LH (back door side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-431, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP LH (BACK DOOR SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp LH (back door side). Refer to EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-431, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B170B BACK-UP LAMP RH CIRCUIT

DTC Description

INFOID:0000000013550656

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B170B	11	Back-up lamp rh output signal (Back-up lamp right hand output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Selector lever is R position
				Signal (terminal)	Back-up lamp RH signal
				Threshold	Harness to the back-up lamp RH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Selector lever is R position
				Signal (terminal)	Back-up lamp RH signal
				Threshold	Harness to the back-up lamp RH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp RH (back door side)]
- BCM
- Rear combination lamp RH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Shift the selector lever to R position and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-433, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550657

1.CHECK BACK-UP LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp RH (back door side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	71		Not existed

Is the inspection result normal?

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

2.CHECK BACK-UP LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH (back door side) harness connector.

BCM		Rear combination lamp RH (back door side)		Continuity
Connector	Terminal	Connector	Terminal	
M28	71	M15	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	71	Ground	0 V

Is the inspection result normal?

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

3. ERASE DTC

1. Connect BCM and rear combination lamp RH (back door side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-433, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4. REPLACE REAR COMBINATION LAMP RH (BACK DOOR SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp RH (back door side). Refer to EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-433, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B173D SIDE TURN SIGNAL LAMP CIRCUIT
LH

LH : DTC Description

INFOID:0000000013550658

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B173D	11	Side turn signal lamp output signal (Side turn signal lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Side turn signal lamp LH signal
				Threshold	Harness to the side turn signal lamp LH is shorted to ground
				Diagnosis delay time	2.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Combination switch TURN LH
				Signal (terminal)	Side turn signal lamp LH signal
				Threshold	Harness to the side turn signal lamp LH is shorted to battery or open
				Diagnosis delay time	2.5 sec.

POSSIBLE CAUSE
- Harness or connector (left front door control unit to door mirror LH)
- Left front door control unit
- Door mirror LH

FAIL-SAFE
Inhibit turn signal lamp operation

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN LH.
3. Perform self-diagnosis for “Left front door control unit”.

Is DTC detected?

YES >> Refer to EXL-435, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550659

1.CHECK SIDE TURN SIGNAL LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect left front door control unit and door mirror LH connector.
3. Check continuity between BCM harness connector and ground.

Left front door control unit		Ground	Continuity
Connector	Terminal		
D11	9		Not existed

Is the inspection result normal?

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

2.CHECK SIDE TURN SIGNAL LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between left front door control unit harness connector and door mirror LH harness connector.

Left front door control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	
D11	9	D42	2	Existed

2. Check voltage between left front door control unit harness connector and ground.

(+)		(–)	Voltage (Approx.)
Left front door control unit			
Connector	Terminal		
D11	9	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect left front door control unit and door mirror LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “Left front door control unit” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-435, "LH : DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE SIDE TURN SIGNAL LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace side turn signal lamp LH. Refer to EXL-519, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “Left front door control unit” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-435, "LH : DTC Description".

Is DTC detected?

YES >> Replace left front door control unit. Refer to DLK-286, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550660

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B173D	11	Side turn signal lamp output signal (Side turn signal lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Side turn signal lamp RH signal
				Threshold	Harness to the side turn signal lamp RH is shorted to ground
				Diagnosis delay time	2.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Combination switch TURN RH
				Signal (terminal)	Side turn signal lamp RH signal
				Threshold	Harness to the side turn signal lamp RH is shorted to battery or open
				Diagnosis delay time	2.5 sec.

POSSIBLE CAUSE

- Harness or connector (right front door control unit to door mirror RH)
- Right front door control unit
- Door mirror RH

FAIL-SAFE

Inhibit turn signal lamp operation

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn combination switch TURN RH.
3. Perform self-diagnosis for “Right front door control unit”.

Is DTC detected?

YES >> Refer to EXL-437, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550661

1.CHECK SIDE TURN SIGNAL LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect right front door control unit and door mirror RH connector.
3. Check continuity between BCM harness connector and ground.

Right front door control unit		Ground	Continuity
Connector	Terminal		
D54	9		Not existed

Is the inspection result normal?

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

2.CHECK SIDE TURN SIGNAL LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between right front door control unit harness connector and door mirror RH harness connector.

Right front door control unit		Door mirror RH		Continuity
Connector	Terminal	Connector	Terminal	
D54	9	D92	2	Existed

2. Check voltage between right front door control unit harness connector and ground.

(+)		(–)	Voltage (Approx.)
Right front door control unit			
Connector	Terminal		
D54	9	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect right front door control unit and door mirror RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “Right front door control unit” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-436, "RH : DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE SIDE TURN SIGNAL LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace side turn signal lamp RH. Refer to EXL-519, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “Right front door control unit” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-436, "RH : DTC Description".

Is DTC detected?

YES >> Replace right front door control unit. Refer to DLK-286, "Removal and Installation".
NO >> INSPECTION END

B1797 PARKING LAMP LH 2 CIRCUIT

DTC Description

INFOID:0000000013550662

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1797	11	Standing light lh 2 (Standing light left hand 2)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch PARKING LH
				Signal (terminal)	Paring lamp LH signal
				Threshold	Harness to the parking lamp LH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch PARKING LH
				Signal (terminal)	Paring lamp LH signal
				Threshold	Harness to the parking lamp LH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to front combination lamp LH)
- BCM
- Front combination lamp LH

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn rotary light switch PARKING LH and wait 12.5 seconds or more.
2. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-439, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550663

1.CHECK PARKING LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp LH connectors.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E16	150		Not existed

Is the inspection result normal?

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

2.CHECK PARKING LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front combination lamp LH harness connector.

BCM		Front combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
E16	150	E80	12	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E16	150	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and front combination lamp LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-439, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE FRONT COMBINATION LAMP LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-439, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B179B PARKING LAMP RH 2 CIRCUIT

DTC Description

INFOID:0000000013550664

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B179B	11	Standing light rh 2 (Standing light right hand 2)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch PARKING RH
				Signal (terminal)	Paring lamp RH signal
				Threshold	Harness to the parking lamp RH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch PARKING RH
				Signal (terminal)	Paring lamp RH signal
				Threshold	Harness to the parking lamp RH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to front combination lamp RH)
- BCM
- Front combination lamp RH

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn rotary light switch PARKING RH and wait 12.5 seconds or more.
2. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-441, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550665

1.CHECK PARKING LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and front combination lamp RH connectors.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E15	126		Not existed

Is the inspection result normal?

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

2.CHECK PARKING LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and front combination lamp RH harness connector.

BCM		Front combination lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
E15	126	E82	12	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
E15	126	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and front combination lamp RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-441, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE FRONT COMBINATION LAMP RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-441, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B17F7 LICENSE PLATE LAMP CIRCUIT

DTC Description

INFOID:0000000013550666

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B17F7	11	License plate lamp output signal	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	License plate lamp signal
				Threshold	Harness to the license plate lamp is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	License plate lamp signal
				Threshold	Harness to the license plate lamp is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector (BCM to license plate lamp)
- BCM
- License plate lamp LH
- License plate lamp RH

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch POSITION and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-443, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550667

1.CHECK LICENSE PLATE LAMP SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and license plate lamp connector.
3. Check continuity between BCM harness connector and ground.

LH

BCM		Ground	Continuity
Connector	Terminal		
M27	62		Not existed

RH

BCM		Ground	Continuity
Connector	Terminal		
M28	72		Not existed

Is the inspection result normal?

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

2.CHECK LICENSE PLATE LAMP SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and license plate lamp harness connector.

LH

BCM		license plate lamp LH		Continuity
Connector	Terminal	Connector	Terminal	
M27	62	M157	1	Existed

RH

BCM		license plate lamp RH		Continuity
Connector	Terminal	Connector	Terminal	
M28	72	M158	1	Existed

2. Check voltage between BCM harness connector and ground.

LH

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	62	Ground	0 V

RH

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	72	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and license plate lamp connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-443, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE LICENSE PLATE LAMP AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace corresponding license plate lamp. Refer to EXL-531, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-443, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B17FC PARKING LAMP/POSITION LAMP SWITCH

DTC Description

INFOID:0000000013550668

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B17FC	16	Standing light/parking light switch (Standing light/parking light switch)	[CIRC VOLT BELOW THRESHOLD]	Diagnosis condition	Ignition switch OFF
				Signal (terminal)	—
				Threshold	Battery power supply is not available
				Diagnosis delay time	—

POSSIBLE CAUSE

- Battery
- Alternator
- Harness or connector

FAIL-SAFE

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-445, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550669

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-51, "DTC Index".

2.CHECK BATTERY VOLTAGE

Measure the battery voltage.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform battery inspection. Refer to PG-102, "MAIN BATTERY : How to Handle Battery".

3.CHECK HEADLAMP CONTROL UNIT POWER SUPPLY

1. Turn ignition switch OFF.
2. Check voltage between front combination lamp LH harness connector and ground.

LH

(+)		(–)	Voltage (Approx.)
Front combination lamp LH			
Connector	Terminal		
E80	11	Ground	13.6 V

RH

(+)		(–)	Voltage (Approx.)
Front combination lamp RH			
Connector	Terminal		
E82	11	Ground	13.6 V

Is the inspection result normal?

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

4. CHECK HEADLAMP CONTROL UNIT GROUND CIRCUIT

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

LH

Front combination lamp LH		Ground	Continuity
Connector	Terminal		
E80	10		Existed

RH

Front combination lamp RH		Ground	Continuity
Connector	Terminal		
E82	10		Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace harness.

B1F10 HAZARD SWITCH

DTC Description

INFOID:0000000013550670

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1F10	2A	Hazard switch (Hazard switch)	[SIGNAL STUCK IN RANGE]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	—
				Threshold	Upper control panel control unit malfunction. There is no signal change (switch stuck)
				Diagnosis delay time	40 sec.

POSSIBLE CAUSE

- Upper control panel control unit
- BCM

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON and wait 40 seconds or more.
2. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-447, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550671

1.CHECK SELF DIAGNOSTIC RESULT

Check DTC using CONSULT.

What is the display history of DTC?

“PAST” >> GO TO 2.
“CRNT”>> GO TO 3.

2.ERASE DTC

1. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-447, "DTC Description".

Is DTC detected?

YES >> GO TO 3.
NO >> Check intermittent incident. Refer to GI-56, "Intermittent Incident".

3.CHECK SWITCH OPERATION

Check the operation of each switch on upper control panel control unit is normal.

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> Replace upper control panel control unit. Refer to BCS-252, "Removal and Installation".

