

# SECTION EXL

## EXTERIOR LIGHTING SYSTEM

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## PRECAUTIONS

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### PRECAUTION

#### PRECAUTIONS

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

INFOID:0000000012432764

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

##### **WARNING:**

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

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

##### **WARNING:**

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

##### Precaution for Work

INFOID:0000000012432765

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

# PREPARATION

< PREPARATION >

## PREPARATION

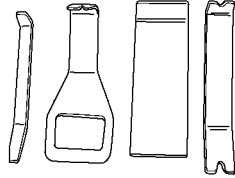
### PREPARATION

#### Special Service Tool

INFOID:0000000012432766

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

| Tool number<br>(TechMate No.)<br>Tool name | Description              |
|--------------------------------------------|--------------------------|
| —<br>(J-46534)<br>Trim Tool Set            | Removing trim components |



AWJIA0483ZZ

## COMPONENT PARTS

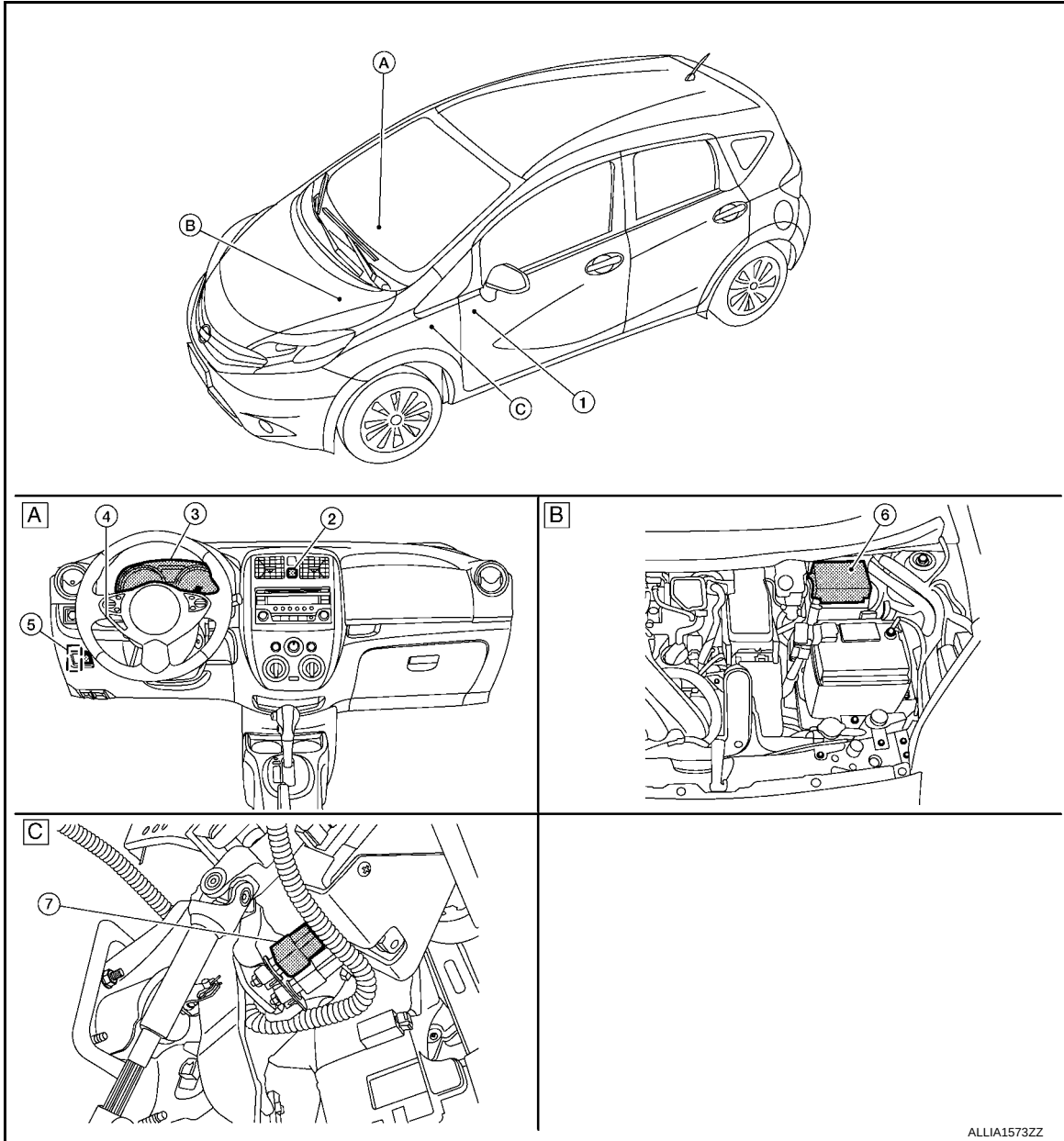
< SYSTEM DESCRIPTION >

## SYSTEM DESCRIPTION

### COMPONENT PARTS

#### Component Parts Location

INFOID:0000000012432767



A. Instrument panel

B. LH side of engine compartment

C. Brake pedal area

#### Component Description

INFOID:0000000012432768

| No. | Part name                                          | Description                                                 |
|-----|----------------------------------------------------|-------------------------------------------------------------|
| 1.  | Daytime running light relays 1 and 2 (if equipped) | Sends power to daytime lamps when operated by the IPDM E/R. |
| 2.  | Hazard switch                                      | Hazard flasher request signal is output to the BCM.         |

## COMPONENT PARTS

### < SYSTEM DESCRIPTION >

|    |                                                      |                                                                                                                                                                                                                                                                                                                                                              |
|----|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. | Combination meter                                    | <ul style="list-style-type: none"> <li>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).</li> <li>Turns the tail lamp indicator lamp and high beam indicator lamp ON according to the request from BCM (via CAN communication).</li> </ul> |
| 4. | Combination switch (lighting and turn signal switch) | Refer to <a href="#">BCS-9, "COMBINATION SWITCH READING SYSTEM : System Description"</a> (with Intelligent Key system) or <a href="#">BCS-79, "COMBINATION SWITCH READING SYSTEM : System Description"</a> (without Intelligent Key system).                                                                                                                 |
| 5. | BCM                                                  | Controls the exterior lighting system.                                                                                                                                                                                                                                                                                                                       |
| 6. | IPDM E/R                                             | Controls the integrated relay, and supplies voltage to the load according to the request from BCM (via CAN communication).                                                                                                                                                                                                                                   |
| 7. | Stop lamp switch                                     | Stop lamp signal is output to the rear combination lamps and high-mounted stop lamp.                                                                                                                                                                                                                                                                         |

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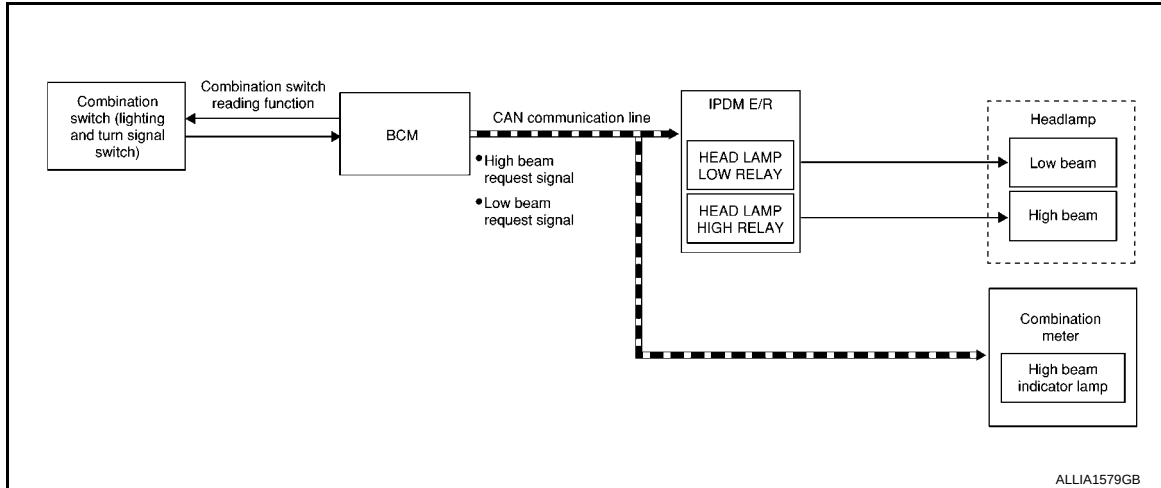
## SYSTEM

### HEADLAMP SYSTEM

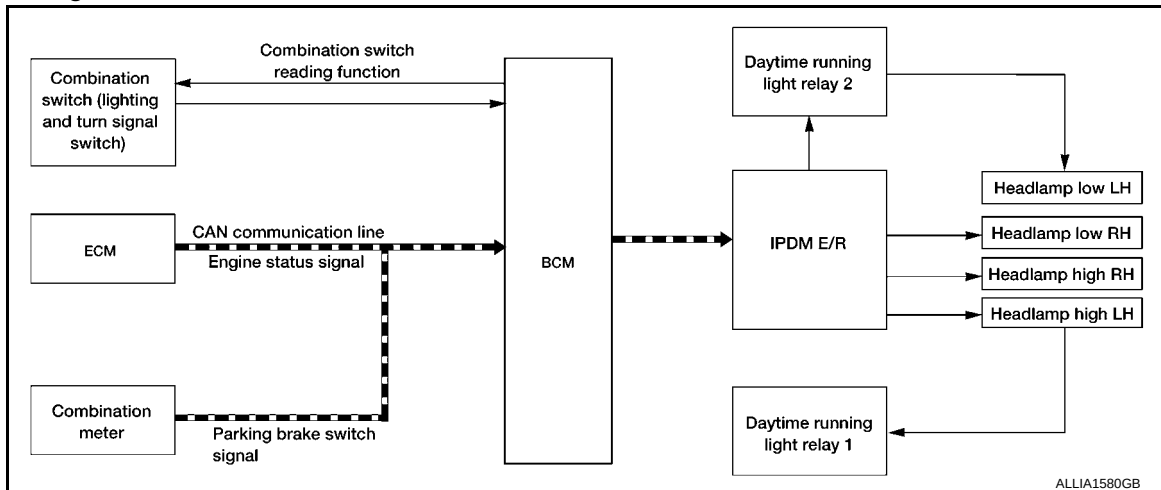
#### HEADLAMP SYSTEM : System Diagram

INFOID:000000012432769

##### System Diagram - For USA



##### System Diagram - For Canada



#### HEADLAMP SYSTEM : System Description

INFOID:000000012432770

##### LOW BEAM OPERATION

When the lighting switch is in 2nd position, the BCM receives input requesting the headlamps to illuminate. This input is communicated to the IPDM E/R across the CAN communication lines. The CPU of the IPDM E/R controls the headlamp low relay coil which supplies power to the low beam headlamps.

##### HIGH BEAM OPERATION/FLASH-TO-PASS OPERATION

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

The combination meter receives a high beam request signal (ON) through the CAN communication lines and turns the high beam indicator lamp ON.

##### EXTERIOR LAMP BATTERY SAVER CONTROL

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

# SYSTEM

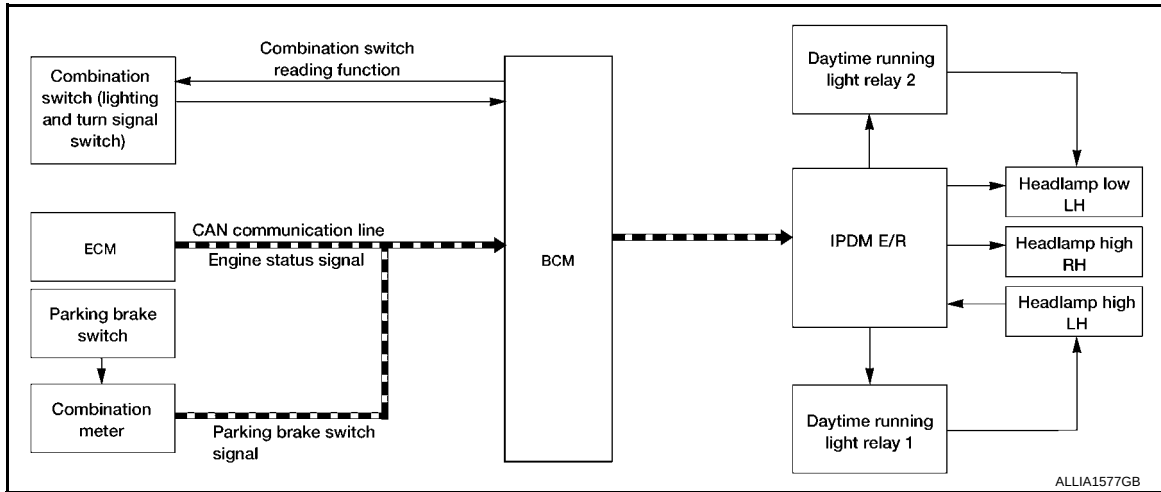
## < SYSTEM DESCRIPTION >

Under this condition, the headlamps remain illuminated for 45 seconds unless the lighting switch position is changed. If the lighting switch position is changed, then the headlamps are turned off. This setting can be changed by CONSULT. Refer to [BCS-20, "HEADLAMP : CONSULT Function \(BCM - HEAD LAMP\)"](#) (with Intelligent Key system) or [BCS-93, "HEADLAMP : CONSULT Function \(BCM - HEAD LAMP\)"](#) (without Intelligent Key system).

## DAYTIME RUNNING LIGHT SYSTEM

### DAYTIME RUNNING LIGHT SYSTEM : System Diagram

INFOID:0000000012432771



### DAYTIME RUNNING LIGHT SYSTEM : System Description

INFOID:0000000012432772

The headlamp system is equipped with a daytime running light control that activates the high beam headlamps at approximately half illumination whenever the engine is operating. If the parking brake is applied before the engine is started the daytime running lights will not be illuminated. The daytime running lights will illuminate once the parking brake is released. Thereafter, the daytime running lights will continue to operate when the parking brake is applied.

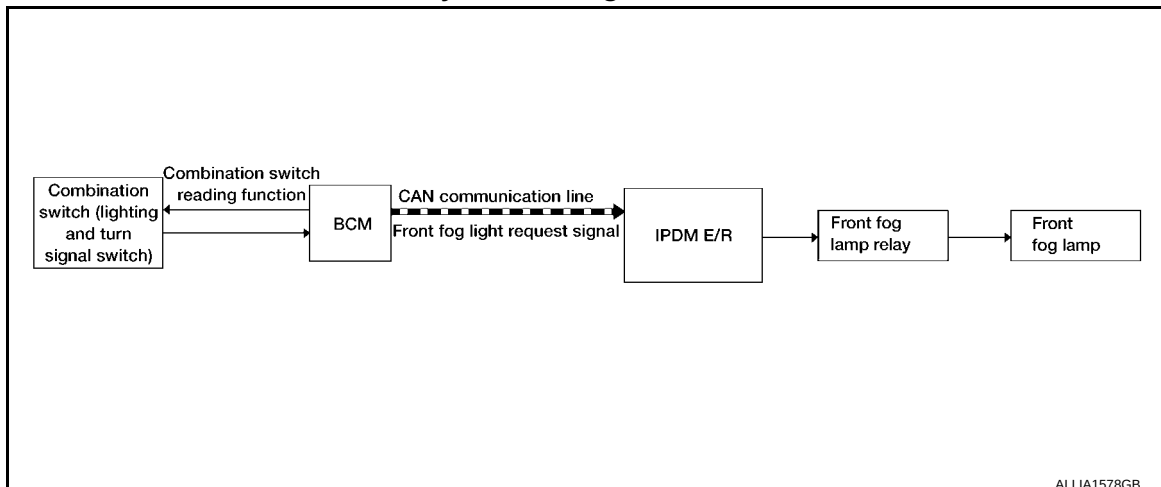
#### OPERATION

The BCM monitors inputs from the parking brake switch and the combination switch (lighting and turn signal switch) to determine when to activate the daytime running light system. The BCM sends a daytime running light request to the IPDM E/R via the CAN communication lines. The IPDM E/R grounds the daytime running light relay 1 which in turn, provides power to the LH high beam lamp. Power flows through the LH high beam lamp to the RH high beam lamp. The high beam lamps are wired in series which causes them to illuminate at a reduced intensity. When daytime light relay 2 is open, it prevents headlamp low beam from turning on while daytime running lights are operating.

## FRONT FOG LAMP SYSTEM

### FRONT FOG LAMP SYSTEM : System Diagram

INFOID:0000000012432773



# SYSTEM

## < SYSTEM DESCRIPTION >

### FRONT FOG LAMP SYSTEM : System Description

INFOID:0000000012432774

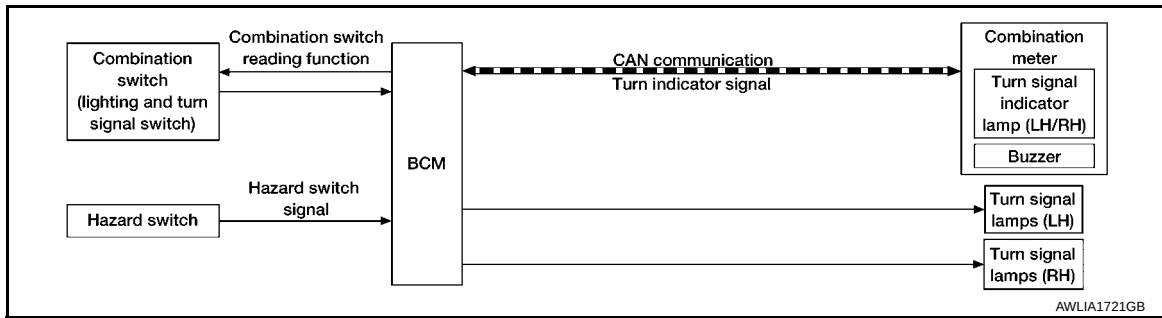
#### FRONT FOG LAMP OPERATION

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

### TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

#### TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Diagram

INFOID:0000000012432775



#### TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Description

INFOID:0000000012432776

#### TURN SIGNAL OPERATION

When the turn signal switch is in LH or RH position with the ignition switch in ON position, the BCM detects the TURN RH or TURN LH ON request. The BCM outputs the flasher output signal to the respective turn signal lamp. The BCM sends a turn indicator signal ON request through the CAN communication lines to the combination meter. The combination meter then activates the appropriate turn signal indicator and audible buzzer.

#### HAZARD LAMP OPERATION

When the hazard switch is in ON position, the BCM detects the hazard switch signal ON. The BCM outputs the flasher output signal (right and left). The BCM sends a hazard indicator signal ON request through the CAN communication lines to the combination meter. The combination meter then activates the hazard indicator and audible buzzer.

#### REMOTE KEYLESS ENTRY OPERATION

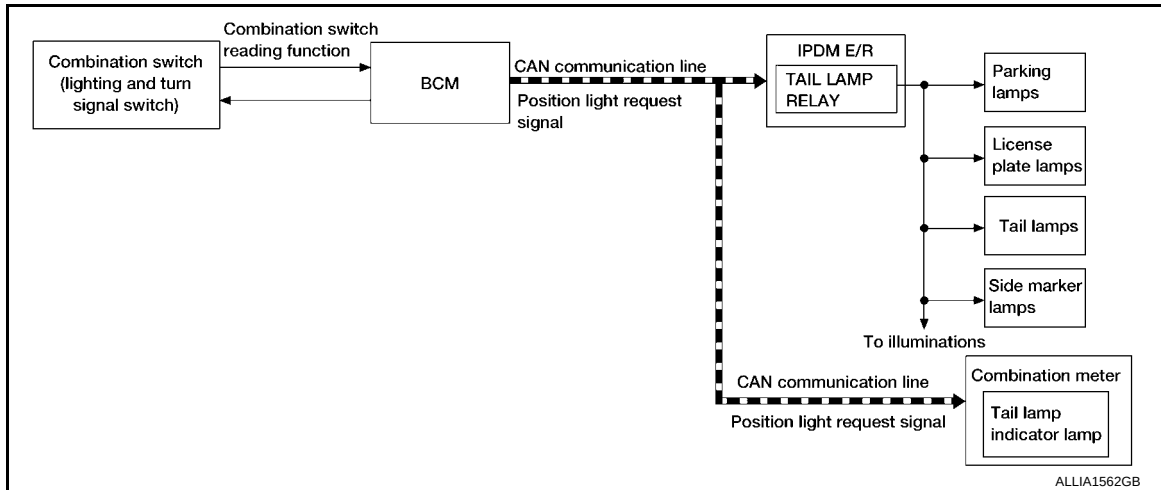
The remote keyless entry receiver transmits hazard lamp signal to BCM, then BCM controls hazard lamps. Refer to [DLK-25, "REMOTE KEYLESS ENTRY FUNCTION : System Description"](#) (with Intelligent Key system) or [DLK-199, "REMOTE KEYLESS ENTRY SYSTEM : System Description"](#) (without Intelligent Key system).

### PARKING, LICENSE PLATE AND TAIL LAMP SYSTEM

# SYSTEM

## < SYSTEM DESCRIPTION >

### PARKING, LICENSE PLATE AND TAIL LAMP SYSTEM : System Diagram INFOID:0000000012432777



### PARKING, LICENSE PLATE AND TAIL LAMP SYSTEM : System Description

INFOID:0000000012432778

#### PARKING, LICENSE PLATE AND TAIL LAMPS OPERATION

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

#### EXTERIOR LAMP BATTERY SAVER CONTROL

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

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

This setting can be changed by CONSULT. Refer to [BCS-26, "BATTERY SAVER : CONSULT Function \(BCM - BATTERY SAVER\)"](#) (with Intelligent Key system) or [BCS-97, "BATTERY SAVER : CONSULT Function \(BCM - BATTERY SAVER\)"](#) (without Intelligent Key system).

# DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000012542302

### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

| Direct Diagnostic Mode | Description                                                                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ECU Identification     | The BCM part number is displayed.                                                                                                                                        |
| Self Diagnostic Result | The BCM self diagnostic results are displayed.                                                                                                                           |
| Data Monitor           | The BCM input/output data is displayed in real time.                                                                                                                     |
| Active Test            | The BCM activates outputs to test components.                                                                                                                            |
| Work support           | The settings for BCM functions can be changed.                                                                                                                           |
| Configuration          | <ul style="list-style-type: none"> <li>The vehicle specification can be read and saved.</li> <li>The vehicle specification can be written when replacing BCM.</li> </ul> |
| CAN DIAG SUPPORT MNTR  | The result of transmit/receive diagnosis of CAN communication is displayed.                                                                                              |

### SYSTEM APPLICATION

BCM can perform the following functions.

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

# DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

## HEADLAMP

HEADLAMP : CONSULT Function (BCM - HEAD LAMP)

INFOID:0000000012542303

## DATA MONITOR

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

## ACTIVE TEST

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

## WORK SUPPORT

| Support Item      | Setting | Description                               |
|-------------------|---------|-------------------------------------------|
| BATTERY SAVER SET | On*     | Exterior lamp battery saver function ON.  |
|                   | Off     | Exterior lamp battery saver function OFF. |
| ILL DELAY SET     | MODE 8  | 180 sec.                                  |
|                   | MODE 7  | 150 sec.                                  |
|                   | MODE 6  | 120 sec.                                  |
|                   | MODE 4  | 60 sec.                                   |
|                   | MODE 5  | 90 sec.                                   |
|                   | MODE 3  | 30 sec.                                   |
|                   | MODE 2  | OFF                                       |
|                   | MODE 1* | 45 sec.                                   |

\*: Initial setting

## FLASHER

# DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

## FLASHER : CONSULT Function (BCM - FLASHER)

INFOID:0000000012542304

### DATA MONITOR

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

### ACTIVE TEST

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

### WORK SUPPORT

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

\* : Initial setting

## COMB SW

## COMB SW : CONSULT Function (BCM - COMB SW)

INFOID:0000000012542305

### DATA MONITOR

| Monitor Item [Unit]    | Description                                                                |
|------------------------|----------------------------------------------------------------------------|
| FR WIPER HI [On/Off]   | Indicates condition of wiper operation of combination switch.              |
| FR WIPER LOW [On/Off]  |                                                                            |
| FR WASHER SW [On/Off]  |                                                                            |
| FR WIPER INT [On/Off]  |                                                                            |
| INT VOLUME [1 - 7]     | Indicates condition of intermittent wiper operation of combination switch. |
| RR WIPER ON [On/Off]   | Indicates condition of rear wiper operation of combination switch.         |
| RR WIPER INT [On/Off]  |                                                                            |
| RR WASHER SW [On/Off]  |                                                                            |
| TURN SIGNAL R [On/Off] | Indicates condition of right turn signal operation of combination switch.  |
| TURN SIGNAL L [On/Off] | Indicates condition of left turn signal operation of combination switch.   |
| TAIL LAMP SW [On/Off]  | Indicates condition of tail lamp switch operation of combination switch.   |

# DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

## < SYSTEM DESCRIPTION >

| Monitor Item [Unit]     | Description                                                                   |
|-------------------------|-------------------------------------------------------------------------------|
| HI BEAM SW [On/Off]     | Indicates condition of Hi beam switch operation of combination switch.        |
| HEAD LAMP SW 1 [On/Off] | Indicates condition of head lamp switch 1 operation of combination switch.    |
| HEAD LAMP SW 2 [On/Off] | Indicates condition of head lamp switch 2 operation of combination switch.    |
| PASSING SW [On/Off]     | Indicates condition of passing switch operation of combination switch.        |
| FR FOG SW [On/Off]      | Indicates condition of front fog lamp switch operation of combination switch. |

## BATTERY SAVER

### BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000012542307

## DATA MONITOR

| Monitor Item [Unit]    | Description                                                            |
|------------------------|------------------------------------------------------------------------|
| REQ SW -DR [On/Off]    | Indicates condition of door request switch LH.                         |
| REQ SW -AS [On/Off]    | Indicates condition of door request switch RH.                         |
| PUSH SW [On/Off]       | Indicates condition push-button ignition switch.                       |
| UNLK SEN -DR [On/Off]  | Indicates condition of door unlock sensor.                             |
| DOOR SW-DR [On/Off]    | Indicates condition of front door switch LH.                           |
| DOOR SW-AS [On/Off]    | Indicates condition of front door switch RH.                           |
| DOOR SW-RR [On/Off]    | Indicates condition of rear door switch RH.                            |
| DOOR SW-RL [On/Off]    | Indicates condition of rear door switch LH.                            |
| DOOR SW-BK [On/Off]    | Indicates condition of back door switch.                               |
| CDL LOCK SW [On/Off]   | Indicates condition of lock signal from door lock and unlock switch.   |
| CDL UNLOCK SW [On/Off] | Indicates condition of unlock signal from door lock and unlock switch. |
| KEY CYL LK-SW [On/Off] | Indicates condition of lock signal from door key cylinder switch.      |
| KEY CYL UN-SW [On/Off] | Indicates condition of unlock signal from door key cylinder switch.    |
| RKE-LOCK [On/Off]      | Indicates condition of lock signal from Intelligent Key.               |
| RKE-UNLOCK [On/Off]    | Indicates condition of unlock signal from Intelligent Key.             |

## ACTIVE TEST

| Test item     | Description                                                  |
|---------------|--------------------------------------------------------------|
| BATTERY SAVER | This test is able to check battery saver operation [On/Off]. |

## WORK SUPPORT

| Support Item        | Setting | Description                               |
|---------------------|---------|-------------------------------------------|
| BATTERY SAVER SET   | ON*     | Exterior lamp battery saver function ON.  |
|                     | OFF     | Exterior lamp battery saver function OFF. |
| ROOM LAMP TIMER SET | MODE 3* | 10 min.                                   |
|                     | MODE 2  | 60 min.                                   |
|                     | MODE 1  | 15 min.                                   |

\*: Initial setting

# DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000012542311

### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

| Direct Diagnostic Mode | Description                                                                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ECU Identification     | The BCM part number is displayed.                                                                                                                                        |
| Self Diagnostic Result | The BCM self diagnostic results are displayed.                                                                                                                           |
| Data Monitor           | The BCM input/output data is displayed in real time.                                                                                                                     |
| Active Test            | The BCM activates outputs to test components.                                                                                                                            |
| Work support           | The settings for BCM functions can be changed.                                                                                                                           |
| Configuration          | <ul style="list-style-type: none"> <li>The vehicle specification can be read and saved.</li> <li>The vehicle specification can be written when replacing BCM.</li> </ul> |
| CAN DIAG SUPPORT MNTR  | The result of transmit/receive diagnosis of CAN communication is displayed.                                                                                              |

### SYSTEM APPLICATION

BCM can perform the following functions.

| System                               | Sub System           | Direct Diagnostic Mode |                        |              |             |              |               |                       |
|--------------------------------------|----------------------|------------------------|------------------------|--------------|-------------|--------------|---------------|-----------------------|
|                                      |                      | ECU Identification     | Self Diagnostic Result | Data Monitor | Active Test | Work support | Configuration | CAN DIAG SUPPORT MNTR |
| Door lock                            | DOOR LOCK            |                        |                        | x            | x           | x            |               |                       |
| Rear window defogger                 | REAR DEFOGGER        |                        |                        | x            | x           |              |               |                       |
| Warning chime                        | BUZZER               |                        |                        | x            | x           |              |               |                       |
| Interior room lamp timer             | INT LAMP             |                        |                        | x            | x           | x            |               |                       |
| Remote keyless entry system          | MULTI REMOTE ENT     |                        |                        | x            | x           | x            |               |                       |
| Exterior lamp                        | HEAD LAMP            |                        |                        | x            | x           | x            |               |                       |
| Wiper and washer                     | WIPER                |                        |                        | x            | x           | x            |               |                       |
| Turn signal and hazard warning lamps | FLASHER              |                        |                        | x            | x           |              |               |                       |
| Air conditioner                      | AIR CONDITIONER      |                        |                        | x            |             |              |               |                       |
| Combination switch                   | COMB SW              |                        |                        | x            |             |              |               |                       |
| BCM                                  | BCM                  | x                      | x                      |              |             | x            | x             | x                     |
| Immobilizer                          | IMMU                 |                        | x                      |              | x           | x            |               |                       |
| Interior room lamp battery saver     | BATTERY SAVER        |                        |                        | x            | x           | x            |               |                       |
| Vehicle security system              | THEFT ALM            |                        |                        | x            |             | x            |               |                       |
| RAP system                           | RETAINED PWR         |                        |                        | x            |             | x            |               |                       |
| Signal buffer system                 | SIGNAL BUFFER        |                        |                        | x            |             |              |               |                       |
| TPMS                                 | AIR PRESSURE MONITOR |                        | x                      | x            | x           | x            |               |                       |
| Panic alarm system                   | PANIC ALARM          |                        |                        |              | x           |              |               |                       |

# DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

## HEADLAMP

### HEADLAMP : CONSULT Function (BCM - HEAD LAMP)

INFOID:0000000012542312

#### DATA MONITOR

| Monitor Item [Unit]      | Description                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------------------|
| IGN ON SW [On/Off]       | Indicates condition of ignition switch ON position.                                           |
| ACC ON SW [On/Off]       | Indicates condition of ignition switch ACC position.                                          |
| HI BEAM SW [On/Off]      | Indicates condition of combination switch.                                                    |
| HEAD LAMP SW 1 [On/Off]  |                                                                                               |
| HEAD LAMP SW 2 [On/Off]  |                                                                                               |
| TAIL LAMP SW [On/Off]    |                                                                                               |
| PASSING SW [On/Off]      |                                                                                               |
| FR FOG SW [On/Off]       |                                                                                               |
| DOOR SW-DR [On/Off]      | Indicates condition of front door switch LH.                                                  |
| DOOR SW-AS [On/Off]      | Indicates condition of front door switch RH.                                                  |
| DOOR SW-RR [On/Off]      | Indicates condition of rear door switch RH.                                                   |
| DOOR SW-RL [On/Off]      | Indicates condition of rear door switch LH.                                                   |
| DOOR SW-BK [On/Off]      | Indicates condition of back door switch.                                                      |
| TURN SIGNAL R [On/Off]   | Indicates condition of combination switch.                                                    |
| TURN SIGNAL L [On/Off]   |                                                                                               |
| KEY ON SW [On/Off]       | Indicates condition of key switch.                                                            |
| KEYLESS LOCK [On/Off]    | Indicates condition of lock signal from keyfob.                                               |
| PKB SW [On/Off]          | Indicates park brake switch signal received from combination meter on CAN communication line. |
| ENGINE RUN [On/Off]      | Indicates engine run signal received from ECM on CAN communication line.                      |
| VEHICLE SPEED [km/h/mph] | Indicates vehicle speed signal received from combination meter on CAN communication line.     |

#### ACTIVE TEST

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

#### WORK SUPPORT

| Support Item      | Setting | Description                               |
|-------------------|---------|-------------------------------------------|
| BATTERY SAVER SET | On*     | Exterior lamp battery saver function ON.  |
|                   | Off     | Exterior lamp battery saver function OFF. |

\* : Initial setting

## FLASHER

### FLASHER : CONSULT Function (BCM - FLASHER)

INFOID:0000000012542313

#### DATA MONITOR

# DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

## < SYSTEM DESCRIPTION >

| Monitor Item [Unit]    | Description                                                        |
|------------------------|--------------------------------------------------------------------|
| HAZARD SW [On/Off]     | Indicates condition of hazard switch.                              |
| TURN SIGNAL R [On/Off] | Indicates condition of turn signal function of combination switch. |
| TURN SIGNAL L [On/Off] |                                                                    |

## ACTIVE TEST

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

## COMB SW

### COMB SW : CONSULT Function (BCM - COMB SW)

INFOID:0000000012542314

## DATA MONITOR

| Monitor Item [Unit]     | Description                                                                      |
|-------------------------|----------------------------------------------------------------------------------|
| TURN SIGNAL R [On/Off]  | Indicates condition of right turn signal operation of combination switch.        |
| TURN SIGNAL L [On/Off]  | Indicates condition of left turn signal operation of combination switch.         |
| HI BEAM SW [On/Off]     | Indicates condition of Hi beam switch operation of combination switch.           |
| HEAD LAMP SW 1 [On/Off] | Indicates condition of head lamp switch 1 operation of combination switch.       |
| HEAD LAMP SW 2 [On/Off] | Indicates condition of head lamp switch 2 operation of combination switch.       |
| TAIL LAMP SW [On/Off]   | Indicates condition of tail lamp switch operation of combination switch.         |
| PASSING SW [On/Off]     | Indicates condition of passing switch operation of combination switch.           |
| FR FOG SW [On/Off]      | Indicates condition of front fog lamp switch operation of combination switch.    |
| FR WIPER HI [On/Off]    | Indicates condition of front wiper operation of combination switch.              |
| FR WIPER LOW [On/Off]   |                                                                                  |
| FR WIPER INT [On/Off]   |                                                                                  |
| FR WASHER SW [On/Off]   |                                                                                  |
| INT VOLUME [1 - 7]      | Indicates condition of intermittent front wiper operation of combination switch. |
| RR WIPER ON [On/Off]    | Indicates condition of rear wiper operation of combination switch.               |
| RR WIPER INT [On/Off]   |                                                                                  |
| RR WASHER SW [On/Off]   |                                                                                  |

## BATTERY SAVER

### BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000012542315

## DATA MONITOR

| Monitor Item [Unit]  | Description                                                          |
|----------------------|----------------------------------------------------------------------|
| IGN ON SW [On/Off]   | Indicates condition of ignition switch ON position.                  |
| KEY ON SW [On/Off]   | Indicates condition of key switch.                                   |
| DOOR SW-DR [On/Off]  | Indicates condition of front door switch LH.                         |
| DOOR SW-AS [On/Off]  | Indicates condition of front door switch RH.                         |
| DOOR SW-RR [On/Off]  | Indicates condition of rear door switch RH.                          |
| DOOR SW-RL [On/Off]  | Indicates condition of rear door switch LH.                          |
| DOOR SW-BK [On/Off]  | Indicates condition of back door switch.                             |
| CDL LOCK SW [On/Off] | Indicates condition of lock signal from door lock and unlock switch. |

# DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

## < SYSTEM DESCRIPTION >

| Monitor Item [Unit]     | Description                                                            |
|-------------------------|------------------------------------------------------------------------|
| CDL UNLOCK SW [On/Off]  | Indicates condition of unlock signal from door lock and unlock switch. |
| KEYLESS LOCK [On/Off]   | Indicates condition of lock signal from keyfob.                        |
| KEYLESS UNLOCK [On/Off] | Indicates condition of unlock signal from keyfob.                      |
| KEY CYL LK-SW [On/Off]  | Indicates condition of lock signal from door key cylinder switch.      |
| KEY CYL UN-SW [On/Off]  | Indicates condition of unlock signal from door key cylinder switch.    |
| ACC SW [On/Off]         | Indicates condition of ignition switch ACC position.                   |

## ACTIVE TEST

| Test item     | Description                                                  |
|---------------|--------------------------------------------------------------|
| BATTERY SAVER | This test is able to check battery saver operation [On/Off]. |

## WORK SUPPORT

| Support Item                                                | Setting | Description |
|-------------------------------------------------------------|---------|-------------|
| ROOM LAMP TIMER SET                                         | MODE 3* | 10 min.     |
|                                                             | MODE 2  | 60 min.     |
|                                                             | MODE 1  | 15 min.     |
| Sets interior room lamp battery saver timer operating time. |         |             |

\* : Initial setting

# DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (IPDM E/R)

### Diagnosis Description

INFOID:000000012542316

#### AUTO ACTIVE TEST

##### Description

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

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

##### Operation Procedure

###### NOTE:

Never perform auto active test in the following conditions:

- Passenger door is open
- CONSULT is connected

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

###### NOTE:

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

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

###### NOTE:

- When auto active test has to be cancelled halfway through test, turn the ignition switch OFF.
- When auto active test is not activated, door switch may be the cause. Check door switch. Refer to [DLK-98, "Component Function Check"](#) (with Intelligent Key system) or [DLK-232, "Component Function Check"](#) (without Intelligent Key system).

##### Inspection in Auto Active Test

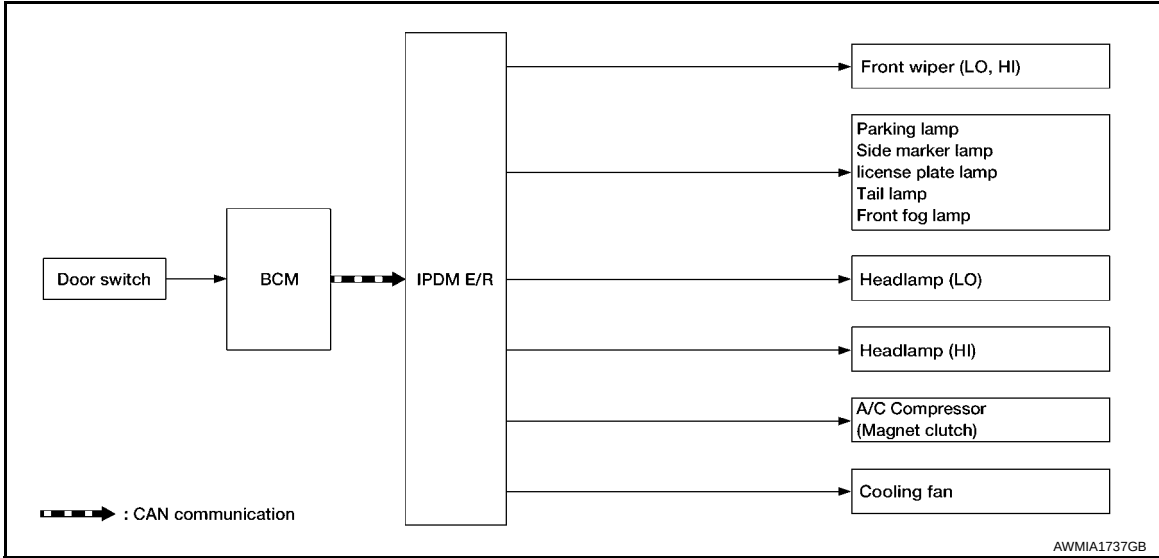
When auto active test is actuated, the following operation sequence is repeated 3 times.

| Operation sequence | Inspection location                                                                                                                                                               | Operation                                               |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 1                  | Front wiper                                                                                                                                                                       | LO for 5 seconds → HI for 5 seconds                     |
| 2                  | <ul style="list-style-type: none"><li>• Parking lamp</li><li>• Side marker lamp</li><li>• License plate lamp</li><li>• Tail lamp</li><li>• Front fog lamp (if equipped)</li></ul> | 10 seconds                                              |
| 3                  | Headlamp                                                                                                                                                                          | LO for 10 seconds → HI ON ⇔ OFF 5 times                 |
| 4                  | A/C compressor (magnet clutch)                                                                                                                                                    | ON ⇔ OFF 5 times                                        |
| 5                  | Cooling fan                                                                                                                                                                       | LO for 5 seconds → MID for 3 seconds → HI for 2 seconds |

# DIAGNOSIS SYSTEM (IPDM E/R)

## < SYSTEM DESCRIPTION >

### Concept of Auto Active Test



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

### Diagnosis Chart in Auto Active Test

| Symptom                                                                                                                                                                                                                                                                                | Inspection contents                                              | Possible cause                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Any of the following components do not operate: <ul style="list-style-type: none"> <li>• Parking lamp</li> <li>• Side marker lamp</li> <li>• License plate lamp</li> <li>• Tail lamp</li> <li>• Front fog lamp</li> <li>• Headlamp (HI, LO)</li> <li>• Front wiper (HI, LO)</li> </ul> | Perform auto active test.<br>Does the applicable system operate? | YES<br>BCM signal input circuit                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                        |                                                                  | NO <ul style="list-style-type: none"> <li>• Lamp or motor</li> <li>• Lamp or motor ground circuit</li> <li>• Harness or connector between IPDM E/R and applicable system</li> <li>• IPDM E/R</li> </ul> |
| A/C compressor does not operate                                                                                                                                                                                                                                                        | Perform auto active test.<br>Does the magnet clutch operate?     | YES <ul style="list-style-type: none"> <li>• BCM signal input circuit</li> <li>• CAN communication signal between BCM and ECM</li> <li>• CAN communication signal between ECM and IPDM E/R</li> </ul>   |
|                                                                                                                                                                                                                                                                                        |                                                                  | NO <ul style="list-style-type: none"> <li>• Magnet clutch</li> <li>• Harness or connector between IPDM E/R and magnet clutch</li> <li>• IPDM E/R</li> </ul>                                             |
| Cooling fan does not operate                                                                                                                                                                                                                                                           | Perform auto active test.<br>Does the cooling fan operate?       | YES <ul style="list-style-type: none"> <li>• ECM signal input circuit</li> <li>• CAN communication signal between ECM and IPDM E/R</li> </ul>                                                           |
|                                                                                                                                                                                                                                                                                        |                                                                  | NO <ul style="list-style-type: none"> <li>• Cooling fan motor</li> <li>• Harness or connector between IPDM E/R and cooling fan motor</li> <li>• IPDM E/R</li> </ul>                                     |

## CONSULT Function (IPDM E/R)

INFOID:0000000012542317

### APPLICATION ITEM

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

| Direct Diagnostic Mode | Description                                         |
|------------------------|-----------------------------------------------------|
| ECU Identification     | The IPDM E/R part number is displayed.              |
| Self Diagnostic Result | The IPDM E/R self diagnostic results are displayed. |

## DIAGNOSIS SYSTEM (IPDM E/R)

### < SYSTEM DESCRIPTION >

| Direct Diagnostic Mode | Description                                                                 |
|------------------------|-----------------------------------------------------------------------------|
| Data Monitor           | The IPDM E/R input/output data is displayed in real time.                   |
| Active Test            | The IPDM E/R activates outputs to test components.                          |
| CAN Diag Support Mntr  | The result of transmit/receive diagnosis of CAN communication is displayed. |

### ECU IDENTIFICATION

The IPDM E/R part number is displayed.

### SELF DIAGNOSTIC RESULT

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

### DATA MONITOR

| Monitor Item [Unit]           | Main Signals | Description                                                                                |
|-------------------------------|--------------|--------------------------------------------------------------------------------------------|
| MOTOR FAN REQ [1/2/3/4]       | ×            | Indicates cooling fan speed signal received from ECM on CAN communication line             |
| AC COMP REQ [On/Off]          | ×            | Indicates A/C compressor request signal received from ECM on CAN communication line        |
| TAIL&CLR REQ [On/Off]         | ×            | Indicates position light request signal received from BCM on CAN communication line        |
| HL LO REQ [On/Off]            | ×            | Indicates low beam request signal received from BCM on CAN communication line              |
| HL HI REQ [On/Off]            | ×            | Indicates high beam request signal received from BCM on CAN communication line             |
| FR FOG REQ [On/Off]           | ×            | Indicates front fog light request signal received from BCM on CAN communication line       |
| FR WIP REQ [Stop/1LOW/Low/Hi] | ×            | Indicates front wiper request signal received from BCM on CAN communication line           |
| WIP AUTO STOP [STOP P/ACT P]  | ×            | Indicates condition of front wiper auto stop signal                                        |
| WIP PROT [Off/BLOCK]          | ×            | Indicates condition of front wiper fail-safe operation                                     |
| IGN RLY1 -REQ [On/Off]        |              | Indicates ignition switch ON signal received from BCM on CAN communication line            |
| IGN RLY [On/Off]              | ×            | Indicates condition of ignition relay                                                      |
| PUSH SW [On/Off]              |              | Indicates condition of push-button ignition switch                                         |
| INTER/NP SW [On/Off]          |              | Indicates condition of CVT shift position                                                  |
| ST RLY CONT [On/Off]          |              | Indicates starter relay status signal received from BCM on CAN communication line          |
| IHBT RLY -REQ [On/Off]        |              | Indicates starter control relay signal received from BCM on CAN communication line         |
| ST/INH RLY [Off/ ST /INH]     |              | Indicates condition of starter relay and starter control relay                             |
| DETENT SW [On/Off]            |              | Indicates condition of CVT shift selector (park position switch)                           |
| DTRL REQ [Off]                |              | Indicates daytime running light request signal received from BCM on CAN communication line |
| THFT HRN REQ [On/Off]         |              | Indicates theft warning horn request signal received from BCM on CAN communication line    |
| HORN CHIRP [On/Off]           |              | Indicates horn reminder signal received from BCM on CAN communication line                 |

### ACTIVE TEST

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

## DIAGNOSIS SYSTEM (IPDM E/R)

### < SYSTEM DESCRIPTION >

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

### CAN DIAG SUPPORT MNTR

Refer to [LAN-13, "CAN Diagnostic Support Monitor"](#).

A

B

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EXL

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O

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## ECU DIAGNOSIS INFORMATION

### BCM, IPDM E/R

#### List of ECU Reference

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| ECU                                  | Reference                                                |
|--------------------------------------|----------------------------------------------------------|
| BCM (with Intelligent Key system)    | <a href="#">BCS-30, "Reference Value"</a>                |
|                                      | <a href="#">BCS-48, "Fail-safe"</a>                      |
|                                      | <a href="#">BCS-49, "DTC Inspection Priority Chart"</a>  |
|                                      | <a href="#">BCS-50, "DTC Index"</a>                      |
| BCM (without Intelligent Key system) | <a href="#">BCS-101, "Reference Value"</a>               |
|                                      | <a href="#">BCS-115, "Fail-safe"</a>                     |
|                                      | <a href="#">BCS-115, "DTC Inspection Priority Chart"</a> |
|                                      | <a href="#">BCS-115, "DTC Index"</a>                     |
| IPDM E/R                             | <a href="#">PCS-13, "Reference Value"</a>                |
|                                      | <a href="#">PCS-19, "Fail-safe"</a>                      |
|                                      | <a href="#">PCS-20, "DTC Index"</a>                      |

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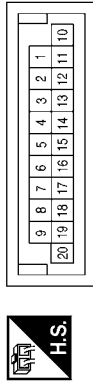


# HEADLAMP

< WIRING DIAGRAM >

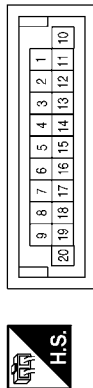
## HEADLAMP - FOR USA CONNECTORS

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



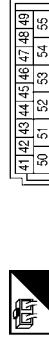
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 4            | L             | -           |
| 7            | L             | -           |
| 8            | L             | -           |
| 13           | P             | -           |
| 16           | P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

|                 |                     |
|-----------------|---------------------|
| Connector No.   | M8                  |
| Connector Name  | JOINT CONNECTOR-M02 |
| Connector Color | GREEN               |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 8            | L             | -           |
| 9            | L             | -           |
| 19           | P             | -           |
| 20           | P             | -           |

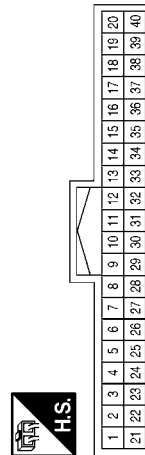
|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M19                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



| Terminal No. | Color of Wire | Signal Name    |
|--------------|---------------|----------------|
| 42           | Y             | BATTERY (FUSE) |
| 50           | G             | BATTERY (F/L)  |
| 55           | B             | GND            |

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

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M18                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



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

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## < WIRING DIAGRAM >

# HEADLAMP

## < WIRING DIAGRAM >

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M98                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |

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

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

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M97                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | BLACK                                                   |

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

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M99                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |

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

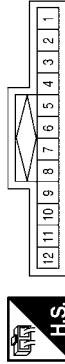
| Terminal No. | Color of Wire | Signal Name    |
|--------------|---------------|----------------|
| 57           | Y             | BATTERY (FUSE) |
| 67           | B             | GND            |
| 70           | G             | BATTERY (F/L)  |

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# HEADLAMP

< WIRING DIAGRAM >

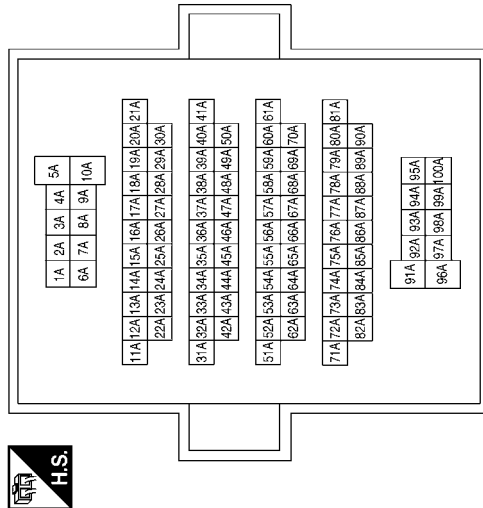
|                 |                     |
|-----------------|---------------------|
| Connector No.   | E14                 |
| Connector Name  | JOINT CONNECTOR-E03 |
| Connector Color | BLUE                |