B1FB1 HEADLAMP CONTROL UNIT TEMPERATURE SENSOR 1

LH

LH : DTC Description

INFOID:0000000013550672

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 1 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-448, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550673

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550674

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB1	01	Temp sensor 1 (H/L range adjust ECU) [Temperature sensor 1 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit RH temperature sensor 1 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-449, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550675

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

B1FB2 HEADLAMP CONTROL UNIT TEMPERATURE SENSOR 2

LH

LH : DTC Description

INFOID:0000000013550676

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 2 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-450, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550677

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550678

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB2	01	Temp sensor 2 (H/L range adjust ECU) [Temperature sensor 2 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit RH temperature sensor 2 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-451, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550679

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

B1FB3 HEADLAMP CONTROL UNIT TEMPERATURE SENSOR 3

LH

LH : DTC Description

INFOID:0000000013550680

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 3 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-452, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550681

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550682

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB3	01	Temp sensor 3 (H/L range adjust ECU) [Temperature sensor 3 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit RH temperature sensor 3 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-453, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550683

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

B1FB4 HEADLAMP CONTROL UNIT TEMPERATURE SENSOR 4

LH

LH : DTC Description

INFOID:0000000013550684

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 4 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-454, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550685

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550686

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB4	01	Temp sensor 4 (H/L range adjust ECU) [Temperature sensor 4 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit RH temperature sensor 4 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-455, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550687

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

B1FB5 HEADLAMP CONTROL UNIT TEMPERATURE SENSOR 5

LH

LH : DTC Description

INFOID:0000000013550688

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 5 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-456, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550689

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550690

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B1FB5	01	Temp sensor 5 (H/L range adjust ECU) [Temperature sensor 5 (headlamp range adjustment ECU)]	[ELECTRICAL MALFUNCTION]	Diagnosis condition	Rotary light switch LO
				Signal (terminal)	—
				Threshold	Harness to headlamp control unit LH temperature sensor 5 has a open or short circuit
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

Front combination lamp LH

FAIL-SAFE

Exterior lamps dim lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch LO.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-457, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550691

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

B2800 STOP LAMP LH CIRCUIT

DTC Description

INFOID:0000000013550692

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2800	11	Stop lamp and tail lamp lh (outer) [Stop lamp and tail lamp left hand (outer)]	[CIRC SHORT TO GRND]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp LH signal
				Threshold	Harness to the stop lamp LH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp LH signal
				Threshold	Harness to the stop lamp LH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp LH (body side)]
- BCM
- Rear combination lamp LH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Brake pedal depressed and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-458, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550693

1.CHECK STOP LAMP LH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp LH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	57		Not existed

Is the inspection result normal?

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

2.CHECK STOP LAMP LH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH (body side) harness connector.

BCM		Rear combination lamp LH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M27	57	M194	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	57	Ground	0 V

Is the inspection result normal?

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

3. ERASE DTC

1. Connect BCM and rear combination lamp LH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-458, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4. REPLACE REAR COMBINATION LAMP LH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp LH (body side). Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-458, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2801 TAIL LAMP LH (BACK DOOR SIDE) CIRCUIT

DTC Description

INFOID:0000000013550694

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2801	11	Stop lamp and tail lamp lh (inner) [Stop lamp and tail lamp left hand (inner)]	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp LH (back door side) signal
				Threshold	Harness to the tail lamp LH (back door side) is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp LH (back door side) signal
				Threshold	Harness to the tail lamp LH (back door side) is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp LH (back door side)]
- BCM
- Rear combination lamp LH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch POSITION and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-460, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550695

1.CHECK TAIL LAMP LH (BACK DOOR SIDE) SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp LH (back door side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	85		Not existed

Is the inspection result normal?

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

2.CHECK TAIL LAMP LH (BACK DOOR SIDE) SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH (back door side) harness connector.

BCM		Rear combination lamp LH (back door side)		Continuity
Connector	Terminal	Connector	Terminal	
M28	85	M14	3	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	85	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp LH (back door side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-460, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP LH (BACK DOOR SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp LH (back door side). Refer to EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-460, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2802 STOP LAMP RH CIRCUIT

DTC Description

INFOID:0000000013550696

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2802	11	Stop lamp and tail lamp rh (outer) [Stop lamp and tail lamp right hand (outer)]	[CIRC SHORT TO GRND]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp RH signal
				Threshold	Harness to the stop lamp RH is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Brake pedal is depressed
				Signal (terminal)	Stop lamp RH signal
				Threshold	Harness to the stop lamp RH is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp RH (body side)]
- BCM
- Rear combination lamp RH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Brake pedal depressed and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-462, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550697

1.CHECK STOP LAMP RH SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp RH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	69		Not existed

Is the inspection result normal?

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

2.CHECK STOP LAMP RH SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH (body side) harness connector.

BCM		Rear combination lamp RH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M28	69	M195	2	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	69	Ground	0 V

Is the inspection result normal?

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

3. ERASE DTC

1. Connect BCM and rear combination lamp RH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-462, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4. REPLACE REAR COMBINATION LAMP RH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp RH (body side). Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-462, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2803 TAIL LAMP RH (BACK DOOR SIDE) CIRCUIT

DTC Description

INFOID:0000000013550698

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2803	11	Stop lamp and tail lamp rh (inner) [Stop lamp and tail lamp right hand (inner)]	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp RH (back door side) signal
				Threshold	Harness to the tail lamp RH (back door side) is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp RH (back door side) signal
				Threshold	Harness to the tail lamp RH (back door side) is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp RH (back door side)]
- BCM
- Rear combination lamp RH (back door side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch POSITION and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-464, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550699

1.CHECK TAIL LAMP RH (BACK DOOR SIDE) SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp RH (back door side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	48		Not existed

Is the inspection result normal?

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

2.CHECK TAIL LAMP RH (BACK DOOR SIDE) SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH (back door side) harness connector.

BCM		Rear combination lamp RH (back door side)		Continuity
Connector	Terminal	Connector	Terminal	
M27	48	M15	3	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	48	Ground	0 V

Is the inspection result normal?

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

3.ERASE DTC

1. Connect BCM and rear combination lamp RH (back door side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-464, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4.REPLACE REAR COMBINATION LAMP RH (BACK DOOR SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp RH (back door side). Refer to EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-464, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2853 TAIL LAMP LH (BODY SIDE) CIRCUIT

DTC Description

INFOID:0000000013550700

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2853	11	Tail lamp lh output signal (Tail lamp left hand output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp LH (body side) signal
				Threshold	Harness to the tail lamp LH (body side) is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp LH (body side) signal
				Threshold	Harness to the tail lamp LH (body side) is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp LH (body side)]
- BCM
- Rear combination lamp LH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch POSITION and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-466, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550701

1.CHECK TAIL LAMP LH (BODY SIDE) SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp LH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M28	82		Not existed

Is the inspection result normal?

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

2.CHECK TAIL LAMP LH (BODY SIDE) SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp LH (body side) harness connector.

BCM		Rear combination lamp LH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M28	82	M194	3	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M28	82	Ground	0 V

Is the inspection result normal?

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

3. ERASE DTC

1. Connect BCM and rear combination lamp LH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-466, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4. REPLACE REAR COMBINATION LAMP LH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp LH (body side). Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-466, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2854 TAIL LAMP RH (BODY SIDE) CIRCUIT

DTC Description

INFOID:0000000013550702

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2854	11	Tail lamp rh output signal (Tail lamp right hand output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp RH (body side) signal
				Threshold	Harness to the tail lamp RH (body side) is shorted to ground
				Diagnosis delay time	12.5 sec.
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	Tail lamp RH (body side) signal
				Threshold	Harness to the tail lamp RH (body side) is shorted to battery or open
				Diagnosis delay time	12.5 sec.

POSSIBLE CAUSE

- Harness or connector [BCM to rear combination lamp RH (body side)]
- BCM
- Rear combination lamp RH (body side)

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn rotary light switch POSITION and wait 12.5 seconds or more.
3. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-468, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550703

1.CHECK TAIL LAMP RH (BODY SIDE) SIGNAL CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect BCM and rear combination lamp RH (body side) connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M27	45		Not existed

Is the inspection result normal?

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

2.CHECK TAIL LAMP RH (BODY SIDE) SIGNAL CIRCUIT 2

1. Check continuity between BCM harness connector and rear combination lamp RH (body side) harness connector.

BCM		Rear combination lamp RH (body side)		Continuity
Connector	Terminal	Connector	Terminal	
M27	45	M195	3	Existed

2. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (Approx.)
BCM			
Connector	Terminal		
M27	45	Ground	0 V

Is the inspection result normal?

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

3. ERASE DTC

1. Connect BCM and rear combination lamp RH (body side) connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-468, "DTC Description".

Is DTC detected?

YES >> GO TO 4.
NO >> INSPECTION END

4. REPLACE REAR COMBINATION LAMP RH (BODY SIDE) AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rear combination lamp RH (body side). Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-468, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

B2857 POSITION LAMP CIRCUIT
LH
LH : DTC Description

INFOID:0000000013550706

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to position lamp LH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to position lamp LH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Position lamp LH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Position lamp LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Parking lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-470, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550707

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550708

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2857	11	Standing light 1 output signal (Standing light 1 output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to position lamp RH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to position lamp RH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Position lamp RH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Position lamp RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Parking lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-472, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550709

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

B2859 SIDE MAKER LAMP CIRCUIT
LH

LH : DTC Description

INFOID:0000000013663016

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to front side marker lamp LH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to front side marker lamp LH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Front side marker lamp LH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Front side marker lamp LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Front side marker lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-474, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013663017

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013663018

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2859	11	Side marker lamp output signal (Side marker lamp output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to front side marker lamp RH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Harness to front side marker lamp RH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Front side marker lamp RH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Front side marker lamp RH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	Rotary light switch POSITION
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Front side marker lamp does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-475, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013663019

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

B2860 DAYTIME RUNNING LIGHT CIRCUIT
LH

LH : DTC Description

INFOID:0000000013550710

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Harness to daytime running light LH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Harness to daytime running light LH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELECTRONIC FAILURE]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Daytime running light LH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERATURE]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Daytime running light LH has a malfunction. There is a over temperature.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE
Front combination lamp LH

FAIL-SAFE
Daytime running light does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-477, "LH : Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550711

1.REPLACE FRONT COMBINATION LAMP LH

Replace the front combination lamp LH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550712

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
B2860	11	Daytime running light output signal (Daytime running light output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Harness to daytime running light RH is shorted to ground
				Diagnosis delay time	1 sec.
	13		[CIRC OPEN]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Harness to daytime running light RH has a open circuit
				Diagnosis delay time	1 sec.
	49		[INTERNAL ELEC-TRONIC FAILURE]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Daytime running light RH internal malfunction
				Diagnosis delay time	1 sec.
	4B		[OVER TEMPERA-TURE]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Daytime running light RH has a mal-function. There is a over tempera-ture.
				Diagnosis delay time	—
	55		[NOT CONFIURED]	Diagnosis condition	Engine start with combination switch AUTO
				Signal (terminal)	—
				Threshold	Configuration data is corrupted
				Diagnosis delay time	—

POSSIBLE CAUSE

Front combination lamp RH

FAIL-SAFE

Daytime running light does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-478, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550713

1.REPLACE FRONT COMBINATION LAMP RH

Replace the front combination lamp RH. Refer to EXL-514, "Removal and Installation".

>> INSPECTION END

P1240 CAN COMM CIRCUIT

LH

LH : DTC Description

INFOID:0000000013550714

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Headlamp control unit LH detected CAN communication
				Diagnosis delay time	—

POSSIBLE CAUSE

- CAN communication line
- Headlamp control unit LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-479, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550715

1. CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

YES >> Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
NO >> Repair or replace harness.

RH

RH : DTC Description

INFOID:0000000013550716

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
P1240	88	CAN BUS (CAN bus)	[BUS OFF]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Headlamp control unit RH detected CAN communication
				Diagnosis delay time	—

POSSIBLE CAUSE

- CAN communication line
- Headlamp control unit RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-480, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550717

1.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

YES >> Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
NO >> Repair or replace harness.

U0100 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013550718

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	ECM does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- ECM
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control unit LH”.

Is DTC detected?

YES >> Refer to EXL-481, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550719

1.CHECK DTC WITH ECM

Check that DTC is not detected with ECM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to EC-142, "DTC Index"

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE ECM AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace ECM. Refer to EC-963, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH.” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-481, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550720

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0100	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	ECM does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- ECM
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control unit RH”.

Is DTC detected?

YES >> Refer to EXL-482, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550721

1.CHECK DTC WITH ECM

Check that DTC is not detected with ECM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to EC-142, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE ECM AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace ECM. Refer to EC-963, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH.” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-482, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

U0121 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013550722

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic stability program control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic stability program control unit
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control unit LH”.

Is DTC detected?