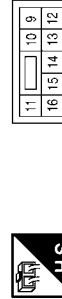
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | P             | -           |
| 5            | P             | -           |
| 8            | L             | -           |
| 12           | L             | -           |

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

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



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



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

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E26                       |
| Connector Name  | FRONT COMBINATION LAMP RH |
| Connector Color | BLACK                     |



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

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E25                       |
| Connector Name  | FRONT COMBINATION LAMP LH |
| Connector Color | BLACK                     |



| Terminal No. | Color of Wire | Signal Name                             |
|--------------|---------------|-----------------------------------------|
| 1            | G             | -                                       |
| 2            | B             | -(WITHOUT DAYTIME RUNNING LIGHT SYSTEM) |
| 3            | L             | -                                       |

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# HEADLAMP

## < WIRING DIAGRAM >

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



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

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

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



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

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 60           | B             | S-GND       |
| 61           | P             | CAN-L       |
| 62           | L             | CAN-H       |

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



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

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

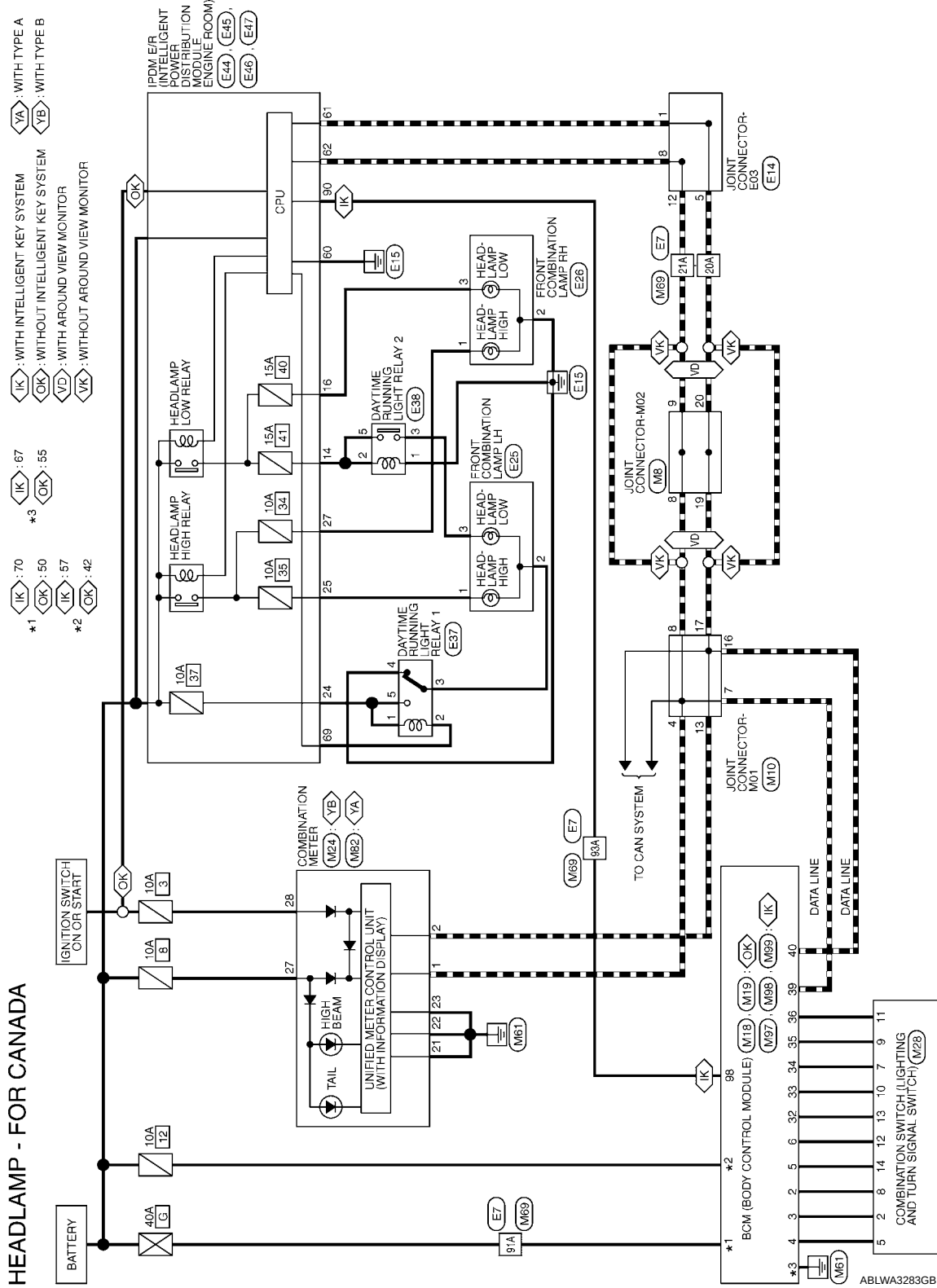
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# HEADLAMP

< WIRING DIAGRAM >

## Wiring Diagram - For Canada

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# HEADLAMP

< WIRING DIAGRAM >

## HEADLAMP - FOR CANADA CONNECTORS

|                 |                     |
|-----------------|---------------------|
| Connector No.   | M8                  |
| Connector Name  | JOINT CONNECTOR-M02 |
| Connector Color | GREEN               |

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

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M18                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |

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



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

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

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M19                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |

|    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| 50 | 51 | 52 | 53 | 54 | 55 |    |    |    |

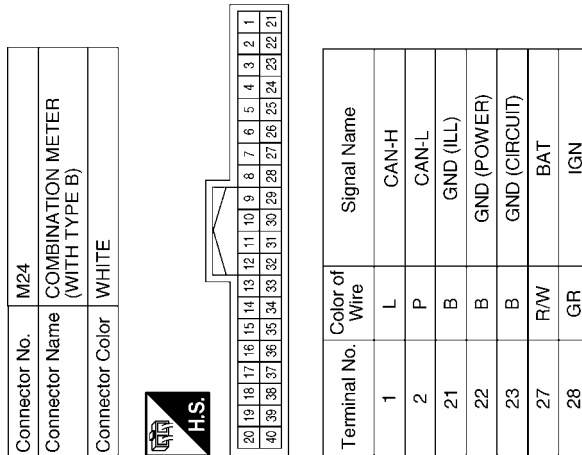
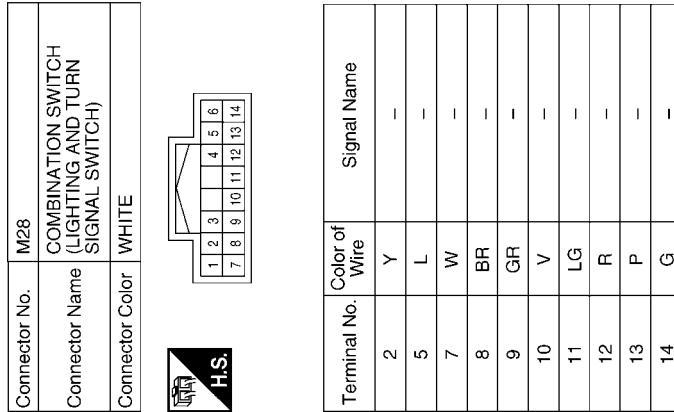
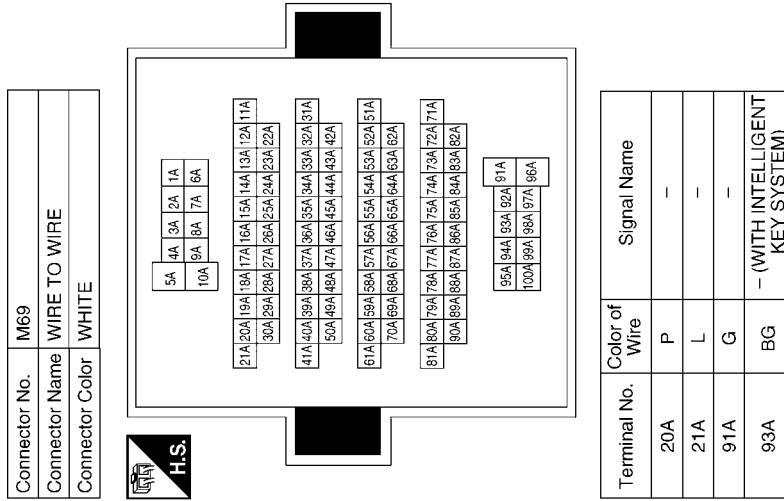


| Terminal No. | Color of Wire | Signal Name    |
|--------------|---------------|----------------|
| 42           | Y             | BATTERY (FUSE) |
| 50           | G             | BATTERY (F/L)  |
| 55           | B             | GND            |

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< WIRING DIAGRAM >



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A  
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EXL  
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< WIRING DIAGRAM >

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M97                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | BLACK                                                   |



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

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

|                 |                                 |
|-----------------|---------------------------------|
| Connector No.   | M82                             |
| Connector Name  | COMBINATION METER (WITH TYPE A) |
| Connector Color | WHITE                           |



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

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M99                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |



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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M98                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |



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

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

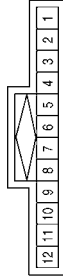
| Terminal No. | Color of Wire | Signal Name              |
|--------------|---------------|--------------------------|
| 98           | BG            | IGN RELAY OUTPUT 1 (USM) |

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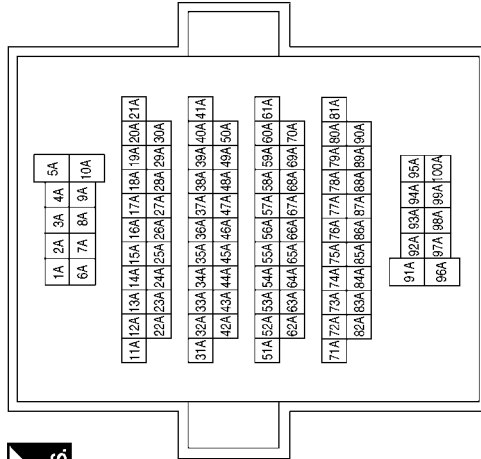
## < WIRING DIAGRAM >

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



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

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



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

|                 |                               |
|-----------------|-------------------------------|
| Connector No.   | E37                           |
| Connector Name  | DAYTIME RUNNING LIGHT RELAY 1 |
| Connector Color | BLACK                         |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | W             | -           |
| 2            | GR            | -           |
| 3            | GR            | -           |
| 4            | B             | -           |
| 5            | W             | -           |

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E26                       |
| Connector Name  | FRONT COMBINATION LAMP RH |
| Connector Color | BLACK                     |



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

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E25                       |
| Connector Name  | FRONT COMBINATION LAMP LH |
| Connector Color | BLACK                     |



| Terminal No. | Color of Wire | Signal Name                          |
|--------------|---------------|--------------------------------------|
| 1            | G             | -                                    |
| 2            | GR            | -(WITH DAYTIME RUNNING LIGHT SYSTEM) |
| 3            | L             | -                                    |

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## < WIRING DIAGRAM >

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

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



| Terminal No. | Color of Wire | Signal Name    |
|--------------|---------------|----------------|
| 24           | W             | DTRL           |
| 25           | G             | HEADLAMP HI LH |
| 27           | Y             | HEADLAMP HI RH |

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

|    |    |    |    |
|----|----|----|----|
| 11 |    | 10 | 9  |
| 16 | 15 | 14 | 13 |
|    |    |    | 12 |



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

|                 |                               |
|-----------------|-------------------------------|
| Connector No.   | E38                           |
| Connector Name  | DAYTIME RUNNING LIGHT RELAY 2 |
| Connector Color | BLUE                          |

|   |   |   |   |
|---|---|---|---|
| 3 | 5 | 2 | 1 |
|---|---|---|---|



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | B             | -           |
| 2            | L             | -           |
| 3            | L             | -           |
| 5            | L             | -           |

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

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



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

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

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



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

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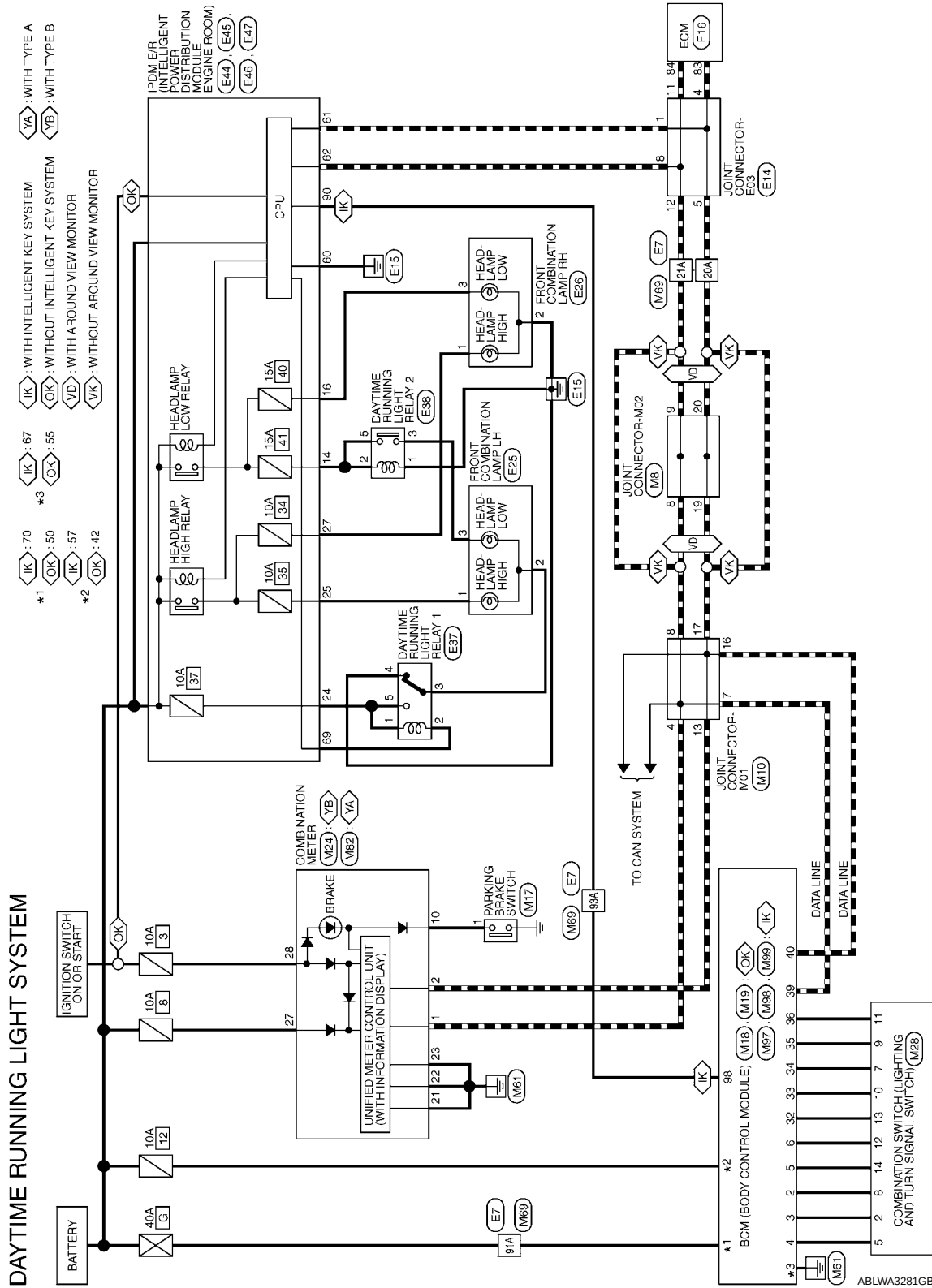
# DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >

## DAYTIME LIGHT SYSTEM

### Wiring Diagram

INFOID:000000012432794

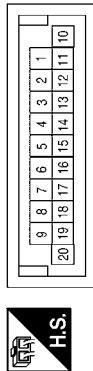


# DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >

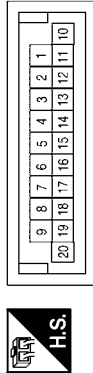
## DAYTIME RUNNING LIGHT SYSTEM CONNECTORS

|                 |                     |
|-----------------|---------------------|
| Connector No.   | M8                  |
| Connector Name  | JOINT CONNECTOR-M02 |
| Connector Color | GREEN               |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 8            | L             | -           |
| 9            | L             | -           |
| 19           | P             | -           |
| 20           | P             | -           |

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



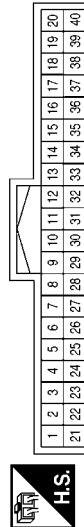
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 4            | L             | -           |
| 7            | L             | -           |
| 8            | L             | -           |
| 13           | P             | -           |
| 16           | P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

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



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | SB            | -           |

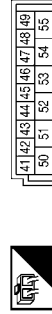
|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M18                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



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

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

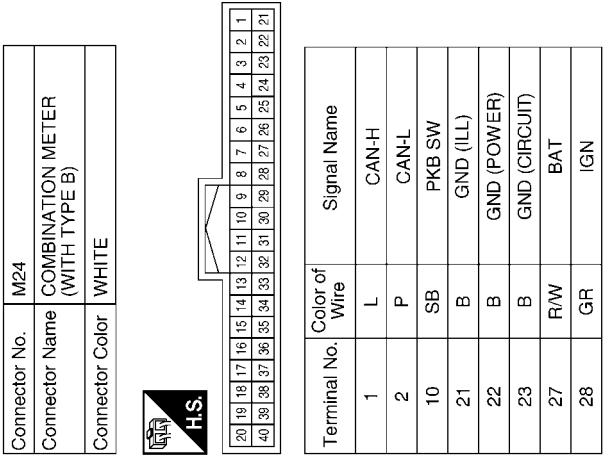
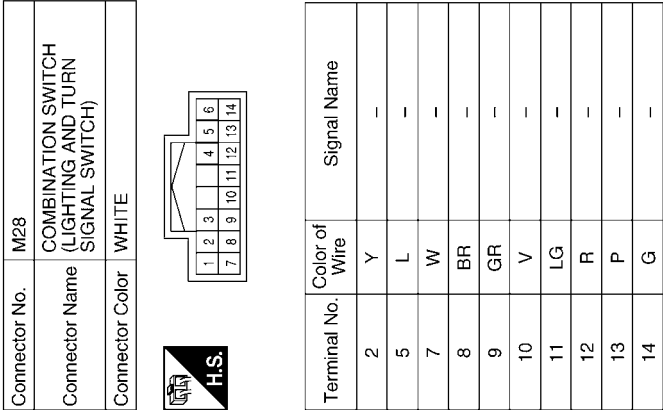
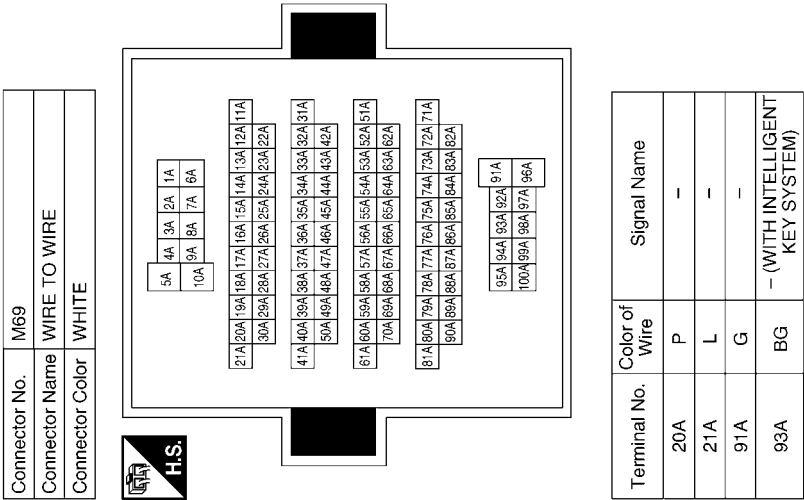
|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M19                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



| Terminal No. | Color of Wire | Signal Name    |
|--------------|---------------|----------------|
| 42           | Y             | BATTERY (FUSE) |
| 50           | G             | BATTERY (F/L)  |
| 55           | B             | GND            |

DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >



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# DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M97                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | BLACK                                                   |



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

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

|                 |                                 |
|-----------------|---------------------------------|
| Connector No.   | M82                             |
| Connector Name  | COMBINATION METER (WITH TYPE A) |
| Connector Color | WHITE                           |



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

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M99                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |



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

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M98                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |



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

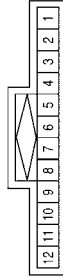
| Terminal No. | Color of Wire | Signal Name              |
|--------------|---------------|--------------------------|
| 98           | BG            | IGN RELAY OUTPUT 1 (USM) |

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# DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >

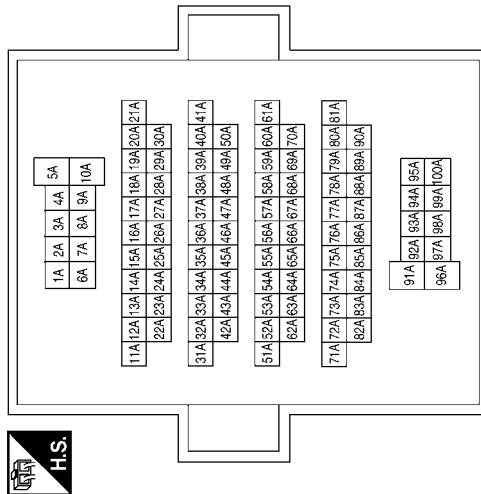
|                 |                     |
|-----------------|---------------------|
| Connector No.   | E14                 |
| Connector Name  | JOINT CONNECTOR-E03 |
| Connector Color | BLUE                |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | P             | -           |
| 4            | P             | -           |
| 5            | P             | -           |
| 8            | L             | -           |
| 11           | L             | -           |
| 12           | L             | -           |

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

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



|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E26                       |
| Connector Name  | FRONT COMBINATION LAMP RH |
| Connector Color | BLACK                     |



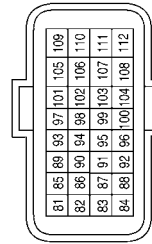
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | Y             | -           |
| 2            | B             | -           |
| 3            | P             | -           |

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E25                       |
| Connector Name  | FRONT COMBINATION LAMP LH |
| Connector Color | BLACK                     |



| Terminal No. | Color of Wire | Signal Name                          |
|--------------|---------------|--------------------------------------|
| 1            | G             | -                                    |
| 2            | GR            | -(WITH DAYTIME RUNNING LIGHT SYSTEM) |
| 3            | L             | -                                    |

|                 |       |
|-----------------|-------|
| Connector No.   | E16   |
| Connector Name  | ECM   |
| Connector Color | BLACK |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 83           | P             | CAN-L       |
| 84           | L             | CAN-H       |

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# DAYTIME LIGHT SYSTEM

< WIRING DIAGRAM >

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



|    |    |    |
|----|----|----|
| 11 | 10 | 9  |
| 16 | 15 | 14 |
| 13 | 12 |    |

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

|                 |                               |
|-----------------|-------------------------------|
| Connector No.   | E38                           |
| Connector Name  | DAYTIME RUNNING LIGHT RELAY 2 |
| Connector Color | BLUE                          |



|   |   |
|---|---|
| 3 | 5 |
| 2 | 1 |

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | B             | -           |
| 2            | L             | -           |
| 3            | L             | -           |
| 5            | L             | -           |

|                 |                               |
|-----------------|-------------------------------|
| Connector No.   | E37                           |
| Connector Name  | DAYTIME RUNNING LIGHT RELAY 1 |
| Connector Color | BLACK                         |



|   |   |
|---|---|
| 3 | 5 |
| 2 | 4 |
| 1 |   |

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | W             | -           |
| 2            | GR            | -           |
| 3            | GR            | -           |
| 4            | B             | -           |
| 5            | W             | -           |

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



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

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

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



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

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

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



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

| Terminal No. | Color of Wire | Signal Name    |
|--------------|---------------|----------------|
| 24           | W             | DTRL           |
| 25           | G             | HEADLAMP HI LH |
| 27           | Y             | HEADLAMP HI RH |