YES >> Refer to EXL-484, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550723

1.CHECK DTC WITH ELECTRONIC STABILITY PROGRAM CONTROL UNIT

Check that DTC is not detected with electronic stability program control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BRC-59, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE ELECTRONIC STABILITY PROGRAM CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic stability program control unit. Refer to BRC-975, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-484, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550724

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0121	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic stability program control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic stability program control unit
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control unit RH”.

Is DTC detected?

YES >> Refer to EXL-485, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550725

1.CHECK DTC WITH ELECTRONIC STABILITY PROGRAM CONTROL UNIT

Check that DTC is not detected with electronic stability program control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BRC-59, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE ELECTRONIC STABILITY PROGRAM CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic stability program control unit. Refer to BRC-975, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.

5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-485, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

U0146 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013550726

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic ignition switch control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic ignition switch control unit
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-487, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550727

1. CHECK DTC WITH ELECTRONIC IGNITION SWITCH CONTROL UNIT

Check that DTC is not detected with electronic ignition switch control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PCS-12, "DTC Index".

2. CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3. INPUT THE VIN OF THE VEHICLE

1. Turn ignition switch ON.
2. Select “Work Support” mode of “Electronic ign switch cont unit” using CONSULT.
3. Select and start the “VIN REGISTRATION”.

Is input the VIN completed?

YES >> GO TO 4.
NO >> Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".

4.ERASE DTC

1. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-487, "LH : DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE ELECTRONIC IGNITION SWITCH CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-487, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550728

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0146	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic ignition switch control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic ignition switch control unit
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-488, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550729

1.CHECK DTC WITH ELECTRONIC IGNITION SWITCH CONTROL UNIT

Check that DTC is not detected with electronic ignition switch control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PCS-12, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.INPUT THE VIN OF THE VEHICLE

1. Turn ignition switch ON.
2. Select “Work Support” mode of “Electronic ign switch cont unit” using CONSULT.
3. Select and start the “VIN REGISTRATION”.

Is input the VIN completed?

YES >> GO TO 4.
NO >> Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".

4.ERASE DTC

1. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-488, "RH : DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE ELECTRONIC IGNITION SWITCH CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-488, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

U0155 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013550730

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Combination meter does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Combination meter
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-490, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550731

1.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to MWI-85, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE COMBINATION METER AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace combination meter. Refer to MWI-155, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-490, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550732

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0155	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Combination meter does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Combination meter
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-491, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550733

1.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to MWI-85, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE COMBINATION METER AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace combination meter. Refer to MWI-155, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-491, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

U0168 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013550734

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic ignition switch control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic ignition switch control unit
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-493, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550735

1.CHECK DTC WITH ELECTRONIC IGNITION SWITCH CONTROL UNIT

Check that DTC is not detected with electronic ignition switch control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PCS-12, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.INPUT THE VIN OF THE VEHICLE

1. Turn ignition switch ON.
2. Select “Work Support” mode of “Electronic ign switch cont unit” using CONSULT.
3. Select and start the “VIN REGISTRATION”.

Is input the VIN completed?

YES >> GO TO 4.
NO >> Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".

4.ERASE DTC

1. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-493, "LH : DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE ELECTRONIC IGNITION SWITCH CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-493, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550736

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0168	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Electronic ignition switch control unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Electronic ignition switch control unit
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-494, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550737

1.CHECK DTC WITH ELECTRONIC IGNITION SWITCH CONTROL UNIT

Check that DTC is not detected with electronic ignition switch control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PCS-12, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.INPUT THE VIN OF THE VEHICLE

1. Turn ignition switch ON.
2. Select “Work Support” mode of “Electronic ign switch cont unit” using CONSULT.
3. Select and start the “VIN REGISTRATION”.

Is input the VIN completed?

YES >> GO TO 4.
NO >> Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".

4.ERASE DTC

1. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-494, "RH : DTC Description".

Is DTC detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE ELECTRONIC IGNITION SWITCH CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace electronic ignition switch control unit. Refer to PCS-47, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-494, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

U0212 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013550738

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Engine start and turn the steering wheel to the left
				Signal (terminal)	CAN communication
				Threshold	Steering column control module does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Steering column control module
- Front combination lamp

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine.
2. Turn the steering wheel to the left.
3. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-496, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550739

1.CHECK DTC WITH STEERING COLUMN CONTROL MODULE

Check that DTC is not detected with steering column control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-61, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE STEERING COLUMN CONTROL MODULE AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace steering column control module. Refer to BCS-250, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.

5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-496, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550740

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U0212	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Engine start and turn the steering wheel to the right
				Signal (terminal)	CAN communication
				Threshold	Steering column control module does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Steering column control module
- Front combination lamp

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine.
2. Turn the steering wheel to the right.
3. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-497, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550741

1.CHECK DTC WITH STEERING COLUMN CONTROL MODULE

Check that DTC is not detected with steering column control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-61, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE STEERING COLUMN CONTROL MODULE AND ERASE DTC

1. Turn ignition switch OFF.

2. Replace steering column control module. Refer to BCS-250, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-497, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

U118A COMMUNICATION ERROR

DTC Description

INFOID:0000000013550742

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U118A	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Headlamp control unit LH does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Front combination lamp

FAIL-SAFE

Headlamp (HI/LO) does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-499, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550743

1.CHECK DTC WITH HEADLAMP CONTROL UNIT LH

Check that DTC is not detected with headlamp control unit LH.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to EXL-365, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE HEADLAMP CONTROL UNIT LH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-499, "DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".

NO >> INSPECTION END

U118B COMMUNICATION ERROR

DTC Description

INFOID:0000000013550744

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U118B	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Headlamp control unit RH does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Front combination lamp

FAIL-SAFE

Headlamp (HI/LO) does not lighting

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-501, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550745

1.CHECK DTC WITH HEADLAMP CONTROL UNIT RH

Check that DTC is not detected with headlamp control unit RH.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to EXL-365, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE HEADLAMP CONTROL UNIT RH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-501, "DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".

NO >> INSPECTION END

U11A3 COMMUNICATION ERROR

LH

LH : DTC Description

INFOID:0000000013550746

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Front camera unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Front camera unit
- Front combination lamp LH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module LH”.

Is DTC detected?

YES >> Refer to EXL-503, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013550747

1. CHECK DTC WITH FRONT CAMERE UNIT

Check that DTC is not detected with front camera unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DAS-44, "DTC Index".

2. CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3. REPLACE FRONT CAMERE UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front camera unit. Refer to DAS-176, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module LH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-503, "LH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp LH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

RH

RH : DTC Description

INFOID:0000000013550748

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U11A3	00	Communication error (Communication error)	[NO SUBTYPE INFO]	Diagnosis condition	Ignition switch ON
				Signal (terminal)	CAN communication
				Threshold	Front camera unit does not transmit signal on the CAN communication
				Diagnosis delay time	2 sec.

POSSIBLE CAUSE

- CAN communication line
- Front camera unit
- Front combination lamp RH

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “H/L control module RH”.

Is DTC detected?

YES >> Refer to EXL-504, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013550749

1.CHECK DTC WITH FRONT CAMERE UNIT

Check that DTC is not detected with front camera unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DAS-44, "DTC Index".

2.CHECK CAN COMMUNICATION SYSTEM DIAGNOSIS

Perform the trouble diagnosis for CAN communication system. Refer to LAN-58, "Trouble Diagnosis Flow Chart".

Is the inspection result normal?

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

3.REPLACE FRONT CAMERE UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace front camera unit. Refer to DAS-176, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “H/L control module RH” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-504, "RH : DTC Description".

Is DTC detected?

YES >> Replace front combination lamp RH. Refer to EXL-514, "Removal and Installation".
NO >> INSPECTION END

U141E COMMUNICATION ERROR

DTC Description

INFOID:0000000013550750

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detection condition	
U141E	00	Communication error (Communication error)	—	Diagnosis condition	All time
				Signal (terminal)	—
				Threshold	Rotary light switch is in an unplausible position
				Diagnosis delay time	—

POSSIBLE CAUSE

- Fuse
- Harness or connector
- Rotary light switch
- BCM

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Perform self-diagnosis for “BCM”.

Is DTC detected?

YES >> Refer to EXL-506, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013550751

1.CHECK FUSE

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

Unit	Location	Fuse No.	Capacity
Rotary light switch	Fuse and fusible link block 2	89	5A

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit if a fuse is blown (open).
NO >> GO TO 2.

2.CHECK ROTARY LIGHT SWITCH POWER SUPPLY

Check voltage between rotary light switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Rotary light switch			
Connector	Terminal		
M219	4	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK ROTARY LIGHT SWICH GROUND CIRCUIT

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

BCM		Rotary light switch		Continuity
Connector	Terminal	Connector	Terminal	
M25	7	M219	2	Existed

3. Check continuity between rotary light switch harness connector and ground.

Rotary light switch		Ground	Continuity
Connector	Terminal		
M219	2		Not existed

Is the inspection result normal?

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

4.CHECK ROTARY LIGHT SWICH SIGNAL CIRCUIT

1. Check continuity between BCM harness connector and rotary light switch harness connector.

BCM		Rotary light switch		Continuity
Connector	Terminal	Connector	Terminal	
M25	1	M219	8	Existed
	2		7	
	3		6	
	4		5	
	5		3	

2. Check continuity between rotary light switch harness connector and ground.

Rotary light switch		Ground	Continuity
Connector	Terminal		
M219	8	Ground	Not existed
	7		
	6		
	5		
	3		

Is the inspection result normal?

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

5.CHECK ROTARY LIGHT SWICH SIGNAL CIRCUIT

Check voltage between rotary light switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Rotary light switch			
Connector	Terminal		

M219	8	Ground	0 V
	7		
	6		
	5		
	3		

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6.ERASE DTC

1. Connect BCM and rotary light switch connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-506, "DTC Description".

Is DTC detected?

YES >> GO TO 7.
NO >> INSPECTION END

7.REPLACEROTARY LIGHT SWITCH AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace rotary light switch. Refer to EXL-514, "Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “BCM” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to EXL-506, "DTC Description".

Is DTC detected?

YES >> Replace BCM. Refer to BCS-248, "Removal and Installation".
NO >> INSPECTION END

PERIODIC MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Description

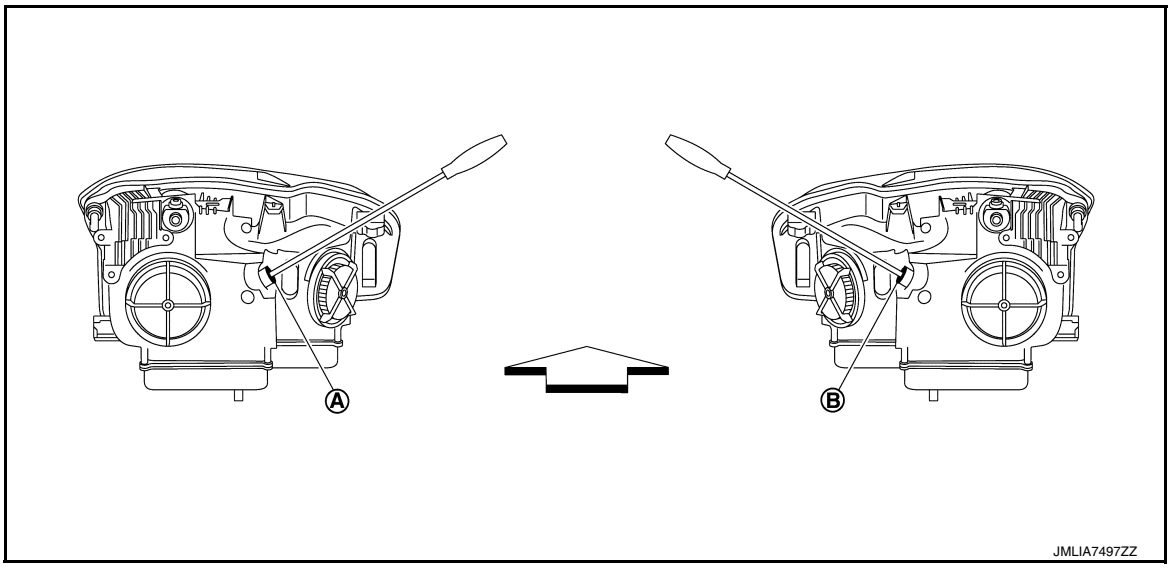
INFOID:0000000013688867

PREPARATION BEFORE ADJUSTING

NOTE:
- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the headlamp assembly has been replaced.

Before performing aiming adjustment, check the following.
- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)
  NOTE:
  Never remove the temporary tire, jack and on-vehicle tool.
- Wipe out dirt on the headlamp.
  CAUTION:
  Never use organic solvent (thinner, gasoline etc.).
- Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW



Ⓐ Headlamp LH (UP/DOWN) adjustment screw

Ⓑ Headlamp RH (UP/DOWN) adjustment screw

⇦ : Vehicle front

Adjustment screw		Screwdriver rotation	Facing direction
Ⓐ	Headlamp LH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN
Ⓑ	Headlamp RH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN

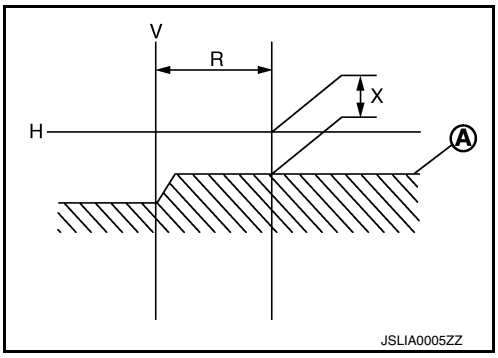
For aiming adjustment procedure, refer to EXL-510, "Aiming Adjustment Procedure".

Aiming Adjustment Procedure

INFOID:0000000013688868

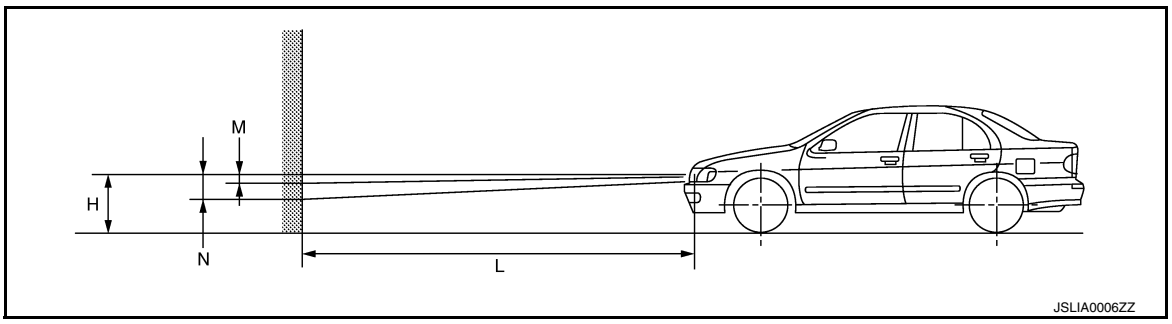
1. Place the screen.
   NOTE:
   - Stop the vehicle facing the wall.
   - Place the board on a plain road vertically.
2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the headlamp center and the screen.
3. Start the engine. Turn the headlamp (LO) ON.
   NOTE:
   Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.
   CAUTION:
   Never cover the lens surface with tape etc. The lens is made of rejin.
4. Measure the distance (X) between the horizontal center line of headlamp (H) and the cutoff line Ⓐ within the light axis measurement range (R) from the vertical center line ahead of headlamp (V).
   Low beam distribution on the screen

   Light axis measurement range (R) : 350 ± 175 mm (13.78 ± 6.89 in)



5. Adjust the cutoff line height (X) with the aiming adjustment screw so as to enter in the adjustment range (M–N) according to the horizontal center line of headlamp (H).

Side view



Distance from headlamp center to screen (L) : 10 m (32.8 ft)

unit: mm (in)

Horizontal center line of headlamp (H)	Highest cutoff line height (M)	Lowest cutoff line height (N)
700 (27.56) or less	4 (0.16)	30 (1.18)
701 (27.60) – 800 (31.50)	4 (0.16)	30 (1.18)
801 (31.54) or more	17 (0.67)	44 (1.73)

FRONT FOG LAMP AIMING ADJUSTMENT

Description

INFOID:0000000013550215

PREPARATION BEFORE ADJUSTING

NOTE:
- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the front fog lamp has been replaced.

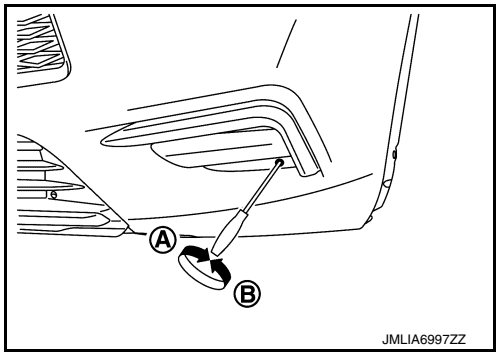
Before performing aiming adjustment, check the following.
- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)
  NOTE:
  Do not remove the temporary tire, jack and on-vehicle tool.
- Wipe out dirt on the front fog lamp.
  CAUTION:
  Never use organic solvent (thinner, gasoline etc.).
- Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW

For Standard Models
- Turn the aiming adjusting screw for adjustment.

  Ⓐ: UP

  Ⓑ: DOWN

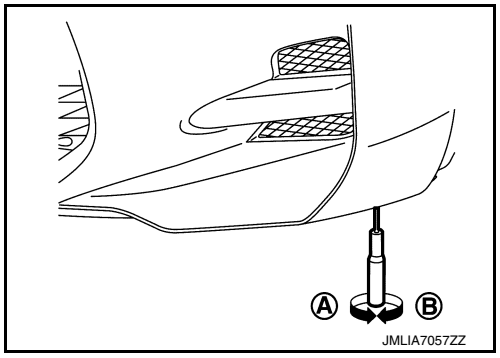


- For the position and direction of the adjusting screw, refer to the figure.
  NOTE:
  A screwdriver or hexagonal wrench [6 mm (0.24 in)] can be used for adjustment.

Except for Standard Models
- Turn the aiming adjusting screw for adjustment.

  Ⓐ: UP

  Ⓑ: DOWN



- For the position and direction of the adjusting screw, refer to the figure.
  NOTE:
  A screwdriver or hexagonal wrench [6 mm (0.24 in)] can be used for adjustment.

For aiming adjustment procedure, refer to EXL-511, "Aiming Adjustment Procedure".

Aiming Adjustment Procedure

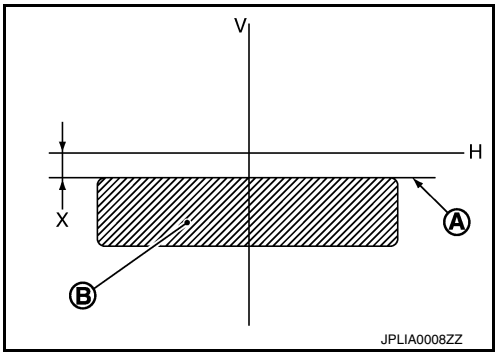
INFOID:0000000013550216

1. Place the screen.
   NOTE:
   - Stop the vehicle facing the wall.
   - Place the board on a plain road vertically.
2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the front fog lamp center and the screen.
3. Start the engine. Turn the front fog lamp ON.

CAUTION:
Never cover the lens surface with a tape, etc. because it is made from resin.
NOTE:
Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.

4. Adjust the cutoff line Ⓐ with the aiming adjustment screw so that the distance (X) between the horizontal center line of front fog lamp (H) and cutoff line Ⓐ becomes 100 mm (3.94 in).
Front fog lamp light distribution on the screen