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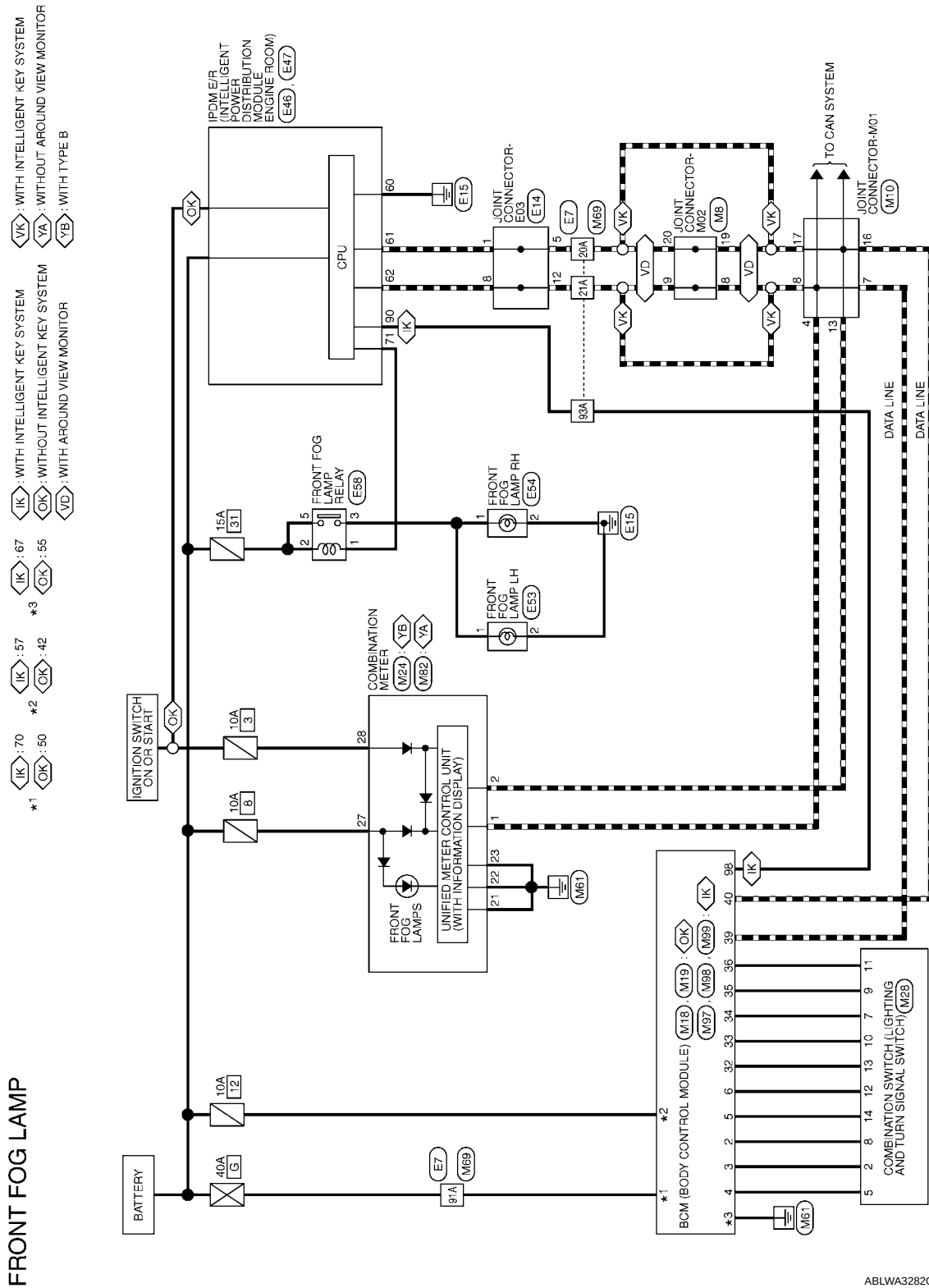
# FRONT FOG LAMP

< WIRING DIAGRAM >

## FRONT FOG LAMP

### Wiring Diagram

INFOID:000000012432795



ABLWA3282GB

# FRONT FOG LAMP

< WIRING DIAGRAM >

## FRONT FOG LAMP CONNECTORS

|                 |                     |
|-----------------|---------------------|
| Connector No.   | M8                  |
| Connector Name  | JOINT CONNECTOR-M02 |
| Connector Color | GREEN               |



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

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M18                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



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

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

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

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M19                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



|    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| 50 | 51 | 52 | 53 | 54 | 55 |    |    |    |

| Terminal No. | Color of Wire | Signal Name    |
|--------------|---------------|----------------|
| 42           | Y             | BATTERY (FUSE) |
| 50           | G             | BATTERY (F/L)  |
| 55           | B             | GND            |

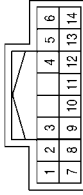
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# FRONT FOG LAMP

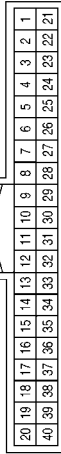
< WIRING DIAGRAM >

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

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



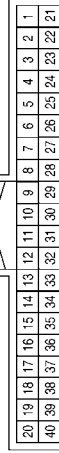
| Connector No.   | M24                             |
|-----------------|---------------------------------|
| Connector Name  | COMBINATION METER (WITH TYPE B) |
| Connector Color | WHITE                           |



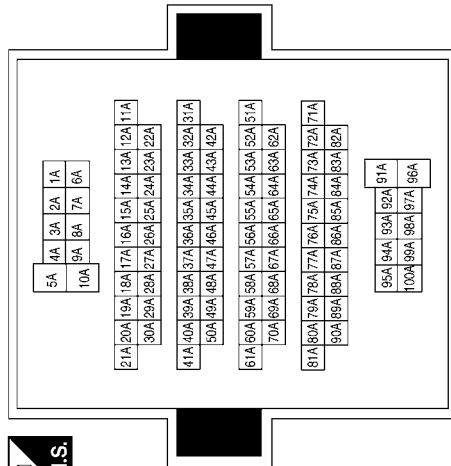
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 2            | Y             | -           |
| 5            | L             | -           |
| 7            | W             | -           |
| 8            | BR            | -           |

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

| Connector No.   | M82                             |
|-----------------|---------------------------------|
| Connector Name  | COMBINATION METER (WITH TYPE A) |
| Connector Color | WHITE                           |



| Terminal No. | Color of Wire | Signal Name                     |
|--------------|---------------|---------------------------------|
| 20A          | P             | -                               |
| 21A          | L             | -                               |
| 91A          | G             | -                               |
| 93A          | BG            | - (WITH INTELLIGENT KEY SYSTEM) |



ABLIA8094GB

# FRONT FOG LAMP

## < WIRING DIAGRAM >

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M98                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |

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

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

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M97                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | BLACK                                                   |

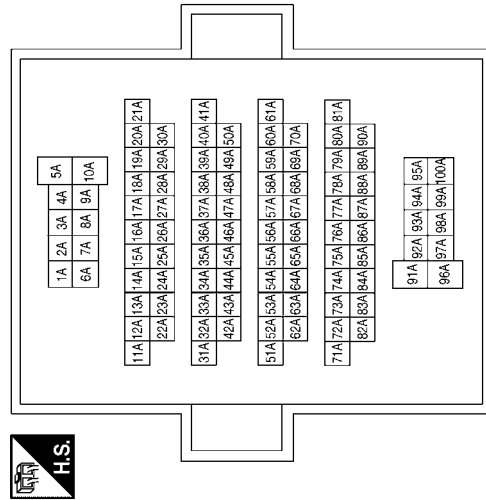
|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |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

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

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

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



|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M99                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |

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

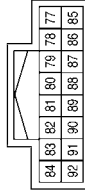
|              |               |                |
|--------------|---------------|----------------|
| Terminal No. | Color of Wire | Signal Name    |
| 57           | Y             | BATTERY (FUSE) |
| 67           | B             | GND            |
| 70           | G             | BATTERY (F/L)  |

ABLIA8095GB

# FRONT FOG LAMP

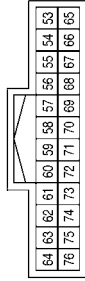
< WIRING DIAGRAM >

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



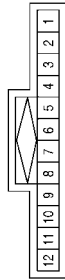
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 90           | L             | IGN SIGNAL  |

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



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

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



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

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



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

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



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

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



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

ABLIA8096GB

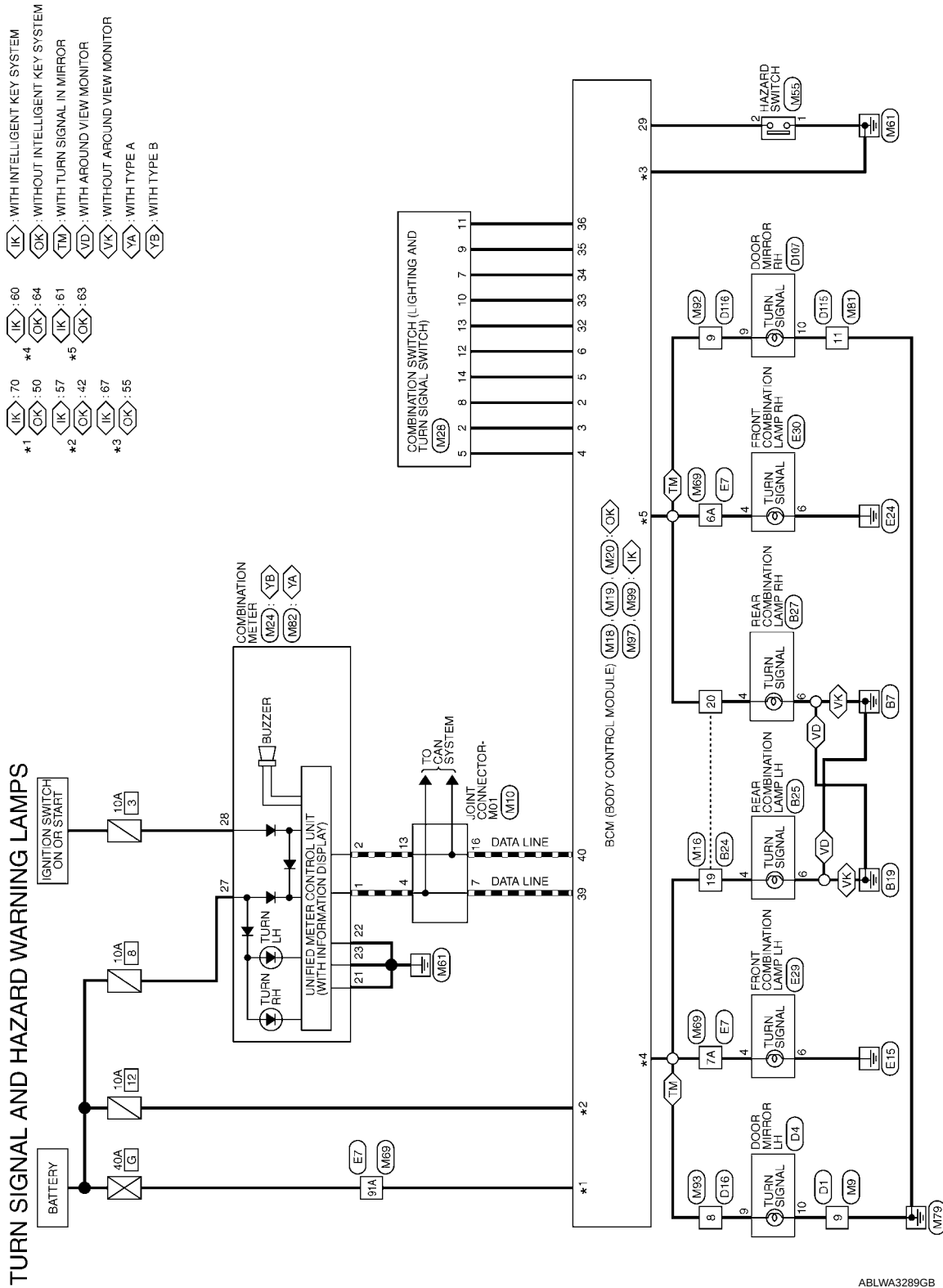
# TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< WIRING DIAGRAM >

## TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

### Wiring Diagram

INFOID:000000012432796



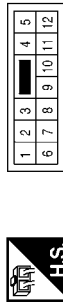
ABLWA3289GB

# TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< WIRING DIAGRAM >

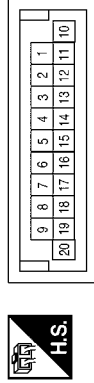
## TURN SIGNAL AND HAZARD WARNING LAMPS CONNECTORS

|                 |              |
|-----------------|--------------|
| Connector No.   | M9           |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



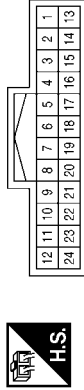
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 9            | B             | —           |

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



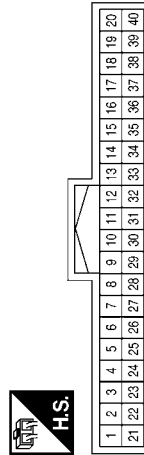
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 4            | L             | —           |
| 7            | L             | —           |
| 13           | P             | —           |
| 16           | P             | —           |

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



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

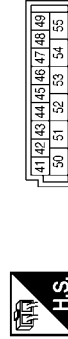
|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M18                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



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

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

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M19                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



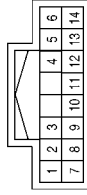
| Terminal No. | Color of Wire | Signal Name    |
|--------------|---------------|----------------|
| 42           | Y             | BATTERY (FUSE) |
| 50           | G             | BATTERY (F/L)  |
| 55           | B             | GND            |

ABLIA8115GB

# TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

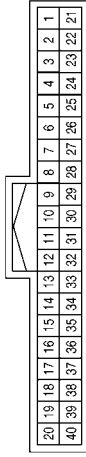
< WIRING DIAGRAM >

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M28                                                        |
| Connector Name  | COMBINATION SWITCH<br>(LIGHTING AND TURN<br>SIGNAL SWITCH) |
| Connector Color | WHITE                                                      |



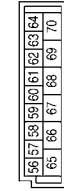
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 2            | Y             | -           |
| 5            | L             | -           |
| 7            | W             | -           |
| 8            | BR            | -           |
| 9            | GR            | -           |
| 10           | V             | -           |
| 11           | LG            | -           |
| 12           | R             | -           |
| 13           | P             | -           |
| 14           | G             | -           |

|                 |                                    |
|-----------------|------------------------------------|
| Connector No.   | M24                                |
| Connector Name  | COMBINATION METER<br>(WITH TYPE B) |
| Connector Color | WHITE                              |



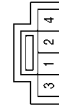
| Terminal No. | Color of Wire | Signal Name   |
|--------------|---------------|---------------|
| 1            | L             | CAN-H         |
| 2            | P             | CAN-L         |
| 21           | B             | GND (ILL)     |
| 22           | B             | GND (POWER)   |
| 23  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

|                 |                                                                  |
|-----------------|------------------------------------------------------------------|
| Connector No.   | M20                                                              |
| Connector Name  | BCM (BODY CONTROL<br>MODULE) (WITHOUT<br>INTELLIGENT KEY SYSTEM) |
| Connector Color | BLACK                                                            |



| Terminal No. | Color of Wire | Signal Name               |
|--------------|---------------|---------------------------|
| 63           | W             | FLASHER OUTPUT<br>(RIGHT) |
| 64           | V             | FLASHER OUTPUT<br>(LEFT)  |

|                 |               |
|-----------------|---------------|
| Connector No.   | M55           |
| Connector Name  | HAZARD SWITCH |
| Connector Color | WHITE         |



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

ABLIA8116GB

# TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< WIRING DIAGRAM >

|                 |              |
|-----------------|--------------|
| Connector No.   | M81          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |

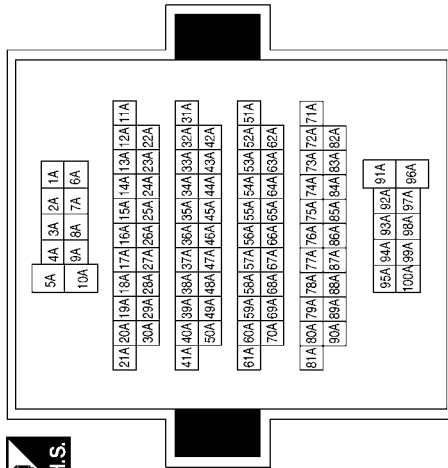
|    |    |   |   |    |
|----|----|---|---|----|
| 1  | 2  | 3 | 4 | 5  |
| 6  | 7  | 8 | 9 | 10 |
| 11 | 12 |   |   |    |



|              |               |             |
|--------------|---------------|-------------|
| Terminal No. | Color of Wire | Signal Name |
| 11           | B             | -           |

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

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



|                 |              |
|-----------------|--------------|
| Connector No.   | M93          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |

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



|              |               |             |
|--------------|---------------|-------------|
| Terminal No. | Color of Wire | Signal Name |
| 8            | V             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | M92          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |

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



|              |               |             |
|--------------|---------------|-------------|
| Terminal No. | Color of Wire | Signal Name |
| 9            | W             | -           |

|                 |                                  |
|-----------------|----------------------------------|
| Connector No.   | M82                              |
| Connector Name  | COMBINATION SWITCH (WITH TYPE A) |
| Connector Color | WHITE                            |

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



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

ABLIA8117GB

# TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< WIRING DIAGRAM >

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

| Terminal No. | Color of Wire | Signal Name             |
|--------------|---------------|-------------------------|
| 3            | Y             | COMBINATION SW INPUT 4  |
| 4            | L             | COMBINATION SW INPUT 3  |
| 5            | G             | COMBINATION SW INPUT 2  |
| 6            | R             | COMBINATION SW INPUT 1  |
| 29           | BG            | HAZARD SW               |
| 32           | P             | COMBINATION SW OUTPUT 5 |

| Connector No.   | M97                                                     |
|-----------------|---------------------------------------------------------|
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | BLACK                                                   |

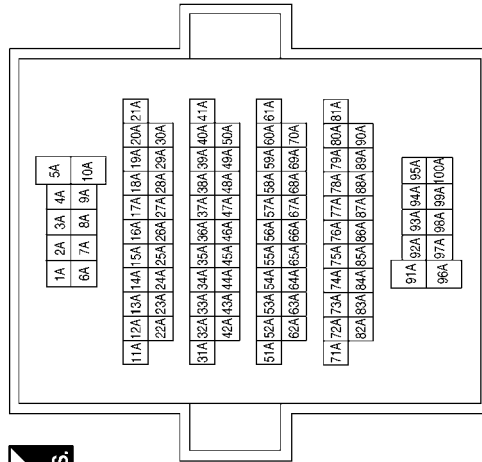


|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----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

| Terminal No. | Color of Wire | Signal Name            |
|--------------|---------------|------------------------|
| 2            | BR            | COMBINATION SW INPUT 5 |

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

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



| Connector No.   | M99                                                     |
|-----------------|---------------------------------------------------------|
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |



|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

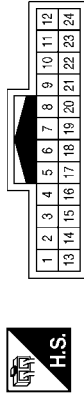
| Terminal No. | Color of Wire | Signal Name            |
|--------------|---------------|------------------------|
| 57           | Y             | BATTERY (FUSE)         |
| 60           | V             | FLASHER OUTPUT (LEFT)  |
| 61           | W             | FLASHER OUTPUT (RIGHT) |
| 67      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

ABLIA8118GB

# TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< WIRING DIAGRAM >

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



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

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E30                       |
| Connector Name  | FRONT COMBINATION LAMP RH |
| Connector Color | GRAY                      |



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

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E29                       |
| Connector Name  | FRONT COMBINATION LAMP LH |
| Connector Color | GRAY                      |



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

|                 |              |
|-----------------|--------------|
| Connector No.   | D1           |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 9            | B             | —           |

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



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

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



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

AALIA2897GB

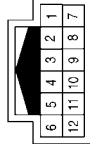
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
EXL  
M  
N  
O  
P

cardiagn.com

# TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

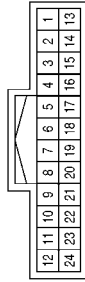
## < WIRING DIAGRAM >

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



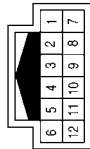
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 9            | W             | -           |
| 10           | B             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | D16          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



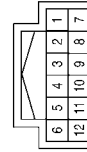
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 8            | W             | -           |

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



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 9            | W             | -           |
| 10           | B             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | D116         |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 9            | W             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | D115         |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 11           | B             | -           |

AALIA2898GB

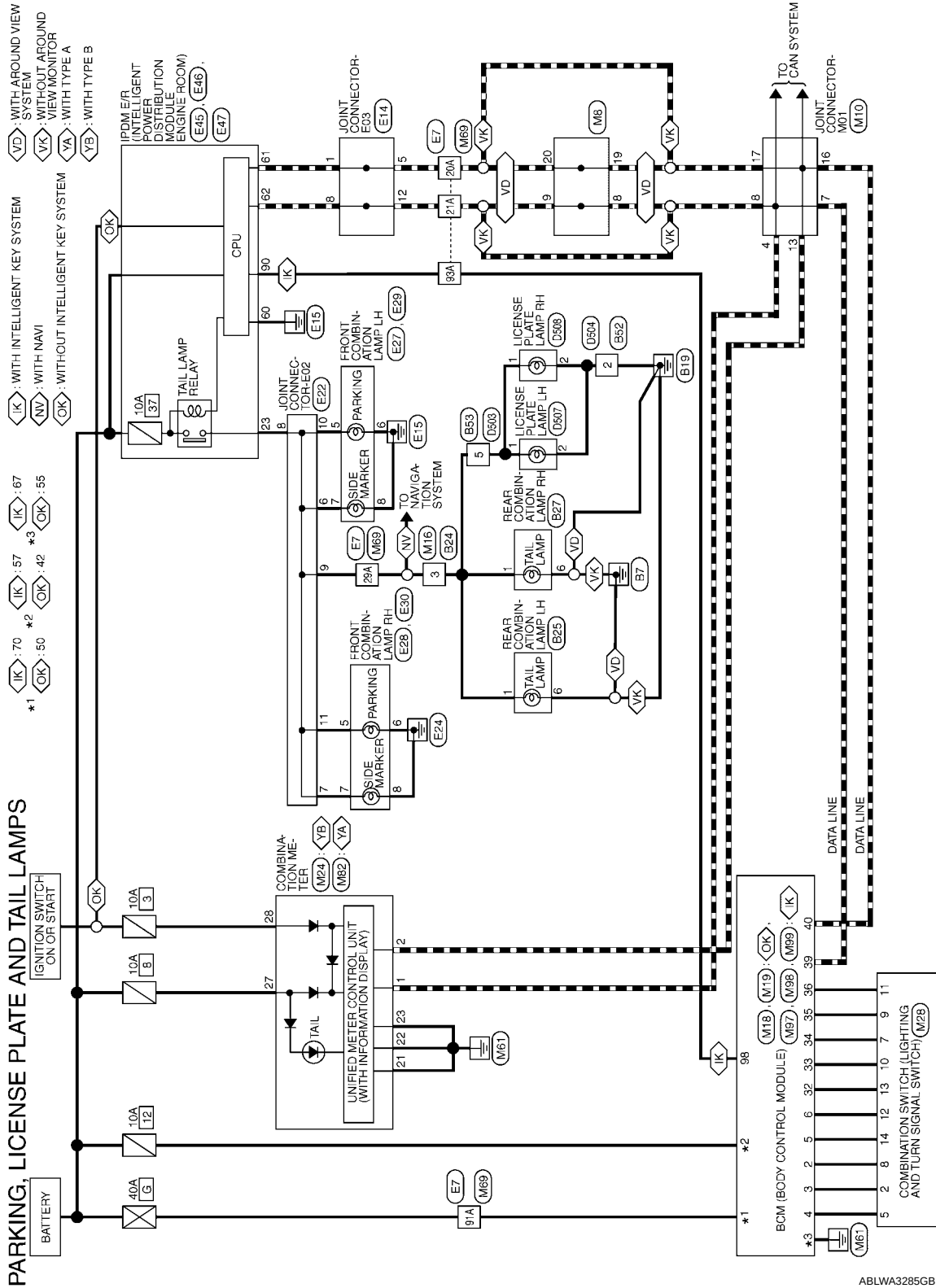
# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< WIRING DIAGRAM >

## PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

### Wiring Diagram

INFOID:000000012432797



ABLWA3285GB

# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< WIRING DIAGRAM >

## PARKING, LICENSE PLATE AND TAIL LAMPS CONNECTERS

|                 |                     |
|-----------------|---------------------|
| Connector No.   | M8                  |
| Connector Name  | JOINT CONNECTOR-M02 |
| Connector Color | GREEN               |

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

**H.S.**



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 8            | L             | -           |
| 9            | L             | -           |
| 19           | P             | -           |
| 20           | P             | -           |

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

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

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

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



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 3            | R             | -           |

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M18                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



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

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

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

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M19                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



|    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| 50 | 51 | 52 | 53 | 54 | 55 |    |    |    |

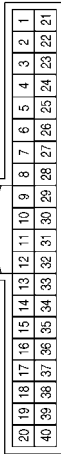
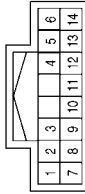
| Terminal No. | Color of Wire | Signal Name    |
|--------------|---------------|----------------|
| 42           | Y             | BATTERY (FUSE) |
| 50           | G             | BATTERY (F/L)  |
| 55           | B             | GND            |

# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< WIRING DIAGRAM >

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

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

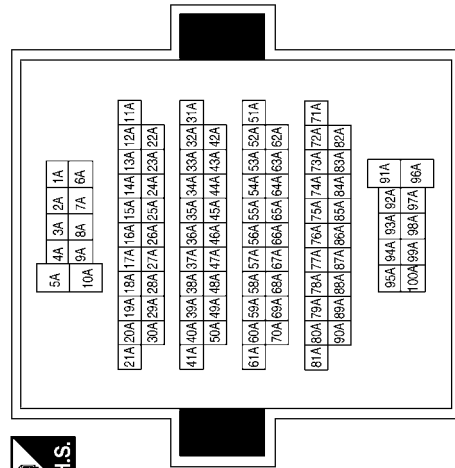


| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 2            | Y             | -           |
| 5            | L             | -           |
| 7            | W             | -           |
| 8            | BR            | -           |

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

| Terminal No. | Color of Wire | Signal Name                    |
|--------------|---------------|--------------------------------|
| 20A          | P             | -                              |
| 21A          | L             | -                              |
| 29A          | R             | -                              |
| 91A          | G             | -                              |
| 93A          | BG            | -(WITH INTELLIGENT KEY SYSTEM) |

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



ABLIA8103GB

# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< WIRING DIAGRAM >

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M97                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | BLACK                                                   |



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

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

|                 |                                 |
|-----------------|---------------------------------|
| Connector No.   | M82                             |
| Connector Name  | COMBINATION METER (WITH TYPE A) |
| Connector Color | WHITE                           |



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

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M99                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |



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

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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M98                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |



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

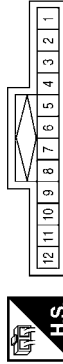
| Terminal No. | Color of Wire | Signal Name              |
|--------------|---------------|--------------------------|
| 98           | BG            | IGN RELAY OUTPUT 1 (USM) |

ABLIA8104GB

# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< WIRING DIAGRAM >

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



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

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

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



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

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E28                       |
| Connector Name  | FRONT COMBINATION LAMP RH |
| Connector Color | BLACK                     |



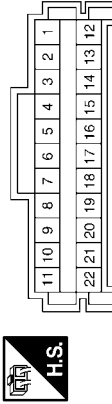
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 7            | R             | -           |
| 8            | B             | -           |

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E27                       |
| Connector Name  | FRONT COMBINATION LAMP LH |
| Connector Color | BLACK                     |



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

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



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

AALIA1470GB

# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< WIRING DIAGRAM >

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

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



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 23           | R             | CLEARANCE   |

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E30                       |
| Connector Name  | FRONT COMBINATION LAMP RH |
| Connector Color | GRAY                      |

|   |   |   |
|---|---|---|
| 6 | 5 | 4 |
|---|---|---|



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

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | E29                       |
| Connector Name  | FRONT COMBINATION LAMP LH |
| Connector Color | GRAY                      |

|   |   |   |
|---|---|---|
| 6 | 5 | 4 |
|---|---|---|



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

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

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



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 3            | L             | —           |

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

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



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

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

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



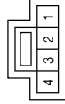
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 60           | B             | S-GND       |
| 61           | P             | CAN-L       |
| 62           | L             | CAN-H       |

AALIA2891GB

# PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

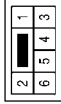
< WIRING DIAGRAM >

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



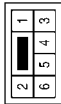
|              |   |               |   |             |   |
|--------------|---|---------------|---|-------------|---|
| Terminal No. | 2 | Color of Wire | B | Signal Name | - |
|--------------|---|---------------|---|-------------|---|

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



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

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



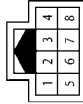
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | L             | -           |
| 6            | B             | -           |

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



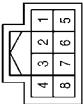
|              |   |               |   |             |   |
|--------------|---|---------------|---|-------------|---|
| Terminal No. | 2 | Color of Wire | B | Signal Name | - |
|--------------|---|---------------|---|-------------|---|

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



|              |   |               |    |             |   |
|--------------|---|---------------|----|-------------|---|
| Terminal No. | 5 | Color of Wire | GR | Signal Name | - |
|--------------|---|---------------|----|-------------|---|

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



|              |   |               |    |             |   |
|--------------|---|---------------|----|-------------|---|
| Terminal No. | 5 | Color of Wire | GR | Signal Name | - |
|--------------|---|---------------|----|-------------|---|

AALIA1472GB

A  
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D  
E  
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H  
I  
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K  
EXL  
M  
N  
O  
P

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< WIRING DIAGRAM >

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



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

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



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

AALIA1488GB

STOP LAMP

< WIRING DIAGRAM >

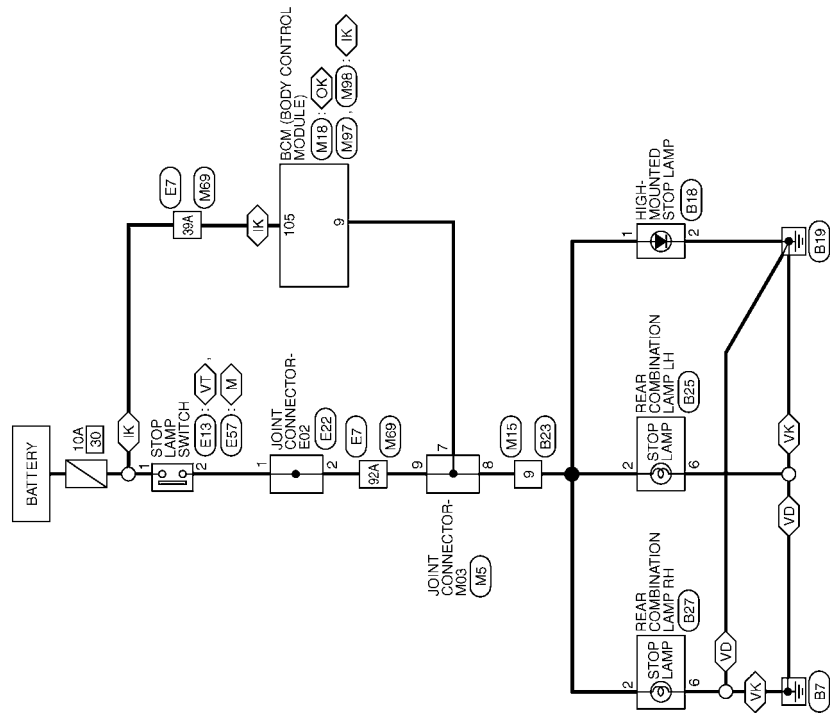
STOP LAMP

Wiring Diagram

INFOID:000000012432798

STOP LAMP

- WITH INTELLIGENT KEY SYSTEM
- WITHOUT INTELLIGENT KEY SYSTEM
- WITH M/T
- WITH AROUND VIEW MONITOR
- WITHOUT AROUND VIEW MONITOR
- WITH CVT



ABLWA3286GB

EXL

A  
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# STOP LAMP

< WIRING DIAGRAM >

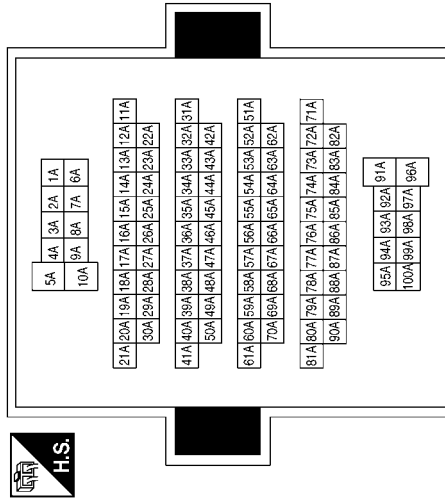
## STOP LAMP CONNECTORS

|                 |                     |
|-----------------|---------------------|
| Connector No.   | M5                  |
| Connector Name  | JOINT CONNECTOR-M03 |
| Connector Color | WHITE               |

|   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|   |   |   |    |    |    |    |    |    |    |    |    |    |    |

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 7            | LG            | -           |
| 8            | R             | -           |
| 9            | R             | -           |

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



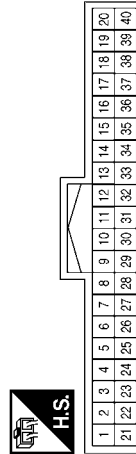
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 39A          | SB            | -           |
| 92A          | R             | -           |

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

|   |   |   |    |    |    |    |    |    |    |
|---|---|---|----|----|----|----|----|----|----|
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|   |   |   |    |    |    |    |    |    |    |

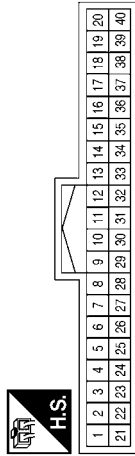
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 9            | R             | -           |

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M97                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | BLACK                                                   |



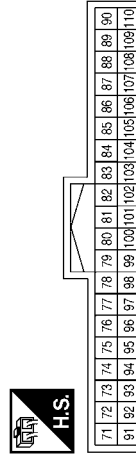
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 9            | LG            | BRAKE SW 1  |

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Connector No.   | M18                                                        |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                      |



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

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Connector No.   | M98                                                     |
| Connector Name  | BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) |
| Connector Color | WHITE                                                   |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 105          | SB            | BRAKE SW 2  |

# STOP LAMP

## < WIRING DIAGRAM >

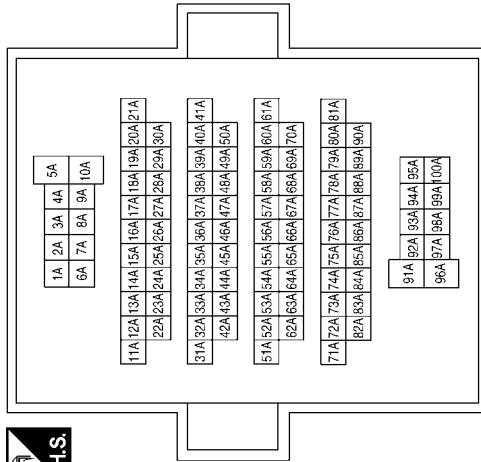
|                 |                                |
|-----------------|--------------------------------|
| Connector No.   | E13                            |
| Connector Name  | STOP LAMP SWITCH<br>(WITH CVT) |
| Connector Color | WHITE                          |



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

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

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



|                 |                           |
|-----------------|---------------------------|
| Connector No.   | B18                       |
| Connector Name  | HIGH-MOUNTED STOP<br>LAMP |
| Connector Color | BLACK                     |



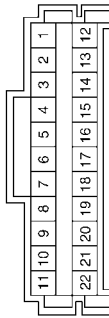
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | R             | -           |
| 2            | B             | -           |

|                 |                                |
|-----------------|--------------------------------|
| Connector No.   | E57                            |
| Connector Name  | STOP LAMP SWITCH<br>(WITH M/T) |
| Connector Color | BLACK                          |



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

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



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

AALIA1424GB

STOP LAMP

< WIRING DIAGRAM >

|                 |                             |
|-----------------|-----------------------------|
| Connector No.   | B27                         |
| Connector Name  | REAR COMBINATION<br>LAMP RH |
| Connector Color | WHITE                       |



|   |   |
|---|---|
| 2 | 1 |
| 6 | 5 |
| 4 | 3 |

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

|                 |                             |
|-----------------|-----------------------------|
| Connector No.   | B25                         |
| Connector Name  | REAR COMBINATION<br>LAMP LH |
| Connector Color | WHITE                       |



|   |   |
|---|---|
| 2 | 1 |
| 6 | 5 |
| 4 | 3 |

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

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



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

|              |               |             |
|--------------|---------------|-------------|
| Terminal No. | Color of Wire | Signal Name |
| 9            | R             | -           |

AALIA1425GB

BACK-UP LAMP

< WIRING DIAGRAM >

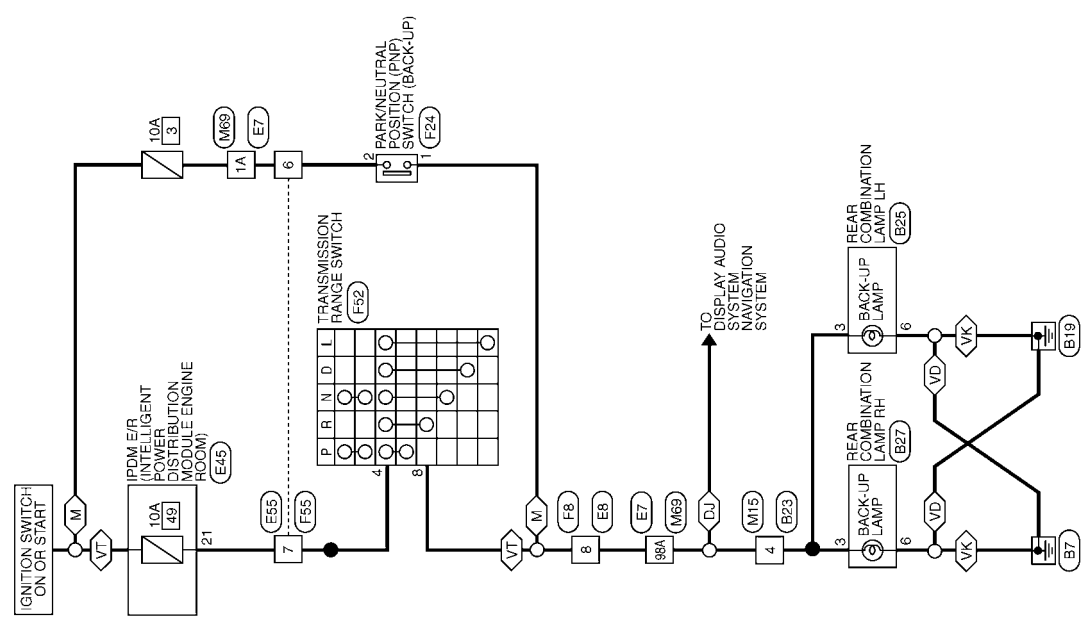
BACK-UP LAMP

Wiring Diagram

INFOID:0000000012432799

BACK-UP LAMP

- <DJ> : WITH NAVIGATION AND DISPLAY AUDIO SYSTEM
- <M> : WITH M/T
- <VD> : WITH AROUND VIEW MONITOR
- <VK> : WITHOUT AROUND VIEW MONITOR
- <VT> : WITH CVT



AALWA1006GB

A  
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M  
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P

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# BACK-UP LAMP

< WIRING DIAGRAM >

## BACK-UP LAMP CONNECTORS

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

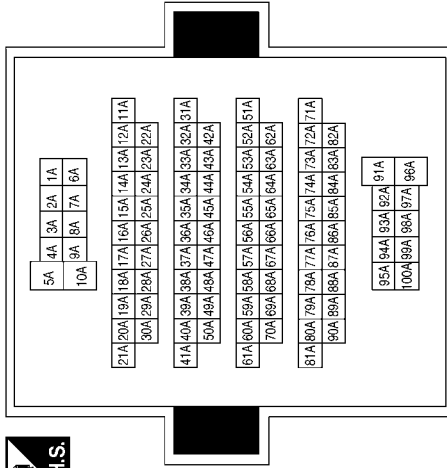
|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| 7  | 6  | 5  | 4  | 3  | 2  | 1  |
| 16 | 15 | 14 | 13 | 12 | 11 | 10 |
| 9  | 8  |    |    |    |    |    |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 4            | SB            | —           |

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

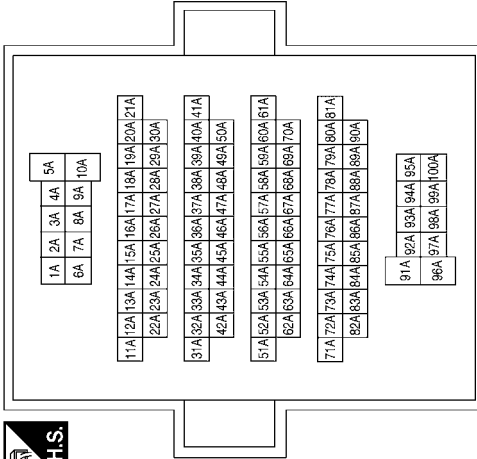
|     |    |    |    |    |
|-----|----|----|----|----|
| 5A  | 4A | 3A | 2A | 1A |
| 10A | 9A | 8A | 7A | 6A |



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

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

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



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

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

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



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 8            | SB            | —           |

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

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



| Terminal No. | Color of Wire | Signal Name       |
|--------------|---------------|-------------------|
| 21           | R             | AT ECU (WITH CVT) |

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

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

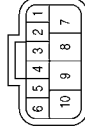


| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 6            | GR            | —           |
| 7            | R             | —           |

# BACK-UP LAMP

## < WIRING DIAGRAM >

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



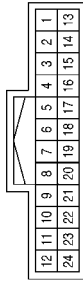
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 4            | R/W           | -           |
| 8            | O             | -           |

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



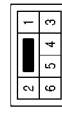
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | O             | -           |
| 2            | R             | -           |

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



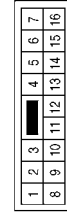
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 8            | O             | -           |

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



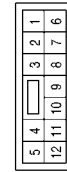
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 3            | Y             | -           |
| 6            | B             | -           |

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



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 4            | Y             | -           |

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



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

ABLIA8088GB

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

BACK-UP LAMP

< WIRING DIAGRAM >

|                 |                             |
|-----------------|-----------------------------|
| Connector No.   | B27                         |
| Connector Name  | REAR COMBINATION<br>LAMP RH |
| Connector Color | WHITE                       |



|   |   |
|---|---|
| 2 | 1 |
| 6 | 3 |
| 5 | 4 |

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

ABLIA8089GB

# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

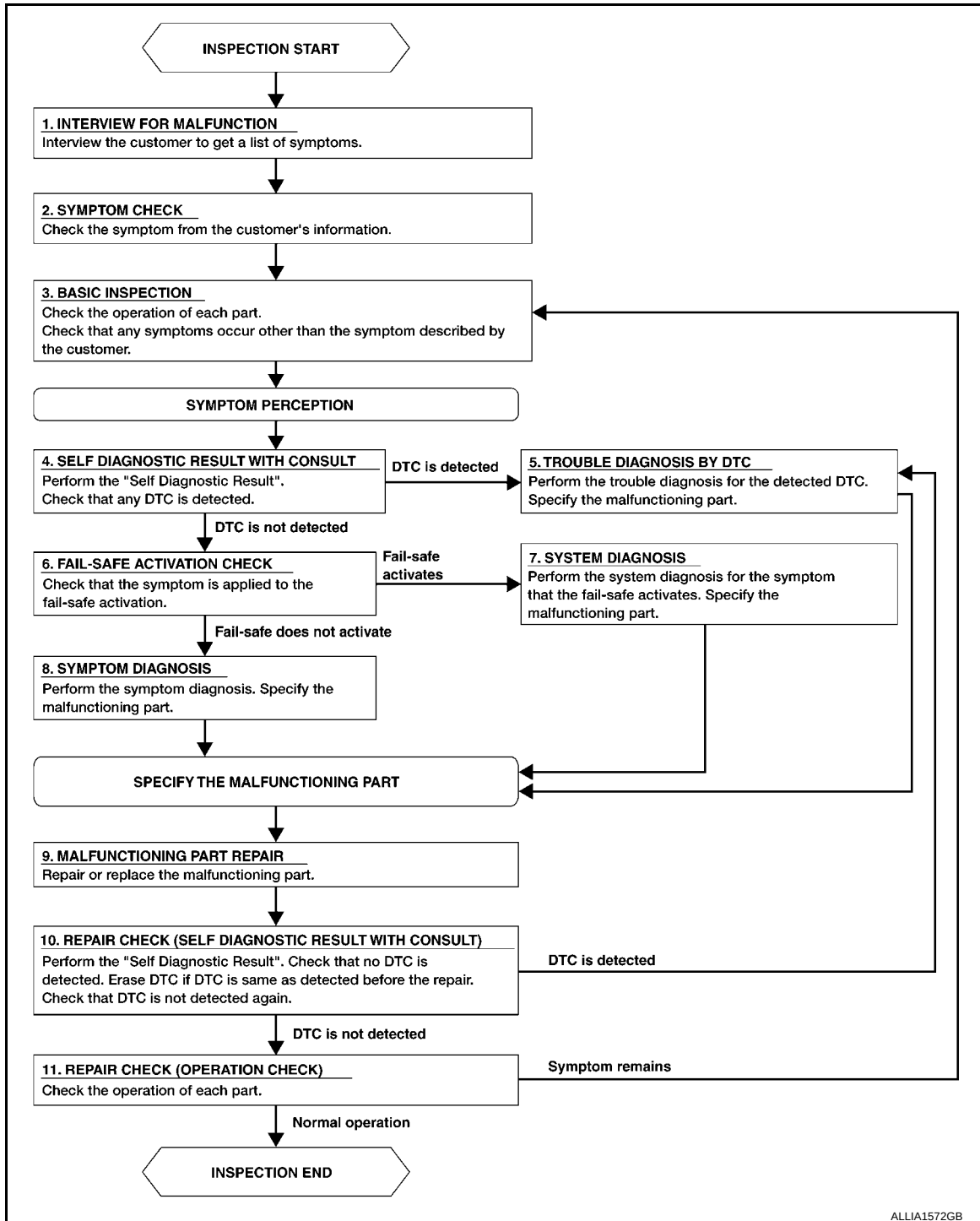
## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000012432800

#### OVERALL SEQUENCE



ALLIA1572GB

# DIAGNOSIS AND REPAIR WORKFLOW

## < BASIC INSPECTION >

---

### DETAILED FLOW

#### 1. INTERVIEW FOR MALFUNCTION

---

Find out what the customer's concerns are.

>> GO TO 2.

#### 2. SYMPTOM CHECK

---

Verify the symptom from the customer's information.

>> GO TO 3.

#### 3. BASIC INSPECTION

---

Check the operation of each part. Check that any concerns occur other than those mentioned in the customer interview.

>> GO TO 4.

#### 4. SELF DIAGNOSTIC RESULT WITH CONSULT

---

Perform the "Self Diagnostic Result". Check that any DTC is detected.

Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 6.

#### 5. TROUBLE DIAGNOSIS BY DTC

---

Perform the trouble diagnosis for the detected DTC. Specify the malfunctioning part.

>> GO TO 9.

#### 6. FAIL-SAFE ACTIVATION CHECK

---

Determine if the customer's concern is related to fail-safe activation.

Does the fail-safe activate?

YES >> GO TO 7.

NO >> GO TO 8.

#### 7. SYSTEM DIAGNOSIS

---

Perform the system diagnosis for the system in which the fail-safe activates. Specify the malfunctioning part.

>> GO TO 9.

#### 8. SYMPTOM DIAGNOSIS

---

Perform the symptom diagnosis, refer to [EXL-91, "Symptom Table"](#). Specify the malfunctioning part.

>> GO TO 9.

#### 9. MALFUNCTION PART REPAIR

---

Repair or replace the malfunctioning part.

>> GO TO 10.

#### 10. REPAIR CHECK (SELF-DIAGNOSTIC RESULT WITH CONSULT)

---

Perform the "Self Diagnostic Result". Verify that no DTCs are detected. Erase all DTCs detected prior to the repair. Verify that DTC is not detected again.

Is any DTC detected?

## DIAGNOSIS AND REPAIR WORKFLOW

### < BASIC INSPECTION >

---

YES >> GO TO 5.

NO >> GO TO 11.

### 11. REPAIR CHECK (OPERATION CHECK)

---

Check the operation of each part.

Does it operate normally?

YES >> Inspection End.

NO >> GO TO 3.

A

B

C

D

E

F

G

H

I

J

K

EXL

M

N

O

P

## POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

### DTC/CIRCUIT DIAGNOSIS

#### POWER SUPPLY AND GROUND CIRCUIT

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

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

INFOID:0000000012542318

Regarding Wiring Diagram information, refer to [BCS-52, "Wiring Diagram"](#).

#### 1.CHECK FUSES AND FUSIBLE LINK

Check that the following fuses and fusible link are not blown.

| Terminal No. | Signal name          | Fuses and fusible link No. |
|--------------|----------------------|----------------------------|
| 57           | Battery power supply | 12 (10A)                   |
| 70           |                      | G (40A)                    |

##### Is the fuse blown?

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

#### 2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M99.
2. Check voltage between BCM connector M99 and ground.

| BCM       |          | Ground | Voltage         |
|-----------|----------|--------|-----------------|
| Connector | Terminal |        |                 |
| M99       | 57       | —      | Battery voltage |
|           | 70       |        |                 |

##### Is the inspection result normal?

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

#### 3.CHECK GROUND CIRCUIT

Check continuity between BCM connector M99 and ground.

| BCM       |          | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal |        |            |
| M99       | 67       | —      | Yes        |

##### Is the inspection result normal?

YES >> Inspection End.  
NO >> Repair harness or connector.

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

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

INFOID:0000000012542319

Regarding Wiring Diagram information, refer to [BCS-117, "Wiring Diagram"](#).

# POWER SUPPLY AND GROUND CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

### 1.CHECK FUSES AND FUSIBLE LINK

Check that the following fuses and fusible link are not blown.

| Terminal No. | Signal name                 | Fuses and fusible link No. |
|--------------|-----------------------------|----------------------------|
| 37           | Battery power supply        | 8 (10A)                    |
| 42           |                             | 12 (10A)                   |
| 50           |                             | G (40A)                    |
| 11           | Ignition switch ACC or ON   | 18 (10A)                   |
| 38           | Ignition switch ON or START | 2 (10A)                    |

#### Is the fuse blown?

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

NO >> GO TO 2.

### 2.CHECK POWER SUPPLY CIRCUIT

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

| BCM       |          | Ground | Ignition switch position |                 |                 |
|-----------|----------|--------|--------------------------|-----------------|-----------------|
| Connector | Terminal | —      | OFF                      | ACC             | ON              |
| M18       | 11       |        | 0 V                      | Battery voltage | Battery voltage |
|           | 37       |        | Battery voltage          |                 |                 |
|           | 38       |        | 0 V                      | 0 V             |                 |
| M19       | 42       |        | Battery voltage          | Battery voltage |                 |
|           | 50       |        |                          |                 |                 |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

### 3.CHECK GROUND CIRCUIT

Check continuity between BCM connector and ground.

| BCM       |          | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal |        |            |
| M19       | 55       | —      | Yes        |

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair harness or connector.

## IPDM E/R

### IPDM E/R : Diagnosis Procedure

INFOID:0000000012542320

Regarding Wiring Diagram information, refer to [PCS-21, "Wiring Diagram"](#).

### 1. CHECK FUSE AND FUSIBLE LINKS

Check that the following IPDM E/R fuse or fusible links are not blown.

## POWER SUPPLY AND GROUND CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

| Terminal No. | Signal name          | Fuse and fusible link Nos. |
|--------------|----------------------|----------------------------|
| 1            | Battery power supply | A (120A), E (80A)          |
| 2            |                      | B (60A)                    |

#### Is the fuse blown?

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

NO >> GO TO 2.