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



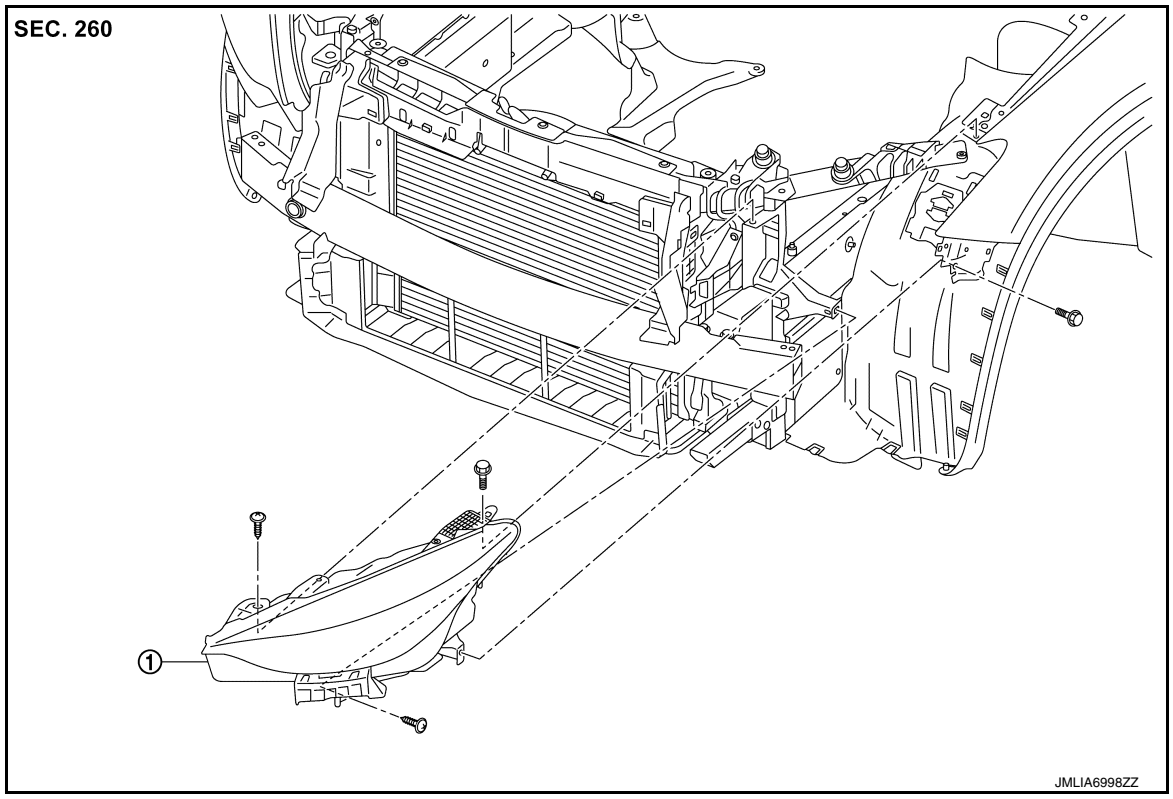
REMOVAL AND INSTALLATION

FRONT COMBINATION LAMP

Exploded View

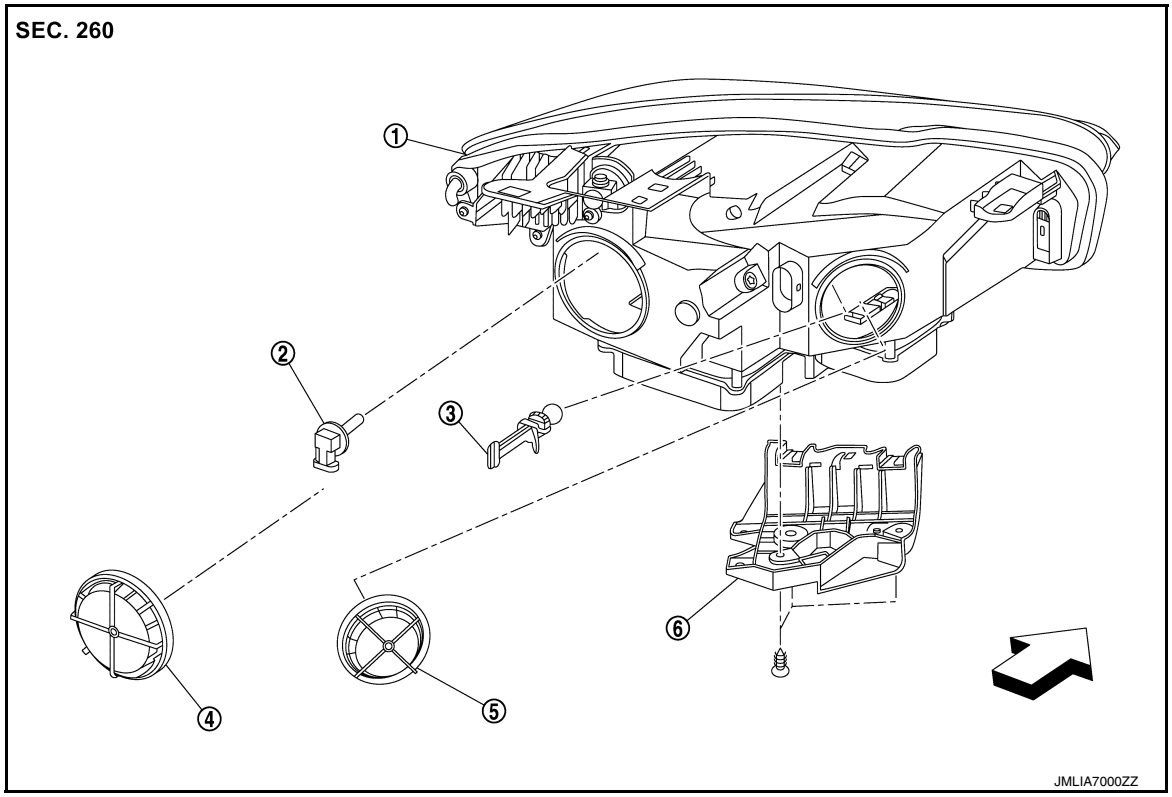
INFOID:0000000013550217

REMOVAL



① Front combination lamp

DISASSEMBLY



① Front combination lamp	② Headlamp bulb (Hi/Lo)	③ Front turn signal lamp bulb
④ Socket cover	⑤ Socket cover	⑥ Front bumper clip
⇦ : Vehicle front		

Removal and Installation

INFOID:0000000013550218

CAUTION:
Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-313, "Precautions for Removing Battery Terminal".

REMOVAL

1. Remove front bumper fascia. Refer to EXT-21, "Removal and Installation".
2. Remove front combination lamp mounting bolts and fixing screws.
3. Pull out front combination lamp forward the vehicle.
4. Disconnect front combination lamp harness connectors.
5. Remove front combination lamp.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:
- **After installation, perform aiming adjustment. Refer to EXL-509, "Description".**
- **Be sure to perform "ADDITIONAL SERVICE WHEN REPLACING HEADLAMP CONTROL UNIT" when removing the front combination lamp. Refer to EXL-387, "Description".**

Replacement

INFOID:0000000013550219

CAUTION:
- **Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-313, "Precautions for Removing Battery Terminal".**
- **After installing bulb, install socket cover and bulb socket securely for watertightness.**
- **Never touch glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lift or right after being turned OFF.**

- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

HEADLAMP BULB (HI/LO)

1. Remove socket cover.
2. Disconnect harness connector.
3. Rotate headlamp (Hi/Lo) counterclockwise and unlock it, and then remove headlamp (Hi/Lo).

FRONT TURN SIGNAL LAMP BULB

1. Remove socket cover.
2. Disconnect harness connector.
3. Rotate front turn signal lamp bulb counterclockwise and unlock it, and then remove front turn signal lamp bulb.

PARKING LAMP/DAYTIME RUNNING LIGHT/ POSITION LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front combination lamp as a set. Refer to EXL-514, "Removal and Installation".

FRONT SIDE MARKER LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front combination lamp as a set. Refer to EXL-514, "Removal and Installation".

Disassembly and Assembly

INFOID:0000000013550220

DISASSEMBLY

1. Remove front combination lamp. Refer to EXL-514, "Removal and Installation".
2. Remove front bumper clip fixing screws, and then remove front bumper clip.
3. Remove socket cover.
4. Disconnect harness connector.
5. Rotate headlamp (Hi/Lo) counterclockwise and unlock it, and then remove headlamp (Hi/Lo).
6. Rotate front turn signal lamp bulb counterclockwise and unlock it, and then remove front turn signal lamp bulb.

ASSEMBLY

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **After installation, perform aiming adjustment. Refer to EXL-509, "Description".**
- **Be sure to perform "ADDITIONAL SERVICE WHEN REPLACING HEADLAMP CONTROL UNIT" when removing the front combination lamp. Refer to EXL-387, "Description".**

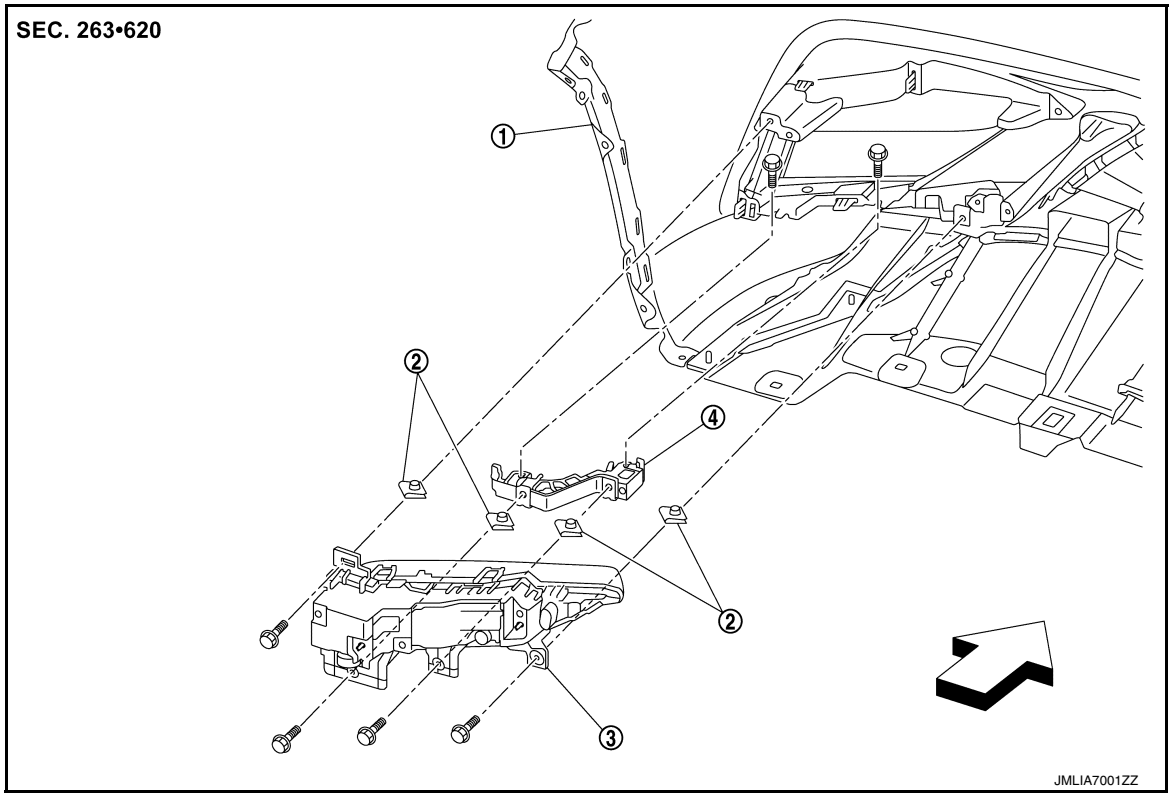
FRONT FOG LAMP

Exploded View

INFOID:0000000013688881

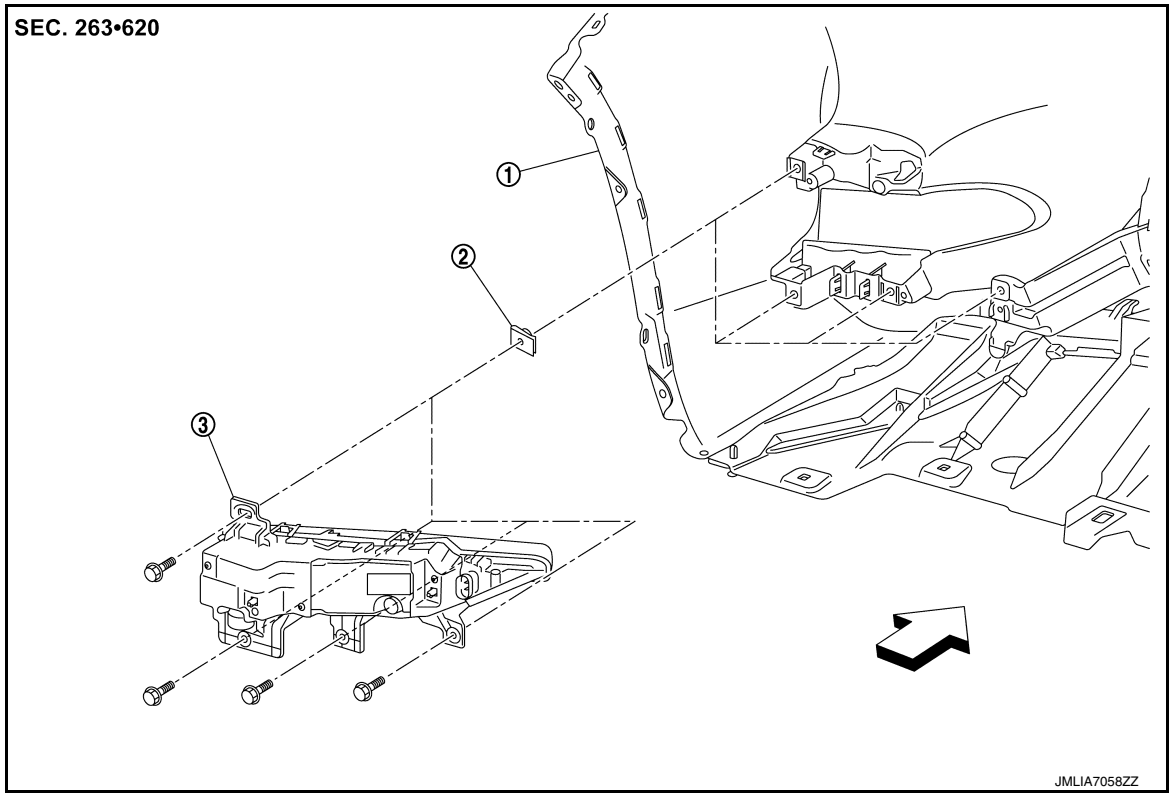
2WD MODELS

Standard Models



① Front bumper fascia
② U nut
③ Front fog lamp
④ Front fog lamp bracket
⇦ : Vehicle front