### 2. CHECK BATTERY POWER SUPPLY CIRCUIT

1. Disconnect IPDM E/R connector E42.
2. Check voltage between IPDM E/R connector E42 and ground.

| IPDM E/R  |          | Ground | Voltage<br>(Approx.) |
|-----------|----------|--------|----------------------|
| Connector | Terminal |        |                      |
| E42       | 1        | —      | Battery voltage      |
|           | 2        |        |                      |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connectors.

### 3. CHECK GROUND CIRCUIT

1. Disconnect IPDM E/R connectors E45, E46 and E47.
2. Check continuity between IPDM E/R connectors and ground.

| IPDM E/R  |          | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal |        |            |
| E45       | 19       | Ground | Yes        |
| E46       | 60       |        |            |
| E47       | 89       |        |            |

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

# HEADLAMP (HI) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## HEADLAMP (HI) CIRCUIT

### Description

INFOID:0000000012432804

The IPDM E/R (intelligent power distribution module engine room) controls the headlamp high relay based on inputs from the BCM via the CAN communication lines. When the headlamp high relay is energized, power flows through fuses 34 and 35, located in the IPDM E/R. Power then flows to the front combination lamp LH and RH high beams.

### Component Function Check

INFOID:0000000012432805

#### 1.CHECK HEADLAMP (HI) OPERATION

##### ☒ WITHOUT CONSULT

1. Start IPDM E/R auto active test. Refer to [PCS-9, "Diagnosis Description"](#).
2. Check that the headlamp switches to the high beam.

##### ☐ CONSULT

1. Select EXTERNAL LAMPS of IPDM E/R active test item.
2. While operating the test items, check that the headlamp switches to the high beam.

**HI** : Headlamp switches to the high beam.

**OFF** : Headlamp OFF

Does the headlamp switch to high beam?

YES >> Headlamp (HI) circuit is normal.

NO >> Refer to [EXL-77, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:0000000012432806

Regarding Wiring Diagram information, refer to [EXL-25, "Wiring Diagram - For USA"](#) or [EXL-31, "Wiring Diagram - For Canada"](#).

#### 1.CHECK HEADLAMP (HI) FUSES

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

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

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

#### 2.CHECK HIGH BEAM BULB

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

Is the bulb OK?

YES >> GO TO 3.

NO >> Replace the bulb.

#### 3.CHECK HEADLAMP (HI) OUTPUT VOLTAGE

1. Turn the ignition switch OFF.
2. Disconnect the front combination lamp connector E25 or E26.
3. Turn the ignition switch ON.
4. Turn the high beam headlamps ON.
5. With the high beam headlamps ON, check the voltage between the combination lamp connector and ground.

## HEADLAMP (HI) CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

| (+) Connector |     | Terminal | (-)    | Voltage         |
|---------------|-----|----------|--------|-----------------|
| LH            | E25 |          |        |                 |
| RH            | E26 | 1        | Ground | Battery voltage |

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### 4. CHECK HEADLAMP (HI) CIRCUIT FOR OPEN

1. Turn the ignition switch OFF.
2. Disconnect IPDM E/R connector E45.
3. Check continuity between the IPDM E/R harness connector E45 and the front combination lamp harness connector E25 or E26.

| Connector |     | Terminal | Connector | Terminal | Continuity |
|-----------|-----|----------|-----------|----------|------------|
| LH        | E45 | 25       | E25       | 1        | Yes        |
| RH        |     | 27       | E26       |          |            |

#### Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).

NO >> Repair or replace the harness or connector.

### 5. CHECK FRONT COMBINATION LAMP (HI) GROUND CIRCUIT

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

| Connector |     | Terminal | —      | Continuity |
|-----------|-----|----------|--------|------------|
| LH        | E25 | 2        | Ground | Yes        |
| RH        | E26 |          |        |            |

#### Is the inspection result normal?

YES >> Replace malfunctioning lamp.

NO >> Repair or replace the harness or connector (without daytime running light system).

>> GO TO 6 (with daytime running light system).

### 6. CHECK FRONT COMBINATION LAMP LH TO DAYTIME RUNNING LIGHT RELAY 1 GROUND CIRCUIT

1. Disconnect daytime running light relay 1 connector E37.
2. Check continuity between the daytime running light relay 1 harness connector E37 and the front combination lamp LH harness connector E25.

| Connector | Terminal | Connector | Terminal | Continuity |
|-----------|----------|-----------|----------|------------|
| E37       | 3        | E25       | 2        | Yes        |

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the harness or connector.

### 7. CHECK DAYTIME RUNNING LIGHT RELAY 1 GROUND CIRCUIT

Check continuity between the daytime running light relay 1 harness connector E37 and ground.

| Connector | Terminal | —      | Continuity |
|-----------|----------|--------|------------|
| E37       | 4        | Ground | Yes        |

#### Is the inspection result normal?

YES >> Replace daytime running light relay 1.

NO >> Repair or replace the harness or connector.

# HEADLAMP (LO) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## HEADLAMP (LO) CIRCUIT

### Description

INFOID:0000000012432807

The IPDM E/R (intelligent power distribution module engine room) controls the headlamp low relay based on inputs from the BCM via the CAN communication lines. When the headlamp low relay is energized, power flows through fuses 40 and 41, located in the IPDM E/R.

(Without daytime running light system) power then flows to the front combination lamp LH and RH low beams. (With daytime running light system) power then flows to the front combination lamp LH low beam and the daytime running light relay 2 which becomes energized and then power is sent to the front combination lamp RH low beam.

### Component Function Check

INFOID:0000000012432808

#### 1.CHECK HEADLAMP (LO) OPERATION

##### ⊗WITHOUT CONSULT

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

##### ⓂCONSULT

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

**LO : Headlamp ON**

**OFF : Headlamp OFF**

Is the headlamp turned ON?

YES >> Headlamp (LO) is normal.

NO >> Refer to [EXL-79, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:0000000012432809

Regarding Wiring Diagram information, refer to [EXL-25, "Wiring Diagram - For USA"](#) or [EXL-31, "Wiring Diagram - For Canada"](#).

#### 1.CHECK HEADLAMP (LO) FUSES

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

| Unit             | Location | Fuse No. | Capacity |
|------------------|----------|----------|----------|
| Headlamp LO (LH) | IPDM E/R | 41       | 15A      |
| Headlamp LO (RH) | IPDM E/R | 40       | 15A      |

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

#### 2.CHECK LOW BEAM BULB

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

Is the bulb OK?

YES >> GO TO 3.

NO >> Replace the bulb.

#### 3.CHECK HEADLAMP (LO) OUTPUT VOLTAGE

1. Turn the ignition switch OFF.
2. Disconnect the front combination lamp connector E25 or E26.
3. Turn the ignition switch ON.

## HEADLAMP (LO) CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

- Turn the low beam headlamps ON.
- With the low beam headlamps ON, check the voltage between the combination lamp connector and ground.

| (+)       |     | Terminal | (-)    | Voltage         |
|-----------|-----|----------|--------|-----------------|
| Connector |     |          |        |                 |
| LH        | E25 | 3        | Ground | Battery voltage |
| RH        | E26 |          |        |                 |

#### Is the inspection result normal?

- YES >> GO TO 9.  
NO >> GO TO 4 (without daytime running light system).  
>> GO TO 5 (with daytime running light system).

### 4.CHECK HEADLAMP (LO) CIRCUIT FOR OPEN

- Turn the ignition switch OFF.
- Disconnect IPDM E/R connector E44.
- Check continuity between the IPDM E/R harness connector E44 and the front combination lamp harness connectors E25 and E26.

| Connector |     | Terminal | Connector | Terminal | Continuity |
|-----------|-----|----------|-----------|----------|------------|
| LH        | E44 | 14       | E25       | 3        | Yes        |
| RH        |     | 16       | E26       |          |            |

#### Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).  
NO >> Repair or replace the harness or connector.

### 5.CHECK DAYTIME RUNNING LIGHT RELAY 2 TO FRONT COMBINATION LAMP LH CIRCUIT FOR OPEN

- Disconnect daytime running light relay 2 connector E38.
- Check continuity between the daytime running light relay 2 harness connector E38 and the front combination lamp LH harness connector E25.

| Connector | Terminal | Connector | Terminal | Continuity |
|-----------|----------|-----------|----------|------------|
| E38       | 3        | E25       | 3        | Yes        |

#### Is the inspection result normal?

- YES >> GO TO 6.  
NO >> Repair or replace the harness or connector.

### 6.CHECK DAYTIME RUNNING LIGHT RELAY 2 VOLTAGE CIRCUIT

With the low beam headlamps ON, check the voltage between the daytime running light relay 2 connector E38 and ground.

| (+)       |          | (-)    | Voltage         |
|-----------|----------|--------|-----------------|
| Connector | Terminal |        |                 |
| E38       | 2        | Ground | Battery voltage |
|           | 5        |        |                 |

#### Is the inspection result normal?

- YES >> GO TO 7.  
NO >> GO TO 8.

### 7.CHECK DAYTIME RUNNING LIGHT RELAY 2 GROUND CIRCUIT

Check continuity between the daytime running light relay 2 harness connector E38 and ground.

## HEADLAMP (LO) CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

| Connector | Terminal | —      | Continuity |
|-----------|----------|--------|------------|
| E38       | 1        | Ground | Yes        |

Is the inspection result normal?

- YES >> Replace daytime light relay 2.  
 NO >> Repair or replace the harness or connector.

### 8.CHECK IPDM E/R TO DAYTIME LIGHT RELAY 2 CIRCUIT FOR OPEN

1. Disconnect IPDM E/R connector E44.
2. Check continuity between the daytime running light relay 2 harness connector E38 and the IPDM E/R connector E44.

| Connector | Terminal | Connector | Terminal | Continuity |
|-----------|----------|-----------|----------|------------|
| E38       | 2        | E44       | 14       | Yes        |
|           | 5        |           |          |            |

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).  
 NO >> Repair or replace the harness or connector.

### 9.CHECK FRONT COMBINATION LAMP (LO) GROUND CIRCUIT

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

| Connector | Terminal | —      | Continuity |
|-----------|----------|--------|------------|
| LH        | 2        | Ground | Yes        |
| RH        |          |        |            |

Is the inspection result normal?

- YES >> Replace malfunctioning lamp.  
 NO >> Repair or replace the harness or connector (without daytime running light system).  
 >> GO TO 10 (with daytime running light system).

### 10.CHECK FRONT COMBINATION LAMP LH TO DAYTIME RUNNING LIGHT RELAY 1 GROUND CIRCUIT

1. Disconnect daytime running light relay 1 connector E37.
2. Check continuity between the daytime running light relay 1 harness connector E37 and the front combination lamp LH harness connector E25.

| Connector | Terminal | Connector | Terminal | Continuity |
|-----------|----------|-----------|----------|------------|
| E37       | 3        | E25       | 2        | Yes        |

Is the inspection result normal?

- YES >> GO TO 11.  
 NO >> Repair or replace the harness or connector.

### 11.CHECK DAYTIME RUNNING LIGHT RELAY 1 GROUND CIRCUIT

Check continuity between the daytime running light relay 1 harness connector E37 and ground.

| Connector | Terminal | —      | Continuity |
|-----------|----------|--------|------------|
| E37       | 4        | Ground | Yes        |

Is the inspection result normal?

- YES >> Replace daytime running light relay 1.  
 NO >> Repair or replace the harness or connector.

# PARKING LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## PARKING LAMP CIRCUIT

### Description

INFOID:0000000012432810

The IPDM E/R (intelligent power distribution module engine room) controls the tail lamp relay based on inputs from the BCM via the CAN communication lines. When the tail lamp relay is energized, power flows through fuse 37, located in the IPDM E/R. Power then flows through the tail lamp relay to the front and rear combination lamps, license plate lamps.

### Component Function Check

INFOID:0000000012432811

#### 1.CHECK PARKING LAMP OPERATION

##### ☒ WITHOUT CONSULT

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

##### ☐ CONSULT

1. Select EXTERNAL LAMPS of IPDM E/R active test item.
2. While operating the test items, check that the parking lamps are turned ON.

**TAIL : Parking lamp ON**

**OFF : Parking lamp OFF**

Is the parking lamp turned ON?

YES >> Parking lamp circuit is normal.

NO >> Refer to [EXL-82, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:0000000012432812

Regarding Wiring Diagram information, refer to [EXL-55, "Wiring Diagram"](#).

#### 1.CHECK PARKING LAMP FUSES

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

| Unit          | Location | Fuse No. | Capacity |
|---------------|----------|----------|----------|
| Parking lamps | IPDM E/R | 37       | 10A      |

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

#### 2.CHECK PARKING LAMP BULB

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

Is the bulb OK?

YES >> GO TO 3.

NO >> Replace the bulb.

#### 3.CHECK TAIL LAMP RELAY OUTPUT (VOLTAGE)

1. Turn the ignition switch OFF.
2. Disconnect the front combination lamp connector, rear combination lamp connector and license plate lamp connector.
3. Turn the ignition switch ON.
4. Turn the parking lamps ON.
5. With the parking lamps ON, check voltage between the front combination lamp connectors and ground.

## PARKING LAMP CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

| (+)       |     |          | (-)    | Voltage         |
|-----------|-----|----------|--------|-----------------|
| Connector |     | Terminal |        |                 |
| LH        | E27 | 7        | Ground | Battery voltage |
|           | E29 | 5        |        |                 |
| RH        | E28 | 7        |        |                 |
|           | E30 | 5        |        |                 |

6. With the parking lamps ON, check voltage between the rear combination lamp connectors and ground.

| (+)       |     |          | (-)    | Voltage         |
|-----------|-----|----------|--------|-----------------|
| Connector |     | Terminal |        |                 |
| LH        | B25 | 1        | Ground | Battery voltage |
| RH        | B27 |          |        |                 |

7. With the parking lamps ON, check voltage between the license plate lamp connector and ground.

| (+)       |      |          | (-)    | Voltage         |
|-----------|------|----------|--------|-----------------|
| Connector |      | Terminal |        |                 |
| LH        | D507 | 1        | Ground | Battery voltage |
| RH        | D508 |          |        |                 |

Are the inspection results normal?

YES >> GO TO 5.

NO >> GO TO 4.

### 4. CHECK PARKING, LICENSE PLATE AND TAIL LAMP CIRCUIT (OPEN)

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

| Connector |     | Terminal | Connector | Terminal | Continuity |
|-----------|-----|----------|-----------|----------|------------|
| LH        | E45 | 23       | E27       | 7        | Yes        |
|           |     |          | E29       | 5        |            |
| RH        |     |          | E28       | 7        |            |
|           |     |          | E30       | 5        |            |

4. Check continuity between the IPDM E/R harness connector and the rear combination lamp harness connector.

| Connector |     | Terminal | Connector | Terminal | Continuity |
|-----------|-----|----------|-----------|----------|------------|
| LH        | E45 | 23       | B25       | 1        | Yes        |
| RH        |     |          | B27       |          |            |

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

| Connector |  | Terminal | Connector | Terminal | Continuity |
|-----------|--|----------|-----------|----------|------------|
| E45       |  | 23       | D507      | 1        | Yes        |
|           |  |          | D508      |          |            |

## PARKING LAMP CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

#### Are the inspection results normal?

YES >> Replace IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).

NO >> Repair or replace the harness or connector.

### 5. CHECK PARKING, LICENSE AND TAIL LAMP GROUND CIRCUITS

1. Check continuity between the front combination lamp harness connectors and ground.

| Connector |     | Terminal | —      | Continuity |
|-----------|-----|----------|--------|------------|
| LH        | E27 | 8        | Ground | Yes        |
|           | E29 | 6        |        |            |
| RH        | E28 | 8        |        |            |
|           | E30 | 6        |        |            |

2. Check continuity between the rear combination lamp harness connectors and ground.

| Connector |     | Terminal | —      | Continuity |
|-----------|-----|----------|--------|------------|
| LH        | B25 | 6        | Ground | Yes        |
| RH        | B27 |          |        |            |

3. Check continuity between the license plate lamp harness connectors and ground.

| Connector | Terminal | —      | Continuity |
|-----------|----------|--------|------------|
| B507      | 2        | Ground | Yes        |
| B508      |          |        |            |

#### Are the inspection results normal?

YES >> Replace the malfunctioning lamp.

NO >> Repair or replace the harness or connector.

# TURN SIGNAL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## TURN SIGNAL LAMP CIRCUIT

### Description

INFOID:0000000012432813

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

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

#### NOTE:

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

### Component Function Check

INFOID:0000000012432814

#### 1.CHECK TURN SIGNAL LAMP

##### CONSULT

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

**LH** : Turn signal lamp LH blinking

**RH** : Turn signal lamp RH blinking

**OFF** : The turn signal lamp OFF

##### Does the turn signal lamp blink?

YES >> Turn signal lamp circuit is normal.

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

### Diagnosis Procedure

INFOID:0000000012432815

Regarding Wiring Diagram information, refer to [EXL-48, "Wiring Diagram"](#).

#### 1.CHECK TURN SIGNAL LAMP BULB

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

##### Is the bulb OK?

YES >> GO TO 2.

NO >> Replace the bulb.

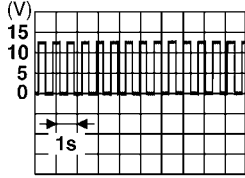
#### 2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

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

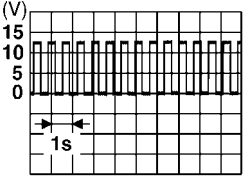
| (+)       |          | (-) | Voltage |
|-----------|----------|-----|---------|
| Connector | Terminal |     |         |

# TURN SIGNAL LAMP CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

|    |     |   |        |                                                                                                  |
|----|-----|---|--------|--------------------------------------------------------------------------------------------------|
| LH | E29 | 4 | Ground | <br>PKIC6370E |
| RH | E30 | 4 |        |                                                                                                  |

5. With turn signal switch operating, check the voltage between the rear combination lamp harness connector and ground.

| (+) Connector |     |   | Terminal | (-)                                                                                 | Voltage |
|---------------|-----|---|----------|-------------------------------------------------------------------------------------|---------|
| Connector     |     |   |          |                                                                                     |         |
| LH            | B25 | 4 | Ground   |  |         |
| RH            | B27 | 4 |          |                                                                                     |         |

PKIC6370E

6. With turn signal switch operating, check the voltage between the door mirror lamp harness connector and ground.

| (+)       |    |          | (-)    | Voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| LH        | D4 | 9        | Ground | 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Are the inspection results normal?

YES >> GO TO 5.

NO >> GO TO 3.

## 3. CHECK TURN SIGNAL LAMP CIRCUIT FOR OPEN

- Turn the ignition switch OFF.
- Disconnect BCM connector.
- Check continuity between the BCM harness connector and the front combination lamp connector.

| Connector |                                      | Terminal | Connector | Terminal | Continuity |
|-----------|--------------------------------------|----------|-----------|----------|------------|
| Front LH  | M99 (With Intelligent Key system)    | 60       | E29       | 4        | Yes        |
| Front RH  |                                      | 61       | E30       |          |            |
| Front LH  | M19 (Without Intelligent Key system) | 64       | E29       |          |            |
| Front RH  |                                      | 63       | E30       |          |            |

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

| Connector | Terminal | Connector | Terminal | Continuity |
|-----------|----------|-----------|----------|------------|
|-----------|----------|-----------|----------|------------|

# TURN SIGNAL LAMP CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

|         |                                      |    |     |   |     |
|---------|--------------------------------------|----|-----|---|-----|
| Rear LH | M99 (With Intelligent Key system)    | 60 | B25 | 4 | Yes |
| Rear RH |                                      | 61 | B27 |   |     |
| Rear LH | M19 (Without Intelligent Key system) | 64 | B25 |   |     |
| Rear RH |                                      | 63 | B27 |   |     |

5. Check continuity between the BCM harness connector and the door mirror lamp connector.

| Connector |                                      | Terminal | Connector | Terminal | Continuity |
|-----------|--------------------------------------|----------|-----------|----------|------------|
| LH        | M99 (With Intelligent Key system)    | 60       | D4        | 9        | Yes        |
| RH        |                                      | 61       | D107      |          |            |
| LH        | M19 (Without Intelligent Key system) | 64       | D4        |          |            |
| RH        |                                      | 63       | D107      |          |            |

Are the inspection results normal?

YES >> GO TO 4.

NO >> Repair or replace the harness or connector.

## 4.CHECK TURN SIGNAL LAMP SHORT CIRCUIT

Check continuity between the BCM harness connector and ground.

| Connector |                                      | Terminal | —      | Continuity |
|-----------|--------------------------------------|----------|--------|------------|
| LH        | M99 (With Intelligent Key system)    | 60       | Ground | No         |
| RH        |                                      | 61       |        |            |
| LH        | M19 (Without Intelligent Key system) | 64       |        |            |
| RH        |                                      | 63       |        |            |

Is the inspection results normal?

YES >> Repair or replace the harness or connector.

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-137, "Removal and Installation"](#) (without Intelligent Key system).

## 5.CHECK TURN SIGNAL LAMP GROUND CIRCUIT

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

| Connector |     | Terminal | —      | Continuity |
|-----------|-----|----------|--------|------------|
| Front LH  | E29 | 6        | Ground | Yes        |
| Front RH  | E30 |          |        |            |

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

| Connector |     | Terminal | —      | Continuity |
|-----------|-----|----------|--------|------------|
| Rear LH   | B25 | 6        | Ground | Yes        |
| Rear RH   | B27 |          |        |            |

3. Check continuity between the door mirror lamp harness connector and ground.

| Connector |      | Terminal | —      | Continuity |
|-----------|------|----------|--------|------------|
| LH        | D4   | 10       | Ground | Yes        |
| RH        | D107 |          |        |            |

Are the inspection results normal?

YES >> Replace the malfunctioning lamp.

NO >> Repair or replace the harness or connector.

# FRONT FOG LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## FRONT FOG LAMP CIRCUIT

### Component Function Check

INFOID:0000000012432816

#### 1.CHECK FRONT FOG LAMP OPERATION

##### WITHOUT CONSULT

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

##### CONSULT

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

**FOG : Front fog lamp ON**  
**OFF : Front fog lamp OFF**

##### Is the front fog lamp turned ON?

- YES >> Front fog lamp circuit is normal.  
NO >> Refer to [EXL-88, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:0000000012432817

Regarding Wiring Diagram information, refer to [EXL-43, "Wiring Diagram"](#).

#### 1.CHECK FRONT FOG LAMP FUSE

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

| Unit           | Fuse No. | Capacity |
|----------------|----------|----------|
| Front fog lamp | 31       | 15 A     |

##### Is the fuse blown?

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

#### 2.CHECK FOG LAMP BULB

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

##### Is the bulb OK?

- YES >> GO TO 3.  
NO >> Replace the bulb.

#### 3.CHECK FRONT FOG LAMP OUTPUT VOLTAGE

##### CONSULT ACTIVE TEST

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

| (+)            |          | (-) | Test item | Voltage<br>(Approx.) |
|----------------|----------|-----|-----------|----------------------|
| Front fog lamp |          |     |           |                      |
| Connector      | Terminal |     |           |                      |

# FRONT FOG LAMP CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 5.

### 4.CHECK FRONT FOG LAMP GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> Replace malfunctioning lamp.

NO >> Repair or replace the harness or connector.

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

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

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

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the harness or connector.

### 6.CHECK FRONT FOG LAMP RELAY VOLTAGE CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the harness or connector.

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

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

| Connector | Terminal | Connector | Terminal | Continuity |
|-----------|----------|-----------|----------|------------|
| E58       | 1        | E46       | 71       | Yes        |

Is the inspection result normal?

YES >> Check the front fog lamp relay. Refer to [EXL-90. "Component Inspection"](#).

## FRONT FOG LAMP CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace the harness or connector.

### Component Inspection

INFOID:0000000012432818

#### 1. CHECK FRONT FOG LAMP RELAY

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

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

#### Is the inspection result normal?

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

# EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### EXTERIOR LIGHTING SYSTEM SYMPTOMS

#### Symptom Table

INFOID:000000012432819

#### CAUTION:

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

| Symptom                                                                             |                                       | Possible cause                                                                                                                                                                                                                                                                               | Inspection item                                                                                                                                                                    |
|-------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Headlamp does not switch to the high beam.                                          | One side                              | <ul style="list-style-type: none"> <li>Fuse</li> <li>Harness between IPDM E/R and the front combination lamp</li> <li>Front combination lamp (High beam relay)</li> <li>IPDM E/R</li> </ul>                                                                                                  | Headlamp (HI) circuit<br>Refer to <a href="#">EXL-77</a> .                                                                                                                         |
|                                                                                     | Both sides                            | —                                                                                                                                                                                                                                                                                            | <b>Symptom diagnosis</b><br>"BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM"<br>Refer to <a href="#">EXL-93</a> .                                                                  |
| High beam indicator lamp is not turned ON.<br>(Headlamp switches to the high beam.) |                                       | <ul style="list-style-type: none"> <li>Combination meter</li> <li>BCM</li> </ul>                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Combination meter.<br/>Data monitor "HI-BEAM IND"</li> <li>BCM (HEAD LAMP)<br/>Active test "HEADLAMP"</li> </ul>                            |
| Headlamp does not switch to the low beam.                                           | One side                              | Front combination lamp (low beam relay)                                                                                                                                                                                                                                                      | —                                                                                                                                                                                  |
|                                                                                     | Both sides                            | <ul style="list-style-type: none"> <li>Combination switch (lighting and turn signal switch)</li> <li>Harness between the combination switch (lighting and turn signal switch) and BCM</li> <li>BCM</li> </ul>                                                                                | Combination switch (lighting and turn signal switch)<br>Refer to <a href="#">BCS-72</a> (with Intelligent Key system) or <a href="#">BCS-134</a> (without Intelligent Key system). |
|                                                                                     |                                       | High beam request signal<br><ul style="list-style-type: none"> <li>BCM</li> <li>IPDM E/R</li> </ul>                                                                                                                                                                                          | IPDM E/R<br>Data monitor "HL HI REQ"                                                                                                                                               |
|                                                                                     |                                       | IPDM E/R                                                                                                                                                                                                                                                                                     | —                                                                                                                                                                                  |
| Headlamp does not turn ON.                                                          | One side                              | <ul style="list-style-type: none"> <li>Bulb</li> <li>Harness between IPDM E/R and the front combination lamp</li> <li>Front combination lamp</li> <li>IPDM E/R</li> </ul>                                                                                                                    | Headlamp (LO) circuit<br>Refer to <a href="#">EXL-79</a> .                                                                                                                         |
|                                                                                     | Both sides                            | —                                                                                                                                                                                                                                                                                            | <b>Symptom diagnosis</b><br>"BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON"<br>Refer to <a href="#">EXL-94</a> .                                                                      |
| Headlamp does not turn OFF.                                                         | When the ignition switch is turned ON | <ul style="list-style-type: none"> <li>BCM</li> <li>Combination switch (lighting and turn signal switch)</li> </ul>                                                                                                                                                                          | Combination switch (lighting and turn signal switch)<br>Refer to <a href="#">BCS-72</a> (with Intelligent Key system) or <a href="#">BCS-134</a> (without Intelligent Key system). |
| Daytime light system does not activate.                                             |                                       | <ul style="list-style-type: none"> <li>Either high beam bulb</li> <li>Parking brake switch</li> <li>Combination switch (lighting and turn signal switch)</li> <li>BCM</li> <li>IPDM E/R</li> <li>Daytime light relays</li> <li>Harness between IPDM E/R and daytime light relays.</li> </ul> | Daytime light system description.<br>Refer to <a href="#">EXL-9</a> .                                                                                                              |

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EXL

# EXTERIOR LIGHTING SYSTEM SYMPTOMS

## < SYMPTOM DIAGNOSIS >

| Symptom                                    |                                                                                                 | Possible cause                                                                                                                                                                                                 | Inspection item                                                                                                                                             |
|--------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Front fog lamp is not turned ON.           | One side                                                                                        | <ul style="list-style-type: none"> <li>Front fog lamp bulb</li> <li>Harness between the front fog lamp and ground</li> </ul>                                                                                   | Front fog lamp circuit<br>Refer to <a href="#">EXL-88</a> .                                                                                                 |
|                                            | Both sides                                                                                      | —                                                                                                                                                                                                              | <b>Symptom diagnosis</b><br>"BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON"<br>Refer to <a href="#">EXL-96</a> .                                              |
| Parking lamp is not turned ON.             | One side                                                                                        | <ul style="list-style-type: none"> <li>Fuse</li> <li>Parking lamp bulb</li> <li>Harness between IPDM E/R and the front/rear combination lamp</li> <li>Front/rear combination lamp</li> <li>IPDM E/R</li> </ul> | Parking lamp circuit<br>Refer to <a href="#">EXL-82</a> .                                                                                                   |
|                                            | Both sides                                                                                      | —                                                                                                                                                                                                              | <b>Symptom diagnosis</b><br>"PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON"<br>Refer to <a href="#">EXL-95</a> .                                  |
| Turn signal lamp does not blink.           | Indicator lamp is normal.<br>(The applicable side performs the high flasher activation).        | <ul style="list-style-type: none"> <li>Harness between BCM and each turn signal lamp</li> <li>Turn signal lamp bulb</li> </ul>                                                                                 | Turn signal lamp circuit<br>Refer to <a href="#">EXL-85</a> .                                                                                               |
| Turn signal indicator lamp does not blink. | One side                                                                                        | Combination meter                                                                                                                                                                                              | —                                                                                                                                                           |
|                                            | Both sides<br>(Always)                                                                          | <ul style="list-style-type: none"> <li>Turn signal indicator lamp signal</li> <li>Combination meter</li> <li>BCM</li> </ul>                                                                                    | <ul style="list-style-type: none"> <li>Combination meter.</li> <li>Data monitor "TURN IND"</li> <li>BCM (FLASHER)</li> <li>Active test "FLASHER"</li> </ul> |
|                                            | Both sides<br>(Does blink when activating the hazard warning lamp with the ignition switch OFF) | <ul style="list-style-type: none"> <li>The combination meter power supply and the ground circuit</li> <li>Combination meter</li> </ul>                                                                         | Combination meter<br>Power supply and the ground circuit<br>Refer to <a href="#">MWI-43</a> (Type A).<br>Refer to <a href="#">MWI-98</a> (Type B).          |

# BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

< SYMPTOM DIAGNOSIS >

## BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

### Description

INFOID:0000000012432820

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

### Diagnosis Procedure

INFOID:0000000012432821

#### 1.COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH) INSPECTION

Check the combination switch (lighting and turn signal switch). Refer to [BCS-72, "Symptom Table"](#) (with Intelligent Key system) or [BCS-134, "Symptom Table"](#) (without Intelligent Key system).

Is the combination switch (lighting and turn signal switch) normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

#### 2.CHECK HEADLAMP (HI) REQUEST SIGNAL INPUT

##### CONSULT DATA MONITOR

1. Select HL HI REQ of IPDM E/R DATA MONITOR item.
2. While operating the combination switch (lighting and turn signal switch), check the monitor status.

| Monitor item | Condition                                            |                       | Monitor status |
|--------------|------------------------------------------------------|-----------------------|----------------|
| HL HI REQ    | Combination switch (lighting and turn signal switch) | HI or PASS            | ON             |
|              |                                                      | Except for HI or PASS | OFF            |

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-137, "Removal and Installation"](#) (without Intelligent Key system).

#### 3.HEADLAMP (HI) CIRCUIT INSPECTION

Check the headlamp (HI) circuit. Refer to [EXL-77, "Diagnosis Procedure"](#).

Is the headlamp (HI) circuit normal?

YES >> Replace IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

# BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

## BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

### Description

INFOID:000000012432822

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

### Diagnosis Procedure

INFOID:000000012432823

#### 1.COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH) INSPECTION

Check the combination switch (lighting and turn signal switch). Refer to [BCS-72, "Symptom Table"](#) (with Intelligent Key system) or [BCS-134, "Symptom Table"](#) (without Intelligent Key system).

Is the combination switch (lighting and turn signal switch) normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

#### 2.CHECK HEADLAMP (LO) REQUEST SIGNAL INPUT

##### CONSULT DATA MONITOR

1. Select HL LO REQ of IPDM E/R DATA MONITOR item.
2. While operating the combination switch (lighting and turn signal switch), check the monitor status.

| Monitor item | Condition                                            |     | Monitor status |
|--------------|------------------------------------------------------|-----|----------------|
| HL LO REQ    | Combination switch (lighting and turn signal switch) | 2ND | ON             |
|              |                                                      | OFF | OFF            |

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-137, "Removal and Installation"](#) (without Intelligent Key system).

#### 3.HEADLAMP (LO) CIRCUIT INSPECTION

Check the headlamp (LO) circuit. Refer to [EXL-79, "Diagnosis Procedure"](#).

Is the headlamp (LO) circuit normal?

YES >> Replace IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

# PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

## PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

### Description

INFOID:0000000012432824

The parking, license plate and tail lamps do not turn ON in any combination switch (lighting and turn signal switch) position.

### Diagnosis Procedure

INFOID:0000000012432825

#### 1.COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH) INSPECTION

Check the combination switch (lighting and turn signal switch). Refer to [BCS-72, "Symptom Table"](#) (with Intelligent Key system) or [BCS-134, "Symptom Table"](#) (without Intelligent Key system).

Is the combination switch (lighting and turn signal switch) normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

#### 2.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT

##### CONSULT DATA MONITOR

1. Select TAIL & CLR REQ of IPDM E/R DATA MONITOR item.
2. While operating the combination switch (lighting and turn signal switch), check the monitor status.

| Monitor item   | Condition                                            |     | Monitor status |
|----------------|------------------------------------------------------|-----|----------------|
| TAIL & CLR REQ | Combination switch (lighting and turn signal switch) | 1st | ON             |
|                |                                                      | OFF | OFF            |

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-137, "Removal and Installation"](#) (without Intelligent Key system).

#### 3.PARK LAMP CIRCUIT INSPECTION

Check the parking lamp circuit. Refer to [EXL-82, "Diagnosis Procedure"](#).

Is the tail lamp circuit normal?

YES >> Replace IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

# BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

## BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

### Description

INFOID:0000000012432826

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

### Diagnosis Procedure

INFOID:0000000012432827

#### 1.COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH) INSPECTION

Check the combination switch (lighting and turn signal switch). Refer to [BCS-72, "Symptom Table"](#) (with Intelligent Key system) or [BCS-134, "Symptom Table"](#) (without Intelligent Key system).

Is the combination switch (lighting and turn signal switch) normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

#### 2.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT

##### CONSULT DATA MONITOR

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

| Monitor item | Condition                                      |     | Monitor status |
|--------------|------------------------------------------------|-----|----------------|
| FR FOG REQ   | Front fog lamp switch<br>(Lighting switch 2ND) | ON  | ON             |
|              |                                                | OFF | OFF            |

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-137, "Removal and Installation"](#) (without Intelligent Key system).

#### 3.FRONT FOG LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to [EXL-88, "Diagnosis Procedure"](#).

Is the front fog lamp circuit normal?

YES >> Replace IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

# HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

## PERIODIC MAINTENANCE

### HEADLAMP AIMING ADJUSTMENT

#### Inspection

INFOID:0000000012432828

#### PREPARATION BEFORE ADJUSTING

Before performing aiming adjustment, check the following:

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

#### **CAUTION:**

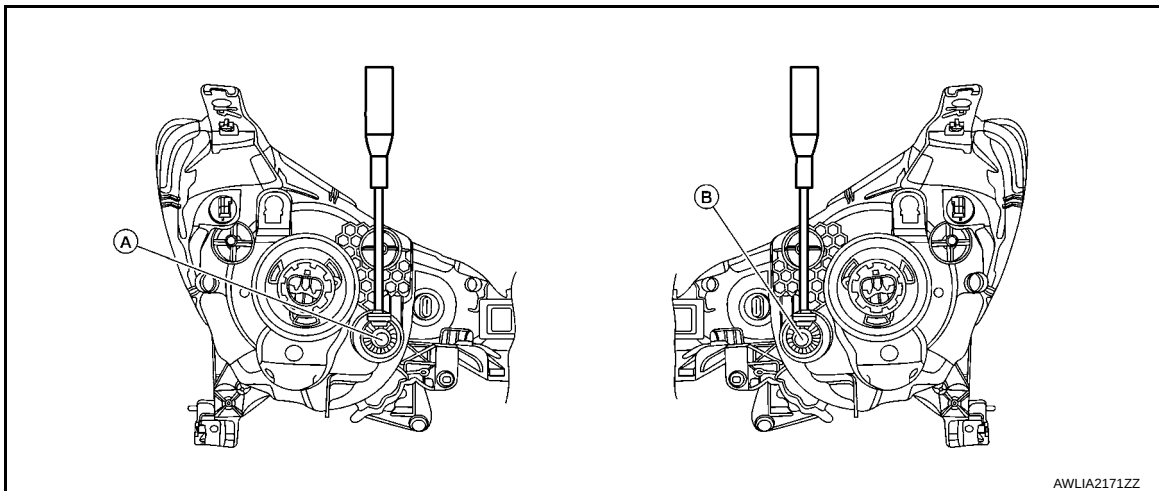
**Do not use organic solvent (thinner, gasoline etc.)**

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

#### **NOTE:**

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

#### AIMING ADJUSTMENT SCREW



A. Adjusting screw (LH)

B. Adjusting screw (RH)

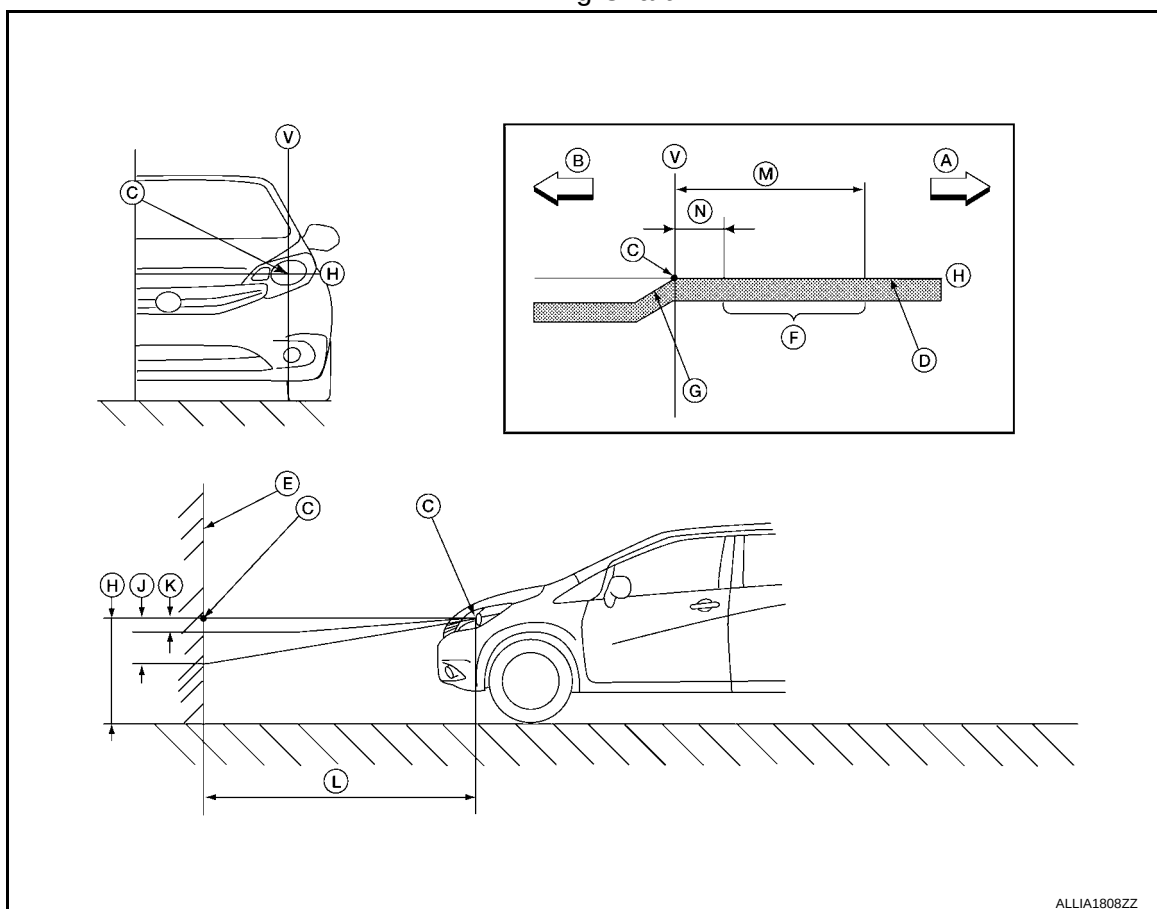
# HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

## Aiming Adjustment Procedure

INFOID:000000012432829

Aiming Chart



- |                      |                                       |                                        |
|----------------------|---------------------------------------|----------------------------------------|
| A. Right             | B. Left                               | C. Center of headlamp bulb (H-V point) |
| D. Cutoff line       | E. Screen                             | F. Aim evaluation segment              |
| G. Step              | H. Horizontal center line of headlamp | J. 26.6 mm (1.05 in)                   |
| K. 13.3 mm (0.52 in) | L. 7.62 m (25 ft)                     | M. 399 mm (15.71 in)                   |
| N. 133 mm (5.24 in)  | V. Vertical center line of headlamp   |                                        |

### LOW BEAM AND HIGH BEAM

#### NOTE:

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

- Use adjustment screw to perform aiming adjustment.
  - Ensure fog lamps (if equipped) are turned off.
- Block the opposite headlamp from projecting a beam pattern onto the adjustment screen, using a suitable object. Aim each headlamp individually.

#### CAUTION:

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

- Place the screen on the same level and flat surface as the vehicle.

#### NOTE:

- Surface should be free of any debris that would cause a difference between the headlamp center and the adjustment screen.
- Face the front of the vehicle to the screen and measure distance between the headlamp center and the screen surface.

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

- Start the engine and turn the headlamp on.
- Determine the preferred vertical aim range dimensions, using the aiming chart.

## HEADLAMP AIMING ADJUSTMENT

### < PERIODIC MAINTENANCE >

---

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

A

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C

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EXL

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# FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

## FRONT FOG LAMP AIMING ADJUSTMENT

### Inspection

INFOID:000000012432830

### PREPARATION BEFORE ADJUSTING

Before performing aiming adjustment procedure, check the following:

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

#### CAUTION:

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

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

#### NOTE:

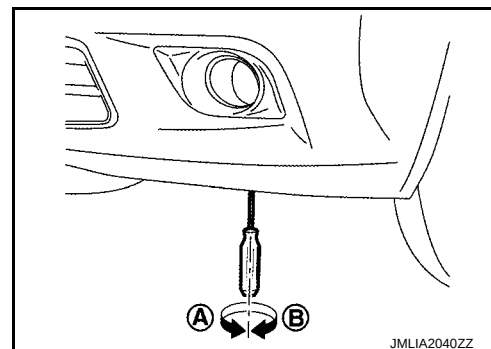
- For headlamp aiming details, refer to regulations in your area.
- By regulation, no means for horizontal aim adjustment is provided from the factory; only vertical aim is adjustable.
- Use adjusting screw to perform aiming adjustment.
- Perform headlamp aiming if:
  - The vehicle front body has been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

### AIMING ADJUSTMENT SCREW

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

A: UP

B: DOWN



### Aiming Adjustment Procedure

INFOID:000000012432831

1. Screen placement.

#### NOTE:

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

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

#### CAUTION:

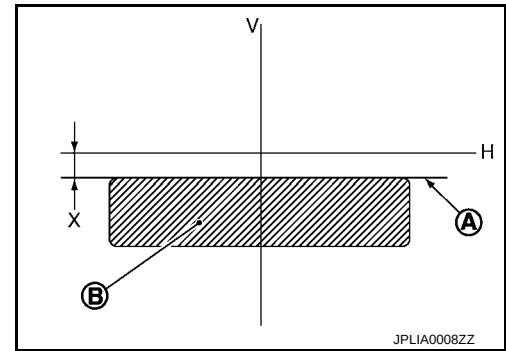
**Do not cover the lens surface with a tape etc. The lens are made of resin.**

## FRONT FOG LAMP AIMING ADJUSTMENT

### < PERIODIC MAINTENANCE >

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

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



## FRONT COMBINATION LAMP

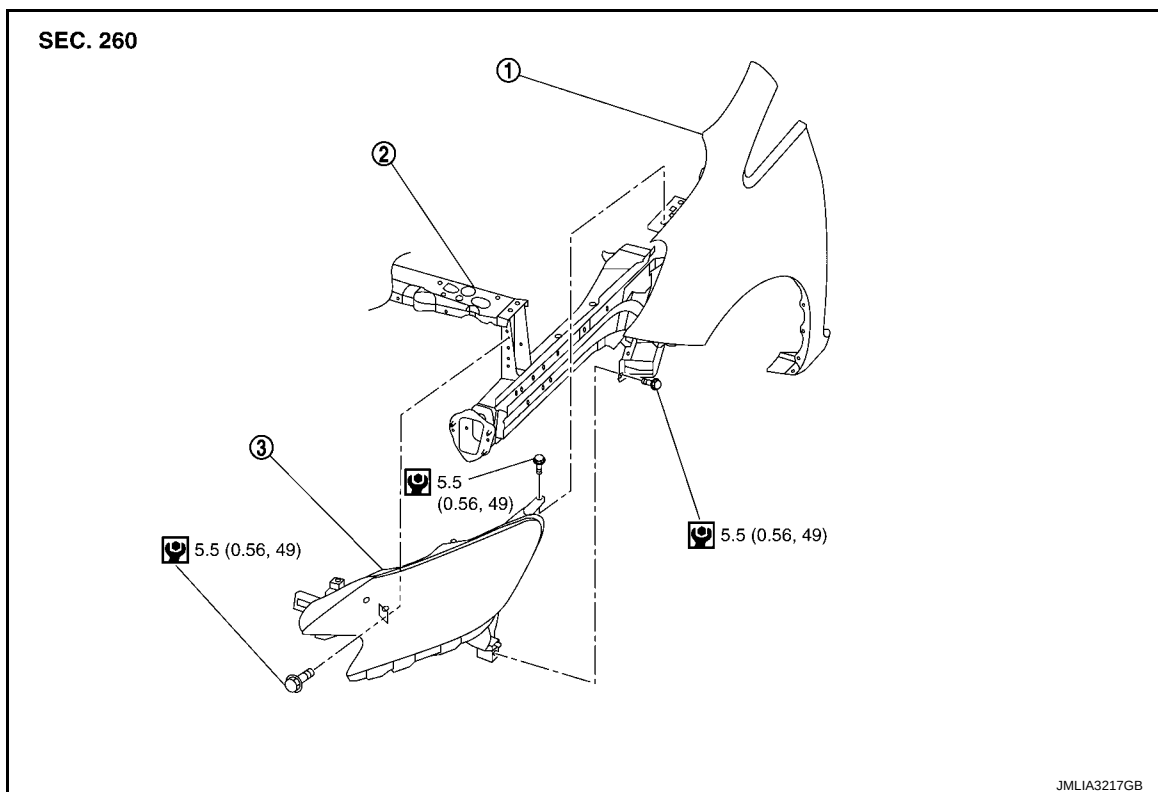
< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION

### FRONT COMBINATION LAMP

Exploded View

INFOID:0000000012432832



1. Front fender

2. Radiator core upper support

3. Front combination lamp

### Removal and Installation

INFOID:0000000012432833

#### REMOVAL

1. Remove front bumper fascia. Refer to [EXT-24, "Removal and Installation"](#).
2. Remove the front combination lamp bolts.
3. Pull front combination lamp forward.
4. Disconnect the harness connectors from front combination lamp and remove.

#### INSTALLATION

Installation is in the reverse order of removal.

#### NOTE:

After installation, perform headlamp aiming adjustment procedure. Refer to [EXL-98, "Aiming Adjustment Procedure"](#).

### Bulb Replacement

INFOID:0000000012432834

#### WARNING:

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

#### CAUTION:

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

#### HEADLAMP BULB

## FRONT COMBINATION LAMP

### < REMOVAL AND INSTALLATION >

---

#### Removal

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

#### Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

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

### SIDE MARKER LAMP BULB

#### Removal

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

#### Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

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

### FRONT TURN SIGNAL/PARKING LAMP BULB

#### Removal

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

#### Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

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

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## FRONT FOG LAMP

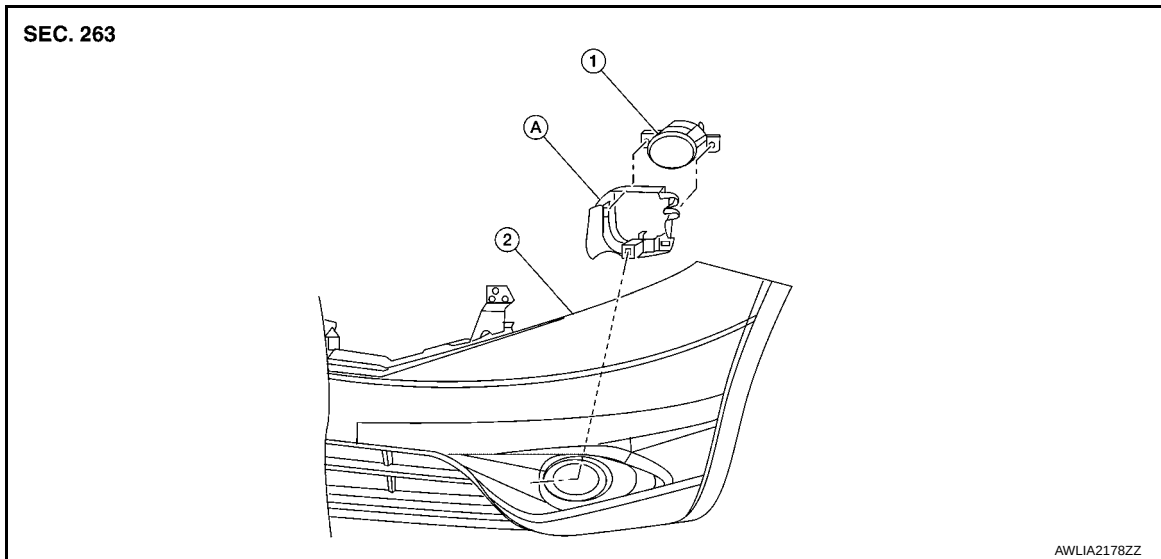
< REMOVAL AND INSTALLATION >

### FRONT FOG LAMP

#### Exploded View

INFOID:0000000012432835

TYPE 1

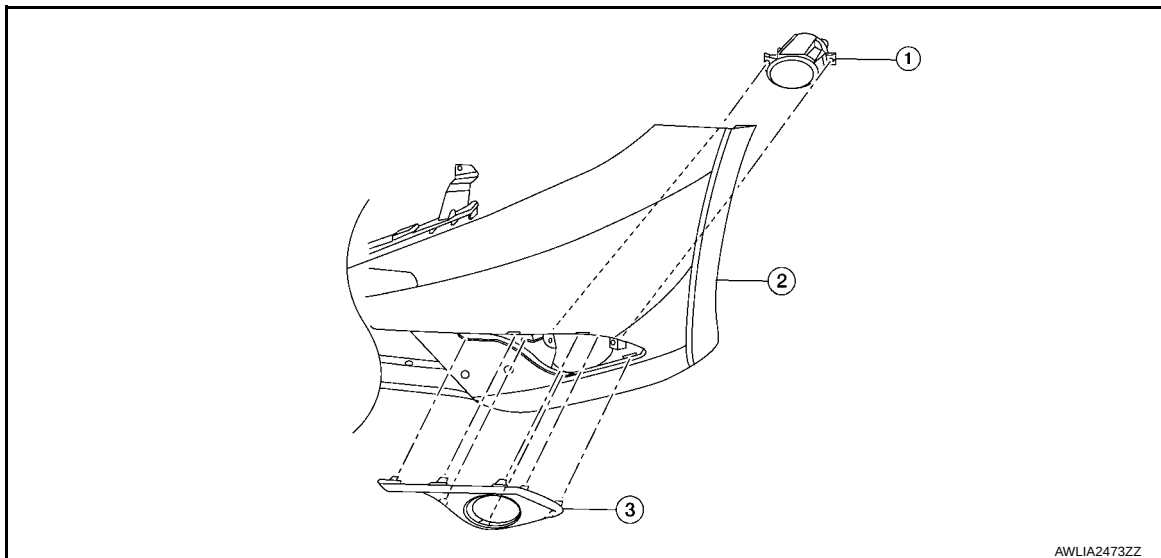


1. Front fog lamp

2. Front bumper fascia

A. Front fog lamp bracket

TYPE 2



1. Front fog lamp

2. Front bumper fascia

3. Front fog lamp finisher

#### Removal and Installation

INFOID:0000000012432836

##### REMOVAL

1. Partially remove front fender protector. Refer to [EXT-38, "Exploded View"](#).
2. Disconnect the harness connector from front fog lamp.
3. Remove screws and front fog lamp.