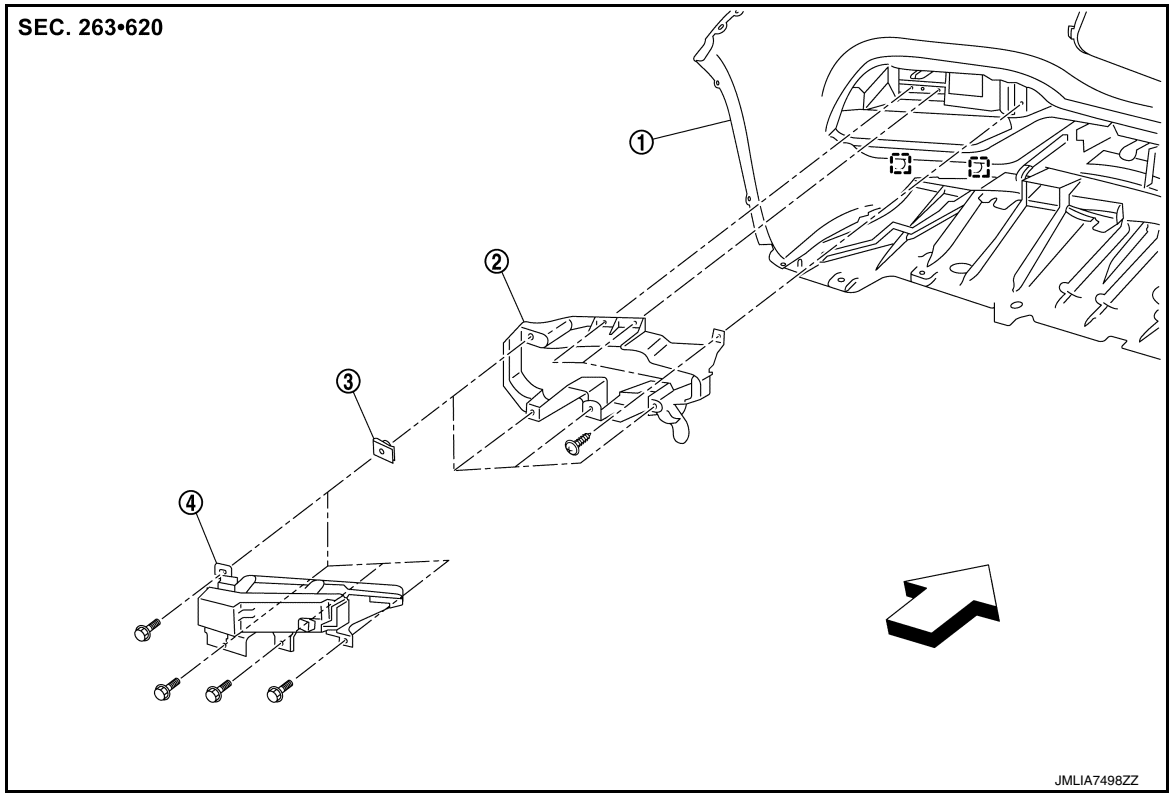
Sports Models



① Front bumper fascia ② U nut ③ Front fog lamp

⇦ : Vehicle front

AWD MODELS



① Front bumper fascia ② Front fog lamp bracket ③ U nut
④ Front fog lamp
: Metal clip
: Vehicle front

Removal and Installation

INFOID:0000000013688882

CAUTION:
Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-313, "Precautions for Removing Battery Terminal".

REMOVAL

1. Remove front fender protector. Refer to EXT-41, "FENDER PROTECTOR : Removal and Installation".
2. Disconnect front fog lamp harness connector.
3. Remove front fog lamp mounting bolts, and then remove front fog lamp.
4. Remove front fog lamp bracket.

2WD models (standard models)
- Remove front fog lamp bracket mounting bolts, and then remove front fog lamp bracket.

AWD models
- Remove front fog lamp bracket fixing screws and metal clips, and then remove front fog lamp bracket.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:
After installation, perform aiming adjustment. Refer to EXL-511, "Description".

Replacement

INFOID:0000000013688883

FRONT FOG LAMP

CAUTION:
Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front combination lamp as a set. Refer to EXL-518, "Removal and Installation".

SIDE TURN SIGNAL LAMP

Exploded View

INFOID:0000000013688884

Refer to MIR-68, "Exploded View".

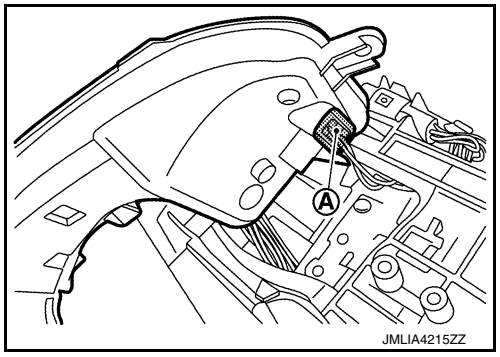
Removal and Installation

INFOID:0000000013688885

CAUTION:
Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-313, "Precautions for Removing Battery Terminal".

REMOVAL

1. Remove door mirror finisher. Refer to MIR-72, "DOOR MIRROR ASSEMBLY : Disassembly and Assembly".
2. Remove side turn signal lamp fixing screws.
3. Disconnect side turn signal lamp harness connector Ⓐ, and then remove side turn signal lamp.



INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000013688886

SIDE TURN SIGNAL LAMP

CAUTION:
Replacement of a single part is not possible due to the adoption of LED. For replacement, replace side turn signal lamp as a set. Refer to EXL-519, "Removal and Installation".

LIGHTING & TURN SIGNAL SWITCH

Removal and Installation

INFOID:0000000013688887

REMOVAL

Remove light & turn signal switch (steering column control module). Refer to BCS-250, "Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

HAZARD SWITCH

Removal and Installation

INFOID:0000000013688888

REMOVAL

Remove upper control panel control unit. Refer to BCS-252, "Removal and Installation".

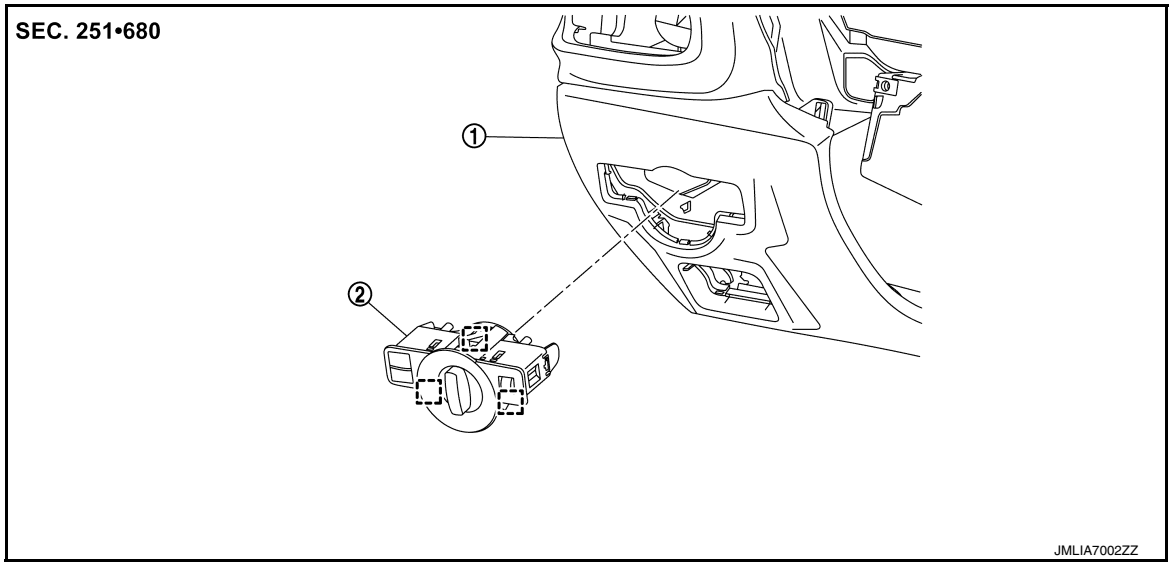
INSTALLATION

Install in the reverse order of removal.

ROTARY LIGHT SWITCH

Exploded View

INFOID:0000000013688889



① Instrument panel assembly ② Rotary light switch

: Metal clip

Removal and Installation

INFOID:0000000013688890

CAUTION:

Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-313, "Precautions for Removing Battery Terminal".

REMOVAL

1. Remove instrument panel. Refer to IP-13, "Removal and Installation".
2. Disengage rotary light switch fixing metal clips, and then remove rotary light switch.

INSTALLATION

Install in the reverse order of removal.

LIGHT & RAIN SENSOR

Removal and Installation

INFOID:0000000013688891

REMOVAL

Remove light & rain sensor. Refer to WW-81, "Removal and Installation".

INSTALLATION

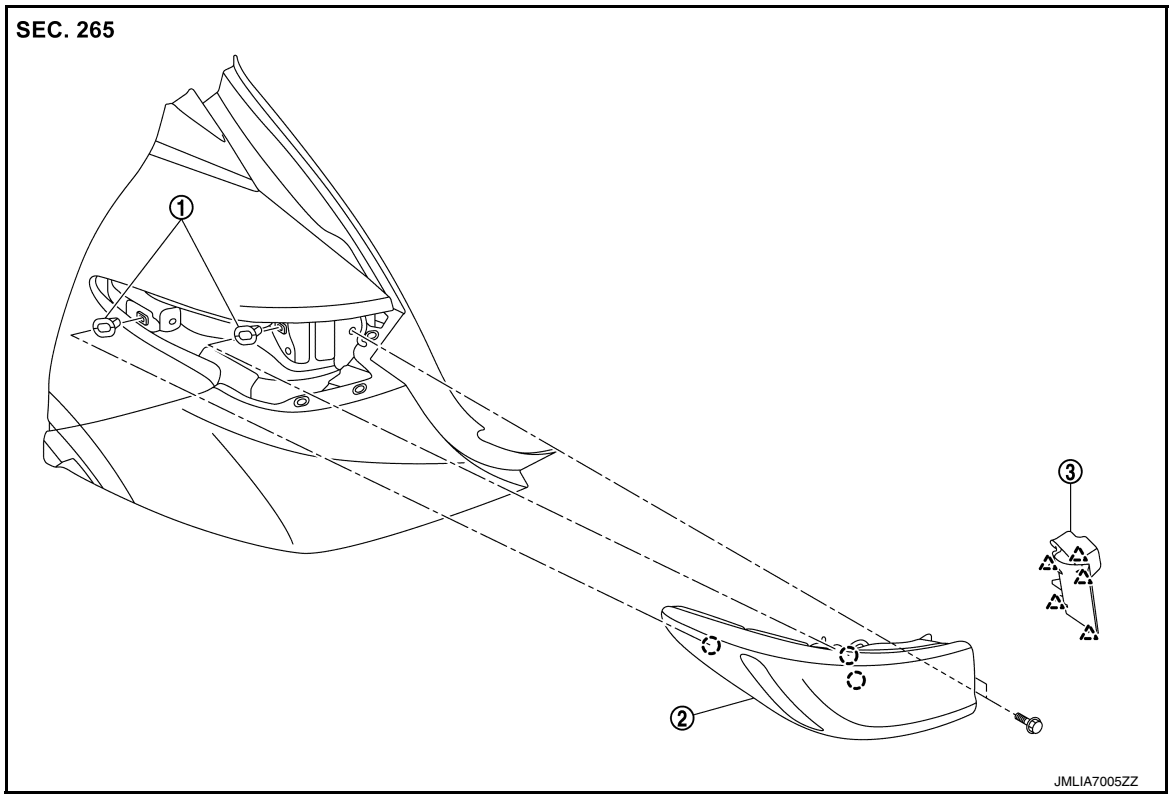
Install in the reverse order of removal.

REAR COMBINATION LAMP

Exploded View

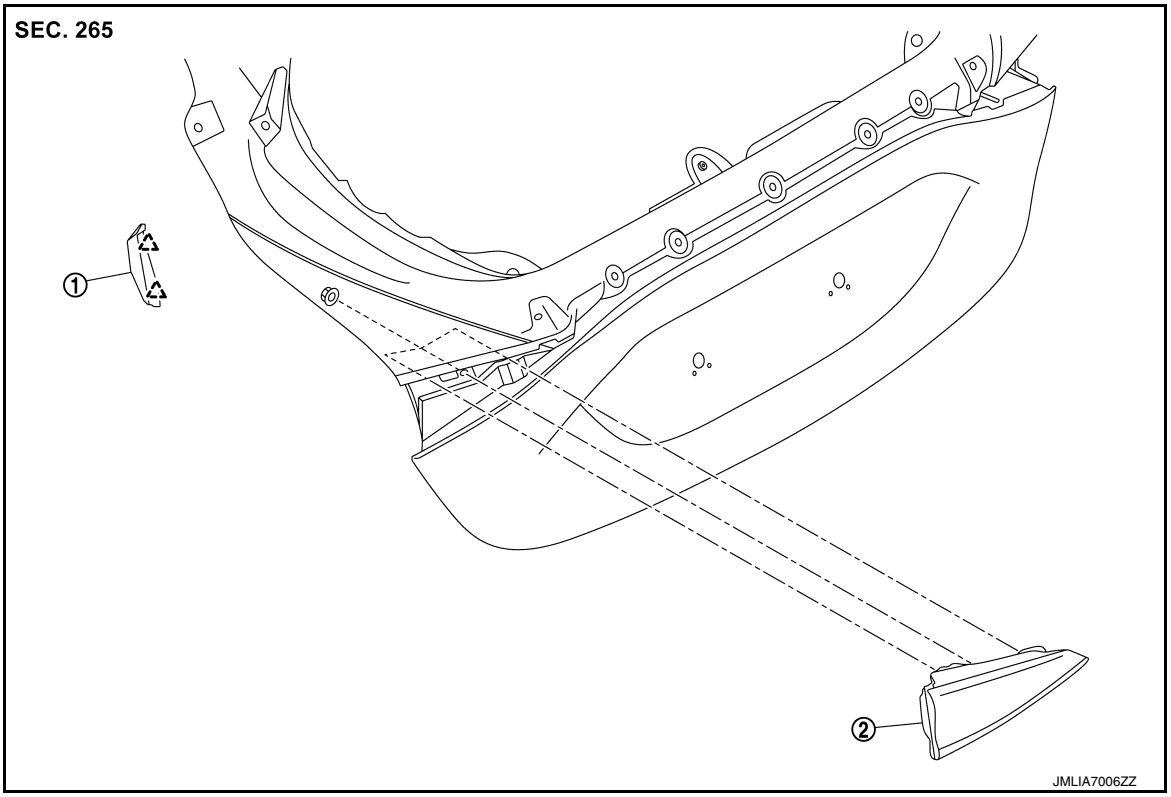
INFOID:0000000013688895

BODY SIDE



① Grommet
② Rear combination lamp
③ Rear combination lamp finisher
: Clip
: Pawl

BACK DOOR SIDE



① Rear combination lamp finisher ② Rear combination lamp

: Pawl

REAR COMBINATION LAMP (BODY SIDE)

REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation

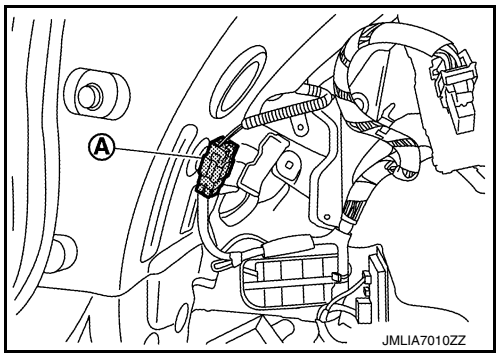
INFOID:0000000013688896

CAUTION:

- **Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-313, "Precautions for Removing Battery Terminal".**
- **When removing, always use a remover tool that is made of plastic.**

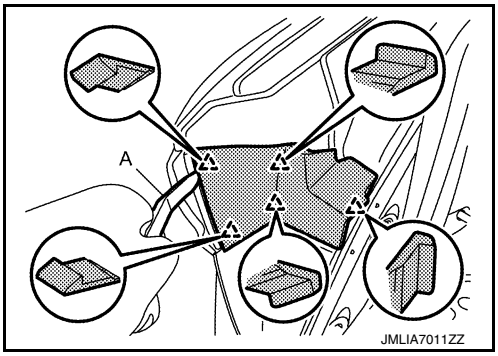
REMOVAL

1. Fully open back door.
2. Remove luggage side finisher lid. Refer to INT-36, "Exploded View".
3. Disconnect rear combination lamp harness connector Ⓐ.

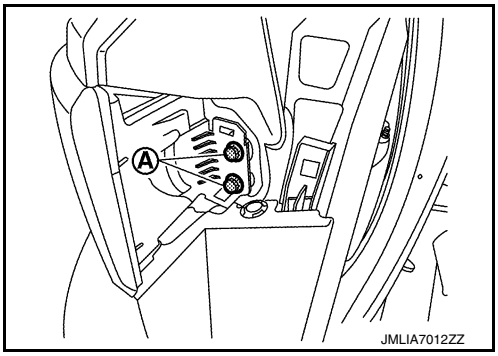


4. Disengage rear combination lamp finisher fixing pawls using a remover tool (A), and then remove rear combination lamp finisher.

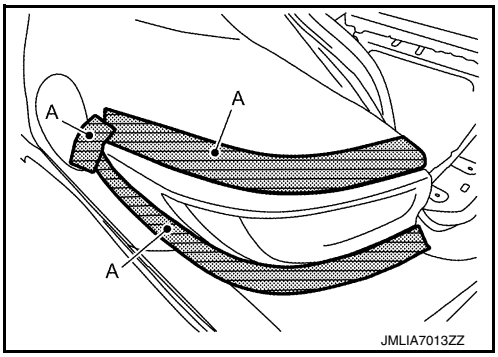
: Pawl



5. Remove rear combination lamp mounting bolts Ⓐ.

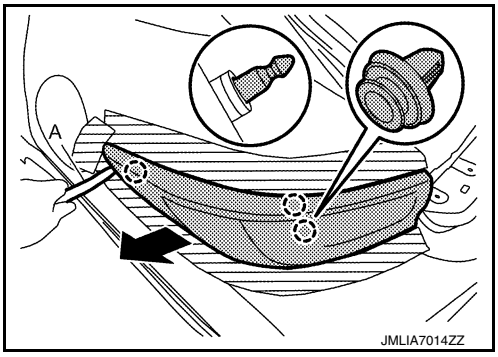


6. Apply protective tape (A) on the part to protect it from damage.

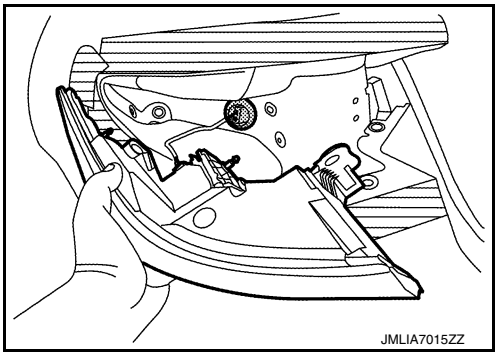


7. Disengage rear combination lamp fixing clips using a remover tool (A).

: Clip



8. Remove grommet, and then remove rear combination lamp.



INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Always replace seal packing with new part after every removal.

REAR COMBINATION LAMP (BODY SIDE) : Replacement

INFOID:0000000013688897

TAIL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".

STOP LAMP/REAR TURN SIGNAL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".

REAR TURN SIGNAL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".

REAR SIDE MARKER LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-525, "REAR COMBINATION LAMP (BODY SIDE) : Removal and Installation".

REAR COMBINATION LAMP (BACK DOOR SIDE)

REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation

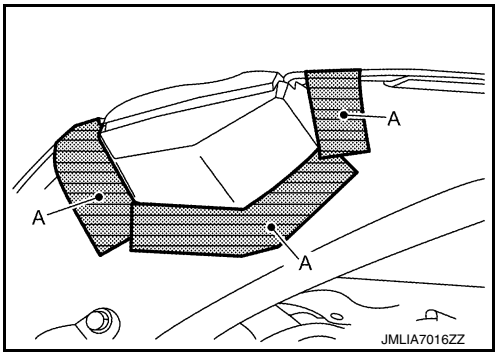
INFOID:0000000013688898

CAUTION:

- **Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-313, "Precautions for Removing Battery Terminal".**
- **When removing, always use a remover tool that is made of plastic.**

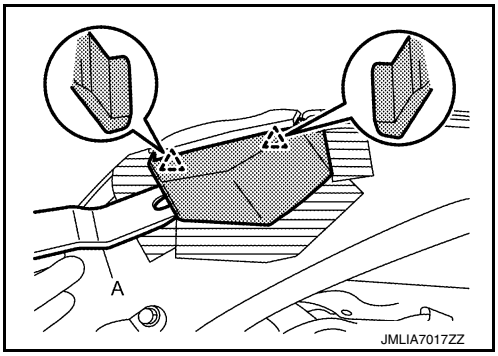
REMOVAL

1. Remove back door inner finisher. Refer to INT-43, "Removal and Installation".
2. Apply protective tape (A) on the part to protect it from damage.

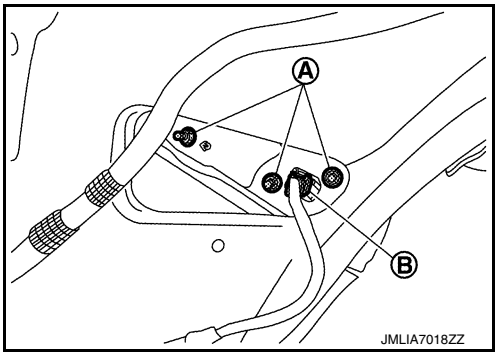


3. Disengage rear combination lamp fixing pawls using a remover tool (A).

: Pawl



4. Remove rear combination lamp mounting nuts Ⓐ, and then disconnect harness connector Ⓑ.



5. Pull rear combination lamp toward vehicle rear to remove rear combination lamp.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Always replace seal packing with new part after every removal.

REAR COMBINATION LAMP (BACK DOOR SIDE) : Replacement

INFOID:0000000013688899

TAIL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".

REAR TURN SIGNAL LAMP

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".

REAR FOG LAMP (DRIVER SIDE ONLY)

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".