##### INSTALLATION

Installation is in the reverse order of removal.

##### NOTE:

After installation, perform fog lamp aiming adjustment procedure. Refer to [EXL-100, "Aiming Adjustment Procedure"](#).

# FRONT FOG LAMP

## < REMOVAL AND INSTALLATION >

### Bulb Replacement

INFOID:000000012432837

#### **WARNING:**

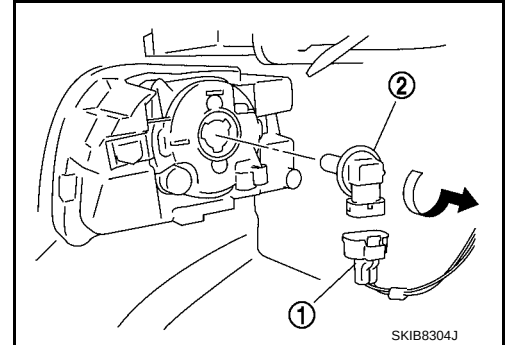
Do not touch bulb by hand while it is lit or right after being turned off. Burning may result.

#### **CAUTION:**

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

#### REMOVAL

1. Partially remove fender protector. Refer to [EXT-38, "Exploded View"](#).
2. Disconnect harness connector (1) from front fog lamp bulb.
3. Rotate the bulb (2) counterclockwise and remove.



#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

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

## DOOR MIRROR TURN SIGNAL LAMP

< REMOVAL AND INSTALLATION >

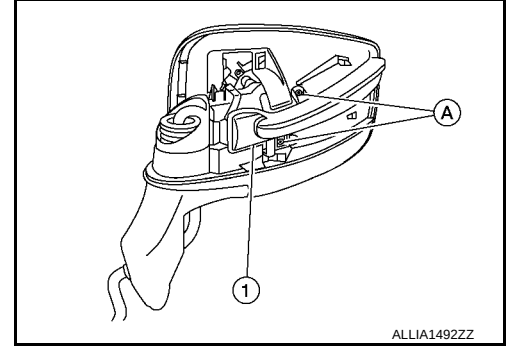
### DOOR MIRROR TURN SIGNAL LAMP

#### Removal and Installation

INFOID:0000000012432838

#### REMOVAL

1. Remove the door mirror rear finisher. Refer to [MIR-18, "Removal and Installation"](#).
2. Remove the screws (A) and door mirror turn signal lamp (1).



3. Disconnect the harness connector from the door mirror turn signal lamp and remove.

#### INSTALLATION

Installation is in the reverse order of removal.

#### Bulb Replacement

INFOID:0000000012432839

#### DOOR MIRROR SIDE TURN SIGNAL LAMP

The door mirror side turn signal lamp bulb is integrated into the door mirror side turn signal lamp and is serviced as an assembly. Refer to [EXL-106, "Removal and Installation"](#).

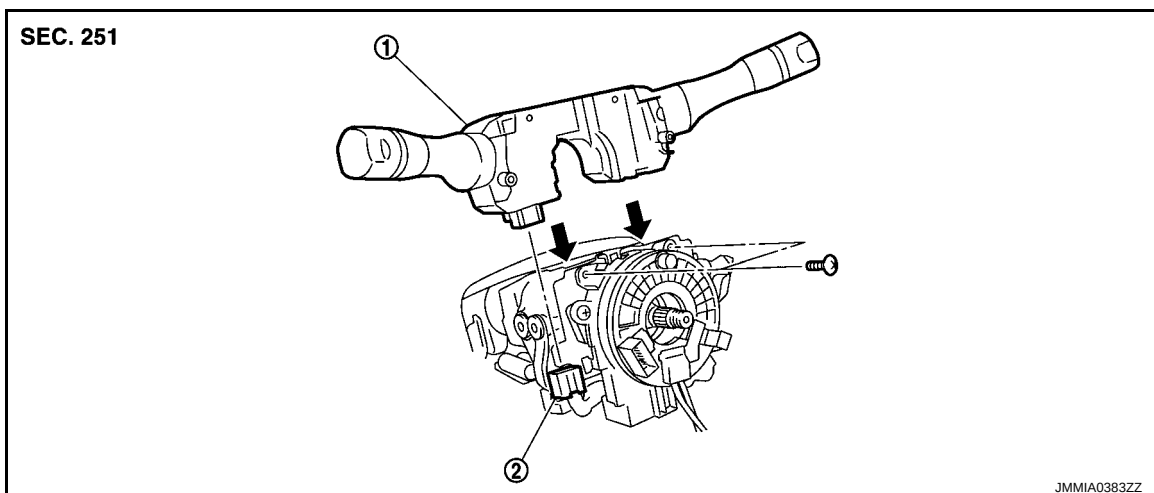
## COMBINATION SWITCH

< REMOVAL AND INSTALLATION >

### COMBINATION SWITCH

#### Exploded View

INFOID:0000000012432840



1. Combination switch
2. Combination switch harness connector

#### Removal and Installation

INFOID:0000000012432841

##### REMOVAL

1. Remove the steering wheel. Refer to [ST-8, "Removal and Installation"](#).
2. Remove steering column covers. Refer to [IP-17, "Removal and Installation"](#).
3. Remove the combination switch screws.
4. Disconnect the harness connector from the combination switch.
5. Remove the combination switch by lifting upward.

##### INSTALLATION

Installation is in the reverse order of removal.

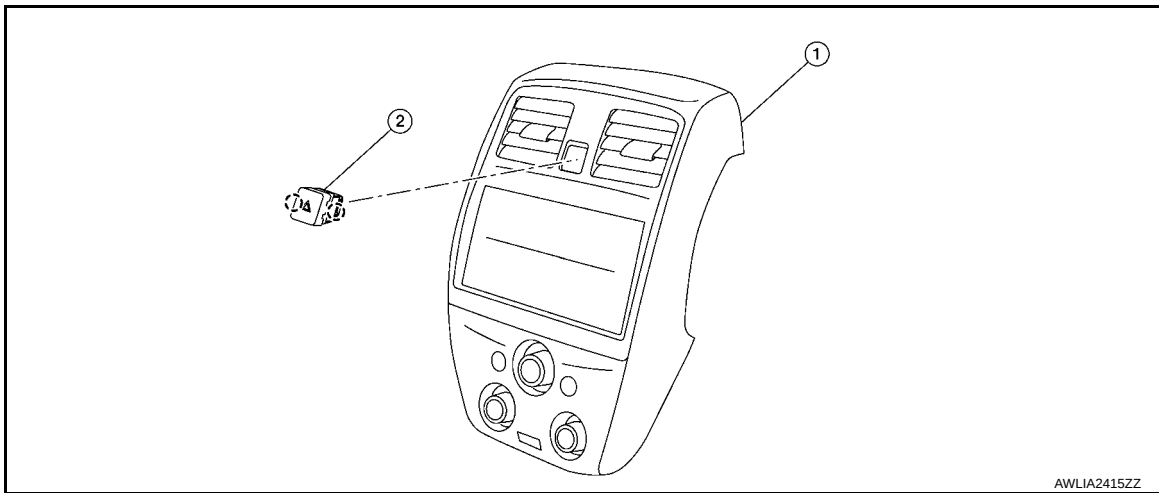
## HAZARD SWITCH

< REMOVAL AND INSTALLATION >

### HAZARD SWITCH

#### Exploded View

INFOID:0000000012432842



1. Cluster lid C

2. Hazard switch

3. Pawl

#### Removal and Installation

INFOID:0000000012432843

##### REMOVAL

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

##### INSTALLATION

Installation is in the reverse order of removal.

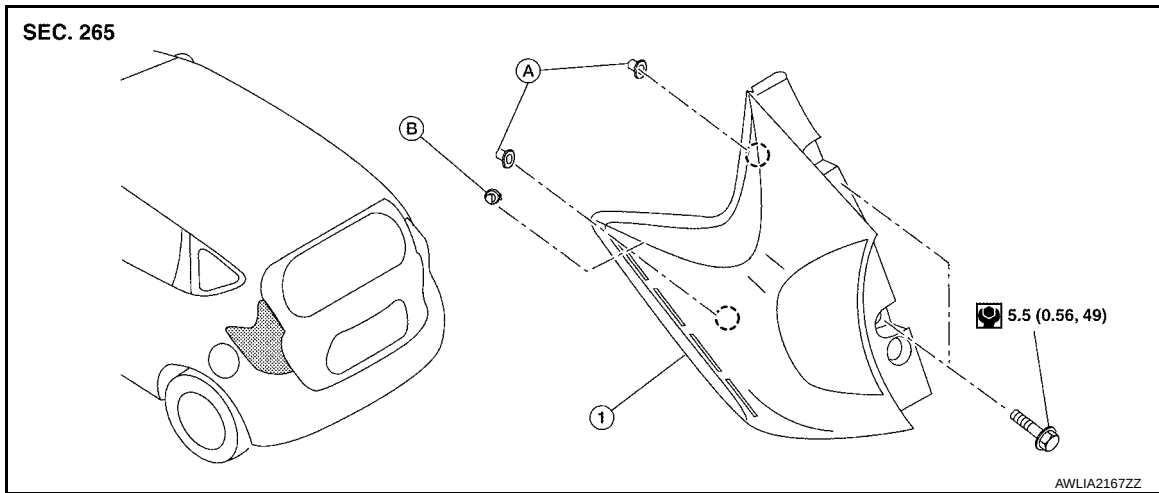
## REAR COMBINATION LAMP

< REMOVAL AND INSTALLATION >

### REAR COMBINATION LAMP

#### Exploded View

INFOID:0000000012432844



1. Rear combination lamp

A. Grommet

B. Clip

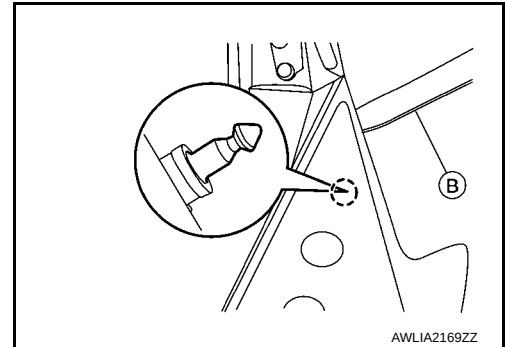
C. Locating pin

#### Removal and Installation

INFOID:0000000012432845

##### REMOVAL

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



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

##### INSTALLATION

Installation is in the reverse order of removal.

#### Bulb Replacement

INFOID:0000000012432846

##### **WARNING:**

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

##### **CAUTION:**

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

##### STOP/TAIL LAMP BULB

##### Removal

1. Remove rear combination lamp. Refer to [EXL-109, "Removal and Installation"](#).

## REAR COMBINATION LAMP

### < REMOVAL AND INSTALLATION >

---

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

#### Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

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

### REAR TURN SIGNAL LAMP BULB

#### Removal

1. Remove rear combination lamp. Refer to [EXL-109, "Removal and Installation"](#).
2. Rotate rear turn signal lamp bulb socket counterclockwise and remove.
3. Remove rear turn signal lamp bulb from bulb socket.

#### Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

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

### BACK-UP LAMP BULB

#### Removal

1. Remove rear combination lamp. Refer to [EXL-109, "Removal and Installation"](#).
2. Rotate back-up lamp bulb socket counterclockwise and remove.
3. Remove back-up lamp bulb from bulb socket.

#### Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

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

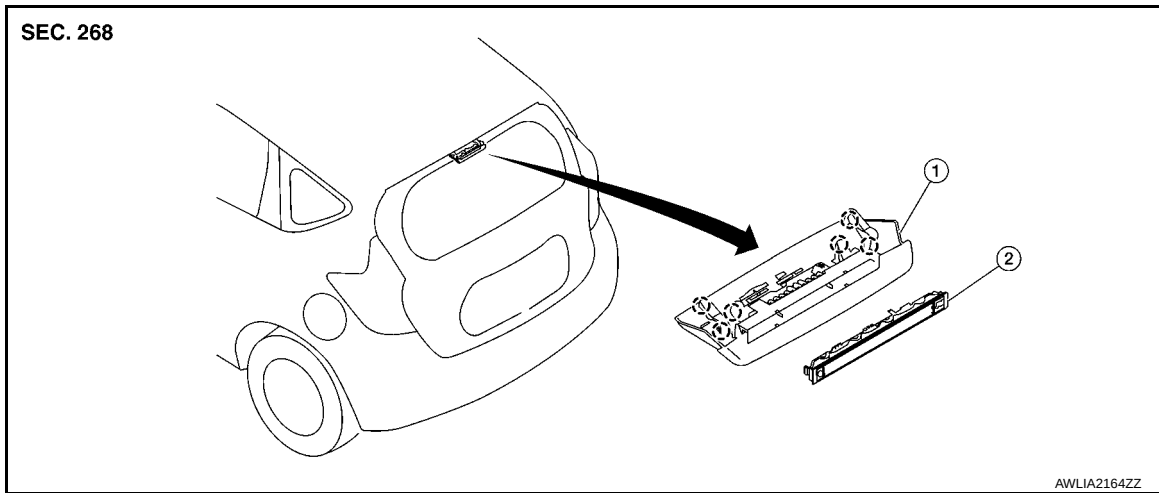
# HIGH-MOUNTED STOP LAMP

< REMOVAL AND INSTALLATION >

## HIGH-MOUNTED STOP LAMP

### Exploded View

INFOID:0000000012432847



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

### Removal and Installation

INFOID:0000000012432848

#### REMOVAL

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

#### INSTALLATION

Installation is in the reverse order of removal.

### Bulb Replacement

INFOID:0000000012432849

#### HIGH-MOUNTED STOP LAMP BULB

The high-mounted stop lamp bulb is a LED and is integrated into the high-mounted stop lamp and is serviced as an assembly. Refer to [EXL-111, "Removal and Installation"](#).

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

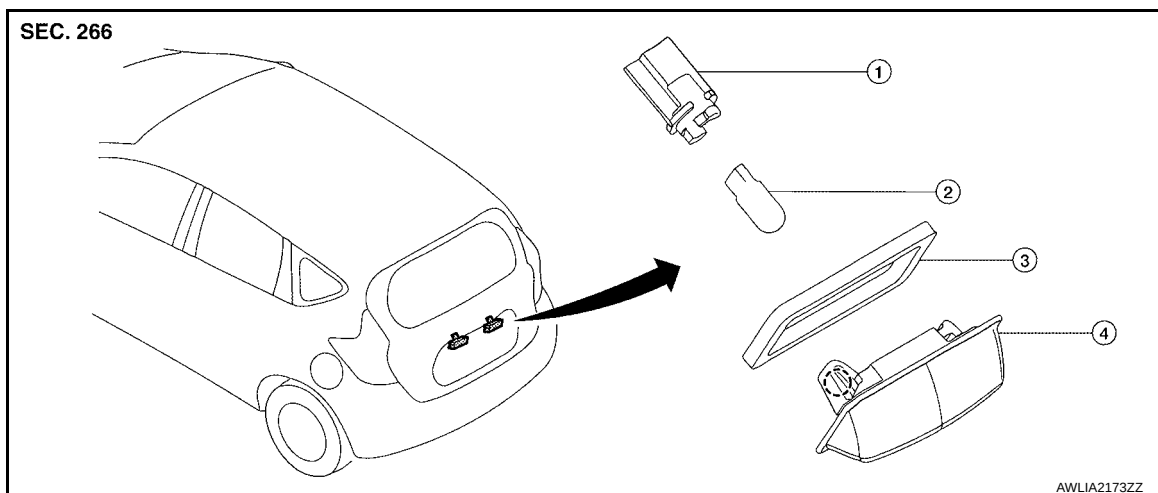
## LICENSE PLATE LAMP

< REMOVAL AND INSTALLATION >

### LICENSE PLATE LAMP

#### Exploded View

INFOID:0000000012432850



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

#### Removal and Installation

INFOID:0000000012432851

##### REMOVAL

1. Remove back door outer finisher. Refer to [EXT-48, "Removal and Installation"](#).
2. Disconnect harness connector from license plate lamp.
3. Release license plate lamp pawl and remove license plate lamp.

##### INSTALLATION

Installation is in the reverse order of removal.

#### Bulb Replacement

INFOID:0000000012432852

##### **WARNING:**

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

##### **CAUTION:**

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

##### REMOVAL

1. Remove license plate lamp. Refer to [EXL-112, "Removal and Installation"](#).
2. Rotate license plate lamp bulb socket counterclockwise and remove.
3. Remove license plate lamp bulb from bulb socket.

##### INSTALLATION

Installation is in the reverse order of removal.

##### **CAUTION:**

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

# FRONT COMBINATION LAMP

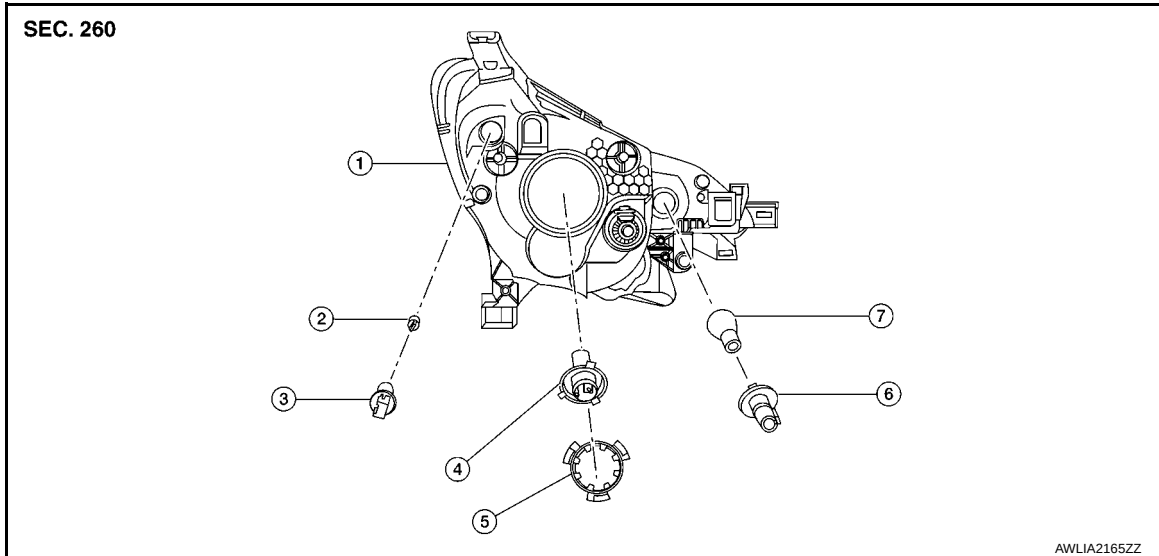
< UNIT DISASSEMBLY AND ASSEMBLY >

## UNIT DISASSEMBLY AND ASSEMBLY

### FRONT COMBINATION LAMP

Exploded View

INFOID:0000000012432853



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

### Disassembly and Assembly

INFOID:0000000012432854

#### **WARNING:**

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

#### **CAUTION:**

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

#### DISASSEMBLY

1. Remove front combination lamp. Refer to [EXL-102. "Removal and Installation"](#).
2. Rotate lock ring counterclockwise and remove.
3. Remove headlamp bulb.
4. Rotate side marker bulb socket counterclockwise and remove.
5. Remove the side marker lamp bulb from the side marker bulb socket.
6. Rotate turn signal/parking lamp bulb socket counterclockwise and remove.
7. Remove turn signal/parking lamp bulb from turn signal/parking lamp bulb socket.

#### ASSEMBLY

Assembly is in the reverse order of disassembly.

#### **CAUTION:**

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

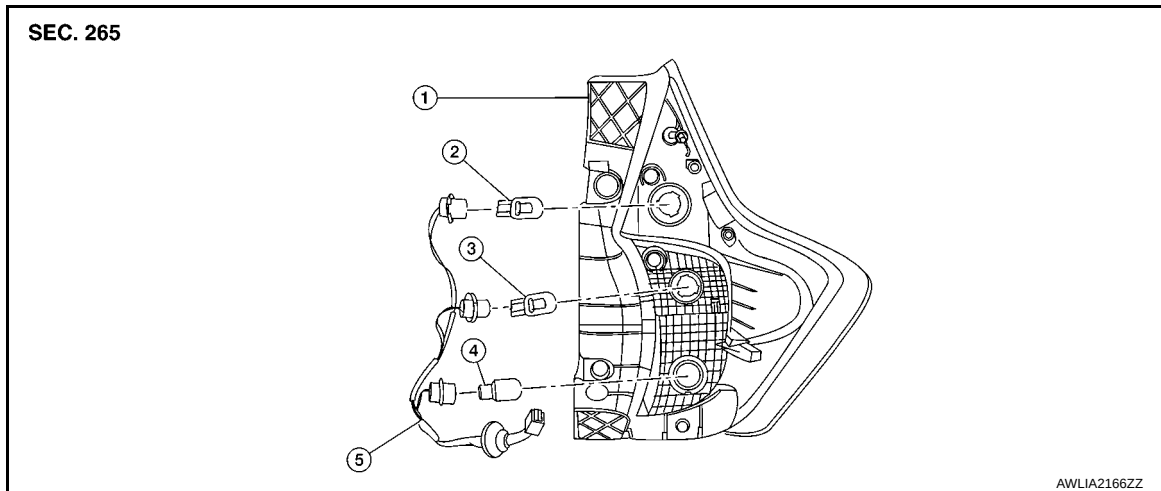
## REAR COMBINATION LAMP

< UNIT DISASSEMBLY AND ASSEMBLY >

### REAR COMBINATION LAMP

#### Exploded View

INFOID:0000000012432855



- |                               |                        |                      |
|-------------------------------|------------------------|----------------------|
| 1. Rear combination lamp      | 2. Stop/tail lamp bulb | 3. Back-up lamp bulb |
| 4. Rear turn signal lamp bulb | 5. Harness connector   |                      |

#### Disassembly and Assembly

INFOID:0000000012432856

##### **WARNING:**

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

##### **CAUTION:**

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

##### DISASSEMBLY

1. Remove rear combination lamp. Refer to [EXL-109, "Removal and Installation"](#).
2. Rotate rear turn signal lamp bulb socket counterclockwise and remove.
3. Remove rear turn signal lamp bulb from bulb socket.
4. Rotate back-up lamp bulb socket counterclockwise and remove.
5. Remove back-up lamp bulb from bulb socket.
6. Rotate stop/tail lamp bulb socket counterclockwise and remove.
7. Remove stop/tail lamp bulb from bulb socket.

##### ASSEMBLY

Assembly is in the reverse order of disassembly.

##### **CAUTION:**

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

## SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

## SERVICE DATA AND SPECIFICATIONS (SDS)

### SERVICE DATA AND SPECIFICATIONS (SDS)

#### Bulb specification

INFOID:0000000012432857

| Item                                       |                                | Wattage (W)* |
|--------------------------------------------|--------------------------------|--------------|
| Front combination                          | Headlamp (HI/LO)               | 65/55        |
|                                            | Front Turn signal/Parking lamp | 28/8         |
|                                            | Side marker lamp               | 5            |
| Fog lamp (if equipped)                     |                                | 55           |
| Door mirror turn signal lamp (if equipped) |                                | LED          |
| Rear combination                           | Stop/Tail lamp                 | 21/5         |
|                                            | Rear turn signal lamp          | 21           |
|                                            | Back-up lamp                   | 21           |
| License plate lamp                         |                                | 5            |
| High-mounted stop lamp                     |                                | LED          |

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