BACK-UP LAMP

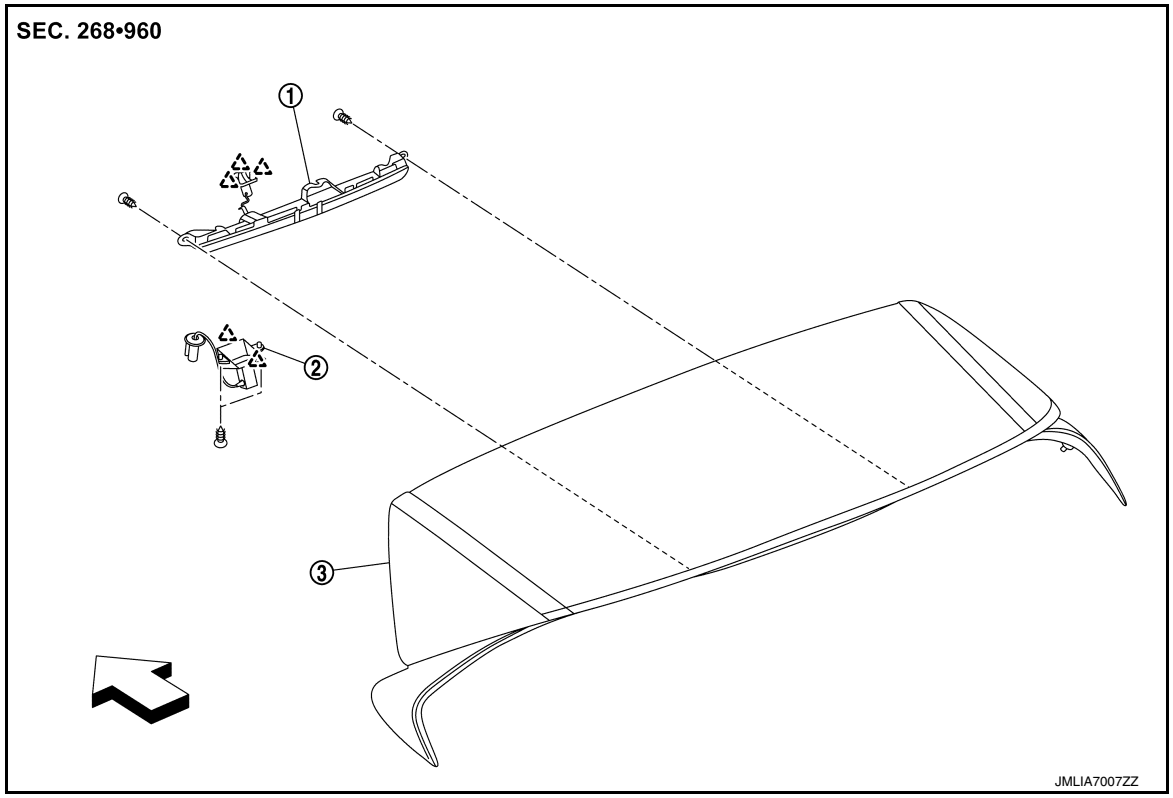
CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace rear combination lamp assembly as a set. Refer to EXL-527, "REAR COMBINATION LAMP (BACK DOOR SIDE) : Removal and Installation".

HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:0000000013688900



① High-mounted stop lamp ② High-mounted stop lamp bracket ③ Rear spoiler

: Pawl

: vehicle front

Removal and Installation

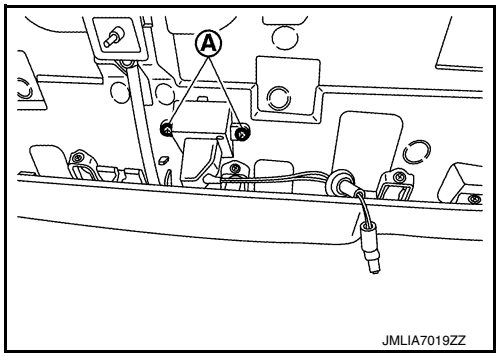
INFOID:0000000013688901

CAUTION:

Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-313, "Precautions for Removing Battery Terminal".

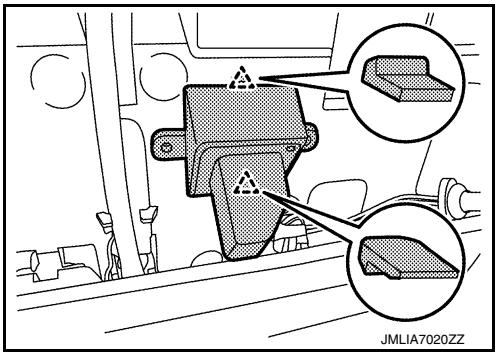
REMOVAL

1. Remove rear spoiler. Refer to EXT-59, "REAR SPOILER : Removal and Installation".
2. Remove high-mounted stop lamp bracket fixing screws Ⓐ.



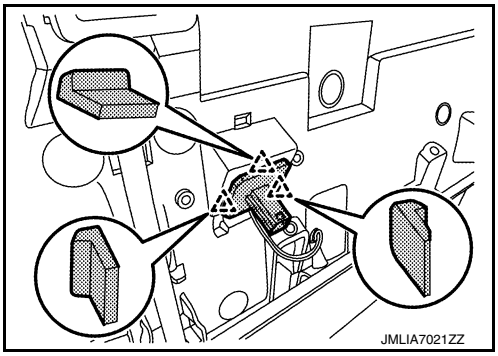
3. Disengage high-mounted stop lamp bracket fixing pawls, and then remove high-mounted stop lamp bracket.

: Pawl

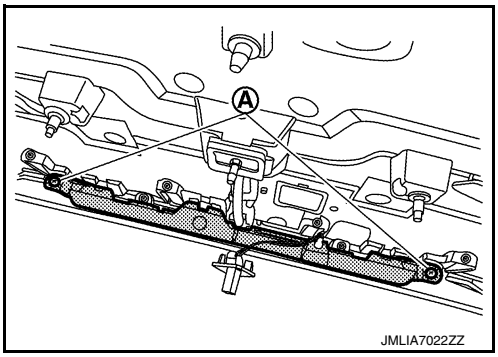


4. Disengage high-mounted stop lamp harness cover fixing pawls.

: Pawl



5. Remove high-mounted stop lamp fixing screws Ⓐ, and then remove high-mounted stop lamp.



INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000013688902

HIGH-MOUNTED STOP LAMP

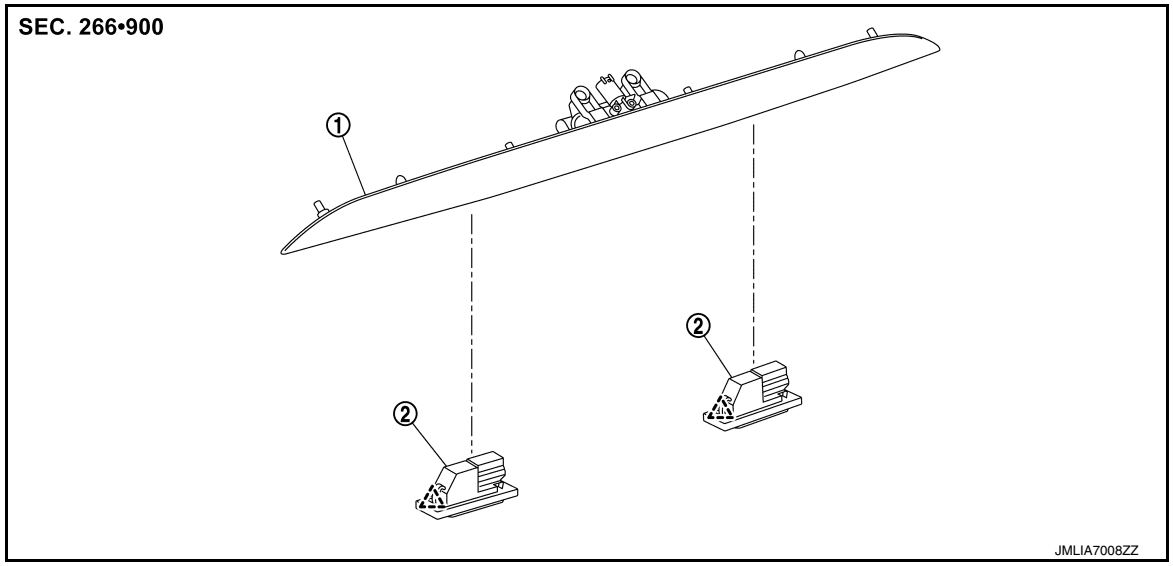
CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace high-mounted stop lamp unit as a set. Refer to EXL-529, "Removal and Installation".

LICENSE PLATE LAMP

Exploded View

INFOID:0000000013688903



① Back door finisher ② License plate lamp

: Pawl

Removal and Installation

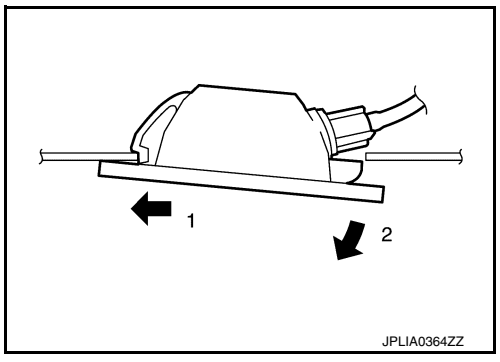
INFOID:0000000013688904

CAUTION:

Disconnect the battery negative terminal or remove power circuit fuse when performing the operation for preventing electric leakage. Refer to EXL-313, "Precautions for Removing Battery Terminal".

REMOVAL

1. While pressing license plate lamp to direction right side, pull it to direction outside and then remove it.



2. Disconnect license plate lamp harness connector, and then remove license plate lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000013688905

LICENSE PLATE LAMP BULB

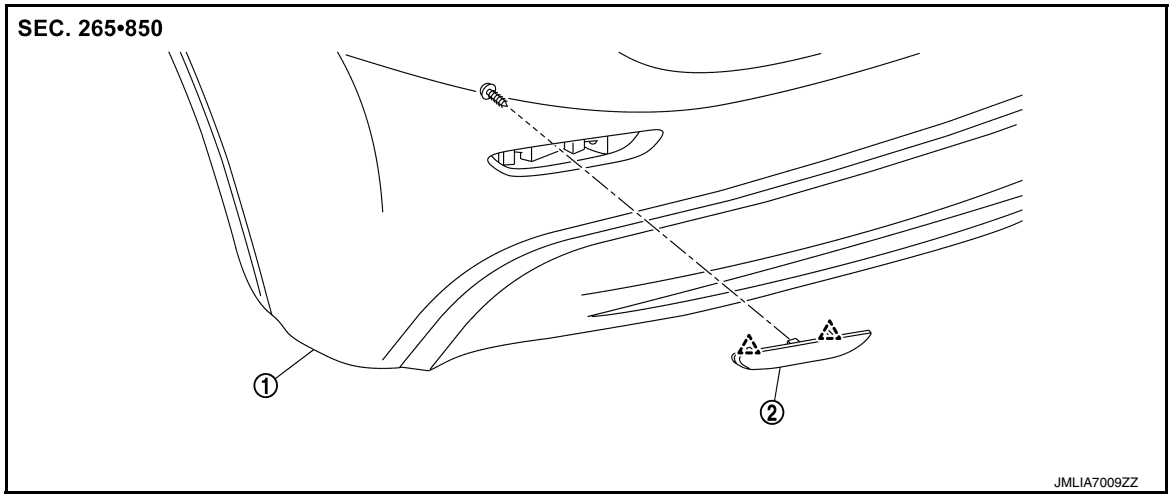
CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace high-mounted stop lamp unit as a set. Refer to EXL-531, "Removal and Installation".

REAR REFLEX REFLECTOR

Exploded View

INFOID:0000000013688906



① Rear bumper fascia ② Rear reflex reflector

: Pawl

Removal and Installation

INFOID:0000000013688907

REMOVAL

1. Remove rear bumper fascia. Refer to EXT-29, "Removal and Installation".
2. Remove rear reflex reflector mounting bolt and fixing pawls, and then remove rear reflex reflector.

INSTALLATION

Install in the reverse order of removal.

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000013550245

Bulb Specifications

Item		Type	Wattage (W)
Front combination lamp	Headlamp (Hi/Lo)	H9	60/55
	Parking lamp/daytime running light/ Position lamp	LED	—
	Front turn signal lamp	PWY24W	24
	Front side marker lamp	LED	—
Front fog lamp		LED	—
Side turn signal lamp (built in door mirror)		LED	—
Rear combination lamp (body side)	Tail lamp	LED	—
	Stop lamp/Rear turn signal lamp	LED	—
	Rear turn signal lamp	LED	—
	Rear side marker lamp	LED	—
Rear combination lamp (trunk lid side)	Tail lamp	LED	—
	Rear turn signal lamp	LED	—
	Back-up lamp	LED	—
	Rear fog lamp (driver side only)	LED	—
License plate lamp		LED	—
High-mounted stop lamp		LED	—